



# SERENA SOFTWARE

## Serena Agile for the Enterprise

Serena Agile 2010 R2 Help  
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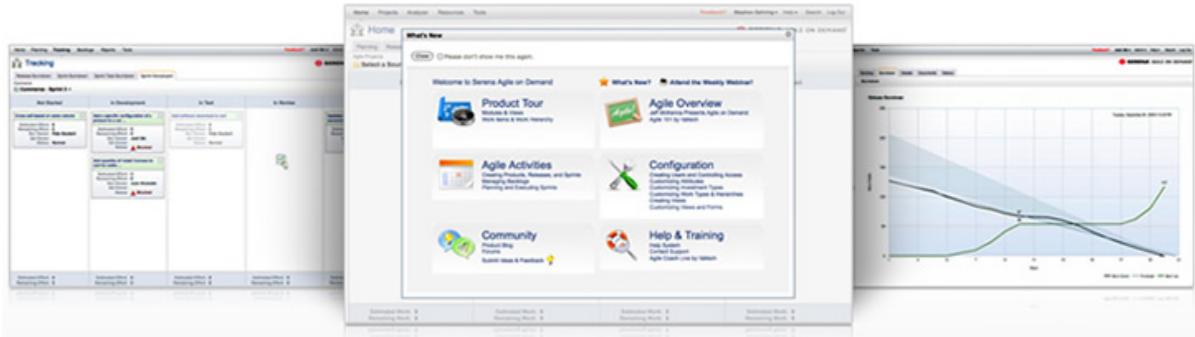
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## Welcome to Serena Agile

Built by a team that includes two co-founders of Scrum, Serena Agile combines agile management software, best-practices, and coaching into a revolutionary new product that will make your teams more effective and productive.



Serena Agile is the ideal tool for multi-team and multi-project Agile environments.

- **All Your Projects In One Place**—Does your team have more than one project? How about more than 50? With Serena Agile, you can keep all of your projects in one place. Portfolio views and reports can be accessed in real time. Your portfolio can include multiple products, projects and teams. Serena Agile handles complex enterprise portfolios and gives you a dashboard view of the health status of all your releases.
- **Team Backlogs**—Use team backlogs to assign work from multiple projects to a single team. Product owners can assign work from the product and release backlogs into the team backlog. Then the team can break the work down into sprints according to priority and rank. Team backlogs can help you unlock the benefits of that single-team Agile experience for your entire organization. Just because your situation is complex doesn't mean that you cannot be Agile in your enterprise.
- **Innovation, Creativity, Visibility**—Are all your teams doing Agile in their own way, with their own flavor? Now you can encourage innovation and creativity without sacrificing visibility. Serena Agile allows each team to maintain their own configurations but still roll up all the data the business needs in reports and dashboards. The teams will be happy doing Agile the way they want. You'll still get visibility and insight across the portfolio of backlogs within your organization.
- **Super-Scrum And Scrum Of Scrums**—Do you have a complex product and team structure with many teams working on dependant projects? Coordinating releases in that environment can be challenging to say the least. We've built flexible backlog views that will help you easily coordinate work between teams and projects. Super scrum is a strategic meeting that is held across projects to coordinate goals. Scrum of scrums is a tactical meeting that is held across teams to tackle impediments and coordinate sprints.

## Release Notes

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## Overview

We STRONGLY RECOMMEND that Customers deploy all service releases, service packs and patches to a test environment before deploying to a production environment. A test environment should have:

- A separate test application server, not in the production environment
- A separate test database, not in the production database

After deploying to the test environment, testing should be performed on all user activities prior to deployment in production. Proper industry practice is to always complete a backup before deploying software, including new installs or updates of any kind. Thus, before deploying this release, the host environment should be prepared as follows:

- Backup the database
- Backup the application server
- Prepare a plan for restoring the database and application server from these backups

For more information about deployment see the deployment guide, found here: [http://help.serena.com/alm/pdf/doc\\_serena\\_agile\\_2010\\_r1\\_deployment\\_guide.pdf](http://help.serena.com/alm/pdf/doc_serena_agile_2010_r1_deployment_guide.pdf).

If you need additional assistance, use the Serena Support webpage to find the appropriate phone number. You can also send e-mail to support@serena.com, and a representative will reply as soon as possible to help answer your questions.

## What's New

The following features and activities are new in Serena Agile:

### Taskboard

A taskboard is a visual snapshot of what the team is currently working on in the current sprint, including what the team is currently working on, what the team is planning to work on, and what the team has not yet started to work on.

### Integration with Serena Business Mashups

You can now integrate Serena Agile with Serena Business Mashups for demand management, issue/defect management, and Agile project management. Team members can create, review, and track issues, defects, and enhancements using Serena Business Mashups and then track and manage the related work using Serena Agile. Visibility into the status and progress for any work item is available from both Serena Agile and Serena Business Mashups.

### RSS feeds for Backlogs

You can subscribe to an RSS feed for any backlog in Serena Agile.

### Team Member Assignments

Team members can now be assigned to teams. You can filter tasks and defects by team member from the sprint taskboard. Resource attributes for work items will only show team members when that work item is assigned to a team or a sprint backlog.

### Move Work Items between Projects

You can now move work items between projects. For example, if you added a work item into the wrong location within the work hierarchy, or if you need to split a project into multiple projects.

## Re-parent Work Items for Teams and Sprints

You can now re-parent work items within teams and prints without first having to move that work item back into a project or a release.

## Multi-select Delete

You can now select multiple work items (by using the CTRL+click keyboard option) and then delete multiple work items with a single action.

## Quick Filter by Work Item Type

You can now filter work items in a backlog by work item type.

## Improvements to Backlog Ranking

Ranking stories is now easier to do while working in a backlog. The list mode option now displays all work items as a flat list (ignoring all parent-child relationships). This will allow you to rank every work item, regardless of work item type. This improvement, combined with the ability to quickly filter a backlog by work item type, will make it easier for users to work in backlogs.

## Enhancements for Import Data

The Import Data template is improved for Serena Agile. Columns are automatically created based on the attributes that you have added to Serena Agile.

## SSO Integration for Get Satisfaction

It is now easier to participate in the Serena Agile community. When a user logs on to Serena Agile, they will also be logged onto Get Satisfaction.

## Defects Resolved

For a complete list of fixes in Serena Agile, consult the following query in the [Serena Support Knowledgebase](#). Note that the previous version of Serena Agile was only available on demand.

If you have additional questions, use the Serena Support webpage to find the appropriate phone number. You can also send e-mail to [support@serena.com](mailto:support@serena.com), and a representative will reply as soon as possible to help answer your questions.

## How to Install?

To install Serena Agile for the enterprise, it must be done as a clean install on hardware that is running Microsoft Windows Server 2003 or Microsoft Windows Server 2008 and (for the database) Microsoft SQL Server 2008. 32-bit or 64-bit hardware. There are no upgrade or migration paths from previous versions. See the [Deployment Guide](#) for more information.

## Document Downloads

The following downloads are available for Serena Agile:



-[Team Member's Guide](#)



-[Documentation \(Full\)](#)



-[Deployment Guide](#)

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## Agile Overview

The ideal Agile process is simple and repeatable. It's scope is high-level, but with specific goals. Scope is defined in a product roadmap. Goals are the features that add business value to the product. The process relies on similar patterns across levels, but with a greater focus on detail as a team gets closer to doing actual work. This does not mean that making that process work is easy. In fact, making an Agile process work requires commitment and discipline, but the steps within the process itself are simple.

Every Agile process relies on basic framework:

- **Work Type**—An Agile process has defined relationships between the types of work done during each stage in the process. For example, a project contains one or more releases, a release contains one or more sprints, and every working day in a sprint contains a daily standup.
- **Work Items**—A work item is an epic, story, or a task. An epic can contain one or more stories, a story can contain one or more tasks. A work item is always stored in a backlog and should be discussed in planning meetings. During daily standup, every team member answers the same questions about any work item to which they have assigned themselves.
- **Backlogs**—An Agile process has a common backlog, from which any specific work item is associated to a release backlog or to a sprint backlog. In general, as the work type gets smaller, two things should happen: the size of a work item that is associated with it should get smaller and the amount of information contained within that work item (description, acceptance criteria, technical notes, story sizing estimates, and so on) should get larger.
- **Teams**—Every Agile process is highly dependent on the quality of its team members, product owners, ScrumMasters, and individual team members.

The relative simplicity of an Agile process helps your organization move past the traditional project management focus on process and helps to put more emphasis on the interactions between team members towards deliverables and towards customer's needs and requests. After you have completed each step in the Agile process (such as completing a sprint, release, or product), your team should have a retrospective, discussing what went well and identifying areas of improvement.

Even though the basic structure of Agile is used by most organizations that use Agile, their approach to the details is rarely the same. There will be different names for a work item, work type, or backlog. There will be different relationships and orders of any work type. There will be different lengths of each phase within the lifecycle. There will be different approaches for how a work item is managed and defined in the backlog.

In order to make Agile work well in your organization, you need to constantly refine it and sometimes re-define it. The relationships of a work type, a work item, and a backlog is (in part) defined by your organization's work breakdown structure and (in part) defined by how your organization chooses to measure business value. In other words, the success of any Agile process has as much to do with an organization's commitment to Agile as it does to how an organization chooses the actual steps within the process.

For more information, see the following topics:

- [Team Roles \[page 14\]](#)
- [Intervals \[page 14\]](#)

- [Storyboard \[page 24\]](#)
- [Backlogs \[page 26\]](#)
- [Work Items \[page 29\]](#)

## Team Roles

Agile organizations are comprised of the following basic roles:

Role	Description
<b>Product Owner</b>	An individual who represents the voice of the customer and manages what is in (or not in) a backlog (product, release, and sprint) and the priority of work.
<b>ScrumMaster</b>	An individual who facilitates the team during a sprint, including running daily standup, tracking velocity, and dealing with impediments that may have been identified by team members.
<b>Stakeholder</b>	An individual or group of individuals who sponsor a project and/or have some level of interest in the successful completion of that project. A stakeholder can be a member of the team itself, such as a tester or a developer, or they can be someone external to the team, such as executive management or the customer.
<b>Team Member</b>	A team member is a member of a team. A team comprises all of the team members who commit to all of the work required to complete a single story during a single sprint, including all tasks and dependencies that are related to that story.

## Intervals

There are four primary intervals (also called a work type) in the Agile process:

Interval	Description
<b>Products</b>	Products contain one or more releases, into which any high priority and high business value work item can be moved. A product roadmap is used to outline what will be done over the next 2-4 releases and it helps drive all work item movement into a release backlog.
<b>Releases</b>	Releases contain one or more sprints. As each upcoming sprint is planned for, well-written stories will be moved into the sprint backlog. As each sprint is completed, a review meeting is held where the successes and failures of the current sprint are openly discussed among team members and the new and/or improved features are demonstrated to the team and other product stakeholders. After all sprints in a release are completed, actual progress is compared to expected progress (as outlined in the product roadmap).

Interval	Description
<b>Sprints</b>	A sprint is where all of the actual work happens. Every day, team members gather in daily standup and quickly state what they have done, what they are going to do, and whether they have any impediments. Sprints rely on a team's velocity to determine how much work can be done in a future sprint and on a team's burndown chart to gauge how well a team is completing its work in a current sprint.
<b>Teams</b>	Teams contain all of the individual team members who belong to a single Scrum team.

In the Agile process, in addition to a primary work type, there are also teams. At minimum, every organization has at least one team and every team has its own sprint (in which progress against any work item is tracked). Some Agile organizations prefer to map multiple teams to a single release, which means that each team would have its own series of sprints in which progress against any work item that is tracked.

For more information, see the following topics:

- [Products \[page 15\]](#)
- [Releases \[page 16\]](#)
- [Sprints \[page 18\]](#)
- [Teams \[page 24\]](#)

## Products

Products contain one or more releases, into which a work item with high priority and high business value is moved. A product roadmap is used to outline what will be done over the next 2-4 releases and it helps determine what will be moved into the release backlog.

For more information, see the following topics:

- [Product Planning \[page 15\]](#)
- [Roadmap Planning \[page 16\]](#)

## Product Planning

Product planning is a way to help your team (and other stakeholders) determine what will be included in future releases. Product planning should identify key business goals, should outline the high-level features that provide the most business value and have the highest priority, and should provide visibility into the project for all stakeholders, including executive sponsors, external teams (such as support, sales, or marketing), and team members.

Product planning is not meant to be exhaustive. Nor is it meant to be anti-Agile (by preventing team members from making the right decisions at the release and sprint levels). Some organizations need to be able to place the value of a product into other contexts, such as a budget or in comparison to other Agile teams within the organization.

The screenshot displays a Jira Planning board for 'Platform - Sprint 1'. The board is organized into a table with the following data:

Name	Priority	Estimated Effort	Remaining Effort
Integrated inventory management		13	0
Manage inventory from in-house system	1	13	0
Acceptance Tests			
Development			
Quality Assurance			
Order management		5	0
View order status	3	5	0
Secure shopping		5	0
Login using SSL	4	5	0

The right-hand sidebar shows the 'Commerce' team's tasks:

- Commission tracking for Partners and Affiliates
- Set payout schedule
- View revenue source commission sales
- Product reviews
- Customer writes a review for a product

## Roadmap Planning

A product roadmap is a forward-looking overview of a product backlog. The purpose of a product roadmap is to describe the features that will be delivered in the next 2-4 releases. Use product roadmap planning to help determine which releases to target for specific feature enhancements.

## Releases

Releases contain one or more sprints. As each upcoming sprint is planned for, well-written stories will be moved into the sprint backlog. As each sprint is completed, a review meeting is held where the successes and failures of the current sprint are openly discussed among team members and the new and/or improved features are demonstrated to the team and other product stakeholders. After all sprints in a release are completed, actual progress is compared to expected progress (as outlined in the product roadmap).

For more information, see the following topics:

- [Release Planning \[page 16\]](#)
- [Release Status \[page 17\]](#)
- [Release Burndown \[page 17\]](#)

## Release Planning

Release planning is an exercise of finding out which features that are defined in the product backlog will help the team meet its current release objectives, as defined by the product roadmap. In general, product owners use this view to manage the epics—a

collection of stories that are too big for a single sprint—that the development team will work on during the release. Epics (and their related stories) can be grouped by themes, priority, and so on.

Product owners should work to ensure that a release aligns with the overall project's goals and business value. They will determine the release schedule (the number and frequency of releases), themes for the release, epics that support the themes, and the length of the sprints contained with the releases. In general, shorter releases require shorter sprints. Sprint lengths range from 1-4 weeks, and are usually on the smaller end of that range. A release plan should always be visible to team members.

The screenshot shows a 'Product Owner Storyboard' interface. At the top, there are two tabs: 'Multi Planning' and 'Product Owner Storyboard'. Below the tabs is a Kanban board with columns for 'Elaborating' and 'Pre-Planning'. On the left side, there are two story cards: 'iple Affiliate site' and 'account'. The 'Elaborating' column contains two story cards: 'View Affiliate commission balance' and 'Defects'. The 'Pre-Planning' column contains one story card: 'View past order details'. Each story card displays its title, priority, business value, estimated effort, and status.

Story Title	Priority	Business Value	Estimated Effort	Status
iple Affiliate site	2	5	5	Normal
account	3	3	5	Normal
View Affiliate commission balance	4	15	8	Normal
Defects		0	0	Normal
View past order details	2	15	13	Normal

### Release Status

A release status meeting gives all team members (and other stakeholders) visibility into the current status of any given release. You can use a release burndown chart to help show the progress of the release, view the distribution of work item objectives as they relate to story points, and view a team's historical velocity.

### Release Burndown

A burndown chart is a simple way of measuring a team's progress during a sprint by comparing the working days in the sprint to the total number of story points to which the team committed. A story is considered complete when it has zero story points remaining and has been accepted by the product owner. A sprint can be considered complete when the total story points to which the team committed reaches zero. Ideally, this occurs on the last working day of the sprint. Working days in a sprint are defined by the working days in your organization's company calendar.

A burndown chart can be useful at several points within the Agile lifecycle: during a release, during a sprint, and for a specific task. A release burndown chart is useful for tracking the progress of a release by using a single metric (such as total story points remaining or total work hours remaining) and comparing it against the original total toward which the team has made a commitment. As team members update this metric for any individual work item they are assigned, the release burndown chart is updated to show the overall progress of the team.

Serena Agile includes an out-of-the-box release burndown chart as part of the **Tracking** module. The release burndown chart is used to view the current status of the release, sorted by sprint in the related backlog pane. The burndown chart shows the backlog from which the burndown chart is based as part of the release, sprint, and task burndown chart views.



Shop Online Alpha Edit +

Name	Estimated Effort	Remaining Effort	Accepted Effort	
<input type="checkbox"/> Sprint Backlog = {BLANK}	16	12	0	
<input type="checkbox"/> Cross sell based on category	8	8	0	Not E

## Sprints

A sprint is where all of the actual work happens. Every day, team members gather in daily standup and quickly state what they have done, what they are going to do, and whether they have any impediments. Sprints rely on a team's velocity to determine how much work can be done in a future sprint and on a team's burndown chart to gauge how well a team is completing its work in a current sprint.

The primary goal of a sprint is to add a new piece of shipping software to an application. This could be one or more new features, a small collection of improvements (fixed defects), and so on, as long as the completed (and accepted) work results in something of actual value for a customer.

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For more information, see the following topics:

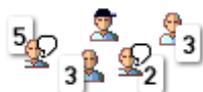
- [Sprint Planning \[page 19\]](#)
- [Sprint Burndown \[page 21\]](#)
- [Daily Standup \[page 21\]](#)
- [Sprint Review \[page 23\]](#)

## ***Sprint Planning***

Sprint planning is used to define the list of stories that a team will commit to building during a single sprint for a given release. How much work a team can do during a sprint is referred to as velocity. Each story or work item is assigned a value (typically known as a story point estimate) by the team. Velocity is the average estimated story points to which a team can commit over time. There are many ways to estimate story points and velocity. The most common approach is to use story points using planning poker as the way to determine the estimated size; however, other approaches include using shirt sizes (XL, L, M, S, and so on), affinity grouping (which seeks to identify similarities between stories and trends among stories over time), and so on.

### **Planning Poker**

Planning poker is a method of estimating the sizes of user stories during sprint and release planning meetings. Team members discuss a user story for a short period of time, after which team members assign that user story a points estimate. This is often done using Fibonacci numbers (1, 2, 3, 5, 8, 13, and so on), where the lower numbers are easier to work on. The team members with the highest and lowest estimates defend their positions, after which team members re-assign that user story a points estimate.



The purpose of planning poker is to achieve a consensus among the team as to the relative sizing for all user stories that are candidates to be moved into a sprint backlog or to be worked on during any single sprint. The user story sizing estimates help product owners select the user stories with the highest business value.

User story size estimates are intended to show how much effort is required in order to complete the work on an individual user story. In general, user stories assigned a 1, 2, or 3 are user stories that can be completed in a single two week sprint by two or fewer team members. User stories assigned a 5 or an 8 are more difficult, may require many team members, may have dependencies on other user stories, or may be too big to complete during a single sprint. Some user stories with a 5 or an 8 sizing estimate should be broken down into smaller user stories. User stories assigned a 13 (or greater) are almost always too large to be worked on during a single sprint and should be broken down by product owners into smaller user stories.

That said, there should be no literal meaning associated with any particular number in the Fibonacci sequence other than the meaning your team learns to associate with them over time. Some teams use standard playing cards, with an Ace representing a 1 and a King representing a 13.

## Velocity

Velocity is a method of determining how many story points of work a team can commit to in a future sprint based on how many story points of work a team was able to complete in previous sprints. As a safe, general rule, a team should never commit to more story points in a sprint than their average velocity over the 2-4 previous sprints.

But velocity is more than a simple math exercise. There are good velocities and there are bad velocities. How do you know one from the other? Some characteristics of a good velocity:

- Story points are measured independently of the size of the team.
- Story points are sized to include all of the business priorities and goals of the Agile project.
- Story points are sized to include dependencies on all team members.
- Story points are sized to account for dependencies on external teams, such as support, sales, or training.

Most characteristics of a bad velocity are simply the opposite of a good velocity, such as committing to a number of story points that is only based on the number of team members available during the sprint. Or not factoring the potential complexity of a new series of features as they relate to the amount of time your support organization will need to be ready for the upcoming product release. Or the amount of time it will take your sales team to learn how to successfully engage potential customers. Or by not accounting for the amount of time it may take a training team (or a documentation team) to produce customer-facing material.

Good velocity? Bad velocity? The reality is that most Agile teams consistently live somewhere in-between. Business priorities change. Challenging defects are discovered. Team members get sick. External dependencies can be hard to predict. But a little strategy can go a long way. Your team's velocity is important. So it's equally important to consider your velocity within the context of the work that your team is doing and how it relates to your product's release cycle, your team's relationship to other teams, your product's relationship to other products within your organization, and so on.

As best you can, you want to avoid disrupting your team to prevent having an adverse effect on its velocity. For example, switching your automated testing platform several times in one calendar year is probably a bad idea. Every time you change platforms, you may be removing valuable points from your velocity. Another way a little strategy can help is for the product owner to have a good idea of what the product roadmap looks like in relation to the work the team will be asked to do during the upcoming release. For example, if one feature enhancement requires your engineering team to reconfigure the back-end, it's probably better to do that work earlier in the release cycle rather than later.

A good velocity helps your team deliver as much value as possible. A good velocity is what your team wants. Your team will need to work hard to learn what its good velocity looks like. Sometimes the old adage "do less to do more" can help a team understand what their velocity should be. If your team finds itself consistently underperforming its story point commitments (even by a point or two, per sprint), or if your team finds itself consistently finishing stories on the very last day of the sprint, right before the sprint review, then your team should consider committing to fewer story points. Over the next 2-4 sprints, this will lower your team's velocity, but it will also give your team a chance to see if a smaller commitment translates into a more successful sprint.

## Sprint Burndown

A burndown chart is a simple way of measuring a team's progress during a sprint by comparing the working days in the sprint to the total number of story points to which the team committed.

A story is considered complete when it does not have any remaining story points and after it has been accepted by a product owner. A sprint can be considered complete when the total story points to which the team committed reaches zero or when the time allotted to the sprint (1-4 weeks) runs out. Ideally, this occurs before the last working day of the sprint. Stories not completed in time are not accepted by the product owner and are moved to a subsequent sprint. Working days in a sprint are defined by the working days in your organization's company calendar.

Serena Agile includes an out-of-the-box sprint burndown chart as part of the **Tracking** module. The sprint burndown chart is used to view the current status of the sprint. The list of stories, sorted by work state will appear in the related backlog pane. The burndown chart shows the backlog from which the burndown chart is based as part of the release, sprint, and task burndown chart views.



Platform  
Platform - Sprint 1 Edit +

Name	Estimated Effort	Remaining Effort	Dev Owner	QA Owner	Work St
<input type="checkbox"/> Work State = Accepted	5	0			Accepted
<input type="checkbox"/> <a href="#">View order status</a>	5	0	Tara Team Member		Accepted
<input type="checkbox"/> Work State = In Review	13	0			In Review

## Daily Standup

Daily standup occurs every day at a time that is convenient for all team members—usually in the morning—and often time-boxed at no more than 15 minutes. A burndown chart is used to view the team's overall status. The list of stories that are being worked on in the

current sprint are viewed alongside a list of impediments (if there are any impediments). During standup, each team member addresses three key issues: what they have worked on since the previous daily standup, what they will work on today, and what impediments (if any) are present that could affect their current work item.

Before arriving at standup, team members should update any user stories with current points remaining. This will ensure that the burndown chart used in the daily standup accurately reflects the current status of the team.

Daily standup is intended to be a quick meeting that benefits the entire team. If design discussions or other issues are raised that cannot be handled during standup, many Agile teams quickly take those conversations offline.

For more information, see the following topics:

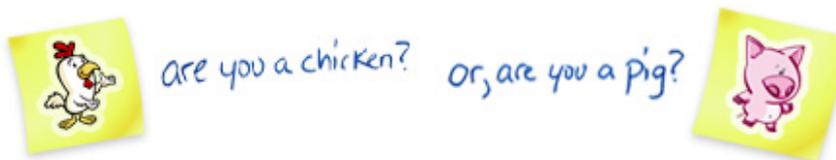
- [Chickens and Pigs \[page 22\]](#)
- [Task Burndown \[page 23\]](#)

## Chickens and Pigs

There is a useful parable from the early days of Scrum ([credited to Ken Schwaber](#)) that organizes the people involved in Agile software development into two roles: chickens and pigs. It goes like this:

*A pig and a chicken are walking down a road. The chicken looks at the pig and says, "Hey, why don't we open a restaurant?" The pig looks back at the chicken and says, "Good idea, what do you want to call it?" The chicken thinks about it and says, "Why don't we call it 'Ham and Eggs'?" "I don't think so," says the pig, "I'd be committed but you'd only be involved."*

The point is that pigs are the ones involved who write, deliver, test, and document software, while the chickens are interested in the outcome but aren't directly doing the same things as pigs. The needs, desires, ideas and influences of the chickens are important and taken into account, but not in a way that would prevent the completion of the project by the pigs.



Pigs are the ones committed to the project, the ones with "their bacon on the line." They comprise the Agile or Scrum team. They have the responsibility to deliver the product and may consist of any number of members with cross-functional skills to do the actual work. pigs on the team include: developers, designers, quality assurance, testers, product owners and facilitators or ScrumMasters.

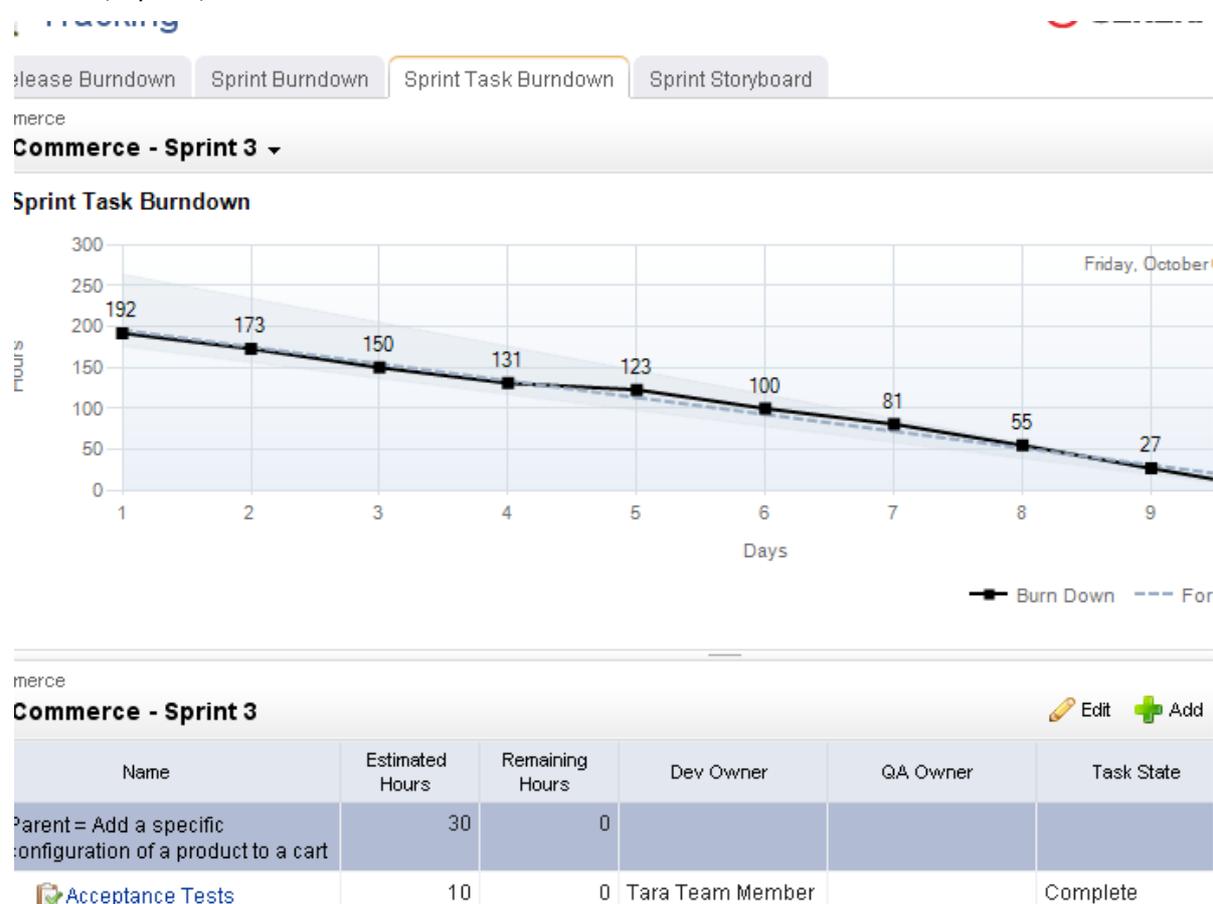
Chicken roles are those roles in the project that are not part of the actual Agile development process, but must be taken into account. An important aspect of an Agile approach is the practice of involving users, business and stakeholders into part of the process. It is important for these people to be engaged and provide feedback to the team to assist in reviewing and planning the work. Those people are termed chickens and represent users, stakeholders, managers, operations, customers and vendors of the software that's produced at the end of the project.

## Task Burndown

A burndown chart is a simple way of measuring a team's progress during a sprint by comparing the working days in the sprint to the total number of story points to which the team committed.

A story is considered complete when it does not have any remaining story points and after it has been accepted by a product owner. A sprint can be considered complete when the total story points to which the team committed reaches zero or when the time allotted to the sprint (1-4 weeks) runs out. Ideally, this occurs on the last working day of the sprint. Stories not completed in time are not accepted by the product owner and are moved to a subsequent sprint. Working days in a sprint are defined by the working days in your organization's company calendar.

Serena Agile includes a task burndown chart as part of the **Tracking** module. The task burndown chart is used to view the daily progress of a team while the sprint progresses. The list of tasks, sorted by parent story will appear in the related backlog pane. The burndown chart shows the backlog from which the burndown chart is based as part of the release, sprint, and task burndown chart views.



### Sprint Review

A review meeting (or retrospective) should occur at the end of every sprint and at the end of every release. A review gives team members (and other stakeholders) to give each other honest feedback about how well the sprint or review was (or was not) executed. The

purpose of the review is to identify areas of improvement, identify successes and failures, and to learn and grow as a team so that it can improve its performance in future sprints.

Sprint reviews are often paired with a sprint demo, where individual team members show what was done during the sprint to other team members and external stakeholders. The usually occurs immediately before or after the review meeting.

## Teams

In an Agile environment, resource management concepts—demand, velocity, commitment, and acceptance—are focused more on teams than on individuals. An Agile team is defined as "all of the team members who commit to all of the work required to complete a single story during a single sprint, including all tasks and dependencies that are related to that story." A team should only commit to working on stories that have a high priority and a high business value. And a team should use its velocity to determine how many stories to which it can commit in an upcoming sprint.

- A sprint assignment is the process of moving a story into a sprint backlog from a release backlog or a team backlog.
- A team assignment is the process of moving a story into a team backlog from a release backlog.

Teams frequently commit to more than one story per sprint, but it is important to understand that the effort required to complete the work required by a single story (including all of its related tasks and dependencies) is done in a single sprint by a single Agile team. Some assignments (like tasks) are identified before the sprint begins, while others (like defects and impediments) are discovered during the sprint. Assignments, once completed, are submitted to the team (for review) and to the product owner (for acceptance).

An Agile team is supposed to be small. This is by design. Good Agile teams share many of the following traits:

- Are small, often having between 7-10 total team members
- Are self-organizing
- Have complimentary skills
- Have collective knowledge
- Work well together
- Are cross-functional
- Are co-located (as much as possible)
- Frequently stay together in subsequent sprints

At a minimum, the relationships between product owners, product backlogs, and teams is 1:1 (meaning that there is a single product owner who manages a single product backlog); the single product owner assigns a work item from the single product backlog to a single Agile team. There can, of course, be many more combinations than that.

## Storyboard

A storyboard (or card wall) can be used to help track the work item status during a sprint. For example, a storyboard could have the following phases:

- **Not Started** A work item that is ready to be worked on by a team member.

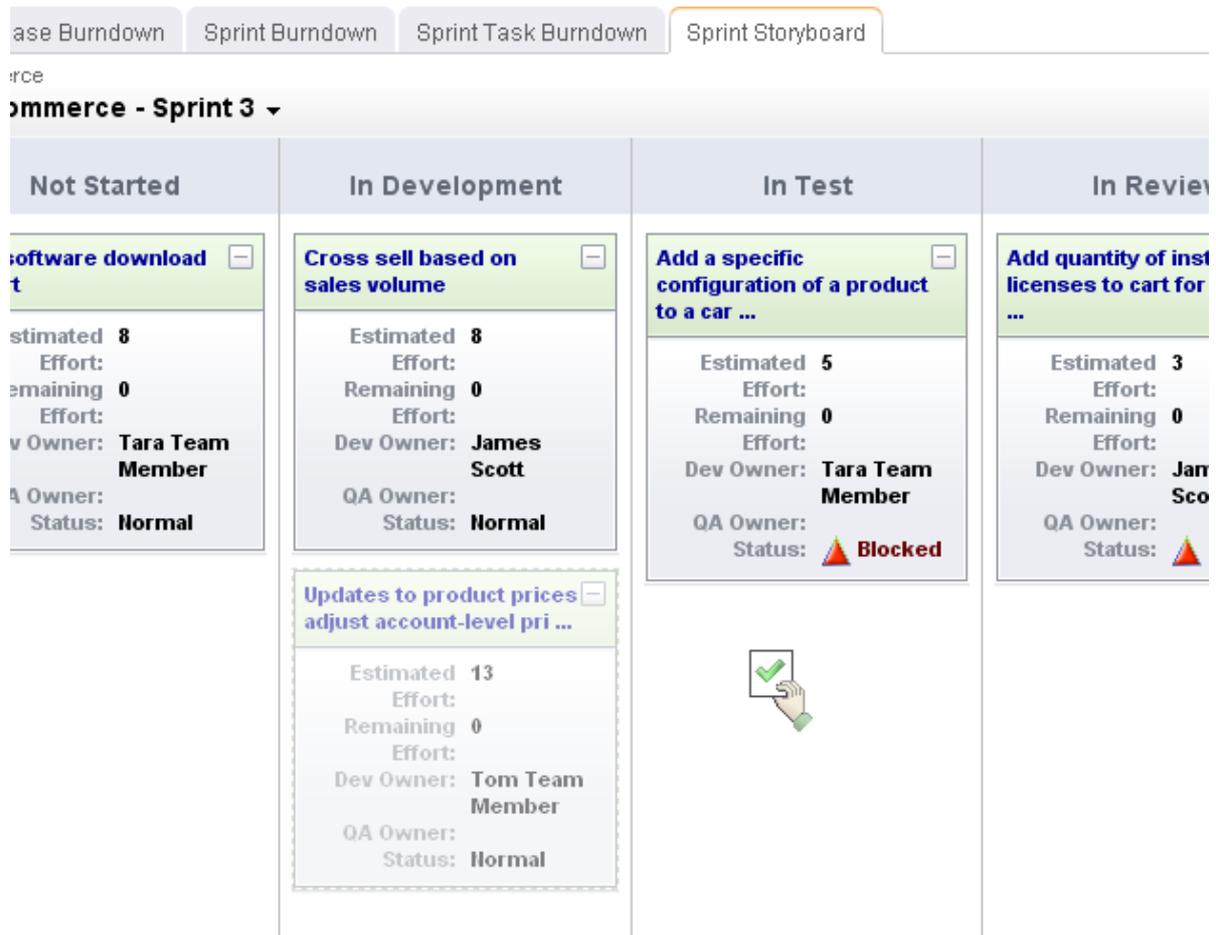
- **In Development** A work item that is being worked on by a team member.
- **In Testing** A work item that is ready to be tested by a team member.
- **Testing** A work item that is being tested by a team member.
- **Ready for Review** A work item that is considered done by the team, but is not yet approved by the product owner.
- **Accepted** A work item that is accepted by the product owner and is considered complete.

While working in a storyboard, you can drag any work item from one column to another. Click the plus symbol to view quick details, such as name, work (estimated and remaining), and status. Click the name of any story to view its details, such as its name, description, acceptance criteria, work (estimated and remaining), status, priority, owners (development, test, and product), notes, and so on.

Serena Agile includes two out-of-the-box storyboards, one for use by product owners as part of their planning activities, and one for use by teams as part of their sprint activities.

- **Product Owner Storyboard** This storyboard has phases for **New, Elaborating, Pre-Planning,** and **Sprint Ready.**
- **Sprint Storyboard** This storyboard has phases for **Not Started, In Development, In Test, In Review,** and **Accepted.**

Once a specific backlog has been chosen, the same basic collection of actions are available: edit a work item and view a work item. A work item can be selected, and then moved to other phases in the storyboard using drag-and-drop.



## Backlogs

A backlog is a queue that contains all of the potential work item that could be built, including actual work, proposed features, good ideas, or discovered defects. The work item in a backlog should cover the entire product's lifecycle, from the current release (and the current sprint) to future releases (and future sprints). Any work item in a backlog can be viewed as an ordered list (sorted by rank), in a table, or by in a tree (grouped as a parent or child work item, as defined by your organization's work breakdown structure).

In terms of the overall scope of work, a release backlog should contain a more defined amount of work than a product backlog (usually most of the work that is believed to be necessary for a specific release) and a sprint backlog should only the work that will be done during the sprint. As work item is moved into a smaller backlog it should decrease in size (for example, story point sizes should decrease), but they should also increase in detail (for example, better acceptance criteria and/or technical notes provided in the stories and/or clear tasks defined).

Any team member may add a work item to the product backlog; however, only product owners should remove a work item (from any backlog) or move a work item into a release or a sprint backlog. This determination may be based on what is outlined in the product roadmap, comparing the priorities of one work item to another, the business value each work item will provide, a team's velocity, and so on. It is important for team members to

have visibility into what is contained in a release or a sprint backlog. Therefore, a work item should not be added to a release or a sprint backlog until after it has been discussed with team members during a release or a sprint planning meeting.

Serena Agile includes several prescriptive backlogs, one for use by team members to view any work item to which they have been assigned, one for use by product owners as part of their planning activities, and the entire backlog hierarchy.

- **My Work** This backlog is used primarily by team members to view any work item that has been assigned to them for work during the current sprint.
- **Planning** This backlog contains every work item that is in the current product backlog, current release backlog, or current sprint backlog.
- **Backlogs** The Backlogs module provides access to the entire work hierarchy, including past, present, and future products, releases, sprints, and teams.

A burndown chart will show the backlog from which the burndown chart is based as part of the release, sprint, and task burndown chart views.

Backlog				
Backlog	Planning	Multi Planning	Product Owner Storyboard	
products				
Shop Online				
Save Edit				
Name	Estimated Effort	Remaining Effort	Work State	
Commission tracking for Partners and Affiliates				Norm
Cross selling			Not Started	
Defects	0	0	Not Started	Norm
Defect 10156				Norm
Order management	13	13		Norm
View past order details	13	13	Not Started	Norm
Partner & Affiliate tools	23	23		Norm
Affiliate manages their account information	5	5	Not Started	Norm
Sign up for an Affiliate account	5	5	Not Started	Norm
User can register multiple Affiliate site URLs in their company profile	5	5	Not Started	Norm
View Affiliate commission balance	8	8	Not Started	Norm

For more information, see the following topics:

- [Product Backlog \[page 28\]](#)
- [Release Backlog \[page 28\]](#)
- [Sprint Backlog \[page 28\]](#)
- [Team Backlog \[page 28\]](#)

## Product Backlog

A work item is added to the product backlog by product owners and team members. A work item is moved into a release backlog (from the product backlog) to support the goals outlined in the product roadmap. A work item in a product backlog should be estimated (at a very high-level), broken down into a smaller work item (with some detail), and so on, before the beginning of the next release.

Product planning meetings may include team members, but they often include high-level stakeholders who are not team members, such as executive sponsors, members of other teams within your organization (support, documentation, marketing, and so on), as needed. The goal of product planning is to make sure that your product roadmap contains only a work item with the highest business value and priority for the upcoming 2-4 releases.

## Release Backlog

A release backlog should only contain a work item that could be committed to by a team for work in a sprint. A work item can be added to the release backlog from the product backlog. A work item in a release backlog should be discussed with team members during release planning meetings. A work item should be estimated, broken down into a smaller work item, become more detailed, and so on, before the beginning of the next sprint.

A work item can be moved between a product and a release backlog as needed, such as when business priorities change or when opportunities to create better business value arise. A work item in a release backlog can be added, edited, and removed; however, any work item in a release backlog should have a high priority and a high business value. In general, only well-defined stories should be moved into a sprint backlog from a release backlog.

## Sprint Backlog

Use a sprint planning meeting to determine which stories will be committed to during a given sprint. A sprint backlog should only contain stories that the development team has committed to for that sprint. Stories in a sprint backlog should be well-written, have a high priority and a high business value, and should have an accurate story point estimate.

Unlike a product or a release backlog, a sprint backlog should not change once it has been committed to by a development team. A product owner should not add or delete any stories and should only edit a user story after discussing the proposed changes with any affected team members. Any work item in a sprint backlog should have assigned owners.

## Team Backlog

Use release planning and sprint planning meetings to determine which stories should be moved into a specific Agile team's backlog. A team backlog should contain stories that will be committed to by a specific Agile team for an upcoming sprint. Stories in a team backlog should be well-written, have a high priority and a high business value. Stories in a team backlog should have an accurate story point estimate before being moved into a specific sprint backlog.

A work item in a team backlog can be moved to and from a release backlog (or another team's backlog) as needed, such as when business priorities change or when opportunities to create better business value arise. A work item in a team backlog can be added, edited, and removed as needed; however, any work item in a team backlog should have a high priority and a high business value.

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## Work Items

A work item is anything that is used to build and track work during any phase of a product's lifecycle, including high-level features (epics), a more detailed work item (such as a story and its individual tasks), issues raised by customers or members of your test team (defects), and issues that prevent team members from completing their assignments (impediments).

In general, a work item lives in backlogs (product, release, and sprint). As a work item move into a smaller backlogs they should decrease in size, but also increase in detail. A work item is configurable and can have many different names. Their relationships (to each other) are defined by your organization's work breakdown structure.

Serena Agile uses epics, stories, tasks, and defects. In general, an epic is the largest work item. Epics should broken down into well-defined stories (which then contain specific tasks). Defects are like stories (in that they should be well-defined and that they may contain specific tasks). An impediment is the final work type. In general, impediments can be resolved quickly; should your organization need to create impediments that require actual work by actual team members, you should add a user story into a backlog that is used by the team that will do the work that is needed before the impediment can be removed.

For more information, see the following topics:

- [Epics \[page 29\]](#)
- [Defects \[page 29\]](#)
- [Impediments \[page 35\]](#)
- [Stories \[page 35\]](#)
- [Tasks \[page 35\]](#)

## Epics

An epic is a very large work item that cannot be worked on by the team during any single sprint. It must be broken down into a smaller work item (stories) before it can be discussed in a planning meeting and before any related work is moved into a release or sprint backlog.

Epics represent how your organization plans to deliver business value at the product level. Epics often map to key features outlined in the product roadmap (what your team plans to deliver over the next 2-4 releases). Sometimes an epic itself is used to represent a feature that is worked on during a single release. Epics are discussed during product planning and are broken down into smaller collections before being moved into release planning. In the product backlog, epics can be grouped by major themes, such as automation, user interface, documentation, and so on.

## Defects

A defect is a bug, an issue, or some problem with the a product. A defect can be identified by a customer, by a member of your sales or support organization, and (most often) by a member of your own team (a tester or an engineer, for example).

Many defects can be fixed easily (often during the same sprint in which they were discovered) and do not need to be tracked as a work item. Some defects require visibility (such as ones raised by customers or support) and need to be tracked as a work item (for visibility). Some defects are complex and may require research by team members or

significant work by engineering (and follow-up testing to ensure the defect is fixed) or work by an external team. Any work item that affects a team's overall velocity should be tracked as a work item so that fixing those kinds of defects is factored into the team's overall velocity.

### **Origins of Defects**

A defect is a bug, an issue, or some problem with the a product. A defect can be identified by a customer, by a member of your sales or support organization, and (most often) by a member of your own team (a tester or an engineer, for example).

A defect can be many things. No matter how you define them, they are often caused by one of the following:

- **A missed implementation**—Something that was not done during the implementation. For example, if a unit test isn't written, the related acceptance test can never fail. Or, perhaps the code itself didn't get a useful set of unit tests created for it. Both of these could lead to a situation where a defect is not discovered until later in the development process, making it more difficult to identify the real cause of the defect and therefore, making it more expensive to fix. It is often much more expensive to fix something later than it is to fix something right away. One way to prevent something from not getting done during an implementation is to actually write less code. Less code means fewer lines of code that require testing, fewer unit tests written by your developers, fewer acceptance tests written by your testers, and less risk that you won't find a defect right away.
- **A missed design decision**—Something that was not understood well enough, soon enough. If your team is not aware of how the design changes over time, or does not consider how edge cases can play into the overall design or how a new requirement may affect everything that has already been built, then there is a greater risk that your team does not factor in these kinds of changes when they occur. For example, if a new requirement is added that was originally viewed as an edge case for a feature that was completed two sprints earlier, it's safe to assume that unit tests and acceptance tests were not written for that specific edge case. It is also safe to assume that unit tests and acceptance tests were not written for how the feature should behave after the work required to add the new requirement has been completed.
- **A misunderstood requirement**—Something that your customer wants, but is added later. The whole purpose of the design is to provide your customer with something of value. If your team is constantly making enhancements to what you have already designed, it can be an indicator that the things your customer really wants are not being understood soon enough. An enhancement is just a fancy name for a defect that didn't have well-understood requirements.

It is worth it to take the time to explore the edge cases and to fully understand what you intend to build before you build it. By making sure that your team understands the requirements better, you are reducing an opportunity to miss a design decision, which in turn reduces the odds that something will be missed during the implementation. All of this will lead to better code, fewer defects, and greater customer value.

One way to view all of this is to view defects in the same way as financial debt. When one is in financial debt, it requires extra energy to get out of. Among the factors included are interest payments, loan payments, and fees. In much the same way, having a large backlog of defects requires you to have meetings about that backlog, discussions about each defect, time for your team to research the causes and solutions for each defect, and

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so on. Among the factors included are coding debt, design debt, and requirements debt. Fixing a defect requires that you set something else aside. In the same way that financial debt can affect an individual's lifestyle, so can defect debt affect the way that your team can make progress. If your team is spending too much time on defects, you have that much less time to spend improving your product, adding features, and so on. The goal is to eliminate defects. The reality is that some number of defects will always be there, but the goal should be to reduce them to zero.

### ***Some Reasons Why Defects Exist***

There are a number of reasons why a defect exists. Most people assume that not finding defects simply has to do with not doing enough testing or by not finding a defect early enough. This is only partially true. There are some other high-level factors that come into play as well, including:

- The actual knowledge that your team has about defects and testing (in general)
- The culture of your organization
- The goals that have been set for your team
- The ability of your team to execute towards those goals

A better understanding of these factors will help you and your team find better ways of finding defects, of developing more efficient ways of fixing the ones that are found, and towards the goal of having zero defects.

For more information, see the following topics:

- [Culture \[page 31\]](#)
- [Execution \[page 32\]](#)
- [Knowledge \[page 32\]](#)
- [Team Goals \[page 33\]](#)
- [Testing Levels \[page 34\]](#)

## **Culture**

Surprisingly, when it comes to reducing the number of defects, your organization's culture is often the biggest challenge that you will face. There are many assumptions that organizations make about defects. Such as "all software has defects", "it is impossible to write software that does not contain defects", or "we do not care enough about defects"; "it is someone else's job to find defects" is also something that you may hear.

Each of these assumptions are not true. For example, even if the reality is that some defects will exist, it is still possible to have software that does not have many defects. The goal is to create software with zero defects. It is therefore important that your team recognizes that it is possible to write software without defects and that as a team, it makes an effort towards that goal. If your company does not seem to care about defects, this does not mean that you or your team cannot care about them.

Everybody on your team is part of that effort. Developers and testers can find the same defect, but in different ways (unit testing versus acceptance testing). It does not matter who finds the defect as long as that defect gets found and then fixed.

Some companies say "we don't have any priority 1 defects." Does that mean that you do have priority 2 defects? When defects are categorized, it is a way of accepting that some

defects will not get fixed. A priority 1 defect is a type of defect that shows up in an area of the application that customers use all the time. A priority 2 defect is a type of defect that shows up in an area of the application that customers use less often (or even much less often); however, this does not mean that it's acceptable for the area of the application that is used less often to be of less quality than the area that is used all the time.

If your team does not learn how to eliminate defects, they will keep showing up. If your team does not learn to fix all defects, then only part of your application can be considered of high quality.

## Execution

Remember that a big part of the testing effort is about making sure that what you have already done still works. Making a commitment to having a goal of zero defects is one part of the effort. Taking the steps towards being able to execute on that goal is another.

- **Automation**—How much automation are you doing? The more the better—for both unit testing and acceptance testing, and as part of your automated build process.
- **Regression**—Do you have regression testing built in? You need to make sure that what you are doing today does not break what you did yesterday.
- **Continuous Testing**—Has anything broken that used to work? Once a piece of code is done, it should always continue working. Never lower the bar. If something that you do breaks something that you have done, fix it immediately.
- **Tools**—How can you achieve a state where most defects are fixed within an hour? To start, the less human involvement, the better. Create an environment where the bulk of your testing effort is automated as part of your build process. If you don't have the tools to support this effort, then get them. If the goal is to fix a defect in one hour, and if it takes your automated testing process 10 minutes to verify and validate the built code, that leaves you 50 minutes with which to fix any failures and still achieve the goal of fixing a defect in one hour.
- **Training**—Let your team know that code quality matters.
- **Time**—It's worth saying again: make time for your team to be able to have good testing habits. It's the single best way to work towards the goal of eliminating defects.

## Knowledge

Whether or not the culture in your organization is willing to accept that defects are not inevitable, you still need to increase the knowledge in your organization about defects; how they are discovered, managed, and fixed.

- **Writing unit tests**—A unit test is an automated way to verify and validate a specific piece of code. Each unit test should be able to run independently from any other unit test. Start having your developers write unit tests and make sure that they have enough time to write them. Run unit testing against your code before adding it to a build, and then again as part of the build. Teams that have a good suite of unit tests in place are more comfortable making changes to their code, accepting greater challenges, and so on, because they have the confidence that they can do so without adding a significant amount of debt to their backlog.
- **Writing acceptance tests**—An acceptance test is an automated way of validating that all of the work defined by a story is completed. Each acceptance test should be written so that the outcome is pass or fail. Start having your testers write

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acceptance tests and make sure that they have enough time to write them. Run acceptance testing immediately after the build has finished.

- **Writing testable code**—After your team is practicing unit testing and acceptance testing, then start applying what you have learned towards writing testable code. The goal should be that all code is testable by using unit testing and acceptance testing. The result will be code that has fewer defects.
- **Doing test-informed development**—How do you say what you want to do before you do it (and in a way that you can test to see if you did it the way you wanted to do it when you are done)? Are you writing unit and acceptance tests that help inform how you will design a feature? Are you considering the behavior of the user in that design? Instead of designing your software before you test it, figure out what the tests should be, implement the tests, and then do the design. Don't spend your time in the debugger; let the automated testing environment verify and validate that you wrote the right code. Teams that have applied these approaches are often more productive and write code that has many fewer defects.
- **Making non-fragile UI tests**—Can you write acceptance tests for your application's GUI framework? If not, you are not writing code that can be tested automatically. Each operation that is available to users in your application should have an automated acceptance test.
- **Dealing with legacy code**—Legacy code is code for which unit or acceptance tests cannot be written, or code that must be refactored before it can have a good set of unit tests. Code that does not have unit testing is often just code that is poorly designed. The first step in dealing with legacy code is to refactor it so that unit tests can be written for it. Doing this will not only bring that code into your automated testing environment, but it will also improve the quality and design of the code itself. If you cannot refactor old code, then put it in some type of code quarantine so that it is isolated from any code against which unit testing is being run. This will help ensure that when a unit test fails, it is failing against a piece of code that can be actively fixed, maintained, or improved.

Automated testing exists for the primary purpose of helping to ensure that everything that your team is doing today does not break anything that your team did yesterday, the day before, and so on. Also, the tests that you write today will be the tests that you use going forward. And, the net result of having automated testing is the same as having incrementally developed regression testing.

## Team Goals

What kind of goals should you have in place to help your team accomplish the things it wants to? How do you measure what you are doing in relation to your goals? If your goal is to have zero defects, the following are some things you should do (or not do) to help track progress towards that goal:

- **Ideal**—The team learns to author defect-free code and fixes any defects that are found immediately.
- **Best**—The best-case scenario is for any defect that is found is for it to be fixed right away. What is the time from when a defect is first discovered to when that defect is fixed? Is it a week? A day? An hour? If you can fix a defect in an hour (or even less than an hour), then that defect isn't sitting in a backlog (and wasting the time of your team). Many defects that are found by automated tests can be quickly fixed, whereas defects that are found by customers are often more time consuming

(especially when you consider how much time it will take to get the fixed software to them).

- **Good**—Keep an eye on the leading indicators. There are a few things that can help you understand how well your team is doing towards its goal of zero defects, such as the number of automated tests, the scope of test coverage, and breaking the defects that are found into groups. In general, the more automated tests that you have, the less you have to worry about on a day-to-day basis. This assumes, of course, that the automated tests that your team is writing are useful and are testing the right things. When a well-written automated test fails, it should be easy to understand where in your code you need to look to address that failure. Keep the test coverage bar high, but keep it focused on what you need, or would need. Is there a test for every IF statement? Does your test coverage scale with your code as it changes and grows? When defects are tracked in groups, you can use the number of defects as an indicator to refactor a piece of code and to bring it up to current standards or when to replace that code with something that can provide more value to your customers. Also, when your testing effort is broken down into smaller areas, it will be easier to identify how to make a fix.
- **Poor**—Watch the trailing indicators, but do not spend too much time on them. There are some things that are easy to track, but do more to identify the symptom than the problem. For example, tracking defects found by individuals or tracking the number of defects by priority. These are things that show what you have done or what someone has done. They don't show what you are doing and are, at best, an interesting place to start when it comes to defect tracking and management.

## Testing Levels

There are four main areas of focus that are used during your team's testing effort:

1. **Task**—The task level is primarily focused at the individual who creates the code and the unit tests that are created to validate that code. Other ways to improve code quality at the task level include code reviews and pair programming.
2. **Story**—The story level is primarily focused at ensuring that the story solves the problem. This includes looking at each of the tasks that comprise the story, both individually and as a whole. For example, a tester writes the acceptance tests that verify and validate a specific piece of functionality; integration testing is then used to ensure that all of the individual pieces work together as intended.
3. **Sprint**—The sprint level is primarily focused at what the team has committed to deliver at the end of the sprint. Have all of the things been done that are supposed to be done? Are the team goals for defect tracking being met? Are the number of automated tests growing? Are you making sure that what you built today hasn't broken what you built yesterday? Are the results of the effort shippable?
4. **Release**—The release level is primarily focused at what multiple teams will commit to deliver at the end of a release. Have you done all of the integration testing for all of the features that all teams have built and delivered? Have you tested the scalability and performance of the application as a whole? Have you tested any data migration that needs to occur for this release?

Understanding how these fit together is useful, but remember that the biggest challenge to overcome towards the goal of having zero defects is the knowledge of your team and cultural issues within your teams.

---

## Impediments

An impediment is an issue, a problem, or anything that is preventing a team member from being able to complete work on a story and/or task. Impediments are often discussed during standup by team members.

It's often helpful to think of impediments in relation to business value. For example, your team only commits to a work item with the highest business value. Anything that is blocking the completion of a work item may prevent your team from delivering business value. It is the job of the ScrumMaster to help facilitate a resolution to the impediment. Some impediments are solved quickly and easily, while others may require the creation of new work item as part of the resolution.

## Stories

A well-written story is one of the most critical elements of Agile. A well-written story has the following traits:

- It has high business value
- It is specific and of a small size; sizing takes into account all work related to that story done by all team members
- It can be discussed by team members during planning meetings clearly, succinctly, and independently of other user stories
- Test cases can be easily defined and the story can be tested thoroughly (and fixed, if required) during the same sprint

So what about a story with those traits? What does it mean to have a high business value? What does it mean to be "of a small size?" How do you know if you can actually talk about a story during a planning meeting when it's time boxed at 5 minutes of discussion? Can every team/person test the same-sized user story in the same way?

The fact is that even when a group of stories have similar traits, no story is the same. In general, your team should only work on stories that have high business value, which means that your team should only work on the stories that are the most requested by your customers, the most needed to improve your application's front-end and back-end performance, the ones that make your application's user interface more usable, and the ones that can be delivered with high quality in a reasonable amount of time.

Your team should apply what you learned while working on stories in previous sprints—success and failure—to the stories your team is working on now. Some examples. If your team is spending too much time discussing stories in planning meetings, the stories need to be more specific and smaller. If your team cannot complete testing user stories thoroughly during the same sprint, the stories need to be more specific and smaller. If your training team's velocity cannot keep up with the engineering team's velocity, you should re-size your stories so that the training team's velocity is factored in better with the rest of the team's velocity, you could minimize the overall scope of training so that the amount of training produced is time-boxed by the length of the sprint, or you could track the training team's velocity separately from the team (or not track it at all).

## Tasks

A task is any work item that has a single objective and resolution.

Most well-defined Agile stories are simply a collection of tasks.

## User Actions

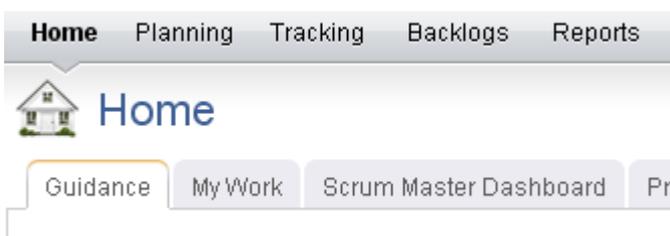
Serena Agile contains a collection of modules and views that are designed to help your team be Agile.

For more information, see the following topics:

- [Application Toolbar \[page 36\]](#)
- [Actions \[page 49\]](#)

### Application Toolbar

The application toolbar is the place around which most activities in Serena Agile are based. For example, the out-of-the-box configuration of Serena Agile contains the following modules (from left-to-right: **Home**, **Planning**, **Tracking**, **Backlogs**, **Reports**, and **Tools**).



The application toolbar contains the following options and settings (from right-to-left: **Settings**, **Change Password**, **Setup**, **Help**, and **Search**).



To access any module, change settings, find the Serena Agile community, search within your portfolio, and so on, just click the application toolbar for the appropriate activity. Modules are configurable as well, so your administrator may have added custom elements to your application toolbar.

For more information, see the following topics:

- [Change Password \[page 37\]](#)
- [Help \[page 37\]](#)
- [Log Out / Log In \[page 39\]](#)
- [Print \[page 39\]](#)
- [Rich Text Editor \[page 42\]](#)
- [Search \[page 42\]](#)
- [Settings \[page 45\]](#)
- [Setup \[page 47\]](#)

## Change Password

For each database to which you have been given access, your password is the same. Passwords are case-sensitive, and must be at least four characters long and must conform to the password policy settings for your organization. There are three password policy settings:

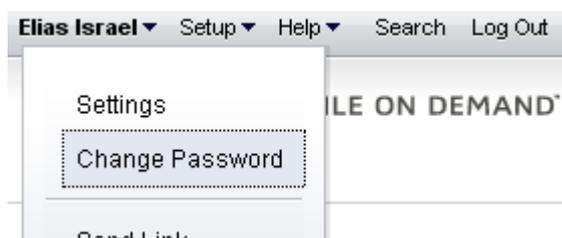
- **Strong**–The password must be between 8-16 characters and must contain at least one number (0-9), one lowercase letter (a-z), one uppercase letter (A-Z), and one non-alphanumeric character (such as #, \$, !, or %).
- **Medium**–The password must be between 8-16 characters and must contain at least one number (0-9), one lowercase letter (a-z), and one uppercase letter (A-Z). Default.
- **Weak**–The password must be between 4-16 characters.

### Changing Your Password

You can change your password at any time and as often as you want.

#### To change your password

1. From the application toolbar, select your name, and then choose **Change Password**.



2. In the **Change Password** dialog box, enter your current password, and then your new password (twice).

 A screenshot of the 'Change Password' dialog box. It contains three text input fields, each with a masked password of seven dots. The fields are labeled: 'Old Password', 'New Password', and 'Confirm New Password'.

3. Click **OK**.

## Help

Click **Help** to access the following additional resources: **Environment Info**, **Help**, **Product Blog**, **Support Forum**, **Tutorials**, and **What's New**. For more information about any of these additional resources, click one of the following tabs.

### Environment Info

The **Environment Info** dialog box provides information about the connection type, database version, most recent update, and other information that may be helpful if you ever need to talk with Serena Support.

Current User  
 Connection Name **QABVT01\_AOD\_SpudDB\_20091007\_02**  
 Database Version **2009.04.00.0002**  
 Last Database Update **Mariner\_2009\_04\_Migration.sql**  
 Last Updated On **10/7/2009**

## Help

The **Help** will open the documentation for the product. Most help links are context-sensitive; the topic that is opened usually depends on the location from which you clicked help.

- nts
- Agile on Demand
- Release Notes
- Guidance
  - Setup Projects and Users
  - Build a Backlog
  - Plan Sprints
  - Track Sprints
  - Allocate Work to Teams
  - Plan Releases
- Application Toolbar
- File
- Reports
- Resources
- Workspace
- Manage Users
- System Settings
- Configuration
- Reference

[Agile on Demand](#) → [Guidance](#) → Setup Projects and Users

## Setup Projects and Users

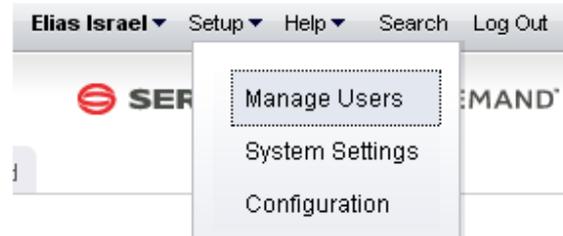
Before you can begin using Serena Agile On Demand, you must create team members. Once created, any individual team member can be assigned to stories, tasks, and other work items. Team members can be created from the application toolbar.

**Add project**   **Add user**

After you have finished using the **New Project Wizard**, the next step is to add your team members into the system. Once created, any individual team member can be assigned to stories, tasks, and other work items. Team members can be created from the application toolbar.

### To add a user

1. From the application toolbar, click **Setup**, and then click **Manage Users**.



2. Click **Add** .
3. Under **User Properties**, enter the first name, last name, and email address.

**User Properties**

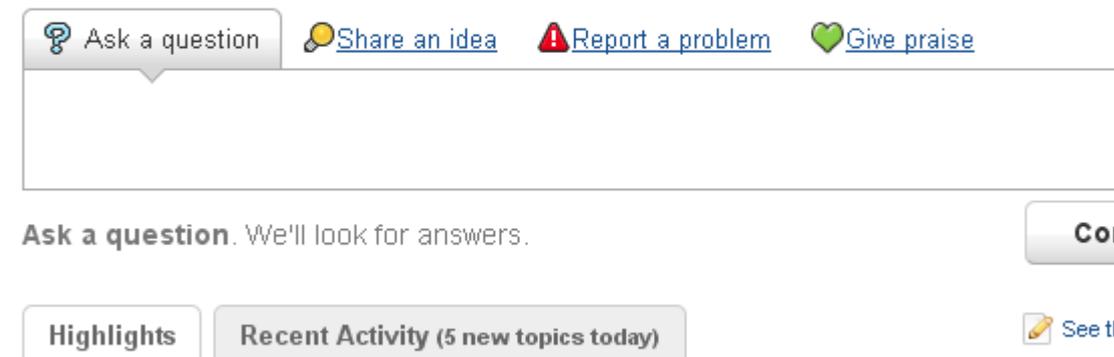
When you are viewing Help, you can navigate the full contents of the help using the left-side TOC. Click a topic that has an arrow next to it to view subtopics. You can use the breadcrumbs found across the top of many of the topics to navigate back up the hierarchy. Most topics that have child topics will have a mini TOC within the topic. Many topics also contain tabs, generally for task-based topics, but not always. Additional help can be found at the top in the tabs. There is also a simple search feature. Though it's not as powerful as Google, it should help you find the topics in the help collection that contain the words from your query. To return to the full help TOC (after viewing a topic you have searched for), simply click the Help tab at the top.

## Support Forum

The Serena support forum is a place where you can see highlights and questions that have been asked by other customers, including answers to issues other customers may have run into while using the product. There are two ways to find the support forum: from the application toolbar, click **Help** and then **Support** or click **Feedback**. They are different access points into the same support system.

 SERENA AGILE ON DEMAND

Community > / Overview



 FREQUENTLY ASKED QUESTIONS

## Log Out / Log In

Before you can access modules, views, and other features, you must first log on with your username and password. When you are finished, you should log out.

### Logging out

When you are finished working, you should log out.

#### To log off

1. From the application toolbar, click **Log Out**.

### Logging in

Before you can access modules, views, and other features, you must first log in with your user name and password.

#### To log on

1. Type your user name and pasword. Click **Log In**
2. Select your database. Click **Continue**.

## Print

When you click the **Print** button on the application toolbar in the **Charts**, **Summary**, and **Timegrid** tabs in the **Reports** module, or in the **Financials** tab in the **Projects** module, the **Print** dialog box opens. When you print a datasheet, chart, or financials data using the **Print** dialog box, it is printed to a portable document format (PDF) file. The **Print**

page contains two tabs, the **General** tab and the **Options** tab. The **General** tab is used to define the general and margin settings, including the font, paper size and orientation, and page numbering used for the PDF file. After filling out the **General** and **Options** tabs, click the **Print** button on the **Print** dialog box to print the datasheet or chart to the PDF file.

To print to a PDF file and view the PDF file, Adobe Acrobat Reader 6.02 or later must be installed on the machine from which you are printing.

- **Font**–Select the font and font size to use from the **Font** lists.
- **Paper Size**–Select the size of the paper you want to use.
- **Orientation**–Select *Portrait* to print using the portrait orientation. Select *Landscape* to print using the landscape orientation.
- **Include page numbers**–Select this option to include page numbers on each page.
- **Save Settings**–Select this option to save your general and margin settings on the **General** tab. When **Save Settings** is selected, the settings on the **General** tab will be the default settings each time you open the **Print** dialog box. Selecting **Save Settings** does not save your settings on the **Options** tab.
- **Left**–Type the left page margin you want to use for the pages of the PDF file in inches.
- **Right**–Type the right page margin you want to use for the pages of the PDF file in inches.
- **Top**–Type the top page margin you want to use for the pages of the PDF file in inches.
- **Bottom**–Type the bottom page margin you want to use for the pages of the PDF file in inches.

The view you are currently in determines the boxes available on the **Options** tab. In the **Charts** tab, the **Options** tab is used to determine whether all of the selected datasheet's charts are printed or just the currently selected chart. In the **Summary** and **Timegrid** tabs, the **Options** tab is used to determine whether charts defined for the selected datasheet's dashboard are printed to the PDF file, whether text wraps when the datasheet is printed, and the column settings for the PDF file. In the **Financials** tab, the **Options** tab is used to determine whether the PDF includes the *Self*, *Roll-up*, and *External* values, entries from the **View** pane, and/or the Breakeven chart for the work item. The **Options** tab is also used to define the maximum number of columns allowed on a page.

After filling out the **General** and **Options** tabs, click the **Print** button on the **Print** dialog box to the PDF file.

When you print a chart to a PDF file, only the default attributes defined for the chart on the **Attributes** tab and the default datasheet snapshot defined on the **Chart Settings** tab on the **Chart Properties** dialog box are used for printing the chart. Default attributes are the first attribute listed in each parameter box on the **Attributes** tab. The default datasheet snapshot is the snapshot selected in the chart using this data list on the **Chart Settings** tab.

To print datasheets or charts to a PDF file and view the PDF file, Adobe Acrobat Reader 6.02 or later must be installed on the machine from which you are printing.

- **All Charts**–Select this option to print all of the selected datasheet's charts.

- **Selected Chart**–Select this option to only print the chart currently selected in the **Charts** tab.

For the **Options** tab in the **Reports** module, **Summary** tab:

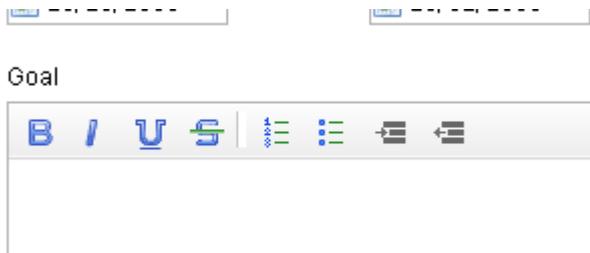
- **Include Dashboard Charts**–Select this check box to print the charts defined for the selected datasheet's dashboard. When you print a chart to a PDF file, only the default attributes defined for the chart on the **Attributes** tab and the default datasheet snapshot defined on the **Chart Settings** tab on the **Chart Properties** dialog box are used for printing the chart. Default attributes are the first attribute listed in each parameter box on the **Attributes** tab. The default datasheet snapshot is the snapshot selected in the chart using this data list on the **Chart Settings** tab.
- **Include Summary**–Select this check box to print the datasheet's summary information with the datasheet. The **Include Summary** check box is selected by default. Clear the check box to exclude the datasheet's summary information from the datasheet.
- **Maximum Columns Per Page Type**–The maximum numbers of summary columns to print on a page for the selected datasheet.
- **Percentages**–The **Percentages** box displays the current column width percentages for each column of the summary section on the selected datasheet.
- **Allow Cells to Wrap**–Select the **Allow Cells to Wrap** check box to have the text in the datasheet's cells wrap when you print the datasheet. Clear the check box to turn off the text wrapping.
- **Include Timegrid**–Select the **Include Timegrid** check box to print the datasheet's timegrid data with the datasheet. The **Include Timegrid** check box is selected by default when there is timegrid data on the selected datasheet. Clear the check box to exclude the datasheet's timegrid information from the datasheet. (This check box is only available in the **Timegrid** tab.)
- **Maximum Columns Per Page Type**–The maximum numbers of timegrid columns to print on a page in the **Maximum Columns Per Page Type** box for the selected datasheet. (This box is only available in the **Timegrid** tab.)
- **Percentages**–The **Percentages** box displays the current column width percentages for each column of the timegrid section on the selected datasheet. The percentages for each column of the timegrid section on the selected datasheet. The columns are listed from left to right. (This box is only available in the **Timegrid** tab.)

For the **Options** tab in the **Financials** tab:

- **Include Details**–Select the **Include Details** option to include all *Self*, *Roll-up*, and *External* values, as well as any work item from the **View** pane for each tab in the **Financials** tab in the PDF.
- **Include Breakeven Chart**–Select this option to include the breakeven chart for the work item in the PDF.
- **Maximum Columns Per Page Type**–The maximum numbers of columns to print on a page.

## Rich Text Editor

The rich text editor is enabled for description fields. It allows simple formatting of contents within these description fields, such as bold, italics, underlines, or strikethroughs. You can add ordered or unordered lists. You can indent and outdent text.



## Search

The **Search** dialog is used to search for a work item, log entry, resources, documents, and work item types. You can access the **Search** dialog from every view. The **Search** dialog consists of a standard search view and an advanced search view for refining your search. To open the advanced search view, click **Advanced**. To hide the advanced search view, click **Hide Advanced**.

### *Searching for attributes, any log type, any work item, and resources*

The search feature allows you to find any searchable attribute found in a work item, log types (such as issues, risks, or documents), or resources. In the default mode, you can specify the type of match you want (any or all words), a particular attribute to search in, and the object type. When searching against **All Investments**, a log item, any work item, and resources will not be included in the search results.

### **To search for attributes, log types, work items, and resources**

1. In the application toolbar, click **Search**.
2. Enter the details for the search query you wish to make. Click **Advanced**

Search for	<input type="text" value="DEF287262"/>	<input type="button" value="Search"/>
In attribute	<input type="text" value="Description"/>	<input type="button" value="Advanced"/>
Match	<input checked="" type="radio"/> any word <input type="radio"/> all words	
Display	<input type="text" value="Defect"/>	

Name	Description
------	-------------

3. Click **Advanced** to add rules, rule details, search within documents stored in Serena Agile, or search across all project types.

The screenshot shows a search configuration interface with four main sections:

- Rules:** A large empty rectangular area with a vertical scrollbar on the right side.
- Rule Detail:** Contains configuration options:
  - Logic:  And  Or
  - Attribute: A dropdown menu currently showing "Description".
  - Comparison: A dropdown menu currently showing "is equal to".
  - Compare To:  the specific value  another attribute. Below this is an empty text input field.
- Documents:** A section with the text "Search In" followed by three checked checkboxes:  Keywords,  Title, and  Description.
- Extended Options:** Contains two radio button options:  All Project Types and  Selected item and descendants.

4. Click **Search**.

### **Search Criteria**

When you are searching for documents, document file names are always searched, and can search document keywords, title, and/or description. Text within a document is not searched. When you are searching datasheets, the work item hierarchy for all portfolios is searched or the selected portfolios and its descendants in the **Reports** tab, it does not search a datasheet's resulting data.

- **Search for**—Type the text you want to search for in this box. You can enter a any alpha-numeric value. To search for a specific string, enclose the text in quotation marks.
- **In Attribute**—This drop-down list enables you to select a specific attribute to search. This can help refine your search and reduce false-positive returns. For example, if you want to find a work item and know that the work item name contains the term "router", you can search only for instances of the word "router" in the *Name* attribute. Your administrator determines which attributes are searchable. All searchable attributes are included in this drop down list.
- **Match: any word**—Select this option to have the search results include any of the text you typed.

- **Match: all words**–Select this option to have the search results include all of the text you typed. To search for a specific phrase, type quotation marks at the beginning and end of the phrase in the **Search for** box.
- **Display**–To further refine your search, use this option to specify the object type against which your search executes. You can choose to search only work item types or a particular work item type, all logs or a particular log type, or only for a work item, resources, or documents. For example, if you are searching for the term "router" in the *Name* attribute, and you know that the work item for which you are searching is a project, specify *Project* in the display drop down.
- **Search**–Click the **Search** button to start the search.
- **Advanced**–When you click the **Advanced** link on the **Search** page, the following features are available for refining your search. You can hide the advanced search features by clicking the **Hide Advanced** link on the **Search** page.

### **Advanced Search Criteria**

The **Advanced Investment Criteria** section is used to search for specific work item data.

- **Rules**–Lists all of the current rules set up for the work item search criteria.
- **Up**–Moves the selected rule up in the **Rules** list.
- **Down**–Moves the selected rule down in the **Rules** list.
- **Delete** Removes the selected rule from the **Rules** list.
- **And**–Select this option to indicate that the work item you are searching for must meet the conditions of the selected rule and all other rules that do not begin with **Or**.
- **Or**–Select this option to indicate that the work item you are searching for must meet the conditions of the selected rule, or all the rules that do not begin with **Or**, or another rule that begins with **Or**.
- **Attribute**–Select the attribute you want to create a search rule for from this list. Only the attributes that have been marked as searchable in the **System Settings** module are displayed in the **Attribute** list.
- **Comparison**–Select the test you want to apply to the attribute selected in the **Attribute** list.
- **Comments To**–Select what the search criteria should compare the attribute to: This specific value. Select the this specific value option and type a value in the box below the options to only search for a work item with the **Comparison** relationship to the value you specified for the selected attribute. If you are searching for a percentage value, type the percentage decimal value in the **Comments To** box. For example, you would type .20 in the **Comments To** box for 20 percent. Select the another attribute option and select an attribute from the list below the options to only search for a work item with the **Comparison** relationship between the two selected attributes.
- **Update**–Click this button to update the selected search rule.
- **Add**–Click this button to add the rule to the search.

- **Documents**–This section is used to determine whether to use document keywords, title, and/or description when searching for documents. Document file names are always searched.
- **Keywords**–Select this check box to search document keywords when searching for documents.
- **Title**–Select this check box to search document keywords when searching for documents.
- **Description**–Select this check box to search document descriptions when searching for documents.
- **Extended Options**–This section is used to determine whether any work item is searched or only the work item and its descendants currently selected in the **Items** pane.
- **All Investments**–Select this option to search any work item.
- **Selected investments and descendants**–Select this option to only search the work item currently selected in the **Portfolios** pane and any descendants.

## Settings

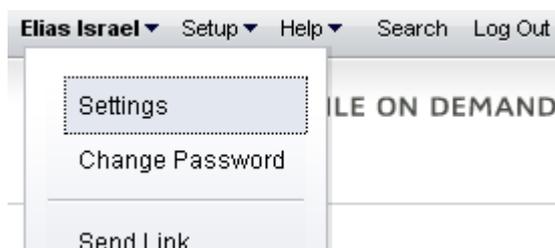
Use the **Settings** dialog box allows you to configure the tabs you want available from your homepage, whether you want to receive email notifications, and the sorting order for a work item.

### Configuring your homepage

Your homepage is available from the application toolbar. You can choose which tabs you want to have on your homepage. In addition to the out-of-the-box homepages, such as **My Work** or a role-based dashboard, your administrator may have configured additional homepages.

### To configure your homepage

1. From the application toolbar, select your name, and then choose **Settings**.



2. In the **Settings** dialog box, choose the tabs that you want to make available from your homepage. Move the homepages that you want to use to the right. The tabs will appear in your homepage from left-to-right based on the order (top-to-bottom) they appear in the **Settings** dialog box.

**Homepage**

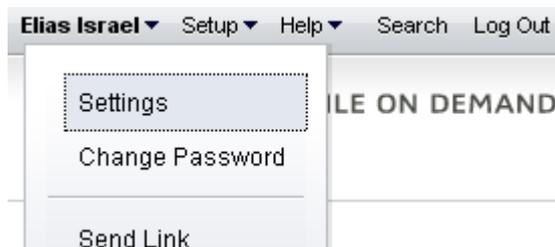
3. Click **OK**.

**Configuring notification settings**

You can choose to receive email notifications for any notification you have configured from the **Define Notifications** tab from the **Tools** module.

**To configure notification settings**

1. From the application toolbar, select your name, and then choose **Settings**.



2. In the **Settings** dialog box, indicate whether you want to receive email notifications, and then select the email locale you wish to use.

**Notification Settings**

Receive Notifications as Email

Email Locale

English - United States

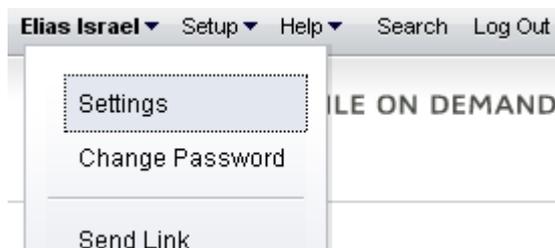
3. Click **OK**.

**Configuring your work item sorting order preference**

You can pick any work item attribute to use as the primary sorting preference for a work item, such as **Name**, **Estimated Hours**, or **Start Date**. This sort order preference is available from any backlog when that backlog is viewed using the **Tree** option.

**To configure your work item sorting order preference**

1. From the application toolbar, select your name, and then choose **Settings**.



2. In the **Settings** dialog box, select the work item attribute you wish to sort a work item by, and then choose **Ascending** or **Descending**.

#### Item Tree Sort Order

Sort By

Name

- Ascending  
 Descending

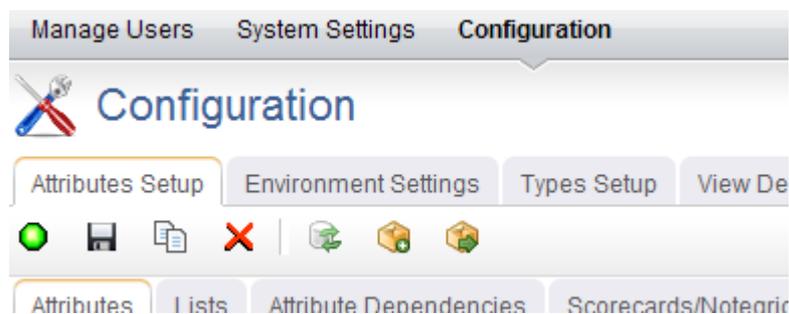
3. Click **OK**.

## Setup

Click **Setup** to manage users, configure the application, and change settings.

### Configuration

After you have created users, added licenses, defined security roles (and assigned users to them), you are ready to configure the application. The **Customization** module is used to manage the work item types, attributes, and views that your organization wants to use.



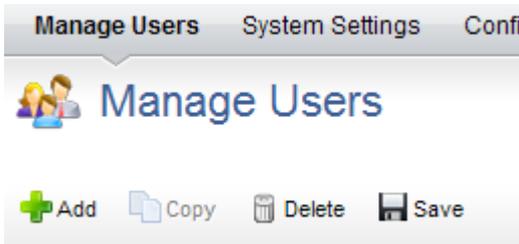
The **Configuration** module helps you configure the following:

- **Attributes Setup**—You can use the **Attributes Setup** tab to create and manage work item type attributes.
- **Environment Settings**—You can use the **Environment Settings** tab to manage system settings, such as documents management, workflow, and reporting server settings or to configure system notifications.
- **Module Designer**—A module (sometimes called a homepage) can be used to provide a daily starting point for members of your organization, including individual contributors, project and resource managers, portfolio analysts, and so on. You can use the **Module Designer** tab to create and modify homepage layouts and to help provide a centralized view into the information that users in your organization need.

- **Types Setup**—A work item is what users in your organization use to create, plan, manage, and analyze your projects. They can be assets, programs, projects, or portfolios. They can be the stages in a lifecycle, such as a request, an approval, or a rejection. They can be the phases in an Agile lifecycle, such as projects, releases, and sprints. They can have dependencies on another work item.
- **User Synchronization**—You can use the **User Synchronization** tab to manage the XML configuration file that contains the field mappings between attributes and a directory service, such as Active Directory or Novell eDirectory. When you create a provider, you have the option of managing some aspects of that provider in the **User Synchronization** tab.
- **View Designer**—You can use the **View Designer** tab to modify the layout of financials views and to create custom summary views for use in the **Projects** module. Custom summary views are also used to layout item request pages.
- **View Management**—You can use the **View Management** tab to manage work item types, log views, and the order in which views appear in modules.

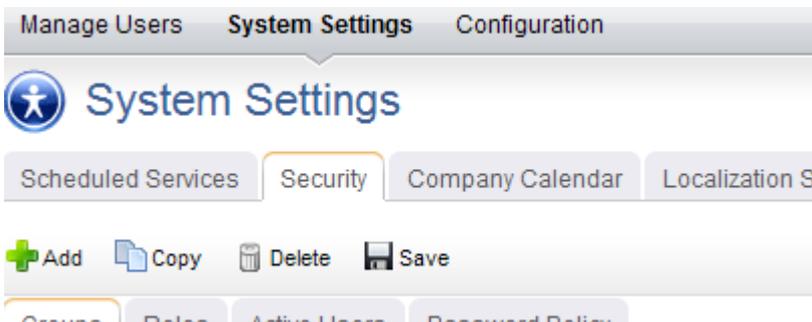
### Manage Users

The **Manage Users** module helps you manage the users of your application. You can add, edit, and delete users, you can change the roles to which users belong, and you can reset passwords.



### System Settings

The **System Settings** module is used to set up and configure financial settings, scheduled services, calendar settings, localization settings, system notifications, licenses, and security configuration for your organization.



The **System Settings** module helps you configure the following:

- **Company Calendar**—You can use the **Company Calendar** tab to customize the calendar being used by your organization. You can define your organization's working and non-working days, you can define the days in your organization's working week, and you can define the number of hours in a day that makes up a full working day. These settings are used to determine resource capacity and scheduling

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for resources that are used in task plans or for the number of days that can appear in a sprint burndown chart. Individual resources have their own calendars and they may override company calendar settings in their local calendar (if they are given permission to do so).

- **Localization Settings**—You can use the **Localization Settings** tab to modify the strings that appear in the application's user interface. This can help your organization address any localized language requirements that you may have. If you add new elements, such as views, attributes, forms, or charts, you will be able to localize the strings associated with the new elements.
- **Scheduled Services**—You can use the **Scheduled Services** tab to create and maintain scheduled jobs and plug-ins. Jobs that are in the queue are run sequentially, with the next job in the queue starting after the current one is finished. In general, most jobs should be scheduled to run at off-peak times.
- **Security**—You can use the **Security** tab to manage the users and groups of users who will be working, and to define the security roles that allow them to access the **Projects, Reports, Resources, Tools, System Settings, and Customization** modules.
- **System Notifications**—You can use the **System Notifications** tab to manage the notifications that will be available to all of the users in your organization. System notifications are available for many events associated with the lifecycle of a work item, such as adding resource allocations or assigning risks. The full list of system notifications is available in the **System Notifications** tab.

## Actions

Working in an Agile project requires working in backlogs, updating a work item, managing collections of projects, resources, sprints, and teams, and so on.

For more information, see the following topics:

- [Backlogs \[page 49\]](#)
- [Projects \[page 57\]](#)
- [Widgets \[page 60\]](#)
- [Templates \[page 66\]](#)
- [Work Items \[page 67\]](#)
- [Work Types \[page 75\]](#)

## Backlogs

A backlog is a queue that contains all of the potential work item that could be built, including actual work, proposed features, good ideas, or discovered defects. The work item in a backlog should cover the entire product's lifecycle, from the current release (and the current sprint) to future releases (and future sprints). Any work item in a backlog can be viewed as an ordered list (sorted by rank), in a table, or by in a tree (grouped as a parent or child work item, as defined by your organization's work breakdown structure).

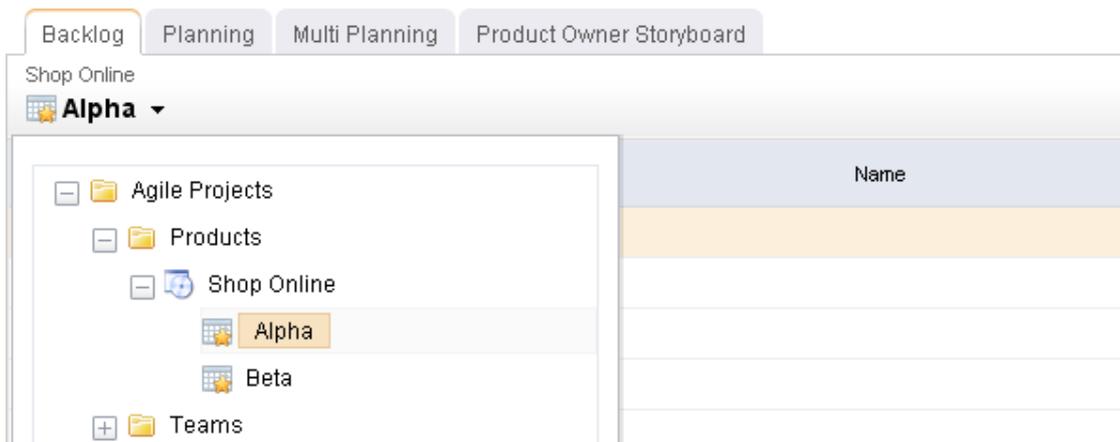
A backlogs is the places in which a work item is managed, be it an epic, a story, a defect, a task, or a custom work item.

### Editing a work item directly in a backlog

You can edit a work item directly in a backlog. Click  Edit, make your changes, and then click  Save.

#### To edit work a work item directly in a backlog

1. Choose a backlog.



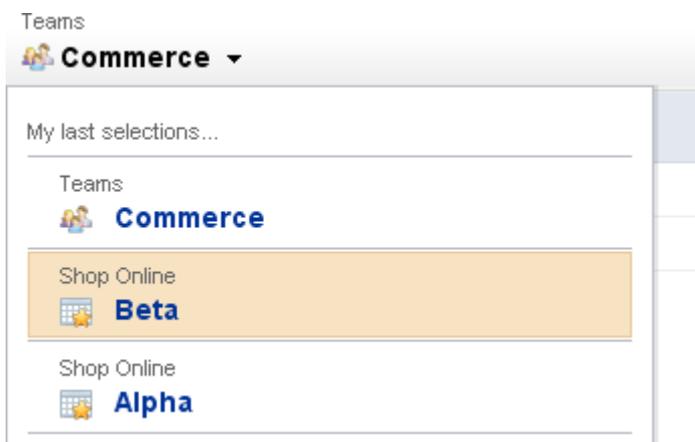
2. From the backlog toolbar, select  Edit.
3. Make your changes.
4. Click  Save. (To exit without saving changes, click  Edit.)

### Hiding a work item

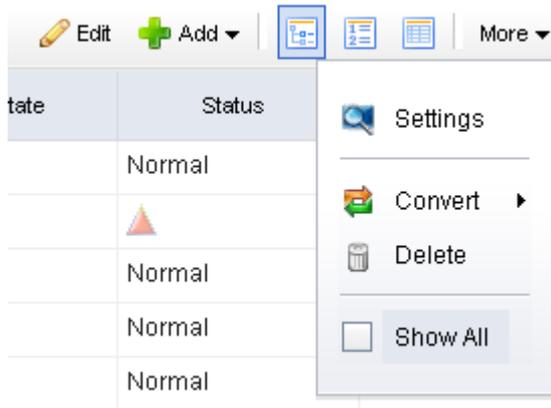
You can hide any work item that is not included in the backlog in which you are currently working.

#### To hide a work item

1. Choose a backlog.



2. From the backlog toolbar, select **More**.



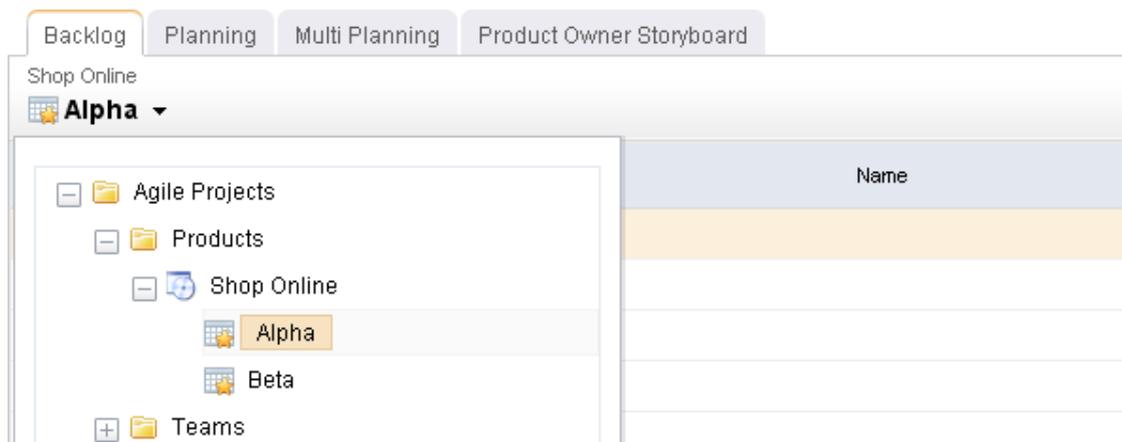
3. De-select **Show All**.

### **Prioritizing a work item**

You can prioritize a work item (sometimes called ranking a work item) in a backlog. Viewing a backlog in list view mode will ensure that you can view a work item by relative priority (where a higher rank equals a higher priority). (By default, Serena Agile shows backlogs in the Tree view mode, which does not rank stories.)

### **To prioritize stories in a backlog**

1. Choose a backlog.



2. Click List.
3. Choose the story you want to re-rank, select it (by holding down the mouse button), and then drag it to its new relative priority.

1	Commission tracking for Partners and Affiliates	
2	+	Cross selling 40
3		Defects 0
4	-	Partner & Affiliate tools 23
		Affiliate manages their account information 5
		Sign up for an Affiliate account 5
		User can register multiple Affiliate site URLs in their company profile 5

- When a work item is in the location you want it to be, de-select it (by releasing the mouse button). The backlog will refresh and the work item will have been re-ranked according to its new relative priority.

		Estimate
1	Commission tracking for Partners and Affiliates	
2	+ Cross selling	40
3	- Partner & Affiliate tools	23
	Affiliate manages their account information	5
	Sign up for an Affiliate account	5
	User can register multiple Affiliate site URLs in their company profile	5
	View Affiliate commission balance	8
4	Defects	0
5	- Integrated inventory management	0

### Selecting a different backlog

You can move between backlogs by selecting a new backlog while working in any backlog.

#### To select a different backlog

- Choose a backlog.

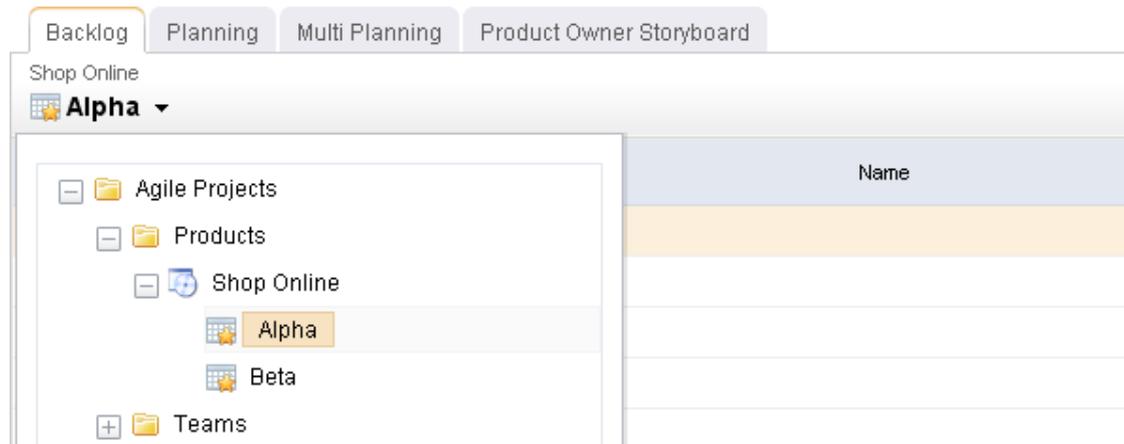


### Showing every work item

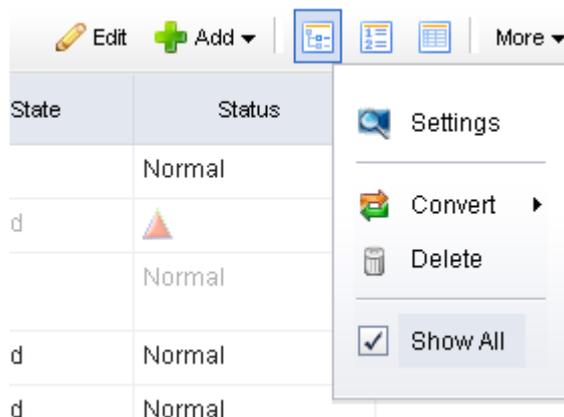
You can show every work item in the work hierarchy, including parents and children of any work item that is not being worked on in the sprint or release in which you are currently working.

## To show every work item

1. Choose a backlog.



2. From the backlog toolbar, select **More**.
3. Select **Show All**.

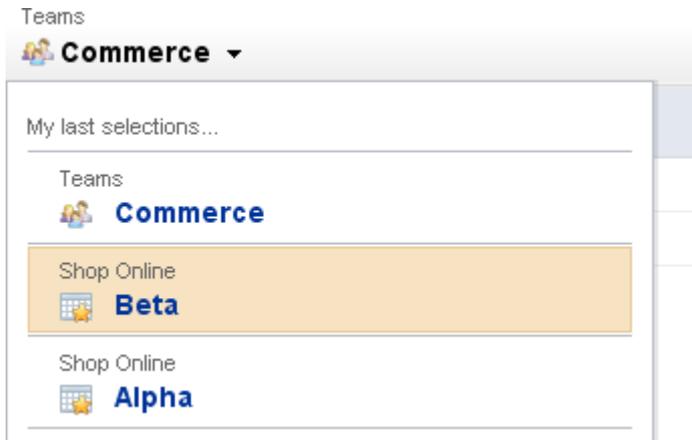


### Viewing a backlog

You can view every work item in a backlog. There are three layout options: **Table**, **List**, and **Tree**. The **Table** and **Tree** options use your organization's work breakdown structure to display the order of every work item. The **List** option displays a work item by priority.

### To view a backlog

1. Choose a backlog.



- From the backlog toolbar, select **More**, and then  Table,  List, or  Tree.

## Settings

Depending on the backlog in which you are working, the **Settings** dialog box may have one or more of the following sections.

### Columns

This tab is used to define which columns appear on the datasheet, and in what order they are displayed. If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit any of the datasheet properties on the Columns, Filters, Organize, Time Views, or Dashboard tabs:

Fields	Description
<b>Add</b>	Click this button to move the selected attributes from the <b>Available Attributes</b> box to the <b>Selected Attributes</b> box.
<b>Available Attributes</b>	The attributes that have been assigned to the work item types listed on the <b>General</b> tab.
<b>Custom Header</b>	The custom display name for the attribute, as it will appear in the datasheet. If this field is empty, the <b>Default Header</b> will be used.
<b>Datasheet Name</b>	The name of the datasheet.
<b>Default Header</b>	The default display name for the attribute, as it will appear in the datasheet.
<b>Move Down</b>	Columns are displayed from left to right in a datasheet. Click this button to move the column for this attribute to the right in the datasheet.
<b>Move Up</b>	Columns are displayed from left to right in a datasheet. Click this button to move the column for this attribute to the left in the datasheet.

Fields	Description
<b>Remove</b>	Click this button to move the selected attributes from the <b>Selected Attributes</b> box to the <b>Available Attributes</b> box.
<b>Selected Attributes</b>	The attributes that are displayed as columns in the datasheet. <b>Columns</b> are displayed from left to right in the order listed here.

## Filters

This tab is used to define which columns appear on the datasheet, and in what order they are displayed. If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit any of the datasheet properties on the Columns, Filters, Organize, Time Views, or Dashboard tabs:

Fields	Description
<b>Add</b>	Click this button to move the selected attributes from the <b>Available Attributes</b> box to the <b>Selected Attributes</b> box.
<b>And</b>	Select this option to indicate that the work item on the datasheet must meet the conditions of the selected filter rule and all other filter rules that do not begin with <b>Or</b> . For example, if multiple rules use the <b>And</b> option, and one rule uses the <b>Or</b> option, the rules containing the <b>And</b> option are grouped together, and the rule containing the <b>Or</b> option is considered separately. The work item on the datasheet must either meet all of the <b>And</b> conditions, or at least the <b>Or</b> condition.
<b>Attribute</b>	Select the datasheet column that you are building a filter rule around from this list.
<b>Compare To</b>	Select what the filter rule should compare the attribute to. Select the this specific value option and type a value in the box below the options to filter the datasheet so that only work item with the <b>Comparison</b> relationship with the value you specified for the selected attribute are displayed. Select the another attribute option and select an attribute from the list below the options to filter the datasheet so that only work item with the <b>Comparison</b> relationship between the two selected attributes are displayed.
<b>Comparison</b>	Select the test you want to apply to the column selected in the <b>Attribute</b> list.
<b>Datasheet Name</b>	The name of the datasheet.
<b>Delete</b>	Removes the selected rule from the <b>Filter Rules</b> box.
<b>Down</b>	Moves the selected rule down in the list.
<b>Filter Rules</b>	Lists all of the current rules set up to filter the datasheet.

Fields	Description
<b>Or</b>	Select this option to indicate that the work item on the datasheet must meet the conditions of the selected filter rule, or all the filter rules that do not begin with <b>Or</b> , or another filter rule that begins with <b>Or</b> .
<b>Up</b>	Moves the selected rule up in the list.
<b>Update</b>	Click this button to update the selected filter rule.

## General

This tab is used to identify the basic information about a datasheet. If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit the work item types included on the datasheet type on the **General** tab. You cannot edit any of the datasheet properties on the **Columns**, **Filters**, **Organize**, **Time Views**, or **Dashboard** tabs:

Fields	Description
<b>Associate With</b>	You can associate the datasheet with a specific location in the work item hierarchy. This enables you to define the root work item for the datasheet; the work item you select is the top-level work item in the datasheet. By default, datasheets are associated with the enterprise portfolio.
<b>Created By</b>	Displays the user name of the person who initially created the datasheet, and the date and time it was created. This box is read-only.
<b>Default Expansion Level</b>	Select the default expansion level for the datasheet from the <b>Default Expansion Level</b> list. The <b>Default Expansion Level</b> list determines how many levels of the datasheet are opened on the datasheet by default.
<b>Description</b>	Type a brief description of what the datasheet can be used for, or what data it includes.
<b>Last Modified By</b>	Displays the user name of the person who made the most recent changes to the datasheet, and the date and time they modified it. This box is read-only.
<b>Location</b>	Displays the location of the datasheet within your organization's portfolios.

Fields	Description
<b>Private</b>	Select this check box if you want the datasheet to only be available to you. Clear the check box if you want the datasheet to be available to all users that have access to datasheets for the portfolio. When the <b>Private</b> check box is selected, only the user that created the datasheet can view and modify the datasheet, unless you are sharing the datasheet.
<b>Share</b>	This button is only available if the <b>Private</b> check box is selected on a datasheet that you created. If you selected the <b>Private</b> check box, but would like to share the datasheet with specific users and/or security groups, you can share the datasheet. When you share a datasheet, the users and/or members of the security groups you assigned to the datasheet can also view and modify the datasheet. Click the <b>Share</b> button on the <b>General</b> tab on the <b>New Datasheet</b> , <b>Datasheet Properties</b> , or <b>Datasheet Type Properties</b> page to assign users and/or security groups to the datasheet on the <b>Datasheet Shared Access</b> page.
<b>Show All Roles</b>	Select this check box check box to display excluded rows on the datasheet. A row is excluded on a datasheet when the check box to the left of the row is cleared. Excluded rows are displayed in gray on the datasheet. If the <b>Show All Roles</b> check box is cleared, the excluded rows are not displayed on the datasheet.
<b>Show Unallocated</b>	Select the <b>Show Unallocated</b> check box to display the differences between a parent work item and its child work item for roll-up attributes in non-roll-up dimensions, such as the target dimension.
<b>Work Items</b>	Select the <b>Include All Types</b> option to include all work item types on the datasheet. Select the <b>Include Only These Types</b> option and select the work item types you want to include on the datasheet. To select more than one work item type from the list, press CTRL while selecting each work item type.

## Projects

You can create new collections of projects, release, sprints, and teams by using the **New Projects Wizard**.

### *New Projects Wizard*

The **New Projects Wizard** can be used to create new (and manage existing) collections of projects, resources, sprints, and teams.

**New Project Wizard**

**Product**

The Product contains the Product Backlog of work items.

Name  
Shop Online

---

**Release**

The Release contains the Release Backlog and is a time interval bounded by dates.

Starting Date  
10/26/2009

Ending Date  
3/29/2010

---

**Sprints**

Each Sprint contains a Sprint Backlog and is a time interval of the length specified here. Enough Sprints to fill the Release interval will be created for each Team.

Interval Length  
2 weeks

---

**Teams**

Each Team contains a Team Backlog and Sprints will be created within them.

New Team Name

### ***Adding a project using the New Projects Wizard***

A simple way to begin using Serena Agile is to create the products, releases, teams and sprints that will comprise your Agile portfolio. Each work item serves as an independent backlog to which any work item can added, moved, and tracked. The **New Project Wizard** is the fastest and easiest way to set up a product, release, team, and sprint structure.

#### **To create a project using the New Projects Wizard**

1. Open the **Backlogs** module.
2. Click **More**, and then select **New Projects** to open the **New Projects Wizard**.
3. Enter the name of the project that you wish to add. Or select the name of an existing product.

**Product**

The Product contains the Product Backlog of work items.

Name

Shop Online

4. Enter the name of the release that you wish to add. Or select the name of an existing release. Define the length of the release.

**Release**

The Release contains the Release Backlog and is a time interval bounded by dates.

Starting Date

10/26/2009

Ending Date

3/29/2010

**Sprints**

5. Select the interval length for each sprint. The number of sprints created depends on the overall length of the release and the number of sprints each release will contain. For example, if you specify that each release is 9 weeks, and then you select a 3 week interval for each sprint, each release will then contain 3 sprints.

Each Sprint contains a Sprint Backlog and is a time interval of the length specified. Sprints to fill the Release interval will be created for each Team.

Interval Length

2 weeks

1 week

2 weeks

3 weeks

Team Backlog and Sprints will be created within them.

6. Enter the name of a new team or select the an existing team, and then click **Add**.

Each Team contains a Team Backlog and Sprints will be created within them.

New Team Name

Front End

Add

Selected Teams

Infrastructure

Help

7. After you have selected your products and teams and defined the length of a release and the number of sprint intervals each will contain, click **Next**.
8. Verify that the projects, resources, sprints, and teams are what you wish to create, and then click **Finish**.
9. Verify in the backlogs tree that you have created the correct projects, resources, sprints, and teams.

## Widgets

Serena Agile ships with an out-of-the-box configuration that is based on the Scrum methodology. The individual components of the configuration are based on widgets, such as a work item list, document stores, a burndown chart, storyboards, and so on. If your organization uses Agile differently, or would prefer to customize your Serena Agile configuration, you can add (or remove) individual widgets, entire tabs, and modules. No matter what configuration and methodology your organization uses, how your organization uses Serena Agile stays the same, with the basic core elements giving you consistent functionality wherever you decide to use them.

Sometimes widgets will appear together on as a homepage, which may contain information that is targeted at specific user roles such as scrum master or team member. A user homepage is often customized to meet the specific needs of your organization, project management style, and individual team structures. Depending on your homepage, the following widgets may be available.

For more information, see the following topics:

- [Audit History \[page 60\]](#)
- [Burndown Chart \[page 60\]](#)
- [Card Wall \[page 61\]](#)
- [Document Store \[page 62\]](#)
- [Image \[page 62\]](#)
- [Item Dependency \[page 62\]](#)
- [Link Label \[page 62\]](#)
- [List \[page 63\]](#)
- [My Work \[page 63\]](#)
- [Single Object Chart \[page 64\]](#)
- [Summary View \[page 64\]](#)
- [URL Container \[page 64\]](#)
- [Widget Wireup \[page 64\]](#)

### **Audit History**

An **Audit History** is used to add the ability to view the history of changes made to specific investments and work types.

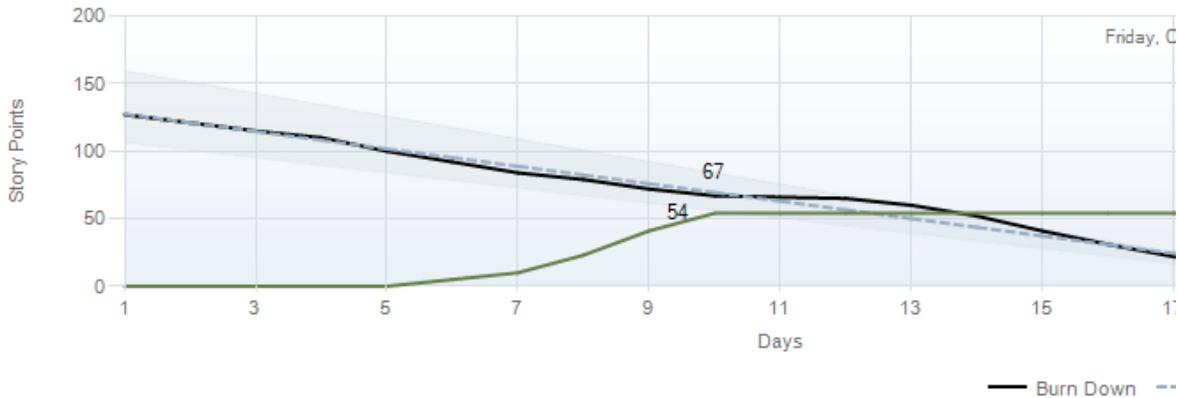
### **Burndown Chart**

A **Burndown Chart** is used to add a burndown chart to a page in the application.

Release Burndown | Sprint Burndown | Sprint Task Burndown | Sprint Storyboard

Shop Online  
Alpha

**Release Burndown**



Shop Online  
Alpha

Name	Estimated Effort	Remaining Effort	Accepted Effort	
Sprint Backlog = {BLANK}	16	12	0	
<a href="#">Cross sell based on category</a>	8	8	0	Not E

**Card Wall**

A **Card Wall** is used to add a card wall (also known as a storyboard) to a page in the application.

Base Burndown | Sprint Burndown | Sprint Task Burndown | **Sprint Storyboard**

Source

**Commerce - Sprint 3** ▾

Not Started	In Development	In Test	In Review
<p><b>Software download</b> [−]</p> <p>Estimated <b>8</b> Effort: Remaining <b>0</b> Effort: Dev Owner: <b>Tara Team Member</b> QA Owner: Status: <b>Normal</b></p>	<p><b>Cross sell based on sales volume</b> [−]</p> <p>Estimated <b>8</b> Effort: Remaining <b>0</b> Effort: Dev Owner: <b>James Scott</b> QA Owner: Status: <b>Normal</b></p> <p><b>Updates to product prices adjust account-level pri ...</b> [−]</p> <p>Estimated <b>13</b> Effort: Remaining <b>0</b> Effort: Dev Owner: <b>Tom Team Member</b> QA Owner: Status: <b>Normal</b></p>	<p><b>Add a specific configuration of a product to a car ...</b> [−]</p> <p>Estimated <b>5</b> Effort: Remaining <b>0</b> Effort: Dev Owner: <b>Tara Team Member</b> QA Owner: Status: <b>Blocked</b></p> <p></p>	<p><b>Add quantity of installed licenses to cart for ...</b></p> <p>Estimated <b>3</b> Effort: Remaining <b>0</b> Effort: Dev Owner: <b>James Scott</b> QA Owner: Status: <b>Blocked</b></p>

### Document Store

A **Document Store** is used to provide a location in which documents can be stored for specific investments, work types, or log types.

### Image

An **Image** is used to add a static image to a page. The image is set using the **Src** property as a URL to the location of the image on your organization's intranet or to a page on the Internet. You can also use the **Events** property to add JavaScript that is triggered when a user clicks on the image.

### Item Dependency

An **Item Dependency** is used to show a dependency for a work item. This control must be configured using the **Configuration** property.

### Link Label

A **Link Label** is used to add a hyperlink to a page in the application, from which users can link out to that information. For example, you can add an external link to a website, such as Google, an internal link to a page located within your organization's intranet, or to a page that is generated by another application.

**List**

A **List** is used to add a work item grid to a page in the application.

Backlog Planning Multi Planning Product Owner Storyboard

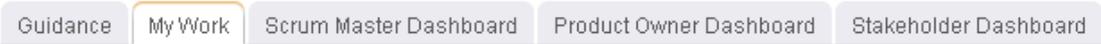
products

Shop Online Save Edit +

Name	Estimated Effort	Remaining Effort	Work State	
Commission tracking for Partners and Affiliates				Norm
Cross selling			Not Started	
Defects	0	0	Not Started	Norm
Defect 10156				Norm
Order management	13	13		Norm
View past order details	13	13	Not Started	Norm
Partner & Affiliate tools	23	23		Norm
Affiliate manages their account information	5	5	Not Started	Norm
Sign up for an Affiliate account	5	5	Not Started	Norm
User can register multiple Affiliate site URLs in their company profile	5	5	Not Started	Norm
View Affiliate commission balance	8	8	Not Started	Norm

**My Work**

The **My Work List** control is used to provide team members with a location from which they can view and access all of any work item to which they are currently assigned.

				
Name	Estimated Effort	Remaining Effort	Work State	Estimated Hours
 Add quantity of install licenses to cart for software	3	0	In Review	25
 Defect 10156				4
 Sign up for an Affiliate account	5	5	Not Started	0
 View Affiliate commission balance	8	8	Not Started	0
<b>Total</b>	<b>16</b>	<b>13</b>		<b>29</b>

### Single Object Chart

A **Single Object Chart** is used to show values in a summary view as a chart. The **Single Object Chart** must be configured using the **BrandXML**, **ConfigureXML**, **Data Processor**, and **Data Processor Assembly** properties.

### Summary View

A **Summary View** is used to add summary information to a page in the application. Summary information can be associated with other information, such as lists or backlogs. Summary information can be configured so that changes made to summary data updates any lists to which that summary is associated.

### URL Container

A **URL Container** is used to display information that resides elsewhere inside of your project workspace. A **URL Container** can point to any URL-addressible content, including reports on other internal systems, such as those generated by SAP or by Serena Business Mashups, or to content located on external systems, or to a location on the Internet.

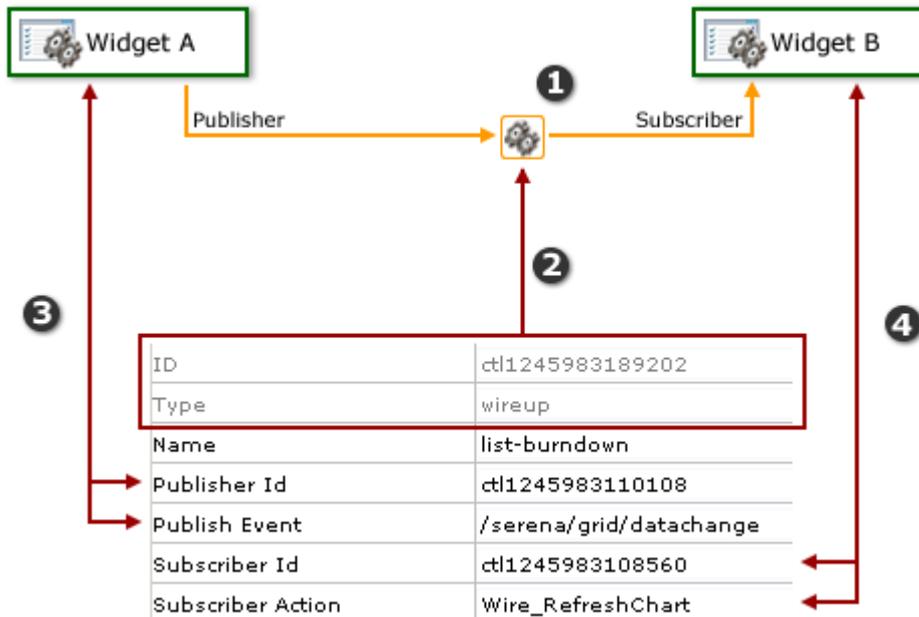
### Widget Wireup

A **Widget Wireup** is used to make associations between widgets. For example, you could use a wireup to associate a **List** widget and a **Summary View** widget so that work item

details are opened in a **Summary View** when that work item is selected in a **List**. And then when updated information is saved in the **Summary View**, that data will then be refreshed in the **List**.

### Overview

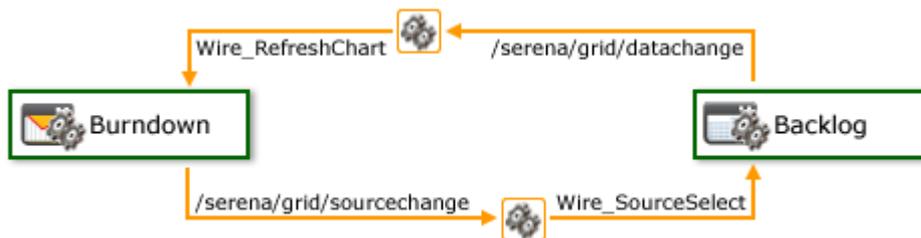
Each widget wireup is configured as a one-way relationship between two widgets, where the publish event in one widget determines the subscriber action in another.



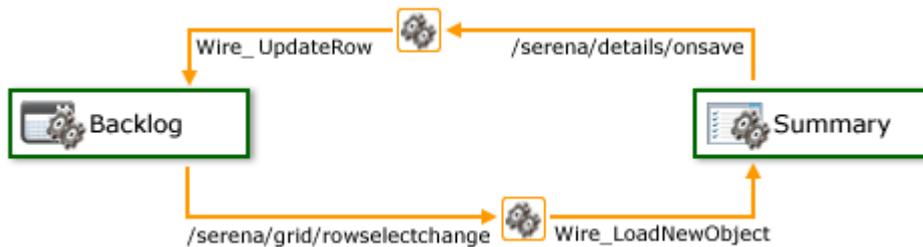
In the diagram above, the numbers correspond to the following:

1. The wireup itself, and the relationship that will be configured.
2. The ID and type of widget.
3. The publisher settings for the wireup. A wireup listens for a specific event (**Publish Event**) that is being broadcast by a specific widget (**Publisher ID**).
4. The subscriber settings for the wireup. A wireup takes a specific action (**Subscriber Action**) on a specific widget (**Subscriber ID**).

Many wireup relationships can be configured as pairs, such as the release, sprint, and task burndown charts that are included in the out-of-the-box configuration of Serena Agile. In these cases, the wireup relationships are configured to show the backlog associated with the selected burndown chart.



For example, a wireup could be added to a **Backlog** widget that is configured to listen for the **onsave** event to be triggered from a **Summary View** widget. When a team member clicks  Save in the **Summary View** widget, the wireup will then tell the **Backlog** widget to update the work item (using the **Wire\_UpdateRow** publish event).



You can also create multiple wireup relationships between widgets, as long as there isn't more than one configured relationship between widgets for each publish event or subscriber action.



## Templates

A work type template allow you to quickly create a new work type by applying default values, copying associated documents and logs, and using predefined task plans that are already defined for any existing work type. Template settings can include: work type attributes, documents, task plans, and log types. Templates do not include resource information, such as assignments or allocations.

Templates can also be used in conjunction with a workflow as a method for applying business processes. When a template is associated with a workflow transition and that transition is finished, the template settings are copied to the work type. Applying a template as part of a workflow transition will not overwrite or delete anything that is already in the work type.

### Copying a work type template

You can copy a work type template and use it to create new work type templates, applying default values, associating documents and log types, and using predefined task plans.

#### To copy a work type type

1. Open the **Projects** module.
2. In the work tree, right-click and select **Templates**.
3. In the **Manage Templates** dialog box, select the template you want to copy and click **Copy**. A new template is added to the list as a copy of the original template.

### Deleting a work type template

If your organization is not using a work type template, you can delete it.

---

### To delete a work type template

1. Open the **Projects** module.
2. In the work tree, select a work type, right-click, and then click **Manage Templates**.
3. In the **Manage Templates** dialog box, click **Delete**.
4. Click **OK**.

### *Editing a work type template*

You can modify any work type template.

### To edit a work type template

1. Open the **Projects** module.
2. In the work tree, right-click and select **Manage Templates**.
3. In the **Manage Templates** dialog box, select the template you want to modify, right-click and select the view you want to modify.
4. Make your changes.
5. Click **OK**.

### *Saving a work type as a work type template*

If your organization prefers a particular type of work type, you can save its values, associated documents and log types, and predefined tasks as a work type template.

### To save a work type as a work type template

1. Open the **Projects** module.
2. In the work tree, choose the work type you want to save as a template, right-click and select **Save as Template**.

### *Viewing a work type template*

You can view all of the work type templates that are available for use in your organization from the **Manage Templates** dialog box.

### To view a work type template

1. Open the **Projects** module.
2. In the work type tree, right-click and select **Manage Templates**.
3. A work type template can be viewed from the **Manage Templates** dialog box.

## Work Items

A work item is anything that is used to build and track work during any phase of a product's lifecycle, including high-level features (epics), a more detailed work item (such as a story and its individual tasks), issues raised by customers or members of your test team (defects), and issues that prevent team members from completing their assignments (impediments).

### *Adding a work item*

You can add a work item to a backlog.

### To add a work item



5. Select the **Notes** tab to enter any notes that may be needed for the work item or for the team member assigned to the work item.



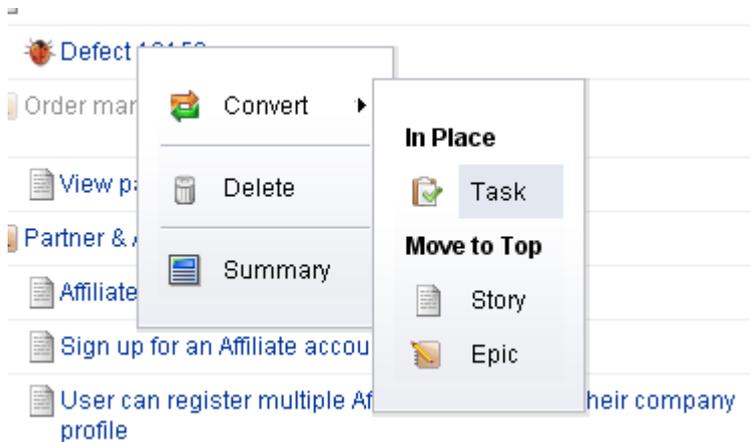
6. When you are finished, click **OK** to save this work item and close the dialog box. If you want to create another work item, click **Save & Add Another**.

### **Converting a work item**

A work item, once created, can be converted to another work item (if that becomes necessary).

#### **To convert a work item**

1. Select a backlog, choose  Convert, and select the work item to which the current work item will be converted.



2. Verify.

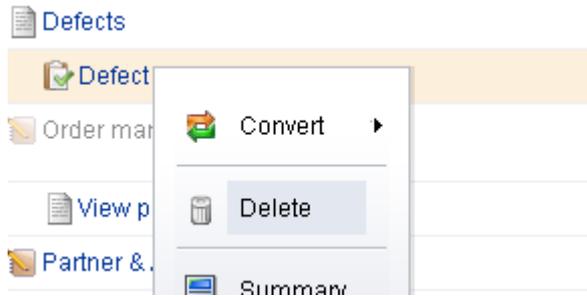


### **Deleting a work item**

You can delete a work item from a backlog.

#### **To delete a work item**

1. Select a backlog, choose  Delete, and select the work item you want to delete.



2. Confirm.

### ***Editing the details of a work item***

You can edit the details of any work item to which you have access or details which cannot be edited directly in the backlog itself. Click the name of the work item directly in the backlog to open its summary details.

#### **To edit the details of a work item**

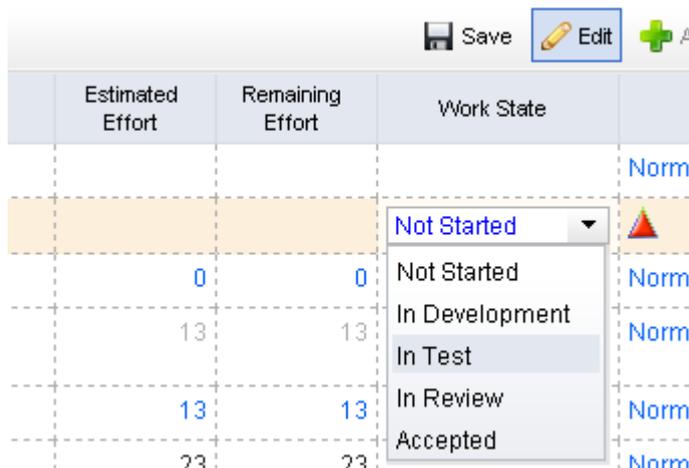
1. Select a backlog, choose a work item and click its name.
2. Make any changes you need to make.
3. Click **OK**.

### ***Editing a work item inline***

You can edit the details of any work item directly in a backlog.

#### **To edit a work item inline**

1. Select a backlog.
2. In the backlog toolbar, click  Edit.
3. Select the work item. Select a column. Double-click. Make your changes.



4. Click  Save. (To exit without saving changes, click  Edit.)

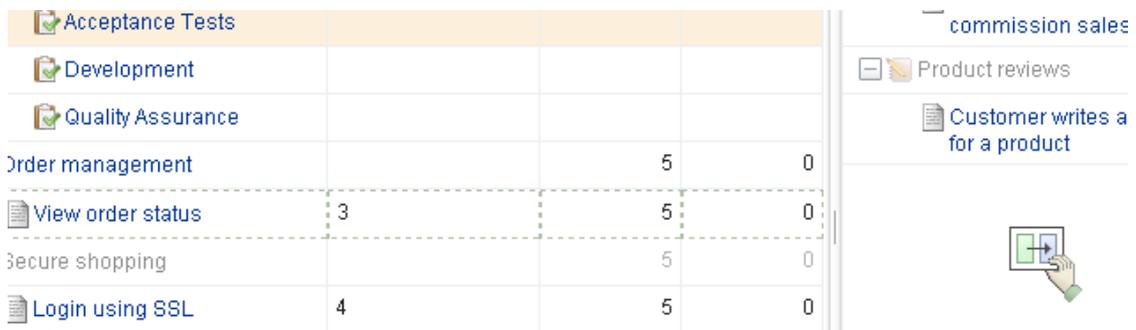
### ***Moving a work item between backlogs***

You can move a work item from one backlog into another. When backlogs are side-by-side in the same view, you can select a work item in one backlog and drag it into the other.

Icon	Description
	New backlog. This will drop the work item into the new backlog. The backlog will refresh and the work item will appear in the new backlog (and disappear from the old backlog).
	Re-rank. This will drop the work item into the selected location; the backlog will refresh and the work items will be in the new order.
	Re-parent. This will drop the work item into the selected location; the backlog will refresh and the work items will be in the new order.
	New phase. This will drop the work item into a new phase in a storyboard (or card wall). The storyboard will refresh and the work item will be moved to the new phase.
	Invalid. You cannot drag-and-drop a work item into a backlog when this icon appears.

**To move a work item between backlogs**

1. Select the backlogs to and from which a work item will be moved, and then select the work item you wish to move.
2. Click and hold down the work item, and then drag it to its new backlog.



3. Verify.

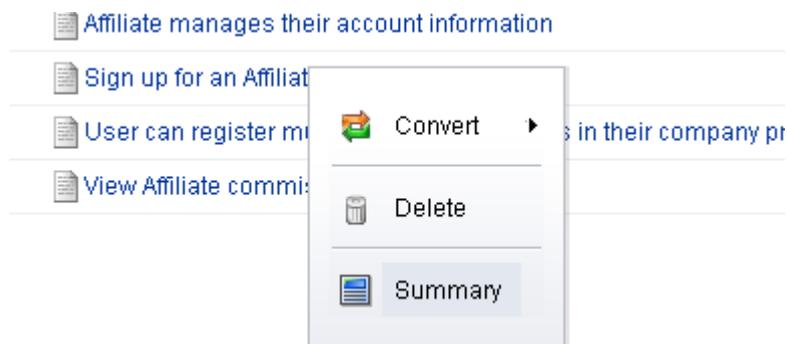
**Viewing a work item summary**

There are two ways to view the details of a work item. Select the name of the work item in a backlog, right-click, and select **Summary**. Or just click the name of the work item in the backlog.

**To view a work item**

1. Select a backlog.
2. Select a work item in the backlog.

3. Right-click and select  Summary.



### Summary

You can use the work item properties dialog box to manage data about the work item, including data that is specific to the work item type (such as epics, stories, or tasks), data that is used for tracking progress against that work item, notes that may have been entered by team members, and a history of changes that have been made to the various settings related to the work item.

### Tab: Work Item Type

This tab in the **Work Item Properties** dialog box is used to view and update certain properties which relate to the work item, such as (for a story) **Acceptance Criteria**, **Business Value**, and **Story State**. The name of the tab is determined by the work item for which you are currently viewing properties. Depending on the work type, the following fields may be available from this tab:

Fields	Description
<b>Acceptance Criteria</b>	The criteria to be completed before a work item can be accepted.
<b>Business Value</b>	The business value for a work item.
<b>Description</b>	The description of a work item in the application, such as a task, work item, summary, and so on.
<b>Development Owner</b>	The name of the resource who has been assigned to do the actual work related to the work item.
<b>Estimated Effort</b>	The amount of effort, measured in story points, required to complete all of the work associated with a work item.
<b>Name</b>	The name of a task (or a task plan).
<b>Priority</b>	Indicates the importance of the task in relation to other tasks. 500 is the default value; 1000 is the highest priority and 0 is the lowest priority. The higher the number, the higher the priority.

Fields	Description
<b>Quality Assurance Owner</b>	The name of the tester who has been assigned to do validate the quality of the work related to the work item.
<b>Remaining Effort</b>	The amount of effort, measured in story points, required to finish all of the remaining work associated with a work item.
<b>State</b>	The state of a task.
<b>Status</b>	The current status of a work item, task, or project.
<b>Story State</b>	The current state of a work item, such as <b>Not Started, In Development, In Testing, Ready for Review, and Accepted.</b>
<b>Task Hours Actual</b>	The actual hours required to complete actual work.
<b>Task Hours Estimated</b>	concepts_field_estimated_hours
<b>Task Hours Remaining</b>	The amount of effort, measured in acutal hours, that are required to finish all of the remaining work that is associated with a work item.
<b>Theme</b>	The name of the theme that is associated with a work item.

### Tab: Tracking

The **Tracking** tab in the **Work Item Properties** dialog box is used to show tracking details about how the work being done against a work item is progressing. Depending on the work type, the following fields may be available from this tab:

Fields	Description
<b>Created By</b>	The name of the resource who initially created the task, task plan, work item, and so on.
<b>Created Date</b>	The date on which a task, task plan, work item, and so on, was created.
<b>Dev Owner</b>	The name of the resource who has been assigned to do the actual work related to the work item.
<b>Estimated Effort</b>	The amount of effort, measured in story points, required to complete all of the work associated with a work item.
<b>Item ID</b>	The unique ID for the work item.

Fields	Description
<b>Last Modified By</b>	The unique ID for the work item.
<b>Last Modified Date</b>	The date on which the most recent changes were made to the task, task plan, or work item.
<b>Parent Item</b>	The unique ID for the parent task.
<b>Product</b>	The name of the product.
<b>Product Owner</b>	The name of the product owner who has been assigned to approve the work related to the work item.
<b>QA Owner</b>	The name of the tester who has been assigned to do validate the quality of the work related to the work item.
<b>Release</b>	The name of the release.
<b>Remaining Effort</b>	The amount of effort, measured in story points, required to finish all of the remaining work associated with a work item.
<b>Sprint</b>	The name of the sprint.
<b>Task Hours Actual</b>	The actual hours required to complete actual work.
<b>Task Hours Estimated</b>	The amount of effort, measured in acutal hours, that are required to complete all of the work that is associated with a work item.
<b>Task Hours Remaining</b>	The amount of effort, measured in acutal hours, that are required to finish all of the remaining work that is associated with a work item.
<b>Team</b>	The group of individual resources who comprise a Scrum team, typically a single product owner, several engineers and testers, and (occasionally) other resources, such as support, documentation, and sales.
<b>Work State</b>	The current state of a work item, such as <b>Not Started, In Development, In Testing, Ready for Review,</b> and <b>Accepted.</b>

## Tab: Notes

The **Notes** tab in the **Work Item Properties** dialog box is used to capture comments, notes, and other non-work related data about the task.

## Tab: History

The **History** tab in the **Work Item Properties** dialog box is used to show the update history of the work item, including what changed, the date it was changed, what the new value is, what the old value was, and who made the change.

## Work Types

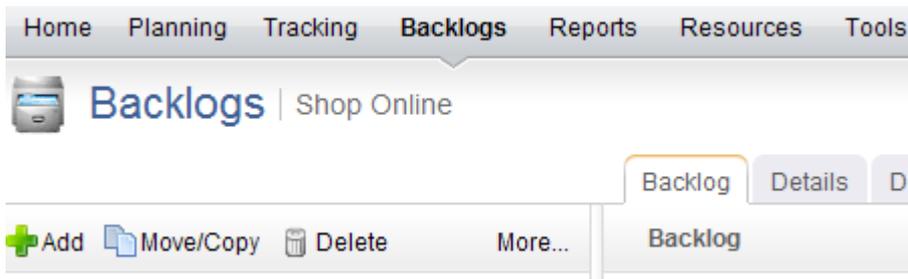
A work type is defined as a project, release, sprint, or team. Every work type is placed in a hierarchical structure called the work tree that orders each work type in relation to its parent work type, any peer work type, and any child work type.

### Adding a work type

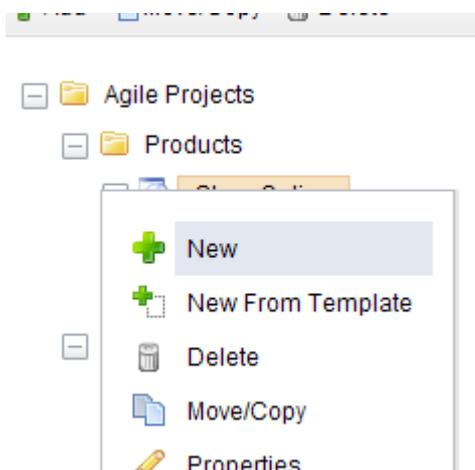
When creating a work type, identify the work type you want to create, and define the summary data for the work type.

#### To add a new work type

1. Open the **Backlogs** module.



2. Select a work type in the work tree under which you want to add a work type. Right-click and select **New**.



3. In the **New Investment** dialog box, select the work type. The work type list that is available from the drop-down will depend on the location in which you are adding a work type and the work breakdown structure your organization has created.

Select the Item Type

Release

Release

Name

Release 0

Completed  No

Start Date

10/19/2009

End Date

2/16/2010

Health Status

Yellow

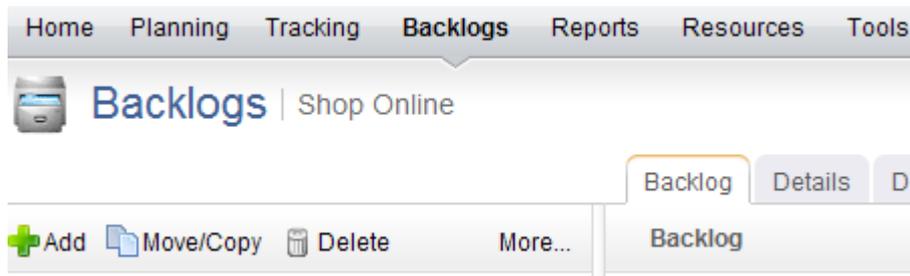
- Click **OK**.

### Copying a work type

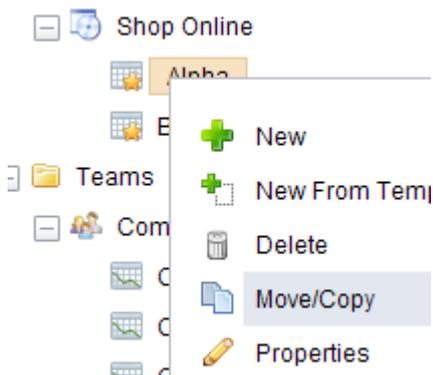
You can copy an existing work type, modify its summary data and properties, create a new work type, and then place it anywhere in your portfolio.

#### To copy a work type

- Open the **Backlogs** module.



- In the work tree, select the work type you want to copy, right-click and select  Copy.



- In the **Move/Copy** dialog box, under **Options**, select **Make a copy** and choose whether you want to also copy any related documents, a child work type, or tasks.

#### Options

- Make a copy of 'Commerce - Sprint 2'
- Include Documents
- Include Children

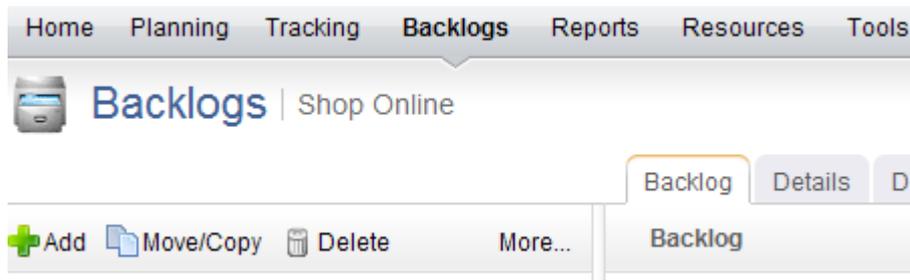
4. Select the location in the work tree into which a copy of the work type will be added.
5. Click **OK**.

### **Deleting a work type**

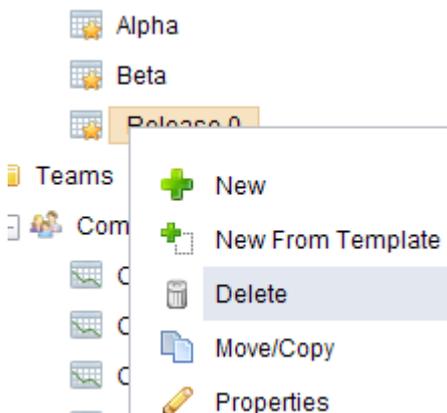
If you no longer need a work type, you can delete it.

#### **To delete a work type**

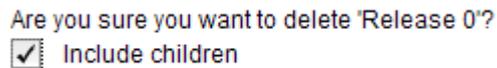
1. Open the **Backlogs** module.



2. Right-click the work tree, select a work type, and click  Delete.



3. In the **Delete** dialog box, select the **Include Children** check box if you would like to delete the selected work type and any work type indented below it.



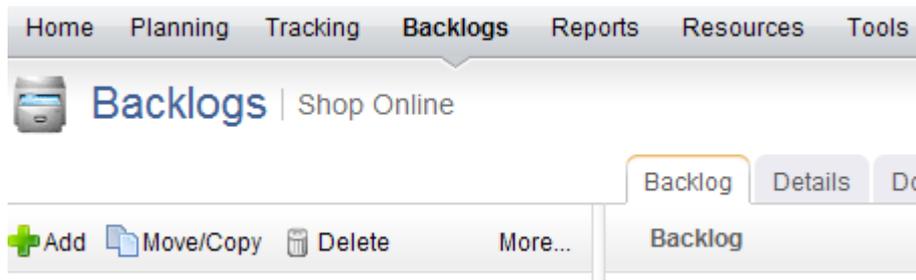
4. Click **OK**.

### **Editing a work type**

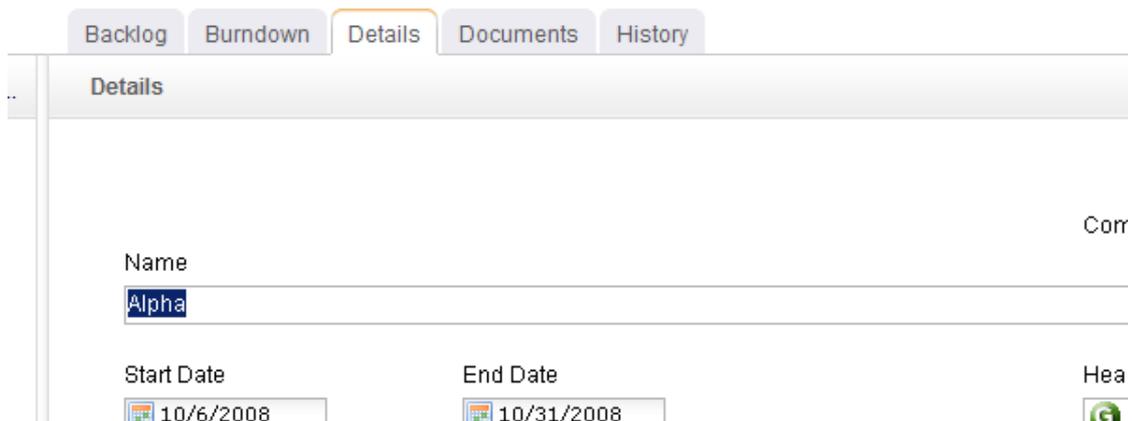
You can edit the details of any work type.

#### **To edit a work type**

1. Open the **Backlogs** module.



2. In the work tree, select a work type.
3. Make your changes from the **Details** tab.



4. Click **OK**.

### **Moving a work type**

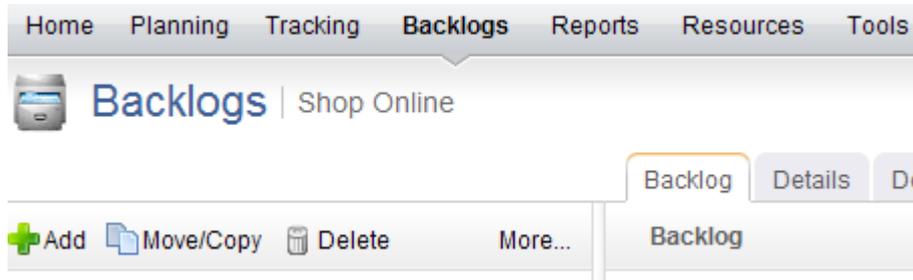
You can move a work type around in the work hierarchy. The simplest way to move a single work type is to drag-and-drop it into the location in the hierarchy that you want it to be.

The **Move Investment** dialog lists any work type that you are authorized to view. A work type is displayed by default in a tree view that you can navigate just like the navigation pane in the **Backlogs** module. When you select a work type for a report or a notification, the selection applies to that work type and any work type below it in that branch of the tree view. When you select a work type for include/exclude or self-allocating activities, the selection applies only to that work type.

You can also enter in a word or phrase and click **Search** to display a list of any work type that matches your search criteria. You can easily alternate between the tree view and the search results by clicking the **Show Tree** or **Show Search Results**, depending on the current view.

### **To move a work type**

1. Open the **Backlogs** module.



2. In the work tree, select the work type you want to move, right-click and select **Move/Copy**.
3. In the **Move/Copy** dialog box, select the location in the work tree under which the work type will be moved.
4. Click **OK**.

### Properties

Use the **Properties** dialog box to view the properties for a project, release, sprint, task plan, or any other work item or work type that is currently in the application.

#### Viewing work type properties

Use the **Investment Properties** dialog to view and modify the properties of a work type.

#### To view work type properties

1. Open the **Projects** module.
2. Select the work type in the navigation tree.
3. Select **More**, and then choose **Properties**.

#### Tab: Attribute History

The **Attribute History** tab in the **Properties** dialog box is used to view the history of changes made to an attribute.

#### Tab: Connector

The **Connector** tab in the **Properties** dialog box is used to view connector details.

The following fields are available from the **Connector** tab in the **Properties** dialog box:

Fields	Description
<b>Connector Name</b>	The names of the connections that are used to provide data for this work item. A connection is made using a recurring tasks, configured from the Jobs tab in the Scheduled Services view.
<b>Last Refreshed</b>	The date and time when a work item was last updated. The frequency of updates is determined by the connection properties that have been configured for the recurring task.

## Tab: General

The **General** tab in the **Properties** dialog box is used to general information about a project, release, task, task plan, or any other work item or work type in the application.

The following fields are available from the **General** tab in the **Properties** dialog box:

Fields	Description
<b>Created By</b>	The name of the resource who initially created the task, task plan, work item, and so on.
<b>Created Date</b>	The date on which a task, task plan, work item, and so on, was created.
<b>Hide On Timesheet</b>	Indicates whether tasks related to this work item will appear in a resource's timesheet. If selected, then the task will not appear in a resource's timesheet.
<b>Item Name</b>	The name of the work item.
<b>Item Type</b>	The the type of work item. If the work item is task-based, then the list will contain task-based work item types. If the work item is activity-based, then the list will contain activity-based work item types.
<b>Last Modified By</b>	The user name of the person who made the most recent changes to the task, task plan, or work item.
<b>Last Modified Date</b>	The date on which the most recent changes were made to the task, task plan, or work item.
<b>Lock Completed Assignments</b>	Indicates whether resources are prevented from submitting time against a task or work item that has been marked as complete.
<b>Self Allocation Allowed</b>	Indicates whether a resource is allowed to allocate themselves to a task or work item, and any activities associated with them. The default setting for this option is inherited from the work item type, but the setting can be configured on a per-work item basis. If self-allocation is allowed, then self-assignment is also allowed. Select this option when you want resources to be able to self-allocate to this work item.
<b>Self Assignment Allowed</b>	Indicates whether a resource is allowed to assign themselves to a task or work item, and any activities associated with them. The default setting for this option is inherited from the work item type, but the setting can be configured on a per-work item basis. If you want to allow self-assignment, but disallow self-allocation, then select this option and de-select Self Allocation Allowed.

## Tab: Role Assignments, Advanced

The **Role Assignments, Advanced** tab in the **Properties** dialog box is used to advanced role assignment details.

The following fields are available from the **Role Assignments, Advanced** tab in the **Properties** dialog box:

Fields	Description
<b>Add</b>	Click this button to add a selected user and/or security group to the role assignment for this work item. This will add the Is Assigned To Role icon in the Assignment column.
<b>Assignments</b>	Indicates whether a user and/or a security group has a role assignment to the selected work item. If the column shows Is Assigned To Role, the user and/or security group has been given a role assignment to the selected work item. If the column shows Inherits Assignment To Role, the user and/or security group is inheriting its role assignment from a role assignment made to a parent work item. If the column shows Does Not Inherit Assignment To Role, the user and/or security group is not inheriting its role assignment from a parent work item
<b>Clear</b>	Click to clear a selected user and/or security group from the role assignment for this work item. This will remove the Is Assigned To Role or the Does Not Inherit Assignment To Role icons from the Assignment column.
<b>Group / User</b>	The users and/or security groups that are available for role assignments to this work item.
<b>Manage By</b>	Indicates how role assignments are managed. Select Role to manage role assignments by security role. Select Group / User to manage role assignments by user and/or security group.
<b>Parent Groups</b>	The security group(s) to which a user and/or security group belongs. This column is only visible when the Role option is selected for the Manage By option.
<b>Remove</b>	Click to remove a selected user and/or security group from the role assignment for this work item. This will add the Does Not Inherit Assignment To Role icon in the Assignment column.
<b>Role</b>	The security role(s) from which users and/or security groups can be given role assignments.
<b>Show Unassigned</b>	Click to show role assignments by security roles or by users and/or security groups. Only roles, users, and groups without a role assignment will be shown.

Fields	Description
<b>Show Users</b>	Click to show the users and security groups that are available for role assignments.
<b>Simple</b>	Click to view the Role Assignments tab using the Simple layout.

### Tab: Role Assignments, Simple

The **Role Assignments, Simple** tab in the **Properties** dialog box is used to view role assignment details.

The following fields are available from the **Role Assignments, Simple** tab in the **Properties** dialog box:

Fields	Description
<b>Add</b>	Click this button to add a selected user and/or security group to the role assignment for this work item. This will add the Is Assigned To Role icon in the Assignment column.
<b>Advanced</b>	Click to view the Role Assignments tab using the Advanced layout.
<b>Assignments</b>	Indicates whether a user and/or a security group has a role assignment to the selected work item. If the column shows Is Assigned To Role, the user and/or security group has been given a role assignment to the selected work item. If the column shows Inherits Assignment To Role, the user and/or security group is inheriting its role assignment from a role assignment made to a parent work item. If the column shows Does Not Inherit Assignment To Role, the user and/or security group is not inheriting its role assignment from a parent work item
<b>Clear</b>	Click to clear a selected user and/or security group from the role assignment for this work item. This will remove the Is Assigned To Role or the Does Not Inherit Assignment To Role icons from the Assignment column.
<b>Group / User</b>	The users and/or security groups that are available for role assignments to this work item.
<b>Remove</b>	Click to remove a selected user and/or security group from the role assignment for this work item. This will add the Does Not Inherit Assignment To Role icon in the Assignment column.
<b>Show Users</b>	Click to show the users and security groups that are available for role assignments.

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## Modules and Views

Serena Agile contains a collection of modules and views that are designed to help your team be Agile.

For more information, see the following topics:

- [Home \[page 83\]](#)
- [Planning \[page 103\]](#)
- [Tracking \[page 108\]](#)
- [Projects \[page 111\]](#)
- [Reports \[page 127\]](#)
- [Resources \[page 150\]](#)
- [Tools \[page 157\]](#)
- [Manage Users \[page 163\]](#)
- [System Settings \[page 168\]](#)
- [Configuration \[page 184\]](#)

### Home

The Home module can be customized to show one or more views that a user will commonly use.

For more information, see the following topics:

- [Guidance \[page 83\]](#)

### Guidance

The **Guidance** section describes scenarios and activities that are common within an Agile organization that is using Serena Agile. The sections are broken out by area, such as configuration (setting up projects and users), planning for releases and sprints, managing backlogs, and so on.

For more information, see the following topics:

- [Setup Projects and Users \[page 83\]](#)
- [Build a Backlog \[page 86\]](#)
- [Plan Releases \[page 90\]](#)
- [Allocate Work to Teams \[page 93\]](#)
- [Plan Sprints \[page 97\]](#)
- [Track Sprints \[page 99\]](#)

### Setup Projects and Users

Before you can begin using Serena Agile, you must first build out your portfolio and add team members. Once your portfolio has been created and team members have been added, you can then assign individual team members to any work item in a team backlog.

## Adding a New Project

A simple way to begin using Serena Agile is to create the products, releases, teams and sprints that will comprise your portfolio. Each of these items serves as an independent backlog to which work can added, moved, and tracked. The **New Projects Wizard** is the fastest and easiest way to set up a product, release, team, and sprint structure.

### To create a project using the New Projects Wizard

1. Open the **Backlogs** module.
2. Click **More**, and then select **New Projects** to open the **New Projects Wizard**.
3. Enter the name of the project that you wish to add. Or select the name of an existing product.

**Product**

The Product contains the Product Backlog of work items.

Name

Shop Online

4. Enter the name of the release that you wish to add. Or select the name of an existing release. Define the length of the release.

**Release**

The Release contains the Release Backlog and is a time interval bounded by d:

Starting Date

10/26/2009

Ending Date

3/29/2010

5. Select the interval length for each sprint. The number of sprints created depends on the overall length of the release and the number of sprints each release will contain. For example, if you specify that each release is 9 weeks, and then you select a 3 week interval for each sprint, each release will then contain 3 sprints.

**Sprints**

Each Sprint contains a Sprint Backlog and is a time interval of the length specified. Sprints to fill the Release interval will be created for each Team.

Interval Length

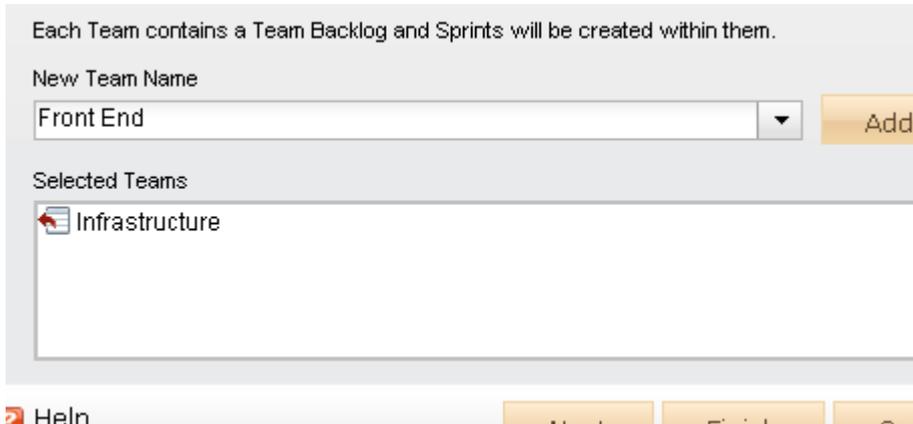
2 weeks

1 week

2 weeks

3 weeks

6. Enter the name of a new team or select the an existing team, and then click **Add**.



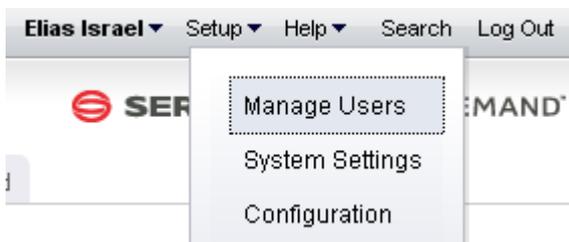
7. After you have selected your products and teams and defined the length of a release and the number of sprint intervals each will contain, click **Next**.
8. Verify that the projects, resources, sprints, and teams are the actual work types you wish to create, and then click **Finish**.
9. Verify in the backlogs tree that you have created the correct projects, resources, sprints, and teams.

## Adding a New User

After you have finished using the **New Projects Wizard** to add products, releases, teams and sprints, the next step is to your team members into the system. Once added, you will be able to assign team members to stories, tasks, and other work items. Team members will be sent an invitation (via email), from which they can log on and begin using Serena Agile.

### To add a user

1. From the application toolbar, click **Setup**, and then choose **Manage Users**.



2. Click **+ Add**.
3. Under **User Properties**, enter the first name, last name, email address, and user name for the user.

**User Properties**

First Name  \*

Last Name  \*

Email  \*

User Name  \*

Active

4. Click  Save.

### **Build a Backlog**

All work items are stored in a backlog. As you and your team make progress towards completing each work item, they will move to, from, and between the product backlog and any of its supporting release, sprint, and team backlogs. But before you can begin working on work items that are stored in a backlog, you must first create those work items.

### **Importing Work Items into a Backlog**

You can use the **Import Data** tab to download a template (a Microsoft Excel file) into which you can enter data about items, resources, resource roles, and resource teams, and then import that data into Serena Agile.

In the template, there is a tab for each of the types of data that you can import: **Investments, Resource Roles, Resource Teams, Resources, and Agile Work Items**. On each tab, a single row represents a single item, resource role, resource team, resource, or work item that will be imported.

This is a feature that can be a useful way to add data, especially during the configuration phase of your deployment. However, this feature, when used carelessly, can add a lot of unnecessary data into your environment. Permission to use this feature should be granted carefully and only to people who are capable of removing unwanted data, should it get imported.

Some important things to remember:

- The **Import Data** feature should not be viewed as a way to manage data on a day-to-day basis.
- The tabs are imported in the following order: **Resource Teams, Resource Roles, Resources, and Investments**. It can be easier to import data one tab at a time; if you import data one tab at a time, you should use the same order for importing data as the tabs themselves (from left to right).
- Do not use characters in the template that are commonly used in Microsoft Excel as calculation indicators. For example, the ampersand symbol (&) may create a calculated cell and a calculated cell will fail upon import.
- You cannot have spaces in user names.

- Importing data should be done at times when there are no other users from your organization logged-in. The import process will fail when conflicts are caused by other work being done.
- There is no preview function.

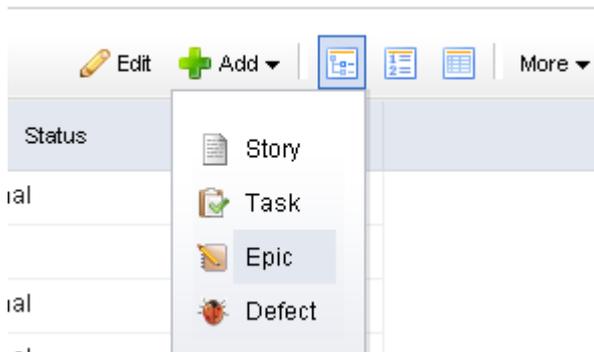
Depending on the amount of information you want to import, and the complexity of that information, you may need more detailed help, including descriptions of each tab in the template and a description of the messages you may encounter while importing information. You can get this information by clicking **Help** while working in the **Import Data** tab. Sometimes, access to attribute details within Serena Agile may be necessary, and that access may require the assistance of your Administrator.

## Authoring Stories

Serena Agile offers intuitive, fast, and robust story authoring capabilities. Simply navigate to a backlog and click "Add" to enter in a new Epic or Story. You can continue adding items quickly by clicking "Save and Add Another" after every item.

### To author stories in a backlog

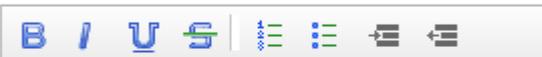
1. Select a backlog, choose  Add, and select the work item type you wish to add.



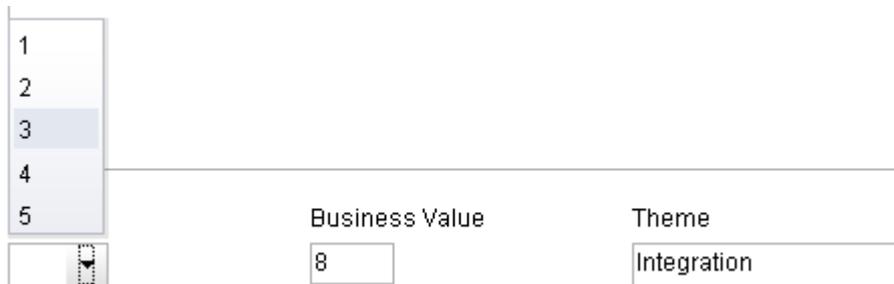
2. Enter the name and description for the work item.

Name

Description



Set the priority, business value, and theme.



A screenshot of a software interface. On the left, there is a vertical dropdown menu with options 1, 2, 3, 4, and 5. Option 3 is highlighted. To the right of the dropdown, there are two input fields. The first is labeled 'Business Value' and contains the number '8'. The second is labeled 'Theme' and contains the text 'Integration'.

3. Select the **Tracking** tab to assign an owner and to specify estimated and actual hours.



A screenshot of the 'Tracking' tab in a software interface. It shows three input fields. The first is labeled 'Product Owner' and contains the name 'Elias Israel'. The second is labeled 'Estimated Effort' and contains the number '8'. The third is labeled 'Remaining Effort' and contains the number '8'.

4. Select the **Notes** tab to enter any notes that may be needed for the work item or for the team member assigned to the work item.



A screenshot of the 'Notes' tab in a software interface. It shows a rich text editor toolbar with the following icons: Bold (B), Italic (I), Underline (U), Strikethrough (ABC), Bulleted List (•), Numbered List (1), Indent (right arrow), and Outdent (left arrow).

5. When you are finished, click **OK** to save this work item and close the dialog box. If you want to create another work item, click **Save & Add Another**.

## Prioritizing the Backlog

Before moving your stories between backlogs, such as from a release backlog to a sprint backlog, the work items in those backlogs should be prioritized. Prioritization (sometimes called stack-ranking) can be done in many ways, often depending on the phase of the process in which prioritization occurs.

- A product backlog often requires prioritization of major features (sometimes called epics) at a high level.
- A release backlog may require breakdown and elaboration of stories so that actual effort and dependencies may be factored in.
- A sprint backlog may need to be re-prioritized due to changes in staffing, the discovery of a defect that needs to be fixed, and so on.

Regardless of how or when a work item is prioritized, Serena Agile makes it easy for you to move work items between backlogs, adjust priorities, change the ranking order, and so on, so that you are using the most effective method for your team. When you are working in a backlog, be sure to set the view mode to  List.

Rank	Name	Estimated Effort
1	Commission tracking for Partners and Affiliates	
2	+ Cross selling	40
3	Defects	0
4	- Partner & Affiliate tools	23
	Affiliate manages their account information	5
	Sign up for an Affiliate account	5
	User can register multiple Affiliate site URLs in their company profile	5
	View Affiliate commission balance	8
5	+ Integrated inventory management	8
6	Domain management	
7	Gift certificates	
8	- Multi currency shopping	18

Viewing a backlog in list view mode will ensure that you can view work items by relative priority (where a higher rank equals a higher priority). (By default, Serena Agile shows backlogs in the  Tree view mode, which does not rank stories.)

### To prioritize stories in a backlog

1. Select a backlog and click  List.
2. Choose the story you want to re-rank, select it (by holding down the mouse button), and then drag it to its new relative priority.

2	+ Cross selling	40
3	Defects	0
4	- Partner & Affiliate tools	23
	Affiliate manages their account information	5
	Sign up for an Affiliate account	5
	User can register multiple Affiliate site URLs in their company profile	5

3. When the work item is in the location you want it to be, de-select it (by releasing the mouse button). The backlog will refresh and the work items will have been re-ranked according to their new relative priority.

		CHILD
1	Commission tracking for Partners and Affiliates	
2	Cross selling	40
3	Partner & Affiliate tools	23
	Affiliate manages their account information	5
	Sign up for an Affiliate account	5
	User can register multiple Affiliate site URLs in their company profile	5
	View Affiliate commission balance	8
4	Defects	0
5	Integrated inventory management	0

### Plan Releases

Release planning is an exercise of finding out which features that are defined in the product backlog will help the team meet its current release objectives, as defined by the product roadmap. In general, product owners use this view to manage the epics—a collection of stories that are too big for a single sprint—that the development team will work on during the release. Epics (and their related stories) can be grouped by themes, priority, and so on.

### Moving Stories to the Release Backlog

Release planning involves moving stories from the product backlog to the release backlog. Which stories and how many stories should be moved into the release will depend on the following factors:

- **Release Capacity**—How many story points worth of work can the teams deliver in a release timeframe?
- **Release Goals**—The release may be a 50% usability and 50% new feature-work release. You can use the "Theme" attribute or another custom attribute to "tag" stories within themes or categories. You can then display a product backlog view grouped by those themes to better visualize how stories fit into those categories.
- **Priority**—You may choose to stack rank stories and move stories from the top of the list, or you may choose to assign a priority value (e.g. 1-5) to every story.

Moving stories can be done from the Planning view as well as the Multi-Planning view. The Planning view supports two backlogs in one screen, whereas the Multi Planning view supports three backlogs in one screen. This is useful if you are moving items from two product backlogs into a single release, or a single product backlog into two releases, etc. Ultimately, which view you use is up to your preference. Use the one that your team finds most useful or create a custom planning view that maps to the way your team likes to do planning.

#### To move a work item to a new backlog

1. Select the work item you want to move, click and hold down the mouse button.

op Online

**Beta**      

Rank	Name	Priority	Estimated Effort	Remaining Effort
1	  Access store branches via subdomains	1	3	3
2	  Beta Defects		0	0
	 Defect 10156	2		
3	 View past order details	2	13	13
4	  Send automatic notifications for out of	3	8	4
<b>Total</b>				

Platform

**Platform - Sprint 1**

Name
  Login using SSL
  Manage inventory from in-house system
  View order status

Platform

**Platform - Sprint 2**

- When you get the work item to the new backlog, release the mouse button.

Platform

**Platform - Sprint 1**     

Remaining Effort	Name	Priority	Estimated Effort	Re t
3	  Login using SSL	4	5	
	  Manage inventory from in-house system	1	13	
0	  View order status	3	5	
13				
4	<b>Total</b>		<b>23</b>	

Platform

**Platform - Sprint 2**     

- The backlog will refresh with the updated work item list.

Platform				
Platform - Sprint 1				
<span>Edit</span> <span>Add</span> <span>[-]</span> <span>[+]</span> <span>[M]</span>				
	Name	Priority	Estimated Effort	Remain Effort
3	Defect 10156	2		
	Login using SSL	4	5	
0	Manage inventory from in-house system	1	13	
	View order status	3	5	
3				
4				
	<b>Total</b>		<b>23</b>	<b>0</b>

### Prioritize the Release Backlog

Before moving your stories into sprints for execution, your backlogs should be prioritized. Prioritization (often stack-ranking) can be done at multiple planning levels. Prioritizing a release backlog requires a bit more precision than prioritizing the product backlog due to the closer delivery time-frame. Because of this, it is recommended that all prioritized release backlogs be stack-ranked in absolute order of priority. This provides clarity as to which stories should be moved into a sprint. Prioritizing a release may also require more break-down and elaboration of stories so that effort and dependencies may be factored into the prioritization. When you are in a backlog, make sure your view-mode is set to List mode, so that you can stack-rank stories in relative priority. By default, the Backlog view will display stories in Tree mode.

1	Integrated inventory management				
2	Multi-currency shopping				
3	Gift certificates				
4	Defects for Release: Alpha		0	0	Not Started
	Defect 11356				
5	Automated upsell recommendations				
6	Cross sell based on category		8	8	Not Started
7	Domain management		3	3	
8	Customer writes a review for a product		8	8	Not Started

---

## ***Allocate Work to Teams***

A team should use its velocity to determine how many stories to which it can commit in an upcoming sprint.

- A sprint assignment is the process of moving a story into a sprint backlog from a release backlog or a team backlog.
- A team assignment is the process of moving a story into a team backlog from a release backlog.

Teams frequently commit to more than one story per sprint, but it is important to understand that the effort required to complete the work required by a single story (including all of its related tasks and dependencies) is done in a single sprint by a single Agile team. Some assignments (like tasks) are identified before the sprint begins, while others (like defects and impediments) are discovered during the sprint.

## **Moving Stories to Team Backlogs**

Once your release backlog is defined and prioritized, you can assign (move) stories from the release backlog to a team backlog. Although this is an optional step, there are certain benefits to moving stories to teams before the sprint. In cases where the team may be working on stories from multiple products, they may need to organize or plan their work before the sprint to account for technical dependencies and other multi-product (or project) issues.

A highly self-organizing team can often add value by tasking out stories before they go into sprint planning, and estimating stories in their team backlog on a regular basis. It's important to note that all stories in a team backlog should be stories that are planned in a current or upcoming release. Because sprints are created as child-objects of teams, any story that is moved into a sprint is automatically moved into the team backlog by the system. As a rule of thumb, teams should become very familiar with stories in their team backlog before they get to Sprint planning. This not only helps their velocity over time, but ensures better stories are developed with a better understanding of business goals and quality.

You can drag-and-drop stories between backlogs. Use the CTRL key to select multiple stories before dropping them into a new backlog.

Shop Online

**Alpha** Edit Add More

Name	Priority	Estimated Effort	Remaining Effort
Automated upsell recommendations	3		
Cross sell based on category	1	8	8
Defects for Release: Alpha		0	0
Defect 11356	1		
Domain management			
Gift certificates			
Integrated inventory management			
Multi-currency shopping			

Teams

**Commerce**

Name	
Customer writes a review for a product	3
Set payout schedule	2
View revenue source for commission sales	1

**Total**

Teams

**Platform**

Name
------

**To move a work item to a backlog**

1. Select the work item you want to move, click and hold down the mouse button.

Shop Online

**Beta** Edit Add More

Rank	Name	Priority	Estimated Effort	Remaining Effort
1	Access store branches via subdomains	1	3	3
2	Beta Defects		0	0
	Defect 10156	2		
3	View past order details	2	13	13
4	Send automatic notifications for out of	3	8	4

Platform

**Platform - Sprint 1**

Name
Login using SSL
Manage inventory from in-house system
View order status

**Total**

Platform

**Platform - Sprint 2**

2. When you get the work item to the new backlog, release the mouse button.

Platform				
Platform - Sprint 1				
Remaining Effort	Name	Priority	Estimated Effort	Re t
3	Login using SSL	4	5	
	Manage inventory from in-house system	1	13	
0	View order status	3	5	
13				
4	<b>Total</b>		<b>23</b>	

3. The backlog will refresh with the updated work item list.

Platform				
Platform - Sprint 1				
	Name	Priority	Estimated Effort	Remain Effort
3	Defect 10156	2		
	Login using SSL	4	5	
0	Manage inventory from in-house system	1	13	
	View order status	3	5	
3				
4				
	<b>Total</b>		<b>23</b>	<b>0</b>

### Prioritizing the Team Backlog

Use release planning and sprint planning meetings to determine which stories should be moved into a specific Agile team's backlog. A team backlog should contain stories that will be committed to by a specific Agile team for an upcoming sprint. Stories in a team backlog should be well-written, have a high priority and a high business value. Stories in a

team backlog should have an accurate story point estimate before being moved into a specific sprint backlog.

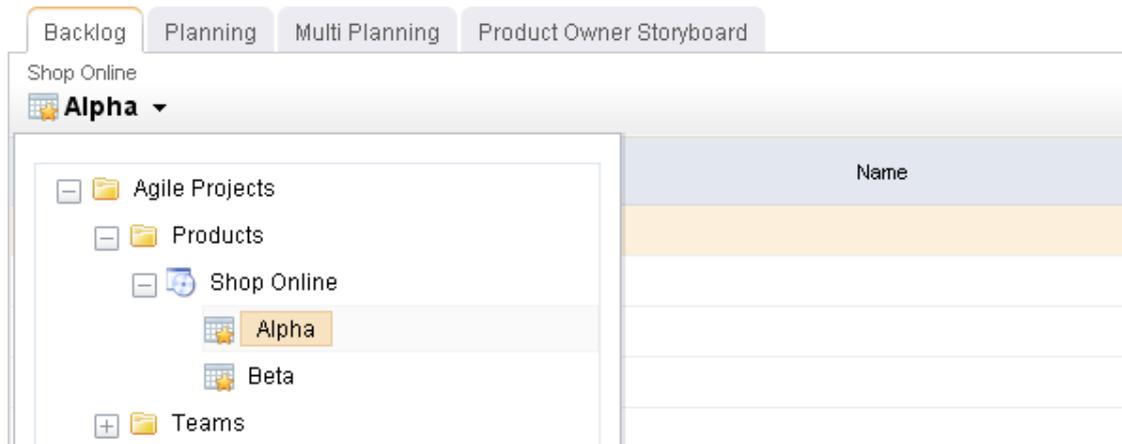
A work item in a team backlog can be moved to and from a release backlog (or another team's backlog) as needed, such as when business priorities change or when opportunities to create better business value arise. A work item in a team backlog can be added, edited, and removed as needed; however, any work item in a team backlog should have a high priority and a high business value.

Although managing team backlogs are optional, a team backlog may be prioritized by the team (with collaboration from the product owner) to account for technical dependencies and other factors that are unrelated to pure business priority. Note: When you are in the Backlog view, make sure your view-mode is set to  List, so that you can stack-rank stories in relative priority. By default, the Backlog view will display stories in  Tree mode.

You can prioritize a work item (sometimes called ranking a work item) in a backlog. Viewing a backlog in list view mode will ensure that you can view a work item by relative priority (where a higher rank equals a higher priority). (By default, Serena Agile shows backlogs in the  Tree view mode, which does not rank stories.)

**To prioritize stories in a backlog**

1. Choose a backlog.



2. Click  List.
3. Choose the story you want to re-rank, select it (by holding down the mouse button), and then drag it to its new relative priority.



- When a work item is in the location you want it to be, de-select it (by releasing the mouse button). The backlog will refresh and the work item will have been re-ranked according to its new relative priority.

		Effort
1	Commission tracking for Partners and Affiliates	
2	Cross selling	40
3	Partner & Affiliate tools	23
	Affiliate manages their account information	5
	Sign up for an Affiliate account	5
	User can register multiple Affiliate site URLs in their company profile	5
	View Affiliate commission balance	8
4	Defects	0
5	Integrated inventory management	0

## Estimating the Team Backlog

Estimating a backlog is often done with the team during collaborative sessions where the team provides technical input on the stories. Serena Agile ships with a standard Scrum configuration which allows estimation of stories by relative effort using story points (Fibonacci series of numbers).

Planning poker is a method of estimating the sizes of user stories during sprint and release planning meetings. Team members discuss a user story for a short period of time, after which team members assign that user story a points estimate. This is often done using Fibonacci numbers (1, 2, 3, 5, 8, 13, and so on), where the lower numbers are easier to work on. The team members with the highest and lowest estimates defend their positions, after which team members re-assign that user story a points estimate.



Velocity is a method of determining how many story points of work a team can commit to in a future sprint based on how many story points of work a team was able to complete in previous sprints. As a safe, general rule, a team should never commit to more story points in a sprint than their average velocity over the 2-4 previous sprints.

### Plan Sprints

A sprint is where all of the actual work happens. Because of the importance of each sprint in a release cycle, it is important to ensure that the right stories are being added to a sprint, that all aspects of a team's velocity is considered while adding stories, and that any impediments that might jeopardize getting these stories done during the sprint are identified and addressed.

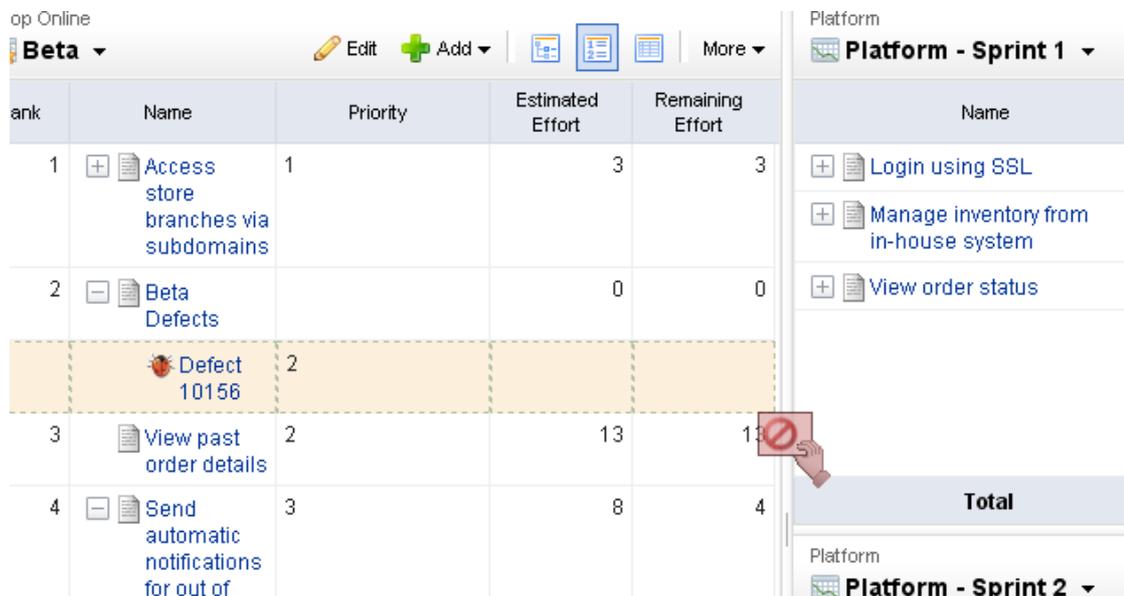
## Planning a Sprint

Sprints can be planned after release backlogs have been defined, prioritized, and estimated. Moving stories from a release or team backlog into a team's sprint backlog is a simple matter of using drag-and-drop to move a work item from one backlog to another.

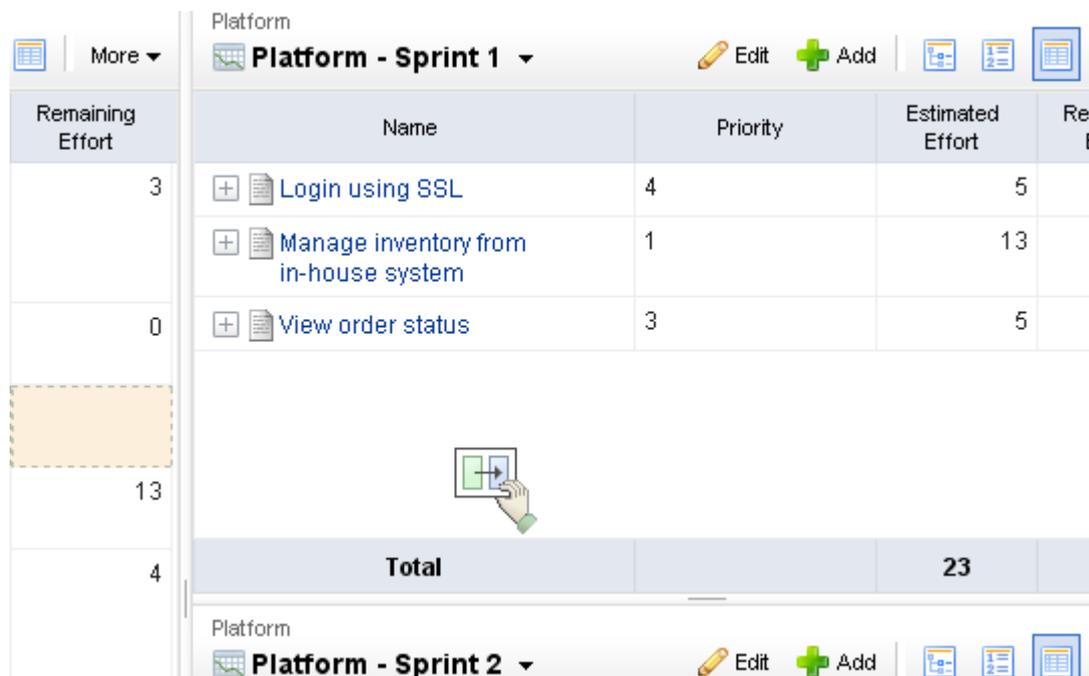
To move a work item into a sprint backlog, simply click the work item (and hold down the mouse button) while you drag it from one backlog to another.

**To move a work item to a backlog**

1. Select the work item you want to move, click and hold down the mouse button.



2. When you get the work item to the new backlog, release the mouse button.



3. The backlog will refresh with the updated work item list.

Name	Priority	Estimated Effort	Remain Effor
Defect 10156	2		
Login using SSL	4	5	
Manage inventory from in-house system	1	13	
View order status	3	5	
<b>Total</b>		<b>23</b>	<b>0</b>

## Breaking Stories into Tasks

User stories can be broken down into tasks by developers and testers to better track work after stories have been moved to the team backlog (for teams that plan ahead) or sprint backlog (for just-in-time planning). Tasks can be estimated via work-hours, to better reflect time spent by developers and testers. When you are working in a backlog, be sure your that the view mode is set to  Tree so that the work hierarchy is visible (and so that a task shows as child work item of a story).

## Track Sprints

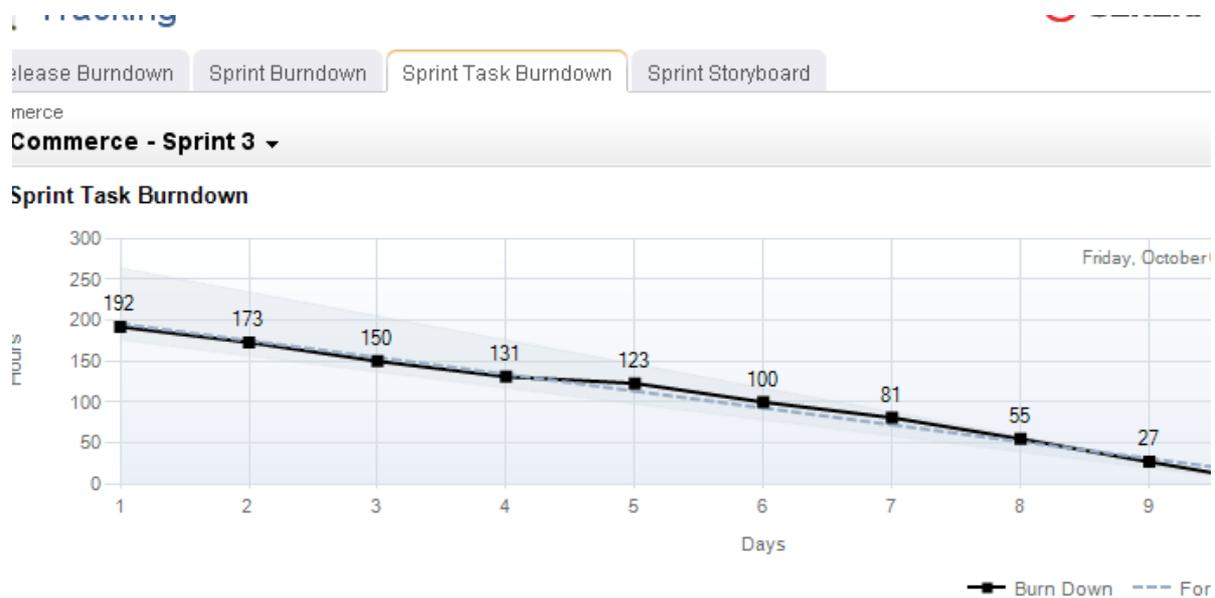
A sprint is where all of the actual work happens. Every day, team members gather in daily standup and quickly state what they have done, what they are going to do, and whether they have any impediments. Sprints rely on a team's velocity to determine how much work can be done in a future sprint and on a team's burndown chart to gauge how well a team is completing its work in a current sprint.

## Daily Standup

Daily standup occurs every day at a time that is convenient for all team members—usually in the morning—and often time-boxed at no more than 15 minutes. A burndown chart is used to view the team's overall status. The list of stories that are being worked on in the current sprint are viewed alongside a list of impediments (if there are any impediments). During standup, each team member addresses three key issues: what they have worked on since the previous daily standup, what they will work on today, and what impediments (if any) are present that could affect their current work item.

Because daily standup is a collaborative meeting, a given team may use multiple views to accomplish their daily standup goals. Many teams will choose to start by viewing their sprint burndown chart, from which the current health of a sprint can be viewed.

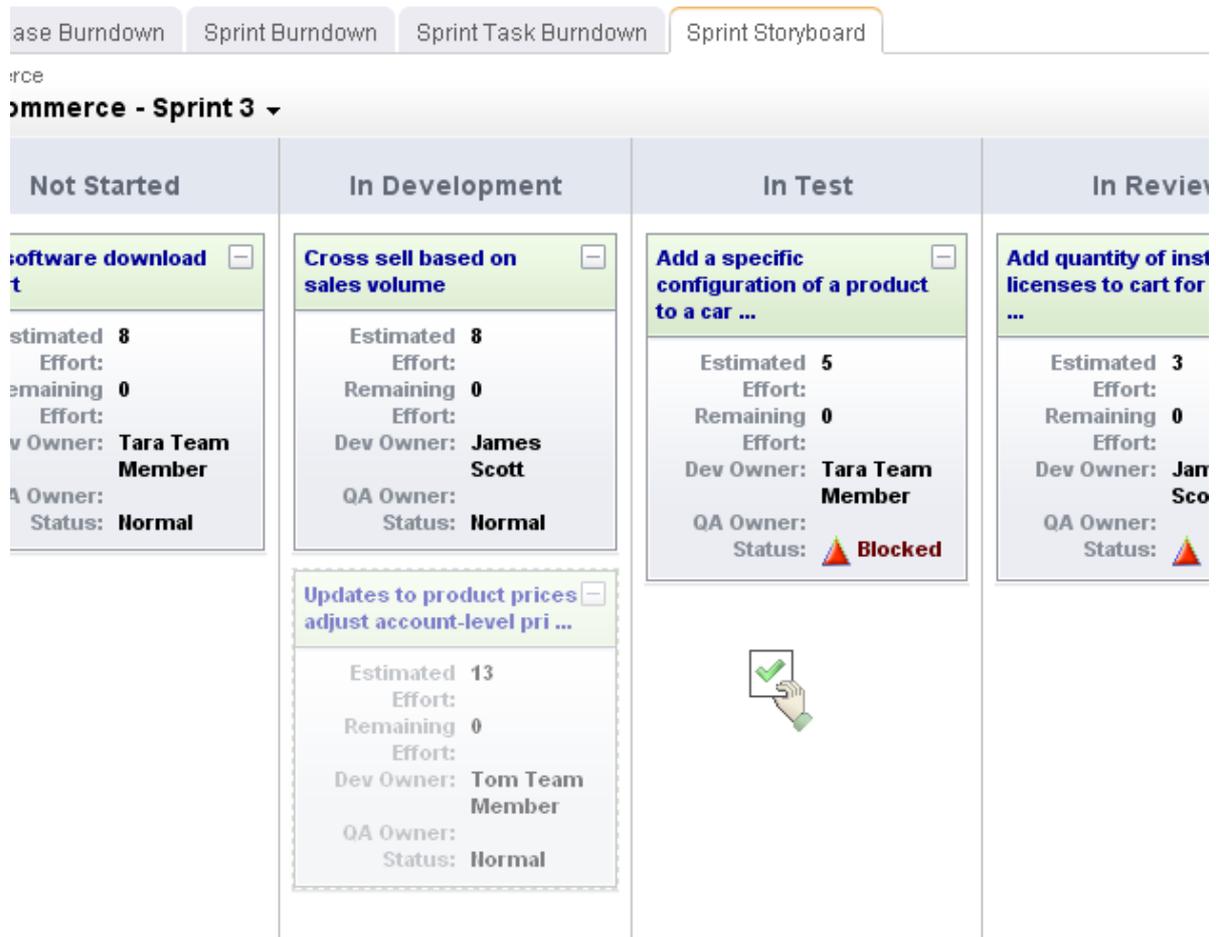
If your team has broken its stories down into tasks and is tracking task by hours, you may also want to review the sprint task burndown chart, which helps assess current progress by hours.



Commerce - Sprint 3 ✎ Edit + Add

Name	Estimated Hours	Remaining Hours	Dev Owner	QA Owner	Task State
Parent = Add a specific configuration of a product to a cart	30	0			
📁 Acceptance Tests	10	0	Tara Team Member		Complete

A storyboard can be used to view all of the stories in the sprint, often organized by work status and grouped into the following phases: Not Started, In Development, In Test, In Review, and Accepted. A storyboard cleanly shows the stories that are being worked on, by whom, and where that story is in the development cycle.



During standup, stories may be updated as information is shared among team members, stories may be transitioned from one phase to another, and so on.

## Managing Defects

A defect is a bug, an issue, or some problem with the a product. A defect can be identified by a customer, by a member of your sales or support organization, and (most often) by a member of your own team (a tester or an engineer, for example).

Serena Serena Agile comes configured with a lightweight way to manage defects. Using this lightweight approach, any defect that is found during a sprint can be added as a defect, similar to how a task is added as a child to a story. If this approach is used, then that defect will need to be fixed before the parent story can be completed.

Platform

**Platform - Sprint 3** Edit Add

Name	Estimated Effort	Remaining Effort	Dev Owner	QA Owner
Customer support chat	29	0		
Product reviews	5	0		
Email request to review a purchased product	5	0	Tara Team Member	Ac
Acceptance Tests			Tara Team Member	

- Story
- Task
- Epic
- Defect

Another approach is to create defects independently. Using this approach, defects should be grouped under a generic story called Defects (or the name that is most meaningful to your team) that is used in the same manner for all products, releases, and sprints. All defects live under this story and can be moved among backlogs as long as they are being moved as part of the same parent container.

### Tracking Release Status

A release status meeting gives all team members (and other stakeholders) visibility into the current status of any given release. You can use a release burndown chart to help show the progress of the release, view the distribution of work item objectives as they relate to story points, and view a team's historical velocity. Release status is typically monitored by a product owner or by a group of stakeholders. In Scrum, a release burndown chart is used as the primary method of monitoring the release status.



Shop Online  
Alpha

Name	Estimated Effort	Remaining Effort	Accepted Effort	
Sprint Backlog = {BLANK}	16	12	0	
<a href="#">Cross sell based on category</a>	8	8	0	Not E

## Reviewing Sprints

A sprint review meeting (or retrospective) should occur at the end of every sprint (and often at the end of every release too). A sprint review gives team members (and other stakeholders) to give each other honest feedback about how well the sprint or review was (or was not) executed. The purpose of the review is to identify areas of improvement, identify successes and failures, and to learn and grow as a team so that it can improve its performance in future sprints.

## Planning

The Planning module is where you will perform most activities centered around planning upcoming work, such as managing backlogs, planning sprints, and so forth.

For more information, see the following topics:

- [Backlogs \[page 104\]](#)
- [Manage Demand \[page 104\]](#)
- [Product Owner Storyboard \[page 104\]](#)
- [Release Planning \[page 105\]](#)
- [Team Planning \[page 106\]](#)
- [Sprint Planning \[page 106\]](#)

## Backlogs

A work item is added to the product backlog by product owners and team members. A work item is moved into a release backlog (from the product backlog) to support the goals outlined in the product roadmap. A work item in a product backlog should be estimated (at a very high-level), broken down into a smaller work item (with some detail), and so on, before the beginning of the next release.

Product planning meetings may include team members, but they often include high-level stakeholders who are not team members, such as executive sponsors, members of other teams within your organization (support, documentation, marketing, and so on), as needed. The goal of product planning is to make sure that your product roadmap contains only a work item with the highest business value and priority for the upcoming 2-4 releases.

## Manage Demand

A work item is added to the product backlog by product owners and team members. A work item is moved into a release backlog (from the product backlog) to support the goals outlined in the product roadmap. A work item in a product backlog should be estimated (at a very high-level), broken down into a smaller work item (with some detail), and so on, before the beginning of the next release.

Product planning meetings may include team members, but they often include high-level stakeholders who are not team members, such as executive sponsors, members of other teams within your organization (support, documentation, marketing, and so on), as needed. The goal of product planning is to make sure that your product roadmap contains only a work item with the highest business value and priority for the upcoming 2-4 releases.

## Product Owner Storyboard

A storyboard (or card wall) can be used to help track the work item status during a sprint. For example, a storyboard could have the following phases:

- **Not Started** A work item that is ready to be worked on by a team member.
- **In Development** A work item that is being worked on by a team member.
- **In Testing** A work item that is ready to be tested by a team member.
- **Testing** A work item that is being tested by a team member.
- **Ready for Review** A work item that is considered done by the team, but is not yet approved by the product owner.
- **Accepted** A work item that is accepted by the product owner and is considered complete.

While working in a storyboard, you can drag any work item from one column to another. Click the plus symbol to view quick details, such as name, work (estimated and remaining), and status. Click the name of any story to view its details, such as its name, description, acceptance criteria, work (estimated and remaining), status, priority, owners (development, test, and product), notes, and so on.

Serena Agile includes two out-of-the-box storyboards, one for use by product owners as part of their planning activities, and one for use by teams as part of their sprint activities.

- **Product Owner Storyboard** This storyboard has phases for **New, Elaborating, Pre-Planning,** and **Sprint Ready.**
- **Sprint Storyboard** This storyboard has phases for **Not Started, In Development, In Test, In Review,** and **Accepted.**

Once a specific backlog has been chosen, the same basic collection of actions are available: edit a work item and view a work item. A work item can be selected, and then moved to other phases in the storyboard using drag-and-drop.

The screenshot shows a Jira Sprint Storyboard for 'Commerce - Sprint 3'. At the top, there are tabs for 'Base Burndown', 'Sprint Burndown', 'Sprint Task Burndown', and 'Sprint Storyboard'. Below the tabs, the board is organized into four columns: 'Not Started', 'In Development', 'In Test', and 'In Review'. Each column contains one or more work items. Each work item card displays the title, estimated effort, remaining effort, and the owner's name and role. The 'In Test' column shows a work item with a 'Blocked' status, indicated by a red triangle icon. A hand icon with a green checkmark is positioned over the 'In Test' column, suggesting a drag-and-drop action.

Not Started	In Development	In Test	In Review
<b>Software download</b> Estimated: 8 Effort: 0 Remaining: 0 Dev Owner: Tara Team Member QA Owner: Normal Status: Normal	<b>Cross sell based on sales volume</b> Estimated: 8 Effort: 0 Remaining: 0 Dev Owner: James Scott QA Owner: Normal Status: Normal	<b>Add a specific configuration of a product to a car ...</b> Estimated: 5 Effort: 0 Remaining: 0 Dev Owner: Tara Team Member QA Owner: Normal Status: <b>Blocked</b>	<b>Add quantity of inst licenses to cart for ...</b> Estimated: 3 Effort: 0 Remaining: 0 Dev Owner: James Scott QA Owner: Normal Status: Normal
	<b>Updates to product prices adjust account-level pri ...</b> Estimated: 13 Effort: 0 Remaining: 0 Dev Owner: Tom Team Member QA Owner: Normal Status: Normal		

## Release Planning

Release planning is an exercise of finding out which features that are defined in the product backlog will help the team meet its current release objectives, as defined by the product roadmap. In general, product owners use this view to manage the epics—a collection of stories that are too big for a single sprint—that the development team will work on during the release. Epics (and their related stories) can be grouped by themes, priority, and so on.

Product owners should work to ensure that a release aligns with the overall project's goals and business value. They will determine the release schedule (the number and frequency of releases), themes for the release, epics that support the themes, and the length of the sprints contained with the releases. In general, shorter releases require shorter sprints.

Sprint lengths range from 1-4 weeks, and are usually on the smaller end of that range. A release plan should always be visible to team members.

The screenshot shows a 'Product Owner Storyboard' interface. At the top, there are two tabs: 'Multi Planning' and 'Product Owner Storyboard'. Below the tabs, the storyboard is organized into columns. The 'Elaborating' column contains two story cards: 'View Affiliate commission balance' (Priority: 4, Business Value: 15, Estimated Effort: 8, Status: Normal) and 'Defects' (Priority: 0, Business Value: 0, Estimated Effort: 0, Status: Normal). The 'Pre-Planning' column contains one story card: 'View past order details' (Priority: 2, Business Value: 15, Estimated Effort: 13, Status: Normal). On the left side, there are additional story cards partially visible, such as 'Multiple Affiliate site' and 'account', with their respective details.

## Team Planning

Team planning is an exercise of finding out which features that are defined in the product backlog will help the team meet its current release objectives, as defined by the product roadmap. In general, product owners use this view to manage the epics—a collection of stories that are too big for a single sprint—that the development team will work on during the release. Epics (and their related stories) can be grouped by themes, priority, and so on.

Product owners should work to ensure that a release aligns with the overall project's goals and business value. They will determine the release schedule (the number and frequency of releases), themes for the release, epics that support the themes, and the length of the sprints contained with the releases. In general, shorter releases require shorter sprints. Sprint lengths range from 1-4 weeks, and are usually on the smaller end of that range. A release plan should always be visible to team members.

## Sprint Planning

Sprint planning is used to define the list of stories that a team will commit to building during a single sprint for a given release. How much work a team can do during a sprint is referred to as velocity. Each story or work item is assigned a value (typically known as a story point estimate) by the team. Velocity is the average estimated story points to which a team can commit over time. There are many ways to estimate story points and velocity. The most common approach is to use story points using planning poker as the way to

determine the estimated size; however, other approaches include using shirt sizes (XL, L, M, S, and so on), affinity grouping (which seeks to identify similarities between stories and trends among stories over time), and so on.

### **Planning Poker**

Planning poker is a method of estimating the sizes of user stories during sprint and release planning meetings. Team members discuss a user story for a short period of time, after which team members assign that user story a points estimate. This is often done using Fibonacci numbers (1, 2, 3, 5, 8, 13, and so on), where the lower numbers are easier to work on. The team members with the highest and lowest estimates defend their positions, after which team members re-assign that user story a points estimate.



The purpose of planning poker is to achieve a consensus among the team as to the relative sizing for all user stories that are candidates to be moved into a sprint backlog or to be worked on during any single sprint. The user story sizing estimates help product owners select the user stories with the highest business value.

User story size estimates are intended to show how much effort is required in order to complete the work on an individual user story. In general, user stories assigned a 1, 2, or 3 are user stories that can be completed in a single two week sprint by two or fewer team members. User stories assigned a 5 or an 8 are more difficult, may require many team members, may have dependencies on other user stories, or may be too big to complete during a single sprint. Some user stories with a 5 or an 8 sizing estimate should be broken down into smaller user stories. User stories assigned a 13 (or greater) are almost always too large to be worked on during a single sprint and should be broken down by product owners into smaller user stories.

That said, there should be no literal meaning associated with any particular number in the Fibonacci sequence other than the meaning your team learns to associate with them over time. Some teams use standard playing cards, with an Ace representing a 1 and a King representing a 13.

### **Velocity**

Velocity is a method of determining how many story points of work a team can commit to in a future sprint based on how many story points of work a team was able to complete in previous sprints. As a safe, general rule, a team should never commit to more story points in a sprint than their average velocity over the 2-4 previous sprints.

But velocity is more than a simple math exercise. There are good velocities and there are bad velocities. How do you know one from the other? Some characteristics of a good velocity:

- Story points are measured independently of the size of the team.
- Story points are sized to include all of the business priorities and goals of the Agile project.
- Story points are sized to include dependencies on all team members.
- Story points are sized to account for dependencies on external teams, such as support, sales, or training.

Most characteristics of a bad velocity are simply the opposite of a good velocity, such as committing to a number of story points that is only based on the number of team members available during the sprint. Or not factoring the potential complexity of a new series of features as they relate to the amount of time your support organization will need to be ready for the upcoming product release. Or the amount of time it will take your sales team to learn how to successfully engage potential customers. Or by not accounting for the amount of time it may take a training team (or a documentation team) to produce customer-facing material.

Good velocity? Bad velocity? The reality is that most Agile teams consistently live somewhere in-between. Business priorities change. Challenging defects are discovered. Team members get sick. External dependencies can be hard to predict. But a little strategy can go a long way. Your team's velocity is important. So it's equally important to consider your velocity within the context of the work that your team is doing and how it relates to your product's release cycle, your team's relationship to other teams, your product's relationship to other products within your organization, and so on.

As best you can, you want to avoid disrupting your team to prevent having an adverse effect on its velocity. For example, switching your automated testing platform several times in one calendar year is probably a bad idea. Every time you change platforms, you may be removing valuable points from your velocity. Another way a little strategy can help is for the product owner to have a good idea of what the product roadmap looks like in relation to the work the team will be asked to do during the upcoming release. For example, if one feature enhancement requires your engineering team to reconfigure the back-end, it's probably better to do that work earlier in the release cycle rather than later.

A good velocity helps your team deliver as much value as possible. A good velocity is what your team wants. Your team will need to work hard to learn what its good velocity looks like. Sometimes the old adage "do less to do more" can help a team understand what their velocity should be. If your team finds itself consistently underperforming its story point commitments (even by a point or two, per sprint), or if your team finds itself consistently finishing stories on the very last day of the sprint, right before the sprint review, then your team should consider committing to fewer story points. Over the next 2-4 sprints, this will lower your team's velocity, but it will also give your team a chance to see if a smaller commitment translates into a more successful sprint.

## Tracking

The Tracking module is where you will perform most activities centered around keeping track of the status of work items in a sprint.

For more information, see the following topics:

- [Release Burndown \[page 108\]](#)
- [Sprint Story Points Burndown \[page 109\]](#)
- [Sprint Task Hours Burndown \[page 109\]](#)
- [Storyboard \[page 110\]](#)
- [Taskboard \[page 110\]](#)

## Release Burndown

A burndown chart is a simple way of measuring a team's progress during a sprint by comparing the working days in the sprint to the total number of story points to which the team committed. A story is considered complete when it has zero story points remaining

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and has been accepted by the product owner. A sprint can be considered complete when the total story points to which the team committed reaches zero. Ideally, this occurs on the last working day of the sprint. Working days in a sprint are defined by the working days in your organization's company calendar.

A burndown chart can be useful at several points within the Agile lifecycle: during a release, during a sprint, and for a specific task. A release burndown chart is useful for tracking the progress of a release by using a single metric (such as total story points remaining or total work hours remaining) and comparing it against the original total toward which the team has made a commitment. As team members update this metric for any individual work item they are assigned, the release burndown chart is updated to show the overall progress of the team.

Serena Agile includes an out-of-the-box release burndown chart as part of the **Tracking** module. The release burndown chart is used to view the current status of the release, sorted by sprint in the related backlog pane. The burndown chart shows the backlog from which the burndown chart is based as part of the release, sprint, and task burndown chart views.

### Sprint Story Points Burndown

A burndown chart is a simple way of measuring a team's progress during a sprint by comparing the working days in the sprint to the total number of story points to which the team committed.

A story is considered complete when it does not have any remaining story points and after it has been accepted by a product owner. A sprint can be considered complete when the total story points to which the team committed reaches zero or when the time allotted to the sprint (1-4 weeks) runs out. Ideally, this occurs before the last working day of the sprint. Stories not completed in time are not accepted by the product owner and are moved to a subsequent sprint. Working days in a sprint are defined by the working days in your organization's company calendar.

Serena Agile includes an out-of-the-box sprint burndown chart as part of the **Tracking** module. The sprint burndown chart is used to view the current status of the sprint. The list of stories, sorted by work state will appear in the related backlog pane. The burndown chart shows the backlog from which the burndown chart is based as part of the release, sprint, and task burndown chart views.

### Sprint Task Hours Burndown

A burndown chart is a simple way of measuring a team's progress during a sprint by comparing the working days in the sprint to the total number of story points to which the team committed.

A story is considered complete when it does not have any remaining story points and after it has been accepted by a product owner. A sprint can be considered complete when the total story points to which the team committed reaches zero or when the time allotted to the sprint (1-4 weeks) runs out. Ideally, this occurs before the last working day of the sprint. Stories not completed in time are not accepted by the product owner and are moved to a subsequent sprint. Working days in a sprint are defined by the working days in your organization's company calendar.

Serena Agile includes an out-of-the-box sprint burndown chart as part of the **Tracking** module. The sprint burndown chart is used to view the current status of the sprint. The list of stories, sorted by work state will appear in the related backlog pane. The burndown

chart shows the backlog from which the burndown chart is based as part of the release, sprint, and task burndown chart views.

## Storyboard

A storyboard (or card wall) can be used to help track the work item status during a sprint. For example, a storyboard could have the following phases:

- **Not Started** A work item that is ready to be worked on by a team member.
- **In Development** A work item that is being worked on by a team member.
- **In Testing** A work item that is ready to be tested by a team member.
- **Testing** A work item that is being tested by a team member.
- **Ready for Review** A work item that is considered done by the team, but is not yet approved by the product owner.
- **Accepted** A work item that is accepted by the product owner and is considered complete.

While working in a storyboard, you can drag any work item from one column to another. Click the plus symbol to view quick details, such as name, work (estimated and remaining), and status. Click the name of any story to view its details, such as its name, description, acceptance criteria, work (estimated and remaining), status, priority, owners (development, test, and product), notes, and so on.

Serena Agile includes two out-of-the-box storyboards, one for use by product owners as part of their planning activities, and one for use by teams as part of their sprint activities.

- **Product Owner Storyboard** This storyboard has phases for **New, Elaborating, Pre-Planning, and Sprint Ready**.
- **Sprint Storyboard** This storyboard has phases for **Not Started, In Development, In Test, In Review, and Accepted**.

Once a specific backlog has been chosen, the same basic collection of actions are available: edit a work item and view a work item. A work item can be selected, and then moved to other phases in the storyboard using drag-and-drop.

## Taskboard

A taskboard (or card wall) can be used to help track the work item status during a sprint. For example, a storyboard could have the following phases:

- **Not Started** A work item that is ready to be worked on by a team member.
- **In Development** A work item that is being worked on by a team member.
- **In Testing** A work item that is ready to be tested by a team member.
- **Testing** A work item that is being tested by a team member.
- **Ready for Review** A work item that is considered done by the team, but is not yet approved by the product owner.
- **Accepted** A work item that is accepted by the product owner and is considered complete.

While working in a storyboard, you can drag any work item from one column to another. Click the plus symbol to view quick details, such as name, work (estimated and

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remaining), and status. Click the name of any story to view its details, such as its name, description, acceptance criteria, work (estimated and remaining), status, priority, owners (development, test, and product), notes, and so on.

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- **Product Owner Storyboard** This storyboard has phases for **New, Elaborating, Pre-Planning,** and **Sprint Ready.**
- **Sprint Storyboard** This storyboard has phases for **Not Started, In Development, In Test, In Review,** and **Accepted.**

Once a specific backlog has been chosen, the same basic collection of actions are available: edit a work item and view a work item. A work item can be selected, and then moved to other phases in the storyboard using drag-and-drop.

## Projects

The Projects module is where you will work with maintaining backlogs and their items.

For more information, see the following topics:

- [Documents \[page 111\]](#)
- [History \[page 116\]](#)
- [Details \[page 116\]](#)
- [User Actions \[page 116\]](#)

## Documents

Users in your organization can use the **Documents** tab to track, manage, and store documents which relate to a work item. Every work item will have its own **Documents** tab. As users in your organization work on the tasks and activities related to a work item, they can add documents, check them out (make updates), and check them in (save updates). A document can only be updated by one team member at a time. A history of each document is kept and users are allowed to access older versions. Documents can be moved from one **Documents** tab to another.

Team members are allowed access to the **Documents** tab based on their permissions to access the work item to which the view is associated. All team members with permission to view the work item will be able to view documents. Team members with permission to add documents and folders will be able to add documents, check them out (make updates), and check them in (save them).

### *Adding a document*

As you work on a work item, files will be created that will be helpful to other team members working on the same work item. You can add these documents to the **Documents** tab for that work item.

#### **To add a document**

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.

4. Select the folder into which you want to add a document.
5. Click **New Document** to add a document to the selected folder.
6. In the **New Document** dialog box, enter a name, a description, keywords (that can help the document be found using search), and any additional comments.
7. Browse to the location on your computer from where you will upload the document.
8. Click **OK**.

### **Checking in a document**

When you are done updating a checked-out document, save your changes by checking it in.

#### **To check-in a document**

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Select a checked-out document, right-click and select **Check In**.
5. In the **Check In** dialog box, select the location of the document being checked-in and add comments. Select the **Update the copy in the repository, but keep the file checked out** check-box to replace the file with the copy you have on your local computer and keep the document checked out.
6. Choose the incremental update that will be made to the document revision history during check in. The format is major.minor.revision (as in 1.0.0 or 2.1.2). Set **Increment Version** to *Major*, *Minor*, or *Revision* to update the document's revision history.
7. Click **OK**.

### **Checking out a document**

Before you can make changes to a document, you must first check it out.

#### **To check-out a document**

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Select a document, right-click and select **Check Out**.
5. In the **Check Out** dialog box, add comments. Select **Mark the file as checked out, but do not download the file** to replace the file with the copy you have on your local computer when you check it back in.
6. Click **OK**.
7. Save the file to your local computer. (Opening the file directly can place the working copy of the document in your temporary Internet files directory.)

### **Copying to another folder**

Many documents useful for one work item will be useful to another. You can copy a document from one **Documents** tab and add it to another **Documents** tab.

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### To copy a document from one work item to another

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Right-click the document that you want to copy and select **Move/Copy** on the shortcut menu to open the Document Move/Copy dialog box.
5. Select **Copy Document**.
6. In the **Target Investment** list, select the name of the work item in which you are placing a copy of the selected document.
7. In the **Target Folder** list, select the document folder in which you want to place the copy of the selected document.
8. Click **Save**.

### *Deleting a document*

Any document can be deleted.

### To delete a document

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Select a document, right-click and select **Delete**.
5. Click **OK**.

### *Finding a document*

Use the search feature to find a document. Searches rely on a document's file name, but can also look for keywords, titles, and descriptions. Search does not look within the text of a document.

### To find a document

1. Open the **Projects, Reports, Tools, or Customization** modules.
2. Click **Search** in the toolbar.
3. In the **Search** dialog box, type the string for which you want to search.
4. Select the *Name* attribute.
5. For **Match**, select any word to have the search results include any of the text you typed or select all words to have the search results include all of the text you typed. To search for a specific phrase, put quotation marks around the word(s) for which you are searching.
6. From the **Display** drop-down, select *Documents*.
7. Click **Advanced** to set up a more detailed search, including defining rules, searching by keyword, title, and description, and selected items.

### ***Moving a document***

You may decide that a document needs to be moved from one item's **Documents** tab to another.

#### **To move a document**

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Right-click the document that you want to move and select **Move/Copy** on the shortcut menu to open the Document Move/Copy dialog box.
5. Under **Target Investment**, select the work item to which you want to move a document.
6. Under **Target Folder**, select the folder in which you want to place the document.
7. Click **OK**.

### ***Viewing a document***

To view a document, you can open the file from the **Documents** tab.

#### **To view a document**

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Right-click the document name in the **Documents** tab and select **Properties**.
5. In the **Document Properties** dialog box, review the list of historical documents at the bottom. Select the version of the document that you want to view and click **View**.
6. In the **Download Information** dialog box, click **OK**.
7. In the **File Download** dialog box, click **Open** to open the file and view it in your Web browser or click **Save** to save the file to disk.

### ***Document Folders***

If there are a lot of documents associated with a work item, the **Documents** tab can be organized into sub-folders.

#### **Adding a document folder**

If a work item has a large number of documents you can add folders to the **Documents** tab and organize it.

#### **To add a document folder**

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Select the folder into which you want to add a folder.

5. Click **New Document Folder** to add a document folder to the selected folder.
6. In the **New Folder** dialog box, enter a name and a description.
7. Click **Save**.

## Deleting a document folder

You can delete any folder in the **Documents** tab that is not being used.

### To delete a document folder

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Select a document folder, right-click and select **Delete**.
5. Click **OK**. All documents contained within the folder, including sub-folders, will be deleted.

## Renaming a document folder

You can rename folders in the **Documents** tab.

### To rename a document folder

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Select a document folder, right-click and select **Properties**.
5. In the **Folder Properties** dialog box, rename the document folder.
6. Click **OK**.

## Document Versions

If there are a lot of documents associated with a work item, the **Documents** tab can be organized into sub-folders.

## Deleting a document version

For some documents, a history of the saved versions is useful. For others, it may not be. You can delete versions of a document that are in a document's history.

### To delete a document version

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Right-click the document which contains the version you want to delete and click **Properties**.
5. In the **Document Properties** dialog box, review the list of historical documents at the bottom of the page, select the version of the document that you want to delete, and click **Delete**.

6. Click **OK** to delete the historical version of the document from the **Documents** tab. Deleting a document version is not reversible.

## Viewing a document's history

Every time a document is checked-out, modified, and then checked-in, a version of that document is retained along with information about when the document was checked-in, who it was checked-in by, and comments (if any) left by the team member.

### To view a document's history

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Right-click the document name in the **Documents** tab and select **Properties**.
5. In the **Document Properties** dialog box, review the list of historical documents at the bottom. Select the version of the document that you want to view and click **View**.

## Viewing the current version of a document

You can view the most recent version of a document by clicking the document name, and then choosing to view it.

### To view the current version of a document

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Documents** tab.
4. Right-click a document and select **View**.

## History

This tab lets you see all of the changes that have been made to a work item, including the date on which the change was made, the user who made the change, which attribute was changed, what the previous value of that attribute was, and what the value of that attribute was after the change was made.

## Details

A **Summary** tab provides a high-level overview of the selected work item. A **Summary** tab can be used in many locations, but they are used primarily within the **Projects** and **Resources** modules. They can be simple (as the default summary pages are), but they can also be customized to provide rich detail, making them an ideal starting point for any work item type and for any user in your organization.

## User Actions

You can right click any work item in the work item tree for additional options.

For more information, see the following topics:

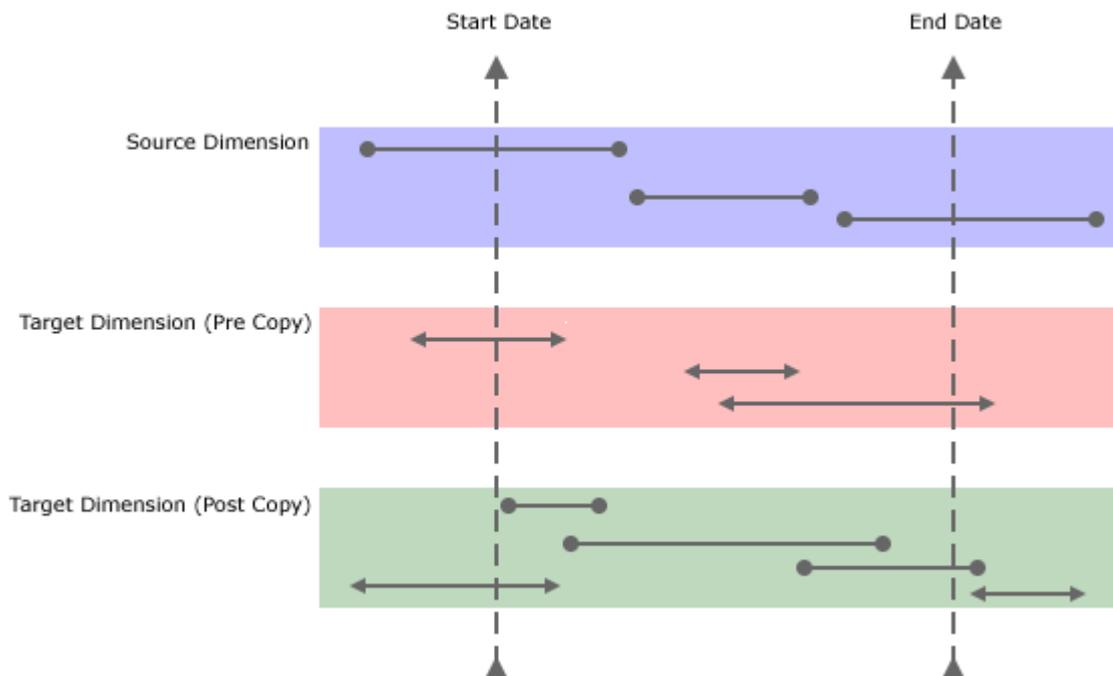
- [Dimensions \[page 117\]](#)
- [Security \[page 118\]](#)

- [Copy Dimension \[page 121\]](#)
- [Custom Log Views \[page 121\]](#)
- [Manage Items \[page 121\]](#)
- [Role Assignments \[page 123\]](#)
- [Reconcile Now \[page 125\]](#)
- [Properties \[page 126\]](#)

## Dimensions

Dimensions are data sets that are used to represent certain situations or goals. Dimensions enable users to group data which represents these situations or goals within a single time period, such as a project plan, a target, a budget, or actuals. There are two system dimensions:

- **Actual** This dimension contains values that represent the actual amounts of dimensioned attributes. For example, posted timesheet time is included in the **Actual** dimension for assignments. The **Actual** dimension can be renamed, but not deleted.
- **Plan** This dimension is used for more detailed project planning. Values in the plan dimension reflect a more detailed knowledge of the program and project execution requirements. The **Plan** dimension includes task plans for a task based work item, such as projects, as well as allocations for an activity-based work item. The **Plan** dimension can be renamed, but not deleted.



Dimensions can be added to some (but not all) of the views that are available in the **Projects** and **Reports** modules. There are two dimensions types:

- **Roll-up**—In a roll-up dimension, a parent work item displays data that is rolled-up from a child work item. Rolled-up data is read-only in the parent work item. When

data in the child work item changes, data in the parent work item changes too. If a child work item becomes a parent work item, original data in the child data is replaced by rolled-up data from a child work item. Most dimensions are roll-up dimensions.

- **Static**—In a static dimension, data is not rolled-up and there are no calculations. Data will be editable at any level of the parent/child hierarchy. Static dimensions are useful for top-down planning.

All security roles are given permission to view a dimension's work item data. You can prevent all users in your organization from being able to view a dimension's work item data by locking the dimension. Permission to edit a dimension's work item data is granted on a per-security role basis for each dimension. To give permission to edit a dimension's work item data, select the check box next to the security role. Permission to edit a dimension's work item data is given to all security groups for a pre-configured dimension.

## Security

A role assignment is a way to grant to a user and/or a security group permission to access any individual work item in the work item hierarchy, including all of its associated data and any of a child work item.

- Unless you want a user and/or security group to be granted access to every work item in the work item hierarchy, you should not make role assignments to the enterprise portfolio.
- Users and/or security groups will inherit the greatest level of permission granted to any particular work item. For example, if a security group is assigned to more than one security role and either of those security roles are given a role assignment to a work item, any user who belongs to the security group with the role assignment will have permission to access that work item and any of its associated data or child work item.
- If you do not want a user and/or a security group to have permission to edit information in a child work item, you can delete or clear the role assignment for the specific child investment; however, users and/or security groups will always be able to view data in a child work item if they have permission to view its parent.
- It is better to create role assignments by using security groups rather than for individual users. This will simplify the process of tracking and managing role assignments made to users across your organization.

The security for any work item is defined using the **Role Assignments** tab in the Properties dialog box. The **Role Assignments** tab has two views:

- **Simple** The simple view shows you which users and/or security groups have a role assignment based on a security role and which users and/or security groups inherit permissions from a parent work item. The simple view does not show you which permissions have been inherited or which users and/or security groups have an inherited role assignment based on a security role assigned to a parent work item.
- **Advanced** The advanced view shows you which users and/or security groups have a role assignment based on a security role, which users and/or security groups inherit permissions from a parent work item, which permissions have been inherited, and which users and/or security groups have an inherited role assignment based on a security role assigned to a parent work item.

## Tab: Role Assignments, Advanced

The **Role Assignments, Advanced** tab in the **Properties** dialog box is used to advanced role assignment details.

The following fields are available from the **Role Assignments, Advanced** tab in the **Properties** dialog box:

Fields	Description
<b>Add</b>	Click this button to add a selected user and/or security group to the role assignment for this work item. This will add the <b>Is Assigned To Role</b> icon in the <b>Assignment</b> column.
<b>Assignments</b>	This column indicates whether a user and/or security group has a role assignment to the selected work item. If the column shows <b>Is Assigned To Role</b> , the user and/or security group has been given a role assignment to the selected work item. If the column shows <b>Inherits Assignment To Role</b> , the user and/or security group is inheriting its role assignment from a role assignment made to a parent work item. If the column shows <b>Does Not Inherit Assignment To Role</b> , the user and/or security group is not inheriting its role assignment from a parent work item.
<b>Clear</b>	Click to clear a selected user and/or security group from the role assignment for this work item. This will remove the <b>Is Assigned To Role</b> or <b>Does Not Inherit Assignment To Role</b> icons from the <b>Assignment</b> column.
<b>Group / User</b>	Displays the users and/or security groups that are available for a role assignment to the selected work item. This list displays only security groups by default.
<b>Manage By</b>	Select <b>Role</b> to manage role assignments by security role and <b>Group / User</b> to manage role assignments by user and/or security group.
<b>Parent Groups</b>	This column indicates the security groups to which a user and/or a security group belong. This column is only visible when the <b>Role</b> option is selected for the <b>Manage By</b> selector.
<b>Remove</b>	Click this button to move the selected attributes from the <b>Selected Attributes</b> box to the <b>Available Attributes</b> box.
<b>Role</b>	This column displays the security roles from which users and/or security groups can be given role assignments.
<b>Show Unassigned</b>	Depending on which method you choose to manage role assignments, displays security roles or displays users and/or security groups who do not have a role assignment to the selected work item.

Fields	Description
<b>Show Users</b>	Select to display both users and security groups in the <b>Group / User</b> list.
<b>Simple</b>	Click to view the <b>Role Assignments</b> tab, simple view.

### Tab: Role Assignments, Simple

The **Role Assignments, Simple** tab in the **Properties** dialog box is used to view role assignment details.

The following fields are available from the **Role Assignments, Simple** tab in the **Properties** dialog box:

Fields	Description
<b>Add</b>	Click this button to add a selected user and/or security group to the role assignment for this work item. This will add the <b>Is Assigned To Role</b> icon in the <b>Assignment</b> column.
<b>Advanced</b>	Click to view the <b>Role Assignments</b> tab, advanced view.
<b>Assignments</b>	This column indicates whether a user and/or security group has a role assignment to the selected work item. If the column shows <b>Is Assigned To Role</b> , the user and/or security group has been given a role assignment to the selected work item. If the column shows <b>Inherits Assignment To Role</b> , the user and/or security group is inheriting its role assignment from a role assignment made to a parent work item. If the column shows <b>Does Not Inherit Assignment To Role</b> , the user and/or security group is not inheriting its role assignment from a parent work item.
<b>Clear</b>	Click to clear a selected user and/or security group from the role assignment for this work item. This will remove the <b>Is Assigned To Role</b> or <b>Does Not Inherit Assignment To Role</b> icons from the <b>Assignment</b> column.
<b>Group / User</b>	Displays the users and/or security groups that are available for a role assignment to the selected work item. This list displays only security groups by default.
<b>Remove</b>	Click this button to move the selected attributes from the <b>Selected Attributes</b> box to the <b>Available Attributes</b> box.
<b>Role</b>	This column displays the security roles from which users and/or security groups can be given role assignments.
<b>Show Users</b>	Select to display both users and security groups in the <b>Group / User</b> list.

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## Copy Dimension

The **Copy Dimension** dialog box helps you copy dimensioned attribute values from one dimension to the other. You can elect to copy all the data or copy only the data that falls within the specified date range. When data is copied data into a dimension, all data in that dimension is overwritten; if data is copied from within a specified date range, only the data in that date range is overwritten. Copying a dimension does not affect the task plan data. (You cannot copy data to the **Plan** or **Actual** dimensions.)

### Copying a dimension

Use the **Copy Dimension** dialog box to copy data from one dimension to another.

#### To copy a dimension

1. Open the **Projects** module.
2. Right-click a work item from the work item tree, and then click **Copy Dimension**.
3. In the **Copy Dimension** dialog box, select the dimension from where you are copying data and the dimension to where the data will be copied.
4. Select the dimension from which you want to copy data in the **Copy from** list and the dimension to which you want to copy data in the **Copy to** list. You cannot copy data to a locked dimension.
5. You can copy all data or you can copy data for a specific date range. Under **Timeframe**, specify the starting and ending dates.
6. Click **Save**.

## Custom Log Views

A log view is essentially a list found in the **Projects** module that is intended to track certain types of information, such as risks, issues, or perhaps a custom view (such as change log). It is a way for people in your organization to enhance the communicative process used to share information. For example, say you have a log view called **Complaints** that contains a log describing a common customer problem. Several members of your team contribute discussion points about this log until the decision is made to convert this log from a **Complaint** to an **Issue**. After a meeting, the decision is made to create a work item from the issue to address the problem. The work item is assigned to a resource who then fixes the problem. Log views typically allow users to add a new work item, edit or delete existing ones, and (in some cases) promote them to another work item type.

## Manage Items

A work item is any entity within your organization to which personnel, finances, and time can be allocated. A work item is defined as a project, a portfolio, an Agile project (including backlogs, features, and sprints), a product, a program, an application, a service, a request, or an asset. A work item can be scheduled, tracked, modeled, compared, reported against, managed, analyzed, and assigned. Every work item is placed in a hierarchical structure called the work item tree that orders each work item in relation to its parent work item, any peer items, and every child work item.

### Adding a new work item

When creating a work item, identify the type of work item you are creating, and define the work item summary data.

### To add a new work item

1. Open the **Projects** module.
2. Select a work item from the work item tree under which you want to add a new work item. Right-click and select **New**.
3. In the **New Investment** dialog box, select the work item type.
4. Click **Save**.

### Adding a new work item from a template

You can add a new work item using a work item template. Choose the type of work item that you want to create and then select the template from a list of templates. Finish entering summary details using the New Investment dialog box.

### To add a new work item from a template

1. Open the **Projects** module.
2. Select a work item in the work item tree under which you want to add a work item. Right-click and select **New from Template**.
3. In the **New Investment from Template** dialog box, select the work item type, a work item template, and (if the template contains a task plan) the date on which starting and ending dates will be based.
4. Click **Save**.

### Copying a work item

You can copy an existing work item, modify its summary data and properties, create a new work item, and then place it anywhere in your portfolio.

### To copy a work item

1. Open the **Projects** module.
2. In the work item tree, select the work item you want to copy, right-click and select **Copy**.
3. In the **Move/Copy Investment** dialog box, under **Options**, select **Make a copy** and choose whether you want also copy any related documents, any child work item, or tasks. If you copy tasks, select the date upon which the summary task in the copied work item will begin.
4. Click **OK**.

### Deleting a work item

If you no longer need a work item, you can delete it.

### To delete a work item

1. Open the **Projects** module.
2. Right-click the work item tree, select a work item, and click **Delete**.
3. In the **Delete Investment** dialog box, select the **Include Children** check box if you would like to delete the selected work item and any work item indented below it.
4. Click **OK**.

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## Editing a work item summary

You can modify the properties of a work item.

### To edit a work item summary

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Summary** tab.
4. Make your changes.
5. Click **Save**.

## Moving a work item

You can move any work item around in the work item hierarchy. The simplest way to move a single work item is to drag-and-drop it into the location in the hierarchy that you want it to be.

The **Move Investment** dialog lists every work item that you are authorized to view. When you select a work item for a report or a notification, the selection applies to that work item and any work item below it in that branch of the tree view. When you select a work item for include/exclude or self-allocating activities, the selection applies only to that work item.

You can also enter in a word or phrase and click **Search** to display a list of matches for your search criteria. You can easily alternate between the tree view and the search results by clicking the **Show Tree** or **Show Search Results**, depending on the current view.

### To move a work item

1. Open the **Projects** module.
2. In the work item tree, select the work item you want to move, right-click and select **Move/Copy**.
3. In the **Move/Copy Investment** dialog box, select the location in the work item tree under which the work item will be moved.
4. Click **OK**.

## Viewing work item properties

Use the **Investment Properties** dialog to view and modify work item properties.

### To view work item properties

1. Open the **Projects** module.
2. Right-click the work item tree and select **Properties** to open the under **Investment Properties** dialog box.

## *Role Assignments*

You can make role assignments for a user and/or a security group while you are creating a new work item.

## Adding a role assignment

A role assignment is a way to grant to a user and/or a security group permission to access any individual work item in the work item heirarchy, including all of its associated data and any of a child work item.

### To add a role assignment

1. Open the **Properties** dialog box for an work item, a work item template, a resource, or a resource team.
2. Select the under **Role Assignments** tab.
3. Choose the **Simple** or **Advanced** tab.
4. From the **Group / User** drop-down, select a security role and click **Add**.
5. Click **Save**.

## Clearing a role assignment

You can clear any role assignment. Clearing a role assignment will prevent users and/or security groups from being able to edit information in any child work item; however, users and/or security groups will always be able to view data in a child work item if they have permission to view its parent.

### To clear a role assignment

1. Open the **Properties** dialog box for a work item, an work item template, a resource, or a resource team.
2. Select the under **Role Assignments** tab.
3. Choose the **Simple** or **Advanced** tab.
4. From the **Group / User** drop-down, select a security role and click **Clear**.
5. Click **Save**.

## Deleting a role assignment

If you are not using a role assignment, you can delete it (though it may be better to clear it).

### To delete a role assignment

1. Open the **Properties** dialog box for a work item, a work item template, a resource, or a resource team.
2. Select the property under **Role Assignments** tab.
3. Choose the **Simple** or **Advanced** tab.
4. From the **Group / User** drop-down, select a security role and click **Delete**.
5. Click **Save**.

## Editing a role assignment

You can modify a role assignment.

### To edit a role assignment

1. Open the **Properties** dialog box for a work item, a work item template, a resource, or a resource team.

2. Select the under **Role Assignments** tab.
3. Choose the **Simple** or **Advanced** tab.
4. From the **Group / User** drop-down, make your changes.
5. Click **Save**.

## Removing a security role assignment for a work item

You can remove a security role assignment made to a work item. Select a work item, view its properties, and then remove the role assignment.

### To remove a security role assignment for a work item

1. Open the **Projects** module.
2. In the work item tree, select an work item, right-click and choose **Properties**.
3. Select the under **Role Assignments** tab.
4. Select the role that you want to remove and click **Remove**.
5. Click **OK**.

## Viewing a role assignment

A role assignment determines who can access a work item.

### To view a role assignment

1. Open the **Properties** dialog box for a work item, a work item template, a resource, or a resource team.
2. Select the under **Role Assignments** tab.
3. Choose the **Simple** or **Advanced** tab.

## **Reconcile Now**

You can use the **Reconcile Now** action to refresh all of the labor attribute maps associated with a single work item (and any child work item). After the labor attribute maps are refreshed, additional recalculations will be performed for any calculated attribute that includes a mapped attribute and for any calculated attribute that is affected by any of the refreshed or recalculated data.

Users will be locked out until this operation completes. Because of labor intensive nature of this process, and its effect on all other users, this type of action should be done as a regular, nightly job that is scheduled in the **Scheduled Services** tab in the **System Settings** module.

## Refreshing labor attribute maps

Refreshing labor attribute maps updates allocation, assignment, and timesheet data in the selected work item (and any child work item). Refreshing attribute maps can be a lengthy process (and should be done as a scheduled job). During a refresh operation, any work item in the work item heirarchy will not be accessible.

### To refresh labor attribute maps

1. Open the **Projects** module.
2. In the work item tree, select a work item, right-click and choose **Reconcile Now**.

3. In the **Refresh Labor Attributes** dialog box, click **Yes**. A large hierarchy may take a long time to refresh.

### Properties

Use the **Properties** dialog box to view the properties for a project, release, sprint, task plan, or any other work item or work type that is currently in the application.

### Viewing work type properties

Use the **Investment Properties** dialog to view and modify the properties of a work type.

#### To view work type properties

1. Open the **Projects** module.
2. Select the work type in the navigation tree.
3. Select **More**, and then choose **Properties**.

#### Tab: Attribute History

The **Attribute History** tab in the **Properties** dialog box is used to view the history of changes made to an attribute.

#### Tab: Connector

The **Connector** tab in the **Properties** dialog box is used to view connector details.

The following fields are available from the **Connector** tab in the **Properties** dialog box:

Fields	Description
<b>Connector Name</b>	The names of the connections that are used to provide data for this work item. A connection is made using a recurring tasks, configured from the Jobs tab in the Scheduled Services view.
<b>Last Refreshed</b>	The date and time when a work item was last updated. The frequency of updates is determined by the connection properties that have been configured for the recurring task.

#### Tab: General

The General tab in the **Properties** dialog box is used to general information about a project, release, task, task plan, or any other work item or work type in the application.

The following fields are available from the **General** tab in the **Properties** dialog box:

Fields	Description
<b>Created By</b>	The name of the resource who initially created the task, task plan, work item, and so on.
<b>Created Date</b>	The date on which a task, task plan, work item, and so on, was created.

Fields	Description
<b>Hide On Timesheet</b>	Indicates whether tasks related to this work item will appear in a resource's timesheet. If selected, then the task will not appear in a resource's timesheet.
<b>Item Name</b>	The name of the work item.
<b>Item Type</b>	The the type of work item. If the work item is task-based, then the list will contain task-based work item types. If the work item is activity-based, then the list will contain activity-based work item types.
<b>Last Modified By</b>	The user name of the person who made the most recent changes to the task, task plan, or work item.
<b>Last Modified Date</b>	The date on which the most recent changes were made to the task, task plan, or work item.
<b>Lock Completed Assignments</b>	Indicates whether resources are prevented from submitting time against a task or work item that has been marked as complete.
<b>Self Allocation Allowed</b>	Indicates whether a resource is allowed to allocate themselves to a task or work item, and any activities associated with them. The default setting for this option is inherited from the work item type, but the setting can be configured on a per-work item basis. If self-allocation is allowed, then self-assignment is also allowed. Select this option when you want resources to be able to self-allocate to this work item.
<b>Self Assignment Allowed</b>	Indicates whether a resource is allowed to assign themselves to a task or work item, and any activities associated with them. The default setting for this option is inherited from the work item type, but the setting can be configured on a per-work item basis. If you want to allow self-assignment, but disallow self-allocation, then select this option and de-select Self Allocation Allowed.

## Reports

The **Reports** module enables you to view and analyze work item data at the portfolio level. This high-level view helps provide your organization both portfolio planning and portfolio monitoring capabilities. Portfolio managers and analysts can perform "what-if" analysis and comparisons, aggregate data across a portfolio to facilitate better decision-making, as well as track portfolio performance over time. This allows you to analyze and monitor your organization's portfolio data using datasheets. Datasheets are read-only spreadsheets in the **Reports** module that display data about any work item in the associated portfolio.

Portfolio managers arrange columns on datasheets to provide logical data calculations, comparisons, and roll-ups. A datasheet can be used to analyze entire portfolios, or any

work item in a similar grouping, and can display different dimensions, units, and periods of data. Portfolios can have more than one datasheet, and any datasheet can be copied or moved to another portfolio.

You can use the **Datasheets**, **Timegrid**, and **Timeline** tabs to build and work with datasheets that illustrate the performance of your organization's portfolios at various levels.

For more information, see the following topics:

- [Charts \[page 128\]](#)
- [Datasheets \[page 134\]](#)
- [Datasheet Options \[page 138\]](#)

## Charts

You can use the **Charts** tab to create and maintain charts for datasheets. You can add new charts, edit charts, move or copy charts, remove charts, and view chart properties. Charts can be saved as datasheet types, printed, or sent via email. Charts belonging to a datasheet type cannot be edited in the **Charts** tab, even if you have permissions for editing charts in the **Charts** tab.

The view toolbar in the **Charts** tab contains a datasheet snapshot list, and displays the name of the snapshot you are viewing. If you are viewing the current datasheet data or snapshots are not enabled, **Live** is displayed on the toolbar.

The **Charts** tab helps you view portfolio data visually by using the following chart types:

- Advanced Bubble
- Bar
- Bubble
- Burndown
- Column
- Gauge
- Pie
- Range Column
- Stacked Bar
- Stacked Column
- Timephased Area
- Timephased Stacked Column

### ***Adding a chart***

Create a chart to view data for any datasheet that has been saved and to which you have access.

#### **To add a chart**

1. Open the **Reports** module.
2. Select a datasheet.

3. Select the **Charts** tab.
4. Click **New Chart**.
5. In the **New Chart** dialog box, select a chart.
6. In the **New Chart** dialog box, choose a chart: **Advanced Bubble, Bar, Bubble, Burndown, Column, Gauge, Pie, Range Column, Stacked Bar, Stacked Column, Timephased Area**, or **Timephased Stacked Column**.
7. Enter a name and a description.
8. On the **Attributes** tab, specify what you want to compare.
9. On the **Chart Settings** tab, select how you want to view data in the chart.
10. On the **Gauge Settings** tab, define the gauge properties and the scale with which you want to present data. This tab is only available for the **Gauge** chart type.
11. On the **Timephase Settings** tab, choose from start and end dates, time periods, or if you want to sync the chart with a datasheet. This tab is only available for the **Burndown, Timephased Area**, and **Timephased Stacked Column** chart types.
12. On the **Axis Settings** tab, choose major and minor grid lines. This tab is available for all of the chart types except **Gauge** and **Pie**.
13. Click **Save**.

### **Copying a chart**

You can create new charts based on charts that are already there.

#### **To copy a chart**

1. Open the **Reports** module.
2. Select an datasheet.
3. Select the **Charts** tab.
4. Click **Copy** to copy a chart.
5. In the **Move/Copy Chart** dialog box, select **Make a copy**.
6. In **Destination**, choose the destination datasheet for the new chart.
7. Click **Save**.

### **Deleting a chart**

If you don't need a chart, you can delete it.

#### **To delete a chart**

1. Open the **Reports** module.
2. Select an datasheet.
3. Select the **Charts** tab.
4. Click **Copy** to copy a chart.
5. In the **Move/Copy Chart** dialog box, select **Make a copy**.
6. In **Destination**, choose the destination datasheet for the new chart.
7. Click **Save**.

### ***Editing a chart***

Make changes to a chart. Change the axis options or the properties. A datasheet type chart can only be edited by a user with specific permission to do so.

#### **To edit a chart**

1. Open the **Reports** module.
2. Select a datasheet.
3. Select the **Charts** tab.
4. Select a chart and click **Edit Chart**.
5. In the **Chart Properties** dialog box, make your changes.
6. Click **Save**.

### ***Moving a chart***

If you want to associate a chart with another datasheet, you can move it.

#### **To move a chart**

1. Open the **Reports** module.
2. Select a datasheet.
3. Select the **Charts** tab.
4. Select a chart and click **Edit Chart**.
5. In the **Chart Properties** dialog box, make your changes.
6. Click **Save**.

### ***Saving a chart***

You can save any chart.

#### **To save a chart**

1. Open the **Reports** module.
2. Select a datasheet.
3. Select the **Charts** tab.
4. Select a chart.
5. Click **View** to view the chart.
6. Click **Save** to save the picture.
7. Select a file format, a location to which the chart will be saved, and click **OK**.

### ***Viewing chart properties***

Charts belonging to a datasheet type cannot be created or edited in the **Charts** tab, even if you have permissions for editing charts in the **Charts** view. When you select a datasheet type chart in the **Charts** tab, the only actions available for the chart is view, regardless of your security role permissions. Users with the appropriate permissions can create and edit charts for datasheet types from the **Datasheet Type Charts** page.

The **Chart Properties** dialog describes information about a chart. This dialog appears when creating a new chart or when modifying the properties for an existing chart.

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Depending on the chart you are creating or have selected, different options will be available.

The following types of charts are available:

- Advanced Bubble
- Bar
- Bubble
- Burndown
- Column
- Gauge
- Pie
- Range Column
- Stacked Bar
- Stacked Column
- Timephased Area
- Timephased Stacked Column

Chart properties vary from chart to chart. Every chart has a name (required) and a description (optional). Depending on the chart, the following tabs may be available:

- **Attributes**—This tab allows you to define the attributes that display in the chart.
- **Axis**—This tab is used to determine whether major and minor grid lines are displayed on a chart for both the X axis and the Y axis.
- **Chart**—This tab is used to define general settings for the chart.
- **Timephase**—This tab is used to define a chart's timephase settings.
- **Gauge**—This tab enables you to set the properties for the attributes selected on the Attributes tab.

### To view chart properties

1. Open the **Reports** module.
2. Select a datasheet.
3. Select the **Charts** tab.
4. Right-click the datasheet and select **Chart Properties**.

### **Datasheet Type Charts**

When you select a datasheet type chart in the **Charts** tab, the only actions available for the chart is view, regardless of your security role permissions. Users with the appropriate permissions can create and edit charts for datasheet types from the **Datasheet Type Charts** dialog. The **Datasheet Type Charts** dialog has the same functionality as the **Charts** tab, except that it is only used for managing datasheet type charts, and you cannot view charts from the **Datasheet Type Charts** dialog.

The **Manage Datasheet Types** dialog is used to edit, copy, and delete datasheet types, as well as create and manage datasheet type charts. When you click **Promote to**

**Datasheet Type** in the **Reports** module, the **Promote to Datasheet Type** dialog opens, offering the same functionality as the **Manage Datasheet Types** dialog.

- **Datasheet Types**—This list displays all of the datasheet types.
- **Edit**—Select a datasheet type from the **Datasheet Types** list and click the **Edit** button to open the **Datasheet Type Properties** dialog box for the selected datasheet type.
- **Charts**—Select a datasheet type from the **Datasheet Types** list and click the **Charts** button to open the **Datasheet Type Charts** dialog box for the selected datasheet type. Datasheet type charts cannot be created or edited from the **Charts** tab. Datasheet type charts must be created and edited from the **Datasheet Type Charts** dialog box.
- **Copy**—Select a datasheet type from the **Datasheet Types** list and click the **Copy** button to copy the selected datasheet type. The copy of the datasheet type appears in the **Datasheet Types** list on the **Manage Datasheet Types** dialog box and the **Datasheet Types** list on the **New Datasheet**, **Datasheet Properties**, and the **Datasheet Type Properties** pages.
- **Deleting a datasheet type**—Any datasheet type that is no longer needed can be deleted. When you delete only a datasheet type, any datasheets that were assigned to the datasheet type become standard datasheets, and can be edited. The datasheet will retain the datasheet properties and charts defined for the datasheet type.

### Adding a datasheet type chart

Create a a datasheet type chart based on a datasheet type. When a chart is created for a datasheet type. the chart is automatically added to all of the datasheets assigned to the datasheet type.

#### To add a datasheet type chart

1. Open the **Reports** module.
2. Select a datasheet.
3. Select the **Charts** tab.
4. Select a chart.
5. Right-click the navigation tree and select **Promote to Datasheet Type Chart** to promote that chart to a datasheet type chart.

### Copying a datasheet type chart

You can create new datasheet type charts based on datasheet type charts that are already there. A datasheet type chart can only be copied to datasheets that are not assigned to a datasheet type. A datasheet type chart cannot be copied to other datasheet types.

#### To copy a datasheet type chart

1. Open the **Reports** module.
2. Select a datasheet.
3. Select the **Charts** tab.
4. Right-click and select **Manage Datasheet Types**.

5. In the **Manage Datasheet Types** dialog box, select a datasheet type from the **Datasheet Types** list, and click **Charts**.
6. In the **Datasheet Type Charts** dialog box, select a chart.
7. Click **Copy**.
8. In the **Move/Copy Chart** dialog box, select **Make a copy**.
9. In **Destination**, choose the destination datasheet for the new chart.
10. Click **OK**.

## Deleting a datasheet type chart

If you don't need a datasheet type chart, you can delete it.

### To delete a datasheet type chart

1. Open the **Reports** module.
2. Right-click the datasheet and select **Manage Datasheet Types**.
3. In the **Manage Datasheet Types** dialog box, select a datasheet type from the **Datasheet Types** list, and click **Delete**.
4. In the **Datasheet Type Charts** dialog box, select a chart and click **Charts**.
5. Click **OK**.

## Editing a datasheet type chart

Make changes to a datasheet type chart. Change the axis options or the properties. When a datasheet type chart is edited, the chart is automatically edited on any datasheet to which the datasheet type is associated.

### To edit a datasheet type chart

1. Open the **Reports** module.
2. In the datasheets tree, right-click a datasheet and select **Manage Datasheets**.
3. In the **Manage Datasheet Types** dialog box, select a datasheet type and then select **Edit Datasheet Type Chart**.
4. In the **Datasheet Properties** dialog box, make your changes. Click **OK**.
5. Click **Save**.

## Moving a datasheet type chart

While working with a datasheet type chart, you may determine that it belongs in a datasheet. A datasheet type chart can be moved to another datasheet within the same portfolio or to a datasheet in another portfolio. A datasheet type chart can only be moved to a datasheet that is not assigned to a datasheet type. A datasheet type chart cannot be moved to another datasheet type, and a standard datasheet type chart cannot be moved to a datasheet type.

### To move a datasheet type chart

1. Open the **Reports** module.
2. In the datasheets tree, select a datasheet, right-click and select **Move/Copy Datasheet**.

3. In the **Move/Copy Datasheet** dialog box, select the location in the datasheets tree under which you want to move the datasheet.
4. Click **OK**.

## Datasheets

You can use the **Datasheets** tab to track and manage rolled-up values that reflect the current display of the view. Data can be displayed with the portfolio hierarchy, or it can be grouped by a specific box:

- When displaying data using the portfolio hierarchy, rolled up data on a parent row reflects the values of all child data indented below the parent row. Data for a portfolio row is rolled up from any work item within the portfolio.
- When displaying data grouped by a specific box, the parent row represents the value that all of the child rows indented below the parent row have in common. Data for a parent row displaying a grouped value is rolled up from any work item that contains that value.

Datasheet rows can be excluded from the roll-up values by clearing the check box to the left of the row.

You can create datasheets in two ways: from scratch or basing one on a datasheet type. When you assign a datasheet to a datasheet type, all of the datasheet's properties and charts are defined for the datasheet by the datasheet type you select.

You can make any datasheet or datasheet type that you create a private datasheet, and you have the option of sharing your private datasheet with other users and/or members of a security group. When a datasheet is private, only the user that created the datasheet can view and modify the datasheet, unless you are sharing the datasheet. When you share a datasheet, the users and/or members of the security groups you assigned to the datasheet can also view and modify the datasheet.

For more information, see the following topics:

- [Define Datasheets \[page 134\]](#)
- [Define Snapshots \[page 136\]](#)

## Define Datasheets

You can define which columns are displayed in a datasheet from the **Columns** tab of the **New Datasheet**, **Datasheet Properties**, and **Datasheet Type Properties** dialog boxes.

You can set up a datasheet to group data by a specific box's values, and sort data by each value in a specific column on the **Organize** tab of the **New Datasheet**, **Datasheet Properties**, and **Datasheet Type Properties** dialog boxes. For example, you select *Status* from the **Group By** list, **Start** from the **Sort By** list, and then select the *Descending* option.

The groups specified on the **Organize** tab of the **New Datasheet**, **Datasheet Properties**, and **New Datasheet** dialog boxes are used to create the layers of drill-down on charts in the **Charts** tab.

If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit any of the datasheet properties on the **Columns**, **Filters**, **Organize**, **Time Views**, or **Dashboard** tabs on the **New Datasheet** or **Datasheet Properties** dialog boxes.

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## Adding a datasheet

Add a datasheet for most work item types.

### To add a datasheet

1. Open the **Reports** module.
2. Select the **Datasheets** tab.
3. Right-click the navigation tree and click **New Datasheet**.
4. Enter a name and select the datasheet type from which this datasheet will be based.
5. On the **General** tab, define general datasheet properties.
6. On the **Columns** tab, identify datasheet columns and column order.
7. On the **Filters** tab, set up a filter for focusing the information displayed on a datasheet.
8. On the **Organize** tab, determine how data is grouped and sorted on the datasheet.
9. On the **Time Views** tab, define the properties for the **Timeline** and **Timegrid** tabs.
10. On the **Demand vs Capacity Filters** tab, define the resource-based filters for the datasheet.
11. On the **Dashboard** tab, set up the dashboard for the datasheet.
12. Click **Save**.

## Copying a datasheet

As you review a datasheet that displays data in a portfolio, you may decide that you want to see the same datasheet columns, but with different data, in a different portfolio. Copying a datasheet will also copy any charts associated with that datasheet.

### To copy a datasheet

1. Open the **Reports** module.
2. Select an datasheet.
3. Select the **Charts** tab.
4. Click **Copy** to copy a datasheet.
5. In the **Move/Copy** dialog box, select **Make a copy**.
6. In the **Destination** box, choose the destination datasheet for the new chart.
7. Click **Save**.

## Deleting a datasheet

When a datasheet is no longer useful for portfolio data analysis, delete it.

### To delete a datasheet

1. Open the **Reports** module.
2. In the navigation tree, right-click the datasheet you want to delete and click **Delete**.
3. Click **Save**.

## Moving a datasheet

You can move a datasheet between portfolios. Moving a datasheet will also move any charts that are associated with that datasheet.

### To move a datasheet

1. Open the **Reports** module.
2. Select a datasheet.
3. Select the **Datasheets** tab.
4. Click **Move/Copy Datasheet** to move a datasheet.
5. In the **Move/Copy Datasheet** dialog box, select the location to which you are moving the datasheet.
6. Click **OK**.

## Sharing a datasheet

Use the **Datasheet Shared Access** dialog box to share a private datasheet with a specific user and/or security group. When a datasheet is private, it is not viewable by anyone except the owner of the datasheet. You can create exceptions and allow some users in your organization to view a private datasheet. On the **General** tab of the **Datasheet Properties** dialog box, click **Share** to open the **Datasheet Shared Access** dialog box. You can filter the users that are available in the **Datasheet Shared Access** dialog box by selecting or de-selecting the **Users**, **Groups**, and **Unselected** check boxes under **Show**. Click **Add** to share the datasheet. Click **Clear** to stop sharing the datasheet. Only selected users and/or groups will be able to view the datasheet.

### To share a datasheet

1. Open the **Reports** module.
2. Select a datasheet.
3. Right-click and select **Datasheet Properties**.
4. On the **General** tab, enable the **Private** check box and click **Share**.
5. Select the users and/or security groups to whom you want to grant access.
6. Click **Save**.

## Define Snapshots

Datasheet snapshots are used in each of the **Reports** module views. **Datasheets**, and **Charts** tabs contain a datasheet snapshot list on the view toolbar.

Selecting a snapshot from the list on the view toolbar displays the data from the snapshot of the datasheet selected in the view and on the datasheet's dashboard (if the dashboard is set up to synchronize with the current datasheet selection). A datasheet snapshot list is available in three places: the navigation bar, the **History** list on generated charts, and the **Chart Settings** tab.

## Adding a datasheet snapshot

Datasheet snapshots capture the data on a datasheet from a specific time period. Datasheet snapshots allow you to analyze and compare portfolio data on a datasheet from different moments in the portfolio's lifecycle to help determine its progress and health.

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When you schedule a datasheet snapshot, snapshots will be automatically created at the scheduled time.

### To add a datasheet snapshot

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and click **Snapshots** to open the **Manage Snapshots** dialog box.
3. In the **Manage Snapshots** dialog box, select a datasheet snapshot and click **New Datasheet Snapshot**.
4. In the **New Snapshot** dialog box, name the snapshot.
5. Select **Include Timegrid Data** to include timephased data from the **Timegrid** tab in the datasheet snapshot.
6. Select **Include Timeline Data** to include milestone data from the **Timeline** tab in the datasheet snapshot.
7. Select **Include Demand vs Capacity Data** to include resource-based data from the **Demand vs Capacity** tab.
8. Under **Schedule**, select **Schedule Snapshot** to create recurring updates to the snapshot. They can be updated on a daily, weekly, or monthly basis.
9. Click **Save**.

### Adding a datasheet snapshot that contains current data

You can create datasheet snapshots that contain data that is current to the datasheet for which you want to create a datasheet snapshot.

### To add a datasheet snapshot that contains current data

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and click **Snapshots** to open the **Manage Snapshots** dialog box.
3. In the **Manage Snapshots** dialog box, select a datasheet snapshot and click **Snapshot Now**.

### Deleting a datasheet snapshot

You can remove any datasheet snapshot that is no longer needed. Once a snapshot is removed, the snapshot (and its history) will no longer be available in the snapshot list on the view toolbar throughout the **Reports** module or the **Charts** tab.

### To delete a datasheet snapshot

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and click **Manage Snapshots** to open the **Manage Snapshots** dialog box.
3. In the **Manage Snapshots** dialog box, select a datasheet snapshot and click **Delete**.
4. Click **OK**.

## Deleting a datasheet snapshot history

You can remove the snapshot history for any datasheet.

### To delete a datasheet snapshot history

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and select **Manage Snapshots**.
3. In the **Manage Snapshots** dialog box, select a datasheet snapshot and then select the **History** tab.
4. Click **Delete**.

## Scheduling a datasheet snapshot

You can create a schedule for capturing snapshots.

### To schedule a datasheet snapshot

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and select **Manage Snapshots**.
3. In the **Manage Snapshots** dialog box, select a datasheet snapshot.
4. Under **Schedule**, select **Schedule Snapshot** and then specify how often you want the snapshot to be created. Set the **Frequency** (hourly, daily, weekly, monthly, or once), **Time of Day**, **Day of Week**, and **Day of Month**.
5. Click **Save**.

## Datasheet Options

You can right-click any resource in the resource tree for additional options:

- **Move/Copy Datasheet**
- **Delete Datasheet**
- **Datasheet Properties**
- **Export Datasheet**
- **Manage Snapshots**
- **Manage Datasheet Types**
- **Promote to Datasheet Type**

For more information, see the following topics:

- [Manage Datasheets \[page 138\]](#)
- [Manage Snapshots \[page 141\]](#)
- [Manage Types \[page 143\]](#)
- [Properties \[page 143\]](#)

## Manage Datasheets

As progress is made on a work item, users with appropriate permissions can create datasheets in the **Reports** module to analyze work item data.

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There are two kinds of datasheets you can create: you can create a datasheet from scratch, or you can create a datasheet that is based on a datasheet type. When you assign a datasheet to a datasheet type, all of the datasheet's properties and charts are defined for the datasheet by the datasheet type you select.

You can make any datasheet or datasheet type that you create a private datasheet, and you have the option of sharing your private datasheet with other users and/or members of a security group. When a datasheet is private, only the user that created the datasheet can view and modify the datasheet, unless you are sharing the datasheet. When you share a datasheet, the users and/or members of the security groups you assigned to the datasheet can also view and modify the datasheet.

To make your datasheet private, select the **Private** check box on the **General** tab. To share your private datasheet, select the **Share** button next to the **Private** check box.

Use the **Add**, **Delete**, **Edit**, and **More** options in the navigation pane (or use the right-click options in the work item heirarchy) to manage datasheets.

## Adding a datasheet

Add a datasheet for most work item types.

### To add a datasheet

1. Open the **Reports** module.
2. Select the **Datasheets** tab.
3. Right-click the navigation tree and click **New Datasheet**.
4. Enter a name and select the datasheet type from which this datasheet will be based.
5. On the **General** tab, define general datasheet properties.
6. On the **Columns** tab, identify datasheet columns and column order.
7. On the **Filters** tab, set up a filter for focusing the information displayed on a datasheet.
8. On the **Organize** tab, determine how data is grouped and sorted on the datasheet.
9. On the **Time Views** tab, define the properties for the **Timeline** and **Timegrid** tabs.
10. On the **Demand vs Capacity Filters** tab, define the resource-based filters for the datasheet.
11. On the **Dashboard** tab, set up the dashboard for the datasheet.
12. Click **Save**.

## Copying a datasheet

As you review a datasheet that displays data in a portfolio, you may decide that you want to see the same datasheet columns, but with different data, in a different portfolio. Copying a datasheet will also copy any charts associated with that datasheet.

### To copy a datasheet

1. Open the **Reports** module.
2. Select an datasheet.
3. Select the **Charts** tab.
4. Click **Copy** to copy a datasheet.

5. In the **Move/Copy** dialog box, select **Make a copy**.
6. In the **Destination** box, choose the destination datasheet for the new chart.
7. Click **Save**.

## Deleting a datasheet

When a datasheet is no longer useful for portfolio data analysis, delete it.

### To delete a datasheet

1. Open the **Reports** module.
2. In the navigation tree, right-click the datasheet you want to delete and click **Delete**.
3. Click **Save**.

## Moving a datasheet

You can move a datasheet between portfolios. Moving a datasheet will also move any charts that are associated with that datasheet.

### To move a datasheet

1. Open the **Reports** module.
2. Select a datasheet.
3. Select the **Datasheets** tab.
4. Click **Move/Copy Datasheet** to move a datasheet.
5. In the **Move/Copy Datasheet** dialog box, select the location to which you are moving the datasheet.
6. Click **OK**.

## Exporting a datasheet

You can export the information in a datasheet as a CSV file.

### To export a datasheet

1. Open the **Reports** module.
2. In the datasheet tree, select the datasheet you want to export, right-click and choose **Export Datasheet**.
3. Save the datasheet as a CSV file type and select the location you want to save it.
4. Click **Save**.

## Sharing a datasheet

Use the **Datasheet Shared Access** dialog box to share a private datasheet with a specific user and/or security group. When a datasheet is private, it is not viewable by anyone except the owner of the datasheet. You can create exceptions and allow some users in your organization to view a private datasheet. On the **General** tab of the **Datasheet Properties** dialog box, click **Share** to open the **Datasheet Shared Access** dialog box. You can filter the users that are available in the **Datasheet Shared Access** dialog box by selecting or de-selecting the **Users**, **Groups**, and **Unselected** check boxes

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under **Show**. Click **Add** to share the datasheet. Click **Clear** to stop sharing the datasheet. Only selected users and/or groups will be able to view the datasheet.

### To share a datasheet

1. Open the **Reports** module.
2. Select a datasheet.
3. Right-click and select **Datasheet Properties**.
4. On the **General** tab, enable the **Private** check box and click **Share**.
5. Select the users and/or security groups to whom you want to grant access.
6. Click **Save**.

### Manage Snapshots

The **Snapshots** dialog displays the existing datasheet snapshots for the datasheet selected in the portfolios pane. Use the **Snapshots** dialog to create new snapshots, edit existing snapshots, or delete snapshot you no longer need. If you want to delete snapshot history, snapshot history is deleted on the **History** tab on the **Edit Snapshots** page.

- **Snapshot Now** Select a snapshot from the snapshot list and click this button to create a snapshot of current data displayed on the selected datasheet.
- **New** Click this button to open the **New Snapshot** page and add a new snapshot to the datasheet.
- **Edit** Select a snapshot from the snapshot list and click this button to open the **Edit Snapshots** page and edit the selected snapshot.
- **Delete** Select a snapshot from the snapshot list and click **Delete**, to delete the selected snapshot.

### Adding a datasheet snapshot

Datasheet snapshots capture the data on a datasheet from a specific time period. Datasheet snapshots allow you to analyze and compare portfolio data on a datasheet from different moments in the portfolio's lifecycle to help determine its progress and health. When you schedule a datasheet snapshot, snapshots will be automatically created at the scheduled time.

### To add a datasheet snapshot

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and click **Snapshots** to open the **Snapshots** dialog box.
3. In the **Snapshots** dialog box, select a datasheet snapshot and click **New Datasheet Snapshot**.
4. In the **New Snapshot** dialog box, name the snapshot.
5. Select **Include Timegrid Data** to include timephased data from the **Timegrid** tab in the datasheet snapshot.
6. Select **Include Timeline Data** to include milestone data from the **Timeline** tab in the datasheet snapshot.

7. Select **Include Demand vs Capacity Data** to include resource-based data from the **Demand vs Capacity** tab.
8. Under **Schedule**, select **Schedule Snapshot** to create recurring updates to the snapshot. They can be updated on a daily, weekly, or monthly basis.
9. Click **Save**.

### **Adding a datasheet snapshot with current data**

You can create datasheet snapshots that contain data that is current to the datasheet for which you want to create a datasheet snapshot.

#### **To add a datasheet snapshot that contains current data**

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and click **Snapshots** to open the **Snapshots** dialog box.
3. In the **Snapshots** dialog box, select a datasheet snapshot and click **Snapshot Now**.

### **Deleting a datasheet snapshot**

You can remove any datasheet snapshot that is no longer needed. Once a snapshot is removed, the snapshot (and its history) will no longer be available in the snapshot list on the view toolbar throughout the **Reports** module or the **Charts** tab.

#### **To delete a datasheet snapshot**

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and click **Manage Snapshots** to open the **Snapshots** dialog box.
3. In the **Snapshots** dialog box, select a datasheet snapshot and click **Delete**.
4. Click **OK**.

### **Deleting a datasheet snapshot history**

You can remove the snapshot history for any datasheet.

#### **To delete a datasheet snapshot history**

1. Open the **Reports** module.
2. In the navigation tree, right-click a datasheet and click to open the **Snapshots** dialog box.
3. In the **Snapshots** dialog box, select a datasheet snapshot and then select the **History** tab.
4. Click **Remove** to delete the selected snapshot or click **Remove All** to delete all snapshots. Confirm.

### **Editing a datasheet snapshot**

A datasheet snapshot is a collection of saved parameters from which you can take real-time snapshots of data for a datasheet. Save them over time to compare snapshots. If the snapshot doesn't contain the data you want it to, edit it.

#### **To edit a datasheet snapshot**

1. Open the **Reports** module.
2. In the datasheets tree, right-click a datasheet and select **Manage Datasheets**.
3. In the **Manage Datasheet Types** dialog box, select a datasheet type and then select **Edit Datasheet Type Chart**.
4. In the **Snapshots** dialog box, select a datasheet snapshot and click **Edit Snapshot**.
5. In the **Edit Snapshots** dialog box, make your changes and then click **Save**.

## Scheduling a datasheet snapshot

You can create a schedule for capturing snapshots on an on-going basis, or capture a single snapshot of a datasheet's current data. A datasheet snapshot captures the data on a datasheet from a specific time period.

### To schedule a datasheet snapshot

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Scheduled Services** tab.
3. Select the **Jobs** tab.
4. Click **New** to add a new attribute.
5. In the **Scheduled Job Properties** section, enter a name and description for the job.
6. Select *Datasheet History* from the **Job Type** list.
7. Set the frequency, date, and time options.
8. Click **Save**.

## Manage Types

The **Manage Datasheet Types** dialog is used to edit, copy, and delete datasheet types, as well as create and manage datasheet type charts. When you click **Promote to Datasheet Type** in the **Reports** module, the **Promote to Datasheet Type** dialog opens, offering the same functionality as the **Manage Datasheet Types** dialog.

## Properties

The **Datasheet Properties** dialog box, the **New Datasheet** page, and the **Datasheet Type Properties** page are used to describe either a datasheet or a datasheet type.

- **Datasheet Name**—Type the name of the selected datasheet.
- **Datasheet Type**—Select a datasheet type from the **Datasheet Type** list to assign the datasheet to a datasheet type. Select **None** from the **Datasheet Type** box if you do not want to assign the datasheet to a datasheet type, or have no datasheet types saved.

Once you have provided a name for the datasheet, you can filter the displayed portfolio data using the settings on the following tabs:

- **General**—This tab contains basic information about a datasheet.
- **Columns**—This tab defines which columns appear on the datasheet, and in what order they are displayed.

- **Filters**–This tab defines which columns appear on the datasheet, and the order in which they are displayed.
- **Time views**–This tab shows how data is grouped and sorted on the datasheet.
- **Demand vs Capacity**–This tab shows the resource demand against capacity for selected resources.
- **Dashboard**–This tab shows how the charts are displayed on the datasheet's dashboard, and whether the data displayed on the charts reflects the current data.

## Columns

This tab is used to define which columns appear on the datasheet, and in what order they are displayed. If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit any of the datasheet properties on the **Columns**, **Filters**, **Organize**, **Time Views**, or **Dashboard** tabs:

Fields	Description
<b>Add</b>	Click this button to move the selected attributes from the <b>Available Attributes</b> box to the <b>Selected Attributes</b> box.
<b>Available Attributes</b>	The attributes that have been assigned to the work item types listed on the <b>General</b> tab.
<b>Custom Header</b>	The custom display name for the attribute, as it will appear in the datasheet. If this field is empty, the <b>Default Header</b> will be used.
<b>Datasheet Name</b>	The name of the datasheet.
<b>Default Header</b>	The default display name for the attribute, as it will appear in the datasheet.
<b>Move Down</b>	Columns are displayed from left to right in a datasheet. Click this button to move the column for this attribute to the right in the datasheet.
<b>Move Up</b>	Columns are displayed from left to right in a datasheet. Click this button to move the column for this attribute to the left in the datasheet.
<b>Remove</b>	Click this button to move the selected attributes from the <b>Selected Attributes</b> box to the <b>Available Attributes</b> box.
<b>Selected Attributes</b>	The attributes that are displayed as columns in the datasheet. <b>Columns</b> are displayed from left to right in the order listed here.

## Dashboard

This tab is used to define the charts displayed on the datasheet's dashboard, and determine whether the data displayed on the charts reflects the data currently displayed on the datasheet. You can also determine whether users can display the other charts

created for the datasheet from the dashboard on the **Dashboard** tab. If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit any of the datasheet properties on the **Columns, Filters, Organize, Time Views, or Dashboard** tabs:

Fields	Description
<b>Allow users to change chart</b>	Select the <b>Allow users to change chart</b> check box to allow users to view the other charts created for the datasheet on the dashboard. If this check box is selected the user can select one of the datasheet's other charts from the chart list on the dashboard. Clear the check box if you only want the chart you selected from the <b>Left Chart</b> or <b>Right Chart</b> chart list to be displayed on the dashboard for the datasheet.
<b>Datasheet Name</b>	The name of the datasheet.
<b>Left Chart</b>	Select the chart you want to be displayed on the left side of the datasheet's dashboard. The charts displayed in the chart list, are the charts created for the datasheet in the <b>Charts</b> tab.
<b>Right Chart</b>	Select the chart you want to be displayed on the right side of the datasheet's dashboard. The charts displayed in the chart list, are the charts created for the datasheet in the <b>Charts</b> tab.
<b>Synchronize with datasheet</b>	Select the <b>Synchronize with datasheet</b> check box to have the data displayed in the selected chart reflect the data displayed in the datasheet. For example, if a snapshot is selected on the datasheet, the chart would display the data from the selected snapshot. Clear the check box if you want the selected chart to only display live data from the datasheet. When the <b>Synchronize with datasheet</b> check box is cleared, the chart on the dashboard displays the data from the snapshot selected in the <b>View chart using this data</b> box in the <b>New Chart</b> or <b>Chart Properties</b> page in the <b>Charts</b> tab.

## Demand vs. Capacity

This tab is used to display the relationship between resource capacity and demand by filtering on resource teams and roles, allocation status and other demand. Using this tab, you can specify the resource-related information that is included in the datasheet:

Fields	Description
<b>Allocation Status</b>	This tab enables you to select the type of allocation that is included on the datasheet. <b>Proposed</b> and <b>Committed</b> are selected by default. This will include both types of allocation status on the datasheet. If you want to filter out one type or the other, clear the appropriate check box. For example, if you want to filter out soft allocations, clear the <b>Proposed</b> check box.

Fields	Description
<b>Other Demand</b>	This tab enables you to define the attributes that constitute "other demand." This demand comes from work item allocations that are outside the scope of the current datasheet, but are contained within the same portfolio hierarchy. For example, you can include demand data from only a work item with a specific project status. Other demand can also be a work item filtered out of the datasheet.
<b>Resource Role</b>	This tab enables you to select the resource roles that are included on the datasheet. Resource roles display as columns on the datasheet within the specified time period. For example, if you have 5 resource roles and the selected time period is <b>Calendar Month</b> from January to December, the datasheet displays 12 time periods, each of which contains five resource role columns. To display a subset of available resource roles, clear the appropriate check box.
<b>Resource Team</b>	This tab enables you to select the resource teams that is included on the datasheet. In the <b>Resource Team</b> column, select the resource teams to include their resource demand and capacity data on the datasheet. All resource teams are selected by default. To display a subset of available resource teams, clear the appropriate check box.

## Filters

This tab is used to define which columns appear on the datasheet, and in what order they are displayed. If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit any of the datasheet properties on the **Columns, Filters, Organize, Time Views,** or **Dashboard** tabs:

Fields	Description
<b>Add</b>	Click this button to move the selected attributes from the <b>Available Attributes</b> box to the <b>Selected Attributes</b> box.
<b>And</b>	Select this option to indicate that the work item on the datasheet must meet the conditions of the selected filter rule and all other filter rules that do not begin with <b>Or</b> . For example, if multiple rules use the <b>And</b> option, and one rule uses the <b>Or</b> option, the rules containing the <b>And</b> option are grouped together, and the rule containing the <b>Or</b> option is considered separately. The work item on the datasheet must either meet all of the <b>And</b> conditions, or at least the <b>Or</b> condition.
<b>Attribute</b>	Select the datasheet column that you are building a filter rule around from this list.

Fields	Description
<b>Compare To</b>	Select what the filter rule should compare the attribute to. Select the this specific value option and type a value in the box below the options to filter the datasheet so that only work item with the <b>Comparison</b> relationship with the value you specified for the selected attribute are displayed. Select the another attribute option and select an attribute from the list below the options to filter the datasheet so that only work item with the <b>Comparison</b> relationship between the two selected attributes are displayed.
<b>Comparison</b>	Select the test you want to apply to the column selected in the <b>Attribute</b> list.
<b>Datasheet Name</b>	The name of the datasheet.
<b>Delete</b>	Removes the selected rule from the <b>Filter Rules</b> box.
<b>Down</b>	Moves the selected rule down in the list.
<b>Filter Rules</b>	Lists all of the current rules set up to filter the datasheet.
<b>Or</b>	Select this option to indicate that the work item on the datasheet must meet the conditions of the selected filter rule, or all the filter rules that do not begin with <b>Or</b> , or another filter rule that begins with <b>Or</b> .
<b>Up</b>	Moves the selected rule up in the list.
<b>Update</b>	Click this button to update the selected filter rule.

## General

This tab is used to identify the basic information about a datasheet. If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit the work item types included on the datasheet type on the **General** tab. You cannot edit any of the datasheet properties on the **Columns, Filters, Organize, Time Views, or Dashboard** tabs:

Fields	Description
<b>Associate With</b>	You can associate the datasheet with a specific location in the work item hierarchy. This enables you to define the root work item for the datasheet; the work item you select is the top-level work item in the datasheet. By default, datasheets are associated with the enterprise portfolio.
<b>Created By</b>	Displays the user name of the person who initially created the datasheet, and the date and time it was created. This box is read-only.

Fields	Description
<b>Default Expansion Level</b>	Select the default expansion level for the datasheet from the <b>Default Expansion Level</b> list. The <b>Default Expansion Level</b> list determines how many levels of the datasheet are opened on the datasheet by default.
<b>Description</b>	Type a brief description of what the datasheet can be used for, or what data it includes.
<b>Display Levels</b>	Select how many levels of data you want to view on the datasheet from the <b>Display Levels</b> list.
<b>Last Modified By</b>	Displays the user name of the person who made the most recent changes to the datasheet, and the date and time they modified it. This box is read-only.
<b>Location</b>	Displays the location of the datasheet within your organization's portfolios.
<b>Private</b>	Select this check box if you want the datasheet to only be available to you. Clear the check box if you want the datasheet to be available to all users that have access to datasheets for the portfolio. When the <b>Private</b> check box is selected, only the user that created the datasheet can view and modify the datasheet, unless you are sharing the datasheet.
<b>Share</b>	This button is only available if the <b>Private</b> check box is selected on a datasheet that you created. If you selected the <b>Private</b> check box, but would like to share the datasheet with specific users and/or security groups, you can share the datasheet. When you share a datasheet, the users and/or members of the security groups you assigned to the datasheet can also view and modify the datasheet. Click the <b>Share</b> button on the <b>General</b> tab on the <b>New Datasheet, Datasheet Properties, or Datasheet Type Properties</b> page to assign users and/or security groups to the datasheet on the <b>Datasheet Shared Access</b> page.
<b>Show All Roles</b>	Select this check box check box to display excluded rows on the datasheet. A row is excluded on a datasheet when the check box to the left of the row is cleared. Excluded rows are displayed in gray on the datasheet. If the <b>Show All Roles</b> check box is cleared, the excluded rows are not displayed on the datasheet.
<b>Show Unallocated</b>	Select the <b>Show Unallocated</b> check box to display the differences between a parent work item and its child work item for roll-up attributes in non-roll-up dimensions, such as the target dimension.

Fields	Description
<b>Work Items</b>	Select the <b>Include All Types</b> option to include all work item types on the datasheet. Select the <b>Include Only These Types</b> option and select the work item types you want to include on the datasheet. To select more than one work item type from the list, press CTRL while selecting each work item type.

## Organize

The **Organize** tab is used to determine how data is grouped and sorted on the datasheet. If you are creating or editing a datasheet that is assigned to a datasheet type, you cannot edit any of the datasheet properties on the **Columns, Filters, Organize, Time Views, or Dashboard** tabs on the **New Datasheet** or **Datasheet Properties** page:

Fields	Description
<b>Ascending</b>	Select this option if you would like the corresponding column sorted in ascending order.
<b>Descending</b>	Select this option if you would like the corresponding column sorted in descending order.
<b>Group By</b>	Select the column's attribute name that will be used for the first grouping of data on the datasheet.
<b>Sort By</b>	Select the column's attribute name that the datasheet's data will sort by first.
<b>Then By</b>	Select the column's attribute name that will be used for each of the consecutive groups of data. You do not need to select an attribute for each of the <b>Then By</b> lists.

## Time Views

This tab is used to group and sort data for a datasheet.

Fields	Description
<b>Add</b>	Click this button to move the selected attributes from the <b>Available Attributes</b> box to the <b>Selected Attributes</b> box.
<b>Available Attributes</b>	The attributes that have been assigned to the work item types listed on the <b>General</b> tab.
<b>Dimension 1</b>	Select the type of dimension to display in the <b>Timegrid</b> tab.
<b>Dimension 2</b>	Select the type of dimension to display in the <b>Timegrid</b> tab.

Fields	Description
<b>Move Down</b>	Columns are displayed from left to right in a datasheet. Click this button to move the column for this attribute to the right in the datasheet.
<b>Move Up</b>	Columns are displayed from left to right in a datasheet. Click this button to move the column for this attribute to the left in the datasheet.
<b>Remove</b>	Click this button to move the selected attributes from the <b>Selected Attributes</b> box to the <b>Available Attributes</b> box.
<b>Selected Attributes</b>	The attributes that are displayed as columns in the datasheet. <b>Columns</b> are displayed from left to right in the order listed here.
<b>Show Milestones</b>	Select this check box to display milestones in the <b>Timeline</b> tab.

## Resources

Resource management decisions are often based around labor. How much is needed? What types of skills are required and when does it need to be done by? Who can do it? Did it get done? You can measure labor in the following ways:

- **Demand**—How much is needed? Demand is the net request for labor, work, and resources for a work item.
- **Capacity**—What types of skills are required and when does it need to be done by? Capacity measures what is needed for a work item and the availability of resources that can be allocated or assigned to one or more tasks. Capacity can be measured using actual resources or by using generic resources as a placeholder.
- **Allocation**—Who can do it? An allocation is an agreement between a resource manager and a project manager as to the availability of a given resource (actual or generic) to work on one or more tasks in task plan.
- **Assignments**—Did it get done? Assignments are tracked against the individual tasks within the task plan. Assignments are tracked in timesheets that are submitted by the resources assigned to tasks in the task plan. Timesheets can be approved or rejected.

Resources are people (labor) that can be used by a work item. This includes generic labor resources and a TBH (to-be-hired or unknown) resource. A resource manager is allowed to add resources and to create resource teams for actual and generic resources (a placeholder). The **Resources** module helps provide tools to resource managers for creating, managing, allocating, and securing your resources.

For more information, see the following topics:

- [Resource Pool \[page 151\]](#)
- [Resource Roles \[page 153\]](#)
- [Team Summary \[page 156\]](#)

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## Resource Pool

You can use the **Resource Pool** tab to create resources, organize resource teams and manage the resources in them, and to track and update an individual resource's skills. The nodes on the resource hierarchy are the individual resource teams.

The upper pane of the **Resource Pool** tab is used by a resource manager to display resources, their roles, and the skills associated with them. Select a resource team. The default column shown for resources is: *Name*. Click the plus symbol next to a resource name to view the list of resource roles and skills associated with that resource. You can add additional columns to the upper pane by clicking the **Properties** button. Use the **Filters** tab to select specific resources. Use the **Organize** tab to sort and group resources.

The lower pane of the **Resource Pool** tab is used to view and modify a resource's details. Select a resource in the upper pane to view details, resource roles, and calendars in the lower pane.

### Adding a resource

A new resource can be added. When a new resource is created, that resource is not assigned to a user account, is not assigned to a license, and is inactive. To assign a license and activate the account, please contact your administrator.

#### To add a resource

1. Open the **Resources** module.
2. Select the **Resource Pool** tab.
3. Click **New Resource**.
4. In the **New Resource** dialog box, type the first name, last name, user name, email address, and contact information for the new resource.
5. Enter starting and ending dates for the resource.
6. Select the resource type from the **Resource Type** drop-down.
7. Click **OK**. The resource will be inactive until a license is assigned to the user account. Please work with an administrator to assign a license to the new resource.

### Adding a resource role

You can associate a resources role to a resource. From the **Resource Pool** view, select a resource. In the lower pane, choose the **Resource Role** tab.

#### To add a resource role to a resource

1. Open the **Resources** module.
2. Select the **Resource Pool**, **Allocations**, or **Assignments** tab.
3. Select a resource.
4. In the lower pane, select the **Resource Roles** tab.
5. Under **Available Resource Roles**, select a role and click **Add**.
6. Click **Save**. Confirm.

### ***Adding a resource from a user account***

In order for a resource to be assigned to tasks, report time against those tasks, manage projects, manage resources, or otherwise perform work against items, that resource must also have a user account. If your administrator has imported resources, when you add a new resource, they may already have a user account. Use the **New Resource from User** option to create a new resource based on an existing user account.

#### **To add a resource who already has a user account**

1. Open the **Resources** module.
2. Right-click the navigation tree and select **New Resource from User** to create a new resource based on an existing user account.
3. In the **New Resource from User** dialog box, select a user.
4. Click **Save**. The resource will be an active resource.

### ***Applying security to a team***

When you create a resource team you can determine who has access to the resource team, and what they can do with the resource team and individual resources. Resource team security is defined on the **Resource Team Properties** page. To define resource team security for a resource team, security groups and/or users are assigned to specific security roles on the resource team. The security roles determine the permissions the members of a security group or individual users have for the resource team and its resources.

#### **To apply security to a resource team**

1. Open the **Resources** module.
2. Select a resource team in the resources tree, right-click and select **Resource Team Properties** to open the **Resource Team Properties** dialog box
3. On the **Role Assignments** tab, from the **Group / User** drop-down, select a security role.
4. Select a security role and click **Add**.
5. Click **OK**.

### ***Deleting a resource***

If a resource isn't needed in the resource pool, it can be deleted.

#### **To delete a resource**

1. Open the **Resources** module.
2. Select the **Resource Pool** tab.
3. Select a resource team.
4. Select a resource and click **Delete**.

### ***Moving a resource***

Open the **Move Resources** dialog box to move a resource or a resource team to a different location in the resource hierarchy.

#### **To move a resource**

1. Open the **Resources** module.
2. Select the **Resource Pool** tab.
3. Select a resource team.
4. Select a resource.
5. Click **Move/Copy**.
6. In the **Move Resources** dialog box, click a resource team into which the resource will move.
7. Click **OK**.

### **Viewing a resource**

Resources can be viewed from the **Resource Pool** tab in the **Resources** module.

#### **To view a resource**

1. Open the **Resources** module.
2. Select the **Resource Pool**, **Allocations**, or **Assignments** tab.
3. Select a resource team from the resources tree.
4. Click the resource you want to view. The resource's details appear in the lower pane.

### **Resource Roles**

You can use the **Resource Roles** tab to create and manage resource roles. The upper pane of the **Resource Roles** tab is used to view resource roles and the skills associated with each role. Click the plus symbol next to a resource role to view the skills associated with that resource role.

The lower pane of the **Resource Roles** tab is used to view resource role properties. Select a resource role in the upper pane. A resource role can be associated with a security role. A resource role can be associated with one or more skills.

#### **Adding a resource role**

A new resource role can be added. You can associate a list of skills to a resource role. When creating a new resource role, the associated skills and rates are added to the resource role.

#### **To add a resource role**

1. Open the **Resources** module.
2. Select the **Resource Roles** tab.
3. Click **New Resource Role**.
4. Type the name of the new resource role and add a description.
5. Under **Default Security Role and Rate**, select the security role to which the resource role is associated and click **Rates** to define the rates associated with the role.
6. Under **Skill Membership**, move the skills you want to associate with the resource role to the right column.
7. Click **OK**.

### ***Deleting a resource role***

Any resource role that is not assigned to a resource can be deleted.

#### **To delete a resource role**

1. Open the **Resources** module.
2. Select the **Resource Roles** tab.
3. Select the resource role that you want to delete, and then click **Delete**. You cannot delete a resource role that is assigned to a resource.
4. Click **OK**.

### ***Editing a resource role***

You can edit the properties of a resource role.

#### **To edit the properties of a resource role**

1. Open the **Resources** module.
2. Select the **Resource Roles** tab.
3. Select a resource role.
4. Make your changes. Modify resource rates. Modify skills.
5. Click **Save**.

### ***Skills***

You can use the **Manage Skills** dialog box to manage the list of skills used in your organization. Skills can be used to help find the resources who best match the skills that are needed. Resources who are associated with a resource role can be given proficiency and experience levels for each skill.

#### **Adding a skill**

Select a resource role and define a rate. The default rate (\$s per hour) is defined for each resource role and the rate must include an date with which the rate is to take effect and the rate (in \$) per hour. Open the **Manage Skills** dialog box to work with the list of skills available in your organization. Enter the name of a skill and click **Add**. If you add a new rate, the rate for the resource will be the new rate starting at the selected date.

#### **To add a skill**

1. Open the **Resources** module.
2. Select the **Resource Roles** tab.
3. Click **New Skill** to open the **Manage Skills** dialog box.
4. In the **Manage Skills** dialog box, add the name of a skill and click **Add**.
5. Click **Save**.

#### **Deleting a skill**

If your organization is not using a skill, you can delete it. Pick a skill from the list of skills and click **Delete**.

#### **To delete a skill**

1. Open the **Resources** module.
2. Select the **Resource Roles** tab.
3. In the resources tree, right-click and select **Manage Skills**.
4. In the **Manage Skills** dialog box, under **Skill List**, select a skill and click **Remove**.
5. Click **Save**.

### Editing a skill

You can modify an existing skill. If you modify an existing rate, the allocation associated with that rate will use the modified rate.

#### To edit a skill

1. Open the **Resources** module.
2. Select the **Resource Roles** tab.
3. Open the **Manage Skills** dialog box. Right-click a resource role in the navigation pane and select **Manage Skills**; or click **Manage Skills** in the view pane.
4. In the **Manage Skills** dialog box, select a skill, rename the skill, and then click **Update**.
5. Click **Save**.

### Renaming a skill

Skills can be renamed. Pick a skill from the list of skills, rename it, and then click **Update**.

#### To rename a skill

1. Open the **Resources** module.
2. Select the **Resource Roles** tab.
3. In the resources tree, right-click and select **Manage Skills**.
4. In the **Manage Skills** dialog box, under **Skill List**, select a skill, rename it, and then click **Update**.
5. Click **Save**.

### Rates

You can use the **Rate Editor** dialog box to add, modify, and delete resource rates used for resource allocations. Add an attribute rate for a *Timephased - FTE* or a *Timephased - UNITS* attribute. If you add a new rate, the rate for the resource will be the new rate starting at the selected date. Click the **Rates** button to open the **Rate Editor** dialog box. If you are allocating a resource to a work item, the default rate for that resource can be changed during the allocation.

It may be important for your organization to limit access to who can define resource role rates. They affect resource costs when resources are allocated to items and every calculation that is based on those resource allocations. Any change to a resource rate may also require changes to labor attribute mapping.

### Adding a rate

Open the **Resource Role Rates** dialog box to associate rates with resource roles. The default rates (\$ per hour) are defined for each resource role. It's important to limit access

who in your organization can add, modify, or delete a resource role rate, since they affect resource costs when they are allocated to items. All calculations based on resource role rates; therefore, changes to resource rates may also require changes to labor attribute mapping.

### To add a rate

1. Open the **Resources** module.
2. Select the **Resource Roles** tab.
3. Select a resource role.
4. In the lower pane, click **Rates**.
5. In the **Resource Role Rates** dialog box, click **New Rate** to add a new rate.
6. Specify the date upon which the rate takes effect, add the rate (per hour), and provide comments (if necessary).
7. Click **Save**.

### Deleting a rate

Delete a rate for a resource allocation.

### To delete a rate

1. Open the **Projects** module.
2. Select a work item.
3. Select the **Team Roster** tab.
4. Select a resource.
5. In the lower pane, select the **Allocation** tab.
6. Click **Rates**.
7. In the **Allocation Rates** dialog box, select the rate you want to delete and click **Delete**.
8. Click **OK**.

## Team Summary

You can use the **Team Summary** tab to manage a resource team. You can select a resource team to view and edit the resource team name and description. You can add resources and resource teams, delete resources, apply security to the resources in a resource team, move resources and resource teams within the Resource Breakdown Structure (RBS), and so on.

### *Adding a resource team*

New resource teams can be added, into which new resources can be placed, creating a new resource team.

### To add a resource team

1. Open the **Resources** module.
2. Select the **Resource Pool** tab.

3. In the navigation tree, under the location in which you want to add a resource team, right-click and select **New Resource Team**.
4. In the **New Resource Team** dialog box, type the name of the new resource team and add a description.
5. Click **OK**.

### ***Deleting a resource team***

A resource manager can delete a resource team from the resource pool. A resource team cannot be deleted if it contains resources.

#### **To delete a resource team**

1. Open the **Resources** module.
2. Select the **Resource Pool** tab.
3. In the resources tree, right-click the resource team that you want to delete, and then click **Delete**. Only empty resource teams can be deleted.
4. Click **OK** to confirm.

### ***Moving a resource team***

Open the **Move Resources** dialog box to move a resource or a resource team to a different location in the Resource Breakdown Structure (RBS).

#### **To move a resource team**

1. Open the **Resources** module.
2. Select the **Resource Pool** tab.
3. Select a resource team.
4. Select a resource.
5. Click **Move/Copy**.
6. In the **Move Resources** dialog box, click a resource team into which the resource will move.
7. Click **OK**.

### ***Viewing a resource team***

A resource team can be viewed from the **Team Summary** tab.

#### **To view a resource team**

1. Open the **Resources** module.
2. Select the **Resource Pool** tab.
3. Click a resource team to view a list of team members who belong to the resource team. The resource team's details appear in the lower pane.

## **Tools**

The **Tools** module is used to view and edit information that you work with on a daily basis, such as your timesheet, notifications, reports, and calendar. You can also open your homepage to displays a collection of important information in a single view.

For more information, see the following topics:

- [Import Data \[page 158\]](#)
- [My Notifications \[page 159\]](#)
- [Define Notifications \[page 160\]](#)

## Import Data

You can use the **Import Data** tab to download the template (a Microsoft Excel file) into which you can enter data about items, resources, resource roles, and resource teams, and then bulk import that data. Only users with the Import Data (View/Edit) permission will be allowed to import work item and resource data.

In the template, there is a tab for each of the types of data that you can import: Investments, Resource Roles, Resource Teams, and Resources. On each tab, a row represents a single item, resource role, resource team, or resource that will be imported.

This is a feature that can be a useful way to add data, especially during the configuration phase of your deployment. However, this feature, when used carelessly, can add a lot of unnecessary data into your environment. Permission to use this feature should be granted carefully and only to people who are capable of removing unwanted data, should it get imported.

Some important things to remember:

- This is a feature that should not be viewed as a way to manage data on a day-to-day basis.
- The tabs are imported in the following order: **Resource Teams, Resource Roles, Resources, and Investments**. It can be easier to import data one tab at a time; if you import data one tab at a time, you should use the same order.
- Do not use characters in the template that are commonly used in Microsoft Excel as calculation indicators. For example, the ampersand symbol (&) may create a calculated cell and a calculated cell will fail upon import.
- You cannot have spaces in user names.
- Importing data should be done at times when there are no other users from your organization logged-in. The import process will fail when conflicts are caused by other work being done.
- There is no preview function.

### ***Downloading the Import Data template***

Download the Import Data template (a Microsoft Excel file) from which you can import data.

#### **To download the Import Data template**

1. Open the **Tools** module.
2. Select the **Import Data** tab.
3. Click **Download Template**.

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### ***Importing data using the Import Data template***

You can import data by using a template (a Microsoft Excel file). You should keep the file size below 3 MB while importing data; files larger than 3 MB may not import successfully or may require multiple attempts.

#### **To import data using the Import Data template**

1. Open the **Tools** module.
2. Select the **Import Data** tab.
3. Enter project information into the template.
4. After you are finished entering project data on the projects tab in the template, click **Browse** and choose the file on your local computer from which you want to import data.
5. Click **Upload and Check**.
6. Click **Finish**.

### ***My Notifications***

You can use the **My Notifications** tab to display your list of notifications. The **My Notifications** tab displays a list of notifications (custom and system) and associated information for each. You can create new, copy existing, delete, and modify notifications. This view can be found in the **Tools** module.

#### ***Acknowledging a notification***

A notification that is marked in bold has not been acknowledged. Use the **Acknowledged** check box to keep track.

#### **To acknowledge a notification**

1. Open the **Tools** module.
2. Select the **My Notifications** tab.
3. Select the notification you want to acknowledge from the list. Acknowledged notifications are shown as plain text; un-acknowledged notifications are shown as bold.
4. Click **Acknowledge**.

#### ***Cancelling an acknowledgement***

You can cancel a notification acknowledgement.

#### **To cancel a notification acknowledgement**

1. Select the **My Notifications** tab.
2. Select a notification and click **Unmark Acknowledge** to un-mark a notification acknowledgement.

#### ***Deleting a notification***

If you don't need a notification, you can delete it.

#### **To delete a notification**

1. Open the **Tools** module.

2. Select the **My Notifications** tab.
3. Click **Delete Notification** to delete the notification.

### **Viewing a notification**

Notification definitions can be viewed from the **My Notifications** tab in the **Tools** module.

#### **To view a notification**

1. Open the **Tools** module.
2. Select the **My Notifications** tab.
3. Select a notification.

### **Notification Settings**

If your administrator has enabled it, you can manage your system notification settings from the **My Notifications** tab in the **Tools** module. You will only see notifications listed in this dialog box that have been enabled by your administrator. You are automatically subscribed to those notifications that the administrator has set as default notifications. However, you must subscribe to any enabled notification that is not set as default.

If the administrator modifies a system notification's default status, your subscription choices may be overwritten. If you suddenly find that you are not receiving notifications to which you previously subscribed, you may need to subscribe again.

#### **Subscribing to a system notification**

Open the **System Notification Settings** dialog box to subscribe to them. If an administrator modifies a system notification's default status, your subscription choices may be overwritten. If you suddenly find that you are not receiving notifications to which you previously subscribed, you may need to subscribe again.

#### **To subscribe to a system notification**

1. Open the **Tools** module.
2. Click **System Notifications** to open the **System Notification** Settings dialog box.
3. Select the **My Notifications** tab.
4. For each notification you want to receive, select the check box in the **Subscribe** column.
5. Click **Save**.

### **Define Notifications**

A notification is an automated way of being notified when specific actions occur within the application, such as when a resource submits their timesheet, when a new work item is added, updated, and so on. Some notifications—system notifications—are available to all users; some notifications—custom notifications—can be configured by each user from the **Define Notifications** tab in the **Tools** module.

You can use the **Define Notifications** tab to create and edit user notifications. The **Define Notifications** tab displays a list of notification definitions and associated information for each. You can create new, copy existing, delete, and modify any notification definition.

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You can create custom notifications for several types of events; for each type, you can select a trigger from a list of available triggers that defines the action whereupon the notification is sent. A notification can only have one trigger. If you want to configure notifications to fire based on several actions, you must create multiple notifications.

For example, you can create a notification that is sent any time a log (such as a risk or an issue) is escalated. The available notification types and associated triggers are as follows:

- Investment: **On Add, On Delete, On Move, On Schedule, On Task Plan Checkin, On Resource Substituted, On Update**
- Log Type (such as a risk, an issue, or a custom log type): **On Add, On Assign, On Delete, On Escalate, or On Update**
- Work Item: **On Add, On Delete, or On Update**
- Workflow: **On Approved or On Rejected**

Once you define the notification type and trigger, you can further define the notification details, such as the work item to which the notification is associated, recipient list, criteria, and so on.

You can create, delete, edit, and copy definitions. Copying a definition is useful if you want to create a new one that is similar to an existing one. You can copy the first definition and edit it to make the new one.

### ***Adding a definition***

In the **Tools** module, the **Define Notifications** tab displays a list of notification definitions and associated information for each. Defining a notification enables you to augment out-of-the-box system notifications with organization-specific notifications. Users cannot subscribe to these custom notifications in the same way they can subscribe to system notifications; however, users can specify a set of recipients.

You can create custom notifications for several types of events; for each type, you can select a trigger from a list of available triggers that defines the action whereupon the notification is sent. A notification can only have one trigger. If you want to configure notifications to fire based on several actions, you must create multiple notifications. For example, you can create a notification that is sent any time a log (such as a risk or issue) is escalated. The available notification types and associated triggers are as follows:

- **Item**—This type can use the following triggers: **On Add, Delete, Move, Schedule, Task Plan Check In, Resource Substituted, or Update.**
- **Item**—This type can use the following triggers: **On Add, Assign, Delete, Escalate, or Update.**
- **Work Item**—This type can use the following triggers: **On Add, Delete, or Update.**
- **Workflow**—This type can use the following triggers: **On Approved or Rejected.**

Once you define the notification type and trigger, you can further define the notification details, such as the work item to which the notification is associated, recipient list, criteria, and so on. You can create, delete, edit, and copy definitions. Copying a definition is useful if you want to create a new one that is similar to an existing one. You can copy the first definition and edit it to make the new one.

### **To add a notification definition**

1. Open the **Tools** module.

2. Select the **Define Notifications** tab.
3. Click **New Definition**.
4. In the **New Definition** dialog box, select a notification type and the trigger by which a notification is sent. Click **OK**.
5. Name the notification, add a description, and set its priority.
6. Select **Definition Active** to start sending notifications based on this notification definition.
7. On the **Investment Types** tab, you can choose the types of items and the location of these items in your organization's work item tree for which notifications will be sent.
8. On the **Criteria** tab, you can define a filter to narrow down the items identified in the **Investment Types** tab for which notifications will be sent.
9. On the **Recipients** tab, select the users, security groups, or security roles who will receive the notification and click **Add**.
10. On the **Template** tab, enter the notification's subject line in **Title**. Add custom attributes into the message body and subject line. Choose an attribute from the **Insert Attribute** drop-down and then click **Into Template** (for the message body) or **Into Title** (for the subject line). Click **Into Template** next to **Insert URL Link** to insert the URL of the summary view for the work item type from which the notification is sent.
11. On the **Mashup Event** tab, you can link the notification to a Serena Business Mashups. Select **Send Mashup Event**, type a name for the event, and enter the URL for the location of the Serena Mashup Manager that will process the event.
12. Click **Save**.

### ***Copying a definition***

Click to copy a notification definition.

#### **To copy a notification definition**

1. Open the **Tools** module.
2. Select the **Define Notifications** tab.
3. Select a notification definition and click **Copy Notification**. A copy of the notification appears in the list.
4. Click **Edit** and modify the copy of the notification as required.

### ***Deleting a definition***

Click to delete a notification definition.

#### **To delete a notification definition**

1. Open the **Tools** module.
2. Select the **Define Notifications** tab.
3. Select a notification definition and click **Delete Notification**.

### ***Editing a definition***

Click to modify a notification definition.

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### To edit a notification definition

1. Open the **Tools** module.
2. Select the **Define Notifications** tab.
3. Select an notification and click **Manage Notifications** to open the **Edit Definition** dialog box.
4. Make your changes.
5. Click **Save**.

### Viewing a definition

Notification definitions can be viewed from the **Define Notifications** tab in the **Tools** module.

### To view a notification definition

1. Open the **Tools** module.
2. Select the **Define Notifications** tab.
3. Select a notification definition.

## Manage Users

This module is used to define the individual users and groups of users (security groups) who will be working. If you already have users set up in an existing Microsoft Windows server or Lightweight Directory Access (LDAP) server, you can import them. A resource can also be created from the **Resource Pool** tab in the **Resources** module. This automatically creates a user in the **Security** tab. Resources created from the **Resources** module will need to be activated and assigned a license before they can be allocated or assigned.

For more information, see the following topics:

- [Users \[page 163\]](#)

### Users

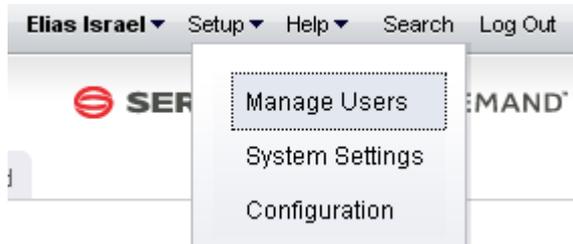
This tab is used to define the individual users and groups of users (security groups) who will be working. If you already have users set up in an existing Microsoft Windows server or Lightweight Directory Access (LDAP) server, you can import them. A resource can also be created from the **Resource Pool** tab in the **Resources** module. This automatically creates a user in the **Security** tab. Resources created from the **Resources** module will need to be activated and assigned a license before they can be allocated or assigned.

### Adding a user

There are two ways to add users. You can import them from a directory service such as Active Directory or Novell eDirectory. The other way to add users from the **Manage Users** module.

### To add a user

1. From the application toolbar, click **Setup**, and then choose **Manage Users**.



2. Click  Add.
3. Under **User Properties**, enter the first name, last name, email address, and user name for the user.

**User Properties**

First Name  \*

Last Name  \*

Email  \*

User Name  \*

Active

4. Click  Save.

### **Assigning a user to a license**

After you have created or imported a user, you must assign the user to a license and then assign the user to the applicable security roles and security groups. Users are assigned to licenses. Users should then be assigned to a security group before being assigned to a security role. Using a security group to assign groups of users to a security role can simplify the tracking and management of permissions for users.

#### **To assign a user to a license**

1. From the application toolbar, click **Setup**, and then select **Manage Users**.
2. Select the **Security** tab.
3. Select the **Users** tab.
4. Select a user.
5. Under **Licenses**, select the check box next to each license you want to assign to the user. The license you assign the user to should be appropriate to the user's responsibilities in your organization.
6. Click **OK**.

### **Deleting a user**

If the user is no longer needed, you can delete it. It is recommended that you inactivate a user instead of deleting it.

**To delete a user**

1. From the application toolbar, click **Setup**, and then select **Manage Users**.
2. Select the **Security** tab.
3. Select the **Users** tab.
4. Select a user.
5. Click **Delete**. Confirm. It is recommended that you inactivate users instead of deleting them.

**Editing a user**

Make your changes and then save them.

**To edit a user**

1. From the application toolbar, click **Setup**, and then select **Manage Users**.
2. Select the **Security** tab.
3. Select the **Users** tab.
4. Make your changes.
5. Click **Save**.

**Importing users and groups**

You can import users from an existing network directory service, such as Active Directory or Novell eDirectory. You must first set up the authentication provider, which determines which users and/or security groups will be imported. You can configure the authentication provider to be run periodically. When the authentication provider is re-run, only new or changed data will be imported. First name, last name, status, and email address are used to determine which users are new and/or have been changed. A user's username, password, domain, and authentication provider will remain unchanged.

**To import users**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. In the **Import Users** dialog box, select the authentication provider from which you are importing.
3. The **Import Users** dialog box displays your authentication provider settings as read-only.
4. Type the following in the *Name* and **Password** boxes: If the authentication provider you selected uses the Application authentication type, type the database user name and password in the corresponding boxes. If the authentication provider you selected uses the Active Directory authentication type, type the domain user name (such as user name), a qualified domain name (such as domain/username), or a full distinguished name (such as cn=username,ou=pretend, dc=domain, dc=com) and password in the corresponding boxes. If the authentication provider you selected uses the Novell eDirectory authentication type, type a full distinguished name and password in the corresponding boxes.
5. Click **Import**. When users are imported, their user name and password are lowercase. When the import completes, click **OK**. If the import returns an error, check the authentication provider to ensure it is configured properly. Also ensure that the user context running the import has sufficient rights on the directory

services server. If the user context does not have sufficient rights, the query will return null strings for those parts of the query the user cannot access. Once you have imported the users and groups, you can edit their information on the **Users** tab and **Groups** tab in the **Security**.

### ***Inactivating a user***

If the user is no longer needed, you can inactivate it.

#### **To inactivate a user**

1. From the application toolbar, click **Setup**, and then select **Manage Users**.
2. Select the **Security** tab.
3. Select the **Users** tab.
4. Select the name of the user you want to inactivate.
5. De-select **Active**.
6. Click **Save**.

### ***Viewing a user***

Users can be viewed from the **Users** tab in the **Manage Users** module.

#### **To view a user**

1. From the application toolbar, click **Setup**, and then select **Manage Users**.
2. Select the **Security** tab.
3. Select the **Users** tab.

### ***Administrator***

An administrator is a user who has been granted access to the **Manage Users**, **System Settings**, and **Customization** modules within the application.

### **Changing the Administrator password**

You should change the Administrator password from its default as soon as you are finished with the initial installation. (The default administrator password is KEYSTONE.) Use a strong password of 8 (or more) characters, with at least one capital letter, one numeral, and one symbol.

#### **To change the Administrator password**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Users** tab.
4. Select the Administrator user from the **Users** tab.
5. In **Password**, enter the new password.
6. Click **Save**.

### ***Users***

A license determines what users in your organization can do once in the application. A license provides up to three actions: view, edit, and administer. These three actions are

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used to give access to modules, views, dialog boxes, and other areas within the application. Actions are often associated to security roles.

## Assigning a user to a license

After you have created or imported a user, you must assign the user to a license and then assign the user to the applicable security roles and security groups. Users are assigned to licenses. Users should then be assigned to a security group before being assigned to a security role. Using a security group to assign groups of users to a security role can simplify the tracking and management of permissions for users.

### To assign a user to a license

1. From the application toolbar, click **Setup**, and then select **Manage Users**.
2. Select the **Security** tab.
3. Select the **Users** tab.
4. Select a user.
5. Under **Licenses**, select the check box next to each license you want to assign to the user. The license you assign the user to should be appropriate to the user's responsibilities in your organization.
6. Click **OK**.

## Notifications

A notification is a way to automatically notify team members about when specific actions occur within Serena Agile, such as when a resource submits their timesheet, when a new work item is added, updated, and so on. Some notifications—system notifications—are available to all users, whereas other notifications—custom notifications—can be configured by each user from the **Define Notifications** tab in the **Tools** module.

## Managing who receives email notifications

There are two ways to manage who receives email notifications. You can manage it on a per-user basis using the **Send Email Notifications** check box on the **Users** tab. Or you can manage it on a multiple-user basis by clicking the **Manage Email Notifications** button.

### To manage who receives email notifications

1. From the application toolbar, click **Setup**, and then select **Manage Users**.
2. Select the **Security** tab.
3. Select the **Users** tab.
4. Below the list of users, click the **Manage Email Notifications** button to display the **Select Users to Receive Notifications** dialog box.
5. Move the names of users that you want to receive notifications to the right list box. Only users in the right list box will receive email notifications. You can **CTRL**-click or **SHIFT**-click to select multiple users.
6. Click **OK**, then click **Save**.

## System Settings

The **System Settings** module is used to set up and configure financial settings, scheduled services, calendar settings, localization settings, system notifications, licenses, and security configuration for your organization.

For more information, see the following topics:

- [Company Calendar \[page 168\]](#)
- [Localization Settings \[page 169\]](#)
- [Scheduled Services \[page 170\]](#)
- [System Notifications \[page 173\]](#)
- [Security \[page 175\]](#)

## Company Calendar

You can use the **Company Calendar** tab to customize the calendar being used by your organization. You can define your organization's working and non-working days, you can define the days in your organization's working week, and you can define the number of hours in a day that makes up a full working day. These settings are used to determine resource capacity and scheduling for resources that are used in task plans or for the number of days that can appear in a sprint burndown chart. Individual resources have their own calendars and they may override company calendar settings in their local calendar (if they are given permission to do so).

### *Defining working days in the company calendar*

Working days are the days in a week, month, and year that count towards resource allocation and resource capacity.

#### **To define working days**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Company Calendar** tab.
3. Under **Select Day Value**, specify whether the day is defined by the default calendar, is a working day for your organization, or is a non-working day for your organization.
4. Click **Save**.

### *Defining working hours in the company calendar*

The default number of working hours per day is eight.

#### **To define working hours per day**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Company Calendar** tab.
3. Under **Working Hours Per Day**, enter the number of hours that make up a resource's working day. The default is 8.
4. Click **Save**.

### *Defining working weeks in the company calendar*

Working weeks are the weeks in a year, typically grouped by month (within quarters).

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### To define working weeks

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Company Calendar** tab.
3. Under **Select Work Week**, choose the days of the week that comprise your organization's working week.
4. Click **Save**.

### *Viewing the company calendar*

Your organization's calendar can be viewed from the **Company Calendar** view in the **Customization** module.

### To view the company calendar

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Company Calendar** tab.

### Localization Settings

You can use the **Localization Settings** tab to modify the strings that appear in the application's user interface. This can help your organization address any localized language requirements that you may have. If you add new elements, such as views, attributes, forms, or charts, you will be able to localize the strings associated with the new elements.

You can filter the text strings available in the user interface by language and by string type. English (United States) is the default language; any new element created will be associated with an English (United States) value. Strings must be modified individually. Default text strings are associated with the English (United States) string values. Updating the English (United States) string values will update the default text string values.

### *Localizing text strings*

Select the language for which you want to create localized text strings, select the string type, and then search. For each string result, you can enter the localized text string in the **String Value** column.

### To localize text strings

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Localization Settings** tab.
3. Select the language for which you want to create localized strings from the **Language Locale** drop-down.
4. Select a string grouping from the **String Type** drop-down.
5. Click **Search**.
6. In the results, for each row you want to localize, enter the localized text in the **String Value** column.
7. Click **Save**.

### *Viewing localized text strings*

Localized text strings can be viewed from the **Localization Settings** tab.

### To view localized text strings

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Localization Settings** tab.
3. Select the language for which you want to view localized strings from the **Language Locale** drop-down.
4. Select a string grouping from the **String Type** drop-down.
5. Click **Search**.

### Scheduled Services

You can use the **Scheduled Services** tab to create and maintain scheduled jobs and plug-ins. Jobs that are in the queue are run sequentially, with the next job in the queue starting after the current one is finished. In general, most jobs should be scheduled to run at off-peak times.

For more information, see the following topics:

- [Jobs \[page 170\]](#)
- [Plug-ins \[page 171\]](#)

### Jobs

The **Jobs** tab lets you schedule recurring tasks (jobs) that run a plug-in so that it performs a specific action, such as cleaning up abandoned print jobs, posting timesheet data, sending workflow notifications, recalculating range calculations on a nightly basis, using connectors to refresh and publish data, and so on. You can schedule jobs for any plug-in that has scheduling enabled.

### Scheduling a job

You can create schedules for processing plug-ins on a daily, weekly, monthly, or one-time basis on the **Jobs** tab of the **Scheduled Services** tab. Plug-ins are DLL files that can be used to process data, such as sending connector job notifications, recalculating range calculations, or cleaning up abandoned print jobs.

### To schedule jobs

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Scheduled Services** tab.
3. Select the **Jobs** tab.
4. Select a job.
5. Under **Scheduled Job Properties**, define the schedule that this job should run. Jobs should be scheduled during time of the day where users are not logged onto the system. In most cases, running of a scheduled job will log off users or cause interruption to their use of the system.
6. Click **Save**.

### Viewing a scheduled service's job history

You can view the history of a scheduled service, including the start and finish times, status of the job when it ran, and so on.

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### To view a scheduled service's job history

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Scheduled Services** tab.
3. Select the **Jobs** tab.
4. Under **Status**, click **View Job History**.

### Viewing the status of a scheduled job

You can check the status of a scheduled job in the **Scheduled Services** tab.

### To view the status of a scheduled job

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Scheduled Services** tab.
3. The status of the scheduled job is listed under **Status**, including its current status, the last time the job ran, whether it was successful the last time it ran, and so on.

### Plug-ins

The **Plug-ins** tab lets you manage plug-ins that are included. Plug-ins are DLL files that can be used to process data, such as sending connector job notifications, recalculating range calculations, or cleaning up abandoned print jobs. Predefined plug-ins are included; additional plug-ins can be created by Serena Professional Services for your organization.

### Available plug-ins

The following plug-ins are included:

- **Clean Up Abandoned Print Jobs**—Use this plug-in to clean up abandoned print jobs and temporary files from the database and file system. This plug-in is run by the **Clean Up Abandoned Print Jobs** scheduled service.
- **Datasheet History**—Use this plug-in to create and schedule datasheet snapshots in the **Reports** module.
- **Post All Data**—Use this plug-in to combine the **Post Timesheet Data** and **Post Attribute Maps** plug-ins. This plug-in is run by the **Nightly Post Job** scheduled service. This plug-in should be run during off-peak hours.
- **Post Attribute Maps**—Use this plug-in to consolidate timesheet data for task plans to the portfolio hierarchy using defined attribute maps. This plug-in can be run manually.
- **Post Timesheet Data**—Use this plug-in to consolidate approved timesheet actuals back into task plans. Actual hours and costs will be recalculated. All timesheet data submitted since the last time this plug-in was run is updated. This plug-in can be run manually.
- **Recalculate Range Calculations**—Use this plug-in to update all range calculations. Range calculations can change based on the system date; this plug-in forces all calculations to be updated to the current system date. This plug-in is run by the **Nightly Recalculation of Range Calculations** scheduled service. This job should be run nightly and at off-peak hours.

- **Refresh Audit Tables for Agile Work Items**—Use this plug-in to rebuild the audit tables for a work item (story, epic, and so on) if they get out of sync. This job should be run (manually) and only when Serena Support recommends it.
- **Refresh Audit Tables for Investments**—Use this plug-in to rebuild the audit tables for items (projects, programs, and so on) if they get out of sync. This job should be run (manually) and only when Serena Support recommends it.
- **Reporting Master Job**—Use this plug-in to determine what scheduled reports need to be run. This is the master job for scheduled reports and is set by default to be run every 15 minutes. This plug-in is run by the **Reports Master** scheduled service.
- **Rollup Investment Hierarchy**—Use this plug-in to force a roll-up of data within the work item hierarchy. The hierarchy will not be accessible during this time. This job should be run (manually) and only when Serena Support recommends it.
- **Scheduled Notification Master Job**—Use this plug-in to send a message to the notification processor to check if any scheduled notifications need to be run. This plug-in is set by default to be run every hour. This is the master job for scheduled notifications. This plug-in is run by the **Notification Master** scheduled service.
- **Send Job Notifications**—Use this plug-in to generate and send nightly email notifications for the execution status of a specific, scheduled service. Plug-in notifications are based on an XML configuration file.
- **Send Workflow Notifications**—Use this plug-in to generate and send reminder notifications for expired transitions in the Workflow tab in the **Projects** module. Workflow notifications are sent to the members of transition approval lists and to the individual who initiates a workflow transition. This plug-in is run by the **Nightly Workflow Notifications** scheduled service.
- **Synchronize Users**—Use this plug-in to synchronize users and resources with information from selected authentication providers, such as Active Directory or Lightweight Directory Access (LDAP). This plug-in may require the assistance of Serena Professional Services in order to ensure proper configuration.
- **System Calendar Change**—Use this plug-in to apply changes that have been made to the system calendar to all task plans. This plug-in should be run during off-peak hours. This plug-in is not used in Serena Project Portfolio Management.

## Adding a plug-in

If you want to be able to schedule jobs for the plug-in, be sure to select the **Can be Scheduled** check box.

### To add a plug in

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Scheduled Services** tab.
3. Select the **Plug-ins** tab.
4. Click **New**.
5. Name the new plug-in and provide a description.
6. Enter the plug-in DLL file name that is provided to you by Serena Professional Services in the **DLL Name** box.
7. Enter the plug-in class name that is provided to you by Serena Professional Services in the **Class Name** box.

8. Select the **Can be Scheduled** check box to allow jobs to be scheduled against this plug-in using the **Jobs** tab in the **Scheduled Services** view.
9. Click **Save**.

## System Notifications

A notification is an automated way of being notified when specific actions occur within the application, such as when a resource submits their timesheet, when a new work item is added, updated, and so on. Some notifications—system notifications—are available to all users; other notifications—custom notifications—can be configured by each user from the **Define Notifications** tab in the **Tools** module.

You can use the **System Notifications** tab to manage the notifications that will be available to all of the users in your organization. System notifications are available for many events associated with the lifecycle of a work item, such as adding resource allocations or assigning risks. The full list of system notifications is available in the **System Notifications** tab.

### *Adding a system notification*

You cannot add system notifications.

### *Editing a system notification*

You can use the **Edit System Notifications** dialog box to modify a system notification. System notifications are preset. System notifications are available for many events associated with the lifecycle of a work item, such as resources added, risks assigned, or timesheets due. Your administrator can enable and disable system notifications to meet the needs of the users. The administrator can also edit a system notification to make it more useful for your enterprise. The administrator uses the **System Notifications** tab of the **System Settings** module to set up system notifications.

### **To edit a system notification**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **System Notifications** tab.
3. Select a notification and click **Edit Notification**.
4. In the **Edit System Notifications**, dialog box, make your changes.
5. Click **Save**.

### *Enabling default system notifications*

Enabled system notifications that are also default notifications will be sent to all users in your organization regardless of their individual subscription preferences. If a default system notification is changed so that it is no longer a default system notification, all user subscriptions to that system notification will be removed.

### **To enable a default system notification**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **System Notifications** tab.
3. Select the check-boxes from both the **Enabled** and **Default** columns beside the notifications you want to enable.

### ***Enabling system notifications***

System notifications that are enabled will be available to users in your organization from the **My Notifications** tab in the **Tools** module.

#### **To enable a system notification**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **System Notifications** tab.
3. Select the check-box from the **Enabled** column beside the notification that you want to enable.

### ***Scheduling system notifications***

You can configure the **Timesheet Due** and **Timesheet Overdue** system notifications to be sent to recipients at a scheduled time.

#### **To schedule system notifications**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **System Notifications** tab.
3. Select a notification that has an On Schedule trigger, such as **Timesheet Due** or **Timesheet Overdue**, and then click the **Edit System Notifications** button.
4. In the **Edit System Notifications** dialog box, select the **Schedule** tab.
5. Under **Job Schedule**, choose the frequency, time of day, and day of the week or month.
6. Click **Save**.

### ***Viewing system notifications***

The list of system notifications is available from the **System Notifications** tab in the **System Settings** module.

#### **To view system notifications**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **System Notifications** tab.

### ***Email Settings***

Users in your organization can view, subscribe to, and un-subscribe from any system notification that is enabled. Users can subscribe to and un-subscribe from their system notifications using the **My Notifications** tab in the **Tools** module. You can subscribe every user in your organization to an enabled system notification by making it a default notification.

#### **Disabling email for a system notification**

You may want to enable notifications for users, but not have those notifications be sent to a user's email account. In this case, when notifications are available, an icon will appear in the application toolbar.

#### **To disable email for a system notification**

1. From the application toolbar, click **Setup**, and then select **System Settings**.

2. Select the **System Notifications** tab.
3. In the row for the system notification you want to disable, un-check the **Enabled** column.

## Managing who receives notifications

Once you've configured and enabled system notifications, you have to specify which users and groups of users should receive email notifications. This is done from the **Users** tab in the **Security** tab.

### To manage which users receive email notifications

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Users** tab.
4. Below the list of users, click the **Manage Email Notifications** button to display the **Select Users to Receive Notifications** dialog box.
5. Select the users who should receive notifications and click the right arrow to add them. You can **CTRL**-click to select multiple users.
6. Click **OK**.

## Security

You can use the **Security** tab to manage the users and groups of users who will be working, and to define the security roles that allow them to access the **Projects**, **Reports**, **Resources**, **Tools**, **System Settings**, and **Customization** modules.

For more information, see the following topics:

- [Active Users \[page 175\]](#)
- [Application Security \[page 176\]](#)
- [Groups \[page 179\]](#)
- [Password Policy \[page 182\]](#)
- [Roles \[page 182\]](#)

### Active Users

The **Active Users** tab lists the current active users.

### Viewing active users

The users who are currently working (active users) can be viewed from the **Active Users** tab of the **Security** tab in the **System Settings** module.

#### To view active users

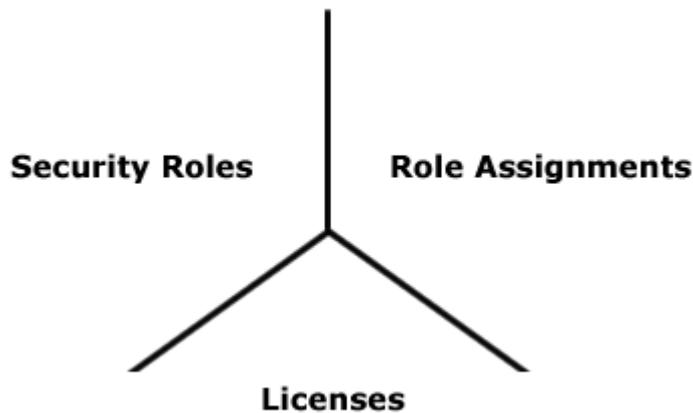
1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Click the **Active Users** tab.

## **Application Security**

Data is integrated from a wide variety of sources that may encompass sensitive project, budget, and resource information. To provide secure and controlled access across to your portfolio data, a multi-layered application security framework is used. This framework enables you to define user access both at a system and individual work item level. Designing a security policy that meets the needs of your organization requires careful planning and a thorough understanding of the security framework.

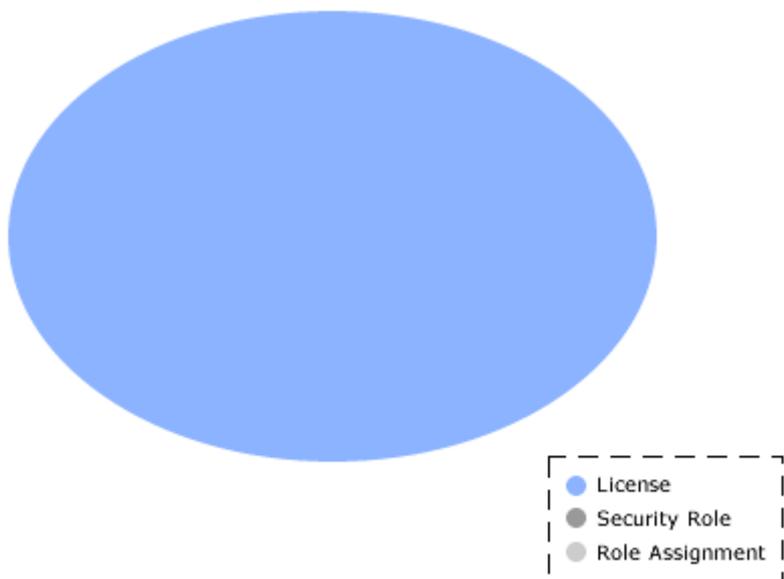
### **Overview**

The structure of this framework is made up of three separate security elements: licenses, security roles, and work item role assignments. The combination of these security elements defines your overall security policy.



### **Licenses**

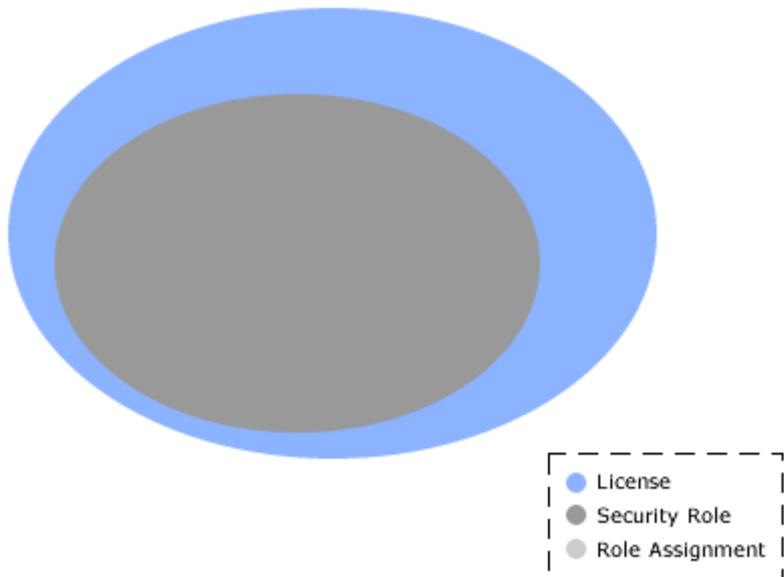
Licenses are the foundation of the security model. There are two types of licenses: a base license that provides access to a limited set of functionality and a full license that provides access to the full application. A license is assigned individually to each user, providing the ability to log on and defining user access to modules and views. Essentially, a license defines the maximum possible access a user can be given to modules and views. Think of the license as a large container; it holds a user's greatest potential access to the application.



## Security Roles

Security roles are basically a collection of individual permissions and define the level of access for users and groups and functions they can perform. The permissions structure enables you to specify the precise level of access for the security role, and to the individual views, dimensions, and user actions. Licensed users are put in groups, which are then assigned to a security role. When user access provided by a security role is combined with the potential access granted by the license, the net result is the most restrictive level of access.

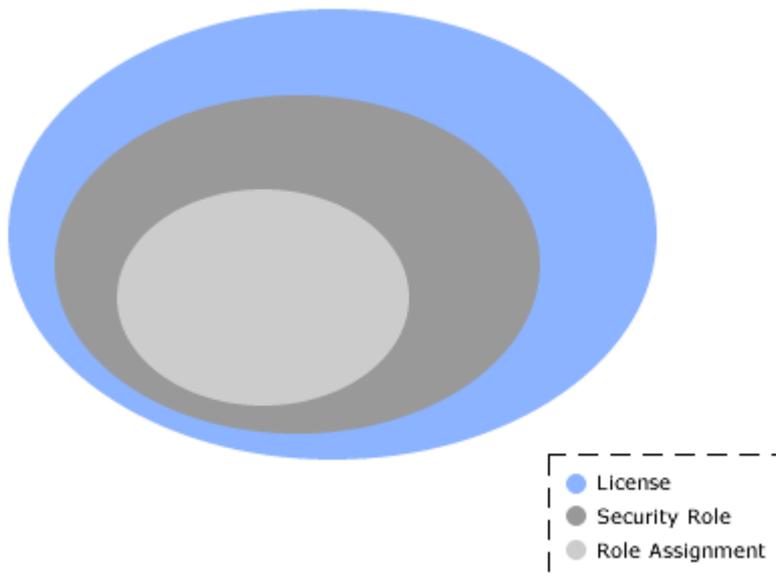
When security roles and licenses are combined, the result is restrictive. However, users and groups can belong to more than one security role. In this case, the user access from each security role is cumulative, but only to the extent provided by the license.



## Role Assignments

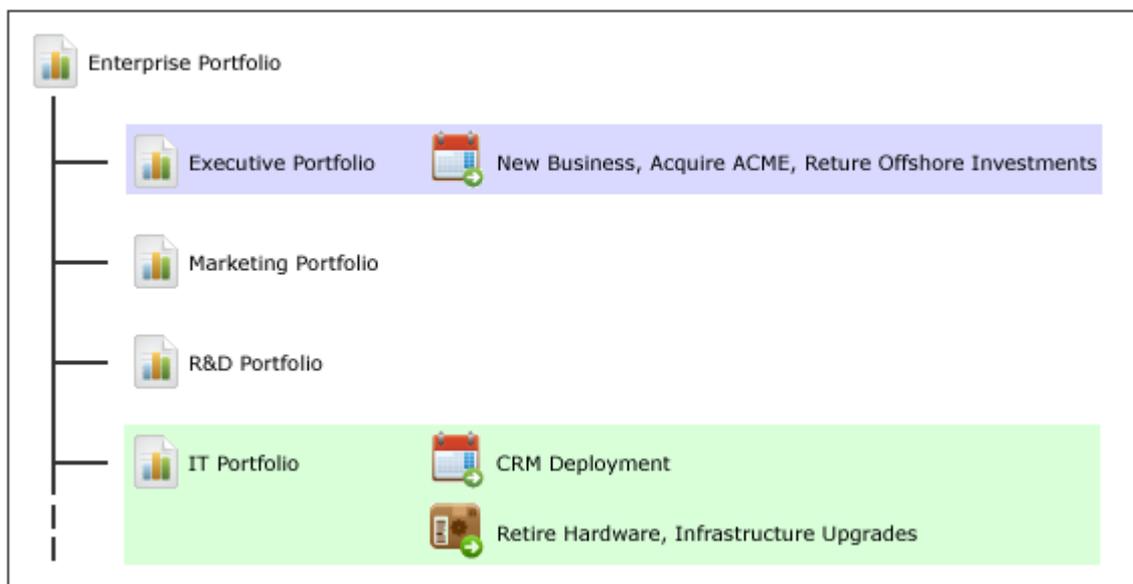
A role assignment is the last layer in the security framework. Role assignments define user and group access to a specific work item or work item portfolios. The security role assignment is actually part of the work item's properties. This is the final step in determining a the level of access for a user or group. A user can have a full license and have unrestricted access via their security role, and will not have access to a work item or portfolio without a appropriate role assignment.

Combining licenses, security roles, and role assignments effectively can provide the appropriate level of access and visibility into portfolio data. In fact, when combined with a well-designed portfolio structure, you can virtually isolate a work item and entire portfolios from unauthorized access.



## Security Example

The following visual provides an example of this security-based portfolio isolation. Users with role assignments on the IT Portfolio, for instance, see only those items highlighted in green. When those users log on, the other items and portfolios will not even appear in the hierarchy. In the same way, users assigned to the Executive Portfolio will only see and have access to items in that specific portfolio.



## Best Practices

There are many ways to approach application access and security role definitions. The security framework is designed to provide the flexibility to meet the specific application security needs of your organization. To help you achieve a well conceived security model, consider the following best practices:

- Document your requirements for user access and application security. Determine the level of granularity needed by your organization.
- Outline the security roles.
- Devise the licensing scheme that will match this setup.
- Define and create each security role and assign corresponding permissions.
- Ensure each security role has access to the appropriate dimensions.
- Create groups, and assign groups to security roles.
- Create users and then add them to appropriate groups.
- Assign users the appropriate licenses that match their security roles.

If you assign a security role permission to edit the properties of a work item in the work item hierarchy, that permission will be inherited by all of that work item's children. It is possible to restrict permission to edit an work item's children, but it is not possible to restrict permission to view an work item's children.

## Groups

The **Groups** tab is used to define the security groups, to specify the users and groups who belong to them, and to specify the security roles to which they are associated. Security groups are a collection of users and/or other security groups that have similar roles in your organization and similar needs for accessing work item data. Without using security groups, every user would need to be individually given permission to access the various modules and views. With groups, you can assign multiple users with similar roles and permission requirements to a single security group, and you can then assign a single

security group permission to access a module or a view. Users can be assigned to more than one security group. If a user is assigned to more than one security group, that user has all the permissions associated with the all the groups to which they are assigned.

### **Adding a security group**

Several default security groups are included. If these groups aren't the right ones for how your organization wants to work, you can add new ones.

#### **To add a security group**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Groups** tab.
4. Click **New**.
5. Under **Group Properties**, enter a name and a description. Select the **Active** check box to activate the group.
6. Under **Users and Groups**, select a user or a security group from the left pane and move them to the right pane to add them to the security group.
7. Under **Global Administrative Roles**, choose the security roles to which the security group will belong.
8. Click **Save**.

### **Assigning a user to a security group**

You can assign users and security groups to security groups. Security groups are given permission to access modules and views by assigning the security group to one or more security roles.

#### **To assign a user to a security group**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Groups** tab.
4. Select the name of the security group to which you want to assign a user or group.
5. Under **Users and Groups**, select the name of the user or group you want to add move the user or group to the column on the right.
6. Click **Save**.

### **Copying a security group**

You can add a security group by copying the properties of an existing security group. When you copy a security group, the users and/or security groups that are assigned to the security group from which the copy is made will also be copied.

#### **To copy a security group**

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Groups** tab.

4. Select the security group you want to copy and click **Copy**.
5. Under **Group Properties**, enter a name and a description. Select the **Active** check box to activate the group.
6. Under **Users and Groups**, select a user or a security group from the left pane and move them to the right pane to add them to the security group.
7. Under **Global Administrative Roles**, choose the security roles to which the security group will belong.
8. Click **Save**.

## Deleting a security group

If your organization doesn't need a security group, you can delete it.

### To delete a security group

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Groups** tab.
4. Select a group.
5. Click **Delete**. Confirm.

## Editing a security group

Make your changes and then save them.

### To edit a security group

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Click the **Groups** tab.
4. Select a group.
5. Make your changes.
6. Click **Save**.

## Importing security groups

You can import users from an existing network directory service, such as Active Directory or Novell eDirectory. You must first set up the authentication provider, which determines which users and/or security groups will be imported. You can configure the authentication provider to be run periodically. When the authentication provider is re-run, only new or changed data will be imported. First name, last name, status, and email address are used to determine which users are new and/or have been changed. A user's username, password, domain, and authentication provider will remain unchanged.

### To import security groups

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. In the **Import Users** dialog box, select the authentication provider from which you are importing.

3. The **Import Users** dialog box displays your authentication provider settings as read-only.
4. Type the following in the *Name* and **Password** boxes: If the authentication provider you selected uses the Application authentication type, type the database user name and password in the corresponding boxes. If the authentication provider you selected uses the Active Directory authentication type, type the domain user name (such as user name), a qualified domain name (such as domain/username), or a full distinguished name (such as cn=username,ou=pretend, dc=domain, dc=com) and password in the corresponding boxes. If the authentication provider you selected uses the Novell eDirectory authentication type, type a full distinguished name and password in the corresponding boxes.
5. Click **Import**. When users are imported, their user name and password are lowercase. When the import completes, click **OK**. If the import returns an error, check the authentication provider to ensure it is configured properly. Also ensure that the user context running the import has sufficient rights on the directory services server. If the user context does not have sufficient rights, the query will return null strings for those parts of the query the user cannot access. Once you have imported the users and groups, you can edit their information on the **Users** tab and **Groups** tab in the **Security**.

## Viewing a security group

Security groups can be viewed from the **Groups** tab of the **Security** tab in the **Projects** module.

### To view a security group

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Groups** tab.

## Password Policy

The **Password Policy** tab provides the following options for password complexity:

- **Strong**—The password must be between 8-16 characters and must contain at least one number (0-9), one lowercase letter (a-z), one uppercase letter (A-Z), and one non-alphanumeric character (such as #, \$, !, or %).
- **Medium**—The password must be between 8-16 characters and must contain at least one number (0-9), one lowercase letter (a-z), and one uppercase letter (A-Z).  
Default.
- **Weak**—The password must be between 4-16 characters.

Password policy options are global settings and will be applied to any database that is used by your organization.

## Roles

The **Roles** tab is used to assign permission to areas within each of the modules: **Projects, Reports, Resources, Tools, System Settings, and Customization**. Permissions are granted on a role-by-role basis. Security roles define the permissions that are available for the users and security groups that are assigned to the security role. Users can be assigned to more than one security role. If a user is assigned to more than

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one security role, that user has all the permissions associated with the all the roles to which they are assigned.

## Adding a security role

Several default security roles are included. If these security roles don't map to the way your organization manages security, you can add new ones.

### To add a security role

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Click the **Roles** tab.
4. Click **New**.
5. Under **Security Role Properties**, enter a name and a description.
6. In the **System Settings, Customization, Resources, Tools, Reports**, and **Projects** tabs, select the permissions that will be allowed for the security role. If the **Allowed** column is selected for a permission, any user or security group will be granted permission to do the associated actions.
7. Click **Save**.

## Assigning a user to a security role

Users can be assigned to security roles one at a time or as part of security groups.

### To assign a user or a security group to a security role

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Roles** tab.
4. Select the name of the security role to which you want to assign a user or group.
5. Under **Users and Groups**, select the name of the user or group you want to add move the user or group to the column on the right.
6. Click **Save**.

## Copying a security role

You can add a security role by copying the properties of an existing security role. When you copy a security role, the users and/or security roles that are assigned to the security role from which the copy is made will also be copied.

### To copy a security role

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Roles** tab.
4. Select the security role you want to copy and click **Copy**.
5. Under **Security Role Properties**, enter a name and a description.
6. In the **Administration, Configuration, Resources, Workspace, Analyzer**, and **Projects** tabs, select the permissions that will be allowed for the security role. If

the **Allowed** column is selected for a permission, any user or security group will be granted permission to do the associated actions.

7. Click **Save**.

## Deleting a security role

If your organization doesn't need a security role, you can delete it.

### To delete a security role

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Roles** tab.
4. Select a role.
5. Click **Delete**. Confirm.

## Editing a security role

Make your changes and then save them. The Administrator (padmin) security role cannot be modified.

### To edit a security role

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Roles** tab.
4. Select a role.
5. Make your changes.
6. Click **Save**.

## Viewing a security role

Security roles can be viewed from the **Roles** tab of the **Security** tab in the **System Settings** module.

### To view a security role

1. From the application toolbar, click **Setup**, and then select **System Settings**.
2. Select the **Security** tab.
3. Select the **Roles** tab.

## Configuration

After you have created users, added licenses, defined security roles (and assigned users to them), you are ready to configure the application. The **Customization** module is used to manage a work item types, attributes, and views that your organization wants to use.

For more information, see the following topics:

- [Attributes Setup \[page 185\]](#)
- [Environment Settings \[page 203\]](#)
- [Module Designer \[page 206\]](#)

- [Types Setup \[page 248\]](#)
- [User Synchronization \[page 255\]](#)
- [View Designer \[page 259\]](#)
- [View Management \[page 284\]](#)

## Attributes Setup

You can use the **Attributes Setup** tab to create and manage work item type attributes.

For more information, see the following topics:

- [Attribute Dependencies \[page 185\]](#)
- [Attributes \[page 186\]](#)
- [Lists \[page 201\]](#)
- [Type System \[page 202\]](#)

## Attribute Dependencies

The Attribute Dependencies tab allows you to link attributes to each other by defining a parent/child relationship. You can define parent/child relationships for any attribute type that can be associated with a list, such as *date*, *float*, *integer*, *money*, *percent*, or *text*.

After you have chosen the parent and child attributes, you need to define the dependency relationships. Select a list work item from the parent attribute and then associate a value from the child attribute by adding a list work item from the child attribute to the list work item of the parent attribute.

## Adding an attribute dependency

Open the **New Attribute Dependency** dialog box and choose the parent and child attributes. Then specify the relationships between a list work item which belongs to the parent and child attributes.

### To add an attribute dependency

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attribute Dependencies** tab.
4. Click **New**.
5. In the **New Attribute Dependency** dialog box select a parent attribute (the attribute for which dependencies will be created) and a child attribute (the attribute from which the dependencies are based).
6. Select the parent/child pair that was just created.
7. Click **OK**.
8. Under **Selections**, select a priority for the dependency (*High*, *Medium*, and *Low*). For each priority, select the parent attributes that are associated with the child attribute and move them to the right column. As the parent / child relationships are created, they will be shown in the **Summary** section below.
9. Click **Save**.

## Deleting an attribute dependency

If you are not using an attribute dependency, you can delete it.

### To delete an attribute dependency

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attribute Dependencies** tab.
4. Select a dependency pair.
5. Click **Delete**.

## Editing an attribute dependency

Make your changes and then save them.

### To edit an attribute dependency

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attribute Dependencies** tab.
4. Select an attribute dependency.
5. Make your changes.
6. Click **Save**.

## Viewing an attribute dependency

An attribute dependency can be viewed from the **Attribute Dependencies** tab in the **Attributes Setup** tab.

### To view an attribute dependency

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attribute Dependencies** tab.
4. Select a dependency pair. This populates the **Selections** and **Summary** boxes. The **Summary** box allows you to view a graphical representation of the parent/child relationship.
5. Use the **Parent List Items** drop-down to select the work item from which you want to view a child work item.

## Attributes

Attributes are information about a work item that shows in a field or column of a view. Attributes should have unique names; if an attribute has the same name as another attribute, then it must have a unique attribute type and/or it must be dimensioned. Attributes can be assigned to work item types from the Investment Type tab in the **Types Setup** tab.

There are six primary types of attributes:

- **General**—A general attribute can be used by any work item type. A general attribute is never timephased (or ranged) and it is never a milestone. General attribute types include: *date*, *flag*, *float*, *integer*, *large text*, *money*, *percent*, *resource*, *text*, *time*, and *URL link*.
- **Timephased**—A timephased attribute can be used to track costs and/or benefits over a defined time period. There are four types of timephased attributes: labor costs, non-labor costs, other costs, and benefits. Timephased attributes can be split so that costs and/or benefits can be tracked in smaller, more detailed levels. When a timephased attribute is split, cost and benefit values are tracked at the split level, plus are rolled-up into the parent timephased attribute. Timephased attribute types include: *Timephased - CURRENCY*, *Timephased - FTE*, *Timephased - NonLabor*, and *Timephased - UNITS*.
- **Calculated Timephased**—A *calculated timephased* attribute can be used to calculate currency, hours, skills, and other measurements that are already being tracked using a timephased attribute. There are four types of *calculated timephased* attributes: currency, FTE, hours, and units. Calculated timephased attributes may use MathML. The *calculated timephased* attribute type includes: *Timephased Calc - CURRENCY*, *Timephased Calc - FTE*, *Timephased Calc - HOURS*, and *Timephased Calc - UNITS*.
- **Ranged Calculation**—A *ranged calculation* attribute can be used to derive the sum for timephased attributes and *calculated timephased* attributes. Ranged calculation attributes always use MathML.
- **Milestone**—A milestone attribute can be used to define dates. A milestone attribute is always dimensioned and can be rolled-up. Status can be assigned to a milestone.
- **Constant**—A *constant* attribute can be used in calculations, transitions, or whenever there is a need for a fixed value. A *constant* attribute is defined using the Edit Rates dialog box. A *constant* attribute must have a rate defined; use the Edit Rates dialog box to define a rate.

There are four roll-up types that can be applied to attributes (from the Attributes tab) and attribute dimensions (from the Dimensions tab):

- **Sum**—The *sum* roll-up type adds all of an attribute's direct descendent values.
- **Average**—The average roll-up type calculates the mean average of an attribute's direct descendent values.
- **Minimum**—The *min* roll-up type selects the lowest value or earliest date from an attribute's direct descendent values.
- **Maximum**—The *max* roll-up type selects the highest value or latest date from an attribute's direct descendent values.

Roll-up types can be used with the following attribute types: *date*, *float*, *integer*, milestone, *money*, *percent*, *ranged calculation*, *time*, and *calculated timephased* (all four of them).

## Copying an attribute

You can create new attributes by copying existing ones.

### To copy an attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.

2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Select the attribute you want to copy and click **Copy**.
5. Make your changes.
6. Click **Save**.

### Deleting an attribute

You can remove any attribute that is not being used by an existing work item type, column, or box. Removing an attribute will remove any associated attribute list values.

#### To delete an attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Select an attribute.
5. Click **Delete**.

### Editing an attribute

Make your changes and then save them. Once created, there are some properties of an attribute that cannot be modified, including its data type, roll-up type, or whether it is dimensioned.

#### To edit an attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Select an attribute.
5. Make your changes.
6. Click **Save**.

### Viewing an attribute

An attribute can be viewed from the Attributes tab in the **Types Setup** view.

#### To view an attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Select an attribute and view its properties.

## Calculated Timephased

A calculated timephased attribute (or field) is used to store information that is calculated and that can vary over time. There are several types of calculated timephased attributes:

*Timephased Calc - CURRENCY, Timephased Calc - FTE, Timephased Calc - HOURS, and Timephased Calc - UNITS.*

## Adding a calculated timephased attribute

Add a new *calculated timephased* attribute. From the **Type** drop-down, select *Timephased Calc - CURRENCY, Timephased Calc - FTE, Timephased Calc - HOURS, or Timephased Calc - UNITS*. A *calculated timephased* attributes can be cumulative, reset, and dimensioned.

### To add a calculated timephased attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select one of the following: *Timephased Calc - CURRENCY, Timephased Calc - FTE, Timephased Calc - HOURS, or Timephased Calc - UNITS*.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up) or *sum* (to add all of this attribute's direct descendent values). A *calculated timephased* attribute that uses the *sum* roll-up type should only be used with a dependency. An attribute with a rollup type other than *none* will be saved as a global attribute. (A global attribute is required for all work item types and optional for any work type.)
8. Under **Time Phase Attributes**, select **Cumulative** and then select *Calendar Quarter, Calendar Year, End of Time, Fiscal Quarter, or Fiscal Year* from the **Reset Interval** drop-down.
9. A *calculated timephased* attribute can be associated with one or more dimensions. Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
10. Click **Save**.

## Constant

A *constant* attribute (or field) is used to store a value that will remain constant.

### Adding a constant attribute

Add a new *constant* attribute. From the **Type** drop-down, select *constant*. Choose a display value. A *constant* attribute can be dimensioned.

### To add a constant attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the attribute. The system name will be generated automatically.

6. From the **Type** drop-down, select *constant*.
7. From the **Display Value** drop-down, select *float, integer, money, or percent*.
8. A *calculated timephased* attribute can be associated with dimensions. Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
9. Click **Save**.

### Adding an attribute rate

Add an attribute rate for a *Timephased - FTE* or a *Timephased - UNITS* attribute. Click the **Rates** button to open the **Rate Editor** dialog box.

#### To add an attribute rate

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. In the list of attributes, select an attribute that has an attribute type of *constant, Timephased - FTE, or Timephased - UNITS*.
5. Under **Time Phase Attributes**, click **Rates**.
6. In the **Edit Rates** dialog box, select **Add**. In the **Rate** column, enter the rate and choose the date upon which the rate is to take effect.
7. Click **Save**.

### Deleting an attribute rate

You can delete rates that have been defined for *Timephased - FTE* and *Timephased - UNITS* attributes. Click the **Rates** button to open the **Rate Editor** dialog box.

#### To delete an attribute rate

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Select an attribute with a type of *constant, Timephased - FTE, or Timephased - UNITS*.
5. Click **Rates**.
6. In the **Rate Editor** dialog box, select a rate and click **Delete**.
7. Click **OK**.

### Editing an attribute rate

You can modify rates that have been defined for *Timephased - FTE* and *Timephased - UNITS* attributes. Click the **Rates** button to open the **Rate Editor** dialog box.

#### To edit an attribute rate

1. From the application toolbar, click **Setup**, and then select **Customization**.

2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Select an attribute with a type of *constant*, *Timephased - FTE*, or *Timephased - UNITS*.
5. Under **Time Phase Attributes**, click **Rates**.
6. Click **Save**.

## Date

A *date* attribute (or field) is used to store dates, such as *Review Date*, *Task Actual Start*, *Task Actual Finish*, *Task Start*, and *Task Finish*.

### Adding a date attribute

Add a new attribute. From the **Type** drop-down, select *date*.

#### To add a date attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *date*.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up), *min* (selects the lowest value or earliest date from an attribute's direct descendent values), *max* (selects the highest value or latest date from an attribute's direct descendent values), *sum* (to add all of this attribute's direct descendent values). General attributes that use the *sum* roll-up type do not require a dependency. An attribute with a rollup type other than *none* will be saved as a global attribute.
8. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
9. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
10. Under **List Attributes**, choose an attribute list to which the attribute will be associated.
11. Under **Calculation**, select **Calculated** and then click **Calculation** to open the **Calculation Editor** dialog box.
12. Calculated attributes can be associated with dimensions (except when using Serena Agile). Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
13. Click **Save**.

## Flag

A *flag* attribute (or field) is used to indicate yes/no data, such as whether a work item is billable (*Billable*), whether a document or a project is checked in (*Is Checked In*), whether a team member has assigned themselves to a task (*Self Assigned*), or whether a task has been made visible across projects (*Task Externally Visible*).

### Adding a flag attribute

Add a new attribute. From the **Type** drop-down, select *flag*.

#### To add a flag attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *flag*.
7. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
8. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
9. Under **Calculation**, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box.
10. Calculated attributes can be associated with dimensions (except when using Serena Agile). Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
11. Click **Save**.

## Float

A *float* attribute (or field) is used to store a value that will vary across the projects in which the field is available, such as *Estimated Work*, *Remaining Work*, *Task Duration*, or *Task Remaining Duration*.

### Adding a float attribute

Add a new attribute. From the **Type** drop-down, select *float*.

#### To add a float attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.

6. From the **Type** drop-down, select *float*.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up), *min* (selects the lowest value or earliest date from an attribute's direct descendent values), *max* (selects the highest value or latest date from an attribute's direct descendent values), *sum* (to add all of this attribute's direct descendent values). General attributes that use the *sum* roll-up type do not require a dependency. An attribute with a rollup type other than *none* will be saved as a global attribute.
8. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
9. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
10. Under **List Attributes**, choose an attribute list to which the attribute will be associated.
11. Under **Calculation**, select **Calculated** and then click **Calculation** to open the **Calculation Editor** dialog box.
12. Calculated attributes can be associated with dimensions (except when using Serena Agile). Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the **Calculation Editor** dialog box. Add the MathML calculation and click **OK**.
13. Click **Save**.

## Integer

An *integer* attribute (or field) can be used to store a unique value in the application, such as *Parent ID*, *Resource User ID*, or *Team Owner*. Or it can be used to capture a required value from a list of values, such as *Priority*.

### Adding an integer attribute

Add a new attribute. From the **Type** drop-down, select *integer*.

#### To add an *integer* attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *integer*.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up), *min* (selects the lowest value or earliest date from an attribute's direct descendent values), *max* (selects the highest value or latest date from an attribute's direct descendent values), *sum* (to add all of this attribute's direct descendent values). General attributes that use the *sum* roll-up type do not require a dependency. An attribute with a rollup type other than *none* will be saved as a global attribute.
8. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.

9. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
10. Under **List Attributes**, choose an attribute list to which the attribute will be associated.
11. Under **Calculation**, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box.
12. Calculated attributes can be associated with dimensions (except when using Serena Agile). Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
13. Click **Save**.

## Large Text

A *large text* attribute (or field) is used to store very large strings of characters.

### Adding a large text attribute

Add a new attribute. From the **Type** drop-down, select *large text*.

#### To add a large text attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *large text*.
7. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
8. Click **Save**.

## Milestone

A *milestone* attribute (or field) is used to store a specific value.

### Adding a milestone attribute

Add a new *milestone* attribute. From the **Type** drop-down, select *milestone*. When a *milestone* is a global attribute, it can be discovered as a search result.

#### To add a milestone attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.

6. From the **Type** drop-down, select milestone.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up), *min* (selects the lowest value or earliest date from an attribute's direct descendent values), or *max* (selects the highest value or latest date from an attribute's direct descendent values). An attribute with a rollup type other than *none* will be saved as a global attribute.
8. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
9. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
10. Milestone attributes are always part of an attribute list. Under **List Attributes**, choose an attribute list to which the milestone attribute will be associated. Milestone attributes are always dimensioned, but they cannot use MathML calculations.
11. Click **Save**.

## Money

A *money* attribute (or field) is used to capture cost data, such as *Task Actual Cost*, *Task Actual Non-Labor Cost*, *Task Total Cost*, or *Project Costs Total*.

### Adding a money attribute

Add a new attribute. From the **Type** drop-down, select *money*.

#### To add a money attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *money*.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up), *min* (selects the lowest value or earliest date from an attribute's direct descendent values), *max* (selects the highest value or latest date from an attribute's direct descendent values), *sum* (to add all of this attribute's direct descendent values). General attributes that use the *sum* roll-up type do not require a dependency. An attribute with a rollup type other than *none* will be saved as a global attribute.
8. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
9. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
10. Under **List Attributes**, choose an attribute list to which the attribute will be associated.
11. Under **Calculation**, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box.

12. Calculated attributes can be associated with dimensions (except when using Serena Agile). Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
13. Click **Save**.

## Percent

A *percent* attribute (or field) is used to store data that is best represented as a percentage, such as *Estimated Percent Complete*, *Percent Work Complete*, or *Task Percent Complete*.

### Adding a percent attribute

Add a new *percent* attribute. From the **Type** drop-down, select *percent*.

#### To add a percent attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *percent*.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up), *min* (selects the lowest value or earliest date from an attribute's direct descendent values), *max* (selects the highest value or latest date from an attribute's direct descendent values), *sum* (to add all of this attribute's direct descendent values). General attributes that use the *sum* roll-up type do not require a dependency. An attribute with a rollup type other than *none* will be saved as a global attribute.
8. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
9. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
10. Under **List Attributes**, choose an attribute list to which the attribute will be associated.
11. Under **Calculation**, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box.
12. Calculated attributes can be associated with dimensions (except when using Serena Agile). Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
13. Click **Save**.

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## Ranged Calculations

A *ranged calculation* attribute (or field) is used to store data that is calculated for a specified timeperiod.

### Adding a ranged calculations attribute

Add a new *ranged calculation* attribute. From the **Type** drop-down, select *ranged calculation*. Select a roll-up type. Choose a display value. A *ranged calculation* attribute can be dimensioned.

#### To add a ranged calculation attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *ranged calculation*.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up) or *sum* (to add all of this attribute's direct descendent values). Ranged calculation attributes that use the *sum* roll-up type should only be used with a dependency. An attribute with a rollup type other than *none* will be saved as a global attribute.
8. From the **Display Value** drop-down, select *float*, *integer*, *money*, or *percent*.
9. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
10. Select **Searchable** to allow users in your organization to find this attribute using search.
11. A *calculated timephased* attribute can be associated with dimensions. Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
12. Click **Save**.

## Resource

A *resource* attribute (or field) is used to identify a specific resource, such as *Development Owner*, *QA Owner*, and *Owner*. The resources that are available from a *resource* field include all of the resources who are currently available in the application.

### Adding a resource attribute

Add a new attribute. From the **Type** drop-down, select resource.

#### To add a resource attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.

4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *resource*.
7. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
8. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
9. Click **Save**.

## Text

A *text* attribute (or field) is used to store strings of text, such as *Resource Email*, *Name*, *Project Status*, *Mitigation Strategy*, *Impact*, or *Description*.

### Adding a text attribute

Add a new attribute. From the **Type** drop-down, select text.

#### To add a text attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select text.
7. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
8. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
9. Under **List Attributes**, choose an attribute list to which the attribute will be associated.
10. Under **Calculation**, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box.
11. Calculated attributes can be associated with dimensions (except when using Serena Agile). Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
12. Click **Save**.

## Time

A *time* attribute (or field) is used to store the time at which something started or finished, such as *Finish Time* or *Start Time*.

## Adding a time attribute

Add a new attribute. From the **Type** drop-down, select time.

### To add a time attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *time*.
7. From the **Rollup Type** drop-down, select *none* (default, no roll-up), *min* (selects the lowest value or earliest date from an attribute's direct descendent values), *max* (selects the highest value or latest date from an attribute's direct descendent values), *sum* (to add all of this attribute's direct descendent values). General attributes that use the *sum* roll-up type do not require a dependency. An attribute with a rollup type other than *none* will be saved as a global attribute.
8. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
9. Select **Searchable** to allow users to search for the attribute in the **Projects** and **Reports** modules.
10. Under **Calculation**, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box.
11. Calculated attributes can be associated with dimensions (except when using Serena Agile). Under **Dimensions**, select **Dimensioned** and then choose the dimensions to which the attribute is associated. If you want to use a MathML calculation with the *calculated timephased* attribute, select **Calculated** and then click **Calculation** to open the Calculation Editor dialog box. Add the MathML calculation and click **OK**.
12. Click **Save**.

## Timephased

A timephased attribute (or field) is used to store information whose value can change over time. There are several types of timephased attributes: *Timephased - CURRENCY*, *Timephased - FTE*, *Timephased - HOURS*, *Timephased - NonLabor*, and *Timephased - UNITS*.

### Adding a timephased attribute

Add a new timephased attribute. From the **Type** drop-down, select *Timephased - CURRENCY*, *Timephased - FTE*, *Timephased - NonLabor*, or *Timephased - UNITS*. If you select *Timephased - FTE* or *Timephased - UNITS*, you can assign rates to the attribute. If you select *Timephased - FTE*, you can use it with a labor attribute map.

### To add a timephased attribute

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.

3. Select the **Attributes** tab.
4. Click **New**.
5. Under **Attribute Properties**, name the new work item type. The system name will be generated.
6. From the **Type** drop-down, select one of the following: *Timephased - CURRENCY*, *Timephased - FTE*, *Timephased - HOURS*, or *Timephased - UNITS*. Timephased attributes always have a roll-up type of *sum*. Timephased attributes are global by default. Timephased attributes are always dimensioned, but they cannot use MathML calculations.
7. Click **Save**.

### **Adding a Timephased - FTE attribute for labor attribute mapping**

Labor attribute mapping is done using attributes that are based on the *Timephased - FTE* attribute type and have the **Mappable** option selected.

#### **To add a Timephased - FTE attribute for labor attribute mapping**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Under **Attribute Properties**, name the new work item type. The system name will be generated.
6. From the **Type** drop-down, select *Timephased - FTE*. Timephased attributes always have a roll-up type of *sum*. Timephased attributes are global by default. Timephased attributes are always dimensioned, but they cannot use MathML calculations.
7. Click **Save**.

## **URL Link**

A *URL link* attribute (or field) is used to store a URL value. A *URL link* can also be configured as a URL container.

### **Adding a URL link attribute**

A URL container allows you to display information that resides elsewhere inside of your project workspace. A URL container can point to any URL addressable content, including reports on other internal systems, such as those generated by SAP or by Serena Business Mashups, or content on external systems or the Internet. You can use more than one URL container, sharing them across projects or dedicating them to specific projects and/or specific views within a project.

For each unique URL container that you want to add to a view, you must first create a global *URL link* attribute. Then, in the **View Designer** tab, you can add that URL container to any view on which you want it to be accessible. Set the `IsURLContainer` property to True. The URL shown in the URL container is specified by the user at run-time.

#### **To add a URL link attribute**

1. From the application toolbar, click **Setup**, and then select **Customization**.

2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. Click **New**.
5. Name the new attribute. The system name will be generated automatically.
6. From the **Type** drop-down, select *URL link*.
7. Select **Global** to make the attribute a global attribute. A global attribute is required for all work item types and optional for any work type.
8. Click **Save**.

## Lists

Attributes can be configured to have drop-down lists and the values contained in those lists are configurable.

### Adding an attribute list

Add a new attribute list. Once added, it will be available to choose from the **List** drop-down in the **List Attributes** section of the **Attributes** tab.

#### To add an attribute list

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Attributes** tab.
4. In the list of attributes, select an attribute that has an attribute type of *constant*, *Timephased - FTE*, or *Timephased - UNITS*.
5. Under **Time Phase Attributes**, click **Rates**.
6. In the **Edit Rates** dialog box, select **Add**. In the Rate column, enter the rate and choose the date upon which the rate is to take effect.
7. Click **Save**.

### Deleting an attribute list

You can remove any attribute list that is not being used by an existing attribute. An attribute list's values will be removed when the attribute list is removed.

#### To delete an attribute list

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Lists** tab.
4. Select an attribute list.
5. Click **Delete**.

### Edit an attribute list

Make your changes and then save them. Once created, you cannot modify an attribute list's list type.

### To edit an attribute list

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Lists** tab.
4. Make your changes.
5. Click **Save**.

### Viewing an attribute list

An attribute list can be viewed from the Lists tab in the **Attributes Setup** tab.

### To view an attribute list

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Attributes Setup** tab.
3. Select the **Lists** tab.
4. Under **Lists**, select an attribute list.

## Type System

The type system is a collection of system configuration data that helps define the fundamental elements of your deployment, including work item types, attributes, dimensions, financials, workflow transitions, and so on. The type system represents out-of-the-box configuration elements plus custom configurations that your organization may have made. The type system is imported and exported from as an XML-based configuration template.

The type system is a template that stores configuration data. When your organization purchased this application, they may have also purchased a template containing configuration data. Importing a template populates a database with all of that template's configuration data. You can export the type system to create a back-up or to configure multiple databases with the same configuration.

### Exporting a type system

Export the type system to use in a different database or to save a backup of the customized elements within your current configuration. If you are creating another database and you want to use configuration data from an existing database, you can export the type system and then import it into the new database. You can also use the type system to create a backup of your custom configuration settings. The following information is not included as part of a type system export: Microsoft Project settings, labor attribute mapping details, timesheet settings, user synchronization settings, changes made from the **Module Designer**, the order in which views appear, a work item request page, or anything that is included out-of-the-box.

### To export a type system

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. In the application tool bar, click **Export Type System**.
4. Save the file.

---

## Importing a type system

Import the type system to apply configuration settings from a different database to a new database, or to import a type system that you have saved as a backup for the type system your organization is currently using. When importing the type system, you can import custom forms created in the **View Designer** tab.

### To import a type system

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. In the application tool bar, click **Import Type System**.
4. In the **Type System Import** dialog box, browse to the location where the type system XML file is located and click **OK**.

## Environment Settings

You can use the **Environment Settings** tab to manage system settings, such as documents management, workflow, and reporting server settings or to configure system notifications.

For more information, see the following topics:

- [Integration Settings \[page 203\]](#)
- [Notification Settings \[page 203\]](#)
- [System Settings \[page 206\]](#)

## Integration Settings

This tab lets you configure settings used to specify the user name and password for the account that is used to authenticate with Serena Business Mashups. First, enable authentication. Then enter the user name and password (twice). And then click **Save**.

## Notification Settings

The Notification Settings tab lets you configure system notifications. Before system notifications can be generated, you must first enable a messaging queue on the MSMQ server that will host the notifications. This queue should be configured as a remote public queue (notifications cannot use remote private queues). You can configure the application so that users will only see their notifications in the application (and not their inbox) or so that users will see their notifications in the application (and in their inbox).

Notifications allow members of your organization to stay informed of changes made to items. Notifications can be displayed to users or they can be sent to users via email. There are four notification types:

- **Workflow**—These notifications report the status of workflow transitions in the Workflow tab of the **Projects** module.
- **System**—These notifications are pre-set. System notifications are available for many events associated with the lifecycle of a work item.
- **User**—These notifications are defined by individual users in the **My Notifications** tab of the **Tools** module.

- **Report**–Report notifications alert administrators when scheduled services have been completed.

There are two delivery methods for notifications:

- **Internal**–Internal notifications are generated and sent by default. Internal notifications are displayed in the navigation toolbar as a notification alert. A notification alert indicates how many notifications a user has. Clicking the notification alert will open the Notifications view, where users can view and work with their notifications.
- **Email**–Email notifications can be sent if that preference is configured. When email notifications are enabled, the application will send an email notification along with the internal notification. Email notifications can only be sent to users who have an email address configured. (Email addresses are configured from the **Security** tab in the **System Settings** module.) Team members can be allowed to disable their email notifications.

### Allowing users to disable email notifications

You can allow users in your organization to disable email notifications. When this option is enabled, team members will be able to choose the **Receive Notifications as Emails** option when they manage their personal settings.

#### To allow users to disable their email notifications

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Environment Settings** tab.
3. Select the **Notification Settings** tab.
4. Select **Allow Users to Disable their Email Notifications**.
5. Click **Save**.

### Configuring notifications

Before users can receive notifications, you must enable a notification queue that is hosted on messaging sever that supports MSMQ. The notification queue should be a remote public queue.

#### To configure notifications

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Environment Settings** tab.
3. Select the **Notification Settings** tab.
4. Enter the name of a server which is hosting email notification queue, the name of the queue, and the default locale.
5. Click **Save**.

### Disabling email notifications

Application notifications (system notifications) cannot be disabled, but it is possible to enable and disable email notifications.

#### To disable email notifications

1. From the application toolbar, click **Setup**, and then select **Customization**.

2. Select the **Environment Settings** tab.
3. Select the **Notification Settings** tab.
4. De-select **Enable Email Notifications**.
5. Click **Save**.

## Enabling email notifications

After a messaging server and a notification queue have been configured, you can enable email notifications. To do this, you will need to identify the SMTP server address, the port number, specify the default sender, and the default email address from which notifications will be sent.

### To enable email notifications

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Environment Settings** tab.
3. Select the **Notification Settings** tab.
4. Select **Enable Email Notifications**. Only users who have an email address entered and the **Send Email Notifications** option selected from the **Users** tab of the **Security** tab can receive email notifications.
5. Enter the name from whom the email notification is sent.
6. Enter the email address from whom the email notification is sent.
7. Enter the address for the SMTP server through which an email notification is sent.
8. Enter the port through which an email notification is sent.
9. Click **Save**.

## Enabling SMTP authentication

SMTP authentication can be used to validate the account used to send email notifications to users.

### To enable SMTP authentication

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Environment Settings** tab.
3. Select the **Notification Settings** tab.
4. Select **Use SMTP Authentication**.
5. Enter a user name and password (twice, for verification).
6. Click **Save**.

## Viewing notification settings

Notification settings can be viewed from the **Notification Settings** tab in the **Environment Settings** tab.

### To view notification settings

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Environment Settings** tab.

3. Select the **Notification Settings** tab.

## System Settings

This tab lets you configure documents manager server settings.

### Configuring documents management

Before users can save documents in the **Documents** tab of the **Projects** module, you must enable documents management.

#### To configure documents management

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Environment Settings** tab.
3. Select the **System Settings** tab.
4. Under **Documents Settings**, enter the name of the server running **Documents Manager** and the database into which documents will be saved.
5. Click **Save**.

## Module Designer

A module (sometimes called a homepage) is a container for views. A module can be used to provide a daily starting point for members of your organization, including individual contributors, project and resource managers, portfolio analysts, and so on. You can use the **Module Designer** tab to create and modify homepage layouts and to help provide a centralized view into the information that users in your organization need.

You can include many elements on a homepage, such as datasheets, charts, logs, and work item assignments. You can also include pages that live in your organization's intranet and pages that live on the Internet. When users visit their homepage, the elements that are included on the homepage will be presented as view frames within the homepage view. The layout for each user role determines the type of information that is displayed when users of that role view their homepages.

When working in the **Module Designer** tab, you can create a custom homepage or you can modify existing ones. The **Module Designer** tab has two panes: the left pane contains the layout control options and the right pane is where the homepage view is created. There are three layout options: **Modules** (along with **Module-Tabs**) shows the list of module/homepages and the tabs that are available in each, **Widgets** lists the widgets that can be added to views, and **Properties** displays the properties for each widget.

For more information, see the following topics:

- [Agile Widgets \[page 206\]](#)
- [Fixed Layout Widgets \[page 236\]](#)

## Agile Widgets

The **Widgets** box lists the elements that can be in the view such as frames and graphical elements.

For more information, see the following topics:

- [Burndown Chart \[page 207\]](#)

- [Card Wall \[page 211\]](#)
- [Custom Help Link \[page 215\]](#)
- [List \[page 216\]](#)
- [My Work List \[page 220\]](#)
- [Report Mover \[page 224\]](#)
- [Summary View \[page 229\]](#)
- [URL Container \[page 231\]](#)
- [Widget Wireup \[page 233\]](#)

## Burndown Chart

A **Burndown Chart** is used to add a burndown chart to a page in the application.

### Overview

The **Burndown Chart** widget is configured from the **Module Designer**. Select a module (or add a new one), then add a tab into which a burndown chart can be added.

The screenshot displays the Configuration tool's Module Designer interface. The top navigation bar includes tabs for Attributes Setup, Environment Settings, Types Setup, View Designer, View Management, and Module Designer. The left sidebar contains the following sections:

- Modules:** A dropdown menu showing 'Tracking' with 'Rename', 'New', and 'Delete' buttons.
- Module-Tabs:** A list of tabs including 'Release Burndown', 'Sprint Burndown', 'Sprint Task Burndown', 'Sprint Storyboard', and 'Integration Burndown' (which is selected). It includes 'Rename', 'New', 'Delete', and 'Save All' buttons.
- Widgets:** A dropdown menu.
- Properties:** A table of configuration options for the selected widget.
 

ID	ctl1255556618730
Type	agile-burn-down-chart
Item Type	Portfolio
Z-Index	
Chart Title	
Estimated Story Points	Task Hours Estimated

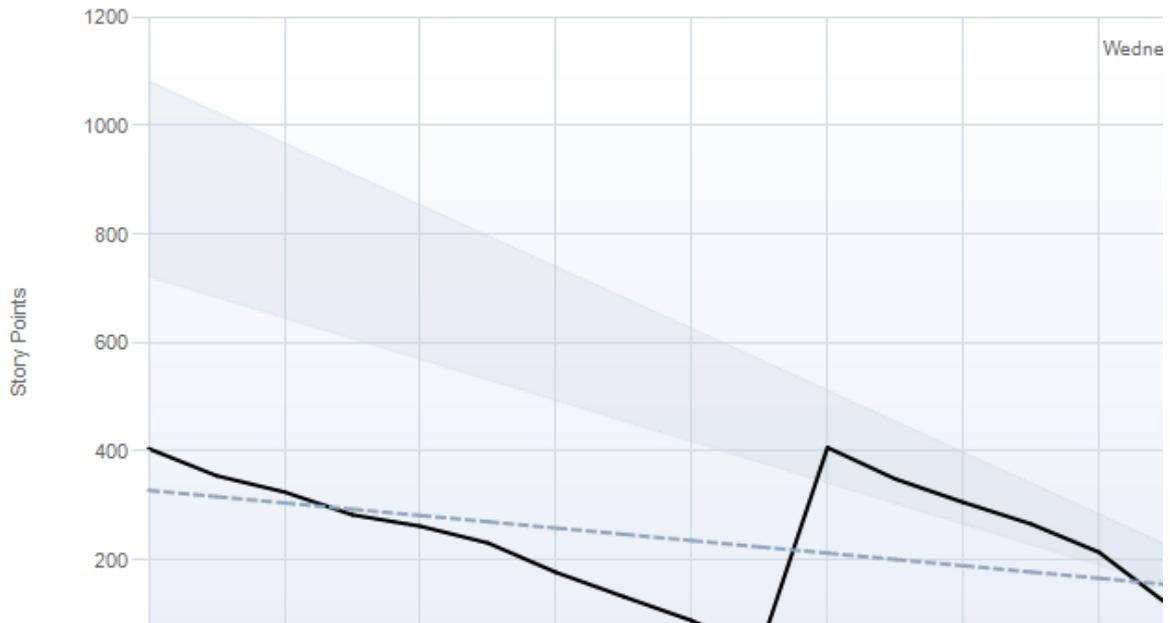
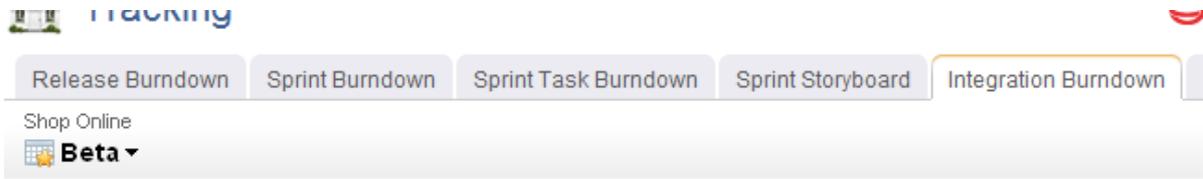
The main workspace on the right shows a wireup configuration for the selected widget, with the following actions listed:

```

Publishes: /serena/grid/sourcechange
Action: Wire_RefreshChart
Action: Wire_SourceSelect
  
```

Properties for the widget can be set on the left-side under **Properties**.

When the burndown appears in a tab in Serena Agile, you must first select the correct interval (product, release, team, or sprint). In this case, the burndown chart was configured for a release. Once a release is selected, the burndown chart will be available.

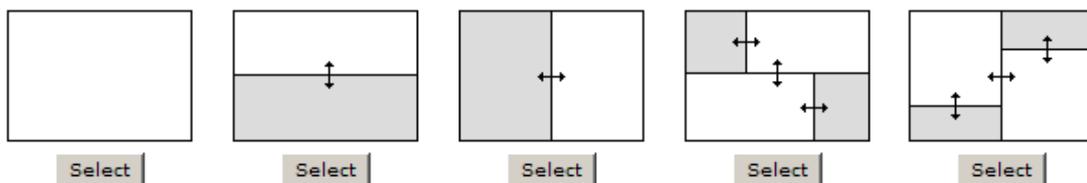


### Adding the Burndown Chart widget to a view

You can add a burndown chart to any custom view or custom workflow that your organization wants to add to Serena Agile. A burndown chart must be configured for a specific interval type, for example a release or a team.

#### To add the Burndown Chart widget to a view

1. From the application toolbar, click **Setup** and select **Configuration**.
2. In the **Configuration** module, select **Module Designer**.
3. Under **Modules**, select an existing module or click **New** to add a module. (If you click **New**, enter the name at the prompt and click **OK**.)
4. Under **Module-Tabs**, click **New** to add a new tab. At the prompt, enter the name of the view, and then click **OK**.
5. Select the layout type. The most commonly used layout types are single, over-under, and side-by-side. (The fixed-size and fixed-position layout types do not support the Serena Agile widgets.)



6. Select the **Burndown Chart** widget, click (and hold down) the mouse button, drag it to the layout pane on which you want it added, and then release the mouse button.
7. Set the properties.

Properties	
ID	ctl1255554665857
Type	agile-burn-down-chart
Item Type	Product
Z-Index	
Chart Title	
Estimated Story Points	Task Hours Estimate
Remaining Story Points	Task Hours Actual
Story Burn Up	Task Hours Remaini
Start Date	Interval Start Date
Finish Date	Interval End Date
Show Cone Of Confidence	True
+/- Confidence %	20
Y Axis Label	Story Points
X Axis Label	Days
CanChangeSource	True
LayoutWidth	100%
LayoutHeight	50%

8. Click **Save All**.

## Wireup Options

When you add the **Burndown Chart** widget to a layout pane, you can use the **Widget Wireup** to synchronize the **Burndown Chart** with another widget, such as **List** or **Summary View**.

The **Burndown Chart** widget can perform the following actions:

Action	Description
<b>Wire_RefreshChart</b>	
<b>Wire_SourceSelect</b>	The <b>Wire_SourceSelect</b> action allows a <b>Widget Wireup</b> to load information in a backlog, a burndown chart, or a list that is determined by the selected interval. When the selected interval on the widget that has been configured as the publisher changes (using the <b>sourcechange</b> event), updates are then pushed to the widget that has been configured as the subscriber.

The **Burndown Chart** widget can perform the following publish options:

Publish Option	Description
/serena/ grid/ sourcechange	The <b>sourcechange</b> event allows a <b>Widget Wireup</b> to listen for when a specific interval is selected for viewing in a backlog, storyboard, or burndown chart. When the selected interval changes on widget that has been configured as the publisher, the information on the widget that is configured as the subscriber is updated to match the information for the new interval (using the <b>Wire_SourceSelect</b> action).

## Properties

The **Burndown Chart** widget has the following properties:

Properties	Description
<b>CanChangeSource</b>	The <b>CanChangeSource</b> property is used to indicate whether a user can change the source while they are working on the page. Set this property to No to prevent users from changing the source while working on the page.
<b>Chart Title</b>	The <b>Chart Title</b> property is used to set the title of a chart.
<b>Estimated Story Points</b>	The <b>Estimated Story Points</b> property is used to specify an estimate of work required to complete a story.
<b>Finish Date</b>	The <b>Finish Date</b> property is used to specify the end date for an interval.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Item Type</b>	The work type: portfolio, product, release, team, or sprint.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Remaining Story Points</b>	The <b>Remaining Story Points</b> property is used to specify an estimate of work not yet completed on a story.

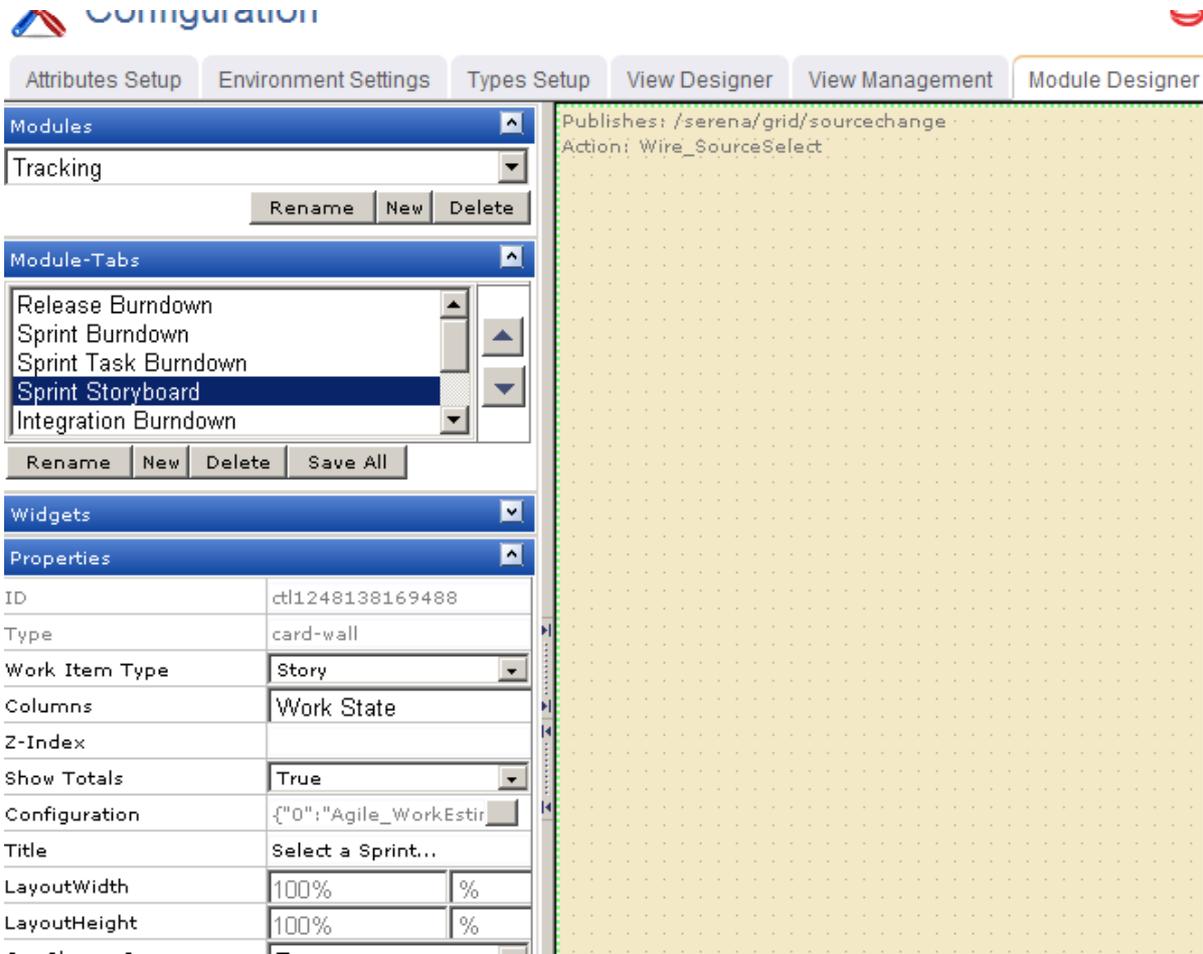
Properties	Description
<b>Show Cone of Confidence</b>	The <b>Show Cone of Confidence</b> property is used to specify whether to show a set of lines on a burndown chart that indicate whether a team is likely to complete the work for a sprint. The lines show interpolated estimates based on the <b>+/- Confidence %</b> attribute, and are commonly referred to as the "cone of confidence."
<b>Start Date</b>	The <b>Start Date</b> property is used to specify the start date for an interval.
<b>Story Burn Up</b>	The <b>Story Burn Up</b> property is used to specify the amount of work completed within a sprint.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>X-Axis Label</b>	The <b>X Axis Label</b> property is used to specify a label for the horizontal axis on a chart.
<b>Y-Axis Label</b>	The <b>Y Axis Label</b> property is used to specify a label for the vertical axis on a chart.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.
<b>+/- Confidence</b>	The <b>+/- Confidence %</b> property is used to set the range above and below the ideal confidence level that is shown in the cone of confidence in a burndown chart.

## Card Wall

A **Card Wall** is used to add a card wall (also known as a storyboard) to a page in the application.

### Overview

The **Card Wall** widget is configured from the **Module Designer**. Select a module (or add a new one), then add a tab into which a card wall can be added.



Properties for the widget can be set on the left-side under **Properties**.

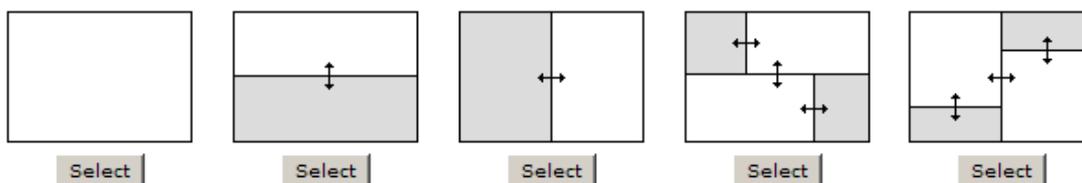
When the card wall appears in a tab in Serena Agile, you must first select an interval (project, release, sprint or team).

### Adding the Card Wall widget to a view

You can add a card wall to any custom view or custom workflow that your organization wants to add to Serena Agile. A card wall must be configured for a specific interval (project, release, sprint or team).

#### To add the Card Wall widget to a view

1. From the application toolbar, click **Setup** and select **Configuration**.
2. In the **Configuration** module, select **Module Designer**.
3. Under **Modules**, select an existing module or click **New** to add a module. (If you click **New**, enter the name at the prompt and click **OK**.)
4. Under **Module-Tabs**, click **New** to add a new tab. At the prompt, enter the name of the view, and then click **OK**.
5. Select the layout type. The most commonly used layout types are single, over-under, and side-by-side. (The fixed-size and fixed-position layout types do not support the Serena Agile widgets.)



6. Select the **Card Wall** widget, click (and hold down) the mouse button, drag it to the layout pane on which you want it added, and then release the mouse button.
7. Set the properties.

Properties	
ID	ctl1255571358582
Type	card-wall
Work Item Type	Story
Columns	Priority
Z-Index	
Show Totals	True
Configuration	
Title	
CanChangeSource	True
LayoutWidth	100% %
LayoutHeight	100% %

8. Click **Save All**.

## Wireup Options

When you add the **Card Wall** widget to a layout pane, you can use the **Widget Wireup** to synchronize the **Card Wall** with another widget, such as **List** or **Burndown Chart**.

The **Card Wall** widget can perform the following actions:

Action	Description
<b>Wire_SourceSelect</b>	The <b>Wire_SourceSelect</b> action allows a <b>Widget Wireup</b> to load information in a backlog, a burndown chart, or a list that is determined by the selected interval. When the selected interval on the widget that has been configured as the publisher changes (using the <b>sourcechange</b> event), updates are then pushed to the widget that has been configured as the subscriber.

The **Card Wall** widget can perform the following publish options:

Publish Option	Description
/serena/ grid/ sourcechange	The <b>sourcechange</b> event allows a <b>Widget Wireup</b> to listen for when a specific interval is selected for viewing in a backlog, storyboard, or burndown chart. When the selected interval changes on widget that has been configured as the publisher, the information on the widget that is configured as the subscriber is updated to match the information for the new interval (using the <b>Wire_SourceSelect</b> action).

## Properties

The **Card Wall** widget has the following properties:

Properties	Description
<b>CanChangeSource</b>	The <b>CanChangeSource</b> property is used to indicate whether a user can change the source while they are working on the page. Set this property to No to prevent users from changing the source while working on the page.
<b>Columns</b>	The <b>Columns</b> property is used to specify the item types to be shown in the columns of a <b>Card Wall</b> widget.
<b>Configuration</b>	The <b>Configuration</b> property is used to specify the attributes shown on a <b>Card Wall</b> widget.
<b>ID</b>	The work type: portfolio, product, release, team, or sprint.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Work Item Type</b>	The <b>Work Item Type</b> property is used to set the work item type that is used by this widget or control by default.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Custom Help Link

A **Custom Help Link** is used to add a custom link to an external help page from a page in the application. For example, the custom help link widget can be used to link to a page contained in your organization's intranet or to a page located in the Internet.

### Adding the Custom Help Link widget to a view

You can add a custom help link to any custom view or custom workflow that your organization wants to add to Serena Agile. A custom help link must be configured to point to a URL that is accessible by a user, either a fully-qualified URL for a page that is on the Internet or an internal URL for a page that is within your organization's intranet.

#### To add the Custom Help Link widget to a view

1. From the application toolbar, click **Setup** and select **Configuration**.
2. In the **Configuration** module, select **Module Designer**.
3. Under **Modules**, select an existing module.
4. Under **Module-Tabs**, select an existing view (or one that you are currently creating).
5. Select the **Custom Help Link** widget, click (and hold down) the mouse button, drag it to the layout pane (anywhere—only a single **Custom Help Link** widget will work for any custom view), and then release the mouse button.
6. Set the properties.

Properties	
ID	ctl1255645820925
Type	customhelp
Name	Process Guidance
CustomHelpURL	help.serena.com/agile/er
Left	73
Top	387
Width	23
Height	23
Z-Index	100

7. Click **Save All**.

### Properties

The **Custom Help Link** widget has the following properties:

Properties	Description
<b>CustomHelpURL</b>	The <b>CustomHelpURL</b> property is used to specify the URL for a custom help page to be displayed when the help link on a page is clicked.

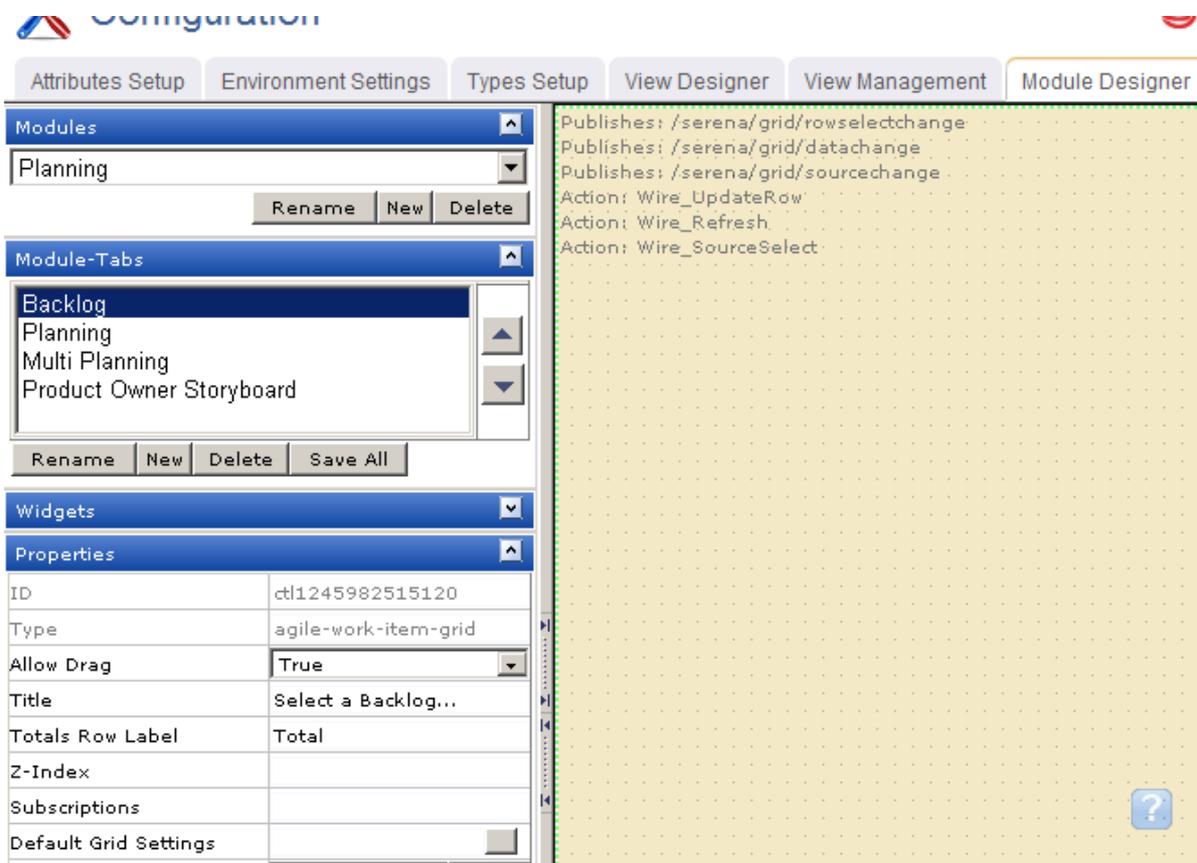
Properties	Description
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	The work type: portfolio, product, release, team, or sprint.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Name</b>	The <b>Name</b> property is used to specify the name of a control or widget.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## List

A **List** is used to add a work item grid to a page in the application.

### Overview

The **List** widget is configured from the **Module Designer**. Select a module (or add a new one), then add a tab into which a card wall can be added.



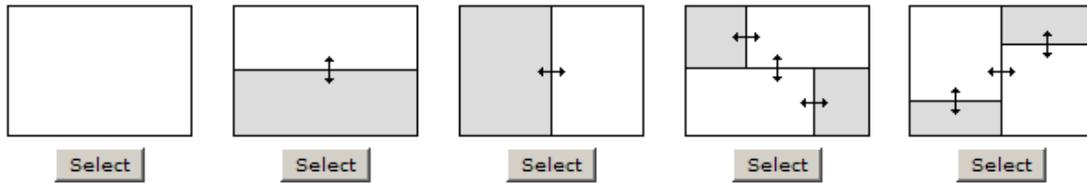
Properties for the widget can be set on the left-side under **Properties**.

## Adding the List widget to a view

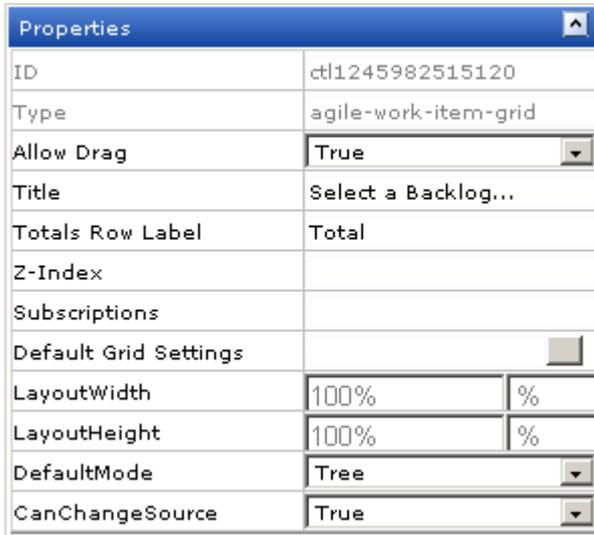
You can add a backlog to any custom view or custom workflow that your organization wants to add to Serena Agile.

### To add the List widget to a view

1. From the application toolbar, click **Setup** and select **Configuration**.
2. In the **Configuration** module, select **Module Designer**.
3. Under **Modules**, select an existing module or click **New** to add a module. (If you click **New**, enter the name at the prompt and click **OK**.)
4. Under **Module-Tabs**, click **New** to add a new tab. At the prompt, enter the name of the view, and then click **OK**.
5. Select the layout type. The most commonly used layout types are single, over-under, and side-by-side. (The fixed-size and fixed-position layout types do not support the Serena Agile widgets.)



6. Select the **List** widget, click (and hold down) the mouse button, drag it to the layout pane on which you want it added, and then release the mouse button.
7. Set the properties.



8. Click **Save All**.

### Wireup Options

When you add the **List** widget to a layout pane, you can use the **Widget Wireup** to synchronize the **List** widget with another widget, such as a **Burndown Chart**.

The **List** widget can perform the following actions:

Action	Description
<b>Wire_Refresh</b>	The <b>Wire_Refresh</b> action allows a <b>Widget Wireup</b> to refresh the information that is available in a backlog or a list. When information changes on the widget that has been configured as the publisher (using the <b>datachange</b> event), updates are then pushed to the widget that has been configured as the subscriber.

Action	Description
<b>Wire_SourceSelect</b>	The <b>Wire_SourceSelect</b> action allows a <b>Widget Wireup</b> to load information in a backlog, a burndown chart, or a list that is determined by the selected interval. When the selected interval on the widget that has been configured as the publisher changes (using the <b>sourcechange</b> event), updates are then pushed to the widget that has been configured as the subscriber.
<b>Wire_UpdateRow</b>	The <b>Wire_UpdateRow</b> action allows a <b>Widget Wireup</b> to refresh the details of a single row in a backlog or list. When the details of a work item are updated on the widget that has been configured as the publisher (using the <b>onsave</b> event), updates are then pushed to the widget that has been configured as the subscriber.

The **List** widget can perform the following publish options:

Publish Option	Description
<b>/serena/grid/datachange</b>	The <b>datachange</b> event allows a <b>Widget Wireup</b> to listen for changes to any work item in a backlog. When changes are detected on the widget that has been configured as the publisher, updates are then pushed to the widget that has been configured as the subscriber (using the <b>Wire_Refresh</b> action).
<b>/serena/grid/rowselectchange</b>	The <b>rowselectchange</b> event allows a <b>Widget Wireup</b> to listen for when changes have been made to a specific row in a backlog. When changes are detected on the widget that has been configured as the publisher, updates are then pushed to the widget that has been configured as the subscriber (using the <b>Wire_Refresh</b> action).
<b>/serena/grid/sourcechange</b>	The <b>sourcechange</b> event allows a <b>Widget Wireup</b> to listen for when a specific interval is selected for viewing in a backlog, storyboard, or burndown chart. When the selected interval changes on widget that has been configured as the publisher, the information on the widget that is configured as the subscriber is updated to match the information for the new interval (using the <b>Wire_SourceSelect</b> action).

## Properties

The **List** widget has the following properties:

Properties	Description
<b>Allow Drag</b>	The <b>Allow Drag</b> property is used to indicate whether users can move a widget around on a page while they are using it.

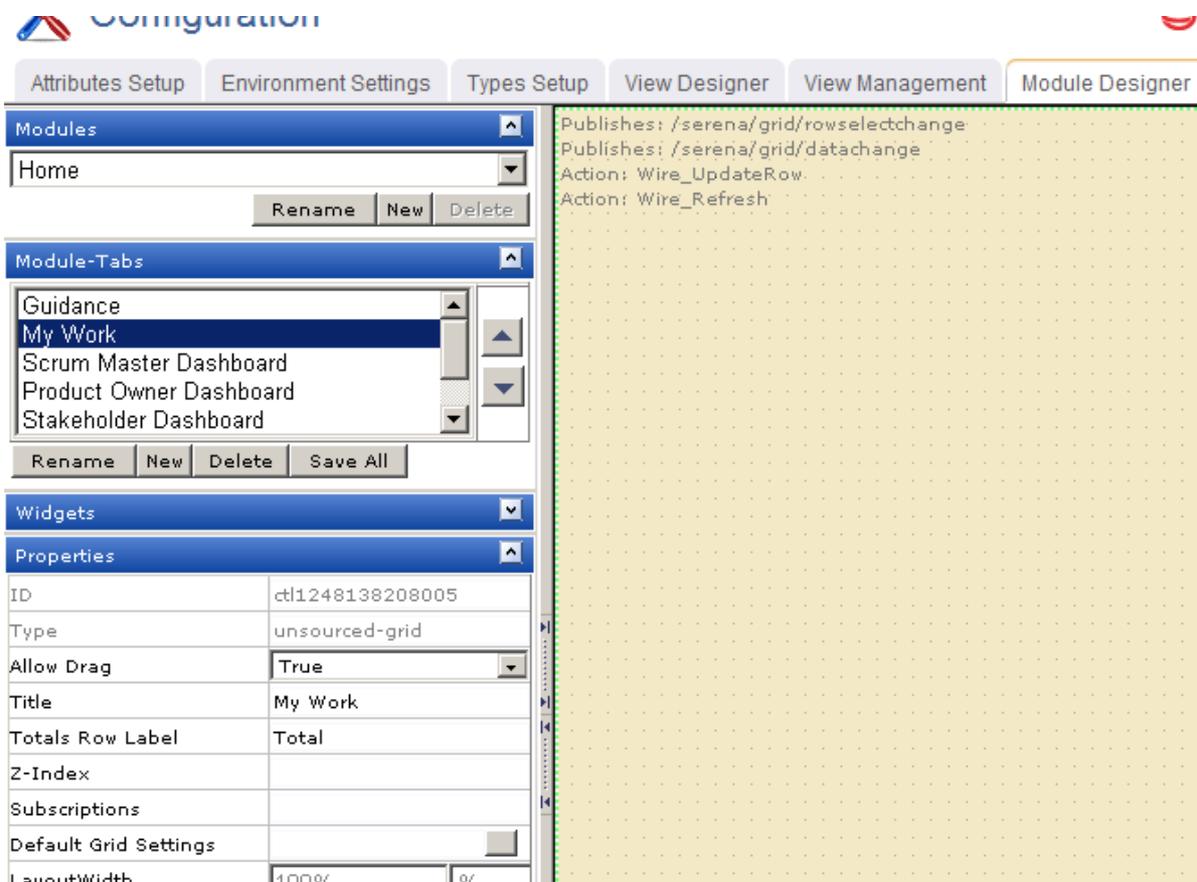
Properties	Description
<b>CanChangeSource</b>	The <b>CanChangeSource</b> property is used to indicate whether a user can change the source while they are working on the page. Set this property to No to prevent users from changing the source while working on the page.
<b>Default Grid Settings</b>	The <b>DefaultGridSettings</b> property is used to specify whether the designer grid should be displayed, and whether widgets should snap to the grid.
<b>Default Mode</b>	The <b>DefaultMode</b> property is used to specify which layout option will be shown to the user by default. The available layout options are list, table, and tree.
<b>ID</b>	The work type: portfolio, product, release, team, or sprint.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Subscriptions</b>	The <b>Subscriptions</b> property is used to list events for which a widget is subscribed.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.
<b>Totals Row Label</b>	The <b>Totals Row Label</b> property is used to specify the label for a totals row.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## My Work List

The **My Work List** control is used to provide team members with a location from which they can view and access all of any work item to which they are currently assigned.

### Overview

The **My Work List** widget is configured from the **Module Designer**. Select a module (or add a new one), then add a tab into which a **My Work List** can be added.



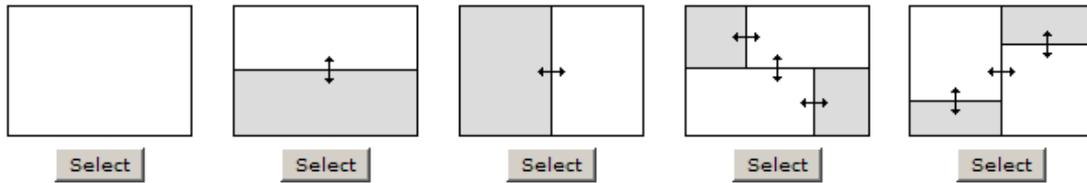
Properties for the widget can be set on the left-side under **Properties**.

## Adding the My Work List widget to a view

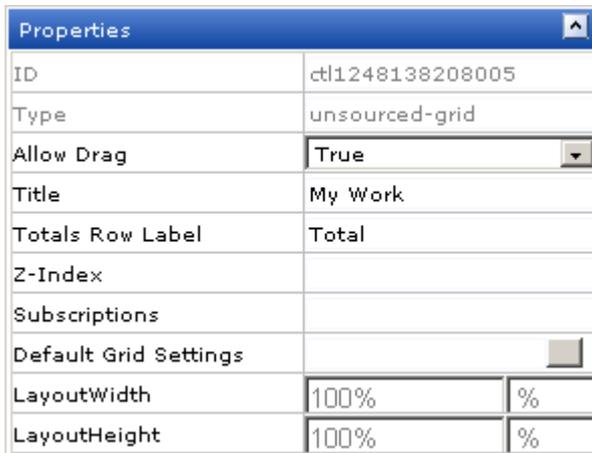
You can add a **My Work List** widget to any custom view or custom workflow that your organization wants to add to Serena Agile.

### To add the My Work List widget to a view

1. From the application toolbar, click **Setup** and select **Configuration**.
2. In the **Configuration** module, select **Module Designer**.
3. Under **Modules**, select an existing module or click **New** to add a module. (If you click **New**, enter the name at the prompt and click **OK**.)
4. Under **Module-Tabs**, click **New** to add a new tab. At the prompt, enter the name of the view, and then click **OK**.
5. Select the layout type. The most commonly used layout types are single, over-under, and side-by-side. (The fixed-size and fixed-position layout types do not support the Serena Agile widgets.)



6. Select the **My Work List** widget, click (and hold down) the mouse button, drag it to the layout pane on which you want it added, and then release the mouse button.
7. Set the properties.



8. Click **Save All**.

### Wireup Options

When you add the **My Work List** widget to a layout pane, you cannot currently use the **Widget Wireup** to synchronize the **My Work List** with another widget.

The **My Work List** widget can perform the following actions:

Action	Description
<b>Wire_Refresh</b>	The <b>Wire_Refresh</b> action allows a <b>Widget Wireup</b> to refresh the information that is available in a backlog or a list. When information changes on the widget that has been configured as the publisher (using the <b>datachange</b> event), updates are then pushed to the widget that has been configured as the subscriber.
<b>Wire_UpdateRow</b>	The <b>Wire_UpdateRow</b> action allows a <b>Widget Wireup</b> to refresh the details of a single row in a backlog or list. When the details of a work item are updated on the widget that has been configured as the publisher (using the <b>onsave</b> event), updates are then pushed to the widget that has been configured as the subscriber.

The **My Work List** widget can perform the following publish options:

Publish Option	Description
/serena/grid/ datachange	The <b>datachange</b> event allows a <b>Widget Wireup</b> to listen for changes to any work item in a backlog. When changes are detected on the widget that has been configured as the publisher, updates are then pushed to the widget that has been configured as the subscriber (using the <b>Wire_Refresh</b> action).
/serena/grid/ rowselectchange	The <b>rowselectchange</b> event allows a <b>Widget Wireup</b> to listen for when changes have been made to a specific row in a backlog. When changes are detected on the widget that has been configured as the publisher, updates are then pushed to the widget that has been configured as the subscriber (using the <b>Wire_Refresh</b> action).

## Properties

The **My Work List** widget has the following properties:

Properties	Description
<b>Allow Drag</b>	The <b>Allow Drag</b> property is used to indicate whether users can move a widget around on a page while they are using it.
<b>Default Grid Settings</b>	The <b>DefaultGridSettings</b> property is used to specify whether the designer grid should be displayed, and whether widgets should snap to the grid.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Layout Height</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>Layout Width</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Subscriptions</b>	The <b>Subscriptions</b> property is used to list events for which a widget is subscribed.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.
<b>Totals Row Label</b>	The <b>Totals Row Label</b> property is used to specify the label for a totals row.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.

Properties	Description
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Report Mover

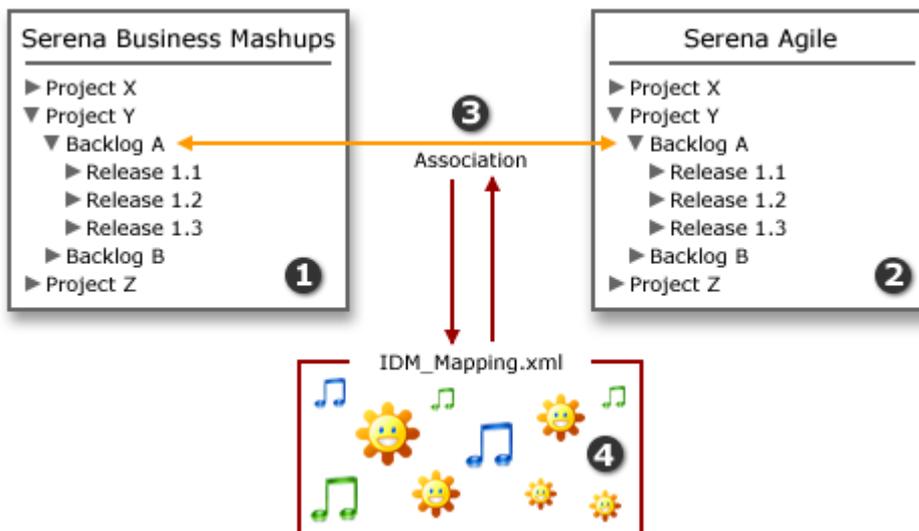
A **Report Mover** is used to create an association between a backlog in Serena Business Mashups and a backlog in Serena Agile.

### Overview

Associations between Serena Business Mashups and Serena Agile are made in three locations:

- An orchestration designed and managed in Serena Business Mashups.
- A configuration file in Serena Agile that defines the relationships between work items in Serena Business Mashups and Serena Agile
- A user in Serena Agile that chooses to associate a backlog in Serena Business Mashups with a backlog in Serena Agile.

For example, you can create an association between a two backlogs. A defects backlog in Serena Business Mashups and a release backlog in Serena Agile that will be used by the team as they track and manage the work needed to fix the defect. Use the Serena Business Mashups backlog to manage the defects as they are discovered, and then use the Serena Agile backlog to manage the work that is needed to resolve the defects.



In the diagram above, the numbers correspond to the following:

1. A backlog in Serena Business Mashups.
2. A backlog and a series of releases for that backlog in Serena Agile.
3. The association between Serena Business Mashups and Serena Agile.

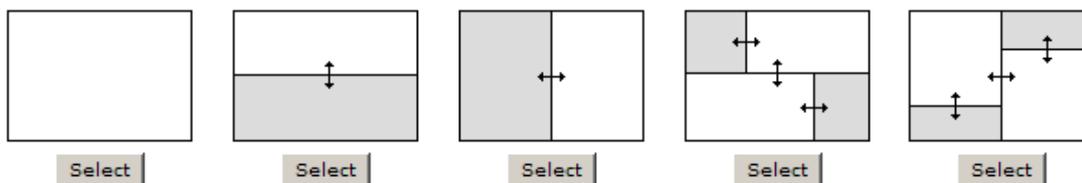
- The XML configuration file that specifies the mappings between the work items in Serena Business Mashups and Serena Agile.

## Adding the Report Mover to a view

You can add a **Report Mover** to any custom view or custom workflow. A **Report Mover** is used to create an association between a backlog in Serena Business Mashups and a backlog in Serena Agile.

### To add the Report Mover to a view

- From the application toolbar, click **Setup** and select **Configuration**.
- In the **Configuration** module, select **Module Designer**.
- Under **Modules**, select an existing module or click **New** to add a module. (If you click **New**, enter the name at the prompt and click **OK**.)
- Under **Module-Tabs**, click **New** to add a new tab. At the prompt, enter the name of the view, and then click **OK**.
- Select the layout type. The most commonly used layout types are single, over-under, and side-by-side. (The fixed-size and fixed-position layout types do not support the Serena Agile widgets.)



- Select the **Report Mover** widget, click (and hold down) the mouse button, drag it to the layout pane on which you want it added, and then release the mouse button.
- Set the properties.

Properties		
ID	ctl1267036721091	
Type	report-mover	
Allow Drag	True	
Title	List	
Totals Row Label	Totals	
Z-Index		
Subscriptions		
DefaultMode	Tree	
CanChangeSource	True	
Default Grid Settings	...	
LayoutWidth	100%	%
LayoutHeight	50	%

- Click **Save All**.

## Mapping the Report Mover to Serena Business Mashups

Before you can associate a backlog in Serena Business Mashups with a backlog in Serena Agile, you must specify the mapping relationships between attributes in Serena Agile and attributes in Serena Business Mashups. Mapping relationships can exist for the following:

- **Attribute, Field**—You can map a field in Serena Business Mashups to an attribute in Serena Agile. For example, the description of a task (Description) in Serena Agile and the description (\_\_DESCRIPTION\_\_) in the related bug in Serena Business Mashups. In the XML mapping file, this relationship is created using the <AttributeMap> element.
- **List Item, List Item**—You can map a list item value in Serena Business Mashups to a list item value in Serena Agile. For example, mapping the status of a defect (Accepted) in Serena Agile to the status of the related bug report (Resolved) in Serena Business Mashups. In the XML mapping file, this relationship is created using the <ListValueMap> element.
- **Work Type, Item Type**—You can map an item type in Serena Business Mashups to a work type in Serena Agile. For example, mapping a Serena Agile defect (work type) to a Serena Business Mashups bug report (item type). In the XML mapping file, this relationship is created using the <ItemMap> element.

### To map attributes between Serena Business Mashups and Serena Agile

1. Download the XML mapping file: [IDM\\_Mapping.zip](#).
2. Create a folder on the Serena Agile application server and place the IDM\_Mapping.xml file in that folder.
3. Use the following SQL script to specify the location of the XML mapping file, where the value of 'C:\IDM\_Mapping.xml' is the location of the folder in which IDM\_Mapping.xml is located.

```
INSERT INTO PES_System (sys_Section, sys_Key, sys_Value)
VALUES ('IntegrationSettings', 'AgileToSBMAAttributeMappingFile',
'C:\IDM_Mapping.xml')
```

4. Open the XML mapping file and define the mappings. The mapping file contains a series of attributes, lists, and list values that define the relationships between attributes in Serena Business Mashups and Serena Agile. For example:

```
<?xml version="1.0" encoding="utf-8"?>
<Mappings>
  <AttributeMaps>
    <AttributeMap>
      <Source>Description</Source>
      <Target>__DESCRIPTION__</Target>
    </AttributeMap>
  </AttributeMaps>
  <ItemMaps>
    <ItemMap>
      <Source>Agile_Defect</Source>
      <Target>Bug Report</Target>
    </ItemMap>
  </ItemMaps>
  <ListValueMaps>
```

```

<ListValueMap>
  <Source>Agile_Defined</Source>
  <Target>Evaluating Issue</Target>
</ListValueMap>
</ListValueMaps>
</Mappings>

```

XML Mapping Element	Description
<b>AttributeMaps</b>	The collection of mapped attributes.
<b>AttributeMap</b>	<p>For each attribute that you want to map, specify the <b>Source</b> and <b>Target</b> list values. The following fields are part of the Serena Business Mashups and are important for creating the mapping relationship with Serena Agile:</p> <ul style="list-style-type: none"> <li>▪ <b>__TITLE__</b>—The title of the item as it is defined in Serena Business Mashups.</li> <li>▪ <b>__NAME__</b>—The name of the item as it is defined in Serena Business Mashups.</li> <li>▪ <b>__STATE__</b>—The type of item—started, in-progress, complete, and so on—as it is defined in Serena Business Mashups.</li> <li>▪ <b>__DESCRIPTION__</b>—The description of the item as it is defined in Serena Business Mashups.</li> <li>▪ <b>__ITEMTYPE__</b>—The type of item—defect, enhancement, bug, and so on—as it is defined in Serena Business Mashups.</li> <li>▪ <b>__URL__</b>—The fully qualified URL for the item type as it is defined in Serena Business Mashups.</li> </ul>
<b>ItemMaps</b>	The collection of mapped items.
<b>ItemMap</b>	For each item that you want to map, specify the <b>Source</b> and <b>Target</b> list values.
<b>ListValueMaps</b>	The collection of mapped list values.
<b>ListValueMap</b>	For each list value that you want to map, specify the <b>Source</b> and <b>Target</b> list values.
<b>Mappings</b>	The collection of mappings between Serena Business Mashups and Serena Agile.
<b>Source</b>	The system name for the attribute, item, or list item as it is defined in Serena Agile.

XML Mapping Element	Description
<b>Target</b>	The system name for the attribute, item, or list item as it is defined in Serena Business Mashups.

## Properties

The **Report Mover** widget has the following properties:

Properties	Description
<b>Allow Drag</b>	The <b>Allow Drag</b> property is used to indicate whether users can move a widget around on a page while they are using it.
<b>CanChangeSource</b>	The <b>CanChangeSource</b> property is used to indicate whether a user can change the source while they are working on the page. Set this property to No to prevent users from changing the source while working on the page.
<b>Default Grid Settings</b>	The <b>DefaultGridSettings</b> property is used to specify whether the designer grid should be displayed, and whether widgets should snap to the grid.
<b>DefaultMode</b>	The <b>DefaultMode</b> property is used to specify which layout option will be shown to the user by default. The available layout options are list, table, and tree.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>Subscriptions</b>	The <b>Subscriptions</b> property is used to list events for which a widget is subscribed.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.
<b>Totals Row Label</b>	The <b>Totals Row Label</b> property is used to specify the label for a totals row.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.

Properties	Description
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Summary View

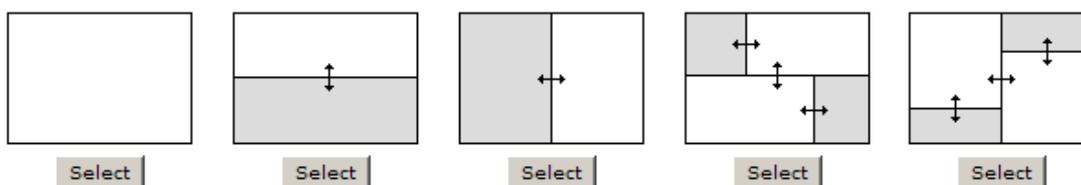
A **Summary View** is used to add summary information to a page in the application. Summary information can be associated with other information, such as lists or backlogs. Summary information can be configured so that changes made to summary data updates any lists to which that summary is associated.

### Adding the Summary View widget to a view

You can add a **Summary View** to any custom view or custom workflow that your organization wants to add to Serena Agile.

#### To add the Summary View widget to a view

1. From the application toolbar, click **Setup** and select **Configuration**.
2. In the **Configuration** module, select **Module Designer**.
3. Under **Modules**, select an existing module or click **New** to add a module. (If you click **New**, enter the name at the prompt and click **OK**.)
4. Under **Module-Tabs**, click **New** to add a new tab. At the prompt, enter the name of the view, and then click **OK**.
5. Select the layout type. The most commonly used layout types are single, over-under, and side-by-side. (The fixed-size and fixed-position layout types do not support the Serena Agile widgets.)



6. Select the **Summary View** widget, click (and hold down) the mouse button, drag it to the layout pane on which you want it added, and then release the mouse button.
7. Set the properties.

Properties		
ID	ctl1255647219896	
Type	summaryview	
Title	Summary	
Z-Index		
Subscriptions		
LayoutWidth	100%	%
LayoutHeight	100%	%

8. Click **Save All**.

### Wireup Options

When you add the **Summary View** widget to a layout pane, you can use the **Widget Wireup** to synchronize the **Summary View** with another widget, such as **List** or **My Work List**.

The **Summary View** widget can perform the following actions:

Action	Description
<b>Wire_LoadNewObject</b>	The <b>Wire_LoadNewObject</b> action allows a <b>Widget Wireup</b> to load work item summary data into the <b>Summary View</b> widget. When a work item has been selected on the widget that has been configured as the publisher (using the <b>rowselectchange</b> event), updates are then pushed to the widget that has been configured as the subscriber.

The **Summary View** widget can perform the following publish options:

Publish Option	Description
<b>/serena/grid/onsave</b>	The <b>onsave</b> event allows a <b>Widget Wireup</b> to listen for when a team member has made edits to a work item and then clicked save. When the edits are saved on the widget that has been configured as the publisher, updates are then pushed to the widget that has been configured as the subscriber (using the <b>Wire_UpdateRow</b> action).

### Properties

The Summary View widget has the following properties:

Properties	Description
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.

Properties	Description
<b>Layout Height</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>Layout Width</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Subscriptions</b>	The <b>Subscriptions</b> property is used to list events for which a widget is subscribed.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## URL Container

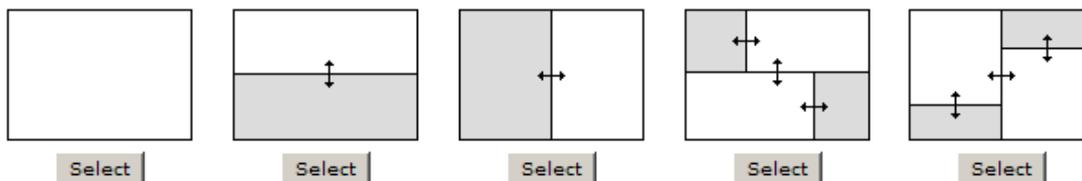
A **URL Container** is used to display information that resides elsewhere inside of your project workspace. A **URL Container** can point to any URL-addressible content, including reports on other internal systems, such as those generated by SAP or by Serena Business Mashups, or to content located on external systems, or to a location on the Internet.

### Adding the URL Container widget to a view

You can add a **URL Container** to any custom view or custom workflow that your organization wants to add to Serena Agile. A custom **URL Container** can be configured to point to a URL that is accessible by a user, either a fully-qualified URL for a page that is on the Internet or an internal URL for a page that is within your organization's intranet.

#### To add the URL Container widget to a view

1. From the application toolbar, click **Setup** and select **Configuration**.
2. In the **Configuration** module, select **Module Designer**.
3. Under **Modules**, select an existing module or click **New** to add a module. (If you click **New**, enter the name at the prompt and click **OK**.)
4. Under **Module-Tabs**, click **New** to add a new tab. At the prompt, enter the name of the view, and then click **OK**.
5. Select the layout type. The most commonly used layout type for a **URL Container** is the single pane layout type.



6. Select the **URL Container** widget, click (and hold down) the mouse button, drag it to the layout pane on which you want it added, and then release the mouse button.
7. Set the properties.



8. Click **Save All**.

## Properties

The URL container widget has the following properties:

Properties	Description
<b>Default URL</b>	The <b>DefaultURL</b> property is used to specify the URL that is shown in the <b>URL Container</b> .
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Layout Height</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>Layout Width</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Show Title Bar</b>	Indicates whether the Title of the URL Container will be shown. If the Title bar is not accessible, then users will not be able to select other URLs from this URL Container.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.

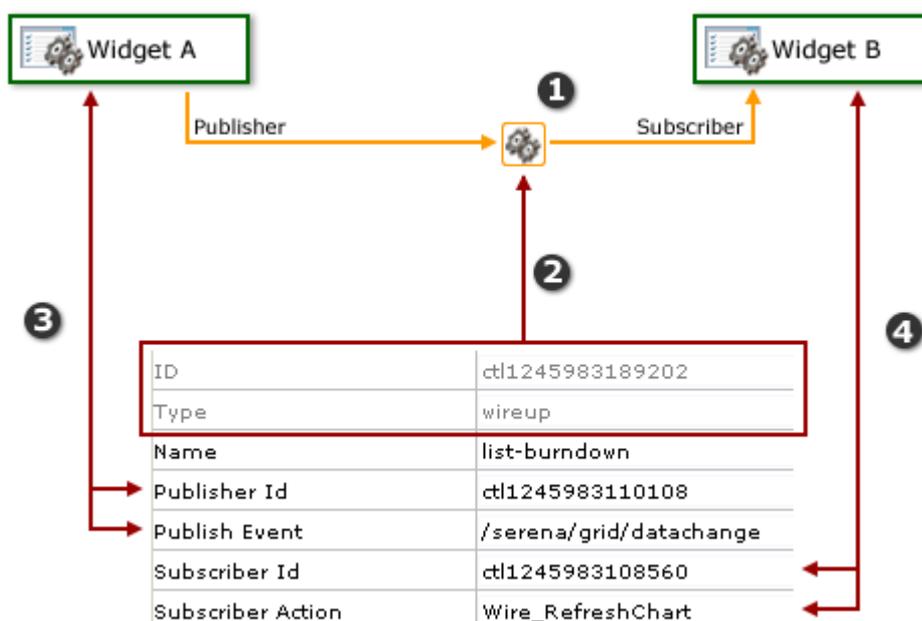
Properties	Description
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.

## Widget Wireup

A **Widget Wireup** is used to make associations between widgets. For example, you could use a wireup to associate a **List** widget and a **Summary View** widget so that work item details are opened in a **Summary View** when that work item is selected in a **List**. And then when updated information is saved in the **Summary View**, that data will then be refreshed in the **List**.

### Overview

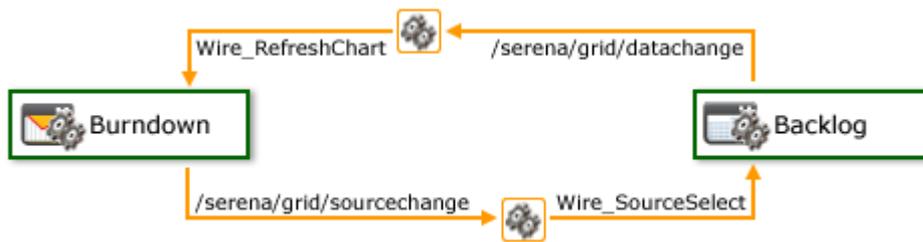
Each wireup is configured as a one-way relationship between two widgets, where the publish event in one widget determines the subscriber action in another.



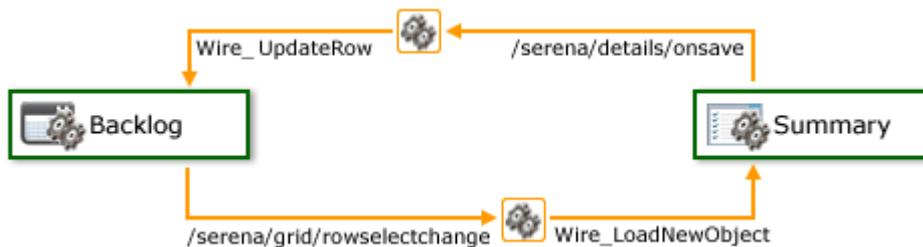
In the diagram above, the numbers correspond to the following:

1. The wireup itself, and the relationship that will be configured.
2. The ID and type of widget.
3. The publisher settings for the wireup. A wireup listens for a specific event (**Publish Event**) that is being broadcast by a specific widget (**Publisher ID**).
4. The subscriber settings for the wireup. A wireup takes a specific action (**Subscriber Action**) on a specific widget (**Subscriber ID**).

Many wireup relationships can be configured as pairs, such as the release, sprint, and task burndowns that are included in the out-of-the-box configuration of Serena Agile. In these cases, the wireup relationships are configured to show the backlog associated with the selected burndown chart.



For example, a wireup could be added to a **Backlog** widget that is configured to listen for the **onsave** event to be triggered from a **Summary View** widget. When a team member clicks  Save in the **Summary View** widget, the wireup will then tell the **Backlog** widget to update the work item (using the **Wire\_UpdateRow** publish event).



You can also create multiple wireup relationships between widgets, as long as there isn't more than one configured relationship between widgets for each publish event or subscriber action.



### Adding the Widget Wireup to a view

You can add a **Widget Wireup** to any custom view or custom workflow. A **Widget Wireup** is used to create a relationship between a single action and a single event. Each widget that is available in Serena Agile has one or more publish events associated with it, as well as one or more subscriber actions. The **Widget Wireup** allows you to define a relationship where the wireup listens to the publishing widget for the defined event, and when that event is triggered, the wireup then tells the subscribing widget to perform the defined action.

For example, a wireup is configured on Widget A (a backlog) to listen to Widget B (a summary view), and then to refresh Widget A when changes made to a work item in Widget B have been saved. When a team member clicks  Save, the **onsave** event is triggered. Since the wireup is configured to listen for the **onsave** event, when that event occurs, the wireup will tell Widget A to refresh.

#### To add the Widget Wireup to a view

1. From the application toolbar, click **Setup** and select **Configuration**.
2. In the **Configuration** module, select **Module Designer**.

3. Under **Modules**, select an existing module.
4. Under **Module-Tabs**, select an existing view (or one that you are currently creating).
5. Select the **Widget Wireup**, click (and hold down) the mouse button, drag it to the layout pane which contains the subscriber widget, and then release the mouse button.
6. Set the properties.

Properties	
ID	ctl1255673606129
Type	wireup
Name	
Publisher Id	ctl1255672166831
Publish Event	/serena/grid/rowselectct
Subscriber Id	ctl1255672166717
Subscriber Action	Wire_UpdateRow
Left	181
Top	239
Width	24
Height	24
Z-Index	100

In order to create the intended relationship between two widgets, the **Publisher ID**, **Publish Event**, **Subscriber ID**, and **Subscriber Action** properties must be set correctly:

Wireup Property	Description
<b>Publisher ID</b>	The <b>Publisher ID</b> property specifies the ID of of the widget from which a <b>Widget Wireup</b> control will listen for a specific publish event.
<b>Publish Event</b>	The <b>Publish Event</b> property specifies the event that the <b>Widget Wireup</b> listens for.
<b>Subscriber ID</b>	The <b>Subscriber ID</b> property is the ID of a widget to which a <b>Widget Wireup</b> will send a configured publish action. The <b>Subscriber ID</b> is always the <b>ID</b> for the widget on which the widget wireup is located.
<b>Subscriber Action</b>	The <b>Subscriber Action</b> property specifies the action that will be sent to the widget specified by the <b>Subscriber ID</b> attribute.

7. Click **Save All**.

## Properties

The **Widget Wireup** widget has the following properties:

Properties	Description
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Name</b>	The <b>Name</b> property is used to specify the name of a control or widget.
<b>Publish Event</b>	The <b>Publish Event</b> property specifies the event that the <b>Widget Wireup</b> listens for.
<b>Publisher ID</b>	The <b>Publisher ID</b> property specifies the ID of of the widget from which a <b>Widget Wireup</b> control will listen for a specific publish event.
<b>Subscriber Action</b>	The <b>Subscriber Action</b> property specifies the action that will be sent to the widget specified by the <b>Subscriber ID</b> attribute.
<b>Subscriber ID</b>	The <b>Subscriber ID</b> property is the ID of a widget to which a <b>Widget Wireup</b> will send a configured publish action. The <b>Subscriber ID</b> is always the <b>ID</b> for the widget on which the widget wireup is located.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

### *Fixed Layout Widgets*

The **Widgets** box lists the elements that can be in the view such as frames and graphical elements.

For more information, see the following topics:

- [Agile work item Assignments \[page 237\]](#)

- [Chart \[page 238\]](#)
- [Datasheet \[page 238\]](#)
- [Group Box \[page 239\]](#)
- [Horizontal Rule \[page 241\]](#)
- [Image \[page 242\]](#)
- [Label \[page 243\]](#)
- [Link Label \[page 244\]](#)
- [Single Object Chart \[page 246\]](#)
- [URL Viewer \[page 247\]](#)

## Agile work item Assignments

The **Agile Work Item Assignments** widget is used to show the list of work item that are currently assigned to a user.

### Properties

The **Agile Work Item Assignments** widget has the following properties:

Properties	Description
<b>Allow Drag</b>	The <b>Allow Drag</b> property is used to indicate whether users can move a widget around on a page while they are using it.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Chart

Use the **Chart** control (sometimes referred to as a widget) to display a chart, such as a burndown chart.

### Properties

The **Chart** widget has the following properties:

Properties	Description
<b>Allow Drag</b>	The <b>Allow Drag</b> property is used to indicate whether users can move a widget around on a page while they are using it.
<b>Default</b>	The <b>Default</b> property is used to specify the default datasheet that will be available when a team member accesses the page on which this control has been placed.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Datasheet

The **Datasheet** widget is used to show a datasheet.

### Properties

The **Datasheet** widget has the following properties:

Properties	Description
<b>Allow Drag</b>	The <b>Allow Drag</b> property is used to indicate whether users can move a widget around on a page while they are using it.
<b>Default</b>	The <b>Default</b> property is used to specify the default datasheet that will be available when a team member accesses the page on which this control has been placed.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Group Box

Use the **Group Box** to group attributes together under a common heading. A **Group Box** is often used to help make it easier for users to work with data by locating common and/or related data in a specific location.

### Properties

The **Group Box** widget has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.

Properties	Description
<b>Font-Family</b>	The <b>Font-Family</b> property is used to set the font, such as verdana, courier, or arial.
<b>Font-Size</b>	The <b>Font-Size</b> property is used to set the size of a font.
<b>Font-Style</b>	The <b>Font-Style</b> property is used to set the displayed style of the text: normal, italic, or oblique.
<b>Font-Weight</b>	The <b>Font-Weight</b> property is used to set the displayed weight of the text: normal, bold, or bolder.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Legend</b>	The <b>Legend</b> property is used to specify whether a legend should be displayed on a chart.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>Text-Decoration</b>	The <b>Text-Decoration</b> property is used to specify whether text should be displayed normally, underlined, overlined, or with a strikethrough bar.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.

Properties	Description
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Horizontal Rule

A **Horizontal Rule** is used to add a simple horizontal line to any page in the application. A **Horizontal Rule** can be used to help make it easier for users to work with data by providing visual separation between sections of data.

### Properties

The **Horizontal Rule** widget has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.

Properties	Description
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Image

An **Image** is used to add a static image to a page. The image is set using the **Src** property as a URL to the location of the image on your organization's intranet or to a page on the Internet. You can also use the **Events** property to add JavaScript that is triggered when a user clicks on the image.

The image properties are set using the **Src** property as a URL to the location of the image on your organization's intranet or to a page on the Internet. You can also use the **Events** property to add JavaScript that is triggered when a user clicks on the image.

## Properties

The **Image** widget has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Events</b>	The <b>Events</b> property is used to add JavaScript to a page. For the <b>Button</b> and <b>Image</b> elements, click the button associated with the <b>Events</b> property to display the <b>Code Editor</b> dialog. In the <b>Code Editor</b> dialog, you can write code to be executed in association with the element (for example, code that executes when the user clicks a button).
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.

Properties	Description
<b>Src</b>	The <b>Src</b> property is used to specify the source URL for an image in an <b>Image</b> control.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Label

A **Label** is used to add a text label to a page in the application.

### Properties

The **Label** widget has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Font-Family</b>	The <b>Font-Family</b> property is used to set the font, such as verdana, courier, or arial.
<b>Font-Size</b>	The <b>Font-Size</b> property is used to set the size of a font.
<b>Font-Style</b>	The <b>Font-Style</b> property is used to set the displayed style of the text: normal, italic, or oblique.

Properties	Description
<b>Font-Weight</b>	The <b>Font-Weight</b> property is used to set the displayed weight of the text: normal, bold, or bolder.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Hyperlink</b>	The <b>Hyperlink</b> property is used to specify the URL for a <b>Link Label</b> widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>Text-Align</b>	The <b>Text-Align</b> property is used to specify whether text should be right-aligned, left-aligned, centered, or justified.
<b>Text-Decoration</b>	The <b>Text-Decoration</b> property is used to specify whether text should be displayed normally, underlined, overlined, or with a strikethrough bar.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.

## Link Label

A **Link Label** is used to add a hyperlink to a page in the application, from which users can link out to that information. For example, you can add a external link to a website, such as Google, an internal link to a page located within your organization's intranet, or to a page that is generated by another application.

## Properties

The **Link Label** widget has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Font-Family</b>	The <b>Font-Family</b> property is used to set the font, such as verdana, courier, or arial.
<b>Font-Size</b>	The <b>Font-Size</b> property is used to set the size of a font.
<b>Font-Style</b>	The <b>Font-Style</b> property is used to set the displayed style of the text: normal, italic, or oblique.
<b>Font-Weight</b>	The <b>Font-Weight</b> property is used to set the displayed weight of the text: normal, bold, or bolder.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Hyperlink</b>	The <b>Hyperlink</b> property is used to specify the URL for a <b>Link Label</b> widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>Text-Align</b>	The <b>Text-Align</b> property is used to specify whether text should be right-aligned, left-aligned, centered, or justified.
<b>Text-Decoration</b>	The <b>Text-Decoration</b> property is used to specify whether text should be displayed normally, underlined, overlined, or with a strikethrough bar.

Properties	Description
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Single Object Chart

A **Single Object Chart** is used to show values in a summary view as a chart. The **Single Object Chart** must be configured using the **BrandXML**, **ConfigureXML**, **Data Processor**, and **Data Processor Assembly** properties.

### Properties

The **Single Object Chart** widget has the following properties:

Properties	Description
<b>BrandXML</b>	The <b>BrandXML</b> property is used to control the visual display and color scheme of a chart.
<b>ConfigureXML</b>	The <b>ConfigureXML</b> property is used to control the data displayed on the single object chart.
<b>DataProcessor</b>	The <b>DataProcessor</b> property is used to specify the code that generates a chart. Effectively, this determines the type of chart.
<b>DataProcessorAssembly</b>	The <b>DataProcessorAssembly</b> property is used to specify the location of a custom chart data processor.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.

Properties	Description
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## URL Viewer

The **URL Viewer** widget is used to add a URL to a page in the application.

### Properties

The **URL Viewer** widget has the following properties:

Properties	Description
<b>Allow Drag</b>	The <b>Allow Drag</b> property is used to indicate whether users can move a widget around on a page while they are using it.
<b>AppendUsernameToQS</b>	The <b>AppendUsernameToQS</b> property is used to indicate whether to append a username to the query string in a <b>URL Viewer</b> control.
<b>DefaultURL</b>	The <b>DefaultURL</b> property is used to specify the URL that is shown in the <b>URL Container</b> .
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.

Properties	Description
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Types Setup

A work item is what users in your organization use to create, plan, manage, and analyze your projects. They can be assets, programs, projects, or portfolios. They can be the stages in a lifecycle, such as a request, an approval, or a rejection. They can be the phases in an Agile lifecycle, such as projects, releases, and sprints. They can have dependencies on other items.

You can use the **Types Setup** tab to manage the work item types your organization uses, their dependencies (if any), and how users in your organization can submit requests for new items.

For more information, see the following topics:

- [Item Types \[page 248\]](#)
- [Work Types \[page 251\]](#)
- [Work Hierarchy \[page 254\]](#)

## Item Types

Use the **Investment Type** tab to add, manage, and maintain all of the work item types that are used by your organization. Only active work item types can be used. Only work item types flagged as creatable will be available to users when they create a new work item.

The **Investment Type** tab contains four tabs: **Properties**, **Attributes**, **Containment**, and **Set Views**.

The **Properties** tab lets you enter information that is unique to that investment type, such as its name, an associated icon, and color, and global information that is available to this work item type when it is used in your organization's portfolio, such as its work type,

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whether resources can self-allocate or self-assign themselves to this work item, and so on. The **Properties** tab contains the following elements:

- **Name**—The name of the work item type.
- **System Name**—The XML name for the work item type; the system name is generated automatically.
- **Icon**—The icon used to represent the work item type.
- **Color**—The color used to represent the work item type when it appears in the Timeline view or in a resource's timesheet (when they have enabled timesheet colors).
- **Active**—Indicates whether the work item type is an active work item type. Only active work item types can be selected from a list that contains work item types.
- **Creatable**—Indicates whether the work item type can be chosen while creating a new work item in the **Projects** module and or when working with a work item request page. Use this option in conjunction with workflow transitions to limit the work item types that users can initially create (and from which it can be transitioned to other work item types).
- **None**—Default. This option prevents work assignments for this work item type. A work item type that is created from this work type is often used as container for another work item type.
- **Work Container**—A container for a work item type is used as a container for a work type. When a work item type is a work container, you must select a work hierarchy from the **Work Hierarchy** drop-down. The default work hierarchy is **Basic**; you can create custom work hierarchies from the **Work Hierarchy** tab in the **Types Setup** view.
- **Team**—A team work item type is used to represent an Agile team and is not directly associated with a work hierarchy. A team work item type can be assigned to a work item from any work container, most commonly by using a sprint work item type to which work a work item is assigned.

The **Attributes** tab displays all of the attributes that can be associated with the work item type. The full list of available attributes are in the left column and the attributes that are associated with the work item type are in the right column. To move an attribute between columns, select it and click the arrow that points to the other column. Hold down the **CTRL** key while selecting attributes to move more than one at a time.

The **Containment** tab displays all of the possible parent and child work item types. This determines all of the possible locations in which a work item can appear in the work item hierarchy; a work item can only be created under a valid parent work item and a work item can only have valid children created underneath it. A work container cannot have a work container as a child work item type.

The **Set Views** tab lets you select the views that will be associated with the work item type. Custom summary views that have been created in the View Designer will be available; the default summary view is **Summary**.

## Activating a work item type

If a work item type is inactive, you can reactivate it so that it can be used when creating a new work item.

### To activate a work item type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Investment Types** tab.
4. Choose a work item type.
5. Select **Active**.
6. Click **Save**.

### **Adding a work item type**

Add a new work item type. The work container option allows a work item type to be associated with a specific work hierarchy. The team option allows a work item type to represent an Agile team (to which an assignable work item can be assigned). Once a work type is set to be a work container or a team, it cannot be changed.

#### **To add a work item type**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Investment Types** tab.
4. Click **New**.
5. Name the work item type. Select an icon and/or a color to which the work item type will be associated.
6. Select **Active** to make this work item type available; only an active work item type can be used to create a new work item.
7. Select **Creatable** to make this work item type available in the New Investment dialog box and in the **Investment Type** list on a work item request page. Use this option to limit the available work item that can be created.
8. Under **Type**, select the work type option: *None*, *Work Container*, or *Team*.
9. On the **Attributes** tab, move the attributes you want to be associated with this work item type to the right column. Required attributes cannot be removed.
10. On the **Containment** tab, select the work item type's parent and child work item types. A work container cannot have a work container as a child work item type.
11. On the **Set Views** tab, associate the views that will be available in the **Projects** module when team members are working on this work item.
12. Click **Save**.

### **Deleting a work item type**

A work item type can be deleted as long as it is not being used by an existing work item. If a work item type is being used (or may be used again) by a work item, you should inactivate it.

#### **To delete a work item type**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Investment Types** tab.

4. Select a work item type and click **Delete**.

### Editing a work item type

Find a work item type on the **Investment Type** tab of the **Types Setup** tab, make the changes that need to be made, and then click **Save**.

#### To edit a work item type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Investment Types** tab.
4. Make your changes.
5. Click **Save**.

### Inactivating a work item type

A work item type can be inactivated. This prevents them being available whenever a list of work item types is used and it helps preserve historical data associated with that work item type.

#### To inactivate a work item type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Investment Types** tab.
4. Under **Investment Types**, select a work item type.
5. De-select **Active**.
6. Click **Save**.

### Viewing a work item type

A work item type is shown on the **Investment Types** tab in the **Types Setup** tab.

#### To view a work item type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Investment Types** tab.
4. Select the work item type in the list.

### *Work Types*

Use the **Agile Work Types** tab to add, manage, and maintain all of any work type that is used by your organization. Only an active work type can be used.

Note: This tab is only available when using Serena Agile.

The **Work Types** tab allows you to create and manage an individual work type that is being used by your organization. A default work type includes defects, epics, tasks, and stories. You can associate icons with any work type. The **Agile Work Types** tab contains the following elements:

- **Name**—The name of the work type.
- **System Name**—The XML name for the work type; the system name is generated automatically.
- **Icon**—The icon used to represent the work type.
- **Active**—Indicates whether the work type is an active work type. Only an active work type can be selected.

The **Attributes** tab displays all of the attributes that can be associated with the work type. The full list of available attributes are in the left column and the attributes that are associated with the work type are in the right column. To move an attribute between columns, select it and click the arrow that points to the other column. Hold down the **CTRL** key while selecting attributes to move more than one at a time.

### Activating a work type

If a work type is inactive, you can reactivate it so that it can be used when creating new work types.

#### To activate a work item

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Agile Work Types** tab.
4. Choose a work type.
5. Select **Active**.
6. Click **Save**.

### Adding a work type

Add a new work type.

#### To add a work type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Agile Work Types** tab.
4. Click **New**.
5. Name the work type. Select an icon and/or a color to which the work type will be associated.
6. Select **Active** to make this work type available; only an active work type can be used to create new items.
7. On the **Attributes** tab, move the attributes you want to be associated with this work type to the right column. Required attributes cannot be removed.
8. On the **Containment** tab, select the parent work type and any child work type.
9. Click **Save**.

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## Deleting a work type

A work type can be deleted as long as it is not being used by an existing work item. If a work type is being used (or may be used again) by a work item, you should inactivate it.

### To delete a work type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Agile Work Types** tab.
4. Select a work type.
5. Click **Delete**.

## Editing a work type

Find a work type on the **Agile Work Types** tab of the **Types Setup** tab, make the changes that need to be made, and then click **Save**.

### To edit a work type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Agile Work Types** tab.
4. Make your changes.
5. Click **Save**.

## Inactivating a work type

A work type can be inactivated. This prevents them being available whenever a work type list is used and it helps preserve historical data associated with that work type.

### To inactivate a work type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Agile Work Types** tab.
4. Under **Agile Work Types**, select a work type.
5. De-select **Active**.
6. Click **Save**.

## Viewing a work type

Every work type is shown on the **Agile Work Types** tab in the **Types Setup** tab.

### To view a work type

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** tab.
3. Select the **Agile Work Types** tab.
4. Select the work type in the list.

## Work Hierarchy

Use the **Work Hierarchy** tab to add, manage, and maintain all of the work breakdown structure that you will use in your organization. Only an active work type can be used.

Note: This tab is only available when using Serena Agile.

The **Work Hierarchy** tab allows you to define any work type relationship. The **Types Setup** view contains four default work type options: defects, epics, tasks, and stories. You can create a custom work hierarchy. Each work item in the hierarchy can be defined independently, including whether it can exist at the top of the hierarchy (without a parent), whether it is assignable (to a team work item type), and what its possible parent and child work item types can be. You can view a representation of the work hierarchy as you are building it. The **Work Hierarchy** tab contains the following elements:

- **Name**—The name of the work type.
- **System Name**—The XML name for the work type; the system name is generated automatically.
- **Work Type**—A drop-down list that contains all of any available work type. A default work type is a defect, epic, task, or story. You can create a custom work type from the **Work Types** tab in the **Types Setup** view.
- **Can Exist Without Parent**—Indicates whether this work type can appear at the top of the work hierarchy.
- **Valid Parents**—Indicates that a work type has valid parents of the selected work type in the work hierarchy.
- **Valid Children**—Indicates that a work type has valid children of the selected work type in the work hierarchy.

The **Attributes** tab displays all of the attributes that can be associated with the work type. The full list of available attributes are in the left column and the attributes that are associated with the work type are in the right column. To move an attribute between columns, select it and click the arrow that points to the other column. Hold down the **CTRL** key while selecting attributes to move more than one at a time.

## Adding a work hierarchy

A work hierarchy is a defined relationship between any work type. A work hierarchy can be defined to use any combination of default and a custom work type. Each work type in the work hierarchy can be defined independently, including whether it can exist at the top of the hierarchy (without a parent), whether it can be assigned to a work item type, such as a team, and what its possible parent and any child work type can be. As you are adding a work hierarchy, you can view the relationships on the right side of the **Work Hierarchy** tab in the **Types Setup** view.

### To add a work hierarchy

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** view.
3. Select the **Work Hierarchy** tab.
4. Enter a name for the new work hierarchy.
5. Select a work type from the **Work Type** drop-down.

6. Select the **Can Exist Without Parent** option to indicate whether this work type can appear at the top of the work hierarchy.
7. Select the **Assignable Work Item** option to indicate whether this work type can be assigned to other work item types, such as a team work item type.
8. Select any work type that will be valid parents and valid children.
9. Click **Save**.

## Deleting a work hierarchy

You can delete a work hierarchy if you are not using it.

### To delete a work hierarchy

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** view.
3. Select the **Work Hierarchy** tab.
4. Select a work hierarchy.
5. Click **Delete**.

## Editing a work hierarchy

You can edit a work hierarchy. Add a new work type, change the parent and child relationships, select a different assignable work type, and so on.

### To edit a work hierarchy

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** view.
3. Select the **Work Hierarchy** tab.
4. Select a work hierarchy.
5. Make your changes.
6. Click **Save**.

## Viewing a work hierarchy

A work hierarchy can be viewed from the **Work Hierarchy** tab of the **Types Setup** view in the **Configuration** module.

### To view a work hierarchy

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **Types Setup** view.
3. Select the **Work Hierarchy** tab.
4. Select a work hierarchy.

## User Synchronization

You can use the **User Synchronization** tab to manage the XML configuration file that contains the field mappings between attributes and a directory service, such as Active

Directory or Novell eDirectory. When you create a provider, you have the option of managing some aspects of that provider in the **User Synchronization** tab.

The XML configuration file lives in the Scheduler Service directory, typically C:\Program Files\Serena\Mariner\SchedulerService. The XML configuration file must be called UserResourcesSyncConfig.xml.

If you are using an on-demand version of this application, you do not need to configure user synchronization. User synchronization is only necessary for on-premise customers.

### ***Adding a user authentication provider***

In order to use a provider in the **User Synchronization** tab, you must first add the provider to the view. Once added, select the **Use in Synchronization** option.

#### **To add a user authentication provider**

1. In the desktop **System Settings** module, under **Actions**, click **Manage Providers**.
2. In the **Manage Providers** dialog box, click **Add**.

### ***Deleting a user authentication provider***

Authentication providers can only be deleted if there are no users assigned to it.

#### **To delete a user authentication provider**

1. In the desktop **System Settings** module, under **Actions**, click **Manage Providers**.
2. In the **Manage Providers** dialog box, select a provider and click **Delete**.

### ***Editing a user authentication provider***

You can update the information related to a user authentication provider.

#### **To edit a user authentication provider**

1. In the desktop **System Settings** module, under **Actions**, click **Manage Providers**.
2. Select an existing provider.
3. Click **OK**.

### ***User Authentication Providers***

User authentication is the process of receiving and verifying user credentials and is a key component of identity management and network security. Authentication is implemented through authentication providers. User authentication providers are set up in the **Manage Providers** dialog box.

Four types of user authentication are supported:

- Active Directory
- NDS eDirectory
- Windows
- Application

User authentication is set up per user by selecting the user authentication provider from the **Authentication Provider** list for each user. Using an Lightweight Directory Access (LDAP)-based authentication provider enables you to validate user authentication using existing network directory services. The experience is seamless to users. If you select the

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Lightweight Directory Access (LDAP) or Microsoft Windows user authentication type, users cannot edit their user password. If you select Microsoft Windows authentication users will not be able to access the application unless they are logged on to the domain. Further, Microsoft Windows authentication will pass through a user's domain credentials when accessing the application. After logging in to the application once, users should not be presented with the log on page on subsequent visits.

To provide additional security, you can set up Lightweight Directory Access (LDAP)-based authentication providers to use a secure connection (SSL) between the application and the directory services provider. This connection requires that the necessary certificates be installed on both the Web server and the directory services server.

## Configuring Active Directory authentication

Each user account set up uses an authentication provider to facilitate user logon. By default, a predefined **Application** authentication provider is included. Multiple authentication types are supported, including those using the Lightweight Directory Access (LDAP) protocol. You can use the **Manage Providers** dialog box to add, modify or remove an authentication provider that uses Active Directory.

### To configure Active Directory authentication

1. In the desktop **System Settings** module, under **Actions**, click **Manage Providers**.
2. In the **Manage Providers** dialog box, click **Add**.
3. In the **Authentication Provider Name** box, type a name.
4. In the **Authentication Type** list, select *Active Directory*.
5. In the **Server** box, type the fully qualified distinguished name (FQDN) of the Active Directory server, for example ad.serena.com.
6. In the **Domain Filter** box, type the Lightweight Directory Access (LDAP) query format for the provider, for example (objectclass=user).
7. Type values for the corresponding boxes (first name, last name, email, and user name). The default values should be correct in most cases for Active Directory.
8. In the **Distinguished Name** box, the field can accept a username (such as username) or a qualified domain name (such as domain\username) in addition to a full Lightweight Directory Access (LDAP) distinguished name.
9. Under **Connect As**, enter a user name and password. This is used to verify that the provider settings have been entered correctly. In Active Directory, the user name can be a simple user name, a qualified domain name, or a full distinguished name.
10. Click **Apply**. This will verify that Active Directory is accessible in the path specified, and that the query returns more than zero users. There is no user validation, as this would require using actual user passwords.
11. If you receive a "Server does not exist" error, modify the provider properties and try again. If no errors return, close the **Manage Providers** dialog.

## Configuring application user authentication

Each user account set up uses an authentication provider to facilitate user logon. By default, a predefined **Application** authentication provider is included. Multiple authentication types, including those using the Lightweight Directory Access (LDAP) protocol, are supported.

### To configure application user authentication

1. In the desktop **System Settings** module, under **Actions**, click **Manage Providers**.
2. In the **Manage Providers** dialog box, click **Add**.
3. In the **Authentication Provider Name** box, type a name.
4. In the **Authentication Type** list, select *Application*.
5. In the **Server** box, type the name of the server hosting the database and then in the **Database Name** box, type the database name.
6. Click **OK**.

### Configuring Novell eDirectory authentication

Each user account set up uses an authentication provider to facilitate user logon. By default, a predefined **Application** authentication provider is included. Multiple authentication types are supported, including those using the Lightweight Directory Access (LDAP) protocol. You can use the **Manage Providers** dialog box to add, modify or remove an authentication provider that uses Novell eDirectory.

### To configure Novell eDirectory authentication

1. In the desktop **System Settings** module, under **Actions**, click **Manage Providers**.
2. In the **Manage Providers** dialog box, click **Add**.
3. In the **Authentication Provider Name** box, type a name.
4. In the **Authentication Type** list, select *NDS eDirectory*.
5. In the **Server** box, type the fully qualified distinguished name (FQDN) of the Novell eDirectory server, for example fully.qualified.serena.com.
6. In the **Domain Filter** box, type the Lightweight Directory Access (LDAP) query format for the provider, for example (objectclass=user).
7. For the fields in the **Field Mapping** group box (first name, last name, email, and user name boxes), type the Lightweight Directory Access (LDAP) directory property that contains the data that best matches the field name. The default values should be correct in most cases for the Novell eDirectory Lightweight Directory Access (LDAP) provider.
8. Under **Connect As**, enter a user name and password. This is used to validate the provider settings. In Novell eDirectory, the user name must be a fully qualified distinguished name (FQDN) with sufficient rights to execute the Lightweight Directory Access (LDAP) filter on the directory services server.
9. Click **Apply**. This will verify that Novell eDirectory is present in the path specified, and that the Lightweight Directory Access (LDAP) query returns more than zero users. There is no user validation.
10. If you receive a "Server does not exist" error, modify the provider properties and try again. If no errors return, close the **Manage Providers** dialog.

### Configuring Microsoft Windows authentication

Each user account set up uses an authentication provider to facilitate user logon. By default, a predefined **Application** authentication provider is included. Multiple authentication types are supported, including those using the Lightweight Directory

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Access (LDAP) protocol. You can use the **Manage Providers** dialog box to add, modify or remove an authentication provider that uses Microsoft Windows.

### To configure Microsoft Windows authentication

1. In the desktop **System Settings** module, under **Actions**, click **Manage Providers**.
2. In the **Manage Providers** dialog box, click **Add**.
3. In the **Authentication Provider Name** box, type a name.
4. In the **Authentication Type** list, select *Windows*.
5. In the **Domain Filter** box, type the name of your Microsoft Windows domain.
6. For the fields in the **Field Mapping** group box (first name, last name, and email), type the Microsoft Windows directory property that contains the data that best matches the field name. The properties in the default Microsoft Windows directory do not contain explicit properties for first name, last name, or e-mail address, so the default of *FullName* for last name is a reasonable choice.
7. Click **OK**.

## View Designer

You can use the **View Designer** tab to modify the layout of financials views and to create custom summary views for use in the **Projects** module. Custom summary views are also used to layout a work item request page.

The **View Designer** tab has five sections:

- **View Layout** This section is used to design the layout of a view. Choose a work item. Select a view. Use a form that is already there, add a new form, or copy a form and use it again.
- **Attributes** This section is used to add attributes to a view layout. Many attributes are named using its system name.
- **Controls** This section is used to add buttons, boxes, rules, images, labels, and so on to a view layout.
- **Properties** This section is used to manage the properties associated with attributes and controls. Properties are only visible for attributes and controls which have been added to the view layout.
- **Pane** The layout pane is a template for designing the view. Click and drag attributes and controls onto the layout pane, and then define the appropriate properties for each. The **View Layout** box defines the work item type that the **Summary** tab is associated with. It contains a list of all the **Summary** tabs, so that you can select the one that you want to work with. It also contains a list of available forms for the selected view and the buttons needed for working with forms. These forms are the tabs that appear in each **Summary** tab.

### Adding a form

The forms that you create in the **View Designer** tab are the tabs that appear in the associated **Summary** tab. When you create a new form in the **View Designer** tab, the form is displayed in the **Forms** list in the **View Layout** box of the **View Designer** tab, where it is available to be used in **Summary** tabs. When creating forms, you can:

- Create a new form.

- Add blocks of JavaScript code to the form by using the **Script** button.
- Create a new form based on an existing form by using the **Copy** button.
- Rename a form.

### To add a form

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, click **New**.
4. Name the form and click **OK**.
5. Click and drag the appropriate attributes and controls to the layout pane and modify their properties as necessary.
6. Under **View Layout**, click **Save**.

### *Adding a view from within the View Designer*

You can add custom summary views to your configuration.

### To add a view from within the View Designer

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, define the view: from the **Investment** list, select the work item type that the summary view will be associated with, from the **Views** list, select a view, and from the **Forms** list, select an existing form or click **New** to create a new form. If you select an existing form, you can click the **Script** button to display the Code Editor dialog box, which can be used to insert blocks of JavaScript code into the form.
4. Under **Attributes**, left-click and drag an attribute onto the layout pane, and position it as desired.
5. Under **Properties**, set or modify the properties for the attribute. Click the button, if available, to make different types of modifications, such as selecting a color or opening a text editor.
6. Under **Controls**, left-click and drag a control onto the layout pane.
7. Under **Properties**, set and modify the properties for the control. Set the properties in the **Properties** box for each element. If you put a work item dependency into the form, you must configure the dependency.
8. Click **Save**.

### *Copying a form*

You can create new forms by copying existing ones.

### To copy a form

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, select the summary view that contains the form you want to copy.

4. In **Forms**, select the form and then click **Copy**.

### ***Copying a view in the View Designer***

You can add new views by copying the settings, properties, and layout of an existing view.

#### **To copy a view**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, select the work item type, its associated view, and the form you want to copy.
4. Click **Copy**.
5. In the Copy To dialog box, select the work item type and view that you want to copy, and then click **OK**.
6. Under **View Layout**, click **Save**.

### ***Deleting a form***

If you are not using a form, you can delete it.

#### **To delete a form**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, select the summary view that contains the form you want to delete.
4. In **Forms**, select the form and then click **Delete**.

### ***Deleting a view from the View Designer***

If you are not using a view, you can delete it. You cannot delete out-of-the-box, system views.

#### **To delete a view**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Management** tab.
3. Select the **Investment Views** tab.
4. Under **Investment Views**, select a view and click **Delete**. You cannot delete system views.

### ***Renaming a form***

You can rename any form in any view.

#### **To rename a form**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, select the work item and then the view which contains the form that you want to rename.
4. Select the form and click **Rename**.

5. Type the new name and click **OK**.

### Attributes

An attribute is a single work item that is used to store, present, report on, or track information that is used by team members as they work on their tasks. Some common attributes include **Actual Work**, **Name**, and **Cost**.

The **Attributes** box lists the attributes available for use in the on the selected form. These attributes are populated from the attributes defined in the **System Settings** module. Every attribute shares a common set of properties, as listed below.

Properties	Description
<b>DataKey</b>	The <b>DataKey</b> property is used to specify an attribute by referring to its System Name value.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>IsMultiLine</b>	The <b>IsMultiLine</b> property is used to indicate whether text that is displayed in an attribute, control, or widget should wrap. Setting this property to <i>True</i> will cause the text to wrap at the end of lines. For small, single line text fields, set this property to <i>False</i> .
<b>IsRichEditor</b>	The <b>IsRichEditor</b> property is used to indicate whether text that is displayed in an attribute, control, or widget should be saved and rendered as rich text with HTML style formatting. Setting this property to <i>True</i> will cause the text to be saved as rich text. For plain text, set this property to <i>False</i> .
<b>Max Value</b>	The <b>Max Value</b> property is used to set a maximum number of characters that a user can enter in a field placed on a <b>Summary</b> tab.
<b>Min Value</b>	The <b>Min Value</b> property is used to set a minimum number of characters a user can enter in a field placed on a <b>Summary</b> tab.
<b>Name</b>	The <b>Name</b> property is used to specify the name of a control or widget.
<b>PESNativeType</b>	The <b>PESNativeType</b> property is used to specify the native database type that will be associated with an attribute.

Properties	Description
<b>Read Only</b>	The <b>Read Only</b> property is used to indicate whether the information for an attribute is read-only. Values in a read-only field cannot be changed by a user.
<b>Required</b>	The <b>Required</b> property is used to indicate whether an attribute is a required field that forces a user to input information into the field. If the <b>Required</b> property is set to <i>True</i> , the user must enter data. If you want to prevent users from entering data in a required field, set this property to <i>False</i> and the <b>Property</b> property to <i>True</i> .
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

### Controls

The **Controls** box lists the elements that can be in the view such as frames and graphical elements.

For more information, see the following topics:

- [Audit History \[page 264\]](#)
- [Burndown Chart \[page 264\]](#)
- [Button \[page 266\]](#)
- [Card Wall \[page 267\]](#)
- [Custom Help Link \[page 268\]](#)
- [Document Store \[page 269\]](#)
- [Group Box \[page 270\]](#)
- [Horizontal Rule \[page 271\]](#)
- [Iframe \[page 272\]](#)
- [Image \[page 273\]](#)
- [Item Dependency \[page 274\]](#)
- [Label \[page 277\]](#)

- [Link Label \[page 278\]](#)
- [List \[page 279\]](#)
- [Single Object Chart \[page 280\]](#)
- [Summary View \[page 282\]](#)
- [Widget Wireup \[page 283\]](#)

## Audit History

An **Audit History** control is used to add the ability to view the history of changes made to specific investments and work types.

### Properties

The **Audit History** control has the following properties:

Properties	Description
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Burndown Chart

A **Burndown Chart** control is used to add a burndown chart to a page in the application.

### Properties

The **Burndown Chart** control has the following properties:

Properties	Description
<b>Chart Title</b>	The <b>Chart Title</b> property is used to set the title of a chart.
<b>Estimated Story Points</b>	The <b>Estimated Story Points</b> property is used to specify an estimate of work required to complete a story.
<b>Finish Date</b>	The <b>Finish Date</b> property is used to specify the end date for an interval.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Remaining Story Points</b>	The <b>Remaining Story Points</b> property is used to specify an estimate of work not yet completed on a story.
<b>Show Cone of Confidence</b>	The <b>Show Cone of Confidence</b> property is used to specify whether to show a set of lines on a burndown chart that indicate whether a team is likely to complete the work for a sprint. The lines show interpolated estimates based on the <b>+/- Confidence %</b> attribute, and are commonly referred to as the "cone of confidence."
<b>Start Date</b>	The <b>Start Date</b> property is used to specify the start date for an interval.
<b>Story Burn Up</b>	The <b>Story Burn Up</b> property is used to specify the amount of work completed within a sprint.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>X Axis Label</b>	The <b>X Axis Label</b> property is used to specify a label for the horizontal axis on a chart.
<b>Y Axis Label</b>	The <b>Y Axis Label</b> property is used to specify a label for the vertical axis on a chart.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

Properties	Description
<b>+/- Confidence %</b>	The <b>+/- Confidence %</b> property is used to set the range above and below the ideal confidence level that is shown in the cone of confidence in a burndown chart.

## Button

A **Button** is used to add a button to a page in the application. You can add use the **Events** property to add JavaScript that is triggered when a user clicks on the button.

### Properties

The **Button** control has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Events</b>	The <b>Events</b> property is used to add JavaScript to a page. For the <b>Button</b> and <b>Image</b> elements, click the button associated with the <b>Events</b> property to display the <b>Code Editor</b> dialog. In the <b>Code Editor</b> dialog, you can write code to be executed in association with the element (for example, code that executes when the user clicks a button).
<b>Font-Family</b>	The <b>Font-Family</b> property is used to set the font, such as verdana, courier, or arial.
<b>Font-Size</b>	The <b>Font-Size</b> property is used to set the size of a font.
<b>Font-Style</b>	The <b>Font-Style</b> property is used to set the displayed style of the text: normal, italic, or oblique.
<b>Font-Weight</b>	The <b>Font-Weight</b> property is used to set the displayed weight of the text: normal, bold, or bolder.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.

Properties	Description
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>Text-Align</b>	The <b>Text-Align</b> property is used to specify whether text should be right-aligned, left-aligned, centered, or justified.
<b>Text-Decoration</b>	The <b>Text-Decoration</b> property is used to specify whether text should be displayed normally, underlined, overlined, or with a strikethrough bar.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Card Wall

A **Card Wall** is used to add a card wall (also known as a storyboard) to a page in the application.

### Properties

The **Card Wall** control has the following properties:

Properties	Description
<b>CanChangeSource</b>	The <b>CanChangeSource</b> property is used to indicate whether a user can change the source while they are working on the page. Set this property to No to prevent users from changing the source while working on the page.
<b>Columns</b>	The <b>Columns</b> property is used to specify the item types to be shown in the columns of a <b>Card Wall</b> widget.

Properties	Description
<b>Configuration</b>	The <b>Configuration</b> property is used to specify the attributes shown on a <b>Card Wall</b> widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. <b>LayoutHeight</b> can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. <b>LayoutWidth</b> can be specified in pixels or as a percentage of the width of the containing pane.
<b>Show Totals</b>	The <b>Show Totals</b> property is used to display the total of a column of values.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Work Item Type</b>	The <b>Work Item Type</b> property is used to set the work item type that is used by this widget or control by default.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Custom Help Link

A **Custom Help Link** is used to add a custom link to an external help page from a page in the application. For example, the custom help link widget can be used to link to a page contained in your organization's intranet or to a page located in the Internet.

### Properties

The **Custom Help Link** control has the following properties:

Properties	Description
<b>CustomHelpURL</b>	The <b>CustomHelpURL</b> property is used to specify the URL for a custom help page to be displayed when the help link on a page is clicked.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.

Properties	Description
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Name</b>	The <b>Name</b> property is used to specify the name of a control or widget.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Document Store

A **Document Store** is used to provide a location in which documents can be stored for specific investments, work types, or log types.

### Properties

The **Document Store** control has the following properties:

Properties	Description
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.

Properties	Description
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Group Box

Use the **Group Box** to group attributes together under a common heading. A **Group Box** is often used to help make it easier for users to work with data by locating common and/or related data in a specific location.

### Properties

The **Group Box** control has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Font-Family</b>	The <b>Font-Family</b> property is used to set the font, such as verdana, courier, or arial.
<b>Font-Size</b>	The <b>Font-Size</b> property is used to set the size of a font.
<b>Font-Style</b>	The <b>Font-Style</b> property is used to set the displayed style of the text: normal, italic, or oblique.
<b>Font-Weight</b>	The <b>Font-Weight</b> property is used to set the displayed weight of the text: normal, bold, or bolder.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Legend</b>	The <b>Legend</b> property is used to specify whether a legend should be displayed on a chart.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.

Properties	Description
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>Text-Decoration</b>	The <b>Text-Decoration</b> property is used to specify whether text should be displayed normally, underlined, overlined, or with a strikethrough bar.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Horizontal Rule

A **Horizontal Rule** is used to add a simple horizontal line to any page in the application. A **Horizontal Rule** can be used to help make it easier for users to work with data by providing visual separation between sections of data.

### Properties

The **Horizontal Rule** control has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.

Properties	Description
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Iframe

An **Iframe** is used as a way to display a page from outside the application, as long as that page can be referenced from a URL. For example, you can show a page from your organization's intranet, a link to a report generated by another application, or to a page on the Internet. The default URL used in the **Iframe** is set using the **Src** property.

### Properties

The **Iframe** control has the following properties:

Properties	Description
<b>FrameBorder</b>	The <b>FrameBorder</b> property is used to specify the style of a frame border.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.

Properties	Description
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Src</b>	The <b>Src</b> property is used to specify the source URL for an image in an <b>Image</b> control.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Image

An **Image** is used to add a static image to a page. The image is set using the **Src** property as a URL to the location of the image on your organization's intranet or to a page on the Internet. You can also use the **Events** property to add JavaScript that is triggered when a user clicks on the image.

### Properties

The **Image** control has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.

Properties	Description
<b>Events</b>	The <b>Events</b> property is used to add JavaScript to a page. For the <b>Button</b> and <b>Image</b> elements, click the button associated with the <b>Events</b> property to display the <b>Code Editor</b> dialog. In the <b>Code Editor</b> dialog, you can write code to be executed in association with the element (for example, code that executes when the user clicks a button).
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Src</b>	The <b>Src</b> property is used to specify the source URL for an image in an <b>Image</b> control.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Item Dependency

An **Item Dependency** is used to show a dependency for a work item. This control must be configured using the **Configuration** property.

## Properties

The **Item Dependency** control has the following properties:

Properties	Description
<b>Configuration</b>	The <b>Configuration</b> property is used to specify the attributes shown on a <b>Card Wall</b> widget.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Adding a dependency control

The dependency control is added to a summary form for the each applicable work item type. For each dependency control, you need to create a custom summary form for the **Dependency Creation** dialog; essentially, this dialog is the user interface that is presented to users when they are adding a dependency to the grid.

### To add a dependency control

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, select the work item type, its associated view, and the form on which the dependency will appear.
4. Under **Controls**, click and drag the Investment Dependency control to the layout pane. Size and position the control as necessary.
5. Under **Properties**, click the button for the Configuration attribute to open the Investment Dependency Configuration dialog box.

6. In the **Side** drop-down, select *Source* or *Target*.
7. In the **Dependency Type** drop-down, select the dependency type that will appear in the view. This list shows only those dependencies whose source or target includes the work item type selected in the view layout.
8. Move the attributes that you want to display in the view under **Column Attributes**.
9. Click **Save**.
10. Under **View Layout**, click **Save**.

### **Adding a dependency creation form**

A work item dependency control can be added to a summary form for any applicable work item type. For each dependency control, you need to create a custom summary form for the Dependency Creation dialog; essentially, this dialog is the user interface that is presented to users when they are adding a dependency to the grid.

#### **To add a dependency creation form**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, from the **Projects** list, select a work item dependency, and then from the **Views** list select **Summary**. Click **New**.
4. Name the form and click **OK**.
5. Click and drag the appropriate attributes and controls to the layout pane and modify their properties as necessary.
6. Under **View Layout**, click **Save**.

### **Adding a work item dependency**

Configuring work item dependencies involves adding and configuring work item dependency controls and creating dependency-creation forms for each. The types of work item dependencies you can use is set in the **System Settings** module. When you put a work item dependency control on a form in the **View Designer** tab, you must configure the dependency by specifying the dependency type, which attributes are to be displayed, and whether the attributes come from the dependency, source side of the dependency, or target side of the dependency. Once the work item dependency control is configured, you need to create a summary form for users to create dependencies.

#### **To add a work item dependency**

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, select the work item type, its associated view, and the form on which the dependency will appear.
4. Under **Controls**, click and drag the Investment Dependency control to the layout pane. Size and position the control as necessary.
5. Under **Properties**, click the button for the Configuration attribute to open the Investment Dependency Configuration dialog box.
6. In the **Side** drop-down, select *Source* or *Target*.

7. In the **Dependency Type** drop-down, select the dependency type that will appear in the view. This list shows only those dependencies whose source or target includes the work item type selected in the view layout.
8. Move the attributes that you want to display in the view under **Column Attributes**.
9. Click **Save**.
10. Under **View Layout**, click **Save**.

## Label

A **Label** is used to add a text label to a page in the application.

## Properties

The **Label** control has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Font-Family</b>	The <b>Font-Family</b> property is used to set the font, such as verdana, courier, or arial.
<b>Font-Size</b>	The <b>Font-Size</b> property is used to set the size of a font.
<b>Font-Style</b>	The <b>Font-Style</b> property is used to set the displayed style of the text: normal, italic, or oblique.
<b>Font-Weight</b>	The <b>Font-Weight</b> property is used to set the displayed weight of the text: normal, bold, or bolder.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Text-Align</b>	The <b>Text-Align</b> property is used to specify whether text should be right-aligned, left-aligned, centered, or justified.

Properties	Description
<b>Text-Decoration</b>	The <b>Text-Decoration</b> property is used to specify whether text should be displayed normally, underlined, overlined, or with a strikethrough bar.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Link Label

A **Link Label** is used to add a hyperlink to a page in the application, from which users can link out to that information. For example, you can add a external link to a website, such as Google, an internal link to a page located within your organization's intranet, or to a page that is generated by another application.

### Properties

The **Link Label** control has the following properties:

Properties	Description
<b>Background-Color</b>	The <b>Background-Color</b> property is used to set the background color of an attribute, control, or widget.
<b>Color</b>	The <b>Color</b> property is used to set the font color of an attribute, control, or widget.
<b>Font-Family</b>	The <b>Font-Family</b> property is used to set the font, such as verdana, courier, or arial.
<b>Font-Size</b>	The <b>Font-Size</b> property is used to set the size of a font.
<b>Font-Style</b>	The <b>Font-Style</b> property is used to set the displayed style of the text: normal, italic, or oblique.

Properties	Description
<b>Font-Weight</b>	The <b>Font-Weight</b> property is used to set the displayed weight of the text: normal, bold, or bolder.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>TabIndex</b>	The <b>TabIndex</b> property is used to set the navigation order when using the <b>TAB</b> key. When the user tabs through the page, the field with a <b>Tab Index</b> of "1" will be first field, "2" second, and so on. For a read-only field, you should not add a <b>Tab Index</b> . This lets the user skip over this field when tabbing through the page.
<b>Text-Align</b>	The <b>Text-Align</b> property is used to specify whether text should be right-aligned, left-aligned, centered, or justified.
<b>Text-Decoration</b>	The <b>Text-Decoration</b> property is used to specify whether text should be displayed normally, underlined, overlined, or with a strikethrough bar.
<b>ToolTip</b>	The <b>ToolTip</b> property is used to add customized tool tips for the control or attribute and over rides the default tool tip.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## List

A **List** is used to add a work item grid to a page in the application.

## Properties

The **List** control has the following properties:

Properties	Description
<b>CanChangeSource</b>	The <b>CanChangeSource</b> property is used to indicate whether a user can change the source while they are working on the page. Set this property to No to prevent users from changing the source while working on the page.
<b>Columns</b>	The <b>Columns</b> property is used to specify the item types to be shown in the columns of a <b>Card Wall</b> widget.
<b>Configuration</b>	The <b>Configuration</b> property is used to specify the attributes shown on a <b>Card Wall</b> widget.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Show Totals</b>	The <b>Show Totals</b> property is used to display the total of a column of values.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Work Item Type</b>	The <b>Work Item Type</b> property is used to set the work item type that is used by this widget or control by default.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Single Object Chart

A **Single Object Chart** is used to show values in a summary view as a chart. The **Single Object Chart** must be configured using the **BrandXML**, **ConfigureXML**, **Data Processor**, and **Data Processor Assembly** properties.

## Properties

The **Single Object Chart** control has the following properties:

Properties	Description
<b>BrandXML</b>	The <b>BrandXML</b> property is used to control the visual display and color scheme of a chart.
<b>ConfigureXML</b>	The <b>ConfigureXML</b> property is used to control the data displayed on the single object chart.
<b>DataProcessor</b>	The <b>DataProcessor</b> property is used to specify the code that generates a chart. Effectively, this determines the type of chart.
<b>DataProcessorAssembly</b>	The <b>DataProcessorAssembly</b> property is used to specify the location of a custom chart data processor.
<b>Height</b>	The <b>Height</b> property is used to specify the height (in pixels) of an attribute, control, or widget.
<b>Left</b>	The <b>Left</b> property is used to set the number of pixels from the left side of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>Top</b>	The <b>Top</b> property is used to set the number of pixels from the top of a page that an attribute, control, or widget is positioned. Use this property to align the attributes, controls, and widgets on a page.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Width</b>	The <b>Width</b> property is used to specify the width (in pixels) of an attribute, control, or widget.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Adding a single-object chart

A single object chart is an XML-based chart type that can be added to summary views and homepages. Using a single object chart, you can quickly and visually represent several types of data for users.

The following visual shows a single object chart inserted into a summary view. The attributes used to render the chart are also placed on the view. The single object chart provides a quick visual reference for the user of this summary view.

The configurations for the single object chart are made in two XML-based properties in the **View Designer** tab:

- **BrandXML**—This property controls the visual display and color scheme of the chart.
- **ConfigureXML**—This property controls the data displayed on the single object chart.

Example files for both a pie chart and gauge chart type are provided. The files for the pie chart type are PESAlignmentPieSOChartBrand.xml and PESAlignmentPieSOChartConfigure.xml, respectively.

The pie chart type can easily be modified to render several other chart types, such as a bar chart and a radar chart, simply by changing the chart type in the XML.

The files for the gauge chart type are PESSOGaugeChartBrand.xml and PESSOGaugeChartConfigure.xml, respectively.

These files are located in your installation directory, by default at C:\Program Files\Serena\Mariner\Mariner\charts\config. You will need the appropriate files to paste into the Code Editor dialog box and then modify for your purposes.

### To add a single object chart

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Designer** tab.
3. Under **View Layout**, select a work item and a view to which you are adding a single object chart.
4. Under **Controls**, select the **Single Object Chart** control and drag it to the layout pane.
5. Under **Properties**, select **BrandXML** to open the **Code Editor** dialog box. Add the XML for the chart.
6. Click **Save**.
7. Under **Properties**, select **ConfigureXML** to open the **Code Editor** dialog box. Add the XML for the chart.
8. Click **Save**.
9. Click **Save**.

## Summary View

A **Summary View** is used to add summary information to a page in the application. Summary information can be associated with other information, such as lists or backlogs. Summary information can be configured so that changes made to summary data updates any lists to which that summary is associated.

### Properties

The **Summary View** control has the following properties:

Properties	Description
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.
<b>Subscriptions</b>	The <b>Subscriptions</b> property is used to list events for which a widget is subscribed.
<b>Title</b>	The <b>Title</b> property is used to specify a title that is visible to team members while using the widget or control.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## Widget Wireup

A **Widget Wireup** is used to make associations between widgets. For example, you could use a wireup to associate a **List** widget and a **Summary View** widget so that work item details are opened in a **Summary View** when that work item is selected in a **List**. And then when updated information is saved in the **Summary View**, that data will then be refreshed in the **List**.

### Properties

The **Widget Wireup** control has the following properties:

Properties	Description
<b>ID</b>	Read only. The <b>ID</b> property is used to show the unique ID of the design control.
<b>LayoutHeight</b>	The <b>LayoutHeight</b> property is used to specify the height of a control or widget. LayoutHeight can be specified in pixels or as a percentage of the height of the containing pane.
<b>LayoutWidth</b>	The <b>Layout Width</b> property is used to specify the width of a control or widget. LayoutWidth can be specified in pixels or as a percentage of the width of the containing pane.

Properties	Description
<b>Name</b>	The <b>Name</b> property is used to specify the name of a control or widget.
<b>Publish Event</b>	The <b>Publish Event</b> property specifies the event that the <b>Widget Wireup</b> listens for.
<b>Publisher ID</b>	The <b>Publisher ID</b> property specifies the ID of of the widget from which a <b>Widget Wireup</b> control will listen for a specific publish event.
<b>Subscriber Action</b>	The <b>Subscriber Action</b> property specifies the action that will be sent to the widget specified by the <b>Subscriber ID</b> attribute.
<b>Subscriber ID</b>	The <b>Subscriber ID</b> property is the ID of a widget to which a <b>Widget Wireup</b> will send a configured publish action. The <b>Subscriber ID</b> is always the <b>ID</b> for the widget on which the widget wireup is located.
<b>Type</b>	Read only. The <b>Type</b> property is used to show the control type. For example, linklabel, button, hr, and so on.
<b>Z-Index</b>	The <b>Z-Index</b> property is used to set the order by which attributes, controls, and widgets are layered on a page. For example, you can layer a form on top of an image.

## View Management

You can use the **View Management** tab to manage work item types, log views, and the order in which views appear in modules.

For more information, see the following topics:

- [Item Views \[page 284\]](#)
- [View Order \[page 285\]](#)

### Item Views

Use the **Investment Views** tab to add views to the **Projects** module. New work item views can be associated with existing work item types from the **Investment Types** tab in the **Types Setup** tab.

### Adding a work item view

Add a new work item view. Once added, work item views will be available when you set views using the **Investment Types** tab in the **Types Setup** tab.

#### To add a work item view

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Management** tab.
3. Select the **Investment Views** tab.

4. Click **New**.
5. Enter a name, a description, and choose an icon.
6. Click **Save**.

### Adding a summary view

Use custom summary views to capture additional work item data in the **Projects** module.

#### To add a summary view

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Management** tab.
3. Select the **Investment Views** tab.
4. Click **New**.
5. Enter a name, a description, and choose an icon.
6. Click **Save**.

### Deleting a work item view

If you don't need a work item view, you can delete it.

#### To delete a work item view

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Management** tab.
3. Select the **Investment Views** tab.
4. Under **Investment Views**, select a view and click **Delete**. You cannot delete a system view.

### View Order

Use the View Order tab to configure order in which views are listed in modules. Changes to the view order will affect all users in the same way regardless of their user role.

### Editing the order in which views appear

Views can be shown in any order, from left to right.

#### To edit the order in which views appear

1. From the application toolbar, click **Setup**, and then select **Customization**.
2. Select the **View Management** tab.
3. Select the **View Order** tab.
4. From the **Module Name** drop-down, select the module in which you want to re-order views.
5. Under **Available Views**, select a view and click **Up** or **Down** for each view you want to move.
6. Click **Save**.

## Serena Agile Web Services API

For more information, see the following topics:

- [Authentication \[page 286\]](#)
- [Item Management \[page 287\]](#)

### Authentication

This section details the methods and parameters for the Authentication Web Service. The Authentication Web Service is available at the URL **https://<asppserver>/Agile/IntegrationAPI/Authentication.asmx**, where <appserver> is the application server. The WSDL for this set of methods can be retrieved at the URL **https://<asppserver>/Agile/IntegrationAPI/Authentication.asmx?wsdl**.

The Authentication webservice must be called using the HTTPS protocol.

The Authentication webservice provides an authentication token that must be supplied with all web service calls (excepting the Logon method). The token is valid until a 20 minute interval passes since the token is used. Each use of the token resets the expiration timer.

When a session is completed, the Logoff method should be called to cause the authentication token to expire immediately.

For more information, see the following topics:

- [Logon \[page 286\]](#)
- [Logoff \[page 287\]](#)

### Logon

This method is required to create an authenticated Web services session. It must be called before any other webservice methods can be used. This method returns a token which is supplied to all of the other methods.

The parameters for the **Logon** method are:

Parameter	Datatype	Description
<b>username</b>	string	The user name of the user who is logging in.
<b>password</b>	string	The password associated with the <b>username</b> .
<b>dbtitle</b>	string	The connection name of the database to connect to.

### XML request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:agil="http://serena.com/Agile">
  <soapenv:Header/>
  <soapenv:Body>
    <agil:Logon>
```

```

        <agil:username>user@example.com</agil:username>
        <agil:password>p@$$w0rD</agil:password>
        <agil:dbtitle>AGILE_database_name</agil:dbtitle>
    </agil:Logon>
</soapenv:Body>
</soapenv:Envelope>

```

### XML response

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <soap:Body>
        <LogonResponse xmlns="http://serena.com/Agile">
            <LogonResult>5092995f-f90b-4743-a0f4-1c74de64d2caAGILE_database_name</LogonResult>
        </LogonResponse>
    </soap:Body>
</soap:Envelope>

```

### Logoff

This method ends an authenticated Web services session, causing the authentication token to expire. It should be called after a web services session. The **Logoff** method takes no parameters.

If the Logoff method is not called, the authentication token will expire after the first 20 minute interval of non-use.

### XML request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:agil="http://serena.com/Agile">
    <soapenv:Header/>
    <soapenv:Body>
        <agil:Logoff>agil:token>509b-4743-a0f4-1c74de64d2caAGILE_database</agil:token>
    </agil:Logoff>
    </soapenv:Body>
</soapenv:Envelope>

```

### XML response

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <soap:Body>
        <LogoffResponse xmlns="http://serena.com/Agile"/>
    </soap:Body>
</soap:Envelope>

```

## Item Management

This section details the methods and parameters for the Item Management Web Service. The Item Management Web Service is available at the URL **http://<asppserver>/Agile/IntegrationAPI/ItemManagement.asmx**, where <asppserver> is the application

server. The WSDL for this set of methods can be retrieved at the URL **<http://<asppserver>/Agile/IntegrationAPI/ItemManagement.asmx?wsdl>**.

Several of the methods use a parameter called **attribute[]**. This is an array of key/value pairs where the key is the XML name of the attribute, and the value is the string representation of the value. The value string will need to be formatted in such a way that it can be converted into the correct type to match the attribute type.

Date types should be in ISO 8061 format and will be assumed to be in UTC.

List attributes can be set by supplying the list item name for the value.

URL Link attributes are a composite made up of three parts: **URL**, **DisplayName**, and **UseDisplayName**. If an attribute key is specified by using its XML name, then the URL and DisplayName portions will be set to the value supplied. You may get/set any part of a URL Link by appending ",part=<part>" to the XML name of the attribute key. For example:

- My-Link
- My-Link,part=URL
- My-Link,part=DisplayName
- My-Link,part=UseDisplayName

For more information, see the following topics:

- [ItemManagement Webservice Methods \[page 288\]](#)
- [Item Management Types \[page 311\]](#)

## ItemManagement Webservice Methods

This section describes the Web service API calls that are available in the ItemManagement API. The calls represent the Web service operations that are invoked from a client and performed on the Serena Agile server. The calls receive one or more arguments from the client, perform an operation on the server, and return an XML response to the client when applicable.

The following table lists all supported calls in alphabetical order, followed by a brief description of each operation. Select a call to view detailed information including:

- **Description**  
A brief description of the call.
- **Parameters**  
A table describing the parameters for each call. Both simple and complex types are listed for each argument. For each complex type parameter, you can click the parameter name for a detailed description. For more information on these types, see [Item Management Types \[page 311\]](#).
- **Response**  
A brief description of the call's response. For each complex type response, you can click the response name for a detailed description.
- **Usage**  
Any notes, additional details, and concerns regarding the call are addressed here.

- **Faults**

Possible error values are listed here.

- **XML**

An example of the actual XML payload being sent is displayed here. The XML not only shows the call and its respective elements, you can also see detailed examples of each argument and how to format the expected data.

### Calls Available

Call	Description
<a href="#">AssignWorkItem [page 290]</a>	This method moves a work item assigned to one backlog by assigning it to a new backlog.
<a href="#">CreateItem [page 290]</a>	This method creates an item, with a specified set of properties and attributes.
<a href="#">CreateWorkItem [page 291]</a>	This method creates a work item, with a specified set of properties and attributes.
<a href="#">DeleteItem [page 292]</a>	This method deletes a specified item.
<a href="#">GetWorkItem [page 295]</a>	This method gets attributes associated with a work item with a specified ID.
<a href="#">GetWorkItemChangeForTransaction [page 296]</a>	This method gets a list of changes made to a work item with a specified ID.
<a href="#">GetWorkItemList [page 296]</a>	This method gets a list of work items in a specified backlog.
<a href="#">MapAgileWorkItem [page 297]</a>	This method maps an item in Serena Agile with another application, such as Serena Business Mashups.
<a href="#">UpdateItem [page 297]</a>	This method updates the attributes associated with an item.
<a href="#">UpdateWorkItem [page 297]</a>	This method updates the attributes associated with a work item.
<a href="#">DeleteWorkItem [page 292]</a>	This method deletes a specified work item.
<a href="#">GetItem [page 292]</a>	This method gets the attributes for an item with a specified ID.
<a href="#">GetItems [page 294]</a>	This method gets a list of items matching a specified pattern.

Call	Description
<a href="#">GetAgileToSBMMappings [page 292]</a>	This method gets an XML document specifying the relationship between attributes in Serena Agile and Serena Business Mashups.

### ***AssignWorkItem***

#### **Description**

This method moves a work item assigned to one backlog by assigning it to a new backlog.

#### **Arguments**

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>id</b>	int	The ID of the work item to be assigned.
<b>sourceBacklogId</b>	int	The ID of the backlog to which the work item is assigned.
<b>targetBacklogId</b>	int	The ID of the backlog to which the work item will be assigned.

### ***CreateItem***

#### **Description**

This method creates an item with a specified set of properties and attributes.

#### **Arguments**

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>typeName</b>	string	The system name associated with type of item to create, such as a Folder, Project, Release, Sprint, or Team. System names for these types are shown in the table below.
<b>name</b>	string	The name to be given to the item.
<b>parentId</b>	int	The Id of the parent item. If the item is to be created as a child of the root, use an Id value of 1.
<b>fields</b>	ItemAttribute[]	An array of attributes and values to be set on the item.

System names for items that can be created with the **CreateItem** method are shown in the following table:

Item type	System name
<b>Folder</b>	Portfolio
<b>Project</b>	Agile_Product
<b>Release</b>	Agile_Release
<b>Sprint</b>	Agile_Sprint
<b>Team</b>	Agile_Team

### **CreateWorkItem**

#### **Description**

This method creates a work item, with a specified set of properties and attributes.

#### **Arguments**

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>typeName</b>	string	The system name associated with type of work item to create, such as a Defect, Epic, Story, or Task. System names for these work types are shown in the table below.
<b>parentId</b>	int	The Id of the parent item.
<b>backlogId</b>	int	The Id of the backlog to which the work item is assigned.
<b>name</b>	string	The name to be given to the work item.
<b>fields</b>	ItemAttribute[]	An array of attributes and values to be set on the work item.

System names for work items that can be created with the **CreateWorkItem** method are shown in the following table:

Item type	System name
<b>Defect</b>	Agile_Defect
<b>Epic</b>	Agile_Epic

Item type	System name
Story	PES-User-Story
Task	Agile_Task

**DeleteItem****Description**

This method deletes a specified item.

**Arguments**

Parameter	Datatype	Description
token	string	A security token authorizing access to the web service.
id	int	The Id of the item to delete.

**DeleteWorkItem****Description**

This method deletes a specified work item.

**Arguments**

Parameter	Datatype	Description
token	string	A security token authorizing access to the web service.
id	int	The Id of the work item to delete.

**GetAgileToSBMMappings****Description**

This method gets an XML document specifying the relationship between attributes in Serena Agile and Serena Business Mashups.

**Arguments**

Parameter	Datatype	Description
token	string	A security token authorizing access to the web service.

**GetItem****Description**

This method gets the attributes for an item with a specified ID.

## Arguments

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>id</b>	int	The ID of the top level project hierarchy from which to get items. The top level project has an ID value of 1.
<b>attributeKeys</b>	string[]	A list of XML system names for the desired attributes to be returned.

## XML request

The following request specifies items of type Agile\_Release under the root, and requests the start date attribute of the releases to be returned.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:agil="http://serena.com/Agile">
  <soapenv:Header/>
  <soapenv:Body>
    <agil:GetItems>
      <agil:token>authtoken</agil:token>
      <agil:rootId>1</agil:rootId>
      <agil:typeName>Agile_Release</agil:typeName>
      <agil:attributeKeys>
        <agil:string>Agile_IntervalStartDate</agil:string>
      </agil:attributeKeys>
      <agil:filter>
        <agil:FilterRule>
          <agil:key></agil:key>
          <agil:op></agil:op>
          <agil:value></agil:value>
        </agil:FilterRule>
      </agil:filter>
    </agil:GetItems>
  </soapenv:Body>
</soapenv:Envelope>
```

## XML response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetItemsResponse xmlns="http://serena.com/Agile">
      <GetItemsResult>
        <Item>
          <id>387</id>
          <parentId>371</parentId>
          <name>The Release Name</name>
          <itemType>Agile_Release</itemType>
```

```

<attributes>
  <ItemAttribute>
    <key>Agile_IntervalStartDate</key>
    <value>2010-02-25T08:00:00</value>
  </ItemAttribute>
</attributes>
</Item>
</GetItemsResult>
</GetItemsResponse>
</soap:Body>
</soap:Envelope>

```

## GetItems

### Description

This method gets a list of items matching a specified pattern.

### Arguments

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>rootId</b>	int	The ID of the top level project hierarchy from which to get items. The top level project has an ID value of 1.
<b>typeName</b>	string	The type items to get.
<b>attributeKeys</b>	string[]	A list of XML system names for the desired attributes to be returned.
<b>filter</b>	array of filter rules	The filters to be applied when selecting items.

### XML request

The following request specifies items of type Agile\_Release under the root, and requests the start date attribute of the releases to be returned.

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:agil="http://serena.com/Agile">
  <soapenv:Header/>
  <soapenv:Body>
    <agil:GetItems>
      <agil:token>authtoken</agil:token>
      <agil:rootId>1</agil:rootId>
      <agil:typeName>Agile_Release</agil:typeName>
      <agil:attributeKeys>
        <agil:string>Agile_IntervalStartDate</agil:string>
      </agil:attributeKeys>
    </agil:GetItems>
  </soapenv:Body>
</soapenv:Envelope>

```

```

<agil:filter>
  <agil:FilterRule>
    <agil:key></agil:key>
    <agil:op></agil:op>
    <agil:value></agil:value>
  </agil:FilterRule>
</agil:filter>
</agil:GetItems>
</soapenv:Body>
</soapenv:Envelope>

```

## XML response

```

<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soap:Body>
    <GetItemsResponse xmlns="http://serena.com/Agile">
      <GetItemsResult>
        <Item>
          <id>387</id>
          <parentId>371</parentId>
          <name>The Release Name</name>
          <itemType>Agile_Release</itemType>
          <attributes>
            <ItemAttribute>
              <key>Agile_IntervalStartDate</key>
              <value>2010-02-25T08:00:00</value>
            </ItemAttribute>
          </attributes>
        </Item>
      </GetItemsResult>
    </GetItemsResponse>
  </soap:Body>
</soap:Envelope>

```

## GetWorkItem

### Description

This method gets attributes associated with a work item with a specified ID.

### Arguments

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>id</b>	int	The Id of the work item.
<b>attributeKeys</b>	string[]	A list of XML system names for the desired attributes to be returned.

## GetWorkItemChangeForTransaction

### Description

This method gets a list of changes made to a work item with a specified ID.

### Arguments

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>transactionGuid</b>	string	The Id of the transaction for which to get changes.
<b>externalSource</b>	string	If this parameter is specified, the change list will include only items mapped in Serena Agile and the external source. To specify items mapped in Serena Business Mashups, set this parameter to the value "SBM".

## GetWorkItemList

### Description

This method gets a list of work items in a specified backlog.

### Arguments

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>backlogId</b>	int	The Id of the backlog to which the work items are assigned.
<b>itemTypes</b>	string[]	A list of XML system names for the work item types to be returned, such as Defect, Epic, Story, and Task. System names for these types are shown in the table below.
<b>attributeKeys</b>	string[]	A list of the desired attributes to be returned.
<b>showAll</b>	boolean	Specifies whether to show all xxxxx.

System names for work items that can be created with the **CreateWorkItem** method are shown in the following table:

Item type	System name
<b>Defect</b>	Agile_Defect

Item type	System name
<b>Epic</b>	Agile_Epic
<b>Story</b>	PES-User-Story
<b>Task</b>	Agile_Task

### ***MapAgileWorkItem***

#### **Description**

This method maps an item in Serena Agile with another application, such as Serena Business Mashups.

#### **Arguments**

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>sourceName</b>	string	The name associated with the application to which the Agile item is mapped, such as "SBM".
<b>itemList</b>	ItemMap[]	A list of mapped items.

### ***UpdateItem***

#### **Description**

This method updates the attributes associated with an item.

#### **Arguments**

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>rootId</b>	int	The ID of the item to update
<b>fields</b>	ItemAttribute[]	A list of attributes and values to be updated on the item.

### ***UpdateWorkItem***

#### **Description**

This method updates the attributes associated with a work item.

## Arguments

Parameter	Datatype	Description
<b>token</b>	string	A security token authorizing access to the web service.
<b>rootId</b>	int	The ID of the work item to update
<b>fields</b>	ItemAttribute[]	A list of attributes and values to be updated on the work item.

## WSDL

This WSDL for the ItemManagement Web Service is as follows:

```
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  <wsdl:types>
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            <s:element minOccurs="0" maxOccurs="1" name="name" type="s:string" />
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      </s:element>
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```

```

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</s:element>
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```

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</wsdl:message>
<wsdl:message name="DeleteWorkItemSoapOut">
    <wsdl:part name="parameters" element="tns>DeleteWorkItemResponse" />
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```

```
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</wsdl:message>
<wsdl:message name="AssignWorkItemSoapOut">
  <wsdl:part name="parameters" element="tns:AssignWorkItemResponse" />
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  <wsdl:part name="parameters" element="tns:GetWorkItemChangesForTransaction" />
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<wsdl:message name="GetWorkItemChangesForTransactionSoapOut">
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<wsdl:message name="GetItemSoapOut">
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</wsdl:operation>
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  <wsdl:output message="tns:UpdateWorkItemSoapOut" />
</wsdl:operation>
<wsdl:operation name="DeleteWorkItem">
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  <wsdl:output message="tns:UpdateItemSoapOut" />
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  <wsdl:output message="tns:GetItemsSoapOut" />
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```

```
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  <soap:binding transport="http://schemas.xmlsoap.org/soap/http" />
  <wsdl:operation name="CreateWorkItem">
    <soap:operation soapAction="http://serena.com/Agile/CreateWorkItem" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetWorkItem">
    <soap:operation soapAction="http://serena.com/Agile/GetWorkItem" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetWorkItemList">
    <soap:operation soapAction="http://serena.com/Agile/GetWorkItemList" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="UpdateWorkItem">
    <soap:operation soapAction="http://serena.com/Agile/UpdateWorkItem" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="DeleteWorkItem">
    <soap:operation soapAction="http://serena.com/Agile/DeleteWorkItem" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="AssignWorkItem">
    <soap:operation soapAction="http://serena.com/Agile/AssignWorkItem" style="document" />
    <wsdl:input>
      <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
```

```
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetWorkItemChangesForTransaction">
    <soap:operation soapAction="http://serena.com/Agile/GetWorkItemChangesForTransa
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetItem">
    <soap:operation soapAction="http://serena.com/Agile/GetItem" style="document" />
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="CreateItem">
    <soap:operation soapAction="http://serena.com/Agile/CreateItem" style="document"
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="UpdateItem">
    <soap:operation soapAction="http://serena.com/Agile/UpdateItem" style="document"
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="DeleteItem">
    <soap:operation soapAction="http://serena.com/Agile/DeleteItem" style="document"
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetItems">
    <soap:operation soapAction="http://serena.com/Agile/GetItems" style="document" /
    <wsdl:input>
        <soap:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal" />
    </wsdl:output>
</wsdl:operation>
```

```
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="MapAgileWorkItem">
  <soap:operation soapAction="http://serena.com/Agile/MapAgileWorkItem" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetAgileToSBMMappings">
  <soap:operation soapAction="http://serena.com/Agile/GetAgileToSBMMappings" style="document" />
  <wsdl:input>
    <soap:body use="literal" />
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal" />
  </wsdl:output>
</wsdl:operation>
</wsdl:binding>
<wsdl:binding name="ItemManagementSoap12" type="tns:ItemManagementSoap">
  <soap12:binding transport="http://schemas.xmlsoap.org/soap/http" />
  <wsdl:operation name="CreateWorkItem">
    <soap12:operation soapAction="http://serena.com/Agile/CreateWorkItem" style="document" />
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetWorkItem">
    <soap12:operation soapAction="http://serena.com/Agile/GetWorkItem" style="document" />
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="GetWorkItemList">
    <soap12:operation soapAction="http://serena.com/Agile/GetWorkItemList" style="document" />
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="UpdateWorkItem">
    <soap12:operation soapAction="http://serena.com/Agile/UpdateWorkItem" style="document" />
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
  </wsdl:operation>
</wsdl:binding>
```

```
<wsdl:output>
  <soap12:body use="literal" />
</wsdl:output>
</wsdl:operation>
<wsdl:operation name="DeleteWorkItem">
  <soap12:operation soapAction="http://serena.com/Agile/DeleteWorkItem" style="document">
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
<wsdl:operation name="AssignWorkItem">
  <soap12:operation soapAction="http://serena.com/Agile/AssignWorkItem" style="document">
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
<wsdl:operation name="GetWorkItemChangesForTransaction">
  <soap12:operation soapAction="http://serena.com/Agile/GetWorkItemChangesForTransaction">
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
<wsdl:operation name="GetItem">
  <soap12:operation soapAction="http://serena.com/Agile/GetItem" style="document">
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
<wsdl:operation name="CreateItem">
  <soap12:operation soapAction="http://serena.com/Agile/CreateItem" style="document">
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal" />
    </wsdl:output>
  </wsdl:operation>
<wsdl:operation name="UpdateItem">
  <soap12:operation soapAction="http://serena.com/Agile/UpdateItem" style="document">
    <wsdl:input>
      <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
```

```

        <soap12:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="DeleteItem">
    <soap12:operation soapAction="http://serena.com/Agile/DeleteItem" style="document" />
    <wsdl:input>
        <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap12:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetItems">
    <soap12:operation soapAction="http://serena.com/Agile/GetItems" style="document" />
    <wsdl:input>
        <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap12:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="MapAgileWorkItem">
    <soap12:operation soapAction="http://serena.com/Agile/MapAgileWorkItem" style="document" />
    <wsdl:input>
        <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap12:body use="literal" />
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetAgileToSBMMappings">
    <soap12:operation soapAction="http://serena.com/Agile/GetAgileToSBMMappings" style="document" />
    <wsdl:input>
        <soap12:body use="literal" />
    </wsdl:input>
    <wsdl:output>
        <soap12:body use="literal" />
    </wsdl:output>
</wsdl:operation>
</wsdl:binding>
<wsdl:service name="ItemManagement">
    <wsdl:port name="ItemManagementSoap" binding="tns:ItemManagementSoap">
        <soap:address location="http://agile64bvt01/Agile/integrationapi/itemmanagement" />
    </wsdl:port>
    <wsdl:port name="ItemManagementSoap12" binding="tns:ItemManagementSoap12">
        <soap12:address location="http://agile64bvt01/Agile/integrationapi/itemmanagement" />
    </wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

## Item Management Types

This section provides detailed descriptions of Serena Agile Web service arguments. The arguments are the request parameters that can be used by Item Management Web service operations. The arguments listed here contain one or more parameters, which

make up the data being sent to the Web service. The parameters listed in each argument are either simple or complex types themselves. If the type is complex, a link to further detail of that type will be provided in the **Type** column.

The following table lists all supported arguments in alphabetical order, followed by a brief description of each type. Select an argument to view detailed information including:

- **Description**

A brief description of the argument.

- **Parameters**

A table describing the types for each argument. Both simple and complex types are listed for each argument. For each complex type, you can click the type name for a detailed description.

- **Usage**

Any notes, additional details, and concerns regarding the argument are addressed here.

- **XML**

An example of the actual XML being sent is displayed here. The XML not only shows the argument and its respective elements, you can also see detailed examples of each element and how to format the expected data.

## Arguments

Argument	Description
<a href="#">ItemAttribute [page 315]</a>	Represents an attribute that is set for an item.
<a href="#">WorkItem [page 316]</a>	Represents a work item and the attributes set on it.
<a href="#">Item [page 314]</a>	Represents an item and the attributes set on it.
<a href="#">ItemChangeRecord [page 315]</a>	Represents a set of changes that have been made to attributes of a work item.
<a href="#">FilterRule [page 313]</a>	Represents a filter rule to use selecting work items.
<a href="#">ItemMap [page 316]</a>	Represents a mapping between an item in Serena Agile and another application, such as Serena Business Mashups.
<a href="#">AgileToSBMMappingContainer [page 312]</a>	Represents a set of mappings that associate items in Serena Agile and Serena Business Mashups.
<a href="#">IdMap [page 314]</a>	Represents a mapping that associates an Id in Serena Agile to an Id in another application, such as Serena Business Mashups.

### ***AgileToSBMMappingContainer***

#### **Description**

The AgileToSBMMappingContainer type represents a set of mappings that associate items in Serena Agile and Serena Business Mashups.

This type is used in the response document for the GetAgileToSBMMappings method.

### Parameters

Parameter	Datatype	Description
<b>globalAttributeMap</b>	IdMap[]	An array of IdMap pairs that map the system names of an attribute in each application.
<b>itemMap</b>	IdMap[]	An array of IdMap pairs that map the system names of work types in each application.
<b>listValueMap</b>	IdMap[]	An array of IdMap pairs that map the values of list items in each application.

### AttributeChange

The AttributeChange type represents a single change that has been made to an attribute of a work item. An array of AttributeChange values is contained in the ItemChangeRecord type. The parameters for the **AttributeChange** method are:

Parameter	Datatype	Description
<b>name</b>	string	The XML system name corresponding to the attribute.
<b>previousValue</b>	string	The value of the attribute before the change
<b>currentValue</b>	string	The current value of the attribute

### FilterRule

#### Description

The FilterRule type represents a single rule used to filter items returned in a query. An array of FilterRule values is contained in the GetItems method.

#### Parameters

Parameter	Datatype	Description
<b>key</b>	string	The XML system name of the attribute to filter on.

Parameter	Datatype	Description
<b>op</b>	string	<p>The comparison operator. If multiple filter rules are specified, they are ORed together. If the filter value is null, then the attribute will be tested for nullity. The comparison operators can be as follows:</p> <ul style="list-style-type: none"> <li>▪ <b>eq, =, ==</b> <i>EQUAL</i> The filter value matches the attribute value exactly.</li> <li>▪ <b>ne, !=, &lt;&gt;</b> <i>NOT EQUAL</i> The filter value does not match the attribute value.</li> <li>▪ <b>lt, &lt;</b> <i>LESS THAN</i> The attribute value is less than the filter value.</li> <li>▪ <b>gt, &gt;</b> <i>GREATER THAN</i> The attribute value is greater than the filter value.</li> </ul> <p>String, list, and URL attributes should only be used with the <b>EQUAL</b> and <b>NOT EQUAL</b> filter rules.</p>
<b>value</b>	string	The attribute value to compare.

### **IdMap**

#### **Description**

The IdMap type represents a mapping of an object's Id in Serena Agile to the corresponding object Id in SBM. An array of IdMap values is contained in the AgileToSBMMappingContainer type.

#### **Parameters**

Parameter	Datatype	Description
<b>sourceId</b>	string	The Id in Serena Agile.
<b>targetId</b>	string	The Id in SBM

### **Item**

The Item type represents a single item. An array of this type is used in the response for the GetItems method.

Parameter	Datatype	Description
<b>id</b>	int	The Id of the item.
<b>parentId</b>	int	The Id of the item's parent item.
<b>name</b>	string	The name of the item.

Parameter	Datatype	Description
<b>externalId</b>	string	The Id of the item in another application integrated with Serena Agile.
<b>itemType</b>	string	The system name of the type of the item, as shown in the table below.
<b>attributes</b>	ItemAttribute[]	An array of attributes and attribute values associated with the item.

System names for **Item** types are shown in the following table:

Item type	System name
<b>Folder</b>	Portfolio
<b>Project</b>	Agile_Product
<b>Release</b>	Agile_Release
<b>Sprint</b>	Agile_Sprint
<b>Team</b>	Agile_Team

### **ItemAttribute**

The ItemAttribute type represents a key/value pair that defines an attribute on an item. This type is used as a parameter for the [CreateItem \[page 290\]](#), CreateWorkItem, UpdateItem, UpdateWorkItem methods. It is used as a member of the Item and WorkItem types. The parameters for the **ItemAttribute** method are:

Parameter	Datatype	Description
<b>key</b>	string	The XML system name corresponding to the attribute.
<b>value</b>	string	The value of the attribute

### **ItemChangeRecord**

The ItemChangeRecord type represents a set of changes that have been made to attributes of a work item. This type is used as a parameter for the [GetWorkItemChangeForTransaction \[page 296\]](#) method. It is used as a member of the xxxxx types. The parameters for the **ItemChangeRecord** type are:

Parameter	Datatype	Description
<b>id</b>	int	The Id of the work item.

Parameter	Datatype	Description
<b>name</b>	string	The name of the work item.
<b>externalId</b>	string	xxxxx
<b>itemType</b>	string	The system name of the type of the work item, as shown in the table below.
<b>attributeChanges</b>	AttributeChange[]	xxxxx

System names for work item types are shown in the following table:

Item type	System name
<b>Defect</b>	Agile_Defect
<b>Epic</b>	Agile_Epic
<b>Story</b>	PES-User-Story
<b>Task</b>	Agile_Task

### *ItemMap*

#### **Description**

The **ItemMap** type represents a mapping of the Ids of corresponding items in Serena Agile and a different integrated application. An array of **ItemMap** values is contained in the **GetItemsResponse** type and **MapAgileWorkItem** method.

#### **Parameters**

Parameter	Datatype	Description
<b>itemId</b>	int	Id of the item in Serena Agile.
<b>externalId</b>	string	Id of the item in a different integrated application.

### *WorkItem*

The **WorkItem** type represents a work item and the attributes that are set for it. This type is used as a parameter for the [GetWorkItem \[page 295\]](#), **CreateWorkItem**, **UpdateItem**, **UpdateWorkItem** methods. It is used as a member of the **Item** and **WorkItem** types. The parameters for the **ItemAttribute** method are:

Parameter	Datatype	Description
<b>id</b>	int	The Id associated with the work item.

Parameter	Datatype	Description
<b>parentId</b>	int	The Id associated with the parent of the work item.
<b>backlogId</b>	string	If the work item is assigned to a backlog, this parameter is the Id associated with the backlog.
<b>name</b>	string	The name given to the work item.
<b>externalId</b>	string	The Id of the work item in another system, such as SBM.
<b>itemType</b>	string	The system name of the type of the work item, as shown in the table below.
<b>attributes</b>	ItemAttribute[]	An array of key/value pairs representing the attribute set on the work item.

System names for work item types are shown in the following table:

Item type	System name
<b>Defect</b>	Agile_Defect
<b>Epic</b>	Agile_Epic
<b>Story</b>	PES-User-Story
<b>Task</b>	Agile_Task