Structure.Gantt

Structure.Gantt 3.5 Documentation

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Add the power of Gantt charts to Jira project management. Structure.Gantt is the most popular extension for Structure.

1 Getting Started with Structure.Gantt

Structure.Gantt adds the power of familiar Gantt charts to Jira, so you can instantly visualize issue dependencies and timelines on a global scale.

Sorry, the widget is not supported in this export.
But you can reach it using the following URL:

https://www.youtube.com/watch?v=dBuPMkbk5pU&rel=0&autoplay=0&modestbranding=1

The following articles will help you quickly get started building powerful Gantt charts.

- Your First Gantt Chart(see page 19)
- Gantt Chart Elements(see page 28)
- Working with Gantt Charts(see page 38)

This guide makes a couple of assumptions:

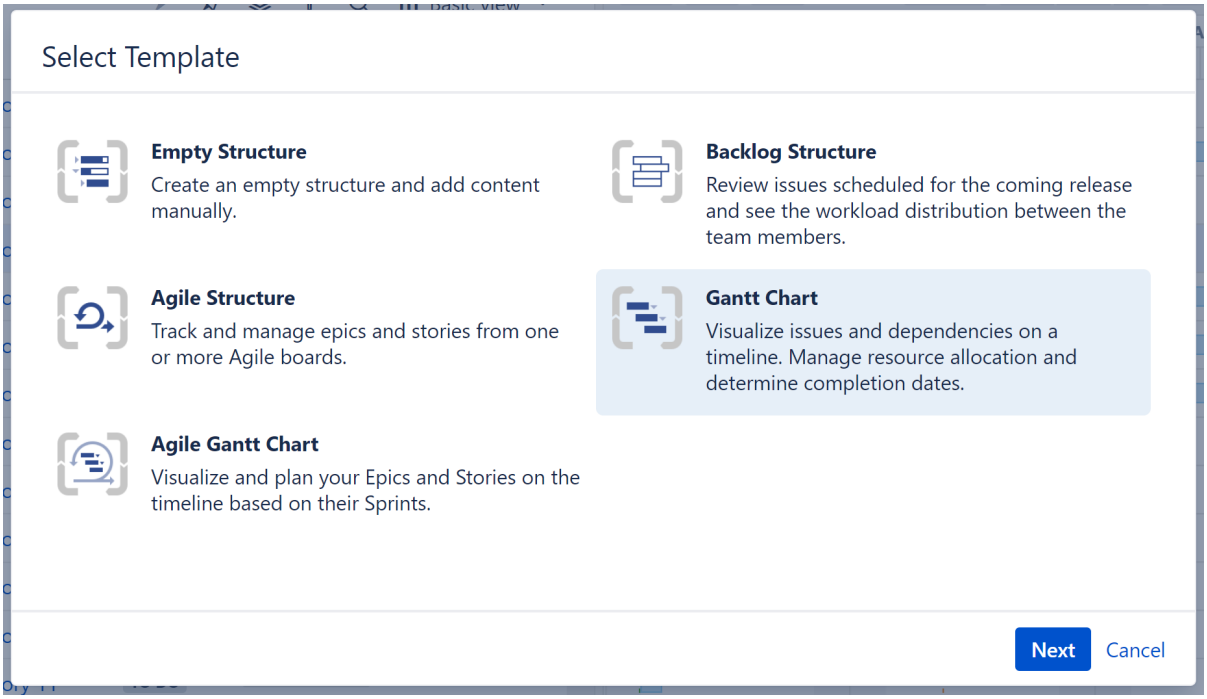
1. You are familiar with the basics of Structure for Jira[1].
2. You have already installed both Structure for Jira and Structure.Gantt. If not, please speak with your system administrator.

1.1 Your First Gantt Chart

The first step to using Structure.Gantt is to create your own Gantt charts. You can use one of our Gantt Chart templates or add a chart to an existing structure.

- To add a Gantt chart to an existing structure, see Create a Gantt Chart from an Existing Structure(see page 20)
- To create a chart for a new project, see Gantt Chart Template(see page 21)
- To create an Agile Gantt chart (visualize and plan your epics and stories based on their sprints), see Agile Gantt Chart Template(see page 25).

1 https://marketplace.atlassian.com/apps/34717/structure-project-management-at-scale?hosting=server&tab=overview

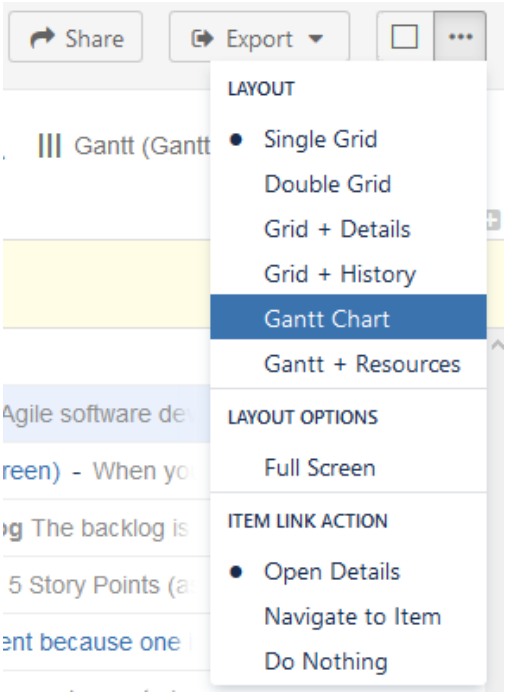


1.1.1 Create a Gantt Chart from an Existing Structure

If you are already working with a project in Structure, adding a Gantt chart couldn't be easier!

Once you have installed Structure.Gantt, two new options will appear under the **Toggle Panels** button:

- Gantt Chart
- Gantt + Resources



Selecting either of these options will open the Gantt Chart Settings screen. To create your Gantt chart:

1. Enter a Project Start Date
2. Select the Gantt Chart Configuration you wish to use for this structure (if you are unsure, we recommend starting with the **Default** configuration and modifying as necessary later)
3. Enter your Fix Version and Sprints Timeline Settings (optional). You can use these options to place markers on your timeline to indicate the dates of fix versions and current/anticipated sprints. For more information, see Gantt Chart Settings(see page 43).

Once you're done, click **Create Gantt Chart**.

That's it! Now you can skip ahead to Working with Your Gantt Chart(see page 38) to learn how to review and modify your project timeline.

If you select a configuration that has been shared by another user, any changes this user makes will affect your Gantt chart too.

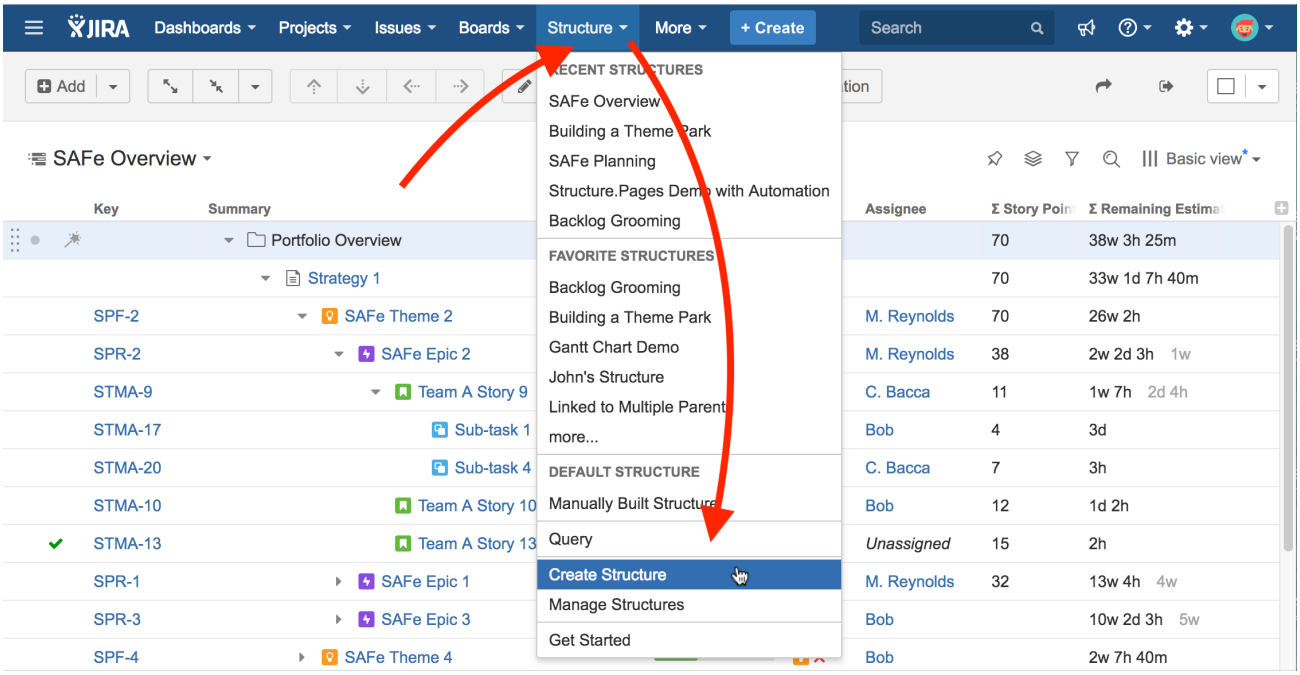
To be able to create Gantt charts (even for existing structures) you need to have the appropriate permissions set for your account. To create a Gantt chart for a structure that you created, you must have permission to create new structures. To create a Gantt chart for a structure you did not create, you need Control access. If you are unable to create a Gantt chart for a structure, speak with your system administrator.

1.1.2 Gantt Chart Template

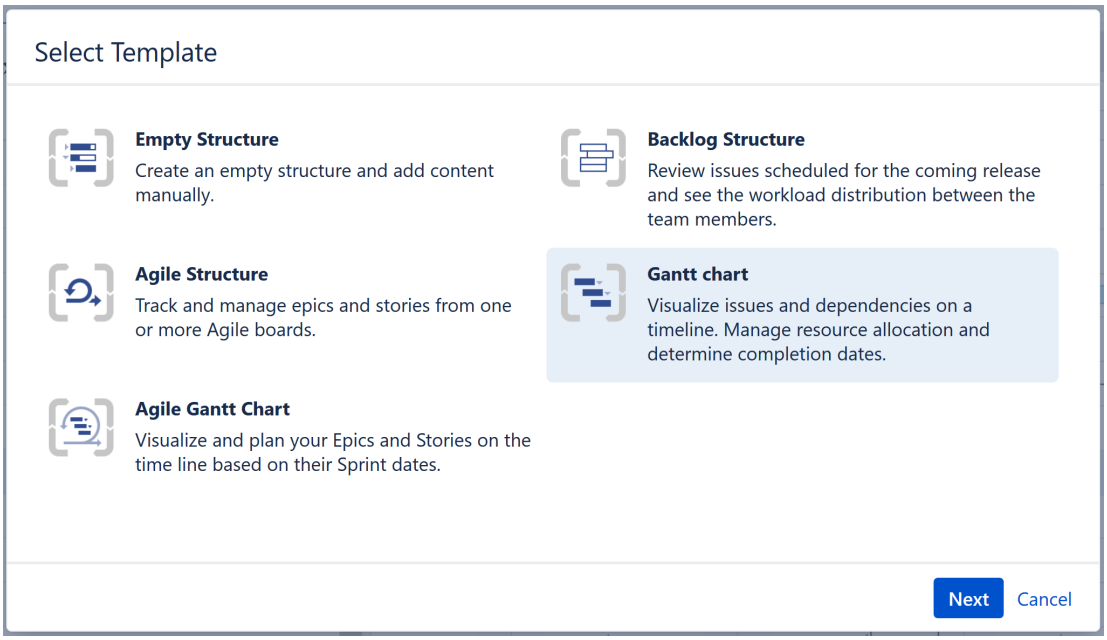
If you are new to Structure or want to create a new Gantt chart separate from any of your existing structures, we recommend using the Gantt Chart Template in the Structure Wizard. In a few simple steps, you can define your work breakdown structure (WBS), timeline, dependencies and other parameters which will be used for generating the Gantt chart.

If you plan to use Structure.Gantt for sprint planning, you may want to try our Agile Gantt Chart Template(see page 25).

To open the wizard, go to the top **Structure** menu and click **Create Structure**.



Select the **Gantt Chart** template and click **Next**.



The Structure Wizard will walk you through the creation of your Gantt chart, including defining scope, WBS, dependencies, scheduling, and resources.

1.1.2.1 Define Scope

With Structure.Gantt, you can combine multiple projects and agile boards into a single, easy-to-read chart—or you can create highly-focused charts that only show select issues from one or more projects.

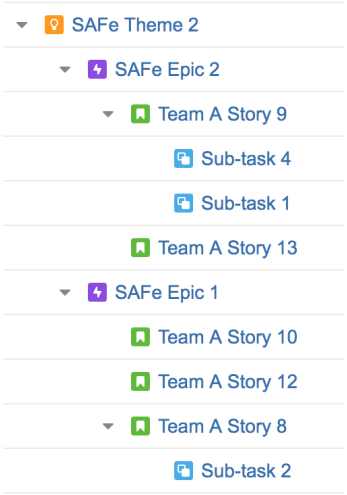
To define your scope:

1. **Select at least one Project or Agile Board to import issues from.** You can include as many projects and/or boards as you need—Structure.Gantt makes it easy to work with multiple projects at one time.
2. **Determine how you want multiple projects/boards displayed.** If you want to view them separately (organized in different folders), make sure the **Put each project or board into a separate folder** checkbox is checked. Otherwise, all issues will be placed together.
3. **Select which issue types to include.** By default, all issue types will be included. You can choose between Jira issue types or use JQL Query to limit the issues included. (You can change your selection later.)

1.1.2.2 Work Breakdown Structure

Structure allows you to arrange issues based on the relationships that exist in Jira, in order to create a visual representation of the hierarchies.

If you're working on a large project and/or multiple projects, there's a good chance you have tasks that also include sub-tasks and epics that span multiple stories. Structure.Gantt can automatically arrange your structure and chart, so you can easily visualize how larger parts are broken down into smaller pieces—and how the work is broken down.



On the Work Breakdown Structure screen, you can select the following types of relationships to be represented in your chart:

- **Sub-tasks** – This places sub-tasks under their parents.
- **Agile Hierarchy** – This will put stories under the epics they belong to.
- **Advanced Roadmaps Hierarchy** – If you are using the Atlassian Advanced Roadmaps (formerly Portfolio) add-on, Structure can visualize the hierarchy you have in your Advanced Roadmaps plans.
- **Issue Links** – If you use issue links to create hierarchy in Jira, Structure can visualize this hierarchy too. You can also specify the link type and direction. For example, if you have a link showing that issue A "contains" issue B, issue B will be added as a child of issue A in your structure.

1.1.2.3 Dependencies

Structure.Gantt uses Jira links to represent dependencies between issues.

By default, Finish to Start dependencies are displayed on your Gantt chart. To configure other types of dependencies, click the **Additional dependency types** link. (If you're not sure what dependencies you'll need, you can adjust dependencies settings(see page 61) at any time using Gantt configuration(see page 21)).

1.1.2.4 Scheduling

Structure.Gantt can use Jira time tracking fields (Original Estimate or Time Spent + Remaining Estimate) or Story Points to schedule tasks within your timeline.

On the Scheduling screen, you can specify how your timeline will be calculated and displayed:

- **Work Estimates** – Select whether you will use Time Tracking or Story Points to create work estimates.
  - If you use Story Points, enter an Hours Ratio (how long a single Story Point typically takes to complete) and Structure.Gantt will convert your Story Points into hours when calculating your timeline.
- **Manual Scheduling/Dates Visualization** – By default, Structure.Gantt automatically places items within your timeline based on estimates and dependencies; however, you can override this with Manual Scheduling. If you wish to use Manual Scheduling, select the fields where Start Date and Finish Date data will be located.

1.1.2.5 Resources

Structure.Gantt allows you to track your resource requirements throughout a project, so you can see at a glance when resources are over-tasked or available for additional work.

On the Resources screen, select whether or not you wish to track resource allocation and, if so, the field you will use to assign resources. You can choose from a variety of Jira fields or use a custom field or formula. Many of our customers use the **Assignee** field, so they can track individual workloads.

> ⓘ You can also use both at the same time by setting up a Formula for the resources(see page 64), but that is only possible using Gantt configuration(see page 21).

1.1.2.6 Calendar

By default, Structure.Gantt uses the predefined "Standard" work calendar(see page 67) to schedule items in the chart. If you have removed or changed the name of this calendar, an additional screen will appear asking you to select which calendar should be used. In either case, you can edit the calendar later via Gantt Configurations(see page 21).

Congratulations! You've just configured your first Gantt chart. Click the Save Settings button, and the structure, its view[2] and the corresponding Gantt chart will automatically be created.

Here are a few additional resource to help you get started:

- If you're new to Structure, you can learn more about working within a structure on our Structure Documentation page[3].
- If you're ready to start managing tasks with Structure.Gantt, see Working with Your Gantt Chart.(see page 38)
- If you need to make changes to your Gantt chart configuration(see page 21), click the Settings button  on the top left of the Gantt screen.

2 https://wiki.almworks.com/display/structure/.Managing+Views+v7.4
3 https://wiki.almworks.com/display/structure/.Documentation+v8.1

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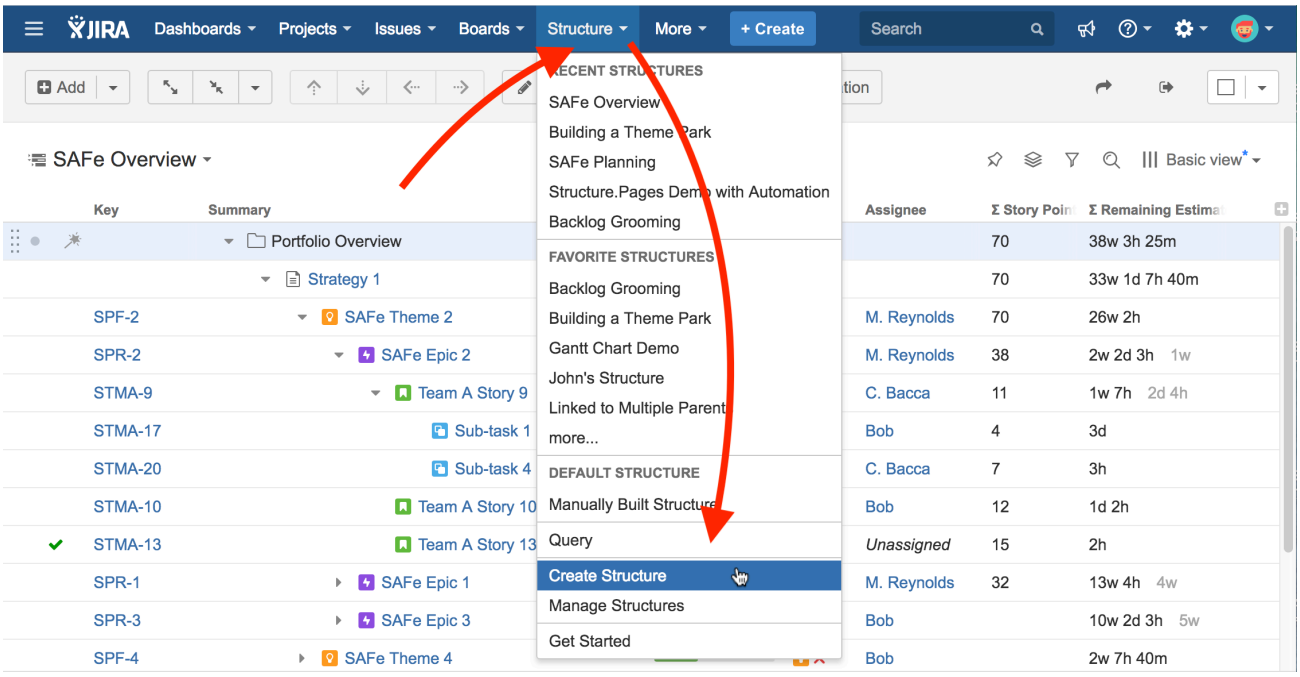
1.1.3 Agile Gantt Chart Template

If you're working in an Agile environment, where tasks are assigned to specific sprints rather than scheduled for specific dates, Structure.Gantt's sprint planning feature makes it easy to visualize and plan epics and stories across multiple projects.

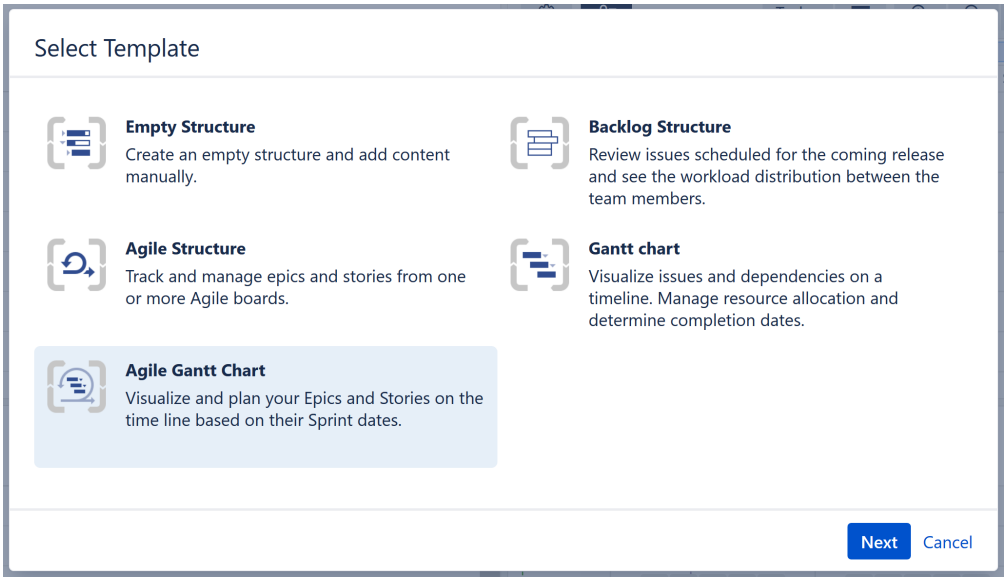
The easiest way to get started is with our Agile Gantt Chart template.

1.1.3.1 Open the Agile Gantt Chart Wizard

To open the wizard, go to the top **Structure** menu and click **Create Structure**.

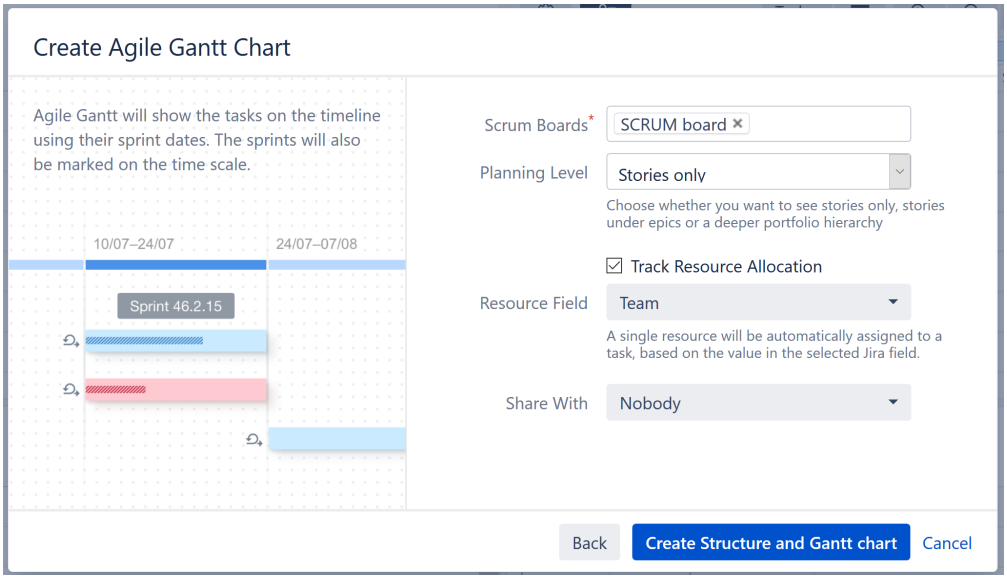


Select the **Agile Gantt Chart** template and click **Next**.



1.1.3.2 Select Your Gantt Chart Options

On the following screen, you'll customize your chart.



Scrum Boards

You can add issues from any board you have permissions for. Simply click the Scrum Boards field, locate the board you want to add, and click it. You can include as many boards as you need.

Planning Level

You can select from the following options when creating your Agile Gantt Chart:

- **Stories only** - adds all issues except epics and sub-tasks, placing them all at the same level within your chart.

- **Stories under epics** - adds stories (everything except epics and sub-tasks) beneath their respective epics in your chart.
- **Advanced Roadmaps** - if Atlassian Advanced Roadmaps (formerly Portfolio) is installed, this will add any Advanced Roadmaps levels above epics.

Resources

Structure.Gantt allows you to track your resource requirements throughout a project, so you can see at a glance when resources are over-tasked or available for additional work.

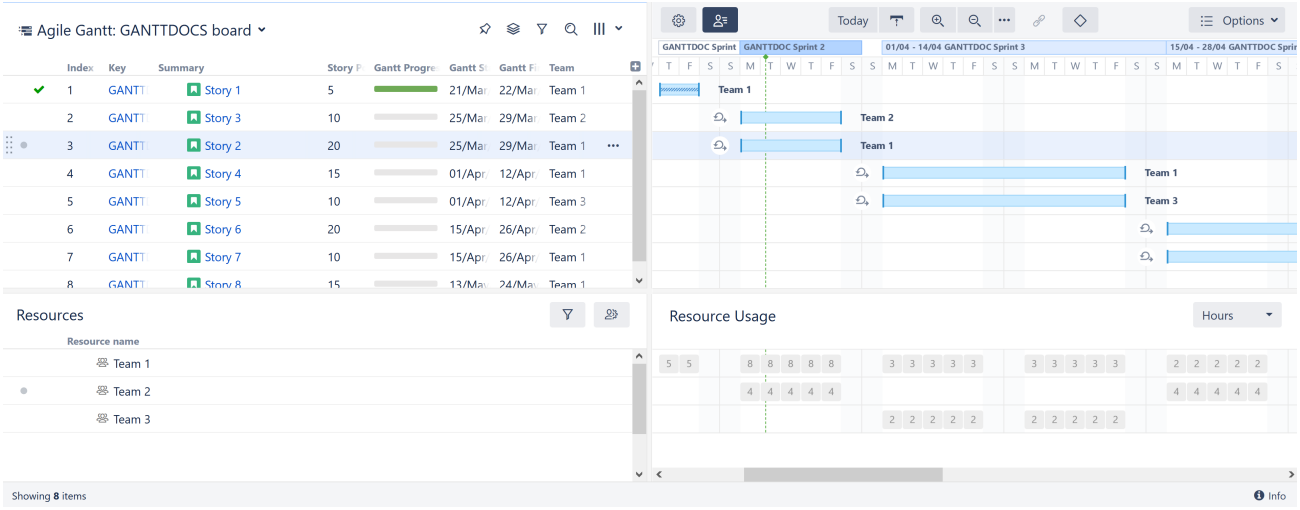
If you wish to track resource allocation, check the **Track Resource Allocation box** and select the **Resource Field** that should be used to assign resources to your tasks. You can choose from a variety of Jira fields or use a custom field or formula. Many of our customers use the Assignee field or a custom Team field.

Sharing

In the Share With section, select who the chart should be shared with. Only the people you select will have access to view the structure and Gantt chart you create. You can change or customize these settings later in Structure Permissions[4].

1.1.3.3 Create Your Gantt Chart

Once you've selected your options, click the **Create Structure and Gantt chart** button. Your new chart will be constructed using Structure's powerful Generators[5] feature. If you need to make changes to the issues included in your chart or how they are arranged, you can edit the automation rules[6] later.



Issues will automatically be scheduled in your Gantt chart based on a 2-week estimate for future sprints and a custom Gantt configuration with the following settings:

- Work estimates are based on Story Points, with Time Tracking enabled if no Story Points data is available.
- The standard 40 hours/week calendar is used, unless there is no "Standard" calendar found.

To view or change these settings, see Gantt Configuration.(see page 25)

4 https://wiki.almworks.com/display/structure/Structure+Permissions
5 https://wiki.almworks.com/display/structure/.Generators+v8.1
6 https://wiki.almworks.com/display/structure/.Editing+a+Generator+v7.4

1.1.3.4 Additional Resources

Congratulations! You've just built an Agile Gantt chart.

Here are a few additional resource to help you get started:

- If you're new to Structure, you can learn more about working within a structure on our Structure Documentation page[7].
- If you're ready to start managing tasks with Structure.Gantt, see Working with Your Gantt Chart.(see page 38)
- If you need to make changes to your Gantt chart configuration(see page 25), click the Settings button  on the top left of the Gantt screen.

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1.2 Gantt Chart Elements

The following section will walk you through the elements of your Gantt chart panel and explain how to accomplish many common tasks.

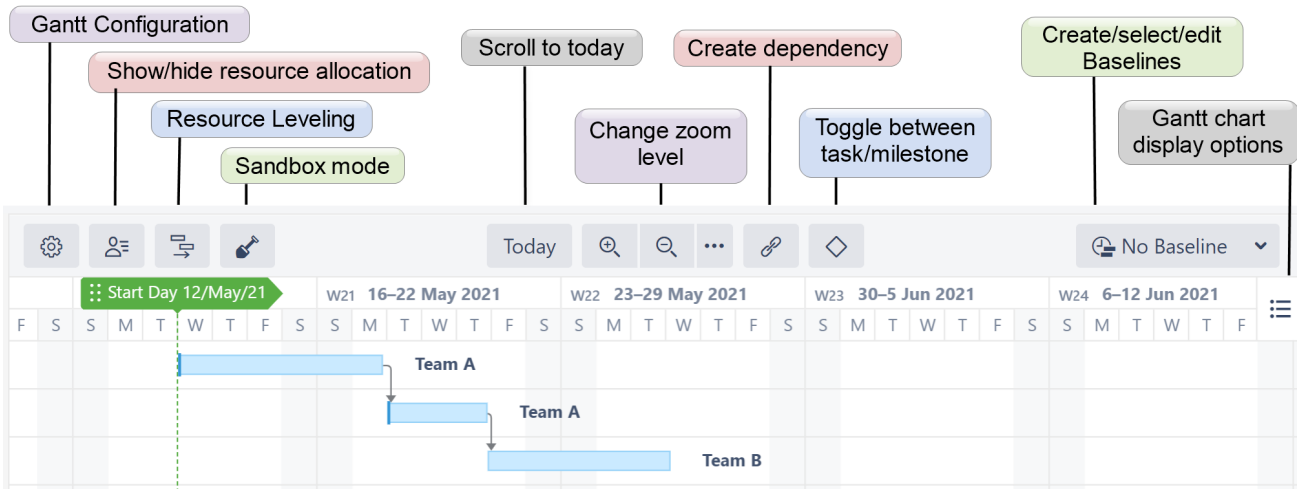
1.2.1 Toolbar

Using the toolbar, you can:

- Access Gantt Chart Settings
- Show/hide resources(see page 116)
- Adjust the chart's appearance
- Select which elements are shown within your timeline
- Create dependencies(see page 108)
- Turn tasks into milestones(see page 115)
- Apply Resource Leveling(see page 122)
- Toggle Sandbox mode(see page 153) on/off

7 https://wiki.almworks.com/display/structure/.Documentation+v8.1

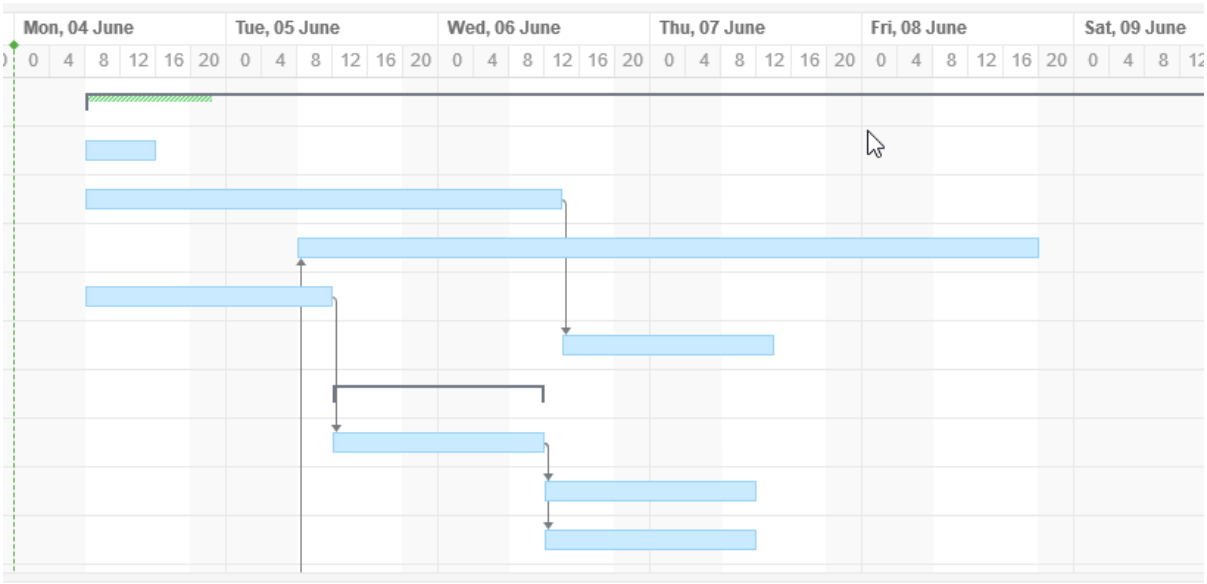
- Manage Baselines(see page 128)



Timeline

Your timeline contains visual representations of tasks, dependencies, progress, milestones and other key dates.

It is also where you will do most of your work. You can also adjust tasks and dependencies directly from your timeline.

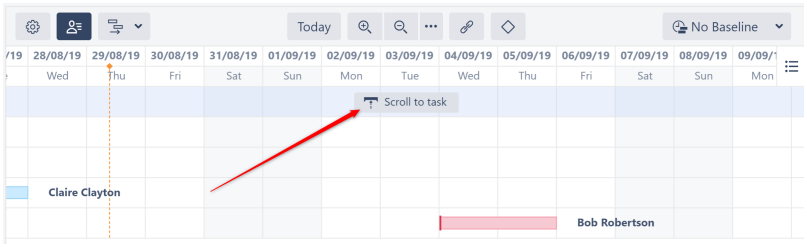


1.2.2 Time Scale

You can quickly navigate or focus your timeline in a variety of ways:

- Zoom in or out to see more or less of your timeline
- Scroll horizontally or vertically
- Hold the **Shift** key and drag the chart with your pointer
- Focus in on the current date with the **Today** button

- Navigate to the current task with the **Scroll to Task** button (only appears if the currently-selected task is not visible)

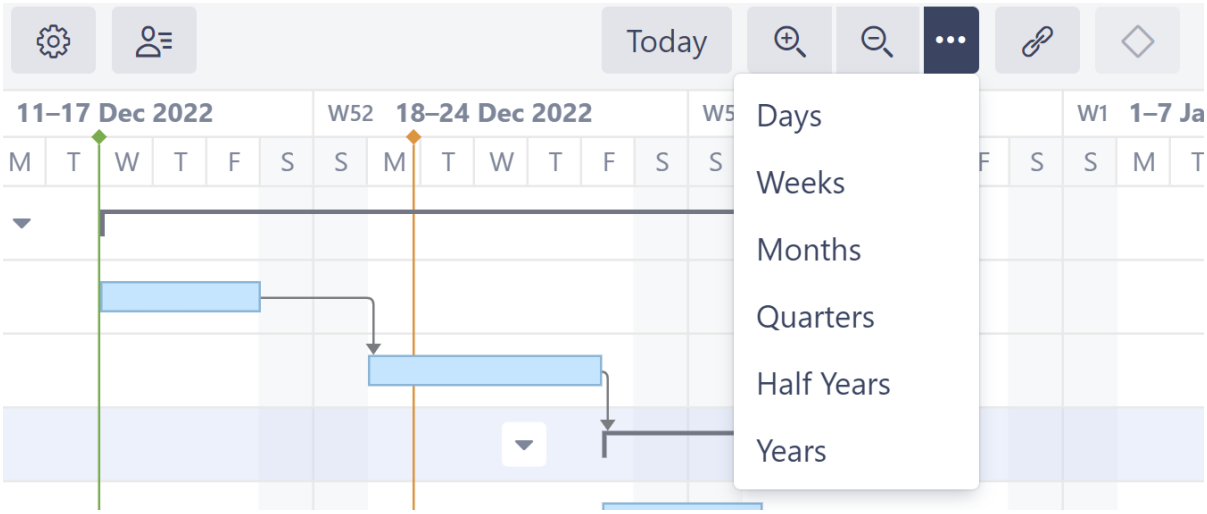


1.2.2.1 Zoom Level

To adjust the zoom level of your chart, use the **+** or **-** magnification buttons in the toolbar.

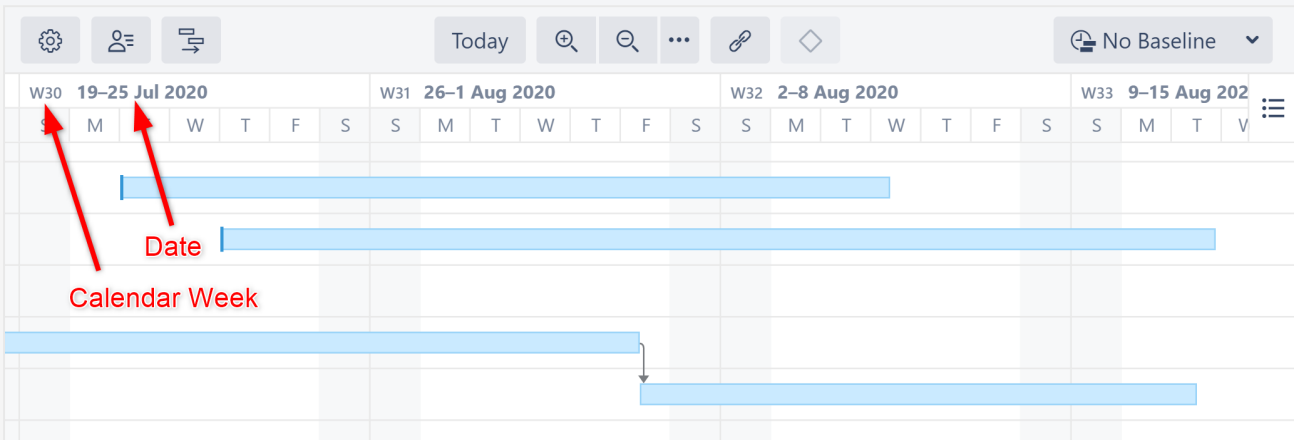
You can also zoom in or out using your mouse wheel, by holding down the **ctrl** button (**cmd** on macs).

To view issues based on a specific time scale, such as weekly or monthly, use the press the three dots beside the magnification buttons.



1.2.2.2 Week Numbers

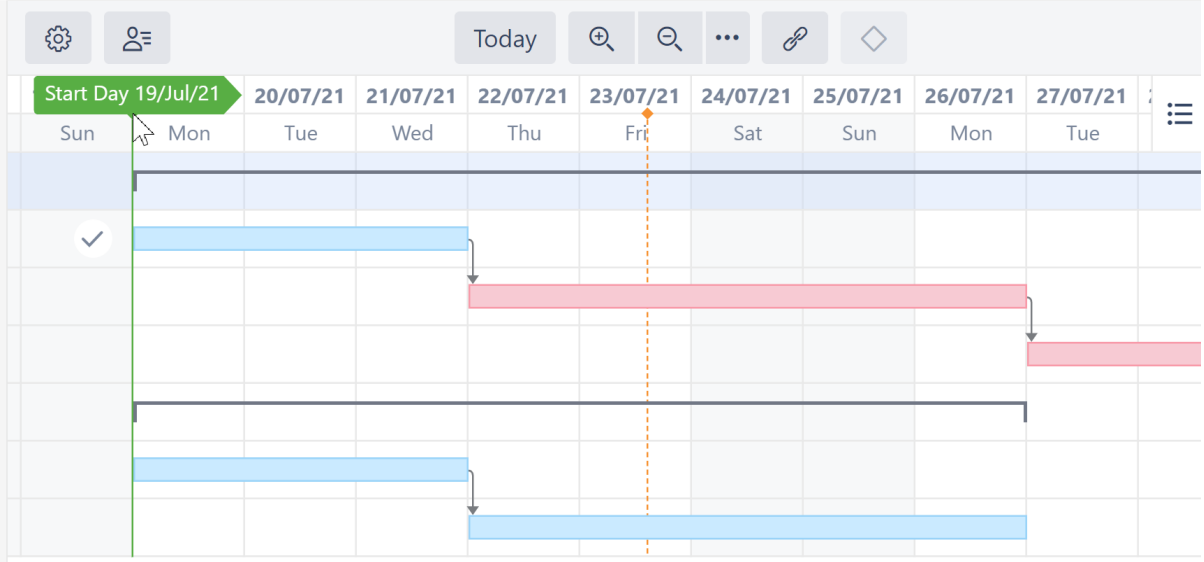
If you zoom out to a point that weeks are shown, Structure.Gantt will list both the dates and the corresponding week numbers:



1.2.3 Start Day and Current Date

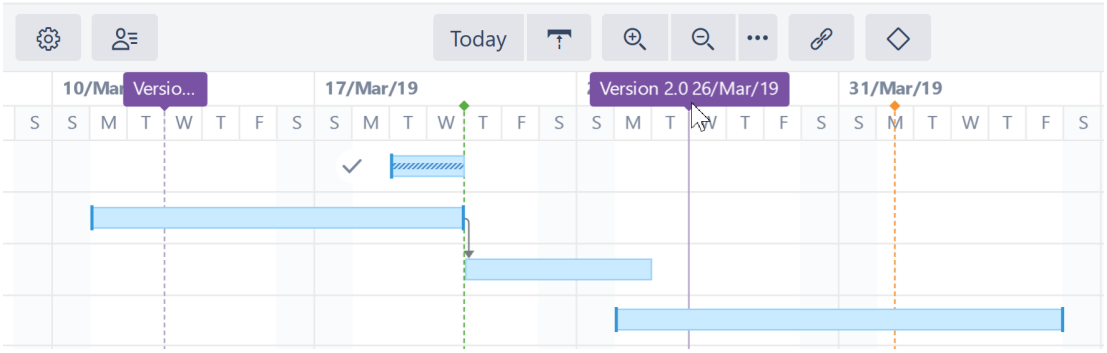
The project start date is indicated by a green vertical dashed line. The current date/time is indicated by an orange vertical line.

Mousing over the point at the top of either line will display the exact date.



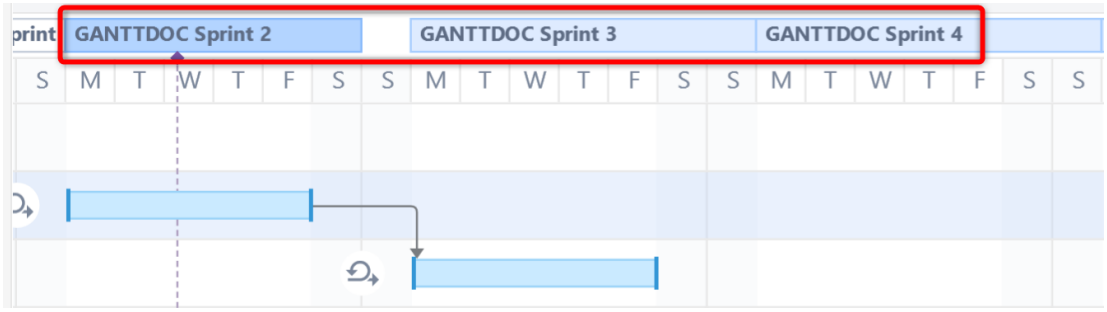
1.2.4 Fix Versions

Fix Version markers display version names. By hovering over a marker, you can also see the release date and project key (if versions are shown for multiple projects).



1.2.5 Sprints

If the highlighted task is manually scheduled by sprints(see page 91), sprints from the corresponding board will be displayed at the top of the timeline when the task is selected.



Sprints are visualized based on sprints already defined in a Jira board or anticipated sprints based on your chart settings. (See Gantt Chart Settings(see page 43) for instructions on specifying sprint timelines.)

1.2.6 Task Bars

Structure items are represented in the chart as task bars.

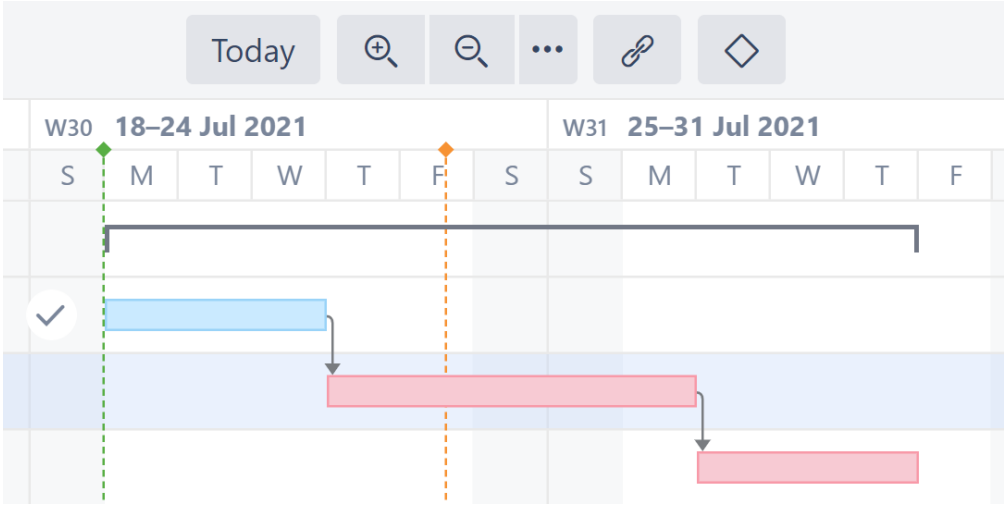
- A task's position on the timeline is based on its dependencies(see page 108), manually-set Start or/and Finish dates(see page 89) or sprint dates(see page 91), and Leveling Delay(see page 122).
- If you have configured Gantt to track the progress of tasks, that will be shown inside the bar. To show/hide progress, use the Display Options menu(see page 35).
- Completed tasks can be marked with a check icon(see page 105). To show or hide Task Indicators, use the Display Options menu(see page 35).
- If a task is a part of the critical path(see page 34), it is shown with a red box around it. You can show or hide critical path highlighting using the Display Options menu(see page 35).

1.2.7 Groups

If an element has children in a structure, it can be shown as a Group.

- A group's Start Date and Duration are calculated automatically, based on the Start Date and Duration of the elements it contains.

- If the group is an issue which has its ownstart/finish dates and estimate values, these are ignored.
- Progress for the group is calculated as an aggregation of its children's progress, and the element's own task progress is ignored as well.

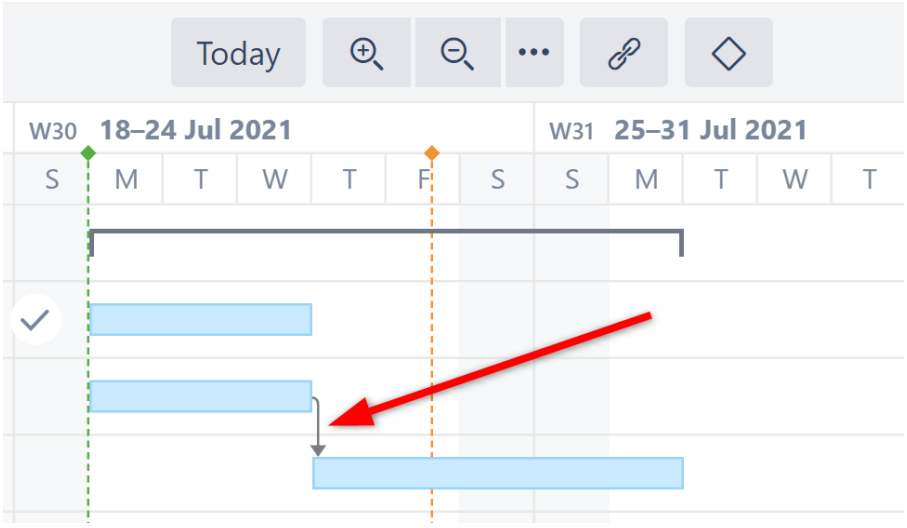


In order to display child/parent relationships as a group, you first need to enable grouping in Gantt configuration(see page 42)

Dependencies

Dependencies are displayed as arrows between task bars.

- Click the arrow to show the Dependency Properties
- To show/hide dependency arrows, use the Options(see page 35) menu in the toolbar

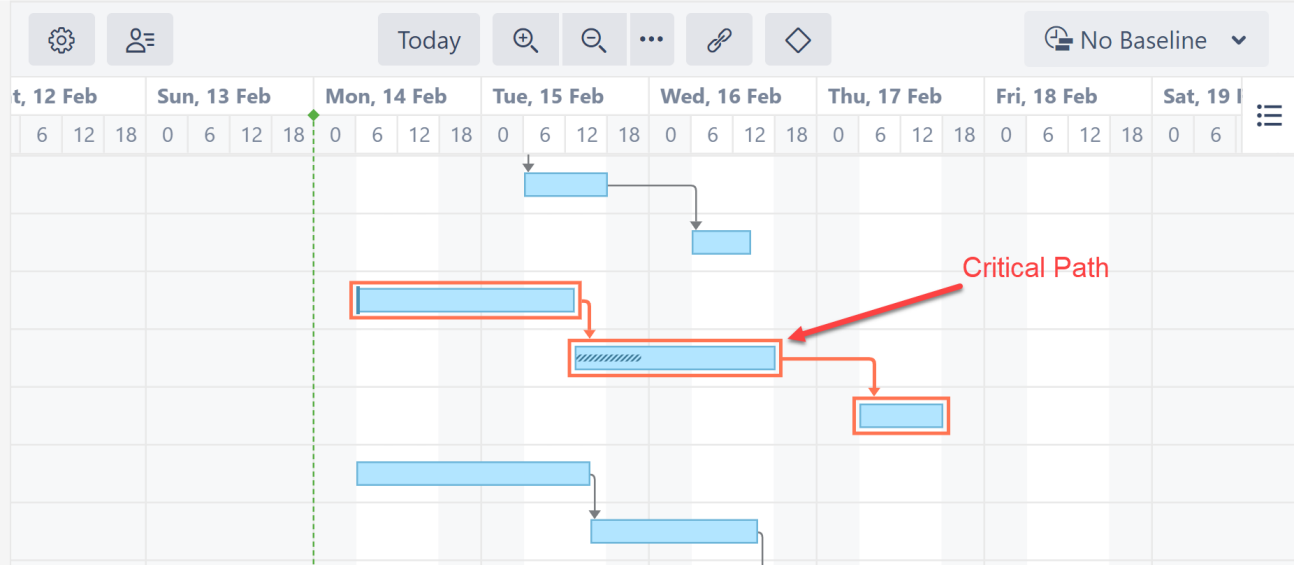


For more information about managing dependencies, see Dependencies Configuration(see page 61).

1.2.8 Critical Path

The critical path highlights items that directly affect the project's end date. It includes the task with the latest Finish Date, as well as any items that, if delayed, will also delay that last task - and extend the project's end date.

If a task is part of the critical path, it is shown with a red box around it. The dependencies that make up the critical path are also shown in red.



To switch off Critical Path highlighting:

1. Select the Options (see page 35)menu in the toolbar
2. Uncheck **Critical Path**

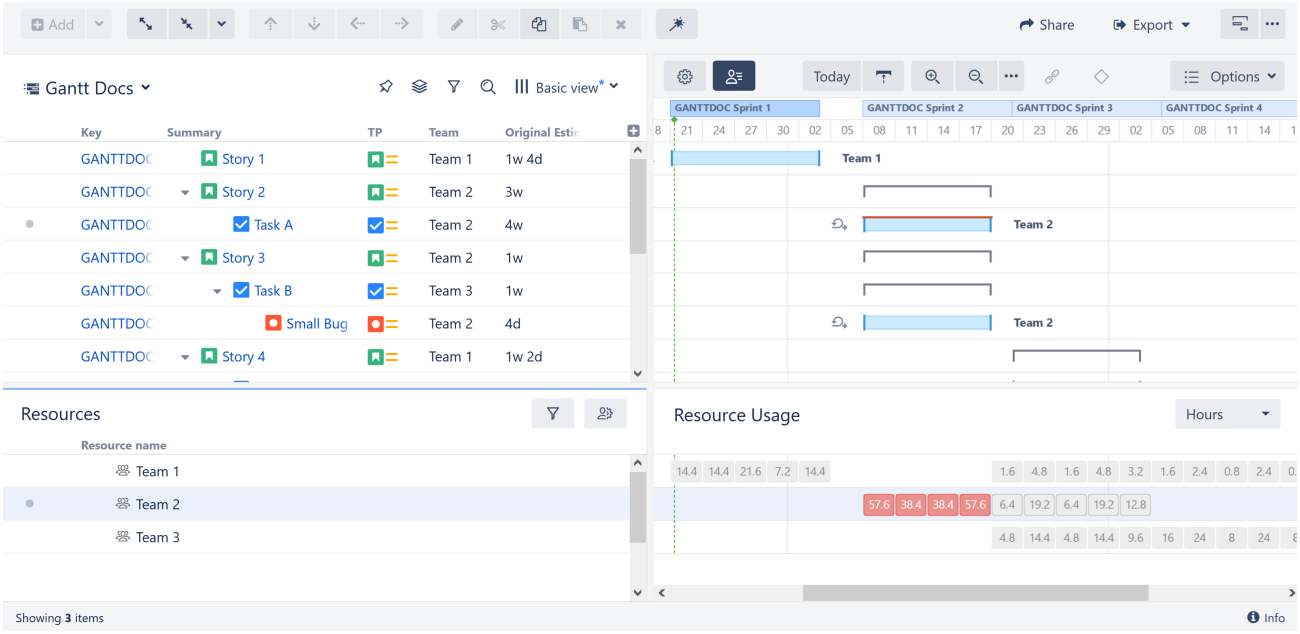
> The critical path does not affect your chart or the issues within it in any way - it's simply a visual indicator.

1.2.9 Resources

To view resource allocation on you Gantt chart, click the Resources button in the Gantt toobar.

The Resources section of your chart is split into two panels:

- **Resources** - Displays a list of all resources based on your Resources Configuration(see page 64).
- **Resource Usage** - Displays the workload for each resource at a given time.

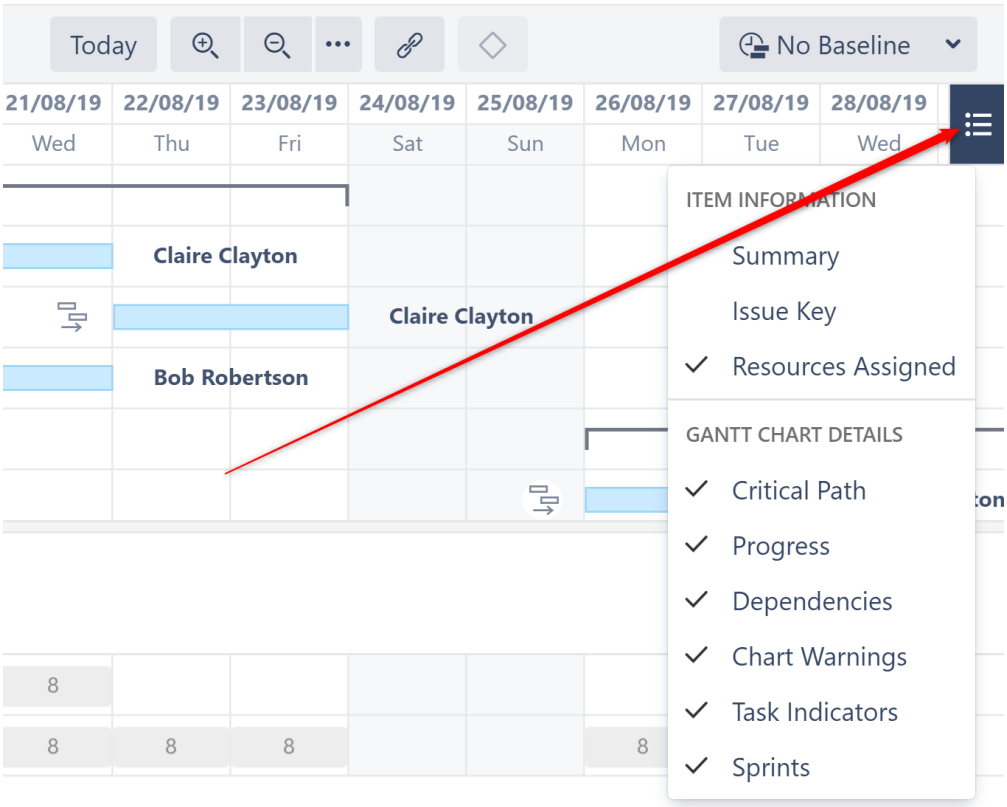


If you don't see any resources in this list, make sure you've configured them. See Resources Configuration(see page 64).

For more information about managing resource, see Resources and Resource Usage(see page 117).

1.2.10 Display Options

The **Options** menu allows you to select what elements should be shown in the chart.

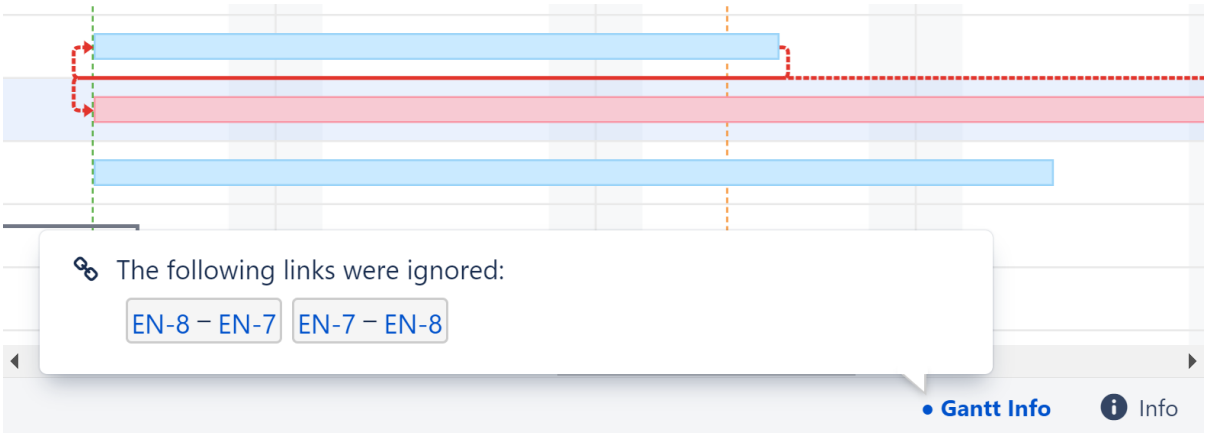


You can show/hide:

- Summary
- Issue Key
- Resources
- Critical Path
- Progress
- Dependencies
- Chart Warnings (such as another time zone or different calendar)
- Task Indicators (see Task Indicators(see page 105))
- Sprints (Note: If this option is switched off, sprints will still be displayed when dragging sprint-scheduled tasks.)
- Custom chart markers

Status Bar

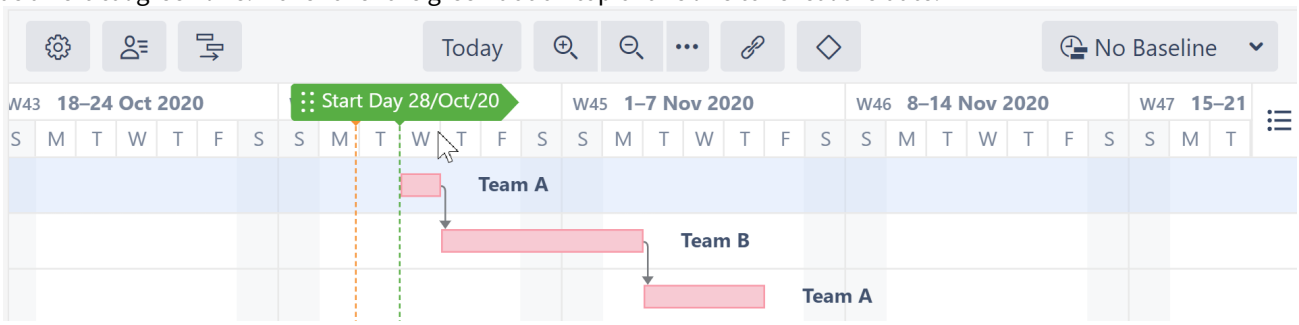
If there are any inconsistencies in the source data (for example, a cycle of dependencies), the Gantt Info link will be shown on the right side of the Structure status bar (next to the Structure Info link at the bottom of the screen). Click the link to see details of the inconsistencies.



If you do not have permission to edit the Gantt chart, that information will be displayed in the Status Bar as well.

1.2.11 Project Start Day

The Project Start Day is used as the starting point for automatic scheduling(see page 88). It appears in the Gantt chart as a vertical green line. Hover over the green dot on top of this line to reveal the date.

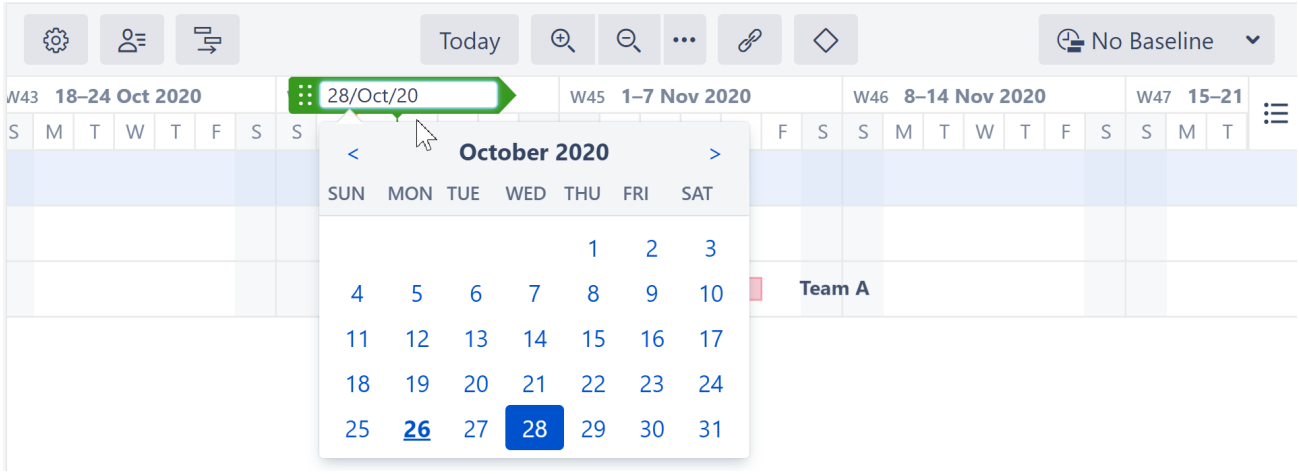


1.2.11.1 Setting the Project Start Day

The Project Start Day is initially selected when you create a new Gantt chart(see page 20). If you change the Start Day later, automatically-scheduled tasks will be adjusted accordingly.

To change the Start Day:

- Open the Gantt Chart Settings(see page 43) and enter a new date
- Click the Start Day Marker and enter the date, or simply drag it to a new location



In order to adjust the Start Day, users must have control access for the structure[8].

1.3 Working with Gantt Charts

The following guide will help you get started working with your Gantt charts. For additional information on the topics discussed, see our Structure.Gantt User's Guide(see page 42).

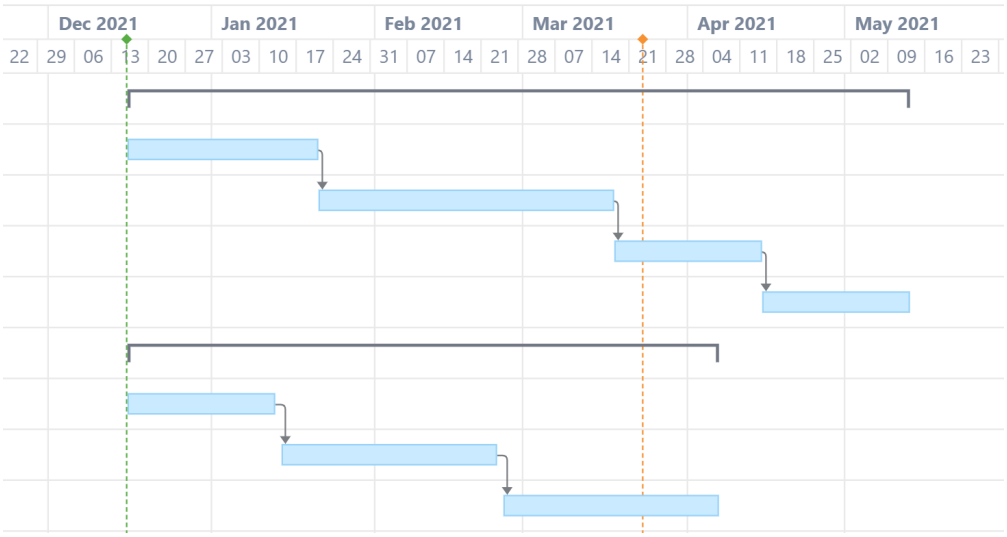
1.3.1 Scheduling Tasks

Tasks can be scheduled automatically by Structure.Gantt or manually.

1.3.1.1 Automatic Scheduling

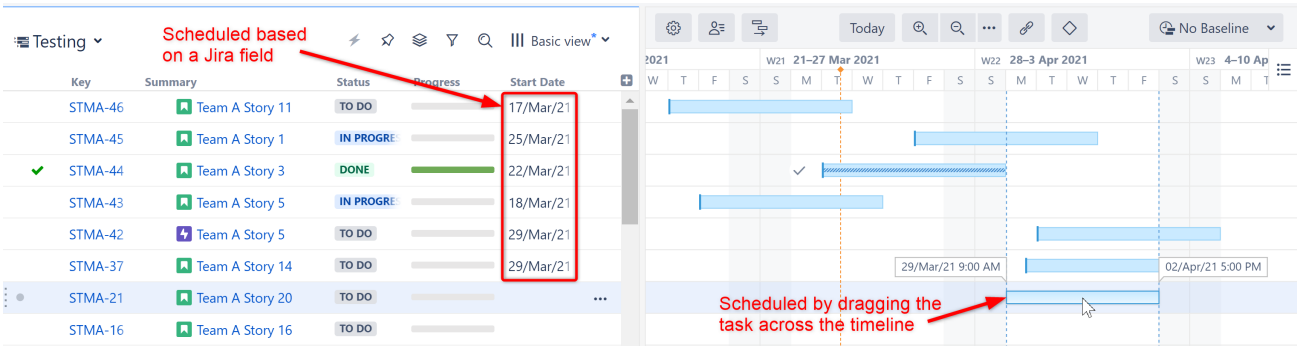
In this mode, tasks are automatically placed on the Gantt timeline based on your project start date, task estimates, predecessors and dependency types.

8 https://wiki.almworks.com/display/structure/.Structure+Permissions+v8.0



1.3.1.2 Manual Scheduling

Manual scheduling allows you to schedule items based on an the values in a Jira field and/or by dragging tasks across the timeline.



As you set the Start/Finish Date of a task, the task is considered to be scheduled manually. This means it will stay at the defined position regardless of its dependencies. If you remove the Start/Finish Date for a task, it will become automatically scheduled again.

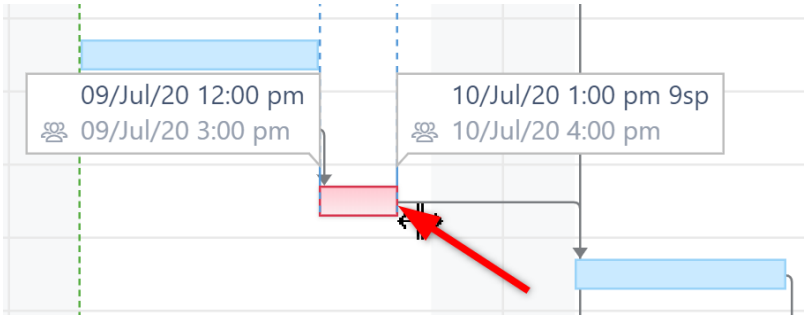
For more information, see Scheduling Tasks(see page 87).

1.3.2 Adjusting Task Duration

The duration of tasks within the Gantt chart are calculated based on each task's work estimate, the Work Estimates Configuration(see page 49) and the calendar(see page 67).

To adjust a task's duration:

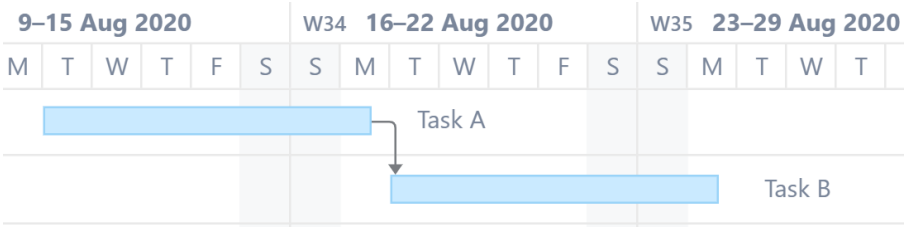
1. Edit the task's work estimate fields, or
2. Drag the side of the task bar.



For more information, see Adjusting Duration(see page 99).

1.3.3 Managing Dependencies

Dependencies are defined based on Issue Links. Changing dependencies creates or removes links between issues.



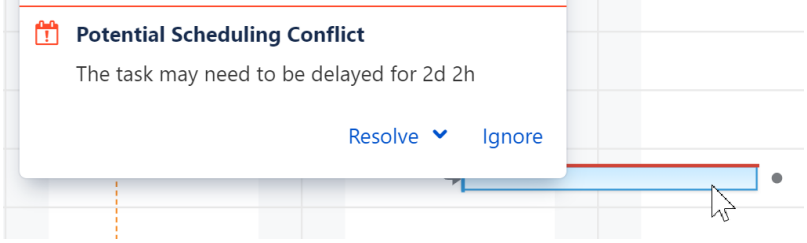
To create a dependency between two tasks, drag from one task to another. The type of dependency you create will depend on the sides of each task you use:

- Finish to Start - Drag from the right side of one task to the left side of the other
- Finish to Finish - Drag from right side to right side
- Start to Finish - Drag from left side to right side
- Start to Start - Drag from left side to left side

For more information about working with and configuring dependencies, see Dependencies(see page 108).

1.3.4 Scheduling Conflicts

Structure.Gantt highlights any scheduling conflicts with a red line (see picture). For example, for finish to start dependencies, if a task is manually scheduled for a date earlier than its predecessor's Finish Date, Gantt will highlight this conflict.



To deal with the conflict, click the task and select one of the following actions:

- **Resolve > Auto Schedule.** This will switch the task to the Automatic Scheduling mode, clearing its Start Date or Finish Date and scheduling the task based on its predecessor and the dependency type.

- **Resolve > Respect Link.** This will change the task Start Date to coincide with the predecessor's Finish Date. The task will stay in the Manual Scheduling mode.
- **Ignore.** Ignore the scheduling conflict and keep the task in its current location.

1.3.5 Next Steps

Congratulations! You're ready to build your first Gantt chart!

If you run into questions or just want to get a deeper understanding of everything Structure.Gantt can do, check out our Structure.Gantt User's Guide(see page 42).

2 Structure.Gantt User's Guide

If you're new to Structure.Gantt, we suggest you begin by reviewing our Getting Started Guide(see page 19).

To learn more about specific features and functionalities, search for them here or browse our full list of articles:

Search

2.1 Creating a Gantt Chart

There are three ways to create a new Gantt chart:

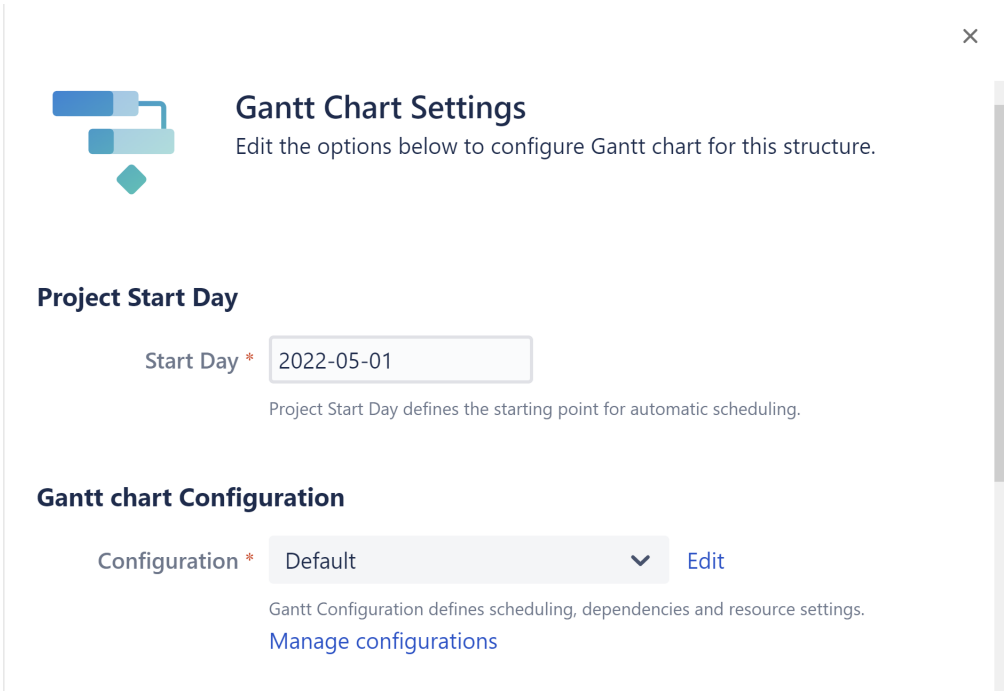
- Create a Gantt Chart from an Existing Structure(see page 20)
- Create a chart for a new project(see page 21)
- Create an Agile Gantt chart (see page 25)(visualize and plan your epics and stories based on their sprints)

2.2 Gantt Configuration

Structure.Gantt is a highly flexible app. It uses Structure and Jira data to build the chart, and it lets you configure most of the parameters that define the chart's behavior.The following sections will walk you through configuring and customizing your Gantt chart(s) to fit your unique business needs.

2.2.1 Gantt Chart Settings

Gantt Chart Settings allow you to select how and which items are displayed within your Gantt chart. You can adjust your settings at any time by clicking the Gantt Chart Settings icon  in the Gantt toolbar.



The **Project Start Day** is used as the starting point for automatic scheduling within your chart.

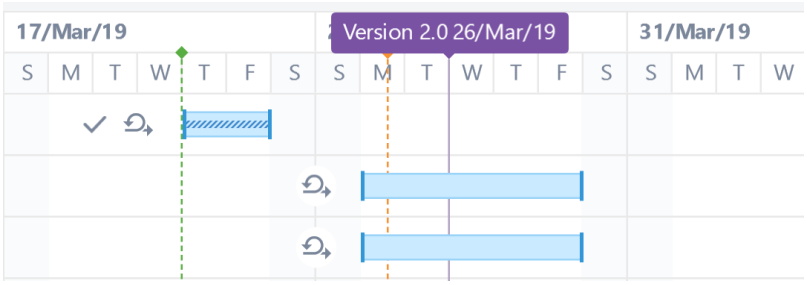
The Gantt Chart Configuration(see page 42) determines how items operate within your chart. This is where you set how scheduling, dependencies, and resources should work.

- If you are new to Structure.Gantt, we recommend starting with the **Default** configuration and modifying as necessary later.
- To make changes to an existing configuration, locate the configuration within the drop-down menu and click **Edit.**
- To build a new configuration, click **Manage configurations**.

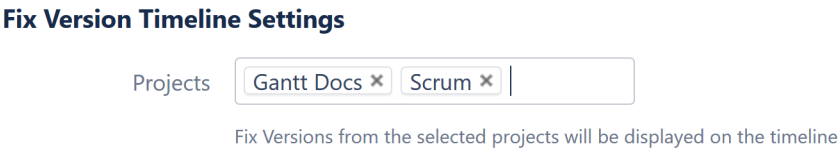
To learn more about creating custom chart configurations, see Gantt Configuration(see page 42).

2.2.1.1 Fix Versions

Structure.Gantt can also place markers at the top of your timeline to show Fix Versions.



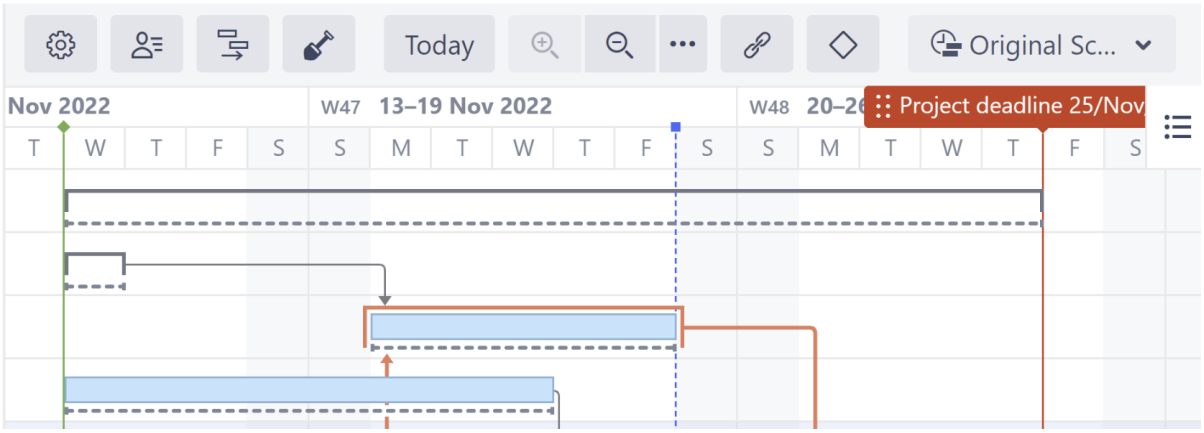
To enable this feature, simply enter the projects you want to show fix versions from.



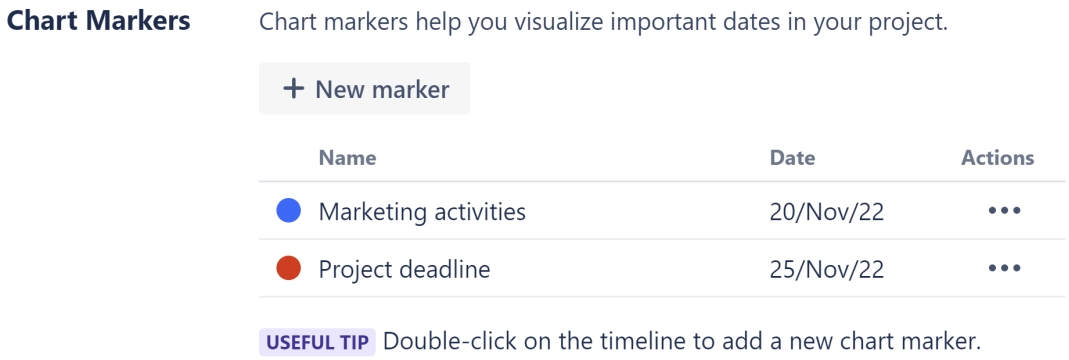
> In the event that the same version with the same release date is defined for multiple selected projects, those will be merged into one single Fix Version.

2.2.1.2 Chart Markers

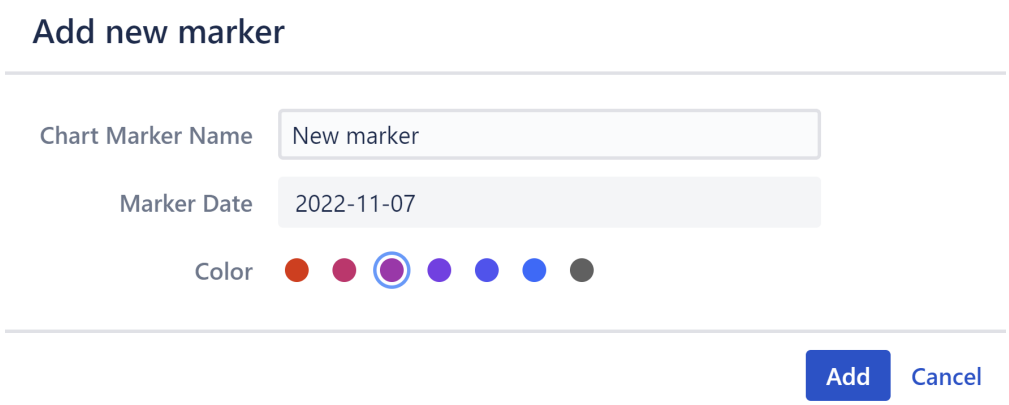
You can also configure custom chart markers to call attention to other important dates on your chart.



In the Chart Markers section, you will find a list of current custom chart markers. To edit or delete an exiting marker, click the Action button (three dots).

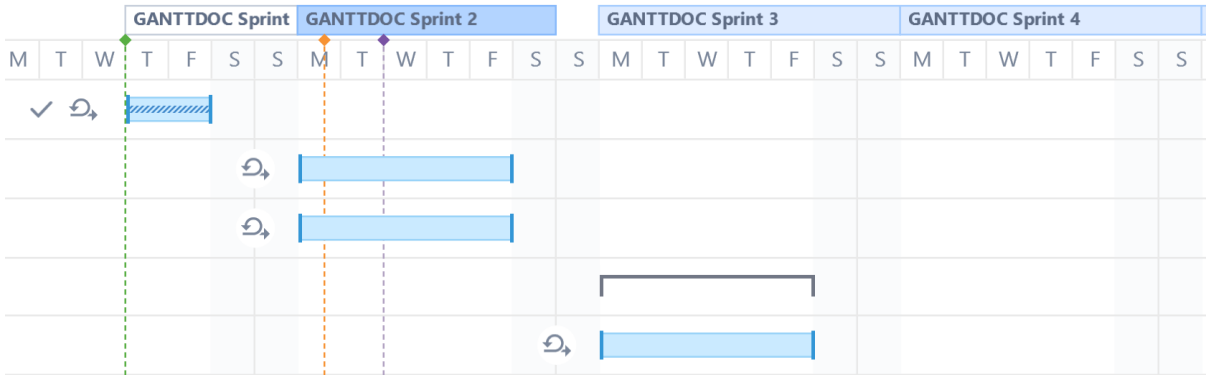


To create a new custom marker, click on the "New marker" button. You can also create a new marker right from the Gantt chart - just doubleclick anywhere on the timeline. You can give the marker a custom name, date, and color.



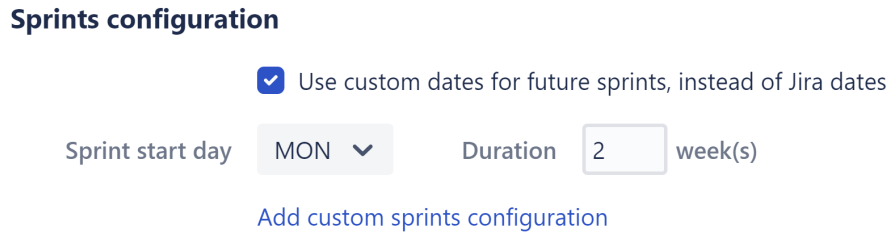
2.2.1.3 Sprints

Structure.Gantt is able to visualize past, current and future sprints.



The dates for past and active sprints are always taken from their values in Jira. For future sprints, you have two options:

- By default, future sprint dates are based on the values in Jira.
- If you prefer to set your own dates and timelines for future sprints, select the "Use custom dates for future sprints, instead of Jira dates" checkbox:



You can customize future sprints based on:

- **Sprint start day** - the day of the week future sprints should start
- **Duration** - how long sprints lasts, in weeks

Future Sprint Scheduling - Custom Configurations

⚠ The following only applies if "Use custom dates for future sprints, instead of Jira dates" is selected.

The first future sprint is scheduled for the **Sprint start day** immediately following the end of the active sprint. If the active sprint ends on the same day of the week as the Sprint start day, Structure.Gantt will visualize the active sprint ending on the previous day.

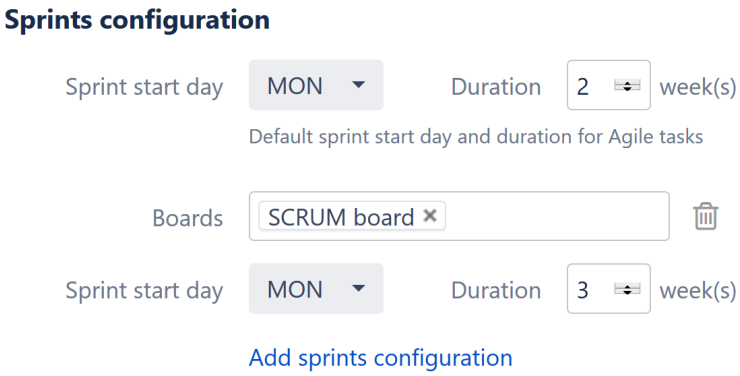
Future sprints are scheduled for the specified duration, and each additional future sprint begins immediately following the previous.

ⓘ If there is no active sprint, Structure.Gantt will base future sprints on the Planned Finish Date of the latest closed sprint. If there are no closed sprints, future sprints will begin on the first Sprint start day following the Project start date.

⚠ On your chart, there may be a gap between the active sprint and the first future sprint, based on the specified Sprint start day and the planned finish date for the active sprint. This is done to keep your start days consistent.

2.2.1.4 Custom Sprint Schedules

You can also create custom schedules for sprints from specific boards. To add a custom schedule, click the **Add sprints configuration** link.

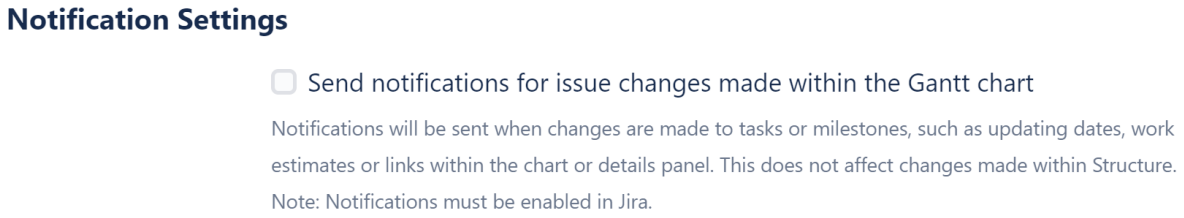


In the example above, any sprints from the SCRUM board will have a 3 week duration. All other sprints will use the default configuration (2 weeks).

If you have copied boards, make sure to assign all copies to the same custom configuration. See Same Sprint on Multiple Boards(see page 94) for more details.

2.2.1.5 Notification Settings

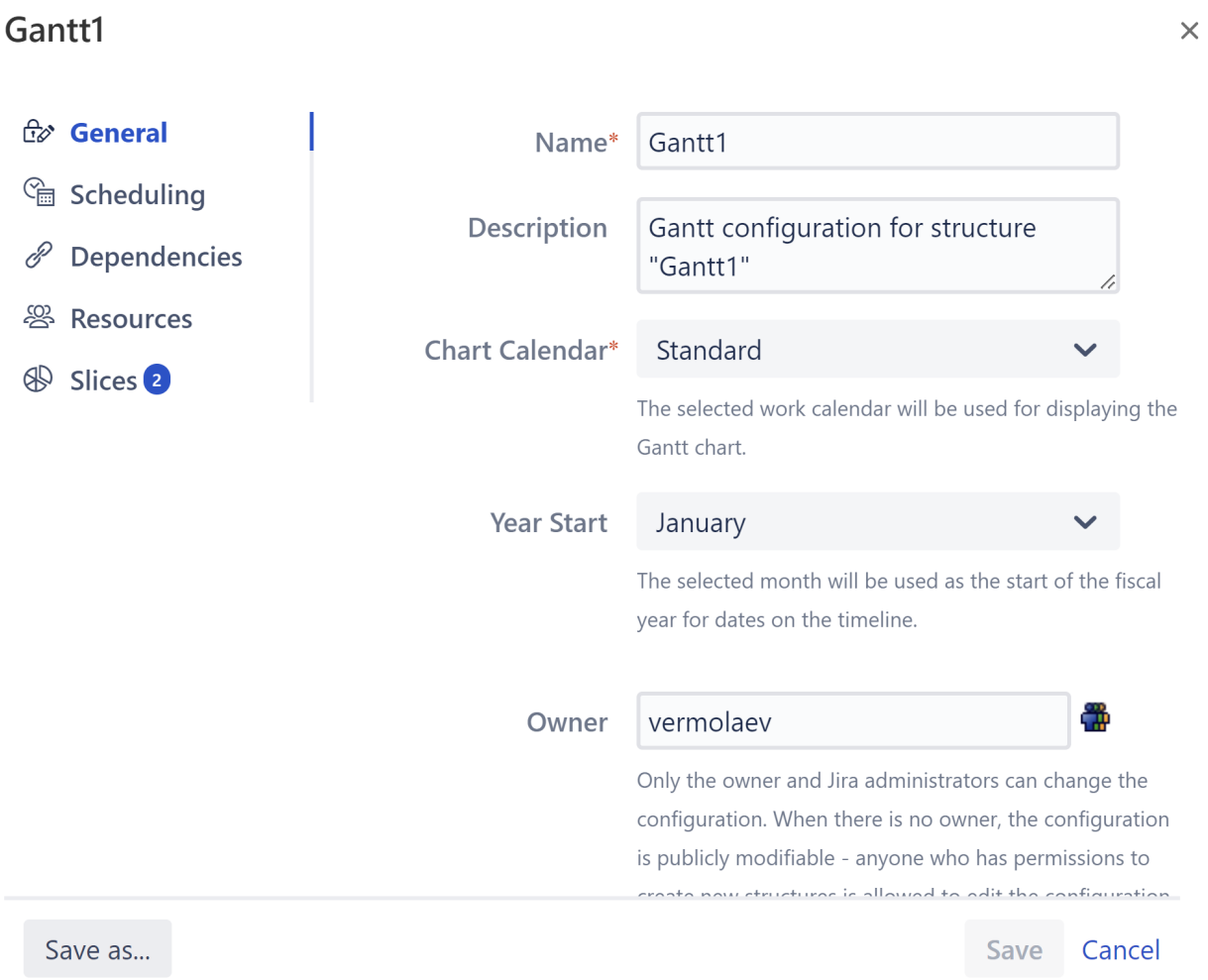
By default, Structure.Gantt will notify users of changes made within the chart based on your Jira and project notification settings. If you would rather notifications not be sent when issue changes are made within the chart, uncheck the **Send notifications for issue changes made within Gantt chart** box.



In order for notifications to be sent, email notifications must be enabled in Jira and for the relevant project. This setting does not affect the notification for changes made within Structure.

2.2.2 General Configuration

In the General tab you define the basic elements of your Gantt chart configuration.



- **Name** - We recommend giving your configuration a name that conveys its purpose or corresponds with the project you will be using it for.
- **Description** - Enter a brief description of the configuration, so you and your users know when best to use it.
- **Chart Calendar** - Select the calendar to be used for displaying the chart to users. We'll cover this more in-depth in the Calendars(see page 67) section.
- **Year Start** - Dates displayed in the timeline will use the selected month as the start of the fiscal year[9], with the year assigned based on the *end* of the fiscal year period. For example, if you select November and the calendar year is 2020, then October (end of the fiscal period) is treated as 2020, and November (start of the new fiscal period) will be treated as 2021. To always display the actual calendar date, leave this set to "January."
- **Owner** - Only the owner and Jira administrators can change the configuration. When there is no owner defined, anyone who has permissions to create new structures is allowed to edit the configuration.
- **Sharing** - Check this box to share your configuration with other users. They will be able to see the configuration and use it in their Gantt charts, but they will not be able to modify the configuration in any way.
- **Appearance** - Select the default look of your Gantt chart:

9 https://en.wikipedia.org/wiki/Fiscal_year

- **Color Scheme** - Select the standard color for items in your chart. You can use choose one of the 6 provided colors, or click CUSTOM to select a custom color.
- **Fill color** - Enter a custom color, either using the color picker or typing its Hex value.
- **Progress color** - Progress can be displayed as a dark or light color over the taskbar. If you select Auto, Structure.Gantt will pick the option that provides the most contrast to your color scheme.

If you share your configuration, and someone uses it in their Gantt chart, you may not be able to delete it. Additionally, shared configurations without a specified owner can be edited by anyone, which could result in changes to your chart. See Permissions(see page 86) for more details.

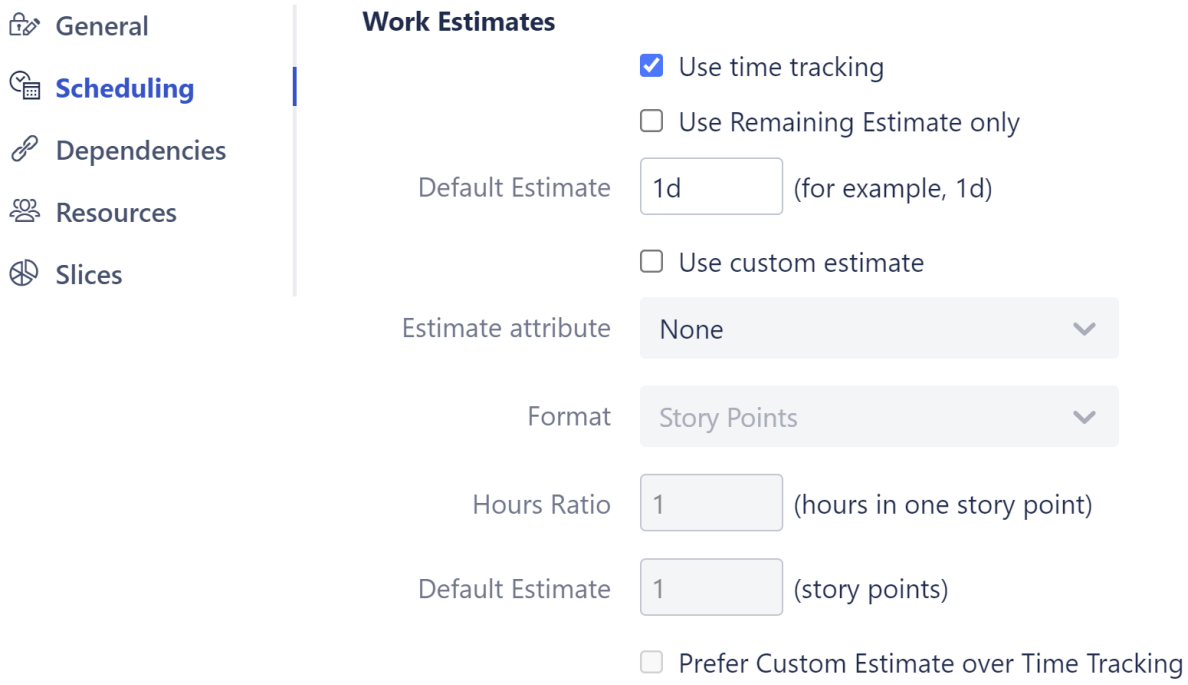
2.2.3 Scheduling Configuration

The Scheduling section of the Gantt configuration allows you to define how tasks are scheduled in the chart. You can define whether Gantt places those tasks automatically or based on user-defined dates, what attributes are used to determine placement and more.

- Work Estimates Configuration(see page 49)
- Progress Configuration(see page 51)
- Manual Scheduling Configuration(see page 55)
- Fixed Duration Attribute(see page 58)
- Precision Configuration(see page 59)
- Behavior Configuration(see page 60)

2.2.3.1 Work Estimates Configuration

In this section, you can configure how the work (effort required to complete the task) is determined.



The work required for each task can be estimated using Time Tracking and/or another estimate attribute, such as Story Points,a text or numeric custom field, or even a formula.

> ⚠ Work estimates define the amount of work (or effort) required to complete a task. The exact duration of the task will depend on the amount of work, the resource assigned to the task and the calendar. Please see the Resources(see page 116) section for more details.

Using Time Tracking for Work Estimate

If **Use time tracking** is selected, work is estimated based on:

- Time Spent + Remaining Estimate, if work has been logged for the task.
- Original Estimate, if no work has been logged.

Structure.Gantt will use this work estimate to determine the task's duration. If you adjust the task duration by changing the size of the task bar in the chart or editing the Work value in the Task Details Panel(see page 102), these fields are updated accordingly:

- Remaining Estimate will be updated, if work has been logged
- Original Estimate and Remaining Estimate will be updated, if no work has been logged

> ⚠ Changing the size of a task bar does not affect the work estimate for fixed-duration(see page 96) tasks. Additionally, it is not possible to change the size of a task bar for tasks scheduled by sprints(see page 91).

Use Remaining Estimate only

If the **Use Remaining Estimate only** option is selected, Structure.Gantt will base its work estimate only on the remaining work.

Default Estimate

The Default Estimate value is used when no other work estimate values are available for a task.

Using a Custom Estimate

If your organization uses another method to estimate work (such as Story Points), select the **Use custom estimate** option and select the appropriate **Estimate Attribute** where those values are stored.

Structure.Gantt will use the values in this field to determine the work required for each task. If you adjust the task duration by changing the size of the task bar in the chart or editing the Work value in the Task Details Panel(see page 102), Structure.Gantt will update the value in this field.

Format

Select the format of the custom estimate (Story Points, minutes, hours, etc.). This allows Structure to correctly interpret the provided values.

Hours Ratio

If your custom estimate is in Story Points, select how many hours it should take to complete each Story Point. This is used to convert Story Points into hours and back, so tasks can be properly visualized on the timeline.

Default Estimate

The Default Estimate value is used when there is no value available for an issue, or the value is invalid.

Using Time Tracking AND Custom Estimate

If you are working on a project where teams use both time tracking and a custom estimate (or you're in the process of migrating from one to the other), you can select both options.

When both are selected:

1. Structure.Gantt will first try to use time tracking values to determine the work estimate
2. If there is no time tracking information available for an issue, it will use the custom estimate instead
3. If neither are available, the Default Estimate will be used.

You can also switch this order, so that the custom estimate is used before time tracking, by checking the **Prefer Custom Estimate over Time Tracking** box.

Updating Work Estimates When Using Time Tracking and Custom Estimate

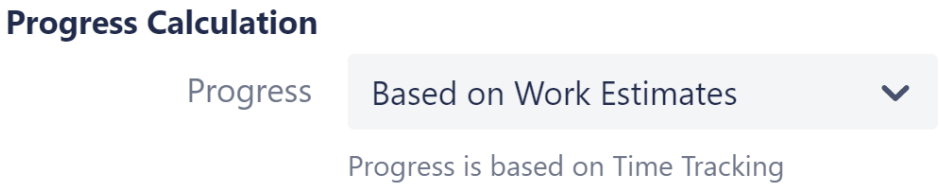
If you adjust the task duration by changing the size of the task bar in the chart or editing the Work value in the Task Details Panel(see page 102), Structure.Gantt will update the value of the preferred estimate only:

- Time Tracking values will be updated, if **Prefer Custom Estimate over Time Tracking** is unchecked
- Custom Estimate values will be updated, if **Prefer Custom Estimate over Time Tracking** is checked

If you remove the Work value from the Task Details Panel, both the Time Tracking and Custom Estimate values will be removed, and the Default Estimate will be used.

2.2.3.2 Progress Configuration

Structure.Gantt allows you to configure how progress for individual tasks and groups is calculated.



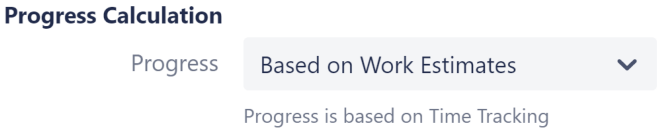
By default, progress is calculated using the same settings as Work Estimates Configuration(see page 49). In this case, progress will be calculated based on the values (Time Tracking, Story Points, etc.) you selected in the Work Estimates section.If you prefer, you can specify a different field from Work Estimates or use a Formula[10] for progress calculation.

> While using Time Tracking, tasks with non-empty resolutions are treated as 100% complete. If using a Formula, it should return values from 0 to 100. All values higher than 100 will be treated as 100. (*Hint: if your formula only returns values between 0 and 1, multiply by 100.*)

Progress Calculation for Tasks - When Progress Is Based on Work Estimates (Time Tracking)

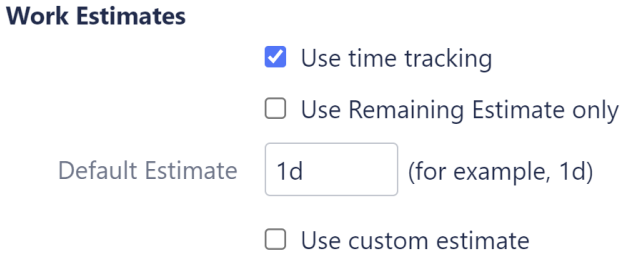
In Structure.Gantt, progress is calculated as a ratio of Completed Work / Planned Work. The way these values are calculated vaires depending on how you've configured your Gantt chart.

The following sections describe how those values are calculated when Progress Calculation is based on Work Estimates.



Work Estimates Are Based on Time Tracking

If your configuration looks like this:



Progress = Completed Work / Planned Work based on the following:

- **Completed Work = Time Spent**
- If Remaining Estimate has been defined: **Planned Work = Time Spent + Remaining Estimate**
- If Remaining Estimate has NOT been defined: **Planned Work = Original Estimate**
- If Original Estimate has not been defined: **Planned Work = Default Estimate** (specified in the configuration)

See the Formula...

---

10 https://wiki.almworks.com/display/structure/.Formula+Column+v8.1

The following formula is used to determine Planned Work:

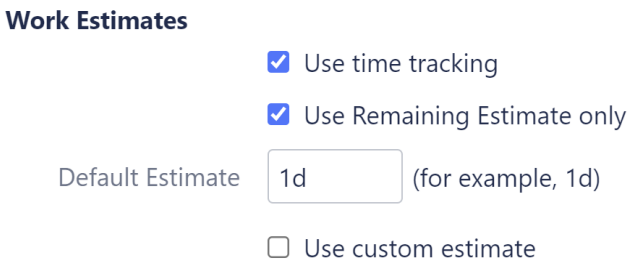
```
IF (TimeSpent > 0 AND DEFINED(RemainingEstimate)) :
    (TimeSpent + RemainingEstimate)
ELSE :
    DEFAULT(OriginalEstimate, DEFAULT(RemainingEstimate, DURATION("1d")))
```

Special Cases

- If no time has been spent on the task: **Progress = 0%**
- If the task is resolved: **Progress = 100%**
- If planned work is zero: **Progress = 0%**

Work Estimates Are Based on Time Tracking w/ Use Remaining Estimate Only

If your configuration looks like this:



Progress = Completed Work / Planned Work based on the following:

- **Completed Work = Time Spent**
- If Remaining Estimate has been defined: **Planned Work = Time Spent + Remaining Estimate**
- If Remaining Estimate has NOT been defined: **Planned Work = Default Estimate** *(specified in the configuration)*

See the Formula...

The following formula is used to determine Planned Work:

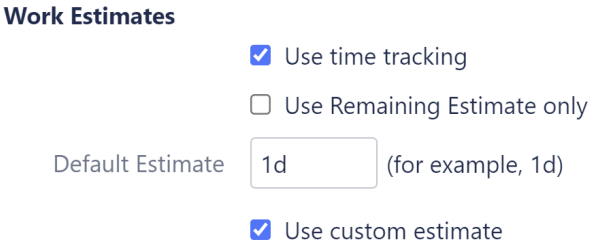
```
IF (DEFINED(RemainingEstimate)) :
    (DEFAULT(TimeSpent, 0) + RemainingEstimate)
ELSE :
    DURATION("1d")
```

Special Cases

- If no time has been spent on the task: **Progress = 0%**
- If the task is resolved: **Progress = 100%**
- If Planned Work is zero (*issue has no work logged and its RemainingEstimate is "0" (not empty)*): **Progress = 100%**

Custom Estimate

If you're using a custom estimate, such as Story Points, your configuration will look like this:



With custom estimates:

- If the issue is unresolved: **Progress = 0%**
- If the task is resolved: **Progress = 100%**

Progress Calculation for Tasks - When Progress Is Based on a Custom Attribute

If you selected a custom attribute for Progress Calculation, the progress for each task will be the value within the attribute field.

> The issue's resolution status does not affect the progress value when a custom progress attribute is configured.

Planned Work and Completed Work

Planned Work and Completed Work still get calculated when using a custom attribute, and these values are used when aggregating progress for a group(see page 54).

1. Planned Work is based on the Work Estimate settings, in the same way we described for work estimates(see page 52) above
2. Completed Work = Planned Work × Custom Progress / 100 *(Custom Progress is determined by converting the value in the custom field to a range from 0 - 100)*

Progress Calculation for Groups

A group's Completed Work and Planned Work are calculated as the sums of the completed and planned work of its children: **Group Progress = Σ Completed Work / Σ Planned Work**.

In the following example, where Group A contains Task 1 and Task 2, you might expect Group A's progress to be 50% (the average of Task 1 and Task 2), but when we calculate a progress based on Total Completed Work and Total Planned Work, Group A's progress is only 25%.

Item	Completed Work	Planned Work	Progress
Task 1	1d	1d	100%
Task 2	0	3d	0%

Item	Completed Work	Planned Work	Progress
Group A	1d	4d	25%

Special Cases

1. If the sum of all completed work or planned work (or both) is zero, **Group Progress = 0%**
2. An empty group's progress is not defined (empty)

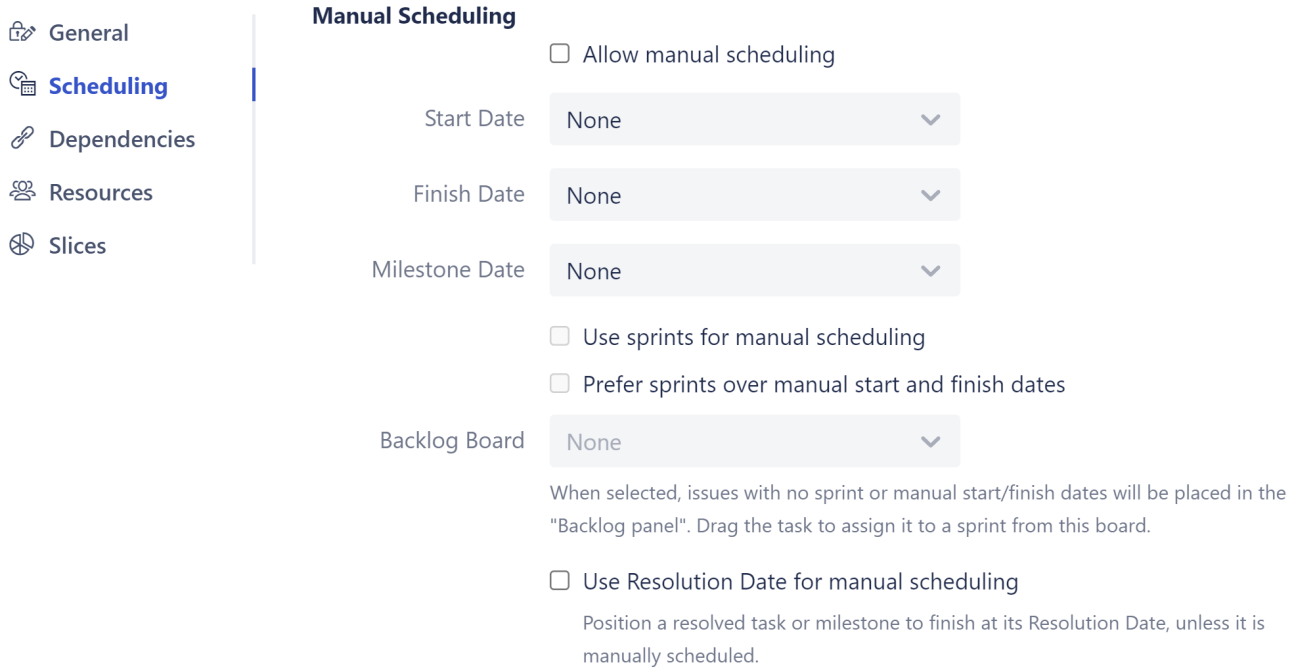
> See above for how Completed Work and Planned Work are calculated for individual tasks.

Progress for Milestones

A milestone has no work, and its progress is undefined. A milestone does not affect the progress of its parent group.

2.2.3.3 Manual Scheduling Configuration

In order to use manual start and finish dates(see page 89) within your chart, you need to enable Manual Scheduling and select the (date or date/time) fields that will store the manually set start, finish and/or milestone dates. If these fields already contain date values, Structure.Gantt will use these values to place tasks appropriately within the chart.



Once Manual Scheduling is enabled, you can adjust Start, Finish and Milestone dates directly from your Gantt chart.

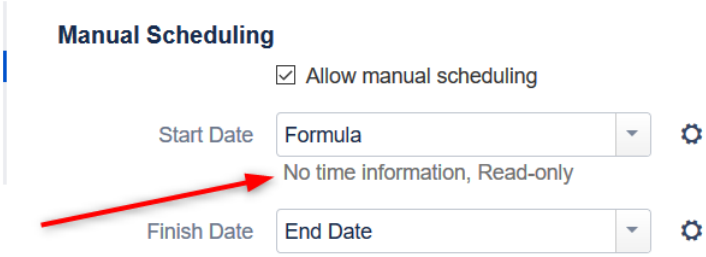
To learn more about manually scheduling from within your Gantt chart, see Scheduling Tasks(see page 87).

> If one of the selected fields has Date type and the other one has Date/Time type, they both will be treated as Date.

Read-Only values

Structure.Gantt allows you to adjust manual dates and/or work estimates simply by dragging and dropping task bars within your chart. Depending on which attribute you selected to represent these values, it may or may not be possible to update those values.

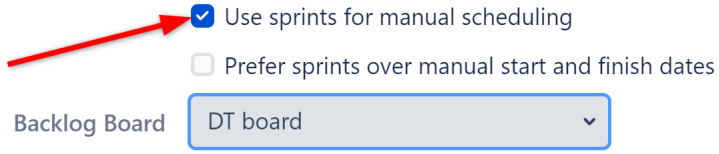
If you use a Formula to calculate a date, you will not be able to make manual updates to that date. In this case, Gantt configuration displays a "read-only" message near the field selector, and you receive an error if you try to drag a task to a new date within your chart.



> In some cases it will not be possible to update the value of a custom field (for example, if the custom field was not added to the Issue Screen, or you do not have edit permissions). When this occurs, Structure.Gantt will display a Jira flag to let you know.

Use Sprints for Manual Scheduling

When the **Use sprints for manual scheduling** option is selected, tasks can be scheduled to begin and end based on sprint dates.

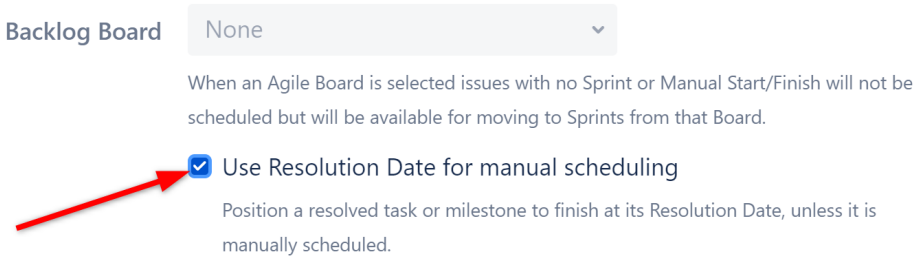


See Use Sprints for Manual Scheduling(see page 57) for more information.

> Using sprints for manual scheduling requires Jira Software.

Use Resolution Date as the Finish Date

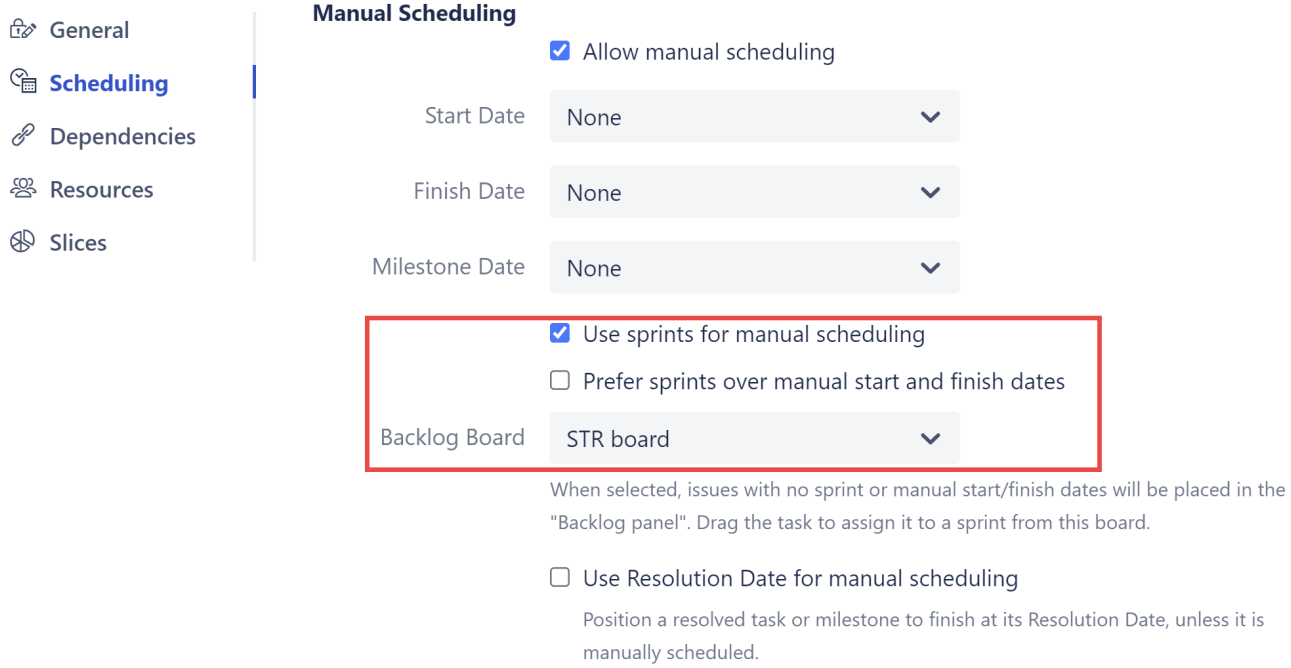
When this option is enabled, all resolved tasks and issue-based milestones(see page 115) that are not scheduled manually will be scheduled using the issue resolution date as the Finish Date.



This does not affect tasks with manually-scheduled Start or Finish dates, or manually-scheduled milestones - those items will continue to be scheduled based on the attributes selected above.

Use Sprints for Manual Scheduling

When the **Use sprints for manual scheduling** option is selected, tasks can be scheduled to begin and end based on sprint dates.



When sprints are used for manual scheduling, tasks that are assigned to sprints will be scheduled for the duration of those sprints, based on current sprint dates and future sprint estimates(see page 45). The work for each task will be evenly distributed across its sprint duration. For more information about sprint-based scheduling, see Planning with Sprints(see page 91).

Prefer sprints over manual start and finish dates

If this option is selected, issues that are assigned to a sprint will automatically be scheduled based on the sprint. If this option is not selected, issues with manual Start or Finish dates will be scheduled based on those, regardless of their sprint assignment.

To learn more, see Scheduling Precedence(see page 58).

Backlog Board

Issues that are not assigned to a sprint (and do not have manual Start or Finish dates) will be represented on the chart in the Backlog panel. You can assign those issues to sprints by dragging them onto the chart or using the Task Details Panel(see page 102). When you do, Structure.Gantt will display sprints from the selected board.

You can only select one board for the backlog. If your chart includes issues that need to be assigned to sprints from another board, you can assign specific boards for each project using Slices(see page 74).

Scheduling Precedence

By default, tasks in Structure.Gantt are automatically scheduled(see page 88) based on the project start date, work estimates and dependencies. If Manual Scheduling is selected in the Gantt configuration(see page 58), tasks will be scheduled in the following manner, depending on the Manual Scheduling(see page 58) options:

Use sprints for manual scheduling AND **Prefer sprints over manual start and finish dates** are selected:

1. If an issue is assigned to a sprint, it will be scheduled for the duration of that sprint, even if it has Start/Finish dates available
2. If an issue is not assigned to a sprint, it will be scheduled based on its Start/Finish dates
3. If no Start/Finish dates are available, the issue is resolved and **Use Resolution Date as the Finish Date** is selected, the issue will be scheduled based on its resolution date
4. Otherwise, the issue will be automatically scheduled

Use sprints for manual scheduling is selected, but **Prefer sprints over manual start and finish date** is NOT selected:

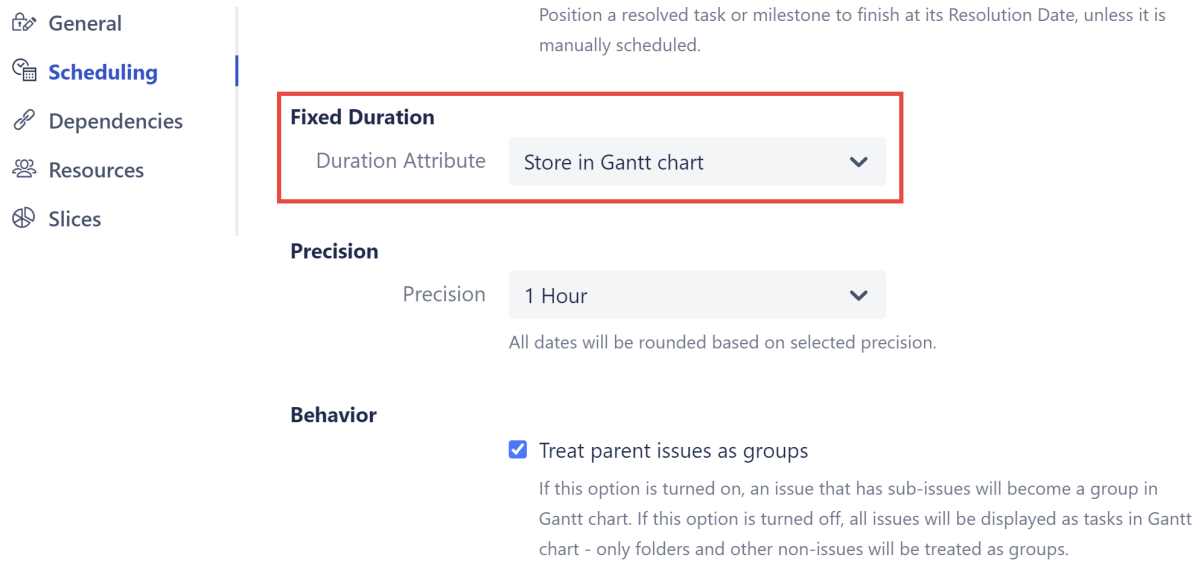
1. If a Start or Finish date is available, the issue will be scheduled based on these, even if it is assigned to a sprint
2. If no Start or Finish date is available, but the issue is assigned to a sprint, the issue will be scheduled for the duration of that sprint
3. If the issue is not assigned to a sprint, is resolved and **Use Resolution Date as the Finish Date** is selected, the issue will be scheduled based on its resolution date
4. Otherwise, the issue will be automatically scheduled

Use sprints for manual scheduling is NOT selected:

1. If a Start or Finish date is available, the issue will be manually scheduled based on these
2. If no Start/Finish dates are available, the issue is resolved and **Use Resolution Date as the Finish Date** is selected, the issue will be scheduled based on its resolution date
3. Otherwise, the issue will be automatically scheduled

2.2.3.4 Fixed Duration Attribute

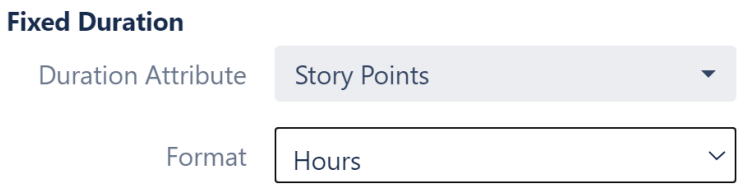
The Fixed Duration Attribute determines how fixed durations(see page 96) are assigned and stored. By default, Fixed Durations are stored in the Gantt Chart and can be manually set or updated using the Task Details panel(see page 102) or dragging its edge on the chart (when a fixed duration is set).



By changing the Duration Attribute, you can automatically assign fixed durations to tasks, based on a Jira attribute or formula.

Format

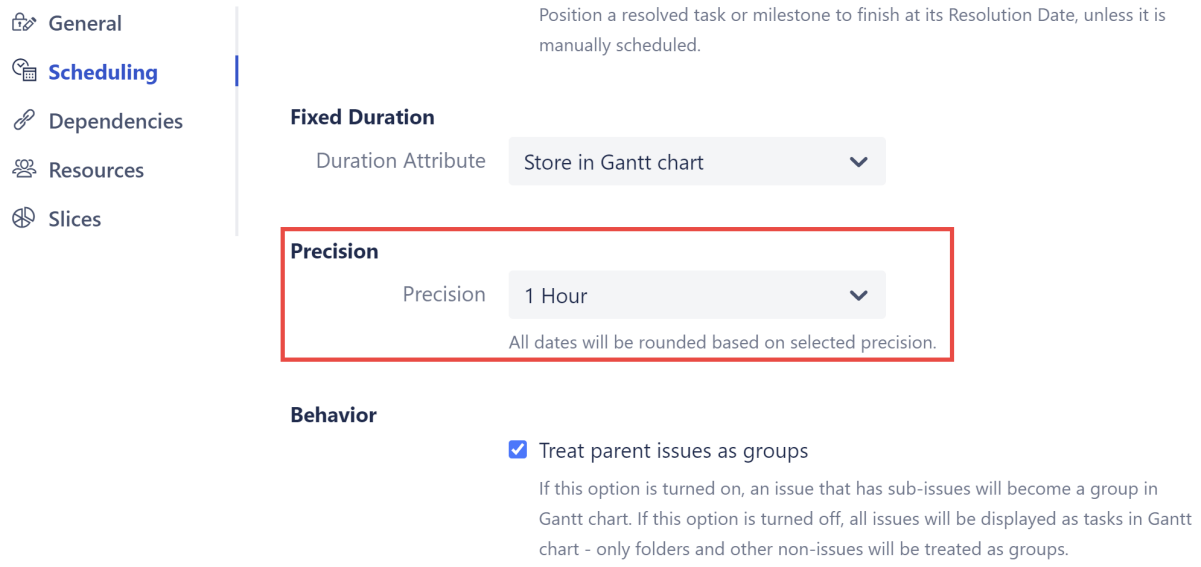
If you use a custom field or formula for the Duration Attribute, you can also specify the format of values in that field.



This tells Structure.Gantt how it should interpret the values in the field (milliseconds, minutes, hours, etc.). You can also select **Text duration** to use Jira duration format (1d 3h 30m).

2.2.3.5 Precision Configuration

Structure.Gantt allows you to define the precision used for scheduling and calculations. You can choose 1 minute, 1 hour or 1 day precision (1 hour is used by default).



Precision defines the minimum meaningful amount of work. All date, time and duration values in your chart are rounded according to the selected precision. When rounding for precision:

- Start dates are rounded down
- Finish dates and durations are rounded up

For example, with the default 1 hour precision, a duration of 15 minutes will be displayed in your chart as 1 hour. A Start Date of September 12, 2022 9:45 AM would be shown as September 12, 2022 9:00 AM.

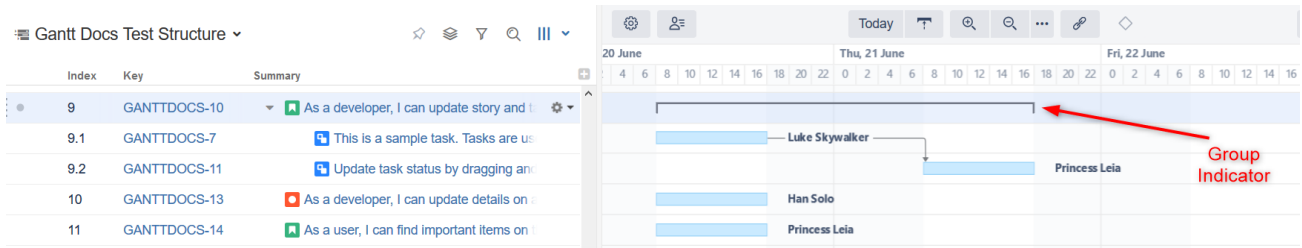
> ⚠ Structure.Gantt rounds the value of Jira fields when doing calculations, but the field value itself is not updated.

2.2.3.6 Behavior Configuration

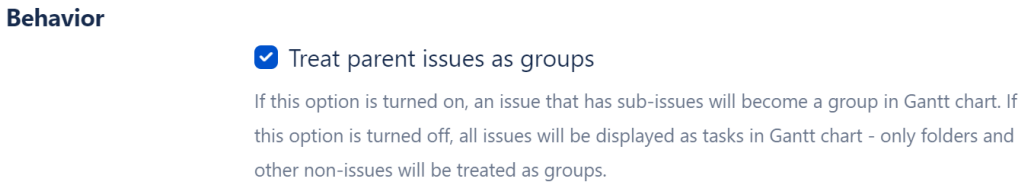
Behavior allows you to change how certain tasks are represented in the chart.

Treat parent issues as groups

A group aggregates values from the tasks it contains, and its own values for manual start date, finish date or work estimation are ignored. You can configure your Gantt chart to show parent issues either as actual tasks or as groups (containers for tasks).



Structure.Gantt groups issues by default. To have your parent issues shown as actual tasks, on the Scheduling screen, under Groups, uncheck the "Treat parent issues as groups" checkbox.



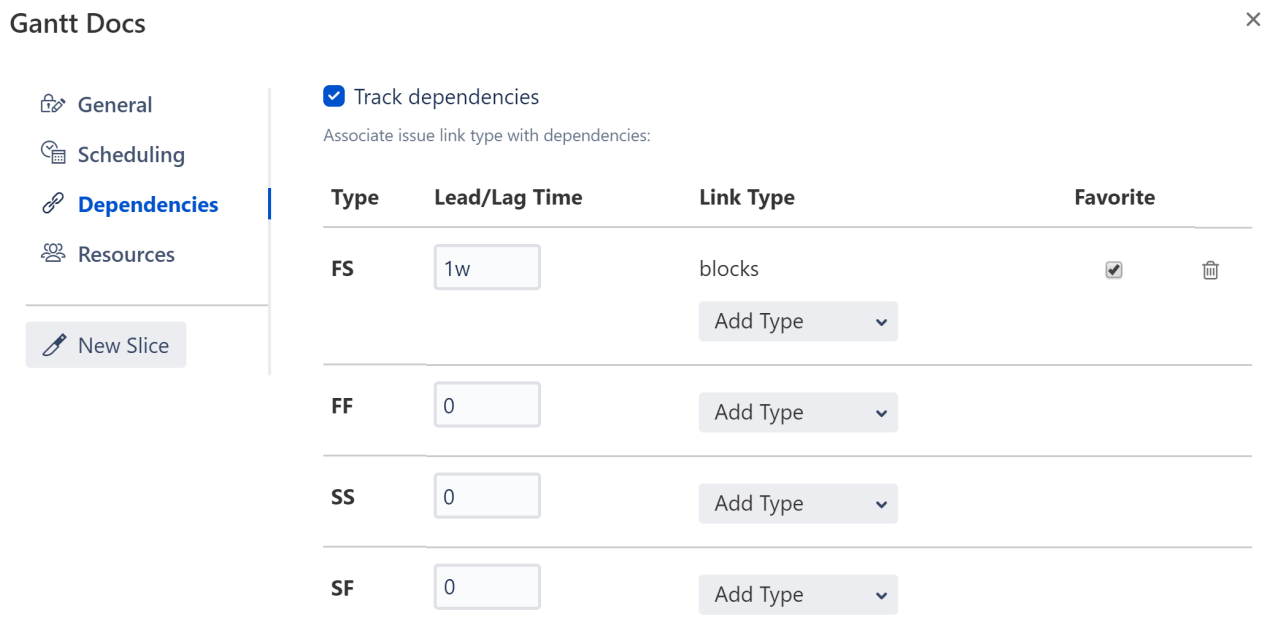
If a parent issue contains non-issue items only (foldersor Confluence pages), it will be shown as a task, regardless of the selected option.

If an issue is treated as a group, any resources assigned to that issue will be ignored when calculating resource usage.

2.2.4 Dependencies Configuration

Structure.Gantt uses Jira issue links for working with dependencies between issues.

To create issue-to-issue dependencies, you first need to specify the link types you want to use for each dependency relationship.

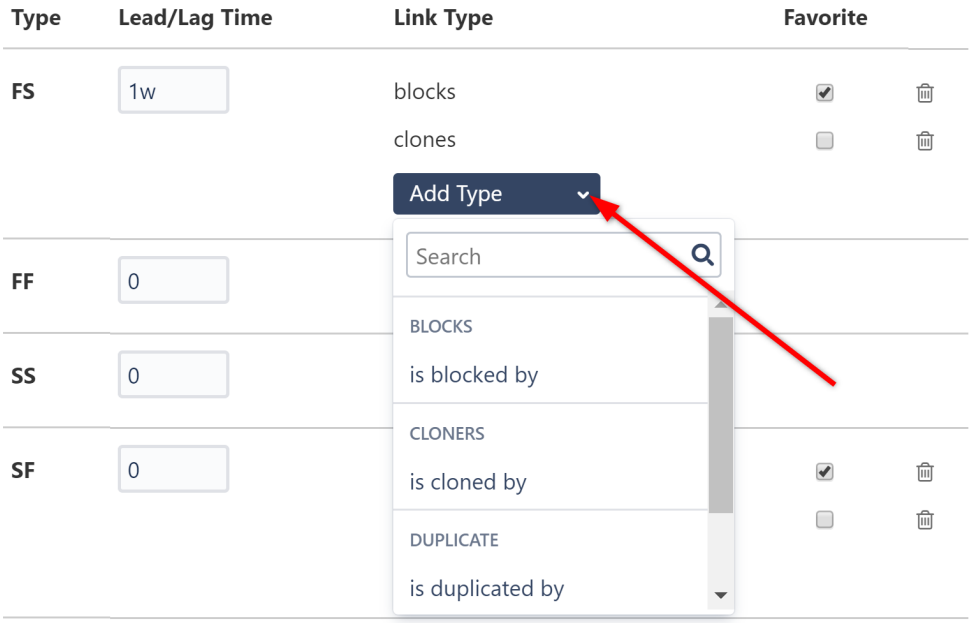


By default, Finish to Start (FS) dependencies are enabled with "blocks" link type. To learn more about the the available dependency types, see Dependencies(see page 108).

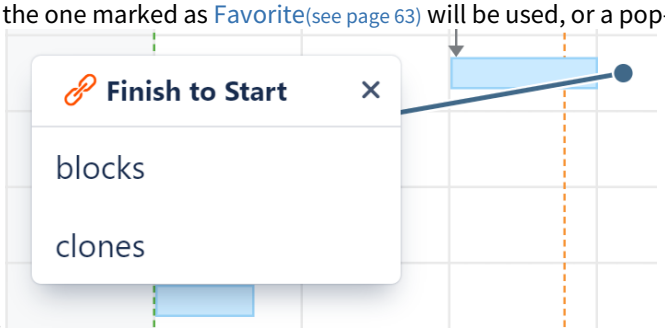
If you have the BigGantt add-on installed, your default link type will be "has to be done before."

2.2.4.1 Adding Dependency and Link Types

You can use multiple dependency relationships and link types within your Gantt chart. To enable a new dependency and/or link type, click the appropriate **Add Type** button and select the link type you want to use.



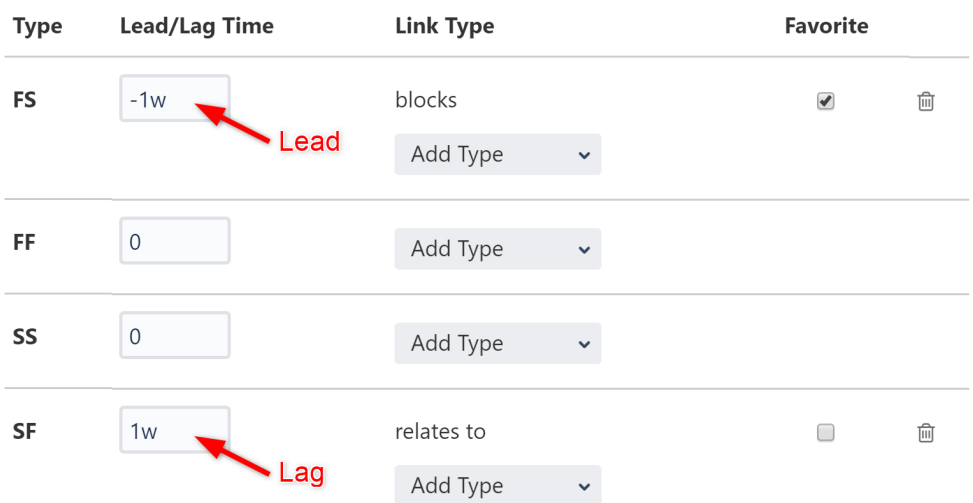
All of the options you select here will be available to you when you create a link using the link button  in the toolbar.When you create a link by dragging one task bar to another, if you have more than one link type associated with the type of dependency being created, the one marked as Favorite(see page 63) will be used, or a pop-up will appear for you to select the appropriate type.



2.2.4.2 Lead/Lag Time

By default, dependency transitions happen immediately. For example, in an FS dependency, the second item in the dependency starts as soon as the first item finishes. If you need to delay a start/finish or begin it early, you can configure a lead/lag time for each dependency type.

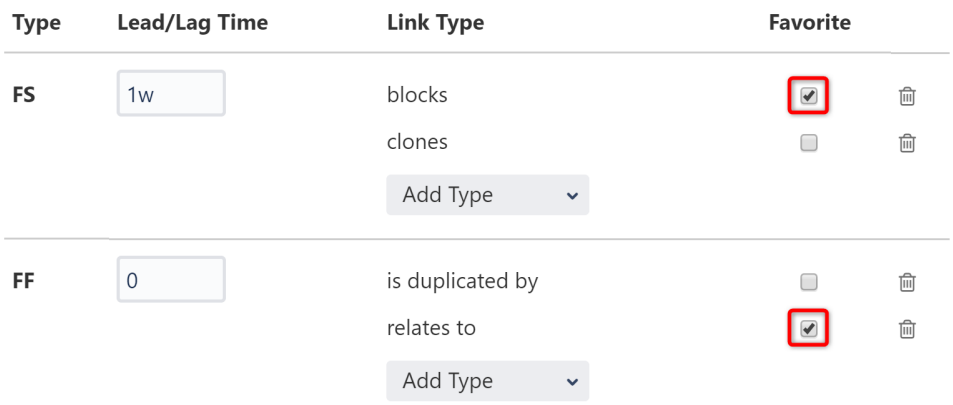
- To set a lead time, input a negative number.
- To set a lag time, input a positive number.



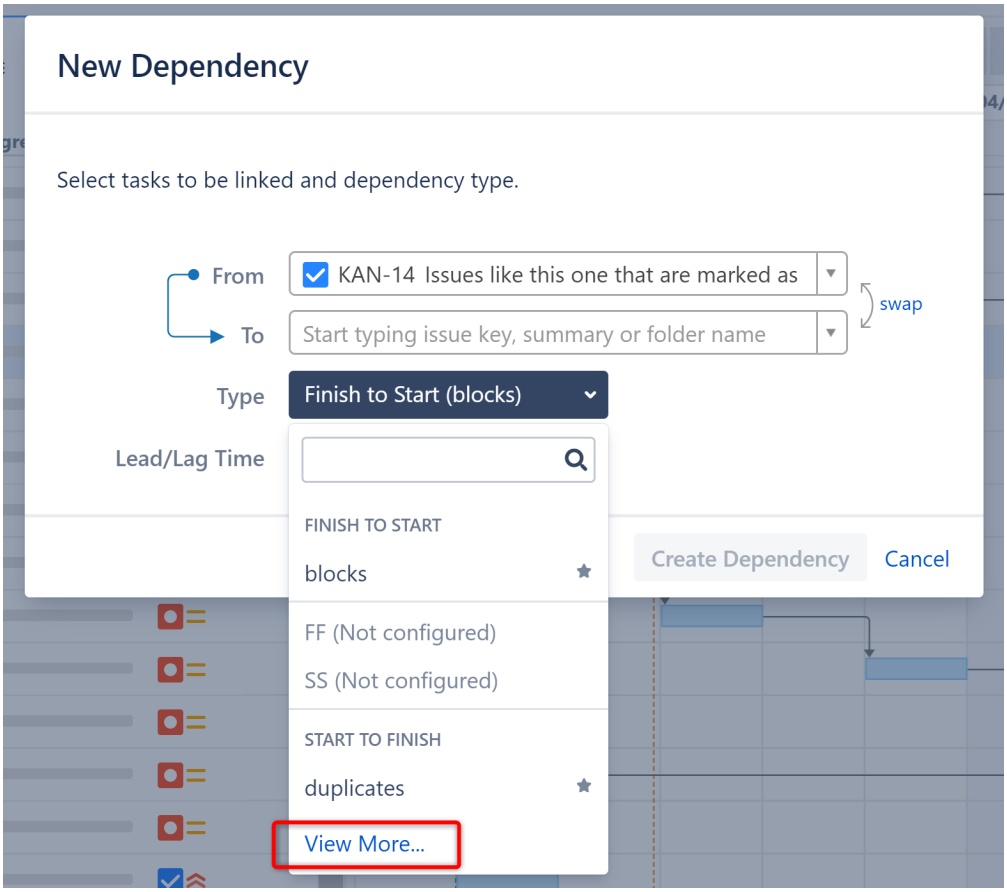
To learn more, see Dependency Lead/Lag Time(see page 111).

2.2.4.3 Favorite

You can specify a default link type for each dependency type by checking the appropriate **favorite** box.



The "favorite" link types for each dependency type will be displayed in the Type drop down menu when using the New Dependency Menu. To see additional link types, click the **View more...** link.



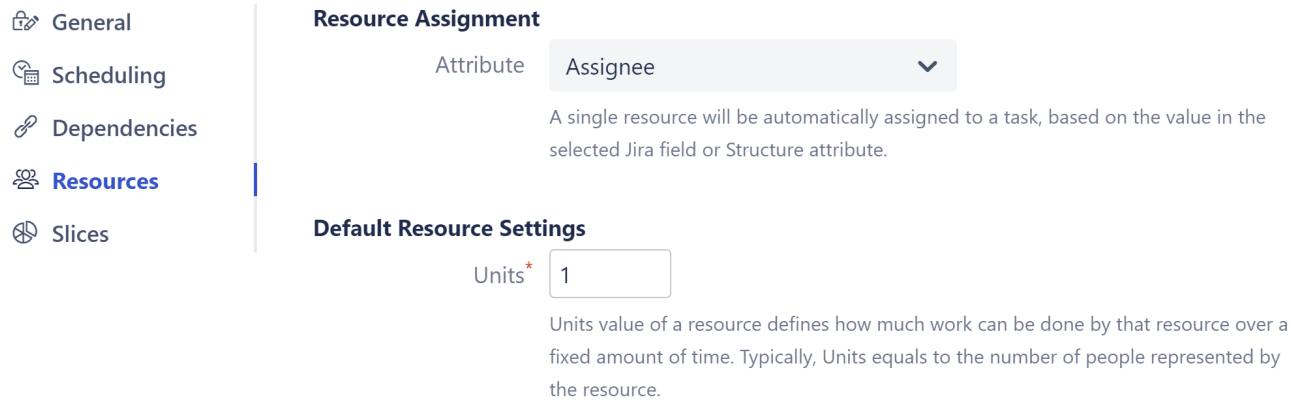
If you don't have any favorites configured, all link types will be shown.

When you add a dependency within your chart, Structure.Gantt creates a link of the corresponding link type between the two issues. See Dependencies(see page 108) for more information about creating dependencies within a Gantt chart.

Structure.Gantt also supports dependencies between other types of items, such as folders and pages, but these are stored within Gantt itself.

2.2.5 Resources Configuration

In the Resources section of the Gantt configuration you can configure the way resources are assigned to tasks and the default settings for resources.



This article covers resource assignment and setting default values for resources and tasks. To learn more about managing resources within your Gantt chart, see Resources(see page 116).

2.2.5.1 Resource Assignment

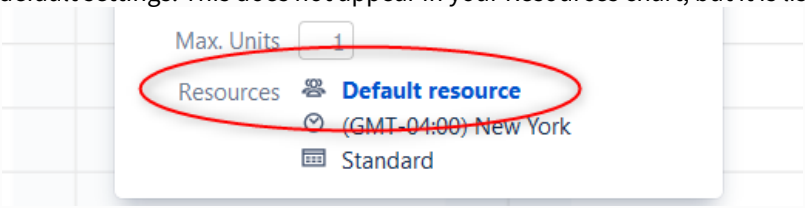
You can assign resources to issues using a Jira field (including text, list and user fields) or a Structure attribute, such as a value calculated through Formulas(see page 64).

Here are a few common examples of resource assignments:

- To use each task's assigned user as its resource, select Assignee.
- To use teams as resources, create a text custom field called "Teams" and populate it with team names accordingly. Structure.Gantt will automatically merge similar values.
- You can also combine these using a simple formula(see page 64): "Assignee OR Team". If there is an Assignee for an issue, Structure will use that field. Otherwise, it will use the Team. (If you want to default to Team instead, switch the order of your formula: "Team OR Assignee".

By default, "None" value is selected.

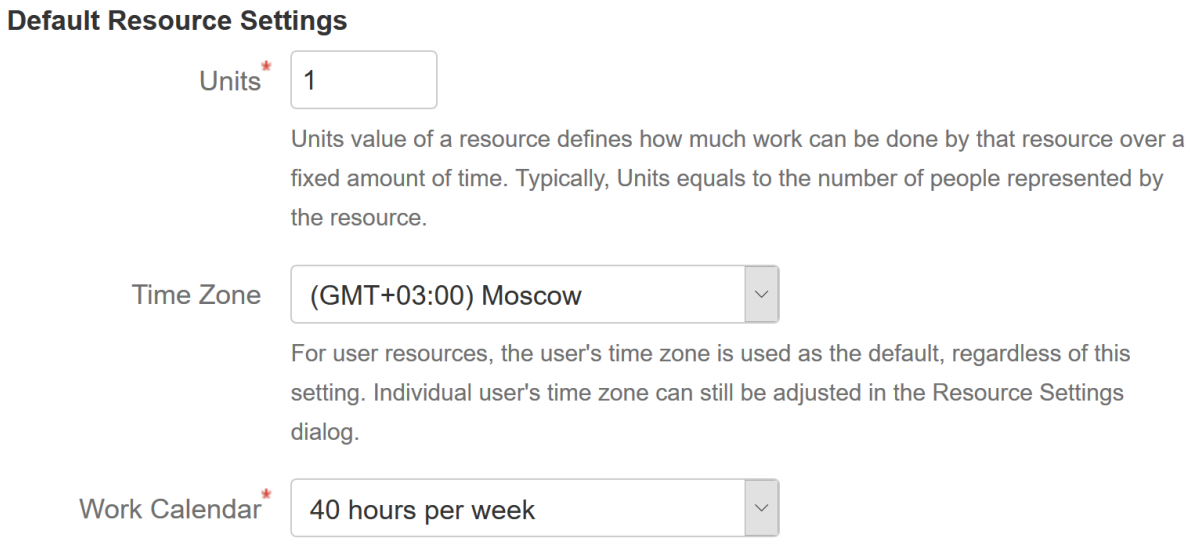
When no attribute is chosen (or there is no value for that attribute field), a "default" resource is used with default settings. This does not appear in your Resources chart, but it is listed on the Task Details Panel:



2.2.5.2 Default Resource Settings

In order to correctly allocate resources and place that information within your Gantt and Resource Usage charts, Structure.Gantt needs to determine the following parameters for each resource:

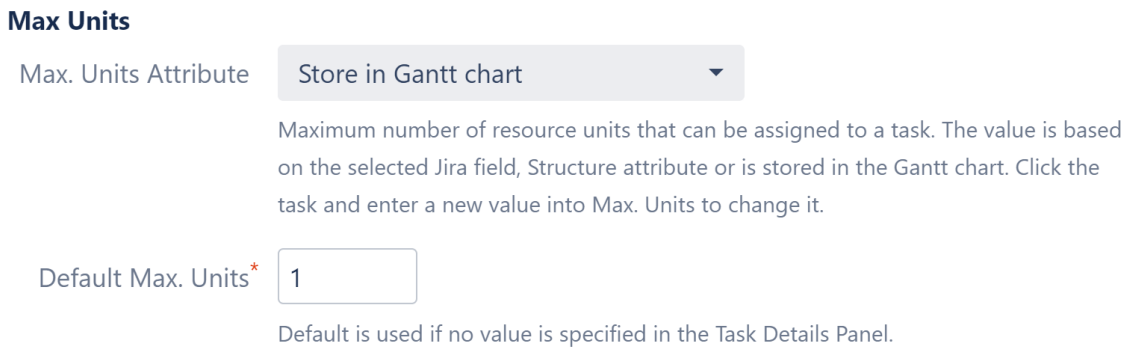
- **Units** - Defines the "size" of a resource. By default, the value is 1, which corresponds to 1 person. If you use teams as resources, and each team has 5 people able to use all available time to work on tasks, you would enter 5.
- **Time Zone** - Defines the default time zone of the resources.
- **Work Calendar** - Defines the default working and non-working hours for the resource.



Default values will be used when a resource does not have its own values specified or when no resource is provided. These values can be overwritten for individual resources, through Resource Settings. See Resources(see page 116) for more information.

2.2.5.3 Max Units

Task settings allow you to configure Maximum Units and Leveling Priority.



Max. Units Attribute

Maximum Units defines the maximum number of resource units that can be allocated for a task. For example, if you set the default Resource Units (above) to 5 and the Maximum Units for a task to 1, that task won't be able to use more than 1/5 of a resource's capacity.

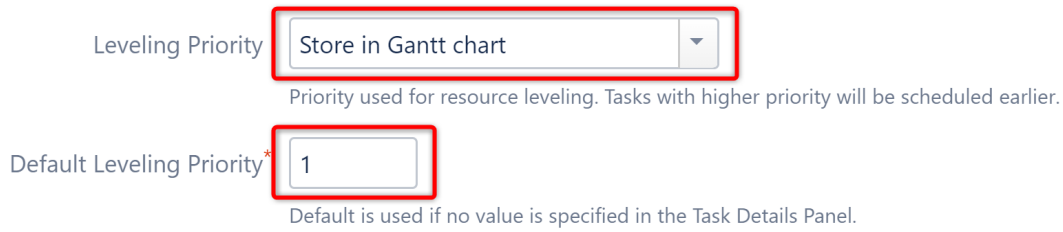
Max. Units Attribute allows you to select where the Maximum Units values are stored. You can choose a Jira field, Structure attribute or the Structure.Gantt database. Once selected, the Maximum Units value for each task can be set or updated using the Task Details panel(see page 102). If a Jira field or Structure attribute is used, you can also update the maximum units for a task directly in your structure, by adding the appropriate column to your view.

Default Max. Units

This default value will be used when a task does not already have a maximum units value set.

2.2.5.4 Leveling Priority

Leveling Priority allows you to prioritize certain tasks when using the Resource Leveling (see page 122)feature in Structure.Gantt. When tasks need to be moved due to overallocation, those with higher priorities will be placed earlier in the timeline.



You have the following options for assigning Leveling Priority:

- **Store in Gantt chart** - If this default option is selected, all tasks are assigned the Default Leveling Priority, unless a unique value is entered in the Task Details Panel(see page 102).
- **Standard Attributes** - Priority can also be assigned based on an attribute, such as a custom field, Jira Rank, Story Points or Structure Index(see page 64) (in this case, the leveling priority is calculated as `maximum structure index - current item index`).
- **Formula** - Using Structure formulas(see page 64), you can create custom calculations to determine the priority for each task.
- **Used in Columns** - You can also assign priorities based on an existing Structure column.

Once priorities are assigned:

- If no values are provided for a task, the Default Leveling Priority is used.
- You can override a task's assigned priority using the Task Details Panel(see page 102). If you're using a Jira field for priority, the value of that field will also be updated. If you're using a formula, the new value will simply be stored in the Gantt chart.

Leveling Priority settings can be customized for specific issues using Slices(see page 71).

2.2.6 Calendars

Structure.Gantt allows you to define different calendars for the following:

- Gantt chart itself(see page 47)
- Default resource(see page 64) calendar
- Individual resource (see page 116)calendar

This is especially useful when you need more precise planning for resources working on different schedules.

Schedules are defined as Calendars, and Structure.Gantt comes with two predefined calendars: "Standard" (40-hour work week, 9-17 every workday) and "24 Hour", with all time marked as working time.

Jira administrators can also define additional calendars using the **Administration | Structure | Structure.Gantt | Work Calendars** page.

2.2.6.1 Creating and Editing Calendars

Calendar format

A calendar is defined by a code in JSON format, which sets the working periods for each day of the week and lists exceptions.

Details about the JSON format are provided below, but please reach out to us at support@almworks.com[11] if you need assistance.

Basic Structure

Every calendar consists either of a week schedule or list of exceptions, or both:

```
{
  "week": ...,
  "exceptions": ...
}
```

⚠ All calendar definitions should be wrapped in curly braces: { }

Week schedule

Week schedule is defined by specifying work ranges for every weekday (monday, tuesday, wednesday, thursday, friday, saturday, sunday):

11 mailto:support@almworks.com

```
"week": {
      "monday": [
        {
          "start": 900,
          "finish": 1300
        },
        {
          "start": 1400,
          "finish": 1715
        }
      ],
      "tuesday": [
        {
          "start": 900,
          "finish": 1300
        },
        {
          "start": 1400,
          "finish": 1715
        }
      ]
}
```

Time is written using HHMM format, where HH is hour (0-24) and MM is minutes, for example: `1730` for 17:30 (5:30 pm) and `930` for 9:30.

You may skip a weekday either by skipping its definition completely or providing an empty list of ranges:

```
{"monday": []}
```

Exceptions

Exceptions are defined for exact dates:

```
"exceptions": [
      {
        "date": 20210301,
        "workPeriods": []
      },
      {
        "date": 20210305,
        "workPeriods": [
       {
         "start": 900,
         "finish": 1300
       },
       {
         "start": 1400,
         "finish": 1715
       }]
      }
]
```

Dates are written using YYYYMMDD format, where YYYY is a 4-digit year, MM is a month (1-12) and DD is a day (0-31).

The workPeriods parameter can be empty, which means it is a day off, or can contain custom start and finish times, which will override the times you have defined in the main scheme.

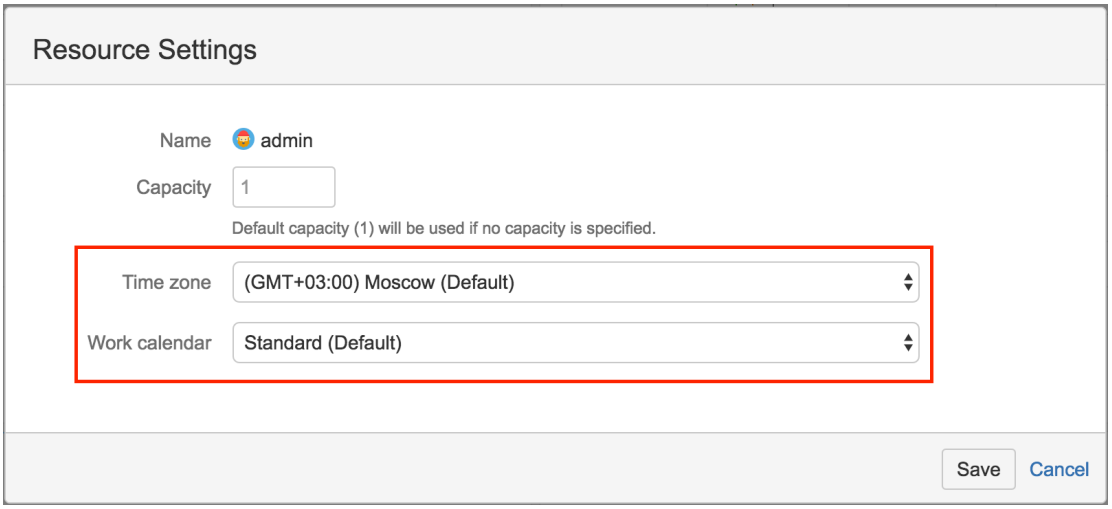
Hierarchy

You can also organize calendars into a hierarchy via the "Based on" property, so you can create more specific calendars, based on a general calendar ("Standard", for example).

> In this case, existing calendar-week schedule values are overridden (i.e. the definition for "wednesday" in a child calendar will override the "wednesday" schedule of its parent calendar).

2.2.6.2 Time zones

Calendars don't have time zone information and should be written in your local time. Time zones are provided separately and are taken either from the current user profile TZ (for the Gantt chart, configured at the User Profile page) or from default or individual resource settings:



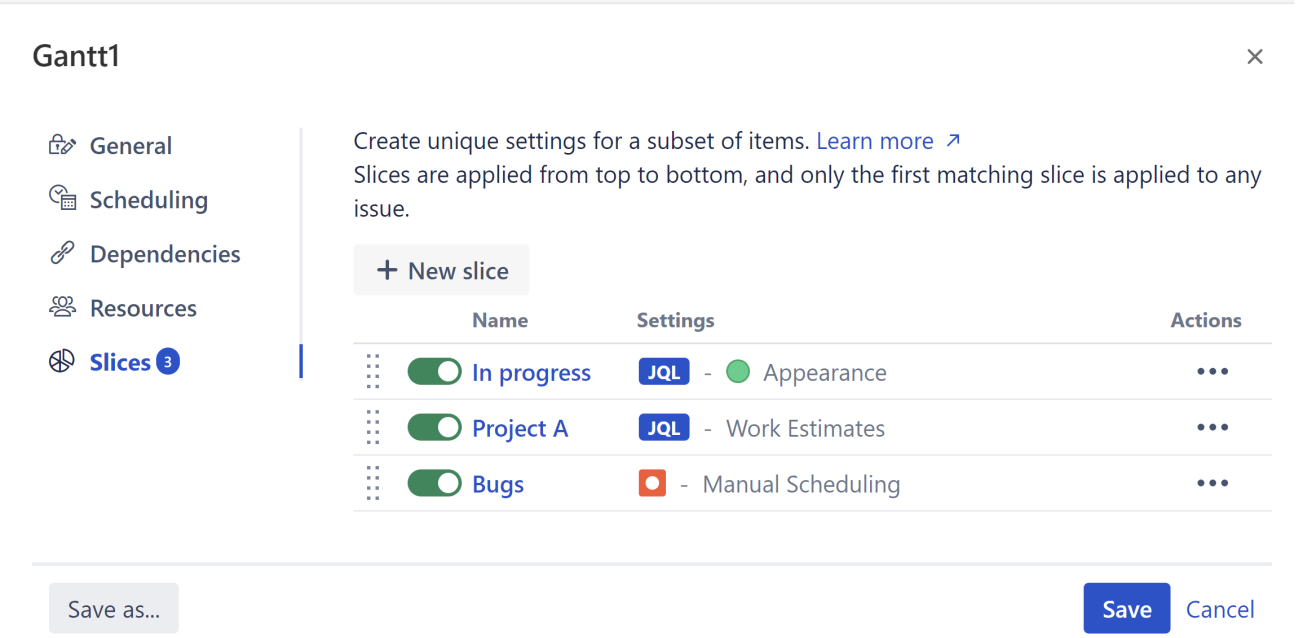
2.2.6.3 Deleting Calendars

Calendars can be deleted (even the ones that are used by other calendars as Based On or by Gantt charts). Gantt will continue to work properly, even if a specified calendar cannot be found: a hard-coded calendar definition, similar to a default version of "Standard" calendar, will be used. However, this is not normal and should be fixed.

> A Gantt info popup will show a warning as soon as the Gantt calendar becomes unavailable.
>
> For a resource calendar issues, there is no notification shown.

2.2.7 Slice-based Configurations

In addition to your general settings, you may have specific situations or issue types that require unique scheduling or dependency rules. It may be helpful to color-code issues from different projects or exclude some issues from your chart completely. The slice feature allows you to do just that.



Slices allow you to fine-tune your chart's configuration for a specific set of issues. When you create a slice, you tell Structure.Gantt to override the default configuration for certain issues, using new configuration rules that you establish for that slice.

Here are some examples of how “slices” can help you further customize your chart:

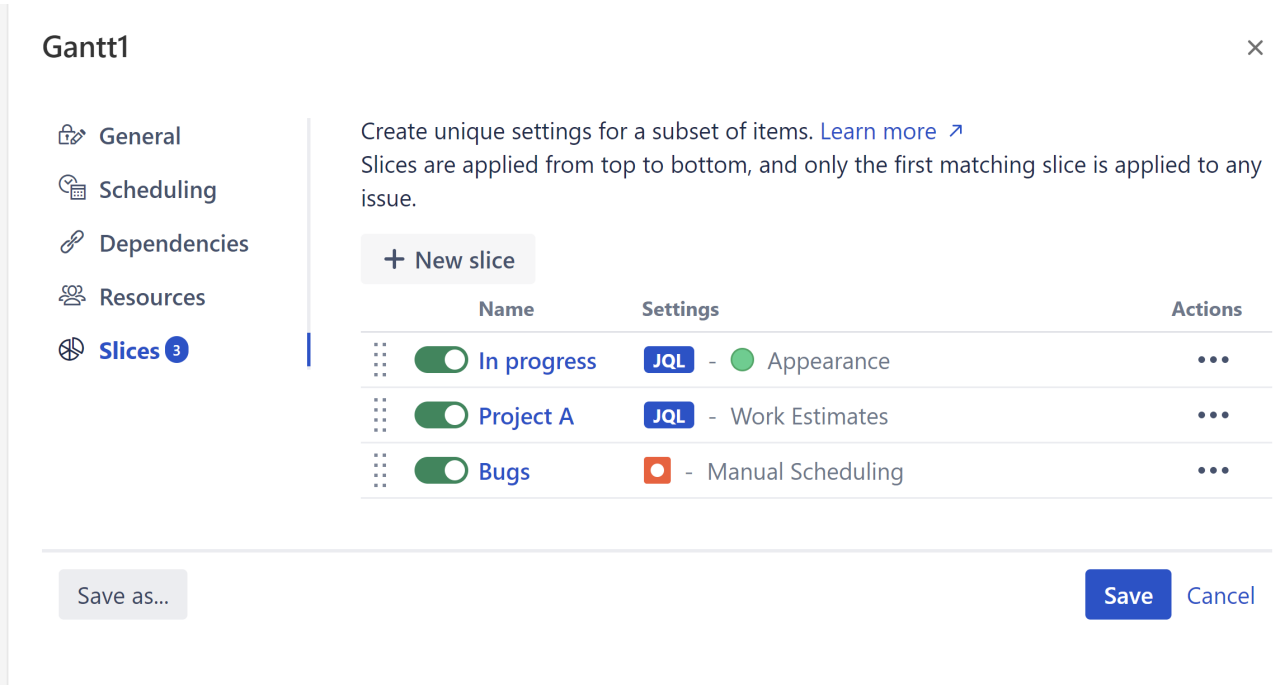
- Establish unique scheduling rules based on a JQL query
- Assign a unique bar color to specific projects or issue types
- Exclude small sub-tasks that have no impact on the schedule
- Set unique dependency configurations for different projects

The following articles will show you how to create a slice, define which issues the slice should be applied to and customize the configuration for the slice.

- Creating a Slice(see page 72)
- Customizing a Slice(see page 74)
- Removing a Slice(see page 80)
- Order of Operation(see page 81)

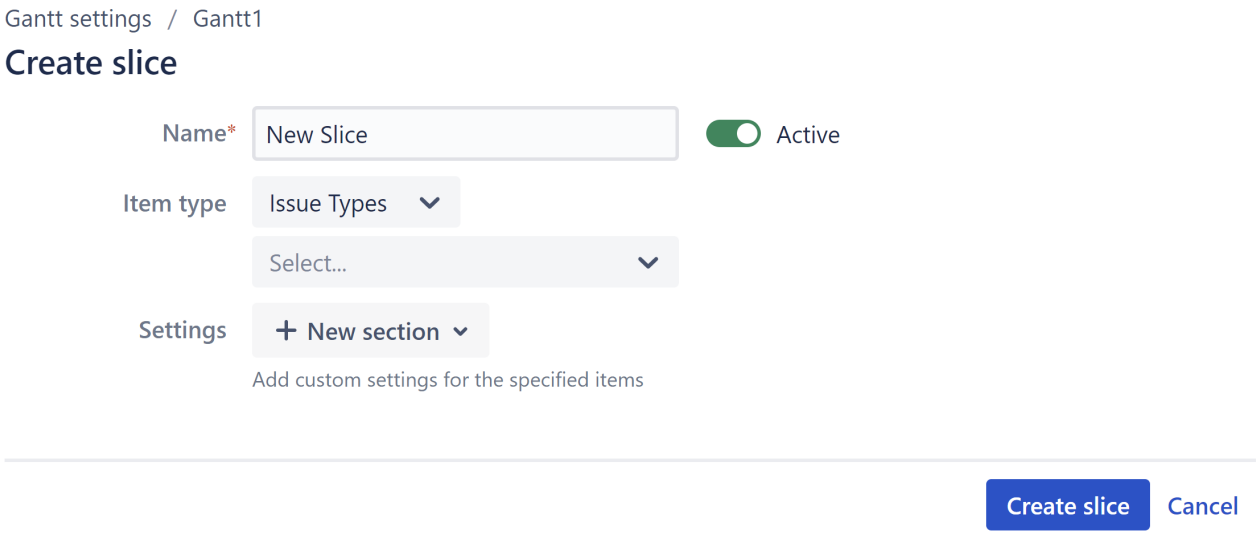
2.2.7.1 Creating a Slice

To create a new slice, open the Gantt chart configuration you want to apply the slice to, choose Slices from the left menu, and click the **New Slice** button.



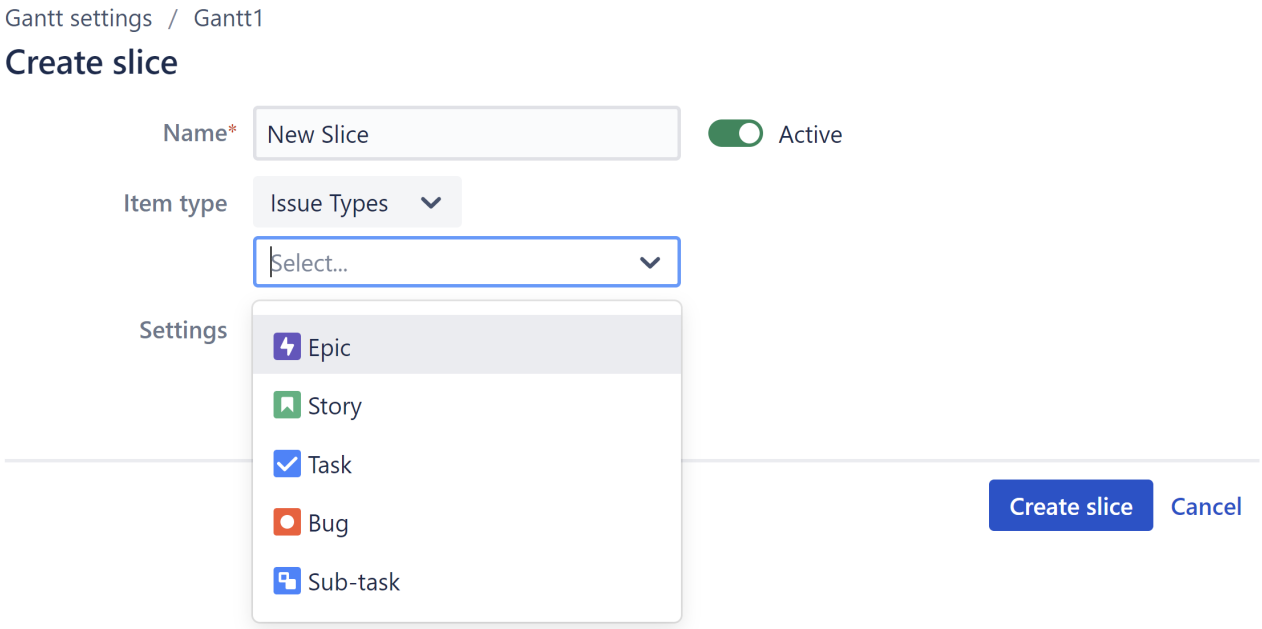
Slice Name

All new slices are named "New Slice" by default. To give your slice a custom name, simply replace this name.



Assigning Issues

You can assign issues to a slice by selecting specific issue types or with a JQL query.



When creating your chart, Structure.Gantt will search for the issue types you specify (or those issues that match your JQL query) and apply the custom settings you configure in your slice, before applying your default settings to the rest of your issues.

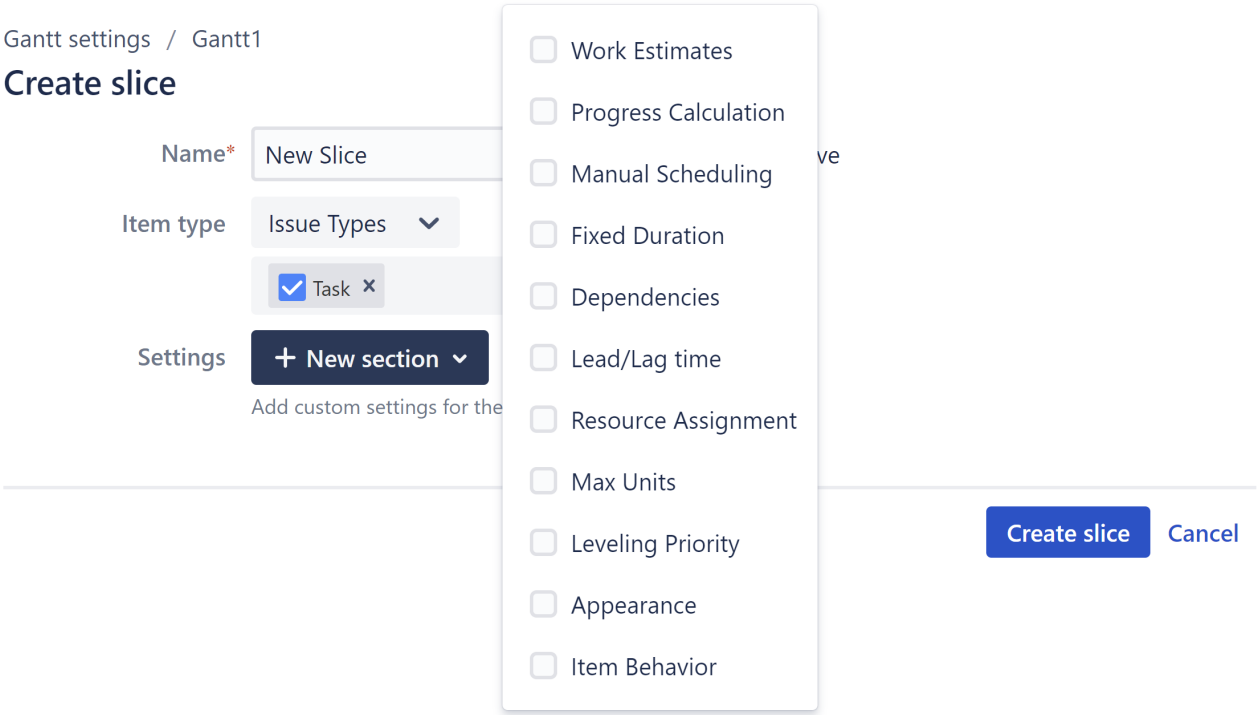
JQL Limitations

JQL queries should be based on issue properties.

Queries that rely on time comparisons, time-based functions – now(), endOfDay(), startOfDay(), endOfMonth(), etc. – or other variables that could change independent of issue changes, may not work properly with Slices, and should be avoided.

2.2.7.2 Customizing a Slice

Once you've chosen the items to include in a slice (based on Issue Type or a JQL query), you can adjust various aspects of their appearance or behavior by clicking the **+New section** menu and selecting the properties you want to customize.



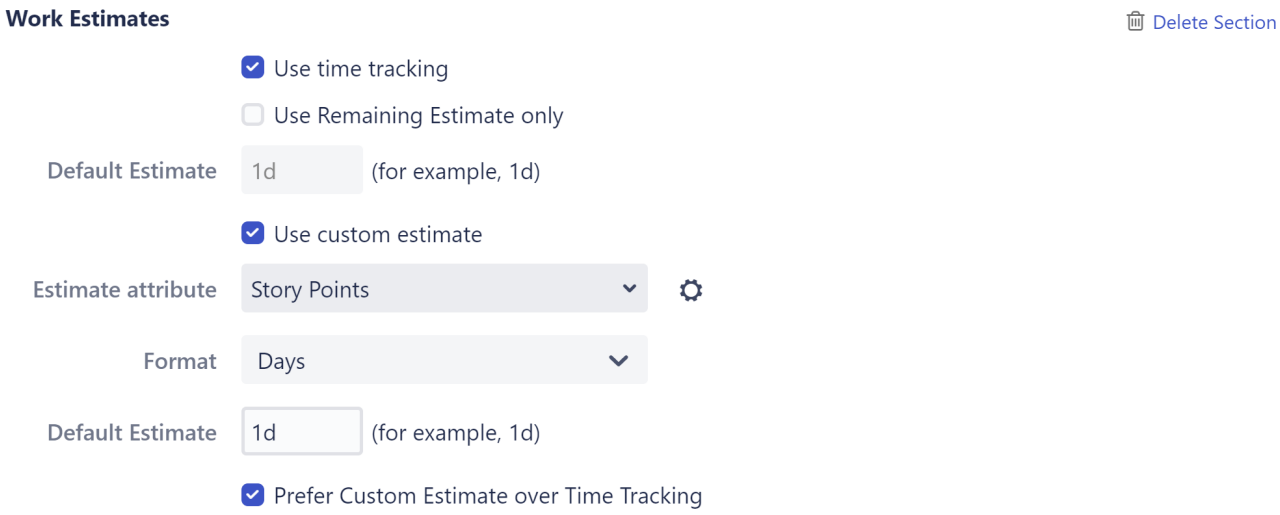
The following properties can be customized for each slice:

- Work Estimates(see page 75)
- Progress Calculation(see page 76)
- Manual Scheduling(see page 76)
- Fixed Durations(see page 77)
- Dependencies(see page 77)
- Lead/Lag Times(see page 78)
- Resource Assignment(see page 79)
- Max Units(see page 79)
- Leveling Priority(see page 79)
- Appearance(see page 79)
- Item Behavior(see page 80)

You can include as many or as few sections in your slice configuration as you need. If you do not specify a custom property within your slice configuration, the default configuration will be used.

Work Estimates

By updating this section, you can apply custom work estimates to any issues matching your slice criteria.

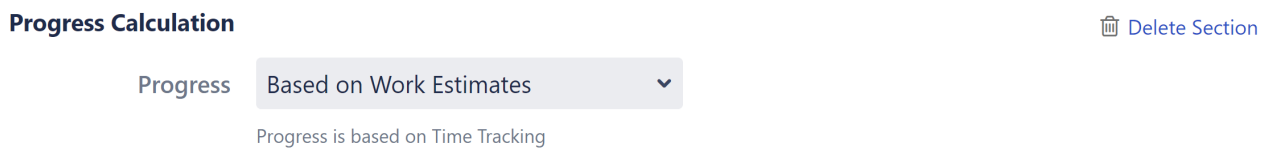


In the example above, time estimates for issues included in the slice will be calculated based on Story Points, regardless of the default configuration.

To learn more about setting work estimates, see Work Estimates Configuration(see page 49).

Progress Calculation

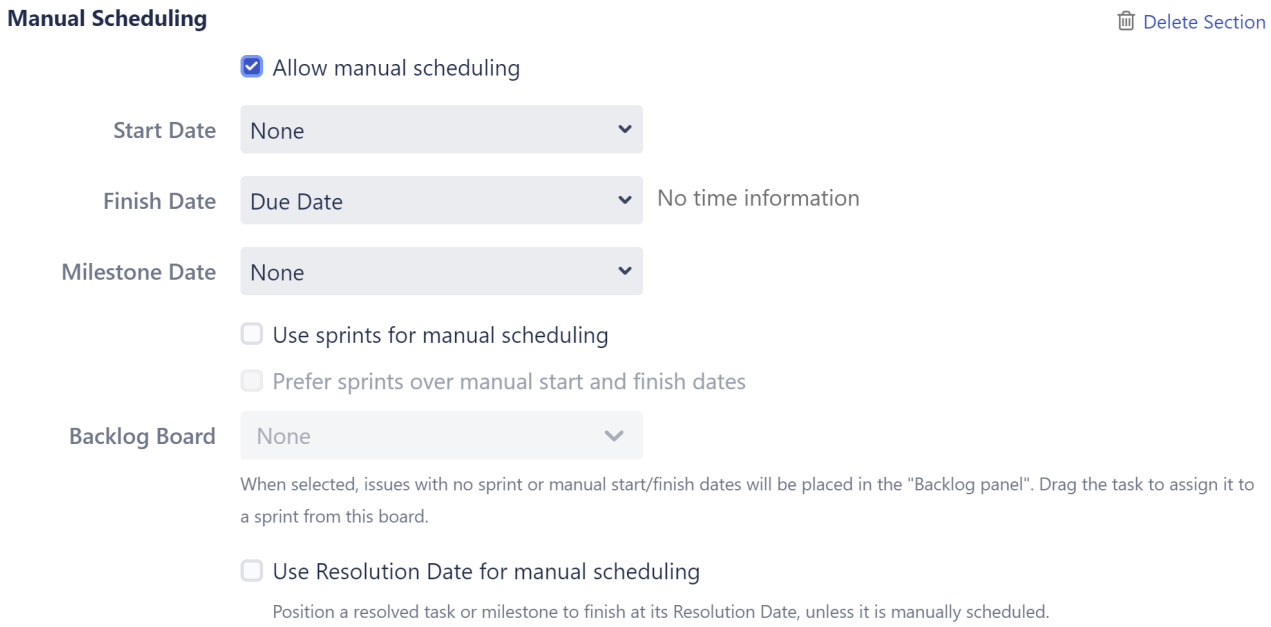
You can specify a unique method of progress calculation for issues within the slice.



For more information about configuring progress calculation, see Progress Configuration(see page 51).

Manual Scheduling

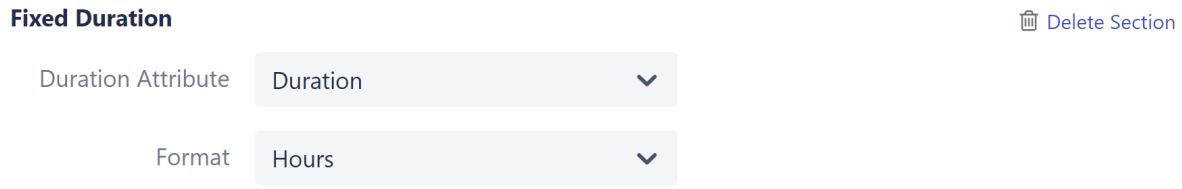
The Manual Scheduling section allows you to override the default scheduling configuration. This can be useful if you have multiple fields for scheduling information or need to prioritize different scheduling methods (automatic(see page 88), manual(see page 55) or sprint-based(see page 91)) for different sets of issues, or if different teams use different fields for scheduling.



To learn more about manual scheduling, see Manual Scheduling Configuration(see page 55).

Fixed Durations

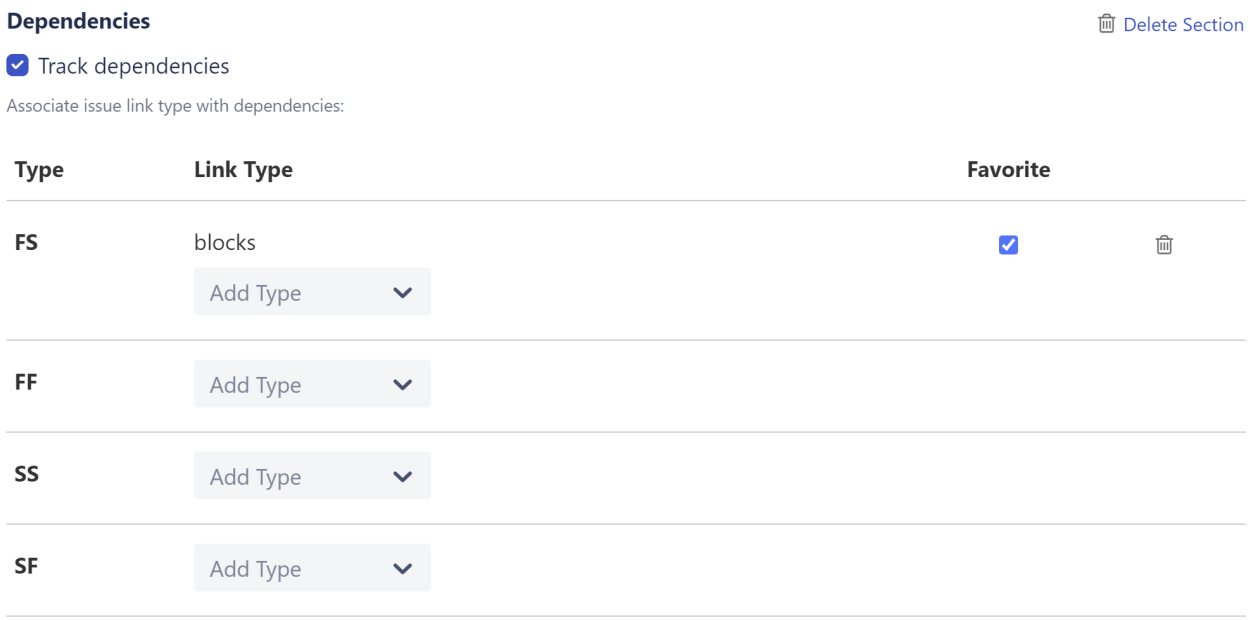
You can specify where fixed duration values are stored for issues within the slice, and the format of those values.



To learn more about fixed duration attributes, see Fixed Duration(see page 96)

Dependencies

You can set up custom link types to be used with each type of dependency within your slice.



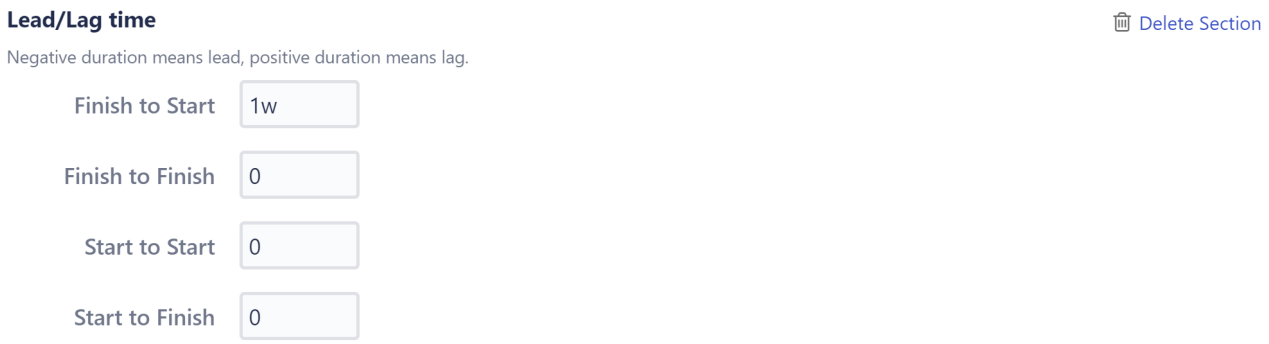
To set a default link type for a dependency type, check the **Favorite** box.

To learn more about using dependencies, see Working with Dependencies.(see page 108) To learn more about configuring dependencies, see Dependencies Configuration(see page 61).

> ⚠ If you are linking two issues with different dependency link types (because one or both issues are part of a slice), the link types of the originating issue will be used.

Lead/Lag Times

You can also set up custom Lead or Lag times for each dependency type within your slice.

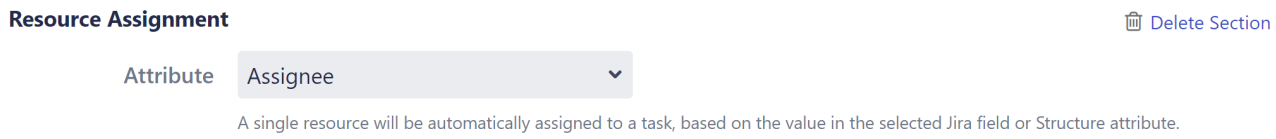


To learn more, see Dependency Lead/Lag Time(see page 111).

> ⚠ If you are linking two issues with different lead/lag times (because one or both issues are part of a slice), the link types of the originating issue will be used.

Resource Assignment

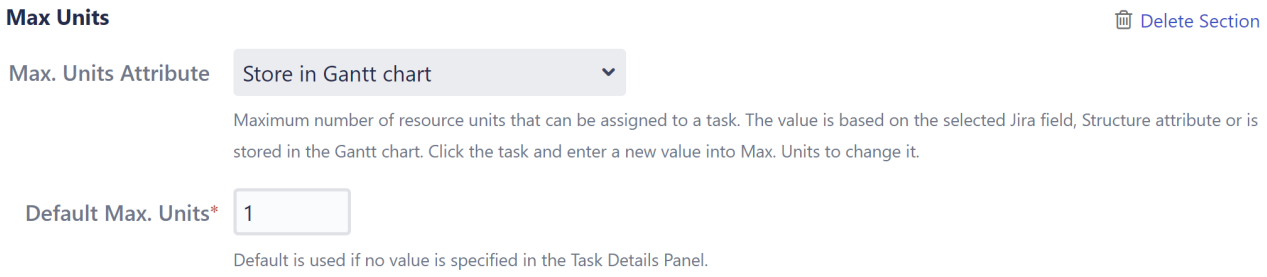
You can set a unique resource attribute, which is used to assign resources to tasks.



To learn more about resource assignment, see Resources Configuration(see page 64).

Max Units

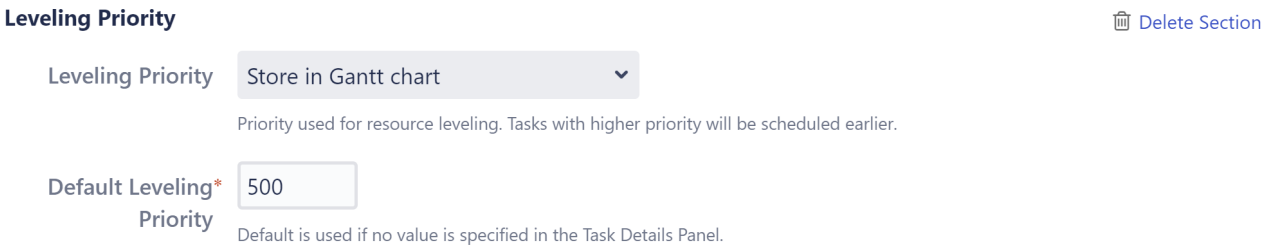
You can configure unique maximum unit settings to customize how resources are allocated for tasks.



To learn more about Max Units, see Resources Configuration(see page 64)

Leveling Priority

This section allows you to set custom leveling(see page 122) priorities.

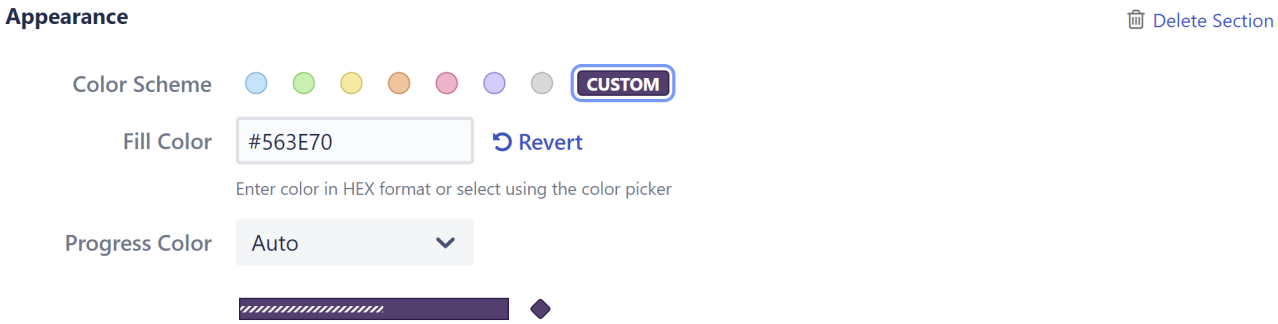


To learn more about leveling priorities, see Resource Leveling(see page 122).

Appearance

You can create a custom color scheme for each slice, under the **Appearance** section.

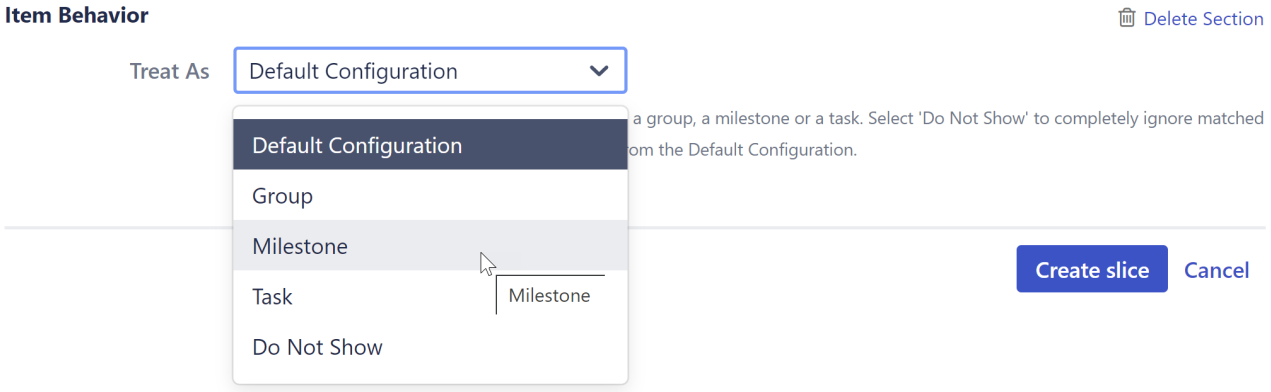
- **Color Scheme** - Select the standard color for items in your chart. You can use choose one of the 6 provided colors, or click CUSTOM to select a custom color.
- **Fill color** - Enter a custom color, either using the color picker or typing its Hex value.
- **Progress color** - Progress can be displayed as a dark or light color over the taskbar. If you select Auto, Structure.Gantt will pick the option that provides the most contrast to your color scheme.



The color scheme you select will be applied to all issues or milestones that match the slice criteria.

Item Behavior

Item Behavior allows you to specify the type of item an issue will be displayed as within your Gantt chart.



You can choose from the following options:

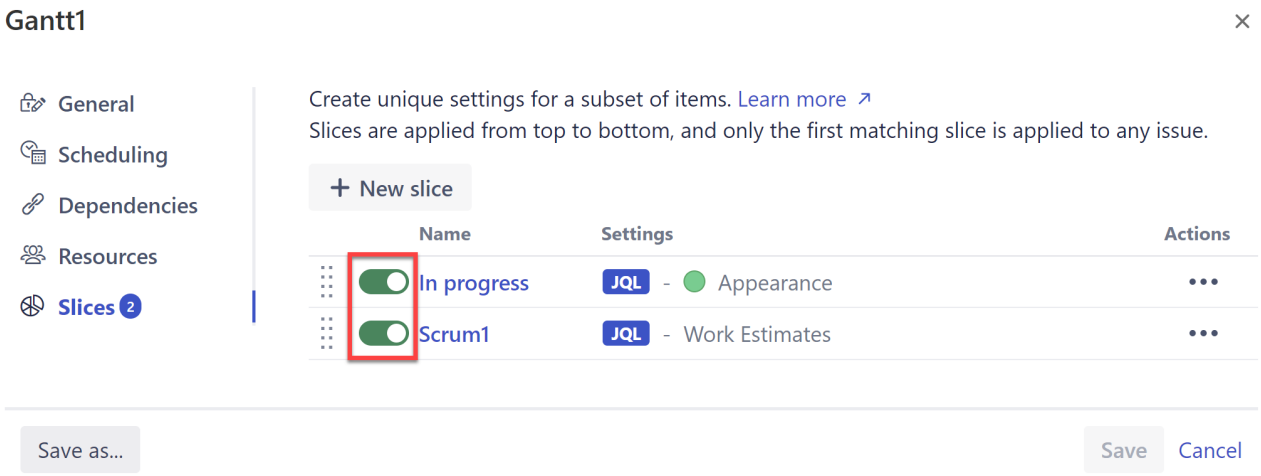
- **Default Configuration** - If this option is selected (default), issues matching the slice criteria will be displayed based on the default configuration.
- **Group** - This will display matching issues as groups(see page 60), containing all their sub-issues.
- **Milestone** - This will convert matching issues into milestones and place them in the chart at their Due Dates. *Note: The Due Date will be calculated automatically, unless one is manually set.*
- **Task** - This will display matching issues as task bars. This can be useful if you have selected Grouping for your general configuration and want to display specific parent issues as task bars instead of groups - for example, you may want to display Epics as task bars, but Stories with sub-issues as groups.
- **Do Not Show** - This will remove the issues from your Gantt chart.

2.2.7.3 Removing a Slice

You can remove a slice from your configuration by deactivating it or deleting it.

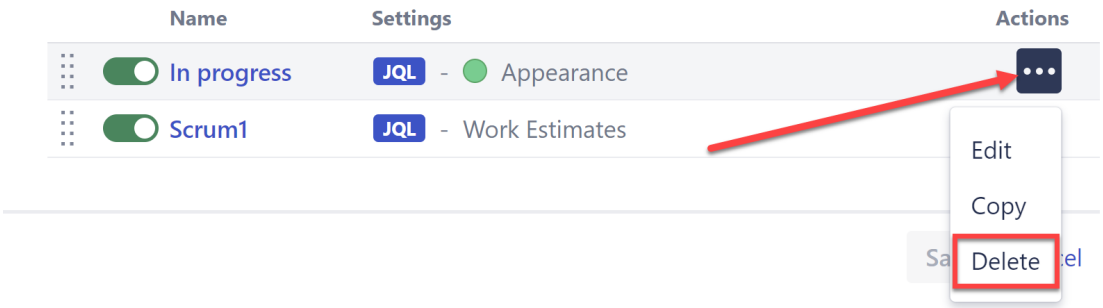
Deactivating a Slice

You can turn a slice on or off with the **Active** toggle next to the slice name. Inactive slices will remain in your slice list (in case you want to reactivate them later) but will not affect your Gantt chart.



Deleting a Slice

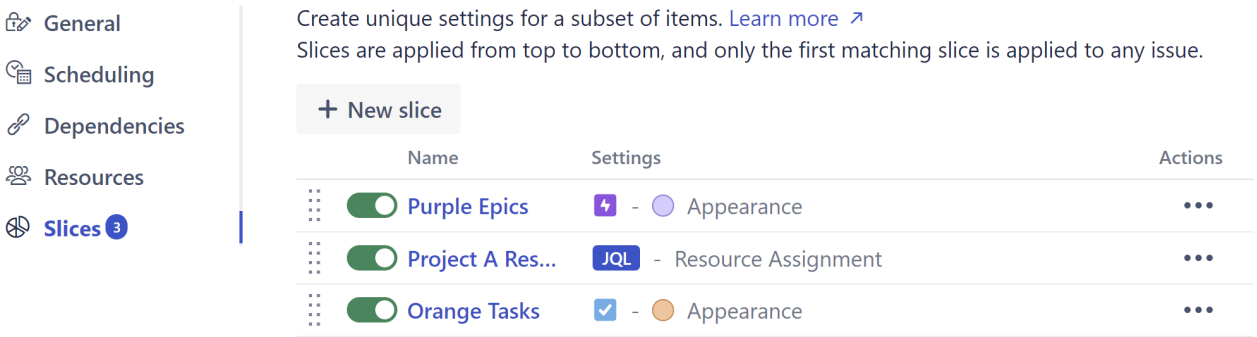
To delete a slice, open the Action menu and select **Delete**.



2.2.7.4 Order of Operation

If you have more than one slice created for a configuration, Structure.Gantt will apply slices in the order they appear, from top to bottom.

Once a slice has been applied to an issue, no other slice can affect it. If you need to apply a different slice first, move it up within the list.



Let's look at an example. We have three slices:

- **Purple Epics** - makes all epics appear purple.
- **Project A Resources** - specifies that for issues in Project A, the Team attribute should be used for assigning resources.
- **Orange Tasks** - makes all tasks orange.

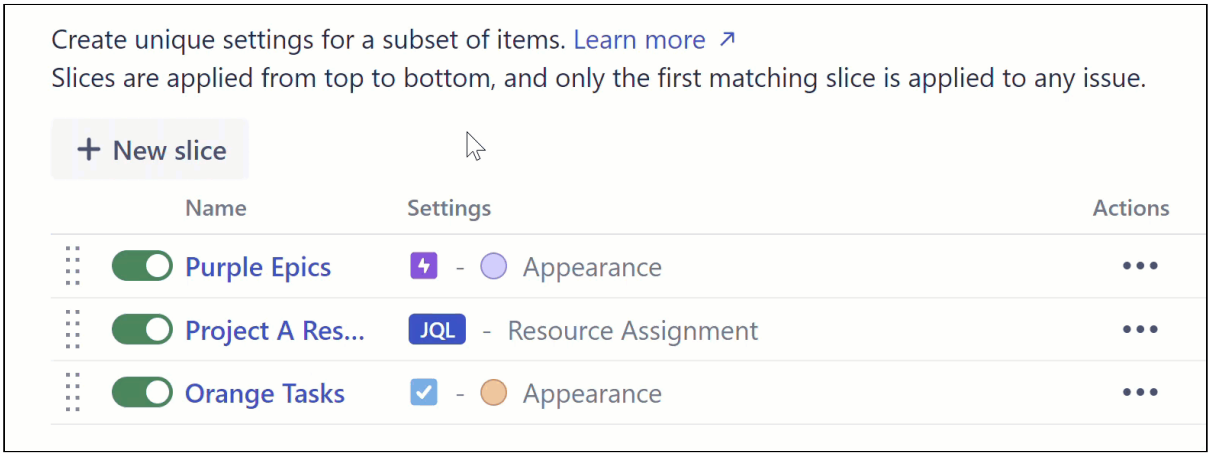
In your chart, the following will occur:

1. All epics will appear purple.
2. The remaining issues from Project A will be assigned resources based on the Team attribute. Since the Purple Epics slice was already applied to the epics in Project A, this slice will not affect them - epics from Project A will be assigned resources based on the standard resource configuration.
3. All tasks, except those from Project A, will appear orange. Tasks from Project A will appear the default color, because the previous slice was already applied to them.

If you need a specific slice applied first, move it up the list. For example, to use the Team resource attribute for epics in Project A, you would have to move the Project A Resources slice above the Purple Epics slice. If you wanted Project A tasks to be orange, you would need to move the Orange Tasks slice up.

Rearranging Slices

To move a slice up or down within your list, use the Drag Bar next to the slice's name.

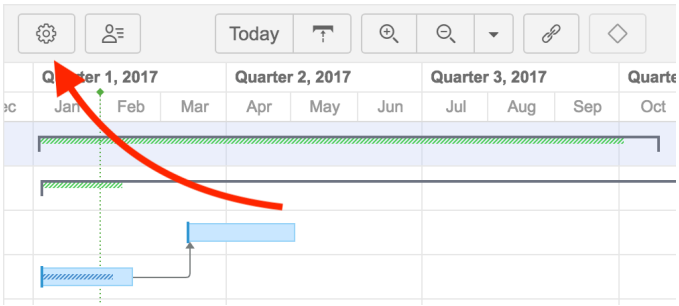


2.2.8 Managing Gantt Configurations

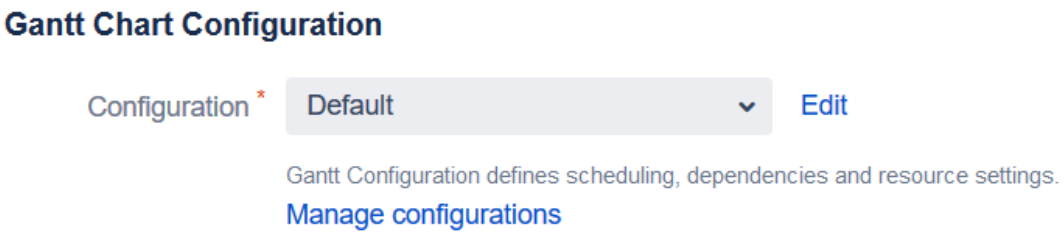
A Default configuration is created the first time you run Structure.Gantt, allowing you to get started with Gantt charts right away. The default configuration works perfectly well for many users; however, we recommend going through the available options to better understand how the Gantt chart works and make sure you are using a configuration that best meets your needs.

2.2.8.1 Changing Gantt Configuration

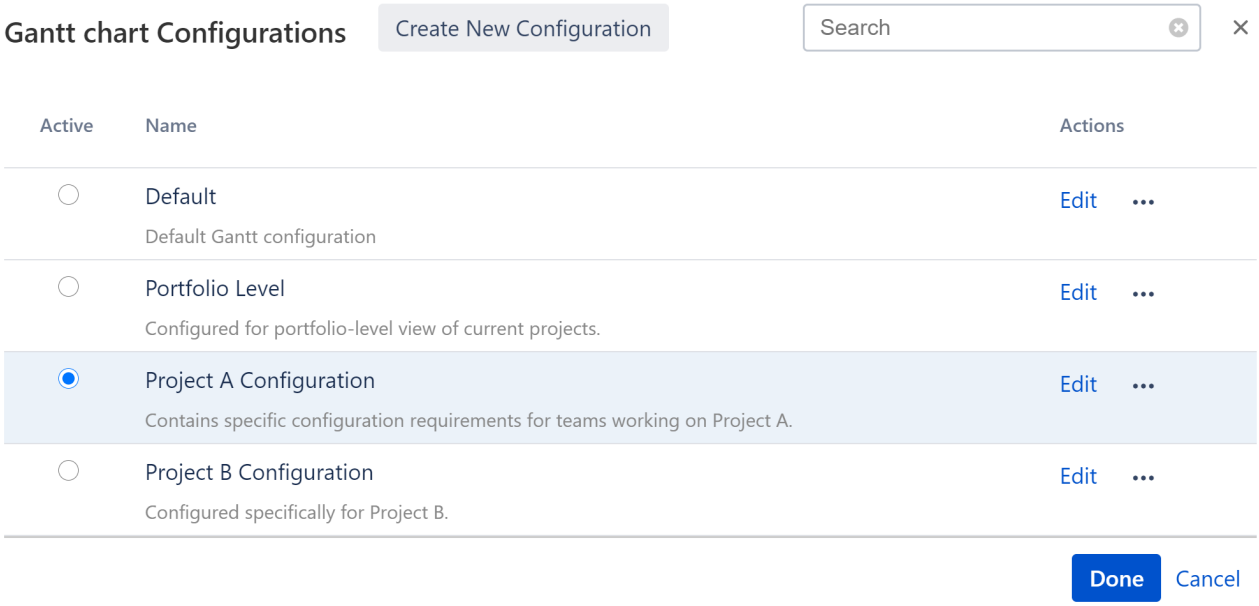
You can customize Gantt configuration during your initial chart setup or (if you are already working with your chart) by clicking the Settings button in the chart toolbar.



On the Gantt Chart Settings(see page 43) screen, look for the Gantt Chart Configuration section.



You can quickly switch to another existing configuration by selecting it in the Configuration drop-down menu and clicking **Save Settings** at the bottom of the page. To make changes to a configuration, select it in the menu and click **Edit**. If you need to create a new configuration, or to see a complete list of your existing configurations, click **Manage configurations**.



The Gantt Chart Configurations list includes:

- Configurations you made - These can be used in your chart, edited, and deleted (with some exception; see Deleting Gantt Configurations(see page 86) for more information).
- Shared configurations - These can be used within your chart, but cannot be edited or deleted (with some exceptions; see Permissions(see page 86) for more details).

To edit one of the existing configurations, click the **Edit** link next to it. To create a new one, click the **Create New Configuration** button.

> To be able to create new configurations, you need to have permissions to create structures.

Learn More

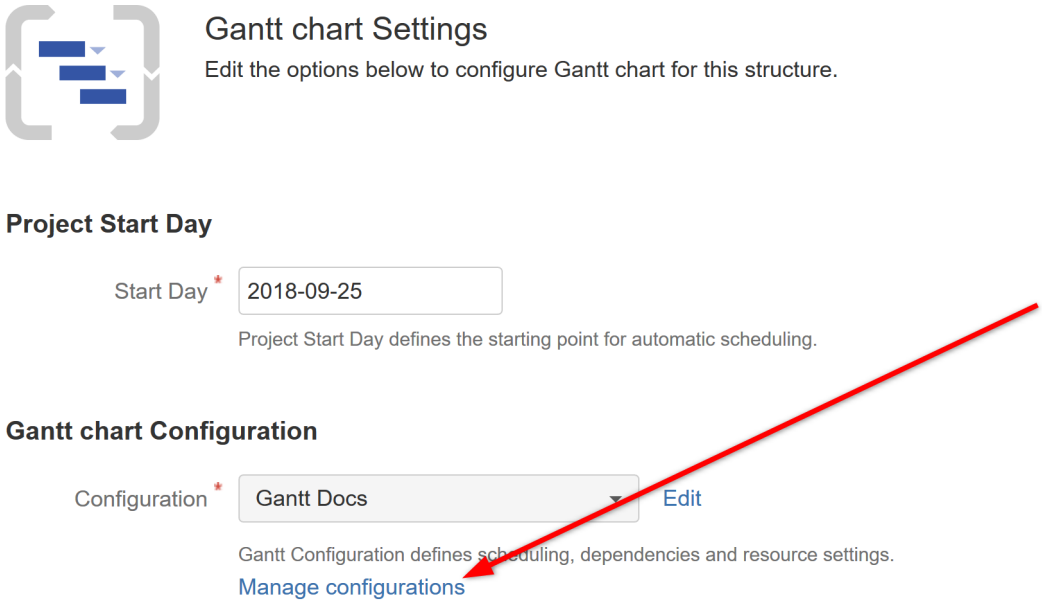
- Copy Configuration(see page 84)
- Deleting Gantt Configurations(see page 86)
- Permissions and Sharing(see page 86)

2.2.8.2 Copy Configuration

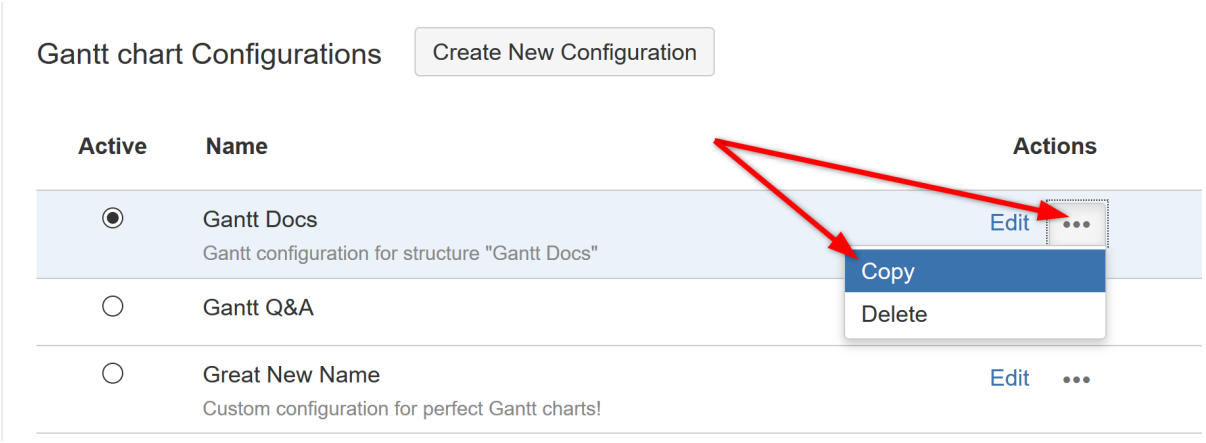
If you need two or more similar (but different) configurations, you can start by creating a copy of an existing configuration.

Create an Exact Copy

If you want to create an identical copy of an existing configuration, open the Gantt Chart Settings (see page 43)screen and click **Manage configurations**.



Find the configuration you want to copy, open it's Actions menu (**...**) and select **Copy**.

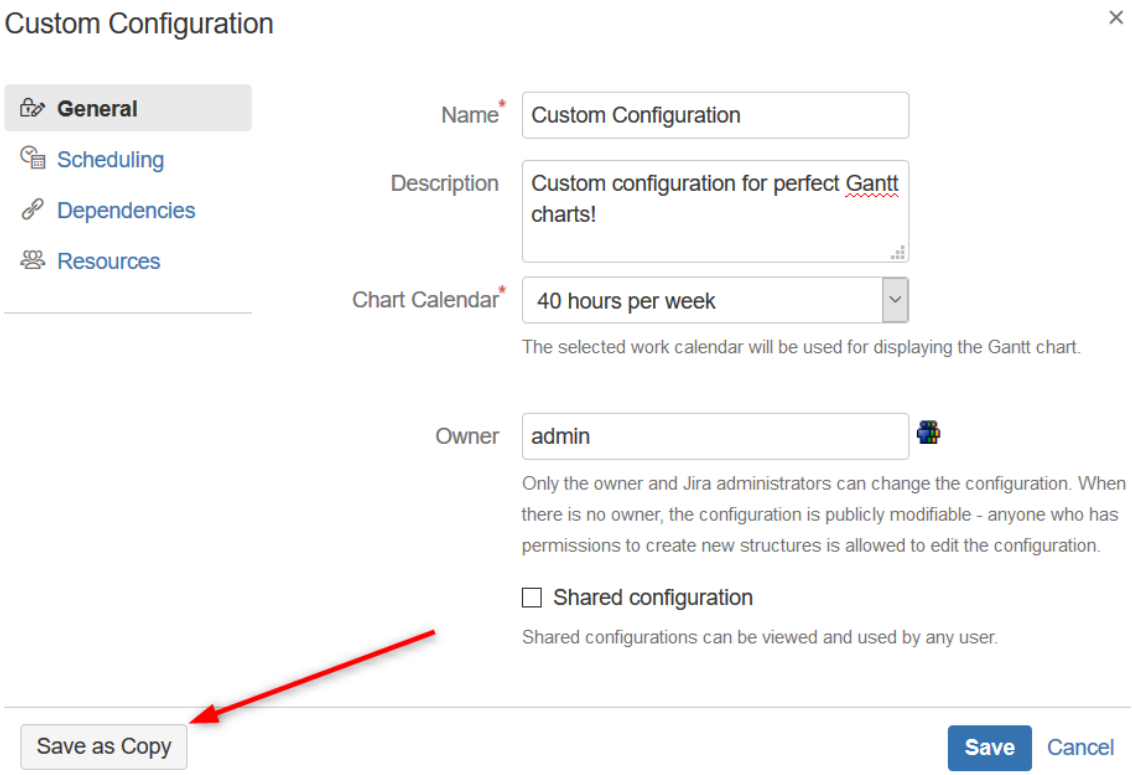


This will create an exact copy of the original configuration, which you can rename and customize as necessary, without affecting the original.

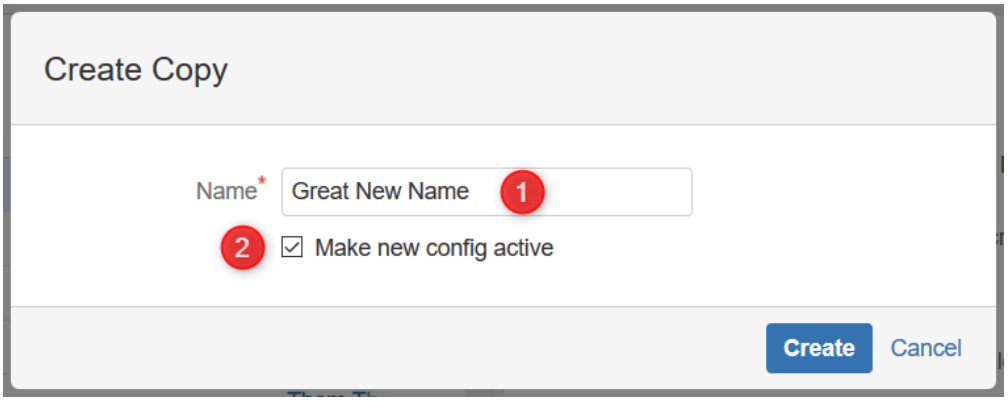
Create a Copy with Changes

You can also open an existing configuration, update it and save your changes as a new configuration.

To do this, open the original configuration in Gantt configuration(see page 84) and make any necessary changes. Instead of clicking the **Save** button, click **Save as Copy**.



Give the new configuration a unique name (1). If you want to switch to the new configuration, check the **Make new config active** checkbox (2); otherwise, leave it blank.



Any changes you made from the original configuration will now be part of the new configuration. The original configuration will remain unchanged.

2.2.8.3 Deleting Gantt Configurations

You can delete an existing Gantt configuration from the Manage Configurations dialog (see Managing Gantt Configurations(see page 82)).

To delete a configuration:

- You must be the owner of the configuration or a Jira administrator
- You must have Control access to all the structures that are using the configuration
- If the configuration is in use, you will need to select a replacement configuration before deleting it

> When replacing an in-use configuration, the replacement configuration must have the same visibility as the one being removed. For example, you can only replace a *public* configuration with another *public* configuration.

2.2.8.4 Permissions and Sharing

User Permissions

Currently there are no dedicated permission settings in Structure.Gantt. The chart has the same permission settings as the structure it is based on.

- Users with View access level can only view the Gantt chart.
- Users with Edit access level can work with the task bars in the chart and make changes.
- Users with the Structure Control access level can change the Gantt Chart settings and manage Gantt configurations.

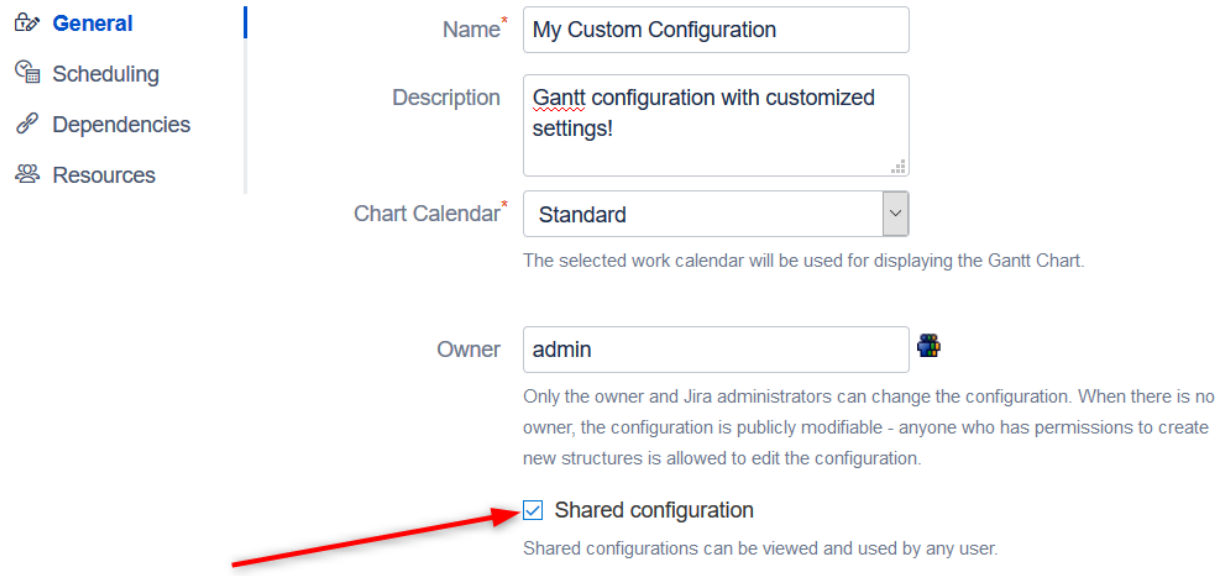
All standard Jira permissions are applied – you need Edit Issues permission to change fields, create links, and so on.

Sharing Configurations

Gantt Chart configurations have their own permissions logic. By default, the configurations you create are not shared with anyone else, so they are not visible in the available configurations list for other users. If you use a non-

shared configuration to build a chart for a shared structure, other users will still be able to work with the chart (based on the structure permissions), but will not be able to see this configuration.

To share a configuration, check the **Shared configuration** box under the Gantt configuration General settings.



Once shared:

- The configuration will be visible to all users in the read-only mode.
- If there is no owner specified, any user will be able to edit the configuration.
- If you want to delete a configuration which is used in at least one chart, you will need to select another configuration to be used in its place. See Deleting Gantt Configurations(see page 86) for more details.

> Jira admins can see and edit all configurations.

2.3 Tasks

Structure.Gantt allows you to easily visualize your tasks and the dependencies between them on a timeline.

You can also schedule tasks, change tasks estimates and create dependencies right in the chart. To learn more about working with tasks in your timeline, see the appropriate article(s) below.

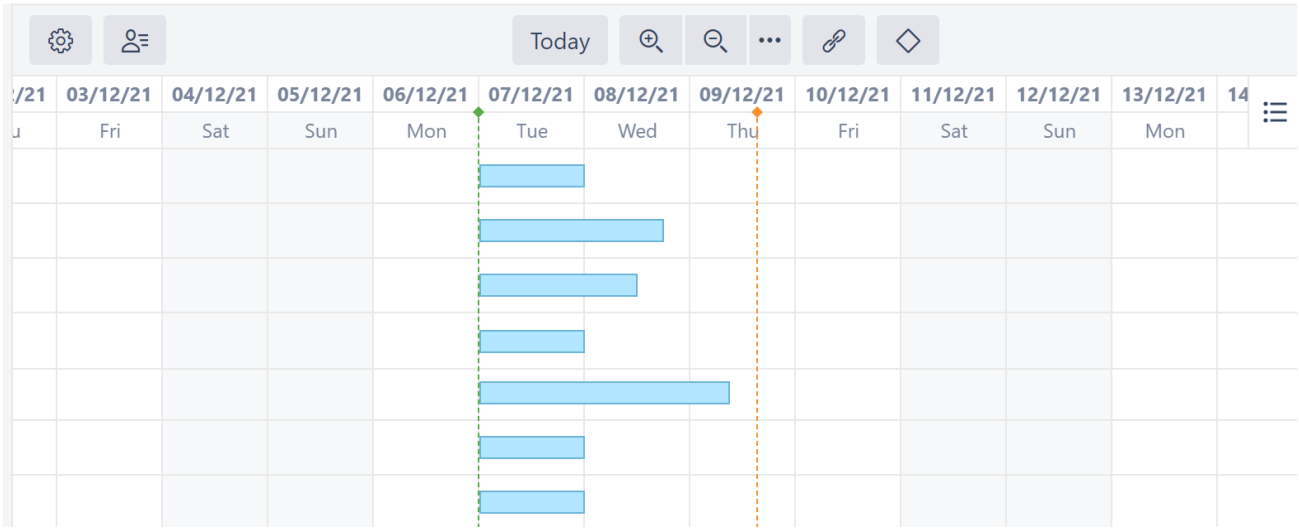
2.3.1 Scheduling Tasks

Gantt charts can be scheduled automatically based on project start dates, task estimates, predecessors and dependency types. Or tasks can be manually scheduled based on Start/Finish dates or sprints.

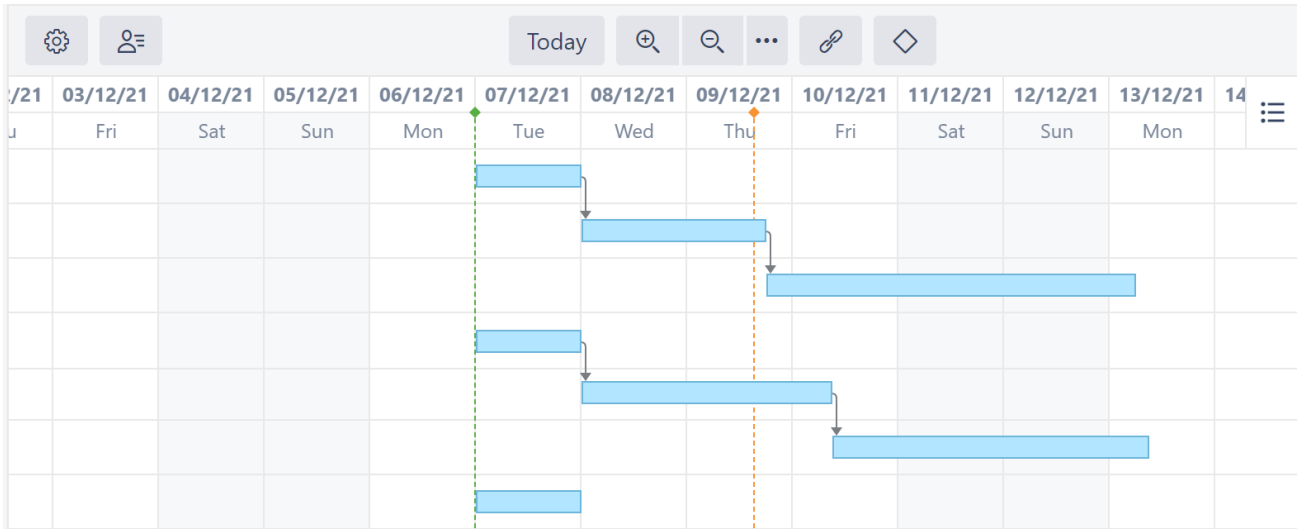
- Manual Scheduling by Start or Finish Date(see page 89)
- Planning with Sprints(see page 91)
- Fixed Duration(see page 96)

2.3.1.1 Automatic Scheduling

By default, Structure.Gantt will auto-schedule tasks based on your project start date, task estimates, predecessors and dependency types. If you are working from a brand new structure and haven't yet set up dependencies or Start and Finish dates, chances are your Gantt Chart looks something like this:



As you create dependencies between items, your chart will automatically update so that successor tasks do not start until their predecessor is complete (or until the predecessor is estimated to be complete).



As you move items around in your structure or change dependencies, your tasks will move within your timeline as well.

The example above illustrates Finish-to-Start dependencies. You can also configure Start-to-Start, Finish-to-Finish and Finish-to-Start dependencies, and Structure.Gantt will schedule them accordingly.

For more information, see Dependencies(see page 108).

2.3.1.2 Manual Scheduling by Start or Finish Date

While automatic scheduling (see page 88)is a powerful tool for visualizing your project timeline and working with dependencies, there are times when you may need to manually schedule Start or Finish dates. For example, you may need to push back a Start Date due to resource limitations or budgeting issues, or some tasks may require a strict Finish Date because of an impending deadline.

To manually edit task Start and Finish dates, you must first enable Manual Scheduling in Gantt Configuration(see page 55)**.**

Manually Adjusting Start and Finish Dates

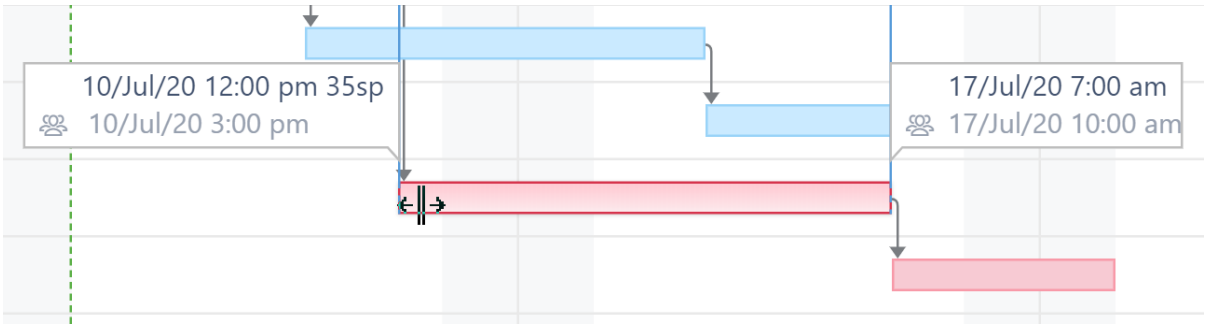
Once you have enabled manual scheduling, you can quickly adjust a task's schedule by:

- Dragging the task bar in the Gantt chart
- Editing the values in the Task Details Panel(see page 102)
- Updating the custom Start Date and Finish Date fields in Jira or Structure(see page 143)

Dragging the Entire Task Bar

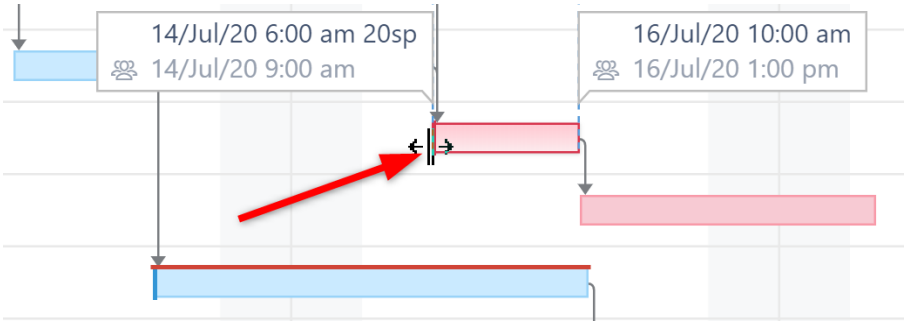
When you drag the entire task bar, in most cases only the Start Date will be updated. The Finish Date will continue to be automatically updated based on task estimates and dependency types. There are two exceptions:

- If both the Start and Finish dates are already manually scheduled(see page 90), both fields will be updated
- If only the Finish Date is manually scheduled(see page 90), the Finish Date will be updated and the Start Date will continue to be automatically scheduled based on task estimates, predecessors, and dependency types



Dragging the Start

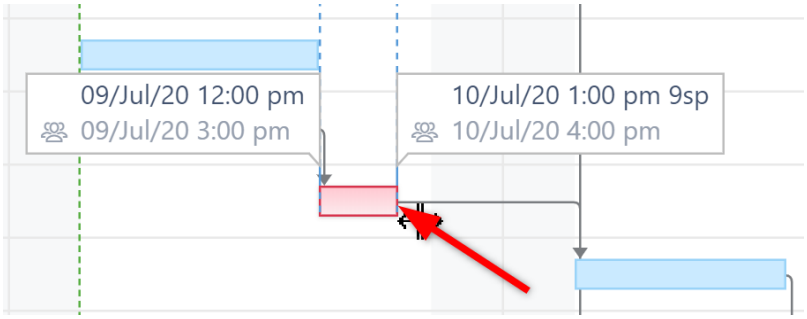
To adjust a task's Start Date (without changing the Finish Date), drag the left side of the bar to the desired date/time. Since the Finish Date remains unchanged, this process also updates the task's Original Estimate (if the task hasn't been started) or Remaining Estimate (if the task is in progress).



Dragging the Finish

Dragging the right side of the task bar works a little differently, depending on whether or not there's an existing value in the Finish Date field:

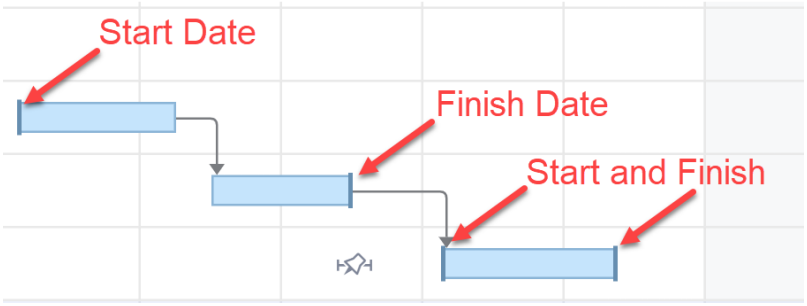
- If the Finish Date is already manually scheduled(see page 90), the finish date and Original Estlimate/Remaining Estimate will be updated. The Start Date will remain unchanged.
- If the Finish Date is not currently manually scheduled(see page 90), only the Original Estimate/Remaining Estimate will be changed. The Start and Finish dates will remain unchanged.



Identifying Manually Scheduled Start and Finish Dates

When a task is manually scheduled, Gantt will place a visual indicator (dark, vertical line) at the corresponding end of the task bar:

- A dark line on the left means the task is manually scheduled by its Start Date
- A dark line on the right means the task is manually scheduled by its Finish Date
- A dark line on both sides means the task is manually scheduled by its Start and Finish dates, so it has a fixed duration(see page 96)



Manual Scheduling Rules

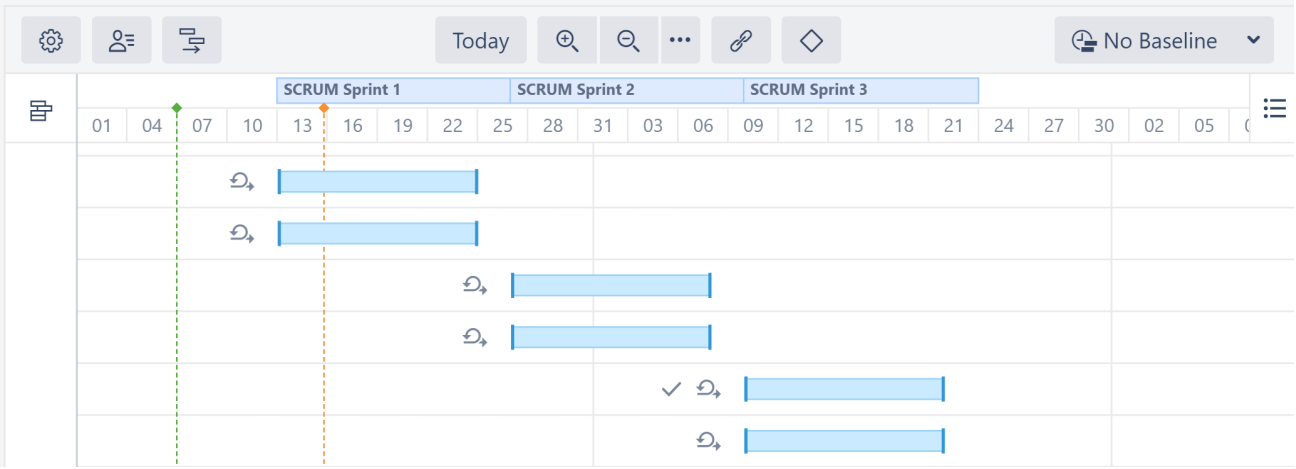
Manual Scheduling uses the following rules:

- If neither Start nor Finish dates are defined, the task is scheduled automatically to start either at the Project Start Day you selected when configuring your Gantt chart or based on the task's dependencies. For example, in the case of a Finish to Start dependency, the task will be scheduled to start immediately following the Finish Date for the task it depends on. (Note: If Use sprints for manual scheduling(see page 57) is selected and the task is assigned to a sprint, the task will be scheduled based on its sprints(see page 91).)
- If you move a task in the chart, it's Start Date value will be set accordingly, and the task will be considered scheduled manually. If the Finish Date is not set manually, it will be calculated based on the task's Start Date and work estimate.
- If you set the Finish Date manually, the Start Date will be calculated based on the Finish Date and work estimate. If you then move the task, the Finish Date will be adjusted accordingly.
- If you set both Start and Finish dates for your task, it will have a Fixed Duration(see page 96), and its work estimate will be divided evenly between the Start and Finish dates. Moving the task bar in the chart will change both the Start and Finish dates accordingly, without affecting work estimate.

> As you set the Start/Finish Date or use sprint-based scheduling, the task is considered to be scheduled manually. This means it will stay at the defined position regardless of its dependencies.
>
> To switch back to the Automatic Scheduling mode, click the task to see the Task Details panel(see page 102) and toggle the Scheduling option to **Auto**. Your Start/Finish dates will remain in Jira, but they will not be used for scheduling purposes. Instead, the task will be placed after its dependencies or, if no dependencies exist, the Gantt Start Date will be set to the Project Start Day, as defined in the Gantt Chart Settings. You can also turn off manual scheduling for a task by removing the Start/Finish dates from the corresponding Jira fields.

2.3.1.3 Planning with Sprints

In an agile environment, tasks are often assigned to a specific sprint, rather than specific dates. With the Use Sprints for Manual Scheduling(see page 57) option enabled, tasks can be scheduled to begin and end based on sprint dates. You can also move a task to a different sprint(see page 95) directly from your Gantt chart.



If a task has more than one sprint assigned to it, Structure.Gantt will use the most recent sprint (based on actual and/or anticipated sprint end dates) for scheduling and visualization.

When tasks are scheduled by sprint, you will see the Agile icon beside the task bar.

Visualizing Sprints

Sprints are represented in the chart header as follows:

- White bars represent closed sprints
- The deep blue bar represents an active sprint
- Blue bars represent future sprints

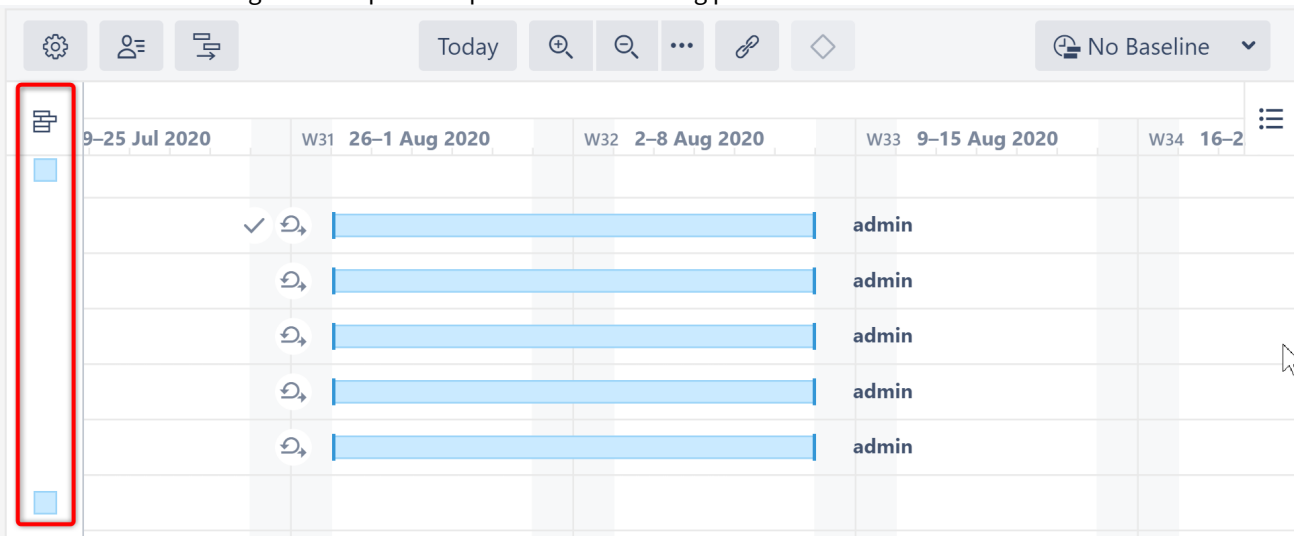
At some zoom levels, sprints will not be shown due to space limitations. To view sprints, simply zoom in.

Future Sprints

Future sprint dates can be taken directly from Jira, or you can configure custom dates in the Sprint configuration(see page 45) settings.

Backlog Panel

Issues that are not assigned to a sprint are placed in the Backlog panel.



To assign these to a sprint, simply drag the task bar to the appropriate location on the chart or click the task bar and edit the sprint field in the Task Details Panel(see page 102).

An issue can be assigned to sprints from the Backlog board selected in the Gantt configuration(see page 57). If you don't see the sprint you want, you may need to adjust the configuration or add a custom Slice(see page 71).

Fixed Duration

Tasks that are scheduled by sprint have a Fixed Duration(see page 96). They are scheduled for the entirety of the sprint, regardless of their work estimate, with the assumption that team members will work on tasks as they have

availability during the sprint period, rather than in a set order or at a specific time. When calculating resource usage(see page 117), Structure.Gantt spreads the work for each task evenly across the sprint.

See Fixed Duration(see page 96) for more details.

Tasks with Start/Finish Dates and Sprints

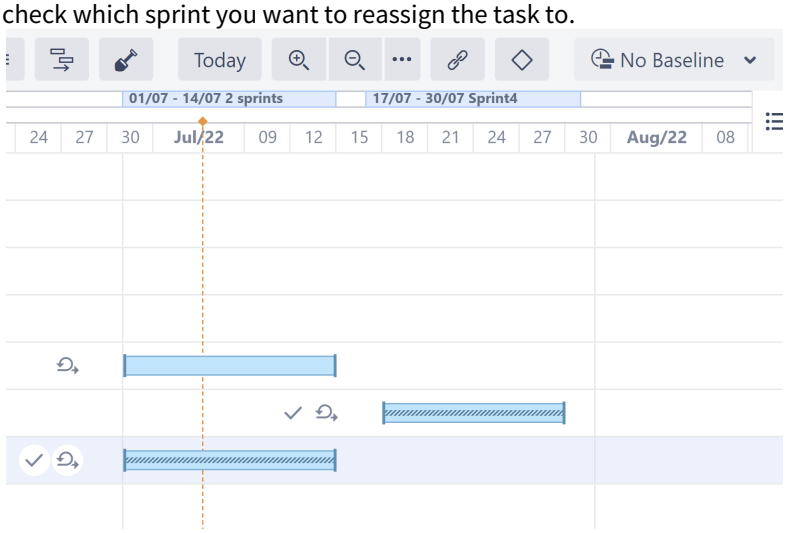
If a task has a Start and/or Finish date and is assigned to a sprint:

- If the **Prefer sprints over manual start and finish dates** is selected in your Gantt configuration(see page 57), the task will be scheduled based on the sprint
- If this is not selected, the task will be scheduled based on the Start/Finish date
- If the task is moved to the Backlog panel(see page 91), its Start/Finish dates will be removed

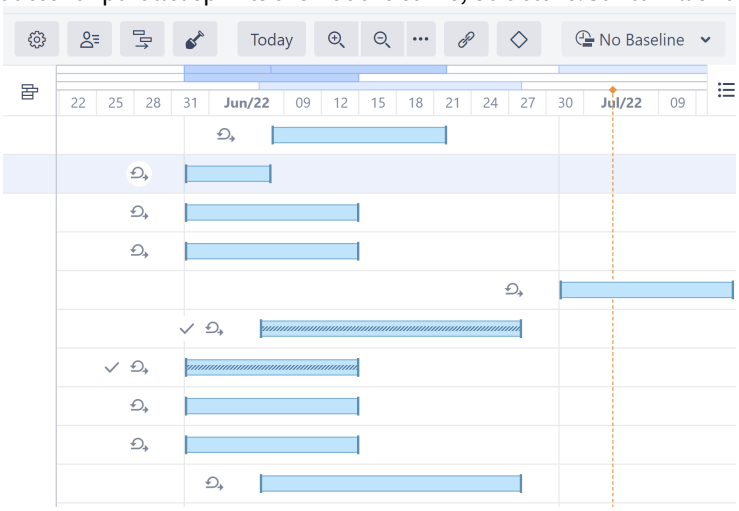
See Scheduling Precedence(see page 58) for more information.

Parallel Sprints

Parallel sprints with the same start and end dates are represented on the timeline as a single bar showing the total amount of parallel sprints. When dragging a task from a board with parallel sprints, Structure.Gantt will always check which sprint you want to reassign the task to.



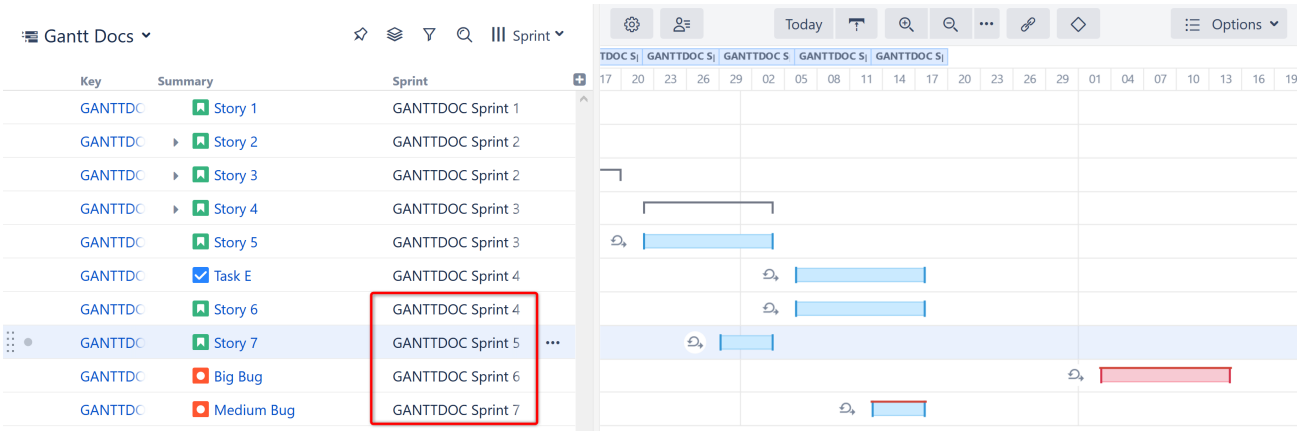
When the start/end dates for parallel sprints are not the same, Structure.Gantt will show them in different rows (up to a maximum of 5).



Same Sprint on Multiple Boards

> ⚠ This article only applies to Gantt charts that are configured with the "Use custom dates for future sprints, instead of Jira dates" option selected. *See* Gantt Chart Settings(see page 43) *for more details.*

When using custom future sprint dates, Structure.Gantt schedules sprints based on the board they were created in. This usually works quite well, but it can result in some unusual behavior if you have copied boards within your Jira instance. This is because copied boards maintain the same sprints as the original, and new sprints can be added on either board. **If you have different sprint planning settings for each board in Structure, sprints created on one board will follow a different timeline from sprints created on its copy.**



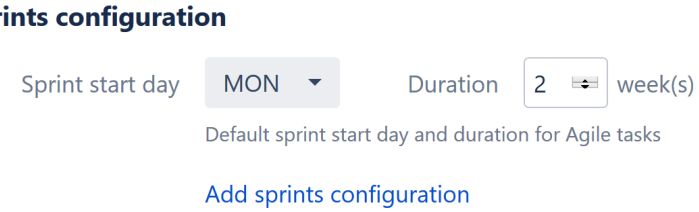
In the example above, it appears as though we have scheduled Sprints 5 before Sprint 4 and Sprint 7 before Sprint 6! This happened because we created Sprints 4 and 6 in our original board and Sprints 5 and 7 in its copy. We then intentionally created different Sprints configurations(see page 45) for the two boards (2 week durations for the original board, 1 week for the copy).

> ⚠ We only did this for the demonstration - we don't recommend it!

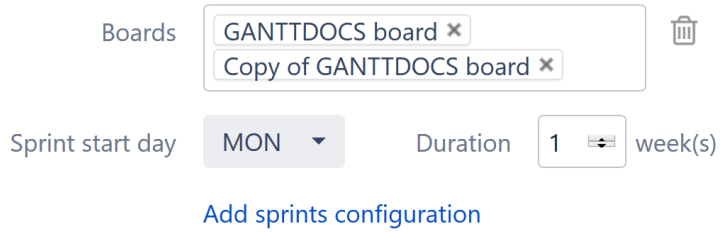
Because future sprints are scheduled based on the board they were created in, Sprints 5 and 7 have shorter durations than the other sprints. If we reassigned Medium Bug to Sprint 6, it would change to the 2-week schedule. Likewise, if we reassigned Big Bug to Sprint 7, it would shift to the 1-week schedule.

Fortunately, you can easily avoid this behavior in one of two ways:

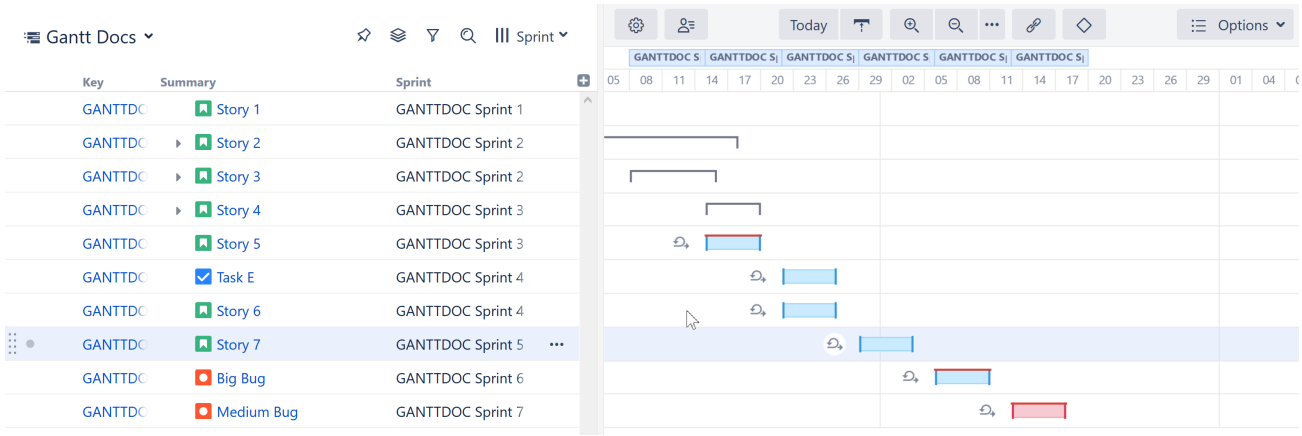
1. Use the same Sprints Configuration for everything. If you don't have any custom configurations, all future sprints will be scheduled using your default configuration.



2. When setting up board-specific configurations, be sure to include all board copies. This way, future sprints will be scheduled the same, regardless of where they were created.



Once the boards have been aligned, our future sprints will be scheduled appropriately.

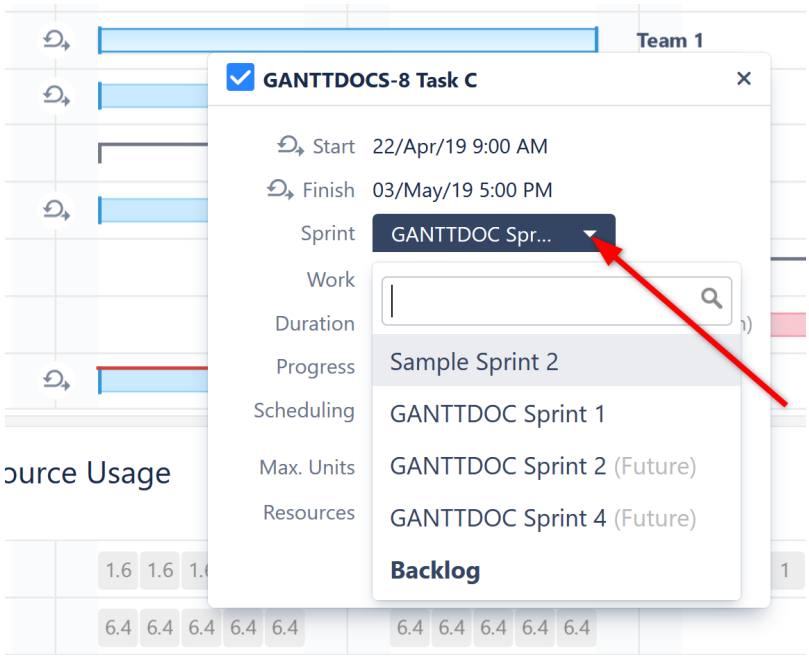


> If a custom configuration is not created for a specific board, sprints from that board will be scheduled using the default configuration.

Reassigning Sprints with Structure.Gantt

If tasks are manually scheduled by sprints,(see page 91) you can assign a task to a new sprint directly from the Gantt chart. To do so:

- Drag the task to the new sprint within the Gantt chart, or
- Update the Sprint in the Task Details panel



When dragging a task, only sprints that belong to the same board as the issue will be suggested. In the Task Details panel, you can select from any sprint available to the current user.

Can't Select a Sprint When Dragging the Task

If you don't see sprint options when dragging a task, it could for one of two reasons:

1. **Prefer sprints over manual start and finish date** is not selected in the Gantt configuration AND the issue has a Start or Finish date assigned. In this case, dragging the task will only adjust the Start/Finish date. You can still update the sprint in the Task Details panel - but it still will not be scheduled based on the sprint. To do that, you need to update your Gantt configuration or remove any Start/Finish dates.
2. The task has never been assigned to a sprint. In this case, Structure.Gantt does not know which board to display sprints from. You can still select a sprint using the Task Details panel, where you can choose from any sprints available to the current user.

Backlog

If you need to unassign a task from a sprint without reassigning it to another, open it's Task Details panel(see page 102) and change the Sprint selection to **Backlog**. Once a task is moved to the backlog, it will be automatically scheduled(see page 88) within your Gantt chart.

> Tasks cannot be assigned to or removed from closed sprints.

2.3.1.4 Fixed Duration

There are times when you may want to allot more time for a task than the amount of work required, allowing the assignee to complete the work at any point during the allotted time. For example, if you have five bugs that need to be fixed in the next week, it may not matter when each of them is fixed, so long as they are all completed in that time.

Using **Fixed Duration**, you set the duration of a task, and the work is distributed evenly across that duration (see Work Distribution(see page 98)). When updating a fixed duration task:

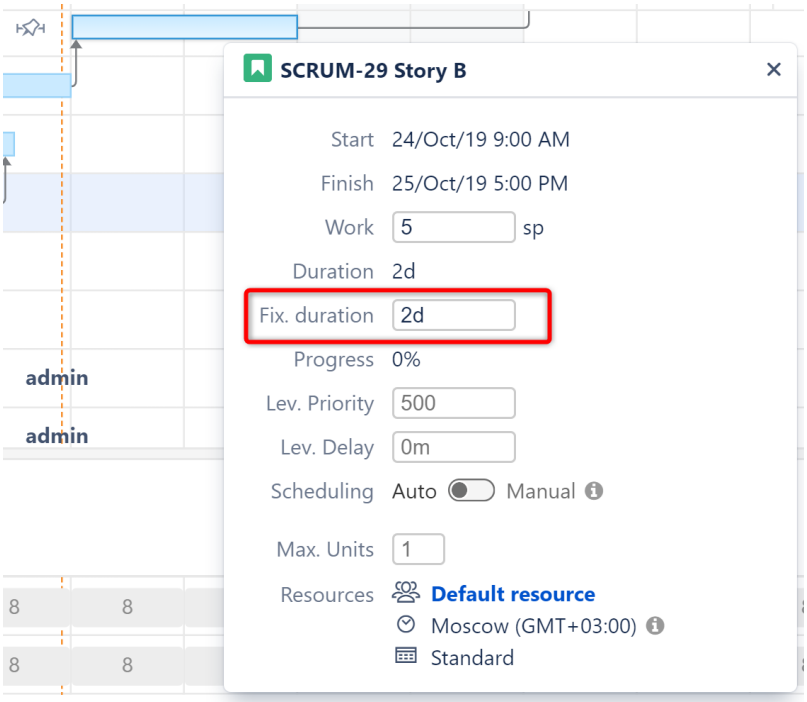
- Adjusting the amount of work required for the task does not affect its duration.
- Moving the task's Start or Finish Date, or changing the duration, will not change the work requirement.

Setting Fixed Durations

Fixed Durations can be set for tasks in one of three ways:

1. Setting the Duration Value

When you update the Fixed Duration value for a task, it is given a Fixed Duration, independent of the work required to complete the task.

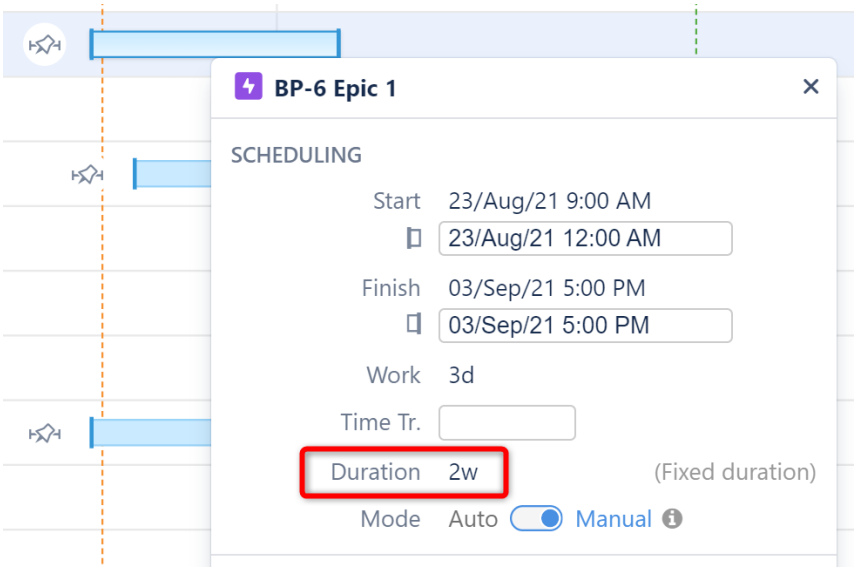


This task can be automatically scheduled, or you can manually assign a Start or Finish date.

> You can also set the duration value for tasks based on a Jira field or formula, by configuring the Duration Attribute(see page 58).

2. Assigning Both a Start and Finish Date

When a task's Start and Finish dates are both assigned, the task has a Fixed Duration.



With this method, if you make further changes to the task's Start or Finish date, the task's duration will change, but the work will remain the same.

> When Start and Finish dates are both manually scheduled, the task's Fixed Duration value is ignored.

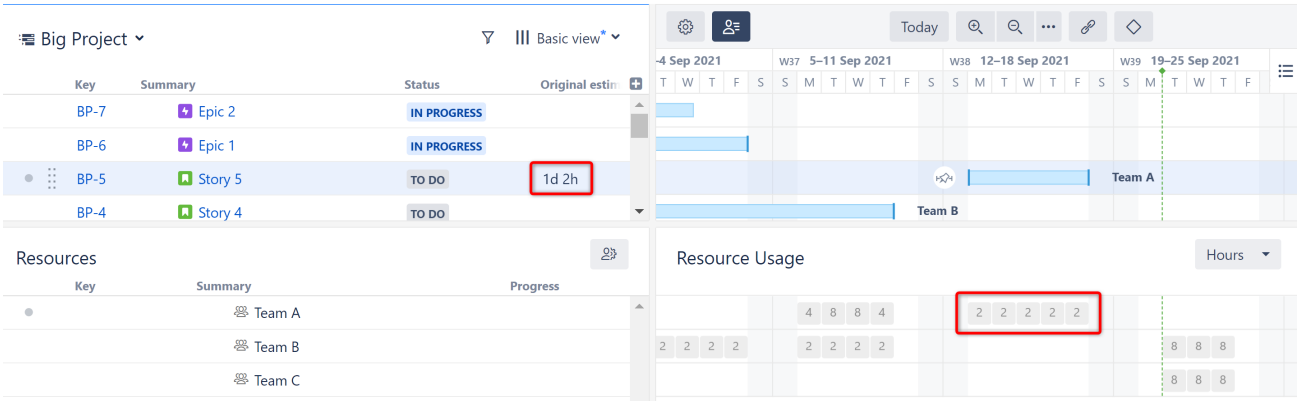
3. Using Sprint-based Scheduling

When tasks are scheduled by sprint, they are given a fixed duration based on the length of the sprint.

See Planning with Sprints(see page 91) for more information.

Work Distribution

With fixed duration, the amount of work that needs to be completed for a task (it's work estimate) is divided evenly across the the duration when calculating resource usage(see page 117). So if an issue's work estimate is 10 hours (1d 2h) and the task has a fixed duration of 10 working days, the issue would require 1 hour of work each day.



> If a task requires more work than the assigned resource can complete in a given period of time, a red line will appear over the task, indicating there is a Scheduling Conflict(see page 102).

2.3.2 Adjusting Duration

In Structure.Gantt, duration for each task can be calculated in one of four ways:

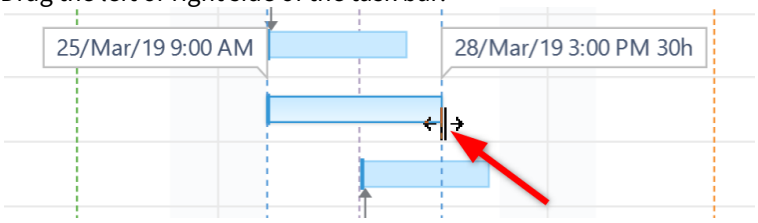
- Automatically(see page 99)
- Based on Start and Finish Dates(see page 99)
- Based on Sprints(see page 100)
- Manually Setting Duration(see page 100)

2.3.2.1 Automatically

By default, task durations are calculated automatically, based on each task's work estimate, the calendar, resource availability and the Work Estimates settings[12].

To adjust the duration of these tasks:

- Edit the task's work estimate fields, or
- Drag the left or right side of the task bar.

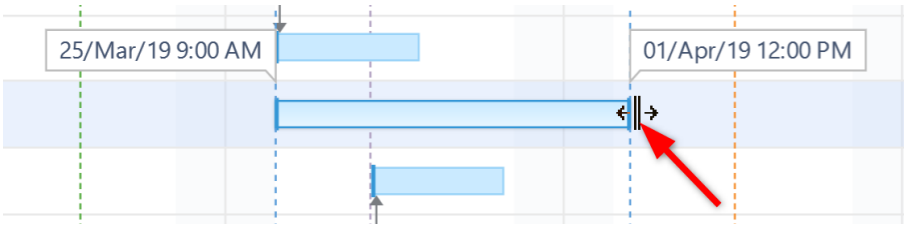


Dragging the right side of a task bar will cause the task's work to be updated and its duration to be recalculated.

2.3.2.2 Based on Start and Finish Dates

When tasks are manually scheduled(see page 55) and have both a manual Start and Finish Date, the task has a fixed duration(see page 96), spanning the time between its Start Date and Finish Date.

To adjust the duration of a fixed duration task, drag either side of the task bar. This will update the task's Start or Finish Date, and the duration will be adjusted accordingly.



Adjusting the duration of a fixed duration task does not affect its work estimate.

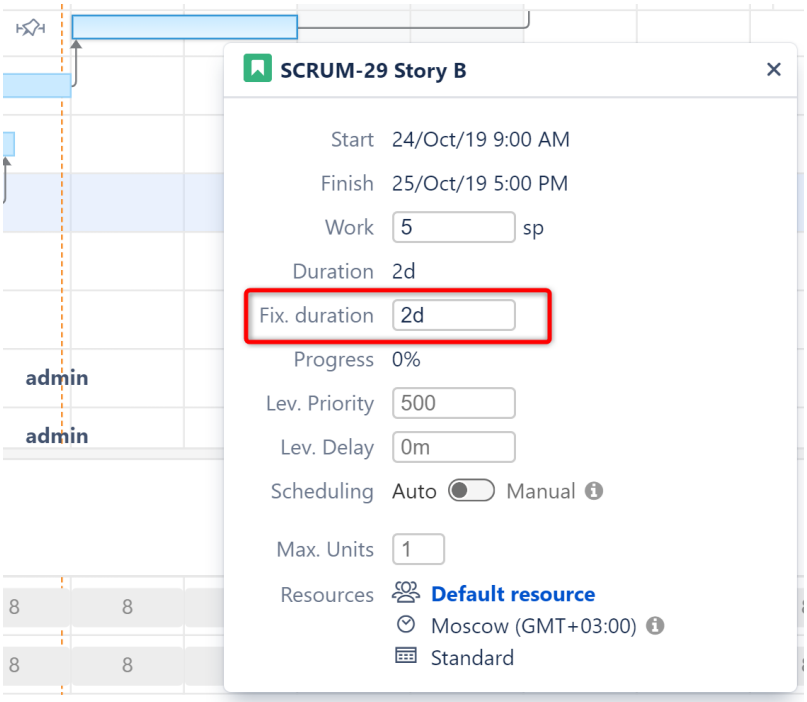
12 https://wiki.almworks.com/display/cloudgantt/Work+Estimates+Configuration

2.3.2.3 Based on Sprints

When tasks are scheduled based on sprints(see page 91), they have a fixed duration(see page 96) corresponding to the length of the sprint. It is not possible to adjust the duration of these tasks, except by removing them from sprint-based scheduling or changing your sprint duration (see page 45)settings.

2.3.2.4 Manually Setting Fixed Duration

You can set a fixed duration(see page 96) for an individual task by updating the **Fix. Duration** field in the Task Details Panel(see page 102).



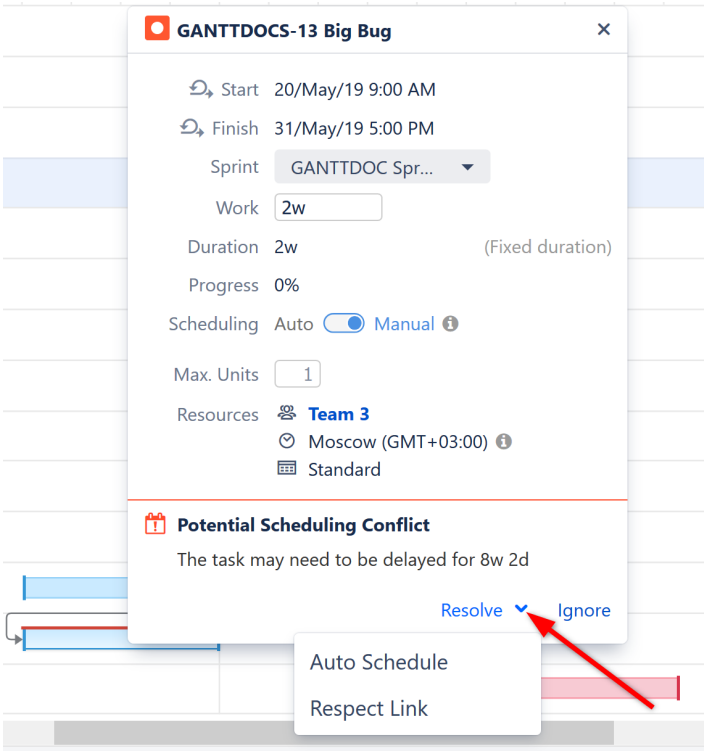
Tasks can also be assigned a fixed duration based on a Jira field or formula, by assigning a Fixed Duration Attribute (see page 58)in the Gantt Configuration.

2.3.3 Scheduling Conflict

Structure.Gantt highlights any scheduling conflicts with a dark red line placed on top of the task bar. To review and resolve the conflict, open the Task Details panel. The conflict will be explained at the bottom of the panel, along with resolution options.

2.3.3.1 Dependency-based Scheduling Conflicts

Issue dependencies may create conflicts when manual scheduling is enabled. For example, for finish-to-start dependencies, if a task is scheduled for a date earlier than its predecessor's Finish Date, Structure.Gantt will



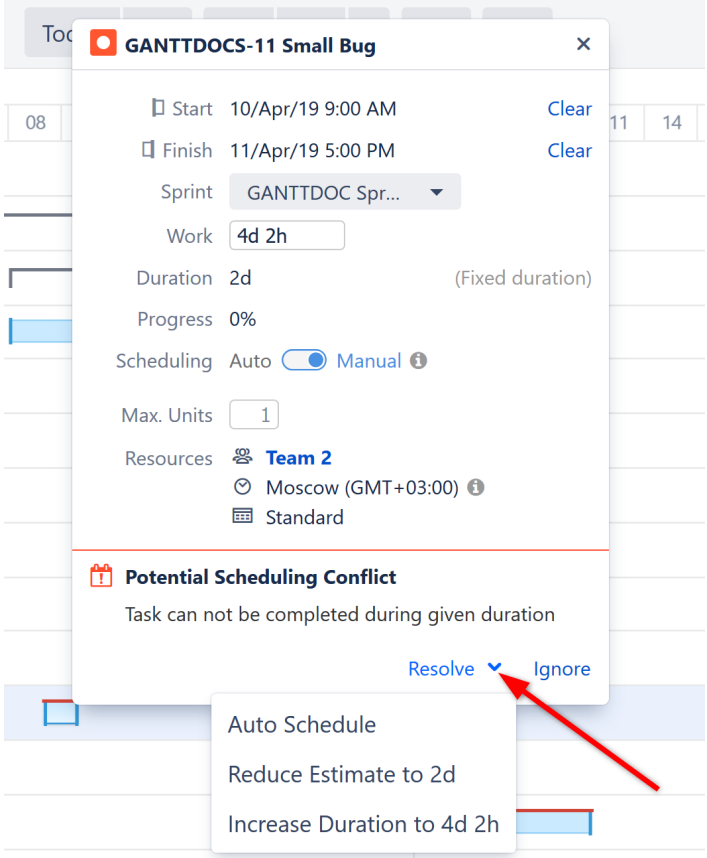
highlight this conflict. To deal with the conflict, click the task and select one of the following actions:

- **Respect Link -** Changes the task Start Date to coincide with the predecessor's Finish Date. The task will stay in the Manual Scheduling mode.
- **Auto Schedule** - Switches the task to Automatic Scheduling(see page 88) mode.
- **Ignore** - Tells Structure.Gantt to ignore the conflict. If additional changes are made to the task and the conflict still exists, the red line will reappear.

When sprint-based scheduling (see page 57)is used, dependent issues in the same sprint will not be marked as a conflict, since they can be completed at any point during the sprint.

If Resource Leveling(see page 122) is active, any leveling delays affecting the item will be removed when **Respect Link** or **Auto Schedule** is selected.

2.3.3.2 Duration/Work Estimate Conflicts

If a task is scheduled for a fixed duration(see page 96) shorter than its work estimate, you will receive an error message. 

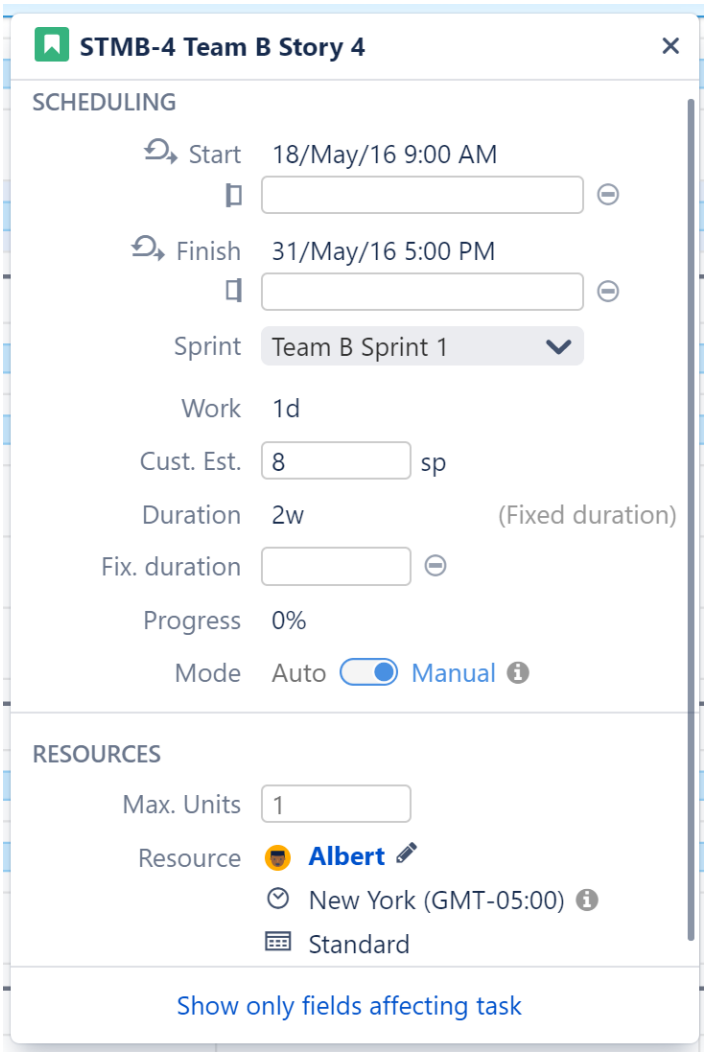
When this occurs, you have a few options to resolve the conflict:

- **Auto Schedule** - Removes manual scheduling.
- **Reduce Estimate** - Reduces the task's work estimate to match its duration.
- **Increase Duration** - Increases the tasks duration to match its work estimate. If the task was scheduled based on sprints(see page 91), a manual Start Date will be added to coincide with the start of its sprint and the task will be manually scheduled based on that date.

> ⚠ If **Prefer sprints over manual start and finish dates** is selected in your Gantt configuration, the Increase Duration option will be unavailable, because changing the start date would have no effect when sprints take precedence.

2.3.4 Task Details Panel

Clicking a task bar will display the Task Details panel, which contains information about the task's timeline and resources.



The Task Details panel is broken up into the following sections:

2.3.4.1 Scheduling

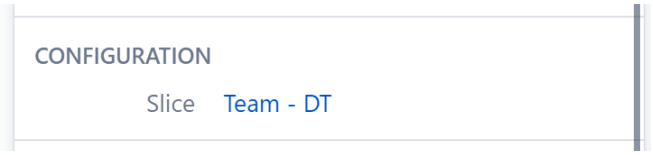
This section includes those fields that can affect the scheduling and duration of the task.

- **Start and Finish dates** - The dates the task is scheduled within the chart to start and/or finish. These values may be based on a manual date, a sprint, or the task's duration and dependencies.
- **Manual Start ( ) / Manual Finish ( )** - If manual scheduling is enabled, a second row will appear beneath the start and finish dates, listing the values in the manual Start/Finish date fields, based on the Gantt Configuration(see page 55). (Note: *This value may not match the Start/Finish dates for a variety of reasons: the task is automatically scheduled, the manual date occurs on a non-work day, etc.*)
- **Sprint** - Shows the sprint the task is assigned to (if available). This can also be used to assign the task to a sprint or reassign it to a new sprint. *Note: Tasks cannot be assigned to or removed from closed sprints.*
- **Work** - The effort required to complete the task.
- **Custom Estimate** - If "Use custom estimate" is selecting in the Gantt Configuration(see page 49), this displays the value in the custom estimate field.
- **Time Tracking** - This lists the value present in the time tracking field (based on the Gantt Configuration(see page 49)).

- **Duration** - The time it takes to complete the task.
- **Fixed duration** - If the task has a specified fixed duration(see page 96), it will be listed here.
- **Progress** - This can be calculated based on the Gantt Configuration(see page 51).
- **Mode** - Allows you to toggle how tasks are scheduled: Manual(see page 89) (based on its Start/End date or sprint) or Auto(see page 88) (based on the project start day, duration and dependencies).

2.3.4.2 Configuration

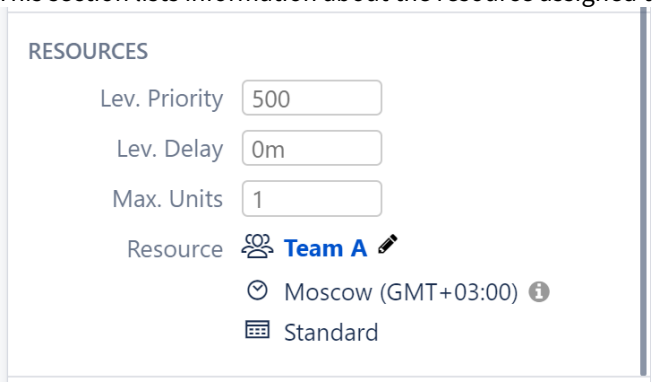
This section is only displayed when the task is affected by a Configuration Slice(see page 71).



- **Slice** - If the task's appearance or behavior is based on a Slice configuration(see page 71), the slice name is listed here.

2.3.4.3 Resources

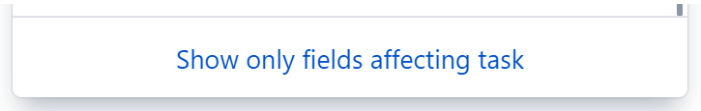
This section lists information about the resource assigned to the task.



- **Leveling Priority** - Weight given to the task for Resource Leveling(see page 122). A higher number equals a higher priority.
- **Leveling Delay** - Leveling delay applied to the task by Resource Leveling(see page 122).
- **Maximum Units** - Shows the maximum resource capacity which can be used on this task. For example, if a resource has capacity of 5, but the Max Unit setting is 1, only 1/5 of the resource will be used to work on this task. If the Max Unit is set to 5 or more, the entire resource will be used and the task can be done 5 times faster. (SeeResources Configuration(see page 64) for more information about assigning and tracking resources.)
- **Resources** - Shows the resource assigned to the task, the resource time zone and calendar.To change the task's resource, click the edit icon (pencil).

2.3.4.4 Show More/Less Fields

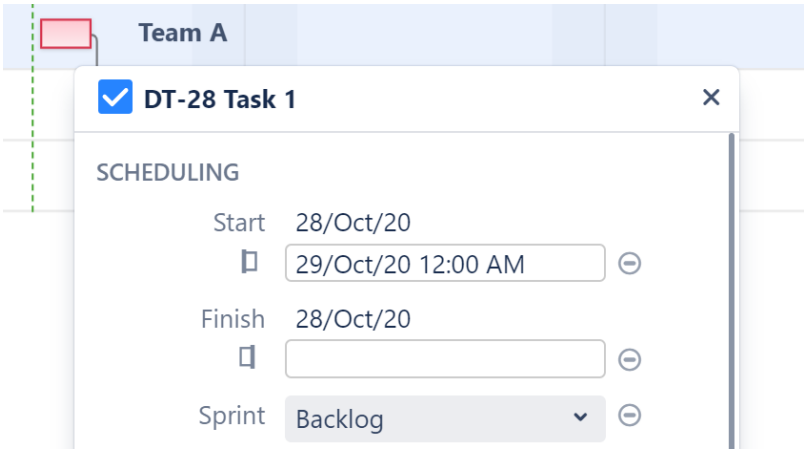
At the bottom of the Task Details panel, you can choose to show only those fields that affect the task (this will hide fields with the ⊖ icon), or all fields.



2.3.4.5 Icons in the Task Details Panel

You may see the following icons within the Task Details panel:

- Manual Start Date
- Manual Finish Date
- The task is manually scheduled based on its sprint
- The field does not affect the task's schedule



2.3.4.6 Clear Start or Finish Date

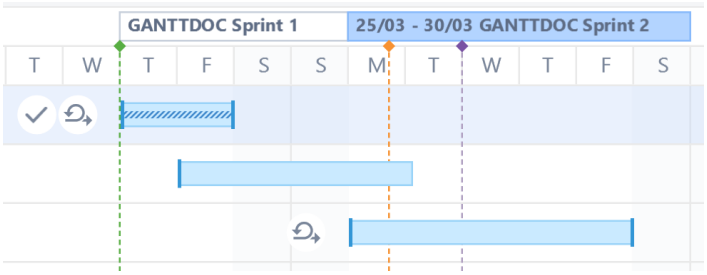
If a task has a manually scheduled Start or Finish date, clearing this date will remove the manual date from Jira and:

- If another date is available (Start or Finish) - the task will be manually scheduled by this date.
- If Use Sprints for Manual Scheduling is selected in the Gantt Configuration and the task is assigned to a sprint - the task will be rescheduled based on the sprint dates/duration.
- If neither of these are available - the task will revert to automatic scheduling.

See Scheduling Precedence(see page 58) for more information.

2.3.5 Task Indicators

Task indicators are icons that can be displayed next to tasks or milestones (or to the left side of their row) to provide additional information about the task.



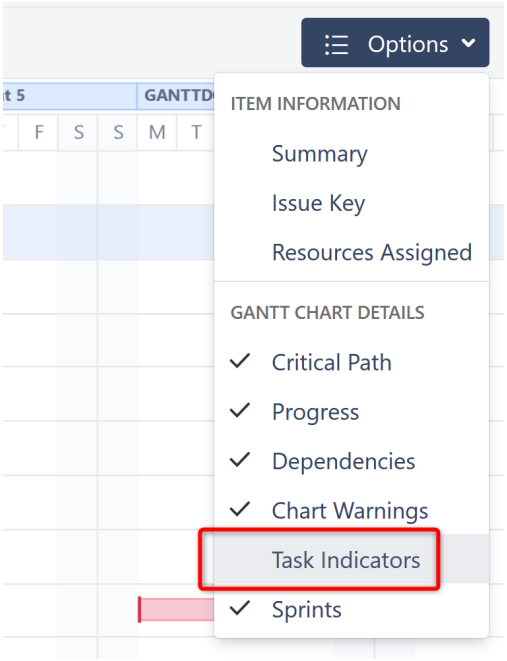
You may see the following indicators on your Gantt Chart:

- The task is complete.
- The task's schedule is based on a sprint.
- A leveling delay has been applied to the task by Resource Leveling(see page 122).
- The task has a Fixed Duration(see page 96).
- The task is hidden(see page 107).
- The task is scheduled in a different time zone/work calendar. It may appear shifted on the timeline or have a different duration.

If you're not sure what an indicator stands for, just hover over it - a description will appear below the task!

2.3.5.1 Show/Hide Task Indicators

Task indicators are visible by default. To hide them from your chart, open the Gantt Chart Display Options menu and uncheck **Task Indicators**.



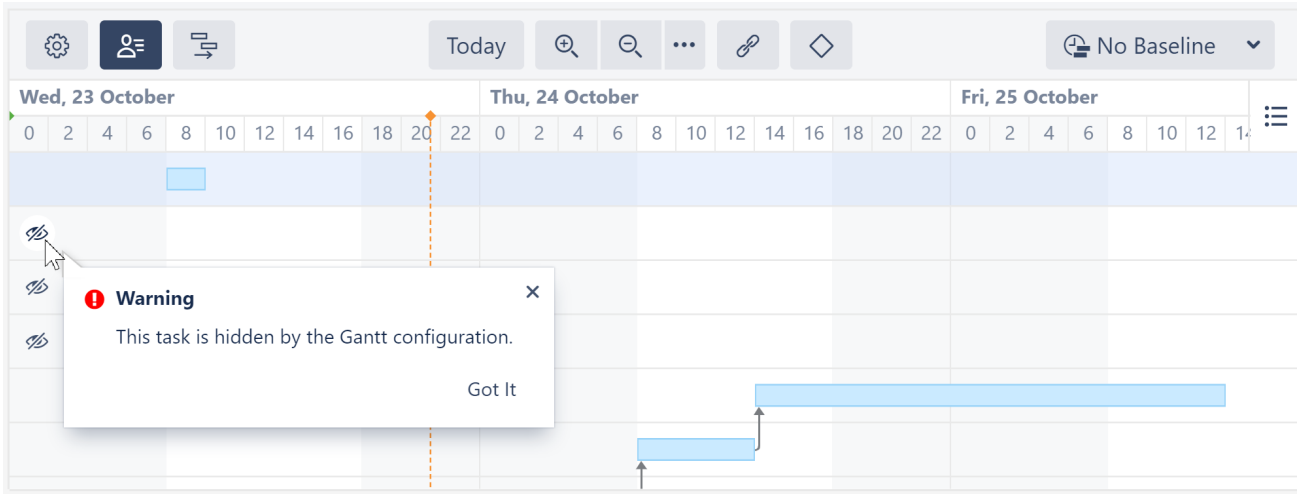
2.3.5.2 Hidden Tasks

If a task is hidden from the Gantt chart, the Hidden Task icon will be displayed on the left side of its row:

Tasks may be hidden for the following reasons:

- The task is hidden by the Gantt Configuration, because the item behavior is marked as Do Not Show in a Slice(see page 71).
- The structure owner does not have permission to view the task.

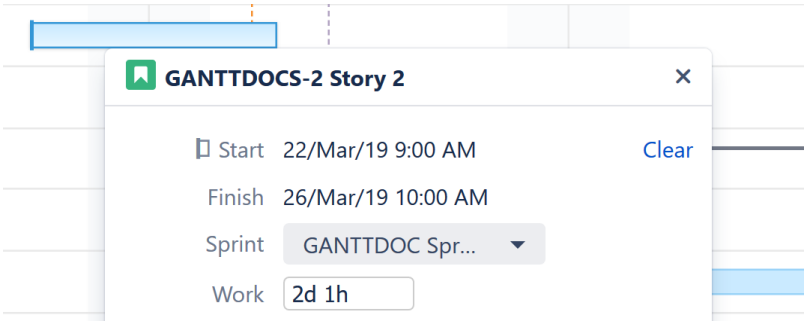
To see why a task is hidden, hover over its Hidden Task icon.



To hide Hidden Task icons, open the Gantt Chart Display Options and uncheck **Chart Warnings**.

2.3.5.3 Indicators in the Task Details Panel

The Task Details panel also uses icons to help you identify how a task is scheduled.



Next to the Start/Finish dates, you may see the following:

- Indicates the task is manually scheduled based on its Start Date
- Indicates the task is manually scheduled based on its Finish Date
- Indicates the task is manually scheduled based on its sprint

2.4 Dependencies

In Structure.Gantt, dependencies are defined based on Issue Links. Changing dependencies creates or removes links between issues (the link type is defined in the Gantt configuration(see page 61)).

Structure.Gantt supports the following types of dependencies:

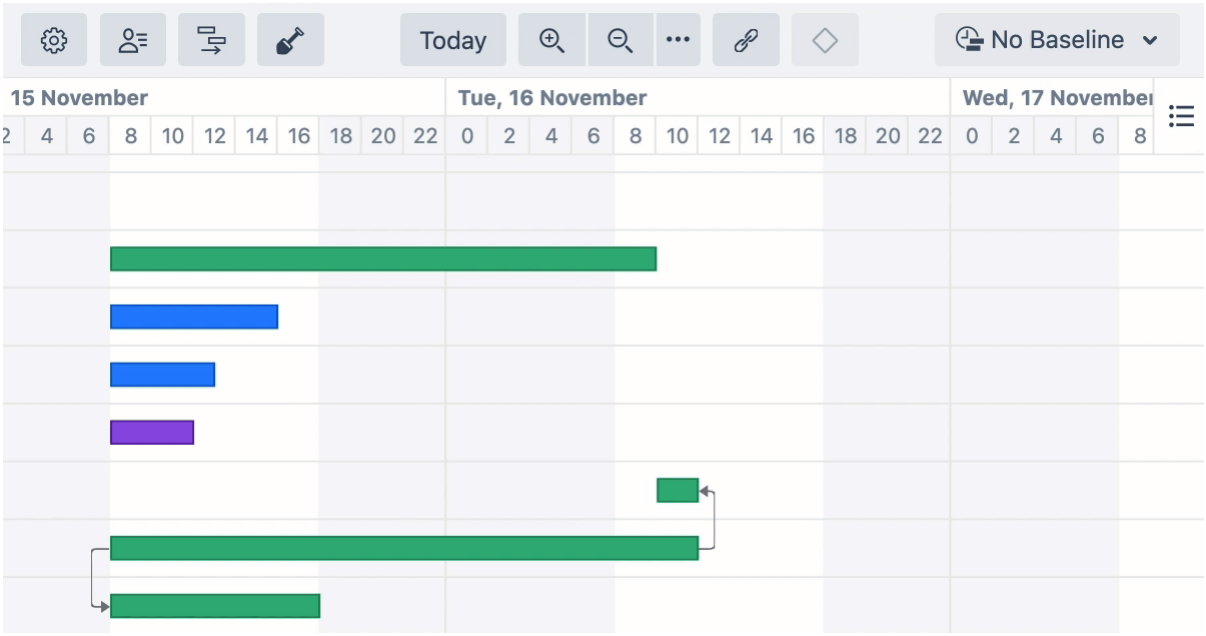
- Finish to Start (FS) - the second item's start is dependent upon the first item's finish
- Start to Start (SS) - the second item's start is dependent upon the first item's start
- Finish to Finish (FF) - the second item's finish is dependent upon the first item's finish
- Start to Finish (SF) - the second item's finish is dependent upon the first item's start

By default, the dependency transition happens immediately. For example, in an FS dependency, the second item starts as soon as the first item finishes. If you need to delay a start/finish or begin it early, you can configure a lead/lag time(see page 111) for dependencies.

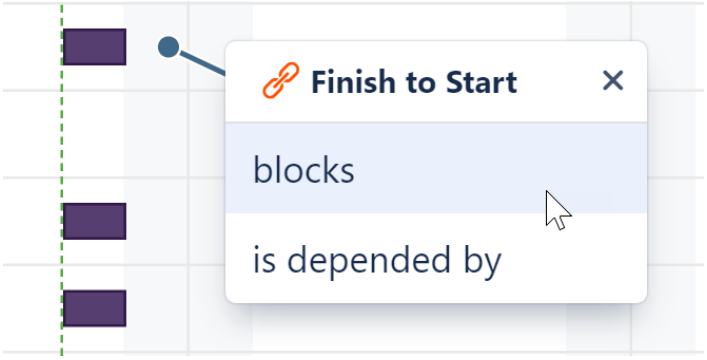
2.4.1 Creating Dependencies with Drag and Drop

To create a dependency between two tasks, drag from one task to another. The type of dependency you create will depend on the sides of each task you use:

- Finish to Start - Drag from the right side of one task to the left side of the other
- Finish to Finish - Drag from right side to right side
- Start to Finish - Drag from left side to right side
- Start to Start - Drag from left side to left side



If you have more than one link type associated with the dependency type you selected, you will be asked which link type you want to use.



You can use favorites to streamline the selection process:

- If you favorite one link type for a dependency type, Structure.Gantt will skip the popup and use that type whenever you create that dependency
- If you favorite multiple link types, only your favorites will be listed in the popup

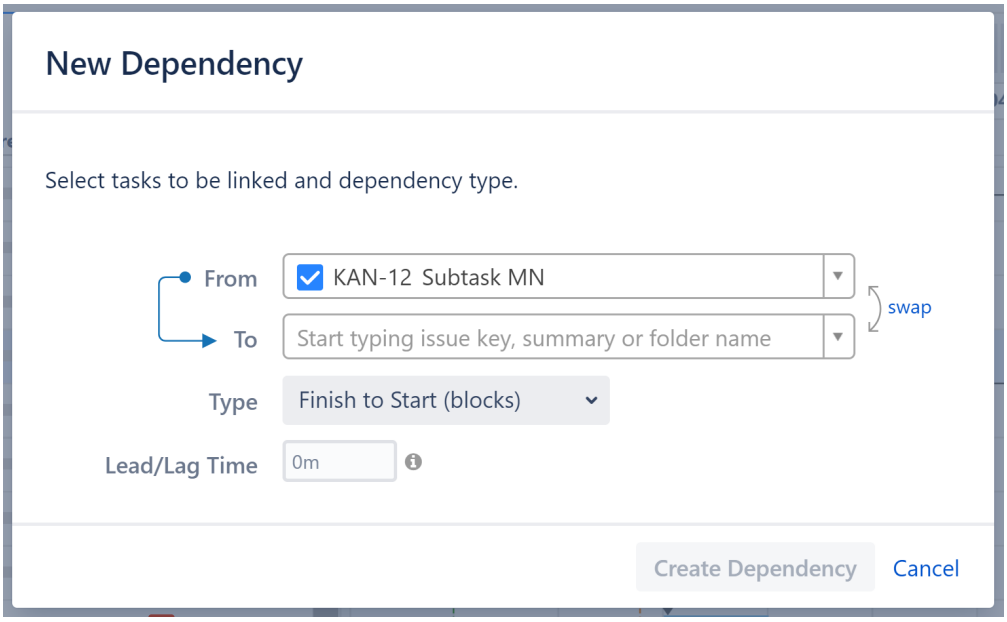
The type of dependencies and link types you can create in Structure.Gantt depends on the types you have enabled in the Gantt Configuration(see page 61).

If Resource Leveling(see page 122) is active, any leveling delays affecting the newly-linked items will be removed.

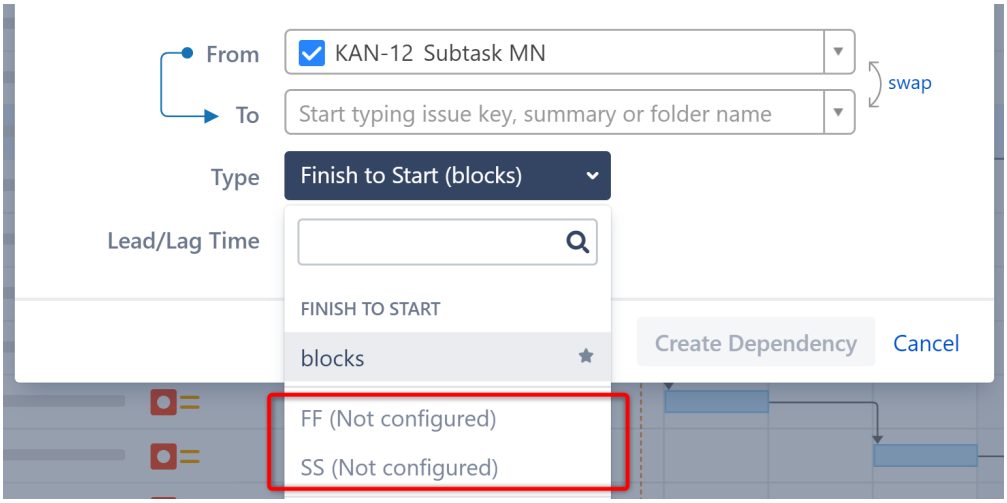
2.4.2 Creating Dependencies with the Toolbar

You can also create dependencies using the Gantt toolbar:

1. Click the Link button in the toolbar
2. Select the tasks you want to include in the dependency
3. Select the Dependency Type
4. Assign a custom lead/lag time(see page 111), if necessary.
5. Click **Create Dependency**



If you haven't configured a Dependency Type, you won't be able to select it in the New Dependency menu.



In order to use these dependency types, you first need to configure them in your Gantt Configuration(see page 61).

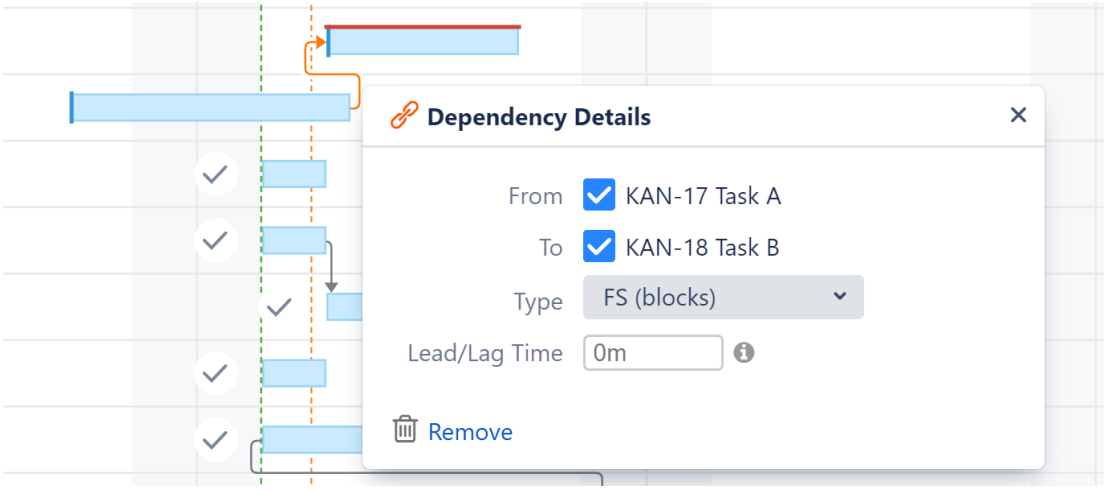
⚠ Start to Finish and Finish to Finish dependencies are currently not supported as targets for groups(see page 60).

2.4.3 Non-Issue Dependencies

It is also possible to create dependencies between non-issues items (Structure Folders[13] and Memos[14]), as well as between issues and non-issues. These dependencies are stored inside Structure.Gantt and are not visible outside of the chart.

2.4.4 Dependency Details

To view or edit the details of an existing dependency, click the link arrow connecting two tasks.



2.4.5 Deleting Dependencies

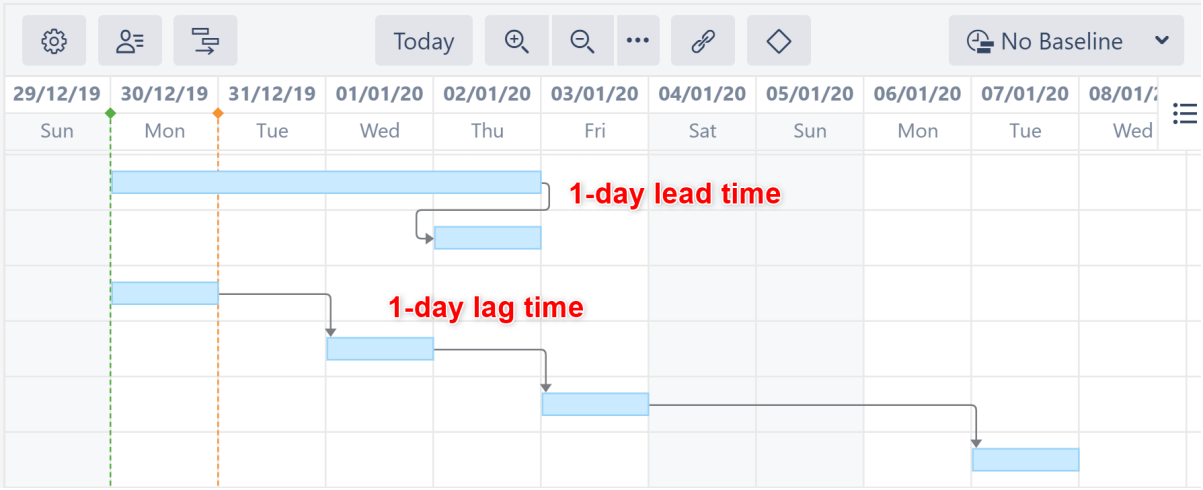
To delete a dependency, click the **Remove** link in the Dependency Properties panel.

ⓘ If Resource Leveling(see page 122) is active, any leveling delays affecting the previously-linked items will be removed.

2.4.6 Dependency Lead/Lag Time

When building dependencies between items, typically one item is set to start or finish the moment another starts or finishes. However, there may be situations where you need to build in a lead or lag time between dependencies. For example, you may need the second item to start shortly before the first item finishes (lead), or you may want to wait a few days after one item finishes before starting the next (lag).

13 https://wiki.almworks.com/display/structure/.Folders+v7.4
14 https://wiki.almworks.com/display/structure/.Memo+vFUTURE-dc



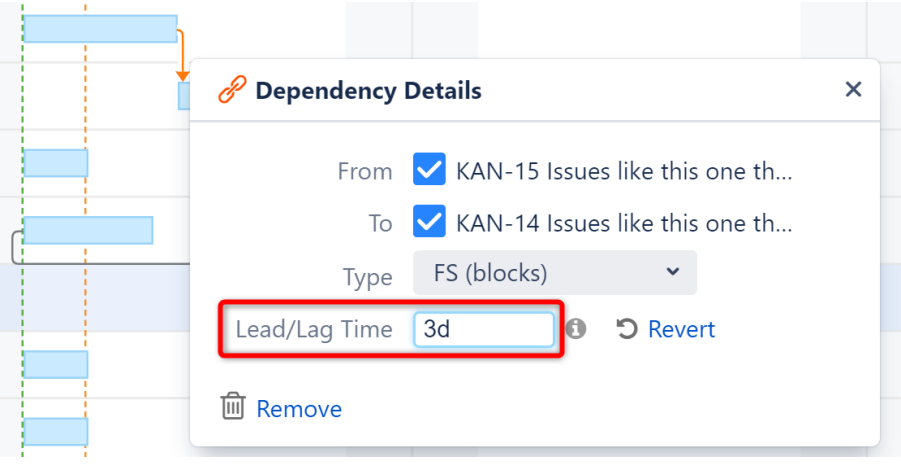
You can accomplish this in Structure.Gantt by configuring the lead/lag time for dependencies.

> Lead/Lag works with all types of dependencies.

2.4.6.1 Setting Individual Lead/Lag Times

To create a lead or lag time for a specific dependency, click the dependency link in the Gantt chart to open the Dependency Details panel. Then edit the Lead/Lag field:

- To set a lead time, input a negative number.
- To set a lag time, input a positive number.

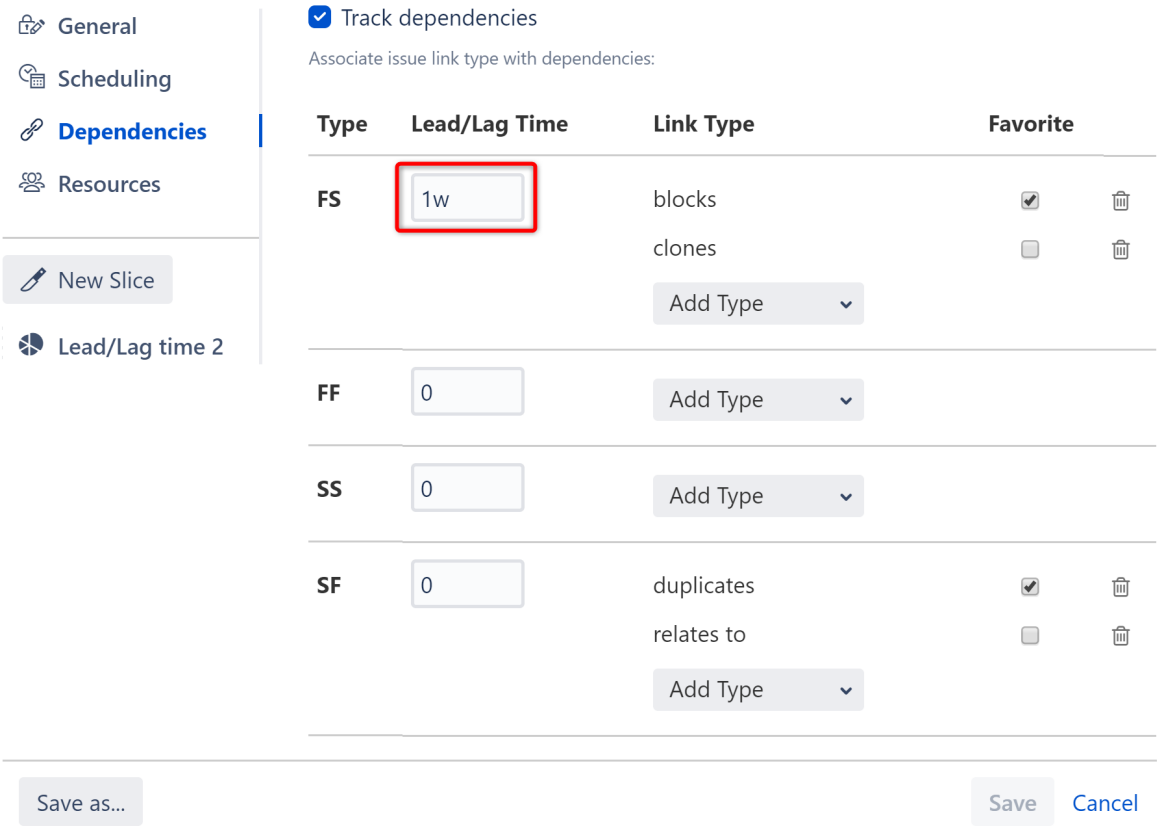


Lead/lag time should be entered using Jira duration format (1d 3h 30m).

> Lead/lag time is applied based on your work calendars:
>
> - The work calendar of the dependency source is used for dependency calculation.
> - The work calendar for the dependency target is used to adjust the task position if it is scheduled during non-working times.

2.4.6.2 Setting Standard Lead/Lag Times

You can also set a standard lead or lag time for each dependency type in your Gantt configuration.



You can also assign a unique Lead/Lag time to a subset of items by creating a Slice(see page 71).

> ⚠ These Lead/Lag times will be overwritten by individual times set using the Dependency Details panel.

2.4.6.3 Lead/Lag Times and Resource Leveling

Running Resource Leveling(see page 122) may affect lead/lag times:

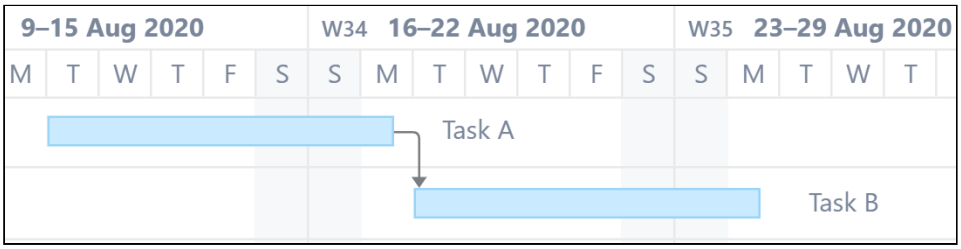
- Lead times may be removed if both items in the dependency share the same resource.
- Lag times may be extended to resolve overallocations.

2.4.7 Dependency Types Supported by Structure.Gantt

Structure.Gantt supports the following dependency types:

2.4.7.1 Finish to Start

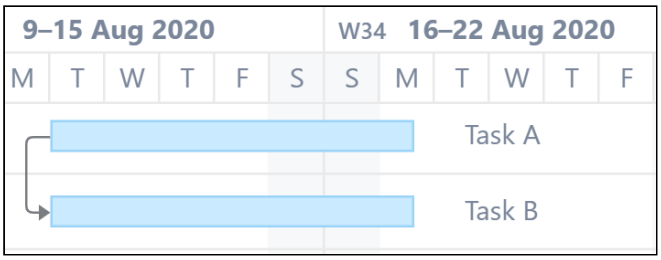
Finish to Start is the most commonly used dependency type. In a Finish to Start dependency, a task's start date is based on when the task it depends on finishes.



Task B starts after Task A finishes.

2.4.7.2 Start to Start

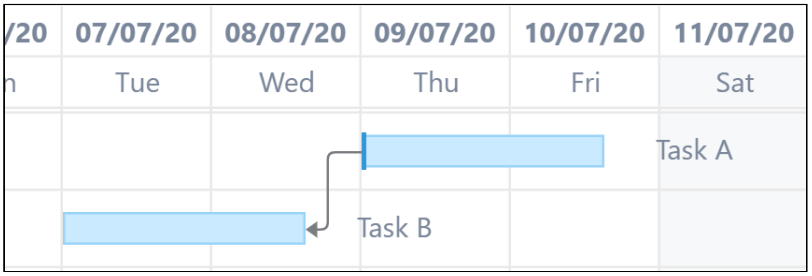
In a Start to Start dependency, a task's start date is based on when the task it depends on starts.



Task B starts at the same time Task A starts.

2.4.7.3 Start to Finish

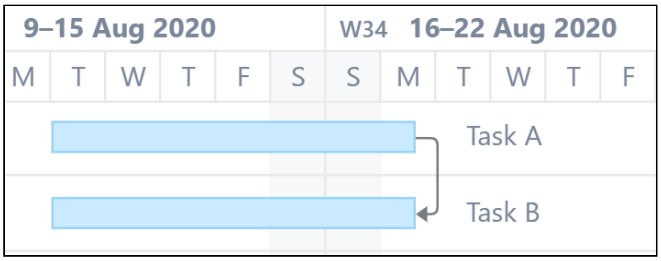
In a Start to Finish dependency, a task's finish date is based on when the task it depends on starts.



Task B finishes before Task A starts.

2.4.7.4 Finish to Finish

In a Finish to Finish dependency, a task's finish date is based on when the task it depends on finishes.

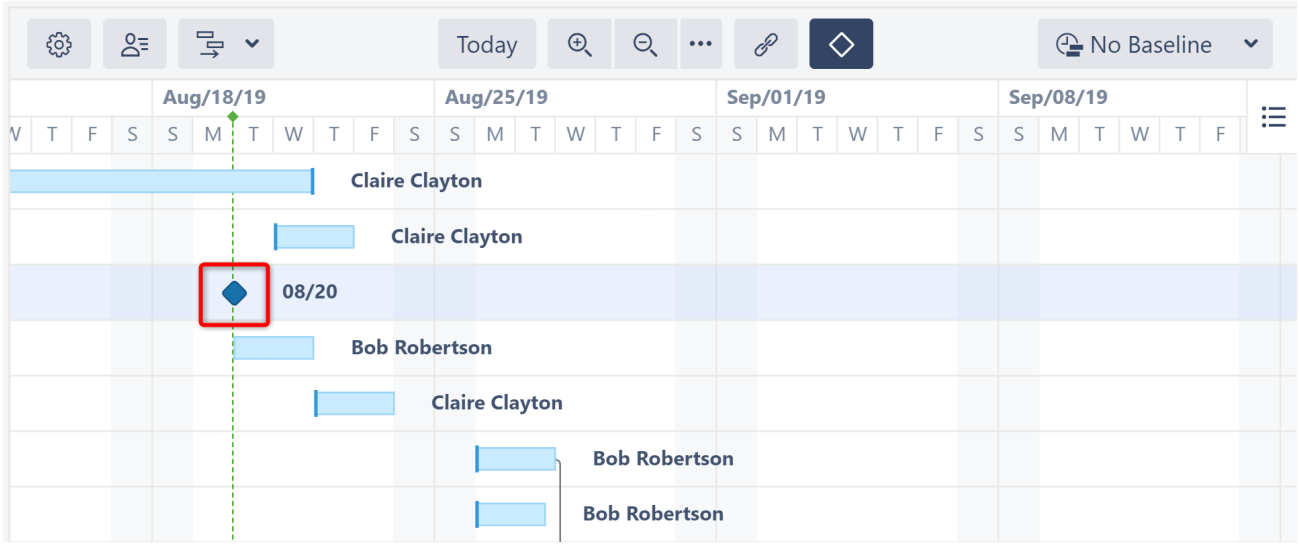


Task B finishes together with Task A.

> The above examples show tasks within a dependency starting or finishing in sync with one another. It is also possible to configure a lead or lag time (see page 111)for these. For example, setting a 1-day lead time for Finish to Start dependencies would cause a task to begin one day before the task it depends on finishes.

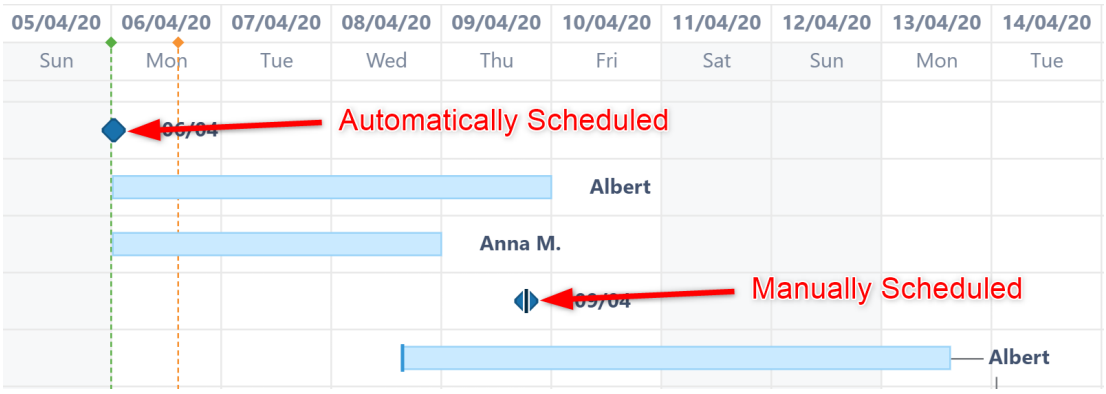
2.5 Milestones

Milestones allow you to mark key points within a project plan. They can be created from issues, folders[15] or memos[16] in the structure.



Once a milestone is added to the chart, you can drag it to a desired date (if Manual Scheduling is enabled) and link tasks or groups to it. If a milestone has been manually scheduled, it will have a dark ridge down it's center:

15 https://wiki.almworks.com/display/structure/.Folders+v7.4
16 https://wiki.almworks.com/display/structure/.Memo+vFUTURE-dc

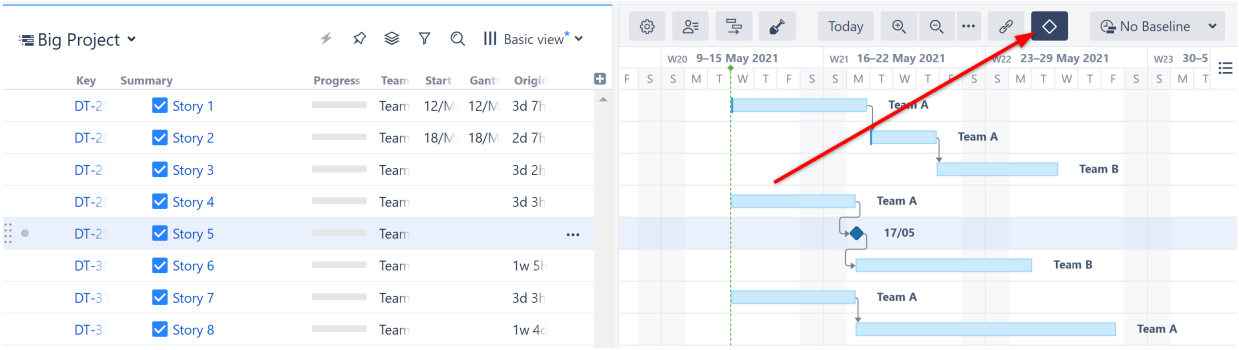


In order to manually schedule a milestone, you first need to set the Milestone attribute under the Manual Scheduling Configuration(see page 55) configuration.

2.5.1 Creating a Milestone

There are two ways milestones can be created within a Gantt chart:

1. Display specific tasks as milestones using slice-based configurations(see page 71).
2. Use the Milestone button to manually convert a selected item into a milestone.



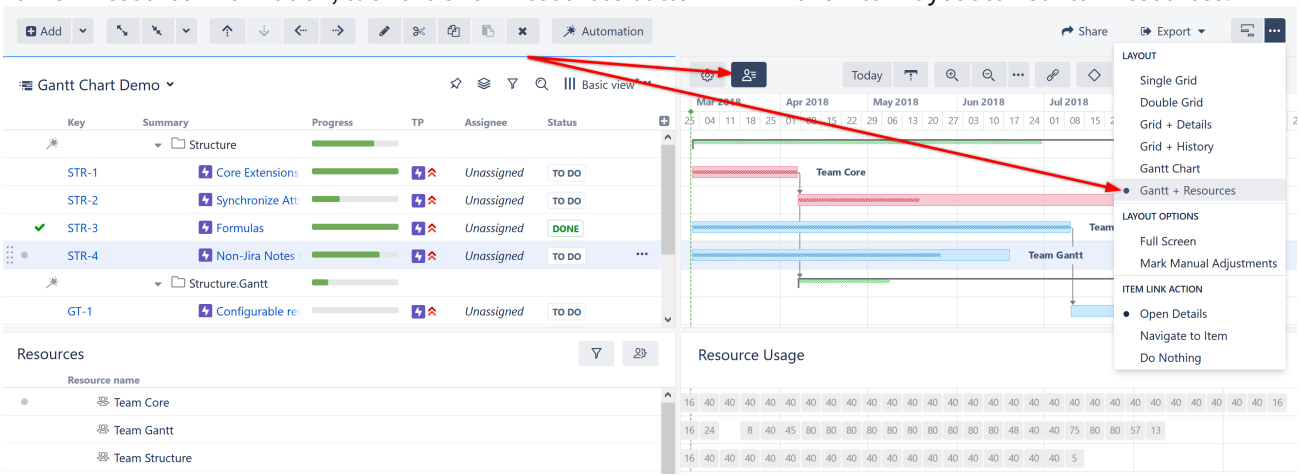
Since there is no concept of milestone in Jira, milestones are only visible within Structure.Gantt. However, their dates can be exported using Structure Effectors[17].

2.6 Resources

Structure.Gantt allows you to track resource usage on a project (or multiple projects).If you used the Structure Wizard(see page 21) to create your Gantt chart, you may have already assigned resources for your chart. If not, or if you need to change your resource assignment, see Resource Assignment(see page 64) to assign resources to your tasks.

17 https://wiki.almworks.com/display/structure/Effectors

To view Resource information, click the Show Resources button  or switch Layout to "Gantt + Resources."



Not seeing any resources? Make sure you've configured(see page 64) them!

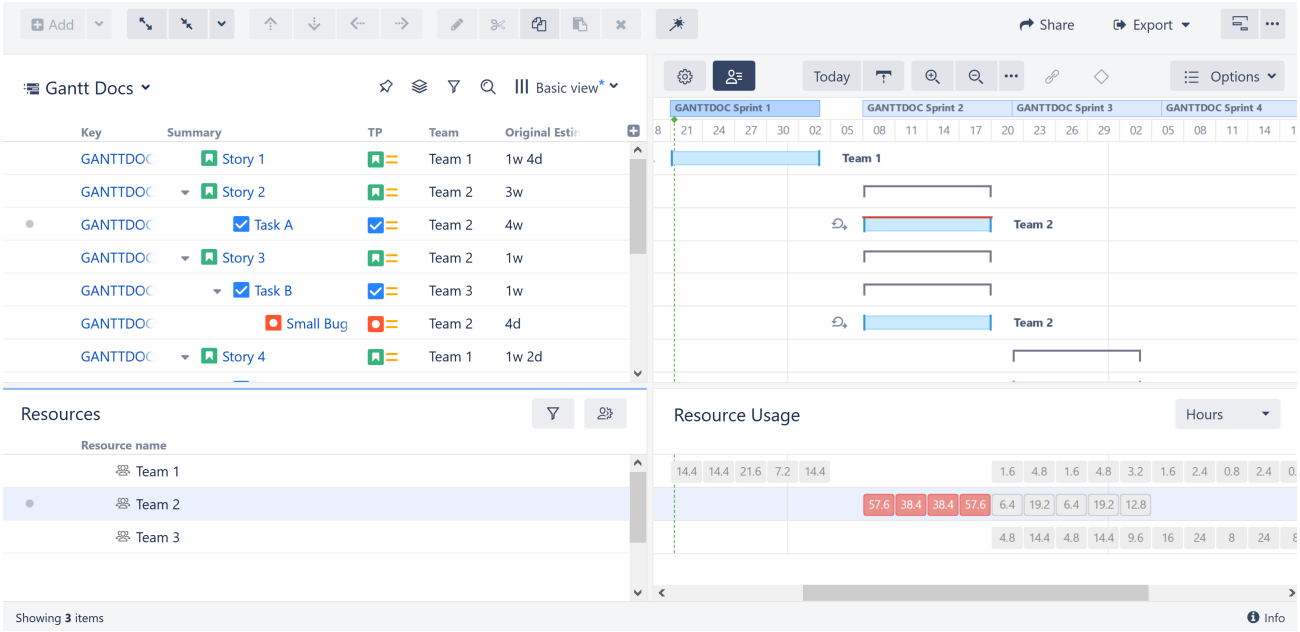
2.6.1 Learn More About Working With Resources

- Resources and Resource Usage(see page 117)
- Resource Settings(see page 120)
- Filter by Resource(see page 121)
- Navigating to a Resource from the Gantt Chart(see page 122)

2.6.2 Resources and Resource Usage

The Resources section of your chart is split into two panels:

- **Resources** - Displays a list of all resources based on the information entered in the field you assigned for resources.
- **Resource Usage** - Displays the workload for each resource at a given time.



You can also display the allocation numbers in the Gantt chart itself. To do that, simply group(see page 117) your tasks by the attribute you used to define the resources.*Note: You cannot group by Formula values.*

2.6.2.1 Hidden Resources

You may only see a limited number of available resources listed here if:

1. The structure has been filtered[18] - in this case, the Resource panel will only include those resources assigned to the items left in the structure
2. Resource Filtering(see page 121) has been applied

2.6.2.2 Groups and Milestones

Resources cannot be assigned to groups or milestones.

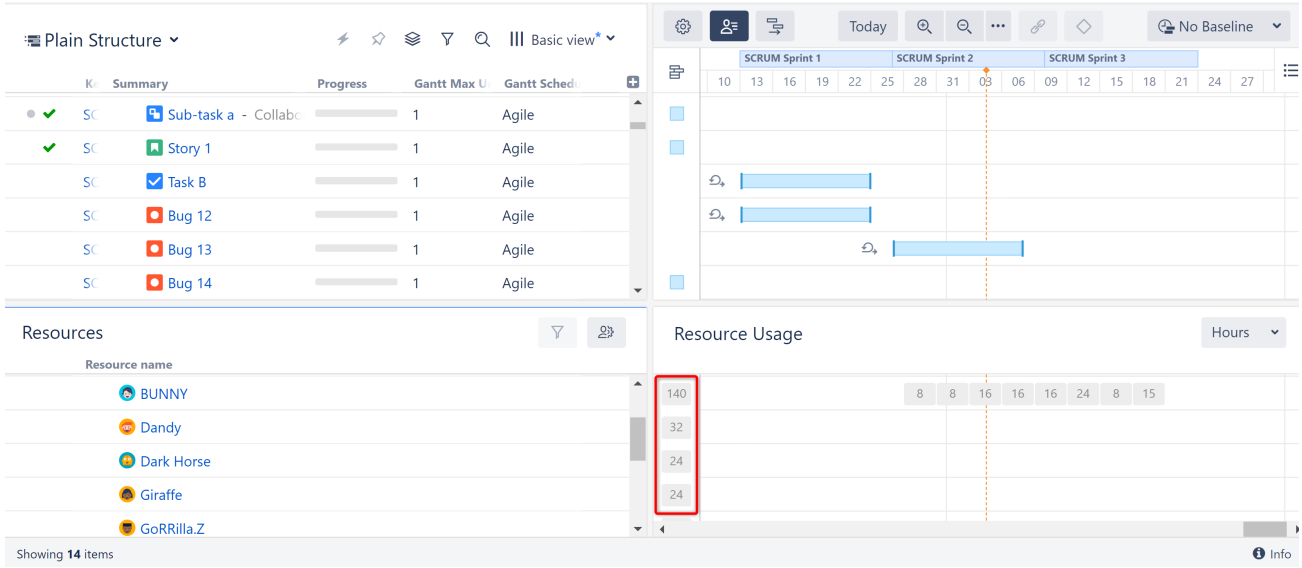
If an issue is treated as a group(see page 32), any resources assigned to that issue will be ignored when calculating resource usage.

2.6.2.3 Backlog Panel

When using sprint-based scheduling(see page 91) with the Backlog panel visible, the resource requirements for backlog items will be displayed to the left of the Resource Usage panel. This allows you to quickly see how much unscheduled work has been assigned to each resource, so you can make adjustments *before* tasks are added to the

18 https://wiki.almworks.com/display/structure/.Filter+v7.4

schedule.



> Backlog resource requirements are only available when displaying resource usage in hours(see page 119).

2.6.2.4 Overallocation

If there is more work assigned to a resource than the resource can handle, the Usage square for that block of time will be highlighted (See Team 2's usage above). This allows you to quickly identify places where you may need to revisit your timeline or work distribution.To resolve the overallocation, manually adjust the tasks or their resources, or use the Resource Leveling (see page 122)tool.

2.6.2.5 Resource Usage Timeline

The Resource Usage timeline aligns with the Gantt chart timeline above and adapts to the zoom level selected in the Gantt toolbar. Zoom in or zoom out to see details of allocation within a specific period.

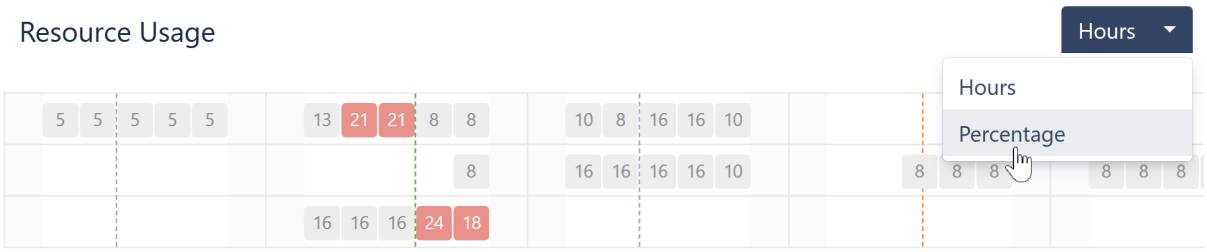
To learn more about assigning resources to tasks, see Resource Assignment.(see page 64)

2.6.2.6 Hours vs Percentage

Resource usage can be displayed in one of two ways:

- the number of hours assigned to a resource for a set period of time
- the percentage of a resource's availability (as determined in Resource Settings(see page 120)) that is being used at a given time

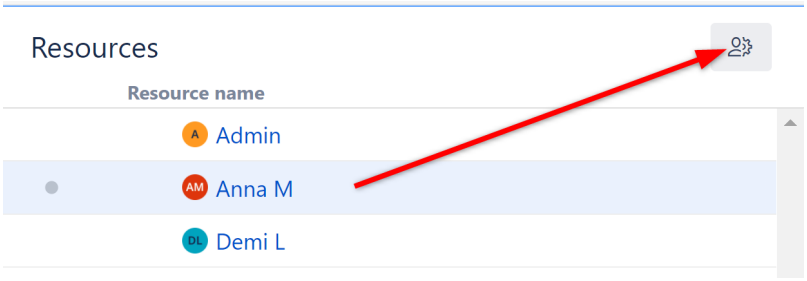
To change how resource usage is displayed, simply click on the drop-down menu in the upper-right corner of the Resource Usage panel.



> Depending on your zoom level and work schedule, chart cells may appear the same but contain different amounts of work. For example, with a 6-hour zoom, you will see two cells for a typical work day (6am-12pm and 12pm-6pm), but if your work day is from 9am-5pm, the first cell will only represent 3 hours of work, while the second represents 5 hours. This is perfectly normal and does not impact the percentage of availability in any way.

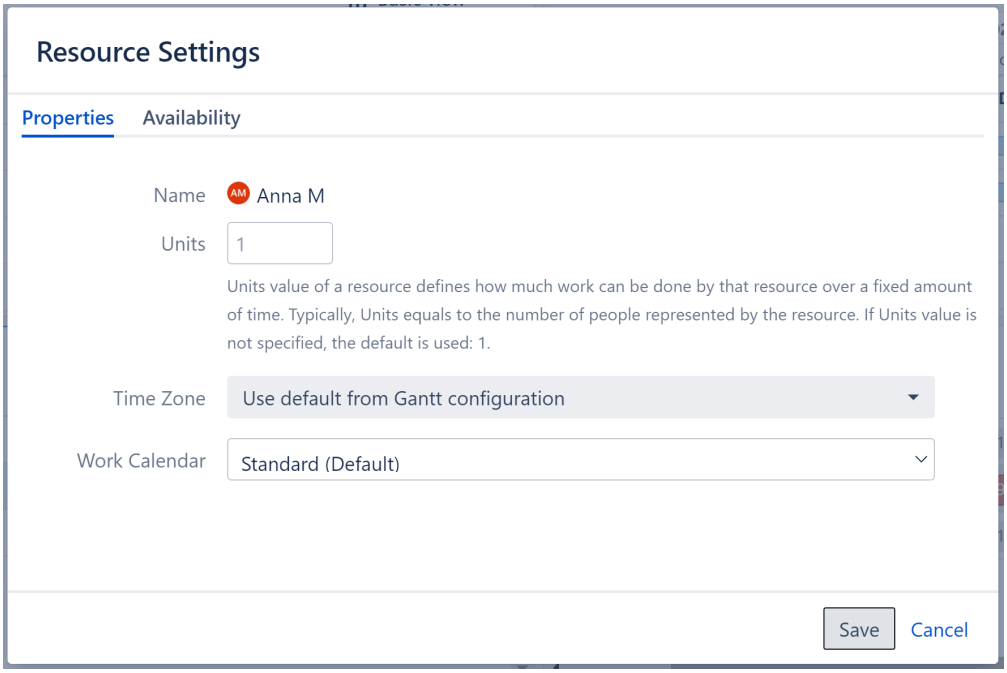
2.6.3 Resource Settings

Each resource has several parameters that are considered when calculating task start and finish dates, duration, and resource allocation. The default values for these parameters are set in the Gantt configuration(see page 120). You can override them for a specific resource by selecting the resource in the resource panel and clicking the Resource Settings button.



You can adjust the following settings:

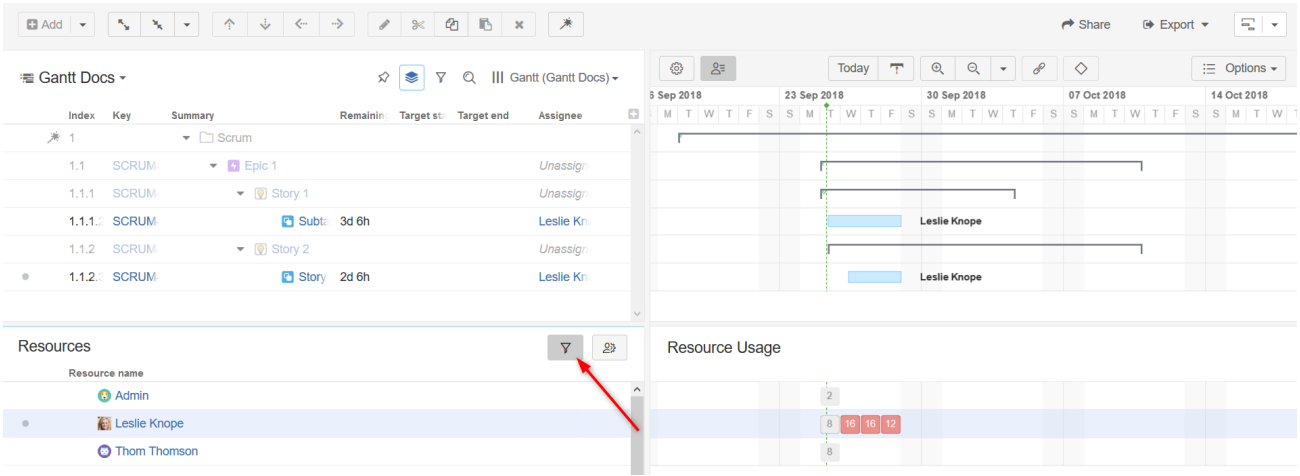
- **Units** - Determines how much work this resource can do in one hour. By default, it is set to 1, which corresponds to one person. If your resource is a team of 5, you should set this value to 5. A resource only able to commit 2 hours of work during a standard 8-hour workday would have a value of 0.25.
- **Time Zone** - Defines the time zone of the resource.
- **Work Calendar** - Defines working and non-working times(see page 67) for the resource in the resource's time zone.
- **Availability** - Defines the percentage of the resource's capacity available during a specific period. This field allows you to factor in things such as vacation days or periods of part-time work.



All these parameters, as well as a task's Maximum Units(see page 28), are taken into account when calculating the duration of a task. For example, a resource with 2 units will do the task twice as fast as the resource with 1 unit, as long as the task has Maximum Units set to 2 or higher.

2.6.4 Filter by Resource

To view only issues assigned to a specific resource, highlight the resource's name in the Resources panel and click the Filter button.



When you filter by resource:

- Issues assigned to that resource will be visible in the WBS and Gantt chart
- Issues above those in the hierarchy will be visible but grayed out

- All other issues will be hidden

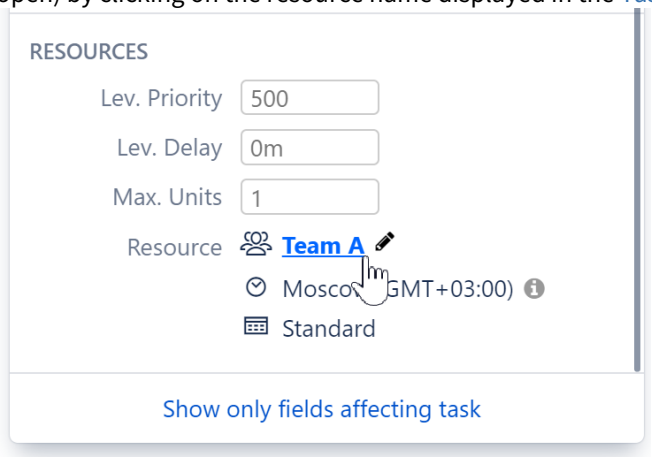
> ⚠ Milestones and groups are not assigned to resources in Structure.Gantt, so these items may be hidden even if they are "assigned" to the specified resource in Structure.

2.6.4.1 Filter by Multiple Resources

To filter by more than one resource, simply select all the applicable resources in the Resources panel. Then click the Filter button.

2.6.5 Navigating to a Resource from the Gantt Chart

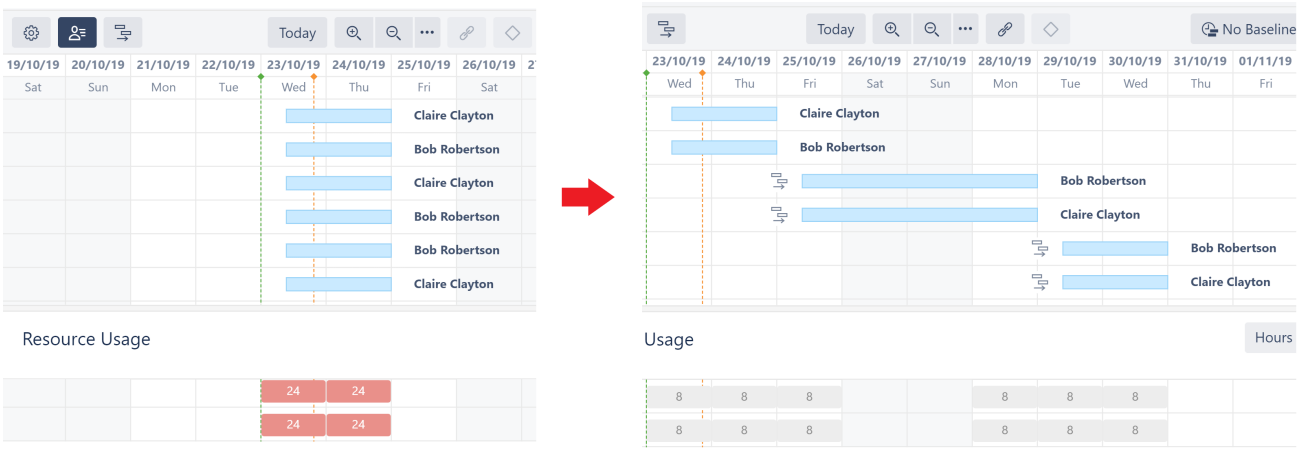
You can quickly navigate to a resource in the Resources panel (and open the Resources panel itself, if it's not yet open) by clicking on the resource name displayed in the Task Details Panel(see page 102).



> ✓ You can also edit the resource from here - just click the pencil icon.

2.7 Resource Leveling

Resource Leveling enables you to resolve most overallocations with the push of a button. Once enabled, Structure.Gantt will identify instances of overallocation and automatically delay certain tasks to give you a realistic picture of when they can be completed.



In the above example, tasks with the Leveling Delay icon were delayed to solve the overallocation seen in the first screenshot.

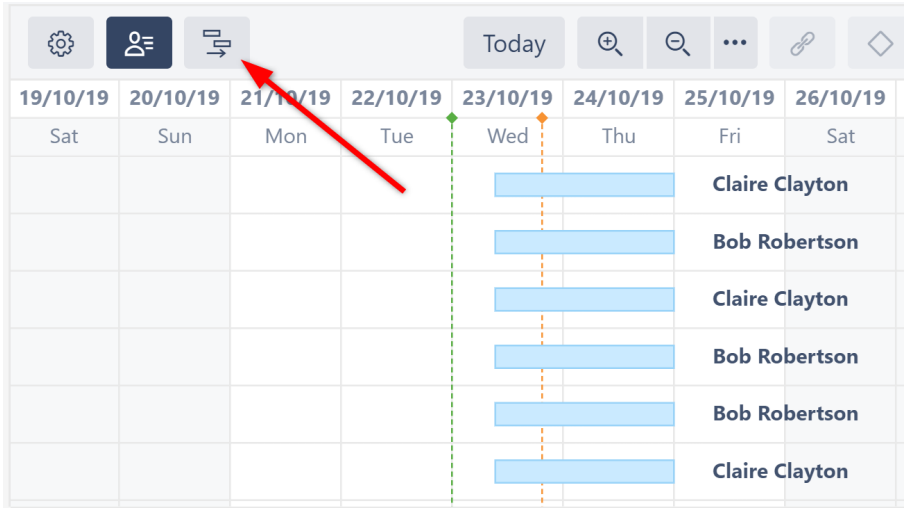
Sorry, the widget is not supported in this export.
But you can reach it using the following URL:

https://www.youtube.com/watch?v=AB79MBjtjpA

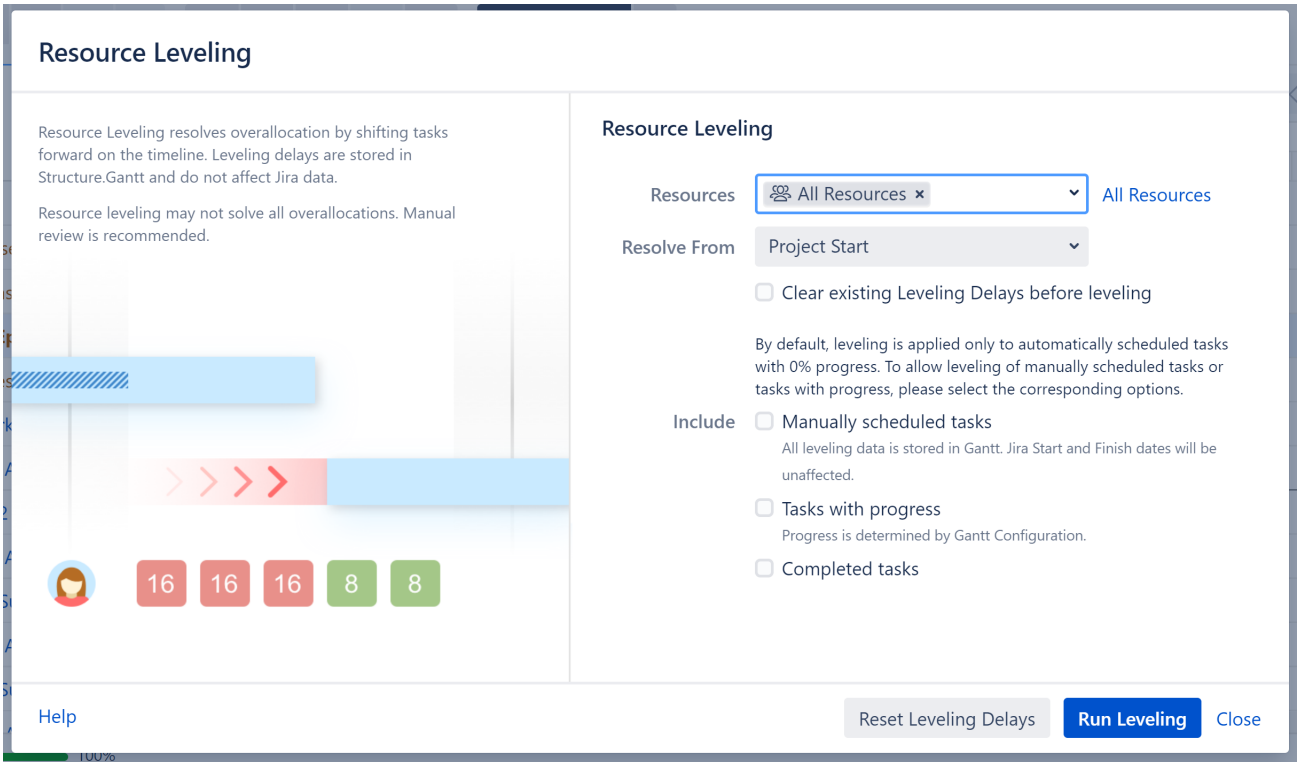
Leveling is a resource-intensive operation. It may take several seconds to dozens of minutes to complete, depending on a variety of factors, including the number of items in a structure, number of resources, number of dependencies, etc.

2.7.1 Starting Resource Leveling

To start Resource Leveling, click the Resource Leveling button in the Structure.Gantt toolbar.



You can then select which resource(s) Resource Leveling should be applied to (or select **All Resources**) and choose the leveling option you want to apply.



The following leveling options are available:

- **Resolve From** - Only overallocations that occur after the chosen date will be resolved. By default, Resource Leveling is applied to all overallocations that occur after the project's start date.
- **Clear existing Leveling Delays before leveling** - By default, if Resource Leveling has already been run on the structure, additional levelings will only address overallocations created since the last leveling. This speeds up the process, but if a delayed task is part of a new overallocation, it may be delayed even further. S electing this option clears any existing delays, allowing Structure.Gantt to consider all tasks from their original positions when applying the leveling.
- **Manually scheduled tasks** - By default, manually scheduled tasks will not be adjusted by resource leveling. To include them, check this option. *Note that tasks* scheduled by sprints(see page 91) *are never affected by leveling.*
- **Tasks with progress** - By default, tasks considered in progress (based on the Progress Calculation settings in the Gantt Configuration) are not affected by resource leveling. If this option is selected, these tasks may be moved by leveling if their original estimate results in resource overallocation.
- **Completed tasks** - If selected, resolved tasks may be moved if they they are part of resource overallocation.

When you click **Run Leveling**, Structure.Gantt will review your allocation chart to identify every instance of overallocation.

When it identifies that a resource is overallocated, it will delay some of the tasks to the future, based on a variety of factors, including but not limited to:

- **Leveling Priority** - If this Gantt attribute is set, tasks with a higher assigned priority will be scheduled earlier in the timeline. See Leveling Priority(see page 67).
- **Dependencies** - Leveling respects dependencies and avoids any adjustments that would result in dependency conflicts.

- **Start time** - Tasks with an earlier start date/time will generally be scheduled sooner to limit downtime.
- **Task length** - Longer tasks receive a higher priority.

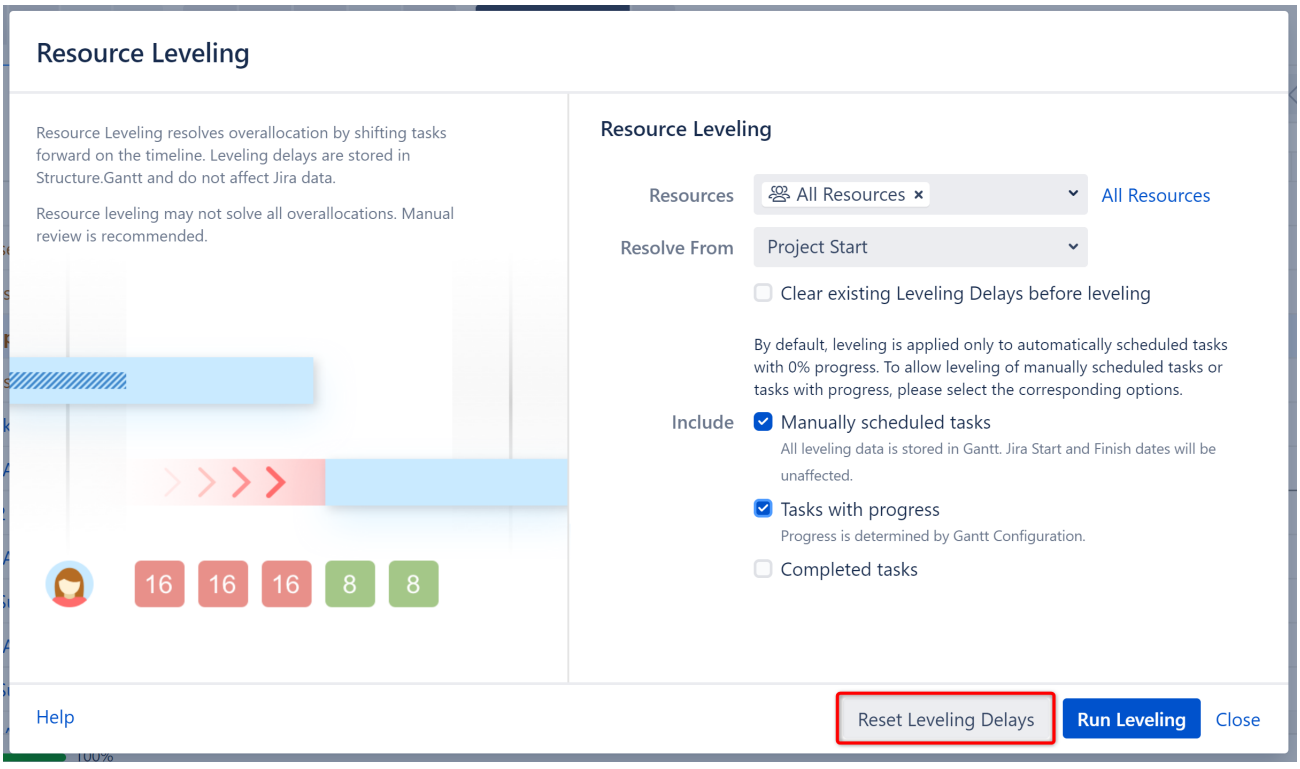
2.7.1.1 Additional Guidelines

- Only one leveling operation can be run per structure at a given time.
- Resource Leveling delays items in the Gantt chart only. It DOES NOT reschedule issues in Jira.
- If a task's scheduling, links or dependencies are changed in the Gantt chart after leveling has been applied, it's leveling delay will be removed. Changes made in Structure or Jira will not affect the leveling delay.

2.7.2 Removing Leveling Delays

To remove leveling delays(see page 126) and return tasks to their original schedule:

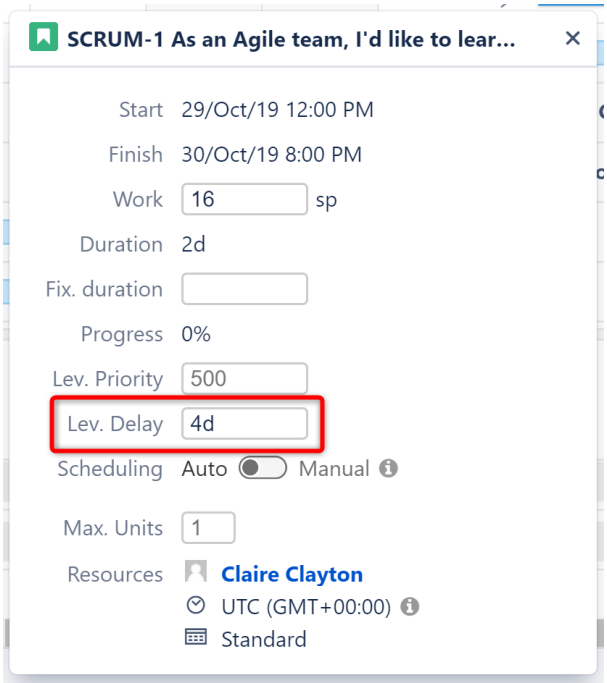
1. Click the Resource Leveling button again.
2. Select which resources you want to remove leveling for, or select **All Resources**.
3. Adjust the **Resolve From** date as necessary. Leveling delays will only be removed for tasks starting after this date.
4. If you included additional types of tasks (Manually scheduled tasks, etc.) in your last leveling, those options will be selected by default. If you uncheck them, leveling will not be reset for those tasks.
5. Once you've configured your options, click **Reset Leveling Delays**.



If you are unsure which tasks have leveling delays and want to remove all delays, make sure all "Include" options are checked.

2.7.3 Leveling Delay

The amount of time between the original schedule and the new schedule is called the **Leveling Delay**. You can view or adjust a task's Leveling Delay in the Task Details panel(see page 102).

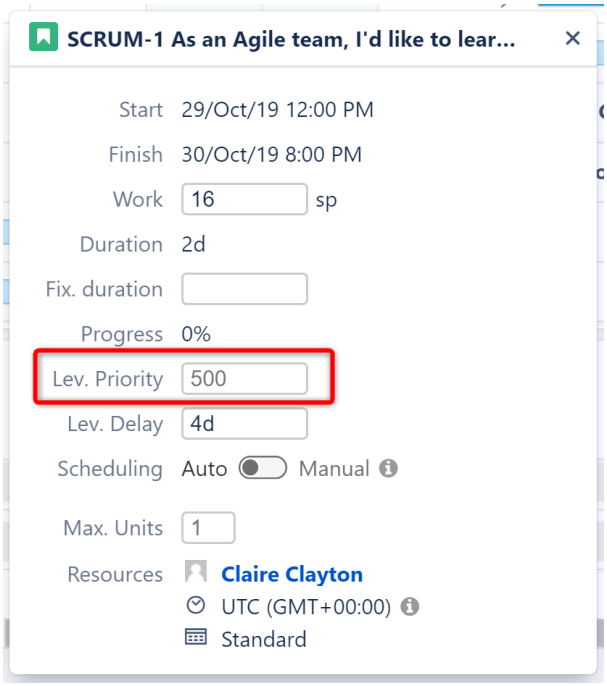


To remove an individual task's leveling delay, simply clear the value in this field.

> Leveling Delay values are stored in Structure.Gantt storage. They have no effect on Jira.

2.7.4 Leveling Priority

Leveling Priority allows you to give a higher weight to certain tasks, making them less likely to be moved when Resource Leveling is run. Leveling Priority can be assigned through Gantt configuration | Resources(see page 64), or adjusted for individual tasks via the Task Details Panel(see page 102).

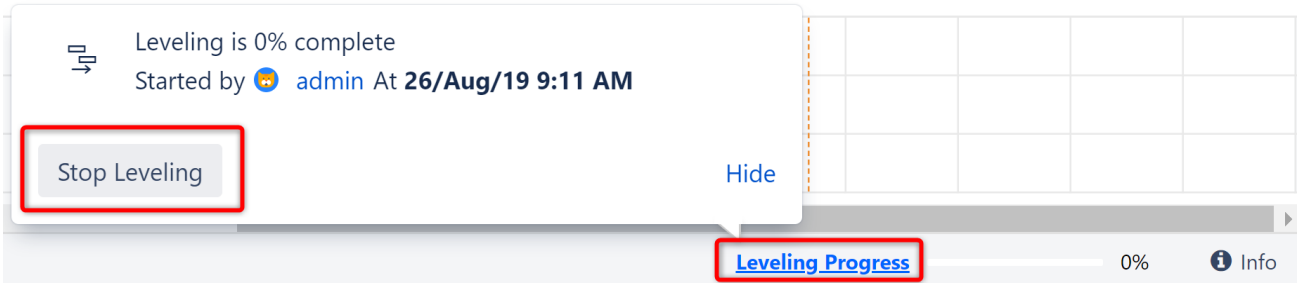


Changes made to the Leveling Priority are not applied until after the current leveling is reset and a new leveling operation is run.

> If a formula is used for Leveling Priority in the Gantt configuration, any changes to an individual task's priority via the Task Details Panel will be stored inside Structure.Gantt storage.

2.7.5 Stop Leveling

On larger structures, the leveling process can take dozens of minutes. It is possible to stop an in-progress leveling operation, when necessary. To do so, find and click the **Leveling Progress** indicator below the Gantt Chart. In the progress pop-up, click **Stop Leveling**.



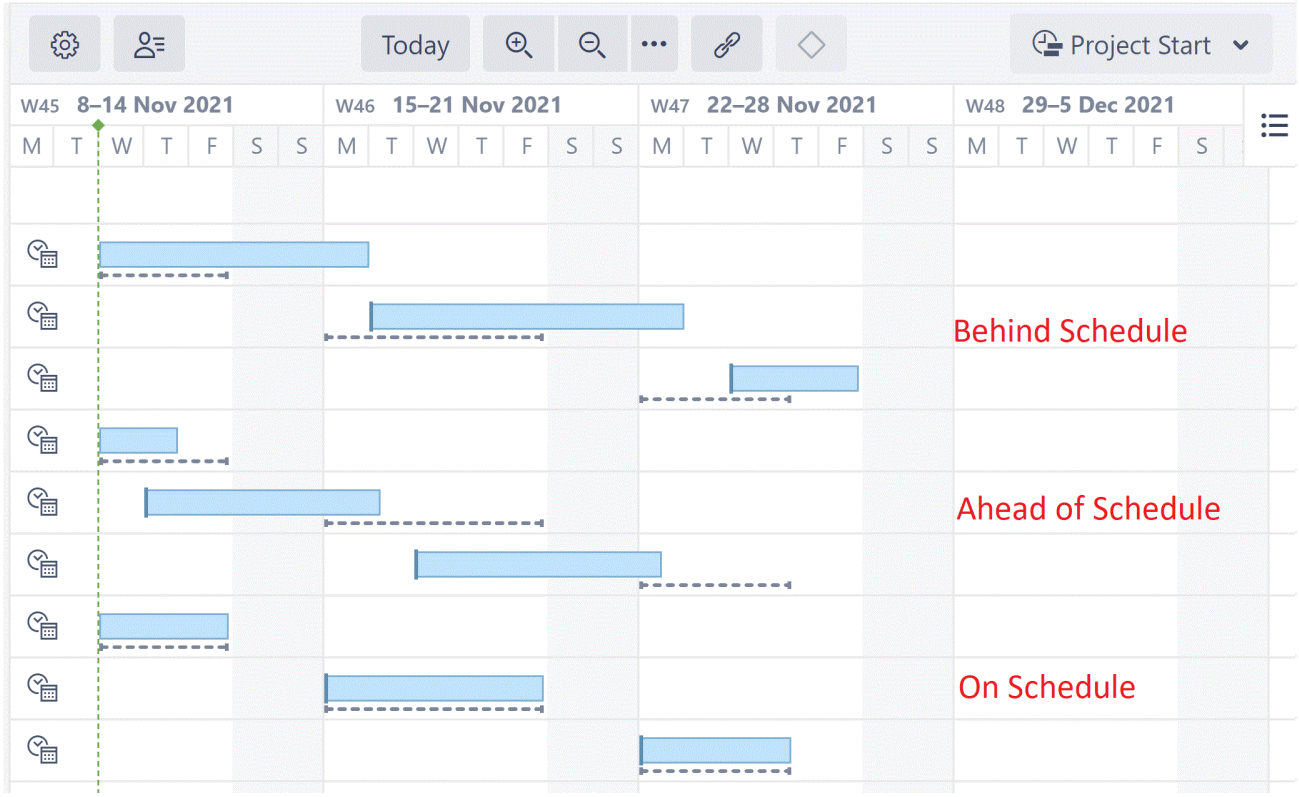
> Only the user who initiated the leveling process or a Jira admin can stop an in-progress leveling operation.

2.8 Baselines

Baselines allow you to compare the current positions of tasks, groups and milestones in the timeline to any of the following:

- the way they looked in the past
- another saved schedule
- a sandboxed(see page 153) schedule
- an original schedule

Using Baselines, you can track schedule changes over time, compare two schedules for the same project, see how a sandbox compares to actual Jira data, and more.



The dotted lines represent the baseline locations, while the full-color tasks are their positions today. In this example, the top set of tasks are behind the baseline schedule, the middle set are ahead, and the bottom set are consistent with the baseline.

2.8.1 Types of Baselines

- Gantt baselines(see page 129) - create a baseline using the current location of tasks.
- Jira-based baselines(see page 130) - create a baseline using data from Jira or a formula.

2.8.2 Additional Information

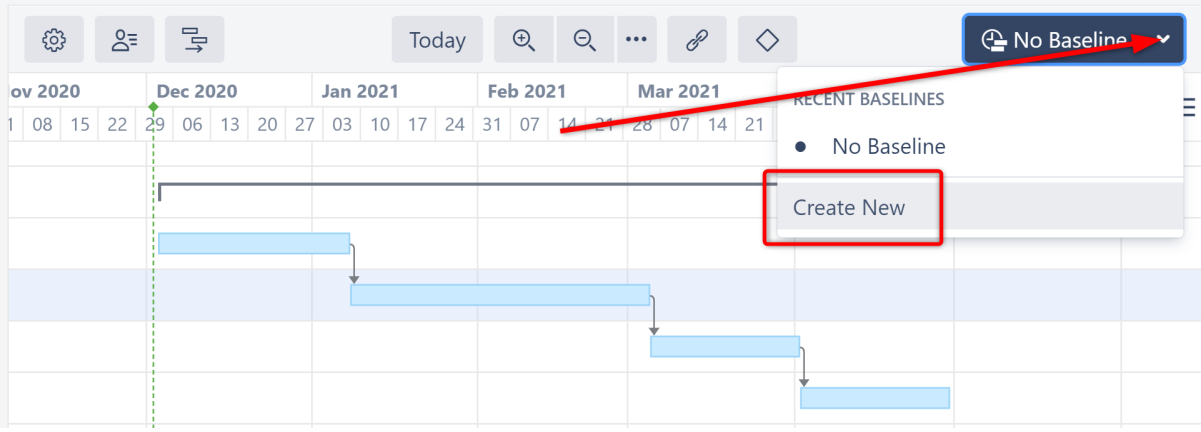
- Working with Baselines(see page 133)
- Managing Baselines(see page 136)

2.8.3 Gantt Baselines

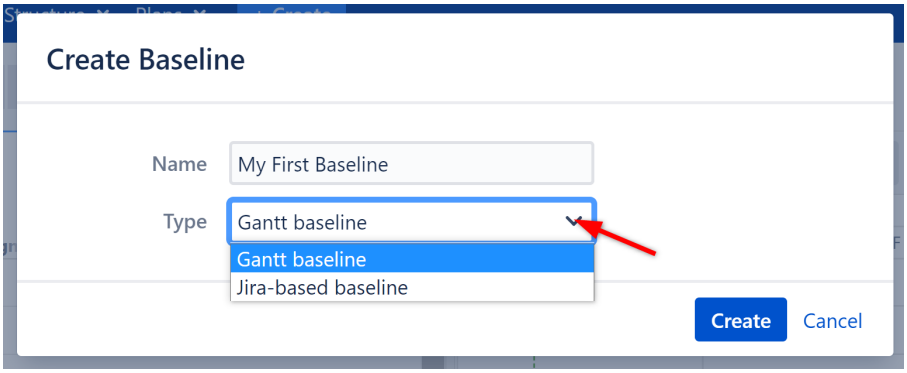
Gantt baselines allow you to take a snapshot of the current positions of tasks, groups, and milestones in the timeline, which can be placed alongside the chart at a future date. This allows you to see at a glance which tasks are behind or ahead of schedule - and how that impacts the project's timeline.

2.8.3.1 Creating a Gantt Baseline

To create a new baseline, open the Baseline menu in the Structure.Gantt toolbar and select **Create New**.



Give the baseline a name and select **Gantt baseline** from the Type dropdown.

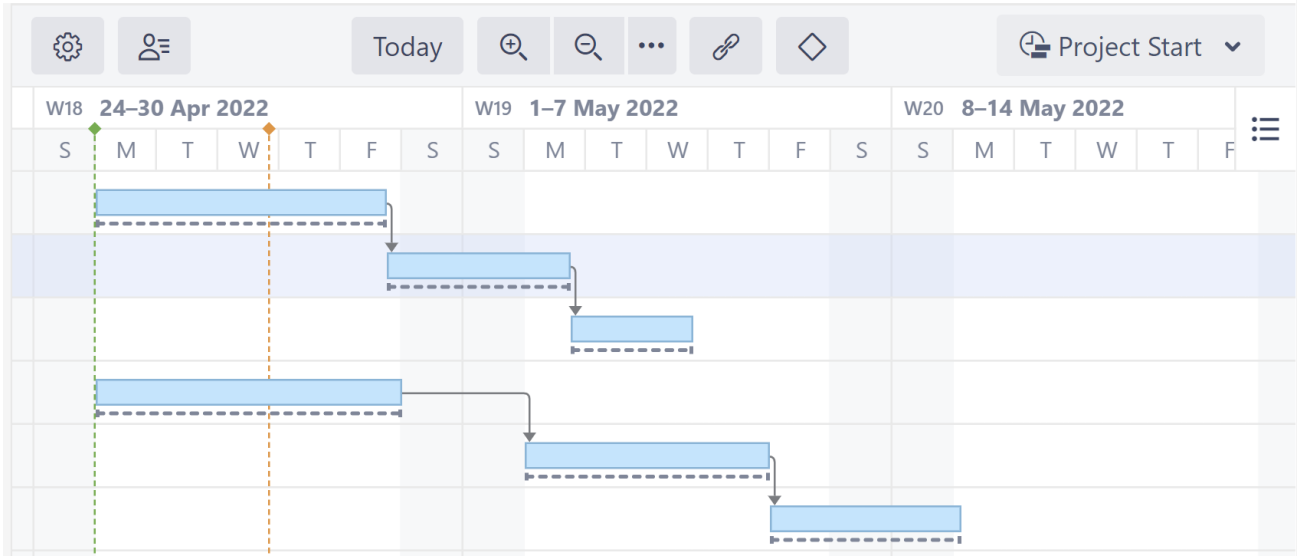


In order to create a baseline, you must be the structure owner or have Edit permissions[19] for the structure.

2.8.3.2 Viewing a Baseline

Once you've created a baseline, it will appear in the chart as dotted line taskbars. Since the baseline is based on the current task positions, the baseline bars will be in the same location as the current task. As you adjust the chart, the baselines will remain in these locations, even as the current task bars change.

19 https://wiki.almworks.com/display/structure/Structure+Permissions



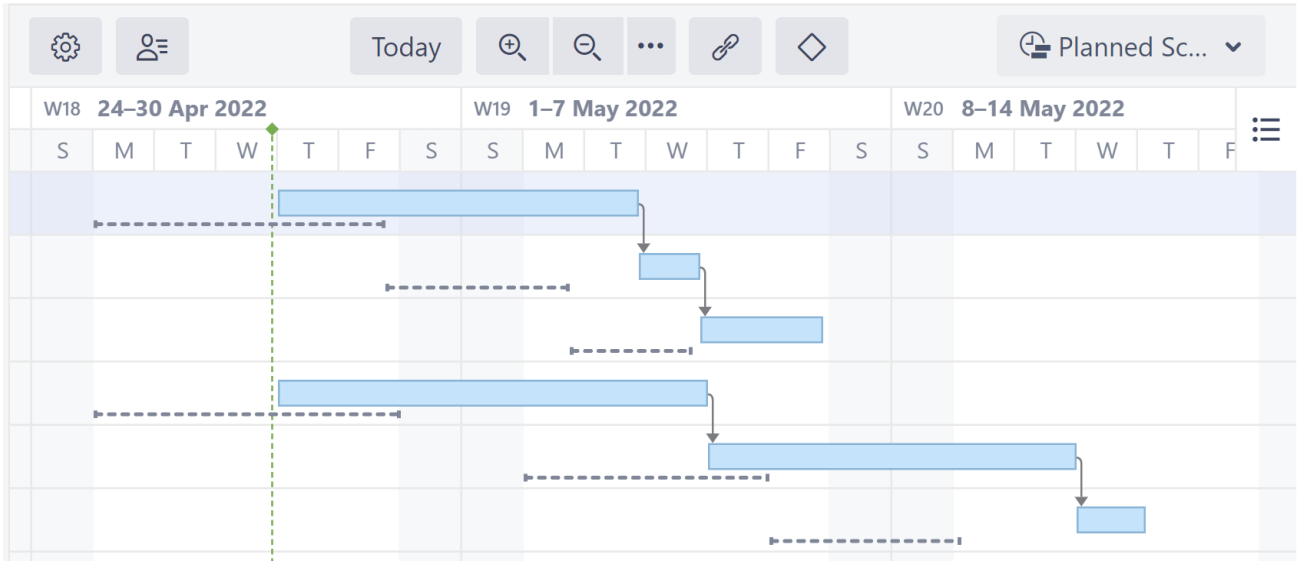
Baseline data is stored in Structure.Gantt storage. It has no effect on Jira.

2.8.3.3 Learn More

- Working with Baselines(see page 133)
- Managing Baselines(see page 136)

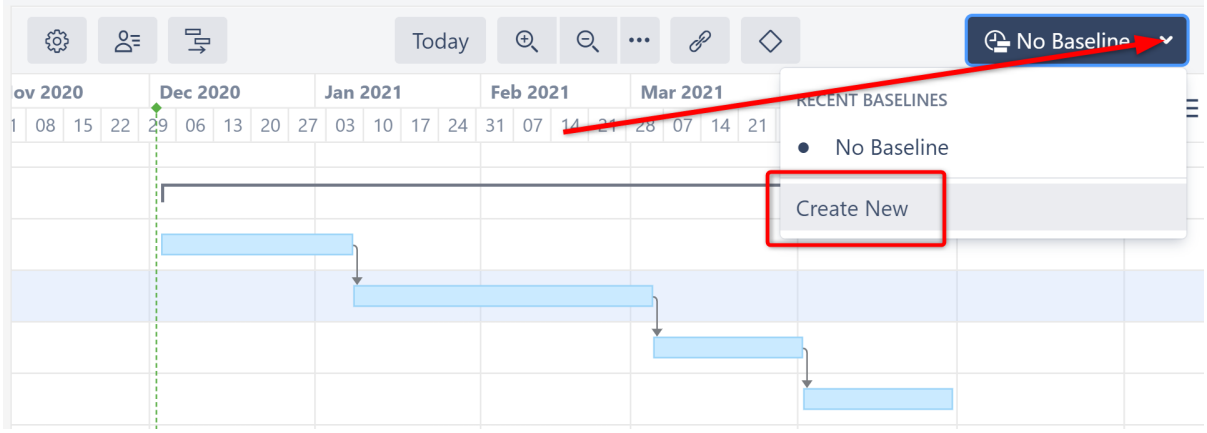
2.8.4 Jira-based Baselines

Jira-based baselines allow you to compare the current task timelines to timelines found in a Jira custom field or based on a formula. This allows you to compare the current chart to a previously planned schedule, alternate schedule, transition dates, or any other date/time data available in Jira.

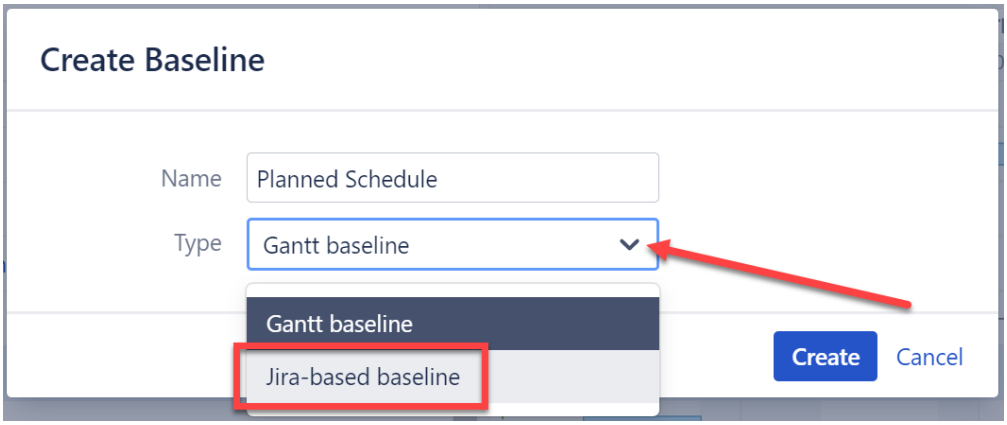


2.8.4.1 Creating a Jira-based Baseline

To create a new baseline, open the Baseline menu in the Structure.Gantt toolbar and select **Create New**.

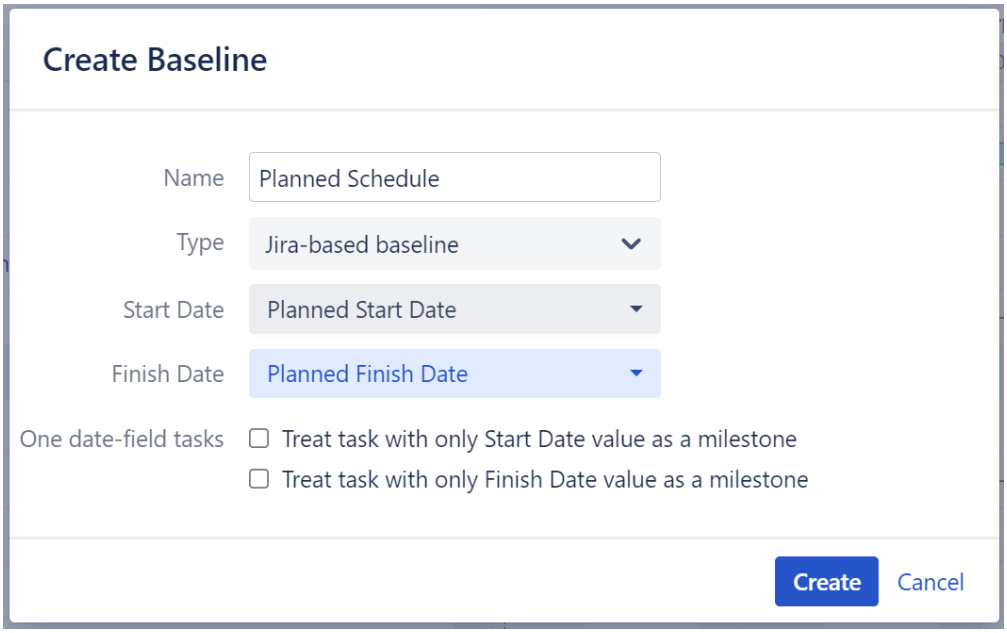


Give the baseline a name and select **Jira-based baseline** from the Type dropdown.



Enter the following information:

- **Start Date** - Select the custom field that contains the start dates that should be used to schedule tasks for the baseline.You can also use a formula.
- **Finish Date** - Select the custom field that contains the finish date that should be used to schedule tasks for the baseline.You can also use a formula.
- **Treat task with only Start Date value as a milestone** - If this option is selected, tasks that only have a value in the Start Date field will appear as milestones in the baseline.
- **Treat task with only Finish Date value as a milestone** - If this option is selected, tasks that only have a value in the Finish Date field will appear as milestones in the baseline.



For more precise placement in the chart, use Date Time fields, rather than Date fields.

In order to create a baseline, you must be the structure owner or have Edit permissions[20] for the structure.

2.8.4.2 Viewing a Baseline

Once created:

- If there are start and finish values available for a task, it's baseline will appear as a dotted line in the same row as the current task
- If you selected either of the **One date-field tasks** options, any issue with only a start/finish date will have a milestone baseline
- If there are no dates for a task, or only one date that does not match the **One date-field tasks** selection, no baseline will appear for that task

2.8.4.3 Popular Uses for Jira-based Baselines

- **Compare current task positions to the dates work actually started and finished for tasks:** set the Start Date to "First Transition to In Progress" and set the Finish Date to "Last Transition to Done." You can also select "Transition Date..." to choose a custom transition.
- **Compare current task positions to an original project plan:** use custom fields that contain the original start and finish dates (as we did above)
- **Change the project scope:** when you need to add new issues to a project, you can simulate that in the chart by creating a baseline that pushes back remaining tasks. The following will push all remaining tasks back 1 month:

20 https://wiki.almworks.com/display/structure/Structure+Permissions

a. Select "Formula..." for the Start Date and Stop Date.
b. Enter the following Start Date formula and map the Gant Start Date variable: `IF(Status != "Done"; DATE_ADD(GanttStartDate, 1, "month"))`
c. Enter the following Finish Date formula and map the Gant Finish Date variable: `IF(Status != "Done"; DATE_ADD(GanttFinishDate, 1, "month"))`

2.8.4.4 Learn More

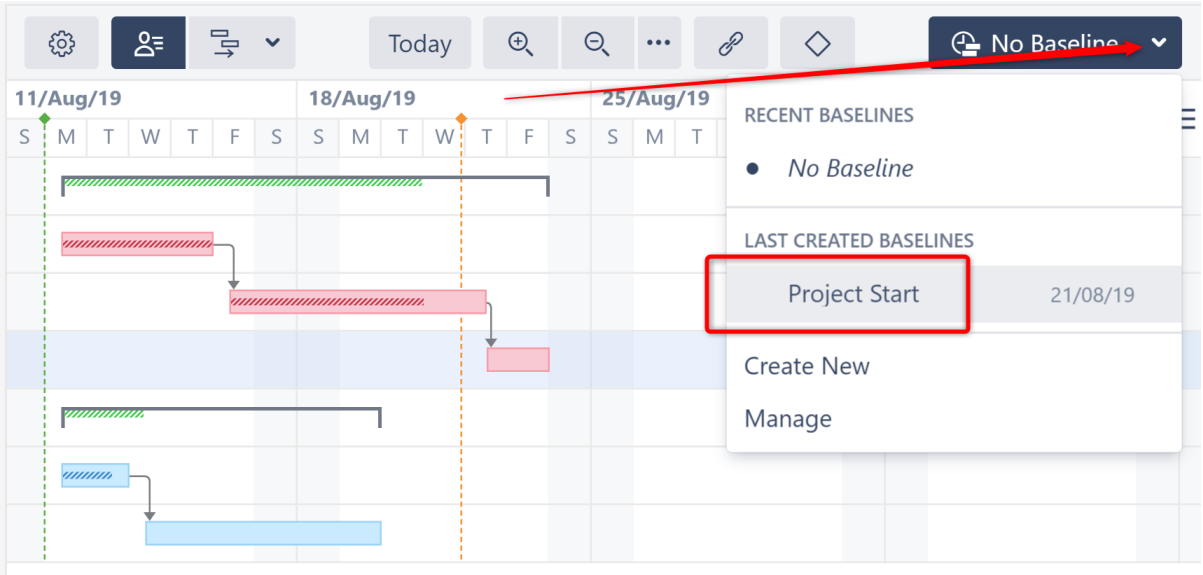
- Working with Baselines(see page 133)
- Managing Baselines(see page 136)

2.8.5 Working with Baselines

- Viewing Saved Baselines(see page 133)
- Hiding Baselines(see page 134)
- Including Baselines in the Gantt Gadget(see page 134)
- Exporting Baselines(see page 135)

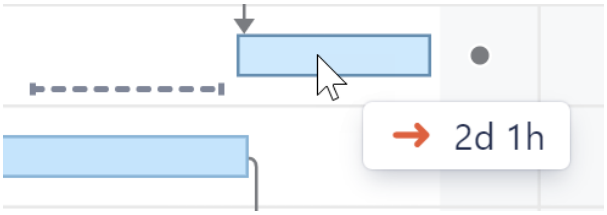
2.8.5.1 Viewing Saved Baselines

To compare the current chart to a saved baseline, open the Baseline menu and select the baseline you wish to use.



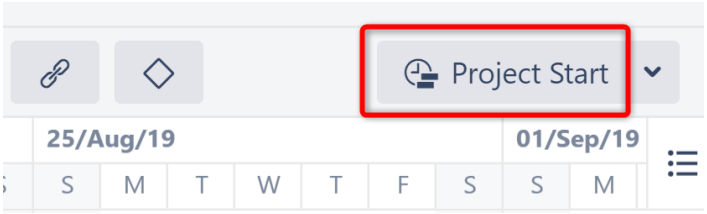
Baseline Offset

When viewing a chart with a baseline, hover over any item to see how far ahead or behind the baseline schedule the task currently is.

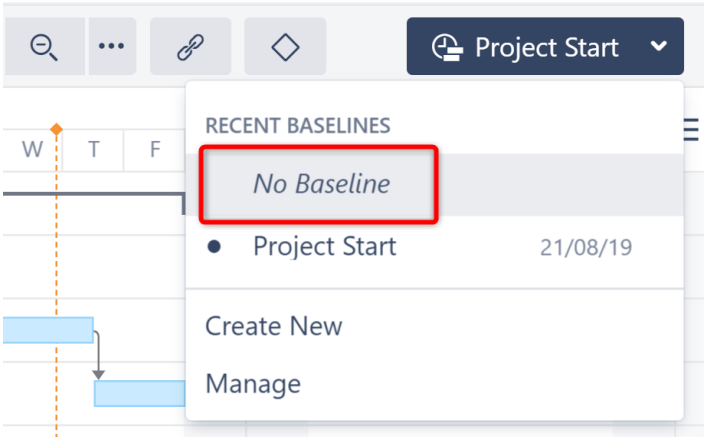


2.8.5.2 Hiding Baselines

When a baseline is applied, it's name is displayed in the Baseline menu.

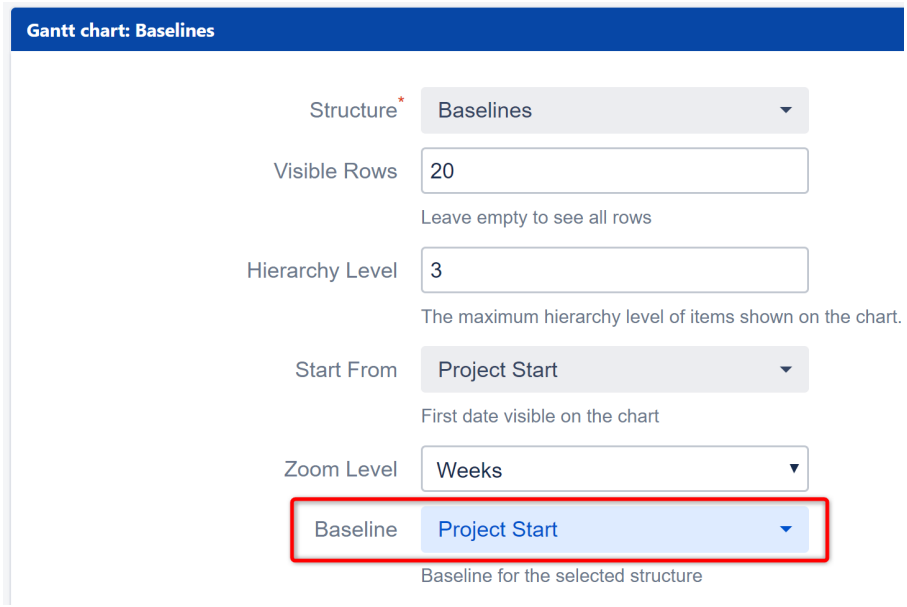


To hide the baseline (so you just see the current chart), open the Baseline menu and click **No Baseline**.



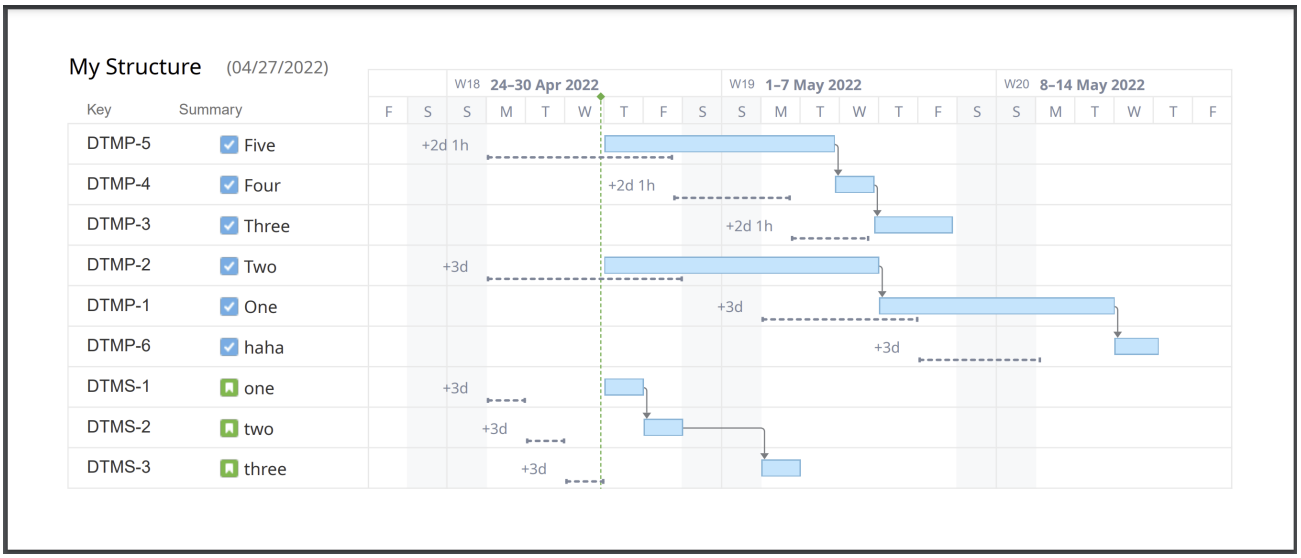
2.8.5.3 Including Baselines in the Gantt Gadget

Baselines can be included in Dashboard gadget(see page 137)s and Confluence gadgets(see page 140). To enable baselines, simply select the baseline you want to include in the gadget settings dialogue.



2.8.5.4 Exporting Baselines

You can include baselines when exporting a Gantt chart(see page 150).

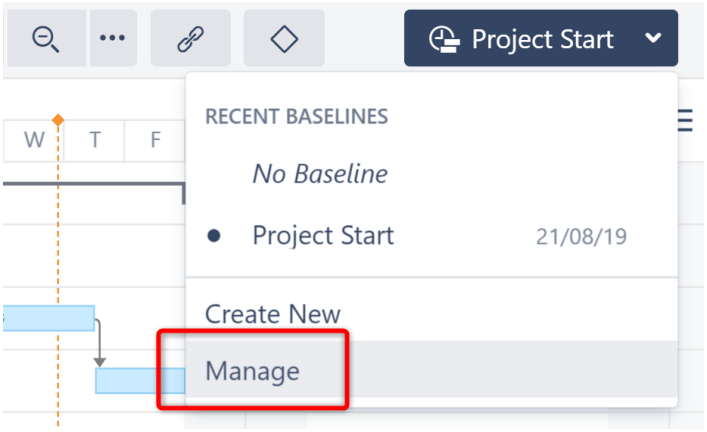


To include baselines in an export:

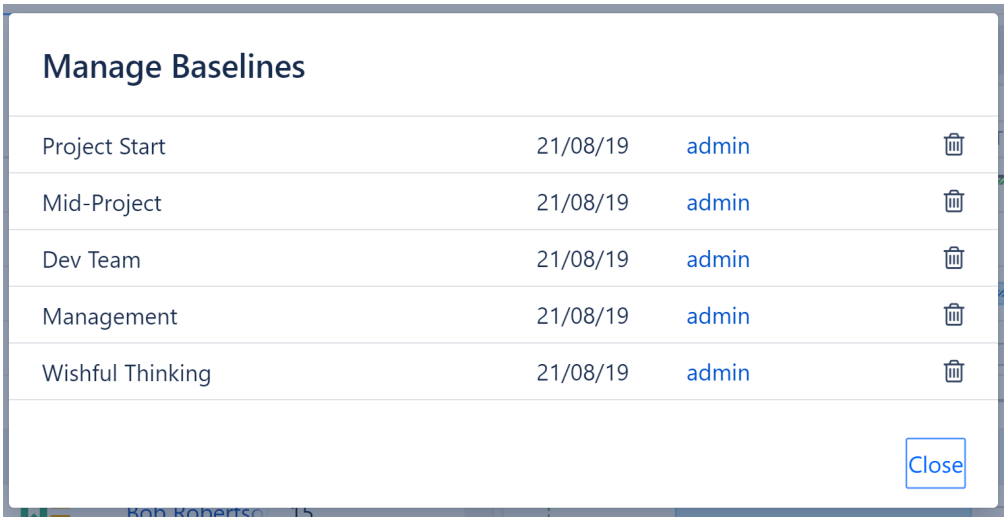
- Make sure the baseline you want to include is visible in the chart before selecting **Export Gantt Chart**
- Check the **Baseline** option in the Gantt Chart Details section of the Export dialogue
- Select whether or not **Baseline delays** should be displayed

2.8.6 Managing Baselines

To manage your saved baselines, open the Baseline menu and select **Manage**.



On the Manage Baselines screen, you will see a list of saved baselines, when they were created and who created them.



You can:

- Edit the baseline's name - click the name to switch to editing mode
- Delete the baseline - click the trash icon

> Baselines can only be renamed or deleted by the baseline's creator, users with Control permission, the structure owner or admins.

2.9 Gadgets

Any Gantt chart can be placed onto a Jira Dashboard or embedded into a Confluence page as a read-only gadget.

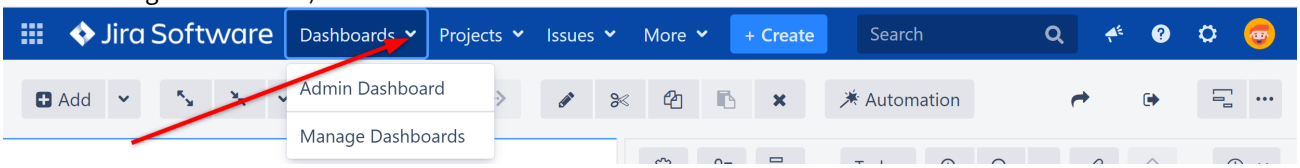
- Jira Dashboard Gadget(see page 137)

- Confluence Gadget(see page 140)

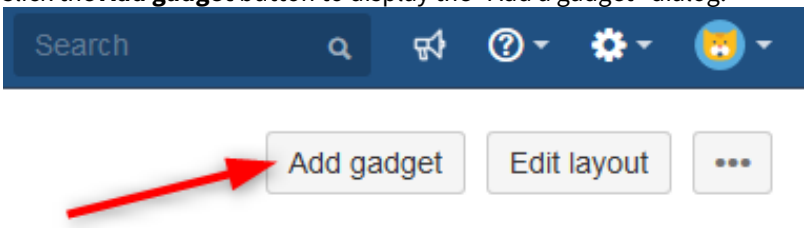
> **Important!**
>
> The Structure.Gantt gadget has limited functionality and is mostly dedicated to viewing. It is not possible to alter a schedule or see task details using the gadget (users should continue to use Jira or Structure.Gantt for these tasks). Additionally, if your gadget is not refreshing or is not refreshing frequently enough, make sure you have properly configured your gadget's refresh interval. See Jira Dashboard Gadget(see page 137) for more details.

2.9.1 Jira Dashboard Gadget

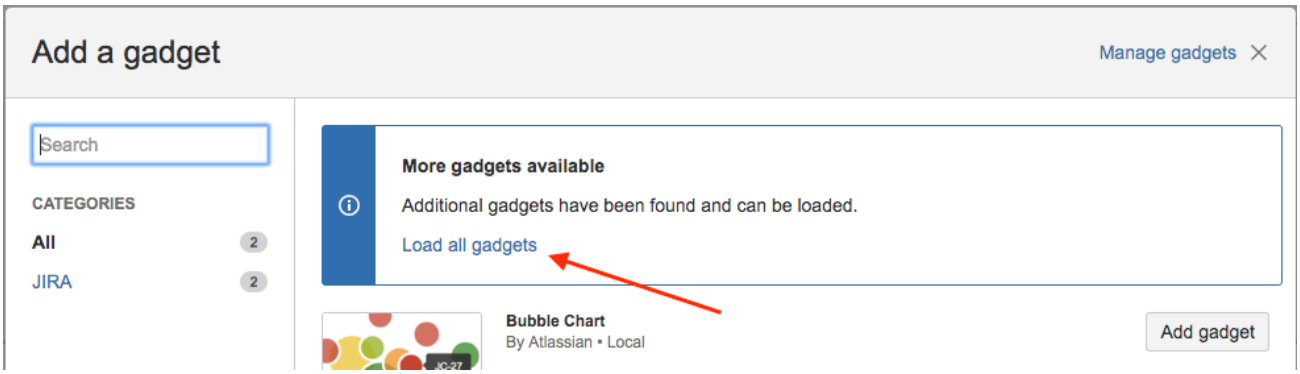
To add the Structure.Gantt gadget to a Jira Dashboard, click **Dashboards** in the top menu and select the desired dashboard, or click **Manage dashboards** to create a new one (see Atlassian documentation[21] for more details on how to manage dashboards).



Click the **Add gadget** button to display the "Add a gadget" dialog.

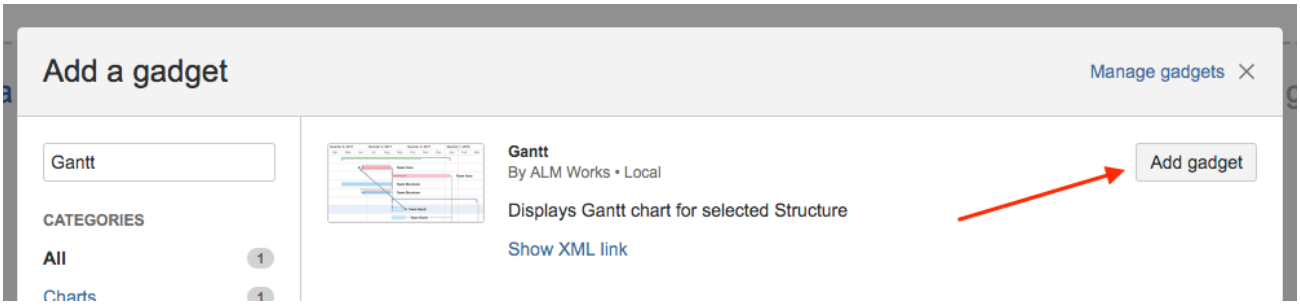


Click **Load all gadgets** to display a list of all available gadgets.



Type "Gantt" in the search field, locate the Gantt gadget and click the **Add**
Type "Gantt" in the search field, locate the Gantt gadget and click the **Add gadget** button.

21 https://confluence.atlassian.com/jiracoreserver/configuring-dashboards-939937983.html



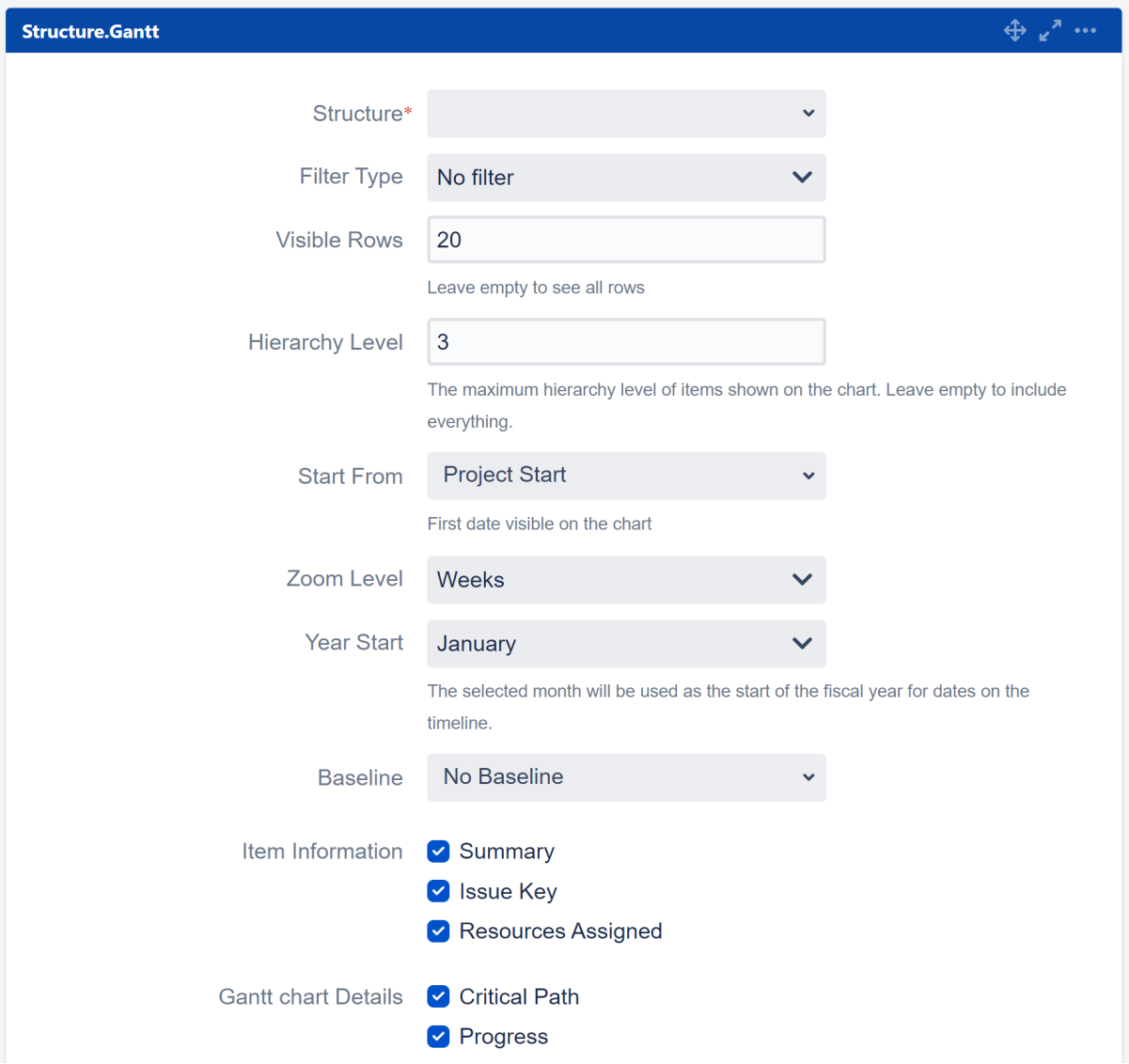
The Structure.Gantt gadget will be placed on your dashboard. Before your Gantt chart will appear there, you'll need to set your Gadget Configuration.

2.9.1.1 Gadget Configuration

When creating your Structure.Gantt gadget, you can set the following options:

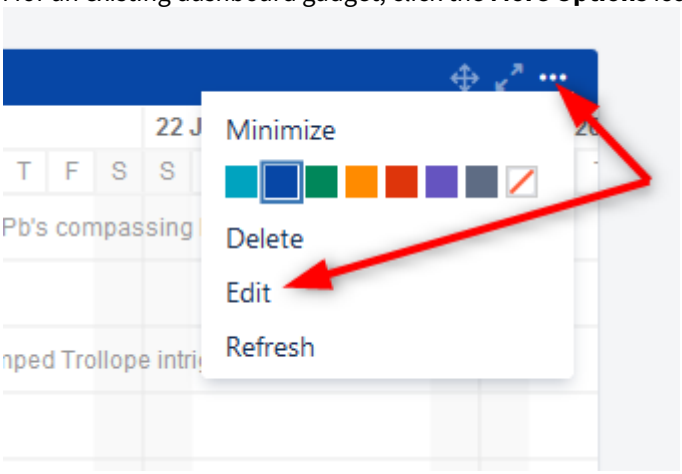
- **Structure** - Defines the structure to load Gantt data for. Please note, only structures with Gantt charts already created are listed.
- **Filter Type** - Allows you to filter the items included in the chart based on a text, JQL or S-JQL[22] query.
- **Visible Rows** - Defines how many rows of your structure will be visible in the chart at a time. (To see additional rows, you can hold Shift+Left Mouse Button and drag the chart.) Set this value to "0" to see all available rows. Please note, the gadget height may increase significantly if there are a lot of rows.
- **Hierarchy Level** - Defines how many levels to expand the structure and display in your chart. "0" means no expansion at all. Please note, it is not possible to manually expand and collapse structure nodes within the gadget.
- **Start From** - Specifies the first date that will be visible on the chart. You can choose from **Project Start**, **Custom Date** and **Today**. If you select **Today**, the chart will be drawn starting from today, or you can specify a number of days to show prior to today.
- **Zoom Level** - Specifies the zoom that will be used to represent the chart. Available options are: Days, Weeks, Months, Quarters, Half Years, Years.
- **Year Start** - Dates displayed in the timeline will use the selected month as the start of the fiscal year[23]. For example, if you select November, then November 2020 will be treated as 2021, since this is the start of the new fiscal year. To always display the actual calendar date, leave this set to "January."
- **Baseline** - Specifies whether or not to include a Baseline(see page 128) in the gadget.
- **Item Information** and **Chart Details** - These allow you to select which details will be shown on your exported chart.
- **WBS** - Specifies whether the work breakdown structure should be included next to the chart in the gadget. Please note, Issue Key and Summary are the only columns supported by the Structure.Gantt gadget at the time.
- **Width** - If WBS is enabled, this allow you to specify the width (in pixels) of the included structure.
- **Refresh Interval** - Specifies how often the gadget should refresh itself and fetch new data from Jira. By default, this is set to "never", i.e. to update the chart data you need to manually refresh the gadget from the gadget menu or by refreshing the page itself.

22 https://wiki.almworks.com/display/structure/Structured+JQL
23 https://en.wikipedia.org/wiki/Fiscal_year


Structure.Gantt
Structure*
Filter Type
No filter
Visible Rows
20
Leave empty to see all rows
Hierarchy Level
3
The maximum hierarchy level of items shown on the chart. Leave empty to include everything.
Start From
Project Start
First date visible on the chart
Zoom Level
Weeks
Year Start
January
The selected month will be used as the start of the fiscal year for dates on the timeline.
Baseline
No Baseline
Item Information
Summary
Issue Key
Resources Assigned
Gantt chart Details
Critical Path
Progress

2.9.1.2 Editing Configuration for an Existing Gadget

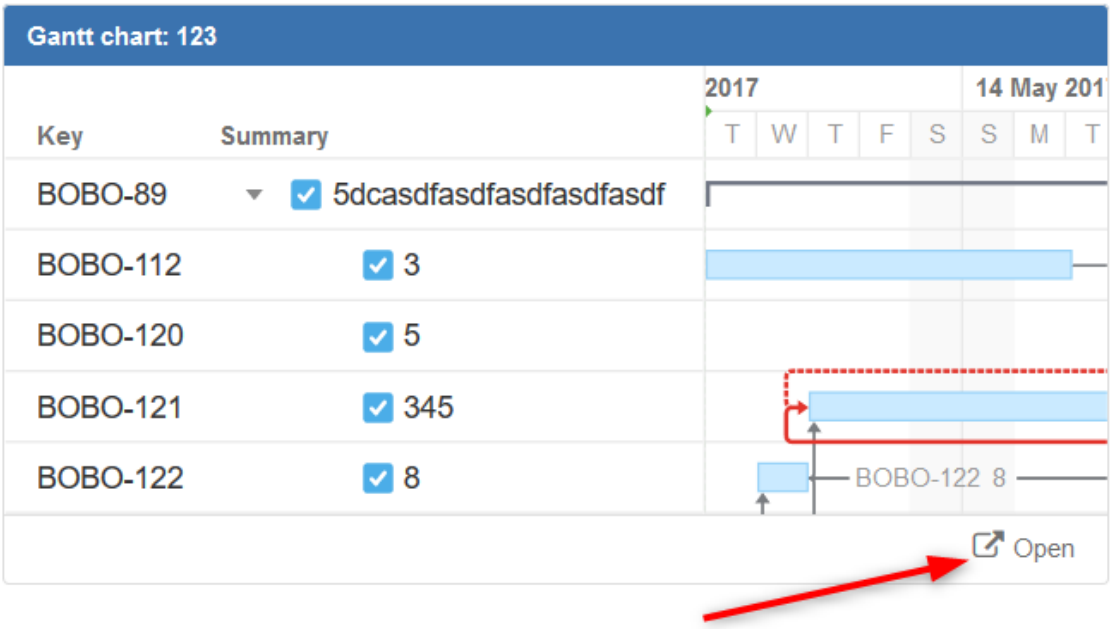
To change the configuration for an existing dashboard gadget, click the **More Options** icon "..." at the top-right of the gadget and select To change the configuration for an existing dashboard gadget, click the **More Options** icon



"..." at the top-right of the gadget and select **Edit**.

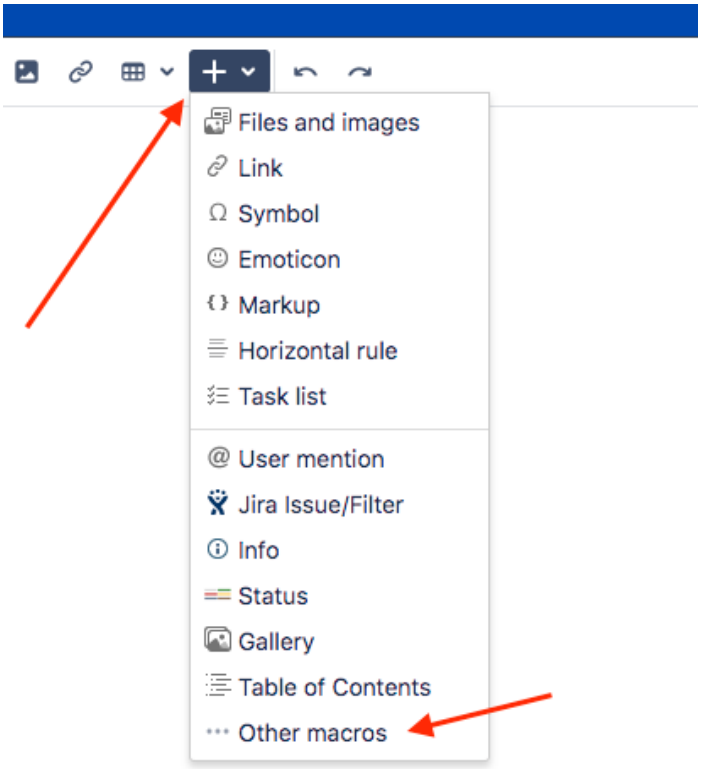
2.9.1.3 Open the Gantt Chart from the Gadget

To edit or view the full Gantt chart, click the **Open** link at the bottom of the gadget.



2.9.2 Confluence Gadget

To add the Structure.Gantt gadget to a confluence page, open the Confluence page you wish to insert the Structure.Gantt gadget into. Click the **Plus** button in the toolbar and select **Other macros**.

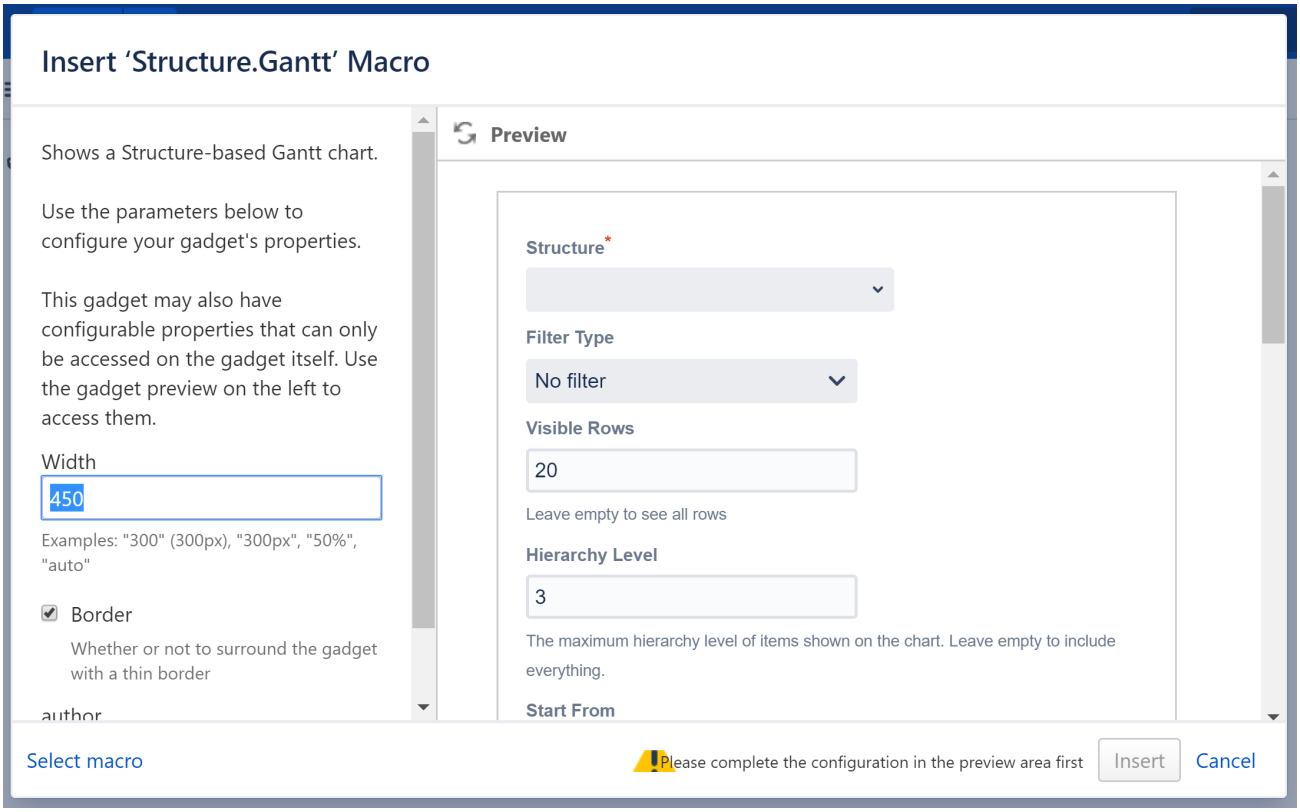


In the Select macro window, type "Gantt" in the search field and click **Structure.Gantt Gadget** in the search results.

> If the Structure.Gantt Gadget does not appear in the search results, your system administrator may need to configure Confluence for the Structure.Gantt gadget(see page 168).

2.9.2.1 Initial Configuration

Before you can add the Structure.Gantt gadget to your Confluence page, you need to configure it.



On the left side of the Insert Gantt Macro screen:

- Specify the gadget width (enter "100%" to make the gadget occupy the entire page width)
- Select whether or not to include a border around the gadget (We recommend unchecking the border setting, since there is already a border within the Structure.Gantt gadget.)

On the right side of the screen, set your desired configurations for the gadget:

- **Structure** - Defines the structure to load Gantt data for. Please note, only structures with Gantt charts already created are listed.
- **Filter Type** - Allows you to filter the items included in the chart based on a text, JQL or S-JQL[24] query.
- **Visible Rows** - Defines how many rows of your structure will be visible in the chart at a time. (To see additional rows, you can hold Shift+Left Mouse Button and drag the chart.) Set this value to "0" to display all available rows. Please note, the gadget height may increase significantly if there are a lot of rows.
- **Hierarchy Level** - Defines how many levels to expand the structure and display in your chart. "0" means no expansion at all. Please note, it is not possible to manually expand and collapse structure nodes within the gadget.
- **Start From** - Specifies the first date that will be visible on the chart. You can choose from **Project Start**, **Custom Date** and **Today**. If you select **Today**, the chart will be drawn starting from today, or you can specify a number of days to show prior to today.
- **Zoom Level** - Specifies the zoom that will be used to represent the chart. Available options are: Days, Weeks, Months, Quarters, Years.
- **Baseline** - Specifies whether or not to include a Baseline(see page 128) in the gadget.
- **Item Information** and **Chart Details** - These allow you to choose which details will be shown on your exported chart. These are similar to the display options available for your actual chart under the Display Options menu (see Gantt Chart Elements(see page 28)).

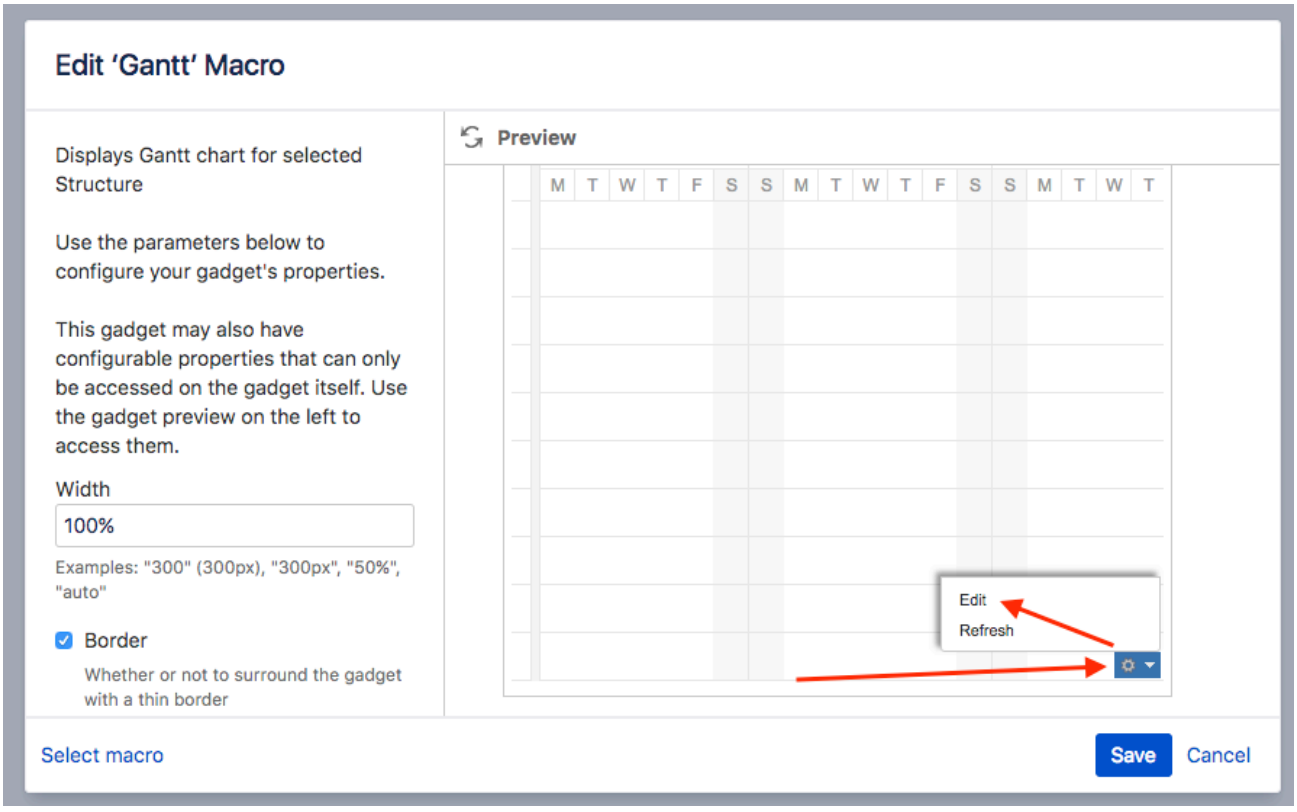
24 https://wiki.almworks.com/display/structure/Structured+JQL

- **WBS** - Specifies whether the work breakdown structure should be included next to the chart in the gadget. Please note, Issue Key and Summary are the only columns supported by the Structure.Gantt gadget at the time.
- **Width** - If WBS is enabled, this allow you to specify the width (in pixels) of the included structure.
- **Refresh Interval** - Specifies how often the gadget should refresh itself and fetch new data from Jira. By default, this is set to "never", i.e. to update the chart data you need to manually refresh the gadget from the gadget menu or by refreshing the page itself.

⚠ Depending on your Jira and Confluence configuration, before you can configure the Structure.Gantt gadget, you may be asked to log into your Jira account and approve gadget data access.

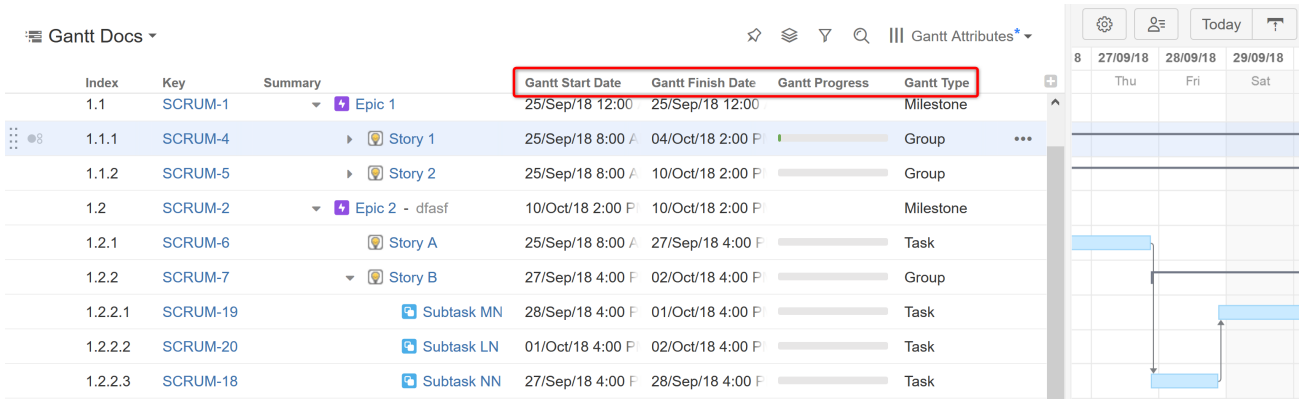
2.9.2.2 Editing Configuration for an Existing Gadget

To change the configuration for existing gadget, click the **Gear icon** in the bottom-right corner of the gadget preview and select **Edit.**



2.10 Gantt Attributes in Structure

Once you've created a Gantt chart, you can view and utilize its attributes within the corresponding structure. Gantt attributes can be turned into structure columns, used in formulas or transformations, or even written to Jira fields using Effectors(see page 148).

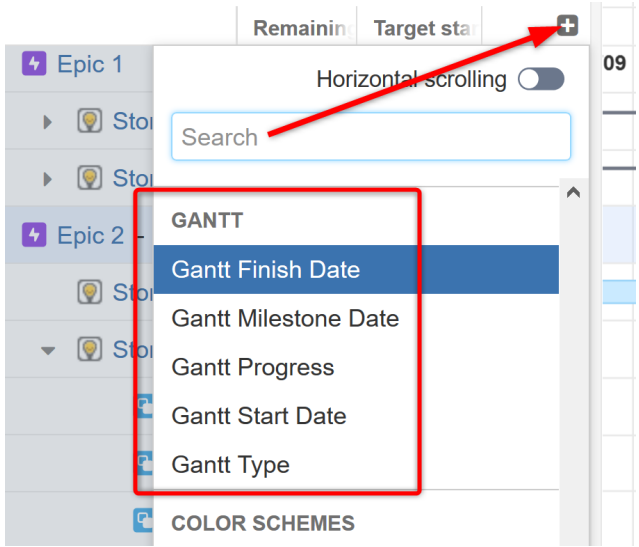


To see all the available Structure.Gantt attributes and their meanings, see List of Gantt Attributes Available in Structure(see page 148).

> ⚠ It is not possible to use Gantt attributes in Structure Automations[25].
>
> Additionally, Gantt attributes should not be used in any formula that is used by Structure.Gantt, such as Manual Start/Finish Dates or Progress, as this could result in an infinite loop.

2.10.1 Adding a Gantt Attribute Column to a Structure

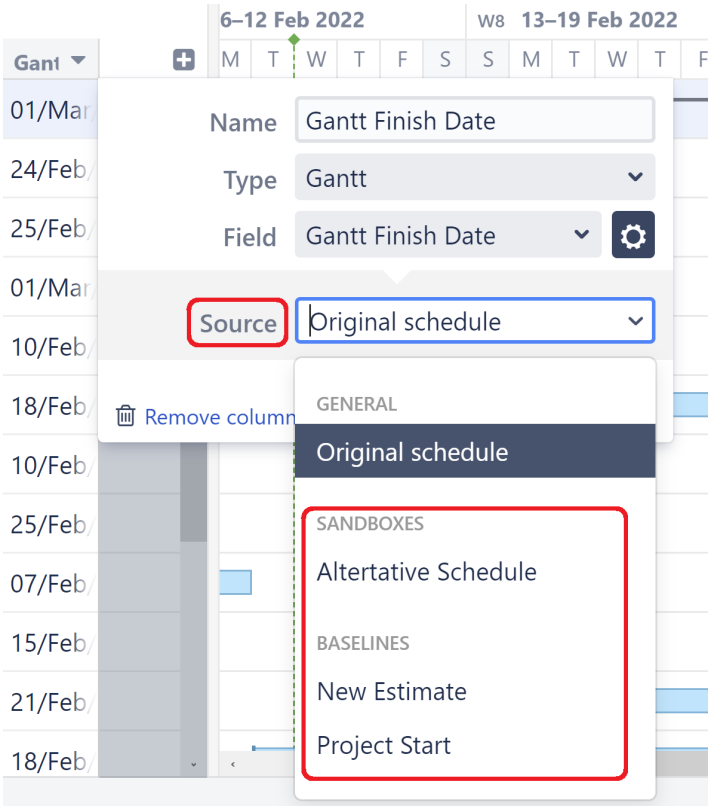
To add a Gantt attribute to your structure, click the + icon to the right of the column headers to create a new column in the structure[26]. Scroll down to the Gantt section, or begin typing the attribute name in the search field, and select the desired attribute.



25 https://wiki.almworks.com/display/structure/.Generators+v8.1
26 https://wiki.almworks.com/display/structure051/Customizing+Columns

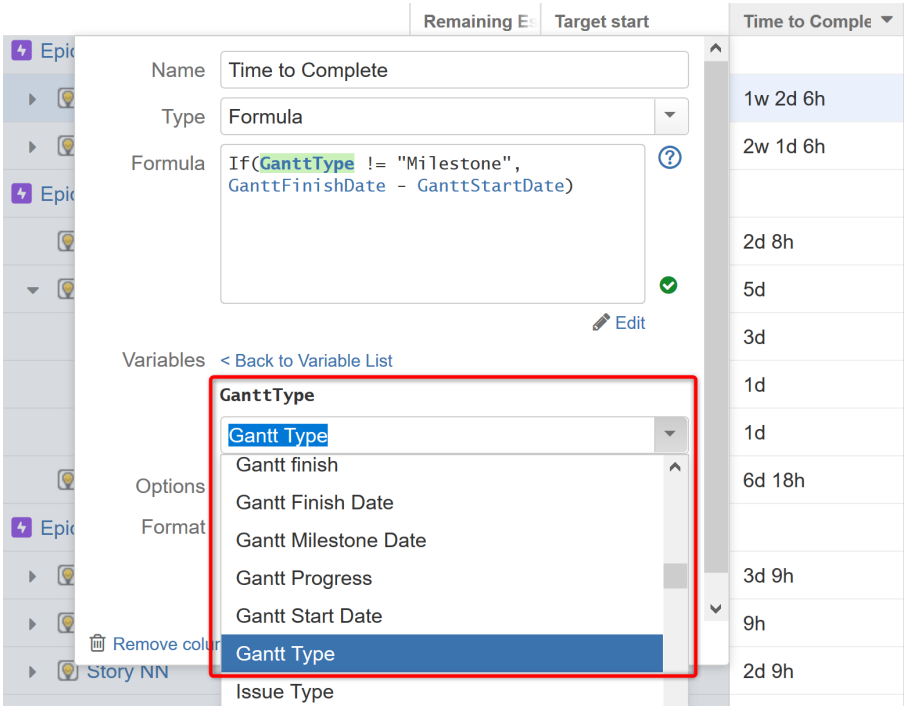
2.10.1.1 Viewing Attribute Values from a Baseline or Sandbox

You can also view attribute values from a baseline or sandbox. Simply add the appropriate Gantt Attribute column, open the column configuration, and select the **Source**.



2.10.2 Using Gantt Attributes in Formulas

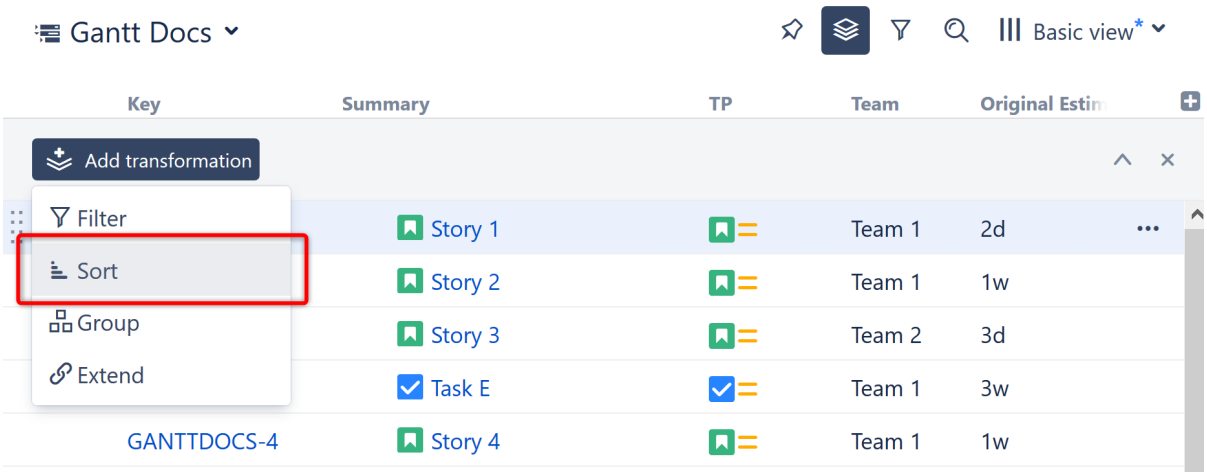
Structure.Gantt attributes can also be used in Structure formulas. Simply enter a new variable into your formula and assign it to the appropriate Gantt attribute.



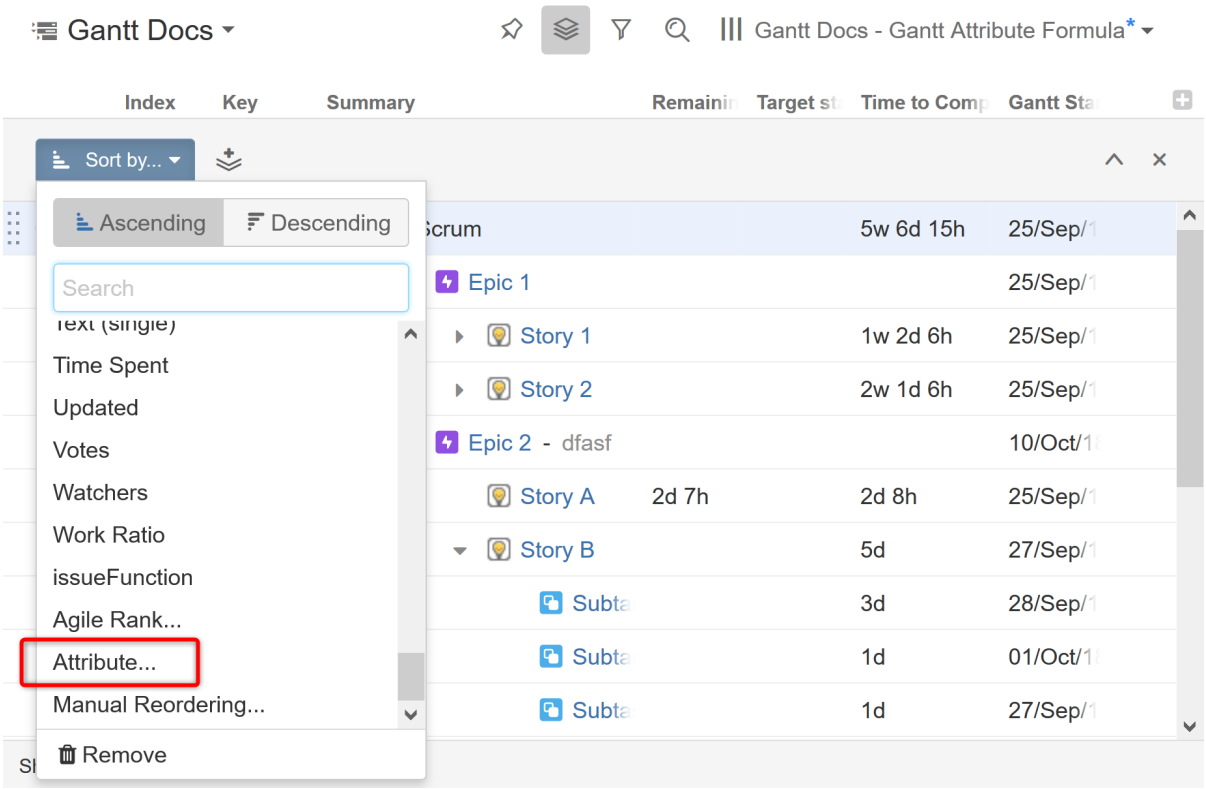
To learn more about using formulas and variables in Structure, see Formula Columns(see page 143).

2.10.3 Using Gantt Attributes in Transformations

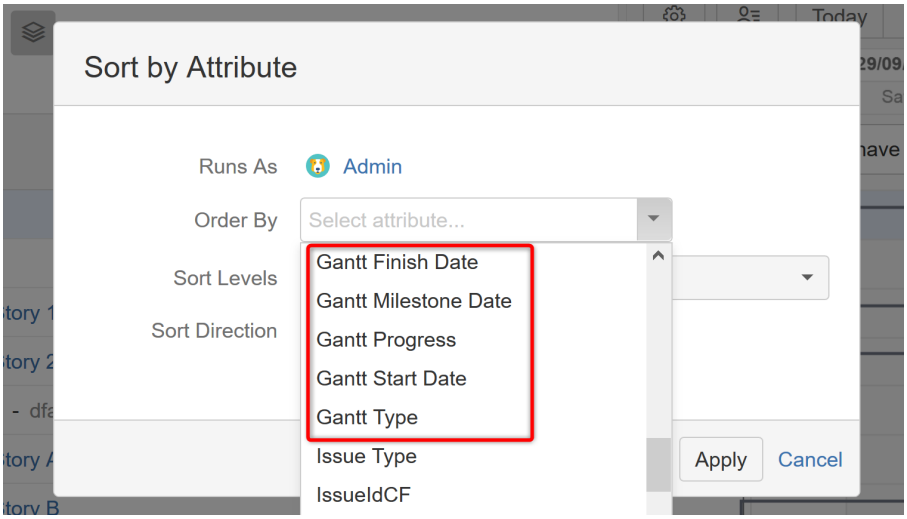
Using Transformations, you can sort items in your structure by their Gantt attributes. To do so, open the Transformations panel and select **Add Transformation | Sort**.



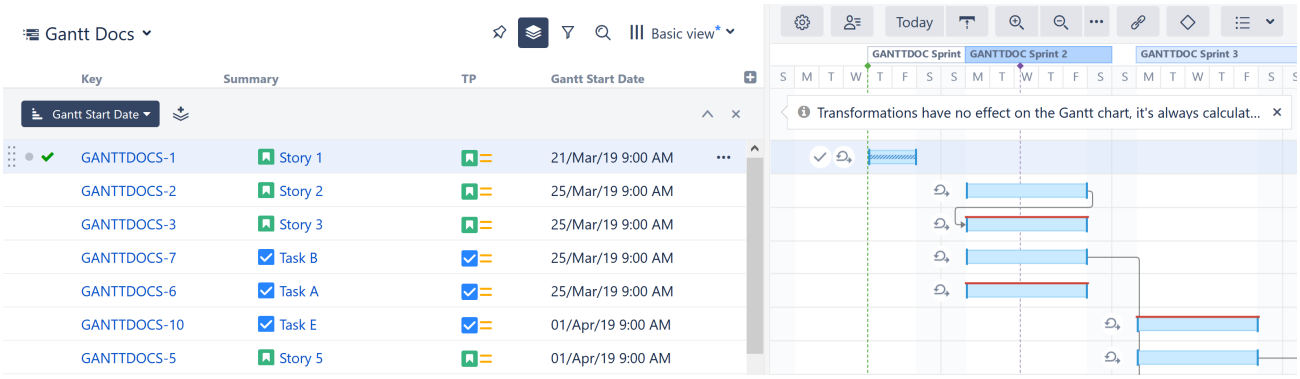
In the **Sort by...** menu, select **Attribute...**



Use the drop-down or search to select the appropriate Gantt Attribute.



Once you click apply, your items will now be sorted accordingly.



You can also group items by some Gantt attributes using the Group by | Text Attribute transformation.

2.10.4 Updating Jira With Effectors

Gantt attributes are only available within Structure.Gantt and Structure; however, it is possible to write Gantt values to Jira fields, using Structure Effectors[27]. This way, these values can be viewed and utilized by anyone, whether they have access to Structure or not.

Sorry, the widget is not supported in this export.
But you can reach it using the following URL:

https://www.youtube.com/watch?v=oE1dSklL9D8

See Attribute to Issue Field Effector[28] *for more information.*

2.10.5 List of Gantt Attributes Available in Structure

The following Gantt Attributes can be used within Structure columns, formulas, transformations and Effectors. To learn more, see Using Gantt Attributes in Structure(see page 148).

Name	Result
Gantt Appearance	The color of the item in the Gantt chart. Most issues will return "blue" unless they are affected by a configuration slice(see page 71) with a custom color scheme.
Gantt Critical Path	Returns "Critical" if the item is part of the critical path.
Gantt Duration	The duration of the task within the Gantt chart.
Gantt Finish Date	The task's finish date.

27 https://wiki.almworks.com/display/structure/Effectors
28 https://wiki.almworks.com/display/structure/Attribute+to+Issue+Field+Effector

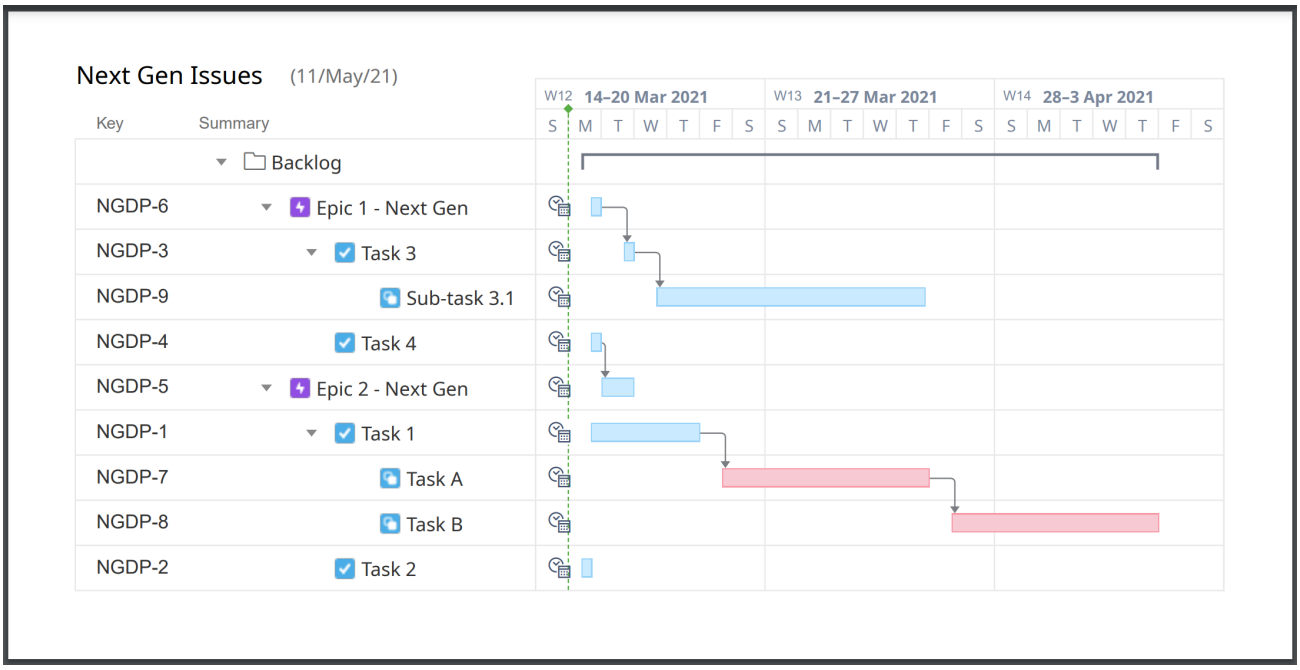
Name	Result
Gantt Fixed Duration	The task's fixed duration[29], if the task has a fixed duration.
Gantt Leveling Delay	The delay applied to the task by resource leveling.
Gantt Manual Finish Date	If a task has a manual finish date, returns that date value.
Gantt Manual Milestone Date	If a task has a manual milestone date, returns that date value.
Gantt Manual Start Date	If a task has a manual start date, returns that date value.
Gantt Max Units	The maximum number of resource units that can be allocated for the task at any given time (see Configuration | Resources[30]).
Gantt Milestone Date	If an item is visualized as a milestones[31] within the chart, returns the milestone date.
Gantt Progress	The calculated progress[32] for the task.
Gantt Resource	The resource[33] assigned to the task.
Gantt Scheduling Error	If a scheduling conflict exists, returns "Error"
Gantt Scheduling Mode	Returns "Auto" if the task is automatically scheduled[34], "Manual" if the task is manually scheduled[35], "Agile" if scheduled by sprint(see page 91).
Gantt Slice	If the task's behavior or appearance is effected by a configuration slice[36], returns the corresponding slice's name.
Gantt Start Date	The task's start date.
Gantt Type	How the task is displayed in the Gantt chart: task, group or milestone.

29 https://wiki.almworks.com/display/ganttmaster/Fixed+Duration
30 https://wiki.almworks.com/display/ganttmaster/Resources
31 https://wiki.almworks.com/display/gantt/Milestones
32 https://wiki.almworks.com/display/ganttmaster/Progress
33 https://wiki.almworks.com/display/ganttmaster/Resources+and+Resource+Usage
34 https://wiki.almworks.com/display/ganttmaster/Automatic+Scheduling
35 https://wiki.almworks.com/display/ganttmaster/Manual+Scheduling
36 https://wiki.almworks.com/display/ganttmaster/Slice-based+Configurations

Name	Result
Gantt Work	The task's work estimate[37] (returned as a time value), based on the Gantt configuration. If Work has been manually entered in the Task Details Panel[38], returns this value.

2.11 Export Gantt Chart

It is possible to export a Gantt chart into a PDF or SVG file to view offline, print or share with someone else.

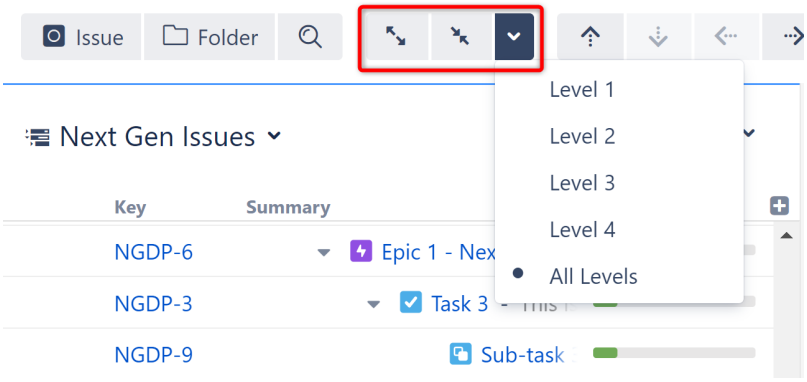


2.11.1 Configuring Hierarchy Level and Zoom

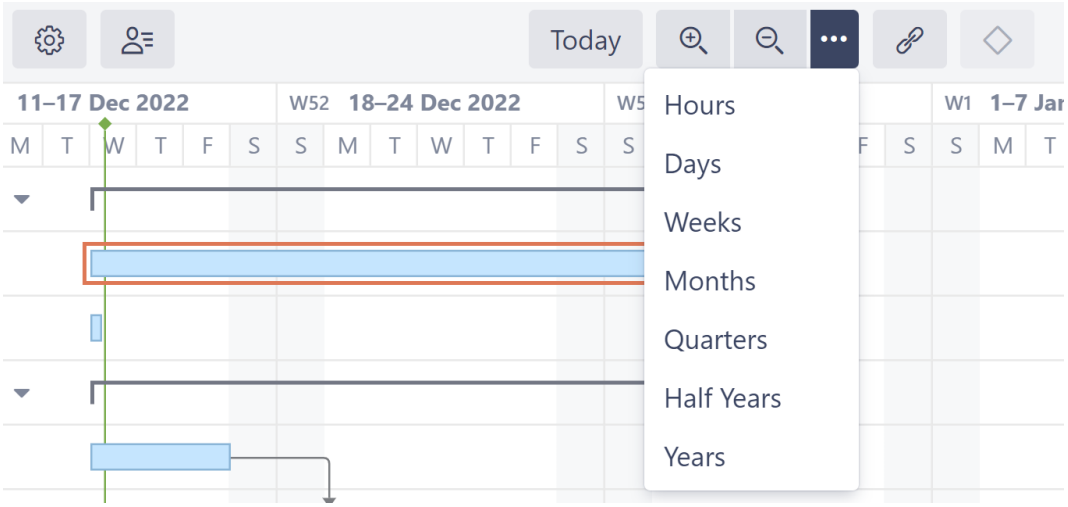
Certain parameters of your Gantt chart export are based on the layout of the structure and chart on your screen, including the hierarchy level[39] and zoom level(see page 28). You should select the desired hierarchy and zoom levels before exporting your Gantt chart.

To configure hierarchy level, you may expand or collapse items manually or use Structure's expand/collapse menu. There are three toolbar buttons you may find useful: **Expand all items**, **Collapse all items** and **Expand items for specified level**.

37 https://wiki.almworks.com/display/ganttmaster/Work+Estimates
38 https://wiki.almworks.com/display/ganttmaster/Task+Details+Panel
39 https://wiki.almworks.com/display/structure/Navigating+Between+Items

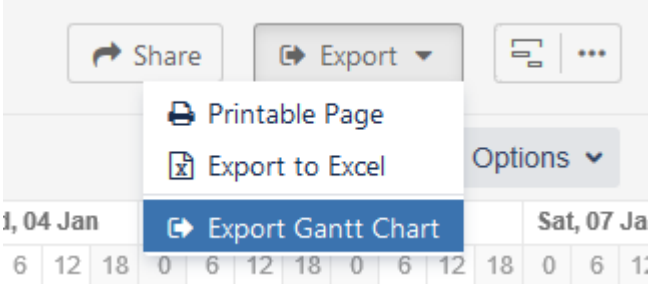


To configure the chart's zoom level, use the Gantt chart zoom toolbar buttons. You can zoom in, zoom out or select a specific unit for your time scale.



2.11.2 Export Gantt Chart

Once you have set the desired hierarchy and zoom levels, click **Export** | **Export Gantt Chart**.



On the Export Gantt Chart window, you will be given a number of options for customizing the settings and appearance of your output file.

- **Output format** - Select the format you want your chart saved in, either PDF (default) or SVG. PDF format is useful for exporting large charts that you want to print, while SVG is ideal for sharing or embedding into other graphical materials.
- **Color Scheme** - Select the color scheme to use for the exported chart: Standard or Black and White (optimized for black and white printing).

- **Range** - By default, the entire timeline (Whole Chart) is included in your export, from your earliest to latest tasks. To export only a portion of the timeline, select **Custom Dates** and enter a date rage to include. You can also specify just the Start Date to include only items starting on or after that date.
- **Year Start** - Dates displayed in the timeline will use the selected month as the start of the fiscal year[40]. For example, if you select November, then November 2020 will be treated as 2021, since this is the start of the new fiscal year. To always display the actual calendar date, leave this set to "January."
- **Item information** and **Gantt Chart Details** - These allow you to choose which details will be shown on your exported chart.
- **Export empty rows** - By default, all chart rows are included in the export, even if they are empty (tasks are scheduled outside of the time range). To remove empty rows, deselect this option. *Note: removed rows will be omitted from the WBS section as well, and parent-child relations may be affected.*
- **WBS** - Check this box to include the work breakdown structure (including the Key and Summary columns) alongside the chart.
- **Width** - This allow you to specify the width (in pixels) of the included work breakdown structure.

Once you have finished with chart configurations, press **Export** to create and download your export file.

2.11.3 Exporting

Depending on the size of the chart, selected output format and your network bandwidth, export may take several seconds or (in some cases) even minutes. A progress dialog will keep you informed about the status of your export. As soon as the export is completed, download should begin automatically.

Depending on your browser settings, you might be asked to select a destination folder for the downloaded file or choose an application to open the file.

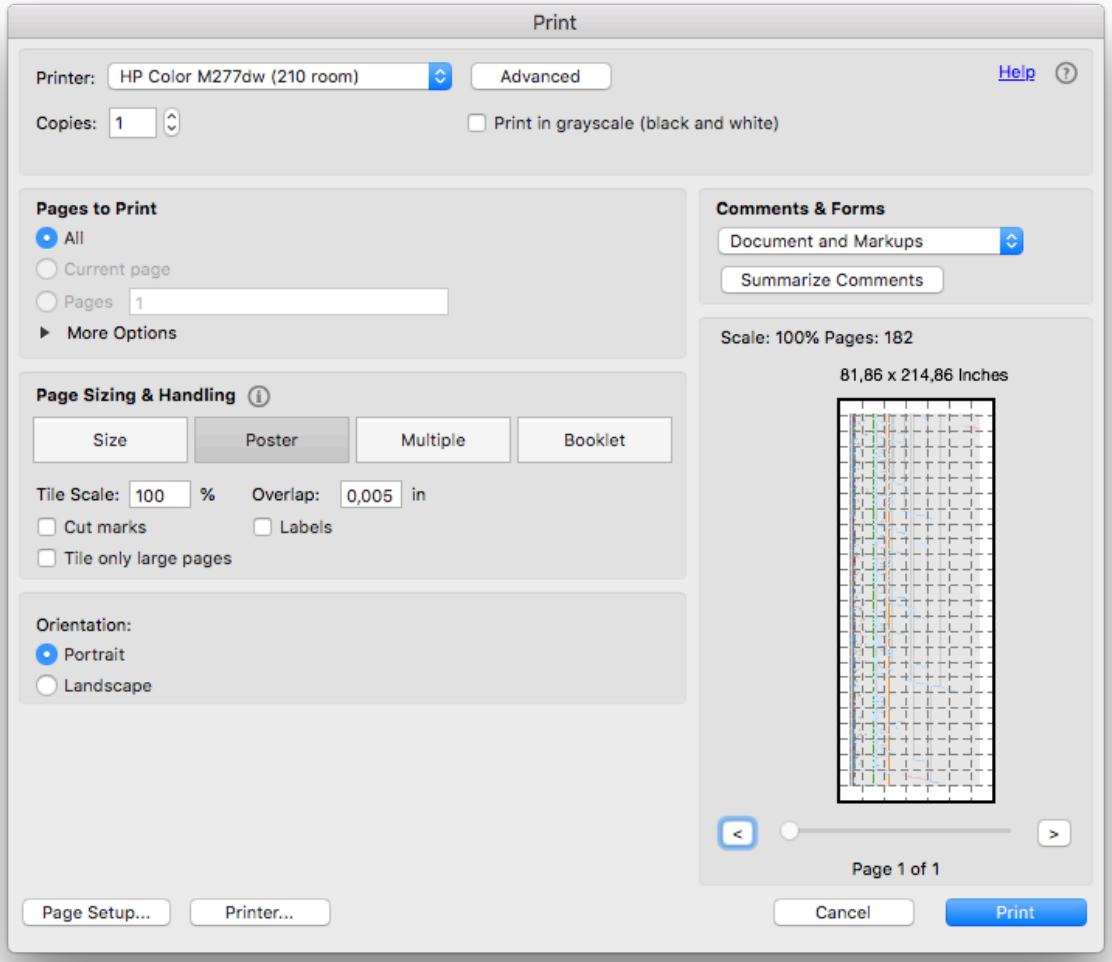
If you are not prompted for a download location, check your browser's default download location for the exported chart. The download file should have the same name as the exported structure.

Fonts in the exported PDF may be different than those that are used in the web version of the Structure.Gantt chart.

2.11.4 Printing Large Charts

Sometimes you may wish to print a large chart to place at a desk or on a wall. This is possible with the help of Adobe Acrobat Reader DC[41].

40 https://en.wikipedia.org/wiki/Fiscal_year
41 https://acrobat.adobe.com/us/en/acrobat/pdf-reader.html



Acrobat Reader allows you to print any large picture as a Poster, i.e. it will automatically split it into a number of pages that can be combined later into a full-size picture. To do so, open your PDF file in the Acrobat Reader and select **File** | **Print** to reveal the printing dialog. Under Page Sizing & Handling, select **Poster**. You can configure additional options, such as tile scaling and overlapping, to suit your needs. For best quality, we recommend setting Tile Scale to "100%".

> ⚠ Adobe limits PDF pages to 200 inches (~5m) and will cut extra graphics if your exported chart exceeds this limit.

2.12 Sandbox Mode

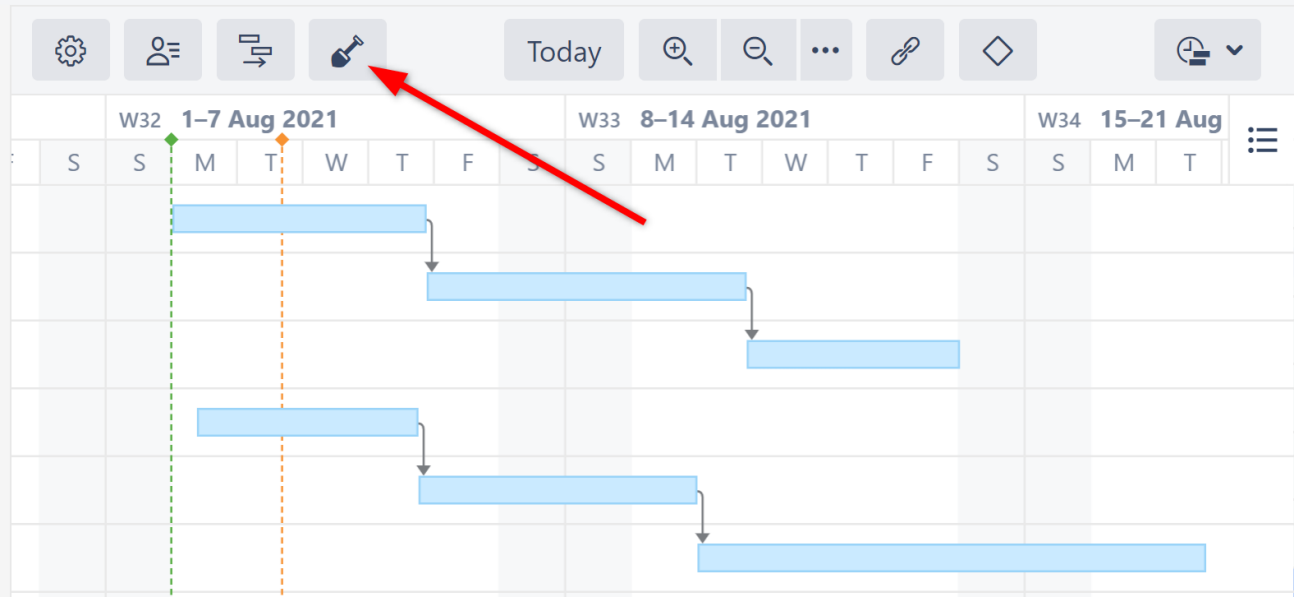
Sandbox mode allows users to test changes without affecting the existing Gantt chart.

You can adjust task schedules, resource assignments, and more - and then see how those changes would affect the overall timeline. If you like the changes, you can apply them to the live chart. If not, delete the changes that didn't work, or close the sandbox to return to the live chart.

Users must have Control access[42]for the structure in order to create or edit a sandbox.

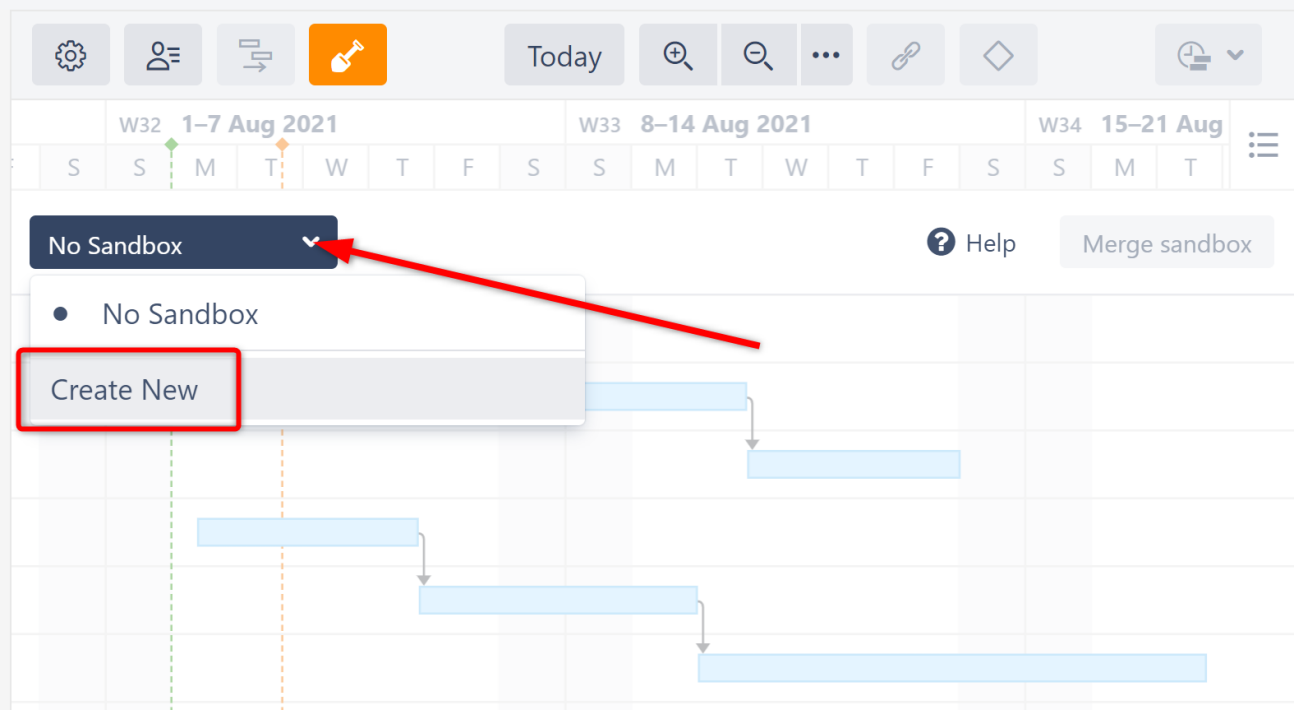
2.12.1 Creating a Sandbox

To create a new sandbox, first click the Sandbox button. This will open Sandbox mode.

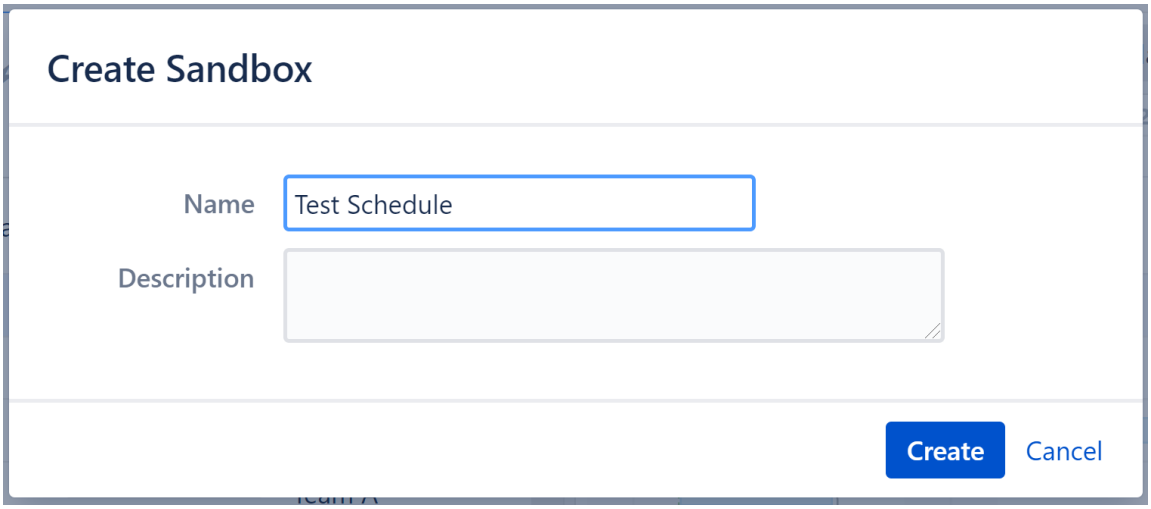


Next, open the Sandbox selector and select **Create New**.

42 https://wiki.almworks.com/display/structure/.Structure+Permissions+v8.0



Name the sandbox, add a description (optional), and click **Create**.



That's it! As you make adjustments to the Gantt chart, they will be applied to the new sandbox and will not affect the live chart.

2.12.1.1 See Also

- Working in a Sandbox(see page 156)
- Opening a Saved Sandbox(see page 164)
- Managing Sandboxes(see page 161)

2.12.2 Working in a Sandbox

When working in a Sandbox, the changes you make to your Gantt chart do not affect the live chart.

> ⚠ Changes made in Structure (adjusting the hierarchy, editing issue details, etc.) are not sandboxed and will update live data.

2.12.2.1 Available Changes

In Sandbox mode, you can make the following changes:

- Move tasks across the timeline, or adjust their start/finish dates
- Change a task's time tracking, fixed duration, leveling priority, leveling delay, or max units
- Switch a task from automatic scheduling to manual scheduling, or vice versa
- Assign a task to a new sprint
- Assign a new resource to a task
- Adjust a resource's units, time zone, work calendar, or availability
- Run Resource Leveling

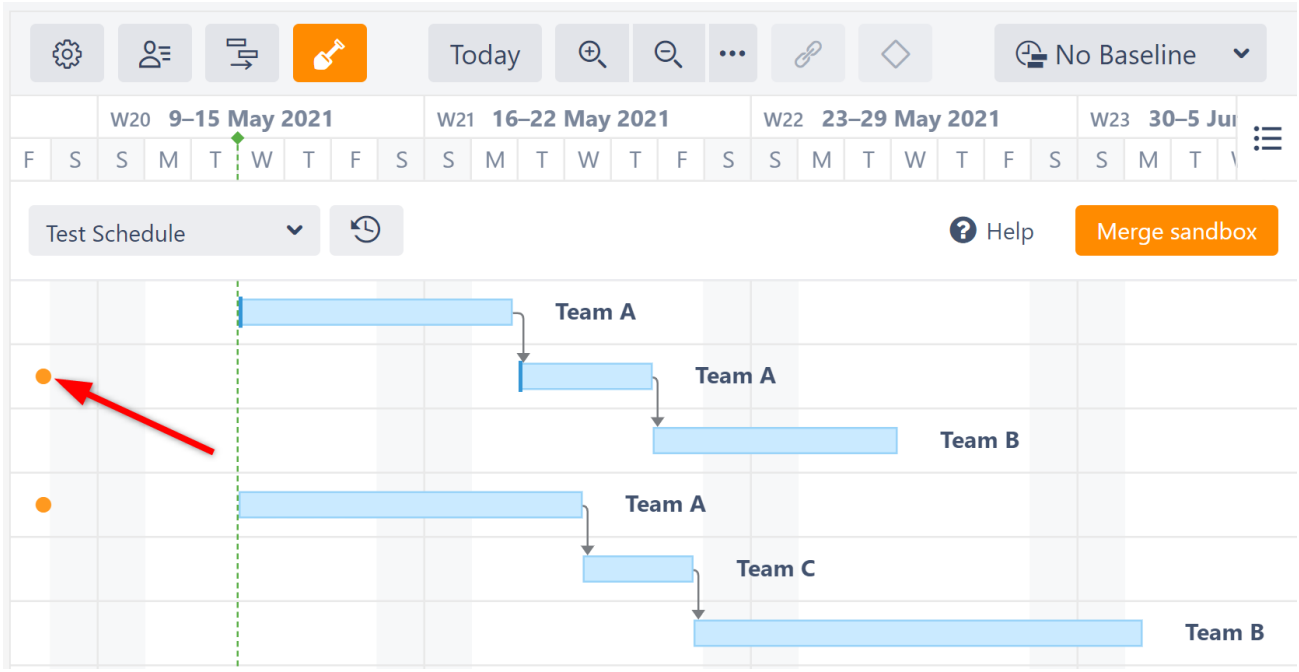
The following changes cannot be made in Sandbox mode (or can be made but will change live data):

- Changing links/dependencies
- Toggling between tasks and milestones
- Changing a chart's settings or configuration (*these changes will immediately affect live date*)
- Edits to the structure's data or hierarchy (*these changes will immediately affect live date*)

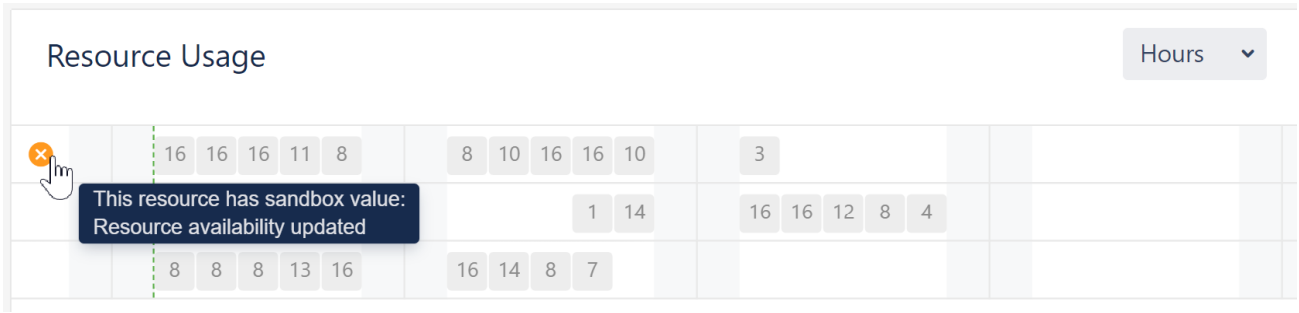
2.12.2.2 Making Changes

When working in Sandbox mode, you can test changes to the Gantt chart by simply making those changes, exactly as you would when working from the live chart. You can make changes on the chart itself, in the Task Details panel(see page 102), or in the Resources panel.

Once you've made a change, an orange indicator will appear beside the changed item.

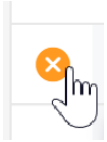


Hover over the indicator to see what was changed.



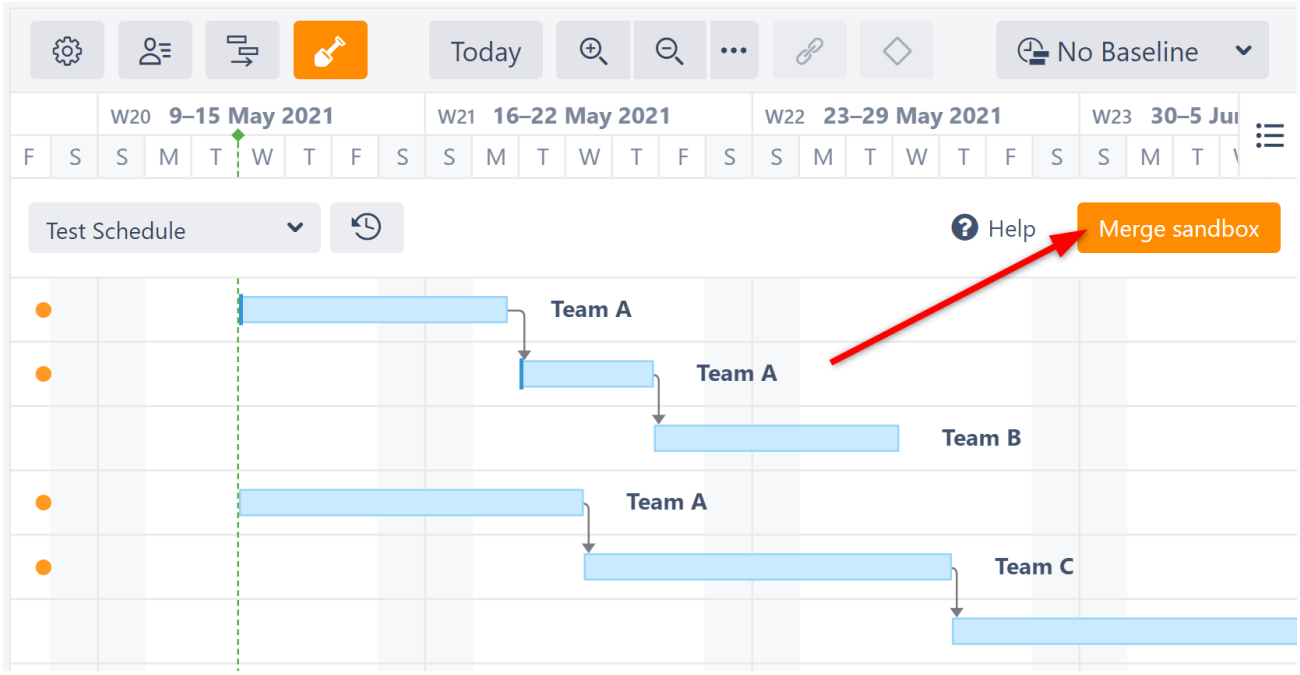
2.12.2.3 Discarding Changes

To remove a change made in Sandbox mode, hover over the orange change indicator - it will transform into an orange X. Click the X to discard the change.



2.12.2.4 Applying Changes

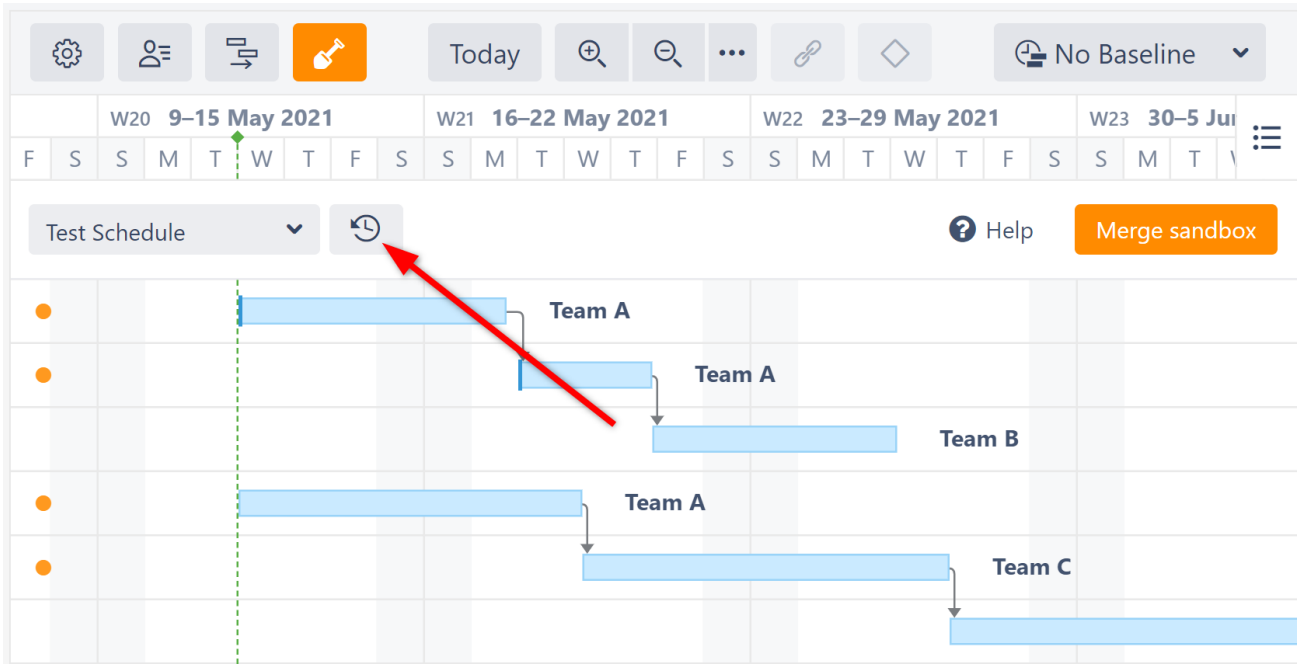
To apply sandbox changes to the live Gantt chart, click the **Merge sandbox** button.



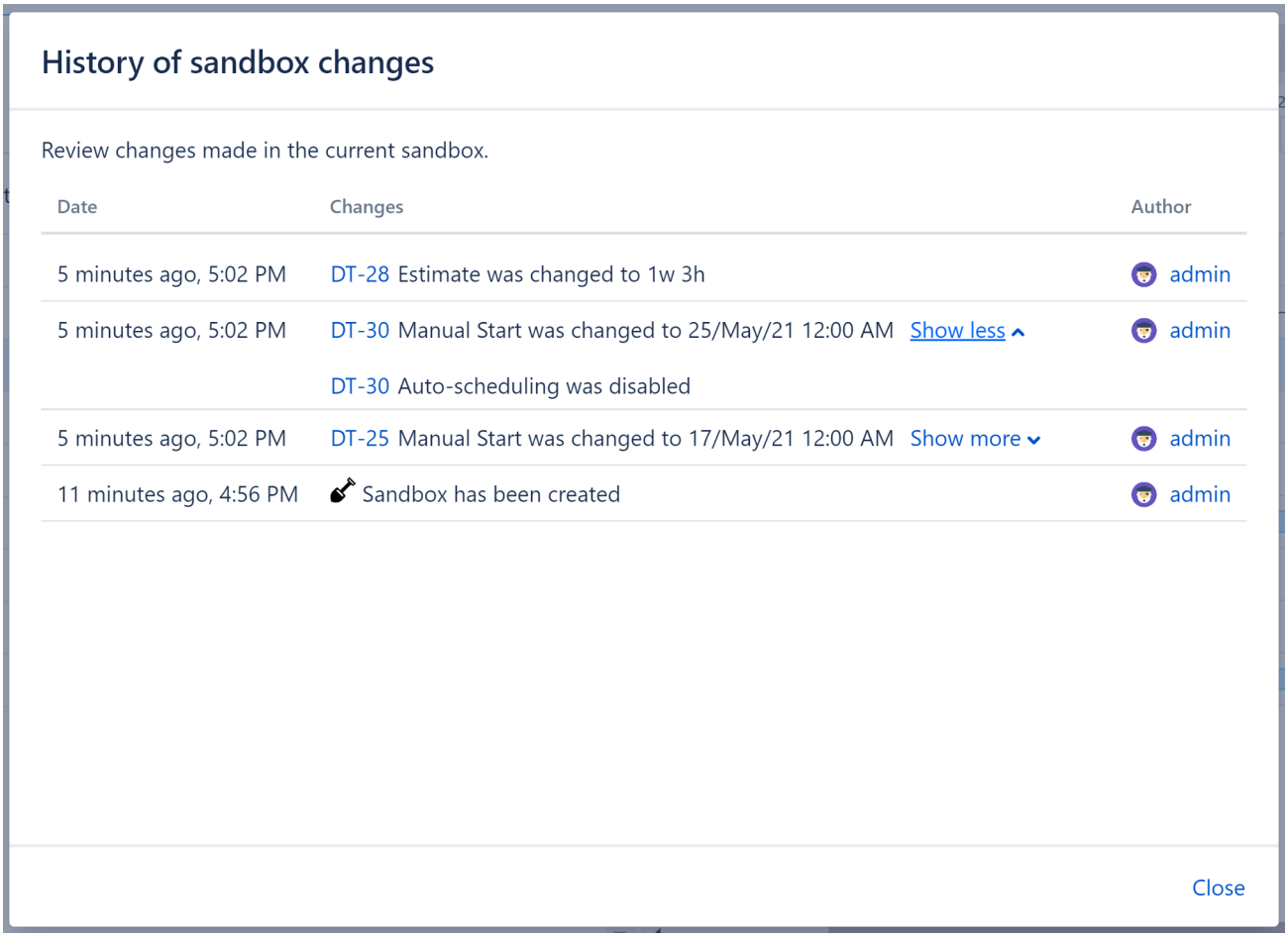
You'll be able to select which changes you want to apply (or apply them all). See Applying Sandbox Changes(see page 160).

2.12.2.5 Viewing Sandbox Changes

To see a list of all the changes that have been made to the sandbox, without applying those changes to the live chart, click the History button.



This will open the History window, where you can view all the changes that have been made in the current sandbox.



2.12.2.6 Live Changes Affect Sandboxes

Unlike Baselines(see page 128), the initial timeline of a sandbox is not static. It is tied to the live chart, so changes to the live chart can affect the sandbox.

When changes are made to the live data, in the sandbox:

- Items that have not been changed in the sandbox will update to match the live changes
- Items that have been changed in the sandbox will keep their sandbox changes

2.12.2.7 Closing a Sandbox

There are two ways to close a sandbox:

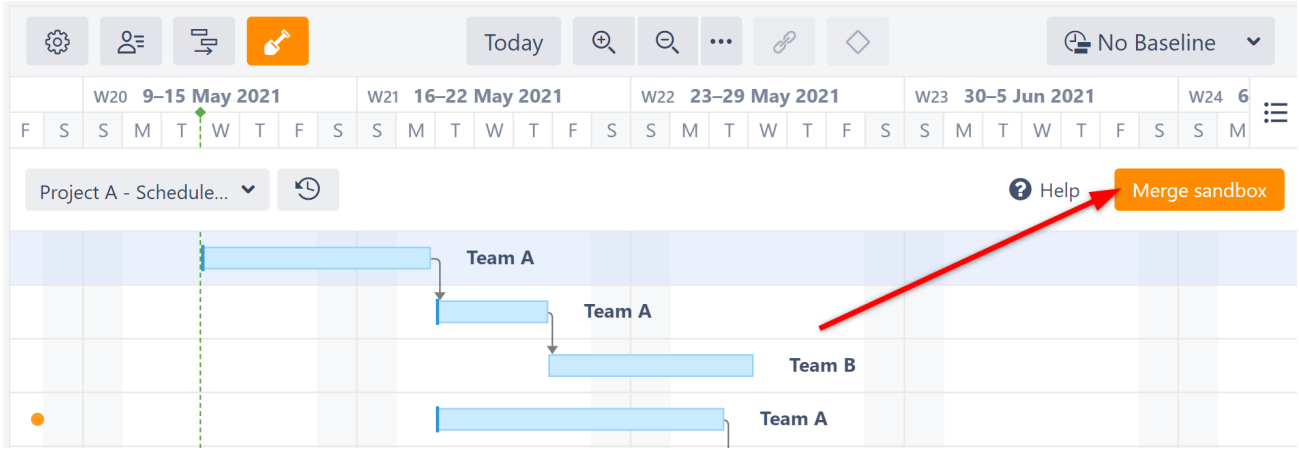
1. Open the Sandbox menu and select a new sandbox.
2. Click the orange Sandbox button (shovel) in the toolbar. This will close the sandbox and return you to the live chart.

See Also

- Creating a Sandbox(see page 154)
- Opening a Saved Sandbox(see page 164)
- Managing Sandboxes(see page 161)

2.12.3 Applying Sandbox Changes

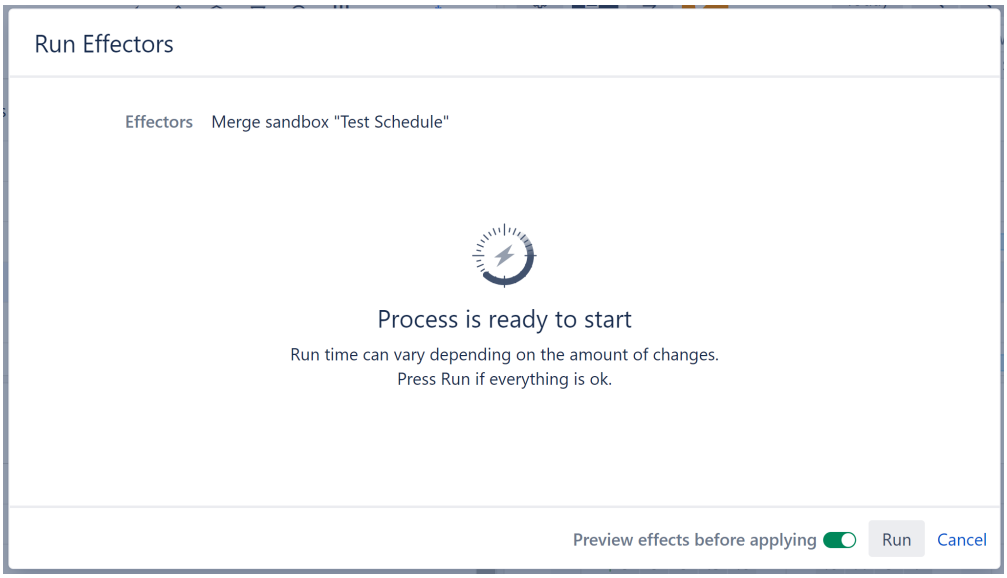
To apply (merge) all or some of your sandbox changes to the live Gantt chart, click the Merge sandbox button.



In order to merge sandbox data, user must have the following Structure permissions[43]: Access Automation, Configure Effectors, Execute Effectors, and Execute Effectors on Query Results. They must also have have Jira Bulk Edit permission.

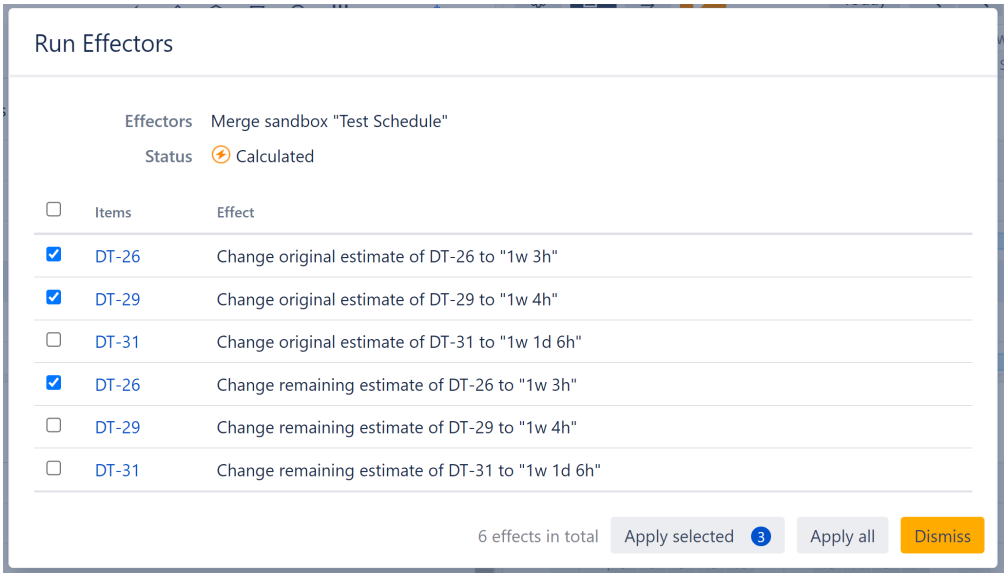
2.12.3.1 Preview Changes

Sandbox changes are merged using Structure Effectors[44]. By default, the preview process allows you to view and approve every change that will be made to the live Gantt chart and/or Jira data. If you prefer to simply apply all sandbox changes without reviewing them, switch the **Preview effects before applying** toggle off. When you're ready to merge changes (in Preview mode or not), click **Run** to begin.



43 https://wiki.almworks.com/display/structure/Global+Permissions
44 https://wiki.almworks.com/display/structure/Effectors

If you selected **Preview effects before applying**, once the preview finishes you will see a list of changes that will be merged. You can select specific changes you want to apply, or click **Select all** to apply all changes.



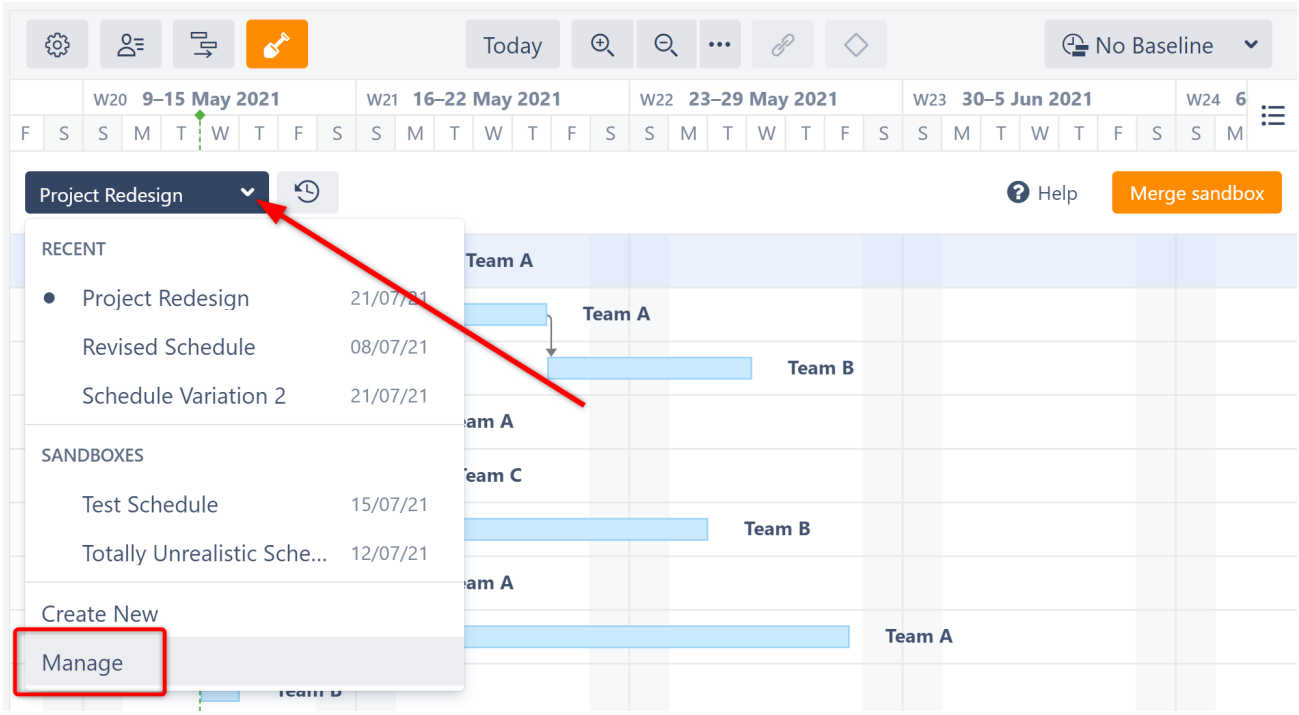
Once you click **Apply selected** or **Apply all**, the Effector will begin processing your changes and updating the live data.

> If you click **Dismiss**, no changes will be made to to the live chart or Jira, and the preview will be discarded. To apply changes later, you will need to begin the merge sandbox process over again.

Once complete, you will see a confirmation letting you know that all changes were made. If the Effector is unable to make some or all changes, that information will be displayed as well.

2.12.4 Managing Sandboxes

To edit or delete a sandbox, open the Sandbox menu and select **Manage**.

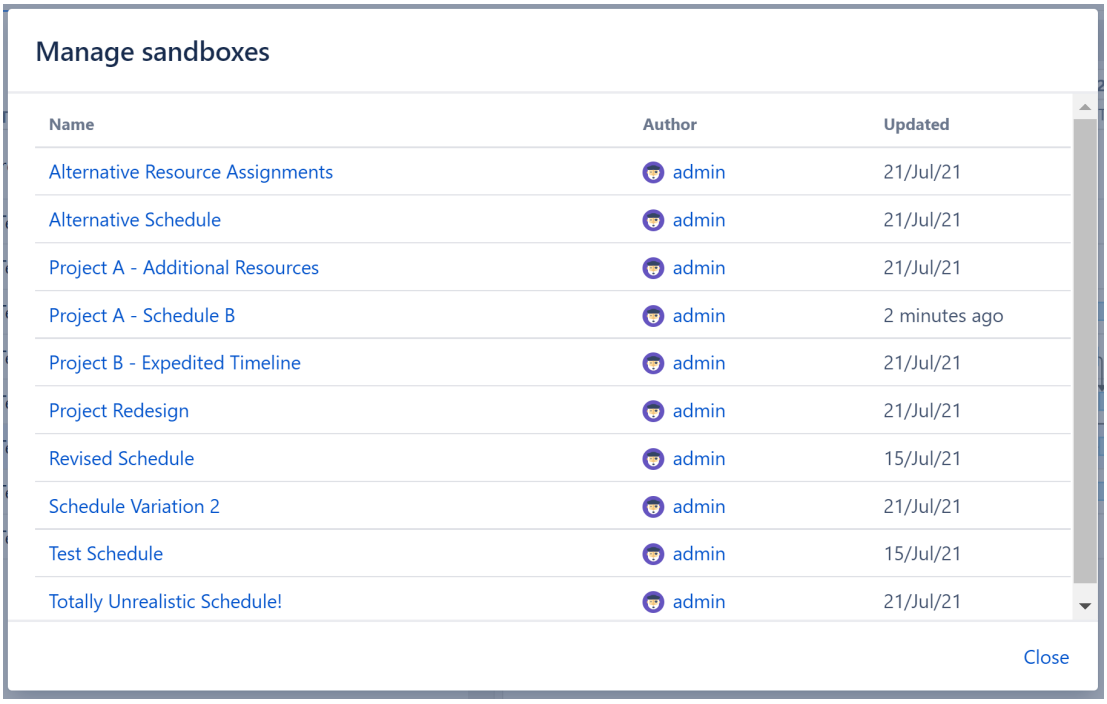


Don't see the Sandbox menu? Click the shovel icon to enter Sandbox mode.

2.12.4.1 Sandbox Details

The Manage sandboxes screen shows you a list of sandboxes with the following information:

- Author - who created the sandbox
- Updated - when changes were last made to the sandbox

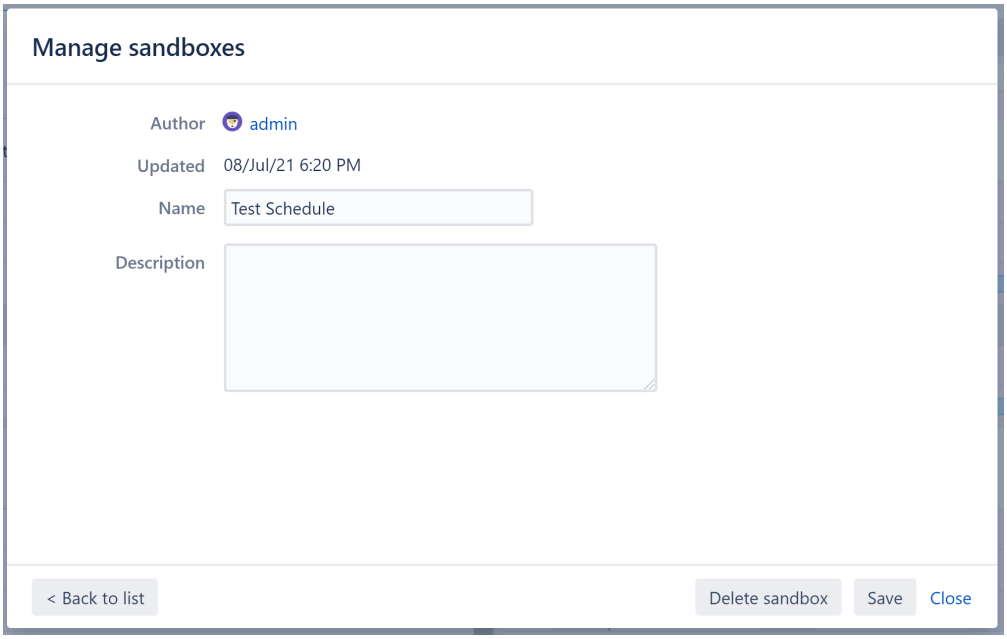


To edit or delete a sandbox, click it's name.

2.12.4.2 Editing a Sandbox

You can edit a sandbox's name and description. Once you've made your changes, click **Save**.

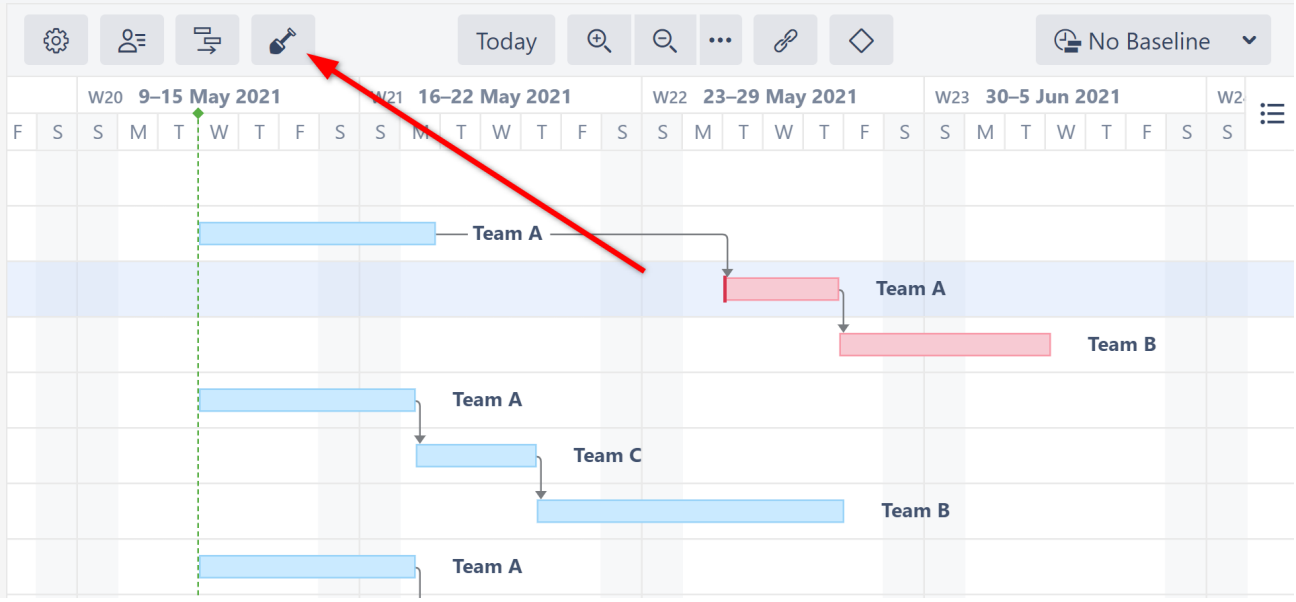
To delete the sandbox, click **Delete sandbox**.



Deleting a sandbox cannot be undone.

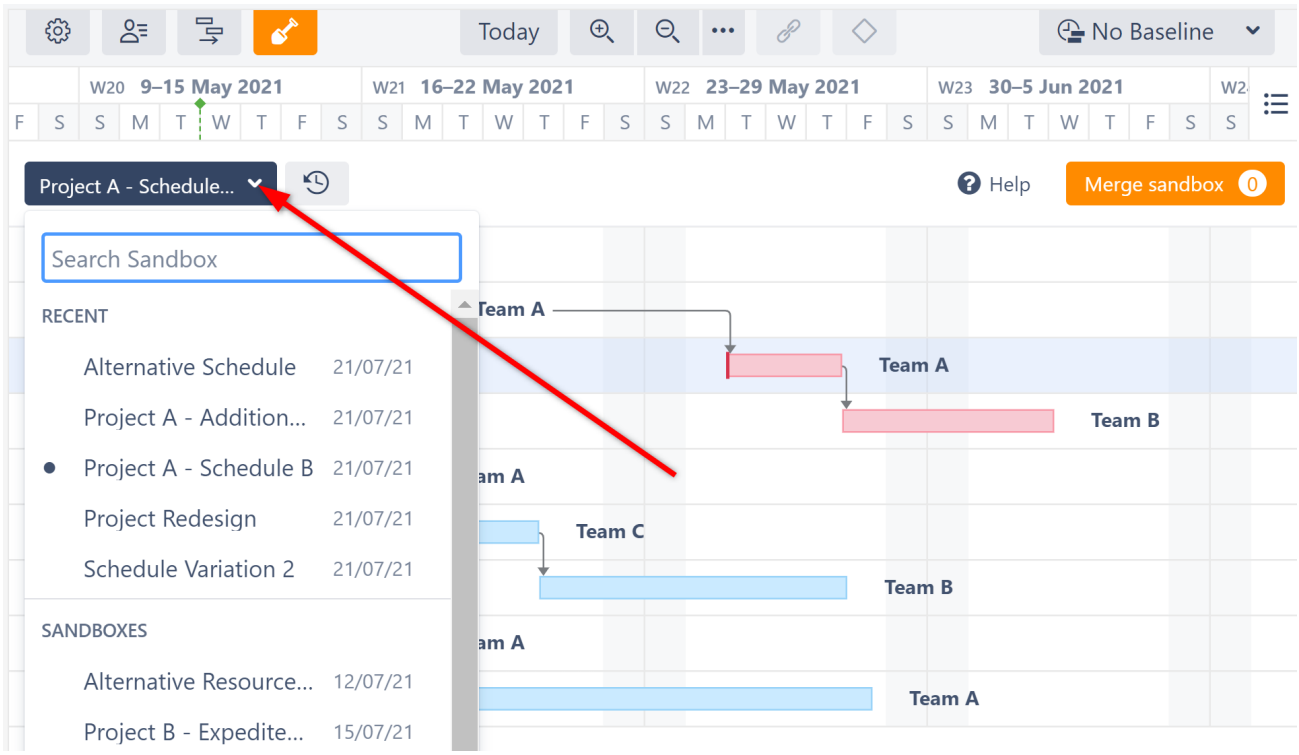
2.12.5 Opening a Saved Sandbox

To open a saved sandbox, enter Sandbox mode by clicking the Sandbox icon. When you enter Sandbox mode, the last-used sandbox will automatically open.



2.12.5.1 Selecting Sandbox

To select a different sandbox, open the Sandbox menu and locate the sandbox you want to work in. If you can't find the sandbox in the list, begin typing its name into the search box.


Today
No Baseline
W20 9–15 May 2021
W21 16–22 May 2021
W22 23–29 May 2021
W23 30–5 Jun 2021
Project A - Schedule...
Help
Merge sandbox 0
Search Sandbox
RECENT
Alternative Schedule 21/07/21
Project A - Addition... 21/07/21
Project A - Schedule B 21/07/21
Project Redesign 21/07/21
Schedule Variation 2 21/07/21
SANDBOXES
Alternative Resource... 12/07/21
Project B - Expedite... 15/07/21
Team A
Team A
Team B
Team C
Team B
Team A

3 Administrator's Guide

3.1 System Requirements and Installation

Structure.Gantt is an extension for Structure for Jira. In order to use Structure.Gantt, Structure must also be installed on your Jira instance.

- To learn more about Structure for Jira, visit us on the Atlassian Marketplace[45]
- For specific version requirements, see our Release Notes(see page 201)
- Both apps can be installed via the App Manager, or by visiting our Structure[46] and Structure.Gantt(see page 177) download pages

3.2 Enterprise Deployment

3.2.1 Performance

Structure.Gantt is a fairly complex product that works on top of Jira and Structure platforms. It is also a very flexible product, just as Structure app is, so a lot of choices can be made by the user – like how much data is in one Gantt chart and where this data comes from.

Therefore, the performance impact of using Structure.Gantt depends on a number of factors:

- The number of issues in the structure (the single most important factor).
- Using Jira's calculated fields as the source of attributes (for example, Start Date). This is rarely the case, but it may have massive performance impact.
- Structure.Gantt CPU, memory footprint and its optimizations.
- Structure and Jira performance.
- Lucene index performance.
- Database performance (simple data retrieval queries).

Performance impact from a single Gantt Chart does not depend on the total number of issues in JIRA, total number of Gantt charts, or total number of users. The amount of consumed memory will depend on the number of concurrent users working with Structure.Gantt and with Structure, as the products maintain caches of per-user data.

45 https://marketplace.atlassian.com/apps/34717/structure-project-management-at-scale?hosting=server&tab=overview
46 https://wiki.almworks.com/display/structure/.Download+vFUTURE-dc

3.2.1.1 Performance Target: 10,000 issues

As of version 1.0, we are targeting Structure.Gantt to work well on configurations with 10,000 issues in one structure / Gantt chart. Such configurations show a reasonable amount of CPU and memory impact, as well as good responsiveness for end-users.

We are also testing Structure.Gantt on structures with 100,000 issues. At the moment, we do not recommend having such large configurations, as the recalculation of the Gantt Chart may take up to 30 seconds, during which Structure.Gantt extracts a lot of information from the Jira database and Lucene index.

3.2.1.2 Testing for Potential Impact

When testing Structure.Gantt for potential performance impact, watch out for the following indicators.

- Memory consumption, which may be influenced by the Gantt configuration
- Frequency of Lucene index queries
- Frequency of database retrieval queries

3.2.2 Security and Data Access

When developing Structure and Structure.Gantt, we follow the best practices and respect the settings that are configured in Jira.

- Jira permissions are respected. All changes that are made through Structure.Gantt are executed in the context of some Jira user account, and with respect to that user's permissions. For example, if a user does not have permissions to create issue links, that action will not be possible through Structure.Gantt.
- Jira issue security and browsing permissions are respected. If a user does not have the permissions to see a particular issue, they will not be able to see it in Structure.Gantt.
- Application security is continuously checked to make sure our products do not introduce XSS or other vulnerabilities to Jira.

3.2.2.1 Caching of Issue Access

For the sake of performance, Structure and Structure.Gantt cache the results of access checks (whether a particular user has access to a particular issue). The cache is invalidated if the issue is changed and every 5 minutes. The cached result can potentially be used when some other factor has changed and the access has changed as well.

This means that if a user *gains* access to an issue through any means other than setting the issue's Security Level, Structure apps might still hide that issue from the user for up to 5 minutes. The same happens if the user *loses* access – Structure apps may still show that issue's data for up to 5 minutes.

3.2.3 Limiting Access to Gantt Charts

Structure.Gantt works on top of Structure app. In particular, a Gantt chart is created based on a structure. Therefore, by limiting who has access to Structure app and who can create structures, a Jira admin can control the exposure of the users to Structure apps.

See Gradual Deployment(see page 166) in the Structure documentation for more details on how to gradually introduce the app to the system.

3.3 Confluence Configuration for Gadgets

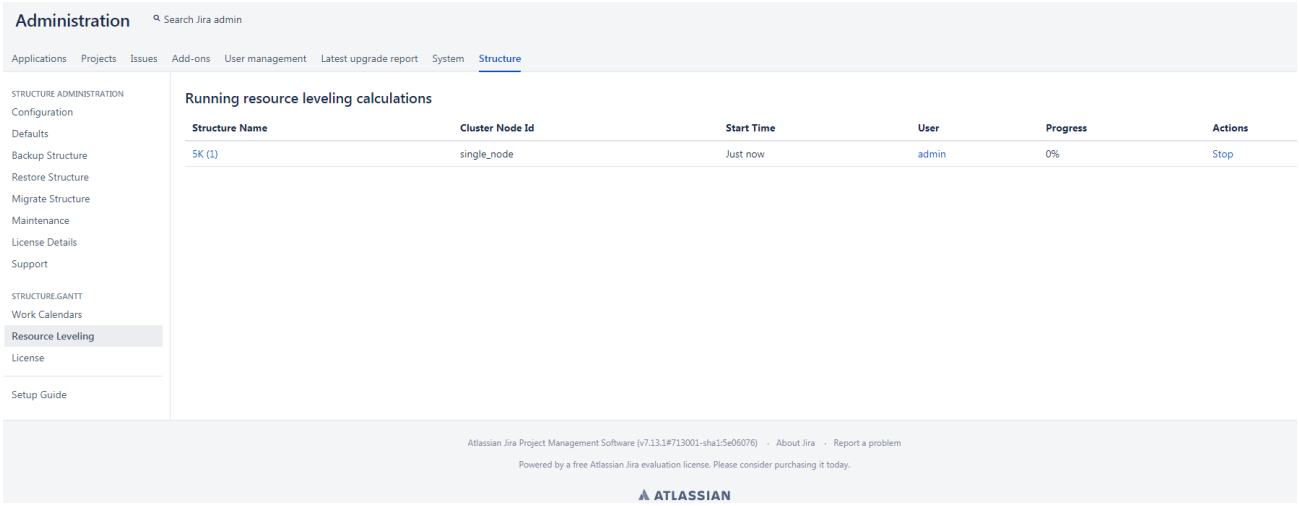
Before users can add the Structure.Gantt gadget to Atlassian Confluence, specific configuration steps must be performed by the Confluence administrator.

To enable the Structure.Gantt gadget in Confluence:

1. Connect your JIRA with your Confluence using Application Links[47]
2. Add the Structure.Gantt gadget to the list of External Gadgets:
    a. Go to your Jira dashboard, click **Add gadget** | **JIRA** | **Load all gadgets**
    b. Locate the Structure.Gantt gadget, click **Show XML link** and copy it
    c. Open Confluence and click **Administration** | **General configuration** | **External Gadgets**
    d. Paste the copied link in the "Gadget Specification URL" field and click **Add**

3.4 Resource Leveling Troubleshooting

Jira admins can view (and stop, when necessary) current leveling operations by going to **Administration** | **Structure** | **Structure.Gantt** | **Resource Leveling.**



The resource leveling screen lists all in-progress leveling operations on the Jira instance and how far along they are in their progress. To cancel a leveling operation, locate it in the list and click **Stop**.

3.4.1 Advanced Configurations

Several additional configurations can be set using the Structure Dark Features and Fine Tuning Interface, including:

- Changing permission levels for Resource Leveling
- Setting the maximum number of tasks that can be leveled
- Allocating additional (or fewer) system resources to Resource Leveling
- Disabling Resource Leveling

For more information, see Advanced Configurations for Structure.Gantt(see page 169).

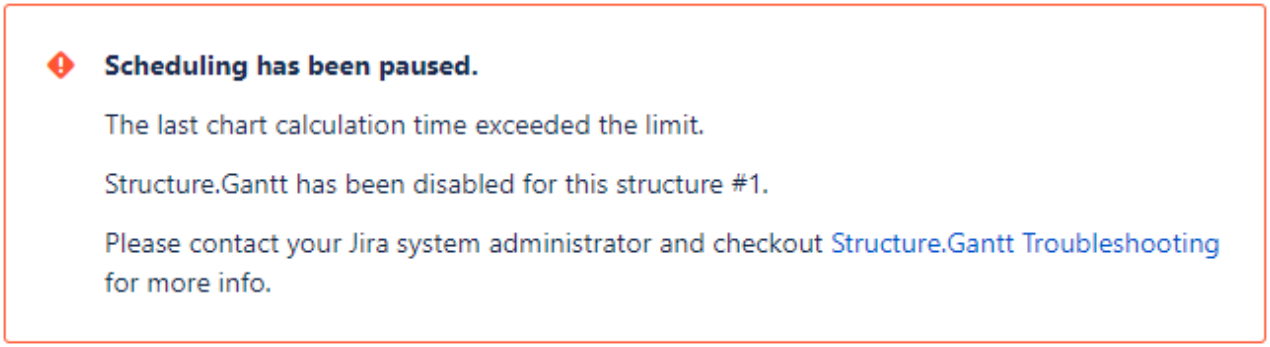
47 https://confluence.atlassian.com/adminjiraserver071/using-applinks-to-link-to-other-applications-802592232.html

3.5 Advanced Configurations for Structure.Gantt

The following custom configurations can be set using the Structure Dark Features and Fine Tuning interface[48].

3.5.1 Scheduling and Time Limits

Structure.Gantt has some facilities that prevents it from locking the Jira instance in the event that scheduling operations are taking too much time. By default, we assume that most charts calculations should take no more than 5 minutes, and Structure.Gantt will stop performing any further scheduling for a particular structure if the calculation exceeds this time. In this case, a message such as this will be shown:



These situations are treated as abnormal and usually mean that the Structure.Gantt scheduling algorithm got stuck for some reason, so we highly recommend that you contact our support team[49] to further investigate the cause. In some rare cases, tuning of these facilities may be needed.

48 https://wiki.almworks.com/display/structure/Advanced+Configuration+and+Dark+Features
49 https://support.almworks.com/

Property	Explanation	Default value
`structure.gantt.settings.schedulingTimeLimit`	This property declares scheduling timeout (in seconds), i.e. maximum time Structure.Gantt can perform scheduling calculations for a single chart. (The default value is based on our measurements for structures with 100,000 issues. It should be sufficient for most cases, but it can be configured to a lower or higher value.)	300 seconds
`structure.gantt.settings.excludedFromScheduling`	This property holds a comma-separated list with the IDs of the structures that have Gantt chart calculations turned off. Any structures listed here will automatically be excluded when Gantt scheduling takes more time than is declared by the *structure.gantt.settings.schedulingTimeLimit*.	Empty
`structure.gantt.settings.updateTimeLimit`	This property declares an additional timeout when waiting to apply a change made by the user on a Gantt chart. Recommended values are up to several minutes.	120 secs
`structure.gantt.settings.attributesTimeLimit`	This property declares the timeout when waiting for Gantt attributes, in order to show them in the Structure grid. Structure.Gantt will try to get the attributes within the declared time and then display empty values if the operation fails. As soon as the chart is finished calculating, the actual values in the grid should refresh automatically. Recommended values are from 30 secs to several minutes.	30 secs
`structure.gantt.settings.pollTimeLimit`	The timeout for poll to wait for the ability to calculate the update. This timeout ensures Structure.Gantt will not hold update requests and threads for an unlimited amount of time. It is recommended to keep this value less than 1 minute.	10 secs

3.5.2 Resource Leveling Configurations

Property	Explanation	Default value
`structure.gantt.settings.leveling.requireControl`	When **false**, Edit permissions are required to start or reset Resource Leveling. When **true**, Control permission is required.	`false`
`structure.gantt.features.resourceLeveling`	Set to **false** to disable Resource Leveling, cancel all leveling calculations and delays, and remove any controls related to Resource Leveling from the UI.	true
`structure.gantt.settings.leveling.taskLimit`	Determines the maximum number of tasks that can be leveled by a single Leveling session.	5,000
`structure.gantt.settings.leveling.threadPoolSizeFactor`	Maximum number of threads allocated for Resource Leveling calculations on every node. The number of threads is determined by the formula `NUMBER_OF_CPU_CORES * threadPoolSizeFactor` and by default means that Resource Leveling may use no more threads than half of the available CPU cores, i.e. for a 4 CPU core machine, Resource Leveling should use no more than 2 threads for calculations. Setting this value to `0` will guarantee Resource Leveling will occupy only a single thread on any node.	0.5

3.5.3 Individual features

Property	Explanation	Default value
`structure.gantt.features.sandbox`	Set to **false** to disable Sandbox feature, and remove any controls related to it from the UI.	`true`
`structure.gantt.features.resolvedCritical`	Include resolved tasks in the critical path.	`true`

3.6 Open Source Licenses

Structure.Gantt is made possible by open source software.

The following is a list of open source libraries used in the product and links to their respective license agreements.

Component / Library	License
Annotations (JetBrains)[50]	Apache 2.0[51]
Apache Commons[52]	Apache 2.0[53]
Apache Derby[54]	Apache 2.0[55]
blob-stream[56]	MIT license[57]
Canvas2SVG[58]	MIT license[59]
CharFunk[60]	MIT license[61]
ES6-Promise[62]	MIT license[63]
Font Awesome[64]	SIL OFL 1.1, MIT license[65]
Jackson[66]	Apache 2.0[67]
jQuery[68]	MIT license[69]
Kotlin[70]	Apache 2.0[71]

50 https://github.com/JetBrains/java-annotations
51 https://www.apache.org/licenses/LICENSE-2.0
52 https://commons.apache.org/
53 https://www.apache.org/licenses/LICENSE-2.0
54 https://db.apache.org/derby/
55 https://www.apache.org/licenses/LICENSE-2.0
56 https://github.com/devongovett/blob-stream
57 https://github.com/devongovett/blob-stream/blob/master/LICENSE
58 https://gliffy.github.io/canvas2svg/
59 https://github.com/gliffy/canvas2svg/blob/master/LICENSE
60 https://github.com/joelarson4/CharFunk
61 https://github.com/joelarson4/CharFunk/blob/master/LICENSE
62 https://github.com/stefanpenner/es6-promise
63 https://github.com/stefanpenner/es6-promise/blob/master/LICENSE
64 https://fontawesome.com/
65 https://fontawesome.com/v4.7.0/license/
66 https://github.com/FasterXML/jackson
67 https://www.apache.org/licenses/LICENSE-2.0
68 https://jquery.com/
69 https://jquery.org/license/
70 https://kotlinlang.org/
71 https://github.com/JetBrains/kotlin/blob/master/license/LICENSE.txt

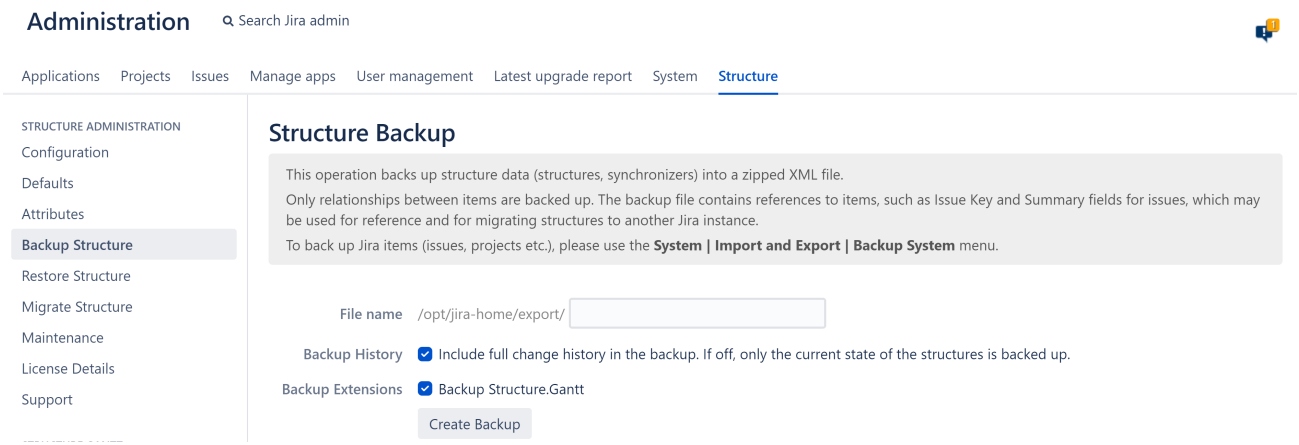
Component / Library	License
moment-jdateformatparser[72]	MIT license[73]
Moment.js[74]	MIT license[75]
PDFKit[76]	MIT license[77]
tslib[78]	Apache 2.0[79]

ALM Works is a proud participant of Pledge 1%.[80] As a part of our pledge to donate 1% of equity, product and time to the community, we're offering all our products free of charge to open-source projects and community projects. You can request a license through Atlassian's Open Source License Request[81] page or Community License Request[82] page. Should you have any questions or need assistance, please let us know at support@almworks.com[83].

3.7 Backup and Restore

When you perform a Structure Backup, you have the option to include your Gantt charts and data in that backup. To include Gantt data, select the **Backup Structure.Gantt** option.

72 https://github.com/MadMG/moment-jdateformatparser
73 https://github.com/MadMG/moment-jdateformatparser/blob/master/LICENSE
74 https://momentjs.com/
75 https://github.com/moment/moment/blob/develop/LICENSE
76 https://pdfkit.org/
77 https://github.com/foliojs/pdfkit/blob/master/LICENSE
78 https://github.com/microsoft/tslib
79 https://github.com/microsoft/tslib/blob/master/LICENSE.txt
80 https://pledge1percent.org/
81 https://www.atlassian.com/software/views/open-source-license-request
82 https://www.atlassian.com/software/views/community-license-request
83 mailto:support@almworks.com



When you include Structure.Gantt in a backup, the following information is saved:

- Gantt configurations
- Values and dependencies stored in the Gantt charts
- Resource settings
- Work Calendars
- Resource leveling delays
- Baselines
- Sandboxes, including sandbox history

Learn more: Backing Up Structure[84]

3.7.1 Restoring Gantt Charts

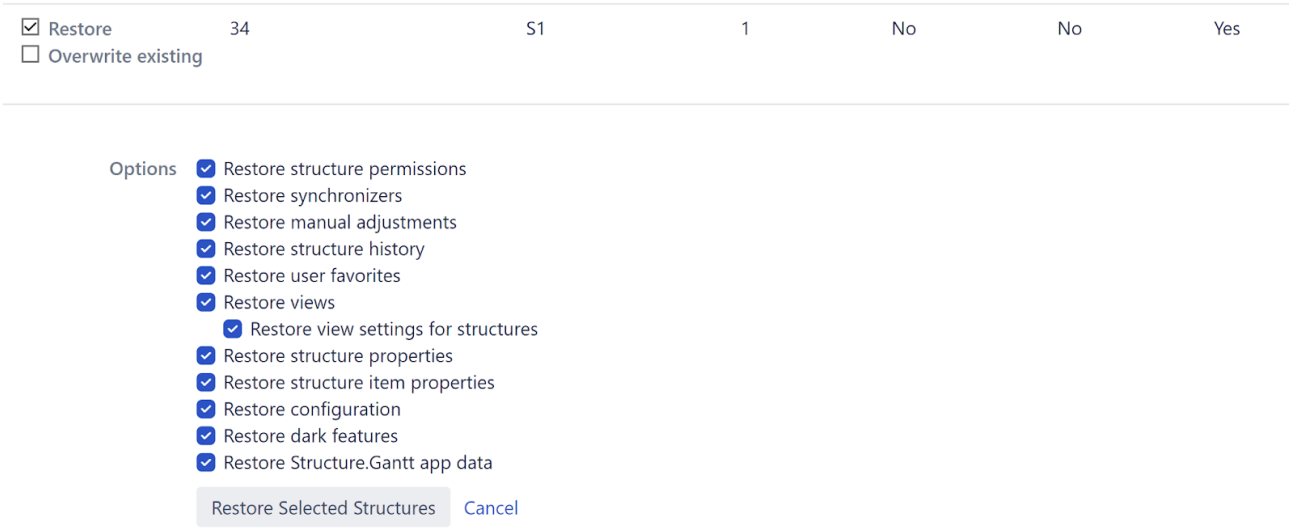
When you restore Structure data from a backup, any saved Gantt charts and data will also be restored.

Learn more: Restoring Structure from Backup[85]

3.7.1.1 Migrating Structure Data

When migrating Structure data from one on-prem instance to another, in order to include Gantt data, you need to select the **Restore Structure.Gantt app data** option.

84 https://wiki.almworks.com/display/structure/Backing+Up+Structure
85 https://wiki.almworks.com/display/structure/Restoring+Structure+from+Backup



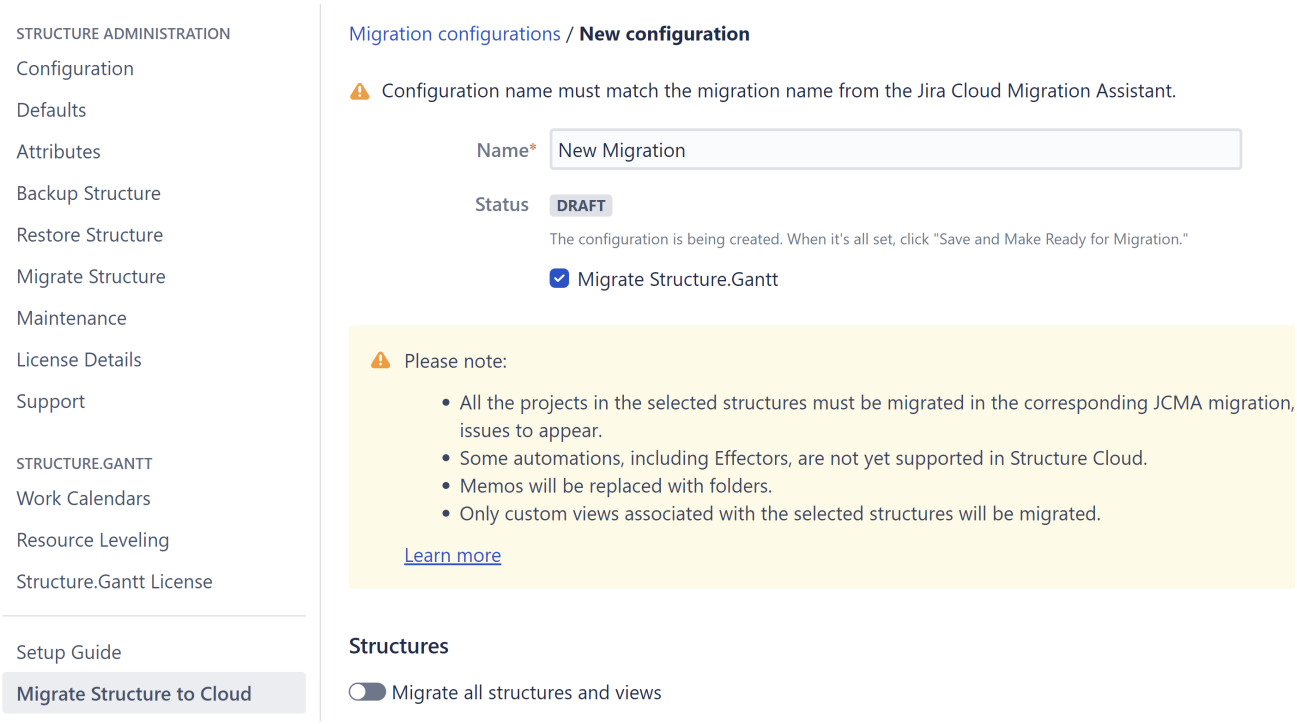
Sandbox history is not restored with a migration.

Learn more: Migrating Structures[86]

3.8 Migrate to Cloud

If you're moving to cloud using the Jira Cloud Migration Assistant, you can migrate your Gantt charts along with your structures. Just follow the Structure Migration Guide[87] and be sure to select "Migrate Structure.Gantt" in the configuration options.

86 https://wiki.almworks.com/display/structure/Migrating+Structures
87 https://wiki.almworks.com/display/strcloud/Migrating+to+Cloud+Using+the+Jira+Cloud+Migration+Assistant



3.8.1 Multiple Gantt Configurations

Structure.Gantt for Jira Cloud only has one Gantt configuration per structure. If you have multiple Gantt configurations for a structure on your DC/Server instance, the last-used configuration will be used when migrating to cloud.

3.8.2 Differences Between DC/Server and Cloud

We are continuously working to bring features from Structure.Gantt DC/Server to the cloud, and most of the features you use are already there. However, there are still some differences. Please be aware that the following features are currently not available in Structure.Gantt Cloud, and their corresponding attributes will not be migrated:

- Sandboxes
- Resource Leveling, including leveling priorities and leveling delays
- Formulas in Gantt configurations
- Custom chart markers

To learn more about the differences between Structure.Gantt for DC/Server and Structure.Gantt for Cloud, see Comparison to Structure.Gantt for Jira Server, Data Center[88].

88 https://wiki.almworks.com/display/gantt/Comparison+to+Structure.Gantt+for+Jira+Server%2C+Data+Center

4 Download

⚠ Structure App[89] version 7.4 or later is required to run Structure.Gantt.

4.1 Download Structure.Gantt

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	3.5.1	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.5.1.jar[90] md5 a70895fa2d59b314174e4675c58fc5ae	2022-12-21	2023-12-21

End-User License Agreement (PDF)[91]

End of Life:

- For beta and release candidate versions: Beta versions may be scheduled to expire after certain amount of time. In any case, the lifespan of such pre-release version is not supposed to be longer than 3 months. You will need to upgrade to a newer version before end-of-life.
- For other versions: You will be able to use this version of the plugin indefinitely, however, after end-of-life date, the support for the version is limited.

4.2 What's Next?

See Getting Started with Structure.Gantt(see page 19)

4.3 Documentation

Download documentation for Structure.Gantt version **3.1**:

File	Modified
Structure.Gantt 3.0 Documentation.pdf[92]	Oct 14, 2021 by Jaramy Conners[93]

89 https://marketplace.atlassian.com/plugins/com.almworks.jira.structure/server/overview
90 https://d1.almworks.com/.files/structure-gantt-3.5.1.jar
91 http://almworks.com/EULA-Structure.pdf
92 https://wiki.almworks.com/download/attachments/126026602/Structure.Gantt%203.0%20Documentation.pdf?api=v2
93 https://wiki.almworks.com/display/~jaramy

For previous versions of Structure.Gantt, see Version Index[94].

4.4 Download Archive

This page contains links to older version of the Structure.Gantt plugin.

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	3.5.1	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.5.1.jar[95] md5 a70895fa2d59b314174e4675c58fc5ae	2022-12-21	2023-12-21
Structure.Gantt	3.5.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.5.0.jar[96] md5 db74bf77b5ab4022360a3fa21e664d09	2022-11-21	2023-11-21
Structure.Gantt	3.4.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.4.0.jar[97] md5 68a5ac03e554dca75f6400110c2a0f94	2022-07-07	2023-07-07
Structure.Gantt	3.3.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.3.0.jar[98] md5 16625776bde9d6859040269052333a6c	2022-05-25	2023-05-25

94 https://wiki.almworks.com/display/docs/Structure.Gantt+Documentation
95 https://d1.almworks.com/.files/structure-gantt-3.5.1.jar
96 https://d1.almworks.com/.files/structure-gantt-3.5.0.jar
97 https://d1.almworks.com/.files/structure-gantt-3.4.0.jar
98 https://d1.almworks.com/.files/structure-gantt-3.3.0.jar

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	3.2.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.2.0.jar[99] md5 c1da67f42070f13912b3f04384d634d4	2022-03-14	2023-03-14
Structure.Gantt	3.1.0	Jira 8.5+ Structure 7.1.0+	structure-gantt-3.1.0.jar[100] md5 82321c510e765b9f08cc6d18cba87f9f	2021-11-26	2022-11-26
Structure.Gantt	3.0.1	Jira 8.5+ Structure 7.1.0+	structure-gantt-3.0.1.jar[101] md5 a31f683a1a1db8816003909279766eaa	2021-11-03	2022-11-03
Structure.Gantt	3.0.0	Jira 8.5+ Structure 7.1.0+	structure-gantt-3.0.0.jar[102] md5 b86dcb1a4df7db1ea702dcdd0b9bd346	2021-10-01	2022-10-01
Structure.Gantt	2.7.3	Jira 7.13+ Structure 6.4.0+	structure-gantt-2.7.3.jar[103] md5 9f2f6aaa2995c9dbc8b1c3011da64cff	2021-09-02	2022-09-02
Structure.Gantt	2.7.2	Jira 7.13+ Structure 6.4.0+	structure-gantt-2.7.2.jar[104] md5 5b25470fa91e4d1afb7099ba6e9d160b	2021-03-04	2022-03-04

99 https://d1.almworks.com/.files/structure-gantt-3.2.0.jar
100 https://d1.almworks.com/.files/structure-gantt-3.1.0.jar
101 https://d1.almworks.com/.files/structure-gantt-3.0.1.jar
102 https://d1.almworks.com/.files/structure-gantt-3.0.0.jar
103 https://d1.almworks.com/.files/structure-gantt-2.7.3.jar
104 https://d1.almworks.com/.files/structure-gantt-2.7.2.jar

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	2.7.1	Jira 7.13+ Structure 6.4.0+	structure-gantt-2.7.1.jar[105] md5 815eb2db5addd95b819e40d074bcbc86	2021-02-16	2022-02-16
Structure.Gantt	2.7.0	Jira 7.13+ Structure 6.4.0+	structure-gantt-2.7.0.jar[106] md5 adb6fae3f14faa3adedc7c2a660c7cc6	2020-12-07	2021-12-07
Structure.Gantt	2.6.0	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.6.0.jar[107] md5 4992634003f9629787b0756fc4039607	2020-11-05	2021-11-05
Structure.Gantt	2.5.2	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.2.jar[108] md5 4780b7629e2d3c0e2bb3e21ef08c5383	2020-08-26	2021-08-26
Structure.Gantt	2.5.1	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.1.jar[109] md5 584d57bc5762cd5190fc4d4231ad5bde	2020-08-17	2021-08-17
Structure.Gantt	2.5.0	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.0.jar[110] md5 c50a9896008c2fc8ee8b840bc3bad66b	2020-08-06	2021-08-06

105 https://d1.almworks.com/.files/structure-gantt-2.7.1.jar
106 https://d1.almworks.com/.files/structure-gantt-2.7.0.jar
107 https://d1.almworks.com/.files/structure-gantt-2.6.0.jar
108 https://d1.almworks.com/.files/structure-gantt-2.5.2.jar
109 https://d1.almworks.com/.files/structure-gantt-2.5.1.jar
110 https://d1.almworks.com/.files/structure-gantt-2.5.0.jar

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	2.4.1	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.4.1.jar[111] md5 255fb18403d2f1079899cee11ad3a0ec	2020-08-17	2021-08-17
Structure.Gantt	2.4.0	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.4.0.jar[112] md5 b27ee09ba8837e9371493d034c5bf56e	2020-05-19	2021-05-19
Structure.Gantt	2.3.0	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.3.0.jar[113] md5 c5765b171c605fe39fea0b0a36176dc1	2020-03-26	2021-03-26
Structure.Gantt	2.2.2	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.2.jar[114] md5 44b6d0aee8327d5083f4fc143505fa18	2020-08-17	2021-08-17
Structure.Gantt	2.2.1	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.1.jar[115] md5 95339d5f8b8c9b4cea3a210300c1681e	2020-02-17	2021-02-17
Structure.Gantt	2.2.0	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.0.jar[116] md5 58dd5106de5b6afaff015850832d9bbb	2020-01-23	2021-01-23

111 https://d1.almworks.com/.files/structure-gantt-2.4.1.jar
112 https://d1.almworks.com/.files/structure-gantt-2.4.0.jar
113 https://d1.almworks.com/.files/structure-gantt-2.3.0.jar
114 https://d1.almworks.com/.files/structure-gantt-2.2.2.jar
115 https://d1.almworks.com/.files/structure-gantt-2.2.1.jar
116 https://d1.almworks.com/.files/structure-gantt-2.2.0.jar

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	2.1.2	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.2.jar[117] md5 f3ea41ce0c9d7c777544b3415ea79fe8	2020-08-17	2021-08-17
Structure.Gantt	2.1.1	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.1.jar[118] md5 247d335328cf118a9dfad1f7f5375c5a	2019-11-18	2020-11-18
Structure.Gantt	2.1.0	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.0.jar[119] md5 8bfdcf75856726cd9bf8cdbc64878f66	2019-11-11	2020-11-11
Structure.Gantt	2.0.1	Jira 7.6+ Structure 5.5.0+	structure-gantt-2.0.1.jar[120] md5 2b23956d7f939c3eee469f4a3cfd46bd	2019-09-25	2020-09-25
Structure.Gantt	2.0.0	Jira 7.6+ Structure 5.5.0+	structure-gantt-2.0.0.jar[121] md5 b19e2c92bbf23ef987e3dc80936af126	2019-09-06	2020-09-06
Structure.Gantt	1.4.1	Jira 7.6+ Structure 5.3.0+	structure-gantt-1.4.1.jar[122] md5 96cfffa09a80d568f54e5425eb7e701d	2019-05-29	2020-05-29

117 https://d1.almworks.com/.files/structure-gantt-2.1.2.jar
118 https://d1.almworks.com/.files/structure-gantt-2.1.1.jar
119 https://d1.almworks.com/.files/structure-gantt-2.1.0.jar
120 https://d1.almworks.com/.files/structure-gantt-2.0.1.jar
121 https://d1.almworks.com/.files/structure-gantt-2.0.0.jar
122 https://d1.almworks.com/.files/structure-gantt-1.4.1.jar

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	1.4.0	Jira 7.6+ Structure 5.3.0+	structure-gantt-1.4.0.jar[123] md5 59de792659fc8c701896f6b23d4ecdea	2019-04-05	2020-04-05
Structure.Gantt	1.3.2	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.2.jar[124] md5 b313702b59b92d42b34f161edc44b31a	2018-12-29	2019-12-29
Structure.Gantt	1.3.1	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.1.jar[125] md5 e917819629c91ebce29f451017fa4aca	2018-12-11	2019-12-11
Structure.Gantt	1.3.0	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.0.jar[126] md5 3eb992f181993a3504245e2d72410ab0	2018-11-14	2019-11-14
Structure.Gantt	1.2.1	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.2.1.jar[127] md5 1a86fe8b88d63d97c959ca8f3244c943	2018-08-21	2019-08-21
Structure.Gantt	1.2.0	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.2.0.jar[128] md5 e8d3c476d2f501b836eab089fc8b0671	2018-07-18	2019-07-19

123 https://d1.almworks.com/.files/structure-gantt-1.4.0.jar
124 https://d1.almworks.com/.files/structure-gantt-1.3.2.jar
125 https://d1.almworks.com/.files/structure-gantt-1.3.1.jar
126 https://d1.almworks.com/.files/structure-gantt-1.3.0.jar
127 https://d1.almworks.com/.files/structure-gantt-1.2.1.jar
128 https://d1.almworks.com/.files/structure-gantt-1.2.0.jar

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	1.1.1	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.1.1.jar[129] md5 91b8a3b977b6e75b3be7dbc95ca3ec2a	2018-06-14	2019-06-14
Structure.Gantt	1.1.0	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.1.0.jar[130] md5 809247311df529c874360e6d427d71c7	2018-05-17	2019-05-17
Structure.Gantt	1.0.1	JIRA 7.2+ Structure 4.5.0+	structure-gantt-1.0.1.jar[131] md5 3362753649c095f401087a3dd8ab8833	2018-02-05	2019-02-05
Structure.Gantt	1.0.0	JIRA 7.2+ Structure 4.5.0+	structure-gantt-1.0.0.jar[132] md5 d68b5ec669b1b9d9e7107de0de2c103c	2017-12-29	2018-12-29
Structure.Gantt	0.7.0 (Beta)	JIRA 7.3+ Structure 4.2.0+	structure-gantt-0.7.0.jar[133] md5 c7c80e30c6e0ed86fe495f6ce145c9fe	2017-09-09	2018-03-09

End of Life:

- For beta versions: Beta versions are scheduled to expire after certain amount of time. You will need to upgrade to another Beta or Production version before that date.
- For other versions: You will be able to use this version of the plugin indefinitely, however, after End-of-Life date, the support for the version is limited.

129 https://d1.almworks.com/.files/structure-gantt-1.1.1.jar
130 https://d1.almworks.com/.files/structure-gantt-1.1.0.jar
131 https://d1.almworks.com/.files/structure-gantt-1.0.1.jar
132 https://d1.almworks.com/.files/structure-gantt-1.0.0.jar
133 https://d1.almworks.com/.files/structure-gantt-0.7.0.jar

5 Additional Resources

5.1 Structure.Gantt Roadmap

Updated On	January 2023
Next Update	February 2023

In this roadmap, we'd like to share some features the Structure.Gantt team is going to work on in the near to mid term. The scope of this roadmap is 6 months to 1 year.

A few notes and disclaimers about the roadmap:

- We only list **new, important functionality**– we are also going to work on other stuff, such as improving existing features, improving quality, improving user interface and adding minor features.
- This document lists only upcoming features in Structure.Gantt. We're also working on Structure for Jira and other Structure extensions, which have their own roadmaps.
- The roadmap is subject to change. We will update it periodically so it reflects our current vision.
- We only describe features briefly. If you are interested in the details of some specific feature or can provide feedback and ideas, please let us know at gantt@almworks.com[134]

It is our general approach at ALM Works to focus on the quality of the product. Sometimes this means delivering a product later or changing plans and priorities, as unexpected dependencies and challenges appear. Therefore, while we try to adhere to the announced roadmap, by no means should it be considered an obligation from ALM Works, and it should not be relied upon when making purchasing decisions.

If you have any questions about our roadmap policy, please write to info@almworks.com[135].

5.1.1 Versions and Dates

We generally aim to release a minor version of Structure.Gantt every 1-2 months and a major version every year. The following is an approximate release schedule for the scope of this roadmap.

Target	Jan'23	Mar'23
Version	3.6	3.7

134 mailto:info@almworks.com.
135 mailto:info@almworks.com

5.1.2 Roadmap

Here's the list of major features that we're planning to work on in Structure.Gatt 3.x series up until Structure.Gantt 4.0

- **Fiscal Year Support** – visualize fiscal year on the timeline header (✓ Structure.Gantt 2.7)
- **Jira-based Baselines** – baselines that are based on Jira Custom Fields or Structure Formulas (✓ Structure.Gantt 2.7)
- **Actual Task Start and Finish** – ability to see when work on a task started and when it was finished (✓ Structure.Gantt 2.7)
- **Sandbox Mode** – ability to play with "what-if" scenarios, without affecting the data seen by other users (✓ Structure.Gantt 3.0)
- **Custom colors** — ability to select custom colors for tasks and milestones (✓ Structure.Gantt 3.1)
- **Drag & drop support for more dependencies** — ability to create dependencies of all types using DnD (✓ Structure.Gantt 3.1)
- **Improved critical path visibility** — redesigned critical path for better visibility (✓ Structure.Gantt 3.2)
- **Baseline Start & Finish as Structure attributes** — ability to add Baseline data as Structure columns (✓ Structure.Gantt 3.3)
- **Improved baselines visibility** — redesigned baselines for a better visibility (✓ Structure.Gantt 3.3)
- **Future sprints with dates** — the dates for future sprints can now be taken from Jira (✓ Structure.Gantt 3.4)
- **Refined slices** — configuration slices will become easier to set up (✓ Structure.Gantt 3.5)
- **Custom chart markers** — ability to add the user markers on the timeline (✓ Structure.Gantt 3.5)

Planned for later:

- **Artificial tasks** — ability to create lightweight Gantt tasks that don't appear in Jira

5.2 Structure.Gantt Concepts Explained

The following articles will introduce some common Gantt chart concepts and practices, as well as some of the key behaviors specific to Structure.Gantt. This information is being provided to help Structure.Gantt users and administrators better understand the basic principles of the app, so they can get the most benefits from using it.

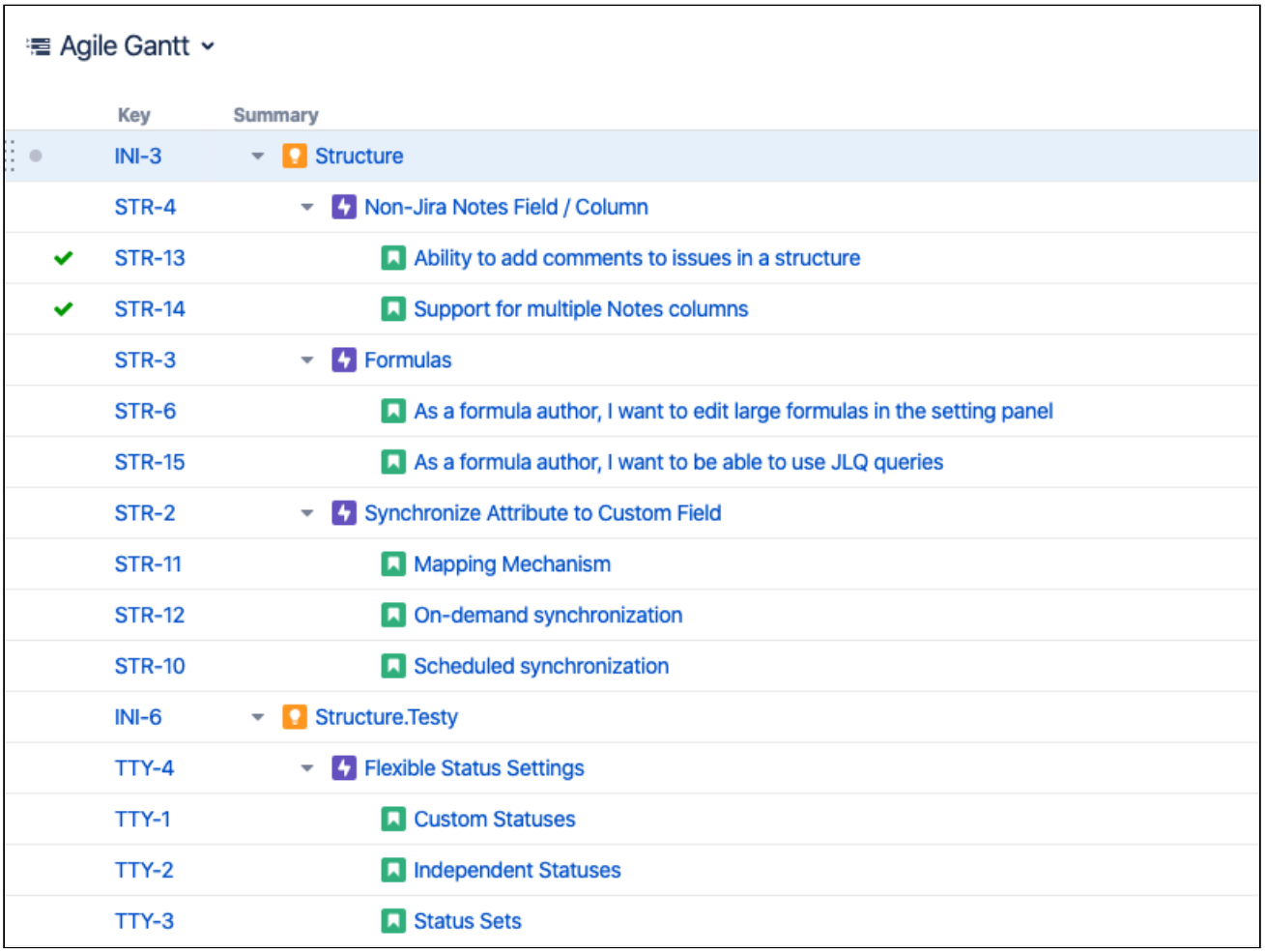
> **Data access and modification**
>
> Structure.Gantt depends mostly on Jira data, i.e. issues, their fields, issue links, fix versions and sprints defined in your Jira instance. Structure.Gantt reads that data to build and visualize schedules, show fix versions and sprints on the chart, and display resources. Structure.Gantt does not modify Jira data unless explicitly told to do so; it stores its own data (including configuration, baselines, etc.) separately from your Jira data and can be safely uninstalled at any time.

5.2.1 Work Breakdown Structure

Like all Gantt charts, Structure.Gantt has two basic parts: the list of tasks to schedule and the visual representation of these tasks on a timeline. The list of tasks is usually called a Work Breakdown Structure[136] or WBS, while the visualized schedule is the Gantt chart itself.

Work Breakdown Structure usually represents a hierarchy of tasks that are "broken" into smaller tasks. A typical WBS may look like this:

136 https://en.wikipedia.org/wiki/Work_breakdown_structure



Here you can see a three-level WBS: Initiatives are placed on top, then they're split into Epics and those are split into Stories. In some cases, the WBS might be much more complex, including items from several projects and possibly dozens of levels. Structure[137] enables users to easily build and maintain very complex dynamic hierarchies. For more information on building hierarchies, please refer to our Structure documentation[138].

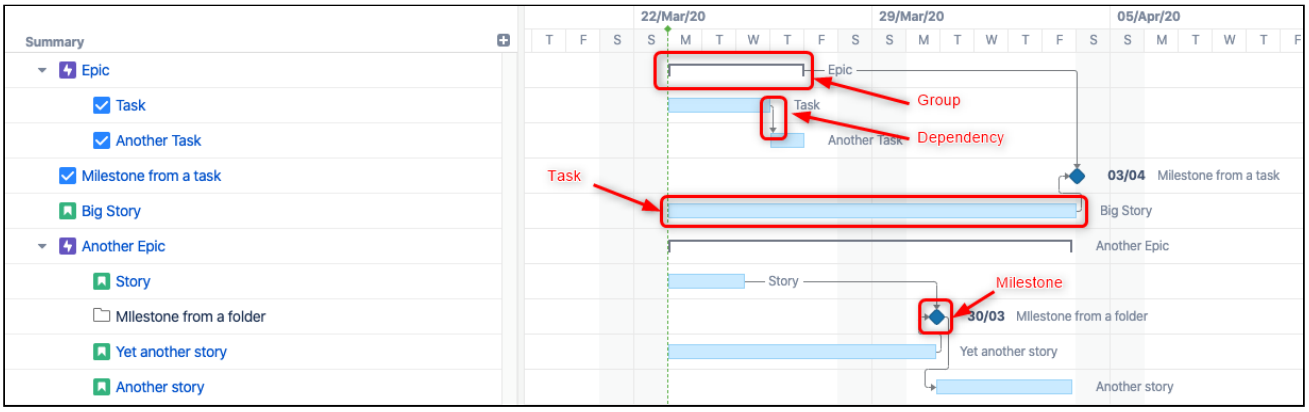
5.2.2 Chart elements

While the WBS contains your hierarchy of issues, the Gantt chart itself contains Tasks, Groups, Milestones and Dependencies, positioned on a timeline. Items of the hierarchy are transformed into Gantt chart elements.

- Tasks - The deepest-level issues within your hierarchy become task bars, by default.
- Groups - Non-issue items, such as Folders[139] and Memos[140], as well as issues containing sub-issues, become Groups, by default. A group starts at the earliest start date of its sub-items and ends at the latest end date.
- Milestones - Milestones(see page 115) allow you to mark key points within a project plan.
- Dependencies - Dependencies(see page 186) allow you to visualize links between issues and other items. Issue dependencies are mapped to Jira Issue Links, based on your chart configuration. Changes to issue links in

137 https://marketplace.atlassian.com/apps/34717/structure-project-management-at-scale
138 https://wiki.almworks.com/x/t7DrAQ
139 https://wiki.almworks.com/display/structure/.Folders+v7.4
140 https://wiki.almworks.com/display/structure/.Memo+vFUTURE-dc

Jira will change your Gantt chart, and changes to dependencies within the chart will change the issue links in Jira.



Read more on Gantt Chart Elements(see page 28).

5.2.3 Schedule

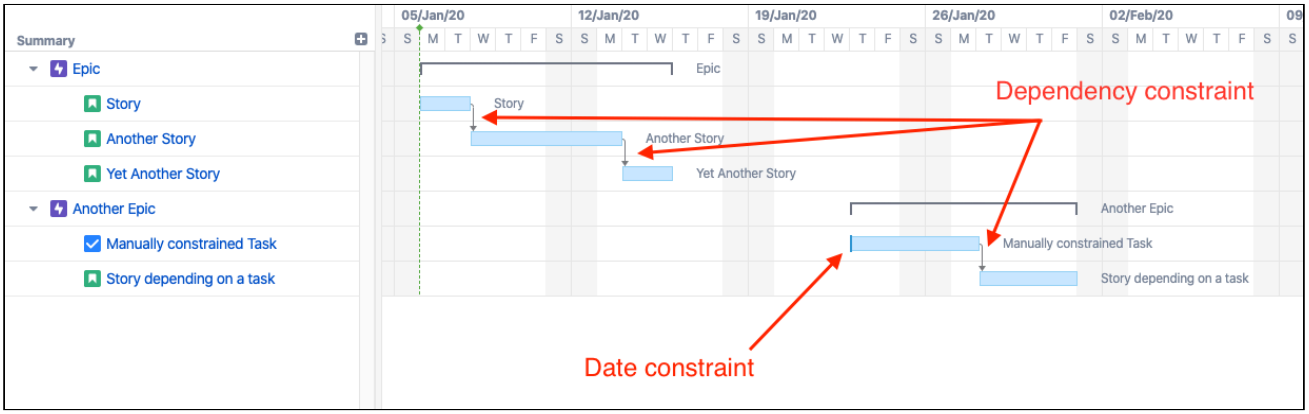
Elements that are visualized on the timeline form the Schedule. Within the schedule, every task or group of tasks has its own start and finish dates, and the project has a start date (configured in the chart settings) and finish date (the finish date of the latest task). Once visualized, the schedule can then be adjusted at any time to achieve desired outcomes.

There are several things Structure.Gantt takes into account while scheduling tasks:

1. Task duration and start or finish constraints
2. Dependencies between tasks
3. Project start day

While scheduling each particular task, Structure.Gantt does the following:

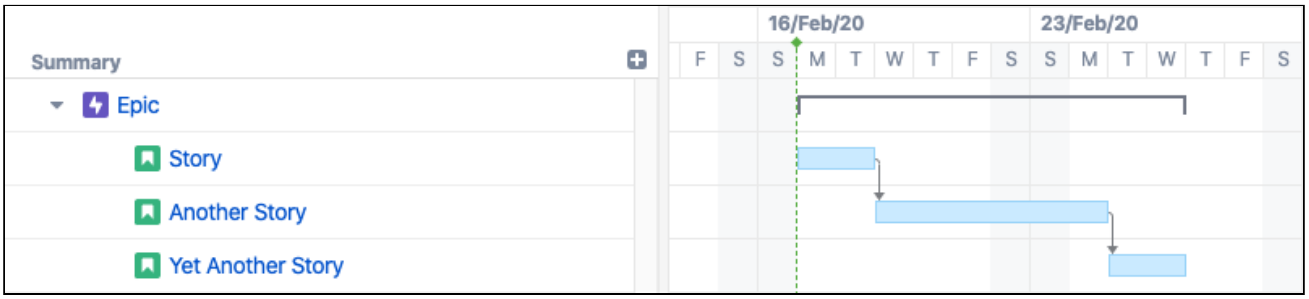
1. It takes the task and tries to determine its duration based on its properties (Work estimate, Resource assigned, etc.).
2. It looks for any start and/or finish constraints and schedules tasks based on those (see Automatic vs. Manual Scheduling(see page 190)).
3. If there is no start/finish constraints, it then looks for any dependencies that may affect its position and schedules accordingly (see Dependencies(see page 0)).
4. If there are no start/finish constraints or dependencies, the task is placed at the Project Start.
5. It repeats these steps for the next unscheduled task.



For the above example, the positions of all tasks except "Story" and "Manually constrained Task" are determined by their dependencies. The position for "Story" is set to be Project Start date, because it doesn't depend on anything and there are no date constraints set for the task. The position for "Manually constrained Task" is determined by its start date constraint.

5.2.3.1 Group Scheduling

Groups are scheduled based on their children. A group's start date is the earliest start date of it's children, and it's end date is the earliest end date of its children.

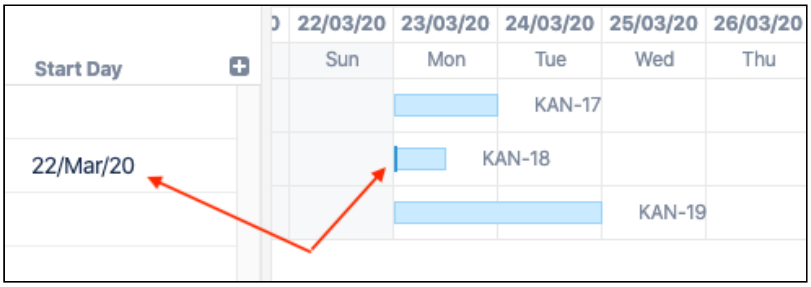


5.2.3.2 Task Adjustments Due to Non-working Time

In certain situations, Structure.Gantt may need to modify a task's schedule to accommodate for non-working time.

A task may be displayed with a different start date, finish date or duration in the following situations:

- A task has a manual start or manual finish date that is set to non-working time. In this case, the start/finish date will be adjusted to the first or last available working day, respectively.
- As you zoom in, non-working time can be collapsed, so that only working time is shown within a cell. For example, at a one-day zoom level, an 8-hour task will fill the entire cell (if you have an 8-hour schedule).



5.2.4 Automatic vs. Manual scheduling

Tasks can be scheduled automatically by Structure.Gantt, or they can be manually scheduled based on start and/or finish dates from a user-specified Jira field.

By default, tasks are *automatically* scheduled based on their predecessors (dependencies), sprint or the project start date (if there are no dependencies). Manual scheduling allows users to explicitly specify task and milestone positions on the timeline.

When manual scheduling is enabled:

- Tasks with start and/or finish dates listed within the Jira field(s) specified in the configuration will be scheduled based on those dates
- If there are no values provided for a task, it will be automatically scheduled

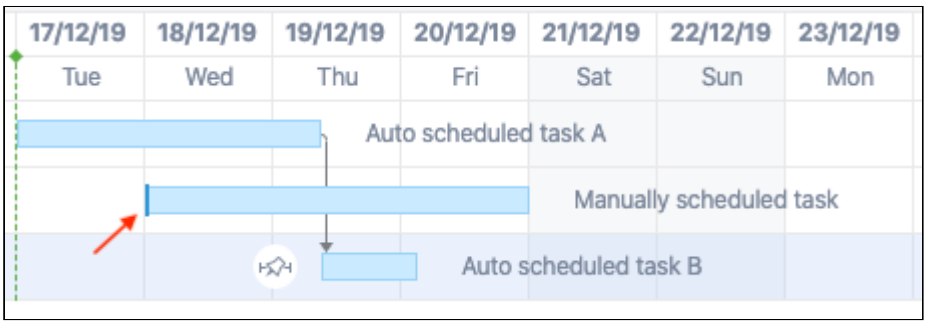
- Dragging a task within the chart will reschedule the task and update the associated Jira field
- Manually-scheduled tasks will remain fixed on the timeline, even when tasks they depend on change

Manual scheduling can be extremely useful for visual planning - just drag items around the chart to see what works - or when some dates are known beforehand, such as a fixed milestone date.

> Manually-scheduled tasks may be altered when Resource Leveling (see page 122)is run, if the leveling is set up to include manually-scheduled tasks.

5.2.4.1 Identifying automatic and manually scheduled tasks

Structure.Gantt provides some visual clues to help you identify tasks that have been manually and automatically scheduled.



A solid edge indicates the task is manually scheduled. The solid edge may appear at the beginning or end of a task, depending on whether the start or finish date is manually scheduled. If both the start and finish dates are manually scheduled, a line will appear on both sides, and the task will be treated as having a Fixed Duration(see page 96).

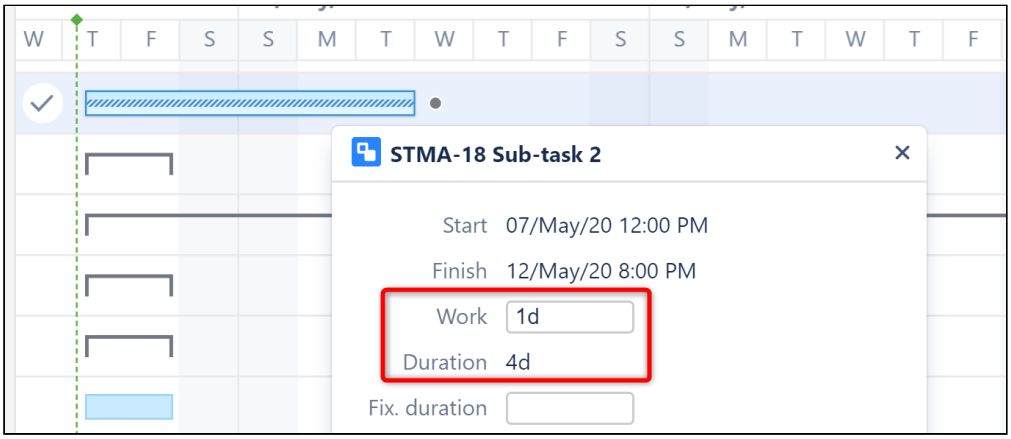
5.2.4.2 Manual Scheduling Mode

If Manual Scheduling is enabled, a task is automatically treated as manually scheduled if:

1. It has a value in at least one of the configured Start or Finish date fields.
2. It was not explicitly switched to Automatic scheduling in the Task Details Panel (see page 102)(doing so tells Structure.Gantt to ignore an existing manual value)

5.2.5 Work Estimate vs. Task Duration

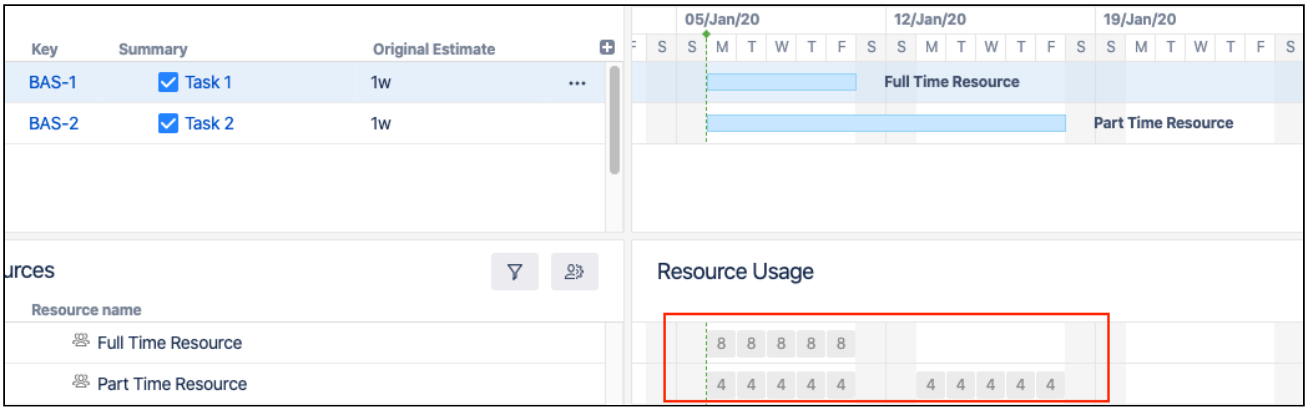
Work Estimate is an estimation of the effort required to complete a task. It does not take into account things like resource availability, work schedule, etc. Task Duration, on the other hand, is an actual projection of the task estimate, considering these other factors. For example, if Task A has a work estimate of 1 day (8 hours), it seems like it should be finished in a single day. But if it's assigned to someone who can only devote 2 hours a day to that project, the task's duration will be 4 days.



Any task goes through two phases:

1. Estimation phase: during this phase, a task is estimated without any particular knowledge about the work calendar or the resource assigned to it (this phase is done manually during a company/team's task estimation session)
2. Scheduling phase: during this phase, the task estimation, particular resource settings (including resource availability and capacity), work calendar and resource time zone are all used to schedule the task to get its calendar duration

In the following screenshot, two tasks, both with 1-week (40 hours) work estimates, are scheduled on the timeline. Notice that Task 2 has a much longer duration, because it's resource is available for fewer hours each day:



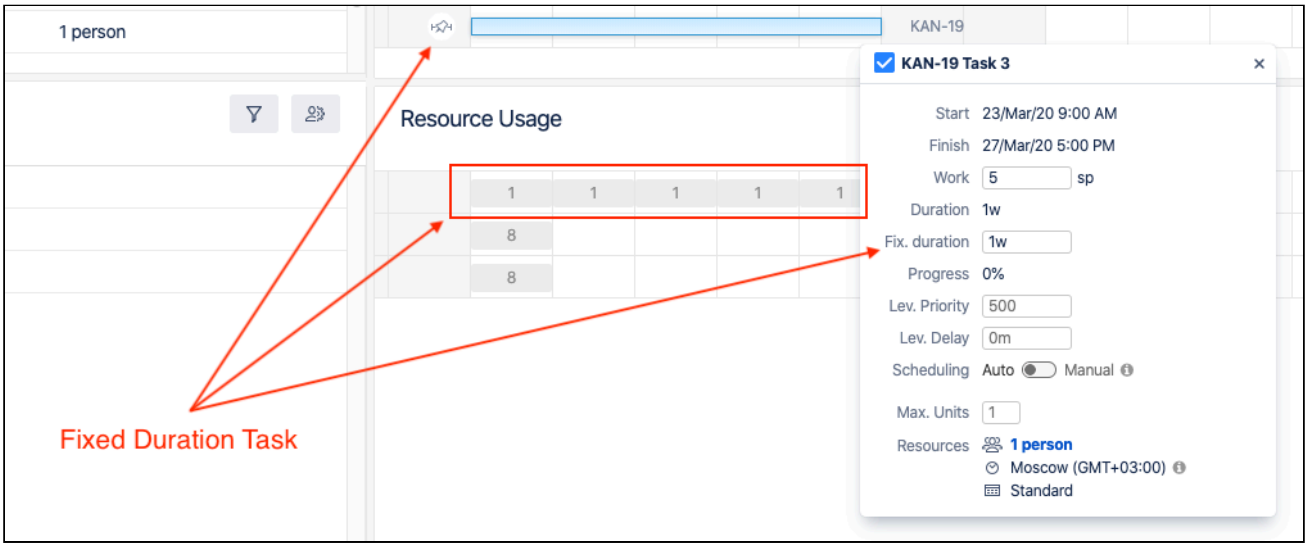
5.2.5.1 Fixed Duration

There are times when you may want to allot more time for a task than the amount of work required - for example, you may not need a task finished for three weeks, even though it will only take someone a week to complete it. Or you may schedule several tasks to a sprint, and it doesn't matter when each individual task is started or finished, as long as every task gets finished during the sprint.

In such cases, the task can be assigned to a fixed duration(see page 96):

- Users can set a fixed duration by manually assigning a start and finish date, or by entering a fixed duration in the Task Details Panel.
- Fixed durations will be assigned automatically when you use sprint-based scheduling(see page 91).

When a task has a fixed duration, Structure.Gantt distributes the work load evenly across the allotted period of time (taking calendar and availability into account as well). Changes to its work estimate will not affect its duration or its position on the timeline.



If you drag the edge of a fixed duration task, you adjust it's duration but do not change the work required to complete the task. For other tasks (without fixed duration), dragging the edge will adjust the work requirement and, therefore, its duration.

5.2.6 Resources

Task estimates and dependencies may not be enough to properly schedule a task. The resource(s) available to work on that task could also affect how long it will take to complete. Most often, those resources are individual team members (such as the Assignee in Jira), but they might also be a team or some other type of resource. Structure.Gantt uses Jira fields, such as the Assignee field or another custom field, to assign resources to tasks.

Each resource has several properties:

- Capacity
- Availability
- Work Calendar
- Time Zone

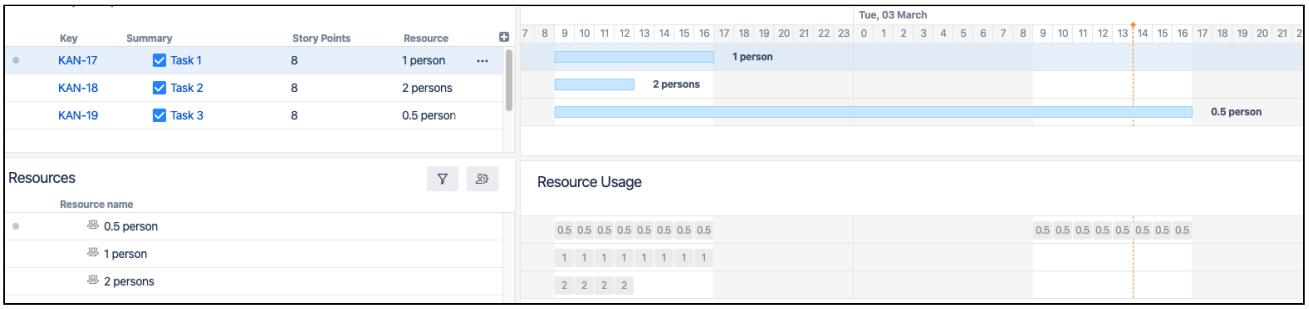
It is not necessary to configure resources for Structure.Gantt. By default, all tasks are assigned to "Default Resource" - this is simply a common resource settings used to properly schedule the unassigned tasks, so tasks will still be treated as unassigned and there were will not be any allocation info shown in the Allocation Chart.

5.2.6.1 Resource Units (Capacity)

Resource Units determine how much work a resource can handle - it's capacity. In Structure.Gantt, resource capacity is based on a scale of 1 unit = 1 person with full availability. This means:

- A resource with a capacity of 1 can complete 1 hour of work per hour

- If you have 8 hours of work time per day, such a resource will be able to complete 8 hours of work each day
- A resource with 0.5 units (i.e. a part-time worker) can only complete 4 hours of work during an 8-hour day
- A resource with 2 units (i.e. a team of 2) can complete 16 hours of work each day



5.2.6.2 Availability

It is possible to further fine-tune resource capacity by specifying its Availability. Availability is specified in percents for a particular time range. For example:

- If a resource is on vacation, you can add an availability period with 0% availability for that time period.
- If your team has an extra person joining for a particular period of time, you can create an increased team capacity period with the corresponding percentage, which will be higher than 100%.

> Availability is calculated based on the resource capacity. For example, specifying 200% for a resource with a capacity of 2 units will temporarily increase its capacity to 4 units.

5.2.6.3 Work Calendar and Time Zone

The work calendar defines the work schedule, which includes working hours, weekends and national holidays. It defines the base schedules across multiple resources.

Time Zones are useful if you have global teams.

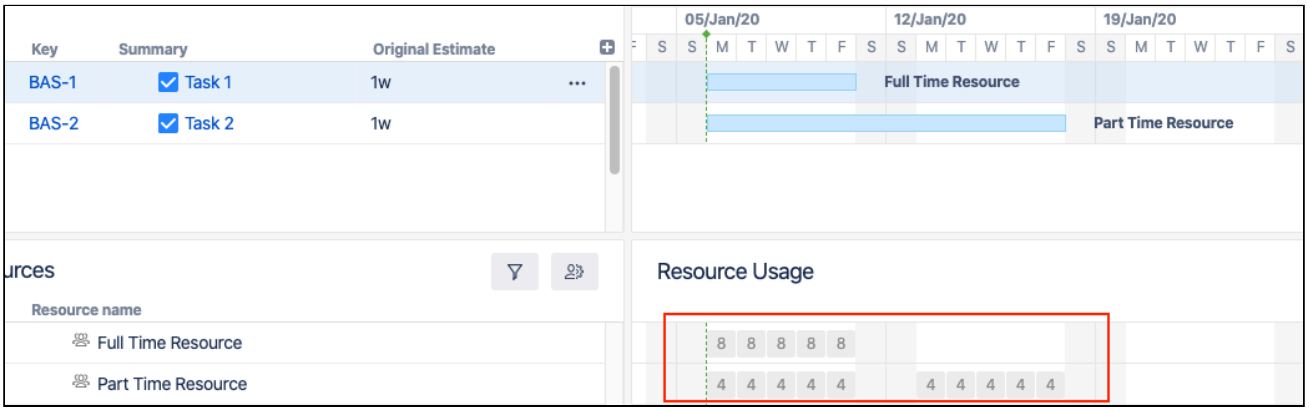
5.2.6.4 Task's Maximum Units

Resource Units determine the capacity of a resource, while Task Maximum Units determines what maximum part of a resource can be allocated for a task. This means:

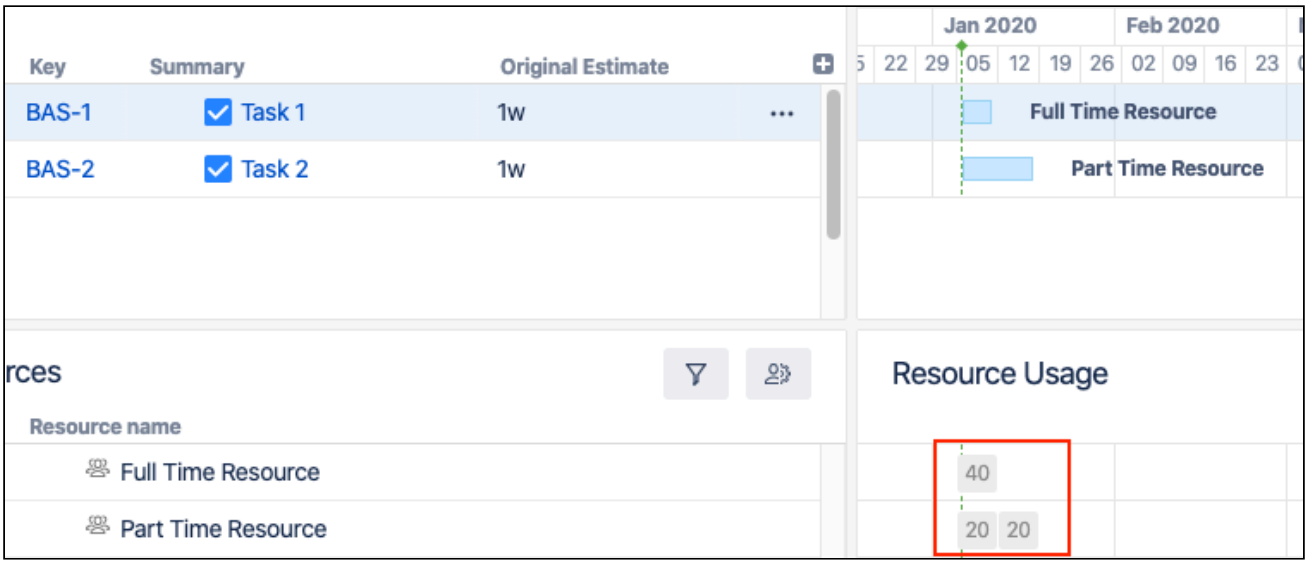
- If you have a resource with a capacity of 2 units and a task's maximum units is set to 1, that means that only 1 unit of the resource will be allocated for the task and the remaining unit will remain available.
- If you have a resource with a capacity of 1 unit and a task's maximum units is set to 2, the full resource will be used on the task (1 unit) and the task duration will be calculated based on the capacity of this resource.
- Assigning a resource with higher capacity will reduce the time needed to complete the task. If you assign a resource with a capacity of 2, the task will be done twice as fast. If you assign a resource with a capacity of 3, it won't speed up the completion further, since only 2 units of this resource will be allocated and one will remain available.

5.2.6.5 Resource Usage

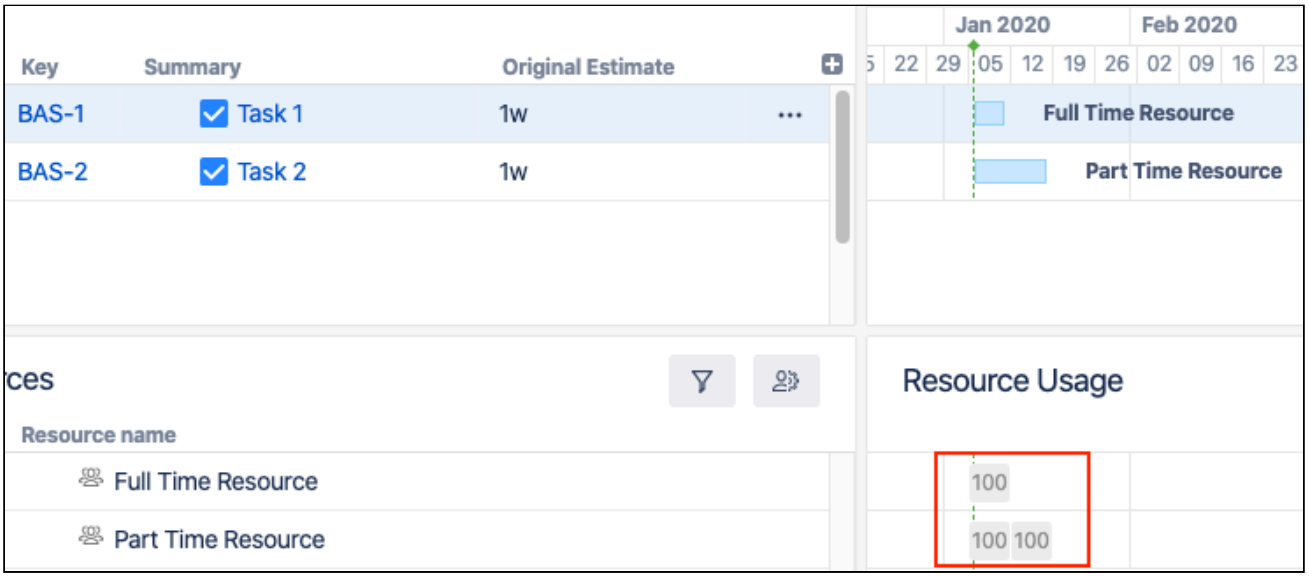
The Resource Usage section of the Gantt chart shows how much of a resource's time is allocated during a set time frame. In the following screenshot, "Full Time Resource" is allocated for 8 hours each day, while "Part Time Resource" is allocated for only 4 hours.



The period of time each usage square represents depends on the chart's zoom level, so zooming out will show different values for the same resources and tasks:



You can also display resource allocation in terms of percentages - how much of each resource's total capacity is assigned during the set time. You'll notice that in this example, both resources are at 100% allocation, even though "Part Time Resource" is assigned half as much work as "Full Time Resource" at any given time - this is because "Part Time" has a lower resource capacity (see Resource Units (see page 193)above).



A resource is treated as **underallocated** if it still has the capacity to do more work during a block of time (it's allocation is less than 100%). A resource is considered **overallocated** if it's workload exceeds its capacity during a block of time (it's allocation is over 100%).

5.2.7 Resource Leveling

Resource Leveling allows you to automatically manage overallocation, while still respecting each task's duration and dependencies. When a resource is assigned to more work than it has the capacity to handle at a given time, Resource Leveling will shift some tasks forward on the timeline to reducing the resource allocation.

When you run Resource Leveling, Structure.Gantt looks for points of overallocation. It then takes the following steps to resolve each:

1. Identify all the tasks affected by the overallocation - those tasks assigned to the same resource at the same time
2. Determine which of the tasks have to be completed earlier (based on dependencies, their leveling priorities, completeness, etc.) and keep them in place
3. Shift other tasks forward to resolve the overallocation
4. If additional overallocations remain, repeat the process

Read more about Resource Leveling(see page 122).

5.2.7.1 Leveling Priority

Assigning Leveling Priorities for tasks helps Structure.Gantt decide which tasks are more important or should be completed sooner. Tasks with higher priorities are less likely to be moved by Resource Leveling.

5.2.7.2 Leveling Delay

The Leveling Delay is an offset that is added to a task to shift it forward when you run Resource Leveling. You can change a task's Leveling Delay to make adjustments to a Resource Leveling operation without making the task manually scheduled.

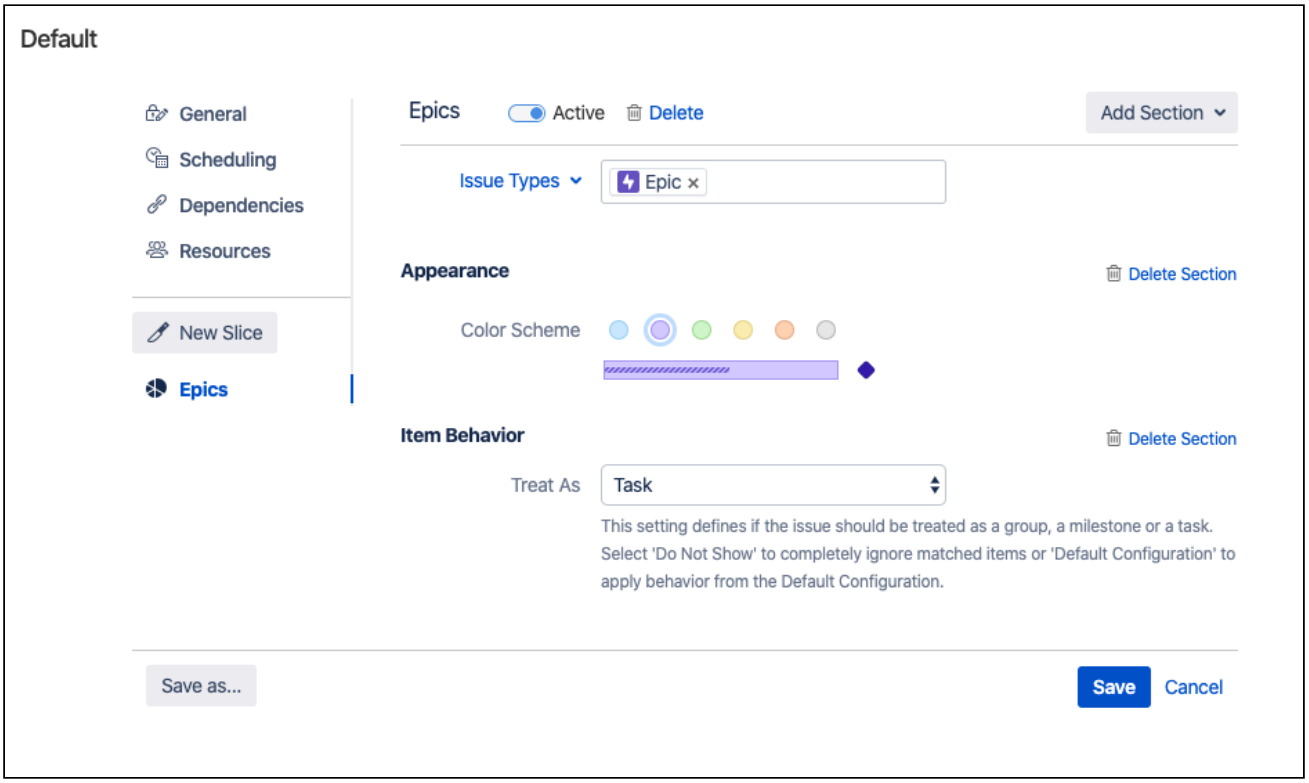
Leveling Delay values are stored in Structure.Gantt's own storage and are independent from other task properties, such as Manual Start Date or Manual Finish Date.

5.2.8 Customizing the Chart with Configuration Slices

The Gantt configuration(see page 186) defines how items are scheduled and displayed within the Gantt chart. If your WBS includes items from multiple projects or teams, it may be necessary to have some custom setting for certain projects, teams, or issues. For example:

- Each project may use different custom fields to assign resources
- Some teams may use different custom fields, link types, etc.
- Sprints may have different names or timelines

Configuration Slices allow you to define specific settings for a subset of items, thus overriding the main Gantt configuration. For example, you can set a unique Leveling Delay setting for one project, use different link types for another, and change the color of certain issue types to highlight them within the chart.



In the above screenshot, we've created a slice that affects all epics in the chart. If an item's issue type is Epic, the chart will:

- Color the item purple
- Treat the item as a task even if they have child stories beneath them in the WBS

Aside from these two custom settings, epics in our chart will follow all other setting from our main configuration.

> If you have more than one slice applied to a configuration, they are processed from top to bottom and *only one slice can be applied to an item at the same time*. This means if an item matches the criteria for more than one slice, only the topmost matching slice will affect the item; all other slices will be ignored for that item. See Order of Operation(see page 81) for more information.

Learn more about Slice-based Configurations(see page 71).

5.2.9 Work Calendars

Options for defining a calendar in Jira are limited to the number of hours in a working day and the number of working days in a single week. That's often not enough for real-world planning of multiple resources with different schedules, so Structure.Gantt allows you to:

- Have several work calendars
- Fine tune the availability for individual resources - see Availability(see page 194) above

Adding multiple work calendars to a Gantt configuration allows you to more precisely control common resource schedules and work with resources of different work schedules. This means you can easily track resources available 24 hours a day alongside resources only available during normal business hours.

Learn more about Calendars(see page 67).

5.2.9.1 Best practices for creating calendars

When creating multiple calendars, we recommend starting with a basic calendar that includes universal times or dates, such as national holidays. Using this as the base, you can then create multiple variations to define working hours for resources of different shifts, keeping the holidays the same.

Once you have several common calendars, specify individual vacations and other availability periods using Resource settings, rather than creating a unique calendar for every resource.

5.2.9.2 Day and Week Conversions in Jira and in Structure.Gantt

Jira allows you to specify a conversion for hours in a work day and working days in a week, which are used when you work with things like estimates, time spent and other time-related values. These conversion ratios are used across the entire app for representing time in a readable format (for example, 2d 1h instead of 17h). Structure.Gantt uses these same conversions for Day and Week, in order to maintain consistency within the Jira environment.

Even though Structure.Gantt provides its own calendars (which may contain a different number of hours per day or working days per week), all time values will still be converted into days and weeks using your Jira settings.

Let's see how this can affect your chart:

- You have configured Jira to have 8 hours of work per day and 5 day of work per week
- You have created a Structure.Gantt calendar for a half-time resource, with only 4 work hours per day
- You create a task with a "1 day" work estimate
- You assign that task to your half-time resource

Even though this is a "1 day" task, before Structure.Gantt places it on the timeline, it first needs to convert it into hours, using your Jira settings - which say that 1 day = 8 hours. So that "1 day" task is actually an "8 hour" task, and since your half-time resource only works 4 hours per day, it will be scheduled for 2 days on your chart.

5.2.10 More reading

To learn more about creating and configuring a Gantt chart, see Creating a New Gantt Chart(see page 186) and 2021-12-08_16-30-23_Gantt Configuration(see page 186).

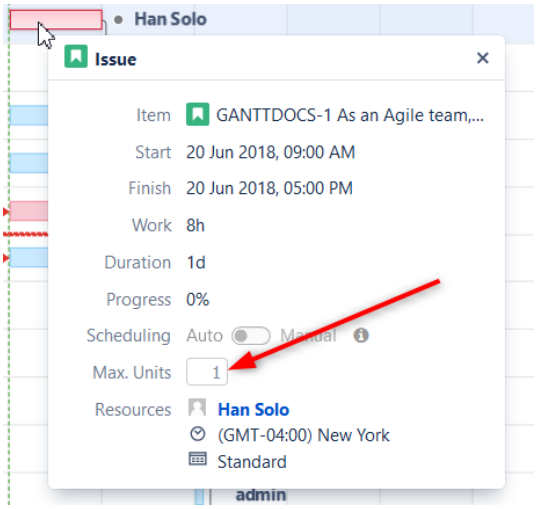
5.3 FAQ

5.3.1 Does Structure.Gantt support Jira Data Center?

Both Structure and Structure.Gantt support Jira Data Center.

5.3.2 I have increased the capacity (Units) of the resource, but the task still takes the same amount of time to complete

This can happen if the Maximum Units value for the task is set to a number smaller than the resource capacity. To check and/or update the task's Maximum Units, click the task in the Gantt chart and locate the **Max. Unit** value in the Task Details Popup.



This Max. Units value defines the maximum number of resource units that can be allocated for the task.

- To learn more about setting an individual task's Maximum Units, see Gantt Chart Elements(see page 28)
- To learn about setting the default Maximum Units value, see Gantt Configuration | Resources(see page 64).

5.3.3 Does Structure.Gantt support Advanced Roadmaps hierarchy?

The work breakdown structure used for building your Gantt chart is created using the Structure app functionality, which supports Parent links used in Advanced Roadmaps plans.

To learn more about visualizing Parent links, see Child Issues (Advanced Roadmaps) Extender[141].

141 https://wiki.almworks.com/display/structure/.Child+Issues+%28Advanced+Roadmaps%29+Extender+vFUTURE-dc

5.4 Features

Structure.Gantt is a relatively new product at the beginning of its journey. Our goal is to continuously improve the power of Structure.Gantt and the benefits it provides, with each new release.

The following features are available in Structure.Gantt.

- Responsive, configurable, visual **Timeline**, showing tasks, dependencies and more
- Structure-generated work breakdown structures with folders and unlimited hierarchy
- Finish-to-Start, Finish-to-Finish, Start-to-Start and Start-to-Finish dependencies
- **Critical Path** highlighting
- Milestones
- **Automatic Scheduling** driven by dependencies (as-soon-as-possible mode)
- **Resource Leveling** to automatically solve overallocations
- **Sprint-based Scheduling**
- **Manual Scheduling** based on custom fields
- **Baselines** to track changes over time
- Effort estimation ("Work" value) based on **Time Tracking**, **Story Points**, a mix of both, or any other attribute or formula
- Flexible **Resource Allocation** charts based on the Assignee field, custom fields, or a Structure formula
- Per-resource time zone support and configurable calendars
- Flexible capacity management for resources via a **Units** value (number of people on a team), an **Availability** schedule (vacation, illness, etc.), and **Max. Units** that can be applied to tasks
- Progress based on Time Tracking, Story Points, or any other attribute or formula
- **Slices** to create different configurations for different issue types
- Gantt chart sharing based on Structure permissions settings
- Printing and Exporting
- Gadgets for Jira Dashboard and Confluence
- What-if Exploration *(what happens if I change these values)*
- Actual Start and Finish dates

5.5 Other Versions

Looking for a different version of Structure? Select your platform and version number at the top of the screen.

Or select your version below:

- Structure.Gantt for Jira Cloud[142]
- Structure.Gantt for Jira Data Center and Server[143]
- For Data Center or Server versions prior to 3.0, please refer to the Version Index[144].

142 https://wiki.almworks.com/documentation/gantt/latest/cloud/structure-gantt-130875852.html
143 https://wiki.almworks.com/documentation/gantt/latest/data-center-and-server/structure-gantt-130875852.html
144 https://wiki.almworks.com/display/docs/Structure.Gantt+Documentation

6 Release Notes

6.1 Structure.Gantt 3.5 Release Notes

21th of November, 2022

Structure.Gantt 3.5 introduces migration to cloud, custom chart markers, and a refined Slices interface.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[145]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[146]

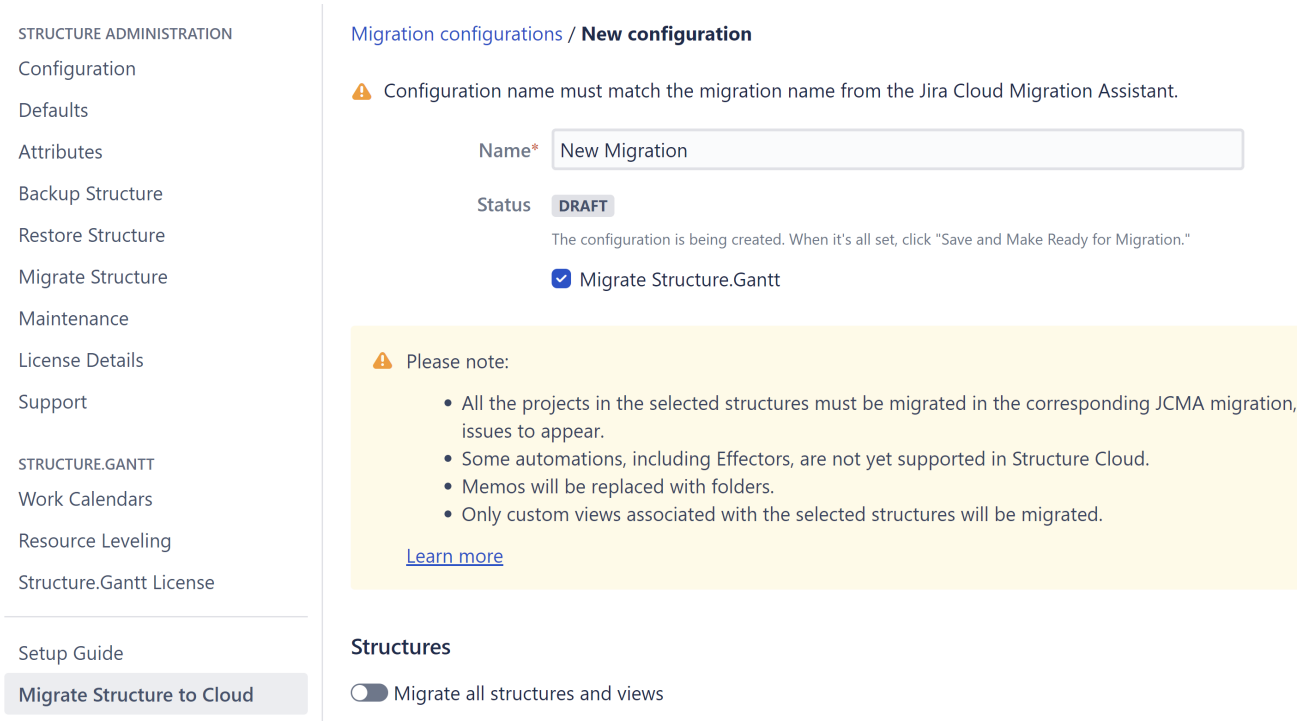
6.1.1 Version Highlights

- Migration to cloud
- Custom chart markers
- Refined Slices
- Other fixes and improvements

6.1.2 Changes in Detail

6.1.2.1 Migration to Cloud

Server/DC users who migrate their structures to cloud can now migrate their corresponding Gantt charts too.

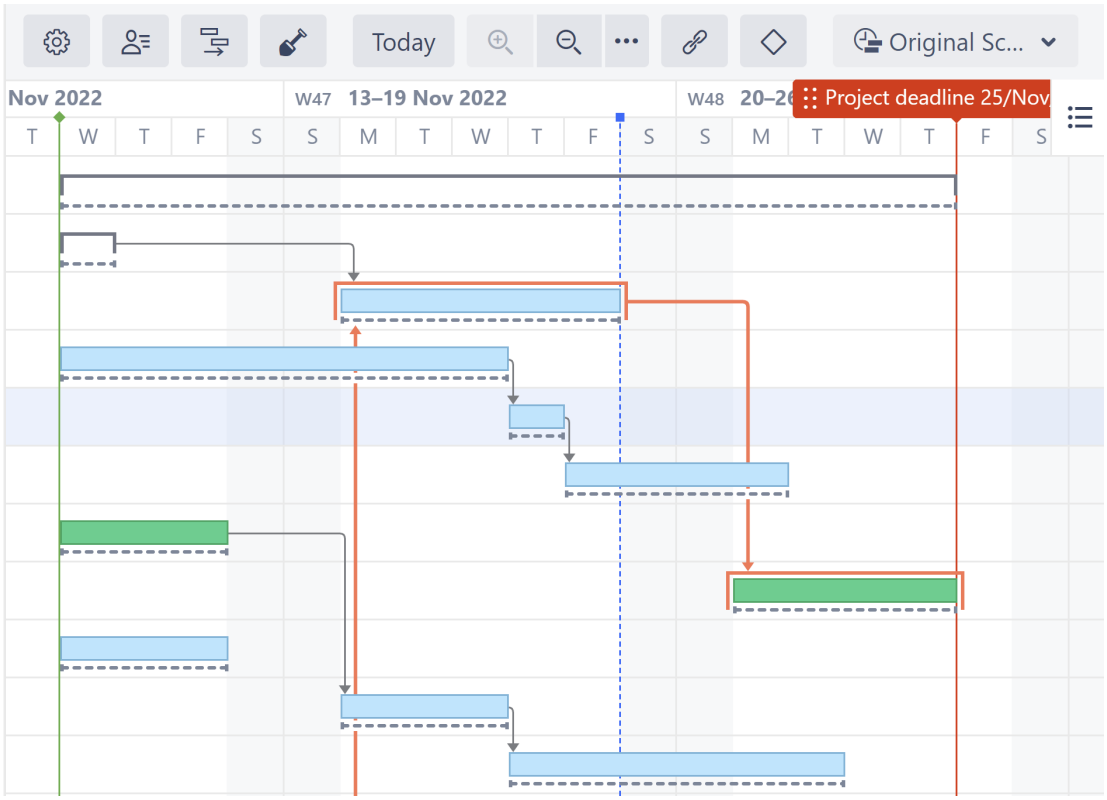


Documentation: Migrate to Cloud(see page 175)

6.1.2.2 Custom chart markers

Track important events or milestones on a chart by placing custom markers on the timeline. Custom markers can be created by double-clicking the Gantt timeline or adding them on the Chart Settings screen.

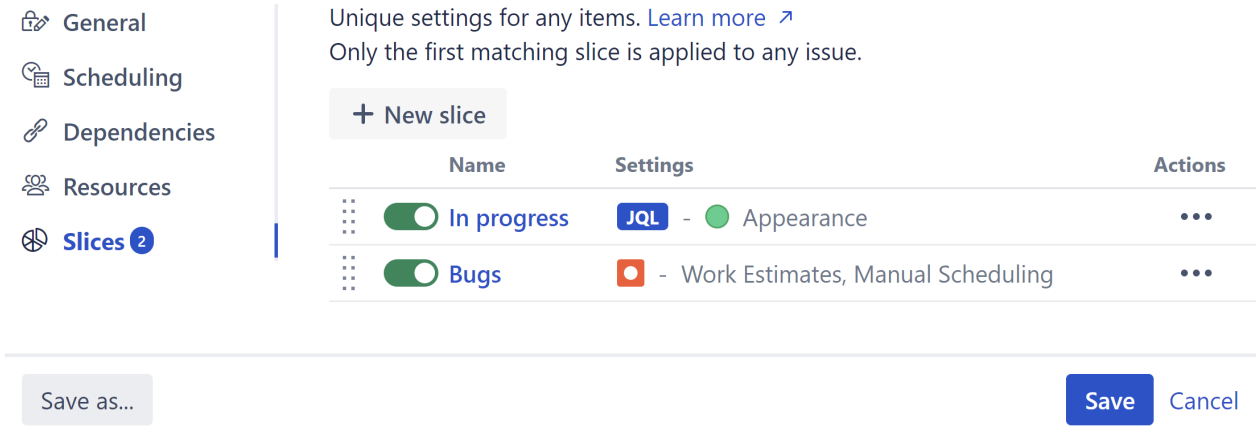
145 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
146 http://alm.works/gantt-demo



Documentation: Gantt Chart Settings(see page 43)

6.1.2.3 Refined Slices

Fine-tuning your chart behavior just became easier. We've redesigned the Slices experience to make it easier to track, manage, and apply slice-based configurations to a chart.



Documentation: Slice-based Configurations(see page 71)

6.1.2.4 Notable Improvements and Fixes

- Shades of grey have been added to the black and white color scheme in the chart export
- If a project is not available to user, fix version markers are not shown
- Better performance for Agile Gantt charts

6.1.3 Supported Versions

Structure.Gantt 3.5 requires Structure 7.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.13 or later. Jira Data Center is also supported.

6.1.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.1.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.
- Sandbox mode: Tempo fields are not yet fully supported; it is possible to adjust them in Sandbox mode, but it is not possible to merge their values with the Original schedule.
- Sandbox mode: Moving tasks between sprints is supported within the same board only.
- Gantt migration/partial restore doesn't restore the sandbox history.
- During migration to cloud attributes, dependencies, and baselines for generated "Not an issue" folders are not migrated.

6.1.6 Enterprise Deployment Notes

Structure.Gantt 3.5 does not add any changes in terms of stability or performance compared to 3.4. There are no particular special areas of interest for load testing and stress testing. We advise running the same testing procedures as you've done for previous upgrades.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[147] .

147 mailto:support@almworks.com

6.1.7 Structure.Gantt 3.5.1 Release Notes

21st of December, 2022

Structure.Gantt 3.5.1 is a patch release for Structure.Gantt 3.5.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[148]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[149]

6.1.7.1 Patch Release

Structure.Gantt 3.5.1 is a patch release for Structure.Gantt 3.5.0. It provides:

- Fixed: Unable to delete a slice from the slice edit page
- Added: Structure Bundle compatibility

6.1.7.2 Supported Versions

Structure.Gantt 3.5.1 requires Structure 7.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.13 or later. Jira Data Center is also supported.

6.1.7.3 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

6.1.7.4 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring any changes compared to version 3.5.0 We advise you to perform the usual testing on a staging server.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[150] .

6.2 Structure.Gantt 3.4 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[151]

148 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
149 http://alm.works/gantt-demo
150 mailto:support@almworks.com
151 http://alm.works/covid19

7th of July, 2022

Structure.Gantt 3.4 adds a new timeline visualization for parallel sprints and the ability to use dates from Jira for future sprints

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[152]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[153]

6.2.1 Version Highlights

- New parallel sprints visualization
- Future sprints dates from Jira
- Other fixes and improvements

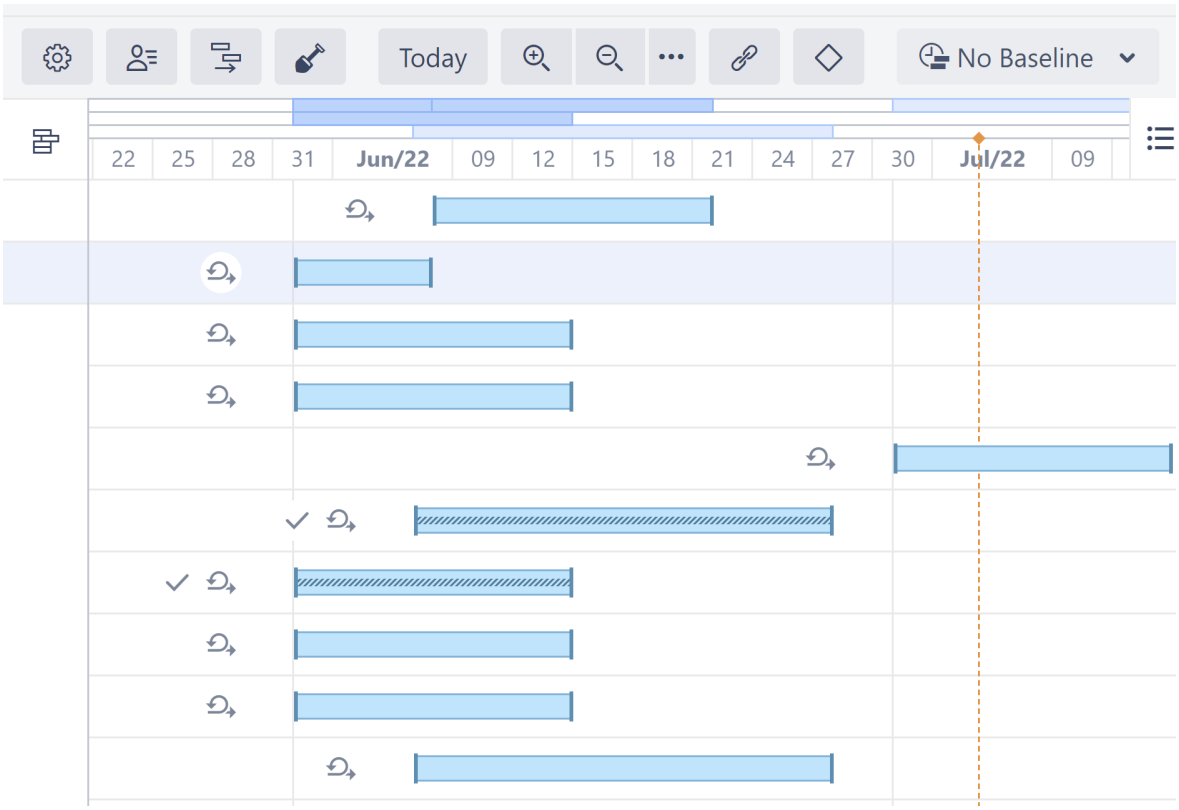
6.2.2 Changes in Detail

6.2.2.1 Parallel Sprints Visualization

Parallel sprints don't always line up. One team might start on Monday, another Wednesday. Some sprints run two weeks, others one. Keeping track of all those timelines can be a nightmare - especially if you're trying to manage shared resources across the different sprints.

But now Structure.Gantt can visualize parallel sprints with up to 5 unique start/end dates, allowing you to seamlessly manage unique timelines and resources!

152 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
153 http://alm.works/gantt-demo

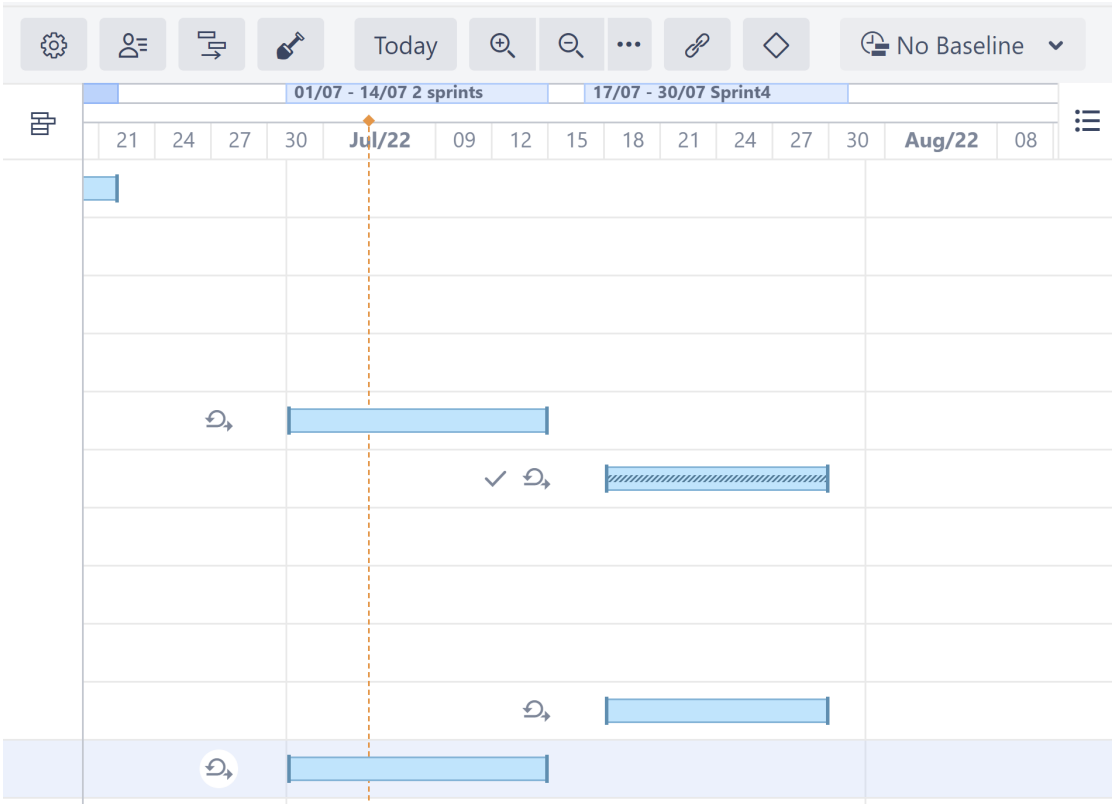


Documentation: Planning with Sprints[154]

6.2.2.2 Future Sprint Dates from Jira

Dates for future sprints are now based on your sprint settings in Jira.

154 https://wiki.almworks.com/documentation/gantt/latest/data-center-and-server/planning-with-sprints-130876288.html



If you prefer, you can still configure your own sprint dates, and use those instead of the dates in Jira.

> Existing Gantt charts will continue to use the Gantt-configured sprint dates. To switch those to the new behavior (and use sprint dates from Jira), disable the "Use custom dates for future sprints, instead of Jira dates" checkbox in the chart settings.

Documentation: Planning with Sprints[155], Sprint Scheduling(see page 45)

6.2.2.3 Notable Improvements and Fixes

- Resolved tasks now contribute to the critical path
- Memo colors are now included when exporting a chart(see page 150)

6.2.3 Supported Versions

Structure.Gantt 3.4 requires Structure 7.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.13 or later. Jira Data Center is also supported.

155 https://wiki.almworks.com/documentation/gantt/latest/data-center-and-server/planning-with-sprints-130876288.html

6.2.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.2.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.
- Sandbox mode: Tempo fields are not yet fully supported; it is possible to adjust them in Sandbox mode, but it is not possible to merge their values with the Original schedule.
- Sandbox mode: Moving tasks between sprints is supported within the same board only.
- Gantt migration/partial restore doesn't restore the sandbox history.

6.2.6 Enterprise Deployment Notes

Structure.Gantt 3.4 does not add any changes in terms of stability or performance compared to 3.3. There are no particular special areas of interest for load testing and stress testing. We advise running the same testing procedures as you've done for previous upgrades.

> ⓘ Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[156] .

6.3 Structure.Gantt 3.3 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[157]

> ⓘ **25th of May, 2022**
>
> Structure.Gantt 3.3 adds baseline start and finish attributes in Structure, and a new baseline visualization

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[158]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[159]

156 mailto:support@almworks.com
157 http://alm.works/covid19
158 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
159 http://alm.works/gantt-demo

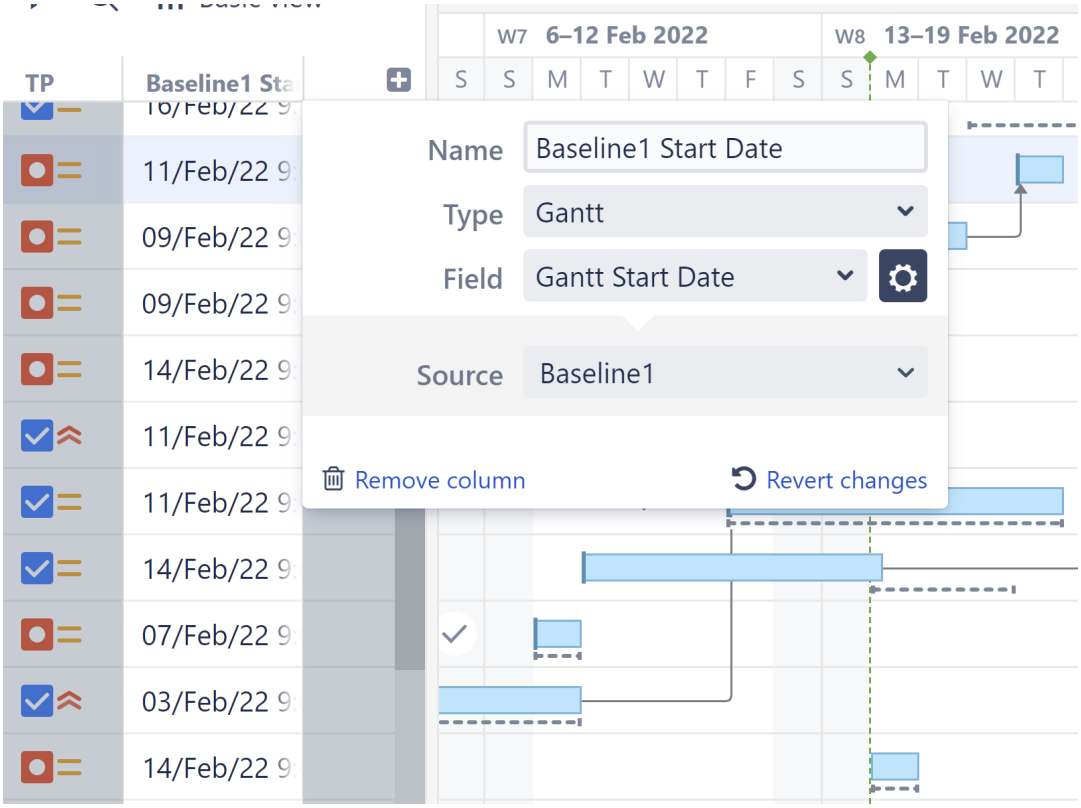
6.3.1 Version Highlights

- Baseline start and finish attributes in Structure
- New baseline visualization
- Other fixes and improvements

6.3.2 Changes in Detail

6.3.2.1 Baseline Start and Finish Date Attributes in Structure

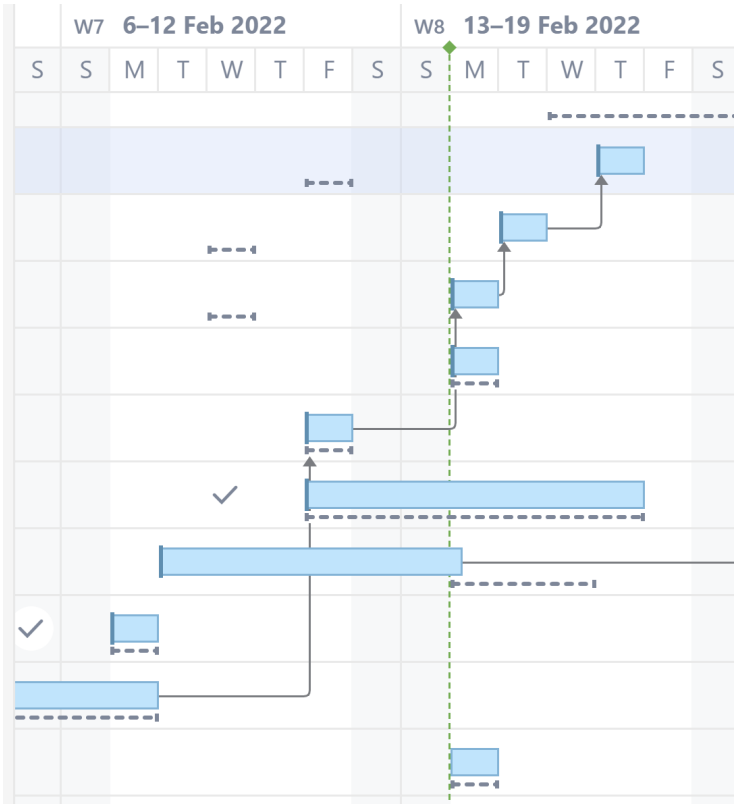
You can now use baseline start and finish dates in formulas, columns, and transformations. This makes it possible to view those dates in Structure and create formulas to compare those dates with the current task, or even sandboxed versions.



Documentation: Gantt Attributes in Structure(see page 143)

6.3.2.2 New Baseline Visualization

We've made it easier to distinguish a task from its baseline by adding more contrast to baselines.



Documentation: Baselines(see page 128)

6.3.3 Supported Versions

Structure.Gantt 3.3 requires Structure 7.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.13 or later. Jira Data Center is also supported.

6.3.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.3.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

- Sandbox mode: Tempo fields are not yet fully supported; it is possible to adjust them in Sandbox mode, but it is not possible to merge their values with the Original schedule.
- Sandbox mode: Moving tasks between sprints is supported within the same board only.
- Gantt migration/partial restore doesn't restore the sandbox history.
- After Structure was disabled and then enabled again, Gantt layout doesn't appear and work calendars, resource leveling and licence pages show errors. To make it work, disable and enable Structure.Gantt, too.

6.3.6 Enterprise Deployment Notes

Structure.Gantt 3.3 does not add any changes in terms of stability or performance compared to 3.2. There are no particular special areas of interest for load testing and stress testing. We advise running the same testing procedures as you've done for previous upgrades.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[160] .

6.4 Structure.Gantt 3.2 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[161]

14th of March, 2022

Structure.Gantt 3.2 adds backup and restore, a new critical path visualization, and relevant sprints

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[162]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[163]

6.4.1 Version Highlights

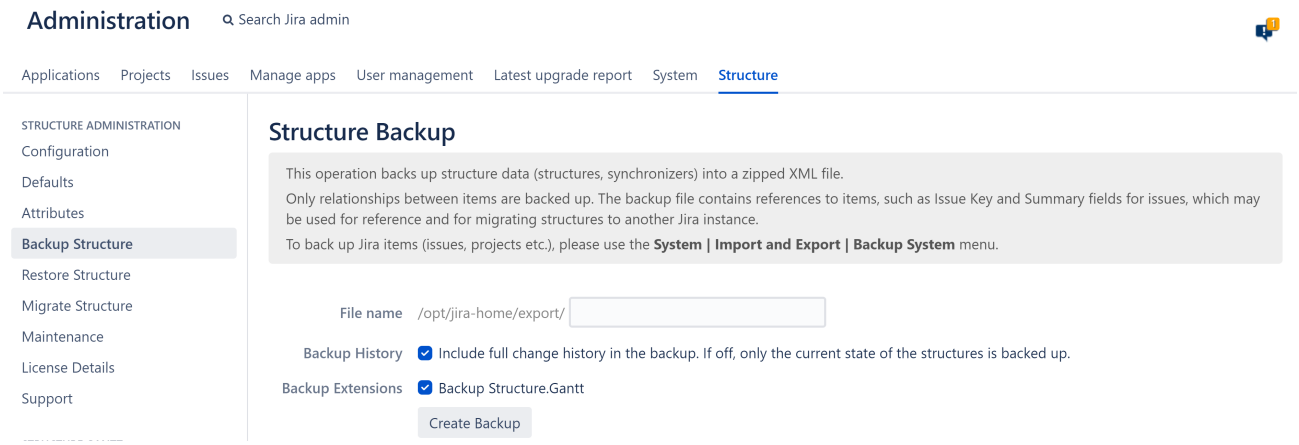
- Backup and restore
- New critical path visualization
- Relevant sprints selector
- Other fixes and improvements

160 mailto:support@almworks.com
161 http://alm.works/covid19
162 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
163 http://alm.works/gantt-demo

6.4.2 Changes in Detail

6.4.2.1 Gantt backup/restore/migration

Back up and restore your Gantt charts along with structures. Now when you back up structures, you can include their Gantt charts as well. When those structures are restored, their corresponding charts are restored too.

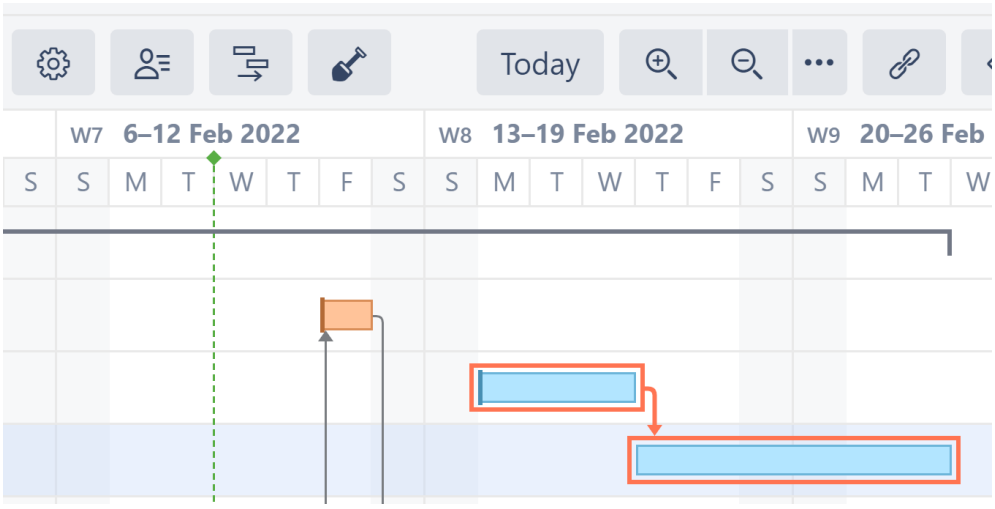


Documentation: Backup and Restore(see page 173)

6.4.2.2 New critical path visualization

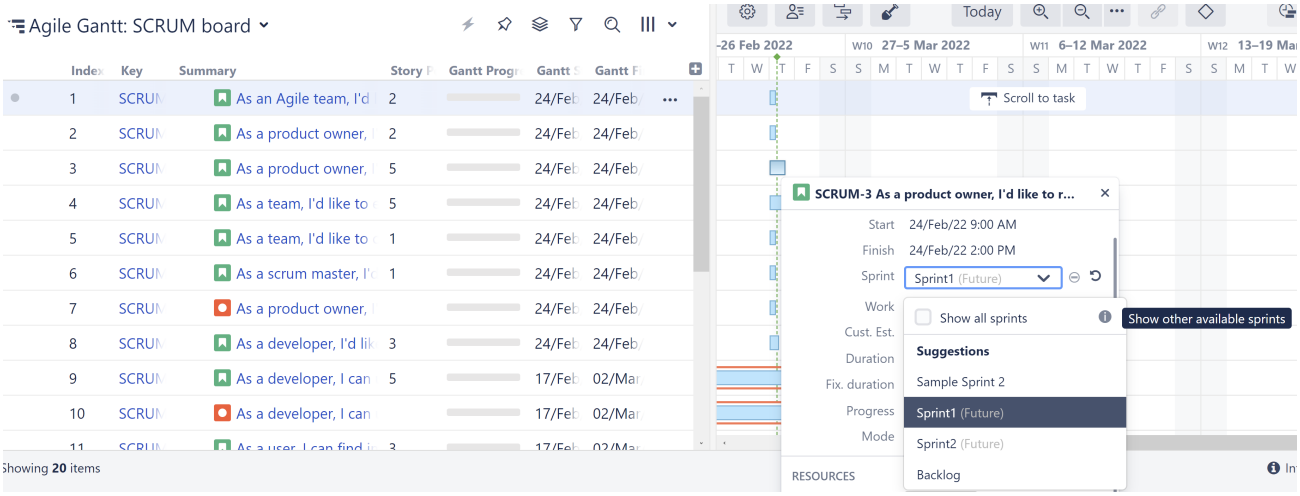
We've made it easier to identify tasks and dependencies that make up the critical path (tasks that, if delayed, will extend the project's end date):

- Tasks in the critical path now have a red highlight around them
- Dependency links in the critical path are red



6.4.2.3 Relevant sprints

To make it easier and faster to assign sprints from the Task Details panel, it's now possible to just list sprints from the current project.



To use this feature, Relevant sprints[164] must be enabled in Jira.

Documentation: Reassigning Sprints with Structure.Gantt (see page 95)

6.4.2.4 Notable Improvements and Fixes

- Kotlin version updated to fix known security issues.

6.4.3 Supported Versions

Structure.Gantt 3.2 requires Structure 7.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.13 or later. Jira Data Center is also supported.

Structure.Gantt 3.2 may work with Structure 7.1-7.3 and Jira 8.5-8.12 with the following limitations:

- Gantt backup and restore are only available in Structure 7.4 or later
- Relevant sprints are only available in Jira 8.11 or later

6.4.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

164 https://confluence.atlassian.com/jirasoftwareserver/limiting-sprint-selection-to-relevant-sprints-1014679373.html

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.4.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.
- Sandbox mode: Tempo fields are not yet fully supported; it is possible to adjust them in Sandbox mode, but it is not possible to merge their values with the Original schedule.
- Sandbox mode: Moving tasks between sprints is supported within the same board only.
- Gantt migration/partial restore doesn't restore the sandbox history.

6.4.6 Enterprise Deployment Notes

Structure.Gantt 3.2 does not add any changes in terms of stability or performance compared to 3.1. There are no particular special areas of interest for load testing and stress testing. We advise running the same testing procedures as you've done for previous upgrades.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[165] .

6.5 Structure.Gantt 3.1 Release Notes

> ALM Works Business Continuity During the COVID-19 Outbreak[166]

> **26th of November, 2021**
>
> Structure.Gantt 3.1 adds custom task colors and drag-and-drop functionality for all types of dependencies

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[167]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[168]

165 mailto:support@almworks.com
166 http://alm.works/covid19
167 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
168 http://alm.works/gantt-demo

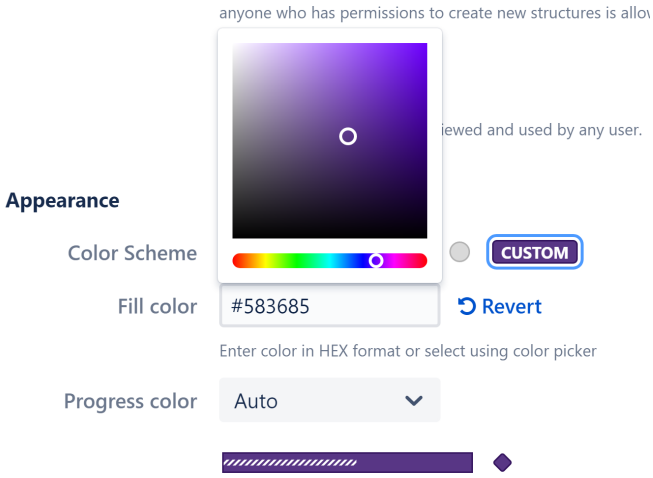
6.5.1 Version Highlights

- Custom task colors
- Drag-and-drop for all types of dependencies
- Other fixes and improvements

6.5.2 Changes in Detail

6.5.2.1 Custom task colors

Customize your chart to match your company identity, and create custom colors for each team/project/etc. – no matter how many you have. It is now possible to customize your default task color, and to add as many additional custom colors as you need using Slices.

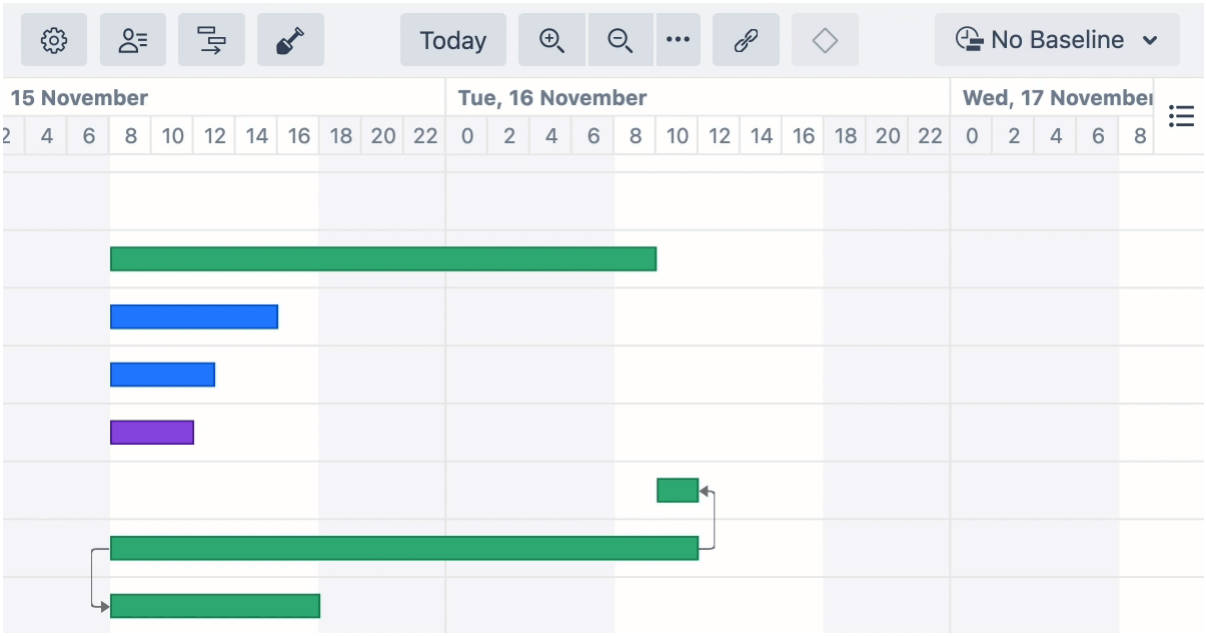


Documentation: General Configuration(see page 47), Customizing a Slice(see page 74)

6.5.2.2 Drag-and-drop support for more types of dependencies

Dependencies aren't one-size-fits all. Now you can quickly create the dependency you need with drag and drop:

- Finish to Start - Drag from the right side of one task to the left side of the other
- Finish to Finish - Drag from right side to right side
- Start to Finish - Drag from left side to right side
- Start to Start - Drag from left side to left side



Documentation: Dependencies[169]

6.5.2.3 Notable Improvements and Fixes

- The Gantt gadget configuration now supports JQL Autocomplete
- Fixed: users' avatars were not displayed correctly

6.5.3 Supported Versions

Structure.Gantt 3.1 requires Structure 7.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.5 or later. Jira Data Center is also supported.

6.5.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.5.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.

169 https://wiki.almworks.com/display/cloudgantt/Dependencies

- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.
- Sandbox mode: Tempo fields are not yet fully supported; it is possible to adjust them in Sandbox mode, but it is not possible to merge their values with the Original schedule.
- Sandbox mode: Moving tasks between sprints is supported within the same board only.

6.5.6 Enterprise Deployment Notes

Structure.Gantt 3.1 does not add any changes in terms of stability or performance compared to 3.0. There are no particular special areas of interest for load testing and stress testing. We advise running the same testing procedures as you've done for previous upgrades.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[170] .

6.6 Structure.Gantt 3.0 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[171]

1st of October, 2021

Structure.Gantt 3.0 adds Sandbox mode for What-If planning

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[172]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[173]

6.6.1 Version Highlights

- Sandbox mode
- Other fixes and improvements

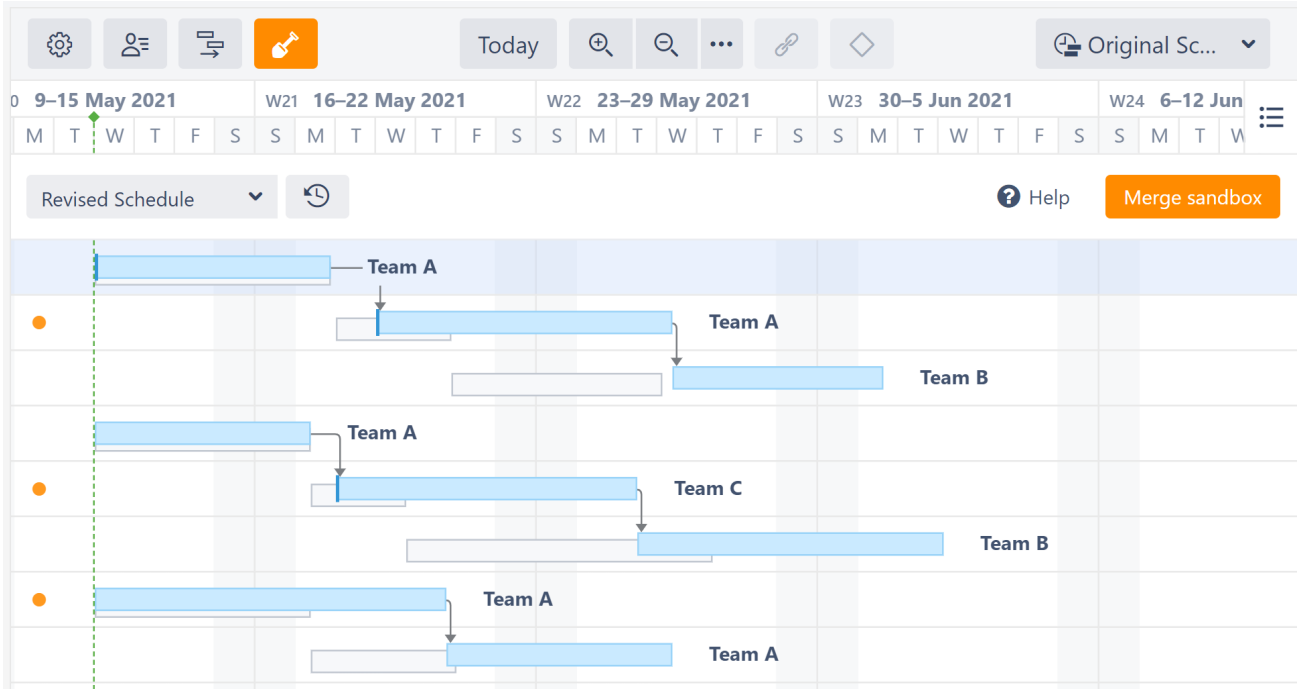
6.6.2 Changes in Detail

6.6.2.1 Sandbox mode

Test what-if scenarios without affecting the live Gantt chart or the underlying data.

170 mailto:support@almworks.com
171 http://alm.works/covid19
172 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
173 http://alm.works/gantt-demo

In Sandbox mode, you can adjust task schedules, resource assignments, and more - and then see how those changes would affect the overall timeline. If you like the changes, apply them to the live chart. If not, delete the changes that didn't work, or close the sandbox to return to the live chart.



Documentation: Sandbox Mode(see page 153)

6.6.2.2 Notable Improvements and Fixes

- It is now possible to change a task's resource from Task Details Panel
- The option to automatically convert zero-duration tasks into milestones has been removed; by default, they will appear as tasks in the timeline
- Fixed: Week number support now should respect user locale setting

6.6.3 Supported Versions

Structure.Gantt 3.0 requires Structure 7.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.5 or later. Jira Data Center is also supported.

6.6.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.6.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.
- Sandbox mode: Tempo fields are not yet fully supported; it is possible to adjust them in Sandbox mode, but it is not possible to merge their values with the Original schedule.
- Sandbox mode: Moving tasks between sprints is supported within the same board only.

6.6.6 Enterprise Deployment Notes

Structure.Gantt 3.0 adds Sandbox mode, which might be important for large installations and Data Center instances.

6.6.6.1 Sandbox mode

Sandbox is a special mode that makes it possible to adjust schedule details without affecting real Jira data. While in Sandbox mode, Gantt stores all task and resource adjustments within its own storage, unless these adjustments are merged back into the original schedule (and Jira) with the help of Structure Effectors[174]. In terms of CPU and memory impact, Sandbox mode uses the same scheduling algorithm as used for the original schedule calculation, while it reuses some of its data structures for better performance.

Taking into account that Sandbox mode works the same way as the original schedule does, it is difficult to predict how it will impact the performance of a particular installation, because it depends on how many Sandboxed schedules exist and are being calculated in parallel, and how many modifications are applied to them or to the original schedule (modifications made to the original schedule may affect sandboxes created within the same Gantt chart).

It is possible to completely disable the Sandbox feature by adjusting the `structure.gantt.features.sandbox` property. See Advanced Configurations for Structure.Gantt(see page 169).

6.6.6.2 Testing an a Staging Environment

For high load installations, we advise testing and running Sandbox on the most popular Gantt charts to estimate the additional load.

The usual load and stress testing are also recommended.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[175] .

174 https://wiki.almworks.com/x/DwP9B
175 mailto:support@almworks.com

6.6.7 Structure.Gantt 3.0.1 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[176]

3rd of November, 2021

Structure.Gantt 3.0.1 is a patch release for Structure.Gantt 3.0.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[177]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[178]

6.6.7.1 Patch Release

Structure.Gantt 3.0.1 is a patch release for Structure.Gantt 3.0.0. This patch release is critical for all systems running Structure.Gantt 3.0.0. It addresses the following issues:

- Fixed: Workflow overview window is empty when opened from the Issue Details panel in Structure
- Fixed: Workflow Designer does not work when opened from the Issue Details panel in Structure
- Fixed: Xray plug-in does not open Issue Details when the summary link is clicked
- Fixed: Timeline not loading

6.6.7.2 Supported Versions

Structure.Gantt 3.0.1 requires Structure 7.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.5 or later. Jira Data Center is also supported.

6.6.7.3 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

6.6.7.4 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring any changes compared to version 3.0. We advise you to perform the usual testing on a staging server.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[179] .

176 http://alm.works/covid19
177 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
178 http://alm.works/gantt-demo
179 mailto:support@almworks.com

6.7 Structure.Gantt 2.7 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[180]

7th of December, 2020

Structure.Gantt 2.7 adds Jira-based Baselines and Fiscal Year support

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[181]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[182]

6.7.1 Version Highlights

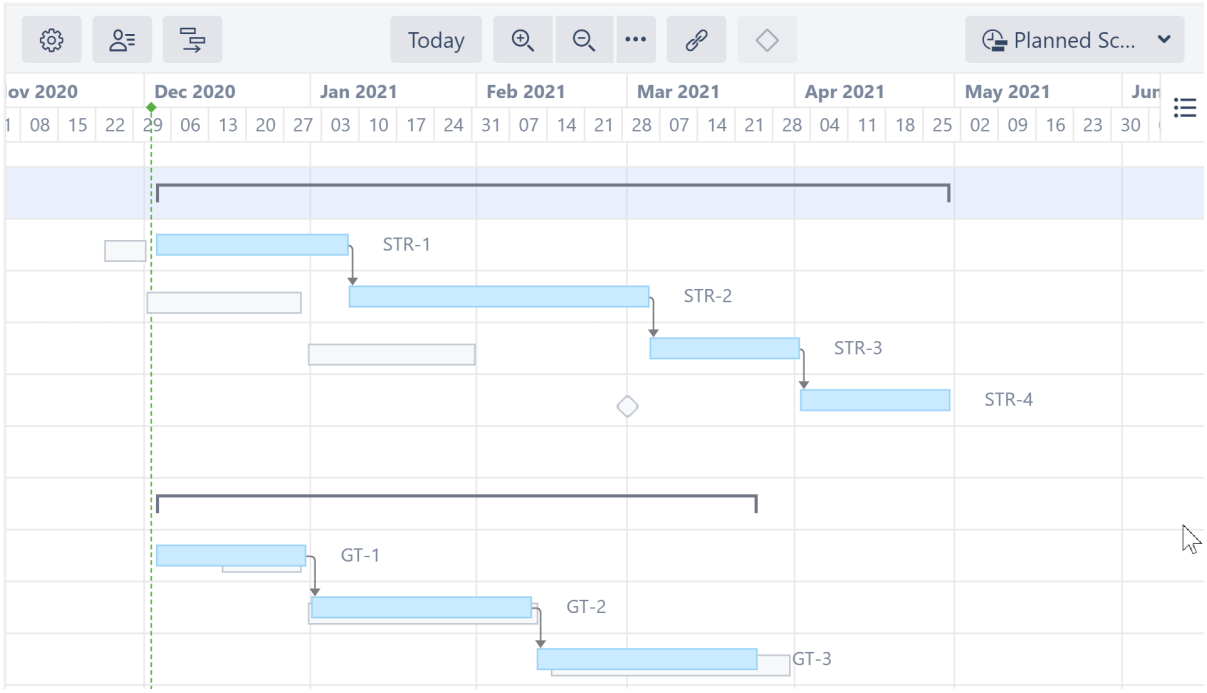
- Jira-based Baselines
- Fiscal Year support
- Other fixes and improvements

6.7.2 Changes in Detail

6.7.2.1 Jira-based Baselines

It is now possible to create baselines from values in Jira system or custom fields, or based on a Structure formula.

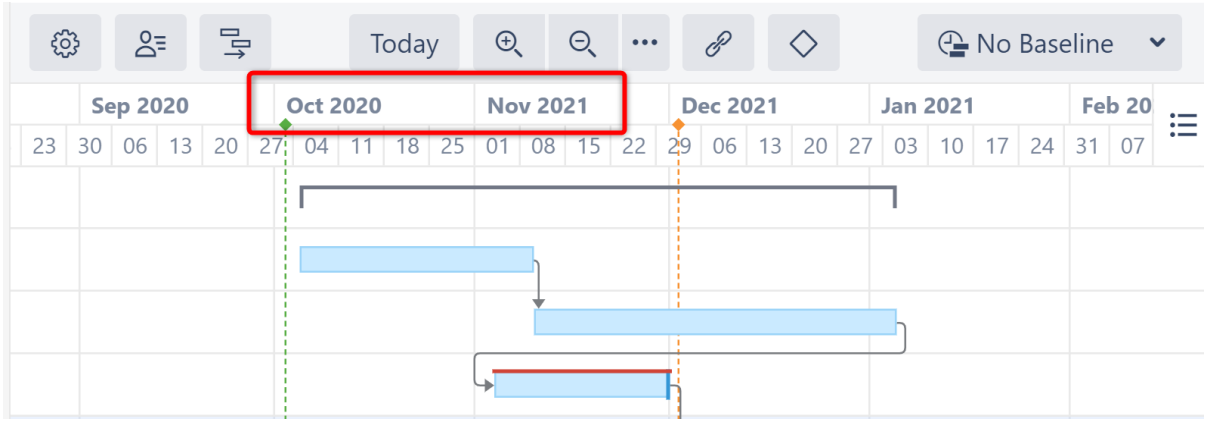
180 http://alm.works/covid19
181 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
182 http://alm.works/gantt-demo



Documentation: Jira-based Baselines(see page 130)

6.7.2.2 Fiscal Year support

It is now possible to configure and display the fiscal year in the chart header, while exporting, or in Structure.Gantt gadgets.



Documentation: General Settings(see page 222)

6.7.2.3 Notable Improvements and Fixes

- It is now possible to skip empty rows while exporting a chart into PDF or SVG
- Time Zone selector has been improved to support quick lookup of the time zone by time offset or location name
- Fixed: Leveling Priority column was not exported while exporting a structure
- Fixed: Fix Version markers were not visualized in Gadget

6.7.3 Supported Versions

Structure.Gantt 2.7 requires Structure 6.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 7.13 or later. Jira Data Center is also supported.

⚠ Structure.Gantt 2.7 is the last version that supports Jira 7.13; future releases will require Jira 8.5+.

6.7.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.7.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

6.7.6 Enterprise Deployment Notes

Structure.Gantt 2.7 does not add any changes in terms of stability or performance compared to 2.6. There are no particular special areas of interest for load testing and stress testing. We advise running the same testing procedures as you've done for previous upgrades.

ⓘ Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[183] .

6.7.7 Structure.Gantt 2.7.1 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[184]

183 mailto:support@almworks.com
184 http://alm.works/covid19

16th of February, 2021

Structure.Gantt 2.7.1 is a patch release for Structure.Gantt 2.7.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[185]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[186]

6.7.7.1 Patch Release

Structure.Gantt 2.7.1 is a patch release for Structure.Gantt 2.7.0. This patch release is critical for all systems running Structure.Gantt 2.7.0. It addresses the following issues:

- Fixed: Unable to select the Tempo 11.0 Team field as the Gantt Resource attribute
- Fixed: Critical Path can sometimes be calculated incorrectly if Backlog is enabled
- Fixed: Unable to change the Manual Start date for tasks when both Manual Start and Manual Finish are specified, and the Fixed Duration attribute is set in the Configuration
- Fixed: Tasks may shift if their date attributes are configured using Structure Formula
- Fixed: Non-integer values for "Hours per day" and "Work days per week" in Jira settings are treated as integers
- Fixed: Fiscal Year is calculated incorrectly during export if configured to January

6.7.7.2 Supported Versions

Structure.Gantt 2.7.1 requires Structure 6.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

Structure.Gantt 2.7 (and its patch releases) is the last version that supports Jira 7.13; future releases will require Jira 8.5+.

6.7.7.3 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

6.7.7.4 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring any changes compared to version 2.7.0. We advise you to perform the usual testing on a staging server.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[187] .

185 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
186 http://alm.works/gantt-demo
187 mailto:support@almworks.com

6.7.8 Structure.Gantt 2.7.2 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[188]

4th of March, 2021

Structure.Gantt 2.7.2 is a patch release for Structure.Gantt 2.7.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[189]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[190]

6.7.8.1 Patch Release

Structure.Gantt 2.7.2 is a patch release based on Structure.Gantt 2.7.

It includes performance-related improvements and is recommended for all systems running Structure.Gantt 2.7.

6.7.8.2 Supported Versions

Structure.Gantt 2.7.2 requires Structure 6.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

Structure.Gantt 2.7 (and its patch releases) is the last version that supports Jira 7.13; future releases will require Jira 8.5+.

6.7.8.3 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

6.7.8.4 Enterprise Deployment Notes

This release improves performance by reducing the number of full schedule recalculations if a chart is accessed during intensive Jira usage. We advise performing the usual testing on a staging server.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[191] .

188 http://alm.works/covid19
189 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
190 http://alm.works/gantt-demo
191 mailto:support@almworks.com

6.7.9 Structure.Gantt 2.7.3 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[192]

1th of September, 2021

Structure.Gantt 2.7.3 is a patch release for Structure.Gantt 2.7

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[193]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[194]

6.7.9.1 Patch Release

Structure.Gantt 2.7.3 is a patch release based on Structure.Gantt 2.7

It includes a fix for a Turkish locale bug and is recommended for all systems running Structure.Gantt 2.7

6.7.9.2 Supported Versions

Structure.Gantt 2.7.3 requires Structure 6.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

Structure.Gantt 2.7 (and its patch releases) is the last version that supports Jira 7.13; future releases will require Jira 8.5+.

6.7.9.3 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

6.7.9.4 Enterprise Deployment Notes

This release improves performance by reducing the number of full schedule recalculations if a chart is accessed during intensive Jira usage. We advise performing the usual testing on a staging server.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[195] .

192 http://alm.works/covid19
193 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
194 http://alm.works/gantt-demo
195 mailto:support@almworks.com

6.8 Structure.Gantt 2.6 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[196]

05th of November, 2020

Structure.Gantt 2.6 includes draggable Project Start Date and improved Task Details Panel

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[197]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[198]

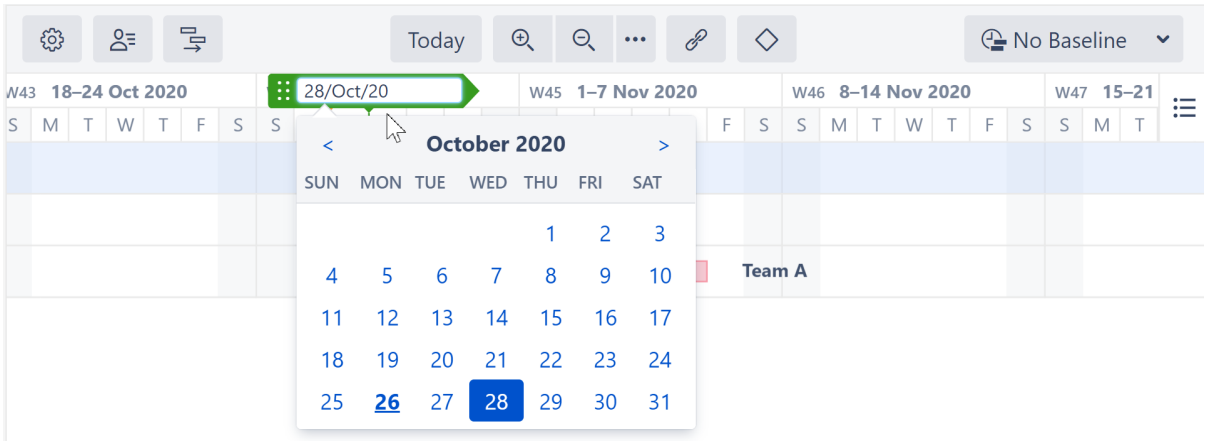
6.8.1 Version Highlights

- Draggable Project Start Date
- Refreshed Task Details Panel
- Other fixes and improvements

6.8.2 Changes in Detail

6.8.2.1 Draggable Project Start Date

It is now possible to quickly reschedule Project Start by simply dragging the Project Start Day marker, or clicking the marker to enter a new date.



Documentation: Project Start Day(see page 37)

196 http://alm.works/covid19
197 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
198 http://alm.works/gantt-demo

6.8.2.2 Refreshed Task Details Panel

Structure.Gantt 2.6 adds several improvements to Task Details panel:

- It is now possible to edit Manual Start, Manual Finish and Milestone dates within the TDP
- Fields having no effect on task position or duration are now marked with special icons and can be hidden
- When a value used by Structure.Gantt is different from it's corresponding Jira value, Structure.Gantt will show both values separately

Documentation: Task Details Panel(see page 102)

6.8.2.3 Notable Improvements and Fixes

- Structure.Gantt now respects Time Tracking estimate formatting options
- Fixed: This release reduces memory consumption for large WBS's with a lot of duplicates

6.8.3 Supported Versions

Structure.Gantt 2.6 requires Structure 6.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

6.8.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.8.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

6.8.6 Enterprise Deployment Notes

In Structure.Gantt 2.6 we have reduced memory consumption for charts with a lot of duplicate issues in the WBS. There are no other significant changes in terms of stability or performance. There are no particular special areas of interest for load testing and stress testing. We advise running the same testing procedures as you've done for previous upgrades.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[199] .

6.9 Structure.Gantt 2.5 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[200]

6th of August, 2020

Structure.Gantt 2.5 includes Agile Backlog, ability to turn off notifications and configuration search

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[201]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[202]

6.9.1 Version Highlights

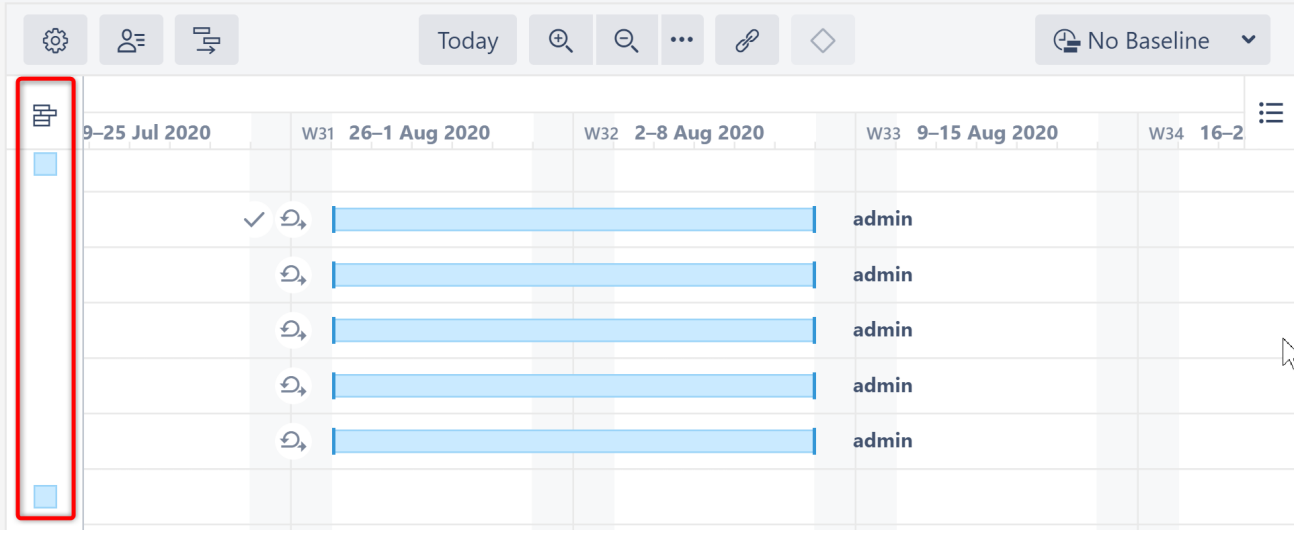
- Agile Backlog
- Optional email notifications
- Configuration search
- Other fixes and improvements

6.9.2 Changes in Detail

6.9.2.1 Agile Backlog

When Sprint-based scheduling (see page 57)is used, Structure.Gantt now places issues that aren't assigned to sprints into the Backlog panel:

199 mailto:support@almworks.com
200 http://alm.works/covid19
201 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
202 http://alm.works/gantt-demo

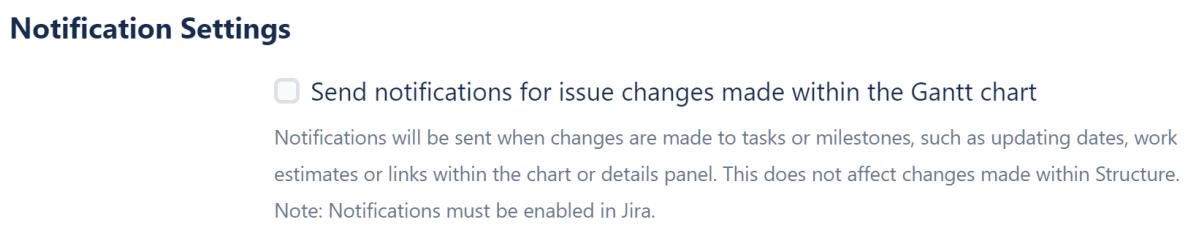


Issues can be dragged out of the Backlog panel and assigned to the desired sprint.

Documentation: Planning with Sprints(see page 91)

6.9.2.2 Optional Email Notifications

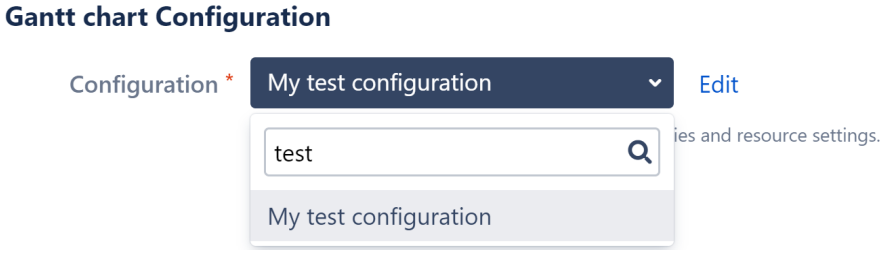
Jira notifications can now be switched off for changes made in the Gantt chart:



Documentation: Gantt Chart Settings(see page 43)

6.9.2.3 Configuration Search

It is now possible to search for a specific chart configuration by its name or description:



Documentation: 2021-12-08_16-30-23_Gantt Configuration(see page 230)

6.9.2.4 Notable Improvements and Fixes

- It is now possible to select multiple resources when filtering by resource(see page 121).

- Chart header now shows week numbers
- Resources are automatically filtered based on filters applied to Structure
- Scheduling conflicts are now ignored for tasks assigned to the same sprint
- Fixed: Structure.Gantt gadget may not load if there are a lot of Gantt charts in the system

6.9.3 Supported Versions

Structure.Gantt 2.5 requires Structure 6.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

6.9.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.9.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

6.9.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.4.0. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.5. We advise running the same testing procedures as you've done for previous upgrades.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[203] .

6.9.7 Structure.Gantt 2.5.1 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[204]

203 mailto:support@almworks.com
204 http://alm.works/covid19

17th of August, 2020

Structure.Gantt 2.5.1 is a patch release for Structure.Gantt 2.5.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[205]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[206]

6.9.7.1 Patch Release

Structure.Gantt 2.5.1 is a patch release for Structure.Gantt 2.5.0. This patch release is critical for all systems running Structure.Gantt 2.5.0. It addresses the following issues:

- Structure.Gantt moved into read-only mode in certain situations, due to incorrect license checking.
- Scheduling and Resource Leveling worked incorrectly with certain resource availability settings.

This release also improves Atlassian Jira 8.12 UI compatibility.

6.9.7.2 Supported Versions

Structure.Gantt 2.5.1 requires Structure 6.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

6.9.7.3 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

6.9.7.4 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring any changes compared to version 2.5.0. We advise you to perform the usual testing on a staging server.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[207] .

6.9.8 Structure.Gantt 2.5.2 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[208]

205 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
206 http://alm.works/gantt-demo
207 mailto:support@almworks.com
208 http://alm.works/covid19

26th of August, 2020

Structure.Gantt 2.5.2 is a patch release for Structure.Gantt 2.5.1

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[209]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[210]

6.9.8.1 Patch Release

Structure.Gantt 2.5.2 is a patch release for Structure.Gantt 2.5.1. It addresses an issue that could cause Structure and Structure.Gantt to become unresponsive.

6.9.8.2 Supported Versions

Structure.Gantt 2.5.2 requires Structure 6.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

6.9.8.3 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

6.9.8.4 Enterprise Deployment Notes

In this release we have addressed an issue related to the depletion of Structure's attributes thread pool, which might cause Structure and Structure.Gantt to become unresponsive. The depletion of the thread pool can happen when many users are accessing Structure.Gantt or its data (through Structure columns) at the same time, causing Structure.Gantt to produce too many blocking tasks.

This release does not introduce any other changes related to stability and performance compared to version 2.5.1. We advice you to perform the usual testing on staging server.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[211] .

6.10 Structure.Gantt 2.4 Release Notes

ALM Works Business Continuity During the COVID-19 Outbreak[212]

209 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
210 http://alm.works/gantt-demo
211 mailto:support@almworks.com
212 http://alm.works/covid19

19th of May, 2020

Structure.Gantt 2.4 includes additional Gantt attributes that can be used in Structure, gadget filtering and other improvements

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[213]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[214]

6.10.1 Version Highlights

- Additional Gantt attributes available in Structure columns, formulas and effectors
- Filtering within a Gantt gadget
- Leveling Priority based on Jira Rank
- Limiting Resource Leveling to overallocations that occur after a specified date
- Other fixes and improvements

6.10.2 Changes in Detail

6.10.2.1 Additional Gantt attributes available in Structure

In this release, we have expanded the number of Gantt attributes available to use in Structure columns, formulas(see page 234) and effectors[215].

Some of the new attributes include:

- Gantt Work
- Gantt Duration
- Gantt Resource
- Gantt Leveling Priority
- Gantt Maximum Units
- Gantt Scheduling Mode
- Gantt Slice

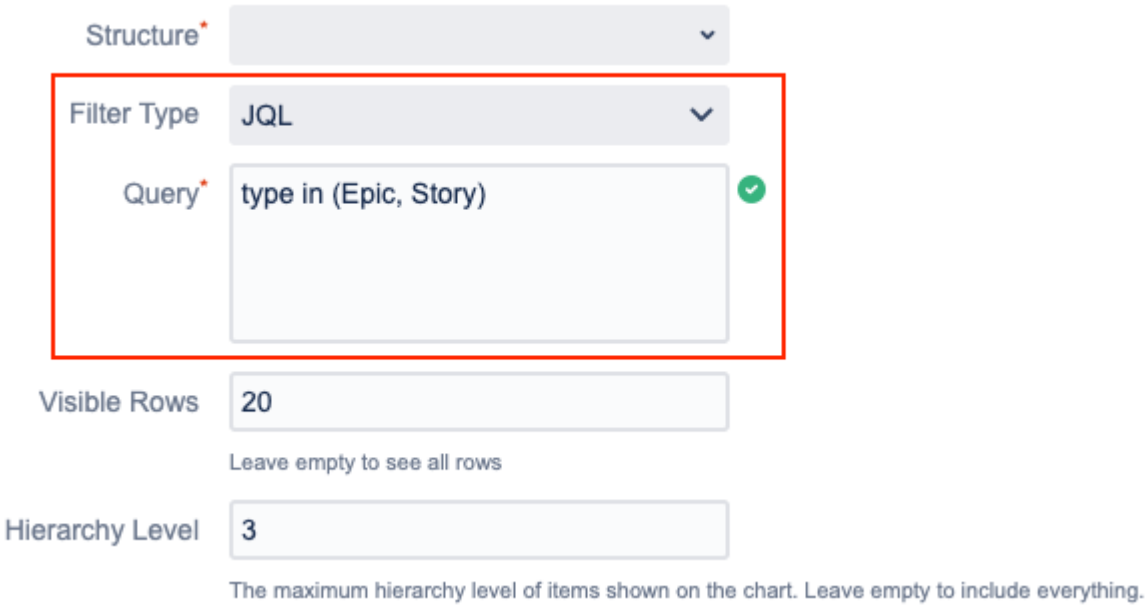
And many more!

Documentation: Using Gantt Attributes in Structure(see page 234) and List of Gantt Attributes Available in Structure(see page 148)

6.10.2.2 2.2 Filtering within a Gantt gadget

It is now possible to filter Structure.Gantt gadget content the same way a Structure gadget is filtered, using a JQL, S-JQL or Text query:

213 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
214 http://alm.works/gantt-demo
215 https://wiki.almworks.com/display/structure/Effectors



Documentation: Using Gadgets(see page 234)

6.10.2.3 Notable Improvements and Fixes

- Resource Leveling(see page 122) can now be set to only resolve overallocations that occur after a specified date
- Jira Rank and Structure Index can now be used for Leveling Priority (see Resources(see page 116))
- It is now possible to use only the Remaining Estimate for Task Estimation (see Work Estimates(see page 234))
- Tasks with zero Estimate or a Fixed Duration of zero can be automatically treated as milestones (see Behavior(see page 234))
- Manually-scheduled milestones are now visually distinguishable from automatically-scheduled ones
- Fixed: Updates to parent items were ignored when using a formula that included the value of a Gantt attribute's parent item
- Fixed: Resource Leveling was not respecting links, which in some cases resulted in scheduling conflicts
- Fixed: Zoom level unexpectedly switched from Days to Hours
- Fixed: Improved scheduling performance for schedules with a large number of fixed duration tasks
- Fixed: Improved performance for schedule updates when a changed task is included in many groups

6.10.3 Supported Versions

Structure.Gantt 2.4 requires Structure 6.0 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

6.10.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.10.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

6.10.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.3.0. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.4. We advise running the same testing procedures as you've done for previous upgrades.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[216] .

6.10.7 Structure.Gantt 2.4.1 Release Notes

> **17th of August, 2020**
>
> Structure.Gantt 2.4.1 is a patch release based on Structure.Gantt 2.4.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[217]

6.10.7.1 Patch release

Structure.Gantt 2.4.1 is a patch release for Structure.Gantt 2.4.0. This patch is critical for Structure.Gantt 2.4.0 running on server instances. Data Center is not affected and upgrading is not necessary.

The release addresses an issue in which a chart may move into read-only mode in certain situations, due to incorrect license checking.

6.10.7.2 Installation and Upgrade

Structure.Gantt 2.4.1 requires Structure 6.0 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

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216 mailto:support@almworks.com
217 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview

6.10.7.3 Enterprise deployment notes

In terms of stability and performance, this release does not bring any changes compared to version 2.4.0.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[218].

6.11 Structure.Gantt 2.3 Release Notes

> ALM Works Business Continuity During the COVID-19 Outbreak[219]

> **26th of March, 2020**
>
> Structure.Gantt 2.3 introduces Structure 6.0 support and other improvements.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[220]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[221]

6.11.1 Version Highlights

- Support for Structure 6.0
- Other improvements and bug fixes

6.11.2 Changes in Detail

6.11.2.1 Support for Structure 6.0

Structure 6.0 introduced Effectors, a feature that makes it possible to write Structure attribute and formula values to Jira fields. It is now also possible to write Structure.Gantt values, including task Start and Finish dates, to Jira fields.

Sorry, the widget is not supported in this export.
But you can reach it using the following URL:

https://www.youtube.com/watch?v=oE1dSklL9D8

218 mailto:support@almworks.com
219 http://alm.works/covid19
220 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
221 http://alm.works/gantt-demo

Documentation: Effectors[222]

6.11.2.2 Notable Improvements and Fixes

- Structure.Gantt is now able to detect whether Structure is installed and compatible with Structure.Gantt
- Fixed: Resource Leveling was not able to resolve overallocation in certain situations when grouping(see page 238) was in use

6.11.3 Supported Versions

Structure.Gantt 2.3 requires Structure 6.0 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.13 or later. Jira Data Center is also supported.

6.11.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.11.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

6.11.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.2.1. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.3. We advise running the same testing procedures as you've done for previous upgrades.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[223].

222 https://wiki.almworks.com/display/structure/Effectors
223 mailto:support@almworks.com

6.12 Structure.Gantt 2.2 Release Notes

23th of January, 2020

Structure.Gantt 2.2 introduces Dependency Lead/Lag time and other improvements and bug fixes.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[224]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[225]

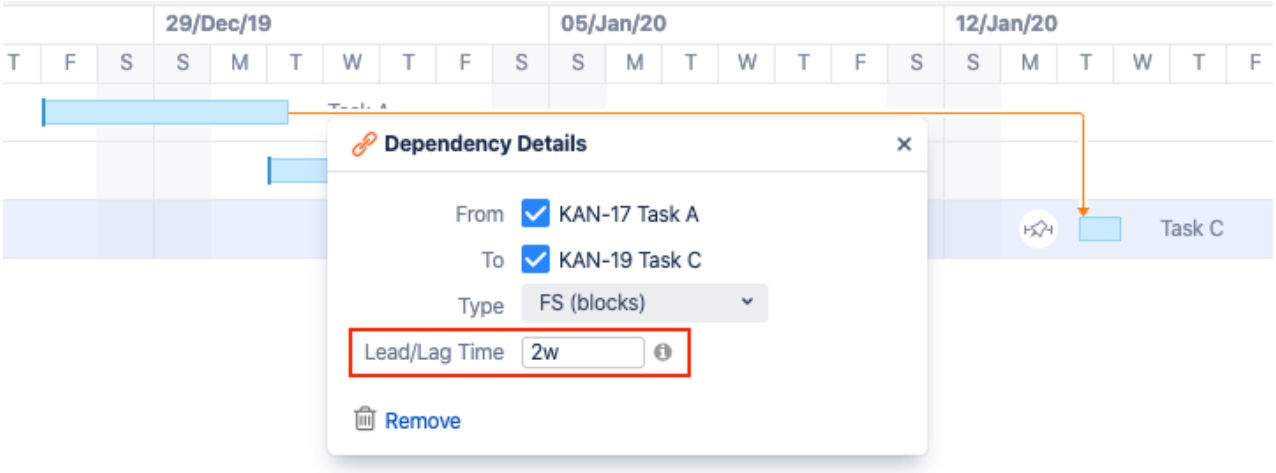
6.12.1 Version Highlights

- Dependency Lead/Lag time
- Change Dependency Type
- Other improvements and bug fixes

6.12.2 Changes in Detail

6.12.2.1 Dependency Lead/Lag Time

It is now possible to specify lead or lag time for dependencies.



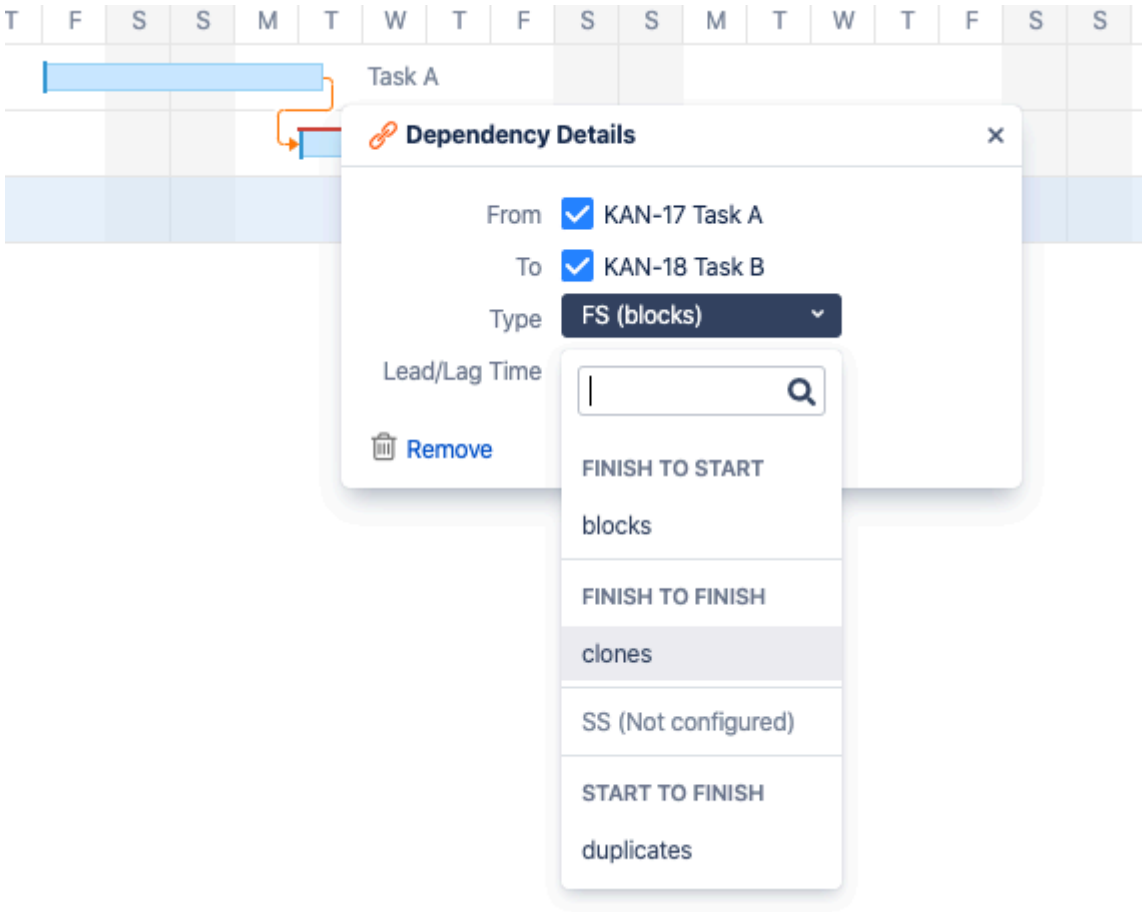
Dependency Lead/Lag times can be applied to individual issues, tailored for specific types of issues using Slices, or set globally through the Gantt configuration.

Documentation: Dependency Lead/Lag Time(see page 111)

224 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
225 http://alm.works/gantt-demo

6.12.2.2 Change Dependency Type

It is now possible to change individual Dependency types from the Dependency Details panel.



Documentation: Working with Dependencies(see page 240)

6.12.2.3 Notable Improvements and Fixes

- Jira default units are now used for unitless numbers entered in duration fields, including Fixed Duration or Lead/Lag time
- The size of the Structure.Gantt client bundle has been reduced

6.12.3 Supported Versions

Structure.Gantt 2.2 requires Structure 5.6 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.6 or later. Jira Data Center is also supported.

6.12.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.12.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

6.12.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.1.1. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.2. We advise running the same testing procedures as you've done for previous upgrades.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[226].

6.12.7 Structure.Gantt 2.2.1 Release Notes

> **17th of February, 2020**
>
> Structure.Gantt 2.2.1 introduces user anonymization support for Jira 8.7.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[227]

6.12.7.1 Patch Release

This is a patch release based on Structure.Gantt 2.2. It introduces user anonymization support for Jira 8.7.

6.12.7.2 Installation and Upgrade

Structure.Gantt 2.2.1 requires Structure 5.6 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

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226 mailto:support@almworks.com
227 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview

6.12.7.3 Enterprise Deployment Notes

Structure.Gantt 2.2.1 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

6.12.8 Structure.Gantt 2.2.2 Release Notes

> **17th of August, 2020**
>
> Structure.Gantt 2.2.2 is a patch release based on Structure.Gantt 2.2.1

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[228]

6.12.8.1 Patch release

Structure.Gantt 2.2.2 is a patch release for Structure.Gantt 2.2.1. This patch is critical for Structure.Gantt 2.2.1 running on server instances. Data Center is not affected and upgrading is not necessary.

The release addresses an issue in which a chart may move into read-only mode in certain situations, due to incorrect license checking.

6.12.8.2 Installation and Upgrade

Structure.Gantt 2.2.2 requires Structure 5.6 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

6.12.8.3 Enterprise deployment notes

In terms of stability and performance, this release does not bring any changes compared to version 2.2.1.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[229].

228 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
229 mailto:support@almworks.com

6.13 Structure.Gantt 2.1 Release Notes

11th of November, 2019

Structure.Gantt 2.1 introduces Auto-scheduled Fixed Duration tasks and other improvements and bug fixes.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[230]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[231]

6.13.1 Version Highlights

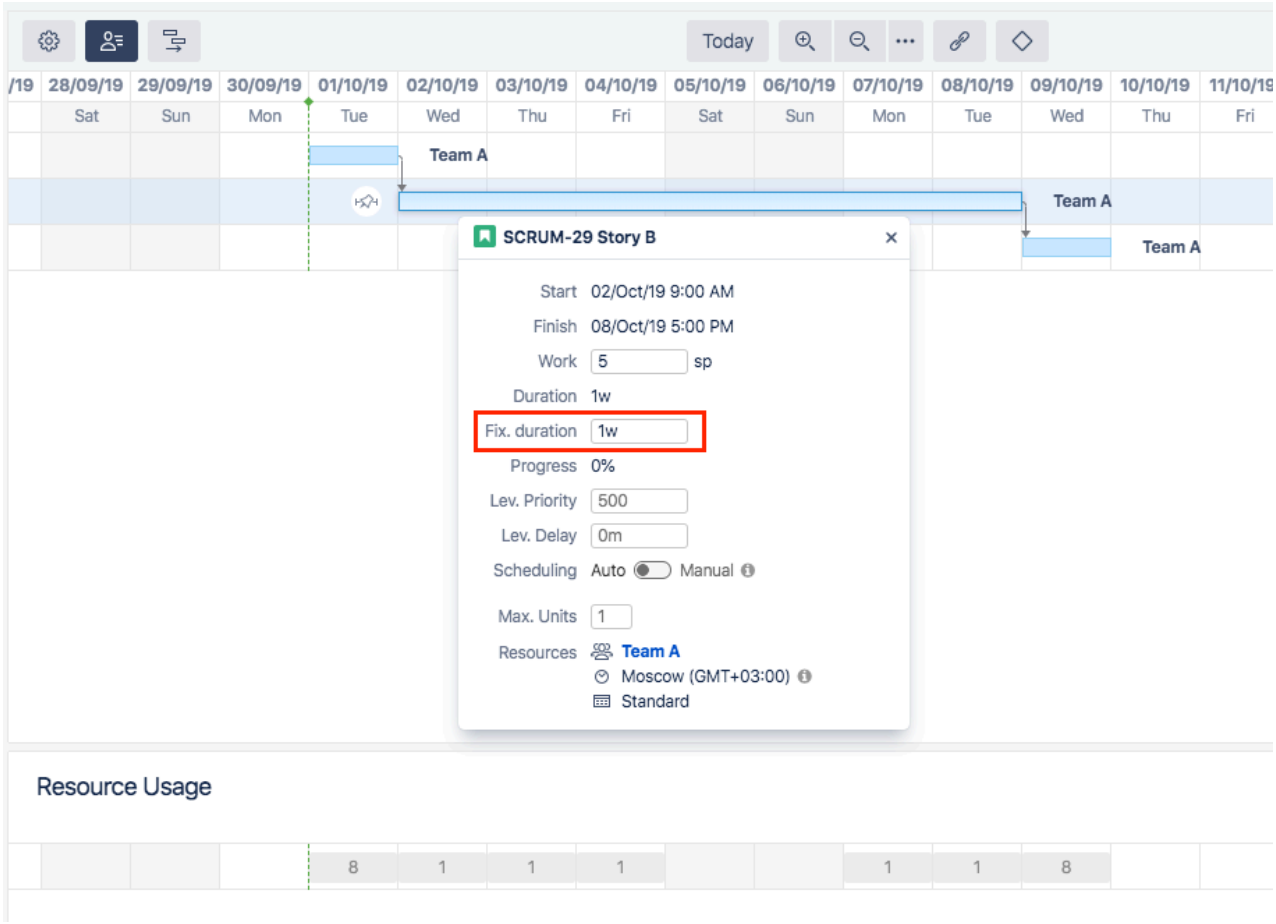
- Auto-scheduled Fixed Duration tasks
- Indicators for hidden tasks
- Other improvements and bug fixes

6.13.2 Changes in Detail

6.13.2.1 Auto-scheduled Fixed Duration tasks

In addition to Agile tasks and tasks with both Manual Start and Manual Finish dates defined, it is now possible to specify duration separate of work for auto-scheduled tasks, as well as tasks that have either a Manual Start or Manual Finish date set.

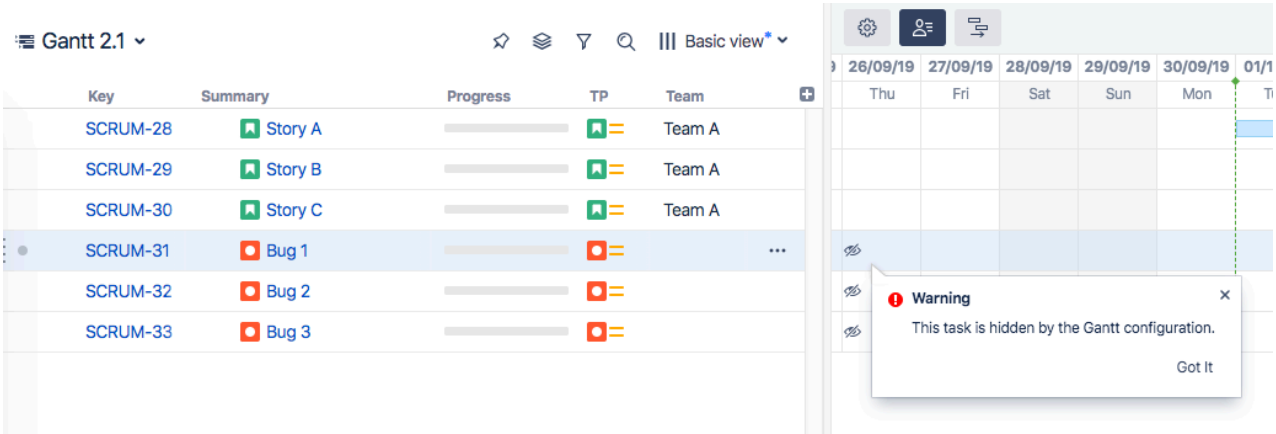
230 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
231 http://alm.works/gantt-demo



Documentation: Fixed Duration(see page 96)

6.13.2.2 Indicators for hidden tasks

A special indicator will now be displayed when a task is not visible on the chart due to insufficient permissions or the Gantt configuration, along with an explanation for why the item is hidden.



Documentation: Task Indicators(see page 105)

6.13.2.3 Notable Improvements and Fixes

- It is now possible to override Leveling Priority separately from Maximum Units in a Slice
- It is now possible to edit Leveling Delays of individual tasks via the Task Details Panel
- An option to clear existing leveling delays before running leveling was introduced
- Run Leveling and Reset Leveling dialogs were united into a single dialog
- Resource Leveling dialog options are now maintained between runs
- Default value for Leveling Priority for newly created configs is 500 (instead of 0)
- Fixed: Resources disappeared when Tempo Teams were used as Resources
- Fixed: Legacy mode for Time tracking is now properly supported by Structure.Gantt

6.13.3 Supported Versions

Structure.Gantt 2.1 requires Structure 5.6 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.6 or later. Jira Data Center is supported too.

6.13.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.13.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

6.13.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.0. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.1. We advise running the same testing procedures as you've done for previous upgrades.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[232].

232 mailto:support@almworks.com

6.13.7 Structure.Gantt 2.1.1 Release Notes

18th of November, 2019

Structure.Gantt 2.1.1 fixes an issue with the Confluence gadget.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[233]

6.13.7.1 Patch Release

This is a patch release based on Structure.Gantt 2.1. It fixes an issue with the Confluence gadget.

6.13.7.2 Installation and Upgrade

Structure.Gantt 2.1.1 requires Structure 5.6 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

6.13.7.3 Enterprise Deployment Notes

Structure.Gantt 2.1.1 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

6.13.8 Structure.Gantt 2.1.2 Release Notes

17th of August, 2020

Structure.Gantt 2.1.2 is a patch release based on Structure.Gantt 2.1.1

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[234]

6.13.8.1 Patch release

Structure.Gantt 2.1.2 is a patch release for Structure.Gantt 2.1.1. This patch is critical for Structure.Gantt 2.1.1 running on server instances. Data Center is not affected and upgrading is not necessary.

The release addresses an issue in which a chart may move into read-only mode in certain situations, due to incorrect license checking.

233 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
234 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview

6.13.8.2 Installation and Upgrade

Structure.Gantt 2.1.2 requires Structure 5.6 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

6.13.8.3 Enterprise deployment notes

In terms of stability and performance, this release does not bring any changes compared to version 2.1.1.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[235].

6.14 Structure.Gantt 2.0 Release Notes

> **6th of September, 2019**
>
> Structure.Gantt 2.0 introduces Resource Leveling and Baselines, as well as other improvements and bug fixes.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[236]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[237]

6.14.1 Version Highlights

- Structure.Gantt becomes a paid app
- Resource Leveling
- Baselines
- Fix Version markers for Gadget
- Other improvements and bug fixes

6.14.2 Changes in Detail

6.14.2.1 Structure.Gantt becomes a paid app

Since its introduction, we have continued to invest in Structure.Gantt — continuously adding new capabilities while also enhancing many of the early features. We feel that with the release of 2.0 we introduce a number of features,

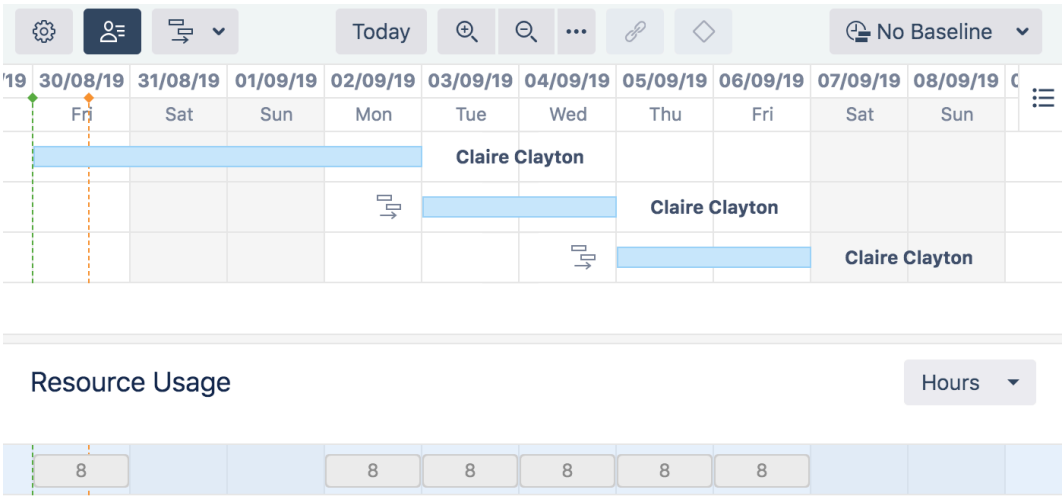
235 mailto:support@almworks.com
236 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
237 http://alm.works/gantt-demo

which make our Gantt offering uniquely competitive. We believe this warrants a fair price that will enable us to continue investing in its development.

You can see the new pricing on the Atlassian Marketplace[238].

6.14.2.2 Resource Leveling

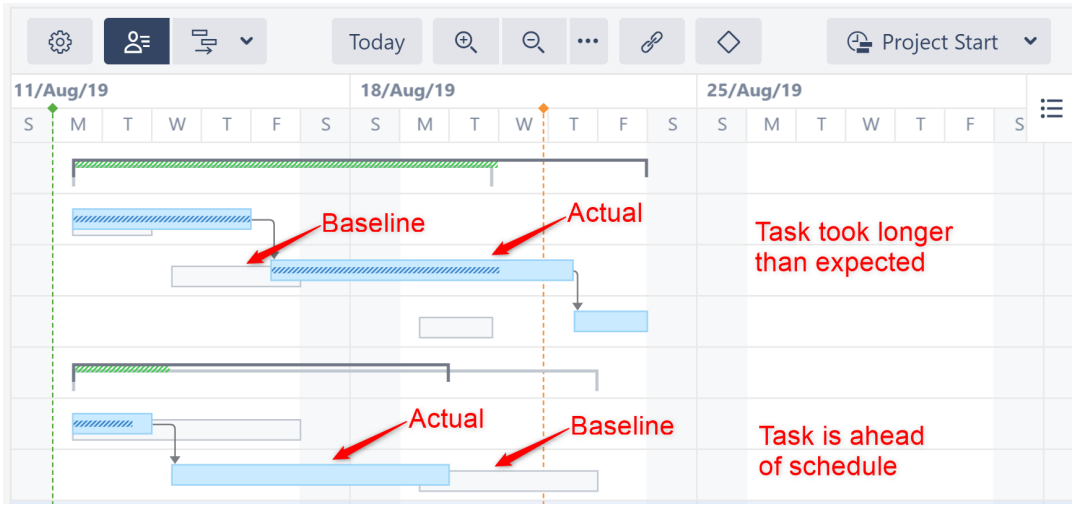
Resource Leveling allows you to automatically resolve overallocations for a single resource or group of resources. When run, Resource Leveling identifies overallocation and applies Leveling Delays to tasks in order to resolve it.



Documentation: R(see page 91)esource Leveling(see page 122)

6.14.2.3 Baselines

Baselines create a snapshot of the schedule at a specific time, which can then be visualized alongside the current schedule, making it easy to identify differences between a proposed schedule and a project's actual progress. Baselines can be added to the Structure.Gantt gadget and included in a PDF or SVG export.

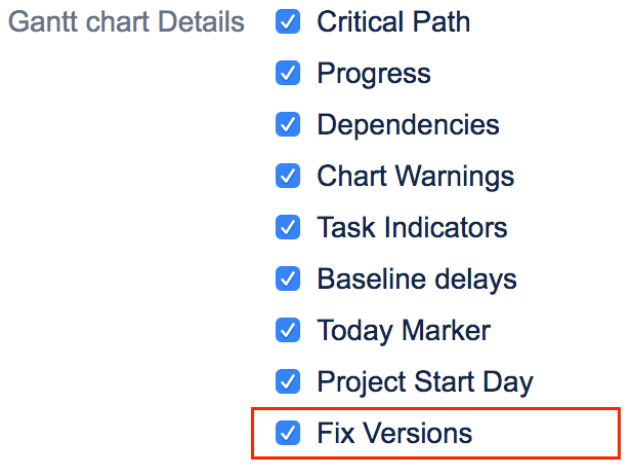


238 https://marketplace.atlassian.com/apps/1217809/structure-gantt-planning-at-scale

Documentation: B(see page 96)aselines(see page 128)

6.14.2.4 Fix Version Markers for Gadget

It is now possible to include Fix Version in the Structure.Gantt gadget, the same way it can be included when exporting your schedule.



Documentation: Confluence Gadget(see page 140)

6.14.2.5 Notable Improvements and Fixes

- Changed: "Use Resolution Date as the Finish Date" option is now turned off by default for newly created configurations
- Changed: For Export and Gadget, Fix Version markers are now displayed expanded (if possible)
- Fixed: Tempo Teams and Team Roles are now properly displayed in the chart and resource list
- Fixed: Sprint markers weren't displayed properly when there was at least one sprint starting and finishing on the same day
- Fixed: JQL queries for Slices should be executed from the structure owner, rather than the current user
- Fixed: Gantt Progress was calculated incorrectly for hierarchies with loop markers
- Fixed: When a duplicate issue is assigned to both a task and a group at the same time, the assigned resource should not be removed
- Fixed: When a Formula returns a negative estimate, the Gantt chart should not disappear

6.14.3 Supported Versions

Structure.Gantt 2.0 requires Structure 5.5 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.6 or later. Jira Data Center is supported too.

6.14.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.14.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.
- Structure.Gantt won't update estimates when Time Tracking Legacy mode is enabled.
- Leveling Delay is applied to Fixed Duration tasks. (Workaround: switch it to Auto scheduling and back to Manual scheduling to clear Leveling Delay.)
- Resources may disappear when Tempo Teams are used as resources and these teams' permissions are restricted for some chart owners. This only affects Tempo Timesheets versions prior to 10.3.0.

6.14.6 Enterprise Deployment Notes

Structure.Gantt 2.0 introduces the Resource Leveling feature that can be important for large installations and Data Center instances.

6.14.6.1 Resource Leveling

Resource Leveling is an on-demand process to automatically fix over-allocations. It is a CPU- and memory-consuming operation, running in the background for periods starting from a few seconds to dozens of minutes. It is sensitive to structure size, number of resources used and number of over-allocations in the particular schedule.

Taking the on-demand nature of Resource Leveling into account, it is difficult to predict how it will impact the performance of a particular installation, because it depends on how many Gantt-enabled structures are there, how large they are and how often users will need to run Resource Leveling for their charts. Being run in parallel, Resource Leveling may have a huge impact on an instance's performance, and as a safeguard we've added several configurable properties:

- By default, Resource Leveling is limited to 5000 tasks per execution, i.e. every time a user starts a Resource Leveling, it will fail if number of tasks exceeds this value. It is not recommended to make this value very large, since it may cause a Resource leveling to run for a very long period of time (hours). It is highly recommended to not increase it without a real need, and, even then, keep it lower than 10000. Please see the `structure.gantt.settings.leveling.taskLimit` property on the Advanced Configurations for Structure.Gantt(see page 169) page for more information.
- Another variable that is reserved for tuning Resource Leveling performance is the number of threads it can occupy at a node at any given moment of time. This one is configured using the `structure.gantt.settings.leveling.threadPoolSizeFactor` property (see Advanced Configurations for Structure.Gantt(see page 169)). By default, the factor is set to 0.5, i.e. the number of threads

Resource Leveling can use for calculations cannot exceed half of the number of CPU cores available at any node.
- It is also possible to completely disable the Resource Leveling feature. See the `structure.gantt.features.resourceLeveling` property on the Advanced Configurations for Structure.Gantt(see page 169) page for more information.

6.14.6.2 Testing on a Staging Environment

For high load installations, we advise testing and running Resource Leveling on the most popular Gantt charts and adjusting Resource Leveling using the properties described above.

The usual load and stress testing are also recommended.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[239].

6.14.7 Structure.Gantt 2.0.1 Release Notes

> **25th of September, 2019**
>
> Structure.Gantt 2.0.1 adds Atlassian Jira 8.4 compatibility.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[240]

6.14.7.1 Patch Release

Starting from this version, Structure.Gantt is compatible with Atlassian Jira 8.4.

6.14.7.2 Installation and Upgrade

Structure.Gantt 2.0.1 requires Structure 5.5 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

6.14.7.3 Enterprise Deployment Notes

Structure.Gantt 2.0.1 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

239 mailto:support@almworks.com
240 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview

6.15 Structure.Gantt 1.4 Release Notes

5th of April, 2019

Structure.Gantt 1.4 introduces Agile planning, Fixed-duration tasks and the ability to export chart data as Structure attributes, as well as other improvements and bug fixes.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[241]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[242]

Structure.Gantt will become a paid app beginning with release 2.0.

6.15.1 Version Highlights

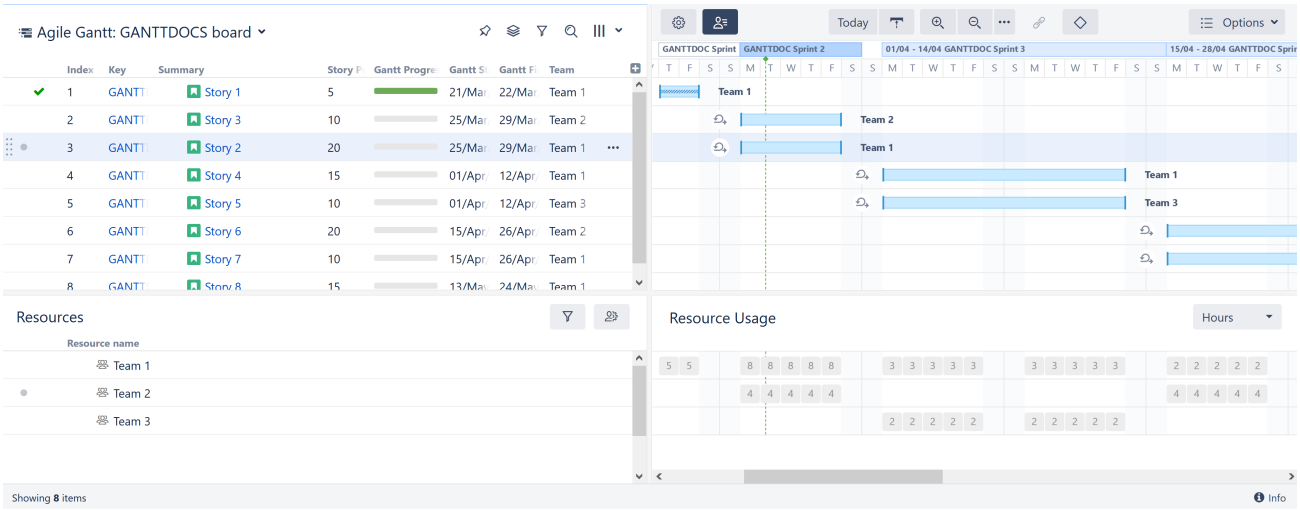
- Agile planning
- Fixed-duration tasks
- Chart data as Structure attributes
- Percentage for resource allocation
- Agile Gantt Template
- Other improvements and important bug fixes

6.15.2 Changes in Detail

6.15.2.1 Agile planning

Starting with this version of Structure.Gantt, it is now possible to use sprint dates to schedule tasks:

241 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
242 http://alm.works/gantt-demo

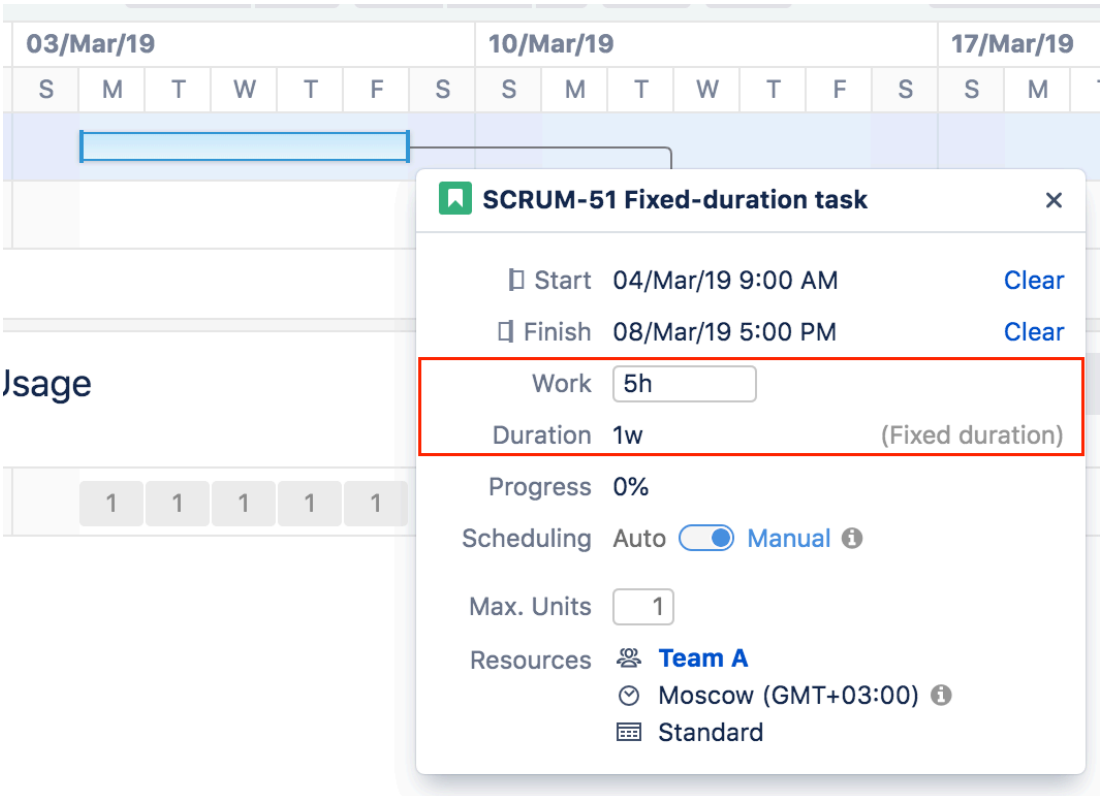


Tasks can be moved between sprints by drag and drop or by changing the sprint in the Task Details panel.

Documentation: Planning with Sprints(see page 91)

6.15.2.2 Fixed-duration tasks

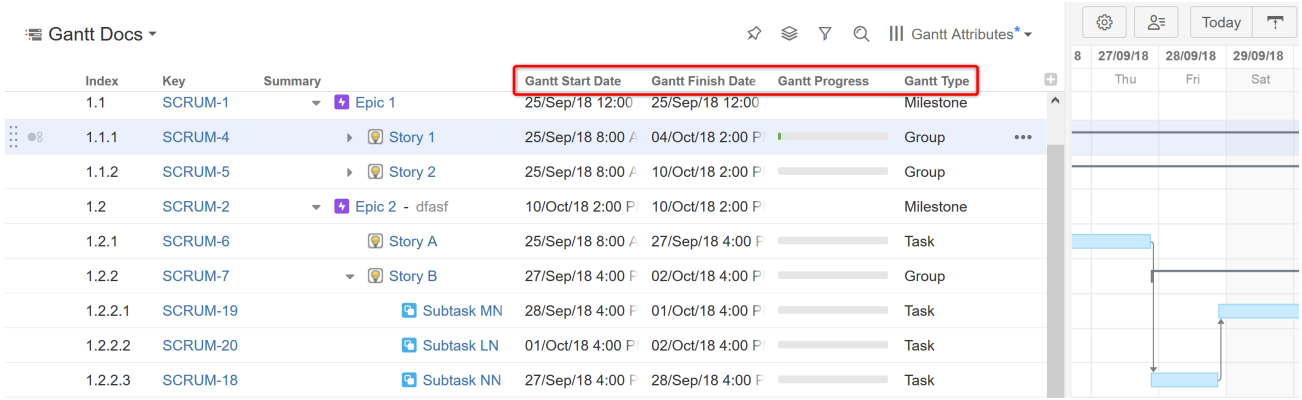
Tasks that are **scheduled by sprint dates** or **manually scheduled with both start and finish dates defined** now have work equally distributed across their duration. Adjusting the duration for these tasks will not affect their work (that can be adjusted separately in the Task Details panel or in Jira itself).



Documentation: Fixed Duration(see page 96)

6.15.2.3 Chart data as Structure attributes

Structure.Gantt data is now available to Structure. Gantt attributes can be represented in columns, used in formulas or used in transformations:



The following attributes are currently supported:

- Gantt Start Date
- Gantt Finish Date
- Gantt Milestone Date
- Gantt Progress
- Gantt Type

With more attributes to follow in future.

Documentation: Using Gantt Attributes in Structure(see page 253)

6.15.2.4 Percentage for Resource allocation

In addition to displaying the number of hours each resource is scheduled for during a set period of time, it is now possible to show the percentage of a resource's availability that is being used during that time. This can be particularly useful when trying to assess which resources are over- or under-allocated.

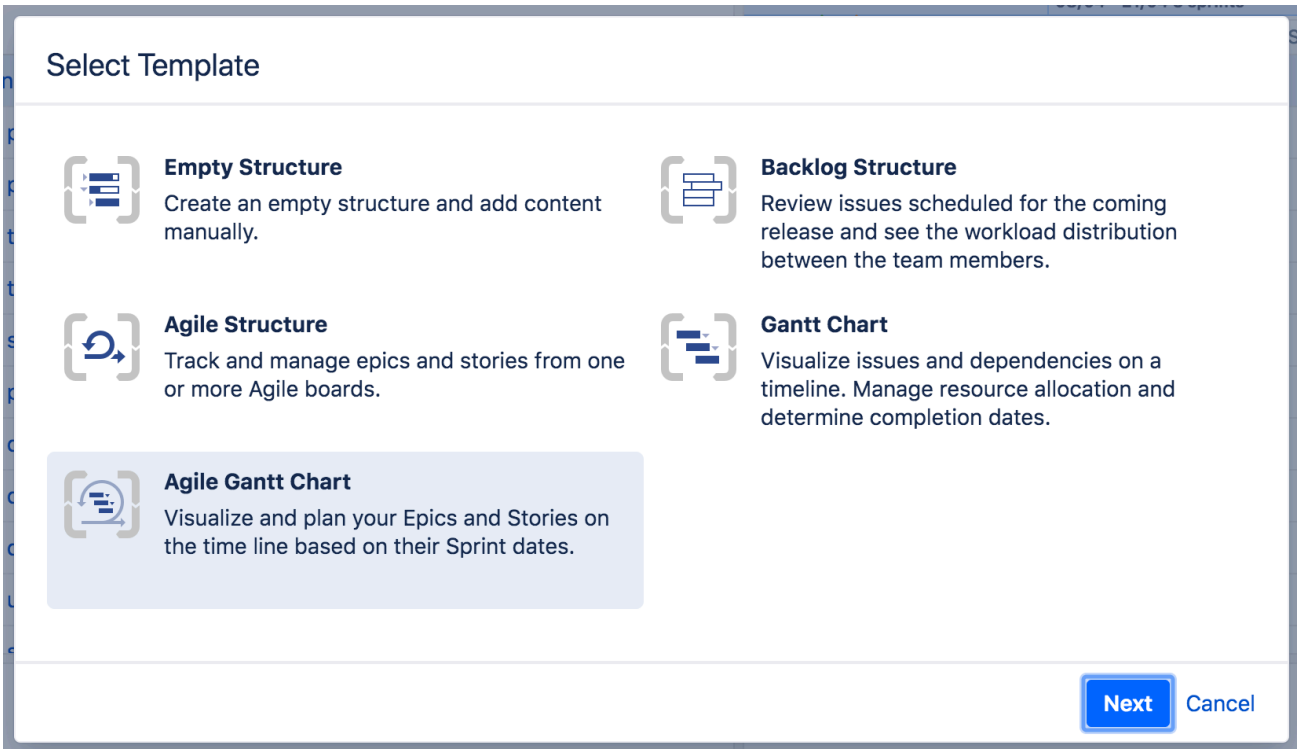
Documentation: Resources and Resource Usage(see page 117)

6.15.2.5 Agile Gantt Template

Using the new Agile Gantt Chart template, it is possible to create new charts with Agile Planning enabled by default with a several different types of hierarchies:

- Stories only
- Stories underneath of Epics

- Portfolio (requires Atlassian Portfolio to be installed) — with Initiatives above Epics



6.15.2.6 Notable Improvements And Fixes

- In addition to Story Points, it is now possible to use arbitrary values for task estimation, i.e. use any text or numeric fields for estimate values (see Work Estimates(see page 253))
- Starting from version 1.4, switching a task to an Automatic scheduling will not clear underlying fields and their values will be preserved (see Manual Scheduling by Start or Finish Date(see page 89))
- Tasks with both manual start and finish dates set are treated as fixed-duration tasks, i.e. changing of their duration will not change their work (see Fixed Duration(see page 96))
- For competed tasks, a checkmark indicator is shown; this is also applies to milestones backed by an issue (see Task Indicators(see page 105))
- It is now possible to open Slice settings right from the Task Details panel by clicking its name (only if user has the permission to view or edit the configuration)
- Jira date formats are now used across all Structure.Gantt UI
- Fixed: "Login and Approve" form should be correctly shown now for a Structure.Gantt gadget being added to a Confluence page
- Fixed: Resources won't be shown anymore for inaccessible issues

6.15.3 Supported Versions

Structure.Gantt 1.4 requires Structure 5.3 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.6 or later. Jira Data Center is supported too.

6.15.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.15.5 Known issues

Below are a few known issues and non-obvious cases.

- If a formula is selected as the source for resource assignment, any changes made to this formula after the resource list has been built will be ignored. For example, if your formula had a variable assigned to one field and you reassign that variable to another field after the resource list has already been built, the resource list will not be updated to reflect this change.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.
- Structure.Gantt won't update estimate when Time Tracking Legacy mode is enabled
- If both Time Tracking and Custom estimate is enabled for the task and estimate is cleared through the Task Details panel, it will clear the both Original Estimate and Custom Estimate fields; undoing that operation will set only the preferred one.
- Kanban boards can be selected along with Scrum ones while creating Agile Gantt.

6.15.6 Enterprise Deployment Notes

Structure.Gantt 1.4 introduces several features that can be important for large installations and Data Center instances.

6.15.6.1 Agile Planning

For Agile Planning to work, Structure.Gantt needs to fetch all Agile boards for the issues contained in the structure, and then fetch all the sprints from these boards. That data is used for visualizing sprints on the timeline and for scheduling. In a particularly large structure, with issues from many boards, that could lead to an increased load on the server and increased latency in calculating the Gantt chart.

6.15.6.2 Chart Data as Structure Attributes

We have exposed the calculated Gantt values (calculated start/finish dates) as Structure "attributes", which makes it possible to show them in the Structure grid and use in formulas.

It is important to keep in mind that this data depends on the calculated Gantt schedule. Requesting this value for even a single item would require the whole Gantt chart to be calculated – even if you're looking at a Single Grid layout and Gantt is not shown. The results of the calculations are cached, of course, so once it has been completed, the values for other items will be immediately available – until Structure.Gantt registers an issue update that would require a recalculation of the chart.

6.15.6.3 Testing on a Staging Environment

Taking this into account, in case you have a large (10,000 issues or more) structure with a configured Gantt chart, we would suggest to test the following scenarios on a staging environment, before upgrading the production instance:

- Open a large structure that has a configured Gantt chart. Go to the Gantt configuration and enable **Use sprints for manual scheduling** option, then enable **Prefer sprints over manual start and finish** feature. Prepare a timer, click OK and measure how long it takes before the updated Gantt chart appears.
- Add a couple of Structure.Gantt columns (Gantt.Start or Gantt.Finish) to this structure. Scroll the Structure grid down and up, noting the delay between the scrolling and the data being loaded and shown in the grid.
- Add a "Text Attribute" transformation to the structure (note: **not** a grouper inside the structure – a transformation[243]). Select "Gantt.Finish" attribute as the grouping value. (You can also use a formula, for example, to group by the week of the finish date!) Note how much time it will take before the transformation is applied. Then proceed to change several issues in a way to affect the chart schedule, for example, change a dependency or a duration of a task. Note how quickly changes are applied and the structure is refreshed.

Watch the log files for errors and warnings while running these experiments. If you are not happy about the speed of the updates or the server load, please let us know! We might be able to suggest wats to improve the configuration and speed up Structure and the Gantt chart.

The usual load and stress testing are also recommended.

> Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[244].

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6.15.7 Structure.Gantt 1.4.1 Release Notes

> **29th of May, 2019**
>
> Structure.Gantt 1.4.1 is a patch release based on Structure.Gantt 1.4.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[245]

> Structure.Gantt will become a paid app beginning with release 2.0.

6.15.7.1 Patch release

This is a patch release based on version 1.4.0. We have addressed the following issues:

- Fixed: Gantt.Progress Structure attribute should not be affected by Structure transformations
- Fixed: Gantt attributes should be updated on structure hierarchy changes (indent and outdent)

243 https://wiki.almworks.com/display/structure/Using+Transformations
244 mailto:support@almworks.com
245 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview

- Fixed: Structure.Gantt gadget was not working properly for structures with a grouping by a component or version
- Fixed: Default configuration should have dependencies switched off if there is no Blocks link type in the system
- Fixed: Structure.Gantt gadget should work correctly in Jira 8.2 and IE11
- Fixed: Scheduling should be paused for a structure if the schedule calculation takes more than 5 minutes to complete, in order to avoid excessive resource usage. Please refer to Structure.Gantt Troubleshooting(see page 258) for more details.

6.15.7.2 Installation and Upgrade

Structure.Gantt 1.4.1 requires Structure 5.3 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

6.15.7.3 Enterprise deployment notes

With Structure.Gantt 1.4.1 we're introducing a new feature that should prevent excessive resource usage for huge Gantt charts or charts that are unable to complete the schedule calculation in a reasonable time. By default, schedule calculation will be paused for a structure if it exceeds 5 minutes. Normally scheduling should not exceed 5 minutes for very large structures (scheduling of structures with 100k issues takes around 2.5 minutes to calculate), but since we are unable to check all possible configurations we've made this timeout configurable. Please, refer to Structure.Gantt Troubleshooting(see page 258) for details on how to adjust it.

To ensure this timeout does not affect your charts, it is recommended to perform the following operations at the staging environment before updating production servers:

- Choose several large structures with configured Gantt charts
- For every structure from the list, open it, switch layout to Gantt chart and wait it to fully load. Then perform regular operations like adding new tasks, adding/removing dependencies, adjusting task positions or adjusting the configuration
- Observe results and ensure that charts are calculated and visualized normally

In the event that you receive a "Scheduling has been paused" message, the corresponding timeout may need to be increased.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[246].

6.16 Structure.Gantt 1.3 Release Notes

14th of November, 2018

Structure.Gantt 1.3 introduces Sliced configurations, ability to specify several Link Types per Dependency and a new "Filter structure by Resource" action, as well as other improvements and bug fixes.

246 mailto:support@almworks.com

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[247]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[248]

6.16.1 Version Highlights

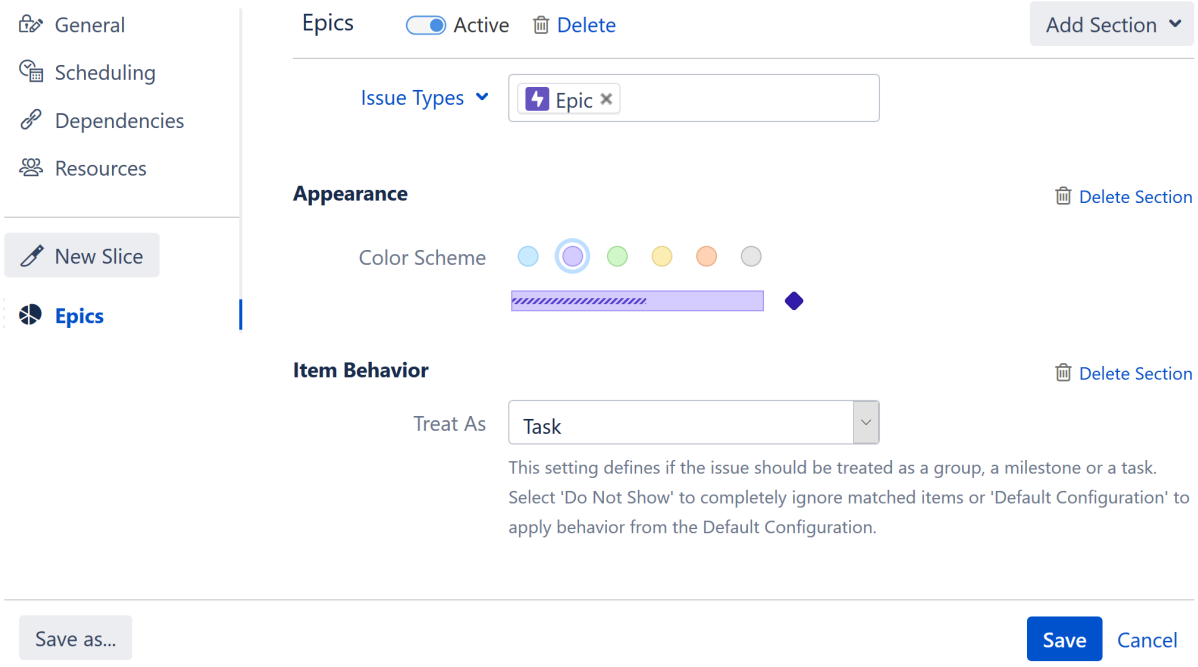
- Slice-based configurations
- Ability to specify several Link Types per Dependency
- Filter structure by Resource action
- Other improvements and important bug fixes

6.16.2 Changes in Detail

6.16.2.1 Slice-based Configurations

It is now possible to define custom chart behaviors for different sets of issues. By creating separate "slices" for specific issue types (or issues that match a JQL query), you can change the appearance of specified issues, alter their behavior within the chart, or remove them from the chart completely.

Slices allow you to color-code issues based on their project, utilize a different set of resources for certain types of issues, define unique dependency configurations and more.



Documentation: Slice-based Configurations(see page 71)

247 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
248 http://alm.works/gantt-demo

6.16.2.2 Specify Multiple Link Types per Dependency

Structure.Gantt now allows you to visualize dependencies even if they are represented by multiple link types in Jira.

Using Gantt configuration, you can select which link types are supported for each type of dependency. When you create new dependencies in your chart, you can choose from the available link types – or you can configure favorite link types to streamline the process.

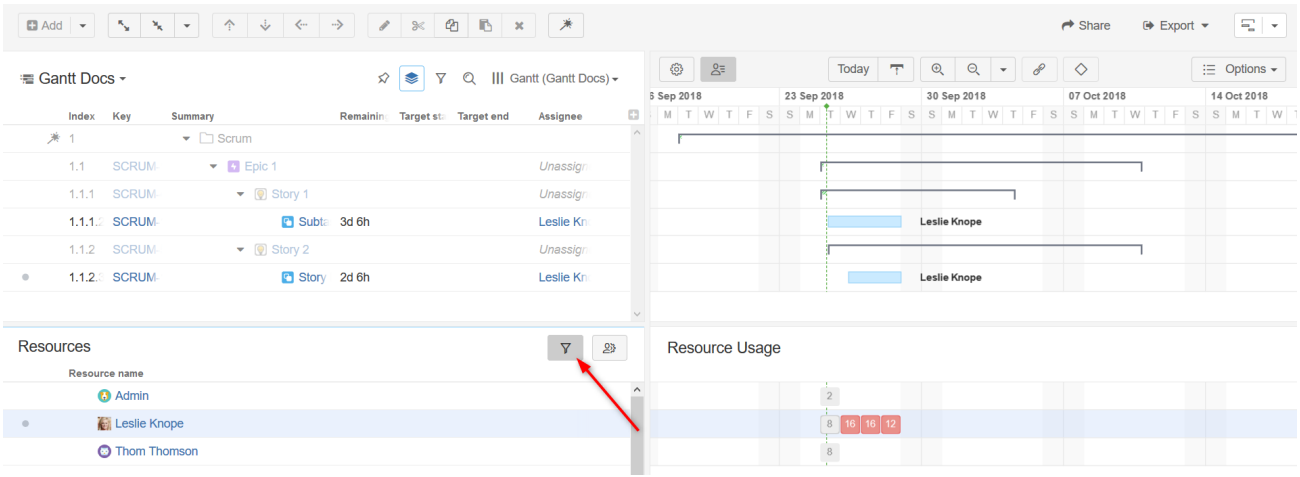
Dependency Type	Link Type	Favorite	Actions
Finish to Start	blocks	☐	Remove
	depends on	☑	Remove
	Add New Type		
Finish to Finish	Add New Type		
Start to Start	Add New Type		
Start to Finish	Add New Type		

Documentation: Dependencies(see page 108)

6.16.2.3 Filter by Resource

It is now possible to filter your structure and Gantt chart based on a specific resource, making it easier to plan work for a particular resource, resolve conflicts and address overloads.

To filter by a specific resource, simply highlight the resource's name in the Resources panel and click the Filter button.



Documentation: Working with Resources(see page 259)

6.16.2.4 Notable Fixes and Improvements

- Ability to copy existing configurations
- Zoom using the mouse wheel
- Resource maximum units can now be based on a Jira or Structure attribute
- Start Date can be manually adjusted by dragging the left side of a task bar (previously, this was only supported for Finish Date)
- Navigate directly from a Gantt gadget to the corresponding Gantt chart, with a new "Open" link
- Fixed a scheduling issue in which some tasks weren't scheduled and "Unexpected error" message appears

6.16.3 Supported Versions

Structure.Gantt 1.3 requires Structure 5.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk), versions 7.2 or later. Jira Data Center is supported too.

6.16.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.16.5 Known issues

Below are a few known issues and non-obvious cases.

- If a formula is selected as the source for resource assignment, any changes made to this formula after the resource list has been built will be ignored. For example, if your formula had a variable assigned to one field and you reassign that variable to another field after the resource list has already been built, the resource list will not be updated to reflect this change.
- The visibility of timeline bars depends on the permission settings of the structure owner (not just the current user). If a structure owner does not have permission to see an issue, they will not be able to see them on the Gantt chart.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Due to Adobe PDF limitations, maximum size of extracted Gantt chart can't exceed 200 inches (508 cm) by any side, and although most web browsers will open such PDFs without problem, Adobe Acrobat Reader will report an issue and crop the exported chart. We recommend using SVG export for huge charts instead.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

6.16.6 Enterprise Deployment Notes

Structure.Gantt 1.3 introduces Slice-based Configurations, which allow users to divide their chart into groups of items (slices) and adjust configurations for those slices separately. Separating items into slices as well as performing separate data access for items of different slices may affect system performance. It is recommended to test slice-based configurations on staging servers before using them in production.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[249].

6.16.7 Structure.Gantt 1.3.1 Release Notes

11th of December, 2018

Structure.Gantt 1.3.1 is a patch release based on Structure.Gantt 1.3.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[250]

Structure.Gantt will become a paid app beginning with release 2.0.

6.16.7.1 Patch release

This is a patch release based on version 1.3.0. We have addressed the following issues:

- Fixed: when grouping transformations were applied to the structure, adjusting tasks or creating dependencies did not work as expected
- Fixed: milestones weren't filtered out by the Resource filter action
- Fixed:when the “Prefer Story Points over Time Tracking” option was selected, task progress was calculated using time spent, rather than status
- Fixed: it was impossible to alter a gadget's configuration after its creation
- Fixed: when a gadget's "Visible rows" setting was left empty, the gadget failed to display all rows

6.16.7.2 Installation and Upgrade

Structure.Gantt 1.3.1 requires Structure 5.1 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

6.16.7.3 Enterprise deployment notes

Structure.Gantt 1.3.1 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

249 mailto:support@almworks.com
250 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview

6.16.8 Structure.Gantt 1.3.2 Release Notes

29th of December, 2018

Structure.Gantt 1.3.2 adds compatibility with Atlassian Jira 8.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[251]

Structure.Gantt will become a paid app beginning with release 2.0.

6.16.8.1 Patch Release

Starting from this version Structure.Gantt is compatible with Atlassian Jira 8.0.

6.16.8.2 Installation and Upgrade

Structure.Gantt 1.3.2 requires Structure 5.1 or above. Please, note that Structure 5.2 is required to run Structure.Gantt 1.3.2 on Jira 8.0.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

6.16.8.3 Enterprise Deployment Notes

Structure.Gantt 1.3.2 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

6.17 Structure Gantt 1.2 Release Notes

18th of July, 2018

Structure.Gantt 1.2 introduces chart export into PDF/SVG and Jira and Confluence gadget.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[252]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[253]

251 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
252 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
253 http://alm.works/gantt-demo

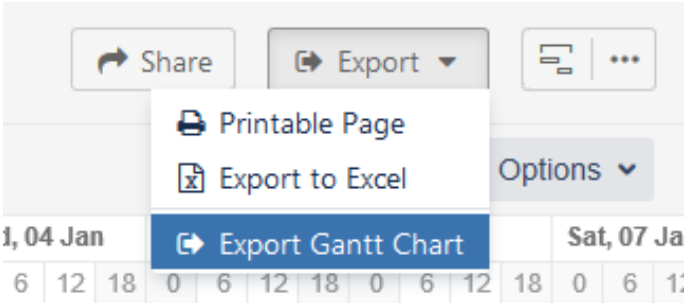
6.17.1 Version Highlights

- Export chart into a PDF or SVG file
- Ability to add Gantt chart to Jira Dashboard and Confluence pages

6.17.2 Changes in Detail

6.17.2.1 Export Gantt chart into a PDF or SVG file

It is now possible to export Gantt chart into a PDF or SVG file.



Documentation: Export Gantt Chart(see page 150)

6.17.2.2 Ability to add Gantt chart to Jira Dashboard and Confluence pages

Structure.Gantt gadget can now be placed on Jira Dashboard or embedded into a Confluence page.

Documentation: Gadgets(see page 136)

6.17.3 Supported Versions

Structure.Gantt 1.2 requires Structure 4.6 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk) of versions 7.2 or later. Jira Data Center is supported too.

6.17.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.17.5 Known issues

Below are a few known issues and non-obvious cases.

- If a formula is selected as the source for resource assignment, any changes made to this formula after the resource list has been built will be ignored. For example, if your formula had a variable assigned to one field

and you reassign that variable to another field after the resource list has already been built, the resource list will not be updated to reflect this change.
- The visibility of timeline bars depends on the permission settings of the structure owner (not just the current user). If a structure owner does not have permission to see an issue, they will not be able to see them on the Gantt chart.
- Maximum of 50 agile boards are available (in order of creation, oldest first) in the "Show Sprints from Board" dropdown menu under Fix Versions and Sprints Timeline Settings.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Due to Adobe PDF limitations, maximum size of extracted Gantt chart can't exceed 200 inches (508 cm) by any side, and although most web browsers will open such PDFs without problem, Adobe Acrobat Reader will report an issue and crop the exported chart. We recommend using SVG export for huge charts instead.

6.17.6 Enterprise Deployment Notes

Structure.Gantt 1.2 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[254].

6.17.7 Structure.Gantt 1.2.1 Release Notes

21th of August, 2018

Structure.Gantt 1.2.1 is a patch release based on Structure.Gantt 1.2.0

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[255]

6.17.7.1 Patch release

This is a patch release based on version 1.2.0. We have addressed the following issues:

- Fixed: an issue with selecting Agile Board for Sprints visualization in a case where there are more than 50 boards configured
- Fixed: an issue when task duration and estimate may be calculated incorrectly if Manual Finish is defined and 24 hours calendar is used
- Fixed: broken icons when exporting into PDF with Firefox and IE 11 browser and using grouping
- Fixed: an input collapse while editing manual attribute specification (manual scheduling, progress or resource attribute editors)
- Fixed: for both start and finish manually scheduled tasks duration can't be less than default estimate

6.17.7.2 Installation and Upgrade

Structure.Gantt 1.2.1 requires Structure 4.6 or above.

254 mailto:support@almworks.com
255 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

6.17.7.3 Enterprise deployment notes

Structure.Gantt 1.2.1 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

6.18 Structure.Gantt 1.1 Release Notes

> **17th of May, 2018**
>
> Structure.Gantt 1.1 introduces Sprints and Fix Versions visualization at the timeline, redesigned Gantt configuration and ability to use Custom field or formula for progress calculation.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[256]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[257]

6.18.1 Version Highlights

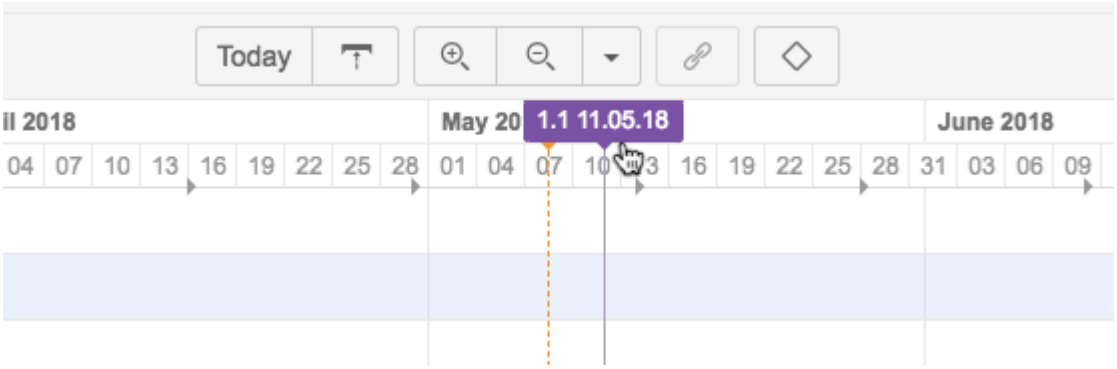
- Visualization of Sprints and Fix Versions on the timeline
- Redesigned Gantt Configuration dialog
- Ability to use Custom Fields or Formulas[258] as a source for Task Progress
- Greatly improved performance

6.18.2 Changes in Detail

6.18.2.1 Visualization of Sprints and Fix Versions

It is now possible to show Sprints and Fix Versions on the timeline. You can select which Boards and Projects should be used as the source.

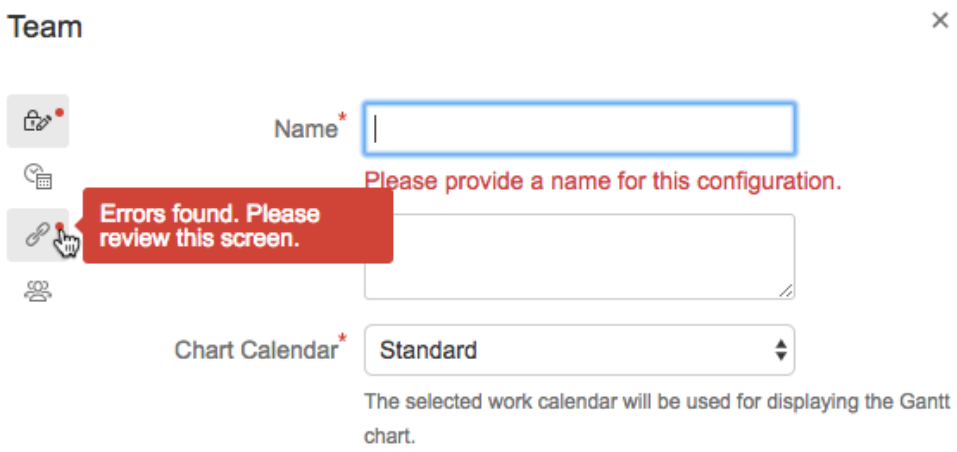
256 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
257 http://alm.works/gantt-demo
258 https://wiki.almworks.com/display/structure/.Formula+Column+v8.1



Documentation: Gantt configuration in Details[259].

6.18.2.2 Redesigned Gantt Configuration dialog

User interface for Gantt configuration was redesigned. Now it's much easier to switch between configurations, edit the current configuration, see if there are any errors in it and fix them.



Documentation: Gantt configuration in Details[260].

6.18.2.3 Ability to use numeric Custom Fields or Formulas for progress calculation

It is now also possible to use any numeric Custom Field or a Structure Formula[261] for Progress.

Documentation: Progress configuration(see page 267)

6.18.2.4 Performance improvements

A major performance issue was fixed, so Gantt calculation now completes much faster.

259 https://wiki.almworks.com/display/gantt/Gantt+Configuration+in+Details
260 https://wiki.almworks.com/display/gantt/Gantt+Configuration+in+Details
261 https://wiki.almworks.com/display/structure/.Formula+Column+v8.1

6.18.3 Supported Versions

Structure.Gantt 1.1 requires Structure 4.6 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Desk) of versions 7.2 or later. Jira Data Center is supported too.

6.18.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please backup your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings are correct.

6.18.5 Known issues

Below are a few known issues and non-obvious cases.

- In some cases removed dependency will be removed from the Jira but may still be visualized on the chart, manual browser page refresh fixes the problem.
- If you are working with issues in multiple time zones, their alignment will be slightly off on the timeline. This may result in a small error in the calculation of the parent issue dates (if grouping is used) or may lead to an issue being excluded from the critical path, because this deviation adds a small gap between issues.
- If a formula is selected as the source for resource assignment, any changes made to this formula after the resource list has been built will be ignored. For example, if your formula had a variable assigned to one field and you reassign that variable to another field after the resource list has already been built, the resource list will not be updated to reflect this change.
- The visibility of timeline bars depends on the permission settings of the structure owner (not just the current user). If a structure owner does not have permission to see an issue they will not be able to see them on the Gantt chart.

6.18.6 Enterprise Deployment Notes

Structure.Gantt 1.1 introduces functionality for defining progress calculation based on custom fields or a Structure Formulas. Using such configurations may require more complex calculations and result in higher performance load. It is recommended to test Structure.Gantt 1.1 with different progress configurations at staging servers before using them in production.

The following configurations may require special attention:

- Progress based on complex Structure Formulas
- Progress based on scripted fields

Should you have any questions on Enterprise Deployment, let us know at support@almworks.com[262] .

262 mailto:support@almworks.com

6.18.7 Structure.Gantt 1.1.1 Release Notes

14th of June, 2018

Structure.Gantt 1.1.1 adds Jira 7.10 compatibility along with several bug fixes and improvements.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[263]

6.18.7.1 Patch release

This is a patch release based on version 1.1. This upgrade is recommended for all customers.

Starting from this version, Structure.Gantt is compatible with Jira 7.10. We are still working on making Structure.Gantt's user interface match the new look and feel of Jira 7.10. The app is perfectly usable, but you can still see some older-style controls and some differences with Structure's controls. We are planning to complete the redesign in the next feature version.

Important: Custom progress format, introduced in version 1.1, has changed in this patch. If you have Gantt charts where progress is calculated based on a formula or a special custom field, you need to review the configuration and make sure that the progress values range from 0.0 to 100.0 (not from 0.0 to 1.0).

If you use a formula, just multiply it by 100.

If you use a custom field with a progress value, you can either update all the values in that field or, if you'd like to continue to use values from 0.0 to 1.0 in the Jira field, use a formula for Gantt progress and multiply the custom field's value by 100.

We also addressed the following issues:

- Fixed: an error while saving Gantt Configuration on Jira Data Center
- Fixed: an error when removing Group transformations
- Fixed: undoing dependency creation removes the Jira link correctly, but does not remove the dependency on the Gantt chart
- Fixed: progress disappears when adding a Group transformation
- Fixed: progress disappears on all charts if a custom field used for progress in one of the configurations is removed from Jira

6.18.7.2 Installation and Upgrade

Structure.Gantt 1.1.1 requires Structure 4.6 or above.

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

Please review your Gantt configurations after upgrading to check that your settings remain correct.

263 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview

6.18.7.3 Enterprise deployment notes

Structure.Gantt 1.1.1 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

6.19 Structure.Gantt 1.0 Release Notes

> **29th of December, 2017**
>
> ALM Works is happy to release Structure.Gantt 1.0, our first General Availability release.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[264]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[265]

Structure.Gantt is an extension to Structure, the Jira app used by more than 4,000 Atlassian customers worldwide to organize their issues in user-defined, multi-level hierarchies. Structure.Gantt enables you to display Jira project data in familiar Gantt charts so you can instantly visualize issue dependencies, timelines and understand resource allocation on a global scale. Designed to fit your current Jira configuration as is, Structure.Gantt is flexible, fast, and currently free for customers with a Structure license.

6.19.1 Version Highlights

- First ever Gantt Charts extension to Structure[266]!
- Easy creation of new structures with Gantt chart with Gantt Chart wizard
- Timelines, dependencies, resource allocation and more
- Good performance on structures of up to 10,000 issues

6.19.2 Getting Started

To start using Structure.Gantt on your Jira, follow a 5-minute installation and setup instructions in Quick Start Guide(see page 271).

6.19.3 Supported Versions

Structure.Gantt 1.0 requires Structure 4.5 or above.

Jira versions 7.2 or later supported. All editions of Jira (Jira Core, Jira Software, Jira Service Desk) are supported. Jira Data Center is supported.

264 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
265 http://alm.works/gantt-demo
266 https://marketplace.atlassian.com/plugins/com.almworks.jira.structure/server/overview

6.19.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please backup your database or Jira before upgrading.

Please review your Gantt configuration after upgrading to check that your settings are correct. Also, be aware, there is the new Resolution Date scheduling option which is enabled by default.

6.19.5 Known issues

Below are a few known issues and non-obvious cases.

- If you are working with issues in multiple time zones, their alignment will be slightly off on the timeline. This may result in a small error in the calculation of the parent issue dates (if grouping is used) or may lead to an issue being excluded from the critical path, because this deviation adds a small gap between issues.
- If a formula is selected as the source for resource assignment, any changes made to this formula after the resource list has been built will be ignored. For example, if your formula had a variable assigned to one field and you reassign that variable to another field after the resource list has already been built, the resource list will not be updated to reflect this change.
- The visibility of timeline bars depends on the permission settings of the structure owner (not just the current user). If a structure owner does not have permission to see an issue they will not be able to see them on the Gantt chart.
- If you are migrating from the Structure.Gantt Beta release the tasks that are assigned to a resource with the capacity higher than 1 will now take longer. That's because we have introduced the Maximum Units parameter, which sets the maximum number of resource units that can be used for the task. This parameter is set to 1 by default.
- Default task duration default for newly created Gantt configurations is now 1 day (previously it was 1 hour).

6.19.6 Enterprise Deployment Notes

See Enterprise Deployment(see page 166) notes in the product documentation.

6.19.7 Structure.Gantt 1.0.1 Release Notes

5th of February, 2018

Structure.Gantt 1.0.1 adds several improvements and performance optimizations to version 1.0.

Download App(see page 177)
Structure.Gantt on Atlassian Marketplace[267]
Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required[268]

267 https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview
268 http://alm.works/gantt-demo

6.19.7.1 Patch Release

This is a patch release based on Structure.Gantt 1.0. Upgrade is recommended to all customers using version 1.0 or pre-GA versions.

The patch includes:

- Navigation to an assigned resource from the Task Info pop-up
- Improved deleting Gantt configurations
- Performance improvements

6.19.7.2 Supported Versions

Structure.Gantt 1.0.1 requires Structure 4.5 or above. Jira versions from 7.2 or later are supported. All editions of Jira (Jira Core, Jira Software, Jira Service Desk) are supported. Jira Data Center is supported.

6.19.7.3 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please backup your database or Jira before upgrading.

Please review your Gantt configuration after upgrading to check that your settings are correct.