

Structure.Gantt by Tempo

Add the power of Gantt charts to Jira project management

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Add the power of Gantt charts to Jira project management -

Make Jira project planning efficient and visual, with Structure's flexible roadmap and Gantt chart extension for Jira.

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 22)
- [Gantt Chart Elements](#)(see page 31)
- [Working with Gantt Charts](#)(see page 41)

i This guide makes a couple of assumptions:

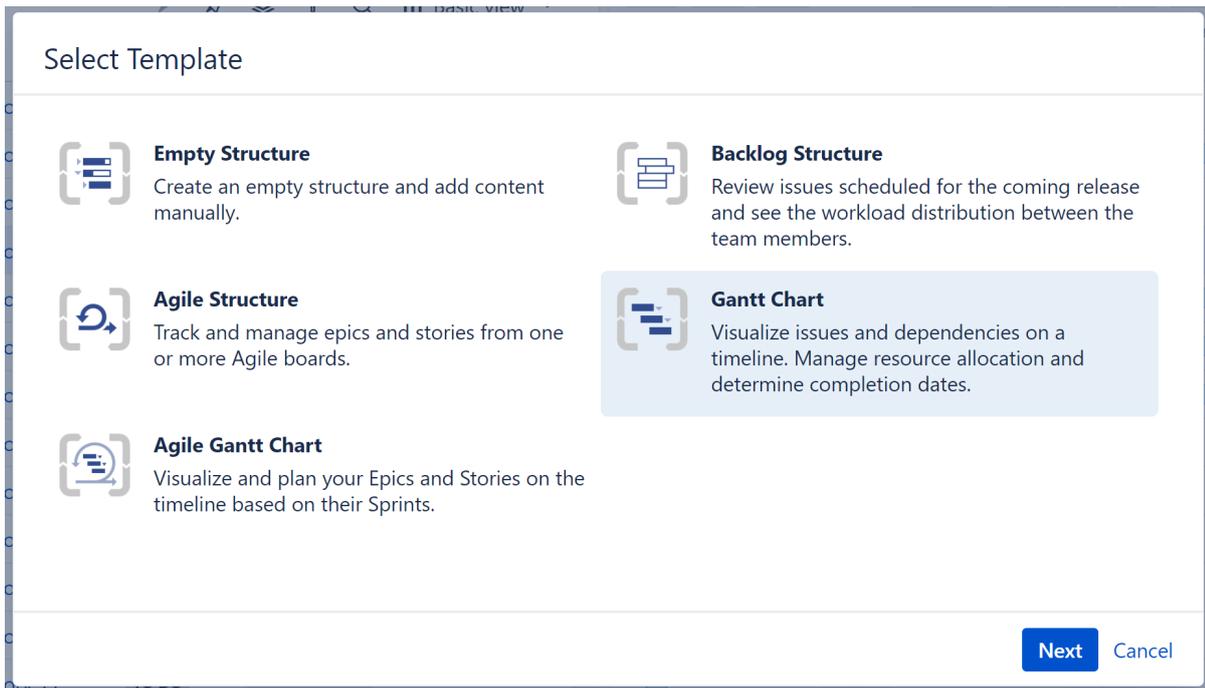
1. You are familiar with the basics of [Structure for Jira](#)¹.
2. You have already installed both Structure for Jira and Structure.Gantt. If not, please speak with your system administrator.

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 23)
- To create a chart for a new project, see [Gantt Chart Template](#)(see page 24)
- To create an Agile Gantt chart (visualize and plan your epics and stories based on their sprints), see [Agile Gantt Chart Template](#)(see page 28).

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

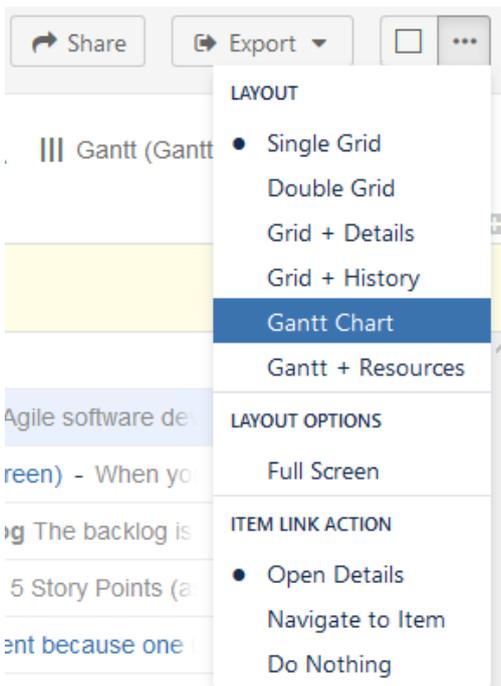


1.1.1 Create a Gantt Chart from an Existing Structure

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 46).

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

That's it! Now you can skip ahead to [Working with Your Gantt Chart](#)(see page 41) 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.

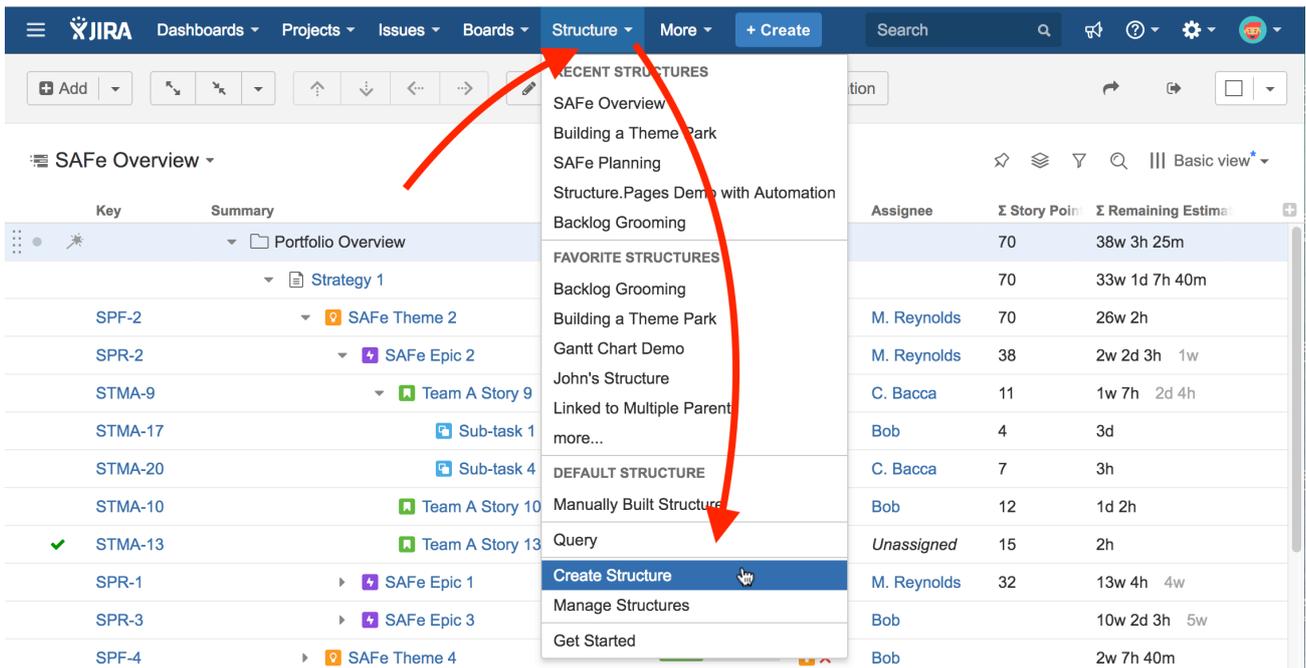
 To be able to create Gantt charts (even for existing structures) you need to have the appropriate permissions set for your account. To create a Gantt chart for a structure that you created, you must have permission to create new structures. To create a Gantt chart for a structure you did not create, 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

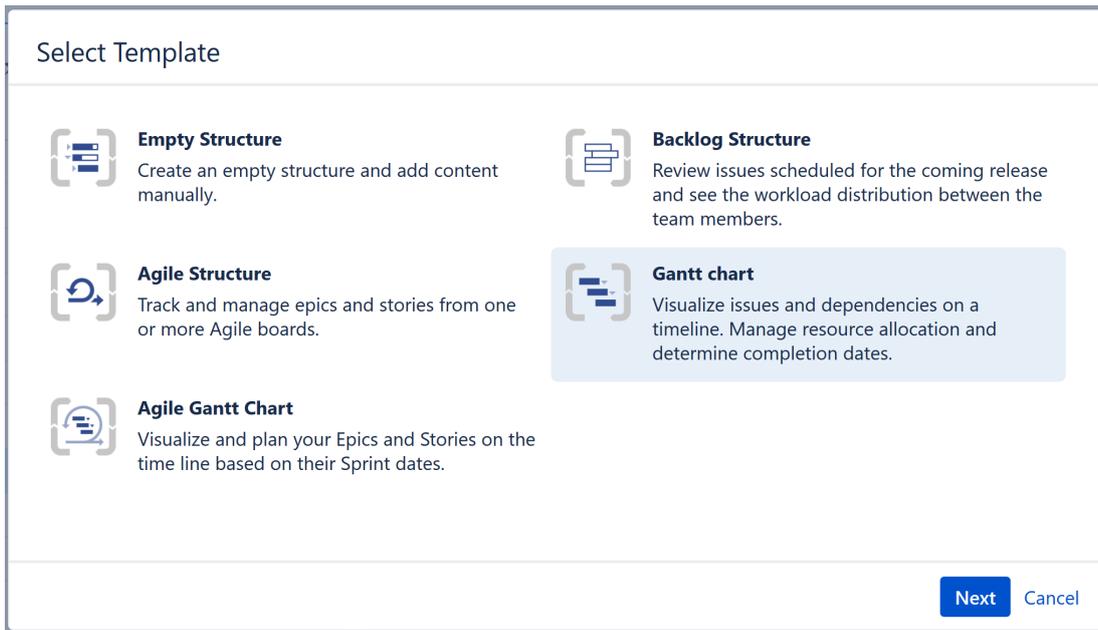
If you are new to Structure or want to create a new Gantt chart separate from any of your existing structures, we recommend using the Gantt Chart Template in the Structure Wizard. In a few simple steps, you can define your work breakdown structure (WBS), timeline, dependencies and other parameters which 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 28).

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.

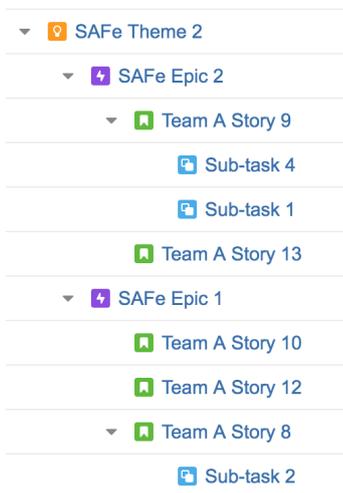
To define your scope:

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 63) at any time using [Gantt configuration](#)(see page 45)).

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 67), but that is only possible using [Gantt configuration](#)(see page 45).

1.1.2.6 Calendar

By default, Structure.Gantt uses the predefined "Standard" [work calendar](#)(see page 70) 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 45).

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 41)
- If you need to make changes to your [Gantt chart configuration](#)(see page 45), click the Settings button  on the top left of the Gantt screen.

² <https://wiki.almworks.com/display/structure/.Managing+Views+v9.2>

³ <https://wiki.almworks.com/display/structure/.Documentation+v9.2>

⚠ 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.

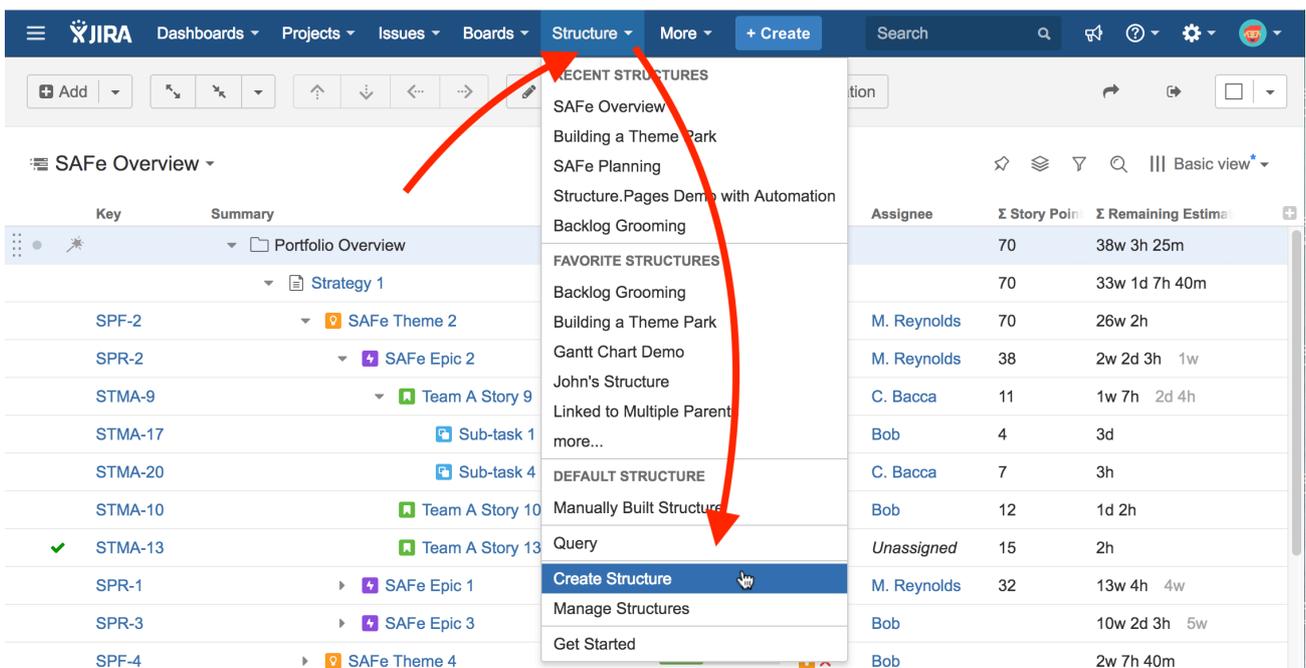
1.1.3 Agile Gantt Chart Template

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.

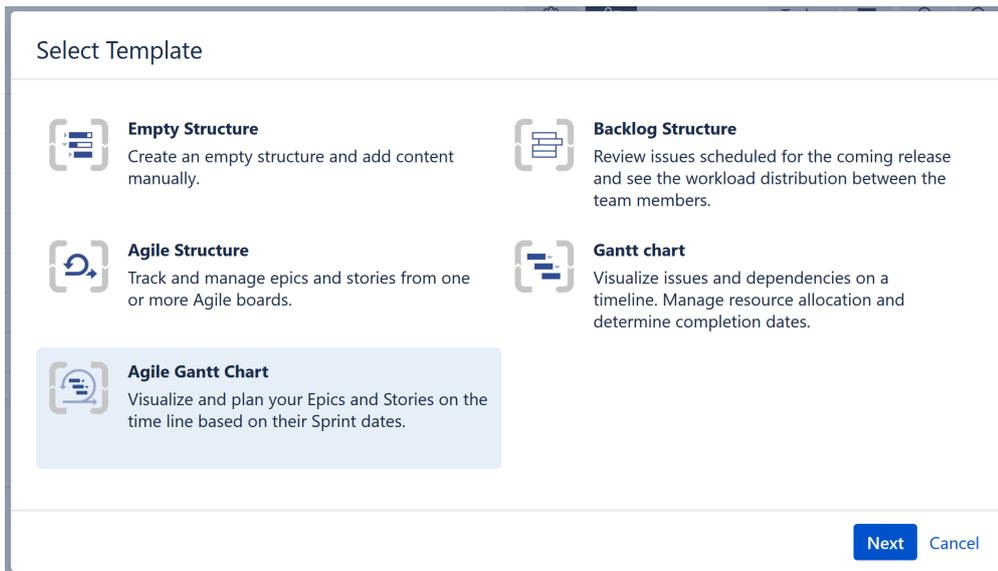
The easiest way to get started is with our Agile Gantt Chart template.

1.1.3.1 Open the Agile Gantt Chart Wizard

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

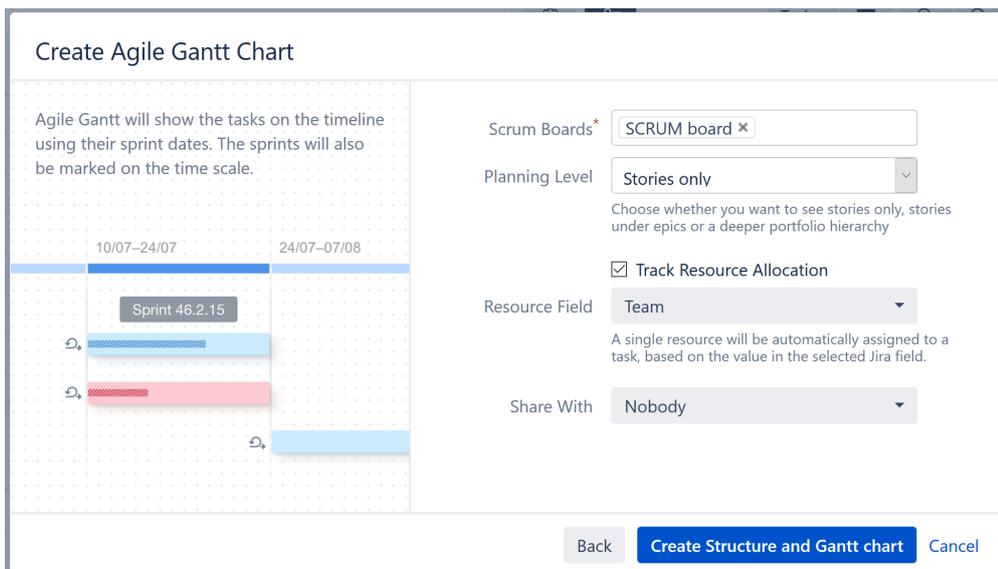


Select the **Agile Gantt Chart** template and click **Next**.



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.

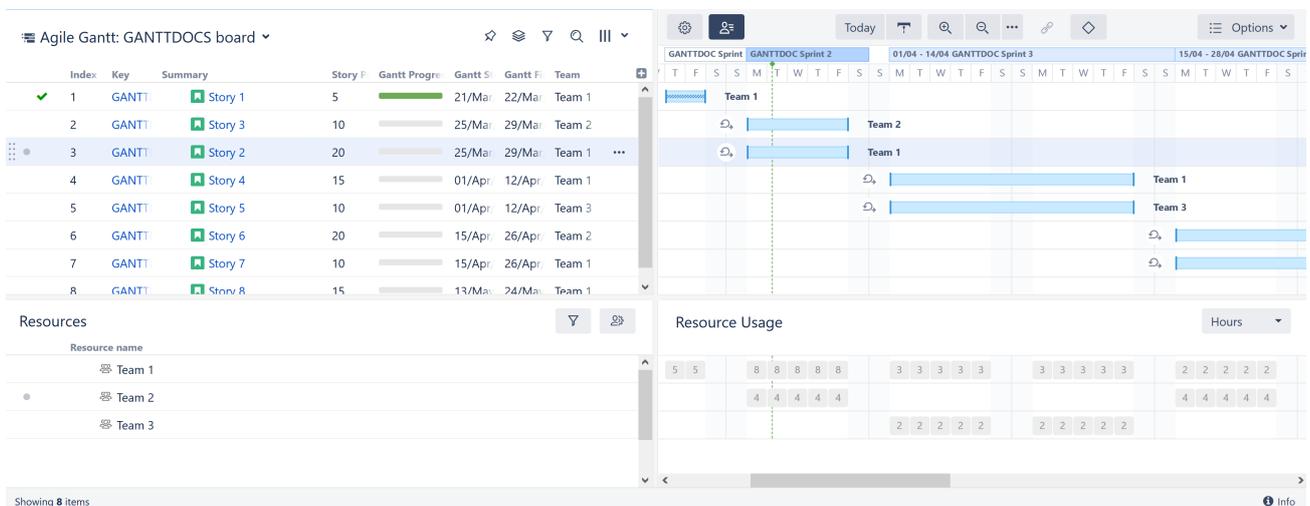
If you wish to track resource allocation, check the **Track Resource Allocation box** and select the **Resource Field** that should be used to assign resources to your tasks. You can choose from a variety of Jira fields or use a custom field or formula. Many of our customers use the Assignee field or 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 45).

4 <https://wiki.almworks.com/display/structure/Structure+Permissions>

5 <https://wiki.almworks.com/display/structure/.Generators+v9.2>

6 <https://wiki.almworks.com/display/structure/.Editing+a+Generator+v9.2>

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 41)
- If you need to make changes to your [Gantt chart configuration](#)(see page 45), click the Settings button  on the top left of the Gantt screen.

 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.

1.2 Gantt Chart Elements

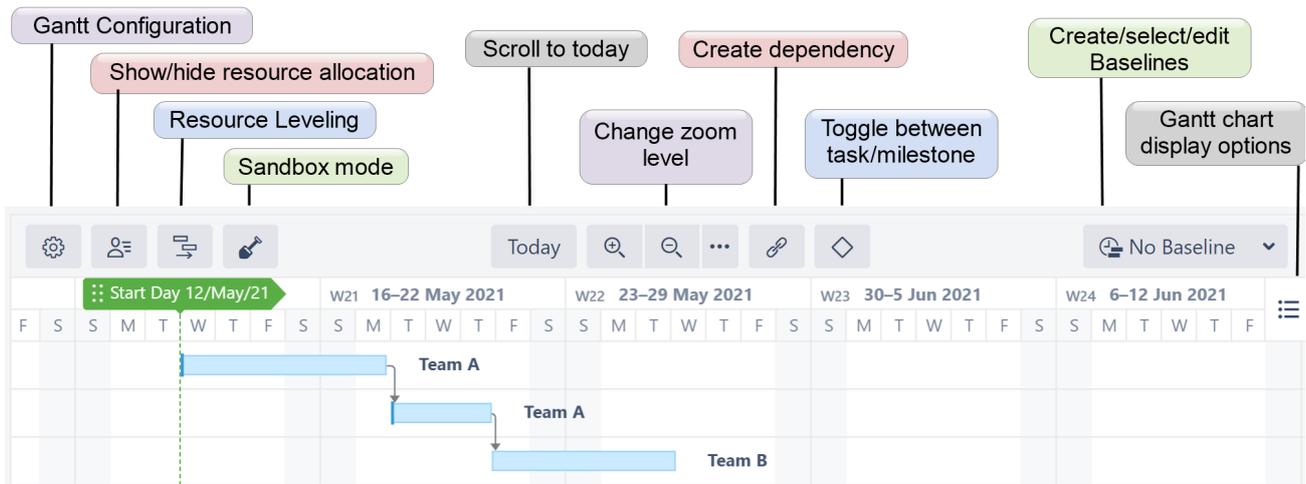
The following section will walk you through the elements of your Gantt chart panel and explain how to accomplish many common tasks.

1.2.1 Toolbar

Using the toolbar, you can:

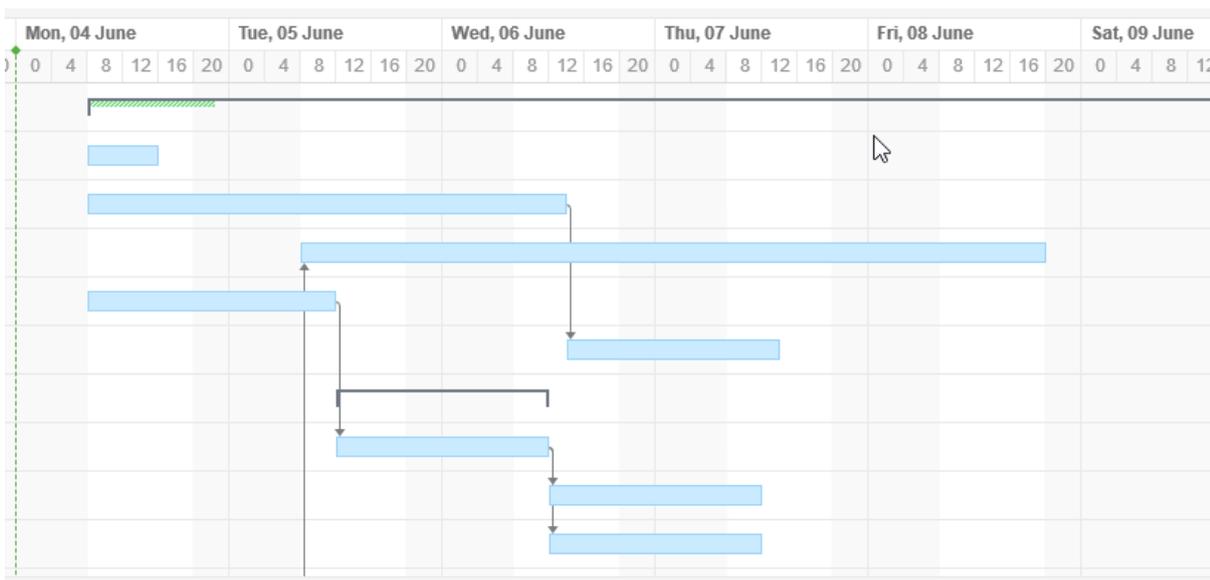
- Access Gantt Chart Settings
- Show/hide [resources](#)(see page 124)
- Adjust the chart's appearance
- Select which elements are shown within your timeline
- Create [dependencies](#)(see page 116)
- Turn tasks into [milestones](#)(see page 123)
- Apply [Resource Leveling](#)(see page 130)
- Toggle [Sandbox mode](#)(see page 161) on/off
- Manage [Baselines](#)(see page 136)

⁷ <https://wiki.almworks.com/display/structure/.Documentation+v9.2>



Timeline

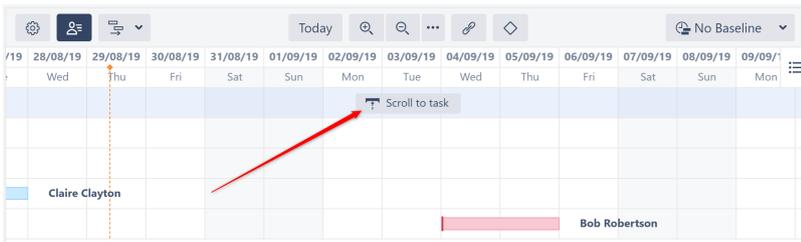
Your timeline contains visual representations of tasks, dependencies, progress, milestones and other key dates. It is also where you will do most of your work. You can also adjust tasks and dependencies directly from your timeline.



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)

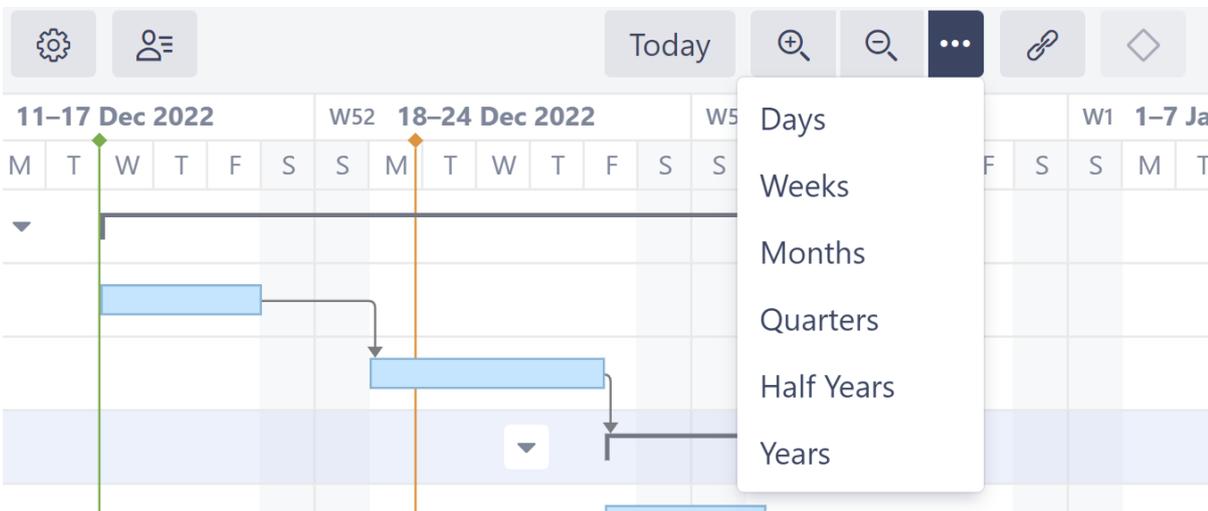


1.2.2.1 Zoom Level

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

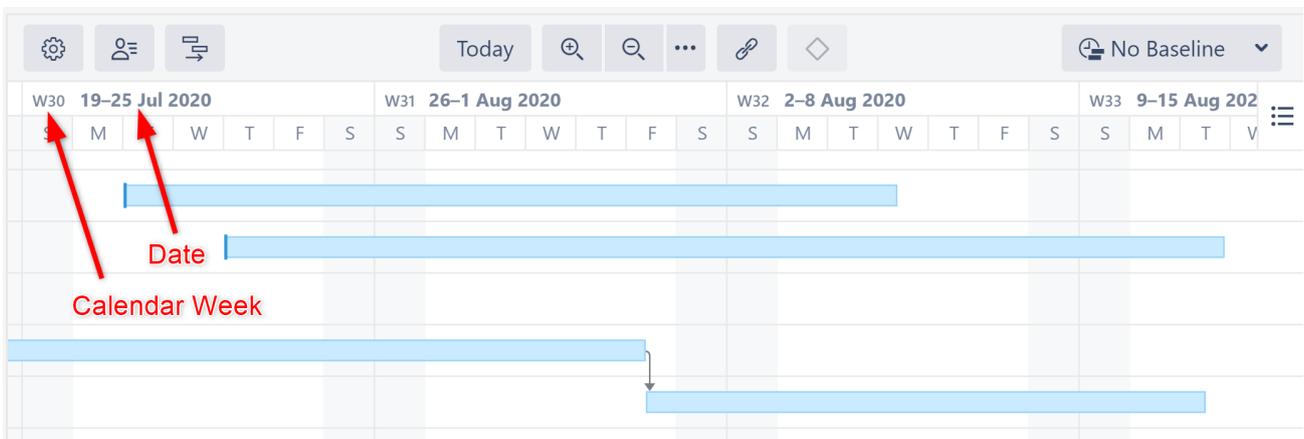
You can also zoom in or out using your mouse wheel, by holding down the **ctrl** button (**cmd** on macs).

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

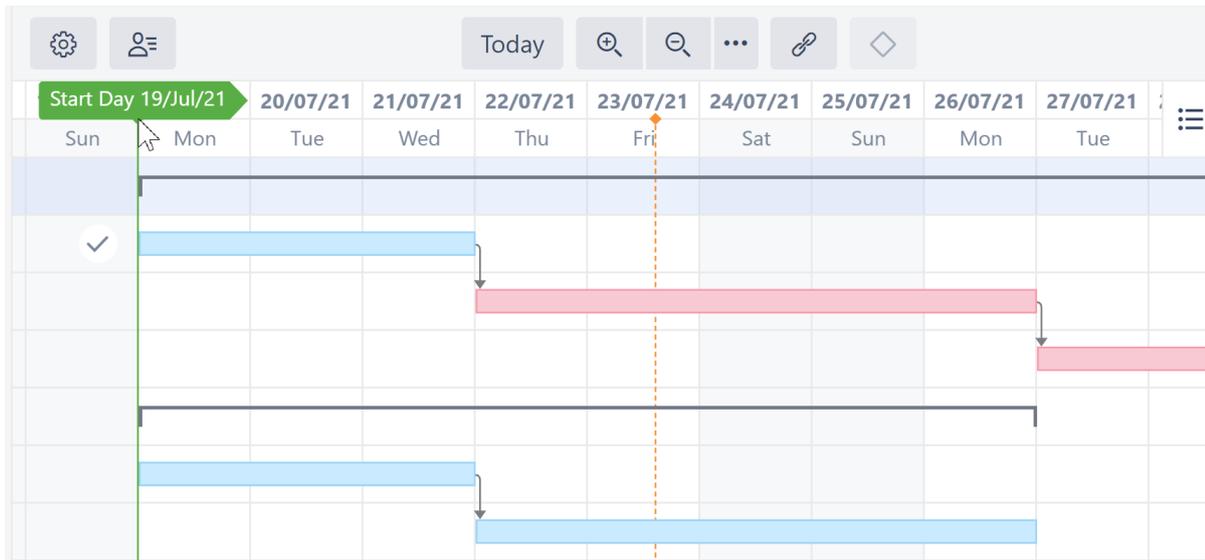
If you zoom out to a point that weeks are shown, Structure.Gantt will list both the dates and the corresponding week numbers:



1.2.3 Start Day and Current Date

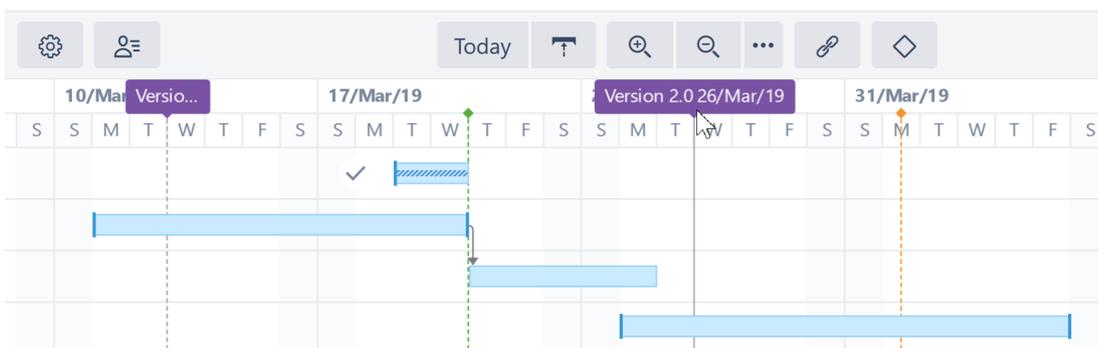
The project start date is indicated by a green vertical dashed line. The current date/time is indicated by an orange vertical line.

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



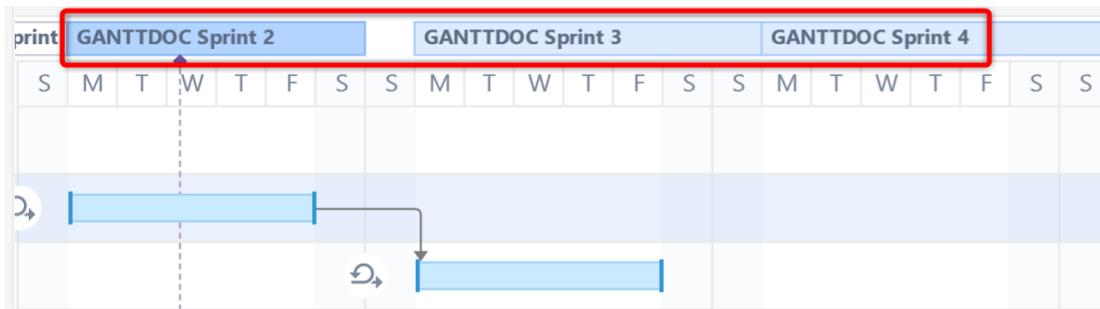
1.2.4 Fix Versions

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 98), 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 46) for instructions on specifying sprint timelines.)

1.2.6 Task Bars

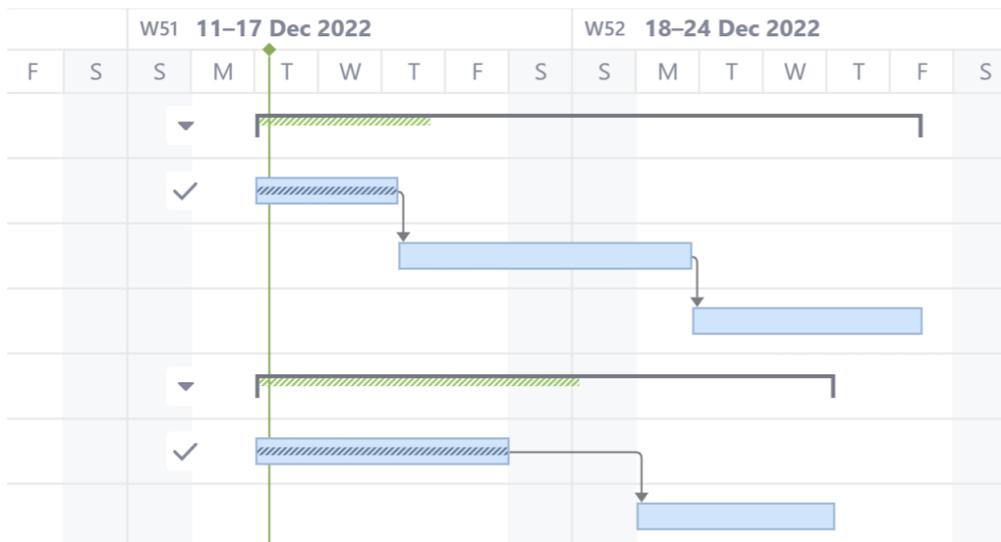
Structure items are represented in the chart as task bars.

- A task's position on the timeline is based on its [dependencies](#)(see page 116), [manually-set Start or/and Finish dates](#)(see page 96) or [sprint dates](#)(see page 98), and [Leveling Delay](#)(see page 130).
- 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 38).
- Completed tasks can be marked with a check [icon](#)(see page 112). To show or hide Task Indicators, use the [Display Options menu](#)(see page 38).
- If a task is a part of the [critical path](#)(see page 38), it is shown with a red box around it. You can show or hide critical path highlighting using the [Display Options menu](#)(see page 38).

1.2.7 Groups

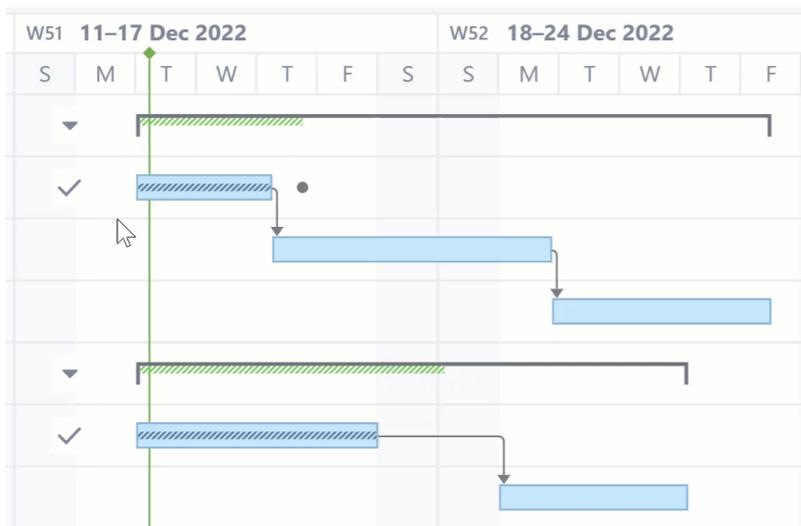
If an element has children in a structure, it can be shown as a Group.

- 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 own start/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.



1.2.7.1 Expanding/Collapsing Groups

To show or hide the tasks within a group, click the triangle to the left of the group.

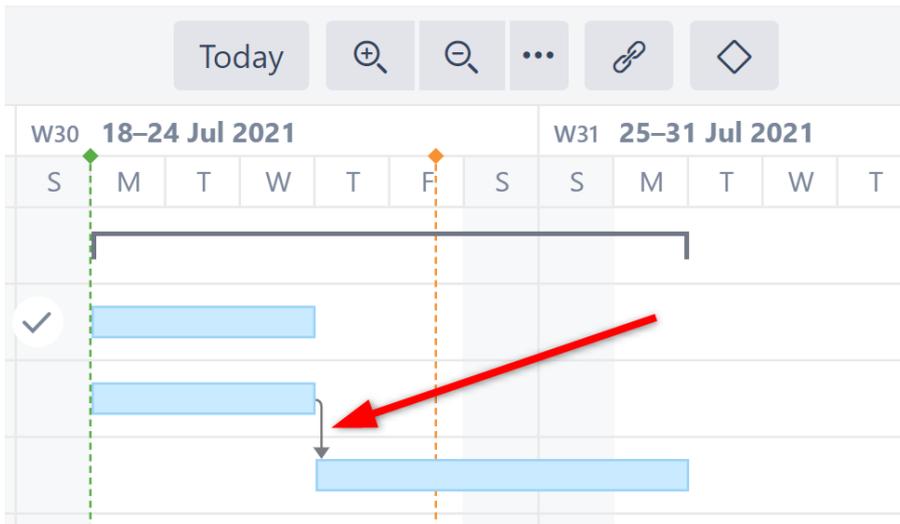


⚠ In order to display child/parent relationships as a group, you first need to enable grouping in [Gantt configuration](#)(see page 45)

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 38) menu in the toolbar



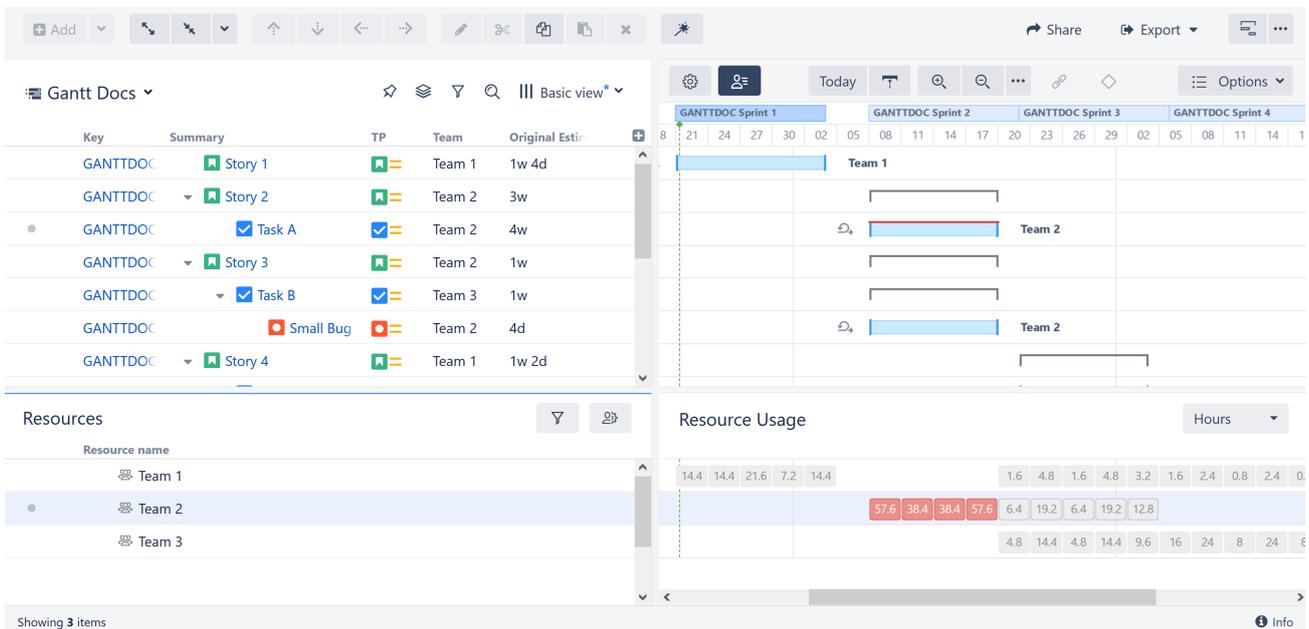
For more information about managing dependencies, see [Dependencies Configuration](#)(see page 63).

1.2.8 Resources

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

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 67).
- **Resource Usage** - Displays the workload for each resource at a given time.



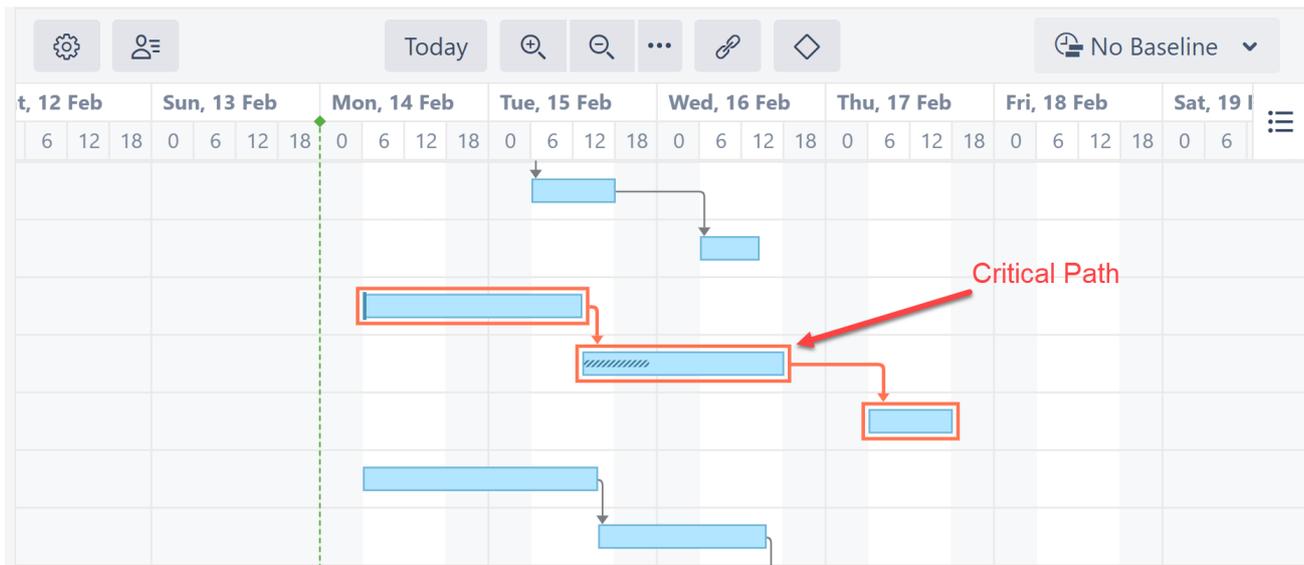
✔ If you don't see any resources in this list, make sure you've configured them. See [Resources Configuration](#)(see page 67).

For more information about managing resource, see [Resources and Resource Usage](#)(see page 125).

1.2.9 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.



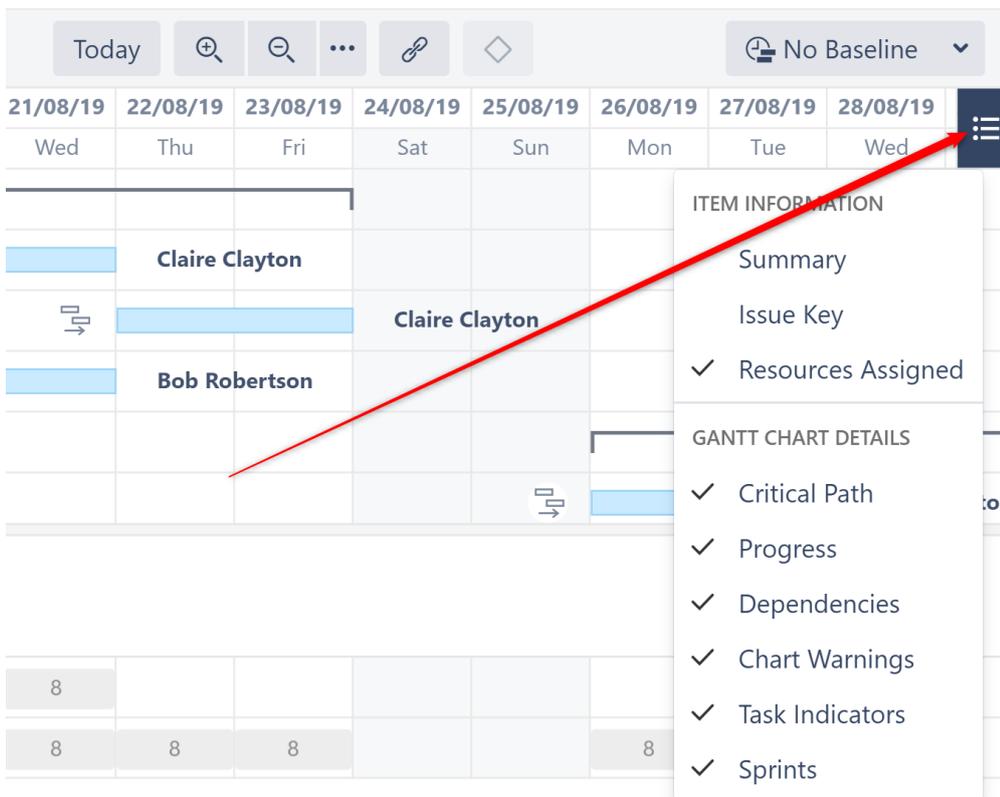
To switch off Critical Path highlighting:

1. Select the [Options](#) (see [page 38](#)) menu in the toolbar
2. Uncheck **Critical Path**

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

Display Options

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

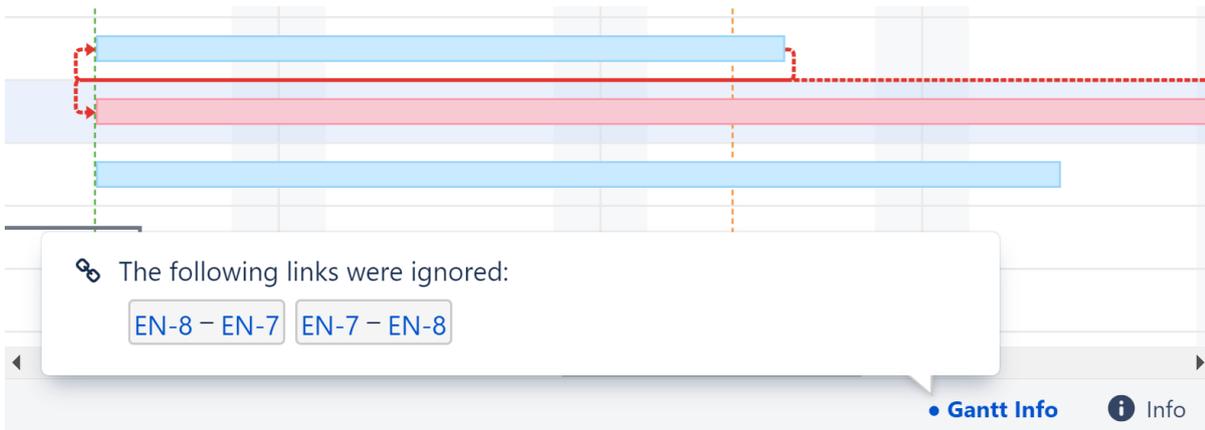


You can show/hide:

- 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 112))
- Sprints (Note: If this option is switched off, sprints will still be displayed when dragging sprint-scheduled tasks.)
- Custom chart markers

Status Bar

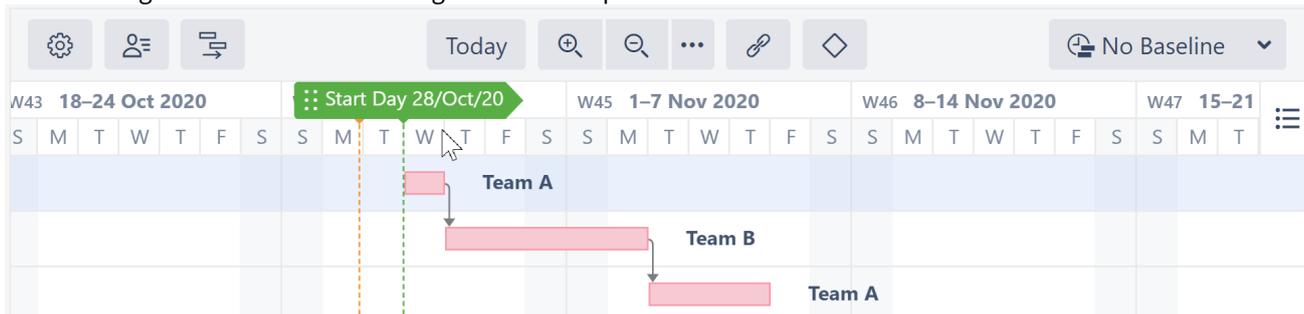
If there are any inconsistencies in the source data (for example, a cycle of dependencies), the Gantt Info link will be shown on the right side of the Structure status bar (next to the Structure Info link  at the bottom of the screen). Click the link to see details of the inconsistencies.



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

1.2.10 Project Start Day

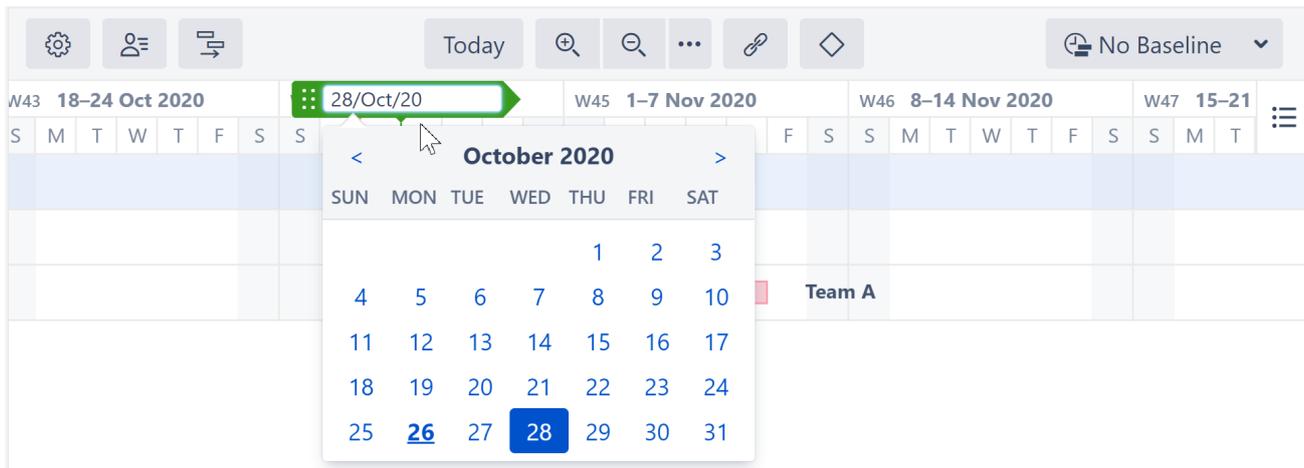
The Project Start Day is used as the starting point for [automatic scheduling](#)(see page 95). It appears in the Gantt chart as a vertical green line. Hover over the green dot on top of this line to reveal the date.



1.2.10.1 Setting the Project Start Day

The Project Start Day is initially selected when you [create a new Gantt chart](#)(see page 23). 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 46) and enter a new date
- Click the Start Day Marker and enter the date, or simply drag it to a new location



i 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 45).

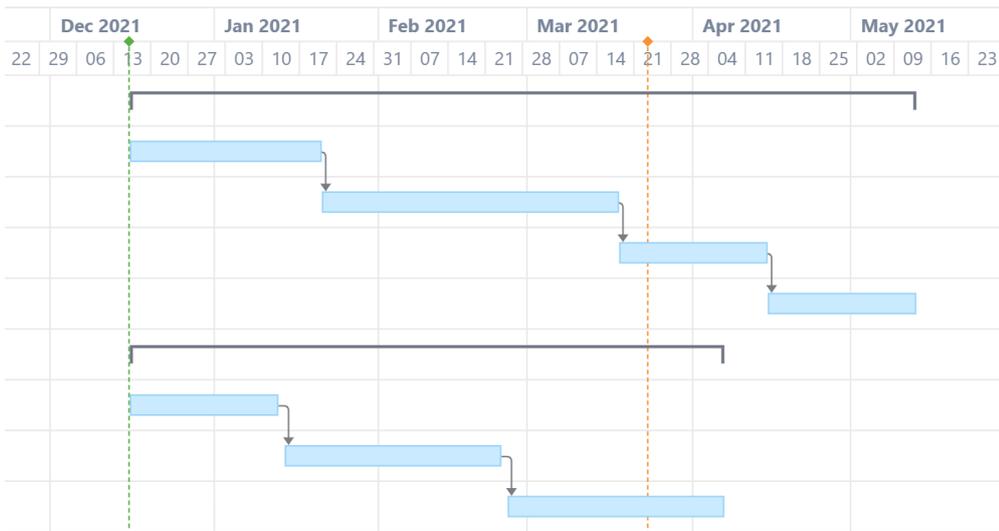
1.3.1 Scheduling Tasks

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+v9.2>



1.3.1.2 Manual Scheduling

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

Key	Summary	Status	Progress	Start Date
STMA-46	Team A Story 11	TO DO		17/Mar/21
STMA-45	Team A Story 1	IN PROGR		25/Mar/21
STMA-44	Team A Story 3	DONE		22/Mar/21
STMA-43	Team A Story 5	IN PROGR		18/Mar/21
STMA-42	Team A Story 5	TO DO		29/Mar/21
STMA-37	Team A Story 14	TO DO		29/Mar/21
STMA-21	Team A Story 20	TO DO		
STMA-16	Team A Story 16	TO DO		

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.

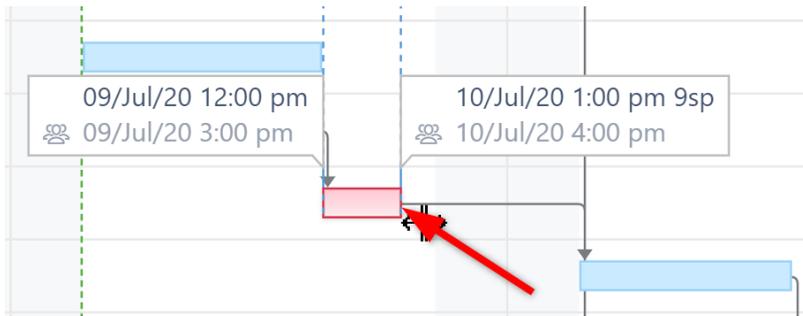
For more information, see [Scheduling Tasks](#)(see page 94).

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 52) and the [calendar](#)(see page 70).

To adjust a task's duration:

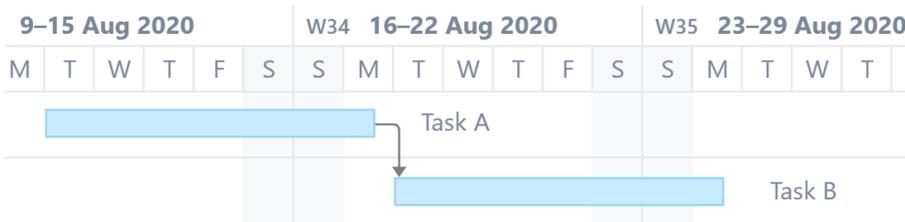
1. Edit the task's work estimate fields, or
2. Drag the side of the task bar.



For more information, see [Adjusting Duration](#)(see page 105).

1.3.3 Managing Dependencies

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



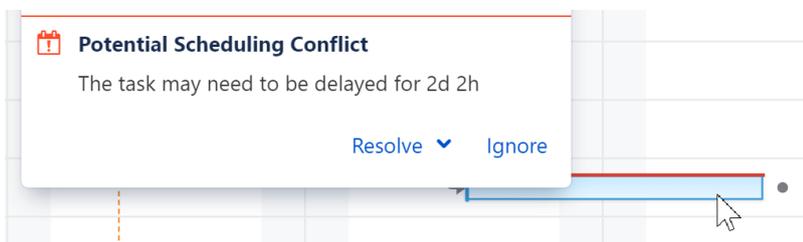
To create a dependency between two tasks, drag from one task to another. The type of dependency you create will depend on the sides of each task you use:

- 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 116).

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 45).

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 22).

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

- [Creating a Gantt Chart](#)(see page 45)
- [Gantt Configuration](#)(see page 45)
- [Tasks](#)(see page 94)
- [Dependencies](#)(see page 116)
- [Milestones](#)(see page 123)
- [Resources](#)(see page 124)
- [Resource Leveling](#)(see page 130)
- [Baselines](#)(see page 136)
- [Gadgets](#)(see page 144)
- [Gantt Attributes in Structure](#)(see page 151)
- [Export Gantt Chart](#)(see page 158)
- [Sandbox Mode](#)(see page 161)

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 23)
- [Create a chart for a new project](#)(see page 24)
- [Create an Agile Gantt chart](#) (see page 28)(visualize and plan your epics and stories based on their sprints)

2.2 Gantt Configuration

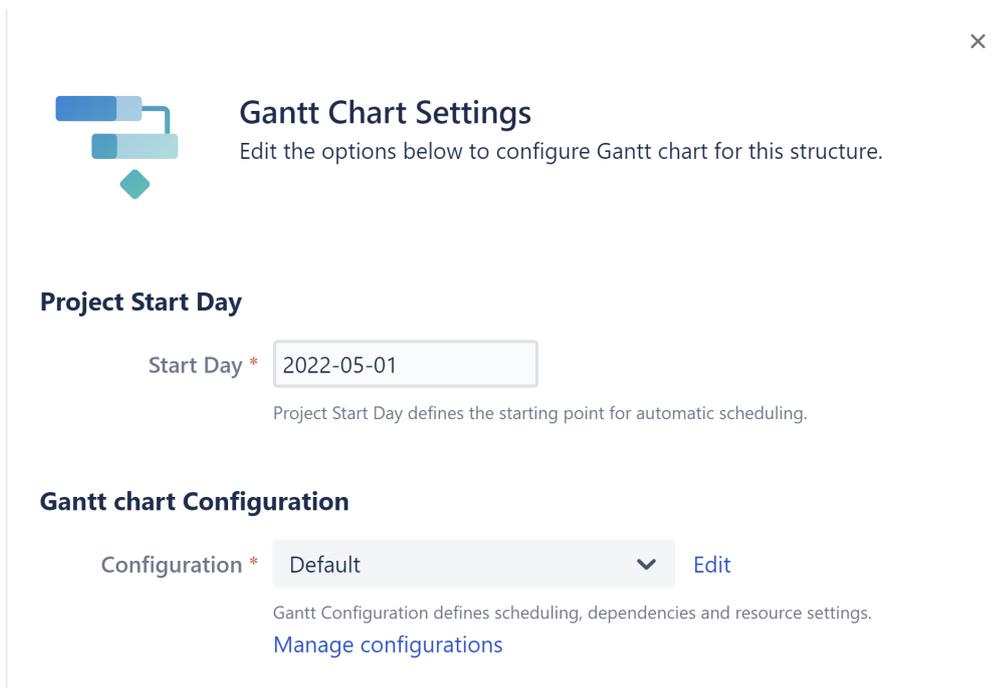
Structure.Gantt is a highly flexible app. It uses Structure and Jira data to build the chart, and it lets you configure most of the parameters that define the chart's behavior. The following sections will walk you through configuring and customizing your Gantt chart(s) to fit your unique business needs.

- [Gantt Chart Settings](#)(see page 46)
- [General Configuration](#)(see page 50)
- [Scheduling Configuration](#)(see page 52)
 - [Work Estimates Configuration](#)(see page 52)
 - [Progress Configuration](#)(see page 54)
 - [Manual Scheduling Configuration](#)(see page 58)
 - [Use Sprints for Manual Scheduling](#)(see page 59)
 - [Scheduling Precedence](#)(see page 60)
 - [Fixed Duration Attribute](#)(see page 61)
 - [Precision Configuration](#)(see page 62)
 - [Behavior Configuration](#)(see page 62)
- [Dependencies Configuration](#)(see page 63)
- [Resources Configuration](#)(see page 67)
- [Calendars](#)(see page 70)
- [Slice-based Configurations](#)(see page 78)
 - [Creating a Slice](#)(see page 79)
 - [Customizing a Slice](#)(see page 81)
 - [Removing a Slice](#)(see page 87)

- [Order of Operation](#)(see page 88)
- [Managing Gantt Configurations](#)(see page 89)
 - [Copy Configuration](#)(see page 91)
 - [Deleting Gantt Configurations](#)(see page 93)
 - [Permissions and Sharing](#)(see page 93)

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.



Gantt Chart Settings
Edit the options below to configure Gantt chart for this structure.

Project Start Day

Start Day *

Project Start Day defines the starting point for automatic scheduling.

Gantt chart Configuration

Configuration * ▼ [Edit](#)

Gantt Configuration defines scheduling, dependencies and resource settings.
[Manage configurations](#)

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

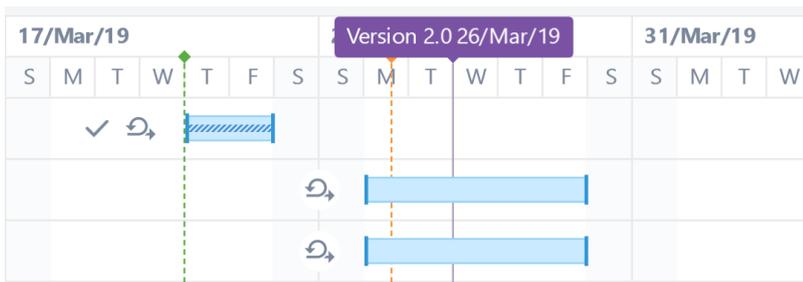
The [Gantt Chart Configuration](#)(see page 45) determines how items operate within your chart. This is where you set how scheduling, dependencies, and resources should work.

- 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 45).

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. If you want the flag at the top of the marker to remain visible at all times, select **Always visible on the timeline**.

Fix Version Timeline Settings

Projects ▼

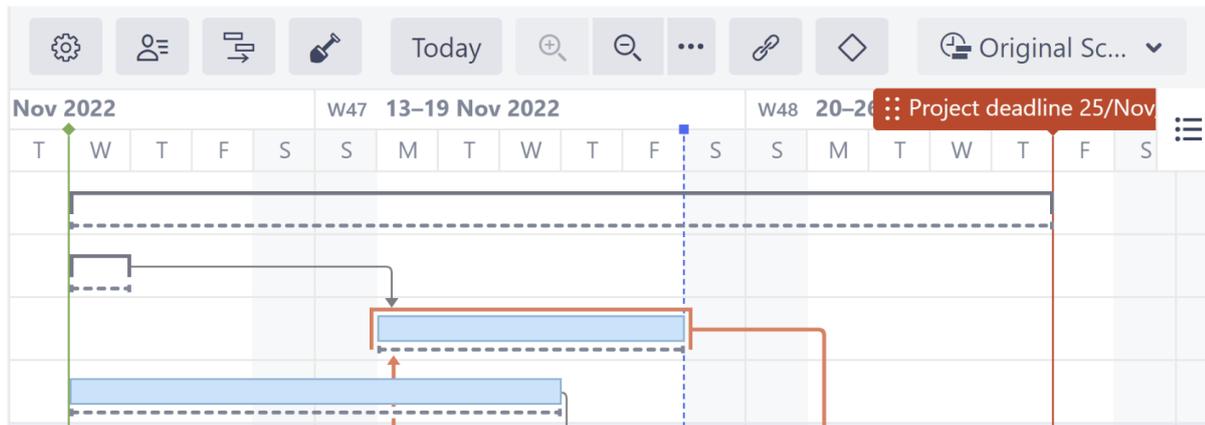
Fix Versions from the selected projects will be displayed on the timeline.

Make markers always visible on the timeline.

i 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 existing marker, click the Action button (three dots).

Chart Markers

Chart markers help you visualize important dates in your project.

[+ New marker](#)

Name	Date	Actions
● Marketing activities	20/Nov/22	⋮
● Project deadline	25/Nov/22	⋮

USEFUL TIP Double-click on the timeline to add a new chart marker.

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 double-click anywhere on the timeline. You can give the marker a custom name, date, and color. If you want the flag at the top of the marker to remain visible at all times, select **Always visible on the timeline**.

Add new marker

Chart Marker Name

Marker Date

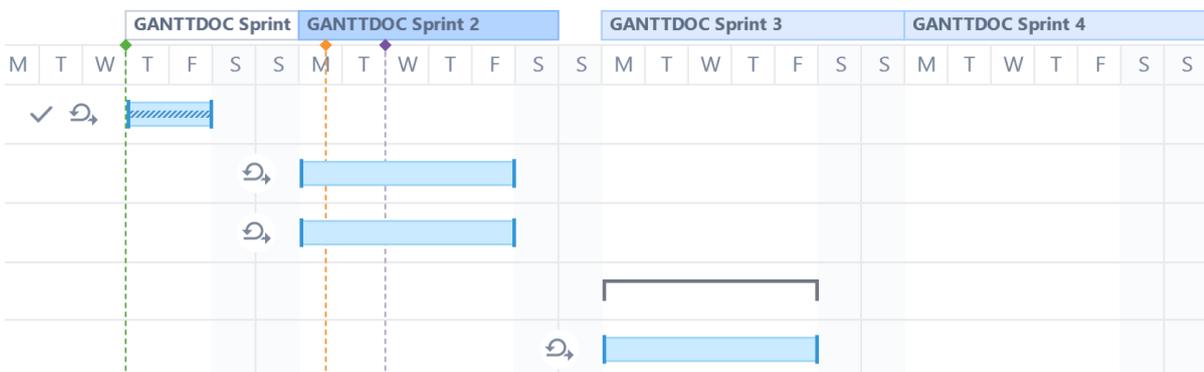
Color

Always visible on the timeline

[Add](#) [Cancel](#)

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:

Sprints configuration

Use custom dates for future sprints, instead of Jira dates

Sprint start day MON ▼ Duration week(s)

[Add custom sprints configuration](#)

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.

Sprints configuration

Sprint start day MON ▾ Duration 2 week(s)

Default sprint start day and duration for Agile tasks

Boards SCRUM board ✕ 

Sprint start day MON ▾ Duration 3 week(s)

[Add sprints configuration](#)

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 100) 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.

Notification Settings

Send notifications for issue changes made within the Gantt chart

Notifications will be sent when changes are made to tasks or milestones, such as updating dates, work estimates or links within the chart or details panel. This does not affect changes made within Structure.

Note: Notifications must be enabled in Jira.

 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.

Gantt1 × **General** Scheduling Dependencies Resources Slices 2Name* Description Chart Calendar* 

The selected work calendar will be used for displaying the Gantt chart.

Year Start 

The selected month will be used as the start of the fiscal year for dates on the timeline.

Owner 

Only the owner and Jira administrators can change the configuration. When there is no owner, the configuration is publicly modifiable - anyone who has permissions to create new structures is allowed to edit the 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 70) 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.

i 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 93) 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 52)
- [Progress Configuration](#)(see page 54)
- [Manual Scheduling Configuration](#)(see page 58)
- [Fixed Duration Attribute](#)(see page 61)
- [Precision Configuration](#)(see page 62)
- [Behavior Configuration](#)(see page 62)

2.2.3.1 Work Estimates Configuration

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

<ul style="list-style-type: none">  General <li style="background-color: #f0f0f0;"> Scheduling  Dependencies  Resources  Slices 	<h4 style="margin: 0;">Work Estimates</h4> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Use time tracking <input type="checkbox"/> Use Remaining Estimate only Default Estimate <input type="text" value="1d"/> (for example, 1d) <input type="checkbox"/> Use custom estimate Estimate attribute None ▼ Format Story Points ▼ Hours Ratio <input type="text" value="1"/> (hours in one story point) Default Estimate <input type="text" value="1"/> (story points) <input type="checkbox"/> Prefer Custom Estimate over Time Tracking 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 124) 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 109), 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 103) tasks. Additionally, it is not possible to change the size of a task bar for tasks [scheduled by sprints](#)(see page 98).

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 109), 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 109), 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.

Progress Calculation

Progress

Based on Work Estimates



Progress is based on Time Tracking

By default, progress is calculated using the same settings as [Work Estimates Configuration](#) (see page 52). 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.

i 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.*)

¹⁰ <https://wiki.almworks.com/display/structure/.Formula+Column+v9.2>

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 varies 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.

Progress Calculation

Progress Based on Work Estimates ▼

Progress is based on Time Tracking

Work Estimates Are Based on Time Tracking

If your configuration looks like this:

Work Estimates

Use time tracking

Use Remaining Estimate only

Default Estimate (for example, 1d)

Use custom estimate

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...

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:

Work Estimates

- Use time tracking
- Use Remaining Estimate only

Default Estimate (for example, 1d)

- Use custom estimate

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:

Work Estimates

- Use time tracking
- Use Remaining Estimate only

Default Estimate (for example, 1d)

- Use custom estimate

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.

Progress CalculationProgress

i 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 57).

1. Planned Work is based on the Work Estimate settings, in the same way we described for [work estimates](#)(see page 55) 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%
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)

i 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 96) 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.

-  General
-  **Scheduling**
-  Dependencies
-  Resources
-  Slices

Manual Scheduling

Allow manual scheduling

Start Date

Finish Date

Milestone Date

Use sprints for manual scheduling

Prefer sprints over manual start and finish dates

Backlog Board

When selected, issues with no sprint or manual start/finish dates will be placed in the "Backlog panel". Drag the task to assign it to a sprint from this board.

Use Resolution Date for manual scheduling

Position a resolved task or milestone to finish at its Resolution Date, unless it is manually scheduled.

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 94).

 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.

Manual Scheduling

Allow manual scheduling

Start Date Read-only

Finish Date

i 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.

Use sprints for manual scheduling

Prefer sprints over manual start and finish dates

Backlog Board

See [Use Sprints for Manual Scheduling](#) (see page 59) 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 123) that are not scheduled manually will be scheduled using the issue resolution date as the Finish Date.

Backlog Board

When an Agile Board is selected issues with no Sprint or Manual Start/Finish will not be scheduled but will be available for moving to Sprints from that Board.

Use Resolution Date for manual scheduling

Position a resolved task or milestone to finish at its Resolution Date, unless it is manually scheduled.

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.

-  General
-  **Scheduling**
-  Dependencies
-  Resources
-  Slices

Manual Scheduling Allow manual schedulingStart Date None ▼Finish Date None ▼Milestone Date None ▼ Use sprints for manual scheduling Prefer sprints over manual start and finish datesBacklog Board STR board ▼

When selected, issues with no sprint or manual start/finish dates will be placed in the "Backlog panel". Drag the task to assign it to a sprint from this board.

 Use Resolution Date for manual scheduling

Position a resolved task or milestone to finish at its Resolution Date, unless it is manually scheduled.

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 48). 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 98).

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 60).

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 109). 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 81).

Scheduling Precedence

By default, tasks in Structure.Gantt are [automatically scheduled](#)(see page 95) based on the project start date, work estimates and dependencies. If Manual Scheduling is selected in the [Gantt configuration](#)(see page 45), 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 103) 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 109) 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.

The screenshot shows the configuration panel for the Fixed Duration Attribute. On the left, there is a sidebar with navigation options: General, Scheduling (highlighted), Dependencies, Resources, and Slices. The main content area has a title 'Position a resolved task or milestone to finish at its Resolution Date, unless it is manually scheduled.' Below this, the 'Fixed Duration' section is highlighted with a red box. It contains a 'Duration Attribute' dropdown menu currently set to 'Store in Gantt chart'. Below this is the 'Precision' section with a dropdown menu set to '1 Hour' and a note: 'All dates will be rounded based on selected precision.' At the bottom is the 'Behavior' section with a checked checkbox 'Treat parent issues as groups' and a descriptive note: 'If this option is turned on, an issue that has sub-issues will become a group in Gantt chart. If this option is turned off, all issues will be displayed as tasks in Gantt chart - only folders and other non-issues will be treated as groups.'

Format

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

Fixed Duration

Duration Attribute Story Points ▼

Format Hours ▼

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).

- General
- Scheduling
- Dependencies
- Resources
- Slices

Position a resolved task or milestone to finish at its Resolution Date, unless it is manually scheduled.

Fixed Duration

Duration Attribute Store in Gantt chart ▼

Precision

Precision 1 Hour ▼

All dates will be rounded based on selected precision.

Behavior

Treat parent issues as groups

If this option is turned on, an issue that has sub-issues will become a group in Gantt chart. If this option is turned off, all issues will be displayed as tasks in Gantt chart - only folders and other non-issues will be treated as groups.

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.

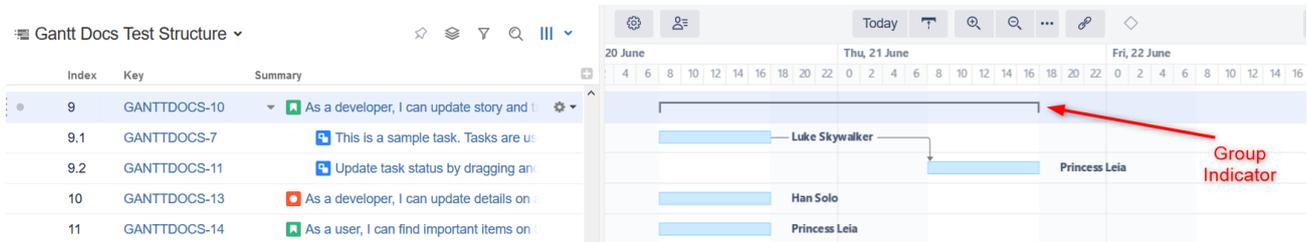
Structure.Gantt rounds the value of Jira fields when doing calculations, but the field value itself is not updated.

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.

Behavior

Treat parent issues as groups

If this option is turned on, an issue that has sub-issues will become a group in Gantt chart. If this option is turned off, all issues will be displayed as tasks in Gantt chart - only folders and other non-issues will be treated as groups.

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

w 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.

Gantt Docs



- General
 - Scheduling
 - Dependencies**
 - Resources
-
- New Slice

Track dependencies

Associate issue link type with dependencies:

Type	Lead/Lag Time	Link Type	Favorite
FS	<input type="text" value="1w"/>	blocks Add Type	<input checked="" type="checkbox"/>
FF	<input type="text" value="0"/>	Add Type	
SS	<input type="text" value="0"/>	Add Type	
SF	<input type="text" value="0"/>	Add Type	

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 116).

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.

Type	Lead/Lag Time	Link Type	Favorite
FS	<input type="text" value="1w"/>	blocks clones	<input checked="" type="checkbox"/> <input type="checkbox"/>
FF	<input type="text" value="0"/>	Add Type	
SS	<input type="text" value="0"/>	Add Type	
SF	<input type="text" value="0"/>	Add Type	<input checked="" type="checkbox"/> <input type="checkbox"/>

Add Type

Search

BLOCKS

is blocked by

CLONERS

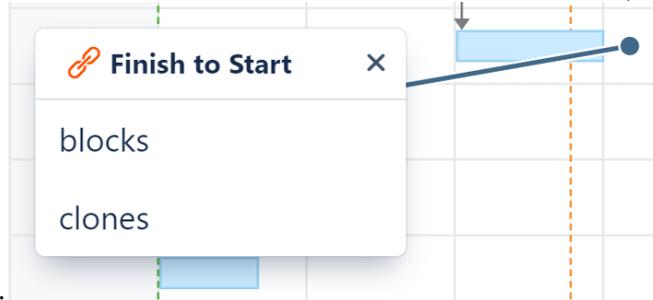
is cloned by

DUPLICATE

is duplicated by

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 65) 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.

Type	Lead/Lag Time	Link Type	Favorite	
FS	<input type="text" value="-1w"/>  Lead	blocks <input type="button" value="Add Type"/> ▼	<input checked="" type="checkbox"/>	
FF	<input type="text" value="0"/>	<input type="button" value="Add Type"/> ▼		
SS	<input type="text" value="0"/>	<input type="button" value="Add Type"/> ▼		
SF	<input type="text" value="1w"/>  Lag	relates to <input type="button" value="Add Type"/> ▼	<input type="checkbox"/>	

To learn more, see [Dependency Lead/Lag Time](#) (see page 119).

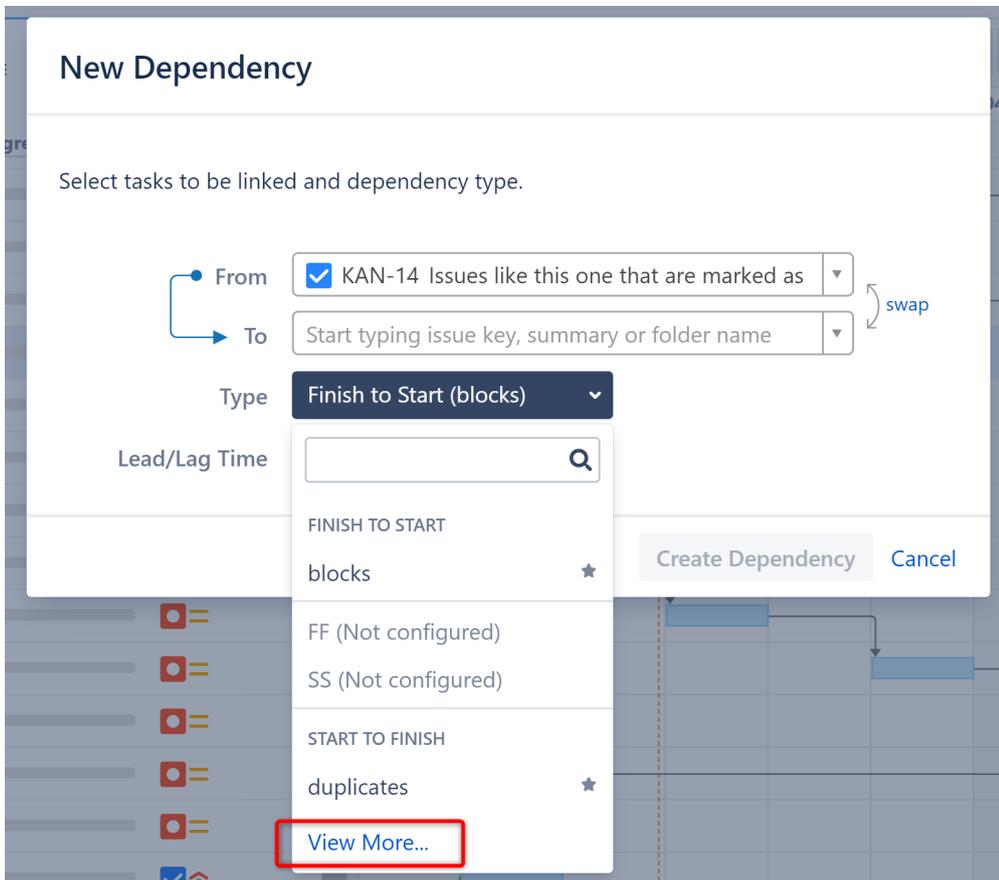
[Dependency Lead/Lag Time](#) (see page 119).

2.2.4.3 Favorite

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

Type	Lead/Lag Time	Link Type	Favorite	
FS	1w	blocks	<input checked="" type="checkbox"/>	
		clones	<input type="checkbox"/>	
		Add Type ▼		
FF	0	is duplicated by	<input type="checkbox"/>	
		relates to	<input checked="" type="checkbox"/>	
		Add Type ▼		

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.



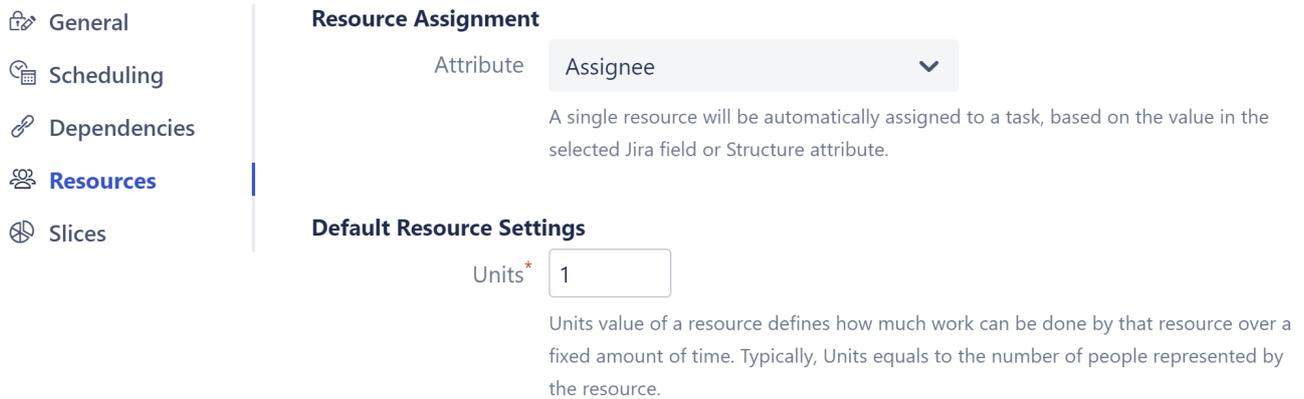
If you don't have any favorites configured, all link types will be shown.

i 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 116) 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.



Resource Assignment

Attribute

A single resource will be automatically assigned to a task, based on the value in the selected Jira field or Structure attribute.

Default Resource Settings

Units*

Units value of a resource defines how much work can be done by that resource over a fixed amount of time. Typically, Units equals to the number of people represented by the resource.

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 124).

2.2.5.1 Resource Assignment

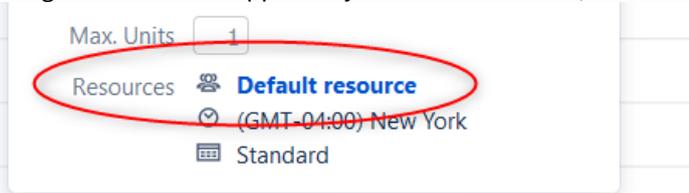
You can assign resources to issues using a Jira field (including text, list and user fields) or a Structure attribute, such as a value calculated through [Formulas](#)(see page 67).

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 67): "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 Resource Settings

Units*

Units value of a resource defines how much work can be done by that resource over a fixed amount of time. Typically, Units equals to the number of people represented by the resource.

Time Zone

For user resources, the user's time zone is used as the default, regardless of this setting. Individual user's time zone can still be adjusted in the Resource Settings dialog.

Work Calendar*

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 124) for more information.

2.2.5.3 Max Units

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

Max Units

Max. Units Attribute

Maximum number of resource units that can be assigned to a task. The value is based on the selected Jira field, Structure attribute or is stored in the Gantt chart. Click the task and enter a new value into Max. Units to change it.

Default Max. Units*

Default is used if no value is specified in the Task Details Panel.

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 109). 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 130) feature in Structure.Gantt. When tasks need to be moved due to overallocation, those with higher priorities will be placed earlier in the timeline.

Leveling Priority

Priority used for resource leveling. Tasks with higher priority will be scheduled earlier.

Default Leveling Priority*

Default is used if no value is specified in the Task Details Panel.

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 109).
- **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 67) (in this case, the leveling priority is calculated as `maximum structure index - current item index`).
- **Formula** - Using [Structure formulas](#)(see page 67), 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 109). 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 78).

2.2.6 Calendars

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

- [Gantt chart itself](#)(see page 50)
- [Default resource](#)(see page 67) calendar
- [Individual resource](#) (see page 124)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.

✔ Need help or have questions? Contact [Tempo Support](#)¹¹.

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: {}

¹¹ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

Week schedule

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

```
{
  "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:

Resource Settings

Name  admin

Capacity

Default capacity (1) will be used if no capacity is specified.

Time zone

Work calendar

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.

2.2.6.4 Example Calendars

Here are some of our most popular calendar examples.

US 10 Federal Holidays Calendar

5-day work week, 8 hours per day, valid until 2025

```

{
  "week": {
    "monday": [{
      "start": 900,
      "finish": 1700
    }],
    "tuesday": [{
      "start": 900,
      "finish": 1700
    }],
    "wednesday": [{
      "start": 900,
      "finish": 1700
    }],
    "thursday": [{
      "start": 900,
      "finish": 1700
    }],
    "friday": [{
      "start": 900,
      "finish": 1700
    }]
  },
  "exceptions": [ {
    "date": 20210101, "workPeriods": [] }, {
    "date": 20220101, "workPeriods": [] }, {
    "date": 20230101, "workPeriods": [] }, {
    "date": 20240101, "workPeriods": [] }, {
    "date": 20250101, "workPeriods": [] }, {
    "date": 20210118, "workPeriods": [] }, {
    "date": 20220117, "workPeriods": [] }, {
    "date": 20230116, "workPeriods": [] }, {
    "date": 20240115, "workPeriods": [] }, {
    "date": 20250120, "workPeriods": [] }, {
    "date": 20210215, "workPeriods": [] }, {
    "date": 20220221, "workPeriods": [] }, {
    "date": 20230220, "workPeriods": [] }, {
    "date": 20240219, "workPeriods": [] }, {
    "date": 20250217, "workPeriods": [] }, {
    "date": 20210402, "workPeriods": [] }, {
    "date": 20220415, "workPeriods": [] }, {
    "date": 20230407, "workPeriods": [] }, {
    "date": 20240329, "workPeriods": [] }, {
    "date": 20250418, "workPeriods": [] }, {
    "date": 20210531, "workPeriods": [] }, {
    "date": 20220530, "workPeriods": [] }, {
    "date": 20230529, "workPeriods": [] }, {
    "date": 20240527, "workPeriods": [] }, {
    "date": 20250526, "workPeriods": [] }, {
    "date": 20240704, "workPeriods": [] }, {

```

```
"date": 20250704, "workPeriods": [] }, {  
"date": 20230704, "workPeriods": [] }, {  
"date": 20220704, "workPeriods": [] }, {  
"date": 20210705, "workPeriods": [] }, {  
"date": 20210906, "workPeriods": [] }, {  
"date": 20220905, "workPeriods": [] }, {  
"date": 20230904, "workPeriods": [] }, {  
"date": 20240902, "workPeriods": [] }, {  
"date": 20250901, "workPeriods": [] }, {  
"date": 20211125, "workPeriods": [] }, {  
"date": 20221124, "workPeriods": [] }, {  
"date": 20231123, "workPeriods": [] }, {  
"date": 20241128, "workPeriods": [] }, {  
"date": 20251127, "workPeriods": [] }, {  
"date": 20211224, "workPeriods": [] }, {  
"date": 20221226, "workPeriods": [] }, {  
"date": 20231225, "workPeriods": [] }, {  
"date": 20241225, "workPeriods": [] }, {  
"date": 20251225, "workPeriods": [] }  
] }
```

UK (England and Wales) Holiday Calendar

5-day work week, 8 hours per day, bank holidays for 2023

```
{
  "week": {
    "monday": [{
      "start": 900,
      "finish": 1700
    }],
    "tuesday": [{
      "start": 900,
      "finish": 1700
    }],
    "wednesday": [{
      "start": 900,
      "finish": 1700
    }],
    "thursday": [{
      "start": 900,
      "finish": 1700
    }],
    "friday": [{
      "start": 900,
      "finish": 1700
    }]
  },
  "exceptions": [ {
    "date": 20230102, "workPeriods": [] }, {
    "date": 20230407, "workPeriods": [] }, {
    "date": 20230410, "workPeriods": [] }, {
    "date": 20230501, "workPeriods": [] }, {
    "date": 20230508, "workPeriods": [] }, {
    "date": 20230529, "workPeriods": [] }, {
    "date": 20230828, "workPeriods": [] }, {
    "date": 20231225, "workPeriods": [] }, {
    "date": 20231226, "workPeriods": [] }
  ]
}
```

Germany Holiday Calendar

5-day work week, 8 hours per day, national holidays for 2023

```

{
  "week": {
    "monday": [{
      "start": 900,
      "finish": 1700
    }],
    "tuesday": [{
      "start": 900,
      "finish": 1700
    }],
    "wednesday": [{
      "start": 900,
      "finish": 1700
    }],
    "thursday": [{
      "start": 900,
      "finish": 1700
    }],
    "friday": [{
      "start": 900,
      "finish": 1700
    }]
  },
  "exceptions": [ {
    "date": 20230101, "workPeriods": [] }, {
    "date": 20230407, "workPeriods": [] }, {
    "date": 20230410, "workPeriods": [] }, {
    "date": 20230501, "workPeriods": [] }, {
    "date": 20230518, "workPeriods": [] }, {
    "date": 20230529, "workPeriods": [] }, {
    "date": 20231003, "workPeriods": [] }, {
    "date": 20231225, "workPeriods": [] }, {
    "date": 20231226, "workPeriods": [] }
  ] }

```

Israel Holiday Calendar

5-day work week, 8 hours per day, public holidays for 2023

```

{
  "week": {
    "sunday": [{
      "start": 900,
      "finish": 1700
    }],
    "monday": [{
      "start": 900,
      "finish": 1700
    }],
    "tuesday": [{
      "start": 900,
      "finish": 1700
    }],
    "wednesday": [{
      "start": 900,
      "finish": 1700
    }],
    "thursday": [{
      "start": 900,
      "finish": 1700
    }]
  },
  "exceptions": [ {
    "date": 20230406, "workPeriods": [] }, {
    "date": 20230412, "workPeriods": [] }, {
    "date": 20230426, "workPeriods": [] }, {
    "date": 20230526, "workPeriods": [] }, {
    "date": 20230925, "workPeriods": [] }, {
    "date": 20230930, "workPeriods": [] }, {
    "date": 20231007, "workPeriods": [] }
  ]
}

```

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.

Gantt1

✕

-  General
-  Scheduling
-  Dependencies
-  Resources
-  Slices 3

Create unique settings for a subset of items. [Learn more](#) ↗

Slices are applied from top to bottom, and only the first matching slice is applied to any issue.

+ New slice

	Name	Settings	Actions
	<input checked="" type="checkbox"/> In progress	JQL - ● Appearance	
	<input checked="" type="checkbox"/> Project A	JQL - Work Estimates	
	<input checked="" type="checkbox"/> Bugs	● - Manual Scheduling	

Save as...

Save

Cancel

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 79)
- [Customizing a Slice](#)(see page 81)
- [Removing a Slice](#)(see page 87)
- [Order of Operation](#)(see page 88)

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.

Gantt1 ×

- General
- Scheduling
- Dependencies
- Resources
- Slices 3

Create unique settings for a subset of items. [Learn more](#) ↗

Slices are applied from top to bottom, and only the first matching slice is applied to any issue.

+ New slice

	Name	Settings	Actions
⋮	<input checked="" type="checkbox"/> In progress	JQL - ● Appearance	⋮
⋮	<input checked="" type="checkbox"/> Project A	JQL - Work Estimates	⋮
⋮	<input checked="" type="checkbox"/> Bugs	● - Manual Scheduling	⋮

Save as...
Save
Cancel

Slice Name

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

Gantt settings / Gantt1

Create slice

Name* Active

Item type Issue Types ▼
Select... ▼

Settings + New section ▼

Add custom settings for the specified items

Create slice
Cancel

Assigning Issues

You can assign issues to a slice by selecting specific issue types, using a JQL query, or selecting a Structure Type (for [memos](#)(see page 115)).

Gantt settings / Default

Create slice

Name* ActiveItem type 

This query is executed on behalf of structure owner.

Settings 

Add custom settings for the specified items

When creating your chart, Structure.Gantt will search for the items you specified 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.

Gantt settings / Gantt1

Create slice

Name*

Item type
▼

Task ✕

Settings
▼

Add custom settings for the

- Work Estimates
- Progress Calculation
- Manual Scheduling
- Fixed Duration
- Dependencies
- Lead/Lag time
- Resource Assignment
- Max Units
- Leveling Priority
- Appearance
- Item Behavior

The following properties can be customized for each slice:

- [Work Estimates](#)(see page 82)
- [Progress Calculation](#)(see page 83)
- [Manual Scheduling](#)(see page 83)
- [Fixed Durations](#)(see page 84)
- [Dependencies](#)(see page 84)
- [Lead/Lag Times](#)(see page 85)
- [Resource Assignment](#)(see page 86)
- [Max Units](#)(see page 86)
- [Leveling Priority](#)(see page 86)
- [Appearance](#)(see page 86)
- [Item Behavior](#)(see page 87)

i 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.

Work Estimates [Delete Section](#)

Use time tracking

Use Remaining Estimate only

Default Estimate (for example, 1d)

Use custom estimate

Estimate attribute 

Format

Default Estimate (for example, 1d)

Prefer Custom Estimate over Time Tracking

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 52).

Progress Calculation

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

Progress Calculation [Delete Section](#)

Progress

Progress is based on Time Tracking

For more information about configuring progress calculation, see [Progress Configuration](#)(see page 54).

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 95), [manual](#)(see page 58) or [sprint-based](#)(see page 98)) for different sets of issues, or if different teams use different fields for scheduling.

Manual Scheduling

 [Delete Section](#)

Allow manual scheduling

Start Date None 

Finish Date Due Date  No time information

Milestone Date None 

Use sprints for manual scheduling

Prefer sprints over manual start and finish dates

Backlog Board None 

When selected, issues with no sprint or manual start/finish dates will be placed in the "Backlog panel". Drag the task to assign it to a sprint from this board.

Use Resolution Date for manual scheduling

Position a resolved task or milestone to finish at its Resolution Date, unless it is manually scheduled.

To learn more about manual scheduling, see [Manual Scheduling Configuration](#)(see page 58).

Fixed Durations

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

Fixed Duration

 [Delete Section](#)

Duration Attribute Duration 

Format Hours 

To learn more about fixed duration attributes, see [Fixed Duration](#)(see page 103)

Dependencies

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

Dependencies

 [Delete Section](#)

Track dependencies

Associate issue link type with dependencies:

Type	Link Type	Favorite	
FS	blocks <input type="text" value="Add Type"/> ▼	<input checked="" type="checkbox"/>	
FF	<input type="text" value="Add Type"/> ▼		
SS	<input type="text" value="Add Type"/> ▼		
SF	<input type="text" value="Add Type"/> ▼		

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 116) To learn more about configuring dependencies, see [Dependencies Configuration](#)(see page 63).

 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.

Lead/Lag time

 [Delete Section](#)

Negative duration means lead, positive duration means lag.

Finish to Start

Finish to Finish

Start to Start

Start to Finish

To learn more, see [Dependency Lead/Lag Time](#)(see page 119).

 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.

Resource Assignment

 [Delete Section](#)

Attribute

A single resource will be automatically assigned to a task, based on the value in the selected Jira field or Structure attribute.

To learn more about resource assignment, see [Resources Configuration](#)(see page 67).

Max Units

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

Max Units

 [Delete Section](#)

Max. Units Attribute

Maximum number of resource units that can be assigned to a task. The value is based on the selected Jira field, Structure attribute or is stored in the Gantt chart. Click the task and enter a new value into Max. Units to change it.

Default Max. Units*

Default is used if no value is specified in the Task Details Panel.

To learn more about Max Units, see [Resources Configuration](#)(see page 67)

Leveling Priority

This section allows you to set custom [leveling](#)(see page 130) priorities.

Leveling Priority

 [Delete Section](#)

Leveling Priority

Priority used for resource leveling. Tasks with higher priority will be scheduled earlier.

Default Leveling*
Priority

Default is used if no value is specified in the Task Details Panel.

To learn more about leveling priorities, see [Resource Leveling](#)(see page 130).

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.

Appearance

 Delete Section

Color Scheme CUSTOM

Fill Color  Revert

Enter color in HEX format or select using the color picker

Progress Color Auto ▼

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.

Item Behavior

 Delete Section

Treat As Default Configuration ▼

Default Configuration

Group

Milestone

Task

Do Not Show

a group, a milestone or a task. Select 'Do Not Show' to completely ignore matched from the Default Configuration.

Create slice
Cancel

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 62), 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.

Gantt1



- General
- Scheduling
- Dependencies
- Resources
- Slices 2

Create unique settings for a subset of items. [Learn more](#) ↗

Slices are applied from top to bottom, and only the first matching slice is applied to any issue.

+ New slice		Name	Settings	Actions
	<input checked="" type="checkbox"/>	In progress	JQL - Appearance	...
	<input checked="" type="checkbox"/>	Scrum1	JQL - Work Estimates	...

Save as...

Save

Cancel

Deleting a Slice

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

Name	Settings	Actions
<input checked="" type="checkbox"/> In progress	JQL - Appearance	...
<input checked="" type="checkbox"/> Scrum1	JQL - Work Estimates	...

Edit

Copy

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.

- General
- Scheduling
- Dependencies
- Resources
- Slices 3

Create unique settings for a subset of items. [Learn more](#) ↗

Slices are applied from top to bottom, and only the first matching slice is applied to any issue.

+ New slice		Name	Settings	Actions
	<input checked="" type="checkbox"/>	Purple Epics	⚡ - Appearance	...
	<input checked="" type="checkbox"/>	Project A Res...	JQL - Resource Assignment	...
	<input checked="" type="checkbox"/>	Orange Tasks	✓ - Appearance	...

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.

Create unique settings for a subset of items. [Learn more](#) ↗

Slices are applied from top to bottom, and only the first matching slice is applied to any issue.

+ New slice

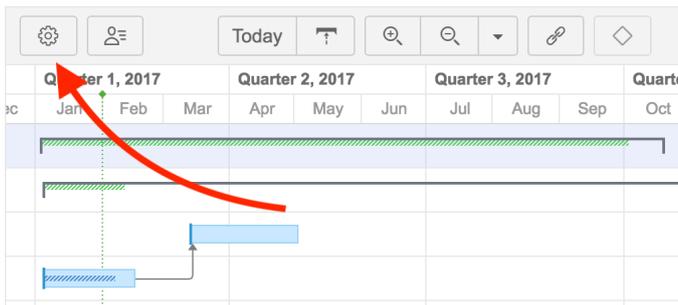
	Name	Settings	Actions
⋮	<input checked="" type="checkbox"/> Purple Epics	- Appearance	⋮
⋮	<input checked="" type="checkbox"/> Project A Res...	- Resource Assignment	⋮
⋮	<input checked="" type="checkbox"/> Orange Tasks	- Appearance	⋮

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 46) screen, look for the Gantt Chart Configuration section.

Gantt Chart Configuration

Configuration * **Default** ▼ [Edit](#)

Gantt Configuration defines scheduling, dependencies and resource settings.

[Manage configurations](#)

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**.

Gantt chart Configurations [Create New Configuration](#) ✕

Active	Name	Actions
<input type="radio"/>	Default Default Gantt configuration	Edit ...
<input type="radio"/>	Portfolio Level Configured for portfolio-level view of current projects.	Edit ...
<input checked="" type="radio"/>	Project A Configuration Contains specific configuration requirements for teams working on Project A.	Edit ...
<input type="radio"/>	Project B Configuration Configured specifically for Project B.	Edit ...

[Done](#) [Cancel](#)

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 93) 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 93) 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 91)
- [Deleting Gantt Configurations](#)(see page 93)
- [Permissions and Sharing](#)(see page 93)

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 46) screen and click **Manage configurations**.



Gantt chart Settings

Edit the options below to configure Gantt chart for this structure.

Project Start Day

Start Day *

Project Start Day defines the starting point for automatic scheduling.

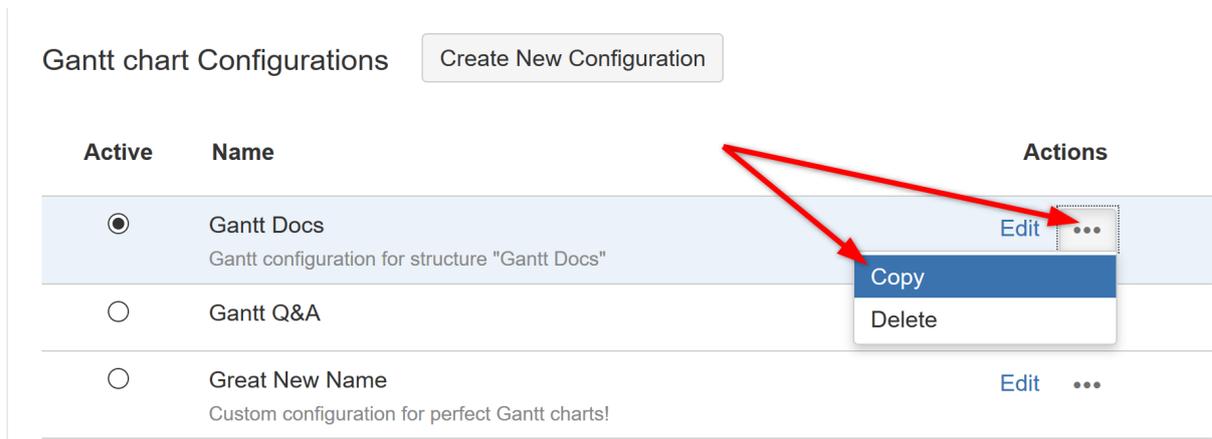
Gantt chart Configuration

Configuration * [Edit](#)

Gantt Configuration defines scheduling, dependencies and resource settings.

[Manage configurations](#)

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

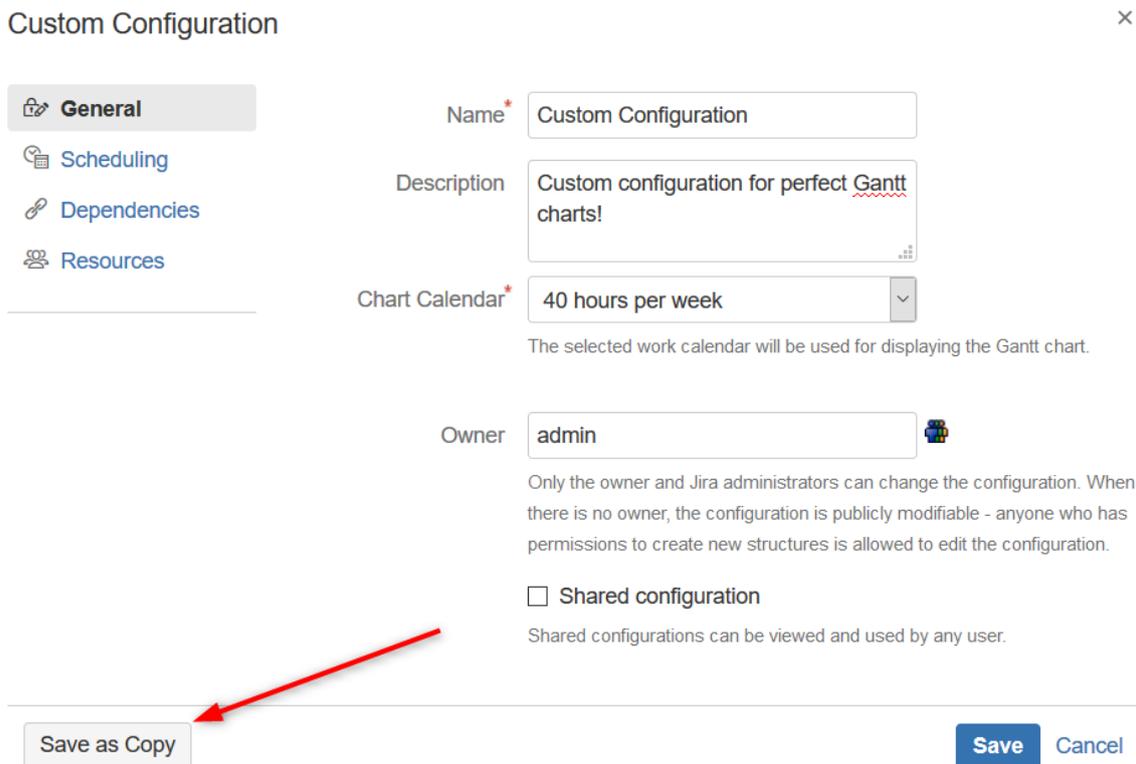


This will create an exact copy of the original configuration, which you can rename and customize as necessary, without affecting the original.

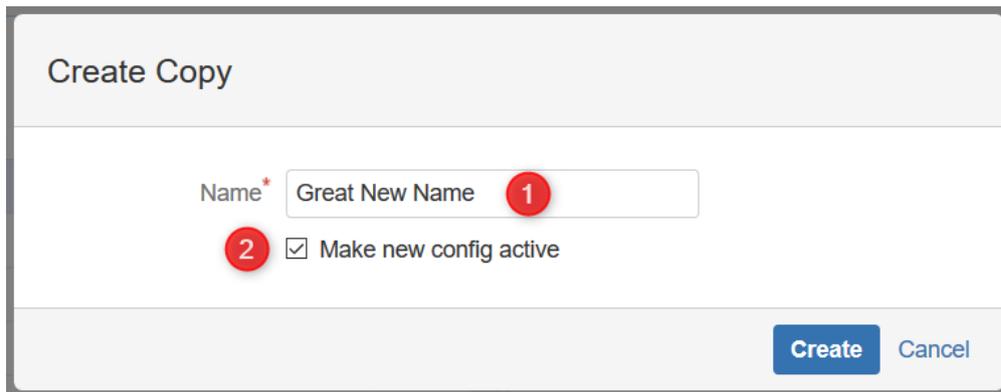
Create a Copy with Changes

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 46) 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 89)).

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

i 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.

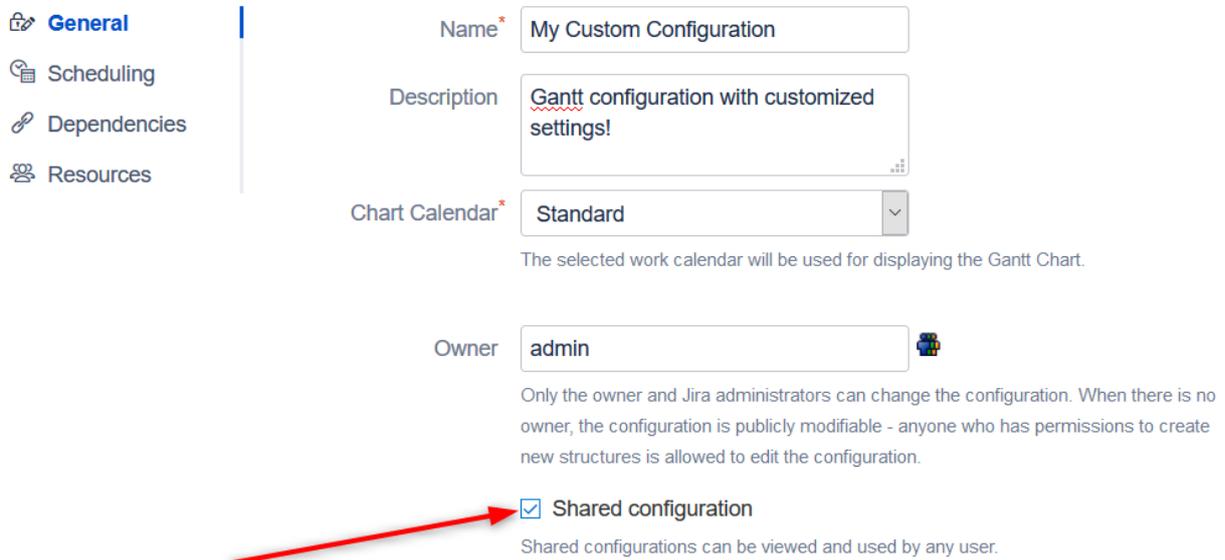
All standard Jira permissions are applied – you need Edit Issues permission to change fields, create links, and so on.

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.



General

- Scheduling
- Dependencies
- Resources

Name* My Custom Configuration

Description Gantt configuration with customized settings!

Chart Calendar* Standard

The selected work calendar will be used for displaying the Gantt Chart.

Owner admin

Only the owner and Jira administrators can change the configuration. When there is no owner, the configuration is publicly modifiable - anyone who has permissions to create new structures is allowed to edit the configuration.

Shared configuration

Shared configurations can be viewed and used by any user.

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 93) for more details.

i 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.

- [Scheduling Tasks](#)(see page 94)
- [Adjusting Duration](#)(see page 105)
- [Scheduling Conflict](#)(see page 107)
- [Task Details Panel](#)(see page 109)
- [Task Indicators](#)(see page 112)
- [Using Memos in Structure.Gantt](#)(see page 115)

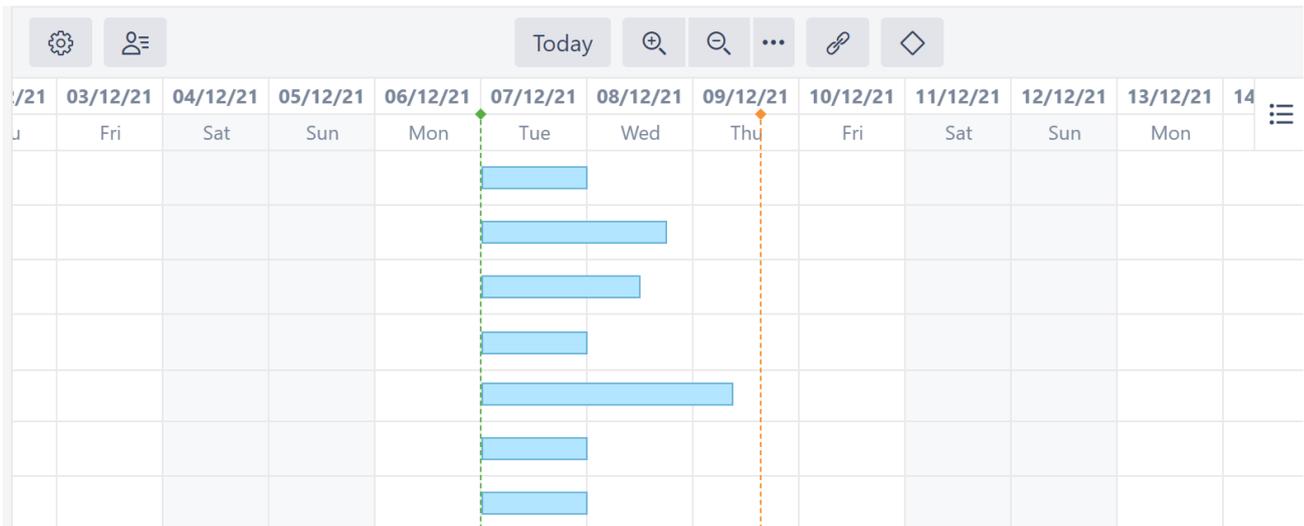
2.3.1 Scheduling Tasks

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.

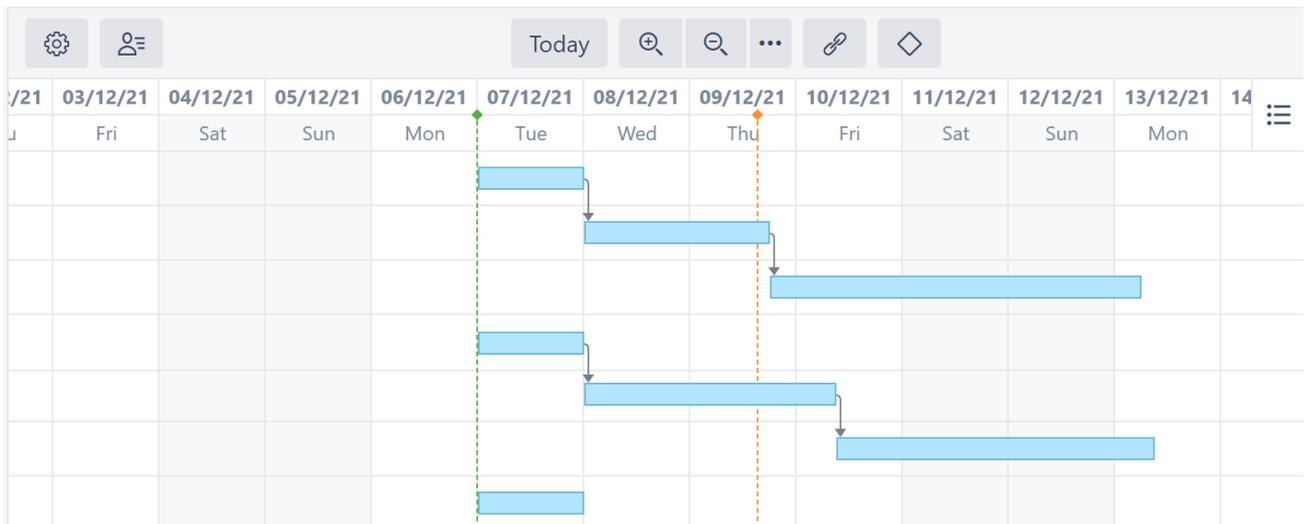
- [Automatic Scheduling](#)(see page 95)
- [Manual Scheduling by Start or Finish Date](#)(see page 96)
- [Planning with Sprints](#)(see page 98)
- [Fixed Duration](#)(see page 103)

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.

i 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 116).

2.3.1.2 Manual Scheduling by Start or Finish Date

While [automatic scheduling](#) (see page 95) 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 58).

Manually Adjusting Start and Finish Dates

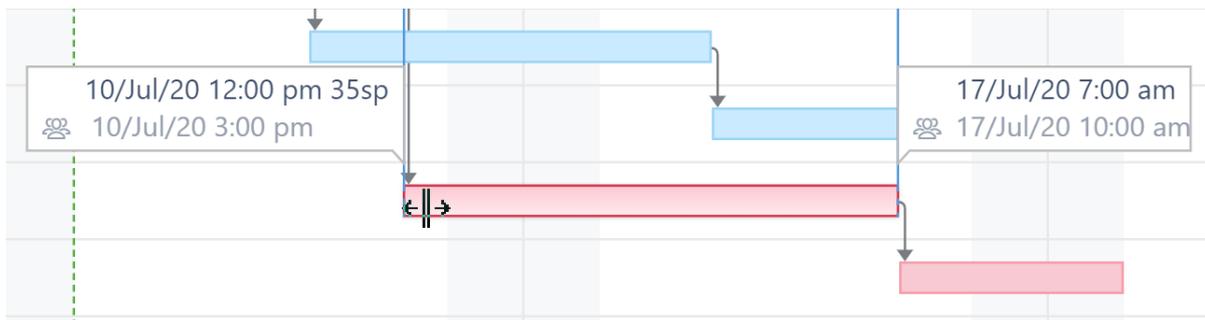
Once you have enabled manual scheduling, you can quickly adjust a task's schedule by:

- Dragging the task bar in the Gantt chart
- Editing the values in the [Task Details Panel](#)(see page 109)
- Updating the custom Start Date and Finish Date fields in Jira or [Structure](#)(see page 151)

Dragging the Entire Task Bar

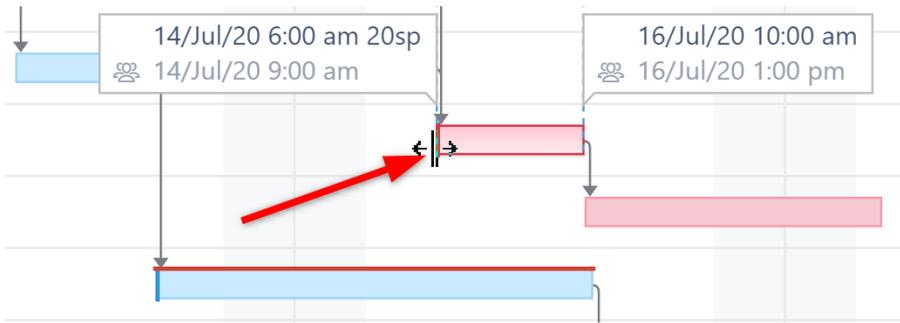
When you drag the entire task bar, in most cases only the Start Date will be updated. The Finish Date will continue to be automatically updated based on task estimates and dependency types. There are two exceptions:

- If both the Start and Finish dates are already [manually scheduled](#)(see page 58), both fields will be updated
- If only the Finish Date is [manually scheduled](#)(see page 58), 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

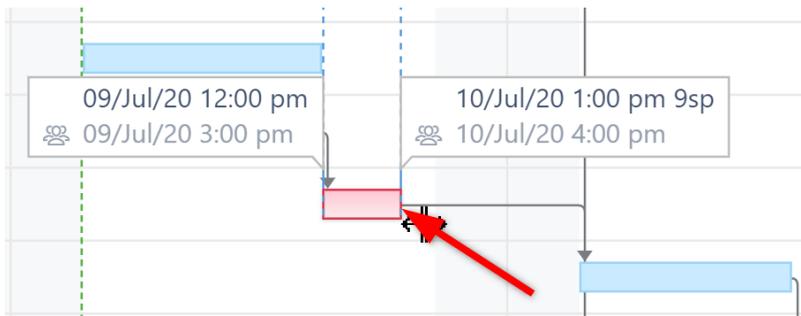
To adjust a task's Start Date (without changing the Finish Date), drag the left side of the bar to the desired date/time. Since the Finish Date remains unchanged, this process also updates the task's Original Estimate (if the task hasn't been started) or Remaining Estimate (if the task is in progress).



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:

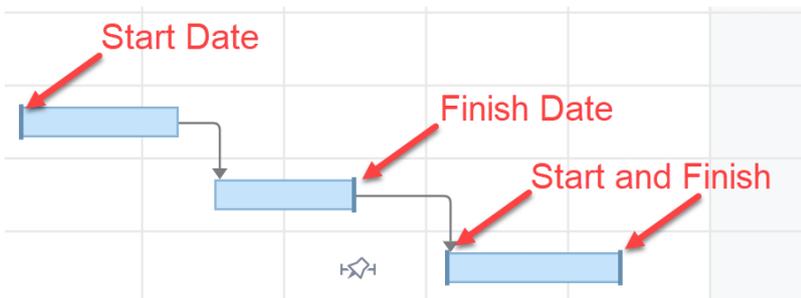
- If the Finish Date is already [manually scheduled](#)(see page 58), the finish date and Original Estimate/Remaining Estimate will be updated. The Start Date will remain unchanged.
- If the Finish Date is not currently [manually scheduled](#)(see page 58), only the Original Estimate/Remaining Estimate 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 103)



Manual Scheduling Rules

Manual Scheduling uses the following rules:

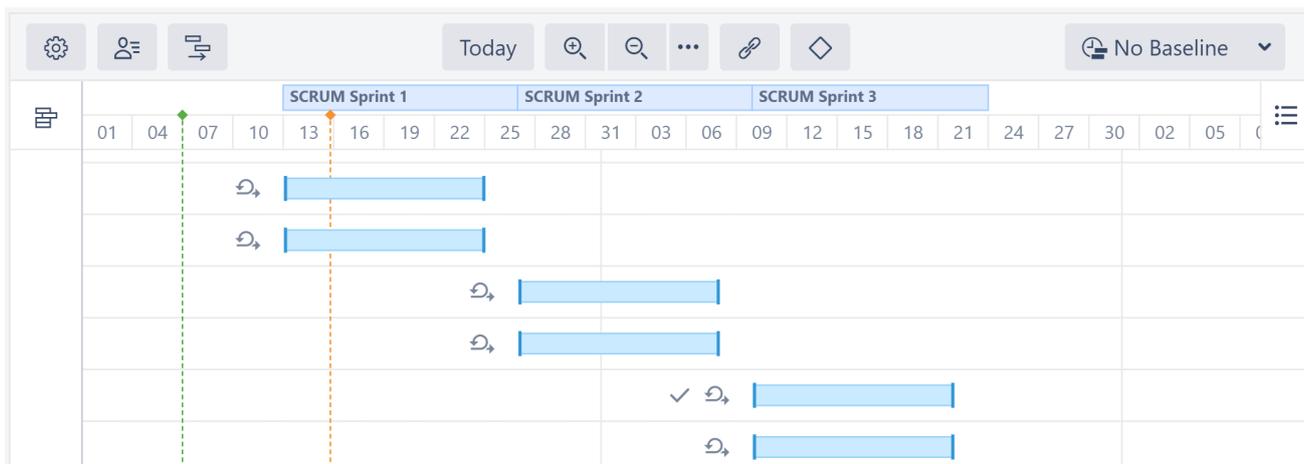
- If neither Start nor Finish dates are defined, the task is scheduled automatically to start either at the Project Start Day you selected when configuring your Gantt chart or based on the task's dependencies. For example, in the case of a Finish to Start dependency, the task will be scheduled to start immediately following the Finish Date for the task it depends on. (Note: If [Use sprints for manual scheduling](#)(see page 59) is selected and the task is assigned to a sprint, the task will be [scheduled based on its sprints](#)(see page 98).)
- If you move a task in the chart, its 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 103), 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.

i 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 109) 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 59) 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 102) 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

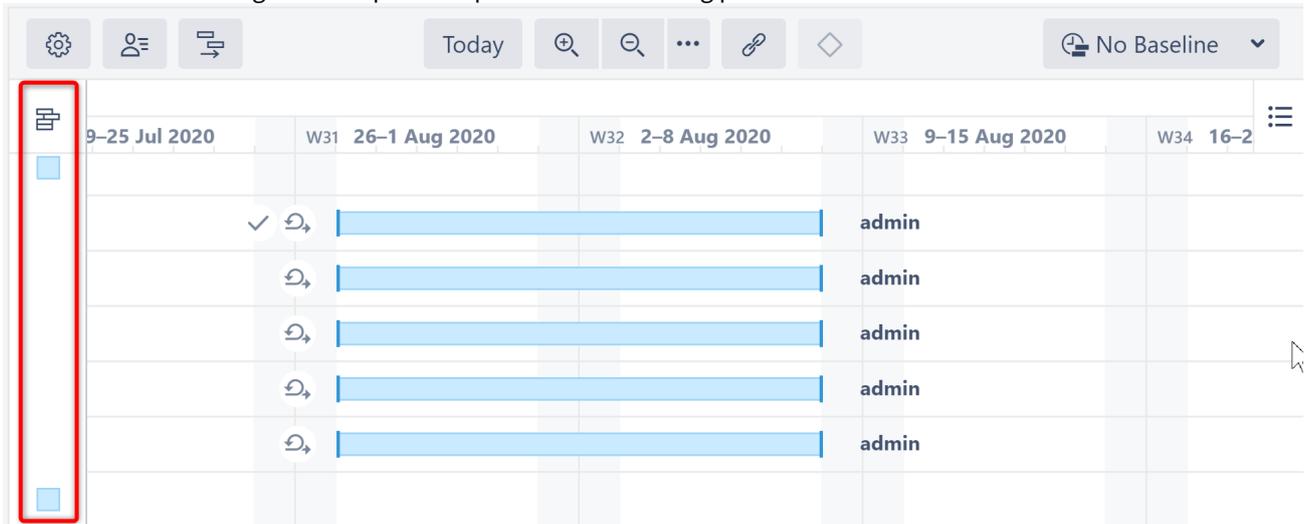
At some zoom levels, sprints will not be shown due to space limitations. To view sprints, simply zoom in.

Future Sprints

Future sprint dates can be taken directly from Jira, or you can configure custom dates in the [Sprint configuration](#)(see page 48) 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 109).

 An issue can be assigned to sprints from the Backlog board selected in the [Gantt configuration](#)(see page 59). If you don't see the sprint you want, you may need to adjust the configuration or add a custom [Slice](#)(see page 78).

Fixed Duration

Tasks that are scheduled by sprint have a **Fixed Duration**(see page 103). 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 125), Structure.Gantt spreads the work for each task evenly across the sprint.

See **Fixed Duration**(see page 103) for more details.

Tasks with Start/Finish Dates and Sprints

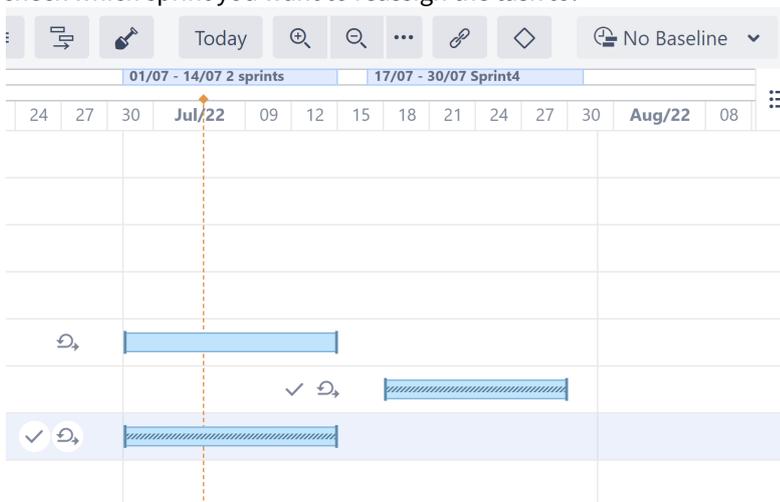
If a task has a Start and/or Finish date and is assigned to a sprint:

- If the **Prefer sprints over manual start and finish dates** is selected in your **Gantt configuration**(see page 59), 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 99), its Start/Finish dates will be removed

See **Scheduling Precedence**(see page 60) 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.



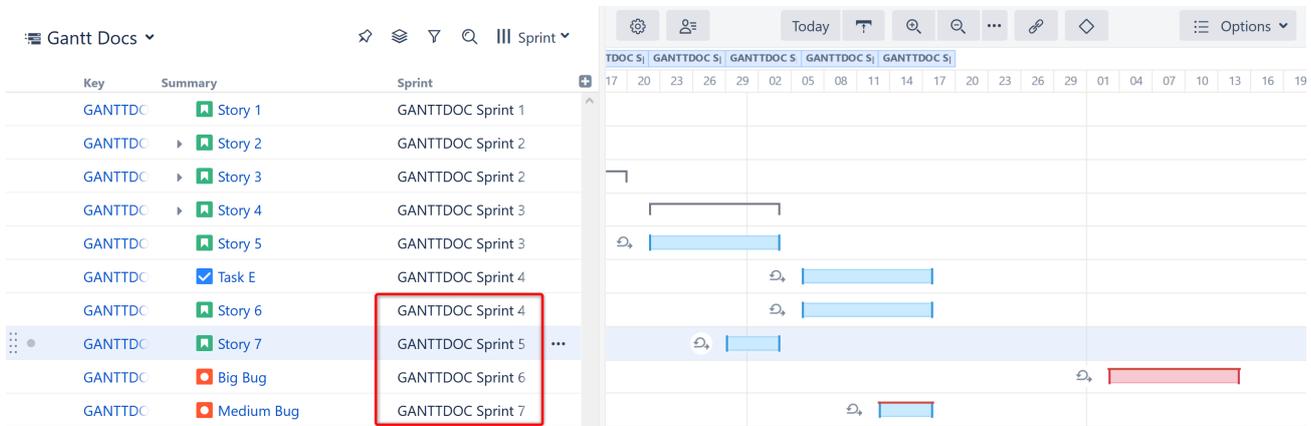
When the start/end dates for parallel sprints are not the same, Structure.Gantt will show them in different rows (up to a maximum of 5).

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 46) 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 48) 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.

Sprints configuration

Sprint start day MON Duration 2 week(s)
Default sprint start day and duration for Agile tasks

[Add sprints configuration](#)

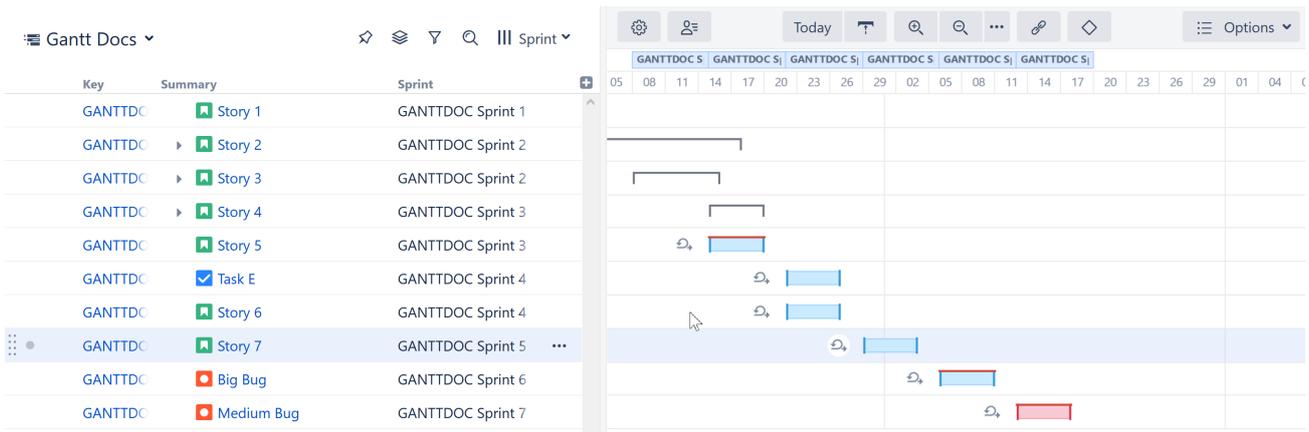
2. When setting up board-specific configurations, be sure to include all board copies. This way, future sprints will be scheduled the same, regardless of where they were created.

Boards GANTTDOCS board Copy of GANTTDOCS board

Sprint start day MON Duration 1 week(s)

[Add sprints configuration](#)

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

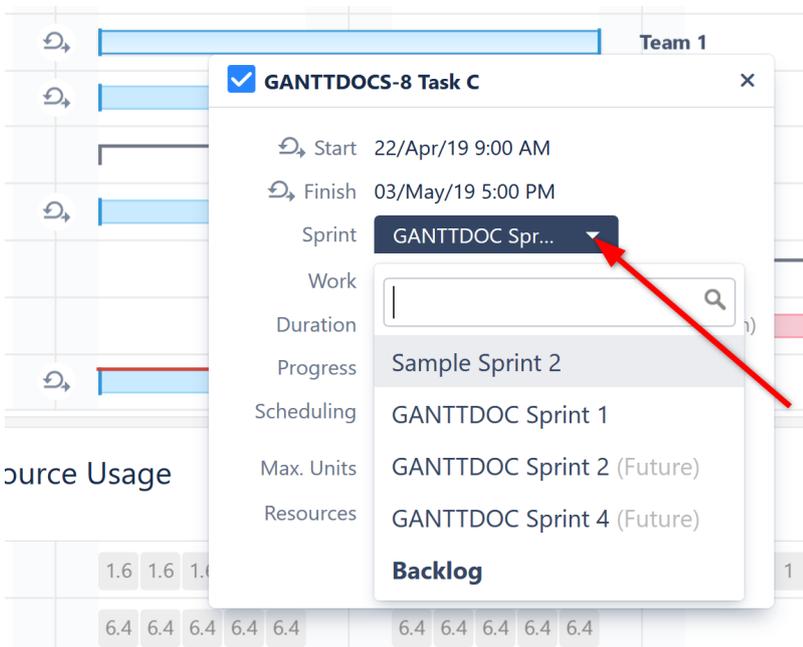


i If a custom configuration is not created for a specific board, sprints from that board will be scheduled using the default configuration.

Reassigning Sprints with Structure.Gantt

If tasks are [manually scheduled by sprints](#), (see page 98) 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 be 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 its [Task Details panel](#)(see page 109) and change the Sprint selection to **Backlog**. Once a task is moved to the backlog, it will be [automatically scheduled](#)(see page 95) 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 105)). When updating a fixed duration task:

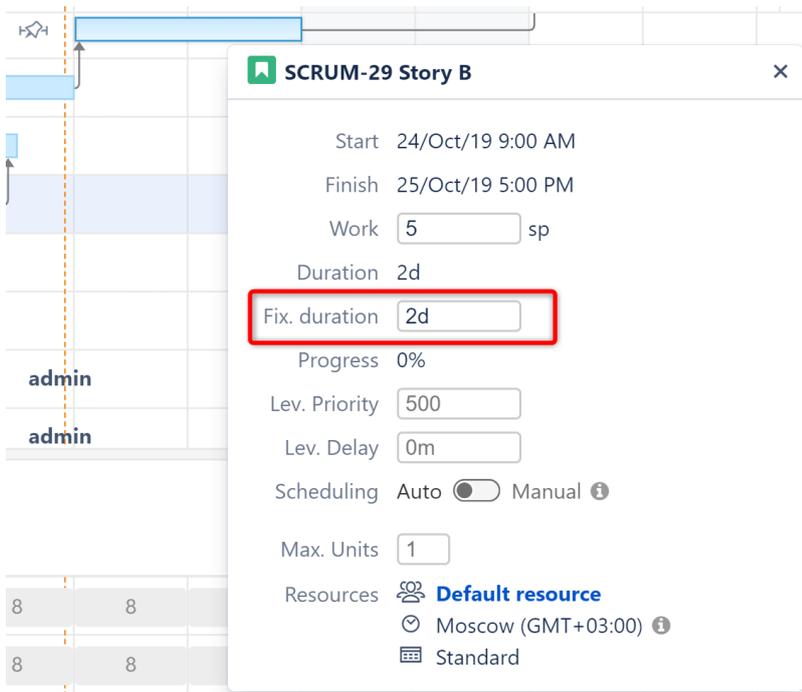
- Adjusting the amount of work required for the task does not affect its duration.
- Moving the task's Start or Finish Date, or changing the duration, will not change the work requirement.

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.

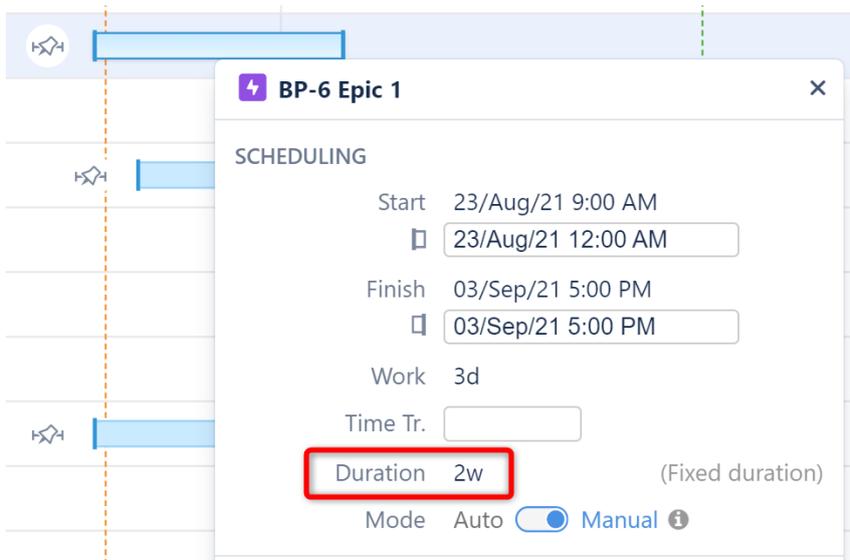


This task can be automatically scheduled, or you can manually assign a Start or Finish date.

i You can also set the duration value for tasks based on a Jira field or formula, by configuring the [Duration Attribute](#)(see page 61).

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.

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

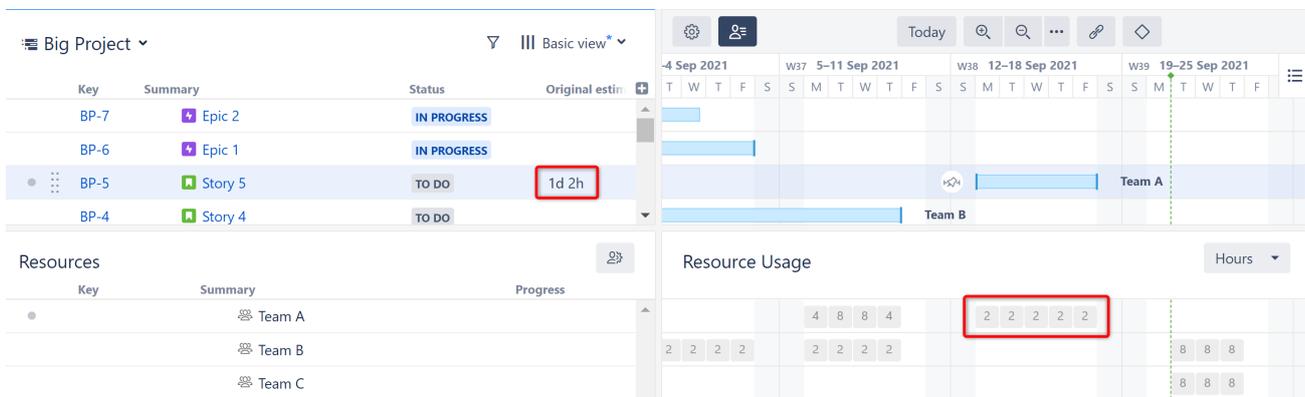
3. Using Sprint-based Scheduling

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 98) 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 125). 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.



i 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 109).

2.3.2 Adjusting Duration

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

- [Automatically](#)(see page 105)
- [Based on Start and Finish Dates](#)(see page 106)
- [Based on Sprints](#)(see page 106)
- [Manually Setting Duration](#)(see page 106)

2.3.2.1 Automatically

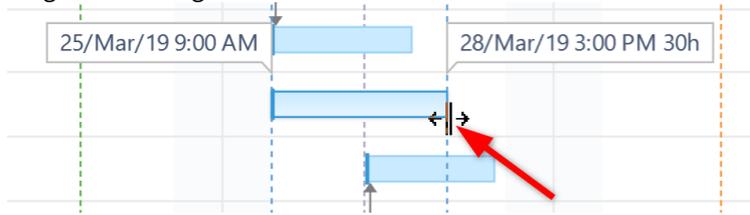
By default, task durations are calculated automatically, based on each task's work estimate, the calendar, resource availability and the [Work Estimates settings](#)¹².

To adjust the duration of these tasks:

- Edit the task's work estimate fields, or

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

- 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 58) and have both a manual Start and Finish Date, the task has a [fixed duration](#) (see page 103), 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.



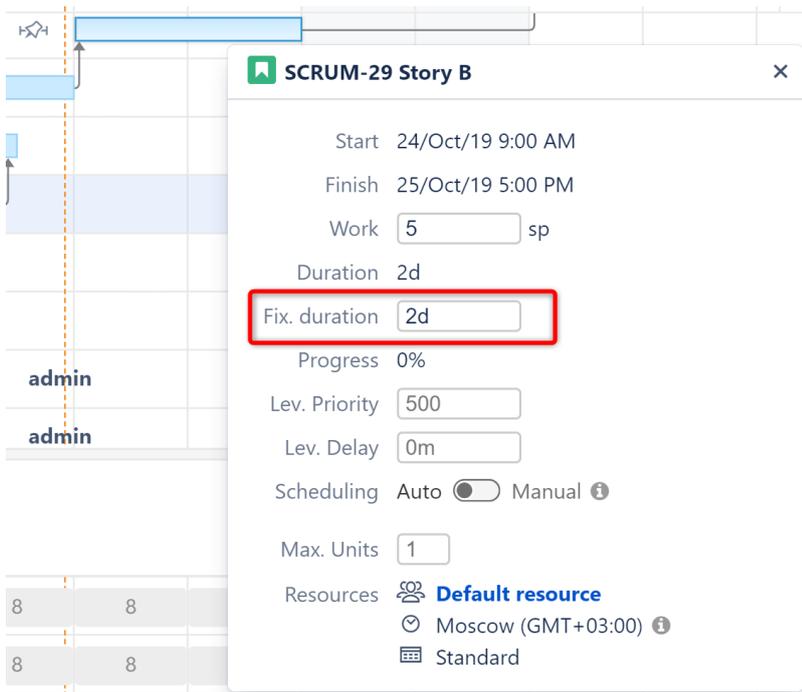
i Adjusting the duration of a fixed duration task does not affect its work estimate.

2.3.2.3 Based on Sprints

When tasks are [scheduled based on sprints](#) (see page 98), they have a [fixed duration](#) (see page 103) 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 48) settings.

2.3.2.4 Manually Setting Fixed Duration

You can set a [fixed duration](#) (see page 103) for an individual task by updating the **Fix. Duration** field in the [Task Details Panel](#) (see page 109).



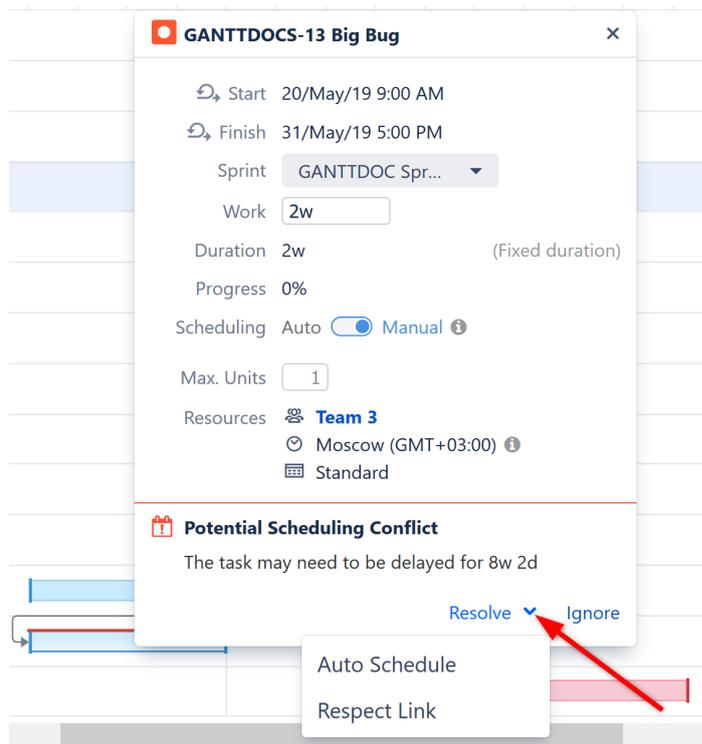
Tasks can also be assigned a fixed duration based on a Jira field or formula, by assigning a [Fixed Duration Attribute](#) (see [page 61](#)) in the Gantt Configuration.

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:

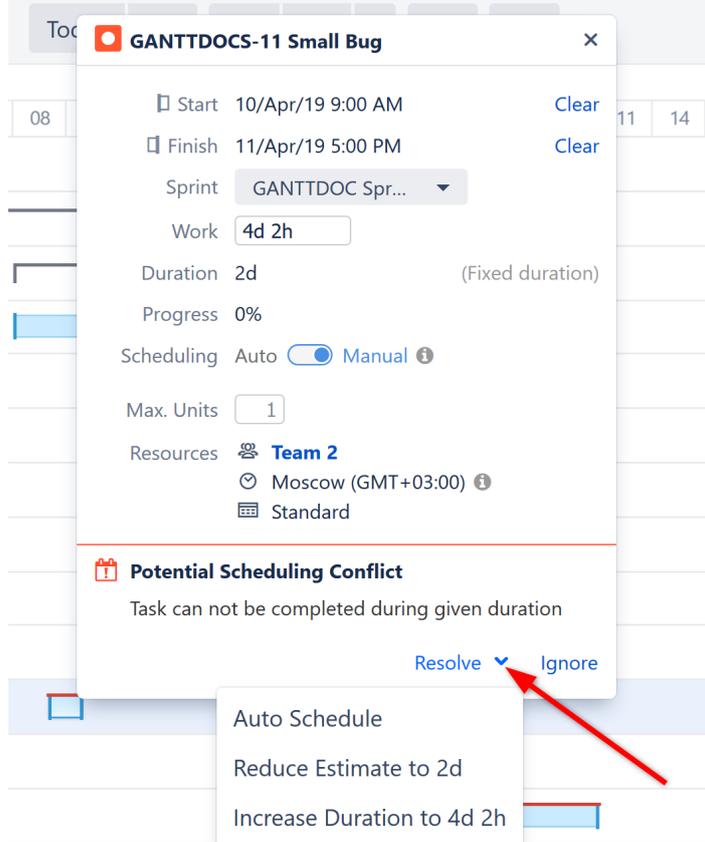
- **Respect Link** - Changes the task Start Date to coincide with the predecessor's Finish Date. The task will stay in the Manual Scheduling mode.
- **Auto Schedule** - Switches the task to [Automatic Scheduling](#) (see page 95) mode.
- **Ignore** - Tells Structure.Gantt to ignore the conflict. If additional changes are made to the task and the conflict still exists, the red line will reappear.

When [sprint-based scheduling](#) (see page 59) 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.

i If [Resource Leveling](#) (see page 130) 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 103) shorter than its work estimate, you will receive an error



message.
to resolve the conflict:

When this occurs, you have a few options

- **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 98), 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.

STMB-4 Team B Story 4

SCHEDULING

Start 18/May/16 9:00 AM

Finish 31/May/16 5:00 PM

Sprint Team B Sprint 1

Work 1d

Cust. Est. 8 sp

Duration 2w (Fixed duration)

Fix. duration

Progress 0%

Mode Auto Manual

RESOURCES

Max. Units 1

Resource Albert

New York (GMT-05:00)

Standard

[Show only fields affecting task](#)

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

2.3.4.1 Scheduling

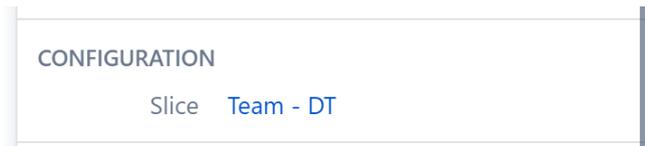
This section includes those fields that can affect the scheduling and duration of the task.

- **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 58). (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 52), 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 52)).

- **Duration** - The time it takes to complete the task.
- **Fixed duration** - If the task has a specified [fixed duration](#)(see page 103), it will be listed here.
- **Progress** - This can be calculated based on the [Gantt Configuration](#)(see page 54).
- **Mode** - Allows you to toggle how tasks are scheduled: [Manual](#)(see page 96) (based on its Start/End date or sprint) or [Auto](#)(see page 95) (based on the project start day, duration and dependencies).

2.3.4.2 Configuration

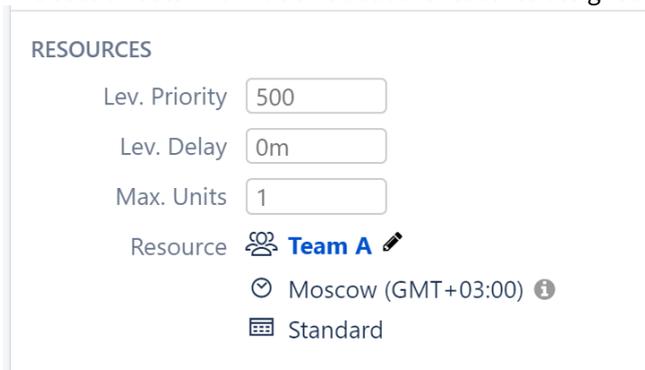
This section is only displayed when the task is affected by a [Configuration Slice](#)(see page 78).



- **Slice** - If the task's appearance or behavior is based on a [Slice configuration](#)(see page 78), 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 130). A higher number equals a higher priority.
- **Leveling Delay** - Leveling delay applied to the task by [Resource Leveling](#)(see page 130).
- **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. (See [Resources Configuration](#)(see page 67) 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

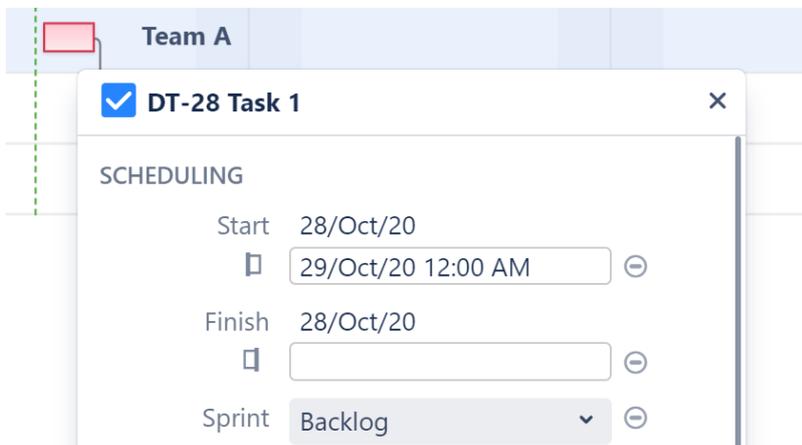
At the bottom of the Task Details panel, you can choose to show only those fields that affect the task (this will hide fields with the  icon), or all fields.

Show only fields affecting task

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

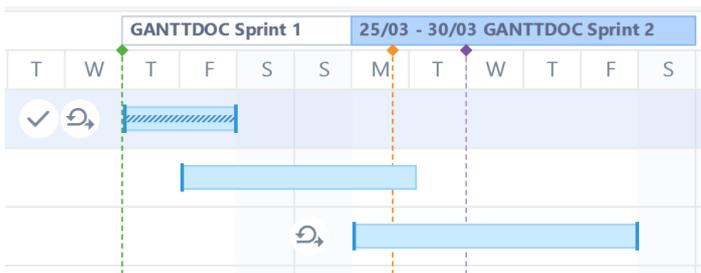
If a task has a manually scheduled Start or Finish date, clearing this date will remove the manual date from Jira and:

- 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 60) 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.



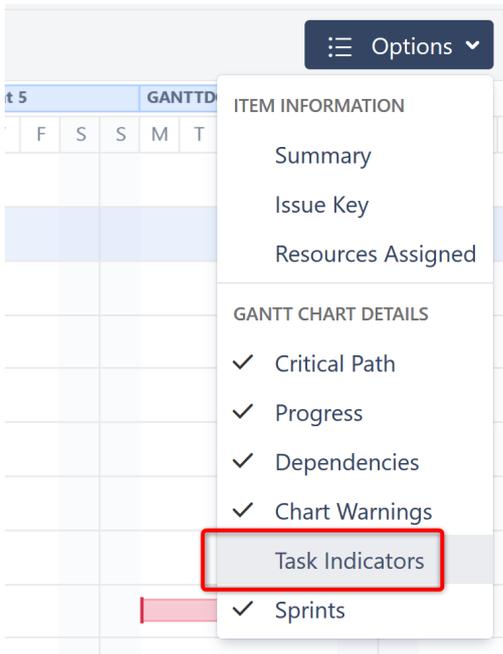
You may see the following indicators on your Gantt Chart:

- ✓ 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 130).
- 📅 The task has a [Fixed Duration](#)(see page 103).
- 👁 The task is [hidden](#)(see page 114).
- 📅 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**.



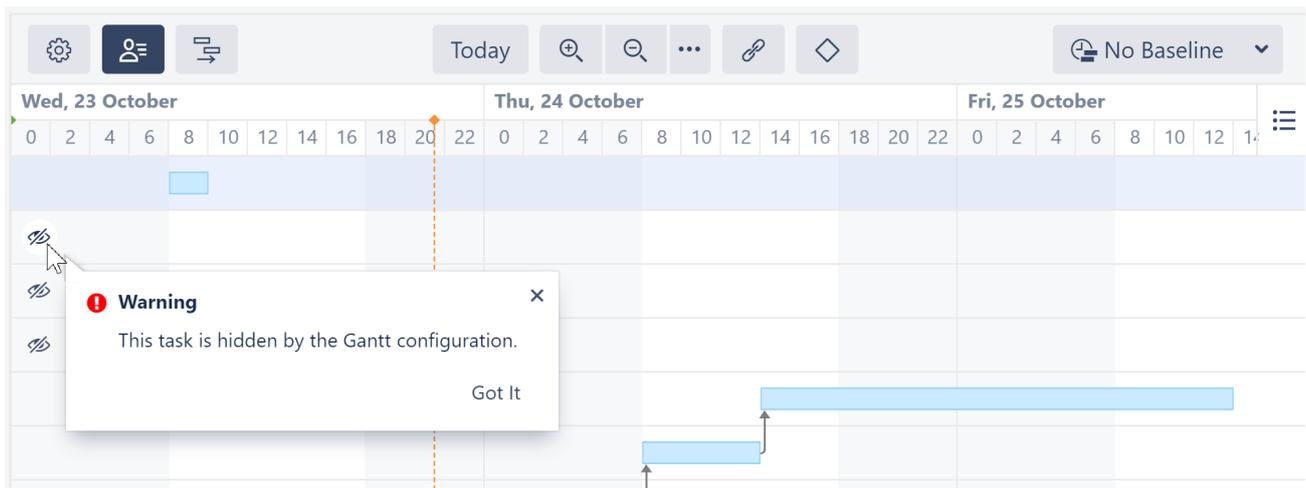
2.3.5.2 Hidden Tasks

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 [Slic](#) [e](#)(see page 78).
- The structure owner does not have permission to view the task.

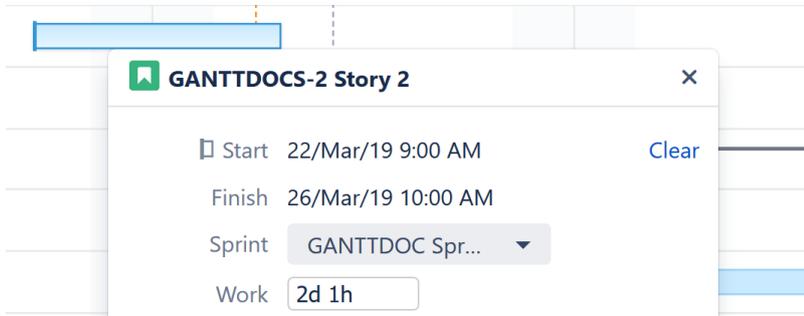
To see why a task is hidden, hover over its Hidden Task icon.



 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.

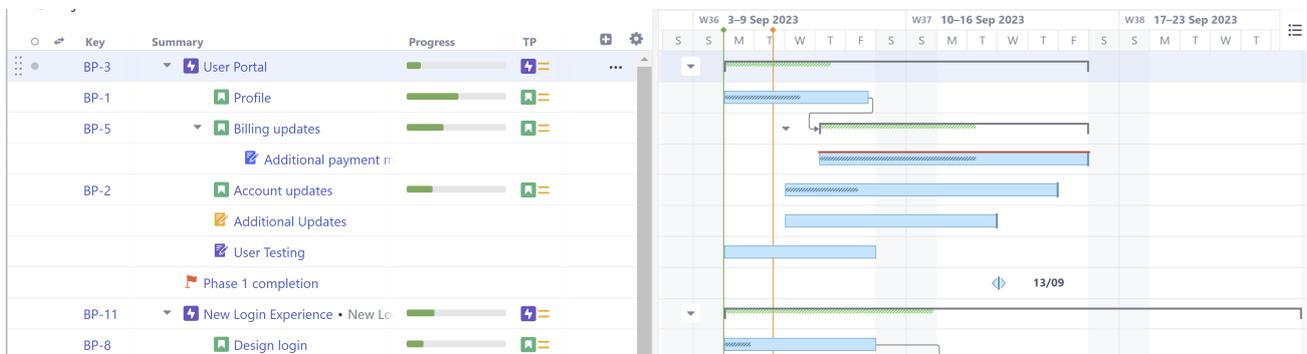


Next to the Start/Finish dates, you may see the following:

-  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

2.3.6 Using Memos in Structure.Gantt

Structure Memos¹³ can be used for planning and timeline visualization in Structure.Gantt.



By default, memos are shown as tasks within the Gantt chart. If field values have been added to the memo, these values can be used for scheduling and resource assignment, just like for Jira issues.

Memos can also be turned into [milestones](#) (see page 123) (see "Phase 1 complete" in the chart above) by clicking the Milestones button in the Gantt toolbar.

2.3.6.1 Using Slices for Memos

Using [Slices](#) (see page 78), you can customize the chart behavior for memos. This can be useful if you want memos to behave differently from other items in the chart. For example, at this time memos do not support all the fields that

¹³ <https://wiki.almworks.com/display/structure/.Memo+v9.0>

Jira issues do - using a slice, you can customize the way memos are visualized based on their available fields, without affecting the rest of your chart.

To assign a slice to memos, in the **Item type** field, select **Structure Type** and **Memo**.

Create slice

Name* Memo Dates Active

Item type Structure Type Memo

Settings + New section
Add custom settings for the specified items

Manual Scheduling

Delete Section

Allow manual scheduling

Start Date None

Finish Date Due Date No time information

Milestone Date Due Date No time information

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 63)).

Structure.Gantt supports the following types of dependencies:

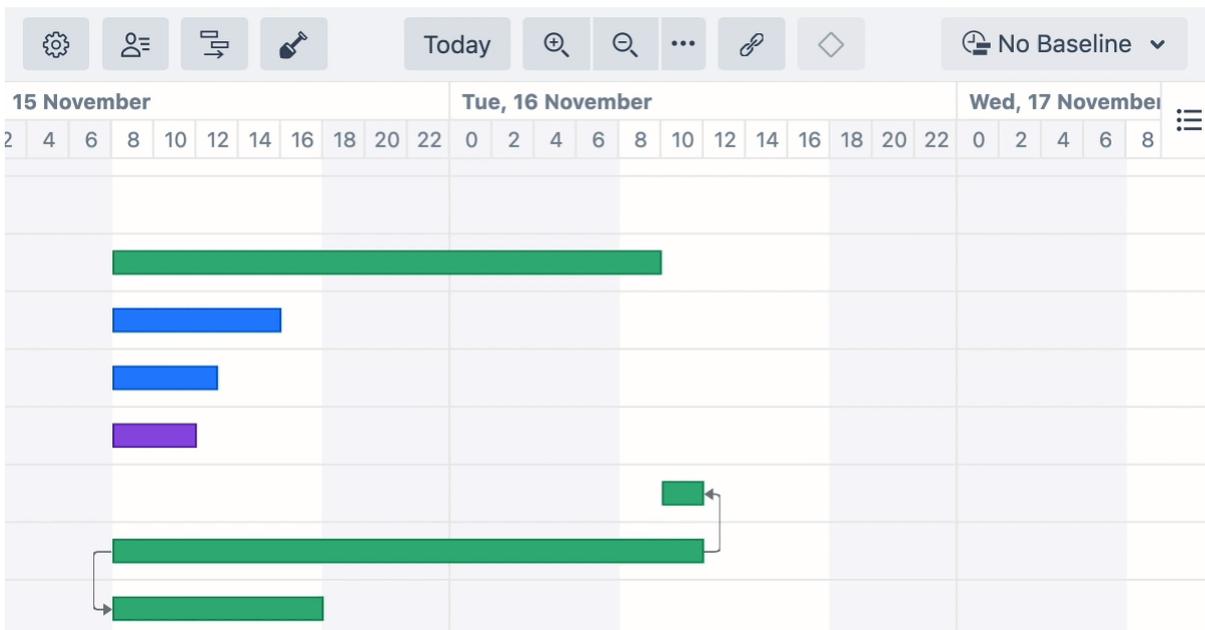
- Finish to Start (FS) - the second item's start is dependent upon the first item's finish
- Start to Start (SS) - the second item's start is dependent upon the first item's start
- Finish to Finish (FF) - the second item's finish is dependent upon the first item's finish
- Start to Finish (SF) - the 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 119) 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

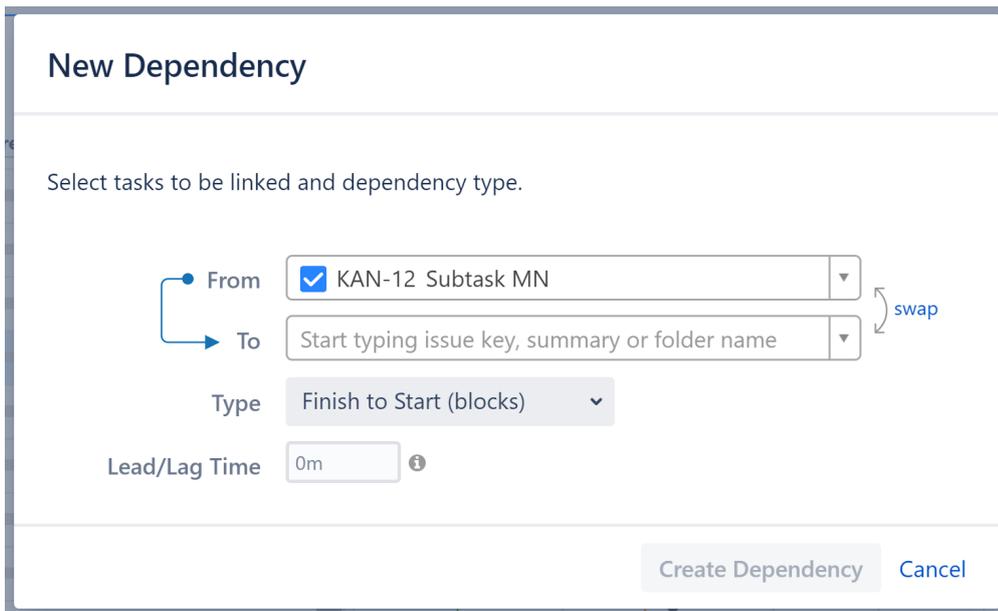
i The type of dependencies and link types you can create in Structure.Gantt depends on the types you have enabled in the [Gantt Configuration](#)(see page 63).

⚠ If [Resource Leveling](#)(see page 130) 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 119), if necessary.
5. Click **Create Dependency**



New Dependency

Select tasks to be linked and dependency type.

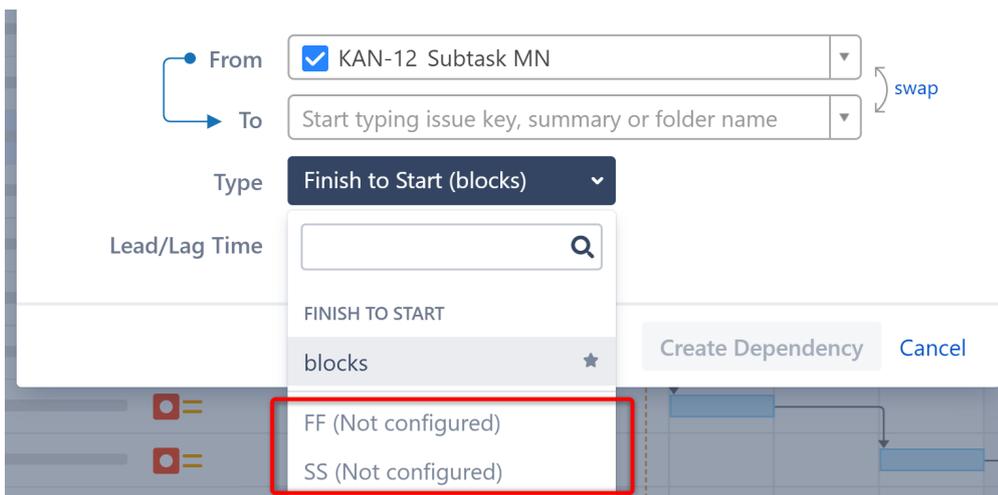
From KAN-12 Subtask MN

To

Type

Lead/Lag Time

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



From KAN-12 Subtask MN

To

Type

Lead/Lag Time

FF (Not configured)

SS (Not configured)

In order to use these dependency types, you first need to configure them in your [Gantt Configuration](#)(see page 63).

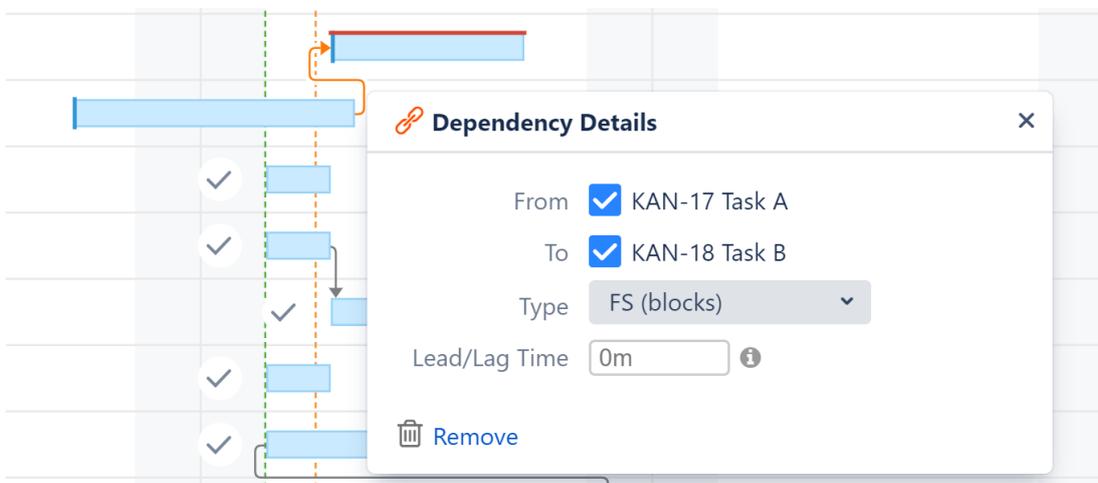
⚠ Start to Finish and Finish to Finish dependencies are currently not supported as targets for [groups](#)(see page 62).

2.4.3 Non-Issue Dependencies

It is also possible to create dependencies between non-issues items (Structure [Folders](#)¹⁴ and [Memos](#)¹⁵), 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.

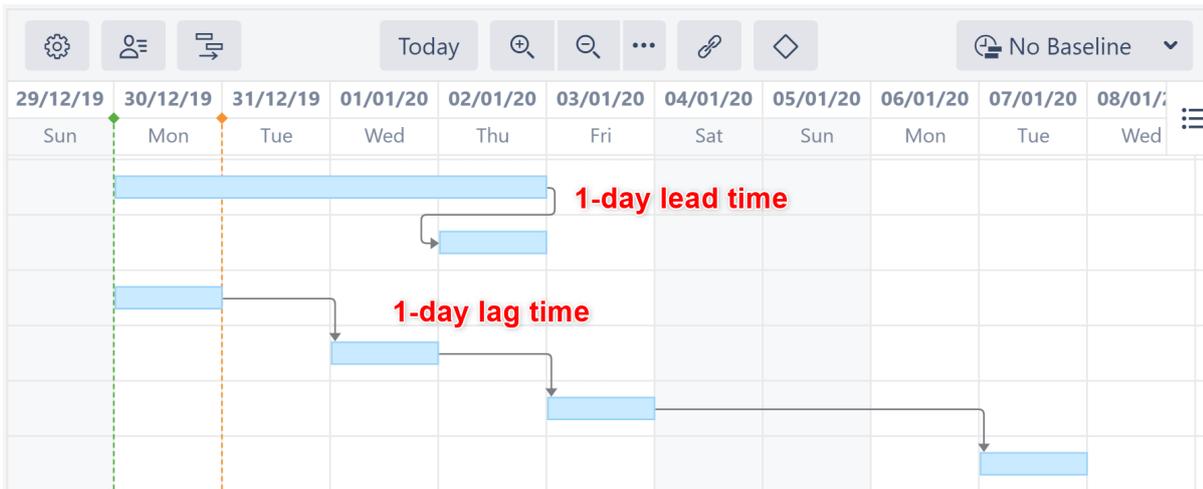
i If [Resource Leveling](#)(see page 130) is active, any leveling delays affecting the previously-linked items will be removed.

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).

¹⁴ <https://wiki.almworks.com/display/structure/.Folders+v8.3>

¹⁵ <https://wiki.almworks.com/display/structure/.Memo+v9.0>



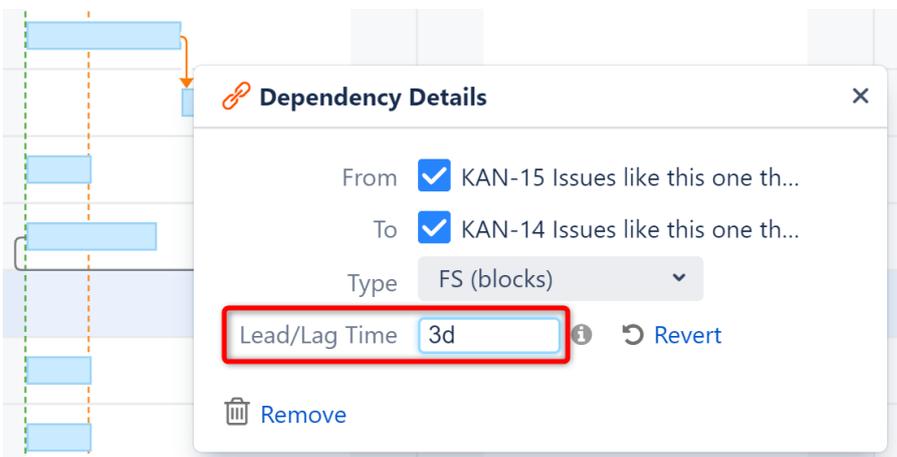
You can accomplish this in Structure.Gantt by configuring the lead/lag time for dependencies.

i 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).

i 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.

General

Scheduling

Dependencies

Resources

New Slice

Lead/Lag time 2

Track dependencies

Associate issue link type with dependencies:

Type	Lead/Lag Time	Link Type	Favorite	
FS	<input style="border: 2px solid red;" type="text" value="1w"/>	blocks	<input checked="" type="checkbox"/>	
		clones	<input type="checkbox"/>	
		<input type="text" value="Add Type"/> ▼		
FF	<input type="text" value="0"/>	<input type="text" value="Add Type"/> ▼		
SS	<input type="text" value="0"/>	<input type="text" value="Add Type"/> ▼		
SF	<input type="text" value="0"/>	duplicates	<input checked="" type="checkbox"/>	
		relates to	<input type="checkbox"/>	
		<input type="text" value="Add Type"/> ▼		

You can also assign a unique Lead/Lag time to a subset of items by creating a [Slice](#)(see page 78).

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 130) may affect lead/lag times:

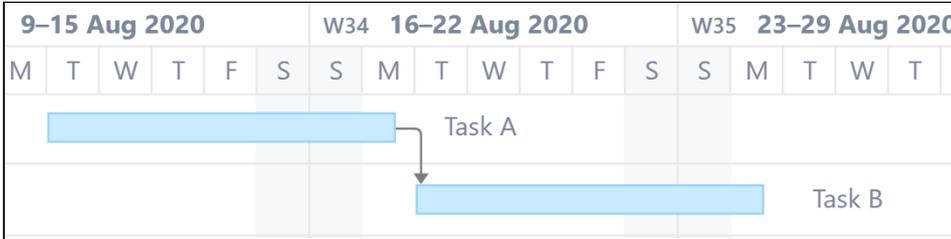
- Lead times may be removed if both items in the dependency share the same resource.
- Lag times may be extended to resolve overallocations.

2.4.7 Dependency Types Supported by Structure.Gantt

Structure.Gantt supports the following dependency types:

2.4.7.1 Finish to Start

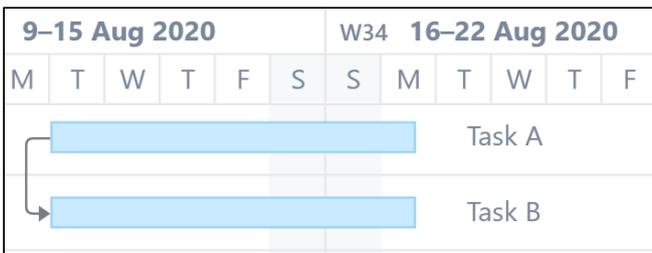
Finish to Start is the most commonly used dependency type. In a Finish to Start dependency, a task's start date is based on when the task it depends on finishes.



Task B starts after Task A finishes.

2.4.7.2 Start to Start

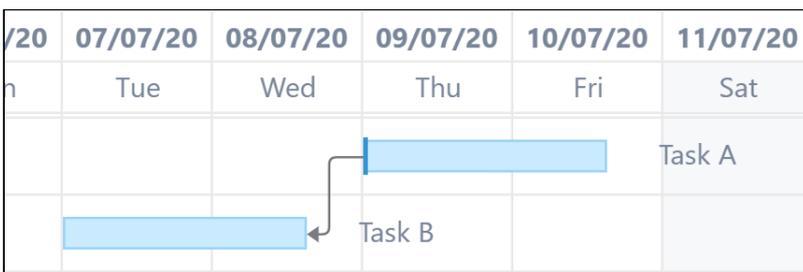
In a Start to Start dependency, a task's start date is based on when the task it depends on starts.



Task B starts at the same time Task A starts.

2.4.7.3 Start to Finish

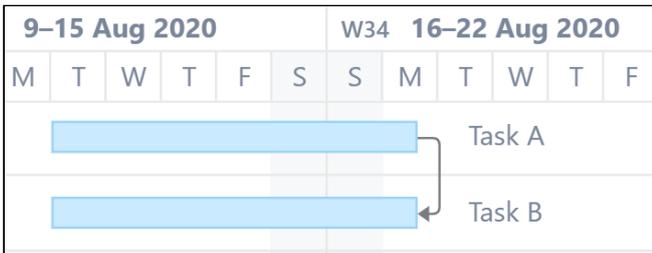
In a Start to Finish dependency, a task's finish date is based on when the task it depends on starts.



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.

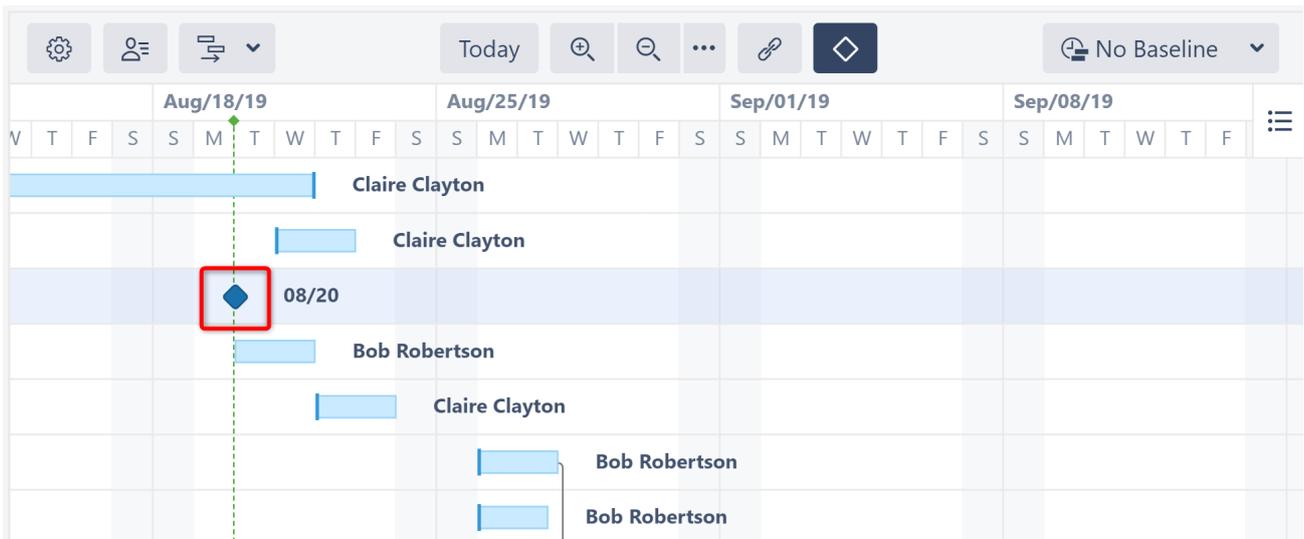


Task B finishes together with Task A.

i 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 119) 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

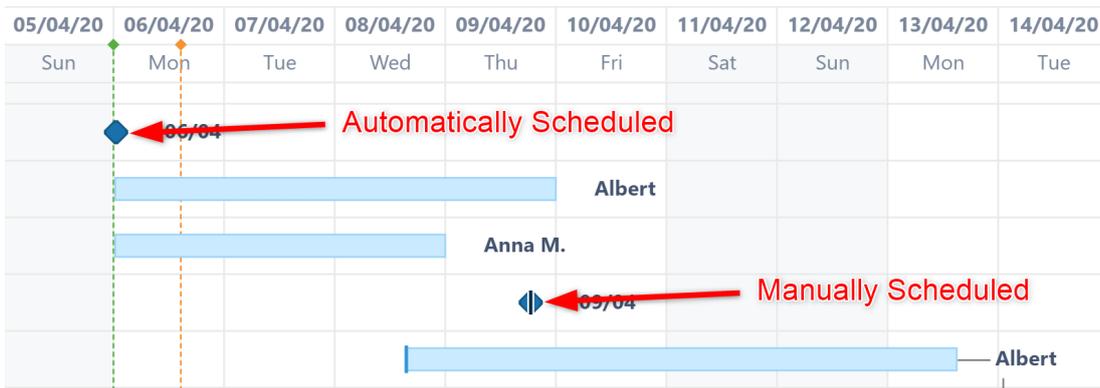
Milestones allow you to mark key points within a project plan. They can be created from issues, [folders](#)¹⁶ or [memos](#)¹⁷ in the structure.



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 its center:

¹⁶ <https://wiki.almworks.com/display/structure/.Folders+v8.3>

¹⁷ <https://wiki.almworks.com/display/structure/.Memo+v9.0>

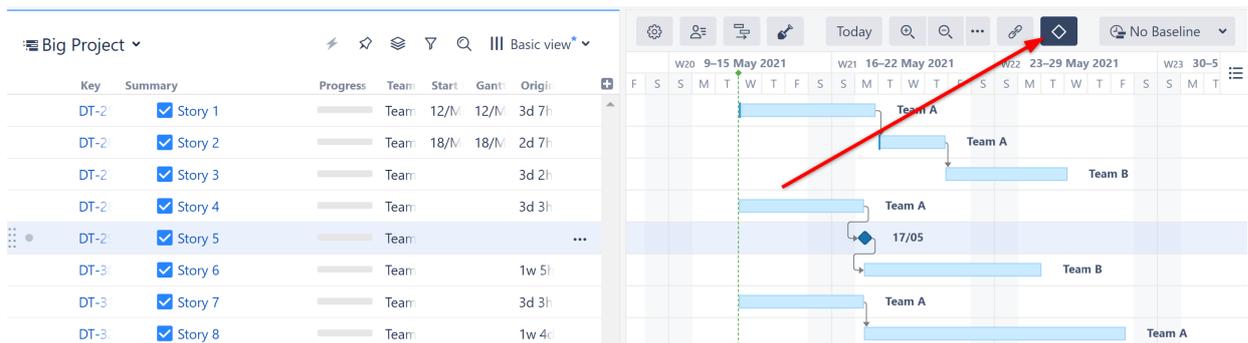


i In order to manually schedule a milestone, you first need to set the Milestone attribute under the [Manual Scheduling Configuration](#)(see page 58) configuration.

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 78).
2. Use the Milestone button to manually convert a selected item into a milestone.



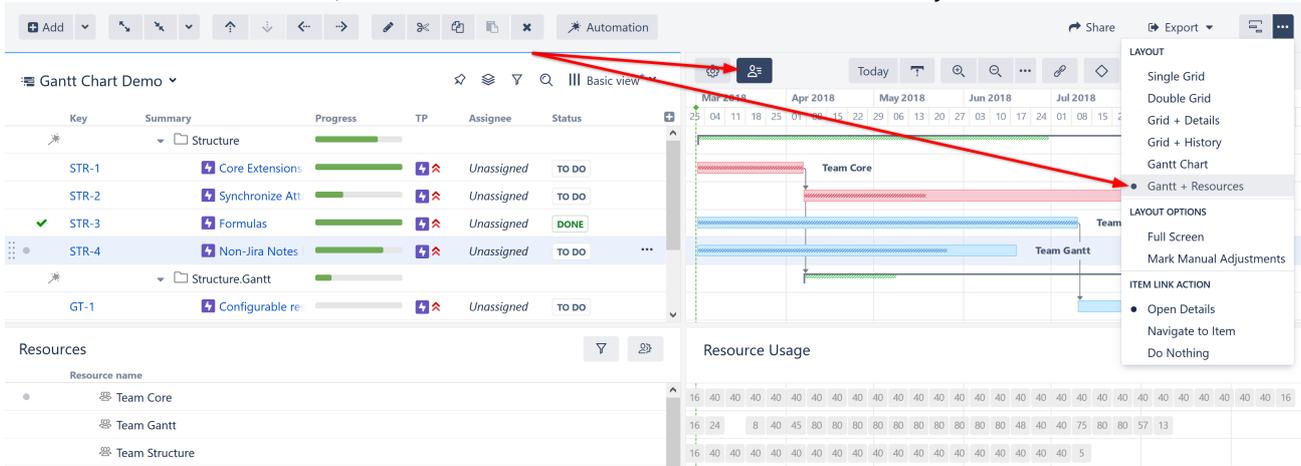
i Since there is no concept of milestone in Jira, milestones are only visible within Structure.Gantt. However, their dates can be exported using Structure [Effectors](#)¹⁸.

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 24) 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 67) to assign resources to your tasks.

¹⁸ <https://wiki.almworks.com/display/structure/Effectors>

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



The screenshot displays the Structure.Gantt interface. On the left, there is a table with columns for Key, Summary, Progress, TP, Assignee, and Status. Below this is a 'Resources' section with a table listing resource names: Team Core, Team Gantt, and Team Structure. On the right, a Gantt chart shows task bars for 'Team Core' and 'Team Gantt' across a timeline from March to July 2018. A 'Resource Usage' table is visible at the bottom right. A red arrow points from the 'Show Resources' button in the top toolbar to the 'Gantt + Resources' option in the layout menu.

 Not seeing any resources? Make sure you've [configured](#)(see page 67) them!

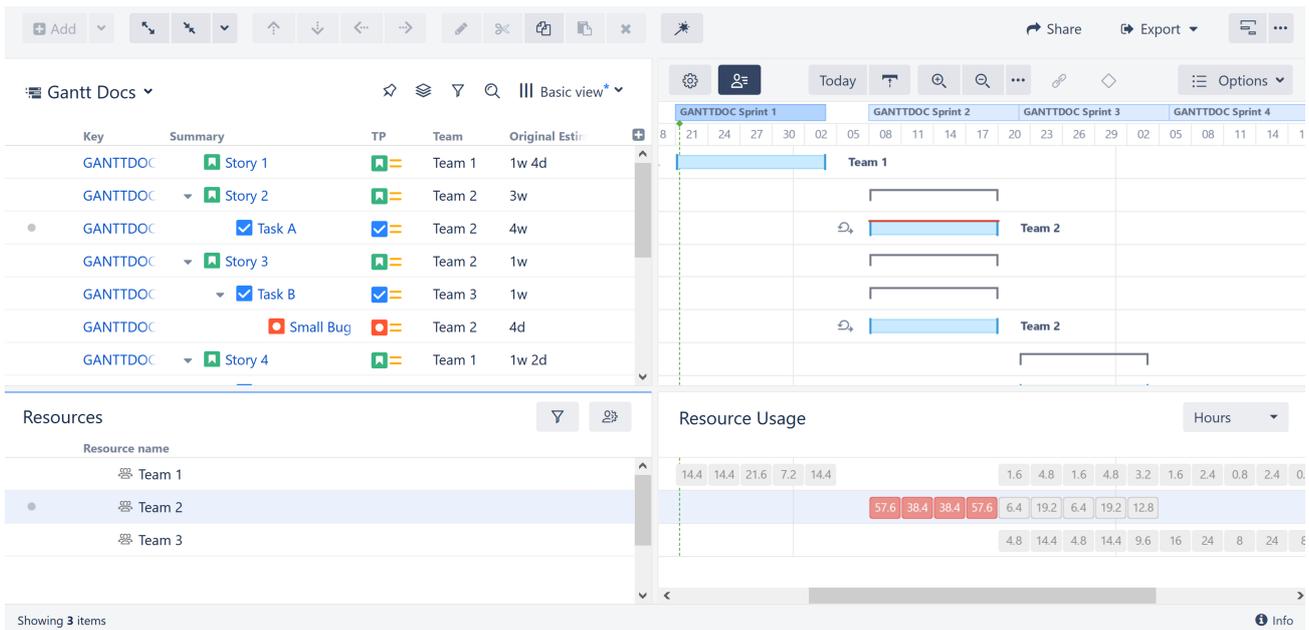
2.6.1 Learn More About Working With Resources

- [Resources and Resource Usage](#)(see page 125)
- [Resource Settings](#)(see page 128)
- [Filter by Resource](#)(see page 129)
- [Navigating to a Resource from the Gantt Chart](#)(see page 130)

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, group the structure 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 filtered¹⁹ - in this case, the Resource panel will only include those resources assigned to the items left in the structure
2. Resource Filtering (see page 129) has been applied

2.6.2.2 Groups and Milestones

Resources cannot be assigned to groups or milestones.

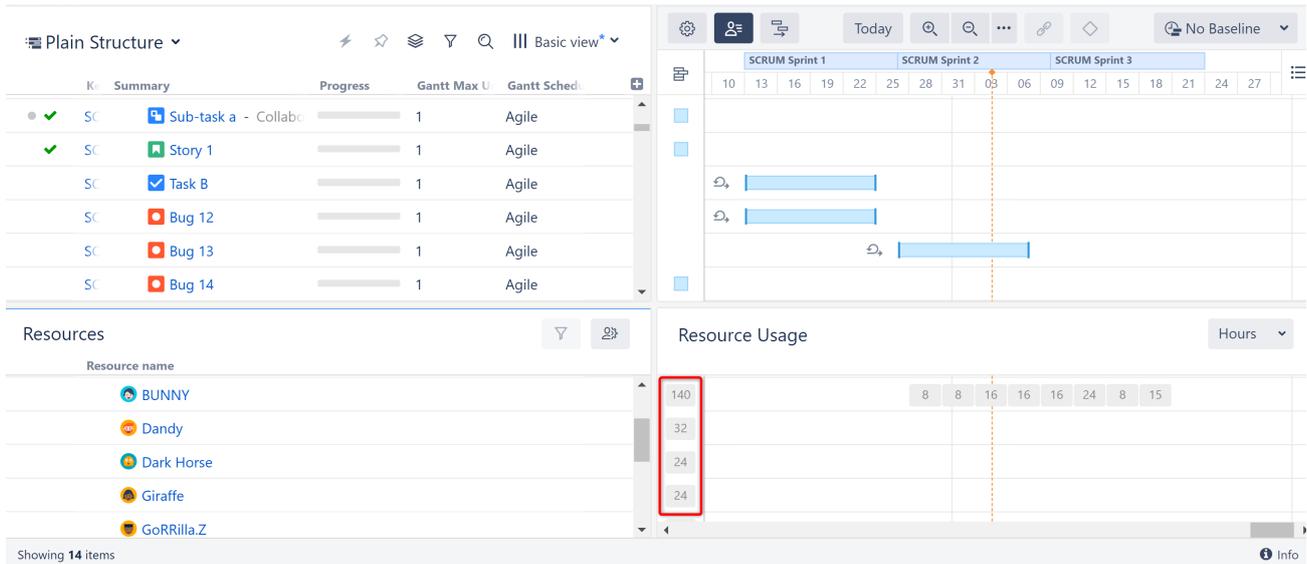
If an issue is treated as a group (see page 35), any resources assigned to that issue will be ignored when calculating resource usage.

2.6.2.3 Backlog Panel

When using sprint-based scheduling (see page 98) 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

¹⁹ <https://wiki.almworks.com/display/structure/.Filter+v9.0>

schedule.



⚠ Backlog resource requirements are only available when displaying resource usage in hours(see page 127).

2.6.2.4 Overalllocation

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 130) 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.

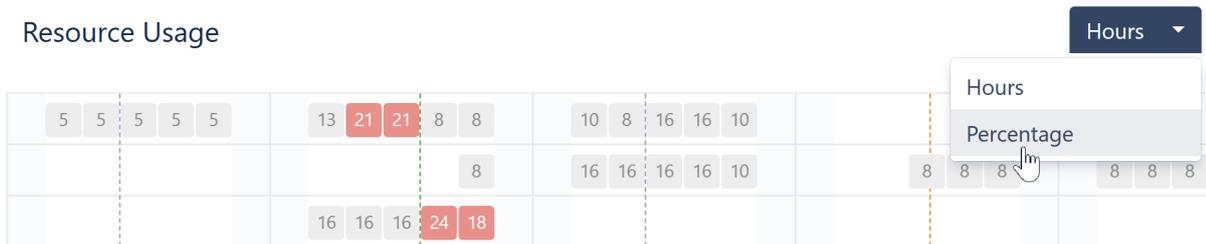
To learn more about assigning resources to tasks, see [Resource Assignment](#).(see page 67)

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 128)) that is being used at a given time

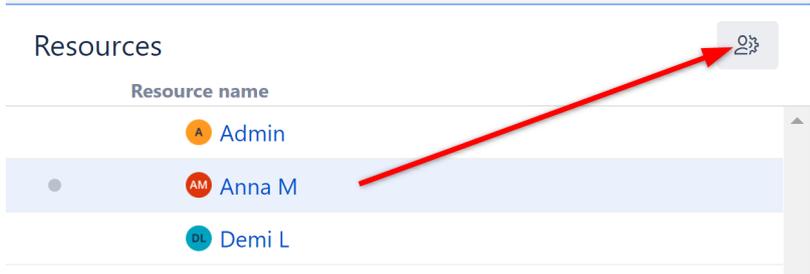
To change how resource usage is displayed, simply click on the drop-down menu in the upper-right corner of the Resource Usage panel.



⚠ 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 67). 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 70) 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.

Resource Settings

Properties Availability

Name AM Anna M

Units

Units value of a resource defines how much work can be done by that resource over a fixed amount of time. Typically, Units equals to the number of people represented by the resource. If Units value is not specified, the default is used: 1.

Time Zone Use default from Gantt configuration

Work Calendar Standard (Default)

Save Cancel

All these parameters, as well as a task's **Maximum Units**(see page 31), 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.

The screenshot shows the Jira Gantt chart interface. On the left, there is a 'Resources' panel with a list of resources: Admin, Leslie Knope, and Thom Thomson. Leslie Knope is highlighted. A red arrow points to a filter icon (a downward-pointing triangle) next to the Leslie Knope name. To the right of the Resources panel is the 'Resource Usage' chart, which shows a Gantt chart with tasks assigned to Leslie Knope. The chart displays dates from 5 Sep 2018 to 14 Oct 2018. The Resource Usage chart shows bars for Leslie Knope with values 2, 8, 16, 16, and 12.

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

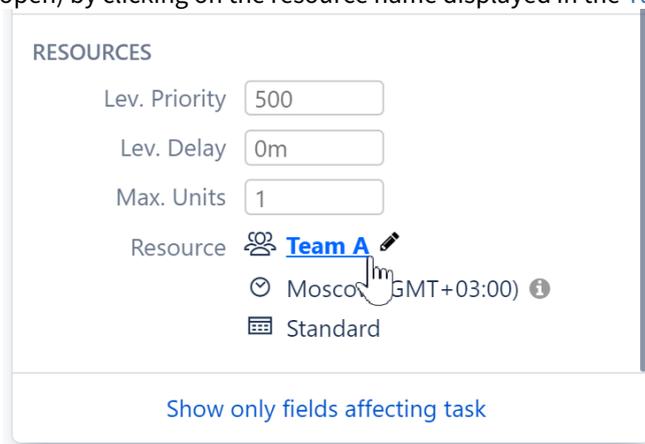
⚠ Milestones and groups are not assigned to resources in Structure.Gantt, so these items may be hidden even if they are "assigned" to the specified resource in Structure.

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

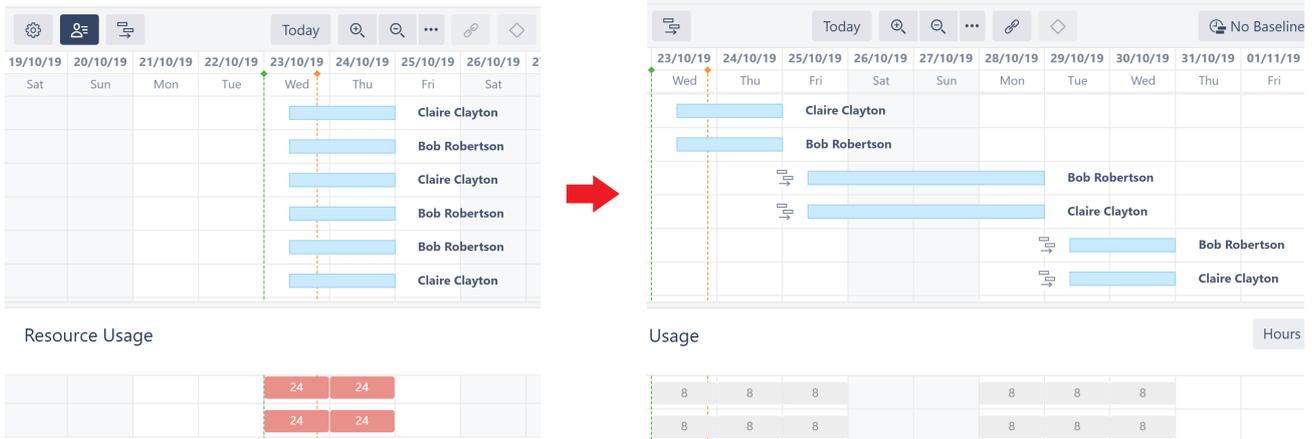
You can quickly navigate to a resource in the Resources panel (and open the Resources panel itself, if it's not yet open) by clicking on the resource name displayed in the [Task Details Panel](#)(see page 109).



✓ 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.



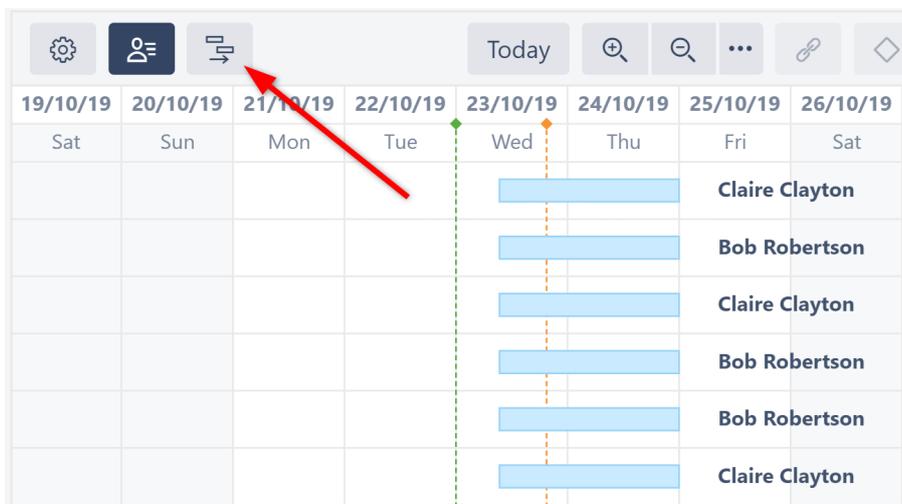
In the above example, tasks with the Leveling Delay icon  were delayed to solve the overallocation seen in the first screenshot.

 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.

Resource Leveling

Resource Leveling resolves overallocation by shifting tasks forward on the timeline. Leveling delays are stored in Structure.Gantt and do not affect Jira data.

Resource leveling may not solve all overallocations. Manual review is recommended.

Resource Leveling

Resources: All Resources

Resolve From:

Clear existing Leveling Delays before leveling

By default, leveling is applied only to automatically scheduled tasks with 0% progress. To allow leveling of manually scheduled tasks or tasks with progress, please select the corresponding options.

Include Manually scheduled tasks
All leveling data is stored in Gantt. Jira Start and Finish dates will be unaffected.

Tasks with progress
Progress is determined by Gantt Configuration.

Completed tasks

Help

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. Selecting 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 98) 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 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 69).
- **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 134](#)) 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**.

Resource Leveling

Resource Leveling resolves overallocation by shifting tasks forward on the timeline. Leveling delays are stored in Structure.Gantt and do not affect Jira data.

Resource leveling may not solve all overallocations. Manual review is recommended.

Resource Leveling

Resources: All Resources x All Resources

Resolve From: Project Start

Clear existing Leveling Delays before leveling

By default, leveling is applied only to automatically scheduled tasks with 0% progress. To allow leveling of manually scheduled tasks or tasks with progress, please select the corresponding options.

Include Manually scheduled tasks
All leveling data is stored in Gantt. Jira Start and Finish dates will be unaffected.

Tasks with progress
Progress is determined by Gantt Configuration.

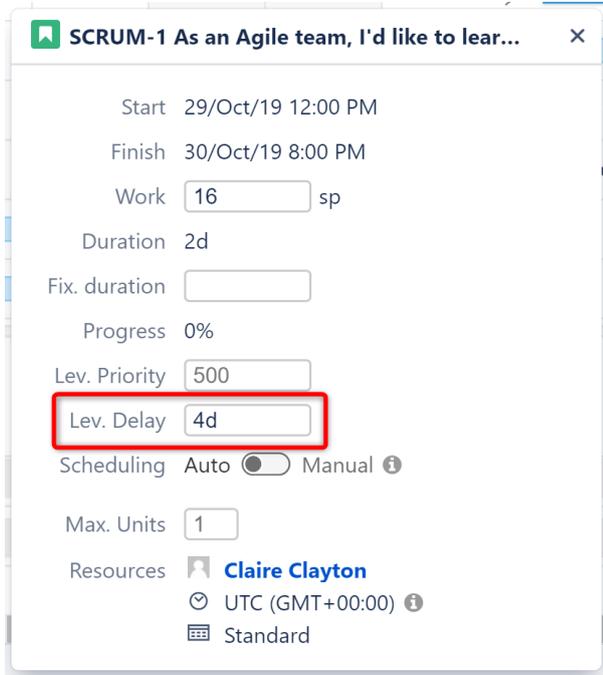
Completed tasks

Help Reset Leveling Delays Run Leveling Close

- ✓ 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 109).



SCRUM-1 As an Agile team, I'd like to lear... ✕

Start 29/Oct/19 12:00 PM

Finish 30/Oct/19 8:00 PM

Work 16 sp

Duration 2d

Fix. duration

Progress 0%

Lev. Priority 500

Lev. Delay 4d

Scheduling Auto Manual ⓘ

Max. Units 1

Resources  Claire Clayton

 UTC (GMT+00:00) ⓘ

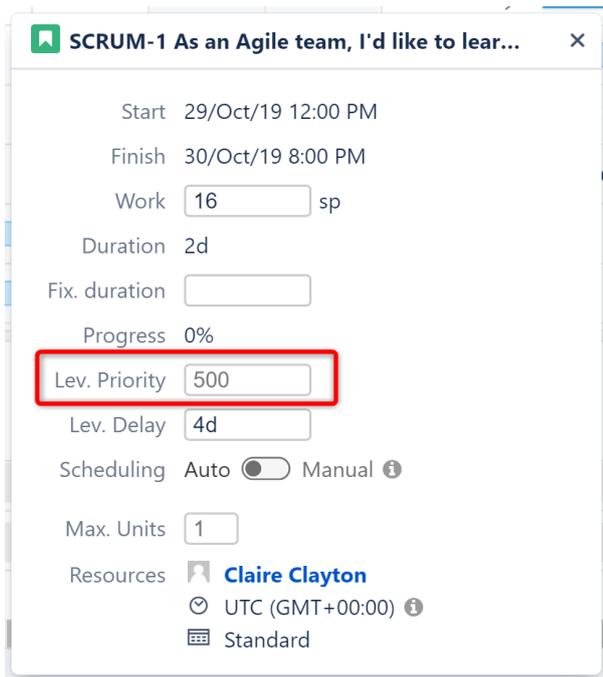
 Standard

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 67), or adjusted for individual tasks via the [Task Details Panel](#)(see page 109).

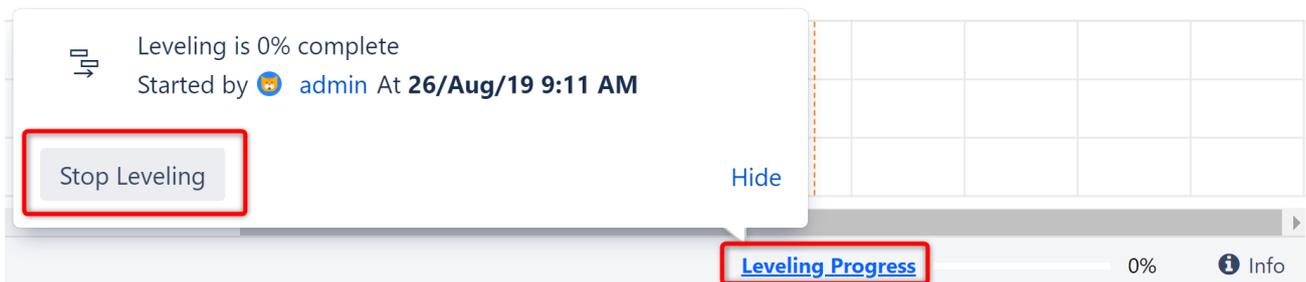


Changes made to the Leveling Priority are not applied until after the current leveling is reset and a new leveling operation is run.

i 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**.



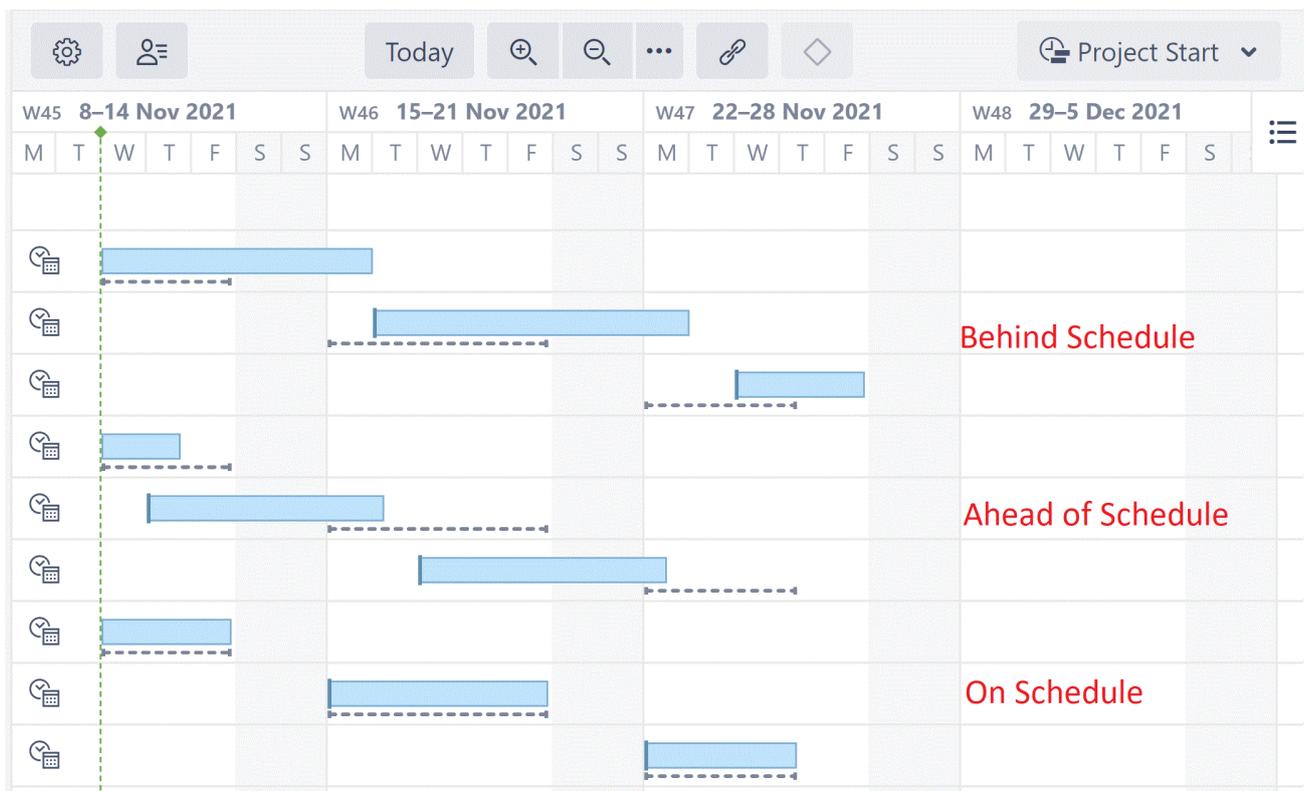
i Only the user who initiated the leveling process or a Jira admin can stop an in-progress leveling operation.

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 161) 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 137) - create a baseline using the current location of tasks.
- [Jira-based baselines](#)(see page 138) - create a baseline using data from Jira or a formula.

2.8.2 Additional Information

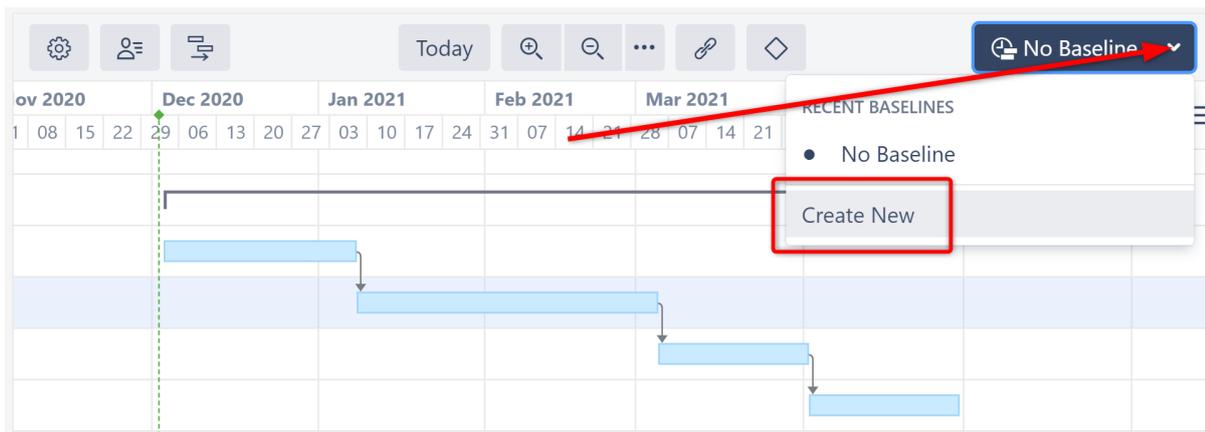
- [Working with Baselines](#)(see page 141)
- [Managing Baselines](#)(see page 144)

2.8.3 Gantt Baselines

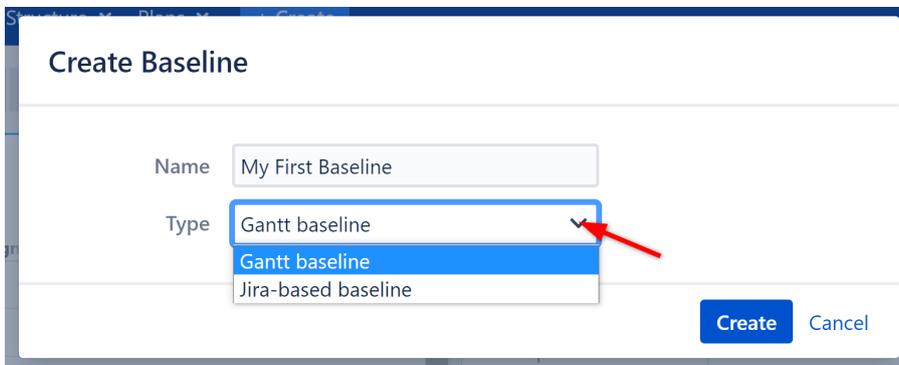
Gantt baselines allow you to take a snapshot of the current positions of tasks, groups, and milestones in the timeline, which can be placed alongside the chart at a future date. This allows you to see at a glance which tasks are behind or ahead of schedule - and how that impacts the project's timeline.

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.

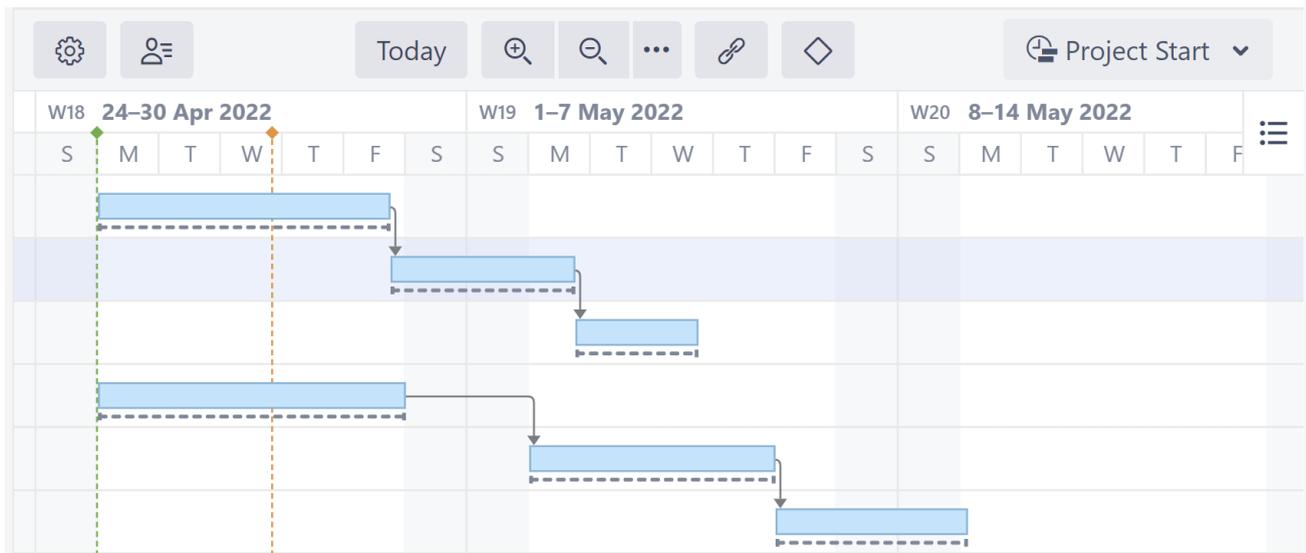


i In order to create a baseline, you must be the structure owner or have [Edit permissions](#)²⁰ for the structure.

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.

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



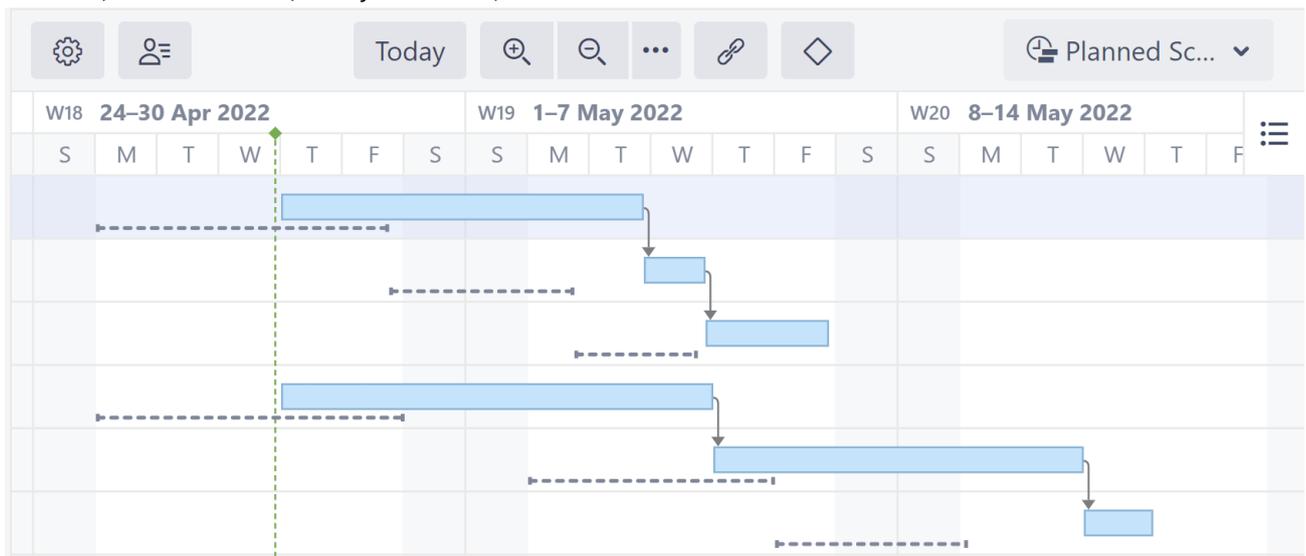
i Baseline data is stored in Structure.Gantt storage. It has no effect on Jira.

2.8.3.3 Learn More

- [Working with Baselines](#)(see page 141)
- [Managing Baselines](#)(see page 144)

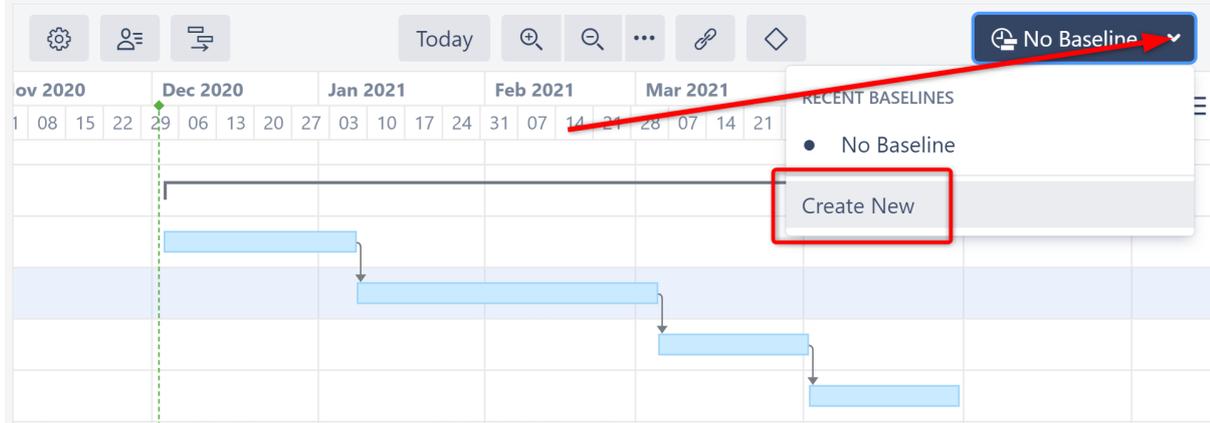
2.8.4 Jira-based Baselines

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.

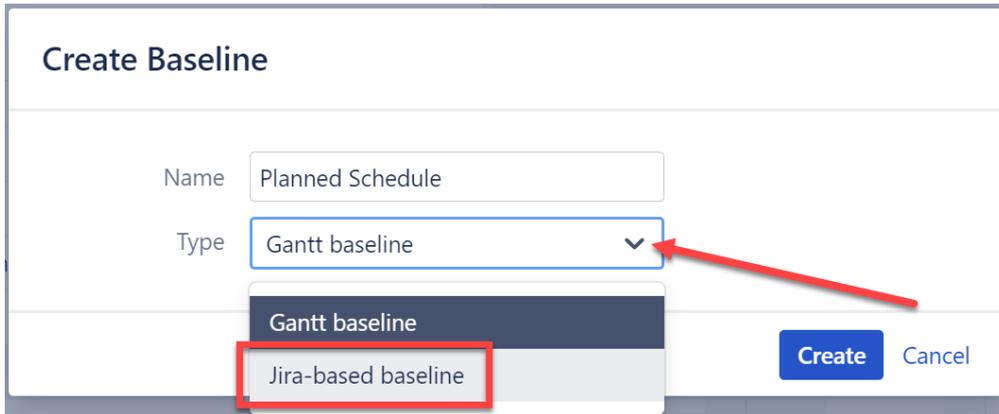


2.8.4.1 Creating a Jira-based Baseline

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.

Create Baseline

Name

Type

Start Date

Finish Date

One date-field tasks Treat task with only Start Date value as a milestone
 Treat task with only Finish Date value as a milestone

✓ 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](#)²¹ 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:

²¹ <https://wiki.almworks.com/display/structure/Structure+Permissions>

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

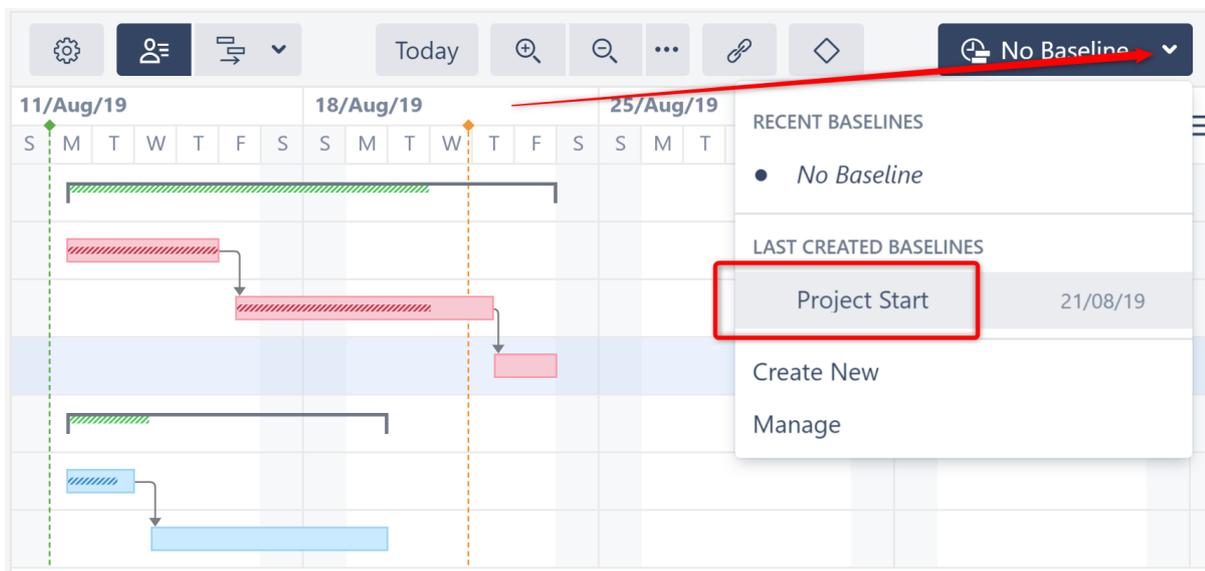
- [Working with Baselines](#)(see page 141)
- [Managing Baselines](#)(see page 144)

2.8.5 Working with Baselines

- [Viewing Saved Baselines](#)(see page 141)
- [Hiding Baselines](#)(see page 142)
- [Including Baselines in the Gantt Gadget](#)(see page 142)
- [Exporting Baselines](#)(see page 143)

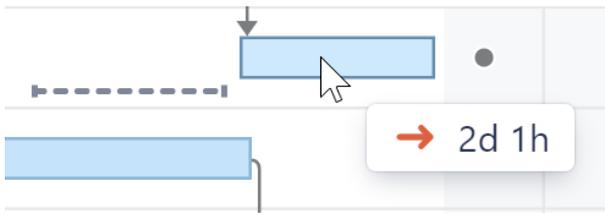
2.8.5.1 Viewing Saved Baselines

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



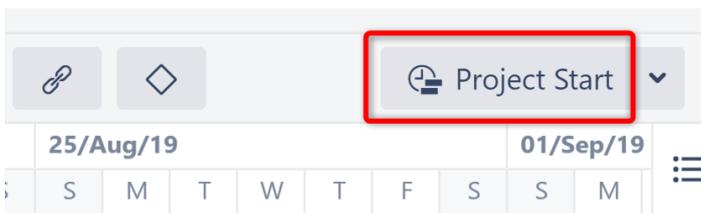
Baseline Offset

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.

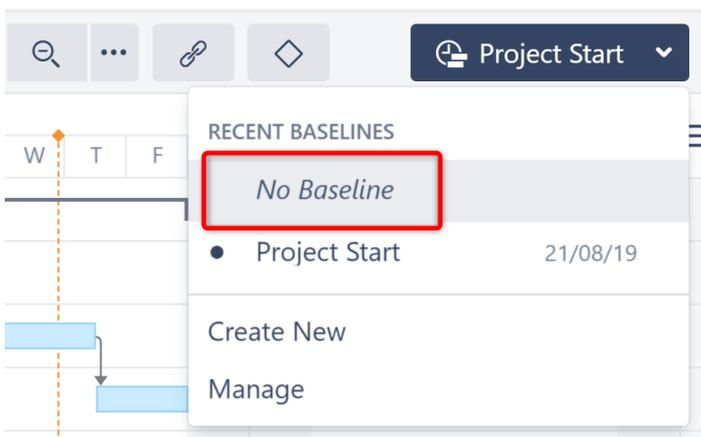


2.8.5.2 Hiding Baselines

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 145)s and [Confluence gadgets](#)(see page 148). To enable baselines, simply select the baseline you want to include in the gadget settings dialogue.

Gantt chart: Baselines

Structure* Baselines

Visible Rows
Leave empty to see all rows

Hierarchy Level
The maximum hierarchy level of items shown on the chart.

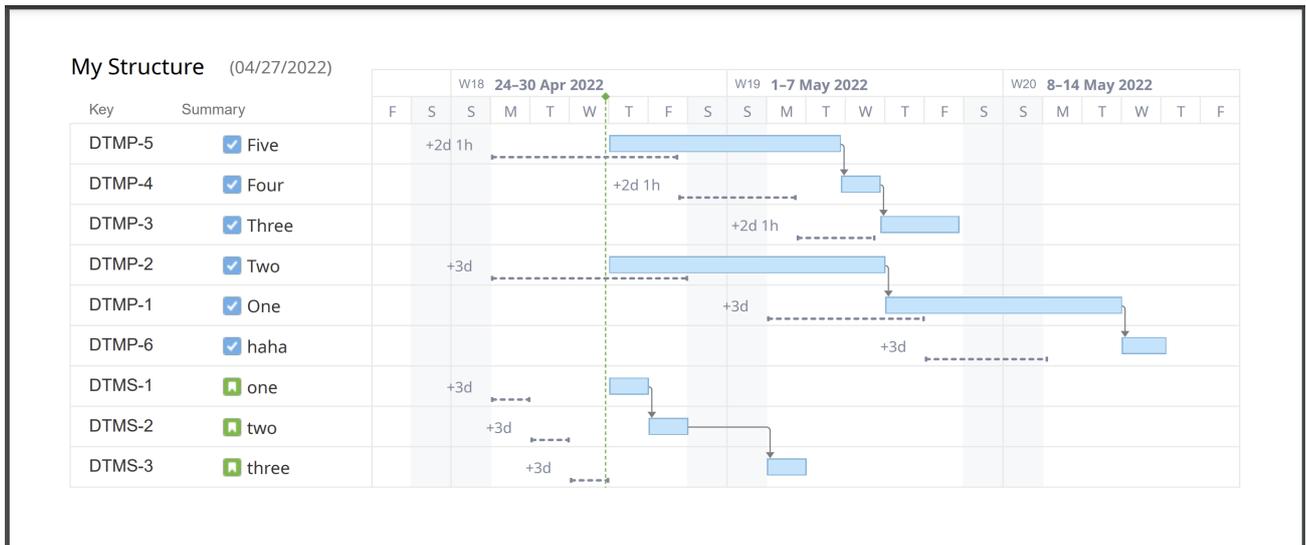
Start From Project Start
First date visible on the chart

Zoom Level Weeks

Baseline Project Start
Baseline for the selected structure

2.8.5.4 Exporting Baselines

You can include baselines when [exporting a Gantt chart](#)(see page 158).

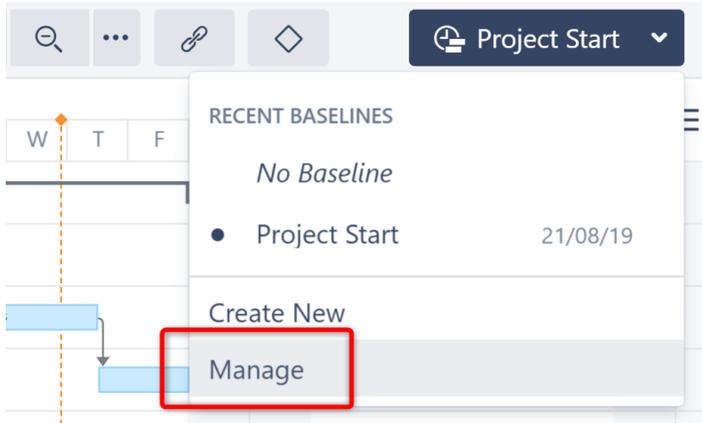


To include baselines in an export:

- 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.

Manage Baselines				
Project Start	21/08/19	admin		
Mid-Project	21/08/19	admin		
Dev Team	21/08/19	admin		
Management	21/08/19	admin		
Wishful Thinking	21/08/19	admin		
				Close

You can:

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

i 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 145)

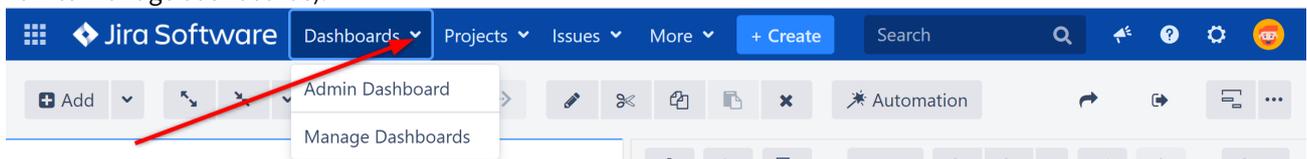
- [Confluence Gadget](#)(see page 148)

⚠ Important!

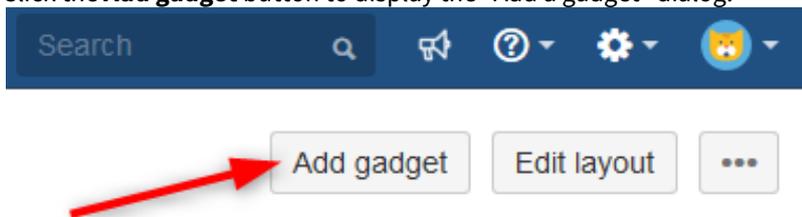
The Structure.Gantt gadget has limited functionality and is mostly dedicated to viewing. It is not possible to alter a schedule or see task details using the gadget (users should continue to use Jira or Structure.Gantt for these tasks). Additionally, if your gadget is not refreshing or is not refreshing frequently enough, make sure you have properly configured your gadget's refresh interval. See [Jira Dashboard Gadget](#)(see page 145) for more details.

2.9.1 Jira Dashboard Gadget

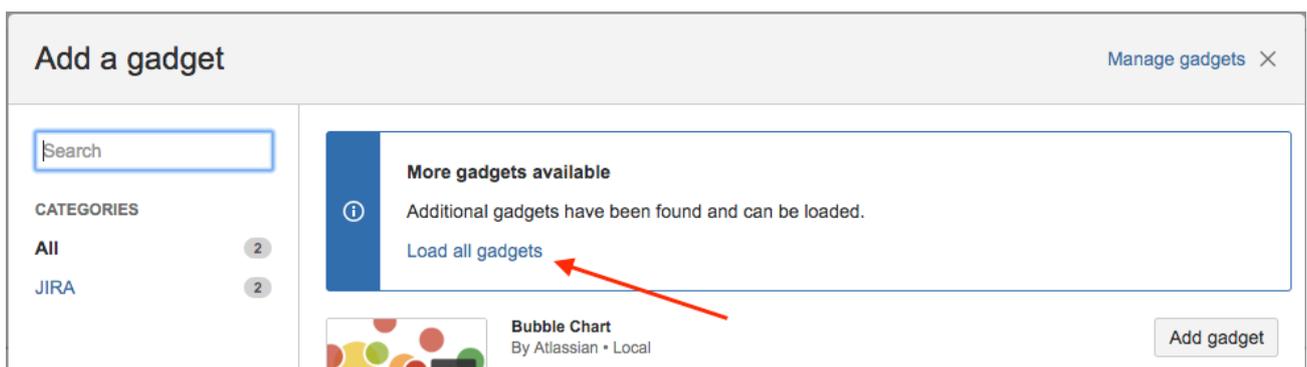
To add the Structure.Gantt gadget to a Jira Dashboard, click **Dashboards** in the top menu and select the desired dashboard, or click **Manage dashboards** to create a new one (see [Atlassian documentation](#)²² for more details on how to manage dashboards).



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

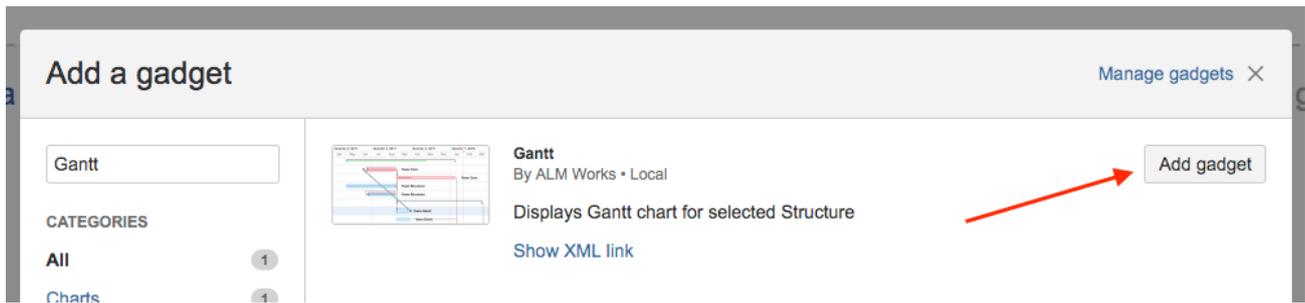


Click **Load all gadgets** to display a list of all available gadgets.



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

²² <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](#)²³ 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](#)²⁴. 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 136) 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.

²³ <https://wiki.almworks.com/display/structure/Structured+JQL>

²⁴ https://en.wikipedia.org/wiki/Fiscal_year

Structure.Gantt

Structure*

Filter Type

Visible Rows
Leave empty to see all rows

Hierarchy Level
The maximum hierarchy level of items shown on the chart. Leave empty to include everything.

Start From
First date visible on the chart

Zoom Level

Year Start
The selected month will be used as the start of the fiscal year for dates on the timeline.

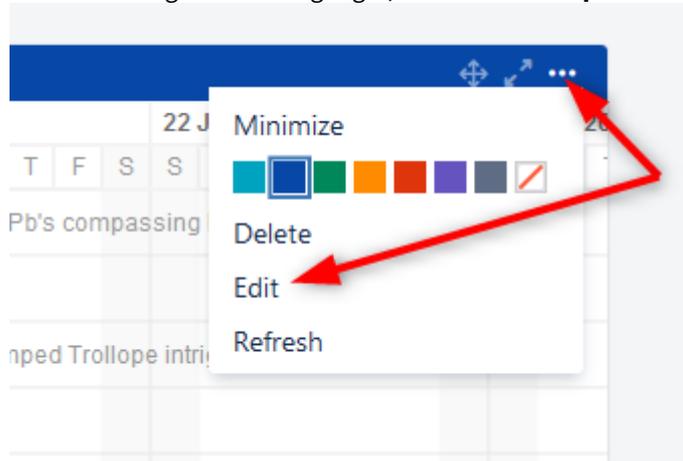
Baseline

Item Information Summary
 Issue Key
 Resources Assigned

Gantt chart Details Critical Path
 Progress

2.9.1.2 Editing Configuration for an Existing Gadget

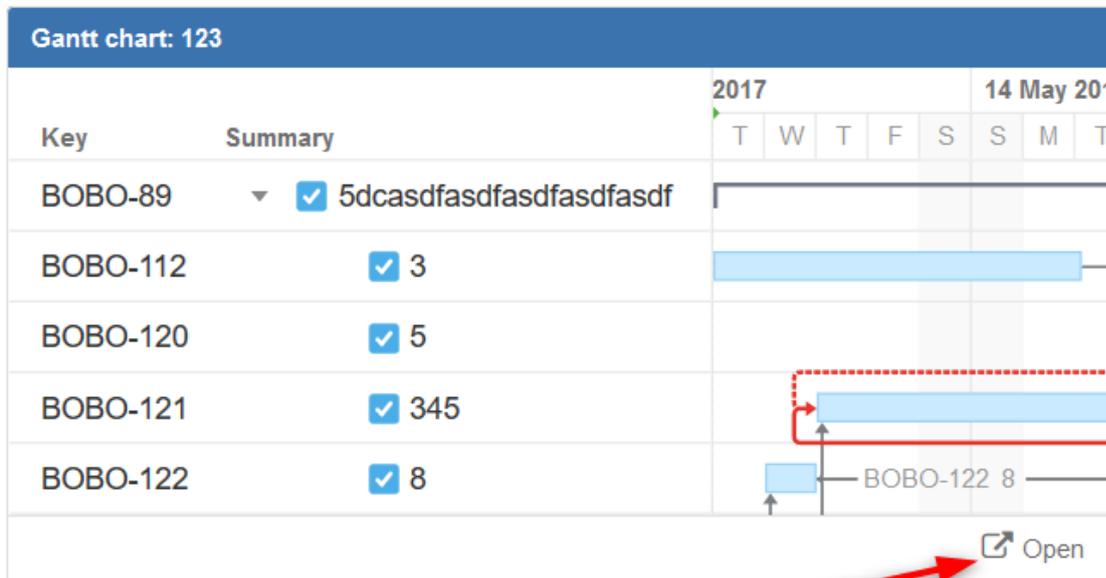
To change the configuration for an existing dashboard gadget, click the **More Options** icon "..."/>



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

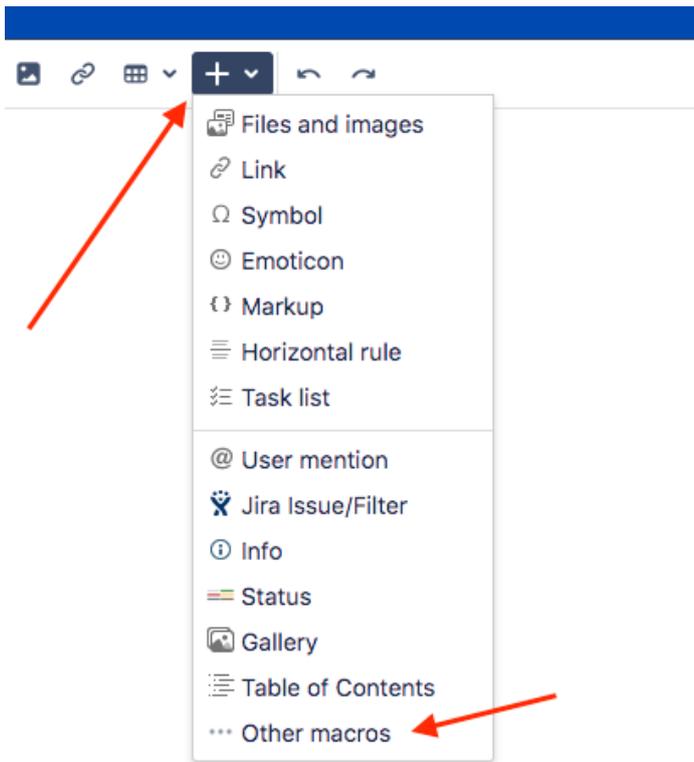
2.9.1.3 Open the Gantt Chart from the Gadget

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.

i 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 272).

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](#)²⁵ 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 136) 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 31)).

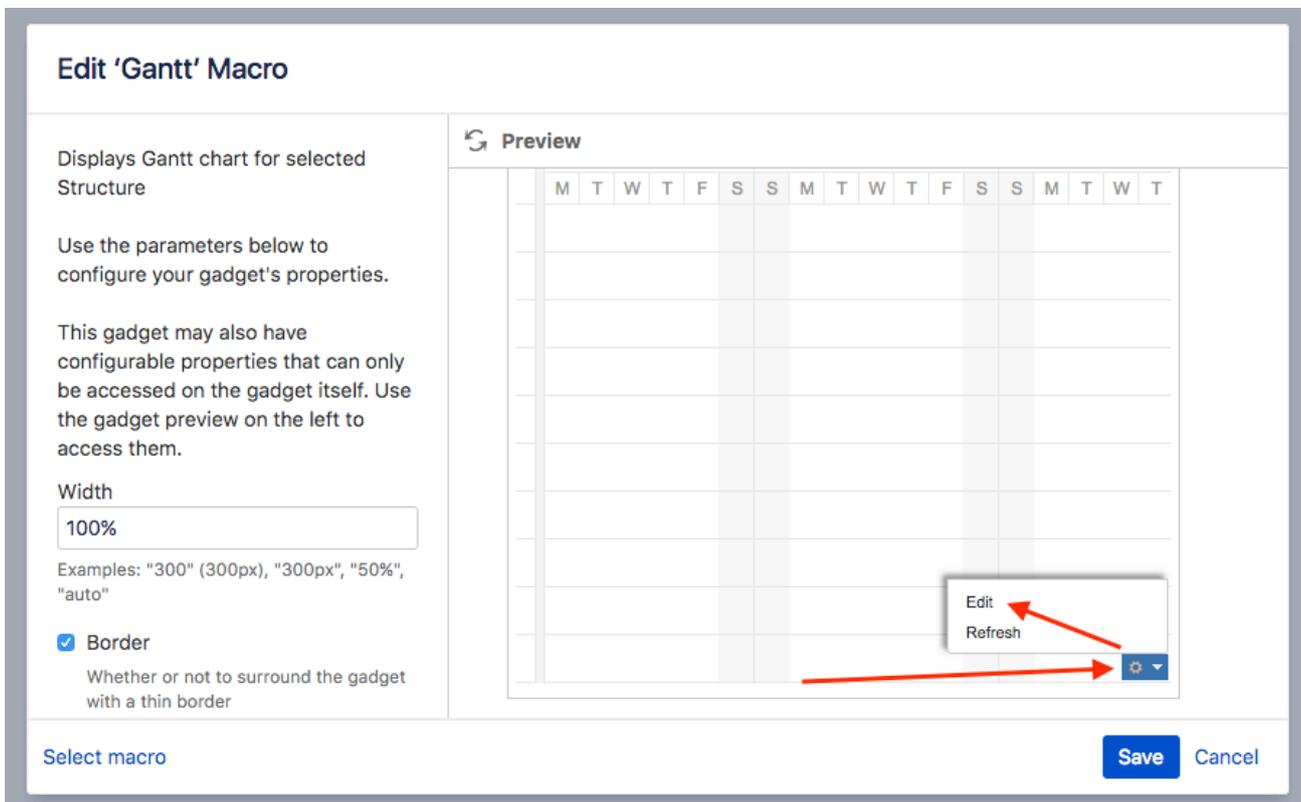
²⁵ <https://wiki.almworks.com/display/structure/Structured+JQL>

- **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 156).

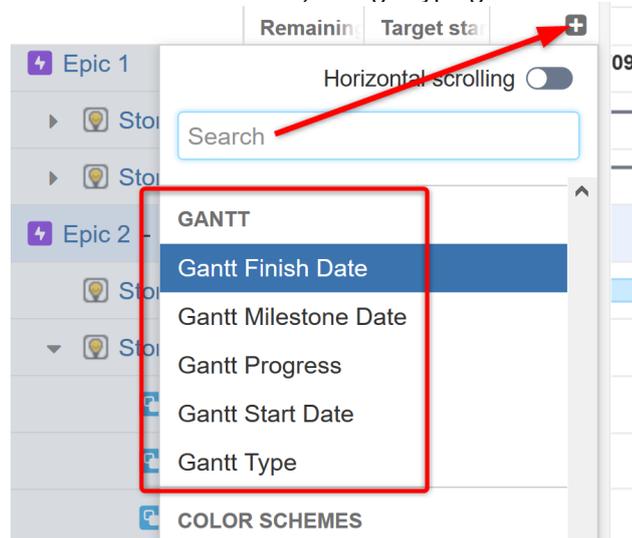
Index	Key	Summary	Gantt Start Date	Gantt Finish Date	Gantt Progress	Gantt Type
1.1	SCRUM-1	Epic 1	25/Sep/18 12:00	25/Sep/18 12:00		Milestone
1.1.1	SCRUM-4	Story 1	25/Sep/18 8:00 A	04/Oct/18 2:00 P		Group
1.1.2	SCRUM-5	Story 2	25/Sep/18 8:00 A	10/Oct/18 2:00 P		Group
1.2	SCRUM-2	Epic 2 - dfasf	10/Oct/18 2:00 P	10/Oct/18 2:00 P		Milestone
1.2.1	SCRUM-6	Story A	25/Sep/18 8:00 A	27/Sep/18 4:00 F		Task
1.2.2	SCRUM-7	Story B	27/Sep/18 4:00 F	02/Oct/18 4:00 P		Group
1.2.2.1	SCRUM-19	Subtask MN	28/Sep/18 4:00 F	01/Oct/18 4:00 P		Task
1.2.2.2	SCRUM-20	Subtask LN	01/Oct/18 4:00 P	02/Oct/18 4:00 P		Task
1.2.2.3	SCRUM-18	Subtask NN	27/Sep/18 4:00 F	28/Sep/18 4:00 F		Task

To see all the available Structure.Gantt attributes and their meanings, see [List of Gantt Attributes Available in Structure](#)(see page 156).

⚠ It is not possible to use Gantt attributes in Structure [Automations](#)²⁶.
 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](#)²⁷. Scroll down to the Gantt section, or begin typing the attribute name in the search field,



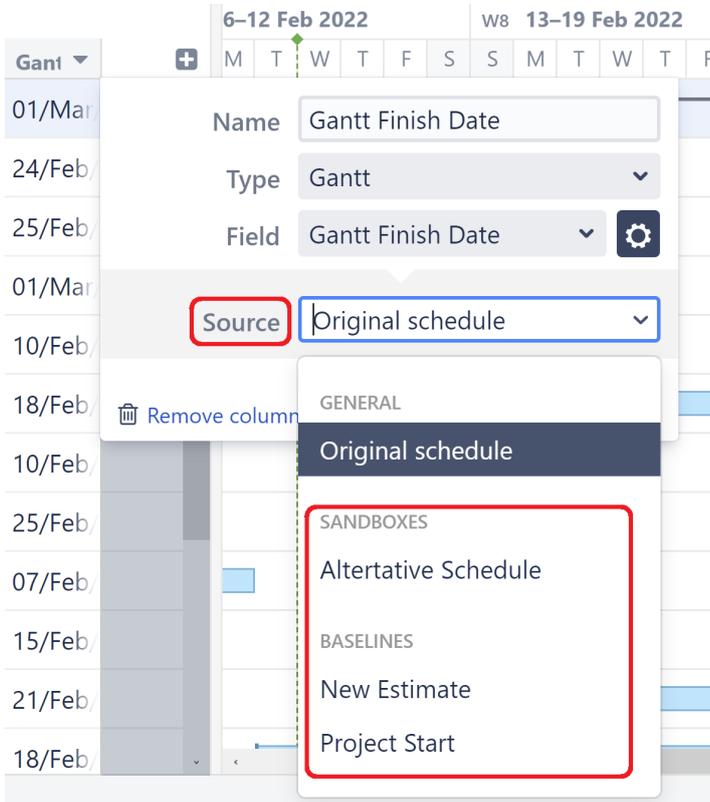
and select the desired attribute.

²⁶ <https://wiki.almworks.com/display/structure/.Generators+v9.2>

²⁷ <https://wiki.almworks.com/display/structure/.Customizing+Columns+v9.1>

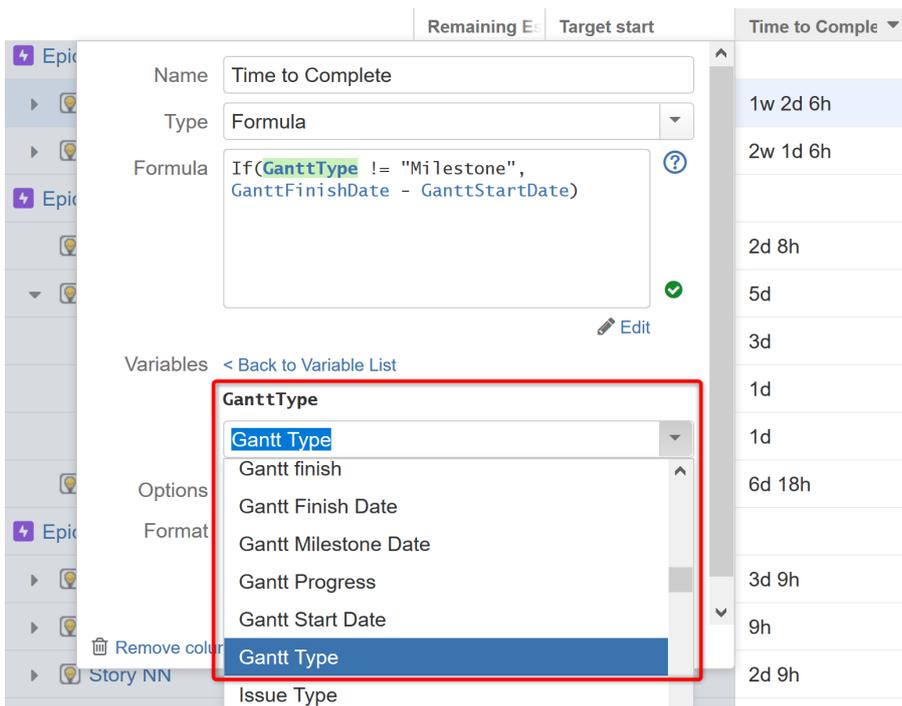
2.10.1.1 Viewing Attribute Values from a Baseline or Sandbox

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

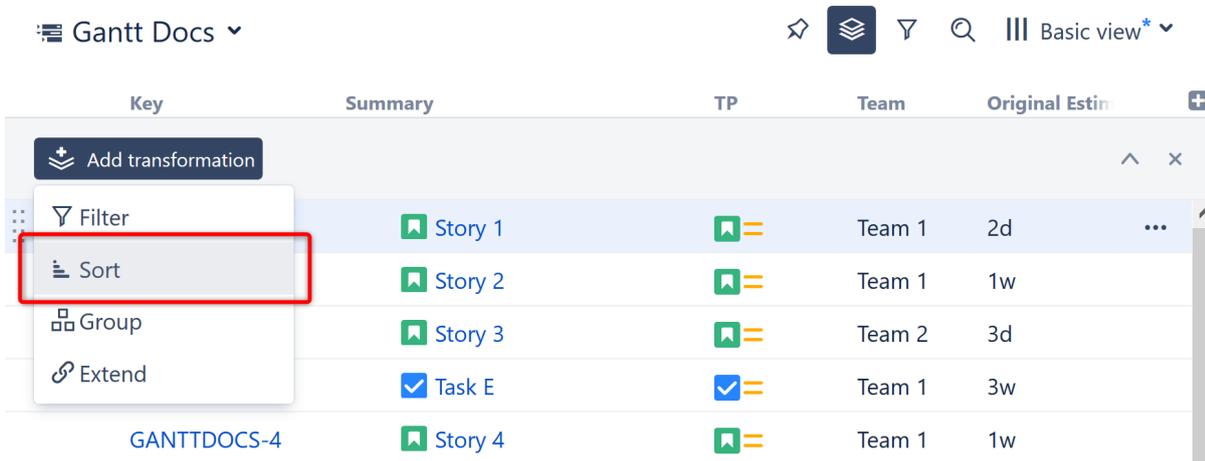
Structure.Gantt attributes can also be used in Structure formulas. Simply enter a new variable into your formula and assign it to the appropriate Gantt attribute.



To learn more about using formulas and variables in Structure, see [Formula Columns](#)²⁸.

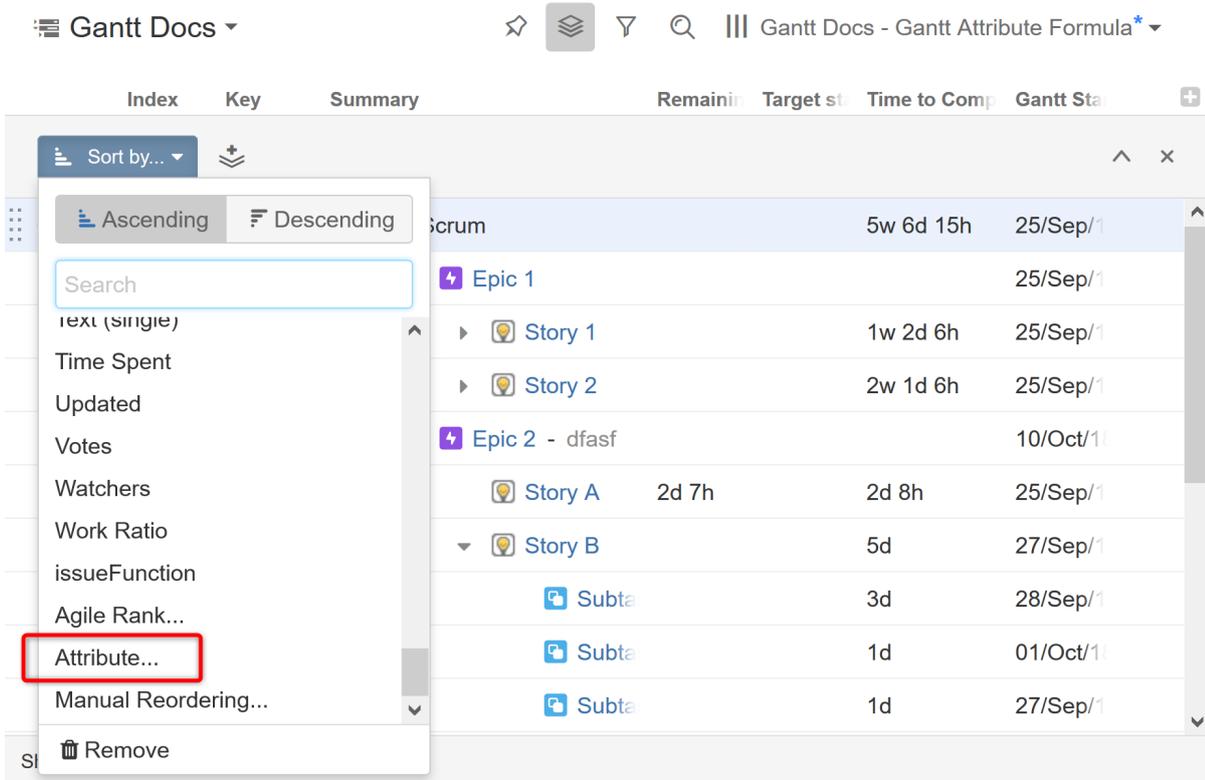
2.10.3 Using Gantt Attributes in Transformations

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**.

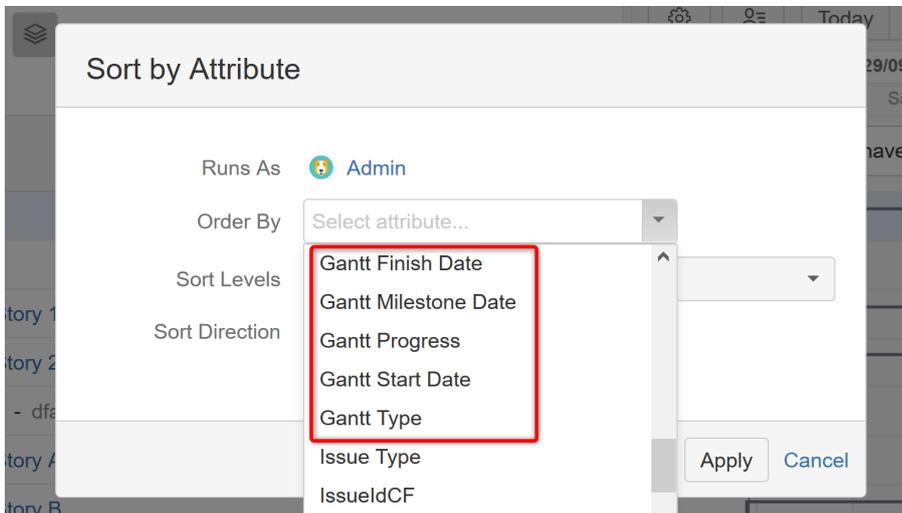


In the **Sort by...** menu, select **Attribute...**

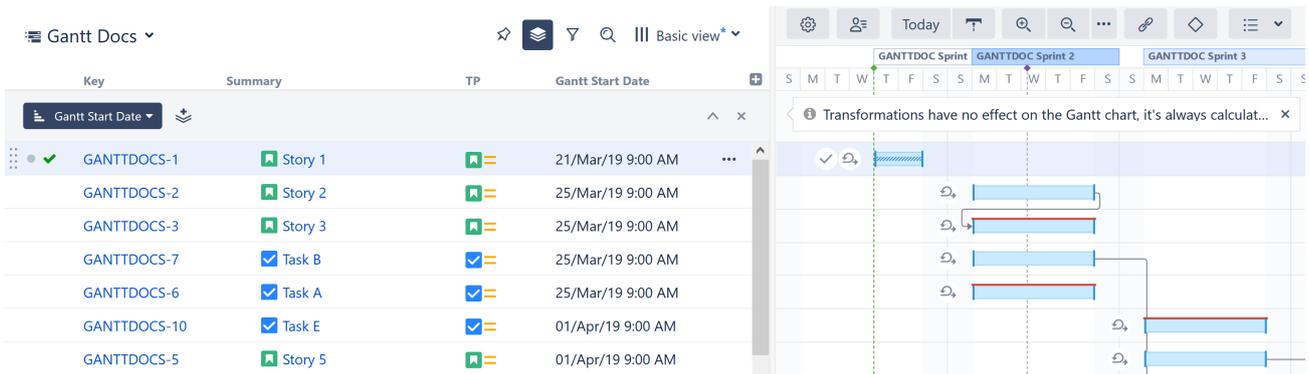
²⁸ <https://wiki.almworks.com/display/structure/.Formula+Column+v9.2>



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](#)²⁹. 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=oE1dSkL9D8>

See [Attribute to Issue Field Effector](#)³⁰ 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 [Gantt Attributes in Structure](#)(see page 151).

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 78) 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.

²⁹ <https://wiki.almworks.com/display/structure/Effectors>

³⁰ <https://wiki.almworks.com/display/structure/Attribute+to+Issue+Field+Effector>

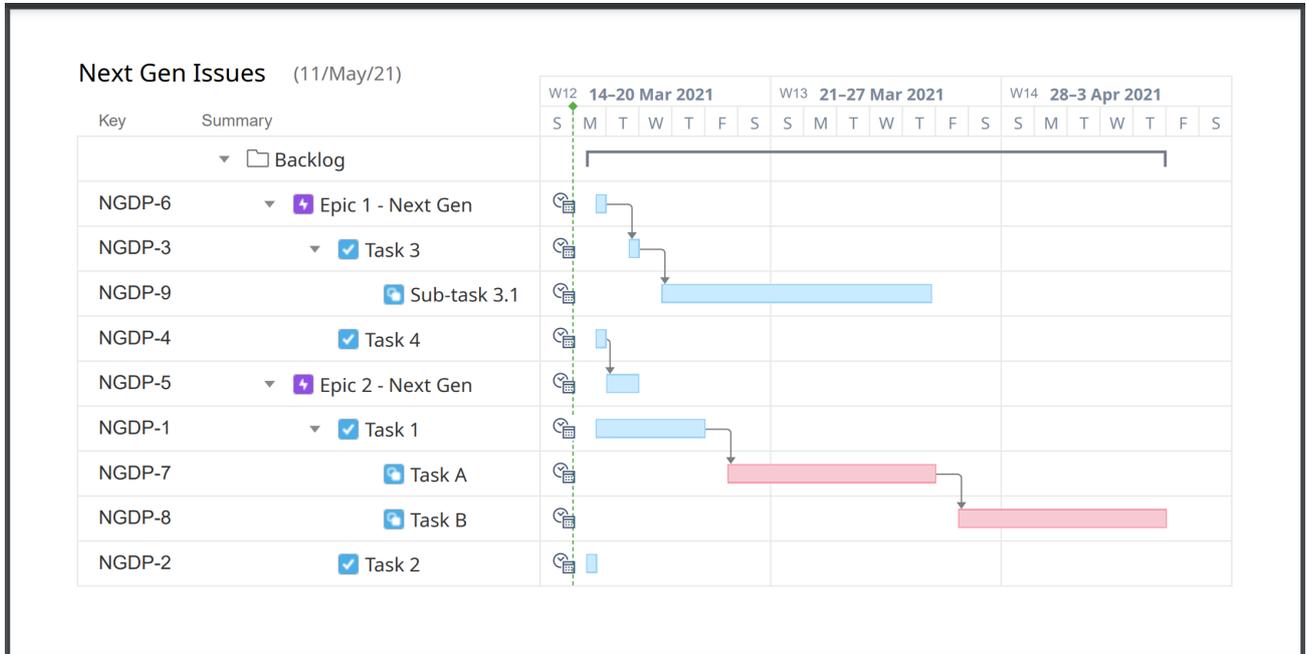
Name	Result
Gantt Fixed Duration	The task's fixed duration (see page 103), if the task has a fixed duration.
Gantt Leveling Delay	The delay applied to the task by resource leveling (see page 130).
Gantt Leveling Priority	The task's priority for resource leveling (see page 130). When an overallocation occurs, tasks with higher priorities are placed earlier on the timeline.
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 (see page 67)).
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 (see page 124) 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 (see page 95), "Manual" if the task is manually scheduled (see page 96), "Agile" if scheduled by sprint (see page 98).
Gantt Slice	If the task's behavior or appearance is effected by a configuration slice (see page 78), 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.
Gantt Work	The task's work estimate (see page 52) (returned as a time value), based on the Gantt configuration. If Work has been manually entered in the Task Details Panel (see page 109), returns this value.

³¹ <https://wiki.almworks.com/display/gantt/Milestones>

³² <https://wiki.almworks.com/display/ganttmaster/Progress>

2.11 Export Gantt Chart

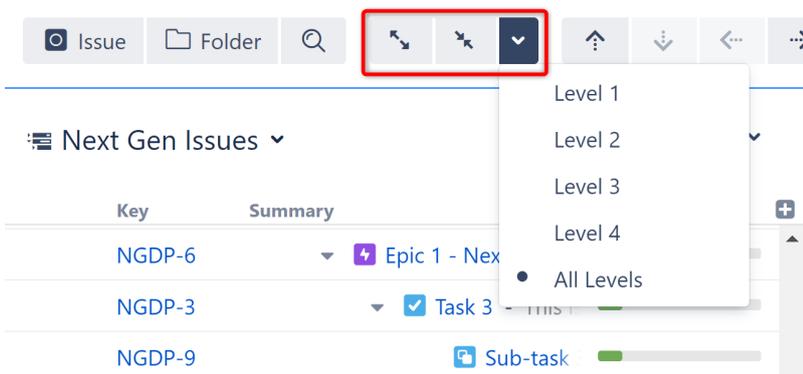
It is possible to export a Gantt chart into a PDF or SVG file to view offline, print or share with someone else.



2.11.1 Configuring Hierarchy Level and Zoom

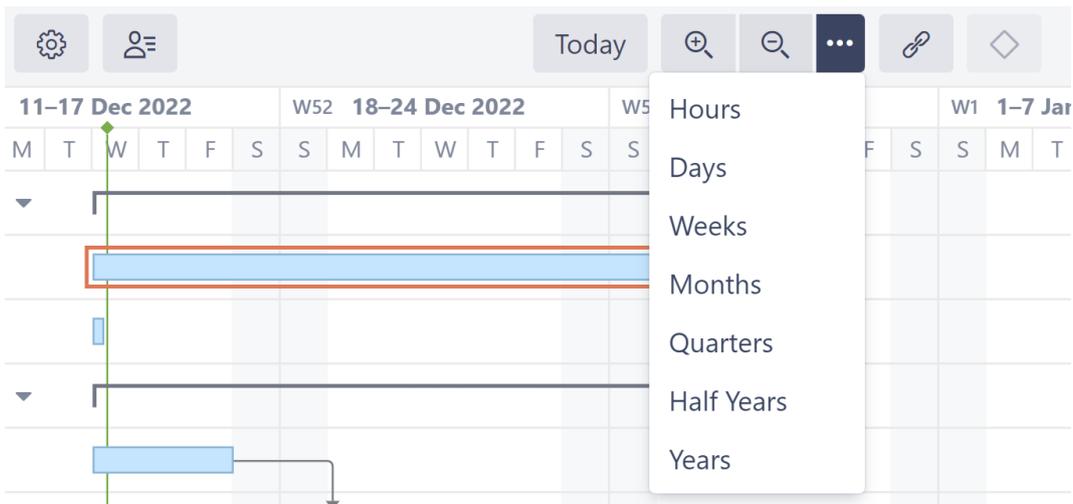
Certain parameters of your Gantt chart export are based on the layout of the structure and chart on your screen, including the [hierarchy level](#)³³ and [zoom level](#)(see page 31). You should select the desired hierarchy and zoom levels before exporting your Gantt chart.

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**.



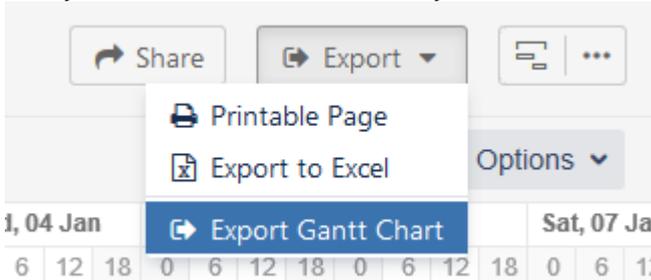
To configure the chart's zoom level, use the Gantt chart zoom toolbar buttons. You can zoom in, zoom out or select a specific unit for your time scale.

³³ <https://wiki.almworks.com/display/structure/Navigating+Between+Items>



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 range 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**³⁴. 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.

³⁴ https://en.wikipedia.org/wiki/Fiscal_year

- **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.

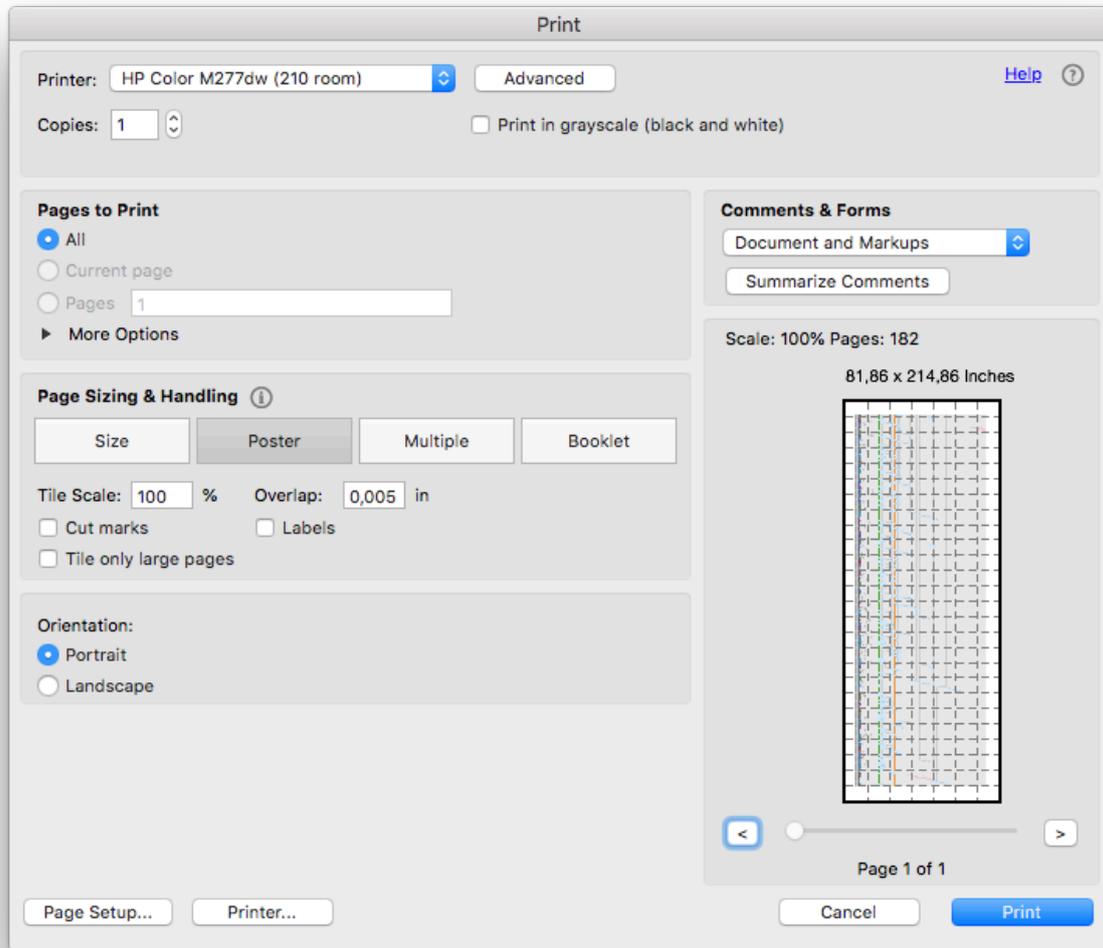
 If you are not prompted for a download location, check your browser's default download location for the exported chart. The download file should have the same name as the exported structure.

 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](#)³⁵.

³⁵ <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.

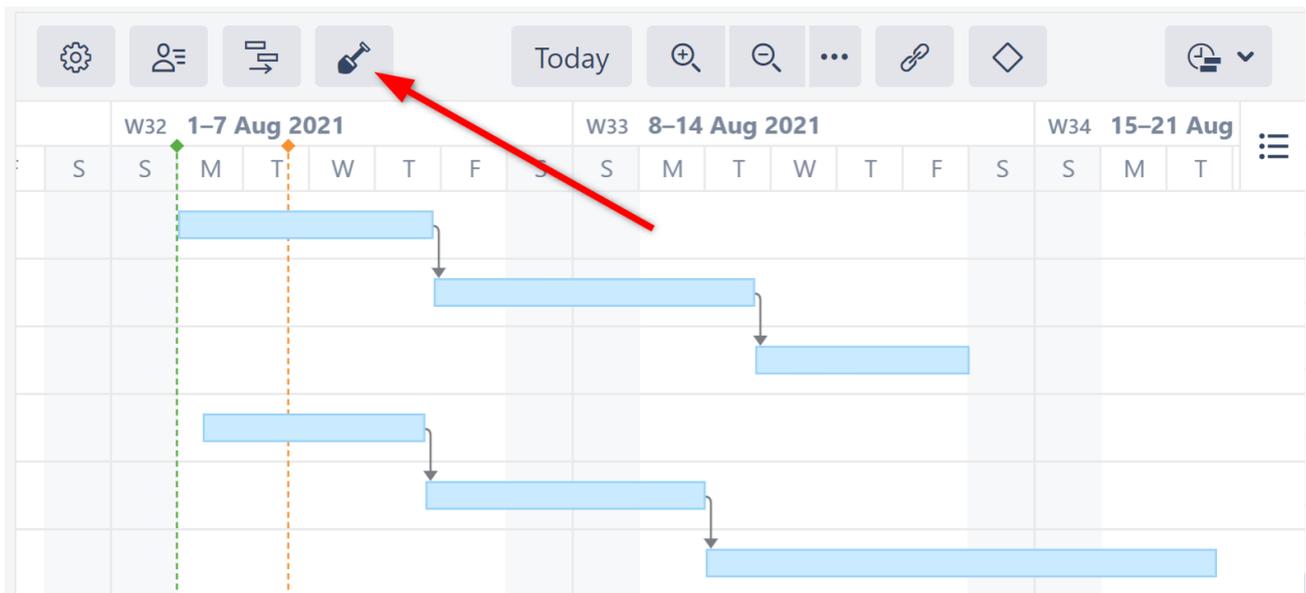
You can adjust task schedules, resource assignments, and more - and then see how those changes would affect the overall timeline. If you like the changes, you can apply them to the live chart. If not, delete the changes that didn't work, or close the sandbox to return to the live chart.

- [Creating a Sandbox](#)(see page 162)
- [Working in a Sandbox](#)(see page 164)
- [Applying Sandbox Changes](#)(see page 168)
- [Managing Sandboxes](#)(see page 169)
- [Opening a Saved Sandbox](#)(see page 172)

i Users must have [Control access](#)³⁶ for the structure in order to create or edit a sandbox.

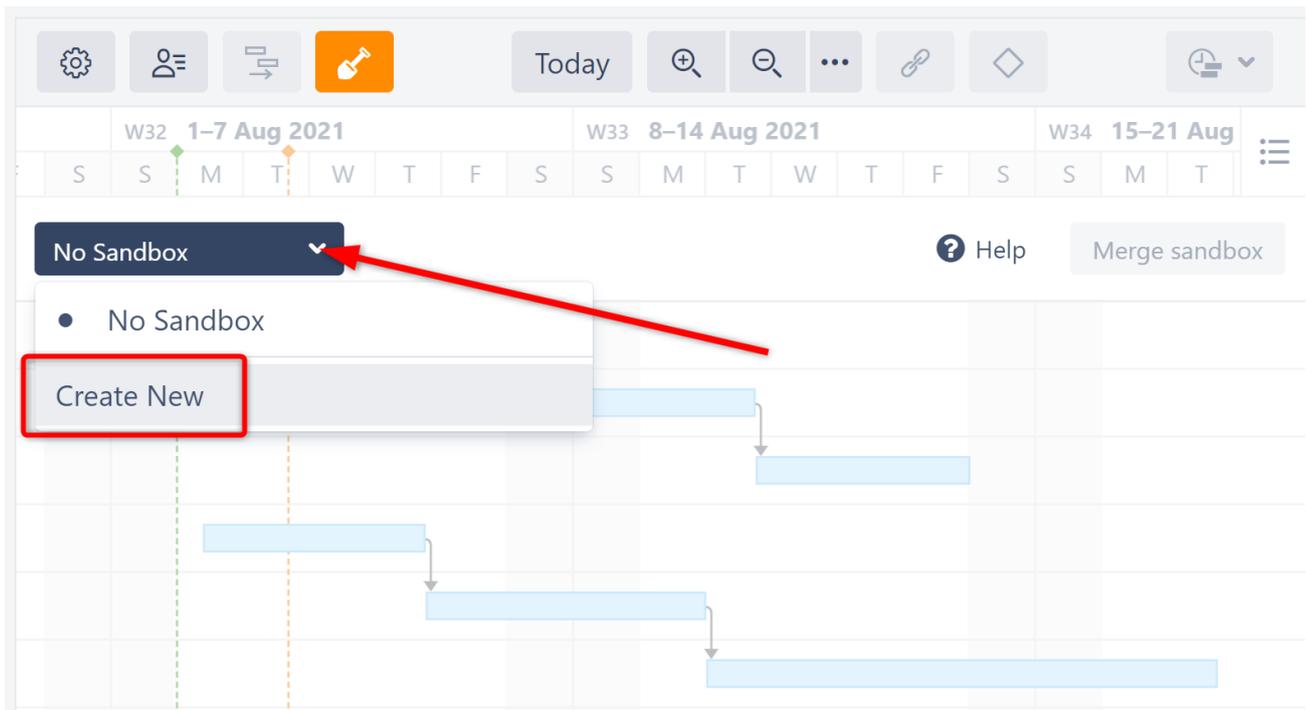
2.12.1 Creating a Sandbox

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



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

³⁶ <https://wiki.almworks.com/display/structure/.Structure+Permissions+v9.2>



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

Create Sandbox

Name

Description

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 164)
- [Opening a Saved Sandbox](#)(see page 172)
- [Managing Sandboxes](#)(see page 169)

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

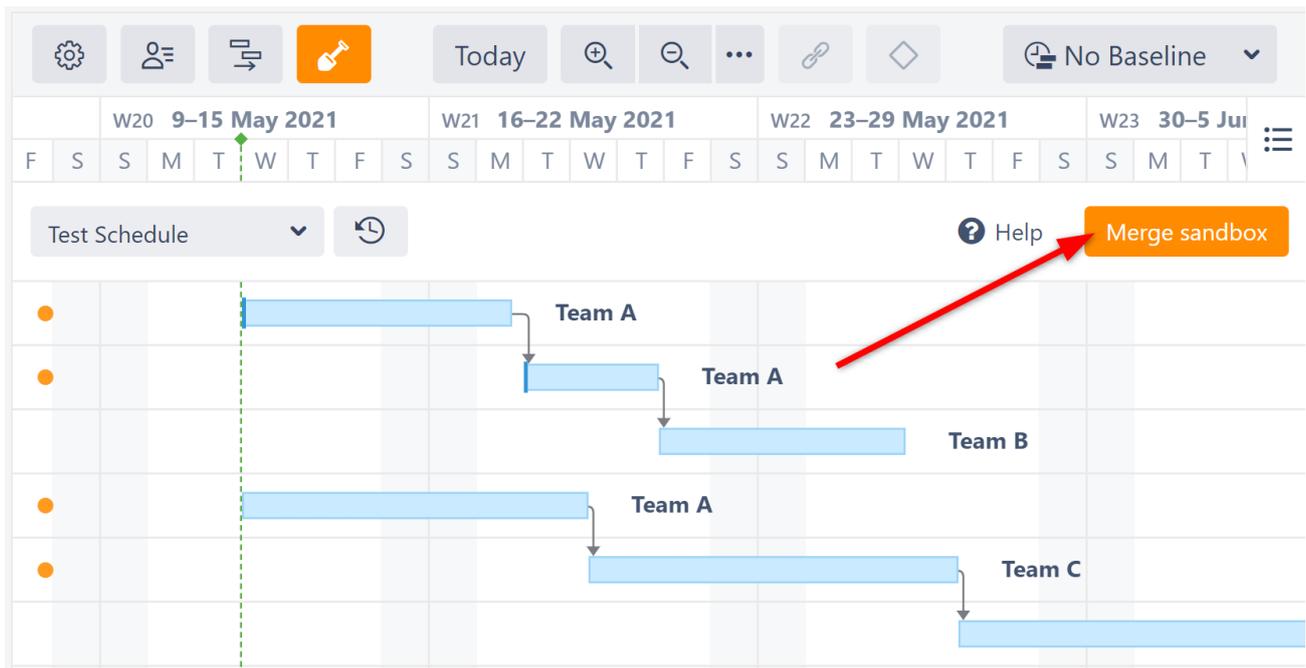
The following changes cannot be made in Sandbox mode (or can be made but will change live data):

- 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 109), or in the Resources panel.

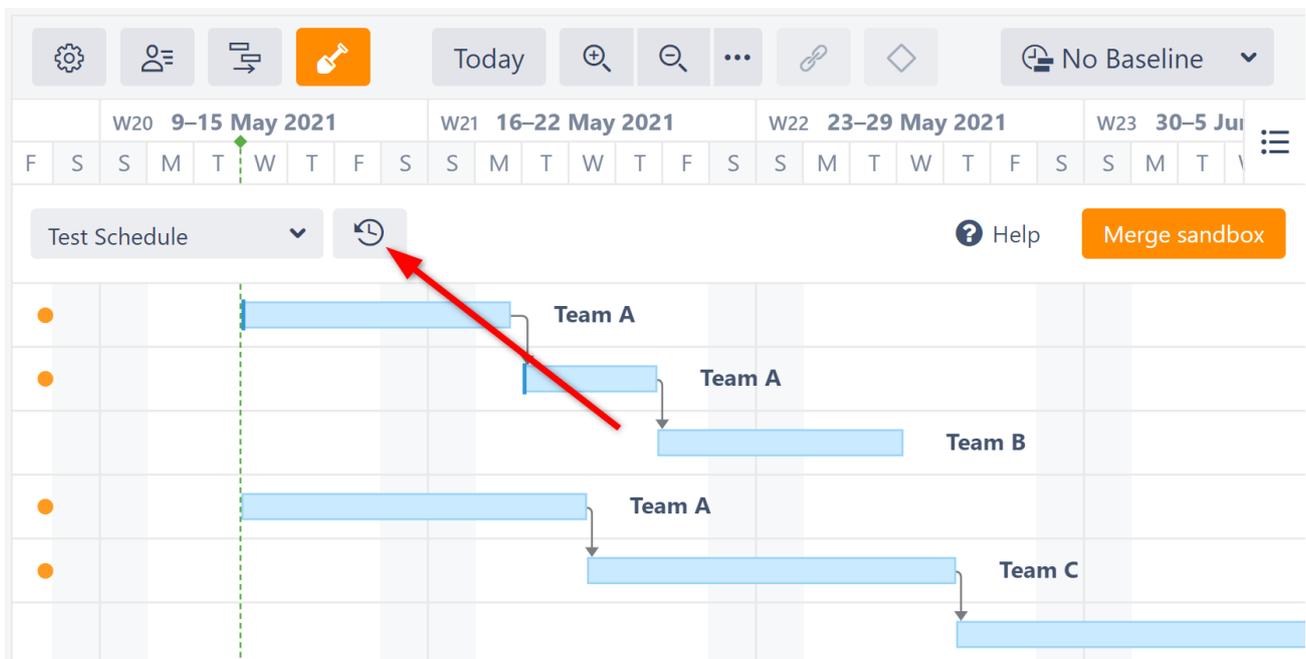
Once you've made a change, an orange indicator will appear beside the changed item.



You'll be able to select which changes you want to apply (or apply them all). See [Applying Sandbox Changes](#) (see page 168).

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.

History of sandbox changes

Review changes made in the current sandbox.

Date	Changes	Author
5 minutes ago, 5:02 PM	DT-28 Estimate was changed to 1w 3h	 admin
5 minutes ago, 5:02 PM	DT-30 Manual Start was changed to 25/May/21 12:00 AM Show less ^	 admin
	DT-30 Auto-scheduling was disabled	
5 minutes ago, 5:02 PM	DT-25 Manual Start was changed to 17/May/21 12:00 AM Show more v	 admin
11 minutes ago, 4:56 PM	 Sandbox has been created	 admin

[Close](#)

2.12.2.6 Live Changes Affect Sandboxes

Unlike [Baselines](#)(see page 136), 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:

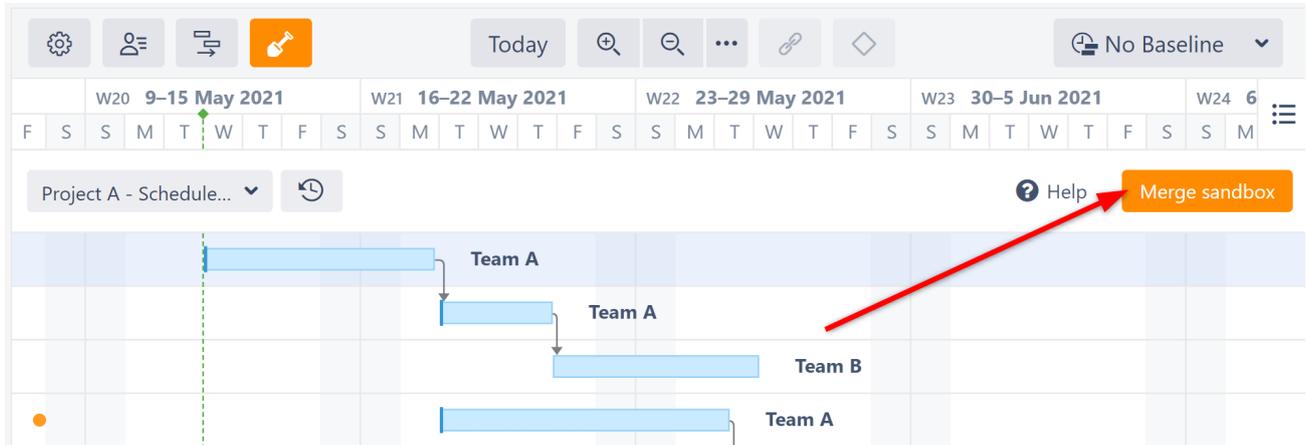
1. Open the Sandbox menu and select a new sandbox.
2. Click the orange Sandbox button (shovel) in the toolbar. This will close the sandbox and return you to the live chart.

See Also

- [Creating a Sandbox](#)(see page 162)
- [Opening a Saved Sandbox](#)(see page 172)
- [Managing Sandboxes](#)(see page 169)

2.12.3 Applying Sandbox Changes

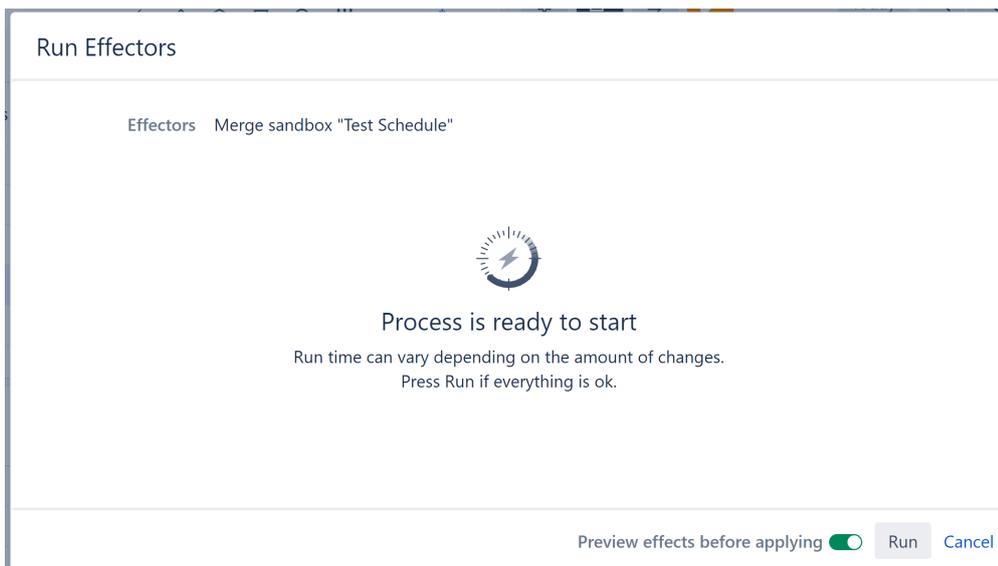
To apply (merge) all or some of your sandbox changes to the live Gantt chart, click the Merge sandbox button.



i In order to merge sandbox data, user must have the following [Structure permissions](#)³⁷: 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](#)³⁸. 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.



³⁷ <https://wiki.almworks.com/display/structure/Global+Permissions>

³⁸ <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.

Run Effectors

Effectors Merge sandbox "Test Schedule"

Status ⚡ Calculated

<input type="checkbox"/>	Items	Effect
<input checked="" type="checkbox"/>	DT-26	Change original estimate of DT-26 to "1w 3h"
<input checked="" type="checkbox"/>	DT-29	Change original estimate of DT-29 to "1w 4h"
<input type="checkbox"/>	DT-31	Change original estimate of DT-31 to "1w 1d 6h"
<input checked="" type="checkbox"/>	DT-26	Change remaining estimate of DT-26 to "1w 3h"
<input type="checkbox"/>	DT-29	Change remaining estimate of DT-29 to "1w 4h"
<input type="checkbox"/>	DT-31	Change remaining estimate of DT-31 to "1w 1d 6h"

6 effects in total Apply selected 3 Apply all Dismiss

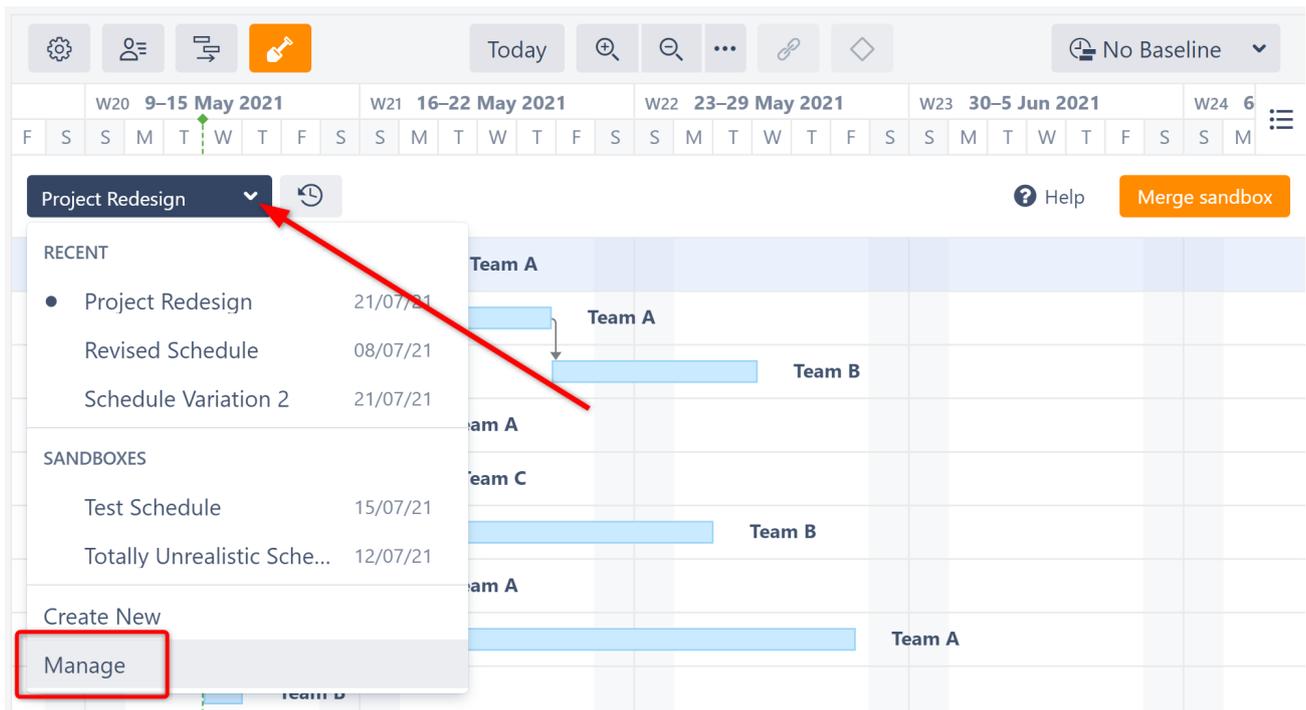
Once you click **Apply selected** or **Apply all**, the Effector will begin processing your changes and updating the live data.

i If you click **Dismiss**, no changes will be made 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

Manage sandboxes

Name	Author	Updated
Alternative Resource Assignments	admin	21/Jul/21
Alternative Schedule	admin	21/Jul/21
Project A - Additional Resources	admin	21/Jul/21
Project A - Schedule B	admin	2 minutes ago
Project B - Expedited Timeline	admin	21/Jul/21
Project Redesign	admin	21/Jul/21
Revised Schedule	admin	15/Jul/21
Schedule Variation 2	admin	21/Jul/21
Test Schedule	admin	15/Jul/21
Totally Unrealistic Schedule!	admin	21/Jul/21

[Close](#)

To edit or delete a sandbox, click its 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**.

Manage sandboxes

Author admin

Updated 08/Jul/21 6:20 PM

Name

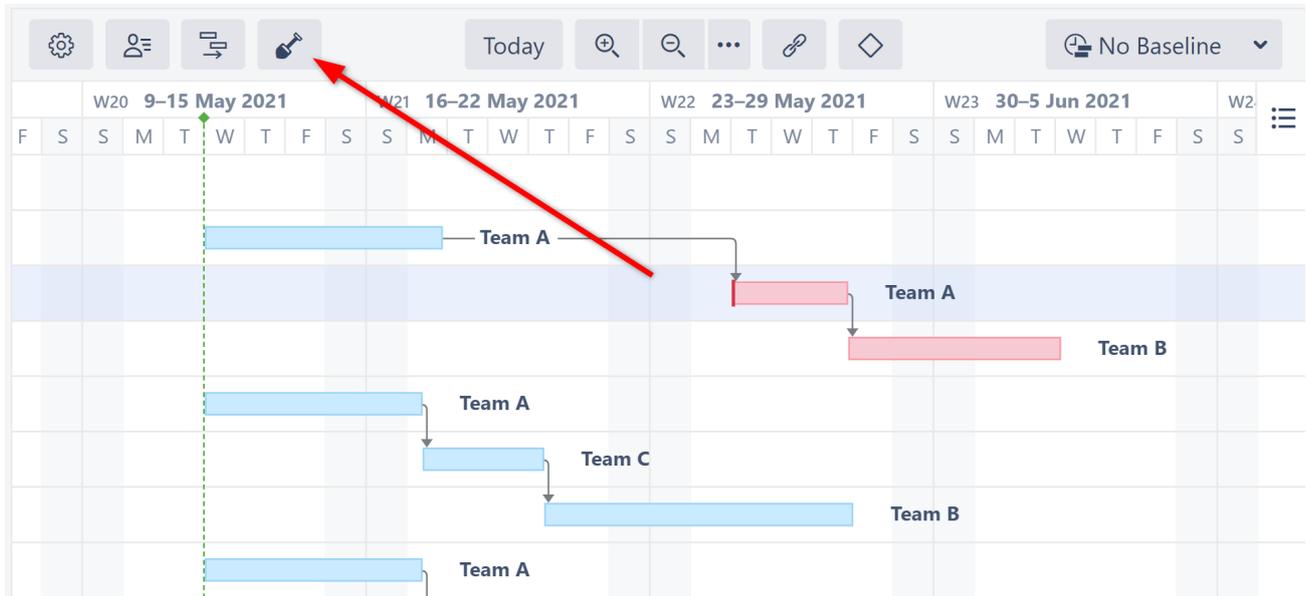
Description

[< Back to list](#) [Delete sandbox](#) [Save](#) [Close](#)

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.

The screenshot displays the Structure.Gantt interface. At the top, there is a navigation bar with icons for settings, users, a list, and a search icon. The main header shows the current date as 'Today' and a 'No Baseline' dropdown. Below this is a weekly calendar grid for May 2021 and June 2021. The main workspace features a Gantt chart with tasks for Team A, Team B, and Team C. A sidebar menu on the left is open, showing a search bar and a list of recent and sandboxed schedules. A red arrow points from the 'Project A - Schedule...' dropdown in the sidebar to the Gantt chart area.

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 Release Notes

Find out about our latest updates.

- [Structure.Gantt 4.1 Release Notes](#)(see page 175)
 - [Structure.Gantt 4.1.1 Release Notes](#)(see page 176)
- [Structure.Gantt 4.0 Release Notes](#)(see page 177)
- [Structure.Gantt 3.6 Release Notes](#)(see page 179)
 - [Structure.Gantt 3.6.2 Release Notes](#)(see page 182)
- [Structure.Gantt 3.5 Release Notes](#)(see page 183)
 - [Structure.Gantt 3.5.1 Release Notes](#)(see page 187)
- [Structure.Gantt 3.4 Release Notes](#)(see page 188)
- [Structure.Gantt 3.3 Release Notes](#)(see page 191)
- [Structure.Gantt 3.2 Release Notes](#)(see page 194)
- [Structure.Gantt 3.1 Release Notes](#)(see page 197)
- [Structure.Gantt 3.0 Release Notes](#)(see page 200)
 - [Structure.Gantt 3.0.1 Release Notes](#)(see page 202)
- [Structure.Gantt 2.7 Release Notes](#)(see page 203)
 - [Structure.Gantt 2.7.1 Release Notes](#)(see page 206)
 - [Structure.Gantt 2.7.2 Release Notes](#)(see page 207)
 - [Structure.Gantt 2.7.3 Release Notes](#)(see page 208)
- [Structure.Gantt 2.6 Release Notes](#)(see page 209)
- [Structure.Gantt 2.5 Release Notes](#)(see page 211)
 - [Structure.Gantt 2.5.1 Release Notes](#)(see page 213)
 - [Structure.Gantt 2.5.2 Release Notes](#)(see page 214)
- [Structure.Gantt 2.4 Release Notes](#)(see page 215)
 - [Structure.Gantt 2.4.1 Release Notes](#)(see page 218)
- [Structure.Gantt 2.3 Release Notes](#)(see page 219)
- [Structure.Gantt 2.2 Release Notes](#)(see page 220)
 - [Structure.Gantt 2.2.1 Release Notes](#)(see page 223)
 - [Structure.Gantt 2.2.2 Release Notes](#)(see page 224)
- [Structure.Gantt 2.1 Release Notes](#)(see page 224)
 - [Structure.Gantt 2.1.1 Release Notes](#)(see page 227)
 - [Structure.Gantt 2.1.2 Release Notes](#)(see page 227)
- [Structure.Gantt 2.0 Release Notes](#)(see page 228)
 - [Structure.Gantt 2.0.1 Release Notes](#)(see page 232)
- [Structure.Gantt 1.4 Release Notes](#)(see page 233)
 - [Structure.Gantt 1.4.1 Release Notes](#)(see page 238)
- [Structure.Gantt 1.3 Release Notes](#)(see page 239)
 - [Structure.Gantt 1.3.1 Release Notes](#)(see page 243)
 - [Structure.Gantt 1.3.2 Release Notes](#)(see page 244)
- [Structure.Gantt 1.2 Release Notes](#)(see page 244)
 - [Structure.Gantt 1.2.1 Release Notes](#)(see page 246)
- [Structure.Gantt 1.1 Release Notes](#)(see page 247)
 - [Structure.Gantt 1.1.1 Release Notes](#)(see page 250)
- [Structure.Gantt 1.0 Release Notes](#)(see page 251)
 - [Structure.Gantt 1.0.1 Release Notes](#)(see page 252)

3.1 Structure.Gantt 4.1 Release Notes

7th of February 2024

Structure.Gantt 4.1 introduces public API, always visible markers, and more

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)³⁹

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁴⁰

3.1.1 Version Highlights

- Public API for Baselines and Resource Leveling
- Custom and fix version markers can be marked as 'always visible'

3.1.2 Changes in Detail

3.1.2.1 Public API

Structure.Gantt has Java API and REST API for Baselines and Resource leveling

3.1.2.2 Always visible markers

We've made highlighting important dates even easier. When creating or editing custom markers, you can now make those markers always visible on your timeline - so everyone will know why that date is important.



To make the flag at the top of the marker remain visible at all times, select Always visible on the timeline. This setting is available for both fix versions and custom chart markers.

3.1.3 Supported Versions

Structure.Gantt 4.1 requires Structure 9.0.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.20 or later. Jira Data Center is also supported.

3.1.4 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.

³⁹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁴⁰ <http://alm.works/gantt-demo>

3.1.5 Enterprise Deployment Notes

Structure.Gantt 4.1 does not add any changes in terms of stability or performance compared to 4.0. 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.

 Need help or have questions? Contact [Tempo Support](#)⁴¹.

3.1.6 Structure.Gantt 4.1.1 Release Notes

 **19th of Mar, 2024**

Structure.Gantt 4.1.1 is a patch release for 4.1; it fixes export in Korean language and more

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁴²

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁴³

3.1.6.1 Patch Release

- Fixed: Korean language support for Gantt Export
- Fixed: Error when opening resource settings for a memo

3.1.6.2 Supported Versions

Structure.Gantt 4.1.1 requires Structure 7.4 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.20 or later. Jira Data Center is also supported.

3.1.6.3 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.

Please review your Gantt configurations after upgrading to check that your settings are correct.

3.1.6.4 Enterprise Deployment Notes

Structure.Gantt 4.1.1 does not add any 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.

⁴¹ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁴² <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁴³ <http://alm.works/gantt-demo>

Need help or have questions? Contact [Tempo Support](#)⁴⁴.

3.2 Structure.Gantt 4.0 Release Notes

14th of November 2023

Structure.Gantt 4.0 introduces memo support, PTO highlights, and more

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁴⁵

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁴⁶

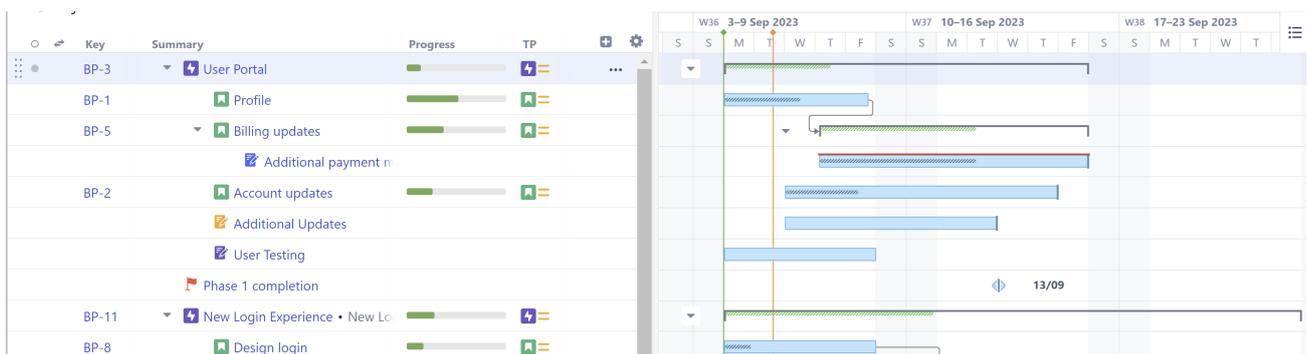
3.2.1 Version Highlights

- Memos can now be visualized as tasks on the Gantt chart
- PTO highlights in the allocation chart
- Jira 9.11 compatibility
- Fixed: Baseline based on formula is not visible
- Fixed: "Cannot change manual start date" error when moving a task with the Target start date defined as Start Date
- Security fixes

3.2.2 Changes in Detail

3.2.2.1 Memo support for high-level roadmapping

[Structure Memos](#)⁴⁷ can now be used for planning and timeline visualization in Structure.Gantt. If field values have been added to the memo, these values can be used for scheduling and resource assignment, just like for Jira issues.



⁴⁴ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁴⁵ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

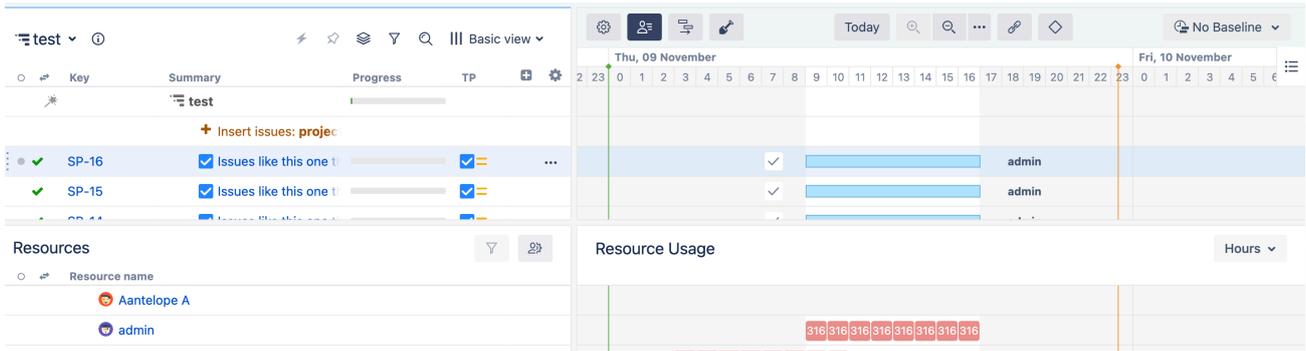
⁴⁶ <http://alm.works/gantt-demo>

⁴⁷ <https://wiki.almworks.com/display/structure/.Memo+v9.0>

Documentation: [Using Memos in Structure.Gantt](#)(see page 115)

3.2.2.2 PTO Highlights

Unavailable time (for example if the capacity = 0%) is shown in the same style in Resource Usage as weekends, with a grey color.



3.2.3 Supported Versions

Structure.Gantt 4.0 requires Structure 9.0.1 or above.

We support all editions of Jira (Jira Core, Jira Software, Jira Service Management/Service Desk), versions 8.20 or later. Jira Data Center is also supported.

3.2.4 Installation and Upgrade

- With this release, Structure.Gantt now supports additional fields for memos. If you were previously using memos as milestones, we recommend not adding those those memos to a slice, as the previous milestone data will be lost.

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.

3.2.5 Enterprise Deployment Notes

Structure.Gantt 4.0 does not add any changes in terms of stability or performance compared to 3.6. 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.

✔ Need help or have questions? Contact [Tempo Support](#)⁴⁸.

⁴⁸https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

3.3 Structure.Gantt 3.6 Release Notes

i **24th of January, 2023**

Structure.Gantt 3.6 introduces fiscal year markers and the ability to expand/collapse groups within charts.

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁴⁹

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁵⁰

3.3.1 Version Highlights

- Fiscal year markers
- Expand / collapse groups within charts

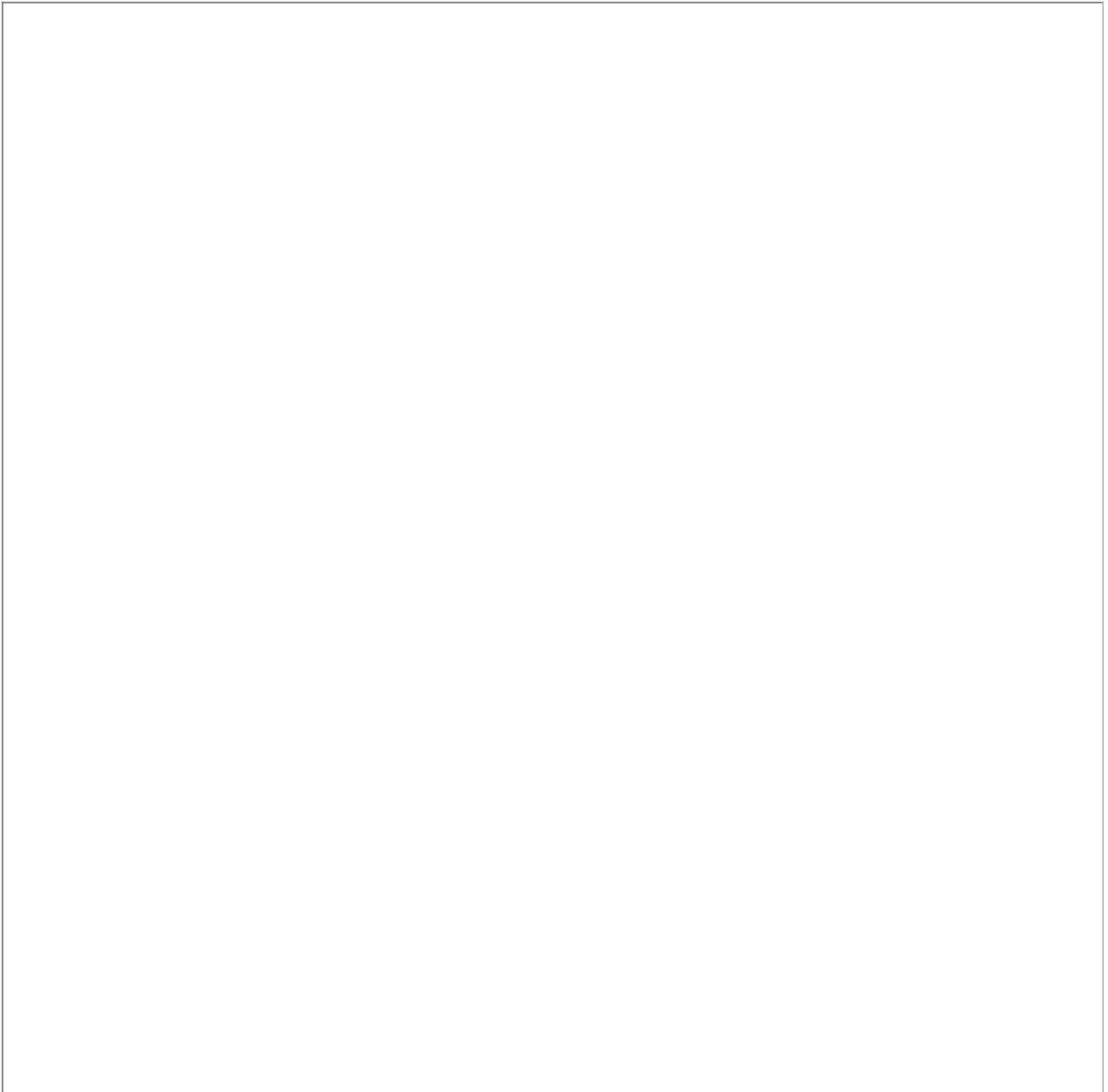
3.3.2 Changes in Detail

3.3.2.1 Fiscal Year Marker

Not every company's fiscal year starts in January. Now you can specify the start of your fiscal year and mark it on Gantt charts, exported charts, and Structure.Gantt gadgets.

⁴⁹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

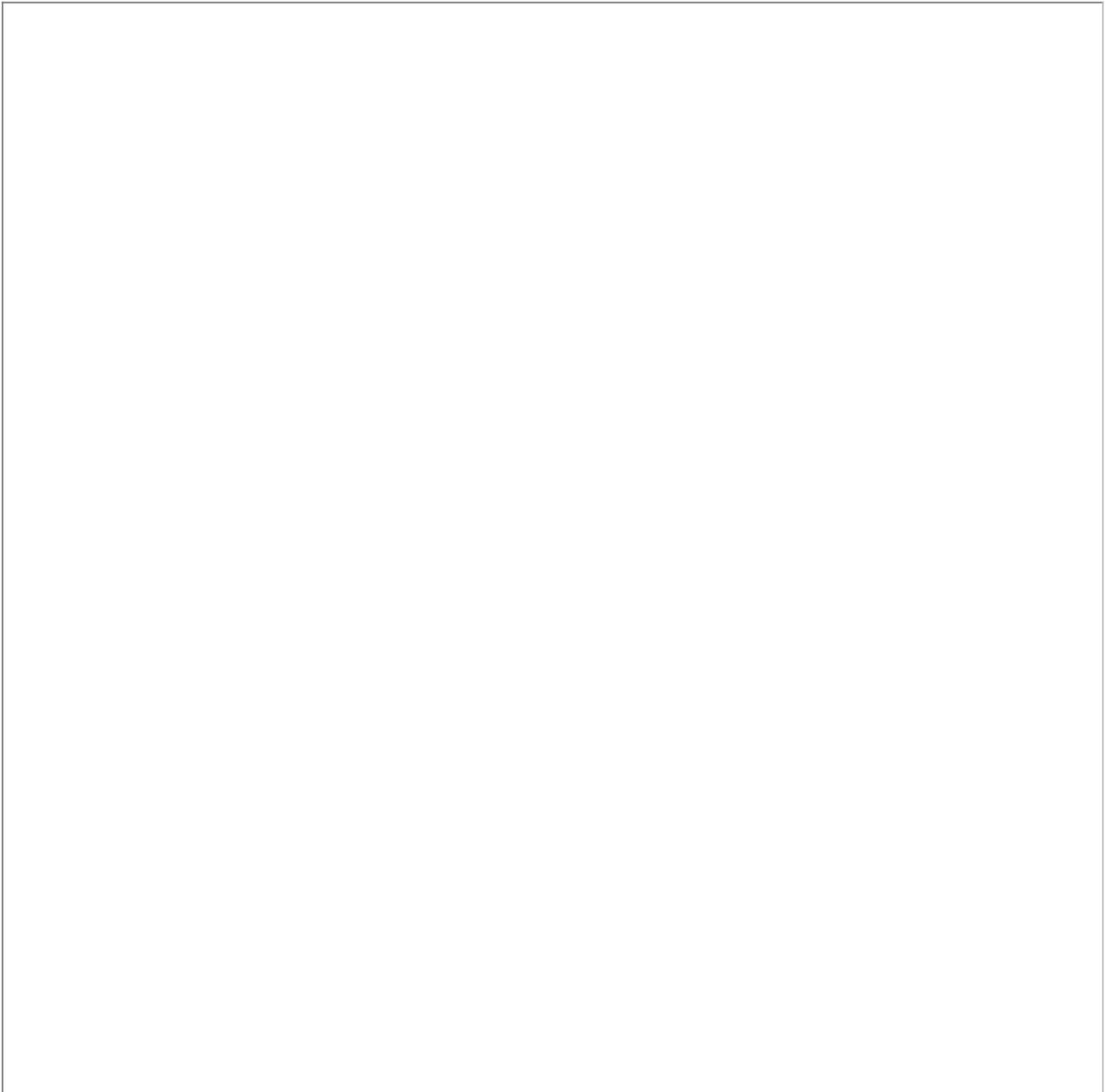
⁵⁰ <http://alm.works/gantt-demo>



Documentation: [General configuration](#)(see page 50)

3.3.2.2 Expand / Collapse Group on Chart

Expand or collapse groups right from the Gantt chart. Click the expand/collapse icon next to a group to show or hide its sub-items, just like you do in Structure.



Documentation: [Gantt chart elements](#)(see page 31)

3.3.2.3 Notable Improvements and Fixes

- User's availability periods are now editable

3.3.3 Supported Versions

Structure.Gantt 3.6 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.

3.3.4 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.

3.3.5 Enterprise Deployment Notes

Structure.Gantt 3.6 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.

✔ Need help or have questions? Contact [Tempo Support](#)⁵¹.

3.3.6 Structure.Gantt 3.6.2 Release Notes

📅 **22nd of May, 2023**

Structure.Gantt 3.6.1 is a patch release for 3.6; it fixes an issue with library dependencies

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁵²

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁵³

3.3.6.1 Patch Release

- Fixed: issue with library dependencies

3.3.6.2 Supported Versions

Structure.Gantt 3.6 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.

⁵¹ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁵² <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁵³ <http://alm.works/gantt-demo>

3.3.6.3 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.

Please review your Gantt configurations after upgrading to check that your settings are correct.

3.3.6.4 Enterprise Deployment Notes

Structure.Gantt 3.6.1 does not add any changes in terms of stability or performance compared to 3.6. 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.

 Need help or have questions? Contact [Tempo Support](#)⁵⁴.

3.4 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 317)

[Structure.Gantt on Atlassian Marketplace](#)⁵⁵

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁵⁶

3.4.1 Version Highlights

- Migration to cloud
- Custom chart markers
- Refined Slices
- Other fixes and improvements

3.4.2 Changes in Detail

3.4.2.1 Migration to Cloud

Server/DC users who migrate their structures to cloud can now migrate their corresponding Gantt charts too.

⁵⁴ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁵⁵ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁵⁶ <http://alm.works/gantt-demo>

STRUCTURE ADMINISTRATION

Configuration

Defaults

Attributes

Backup Structure

Restore Structure

Migrate Structure

Maintenance

License Details

Support

STRUCTURE.GANTT

Work Calendars

Resource Leveling

Structure.Gantt License

Setup Guide

Migrate Structure to Cloud

Migration configurations / **New configuration**

 Configuration name must match the migration name from the Jira Cloud Migration Assistant.

Name*

Status **DRAFT**

The configuration is being created. When it's all set, click "Save and Make Ready for Migration."

Migrate Structure.Gantt

 Please note:

- All the projects in the selected structures must be migrated in the corresponding JCMA migration, issues to appear.
- Some automations, including Effectors, are not yet supported in Structure Cloud.
- Memos will be replaced with folders.
- Only custom views associated with the selected structures will be migrated.

[Learn more](#)

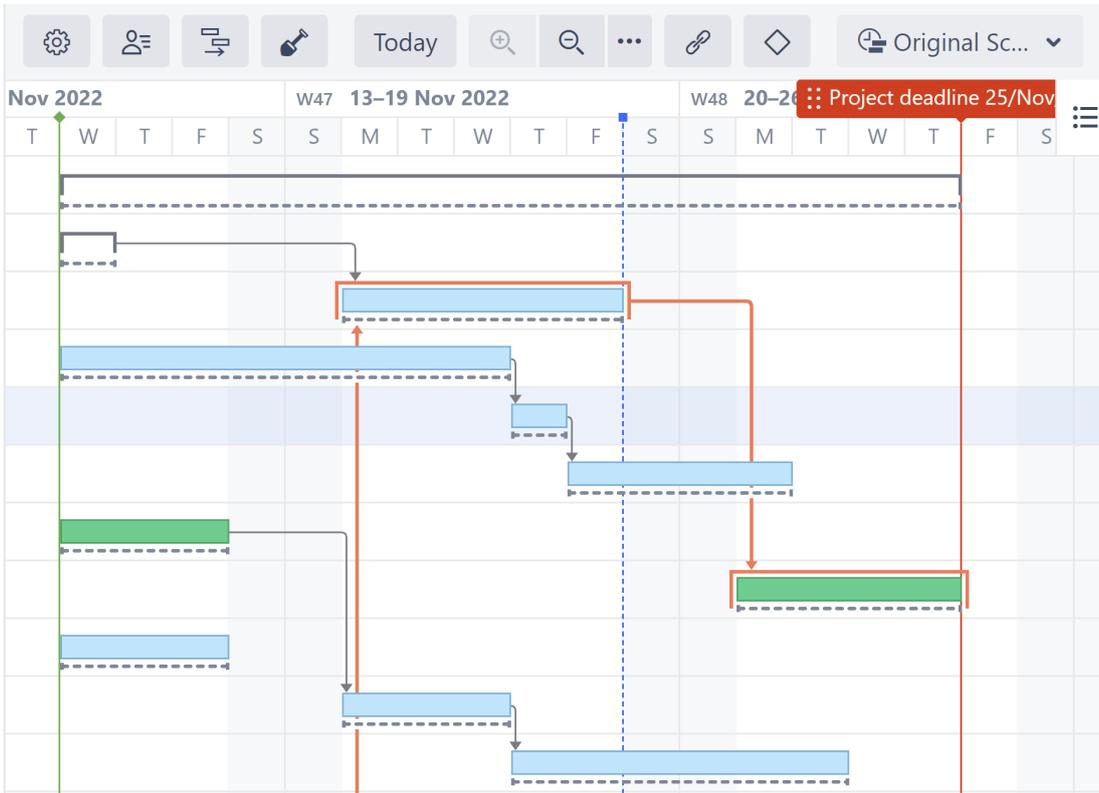
Structures

Migrate all structures and views

Documentation: [Migrate to Cloud](#)(see page 280)

3.4.2.2 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.



Documentation: [Gantt Chart Settings](#)(see page 46)

3.4.2.3 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.

- General
- Scheduling
- Dependencies
- Resources
- Slices 2

Unique settings for any items. [Learn more](#) ↗

Only the first matching slice is applied to any issue.

+ New slice

	Name	Settings	Actions
⋮	<input checked="" type="checkbox"/> In progress	JQL - ● Appearance	⋮
⋮	<input checked="" type="checkbox"/> Bugs	■ - Work Estimates, Manual Scheduling	⋮

Save as...

Save

Cancel

Documentation: [Slice-based Configurations](#)(see page 78)

3.4.2.4 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

3.4.3 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.

3.4.4 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.

Please review your Gantt configurations after upgrading to check that your settings are correct.

3.4.5 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.
- During migration to cloud attributes, dependencies, and baselines for generated "Not an issue" folders are not migrated.

3.4.6 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.

 Need help or have questions? Contact [Tempo Support](#)⁵⁷.

⁵⁷https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

3.4.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)⁵⁸

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁵⁹

3.4.7.1 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

3.4.7.2 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.

3.4.7.3 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.

3.4.7.4 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.

 Need help or have questions? Contact [Tempo Support](#)⁶⁰.

⁵⁸ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁵⁹ <http://alm.works/gantt-demo>

⁶⁰ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

3.5 Structure.Gantt 3.4 Release Notes

i 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 317)

[Structure.Gantt on Atlassian Marketplace](#)⁶¹

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁶²

3.5.1 Version Highlights

- New parallel sprints visualization
- Future sprints dates from Jira
- Other fixes and improvements

3.5.2 Changes in Detail

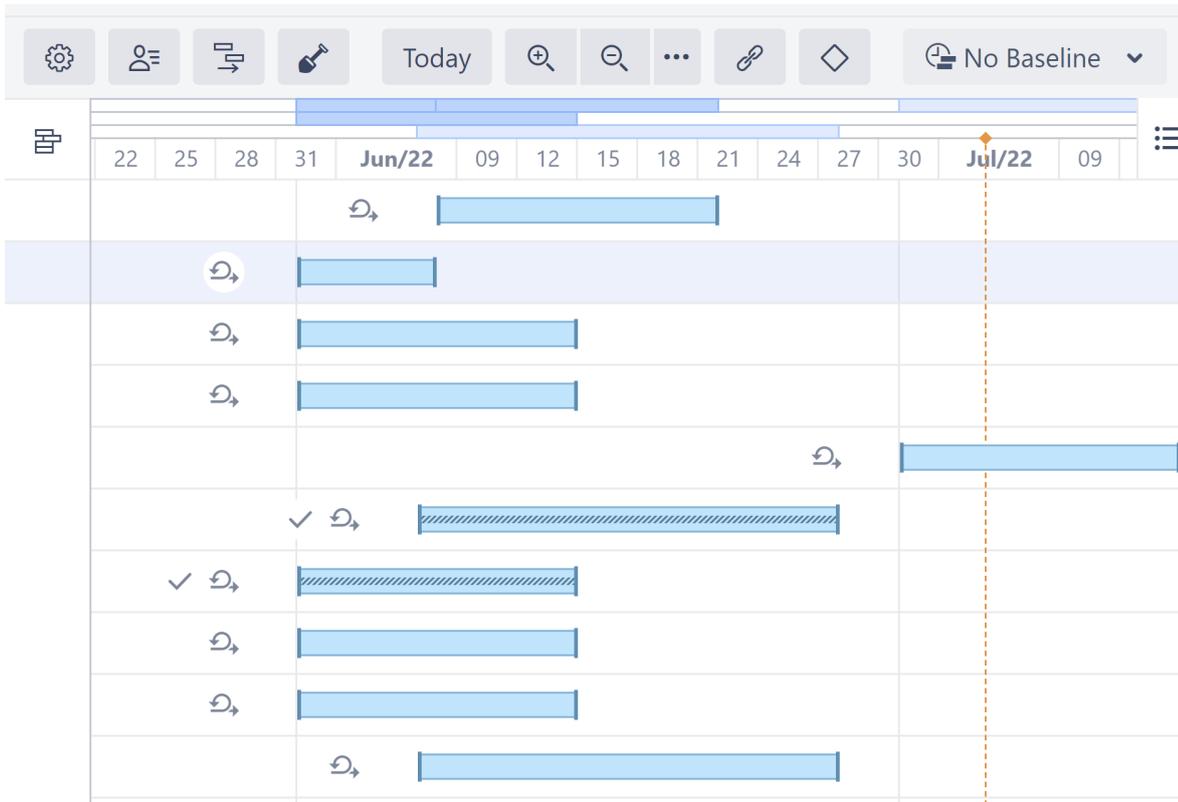
3.5.2.1 Parallel Sprints Visualization

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!

⁶¹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁶² <http://alm.works/gantt-demo>

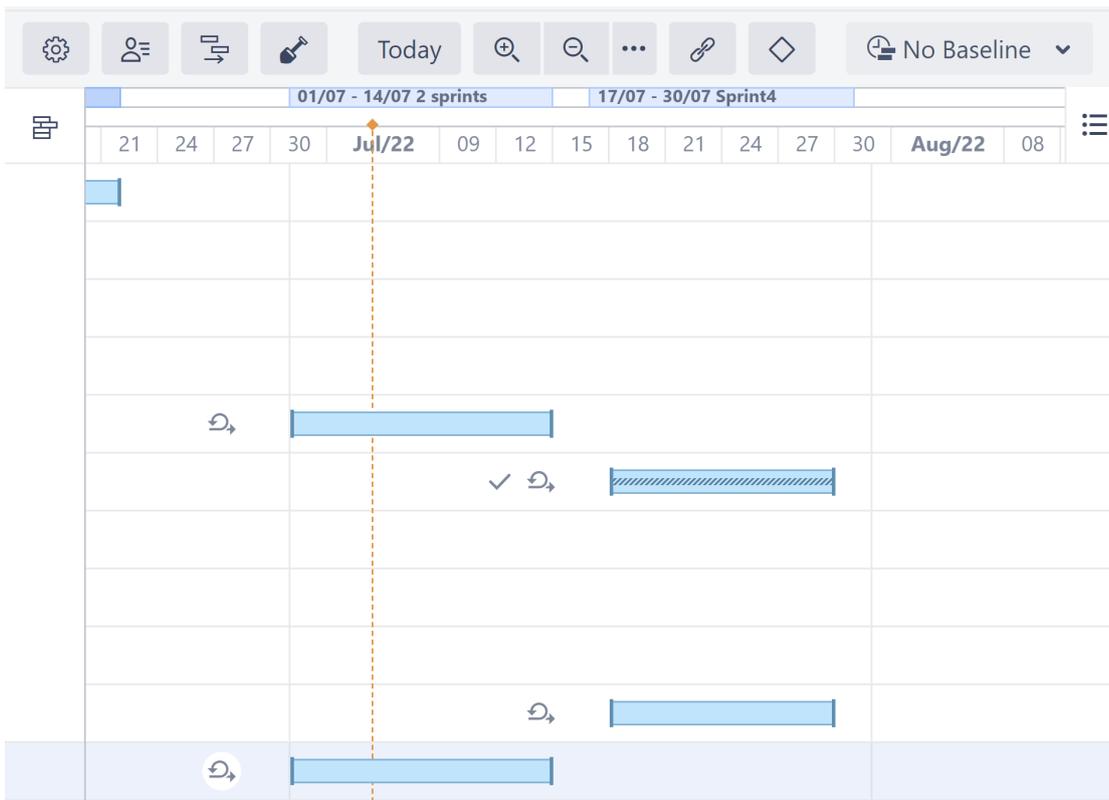


Documentation: [Planning with Sprints](#)⁶³

3.5.2.2 Future Sprint Dates from Jira

Dates for future sprints are now based on your sprint settings in Jira.

⁶³ <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.

i 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](#)⁶⁴, [Sprint Scheduling](#)(see page 48)

3.5.2.3 Notable Improvements and Fixes

- Resolved tasks now contribute to the critical path
- Memo colors are now included when [exporting a chart](#)(see page 158)

3.5.3 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.

⁶⁴ <https://wiki.almworks.com/documentation/gantt/latest/data-center-and-server/planning-with-sprints-130876288.html>

3.5.4 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.

3.5.5 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.
- 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.

3.5.6 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.

 Need help or have questions? Contact [Tempo Support](#)⁶⁵.

3.6 Structure.Gantt 3.3 Release Notes

 **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 317)

[Structure.Gantt on Atlassian Marketplace](#)⁶⁶

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁶⁷

⁶⁵ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁶⁶ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁶⁷ <http://alm.works/gantt-demo>

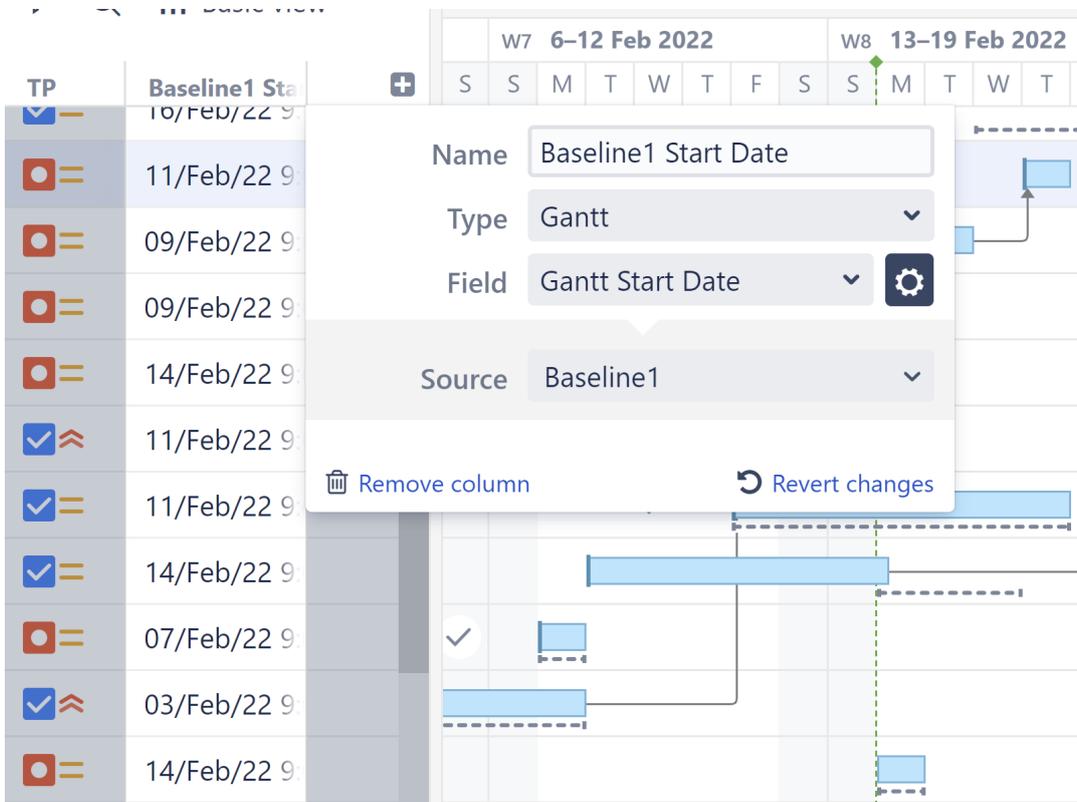
3.6.1 Version Highlights

- Baseline start and finish attributes in Structure
- New baseline visualization
- Other fixes and improvements

3.6.2 Changes in Detail

3.6.2.1 Baseline Start and Finish Date Attributes in Structure

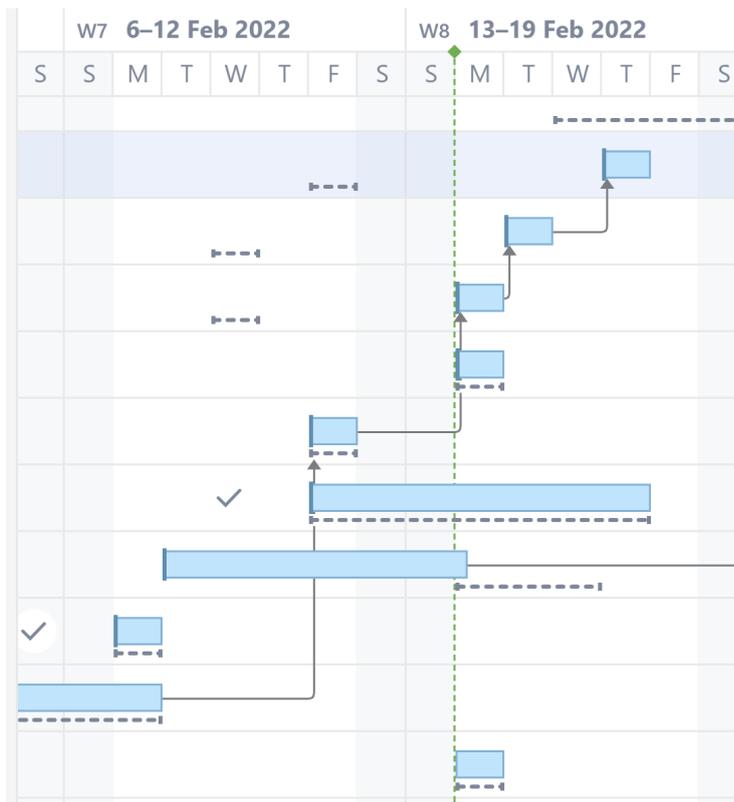
You can now use baseline start and finish dates in formulas, columns, and transformations. This makes it possible to view those dates in Structure and create formulas to compare those dates with the current task, or even sandboxed versions.



Documentation: [Gantt Attributes in Structure](#)(see page 151)

3.6.2.2 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 136)

3.6.3 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.

3.6.4 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.

3.6.5 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.
- 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.

3.6.6 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.

 Need help or have questions? Contact [Tempo Support](#)⁶⁸.

3.7 Structure.Gantt 3.2 Release Notes

 **14th of March, 2022**

Structure.Gantt 3.2 adds backup and restore, a new critical path visualization, and relevant sprints

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁶⁹

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁷⁰

3.7.1 Version Highlights

- Backup and restore
- New critical path visualization
- Relevant sprints selector
- Other fixes and improvements

3.7.2 Changes in Detail

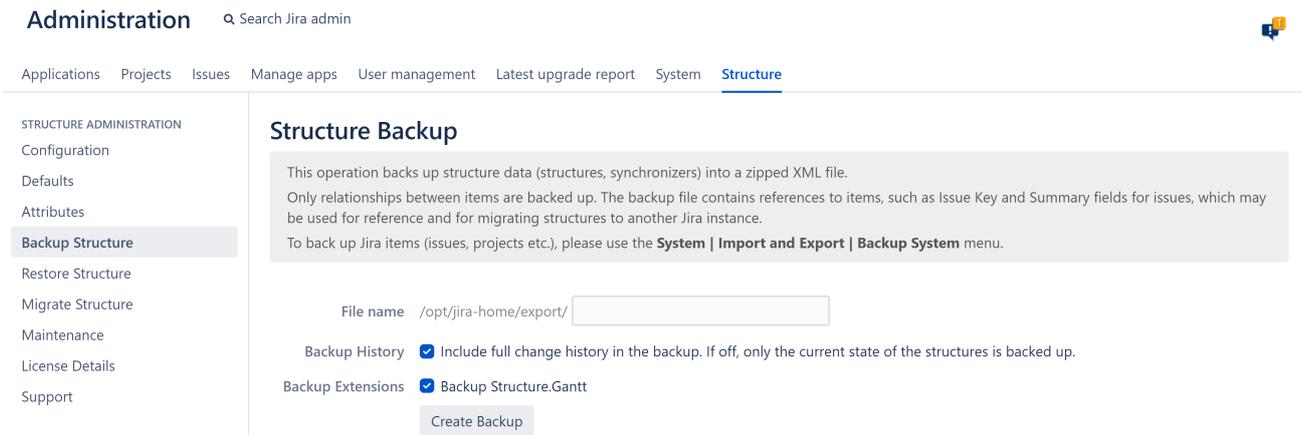
3.7.2.1 Gantt backup/restore/migration

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.

⁶⁸ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁶⁹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁷⁰ <http://alm.works/gantt-demo>

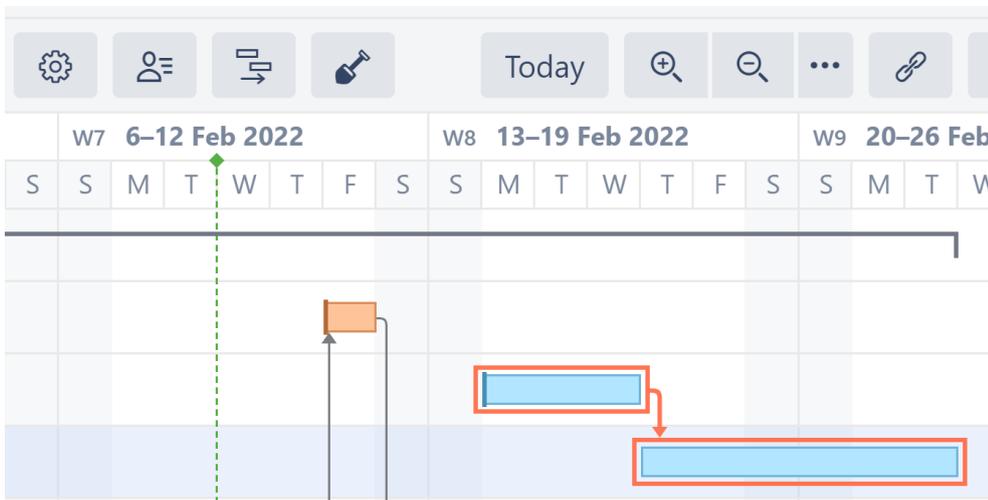


Documentation: [Backup and Restore](#)(see page 278)

3.7.2.2 New critical path visualization

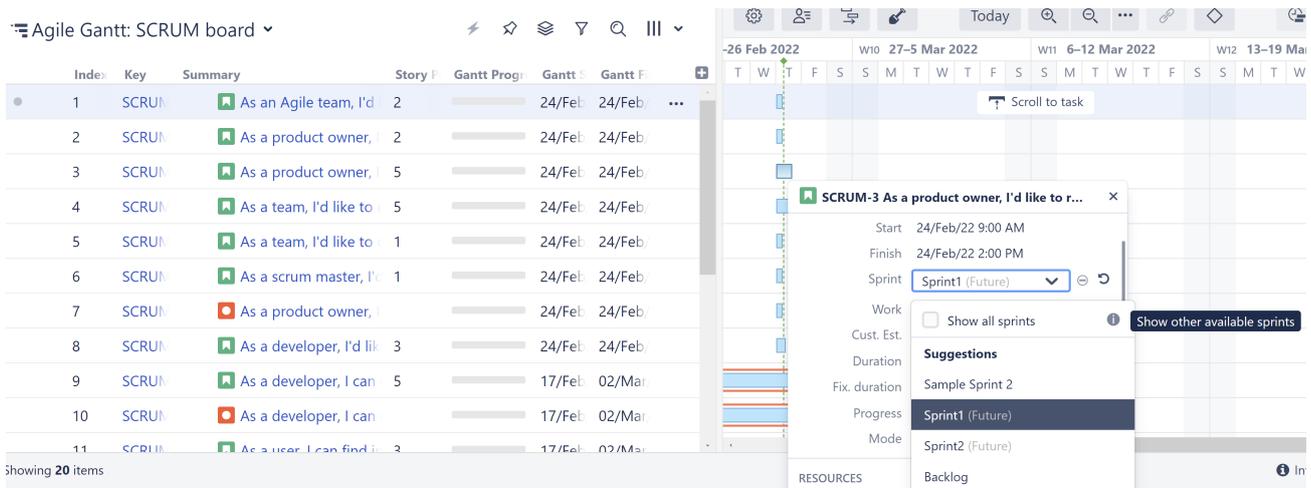
We've made it easier to identify tasks and dependencies that make up the critical path (tasks that, if delayed, will extend the project's end date):

- Tasks in the critical path now have a red highlight around them
- Dependency links in the critical path are red



3.7.2.3 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.



i To use this feature, [Relevant sprints](#)⁷¹ must be enabled in Jira.

Documentation: [Reassigning Sprints with Structure.Gantt](#)(see page 102)

3.7.2.4 Notable Improvements and Fixes

- Kotlin version updated to fix known security issues.

3.7.3 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.

i 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

3.7.4 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.

⁷¹ <https://confluence.atlassian.com/jirasoftwareserver/limiting-sprint-selection-to-relevant-sprints-1014679373.html>

3.7.5 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.
- 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.

3.7.6 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.

 Need help or have questions? Contact [Tempo Support](#)⁷².

3.8 Structure.Gantt 3.1 Release Notes

 **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 317)

[Structure.Gantt on Atlassian Marketplace](#)⁷³

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁷⁴

3.8.1 Version Highlights

- Custom task colors
- Drag-and-drop for all types of dependencies
- Other fixes and improvements

⁷² https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

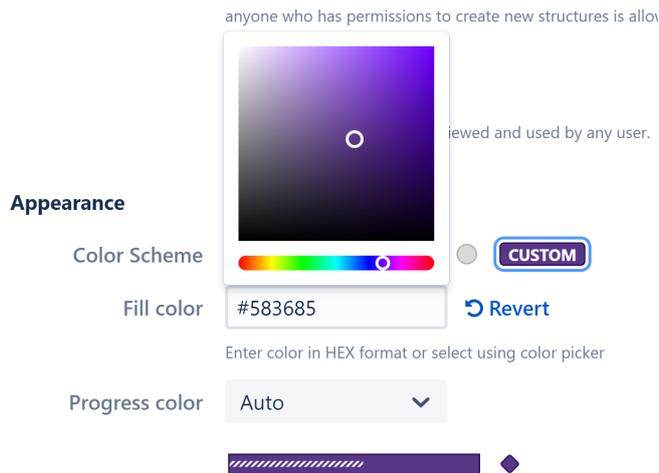
⁷³ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁷⁴ <http://alm.works/gantt-demo>

3.8.2 Changes in Detail

3.8.2.1 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.

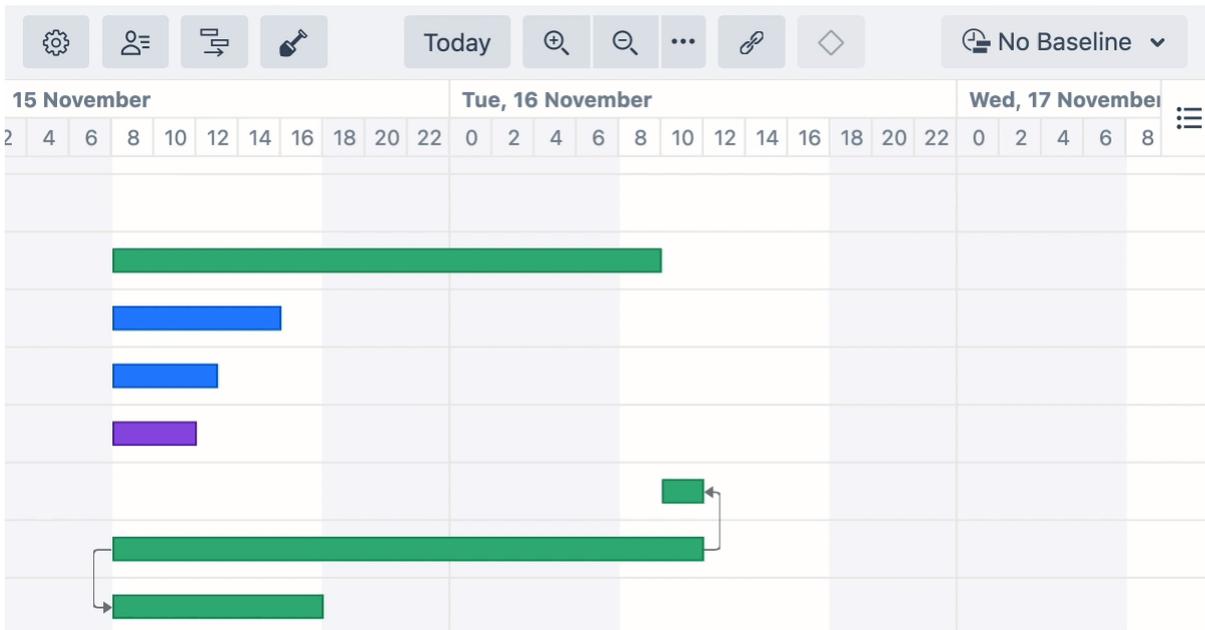


Documentation: [General Configuration](#)(see page 50), [Customizing a Slice](#)(see page 81)

3.8.2.2 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](#)⁷⁵

3.8.2.3 Notable Improvements and Fixes

- The Gantt gadget configuration now supports JQL Autocomplete
- Fixed: users' avatars were not displayed correctly

3.8.3 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.

3.8.4 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.

3.8.5 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.

⁷⁵ <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.

3.8.6 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.

 Need help or have questions? Contact [Tempo Support](#)⁷⁶.

3.9 Structure.Gantt 3.0 Release Notes

 **1st of October, 2021**

Structure.Gantt 3.0 adds Sandbox mode for What-If planning

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁷⁷

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁷⁸

3.9.1 Version Highlights

- Sandbox mode
- Other fixes and improvements

3.9.2 Changes in Detail

3.9.2.1 Sandbox mode

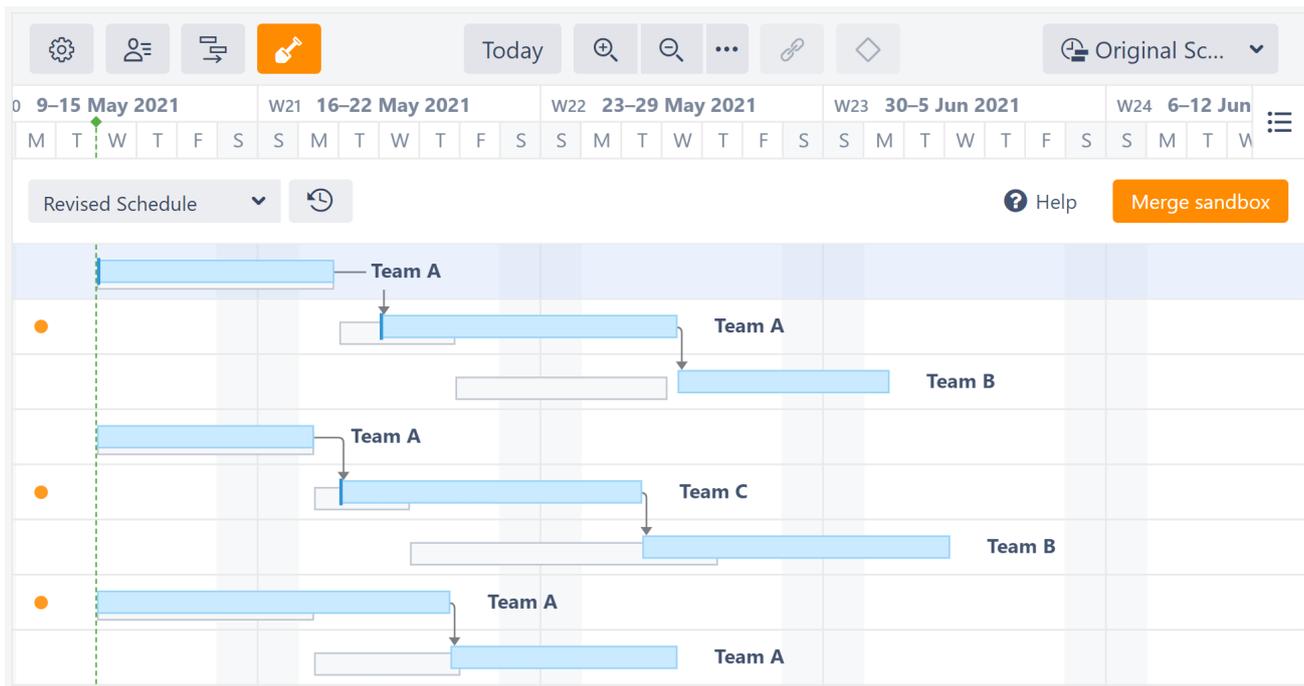
Test what-if scenarios without affecting the live Gantt chart or the underlying data.

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.

⁷⁶ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁷⁷ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁷⁸ <http://alm.works/gantt-demo>



Documentation: [Sandbox Mode](#)(see page 161)

3.9.2.2 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

3.9.3 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.

3.9.4 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.

3.9.5 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.
- 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.

3.9.6 Enterprise Deployment Notes

Structure.Gantt 3.0 adds Sandbox mode, which might be important for large installations and Data Center instances.

3.9.6.1 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](#)⁷⁹. 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 273).

3.9.6.2 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.

 Need help or have questions? Contact [Tempo Support](#)⁸⁰.

3.9.7 Structure.Gantt 3.0.1 Release Notes

 **3rd of November, 2021**

Structure.Gantt 3.0.1 is a patch release for Structure.Gantt 3.0.0

⁷⁹ <https://wiki.almworks.com/x/DwP9B>

⁸⁰ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁸¹

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁸²

3.9.7.1 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

3.9.7.2 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.

3.9.7.3 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.

3.9.7.4 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.

 Need help or have questions? Contact [Tempo Support](#)⁸³.

3.10 Structure.Gantt 2.7 Release Notes

 **7th of December, 2020**

Structure.Gantt 2.7 adds Jira-based Baselines and Fiscal Year support

⁸¹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁸² <http://alm.works/gantt-demo>

⁸³ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁸⁴

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁸⁵

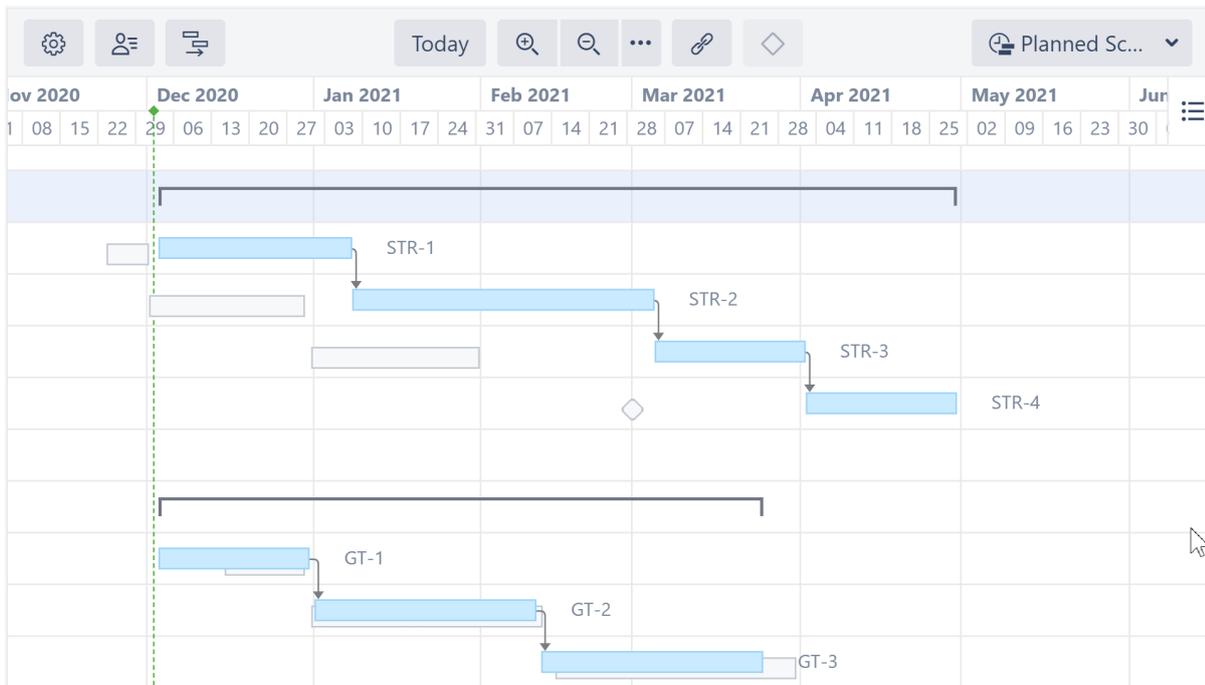
3.10.1 Version Highlights

- Jira-based Baselines
- Fiscal Year support
- Other fixes and improvements

3.10.2 Changes in Detail

3.10.2.1 Jira-based Baselines

It is now possible to create baselines from values in Jira system or custom fields, or based on a Structure formula.



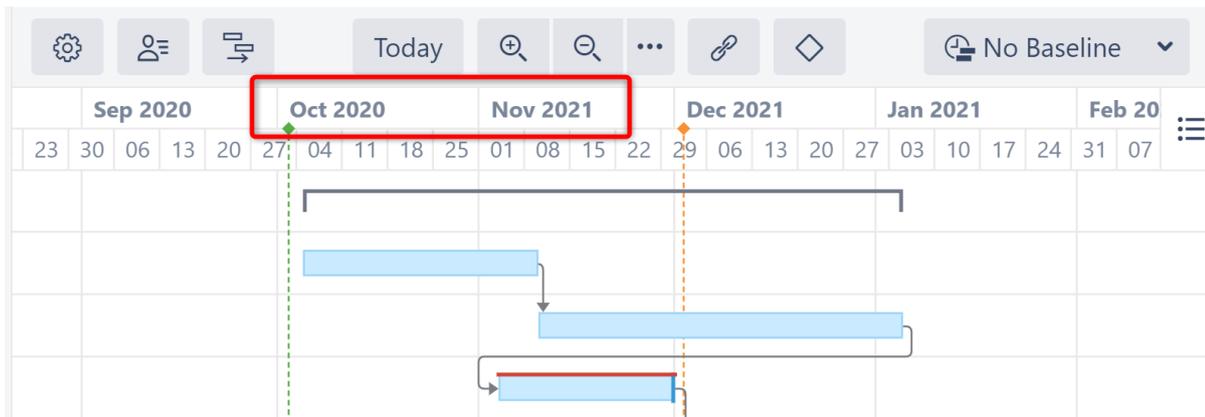
Documentation: [Jira-based Baselines](#)(see page 138)

3.10.2.2 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.

⁸⁴ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁸⁵ <http://alm.works/gantt-demo>



Documentation: [General Settings](#)(see page 203)

3.10.2.3 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

3.10.3 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+.

3.10.4 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.

3.10.5 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.

3.10.6 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.

 Need help or have questions? Contact [Tempo Support](#)⁸⁶.

3.10.7 Structure.Gantt 2.7.1 Release Notes

 **16th of February, 2021**

Structure.Gantt 2.7.1 is a patch release for Structure.Gantt 2.7.0

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁸⁷

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁸⁸

3.10.7.1 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

3.10.7.2 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+.

⁸⁶ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁸⁷ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁸⁸ <http://alm.works/gantt-demo>

3.10.7.3 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.

3.10.7.4 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.

 Need help or have questions? Contact [Tempo Support](#)⁸⁹.

3.10.8 Structure.Gantt 2.7.2 Release Notes

 **4th of March, 2021**

Structure.Gantt 2.7.2 is a patch release for Structure.Gantt 2.7.

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁹⁰

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁹¹

3.10.8.1 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.

3.10.8.2 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+.

⁸⁹ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁹⁰ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁹¹ <http://alm.works/gantt-demo>

3.10.8.3 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.

3.10.8.4 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.

 Need help or have questions? Contact [Tempo Support](#)⁹².

3.10.9 Structure.Gantt 2.7.3 Release Notes

 **1th of September, 2021**

Structure.Gantt 2.7.3 is a patch release for Structure.Gantt 2.7

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁹³

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁹⁴

3.10.9.1 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

3.10.9.2 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+.

⁹² https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁹³ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁹⁴ <http://alm.works/gantt-demo>

3.10.9.3 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.

3.10.9.4 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.

 Need help or have questions? Contact [Tempo Support](#)⁹⁵.

3.11 Structure.Gantt 2.6 Release Notes

 **05th of November, 2020**

Structure.Gantt 2.6 includes draggable Project Start Date and improved Task Details Panel

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁹⁶

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁹⁷

3.11.1 Version Highlights

- Draggable Project Start Date
- Refreshed Task Details Panel
- Other fixes and improvements

3.11.2 Changes in Detail

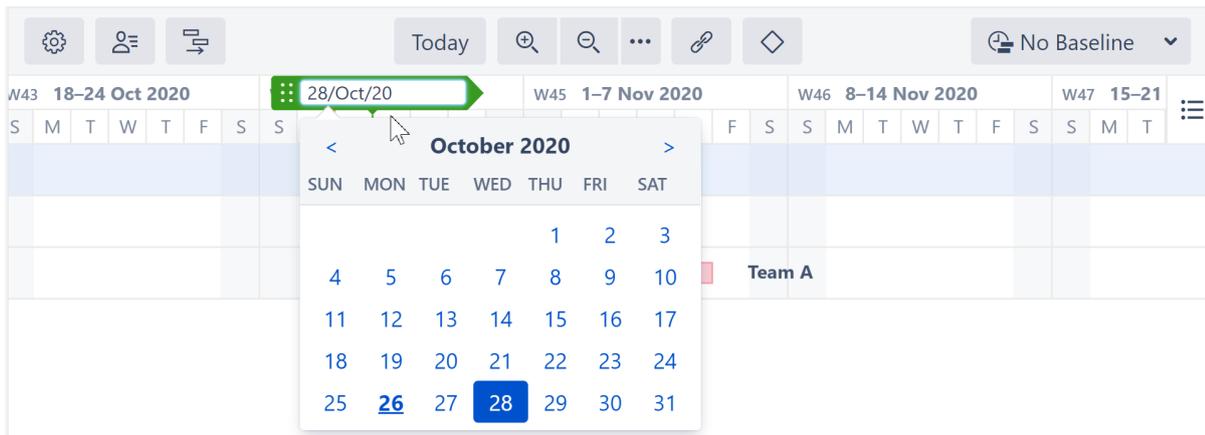
3.11.2.1 Draggable Project Start Date

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.

⁹⁵ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁹⁶ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁹⁷ <http://alm.works/gantt-demo>



Documentation: [Project Start Day](#)(see page 40)

3.11.2.2 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 109)

3.11.2.3 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

3.11.3 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.

3.11.4 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.

3.11.5 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.

3.11.6 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.

✔ Need help or have questions? Contact [Tempo Support](#)⁹⁸.

3.12 Structure.Gantt 2.5 Release Notes

📅 **6th of August, 2020**

Structure.Gantt 2.5 includes Agile Backlog, ability to turn off notifications and configuration search

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)⁹⁹

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁰⁰

3.12.1 Version Highlights

- Agile Backlog
- Optional email notifications
- Configuration search
- Other fixes and improvements

3.12.2 Changes in Detail

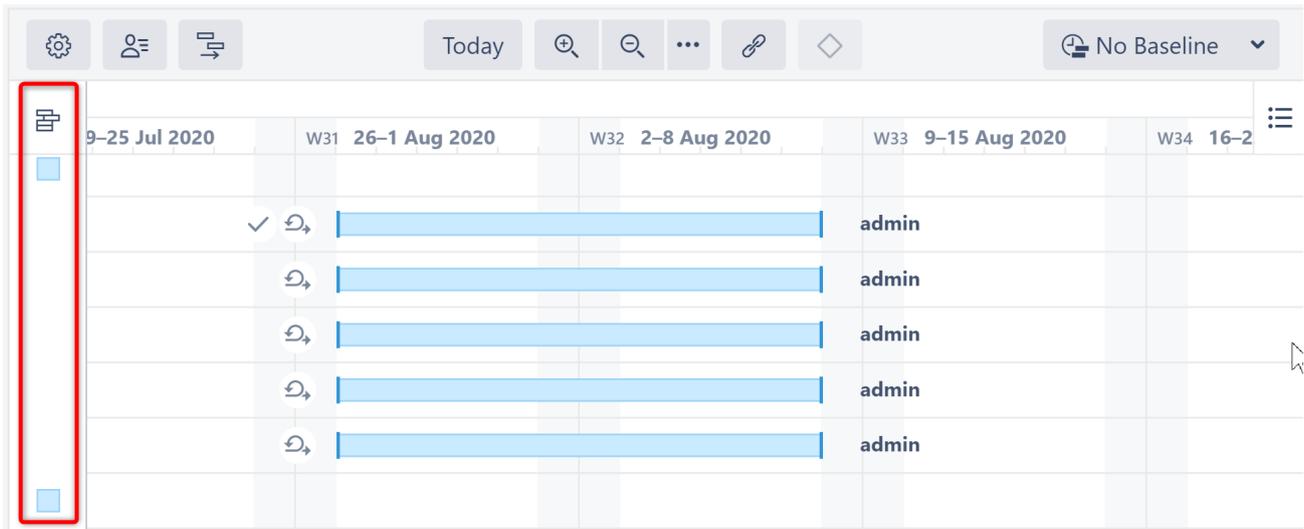
3.12.2.1 Agile Backlog

When [Sprint-based scheduling](#) (see page 59) is used, Structure.Gantt now places issues that aren't assigned to sprints into the Backlog panel:

⁹⁸ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

⁹⁹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁰⁰ <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 98)

3.12.2.2 Optional Email Notifications

Jira notifications can now be switched off for changes made in the Gantt chart:

Notification Settings

Send notifications for issue changes made within the Gantt chart

Notifications will be sent when changes are made to tasks or milestones, such as updating dates, work estimates or links within the chart or details panel. This does not affect changes made within Structure.

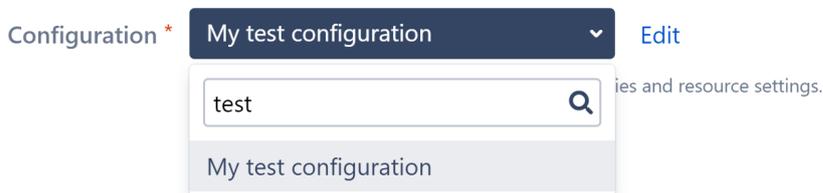
Note: Notifications must be enabled in Jira.

Documentation: [Gantt Chart Settings](#)(see page 46)

3.12.2.3 Configuration Search

It is now possible to search for a specific chart configuration by its name or description:

Gantt chart Configuration



Documentation: [2021-12-08_16-30-23_Gantt Configuration](#)(see page 211)

3.12.2.4 Notable Improvements and Fixes

- It is now possible to select multiple resources when [filtering by resource](#)(see page 129).

- 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

3.12.3 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.

3.12.4 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.

3.12.5 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.

3.12.6 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.

 Need help or have questions? Contact [Tempo Support](#)¹⁰¹.

3.12.7 Structure.Gantt 2.5.1 Release Notes

 **17th of August, 2020**

Structure.Gantt 2.5.1 is a patch release for Structure.Gantt 2.5.0

¹⁰¹https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁰²

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁰³

3.12.7.1 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.

3.12.7.2 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.

3.12.7.3 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.

3.12.7.4 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.

 Need help or have questions? Contact [Tempo Support](#)¹⁰⁴.

3.12.8 Structure.Gantt 2.5.2 Release Notes

 **26th of August, 2020**

Structure.Gantt 2.5.2 is a patch release for Structure.Gantt 2.5.1

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁰⁵

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁰⁶

¹⁰² <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁰³ <http://alm.works/gantt-demo>

¹⁰⁴ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹⁰⁵ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁰⁶ <http://alm.works/gantt-demo>

3.12.8.1 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.

3.12.8.2 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.

3.12.8.3 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.

3.12.8.4 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 advise you to perform the usual testing on staging server.

 Need help or have questions? Contact [Tempo Support](#)¹⁰⁷.

3.13 Structure.Gantt 2.4 Release Notes

 **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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁰⁸

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁰⁹

¹⁰⁷https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹⁰⁸ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁰⁹ <http://alm.works/gantt-demo>

3.13.1 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

3.13.2 Changes in Detail

3.13.2.1 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 215](#)) and [effectors](#)¹¹⁰.

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 215](#)) and [List of Gantt Attributes Available in Structure](#)(see [page 156](#))

3.13.2.2 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:

¹¹⁰ <https://wiki.almworks.com/display/structure/Effectors>

Structure*

Filter Type

Query* ✓

Visible Rows
Leave empty to see all rows

Hierarchy Level
The maximum hierarchy level of items shown on the chart. Leave empty to include everything.

Documentation: [Using Gadgets](#)(see page 215)

3.13.2.3 Notable Improvements and Fixes

- [Resource Leveling](#)(see page 130) 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 124))
- It is now possible to use only the Remaining Estimate for Task Estimation (see [Work Estimates](#)(see page 215))
- Tasks with zero Estimate or a Fixed Duration of zero can be automatically treated as milestones (see [Behavior](#)(see page 215))
- 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

3.13.3 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.

3.13.4 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.

3.13.5 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.

3.13.6 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.

✔ Need help or have questions? Contact [Tempo Support](#)¹¹¹.

3.13.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹¹²

3.13.7.1 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.

3.13.7.2 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.

¹¹¹https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹¹²<https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

3.13.7.3 Enterprise deployment notes

In terms of stability and performance, this release does not bring any changes compared to version 2.4.0.

 Need help or have questions? Contact [Tempo Support](#)¹¹³.

3.14 Structure.Gantt 2.3 Release Notes

 **26th of March, 2020**

Structure.Gantt 2.3 introduces Structure 6.0 support and other improvements.

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹¹⁴

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹¹⁵

3.14.1 Version Highlights

- Support for Structure 6.0
- Other improvements and bug fixes

3.14.2 Changes in Detail

3.14.2.1 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>

Documentation: [Effectors](#)¹¹⁶

¹¹³https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹¹⁴ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹¹⁵ <http://alm.works/gantt-demo>

¹¹⁶ <https://wiki.almworks.com/display/structure/Effectors>

3.14.2.2 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 219](#)) was in use

3.14.3 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.

3.14.4 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.

3.14.5 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.

3.14.6 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.

 Need help or have questions? Contact [Tempo Support](#)¹¹⁷.

3.15 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.

¹¹⁷https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹¹⁸

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹¹⁹

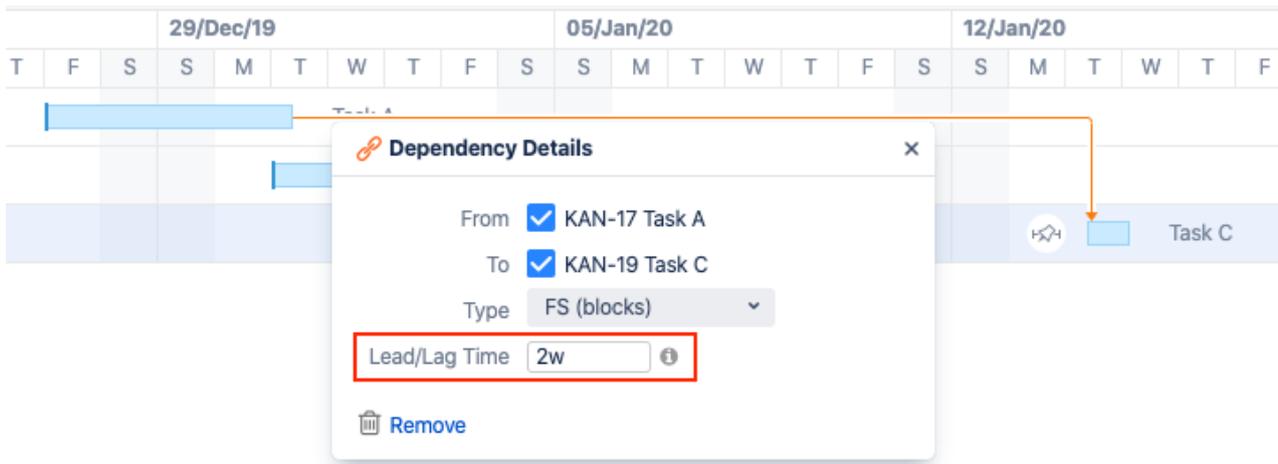
3.15.1 Version Highlights

- Dependency Lead/Lag time
- Change Dependency Type
- Other improvements and bug fixes

3.15.2 Changes in Detail

3.15.2.1 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.

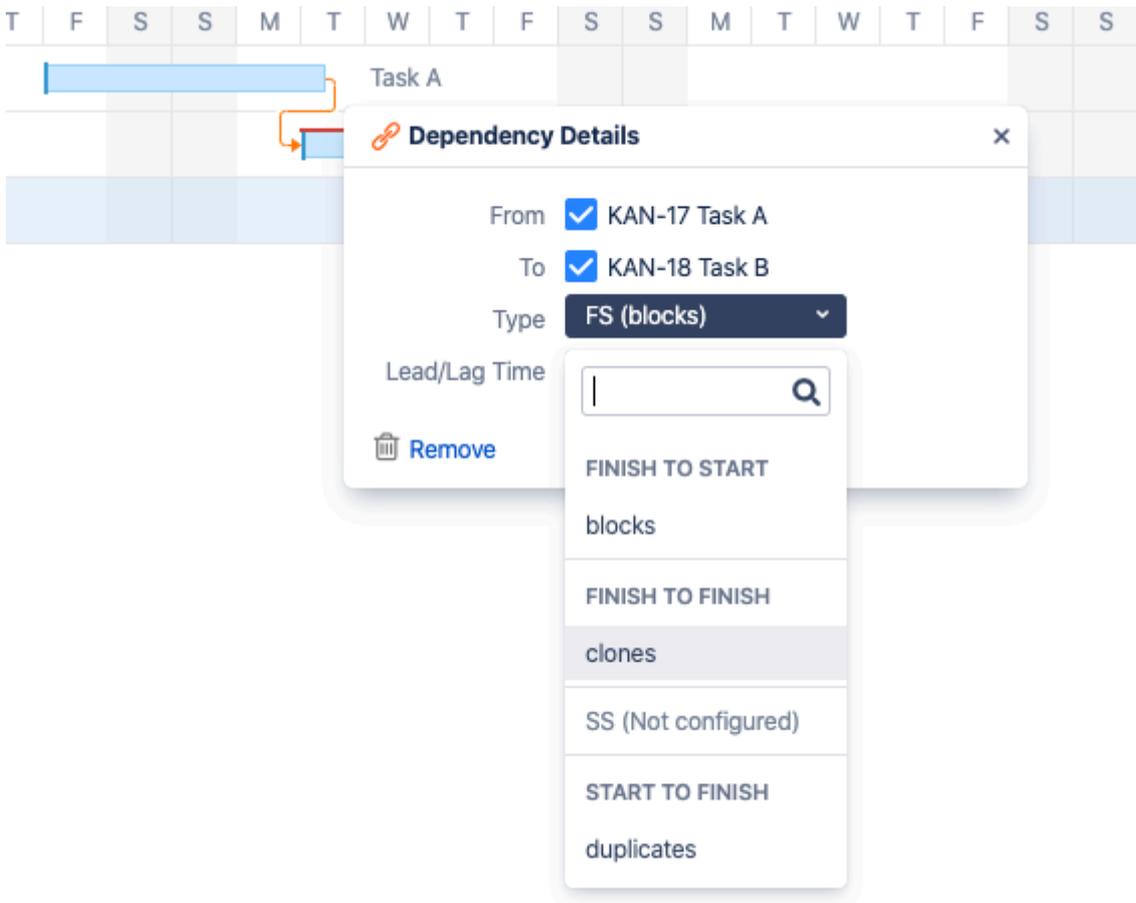
Documentation: [Dependency Lead/Lag Time](#)(see page 119)

3.15.2.2 Change Dependency Type

It is now possible to change individual Dependency types from the Dependency Details panel.

¹¹⁸ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹¹⁹ <http://alm.works/gantt-demo>



Documentation: [Working with Dependencies](#)(see page 220)

3.15.2.3 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

3.15.3 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.

3.15.4 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.

3.15.5 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.

3.15.6 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.

 Need help or have questions? Contact [Tempo Support](#)¹²⁰.

3.15.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹²¹

3.15.7.1 Patch Release

This is a patch release based on Structure.Gantt 2.2. It introduces user anonymization support for Jira 8.7.

3.15.7.2 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.

3.15.7.3 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.

¹²⁰https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹²¹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

3.15.8 Structure.Gantt 2.2.2 Release Notes

i 17th of August, 2020

Structure.Gantt 2.2.2 is a patch release based on Structure.Gantt 2.2.1

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹²²

3.15.8.1 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.

3.15.8.2 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.

3.15.8.3 Enterprise deployment notes

In terms of stability and performance, this release does not bring any changes compared to version 2.2.1.

3.16 Structure.Gantt 2.1 Release Notes

i 11th of November, 2019

Structure.Gantt 2.1 introduces Auto-scheduled Fixed Duration tasks and other improvements and bug fixes.

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹²³

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹²⁴

¹²² <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹²³ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹²⁴ <http://alm.works/gantt-demo>

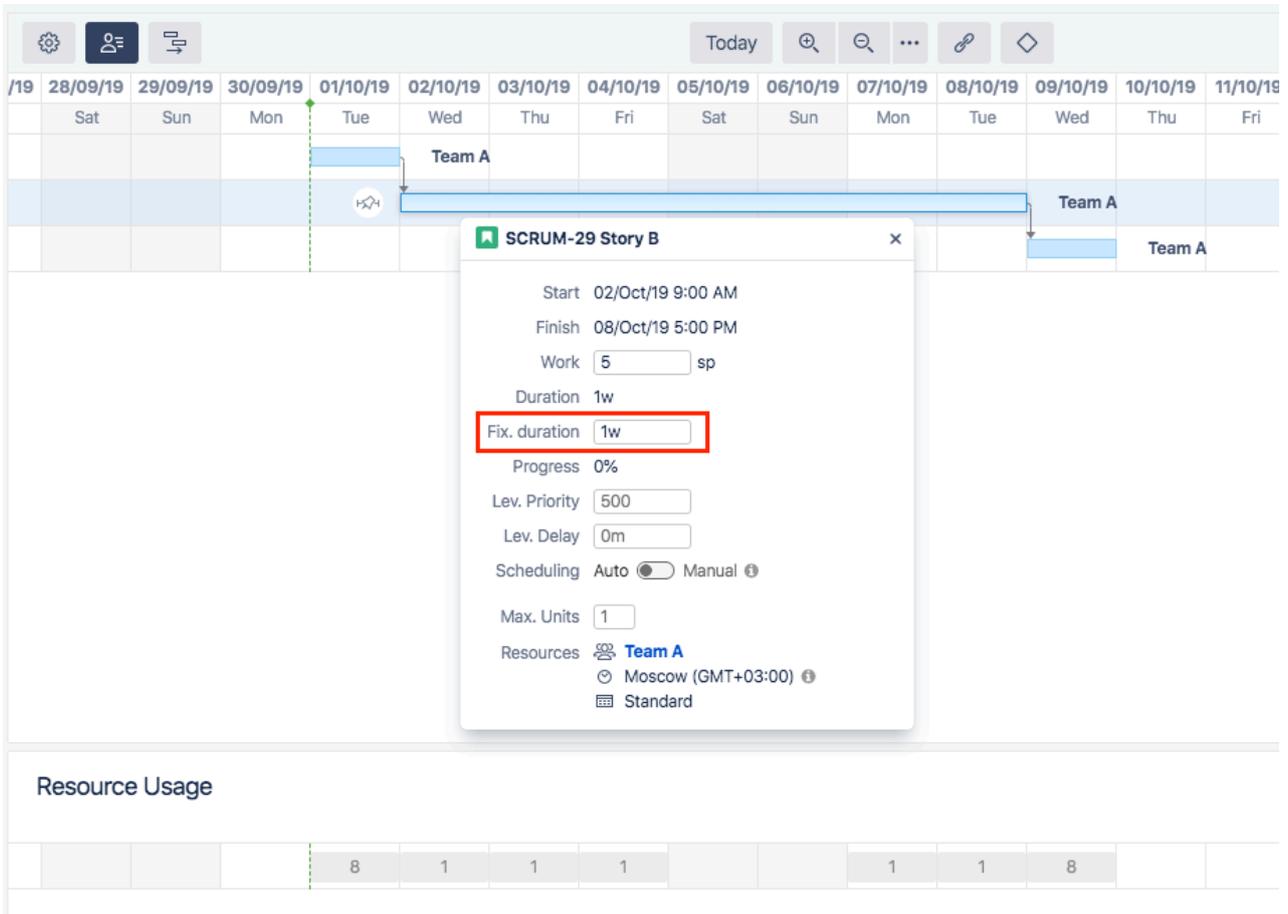
3.16.1 Version Highlights

- Auto-scheduled Fixed Duration tasks
- Indicators for hidden tasks
- Other improvements and bug fixes

3.16.2 Changes in Detail

3.16.2.1 Auto-scheduled Fixed Duration tasks

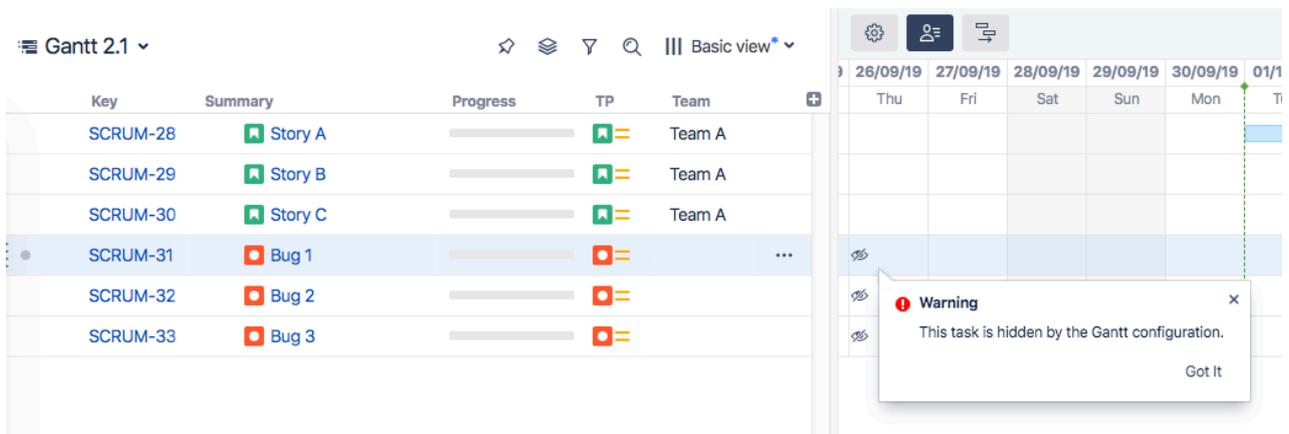
In addition to Agile tasks and tasks with both Manual Start and Manual Finish dates defined, it is now possible to specify duration separate of work for auto-scheduled tasks, as well as tasks that have either a Manual Start or Manual Finish date set.



Documentation: [Fixed Duration](#)(see page 103)

3.16.2.2 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 112)

3.16.2.3 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

3.16.3 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.

3.16.4 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.

3.16.5 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.

3.16.6 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.

 Need help or have questions? Contact [Tempo Support](#)¹²⁵.

3.16.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹²⁶

3.16.7.1 Patch Release

This is a patch release based on Structure.Gantt 2.1. It fixes an issue with the Confluence gadget.

3.16.7.2 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.

3.16.7.3 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.

3.16.8 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

¹²⁵https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹²⁶ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

[Download App](#)(see page 317)
[Structure.Gantt on Atlassian Marketplace](#)¹²⁷

3.16.8.1 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.

3.16.8.2 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.

3.16.8.3 Enterprise deployment notes

In terms of stability and performance, this release does not bring any changes compared to version 2.1.1.

 Need help or have questions? Contact [Tempo Support](#)¹²⁸.

3.17 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 317)
[Structure.Gantt on Atlassian Marketplace](#)¹²⁹
[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹³⁰

3.17.1 Version Highlights

- Structure.Gantt becomes a paid app

¹²⁷ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹²⁸ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹²⁹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹³⁰ <http://alm.works/gantt-demo>

- Resource Leveling
- Baselines
- Fix Version markers for Gadget
- Other improvements and bug fixes

3.17.2 Changes in Detail

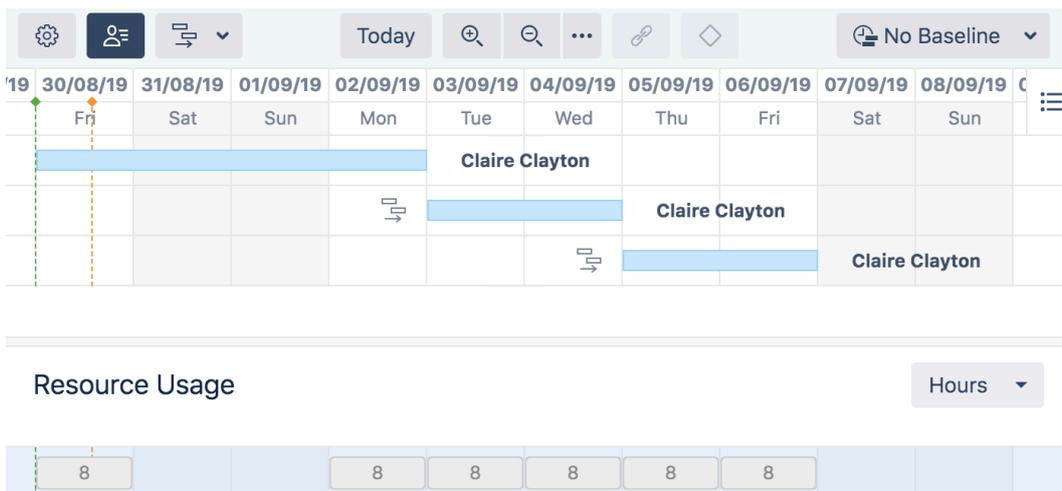
3.17.2.1 Structure.Gantt becomes a paid app

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, 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](https://marketplace.atlassian.com/apps/1217809/structure-gantt-planning-at-scale)¹³¹.

3.17.2.2 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.

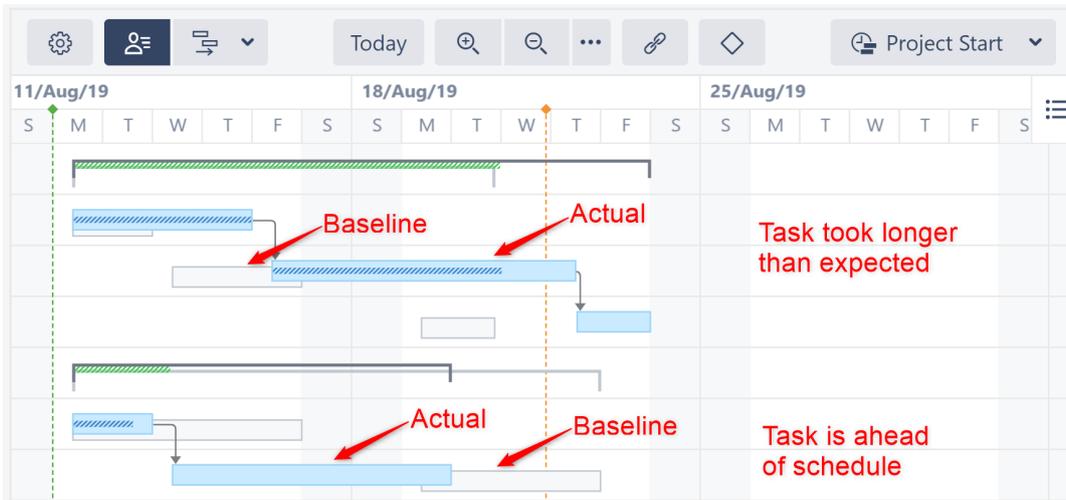


Documentation: [R](#)([see page 98](#))[esource Leveling](#)([see page 130](#))

3.17.2.3 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.

¹³¹ <https://marketplace.atlassian.com/apps/1217809/structure-gantt-planning-at-scale>



Documentation: [B\(see page 103\)aselines\(see page 136\)](#)

3.17.2.4 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.

- Gantt chart Details
- Critical Path
 - Progress
 - Dependencies
 - Chart Warnings
 - Task Indicators
 - Baseline delays
 - Today Marker
 - Project Start Day
 - Fix Versions

Documentation: [Confluence Gadget\(see page 148\)](#)

3.17.2.5 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

3.17.3 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.

3.17.4 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.

3.17.5 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.

3.17.6 Enterprise Deployment Notes

Structure.Gantt 2.0 introduces the Resource Leveling feature that can be important for large installations and Data Center instances.

3.17.6.1 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 273) 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 273)). 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 273) page for more information.

3.17.6.2 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.

 Need help or have questions? Contact [Tempo Support](#)¹³².

3.17.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹³³

3.17.7.1 Patch Release

Starting from this version, Structure.Gantt is compatible with Atlassian Jira 8.4.

3.17.7.2 Installation and Upgrade

Structure.Gantt 2.0.1 requires Structure 5.5 or above.

¹³²https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹³³ <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.

3.17.7.3 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.

3.18 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹³⁴

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹³⁵

 Structure.Gantt will become a paid app beginning with release 2.0.

3.18.1 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

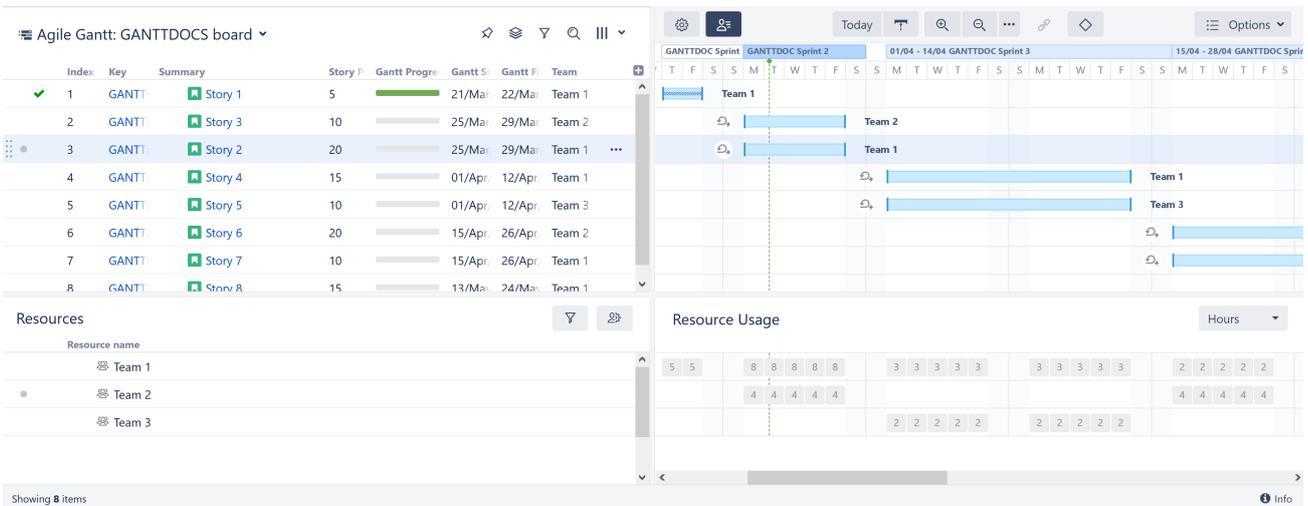
3.18.2 Changes in Detail

3.18.2.1 Agile planning

Starting with this version of Structure.Gantt, it is now possible to use sprint dates to schedule tasks:

¹³⁴ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹³⁵ <http://alm.works/gantt-demo>

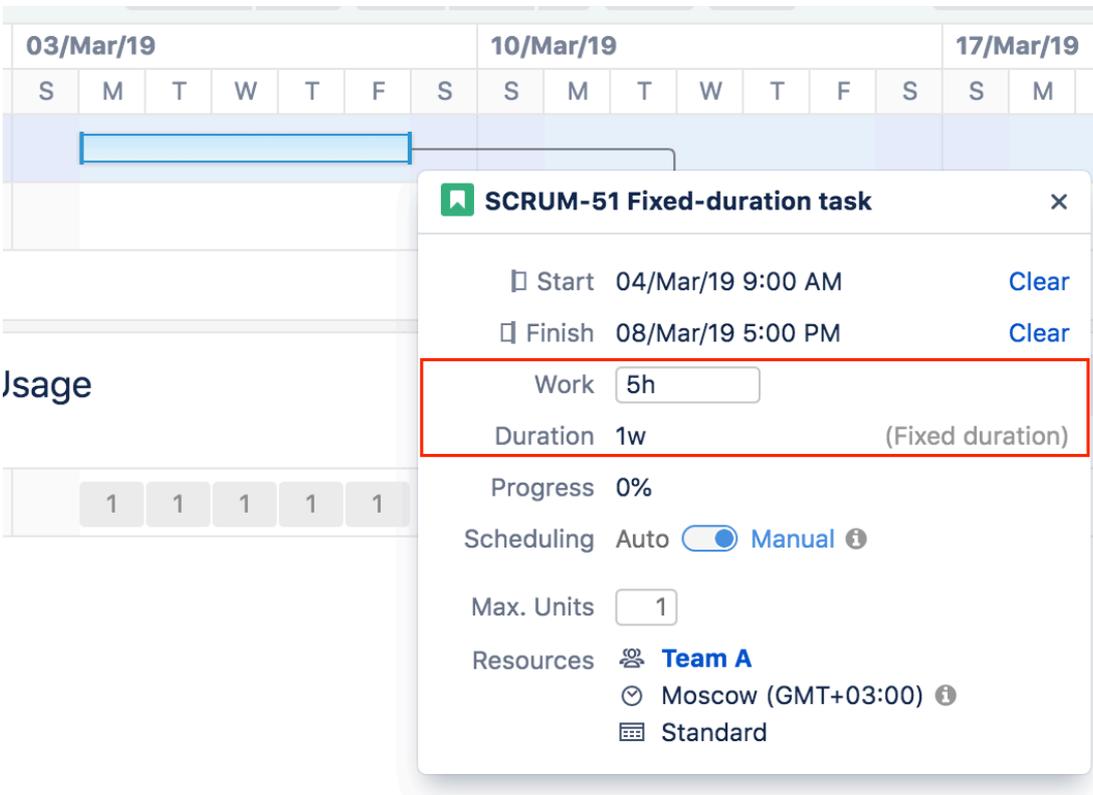


Tasks can be moved between sprints by drag and drop or by changing the sprint in the Task Details panel.

Documentation: [Planning with Sprints](#)(see page 98)

3.18.2.2 Fixed-duration tasks

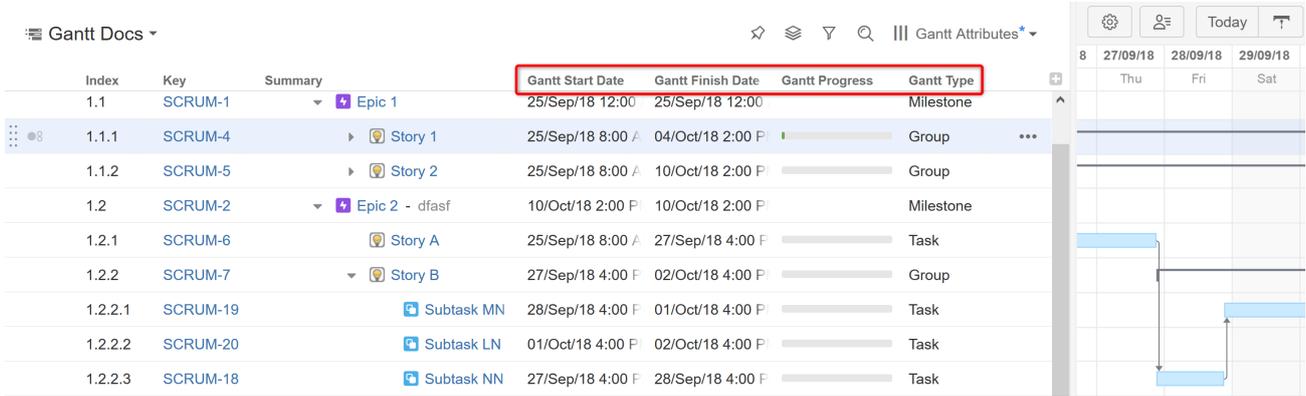
Tasks that are **scheduled by sprint dates** or **manually scheduled with both start and finish dates defined** now have work equally distributed across their duration. Adjusting the duration for these tasks will not affect their work (that can be adjusted separately in the Task Details panel or in Jira itself).



Documentation: [Fixed Duration](#)(see page 103)

3.18.2.3 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 233)

3.18.2.4 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.



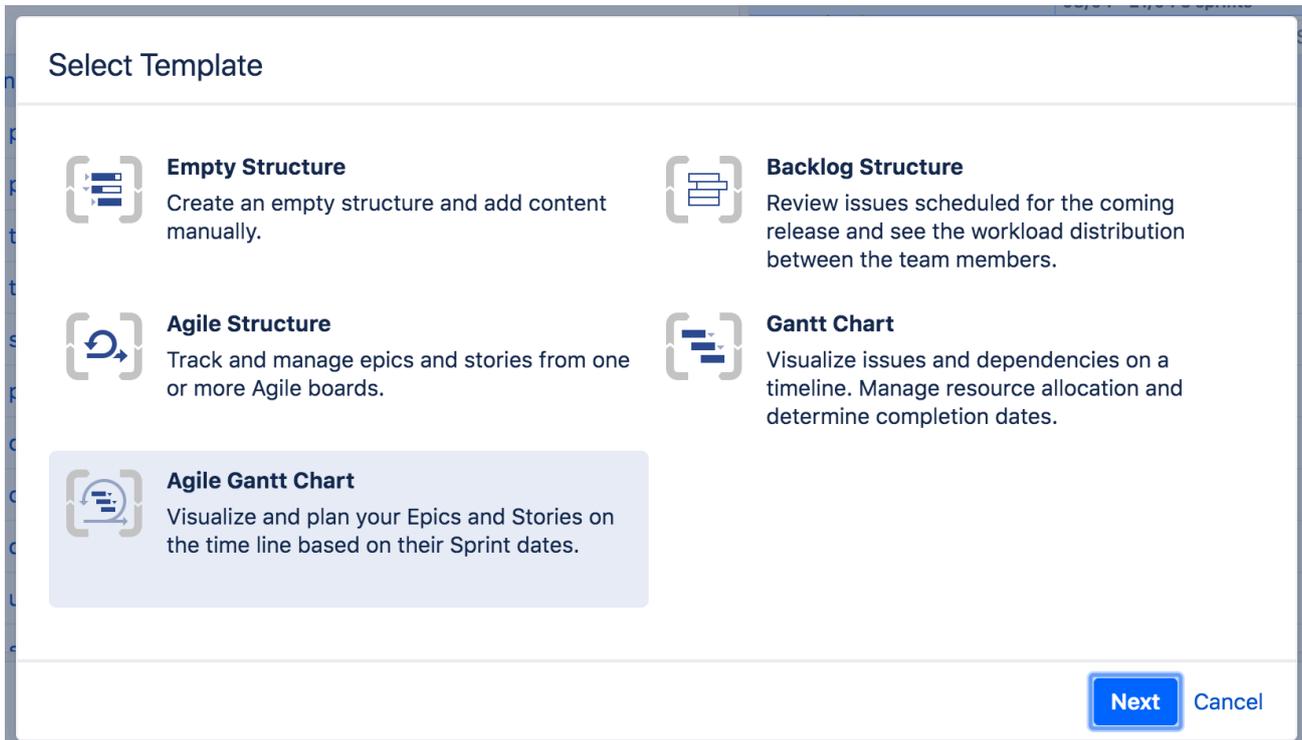
Documentation: [Resources and Resource Usage](#)(see page 125)

3.18.2.5 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



3.18.2.6 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 233))
- 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 96))
- 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 103))
- For completed tasks, a checkmark indicator is shown; this is also applies to milestones backed by an issue (see [Task Indicators](#)(see page 112))
- 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

3.18.3 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.

3.18.4 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.

3.18.5 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.

3.18.6 Enterprise Deployment Notes

Structure.Gantt 1.4 introduces several features that can be important for large installations and Data Center instances.

3.18.6.1 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.

3.18.6.2 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.

3.18.6.3 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](#)¹³⁶). 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 ways to improve the configuration and speed up Structure and the Gantt chart.

The usual load and stress testing are also recommended.

 Need help or have questions? Contact [Tempo Support](#)¹³⁷.

3.18.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹³⁸

 Structure.Gantt will become a paid app beginning with release 2.0.

3.18.7.1 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)

¹³⁶ <https://wiki.almworks.com/display/structure/.Using+Transformations+v9.2>

¹³⁷ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹³⁸ <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 276](#)) for more details.

3.18.7.2 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.

3.18.7.3 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 276](#)) 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.

 Need help or have questions? Contact [Tempo Support](#)¹³⁹.

3.19 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.

¹³⁹https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁴⁰

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁴¹

3.19.1 Version Highlights

- Slice-based configurations
- Ability to specify several Link Types per Dependency
- Filter structure by Resource action
- Other improvements and important bug fixes

3.19.2 Changes in Detail

3.19.2.1 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.

The screenshot shows the configuration interface for 'Epics' in Structure.Gantt. On the left is a sidebar with navigation options: General, Scheduling, Dependencies, Resources, New Slice, and Epics (which is selected). The main area is titled 'Epics' and includes a toggle for 'Active' (which is turned on) and a 'Delete' button. Below this is an 'Issue Types' dropdown menu with 'Epic' selected. The 'Appearance' section features a 'Color Scheme' with six colored circles (blue, purple, green, yellow, orange, grey) and a 'Delete Section' button. The 'Item Behavior' section has a 'Treat As' dropdown menu set to 'Task' and a 'Delete Section' button. A descriptive text below the dropdown explains that this setting defines if the issue should be treated as a group, a milestone, or a task, and offers options to 'Do Not Show' or 'Default Configuration'. At the bottom, there are 'Save as...', 'Save', and 'Cancel' buttons.

Documentation: [Slice-based Configurations](#)(see page 78)

¹⁴⁰ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁴¹ <http://alm.works/gantt-demo>

3.19.2.2 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.

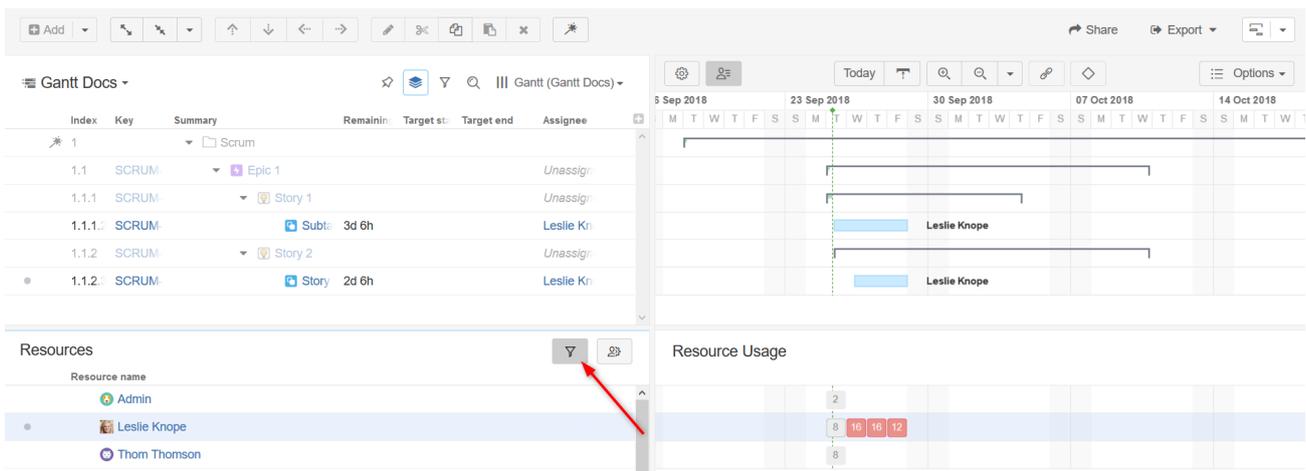
Dependency Type	Link Type	Favorite	Actions
Finish to Start	blocks	<input type="checkbox"/>	Remove
	depends on	<input checked="" type="checkbox"/>	Remove
Add New Type ▾			
Finish to Finish	Add New Type ▾		
Start to Start	Add New Type ▾		
Start to Finish	Add New Type ▾		

Documentation: [Dependencies](#)(see page 116)

3.19.2.3 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 239)

3.19.2.4 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

3.19.3 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.

3.19.4 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.

3.19.5 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.

3.19.6 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.

✔ Need help or have questions? Contact [Tempo Support](#)¹⁴².

3.19.7 Structure.Gantt 1.3.1 Release Notes

i 11th of December, 2018

Structure.Gantt 1.3.1 is a patch release based on Structure.Gantt 1.3.0

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁴³

⚠ Structure.Gantt will become a paid app beginning with release 2.0.

3.19.7.1 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

3.19.7.2 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.

3.19.7.3 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.

¹⁴²https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹⁴³<https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

3.19.8 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁴⁴

! Structure.Gantt will become a paid app beginning with release 2.0.

3.19.8.1 Patch Release

Starting from this version Structure.Gantt is compatible with Atlassian Jira 8.0.

3.19.8.2 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.

3.19.8.3 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.

3.20 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁴⁵

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁴⁶

¹⁴⁴ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁴⁵ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁴⁶ <http://alm.works/gantt-demo>

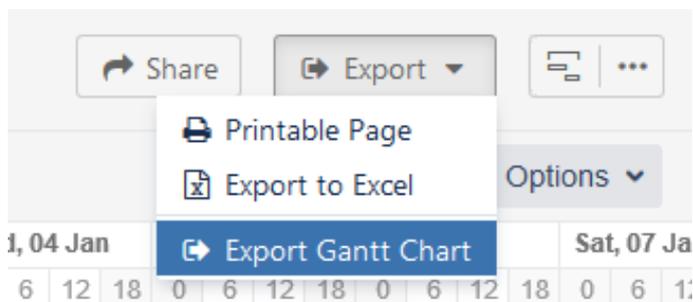
3.20.1 Version Highlights

- Export chart into a PDF or SVG file
- Ability to add Gantt chart to Jira Dashboard and Confluence pages

3.20.2 Changes in Detail

3.20.2.1 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 158)

3.20.2.2 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 144)

3.20.3 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.

3.20.4 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.

3.20.5 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.

3.20.6 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.

 Need help or have questions? Contact [Tempo Support](#)¹⁴⁷.

3.20.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁴⁸

3.20.7.1 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

¹⁴⁷https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

¹⁴⁸<https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

3.20.7.2 Installation and Upgrade

Structure.Gantt 1.2.1 requires Structure 4.6 or above.

If you already have production data from a previous version of Structure.Gantt, please consider backing up your data before upgrading.

3.20.7.3 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.

3.21 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁴⁹

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁵⁰

3.21.1 Version Highlights

- Visualization of Sprints and Fix Versions on the timeline
- Redesigned Gantt Configuration dialog
- Ability to use Custom Fields or [Formulas](#)¹⁵¹ as a source for Task Progress
- Greatly improved performance

3.21.2 Changes in Detail

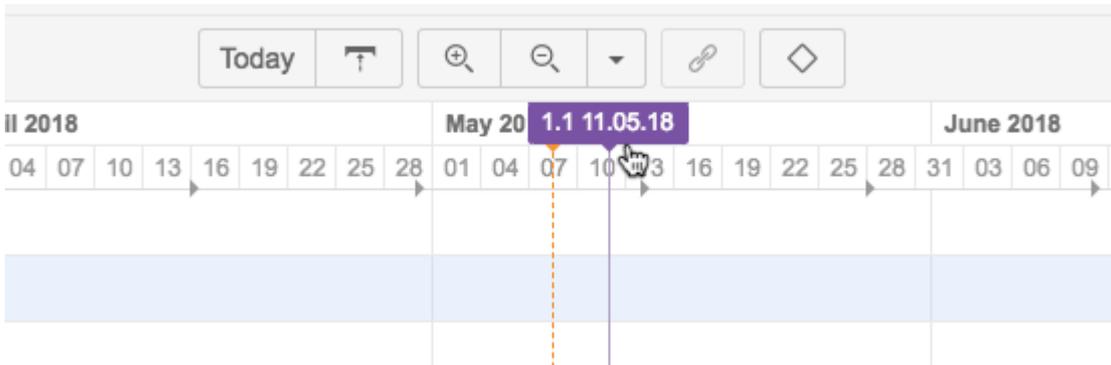
3.21.2.1 Visualization of Sprints and Fix Versions

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.

¹⁴⁹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁵⁰ <http://alm.works/gantt-demo>

¹⁵¹ <https://wiki.almworks.com/display/structure/.Formula+Column+v9.2>



Documentation: [Gantt configuration in Details](#)¹⁵².

3.21.2.2 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](#)¹⁵³.

3.21.2.3 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](#)¹⁵⁴ for Progress.

Documentation: [Progress configuration](#)(see page 247)

3.21.2.4 Performance improvements

A major performance issue was fixed, so Gantt calculation now completes much faster.

152 <https://wiki.almworks.com/display/gantt/Gantt+Configuration+in+Details>

153 <https://wiki.almworks.com/display/gantt/Gantt+Configuration+in+Details>

154 <https://wiki.almworks.com/display/structure/.Formula+Column+v9.2>

3.21.3 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.

3.21.4 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.

3.21.5 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.

3.21.6 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



Need help or have questions? Contact [Tempo Support](#)¹⁵⁵.

¹⁵⁵https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

3.21.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁵⁶

3.21.7.1 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

3.21.7.2 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.

¹⁵⁶ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

3.21.7.3 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.

3.22 Structure.Gantt 1.0 Release Notes

i **29th of December, 2017**

We are happy to release Structure.Gantt 1.0, our first General Availability release.

[Download App](#)(see page 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁵⁷

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁵⁸

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.

3.22.1 Version Highlights

- First ever Gantt Charts extension to [Structure](#)¹⁵⁹!
- 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

3.22.2 Getting Started

To start using Structure.Gantt on your Jira, follow a 5-minute installation and setup instructions in [Quick Start Guide](#)(see page 251).

3.22.3 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.

¹⁵⁷ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁵⁸ <http://alm.works/gantt-demo>

¹⁵⁹ <https://marketplace.atlassian.com/plugins/com.almworks.jira.structure/server/overview>

3.22.4 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.

3.22.5 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).

3.22.6 Enterprise Deployment Notes

See [Enterprise Deployment](#)(see page 270) notes in the product documentation.

3.22.7 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 317)

[Structure.Gantt on Atlassian Marketplace](#)¹⁶⁰

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁶¹

¹⁶⁰ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁶¹ <http://alm.works/gantt-demo>

3.22.7.1 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

3.22.7.2 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.

3.22.7.3 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.

4 Additional Resources

- [Structure.Gantt Roadmap](#)(see page 254)
- [Comparison Between Structure.Gantt for Cloud and Data Center](#)(see page 255)
- [Structure.Gantt Concepts Explained](#)(see page 255)
- [FAQ](#)(see page 268)
- [Features](#)(see page 269)
- [Other Versions](#)(see page 269)

4.1 Structure.Gantt Roadmap

Updated On	Feb 2024
Next Update	Apr 2024

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.

 It is our general approach at Structure 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 the Structure team, and it should not be relied upon when making purchasing decisions.

4.1.1 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	Mar'24	May'24	Sep '24	Nov '24
Version	4.2	5.0	5.1	5.2

4.1.2 Roadmap

Here's the list of major features that we're recently released:

- **Sandbox Mode** – ability to play with "what-if" scenarios, without affecting the data seen by other users (✔ Structure.Gantt 3.0)

- **Baseline Start & Finish as Structure attributes** — ability to add Baseline data as Structure columns (✔ Structure.Gantt 3.3)
- **Future sprints with dates**— the dates for future sprints can now be taken from Jira (✔ Structure.Gantt 3.4)
- **Custom chart markers** — ability to add the user markers on the timeline (✔ Structure.Gantt 3.5)

Planned for later:

- **Planning tasks** — ability to create lightweight Gantt tasks that don't appear in Jira
- **UX and UI improvements** — always visible markers, customizable timelines, bigger bars, different color schemes, and more
- Bulk edit — Move group of tasks on the chart

4.2 Comparison Between Structure.Gantt for Cloud and Data Center

Users who are familiar with Structure.Gantt for Jira Data Center will notice some differences in the way some features work in Structure.Gantt Cloud. Additionally, there are some features that are not currently available in Structure.Gantt Cloud. We will work to bring many (if not all) of these features to Structure.Gantt Cloud as soon as possible.

4.2.1 The following features work a little differently in Structure.Gantt Cloud

- Chart configurations - in Cloud, there is one configuration per structure. Configurations can't be shared between charts, but it is possible to copy one chart's configuration to another.
- Scheduling conflicts - it is not possible to ignore a scheduling conflict in Structure.Gantt Cloud.
- Search in dependency dialog - Searching by issue key is not supported
- Sprints that are not relevant to the corresponding board of the selected task are not shown in the chart header and do not influence the sprint dates calculation.

4.2.2 The following Structure.Gantt features are currently not available in Structure.Gantt Cloud

- Resource leveling
- Undo/redo changes
- Sandbox mode

4.3 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.

i 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.

- [Work Breakdown Structure](#)(see page 256)
- [Chart elements](#)(see page 257)
- [Schedule](#)(see page 258)
 - [Group Scheduling](#)(see page 259)
 - [Task Adjustments Due to Non-working Time](#)(see page 259)
- [Automatic vs. Manual scheduling](#)(see page 259)
 - [Identifying automatic and manually scheduled tasks](#)(see page 260)
 - [Manual Scheduling Mode](#)(see page 260)
- [Work Estimate vs. Task Duration](#)(see page 260)
 - [Fixed Duration](#)(see page 261)
- [Resources](#)(see page 262)
 - [Resource Units \(Capacity\)](#)(see page 262)
 - [Availability](#)(see page 263)
 - [Work Calendar and Time Zone](#)(see page 263)
 - [Task's Maximum Units](#)(see page 263)
 - [Resource Usage](#)(see page 264)
- [Resource Leveling](#)(see page 265)
 - [Leveling Priority](#)(see page 265)
 - [Leveling Delay](#)(see page 265)
- [Customizing the Chart with Configuration Slices](#)(see page 266)
- [Work Calendars](#)(see page 267)
 - [Best practices for creating calendars](#)(see page 267)
 - [Day and Week Conversions in Jira and in Structure.Gantt](#)(see page 267)
- [More reading](#)(see page 267)

4.3.1 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](#)¹⁶² 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:

¹⁶² https://en.wikipedia.org/wiki/Work_breakdown_structure

Agile Gantt ▾	
Key	Summary
INI-3	Structure
STR-4	Non-Jira Notes Field / Column
✓ STR-13	Ability to add comments to issues in a structure
✓ STR-14	Support for multiple Notes columns
STR-3	Formulas
STR-6	As a formula author, I want to edit large formulas in the setting panel
STR-15	As a formula author, I want to be able to use JQL queries
STR-2	Synchronize Attribute to Custom Field
STR-11	Mapping Mechanism
STR-12	On-demand synchronization
STR-10	Scheduled synchronization
INI-6	Structure.Testy
TTY-4	Flexible Status Settings
TTY-1	Custom Statuses
TTY-2	Independent Statuses
TTY-3	Status Sets

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](#)¹⁶³ enables users to easily build and maintain very complex dynamic hierarchies. For more information on building hierarchies, please refer to our [Structure documentation](#)¹⁶⁴.

4.3.2 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](#)¹⁶⁵ and [Memos](#)¹⁶⁶, 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 123) allow you to mark key points within a project plan.
- Dependencies - [Dependencies](#)(see page 116) 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

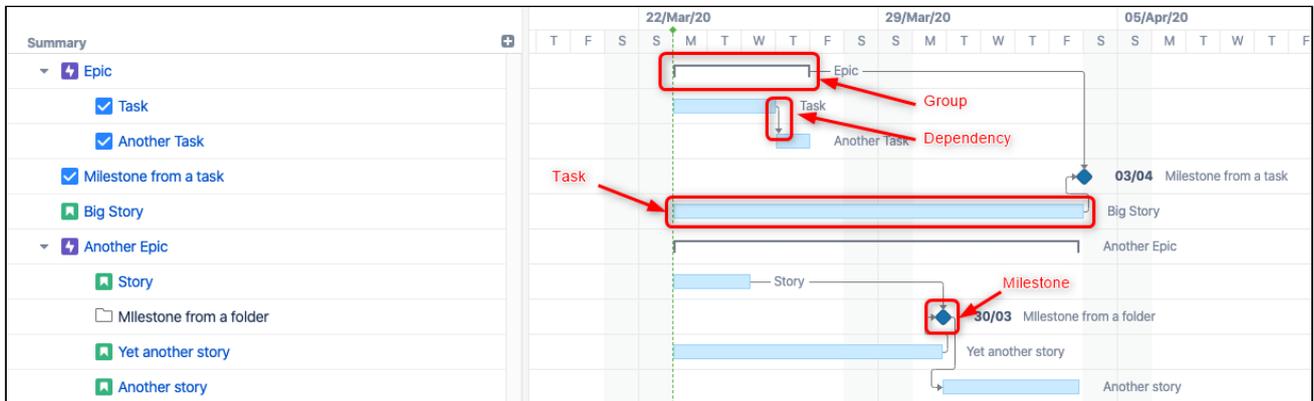
¹⁶³ <https://marketplace.atlassian.com/apps/34717/structure-project-management-at-scale>

¹⁶⁴ <https://wiki.almworks.com/x/t7DrAQ>

¹⁶⁵ <https://wiki.almworks.com/display/structure/.Folders+v8.3>

¹⁶⁶ <https://wiki.almworks.com/display/structure/.Memo+v9.0>

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 31).

4.3.3 Schedule

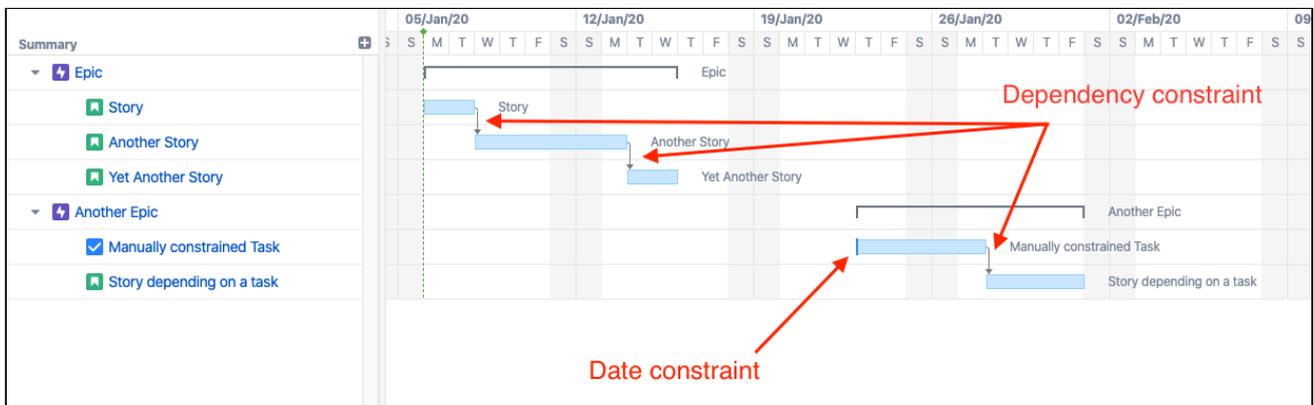
Elements that are visualized on the timeline form the Schedule. Within the schedule, every task or group of tasks has its own start and finish dates, and the project has a start date (configured in the chart settings) and finish date (the finish date of the latest task). Once visualized, the schedule 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:

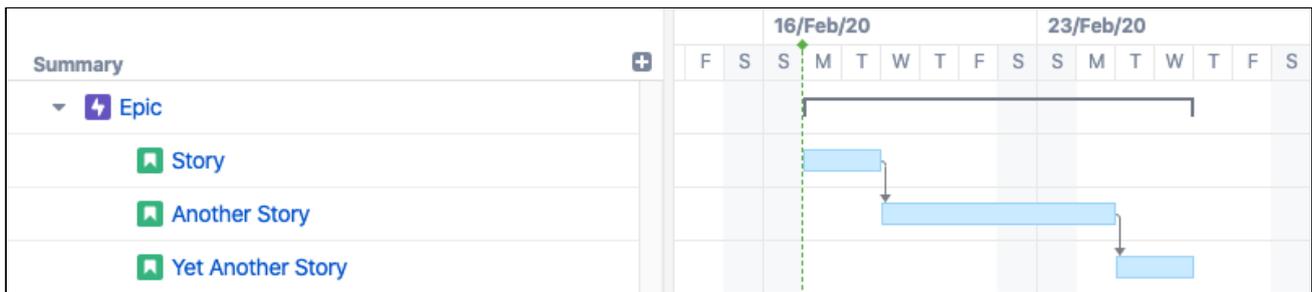
1. It takes the task and tries to determine its duration based on its properties (Work estimate, Resource assigned, etc.).
2. It looks for any start and/or finish constraints and schedules tasks based on those (see [Automatic vs. Manual Scheduling](#)(see page 259)).
3. If there is no start/finish constraints, 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.

4.3.3.1 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.

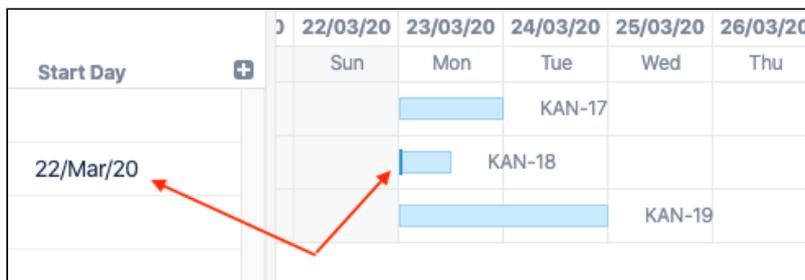


4.3.3.2 Task Adjustments Due to Non-working Time

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).



4.3.4 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

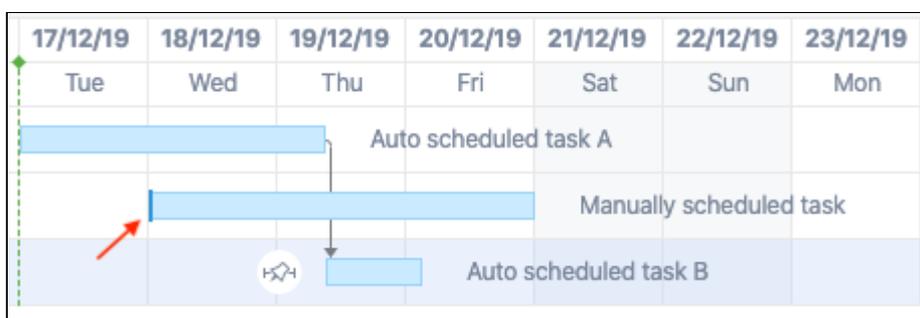
- Dragging a task within the chart will reschedule the task and update the associated Jira field
- Manually-scheduled tasks will remain fixed on the timeline, even when tasks they depend on change

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.

i Manually-scheduled tasks may be altered when [Resource Leveling](#) (see page 130) is run, if the leveling is set up to include manually-scheduled tasks.

4.3.4.1 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 103).

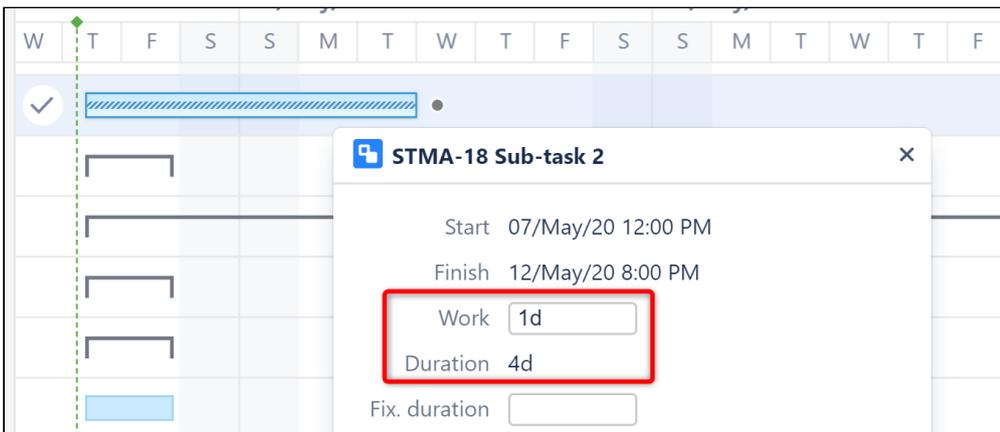
4.3.4.2 Manual Scheduling Mode

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 109) (doing so tells Structure.Gantt to ignore an existing manual value)

4.3.5 Work Estimate vs. Task Duration

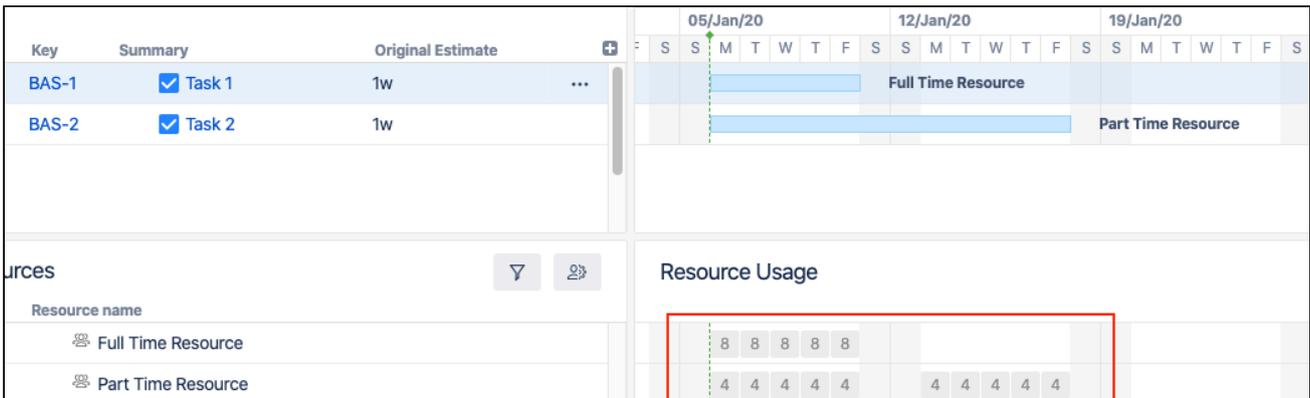
Work Estimate is an estimation of the effort required to complete a task. It does not take into account things like resource availability, work schedule, etc. Task Duration, on the other hand, is an actual projection of the task estimate, considering these other factors. For example, if Task A has a 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:



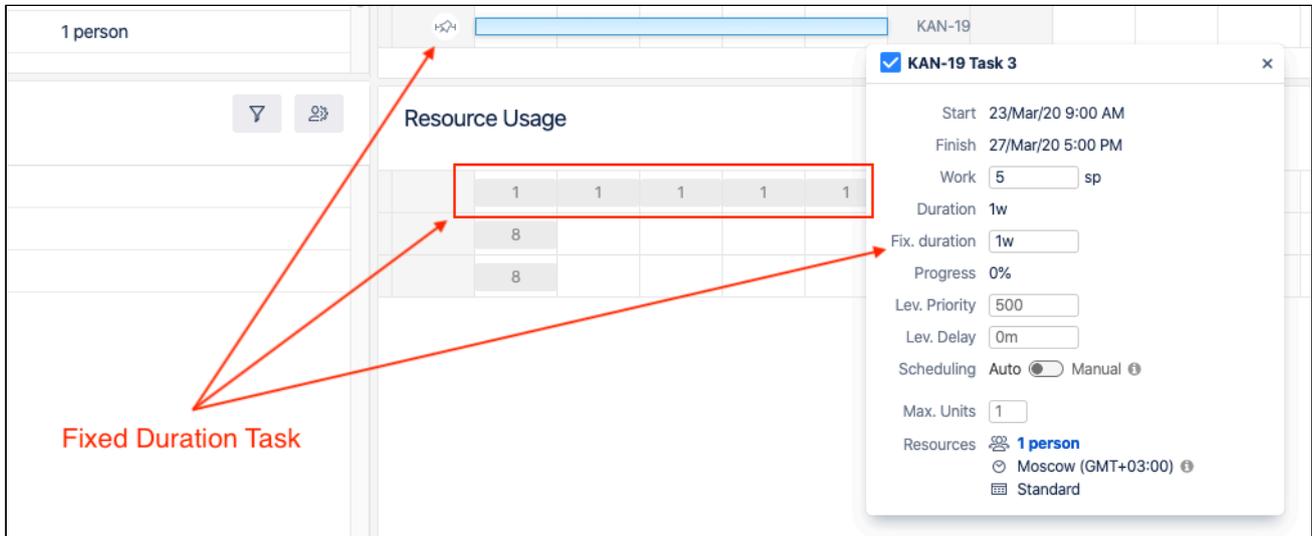
4.3.5.1 Fixed Duration

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 103):

- 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 98).

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.



i 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.

4.3.6 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:

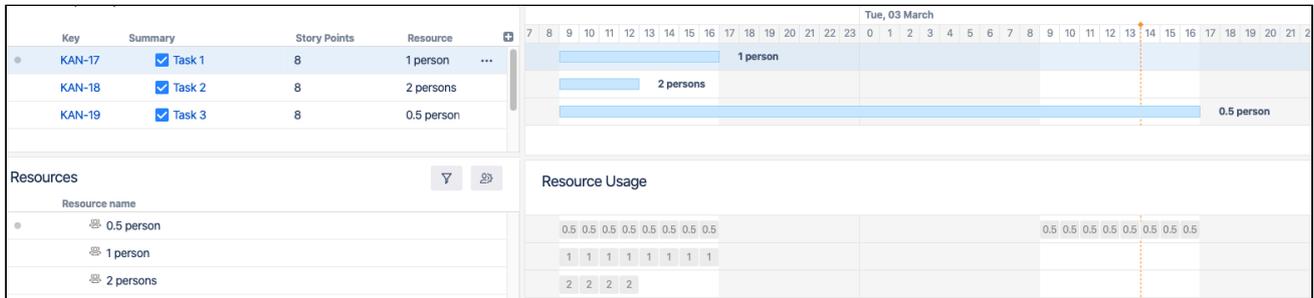
- Capacity
- Availability
- Work Calendar
- Time Zone

i 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 will not be any allocation info shown in the Allocation Chart.

4.3.6.1 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



4.3.6.2 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%.

i 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.

4.3.6.3 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.

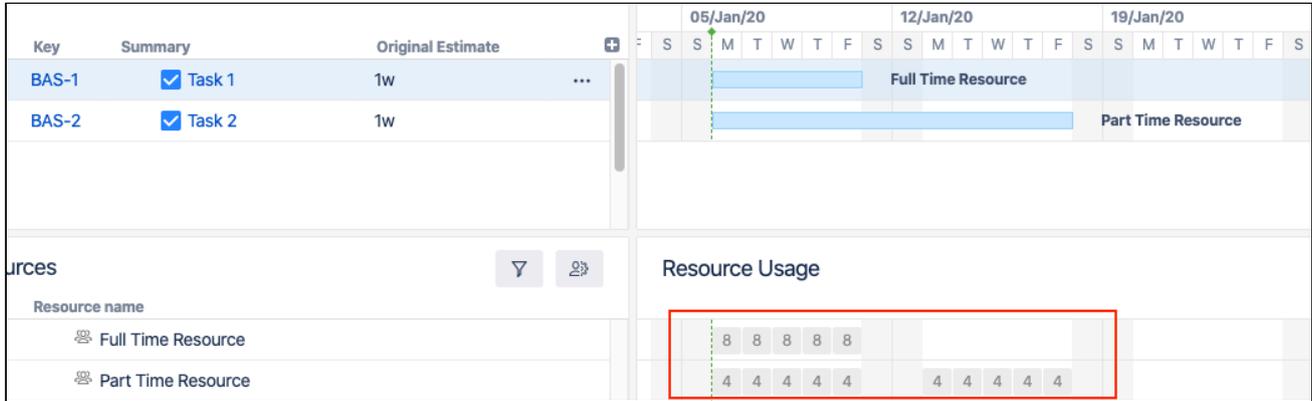
4.3.6.4 Task's Maximum Units

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:

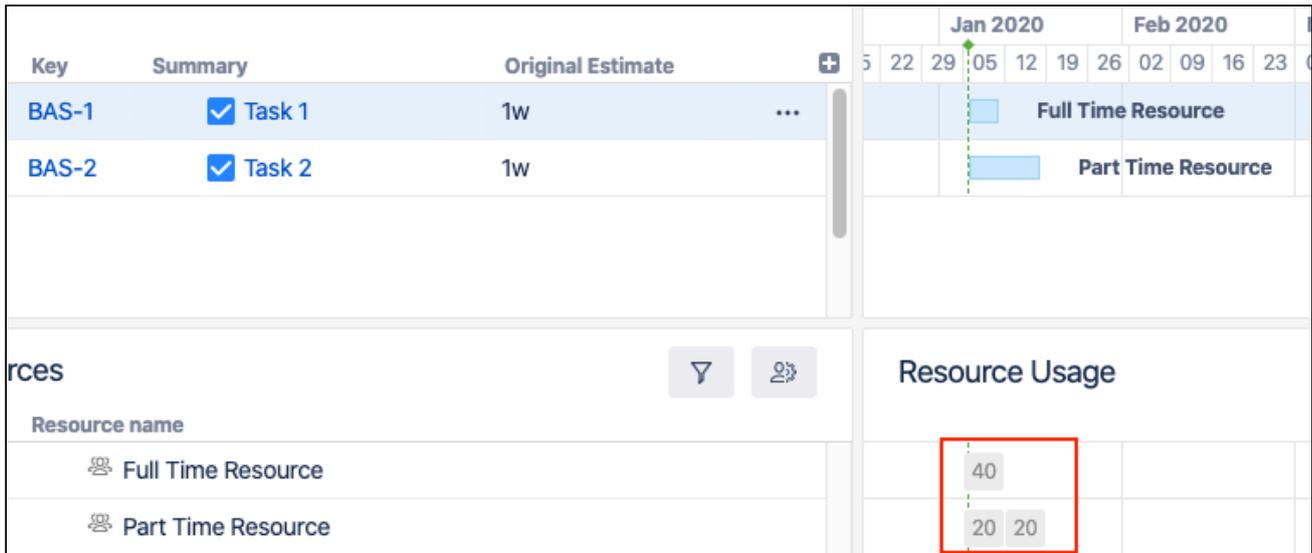
- If you have a resource with a capacity of 2 units and a task's maximum units is set to 1, that means that only 1 unit of the resource will be allocated for the task and the remaining unit will remain available.
- If you have a resource with a capacity of 1 unit and a task's maximum units is set to 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.

4.3.6.5 Resource Usage

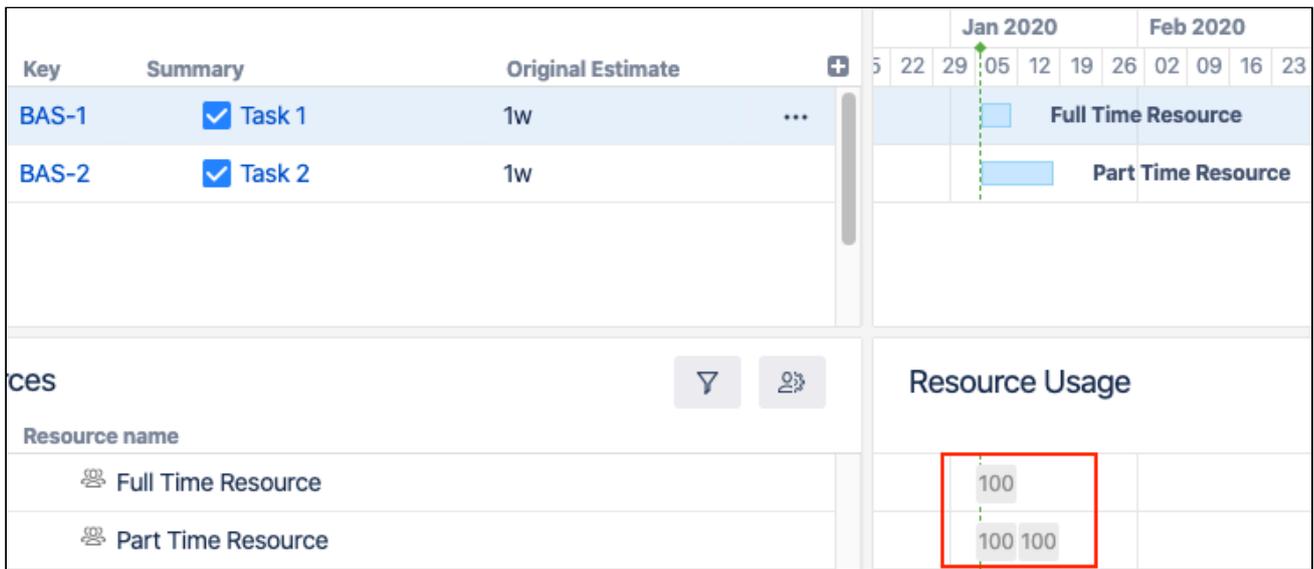
The Resource Usage section of the Gantt chart shows how much of a resource's time is allocated during a set time frame. In the following screenshot, "Full Time Resource" is allocated for 8 hours each day, while "Part Time Resource" is allocated for only 4 hours.



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 262) 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%).

4.3.7 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 130).

4.3.7.1 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.

4.3.7.2 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.

4.3.8 Customizing the Chart with Configuration Slices

The [Gantt configuration](#) (see page 45) 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.

The screenshot displays the 'Default' configuration interface for Gantt charts. On the left, a sidebar contains navigation options: General, Scheduling, Dependencies, Resources, New Slice, and Epics (which is currently selected). The main area is divided into sections for configuration:

- Epics:** A toggle switch is set to 'Active', and there is a 'Delete' button. An 'Add Section' dropdown is visible.
- Issue Types:** A dropdown menu is set to 'Epic x'.
- Appearance:** A 'Color Scheme' section shows a row of colored circles (blue, purple, green, yellow, orange, grey). The purple circle is selected. Below it, a purple bar with a diamond icon is shown.
- Item Behavior:** A 'Treat As' dropdown menu is set to 'Task'. Below it, a note states: 'This setting defines if the issue should be treated as a group, a milestone or a task. Select 'Do Not Show' to completely ignore matched items or 'Default Configuration' to apply behavior from the Default Configuration.'

At the bottom, there are buttons for 'Save as...', 'Save', and 'Cancel'.

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.

i 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 88) for more information.

Learn more about [Slice-based Configurations](#)(see page 78).

4.3.9 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 263) 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 70).

4.3.9.1 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.

4.3.9.2 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.

4.3.10 More reading

To learn more about creating and configuring a Gantt chart, see [Creating a New Gantt Chart](#) (see page 22) and [Gantt Configuration](#)(see page 45).

4.4 FAQ

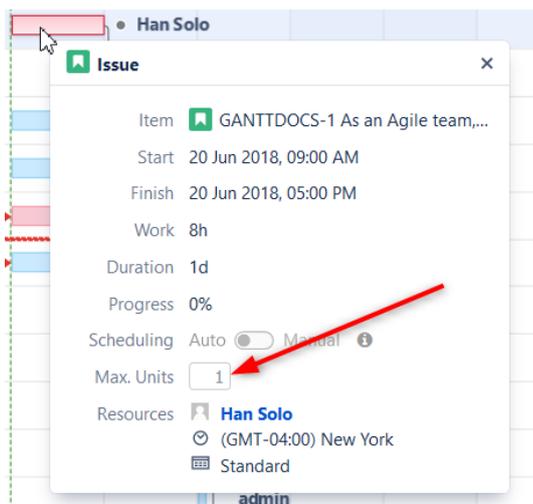
- [Does Structure.Gantt support Jira Data Center?](#)(see page 268)
- [I have increased the capacity \(Units\) of the resource, but the task still takes the same amount of time to complete](#)(see page 268)
- [Does Structure.Gantt support Advanced Roadmaps hierarchy?](#)(see page 268)

4.4.1 Does Structure.Gantt support Jira Data Center?

Both Structure and Structure.Gantt support Jira Data Center.

4.4.2 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 31)
- To learn about setting the default Maximum Units value, see [Gantt Configuration | Resources](#)(see page 67).

4.4.3 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](#)¹⁶⁷.

¹⁶⁷ <https://wiki.almworks.com/display/structure/.Child+Issues+%28Advanced+Roadmaps%29+Extender+v8.1>

4.5 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

4.6 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](#)¹⁶⁸
- [Structure.Gantt for Jira Data Center and Server](#)¹⁶⁹
- For Data Center or Server versions prior to 3.0, please refer to the [Version Index](#)¹⁷⁰.

¹⁶⁸ <https://wiki.almworks.com/documentation/gantt/latest/cloud/structure-gantt-130875852.html>

¹⁶⁹ <https://wiki.almworks.com/documentation/gantt/latest/data-center-and-server/structure-gantt-130875852.html>

¹⁷⁰ <https://wiki.almworks.com/display/docs/Structure.Gantt+Documentation>

5 Administrator's Guide

Resources for Jira admins.

- [System Requirements and Installation](#)(see page 270)
- [Enterprise Deployment](#)(see page 270)
- [Confluence Configuration for Gadgets](#)(see page 272)
- [Resource Leveling Troubleshooting](#)(see page 272)
- [Advanced Configurations for Structure.Gantt](#)(see page 273)
- [Structure.Gantt Troubleshooting](#)(see page 276)
- [Open Source Licenses](#)(see page 277)
- [Backup and Restore](#)(see page 278)
- [Migrate to Cloud](#)(see page 280)

5.1 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](#)¹⁷¹
- For specific version requirements, see our [Release Notes](#)(see page 174)
- Both apps can be installed via the App Manager, or by visiting our [Structure](#)¹⁷² and [Structure.Gantt](#)(see page 317) download pages

5.2 Enterprise Deployment

5.2.1 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.

¹⁷¹ <https://marketplace.atlassian.com/apps/34717/structure-project-management-at-scale?hosting=server&tab=overview>

¹⁷² <https://wiki.almworks.com/display/structure/.Download+v9.3>

5.2.1.1 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.

5.2.1.2 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

5.2.2 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.

5.2.2.1 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.

5.2.3 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 270) in the Structure documentation for more details on how to gradually introduce the app to the system.

5.3 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](#)¹⁷³
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**

5.4 Resource Leveling Troubleshooting

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

Structure Name	Cluster Node Id	Start Time	User	Progress	Actions
5K (1)	single_node	Just now	admin	0%	Stop

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**.

5.4.1 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 273).

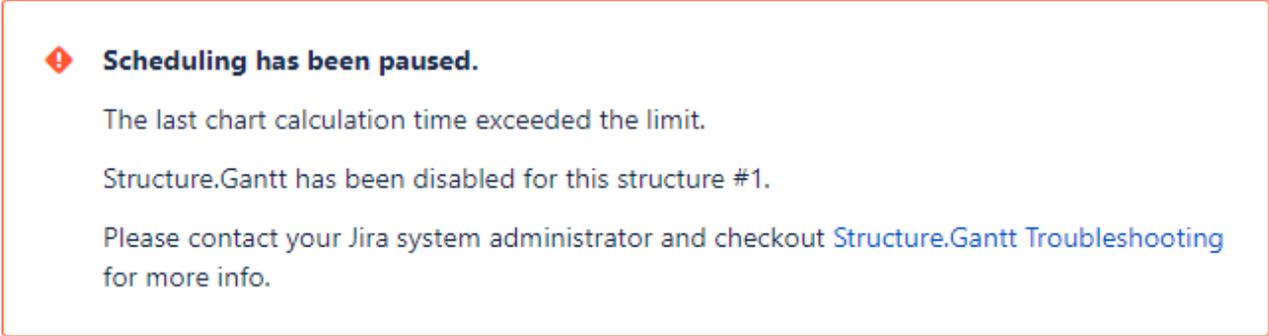
¹⁷³ <https://confluence.atlassian.com/adminjiraserver071/using-applinks-to-link-to-other-applications-802592232.html>

5.5 Advanced Configurations for Structure.Gantt

The following custom configurations can be set using the [Structure Dark Features and Fine Tuning interface](#)¹⁷⁴.

5.5.1 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:



! **Scheduling has been paused.**

The last chart calculation time exceeded the limit.

Structure.Gantt has been disabled for this structure #1.

Please contact your Jira system administrator and checkout [Structure.Gantt Troubleshooting](#) for more info.

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](#)¹⁷⁵ to further investigate the cause. In some rare cases, tuning of these facilities may be needed.

¹⁷⁴ <https://wiki.almworks.com/display/structure/.Advanced+Configuration+and+Dark+Features+v9.2>

¹⁷⁵ <https://support.almworks.com/>

Property	Explanation	Default value
<code>structure.gantt.settings.schedulingTimeLimit</code>	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
<code>structure.gantt.settings.excludedFromScheduling</code>	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 <code>structure.gantt.settings.schedulingTimeLimit</code> .	Empty
<code>structure.gantt.settings.updateTimeLimit</code>	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
<code>structure.gantt.settings.attributesTimeLimit</code>	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
<code>structure.gantt.settings.pollTimeLimit</code>	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

5.5.2 Resource Leveling Configurations

Property	Explanation	Default value
<code>structure.gantt.settings.leveling.requireControl</code>	When false , Edit permissions are required to start or reset Resource Leveling. When true , Control permission is required.	false
<code>structure.gantt.features.resourceLeveling</code>	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
<code>structure.gantt.settings.leveling.taskLimit</code>	Determines the maximum number of tasks that can be leveled by a single Leveling session.	5,000
<code>structure.gantt.settings.leveling.threadPoolSizeFactor</code>	Maximum number of threads allocated for Resource Leveling calculations on every node. The number of threads is determined by the formula <code>`NUMBER_OF_CPU_CORES * threadPoolSizeFactor`</code> 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 <code>`0`</code> will guarantee Resource Leveling will occupy only a single thread on any node.	0.5

5.5.3 Individual features

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

5.6 Structure.Gantt Troubleshooting

Structure.Gantt has system checks that prevent it from locking the Jira instance if 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 calculation exceeds this time. In this case, a message like this will be shown:

 **Scheduling has been paused.**

The last chart calculation time exceeded the limit.

Structure.Gantt has been disabled for this structure #1.

Please contact your Jira system administrator and checkout [Structure.Gantt Troubleshooting](#) for more info.

This situation is treated as abnormal and usually means the Structure.Gantt scheduling algorithm got stuck for some reason, so we highly recommend you to [contact our support](#)¹⁷⁶ for further investigation of the cause. In some rare cases, adjusting these checks may be needed, and there are several properties that are accessible via Structure's [Advanced Configuration](#)¹⁷⁷:

Dark Feature	Meaning	Default value
<code>structure.gantt.settings.schedulingTimeLimit</code>	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 still can be configured to a lower or higher value.)	300 seconds
<code>structure.gantt.settings.excludedFromScheduling</code>	This property holds a comma-separated list with the IDs of the structures that have Gantt chart calculations turned off. Structure.Gantt will automatically exclude a particular structure in case when Gantt scheduling takes more time than is declared by the <code>structure.gantt.settings.schedulingTimeLimit</code> setting.	Empty
<code>structure.gantt.settings.updateTimeLimit</code>	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

¹⁷⁶ <http://www.tempio.io/contact-support>

¹⁷⁷ <https://wiki.almworks.com/display/structure/.Advanced+Configuration+and+Dark+Features+v9.2>

Dark Feature	Meaning	Default value
<code>structure.gantt.settings.attributesTimeLimit</code>	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 for 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
<code>structure.gantt.settings.pollTimeLimit</code>	The timeout for poll to wait for 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

5.7 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) ¹⁷⁸	Apache 2.0 ¹⁷⁹
Apache Commons ¹⁸⁰	Apache 2.0 ¹⁸¹
Apache Derby ¹⁸²	Apache 2.0 ¹⁸³
blob-stream ¹⁸⁴	MIT license ¹⁸⁵
Canvas2SVG ¹⁸⁶	MIT license ¹⁸⁷
CharFunk ¹⁸⁸	MIT license ¹⁸⁹

178 <https://github.com/JetBrains/java-annotations>

179 <https://www.apache.org/licenses/LICENSE-2.0>

180 <https://commons.apache.org/>

181 <https://www.apache.org/licenses/LICENSE-2.0>

182 <https://db.apache.org/derby/>

183 <https://www.apache.org/licenses/LICENSE-2.0>

184 <https://github.com/devongovett/blob-stream>

185 <https://github.com/devongovett/blob-stream/blob/master/LICENSE>

186 <https://gliffy.github.io/canvas2svg/>

187 <https://github.com/gliffy/canvas2svg/blob/master/LICENSE>

188 <https://github.com/joelarson4/CharFunk>

189 <https://github.com/joelarson4/CharFunk/blob/master/LICENSE>

Component / Library	License
ES6-Promise ¹⁹⁰	MIT license ¹⁹¹
Font Awesome ¹⁹²	SIL OFL 1.1, MIT license ¹⁹³
Jackson ¹⁹⁴	Apache 2.0 ¹⁹⁵
jQuery ¹⁹⁶	MIT license ¹⁹⁷
Kotlin ¹⁹⁸	Apache 2.0 ¹⁹⁹
moment-jdateformatparser ²⁰⁰	MIT license ²⁰¹
Moment.js ²⁰²	MIT license ²⁰³
PDFKit ²⁰⁴	MIT license ²⁰⁵
tslib ²⁰⁶	Apache 2.0 ²⁰⁷



Need help or have questions? Contact [Tempo Support](#)²⁰⁸.

5.8 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.

¹⁹⁰ <https://github.com/stefanpenner/es6-promise>

¹⁹¹ <https://github.com/stefanpenner/es6-promise/blob/master/LICENSE>

¹⁹² <https://fontawesome.com/>

¹⁹³ <https://fontawesome.com/v4.7.0/license/>

¹⁹⁴ <https://github.com/FasterXML/jackson>

¹⁹⁵ <https://www.apache.org/licenses/LICENSE-2.0>

¹⁹⁶ <https://jquery.com/>

¹⁹⁷ <https://jquery.org/license/>

¹⁹⁸ <https://kotlinlang.org/>

¹⁹⁹ <https://github.com/JetBrains/kotlin/blob/master/license/LICENSE.txt>

²⁰⁰ <https://github.com/MadMG/moment-jdateformatparser>

²⁰¹ <https://github.com/MadMG/moment-jdateformatparser/blob/master/LICENSE>

²⁰² <https://momentjs.com/>

²⁰³ <https://github.com/moment/moment/blob/develop/LICENSE>

²⁰⁴ <https://pdfkit.org/>

²⁰⁵ <https://github.com/foliojs/pdfkit/blob/master/LICENSE>

²⁰⁶ <https://github.com/microsoft/tslib>

²⁰⁷ <https://github.com/microsoft/tslib/blob/master/LICENSE.txt>

²⁰⁸ https://tempo-io.atlassian.net/servicedesk/customer/portal/6/group/1051/create/45?customfield_12525=12554&customfield_12526=12514

Administration

Applications Projects Issues Manage apps User management Latest upgrade report System **Structure**

STRUCTURE ADMINISTRATION

- Configuration
- Defaults
- Attributes
- Backup Structure**
- Restore Structure
- Migrate Structure
- Maintenance
- License Details
- Support

Structure Backup

This operation backs up structure data (structures, synchronizers) into a zipped XML file. Only relationships between items are backed up. The backup file contains references to items, such as Issue Key and Summary fields for issues, which may be used for reference and for migrating structures to another Jira instance. To back up Jira items (issues, projects etc.), please use the **System | Import and Export | Backup System** menu.

File name

Backup History Include full change history in the backup. If off, only the current state of the structures is backed up.

Backup Extensions Backup Structure.Gantt

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](#)²⁰⁹

5.8.1 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](#)²¹⁰

5.8.1.1 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.

²⁰⁹ <https://wiki.almworks.com/display/structure/Backing+Up+Structure>

²¹⁰ <https://wiki.almworks.com/display/structure/Restoring+Structure+from+Backup>

<input checked="" type="checkbox"/> Restore	34	S1	1	No	No	Yes
<input type="checkbox"/> Overwrite existing						

- Options
- Restore structure permissions
 - Restore synchronizers
 - Restore manual adjustments
 - Restore structure history
 - Restore user favorites
 - Restore views
 - Restore view settings for structures
 - Restore structure properties
 - Restore structure item properties
 - Restore configuration
 - Restore dark features
 - Restore Structure.Gantt app data
- Restore Selected Structures [Cancel](#)

 Sandbox history is not restored with a migration.

Learn more: [Migrating Structures](#)²¹¹

5.9 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](#)²¹² and be sure to select "Migrate Structure.Gantt" in the configuration options.

²¹¹ <https://wiki.almworks.com/display/structure/.Migrating+Structures+v9.0>

²¹² <https://wiki.almworks.com/display/strcloud/Migrating+to+Cloud+Using+the+Jira+Cloud+Migration+Assistant>

STRUCTURE ADMINISTRATION

- Configuration
- Defaults
- Attributes
- Backup Structure
- Restore Structure
- Migrate Structure
- Maintenance
- License Details
- Support

STRUCTURE.GANTT

- Work Calendars
- Resource Leveling
- Structure.Gantt License

- Setup Guide
- Migrate Structure to Cloud

Migration configurations / **New configuration**

 Configuration name must match the migration name from the Jira Cloud Migration Assistant.

Name*

Status **DRAFT**

The configuration is being created. When it's all set, click "Save and Make Ready for Migration."

Migrate Structure.Gantt

 Please note:

- All the projects in the selected structures must be migrated in the corresponding JCMA migration, issues to appear.
- Some automations, including Effectors, are not yet supported in Structure Cloud.
- Memos will be replaced with folders.
- Only custom views associated with the selected structures will be migrated.

[Learn more](#)

Structures

Migrate all structures and views

 The Jira Cloud Migration Assistant only support Structure.Gantt 3.5 or later. For earlier versions, see [Manually Migrating to Cloud](#)²¹³.

For best results, we recommend updating to the latest versions of Structure and Structure.Gantt.

5.9.1 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.

5.9.2 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 Between Structure.Gantt for Cloud and Data Center](#)(see page 255).

²¹³ <https://wiki.almworks.com/display/structure/.Manually+Migrating+to+Cloud+v9.2>

6 Structure.Gantt Developer's Guide

6.1 Structure.Gantt Developer Documentation

Structure.Gantt for Developers

The Structure.Gantt app provides APIs that allow you to access Gantt Charts, Baselines, and Resource Leveling functions. Here are the typical integration use cases:

Custom Development

You customize Jira for your customer or employer, and you need to integrate Structure.Gantt with some other in-house system – see our [integrating plugins](#)(see page 283) and [Java API reference](#)(see page 287).

Remote Access

You need to get information about Gantt charts, create new Baselines, or run Resource Leveling remotely from some automated scripts or a client application – read about [Structure.Gantt REST API](#)(see page 287).

6.1.1 [Structure.Gantt API Overview](#)

6.1.2 [Setting Up the Integration with Structure.Gantt](#)

6.1.3 [Structure.Gantt Java API Reference](#)

6.1.4 [Structure.Gantt REST API Reference](#)

6.1.5 [Java API Usage Examples](#)

6.2 Structure.Gantt API Overview

There are three parts of Structure.Gantt functionality that are currently available through the API for developers: Gantt Chart, Baseline, and Resource Leveling APIs. Below, you will find brief descriptions of each API, along with links to their detailed documentation.

6.2.1 Gantt Chart API

The **Gantt Chart API** manages the creation, modification, and retrieval of Gantt charts. The Gantt chart is a central concept in Structure.Gantt. [Learn more about Gantt Charts](#)(see page 282).

- **Key Features:**
 - Create new Gantt charts.
 - Update existing Gantt charts.
 - Fetch Gantt charts based on specific criteria.

The Gantt Chart API is accessible via [Java API](#)(see page 287) (see [GanttChartManager](#)²¹⁴) and [REST API](#)(see page 288).

6.2.2 Baseline API

The **Baseline API** manages baselines within Gantt charts. [Learn more about the Baselines](#)(see page 136).

- **Key Features:**
 - Create baselines for existing Gantt charts.
 - Update and delete baselines.
 - Retrieve baselines.

The Baseline API is accessible via [Java API](#)(see page 287) (see [BaselineManager](#)²¹⁵) and [REST API](#)(see page 295).

6.2.3 Resource Leveling API

The **Resource Leveling API** addresses resource over-allocations within Gantt charts by adding additional delays to tasks based on resource availability, ensuring resources are not over-committed.

[Learn more about the Resource Leveling](#)²¹⁶.

- **Key Features:**
 - Initiate the resource leveling processes for specified users, teams, and date ranges.
 - Stop existing processes.
 - Get information about currently running processes.

The Resource Leveling API is accessible via [Java API](#)(see page 287) (see [ResourceLevelingManager](#)²¹⁷) and [REST API](#)(see page 304).

6.3 Setting Up the Integration with Structure.Gantt

To start using Structure.Gantt in your app:

6.3.1 1. Add dependency to your pom.xml

Figure out the [Version of the API](#)(see page 287) that you need – it may depend on your Jira and Structure.Gantt version.

To use API classes, add the following dependency:

214 <https://almworks.com/structure/javadoc/gantt/latest/com/almworks/structure/gantt/api/gantt/GanttChartManager.html>

215 <https://almworks.com/structure/javadoc/gantt/latest/com/almworks/structure/gantt/api/baseline/BaselineManager.html>

216 <https://wiki.almworks.com/display/ganttmaster/Resource+Leveling>

217 <https://almworks.com/structure/javadoc/gantt/latest/com/almworks/structure/gantt/api/leveling/ResourceLevelingManager.html>

```
<dependency>
  <groupId>com.almworks.jira.structure</groupId>
  <artifactId>gant-api</artifactId>
  <version>1.0.0</version>
  <scope>provided</scope>
</dependency>
```

i Structure.Gantt API has dependencies on the Annotations library from JetBrains, providing `@Nullable` and `@NotNull` annotations, used throughout the API.

You don't need to explicitly add dependencies on these libraries.

6.3.2 2. Import Structure.Gantt services

In your `atlassian-plugin.xml`, use `<component-import>` module to import necessary Structure.Gantt services.

```
<!-- Import BaselineManager if you need to manage baselines. -->
<component-import key="gant-baseline-manager" interface="com.almworks.structure.gantt.api.baseline.BaselineManager"/>

<!-- Import GanttChartManager if you're working with Gantt charts to create, search, update, and delete them. -->
<component-import key="gant-chart-manager" interface="com.almworks.structure.gantt.api.gantt.GanttChartManager"/>

<!-- Import ResourceLevelingManager if you require functionality related to resources leveling within Gantt charts, such as resolving over-allocations. -->
<component-import key="gant-resource-leveling-manager" interface="com.almworks.structure.gantt.api.leveling.ResourceLevelingManager"/>
```

6.3.3 3. Have Structure.Gantt API services injected into your component

```
public class TestComponent {
    private final BaselineManager myBaselineManager;
    private final GanttChartManager myGanttChartManager;

    public TestComponent(BaselineManager baselineManager, GanttChartManager
ganttChartManager) {
        myBaselineManager = baselineManager;
        myGanttChartManager = ganttChartManager;
    }

    ...
}
```

That's it! Now you can work with Structure.Gantt API.

6.3.4 Controlling Compatibility

You can declare dependency on the specific range of the API versions via OSGi bundle instructions added to your `pom.xml` or `atlassian-plugin.xml`. Figure out the compatible OSGi versions range from the [API versions](#)(see page 287) table and modify your `pom.xml` to contain the following:

```
<plugin>
  <groupId>com.atlassian.maven.plugins</groupId>
  <artifactId>maven-jira-plugin</artifactId>
  ...
  <configuration>
    <instructions>
      <Import-Package>
        com.almworks.structure.gantt.api*;version="[1,2)",
        org.jetbrains.annotations;version="0"
      </Import-Package>
    </instructions>
  </configuration>
</plugin>
```

6.3.5 Declare Optional Dependency

If you are integrating your app with Structure.Gantt, or when you generally write code that uses Structure.Gantt API but also should work when Structure.Gantt is not present, you need to declare that dependencies are optional and isolate dependencies in the code.

Since your app must first be loaded as an OSGi bundle, it should declare dependencies from the Structure API packages as optional.

Modify `<Import-Package>` declaration in your `pom.xml` or `atlassian-plugin.xml` and add the `resolution:=optional` classifier.

```
<Import-Package>
  com.almworks.jira.structure*;version="[16,17)";resolution:=optional,
  com.almworks.integers*;version="0";resolution:=optional,
  org.jetbrains.annotations;version="0";resolution:=optional
</Import-Package>
```

So once you have declared the optional resolution of the Structure.Gantt API classes, your bundle will load - but if your code tries to access a class from the Structure.Gantt API, you'll get a `NoClassDefFoundError`. To avoid this, you need to isolate the dependency on Structure.Gantt API classes - typically in some wrapper classes.

Here's a sample wrapper for the Structure.Gantt API that provides `GanttChartManager` wrapper (whatever it does) when Structure.Gantt is available and `null` otherwise.

```
public class GanttChartAccessor {
  public static boolean isStructureGanttPresent() {
    if (!
ComponentAccessor.getPluginAccessor().isPluginEnabled("com.almworks.structure.gantt"
)) {
      return false;
    }
    try {
      Class.forName("com.almworks.structure.gantt.api.gantt.GanttChartManager");
    } catch (Exception e) {
      return false;
    }
    return true;
  }

  public static GanttChartManager getGanttChartManager() {
    if (!isStructureGanttPresent()) return null;
    GanttChartManager ganttChartManager;
    try {
      ganttChartManager =
ComponentAccessor.getOSGiComponentInstanceOfType(GanttChartManager.class);
      return ganttChartManager;
    } catch (Exception e) {
      return null;
    }
  }
}
```

6.4 Structure.Gantt Java API Reference

i Structure.Gantt API is a work in progress. You will find that some of the packages are documented less than others, and some are not documented yet.

We're continually working on API improvements and documentation and will make the javadocs and other parts of the documentation more complete with future releases.

Structure.Gantt API Reference for the latest version: <https://almworks.com/structure/javadoc/gantt/latest>

You can download javadocs from the Maven repositories into your IDE.

To learn more, choose the correct API artifact, and download Javadoc JARs, see [Structure.Gantt API Versions](#)(see [page 287](#)).

6.4.1 Structure.Gantt API Versions

6.4.1.1 Current Versions

Version	Supported Jira versions	Supported Gantt versions	OSGI Import Version	Release date
1.0.0 Javadocs ²¹⁸	Jira 8.20+	4.1.0+	"[1,2]"	2024-02-02

6.5 Structure.Gantt REST API Reference

i Structure.Gantt REST API is under development. The functionality available through REST is sometimes not complete, but it allows you to work with the Gantt charts, Baselines, and Resource Leveling.

6.5.1 General Notes

6.5.1.1 REST Resource Addresses

Structure.Gantt REST API resources have the URL prefix

```
${BASEURL}/rest/structure-gantt/public/${VERSION}/{NAME}
```

²¹⁸ <https://almworks.com/structure/javadoc/gantt/1.0.0/>

where BASEURL is the base Jira address (<http://localhost:2990/jira> being the standard base URL for development environments), VERSION is the version of the API (currently only version 1.0 is available), and NAME is the name of the resource.

6.5.1.2 Authentication

Authentication is done via the standard Jira authentication engine and supported by cookies. When accessing REST API from a remote application, you may need to set up the session first by calling the Jira authentication REST resource. (You don't need to do that if you access Structure.Gantt REST API from a JavaScript on a page from the same Jira instance.)

Most read operations are available to non-authenticated access (subject to permission checks for the anonymous user). Most mutation operations are available to authenticated users only.

6.5.2 REST Resources

6.5.2.1 Gantt Chart Resource

6.5.2.2 Baseline Resource

6.5.2.3 Resource Leveling Resource

6.5.3 Gantt Chart Resource

- 6.5.3.1
- [Gantt Chart Resource endpoints](#) [Creates a new Gantt Chart](#) [Get Gantt chart by ID](#) [Search Gantt charts](#) [Update a Gantt chart](#) [Remove Gantt chart](#) [Gantt Chart Resource endpoints](#)
 - [Creates a new Gantt Chart](#)
 - [Get Gantt chart by ID](#)
 - [Search Gantt charts](#)
 - [Update a Gantt chart](#)
 - [Remove Gantt chart](#)

Gantt Chart Resource endpoints

Creates a new Gantt Chart

Creates a new Gantt Chart for the specified structure.

URL: /gantt

Method: POST

Body Parameters:

Parameter	Type	Required	Description
structureId	Number	Yes	The unique ID of the structure
startDate	String	Yes	The start date for the Gantt chart
name	String	No	The name of the newly created Gantt chart. This parameter is optional and will have null value by default.
configId	Number	No	The ID of the configuration that will be used for the newly created Gantt chart. This should be used if you wish to specify the configuration by its unique identifier. This parameter cannot be used together with configName.
configName	String	No	The name of the configuration that will be used for the newly created Gantt chart. Use this if you prefer to specify the configuration by its name. This parameter cannot be used together with configId.

Examples:

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/" \
-H "Content-Type: application/json" \
-d '{
  "structureId": 12,
  "startDate": "2023-12-20",
  "name": "New Gantt",
  "configId": "1"
}' \
--basic --user user:password
```

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/" \
-H "Content-Type: application/json" \
-d '{
  "structureId": 12,
  "startDate": "2023-12-20",
  "name": "New Gantt",
  "configName": "Default"
}' \
--basic --user user:password
```

Responses

STATUS 200 *application/json* - returns baseline object.

Example

```
{
  "id": 116,
  "structureId": 12,
  "startDate": "2023-12-20",
  "configId": 1,
  "configName": "Default",
  "name": "New Gantt"
}
```

STATUS 404 *application/json* - error message if the structure doesn't exist or the user doesn't have permission to create a Gantt chart for the specified structure.

```
{
  "message": "Structure #12 does not exist or you don't have permission to edit it"
}
```

STATUS 400 *application/json* - error message if a Gantt chart already exists for the specified structure.

```
{
  "message": "Unable to create second main gantt"
}
```

STATUS 400 *application/json* - error message if both parameters configId and configName were passed to the request.

```
{
  "message": "Specify either config name or config id, not both."
}
```

Get Gantt chart by ID

Retrieves information about the Gantt chart by its id.

URL: /gantt/{ganttId}

Method: GET

URL Parameters:

Parameter	Type	Description
ganttId	Number	The unique ID of the Gantt chart

Example:

```
curl -X GET --location "http://example.com/rest/structure-gantt/public/1.0/gantt/116" \
  \
  -H "Content-Type: application/json" \
  --basic --user user:password
```

Responses

STATUS 200 *application/json* - returns Gantt chart object.

Example

```
{
  "id": 116,
  "structureId": 12,
  "startDate": "2023-12-20",
  "configId": 1,
  "configName": "Default",
  "name": "New Gantt"
}
```

STATUS 404 *application/json* - error message if a Gantt chart with the specified ID doesn't exist or the user doesn't have permission to view this Gantt chart.

```
{
  "message": "Gantt chart #111 does not exist or you don't have permission to view it"
}
```

Search Gantt charts

Returns Gantt charts based on the provided criteria. Without any input, it returns all available Gantt charts for the user.

If a structure ID is specified, returns the Gantt chart associated with that structure (name parameter will be ignored),

while providing a name will filter the Gantt charts to those matching the name.

URL: /gantt/

Method: GET

URL Parameters:

Parameter	Type	Required	Description
structureId	Number	No	The unique ID of the structure
name	String	No	Name of the Gantt chart to search

Examples:

```
# Search by structureId
curl -X GET --location "http://example.com/rest/structure-gantt/public/1.0/gantt?structureId=12" \
  -H "Content-Type: application/json" \
  --basic --user user:password

# Search by name
curl -X GET --location "http://example.com/rest/structure-gantt/public/1.0/gantt?name=New%20Gantt%20name" \
  -H "Content-Type: application/json" \
  --basic --user user:password

# Get all available Gantt Charts
curl -X GET --location "http://example.com/rest/structure-gantt/public/1.0/gantt" \
  -H "Content-Type: application/json" \
  --basic --user user:password
```

Responses

STATUS 200 *application/json* - returns Gantt chart list matching the criteria.

Example

```
[
  {
    "id": 71,
    "structureId": 10,
    "startDate": "2024-01-04",
    "configId": 1,
    "configName": "Default"
  },
  {
    "id": 118,
    "structureId": 12,
    "startDate": "2024-02-02",
    "configId": 1,
    "configName": "Default",
    "name": "New Gantt name"
  }
]
```

Update a Gantt chart

Updates a Gantt chart.

URL: /gantt/{ganttId}

Method: PUT**URL Parameters:**

Parameter	Type	Description
ganttId	Number	The unique ID of the Gantt chart to be updated

Body Parameters:

Parameter	Type	Required	Description
startDate	String	No	The new start date for the Gantt chart
name	String	No	The new name for the Gantt chart.
configId	Number	No	The ID of the configuration that will be used after updating the Gantt chart. This should be used if you wish to specify the configuration by its unique identifier. This parameter cannot be used together with configName.
configName	String	No	The name of the configuration that will be used after updating the Gantt chart. Use this if you prefer to specify the configuration by its name. This parameter cannot be used together with configId.

Examples:

```
curl -X PUT --location "http://example.com/rest/structure-gantt/public/1.0/gantt/38" \
  -H "Content-Type: application/json" \
  -d '{
    "startDate": "2023-12-15",
    "name": "New name for Gantt Chart",
    "configId": 1
  }' \
  --basic --user user:password
```

```
curl -X PUT --location "http://example.com/rest/structure-gantt/public/1.0/gantt/38" \
  -H "Content-Type: application/json" \
  -d '{
    "startDate": "2023-12-15",
    "name": "New name for Gantt Chart",
    "configName": "Default"
  }' \
  --basic --user user:password
```

Responses

STATUS 200 *application/json* - returns the updated Gantt chart.

Example

```
{
  "id": 38,
  "structureId": 7,
  "startDate": "2023-12-15",
  "configId": 1,
  "configName": "Default",
  "name": "New name for Gantt Chart"
}
```

STATUS 400 *application/json* - error message if both parameters configId and configName were passed to the request.

```
{
  "message": "Specify either config name or config id, not both."
}
```

STATUS 404 *application/json* - error message if a Gantt chart with the specified ID doesn't exist or if the user doesn't have permission to edit it.

```
{
  "message": "Gantt chart #111 does not exist or you don't have permission to view it"
}
```

Remove Gantt chart

Remove Gantt chart with specified id.

URL: /gantt/{ganttId}

Method: DELETE

URL Parameters:

Parameter	Type	Description
ganttId	Number	The unique ID of the Gantt chart to be deleted

Example:

```
curl -X DELETE --location "http://example.com/rest/structure-gantt/public/1.0/gantt/116" \
  -H "Content-Type: application/json" \
  --basic --user user:password
```

Responses

STATUS 202 *application/json* - response is empty if the Gantt chart was deleted successfully.

Example

STATUS 404 *application/json* - error message if a Gantt chart with the specified ID doesn't exist or the user doesn't have permission to delete the Gantt chart.

```
{
  "message": "Gantt chart #111 does not exist or you don't have permission to view it"
}
```

6.5.4 Baseline Resource

- 6.5.4.1
- [Shared objects Baseline Resource endpoints](#) Create a baseline for the specified Gantt chart Get baseline by ID Get baselines for a specified Gantt chart Update baseline Remove baseline Shared objects
 - [Baseline Resource endpoints](#)
 - [Create a baseline for the specified Gantt chart](#)
 - [Get baseline by ID](#)
 - [Get baselines for a specified Gantt chart](#)
 - [Update baseline](#)
 - [Remove baseline](#)

Shared objects

Baseline parameters

Represents baseline parameters. The list may be extended in the future.

Fields:

Name	Type	Required	Description	Compatibility Baseline Types
startDateSpec	String	Yes	<p>The attribute specification of the custom field that contains the start dates that should be used to schedule tasks for the baseline.</p> <p>For additional details on the attribute specification, please refer to the structure documentation²¹⁹.</p>	Jira - Baseline
finishDateSpec	String	Yes	<p>The attribute specification of the custom field that contains the finish date that should be used to schedule tasks for the baseline.</p> <p>For additional details on the attribute specification, please refer to the structure documentation²²⁰.</p>	Jira - Baseline
singleStartAsMilestone	String	No, false by default	<p>If this option is enabled, tasks that only have a value in the Start Date field will appear as milestones in the baseline.</p>	Jira - Baseline

²¹⁹ <https://almworks.com/structure/javadoc/latest/com/almworks/jira/structure/api/attribute/AttributeSpec.html>

²²⁰ <https://almworks.com/structure/javadoc/latest/com/almworks/jira/structure/api/attribute/AttributeSpec.html>

Name	Type	Required	Description	Compatible baseline types
singleFinishAsMilestone	String	No, false by default	If this option is enabled, tasks that only have a value in the Finish Date field will appear as milestones in the baseline.	Jira - based

Example:

```

Example of Resource

{
  "startDateSpec": "{\\"id\\":\\"created\\",\\"format\\":\\"time\\"}",
  "finishDateSpec": "{\\"id\\":\\"resolved\\",\\"format\\":\\"time\\"}",
  "singleStartAsMilestone": true,
  "singleFinishAsMilestone": false
}
    
```

6.5.4.2 Baseline Resource endpoints

Create a baseline for the specified Gantt chart

Create a baseline for the specified Gantt chart.

URL: /gantt/{ganttId}/baseline/

Method: POST

Body Parameters:

Parameter	Type	Description
name	String	Name of the new baseline.
type	String	Type of baseline, either "gantt" or "jira-based". See Baselines (see page 136) page for more details.
params	Baseline parameters object	Object with properties of the new baseline. See description of Baseline parameters object above.

URL Parameters:

Parameter	Type	Description
ganttid	Number	ID of the Gantt chart for which the baseline will be created.

Examples:

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/114/baseline/" \
  -H "Content-Type: application/json" \
  -d '{
    "name": "New Jira-based baseline",
    "type": "jira-based",
    "params": {
      "startDateSpec": "{\\"id\\":\\"created\\",\\"format\\":\\"time\\"}",
      "finishDateSpec": "{\\"id\\":\\"resolved\\",\\"format\\":\\"time\\"}",
      "singleStartAsMilestone": true,
      "singleFinishAsMilestone": false
    }
  }' \
  --basic --user user:password
```

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/114/baseline/" \
  -H "Content-Type: application/json" \
  -d '{
    "name": "New baseline Gantt",
    "type": "gantt"
  }' \
  --basic --user user:password
```

Responses

STATUS 200 *application/json* - returns created baseline object.

Example

```
{
  "id": 62,
  "ganttId": 114,
  "name": "New Jira-based baseline",
  "createdAt": "2024-02-01T10:09:48.292Z",
  "creator": "JIRAUSER10000",
  "type": "jira-based",
  "params": {
    "startDateSpec": "{\\"id\\":\\"created\\",\\"format\\":\\"time\\"}",
    "finishDateSpec": "{\\"id\\":\\"resolved\\",\\"format\\":\\"time\\"}",
    "singleStartAsMilestone": true,
    "singleFinishAsMilestone": false
  }
}
```

STATUS 404 *application/json* - error message if user doesn't have permission to create baselines for the specified Gantt chart.

```
{
  "message": "Gantt #114 does not exist or you don't have permission to edit it"
}
```

STATUS 400 *application/json* - error message if startDateSpec or finishDateSpec parameters are not passed for a Jira-based baseline.

```
{
  "message": "Attribute specification for start date or finish date is not provided"
}
```

Get baseline by ID

Retrieves the baseline by its id.

URL: /baseline/{baselineId}

Method: GET

URL Parameters:

Parameter	Type	Description
baselineId	Long	The unique ID of the baseline.

Example:

```
curl -X GET --location "http://example.com/rest/structure-gantt/public/1.0/baseline/42" \
  -H "Content-Type: application/json" \
  --basic --user user:password
```

Responses

STATUS 200 *application/json* - returns baseline object.

Example

```
{
  "id": 42,
  "ganttId": 50,
  "name": "New baseline",
  "createdAt": "2024-01-30T09:49:09.047Z",
  "creator": "JIRAUSER10000",
  "type": "gantt",
  "params": {}
}
```

STATUS 404 *application/json* - error message if the baseline wasn't found or the user doesn't have permission to view it.

```
{
  "message": "Baseline #60 does not exist or you don't have permission to view it"
}
```

Get baselines for a specified Gantt chart

Retrieve baselines for a specified Gantt chart.

URL: /gantt/{ganttId}/baseline/

Method: GET

URL Parameters:

Parameter	Type	Description
ganttId	Long	The unique ID of the Gantt chart.

Example:

```
curl -X GET --location "http://example.com/rest/structure-gantt/public/1.0/gantt/42/baseline/" \
  -H "Content-Type: application/json" \
  --basic --user user:password
```

Responses

STATUS 200 *application/json* - returns a list of baselines for the specified Gantt chart.

Example

```
[
  {
    "id": 58,
    "ganttId": 114,
    "name": "New Jira-based baseline",
    "createdAt": "2024-02-02T15:29:04.922Z",
    "creator": "JIRAUSER10000",
    "type": "jira-based",
    "params": {
      "startDateSpec": "{\\"id\\":\\"created\\",\\"format\\":\\"time\\"}",
      "finishDateSpec": "{\\"id\\":\\"resolved\\",\\"format\\":\\"time\\"}",
      "singleStartAsMilestone": true,
      "singleFinishAsMilestone": false
    }
  },
  {
    "id": 59,
    "ganttId": 114,
    "name": "New baseline Gantt",
    "createdAt": "2024-02-02T15:29:04.922Z",
    "creator": "JIRAUSER10000",
    "type": "gantt",
    "params": {}
  }
]
```

STATUS 404 *application/json* - error message if the Gantt chart wasn't found or the user doesn't have permission to view it.

```
{
  "message": "Gantt #42 does not exist or you don't have permission to view it"
}
```

Update baseline

Update the baseline.

URL: /baseline/{baselineId}

Method: PUT

URL Parameters:

Parameter	Type	Description
baselineId	Number	ID of the baseline to be updated.

Body Parameters:

Parameter	Type	Required	Description
name	String	No	New name for the baseline.
params	Baseline parameters object	No	Object with parameters of the baseline, with each parameter being optional. Only the parameters provided will be updated. See description of Baseline parameters object above.

Example:

```
curl -X PUT --location "http://example.com/rest/structure-gantt/public/1.0/baseline/60" \
  -H "Content-Type: application/json" \
  -d '{
    "name": "New baseline name",
    "params": {
      "singleFinishAsMilestone": true
    }
  }' \
  --basic --user user:password
```

Responses

STATUS 200 *application/json* - returns updated baseline object.

Example

```
{
  "id": 62,
  "ganttId": 114,
  "name": "New baseline name",
  "createdAt": "2024-02-01T10:09:48.292Z",
  "creator": "JIRAUSER10000",
  "type": "jira-based",
  "params": {
    "startDateSpec": "{\\"id\\":\\"created\\",\\"format\\":\\"time\\"}",
    "finishDateSpec": "{\\"id\\":\\"resolved\\",\\"format\\":\\"time\\"}",
    "singleStartAsMilestone": true,
    "singleFinishAsMilestone": true
  }
}
```

STATUS 404 *application/json* - error message if the baseline doesn't exist or the user doesn't have permission to update baselines for the specified Gantt chart.

```
{
  "message": "Baseline #60 does not exist or you don't have permission to edit it"
}
```

Remove baseline

Remove baseline by ID.

URL: /baseline/{baselineId}

Method: DELETE

URL Parameters:

Parameter	Type	Description
baselineId	Number	The unique ID of the baseline.

Example:

```
curl -X DELETE --location "http://example.com/rest/structure-gantt/public/1.0/baseline/42" -H "Content-Type: application/json" --basic --user user:password
```

Success Response:

STATUS 202 *application/json* - empty response if baseline was removed successfully.

Error Responses:

STATUS 404 `application/json` - error message if the baseline doesn't exist or the user doesn't have permission to delete the baseline.

```
{
  "message": "Baseline #60 does not exist or you don't have permission to edit it"
}
```

6.5.5 Resource Leveling Resource

- 6.5.5.1
 - [Shared objects Resource Leveling endpoints](#) [Initiate a resource leveling process](#) [Get information about the running resource leveling process](#) [Clear existing leveling delays](#) [Stop resource leveling process for the specified Gantt Chart](#) [Shared objects](#)
 - [Resource Leveling endpoints](#)
 - [Initiate a resource leveling process](#)
 - [Get information about the running resource leveling process](#)
 - [Clear existing leveling delays](#)
 - [Stop resource leveling process for the specified Gantt Chart](#)

Shared objects

Resource

Represents one resource object for which leveling will be applied.

Fields:

Name	Type	Required	Description
key	String	Yes	<p>The identifier for the resource, which varies based on the type:</p> <ul style="list-style-type: none"> • For "user" type, this should be the user key (e.g., "JIRAUSER10000"). • For "team" type, this is the text name representation of the team. <p>You can find more details in Resources Configuration(see page 67).</p>

Name	Type	Required	Description
type	String	Yes	Specifies the type of the resource, with possible values: <ul style="list-style-type: none"> • user: Indicates an individual user. • team: Represents a team resource. You can find more details in Resources Configuration(see page 67).

Example:

Example of Resource
<pre>{ "key": "JIRAUSER10000", "type": "user" }</pre>

Options

Represents Resource Leveling process options. The list of available options may be extended in the future.

Fields:

Name	Type	Required	Description
levelManual	String	No, false by default	By default, manually scheduled tasks will not be adjusted by resource leveling. To include them, enable this option. Acceptable values: "true" or "false"
levelResolved	String	No, false by default	If enabled, resolved tasks may be moved if they are part of resource overallocation. Acceptable values: "true" or "false"
levelInProgress	String	No, false by default	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 enabled, these tasks may be moved by leveling if their original estimate results in resource overallocation. Acceptable values: "true" or "false"

Name	Type	Required	Description
clearLevelingDelay	String	No, false by default	Enabling this option clears any existing delays, allowing Structure.Gantt to consider all tasks from their original positions when applying the leveling. Acceptable values: "true" or "false"

Example:

Example of Resource
<pre>{ "levelResolved": "true", "levelInProgress": "false", "levelManual": "false", "clearLevelingDelay": "true" }</pre>

6.5.5.2 Resource Leveling endpoints

Initiate a resource leveling process

Initiates a resource leveling process, which applies the results to the tasks associated with the resources. This method only starts the leveling process and returns information about the initiated process immediately, without waiting for the process to complete.

URL: /gantt/{ganttId}/leveling/

Method: POST

URL Parameters:

Parameter	Type	Description
ganttId	Number	ID of the Gantt chart for which the resource leveling process will be started.

Body Parameters:

Parameter	Type	Required	Description
startDay	String	No	<p>Only overallocations that occur after the chosen date will be resolved.</p> <p>Possible values:</p> <ul style="list-style-type: none"> • Date in the default ISO format YYYY-MM-DD, e.g., 2024-01-01 • "projectStart" - to apply Resource Leveling to all overallocations that occur after the project's start date. This is the default value which will be used if startDay is not specified. • "today" - to apply Resource Leveling to all overallocations that occur after the current date.
resources	Array of Resource objects	No	<p>List of resources for which resource leveling will be applied. See the description of <i>Resource</i> object above.</p> <p>If this parameter is not specified, leveling will be applied to all resources in this Gantt chart.</p>
options	Options object	No	See the description of <i>Options</i> object above.

Examples:

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/117/leveling/start" \
  -H "Content-Type: application/json" \
  -d '{
    "startDay": "projectStart",
    "resources": [
      {
        "key": "JIRAUSER10000",
        "type": "user"
      }
    ],
    "options": {
      "levelResolved": "true",
      "levelInProgress": "false",
      "levelManual": "false",
      "clearLevelingDelay": "true"
    }
  }' \
  --basic --user user:password
```

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/117/leveling/start" \  
  -H "Content-Type: application/json" \  
  -d '{  
    "startDay": "today",  
    "resources": [  
      {  
        "key": "Team 1",  
        "type": "team"  
      }  
    ],  
    "options": {  
      "levelResolved": "false",  
      "levelInProgress": "false",  
      "levelManual": "false",  
      "clearLevelingDelay": "true"  
    }  
  }' \  
  --basic --user user:password
```

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/117/leveling/start" \  
  -H "Content-Type: application/json" \  
  -d '{  
    "startDay": "2024-02-05"  
  }' \  
  --basic --user user:password
```

Responses

STATUS 202 *application/json* - returns description of the started resource leveling process.

Example

```
{
  "ganttId": 117,
  "nodeId": "single_node",
  "version": 4,
  "user": "JIRAUSER10000",
  "progress": 0,
  "startDay": "2023-12-20",
  "resources": [
    {
      "key": "JIRAUSER10000",
      "type": "user"
    }
  ],
  "params": {
    "levelAgile": "false",
    "levelInProgress": "false",
    "clearLevelingDelay": "true",
    "isAllResources": "false",
    "levelManual": "false",
    "levelResolved": "true"
  }
}
```

STATUS 404 *application/json* - error message if the specified Gantt chart doesn't exist or if the user doesn't have permission to start resource leveling for it.

```
{
  "message": "Gantt chart #118 does not exist or user doesn't have permission to start leveling run for it"
}
```

Get information about the running resource leveling process

Get information about the running resource leveling process for the specified Gantt Chart.

URL: /gantt/{ganttId}/leveling/

Method: GET

URL Parameters:

Parameter	Type	Description
ganttId	Number	ID of the Gantt chart.

Example:

```
curl -X GET --location "http://example.com/rest/structure-gantt/public/1.0/gantt/42/leveling" \
  -H "Content-Type: application/json" \
  --basic --user user:password
```

Responses

STATUS 200 *application/json* - response with information about the current resource leveling run.

```
{
  "ganttId": 42,
  "nodeId": "node1",
  "version": 1,
  "user": "admin",
  "progress": 80,
  "startDay": "2023-09-21",
  "resources": [
    { "key": "JIRAUSER10000", "type": "user"},
    { "key": "Team 1", "type": "team"}
  ],
  "options": {
    "levelResolved": "true",
    "levelInProgress": "false",
    "levelManual": "false",
    "clearLevelingDelay": "true"
  }
}
```

Example

STATUS 404 *application/json* - error message if there is no running resource leveling process for specified Gantt chart.

```
{
  "message": "There is no leveling run for specified gantt"
}
```

STATUS 404 *application/json* - error message if the specified Gantt chart doesn't exist or the user doesn't have permission to get information about leveling processes for it.

```
{
  "message": "Gantt chart #42 does not exist or user doesn't have permission to get information about running resource leveling for it"
}
```

Clear existing leveling delays

Clear existing leveling delays for the specified Gantt Chart.

URL: /gantt/{ganttId}/leveling/clear

Method: POST

URL Parameters:

Parameter	Type	Description
ganttId	Number	ID of the Gantt chart for which leveling delays will be cleared.

Body Parameters:

Parameter	Type	Required	Description
startDay	String	No	Only leveling delays for the tasks which are placed after the startDay will be cleared. Possible values: <ul style="list-style-type: none"> Date in the default ISO format YYYY-MM-DD, e.g., 2024-01-01 "projectStart" - to apply Resource Leveling to all overallocations that occur after the project's start date. This is the default value which will be used if startDay is not specified. "today" - to apply Resource Leveling to all overallocations that occur after the current date.
resources	Array of Resource objects	No	List of resources for which leveling delays will be cleared. See the description of <i>Resource</i> object above. If this parameter is not specified, leveling delays will be cleared for all resources in this Gantt chart.

Example:

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/42/leveling/clear" \
  -H "Content-Type: application/json" \
  -d '{
    "startDay": "projectStart",
    "resources": [
      {
        "key": "JIRAUSER10000",
        "type": "user"
      },
      {
        "key": "Team 1",
        "type": "team"
      }
    ]
  }' \
  --basic --user user:password
```

Responses

STATUS 202 *application/json* - empty results if there are no errors and leveling delays were cleared successfully.

STATUS 404 *application/json* - error message if the specified Gantt chart doesn't exist or the user doesn't have permission to clear leveling delays for it

```
{
  "message": "Gantt chart #120 does not exist or user doesn't have permission to clear leveling delays for it"
}
```

Stop resource leveling process for the specified Gantt Chart

Stop the running resource leveling process for the specified Gantt Chart based on nodeId and version. Will stop the running process only if it matches the specified values for nodeId and version. This check is necessary to avoid stopping another process that may have been started between the start of the original process and the termination request.

URL: /gantt/{ganttId}/leveling/stop

Method: POST

URL Parameters:

Parameter	Type	Description
ganttId	Number	ID of the Gantt chart for which the existing resource leveling process will be stopped.

Body Parameters:

Parameter	Type	Required	Description
nodeId	String	Yes	ID of the node which is performing the current resource leveling process. The nodeId should correspond to the one provided in the response from the start method.
version	Number	Yes	Version of the resource leveling process. The version should correspond to the one provided in the response from the start method.

Example:

```
curl -X POST --location "http://example.com/rest/structure-gantt/public/1.0/gantt/117/leveling/stop" \
  -H "Content-Type: application/json" \
  -d '{
    "nodeId": "single_node",
    "version": 2
  }' \
  --basic --user user:password
```

Responses

STATUS 202 *application/json* - returns an empty response when the resource leveling process was stopped successfully.

Example

STATUS 404 *application/json* - error message if there is no running resource leveling process with the specified Gantt chart, nodeId, and version.

```
{
  "message": "There is no leveling run for specified gantt, version and nodeId"
}
```

STATUS 404 *application/json* - error message if the specified Gantt chart doesn't exist or the user doesn't have permission to stop Resource Leveling for it.

```
{
  "message": "Gantt chart #42 does not exist or user doesn't have permission to stop Resource Leveling for it"
}
```

6.6 Java API Usage Examples

Use the sample plugin to learn by example. Download the source bundle from this page and use it with the latest API version.

[gant-api-examples-1.0.0-SNAPSHOT-sources.jar](#)²²¹

6.6.1 Script Runner examples

This code demonstrates getting a Gantt chart by structure id, initiating the resource leveling process for this Gantt chart, and then logging the progress until completion.

²² <https://wiki.almworks.com/download/attachments/194642808/gantt-api-examples-1.0.0-SNAPSHOT-sources.jar?api=v2&modificationDate=1706875356000&version=1>

```

package examples.docs.structure

import com.almworks.structure.gantt.api.leveling.ResourceLevelingManager
import com.almworks.structure.gantt.api.gantt.GanttChartManager
import com.onresolve.scriptrunner.runner.customisers.PluginModule
import com.onresolve.scriptrunner.runner.customisers.WithPlugin

@WithPlugin("com.almworks.structure.gantt")

@PluginModule
ResourceLevelingManager resourceLevelingManager
@PluginModule
GanttChartManager ganttChartManager

def structureId = 12;

// Get gantt by structureId
def gantt = ganttChartManager.getGanttChartByStructureId(structureId)

if (gantt) {
    def ganttId = gantt.id

    def started = resourceLevelingManager.createLevelingRun(ganttId)
        .fromProjectStart()
        .apply()

    def current = started
    // Keep checking the status of the resource leveling process until it completes.
    // We check that either the process is not running, or it is not the process we
    started because the node ID or version is different.
    while (current != null && current.nodeId == started.nodeId && current.version ==
started.version) {
        log.warn("Leveling is in progress: $current.progress%")
        Thread.sleep(1000)
        current = resourceLevelingManager.getLevelingInfo(ganttId)
    }
    "Leveling is finished"
} else {
    "Gantt doesn't exists"
}

```

This example demonstrates how to programmatically manage a Gantt chart and its baselines. Initially, it checks for and deletes an existing Gantt chart for a given structure ID. Then, it creates a new Gantt chart and immediately finds it by name to ensure it's working with the correct chart. Before starting resource leveling, it creates a baseline for comparison purposes. The resource leveling process is then initiated for a specified resource, with enabled "Level resolved tasks" and "Level tasks in progress" options.

```

package examples.docs.structure

import java.time.LocalDate
import com.almworks.structure.gantt.api.leveling.ResourceLevelingManager
import static com.almworks.structure.gantt.api.leveling.ResourceLevelingOptions.*
import com.almworks.structure.gantt.api.gantt.GanttChartManager
import com.almworks.structure.gantt.api.baseline.BaselineManager
import com.almworks.structure.gantt.api.baseline.BaselineType
import com.onresolve.scriptrunner.runner.customisers.PluginModule
import com.onresolve.scriptrunner.runner.customisers.WithPlugin

@WithPlugin("com.almworks.structure.gantt")

@PluginModule
ResourceLevelingManager resourceLevelingManager
@PluginModule
GanttChartManager ganttChartManager
@PluginModule
BaselineManager baselineManager

def structureId = 12L;
def gantt = ganttChartManager.getGanttChartByStructureId(structureId)
// Delete existing Gantt chart
if (gantt) {
    ganttChartManager.removeGanttChart(gantt.id)
}
// Create new Gantt chart
def created = ganttChartManager.createGanttChart(structureId, "Default",
LocalDate.now(), "New Gantt name");
// Find created Gantt chart by name
gantt = ganttChartManager.getGanttChartsByName("New Gantt name")[0]
// Create new baseline before resource leveling
def baseline = baselineManager.createBaseline(gantt.id, "Baseline before leveling",
BaselineType.GANTT, [:])
// Run resource leveling for specified user to compare results of resource leveling
with Baseline
resourceLevelingManager.createLevelingRun(gantt.id)
    .fromProjectStart()
    .addUserResource("JIRAUSER10000")
    .setOption(LEVEL_RESOLVED, "true")
    .setOption(LEVEL_IN_PROGRESS, "true")
    .apply()
// User can compare results of resource leveling with baseline after leveling
completion.

```

7 Download

 [Structure App](#)²²² version 9.0.1 or later is required to run Structure.Gantt.

7.1 Download Structure.Gantt

Extension	Version	Compatibility	Download link	Publish Date	End of Life
4.1.1	Jira 8.20+ Structure 9.0.1+	structure-gantt-4.1.1.jar ²²³ md5 0f7b2205ed956c855d6566b0 e7f544a5	2024-03-19	2025-03-19	2025-02-07

[End-User License Agreement \(PDF\)](#)²²⁴

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.

7.2 What's Next?

See [Getting Started with Structure.Gantt](#)(see page 22)

7.3 Documentation

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

²²² <https://marketplace.atlassian.com/plugins/com.almworks.jira.structure/server/overview>

²²³ <https://d1.almworks.com/.files/structure-gantt-4.1.1.jar>

²²⁴ <http://almworks.com/EULA-Structure.pdf>

File	Modified
 Structure.Gantt 3.0 Documentation.pdf ²²⁵	Oct 14, 2021 by Jaramy Conners ²²⁶

For previous versions of Structure.Gantt, see [Version Index](#)²²⁷.

7.4 Download Archive

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

Version	Compatibility	Download link	Publish Date	End of Life
4.1.1	Jira 8.20+ Structure 9.0.1+	structure-gantt-4.1.1.jar ²²⁸ md5 0f7b2205ed956c855d6566b0e7f544a5	2024-03-19	2025-03-19
4.1	Jira 8.20+ Structure 9.0.1+	structure-gantt-4.1.0.jar ²²⁹ md5 a42e4ed4b31ffbb1a30a45d43262c12d	2024-02-07	2025-02-07
4.0	Jira 8.20+ Structure 9.0.1+	structure-gantt-4.0.0.jar ²³⁰ md5 90fa14626830b7a6be762e890df92208	2023-11-14	2024-11-14
3.6.2	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.6.2.jar ²³¹ md5 a8b4bbc74eaaa420d66c9a67e717d150	2023-05-22	2024-05-22

²²⁵ <https://wiki.almworks.com/download/attachments/126026602/Structure.Gantt%203.0%20Documentation.pdf?api=v2>

²²⁶ <https://wiki.almworks.com/display/~jaramy>

²²⁷ <https://wiki.almworks.com/display/docs/Structure.Gantt+Documentation>

²²⁸ <https://d1.almworks.com/.files/structure-gantt-4.1.1.jar>

²²⁹ <https://d1.almworks.com/.files/structure-gantt-4.1.0.jar>

²³⁰ <https://d1.almworks.com/.files/structure-gantt-4.0.0.jar>

²³¹ <https://d1.almworks.com/.files/structure-gantt-3.6.2.jar>

Version	Compatibility	Download link	Publish Date	End of Life
3.6.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.6.0.jar ²³² md5 ec f89727ae383f14867b160e9cd90 c6c	2023-01-24	2024-01-24
3.5.1	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.5.1.jar ²³³ md5 a70895fa2d59b314174e4675c58fc 5ae	2022-12-21	2023-12-21
3.5.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.5.0.jar ²³⁴ md5 db74bf77b5ab4022360a3fa21e664 d09	2022-11-21	2023-11-21
3.4.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.4.0.jar ²³⁵ md5 68a5ac03e554dca75f6400110c2a0 f94	2022-07-07	2023-07-07
3.3.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.3.0.jar ²³⁶ md5 16625776bde9d6859040269052333 a6c	2022-05-25	2023-05-25
3.2.0	Jira 8.13+ Structure 7.4.0+	structure-gantt-3.2.0.jar ²³⁷ md5 c1da67f42070f13912b3f04384d63 4d4	2022-03-14	2023-03-14

232 <https://d1.almworks.com/files/structure-gantt-3.6.0.jar>

233 <https://d1.almworks.com/files/structure-gantt-3.5.1.jar>

234 <https://d1.almworks.com/files/structure-gantt-3.5.0.jar>

235 <https://d1.almworks.com/files/structure-gantt-3.4.0.jar>

236 <https://d1.almworks.com/files/structure-gantt-3.3.0.jar>

237 <https://d1.almworks.com/files/structure-gantt-3.2.0.jar>

Version	Compatibility	Download link	Publish Date	End of Life
3.1.0	Jira 8.5+ Structure 7.1.0+	structure-gantt-3.1.0.jar ²³⁸ md5 82321c510e765b9f08cc6d18cba87f9f	2021-11-26	2022-11-26
3.0.1	Jira 8.5+ Structure 7.1.0+	structure-gantt-3.0.1.jar ²³⁹ md5 a31f683a1a1db8816003909279766eaa	2021-11-03	2022-11-03
3.0.0	Jira 8.5+ Structure 7.1.0+	structure-gantt-3.0.0.jar ²⁴⁰ md5 b86dcb1a4df7db1ea702dcdd0b9bd346	2021-10-01	2022-10-01
2.7.3	Jira 7.13+ Structure 6.4.0+	structure-gantt-2.7.3.jar ²⁴¹ md5 9f2f6aaa2995c9dbc8b1c3011da64cff	2021-09-02	2022-09-02
2.7.2	Jira 7.13+ Structure 6.4.0+	structure-gantt-2.7.2.jar ²⁴² md5 5b25470fa91e4d1afb7099ba6e9d160b	2021-03-04	2022-03-04
2.7.1	Jira 7.13+ Structure 6.4.0+	structure-gantt-2.7.1.jar ²⁴³ md5 815eb2db5add95b819e40d074bcbcb86	2021-02-16	2022-02-16

238 <https://d1.almworks.com/.files/structure-gantt-3.1.0.jar>

239 <https://d1.almworks.com/.files/structure-gantt-3.0.1.jar>

240 <https://d1.almworks.com/.files/structure-gantt-3.0.0.jar>

241 <https://d1.almworks.com/.files/structure-gantt-2.7.3.jar>

242 <https://d1.almworks.com/.files/structure-gantt-2.7.2.jar>

243 <https://d1.almworks.com/.files/structure-gantt-2.7.1.jar>

Version	Compatibility	Download link	Publish Date	End of Life
2.7.0	Jira 7.13+ Structure 6.4.0+	structure-gantt-2.7.0.jar ²⁴⁴ md5 adb6fae3f14faa3adedc7c2a660c7cc6	2020-12-07	2021-12-07
2.6.0	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.6.0.jar ²⁴⁵ md5 4992634003f9629787b0756fc4039607	2020-11-05	2021-11-05
2.5.2	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.2.jar ²⁴⁶ md5 4780b7629e2d3c0e2bb3e21ef08c5383	2020-08-26	2021-08-26
2.5.1	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.1.jar ²⁴⁷ md5 584d57bc5762cd5190fc4d4231ad5bde	2020-08-17	2021-08-17
2.5.0	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.0.jar ²⁴⁸ md5 c50a9896008c2fc8ee8b840bc3bad66b	2020-08-06	2021-08-06
2.4.1	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.4.1.jar ²⁴⁹ md5 255fb18403d2f1079899cee11ad3a0ec	2020-08-17	2021-08-17

244 <https://d1.almworks.com/files/structure-gantt-2.7.0.jar>

245 <https://d1.almworks.com/files/structure-gantt-2.6.0.jar>

246 <https://d1.almworks.com/files/structure-gantt-2.5.2.jar>

247 <https://d1.almworks.com/files/structure-gantt-2.5.1.jar>

248 <https://d1.almworks.com/files/structure-gantt-2.5.0.jar>

249 <https://d1.almworks.com/files/structure-gantt-2.4.1.jar>

Version	Compatibility	Download link	Publish Date	End of Life
2.4.0	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.4.0.jar ²⁵⁰ md5 b27ee09ba8837e9371493d034c5bf56e	2020-05-19	2021-05-19
2.3.0	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.3.0.jar ²⁵¹ md5 c5765b171c605fe39fea0b0a36176dc1	2020-03-26	2021-03-26
2.2.2	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.2.jar ²⁵² md5 44b6d0aee8327d5083f4fc143505fa18	2020-08-17	2021-08-17
2.2.1	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.1.jar ²⁵³ md5 95339d5f8b8c9b4cea3a210300c1681e	2020-02-17	2021-02-17
2.2.0	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.0.jar ²⁵⁴ md5 58dd5106de5b6afaff015850832d9bbb	2020-01-23	2021-01-23
2.1.2	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.2.jar ²⁵⁵ md5 f3ea41ce0c9d7c777544b3415ea79fe8	2020-08-17	2021-08-17

250 <https://d1.almworks.com/.files/structure-gantt-2.4.0.jar>

251 <https://d1.almworks.com/.files/structure-gantt-2.3.0.jar>

252 <https://d1.almworks.com/.files/structure-gantt-2.2.2.jar>

253 <https://d1.almworks.com/.files/structure-gantt-2.2.1.jar>

254 <https://d1.almworks.com/.files/structure-gantt-2.2.0.jar>

255 <https://d1.almworks.com/.files/structure-gantt-2.1.2.jar>

Version	Compatibility	Download link	Publish Date	End of Life
2.1.1	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.1.jar ²⁵⁶ md5 247d335328cf118a9dfad1f7f5375c5a	2019-11-18	2020-11-18
2.1.0	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.0.jar ²⁵⁷ md5 8bfdcf75856726cd9bf8cdbc64878f66	2019-11-11	2020-11-11
2.0.1	Jira 7.6+ Structure 5.5.0+	structure-gantt-2.0.1.jar ²⁵⁸ md5 2b23956d7f939c3eee469f4a3cfd46bd	2019-09-25	2020-09-25
2.0.0	Jira 7.6+ Structure 5.5.0+	structure-gantt-2.0.0.jar ²⁵⁹ md5 b19e2c92bbf23ef987e3dc80936af126	2019-09-06	2020-09-06
1.4.1	Jira 7.6+ Structure 5.3.0+	structure-gantt-1.4.1.jar ²⁶⁰ md5 96cffffa09a80d568f54e5425eb7e701d	2019-05-29	2020-05-29
1.4.0	Jira 7.6+ Structure 5.3.0+	structure-gantt-1.4.0.jar ²⁶¹ md5 59de792659fc8c701896f6b23d4ecdea	2019-04-05	2020-04-05

256 <https://d1.almworks.com/.files/structure-gantt-2.1.1.jar>

257 <https://d1.almworks.com/.files/structure-gantt-2.1.0.jar>

258 <https://d1.almworks.com/.files/structure-gantt-2.0.1.jar>

259 <https://d1.almworks.com/.files/structure-gantt-2.0.0.jar>

260 <https://d1.almworks.com/.files/structure-gantt-1.4.1.jar>

261 <https://d1.almworks.com/.files/structure-gantt-1.4.0.jar>

Version	Compatibility	Download link	Publish Date	End of Life
1.3.2	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.2.jar ²⁶² md5 b313702b59b92d42b34f161edc44b31a	2018-12-29	2019-12-29
1.3.1	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.1.jar ²⁶³ md5 e917819629c91ebce29f451017fa4aca	2018-12-11	2019-12-11
1.3.0	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.0.jar ²⁶⁴ md5 3eb992f181993a3504245e2d72410ab0	2018-11-14	2019-11-14
1.2.1	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.2.1.jar ²⁶⁵ md5 1a86fe8b88d63d97c959ca8f3244c943	2018-08-21	2019-08-21
1.2.0	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.2.0.jar ²⁶⁶ md5 e8d3c476d2f501b836eab089fc8b0671	2018-07-18	2019-07-19
1.1.1	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.1.1.jar ²⁶⁷ md5 91b8a3b977b6e75b3be7dbc95ca3ec2a	2018-06-14	2019-06-14

²⁶² <https://d1.almworks.com/.files/structure-gantt-1.3.2.jar>

²⁶³ <https://d1.almworks.com/.files/structure-gantt-1.3.1.jar>

²⁶⁴ <https://d1.almworks.com/.files/structure-gantt-1.3.0.jar>

²⁶⁵ <https://d1.almworks.com/.files/structure-gantt-1.2.1.jar>

²⁶⁶ <https://d1.almworks.com/.files/structure-gantt-1.2.0.jar>

²⁶⁷ <https://d1.almworks.com/.files/structure-gantt-1.1.1.jar>

Version	Compatibility	Download link	Publish Date	End of Life
1.1.0	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.1.0.jar ²⁶⁸ md5 809247311df529c874360e6d427d71c7	2018-05-17	2019-05-17
1.0.1	JIRA 7.2+ Structure 4.5.0+	structure-gantt-1.0.1.jar ²⁶⁹ md5 3362753649c095f401087a3dd8ab8833	2018-02-05	2019-02-05
1.0.0	JIRA 7.2+ Structure 4.5.0+	structure-gantt-1.0.0.jar ²⁷⁰ md5 d68b5ec669b1b9d9e7107de0de2c103c	2017-12-29	2018-12-29
0.7.0 (Beta)	JIRA 7.3+ Structure 4.2.0+	structure-gantt-0.7.0.jar ²⁷¹ 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.

²⁶⁸ <https://d1.almworks.com/.files/structure-gantt-1.1.0.jar>

²⁶⁹ <https://d1.almworks.com/.files/structure-gantt-1.0.1.jar>

²⁷⁰ <https://d1.almworks.com/.files/structure-gantt-1.0.0.jar>

²⁷¹ <https://d1.almworks.com/.files/structure-gantt-0.7.0.jar>