

Structure.Gantt Documentation

Structure.Gantt 2.6 Documentation

Exported on 12/07/2020

Table of Contents

1	Quick Start Guide	16
1.1	Getting Started	16
1.1.1	Creating Your First Gantt Chart	16
1.1.2	Gantt Chart Configuration	16
1.2	Gantt Chart Elements.....	17
1.3	Working with Gantt Charts	18
1.3.1	Adjusting Start/Finish Date, Manual and Automatic Scheduling	18
1.3.2	Managing Dependencies.....	18
1.3.3	Managing Resources	18
2	Introducing Structure.Gantt.....	20
2.1	Resource Management	21
3	Creating Your First Gantt Chart	22
3.1	Define Your Chart Manually	22
3.2	Using Structure Wizard	23
3.2.1	Define Scope.....	24
3.2.2	Work Breakdown Structure	24
3.2.3	Dependencies.....	25
3.2.4	Scheduling.....	25
3.2.5	Resources	26
3.2.6	Calendar	26
3.3	Agile Gantt Chart Template	26
3.3.1	Open the Agile Gantt Chart Wizard	27
3.3.2	Select Your Gantt Chart Options	27
3.3.2.1	Scrum Boards	28
3.3.2.2	Planning Level	28
3.3.2.3	Resources	28
3.3.2.4	Sharing.....	28
3.3.3	Create Your Gantt Chart.....	29
3.3.4	Additional Resources	29
4	Working With Your Gantt Chart	30
4.1	Working With Tasks.....	30

4.1.1	Scheduling Tasks	30
4.1.1.1	Automatic Scheduling	31
4.1.1.2	Manual Scheduling by Start or Finish Date.....	32
4.1.1.3	Planning with Sprints.....	34
4.1.1.4	Fixed Duration	39
4.1.2	Adjusting Duration	42
4.1.2.1	Automatically	42
4.1.2.2	Based on Start and Finish Dates.....	43
4.1.2.3	Based on Sprints	43
4.1.2.4	Manually Setting Fixed Duration	43
4.1.3	Working With Dependencies	44
4.1.3.1	Finish to Start Dependencies	44
4.1.3.2	Other Dependency Types	45
4.1.3.3	Non-Issue Dependencies	46
4.1.3.4	Dependency Details	46
4.1.3.5	Deleting Dependencies.....	47
4.1.3.6	Dependency Lead/Lag Time.....	47
4.1.3.7	Dependency Types Supported by Structure.Gantt	49
4.1.4	Scheduling Conflict.....	51
4.1.4.1	Dependency-based Scheduling Conflicts	51
4.1.4.2	Duration/Work Estimate Conflicts	52
4.2	Gantt Chart Elements.....	53
4.2.1	Toolbar	53
4.2.2	Timeline.....	53
4.2.2.1	Scroll to task.....	54
4.2.3	Time Scale	54
4.2.3.1	Zoom Level	55
4.2.3.2	Week Numbers	55
4.2.4	Start Day and Current Date.....	56
4.2.5	Fix Versions.....	56
4.2.6	Sprints.....	57
4.2.7	Task Bars	57
4.2.8	Groups	57
4.2.9	Dependencies.....	58
4.2.10	Critical Path.....	58

4.2.11	Display Options	59
4.2.12	Status Bar	59
4.2.13	Task Details Panel	60
4.2.13.1	Scheduling.....	61
4.2.13.2	Configuration	62
4.2.13.3	Resources	62
4.2.13.4	Show More/Less Fields	63
4.2.13.5	Icons in the Task Details Panel.....	63
4.2.13.6	Clear Start or Finish Date.....	63
4.2.14	Task Indicators.....	64
4.2.14.1	Show/Hide Task Indicators	64
4.2.14.2	Hidden Tasks.....	65
4.2.14.3	Indicators in the Task Details Panel.....	66
4.2.15	Milestones	66
4.2.15.1	Creating a Milestone	67
4.2.16	Project Start Day	67
4.2.16.1	Setting the Project Start Day	68
4.3	Resource Management	68
4.3.1	Learn More About Working With Resources	69
4.3.2	Resources and Resource Usage.....	69
4.3.2.1	Hidden Resources	70
4.3.2.2	Backlog Panel.....	70
4.3.2.3	Overallocation.....	70
4.3.2.4	Resource Usage Timeline	71
4.3.2.5	Hours vs Percentage	71
4.3.3	Resource Settings	71
4.3.4	Filter by Resource.....	72
4.3.4.1	Filter by Multiple Resources	73
4.3.5	Navigating to a Resource from the Gantt Chart	73
4.4	Baselines.....	74
4.4.1	Creating a Baseline	74
4.4.2	Comparing Current Chart to a Baseline	75
4.4.3	Baseline Offset	76
4.4.4	Hiding Baselines.....	76
4.4.5	Managing Baselines	77

4.4.6	Gantt Gadget	78
4.4.7	Exporting Baselines	79
4.5	Resource Leveling	79
4.5.1	Starting Resource Leveling.....	80
4.5.1.1	Additional Guidelines.....	82
4.5.2	Removing Leveling Delays.....	82
4.5.3	Leveling Delay	83
4.5.4	Leveling Priority	83
4.5.5	Stop Leveling.....	84
4.6	Exporting to a Printable File	84
4.6.1	Configuring Hierarchy Level and Zoom	85
4.6.2	Export Gantt Chart	85
4.6.3	Exporting	87
4.6.4	Printing Large Charts	87
4.7	Using Gadgets	88
4.7.1	Jira Dashboard Gadget	89
4.7.1.1	Gadget Configuration	90
4.7.1.2	Editing Configuration for an Existing Gadget	92
4.7.1.3	Open the Gantt Chart from the Gadget.....	92
4.7.2	Confluence Gadget.....	92
4.7.2.1	Initial Configuration.....	93
4.7.2.2	Editing Configuration for an Existing Gadget	95
4.8	Using Gantt Attributes in Structure.....	95
4.8.1	Adding a Gantt Attribute Column to a Structure	96
4.8.2	Using Gantt Attributes in Formulas.....	97
4.8.3	Using Gantt Attributes in Transformations.....	97
4.8.4	Updating Jira With Effectors.....	99
4.8.5	List of Gantt Attributes Available in Structure.....	99
5	Settings and Configuration.....	101
5.1	Gantt Chart Settings	101
5.1.1	Fix Versions.....	102
5.1.2	Sprints.....	103
5.1.2.1	Future Sprint Scheduling.....	103
5.1.3	Custom Sprint Schedules	104

5.1.4	Notification Settings	104
5.2	Gantt Configuration in Details.....	105
5.2.1	Changing Gantt Configuration	105
5.2.1.1	Customize a Configuration	106
5.2.2	General Settings.....	107
5.2.3	Scheduling.....	107
5.2.3.1	Work Estimates	108
5.2.3.2	Progress.....	110
5.2.3.3	Manual Scheduling.....	111
5.2.3.4	Fixed Duration Attribute	114
5.2.3.5	Precision	115
5.2.3.6	Grouping.....	116
5.2.4	Dependencies.....	117
5.2.4.1	Adding Dependency and Link Types	118
5.2.4.2	Lead/Lag Time.....	119
5.2.4.3	Favorite.....	119
5.2.5	Resources	121
5.2.5.1	Resource Assignment.....	121
5.2.5.2	Default Resource Settings	122
5.2.5.3	Task Settings	122
5.2.6	Calendars.....	124
5.2.6.1	Calendar format	124
5.3	Slice-based Configurations	127
5.3.1	Creating a Slice.....	128
5.3.1.1	Slice Name.....	129
5.3.1.2	Assigning Issues	129
5.3.2	Customizing a Slice	130
5.3.2.1	Work Estimates	131
5.3.2.2	Progress Calculation	132
5.3.2.3	Manual Scheduling.....	133
5.3.2.4	Dependencies.....	133
5.3.2.5	Lead/Lag Times	134
5.3.2.6	Resource Assignment.....	135
5.3.2.7	Task Settings	136
5.3.2.8	Appearance	136

5.3.2.9	Item Behavior	137
5.3.3	Removing a Slice	138
5.3.3.1	Deactivating a Slice.....	138
5.3.3.2	Deleting a Slice.....	138
5.3.4	Order of Operation.....	138
5.3.4.1	Rearranging Slices	139
5.4	Managing Gantt Configurations	140
5.4.1	Copy Configuration.....	140
5.4.1.1	Create an Exact Copy	140
5.4.1.2	Create a Copy with Changes.....	141
5.4.2	Deleting Gantt Configurations.....	142
5.4.3	Charts and Configurations Permissions	143
5.4.3.1	User Permissions.....	143
5.4.3.2	Sharing Configurations.....	143
6	Administrator's Guide.....	145
6.1	System Requirements and Installation.....	145
6.2	Enterprise Deployment.....	145
6.2.1	Performance.....	145
6.2.1.1	Performance Target: 10,000 issues	145
6.2.1.2	Testing for Potential Impact.....	146
6.2.2	Security and Data Access.....	146
6.2.2.1	Caching of Issue Access	146
6.2.3	Limiting Access to Gantt Charts	146
6.3	Confluence Configuration for Gadgets	146
6.4	Resource Leveling Troubleshooting	147
6.4.1	Advanced Configurations	147
6.5	Advanced Configurations for Structure.Gantt.....	147
6.5.1	Scheduling and Time Limits	148
6.5.2	Resource Leveling Configurations	149
7	FAQ.....	151
7.1	Does Structure.Gantt support Jira Data Center?.....	151
7.2	Does Structure.Gantt support Portfolio for Jira hierarchy?	151
7.3	I have increased the capacity (Units) of the resource, but the task still takes the same amount of time to complete.....	151

8	Download	152
8.1	Download Structure.Gantt	152
8.2	What's Next?	152
8.3	Download Archive	152
9	Release Notes	158
9.1	Structure.Gantt 2.6 Release Notes	158
9.1.1	Version Highlights	159
9.1.2	Changes in Detail	159
9.1.2.1	Draggable Project Start Date	159
9.1.2.2	Refreshed Task Details Panel	159
9.1.2.3	Notable Improvements and Fixes	159
9.1.3	Supported Versions.....	159
9.1.4	Installation and Upgrade	160
9.1.5	Known issues.....	160
9.1.6	Enterprise Deployment Notes	160
9.2	Structure.Gantt 2.5 Release Notes	160
9.2.1	Version Highlights	161
9.2.2	Changes in Detail	161
9.2.2.1	Agile Backlog	161
9.2.2.2	Optional Email Notifications	161
9.2.2.3	Configuration Search	162
9.2.2.4	Notable Improvements and Fixes	162
9.2.3	Supported Versions.....	162
9.2.4	Installation and Upgrade	162
9.2.5	Known issues.....	162
9.2.6	Enterprise Deployment Notes	163
9.2.7	Structure.Gantt 2.5.1 Release Notes	163
9.2.7.1	Patch Release	163
9.2.7.2	Supported Versions.....	163
9.2.7.3	Installation and Upgrade	163
9.2.7.4	Enterprise Deployment Notes	164
9.2.8	Structure.Gantt 2.5.2 Release Notes	164
9.2.8.1	Patch Release	164
9.2.8.2	Supported Versions.....	164

9.2.8.3	Installation and Upgrade.....	164
9.2.8.4	Enterprise Deployment Notes	164
9.3	Structure.Gantt 2.4 Release Notes	165
9.3.1	Version Highlights	165
9.3.2	Changes in Detail	165
9.3.2.1	Additional Gantt attributes available in Structure.....	165
9.3.2.2	2.2 Filtering within a Gantt gadget.....	166
9.3.2.3	Notable Improvements and Fixes	166
9.3.3	Supported Versions.....	167
9.3.4	Installation and Upgrade.....	167
9.3.5	Known issues.....	167
9.3.6	Enterprise Deployment Notes	167
9.3.7	Structure.Gantt 2.4.1 Release Notes	167
9.3.7.1	Patch release	168
9.3.7.2	Installation and Upgrade.....	168
9.3.7.3	Enterprise deployment notes.....	168
9.4	Structure.Gantt 2.3 Release Notes	168
9.4.1	Version Highlights	168
9.4.2	Changes in Detail	169
9.4.2.1	Support for Structure 6.0.....	169
9.4.2.2	Notable Improvements and Fixes	169
9.4.3	Supported Versions.....	169
9.4.4	Installation and Upgrade.....	169
9.4.5	Known issues.....	169
9.4.6	Enterprise Deployment Notes	170
9.5	Structure.Gantt 2.2 Release Notes	170
9.5.1	Version Highlights	170
9.5.2	Changes in Detail	170
9.5.2.1	Dependency Lead/Lag Time.....	170
9.5.2.2	Change Dependency Type	171
9.5.2.3	Notable Improvements and Fixes	172
9.5.3	Supported Versions.....	172
9.5.4	Installation and Upgrade.....	172
9.5.5	Known issues.....	172
9.5.6	Enterprise Deployment Notes	172

9.5.7	Structure.Gantt 2.2.1 Release Notes	172
9.5.7.1	Patch Release	173
9.5.7.2	Installation and Upgrade	173
9.5.7.3	Enterprise Deployment Notes	173
9.5.8	Structure.Gantt 2.2.2 Release Notes	173
9.5.8.1	Patch release	173
9.5.8.2	Installation and Upgrade	173
9.5.8.3	Enterprise deployment notes.....	174
9.6	Structure.Gantt 2.1 Release Notes	174
9.6.1	Version Highlights	174
9.6.2	Changes in Detail	174
9.6.2.1	Auto-scheduled Fixed Duration tasks	174
9.6.2.2	Indicators for hidden tasks	175
9.6.2.3	Notable Improvements and Fixes	176
9.6.3	Supported Versions.....	176
9.6.4	Installation and Upgrade	176
9.6.5	Known issues.....	176
9.6.6	Enterprise Deployment Notes	176
9.6.7	Structure.Gantt 2.1.1 Release Notes	177
9.6.7.1	Patch Release	177
9.6.7.2	Installation and Upgrade	177
9.6.7.3	Enterprise Deployment Notes	177
9.6.8	Structure.Gantt 2.1.2 Release Notes	177
9.6.8.1	Patch release	177
9.6.8.2	Installation and Upgrade	178
9.6.8.3	Enterprise deployment notes.....	178
9.7	Structure.Gantt 2.0 Release Notes	178
9.7.1	Version Highlights	178
9.7.2	Changes in Detail	178
9.7.2.1	Structure.Gantt becomes a paid app	178
9.7.2.2	Resource Leveling	179
9.7.2.3	Baselines.....	179
9.7.2.4	Fix Version Markers for Gadget.....	180
9.7.2.5	Notable Improvements and Fixes	180
9.7.3	Supported Versions.....	180

9.7.4	Installation and Upgrade.....	181
9.7.5	Known issues.....	181
9.7.6	Enterprise Deployment Notes	181
9.7.6.1	Resource Leveling	181
9.7.6.2	Testing on a Staging Environment.....	182
9.7.7	Structure.Gantt 2.0.1 Release Notes	182
9.7.7.1	Patch Release	182
9.7.7.2	Installation and Upgrade.....	182
9.7.7.3	Enterprise Deployment Notes	182
9.8	Structure.Gantt 1.4 Release Notes	183
9.8.1	Version Highlights	183
9.8.2	Changes in Detail	183
9.8.2.1	Agile planning.....	183
9.8.2.2	Fixed-duration tasks	184
9.8.2.3	Chart data as Structure attributes	185
9.8.2.4	Percentage for Resource allocation	185
9.8.2.5	Agile Gantt Template	185
9.8.2.6	Notable Improvements And Fixes	186
9.8.3	Supported Versions.....	186
9.8.4	Installation and Upgrade.....	187
9.8.5	Known issues.....	187
9.8.6	Enterprise Deployment Notes	187
9.8.6.1	Agile Planning.....	187
9.8.6.2	Chart Data as Structure Attributes	187
9.8.6.3	Testing on a Staging Environment.....	188
9.8.7	Structure.Gantt 1.4.1 Release Notes	188
9.8.7.1	Patch release	188
9.8.7.2	Installation and Upgrade.....	189
9.8.7.3	Enterprise deployment notes.....	189
9.9	Structure.Gantt 1.3 Release Notes	189
9.9.1	Version Highlights	190
9.9.2	Changes in Detail	190
9.9.2.1	Slice-based Configurations	190
9.9.2.2	Specify Multiple Link Types per Dependency.....	191
9.9.2.3	Filter by Resource.....	191

9.9.2.4	Notable Fixes and Improvements	192
9.9.3	Supported Versions.....	192
9.9.4	Installation and Upgrade.....	192
9.9.5	Known issues.....	192
9.9.6	Enterprise Deployment Notes	192
9.9.7	Structure.Gantt 1.3.1 Release Notes	193
9.9.7.1	Patch release.....	193
9.9.7.2	Installation and Upgrade.....	193
9.9.7.3	Enterprise deployment notes.....	193
9.9.8	Structure.Gantt 1.3.2 Release Notes	194
9.9.8.1	Patch Release	194
9.9.8.2	Installation and Upgrade.....	194
9.9.8.3	Enterprise Deployment Notes	194
9.10	Structure Gantt 1.2 Release Notes	194
9.10.1	Version Highlights	195
9.10.2	Changes in Detail	195
9.10.2.1	Export Gantt chart into a PDF or SVG file	195
9.10.2.2	Ability to add Gantt chart to Jira Dashboard and Confluence pages.....	195
9.10.3	Supported Versions.....	195
9.10.4	Installation and Upgrade.....	195
9.10.5	Known issues.....	195
9.10.6	Enterprise Deployment Notes	196
9.10.7	Structure.Gantt 1.2.1 Release Notes	196
9.10.7.1	Patch release	196
9.10.7.2	Installation and Upgrade.....	196
9.10.7.3	Enterprise deployment notes.....	197
9.11	Structure.Gantt 1.1 Release Notes	197
9.11.1	Version Highlights	197
9.11.2	Changes in Detail	197
9.11.2.1	Visualization of Sprints and Fix Versions	197
9.11.2.2	Redesigned Gantt Configuration dialog	198
9.11.2.3	Ability to use numeric Custom Fields or Formulas for progress calculation	198
9.11.2.4	Performance improvements	198
9.11.3	Supported Versions.....	199
9.11.4	Installation and Upgrade.....	199

9.11.5	Known issues.....	199
9.11.6	Enterprise Deployment Notes	199
9.11.7	Structure.Gantt 1.1.1 Release Notes	200
9.11.7.1	Patch release.....	200
9.11.7.2	Installation and Upgrade.....	200
9.11.7.3	Enterprise deployment notes.....	201
9.12	Structure.Gantt 1.0 Release Notes	201
9.12.1	Version Highlights	201
9.12.2	Getting Started	201
9.12.3	Supported Versions.....	201
9.12.4	Installation and Upgrade.....	202
9.12.5	Known issues.....	202
9.12.6	Enterprise Deployment Notes	202
9.12.7	Structure.Gantt 1.0.1 Release Notes	202
9.12.7.1	Patch Release	203
9.12.7.2	Supported Versions.....	203
9.12.7.3	Installation and Upgrade.....	203
10	Structure.Gantt Roadmap	204
10.1	Versions and Dates.....	204
10.2	Roadmap	204
11	Features and Limitations.....	206
11.1	Features.....	206
11.2	Current Limitations / Roadmap.....	206
12	Open Source Licenses.....	207
13	Structure.Gantt Concepts Explained	209
13.1	Work Breakdown Structure	209
13.2	Chart elements.....	210
13.3	Schedule.....	211
13.3.1	Group Scheduling	212
13.3.2	Task Adjustments Due to Non-working Time.....	212
13.4	Automatic vs. Manual scheduling	213
13.4.1	Identifying automatic and manually scheduled tasks.....	213
13.4.2	Manual Scheduling Mode	213

13.5	Work Estimate vs. Task Duration.....	214
13.5.1	Fixed Duration.....	214
13.6	Resources	215
13.6.1	Resource Units (Capacity)	216
13.6.2	Availability.....	216
13.6.3	Work Calendar and Time Zone.....	216
13.6.4	Task's Maximum Units.....	216
13.6.5	Resource Usage.....	217
13.7	Resource Leveling.....	218
13.7.1	Leveling Priority	218
13.7.2	Leveling Delay	218
13.8	Customizing the Chart with Configuration Slices.....	219
13.9	Work Calendars	220
13.9.1	Best practices for creating calendars.....	220
13.9.2	Day and Week Conversions in Jira and in Structure.Gantt.....	220
13.10	More reading	221

Welcome to Structure.Gantt documentation.

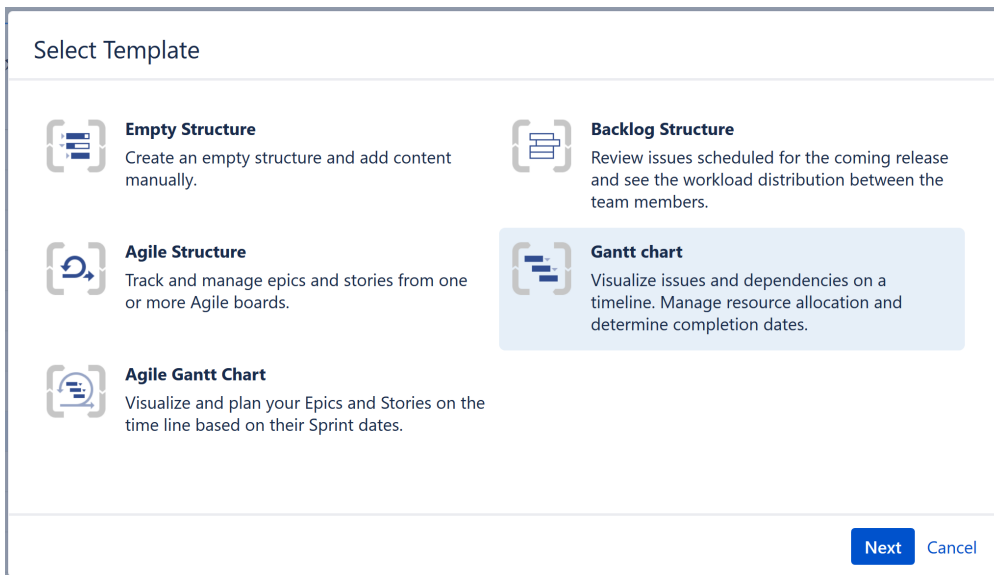
1 Quick Start Guide

Structure.Gantt is a Structure extension, which brings planning and resource management features to structures. It adds the power of familiar Gantt charts to Jira, so you can instantly visualize issue dependencies and timelines, and understand resource allocations on a global scale.

1.1 Getting Started

1.1.1 Creating 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. See [Creating Your First Gantt Chart](#)(see page 22) for a step-by-step guide to each method.

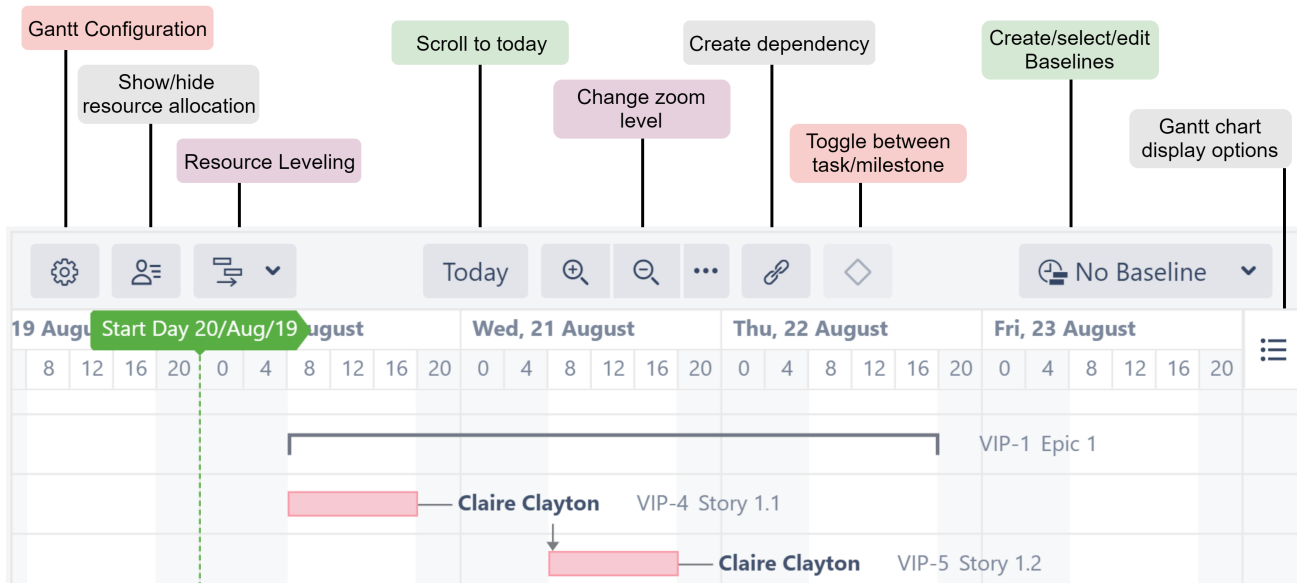


1.1.2 Gantt Chart Configuration


The [Gantt Chart configuration](#)(see page 105) defines how the chart is built, including where the chart's information comes from and what fields are used to build it.

Structure.Gantt comes with a predefined "Default" configuration, with several predefined parameters. You can begin with the default configuration and customize it as necessary, or you can create your own custom configurations. See [Gantt Configuration in Details](#)(see page 105) for more details.

1.2 Gantt Chart Elements



Your Gantt chart is composed of the following elements:

- **Time Scale** - Allows you to quickly navigate or focus your timeline to view a specific time frame. See [Gantt Chart Elements | Time Scale](#)(see page 54) for more details.
- **Start Date** - The project start date is indicated by a green vertical dashed line. Mouse over the point at the top to see the exact date.
- **Current Date** - The current date/time is indicated by an orange vertical line. Mouse over the point at the top to see the exact date.
- **Task Bars** - Structure items are represented in the chart with bars. Clicking the task bar will show the [Task Details panel](#)(see page 60), which contains information about the task's timeline and resources. See [Gantt Chart Elements | Task Bars](#)(see page 57) for more details.
- **Groups** - If an element has children in a structure, it can be shown as a Group (solid black line that extends from the earliest Start Date to the latest Finish Date of its child tasks). See [Gantt Chart Elements | Groups](#)(see page 57) for more details.
- **Dependencies** - Dependencies are displayed as arrows between task bars. Clicking the arrow will display the [Dependency Properties](#). See [Dependencies](#)(see page 117) for more information.
- **Critical Path** - Tasks included in the critical path are highlighted in red.
- **Conflicts** - Scheduling conflicts are indicated by a dark red line placed on top of the task bar. To review and resolve the conflict, open the [Task Details panel](#)(see page 60). See [Scheduling Conflict](#)(see page 51) for more information.
- **Display Options** - The Display Options menu allows you to select what elements should be shown in the chart. See [Gantt Chart Elements | Options](#)(see page 0) for more details.
- **Status Bar** - If there are any inconsistencies in the source data, 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.

1.3 Working with Gantt Charts

1.3.1 Adjusting Start/Finish Date, Manual and Automatic Scheduling

If you have enabled Manual Scheduling and configured fields for the Start and Finish Dates in the configuration, you can adjust them by dragging a task to the desired location. You can also adjust them by changing Jira fields, either on the issue page or right in the structure (if you have added the columns containing the date fields to your view). If you have enabled [sprint planning](#)(see page 34), you can reschedule a task by dragging it from one sprint to another.

See [Scheduling Tasks](#)(see page 30) for more details.

1.3.2 Managing Dependencies

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

To create a Finish to Start dependency:

1. Mouse over the task bar until a black circle appears to the right of the bar
2. Press the circle and drag your dependency line to the task you want to link to
3. If you have more than one link type set up for Finish to Start dependencies, you may be asked to select the link type you wish to create.

To create other types of dependencies, use the Link button in the toolbar.

To remove a dependency:

1. Click the link arrow between two tasks to display the Dependency Properties
2. Click **Remove**

For more information about working with and configuring dependencies, see [Working With Dependencies](#)(see page 44).

1.3.3 Managing Resources

Structure.Gantt allows you to track resource usage on a project (or multiple projects). You can assign resources to issues using a Jira field (such as Assignee or a custom Team field) or a Structure attribute, such as a value calculated through [Formulas](#)¹. Once resources are configured, Structure.Gantt can display the number of hours or percentage of availability assigned to each resource at a given time.

To view your assigned resources and their usage, click the Resources button or switch Layout to "Gantt + Resources."

¹ <https://wiki.almworks.com/display/structure/Formula+Column>

The screenshot displays the Structure.Gantt interface. On the left, a table lists project items with columns for Key, Summary, Team, Estimate, and Cost. The main area shows a Gantt chart for 2017, divided into quarters. A context menu is open on the right, listing options under 'LAYOUT', 'LAYOUT OPTIONS', and 'ITEM LINK ACTION'. A red arrow points from the gear icon in the top toolbar to the 'Gantt + Resources' option in the context menu.

Key	Summary	Team	Estimate	Cost (k)
Structure				
\$227				
✓ STR-1	Core Extensions	Team Core	4w 3d	\$23
STR-7	Synchronize Att	Team Core	19w 4d	\$74
✓ STR-1	Formulas - Me	Team Struc	16w 4d	\$84
✓ STR-6	Non-Jira Notes	Team Struc	9w 1d	\$46
Structure.Gantt				
\$67				
GT-3	Configurable res	Team Gant	4w	\$20
GT-4	Milestone feat	Team Gant	4w 2d	\$20

Resource name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Team Core	104	184	160	184	176	168			
Team Gantt		104	72		136	24	184	16	
Team Structure	208	368	240	184	40				

To assign resources to your tasks, see [Resources](#).(see page 121) For additional information, see [Resource Management](#)(see page 68).

2 Introducing Structure.Gantt

Structure.Gantt allows you to display cross-project and cross-team work in a Gantt chart.

Is built as an extension to [Structure²](#), the Jira app that allows to organize issues in adaptable, user-defined hierarchies.



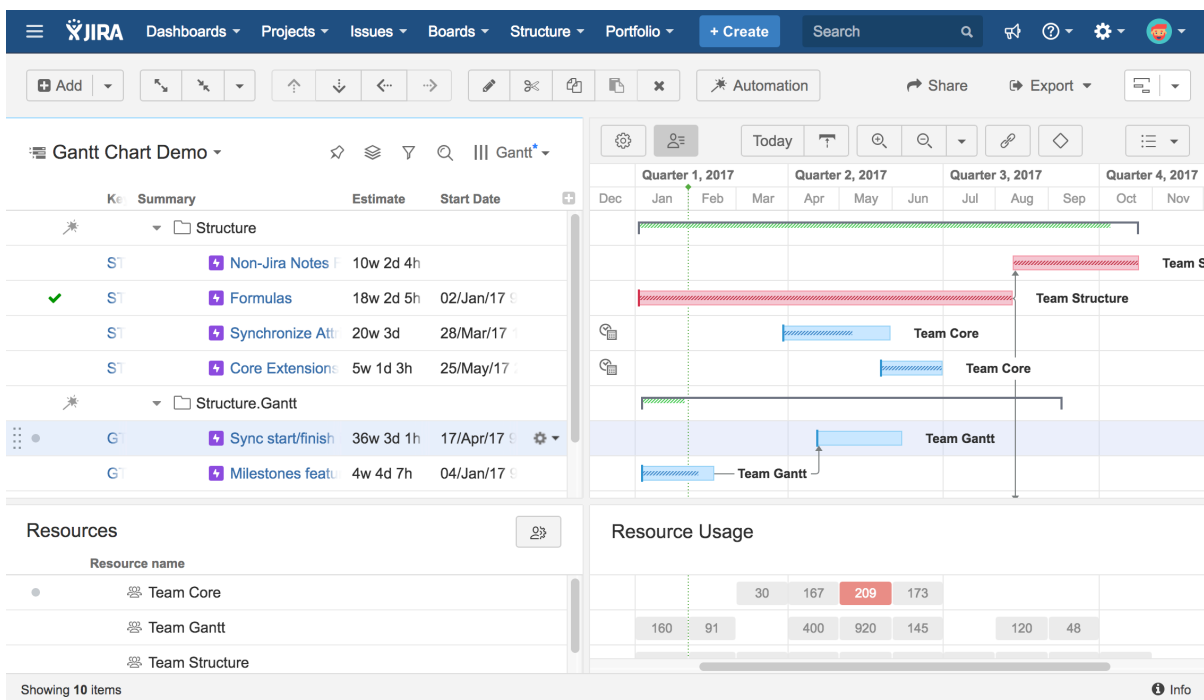
Sorry, the widget is not supported in this export.
But you can reach it using the following URL:

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

Main Concepts

Every Gantt chart consists of two parts:

- Work breakdown structure, which defines the scope of work and which is built using Structure functionality
- The chart itself, which visualizes your tasks on the timescale, showing their start and finish dates, dependencies between them and other information



The chart is designed to be very configurable and allows you to use your Jira data (such as time tracking, date/time fields, links, etc) for visualizing your work on the timeline.

The chart consists of the following elements:

- The toolbar, which helps you navigate the chart, configure the view and do a few other things
- The timeline
- The chart itself with the tasks, dependencies and other useful information

² <https://wiki.almworks.com/display/structure/Basic+Concepts>

You can schedule your tasks, change tasks estimate and dependencies [right in the chart](#)(see [page 30](#)).

Configurations

You define how the Gantt chart should be built by creating a [chart configuration](#)(see [page 105](#)) - a set of parameters defining what should be used for estimation, scheduling, dependencies, resources, etc.

You can create multiple configurations and quickly switch between them for the same structure, or reuse any configuration in multiple structures.

2.1 Resource Management

Structure.Gantt allows you to visualize resource allocation and identify potential bottlenecks. For each individual resource you can [define it's capacity, calendar, availability and the time zone](#)(see [page 68](#)).

3 Creating Your First Gantt Chart

Depending on your needs and experience with Structure, there are a few different methods for creating a new Gantt Chart.

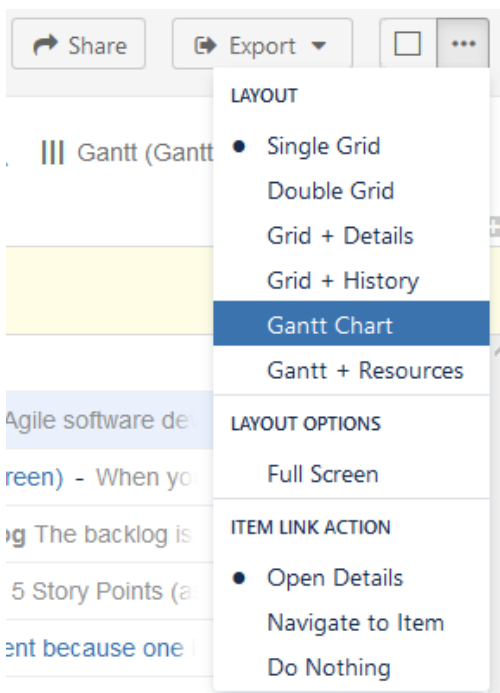
- To add a Gantt chart to an existing structure, see [Define Your Chart Manually](#)(see page 22)
- To create a chart for a new project, see [Using Structure Wizard](#)(see page 23)
- To create an Agile Gantt chart (visualize and plan your epics and stories based on their sprints), see [Agile Gantt Chart Template](#)(see page 26).

3.1 Define Your Chart Manually

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 101).

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

That's it! Now you can skip ahead to [Working with Your Gantt Chart](#)(see page 30) 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.

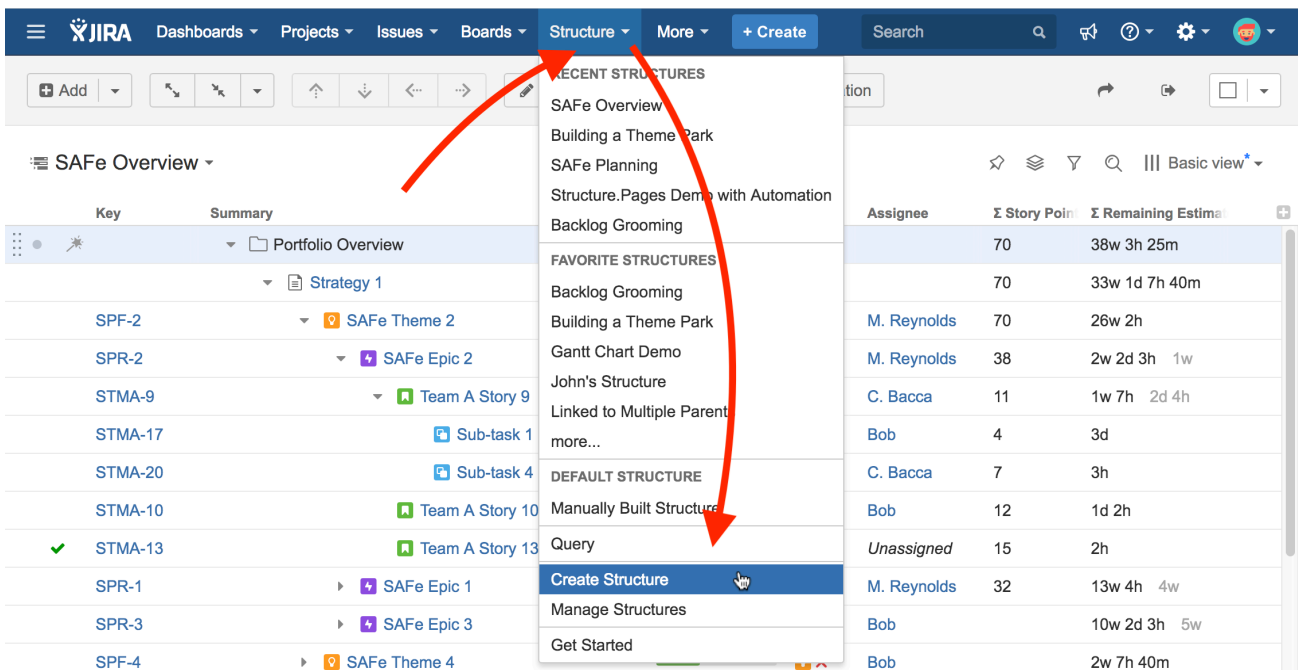
ℹ️ To be able to create Gantt charts (even for existing structures) you need to have the appropriate permissions set for your account. To create a Gantt chart for a structure that you created, you must have permission to create new structures. To create a Gantt chart for a structure you did not create,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

3.2 Using Structure Wizard

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 26).

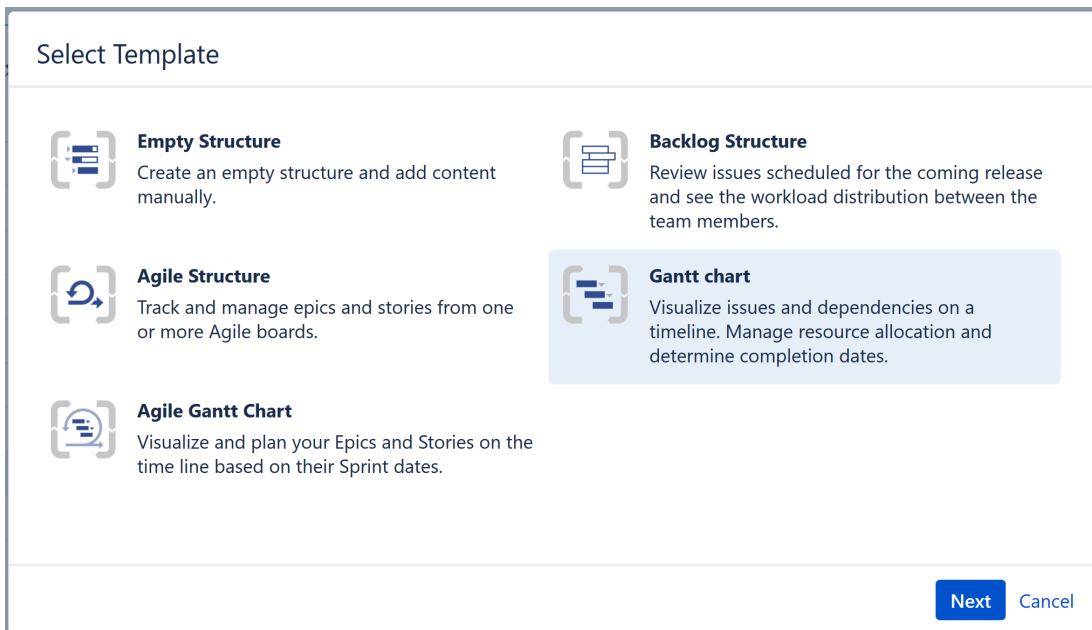
To open the wizard, go to the top **Structure** menu and click **Create Structure**.



The screenshot shows the JIRA interface with the 'Structure' menu open. A red arrow points from the 'Structure' menu in the top navigation bar to the 'Create Structure' option in the dropdown menu. The main content area shows a 'SAFe Overview' structure with a hierarchy of tasks and sub-tasks. A table on the right side of the screen displays a list of tasks with columns for Assignee, Story Points, and Remaining Estimate.

Assignee	Σ Story Points	Σ Remaining Estimate
	70	38w 3h 25m
	70	33w 1d 7h 40m
M. Reynolds	70	26w 2h
M. Reynolds	38	2w 2d 3h 1w
C. Bacca	11	1w 7h 2d 4h
Bob	4	3d
C. Bacca	7	3h
Bob	12	1d 2h
Unassigned	15	2h
M. Reynolds	32	13w 4h 4w
Bob		10w 2d 3h 5w
Bob		2w 7h 40m

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.

3.2.1 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.

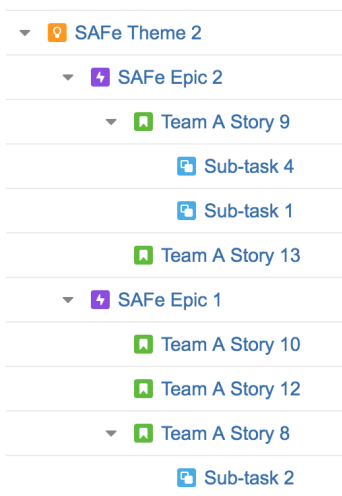
To define your scope:

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.)

3.2.2 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.
- **Portfolio Hierarchy** – If you are using the Atlassian Portfolio add-on, Structure can visualize the hierarchy you have in your Portfolio 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.

3.2.3 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 117) at any time using [Gantt configuration](#)(see page 105)).

3.2.4 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.

3.2.5 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 121), but that is only possible using [Gantt configuration](#)(see page 105).


3.2.6 Calendar

By default, Structure.Gantt uses the predefined "Standard" [work calendar](#)(see page 124) 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 105).

Congratulations! You've just configured your first Gantt chart. Click the Save Settings button, and the structure, its [view](#)³ 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](#)⁴.
- If you're ready to start managing tasks with Structure.Gantt, see [Working with Your Gantt Chart](#).(see page 30)
- If you need to make changes to your [Gantt chart configuration](#)(see page 105), 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.

3.3 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.

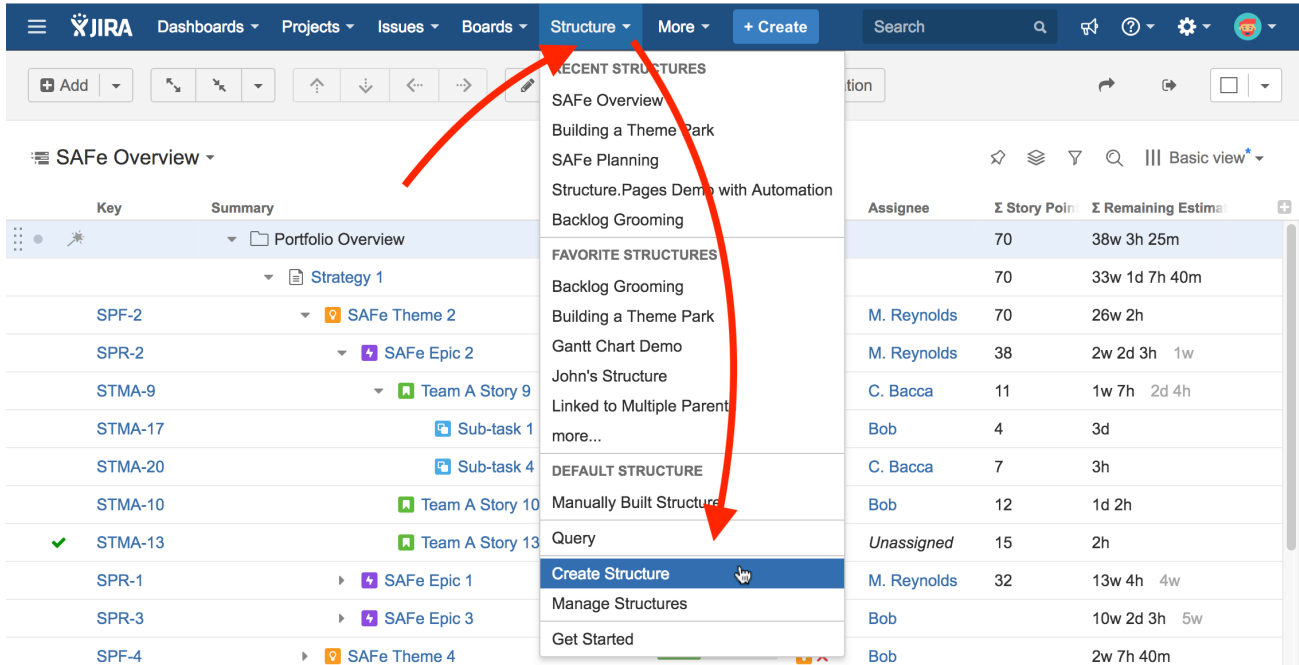
The easiest way to get started is with our Agile Gantt Chart template.

³ <https://wiki.almworks.com/display/structure/Configuring+View>

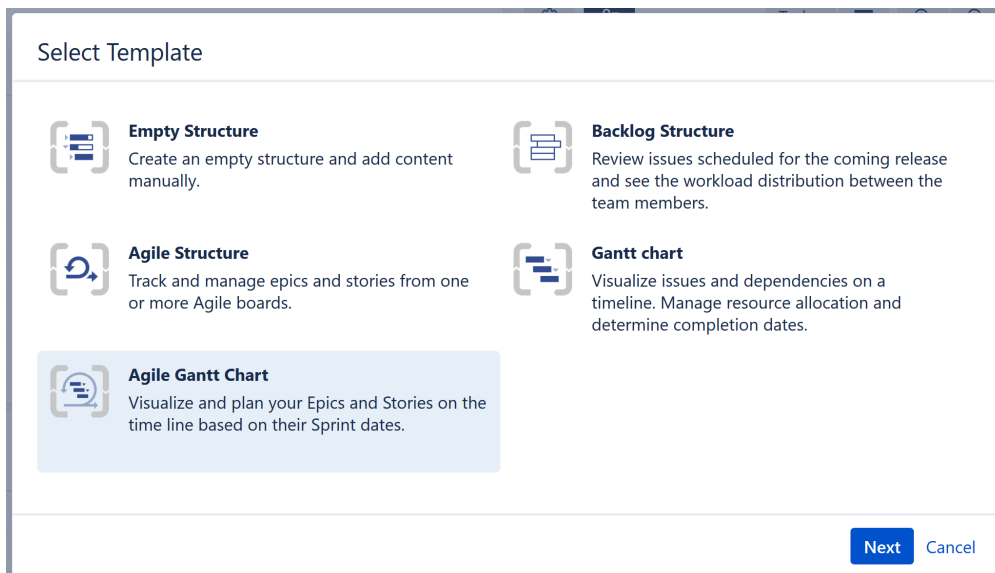
⁴ <https://wiki.almworks.com/display/structure/Documentation>

3.3.1 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**.



3.3.2 Select Your Gantt Chart Options

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

Create Agile Gantt Chart

Agile Gantt will show the tasks on the timeline using their sprint dates. The sprints will also be marked on the time scale.

Scrum Boards*

Planning Level
Choose whether you want to see stories only, stories under epics or a deeper portfolio hierarchy

Track Resource Allocation

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

Share With

3.3.2.1 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.

3.3.2.2 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.
- **Portfolio** - if Atlassian Portfolio is installed, this will add a portfolio level above epics.

3.3.2.3 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.

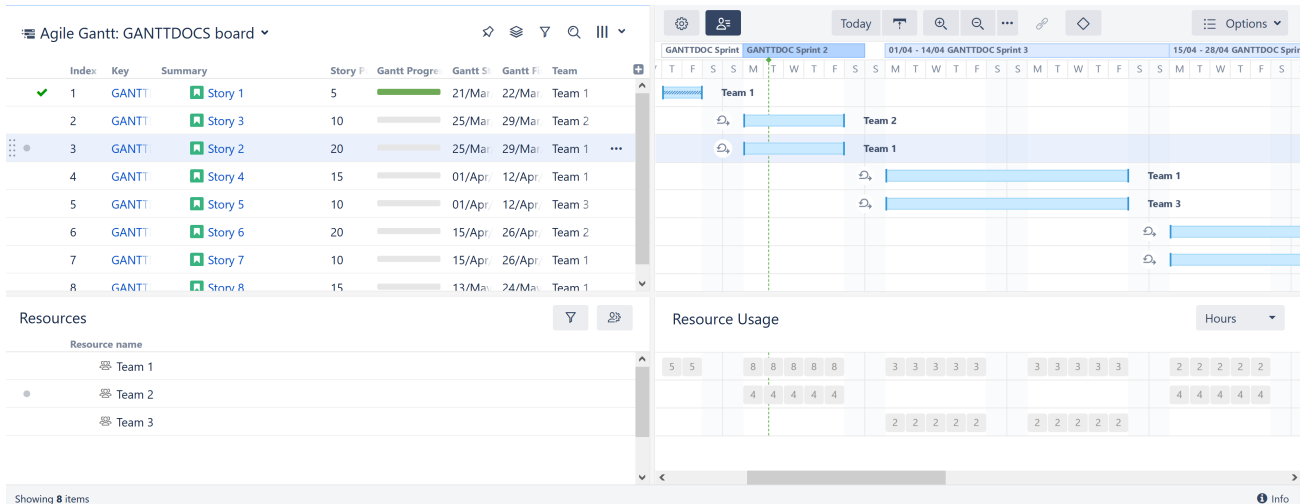
3.3.2.4 Sharing

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](#)⁵.

⁵ <https://wiki.almworks.com/display/structure/Structure+Permissions>

3.3.3 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 [Automation](#)⁶ 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](#)⁷ 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 105)

3.3.4 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](#)⁸.
- If you're ready to start managing tasks with Structure.Gantt, see [Working with Your Gantt Chart](#).(see page 30)
- If you need to make changes to your [Gantt chart configuration](#)(see page 105), 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.

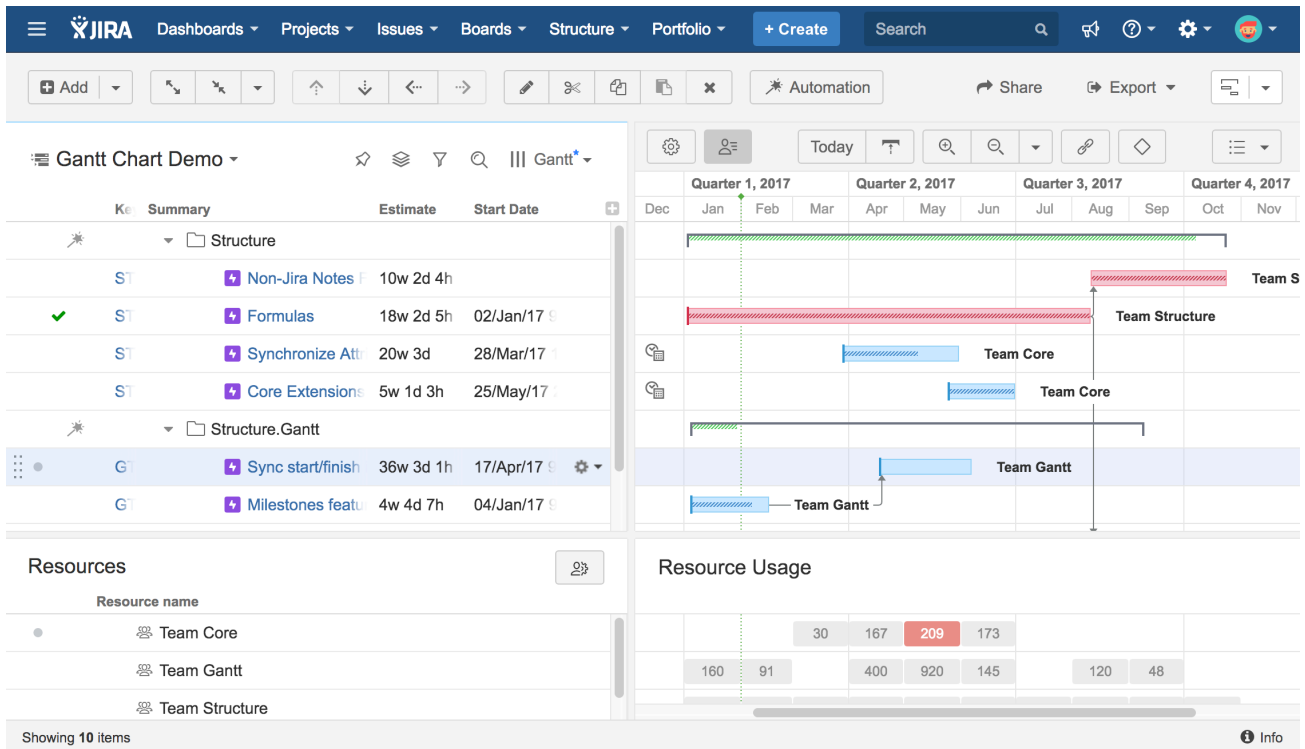
⁶ <https://wiki.almworks.com/display/structure/Automation>

⁷ <https://wiki.almworks.com/display/structure/Editing+a+Generator>

⁸ <https://wiki.almworks.com/display/structure/Documentation>

4 Working With Your Gantt Chart

Once you have created your Gantt chart, you will see the work breakdown structure (WBS) in the left panel and the chart itself in the right panel. Depending on your panel layout, you may also see the Resources and Resources Usage panels at the bottom of the screen.



When working with a Gantt chart, you can make most scheduling changes directly from the toolbar and your timeline. In some cases, you may need to change your Gantt chart configuration, which we will discuss later.

To start working with your Gantt chart right away, see [Scheduling Tasks](#)(see page 30).

For a closer look at the menu and layout, see [Gantt Chart Elements](#)(see page 53).

4.1 Working With Tasks

Structure.Gantt not only 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 30)
- [Adjusting Duration](#)(see page 42)
- [Working With Dependencies](#)(see page 44)
- [Scheduling Conflict](#)(see page 51)

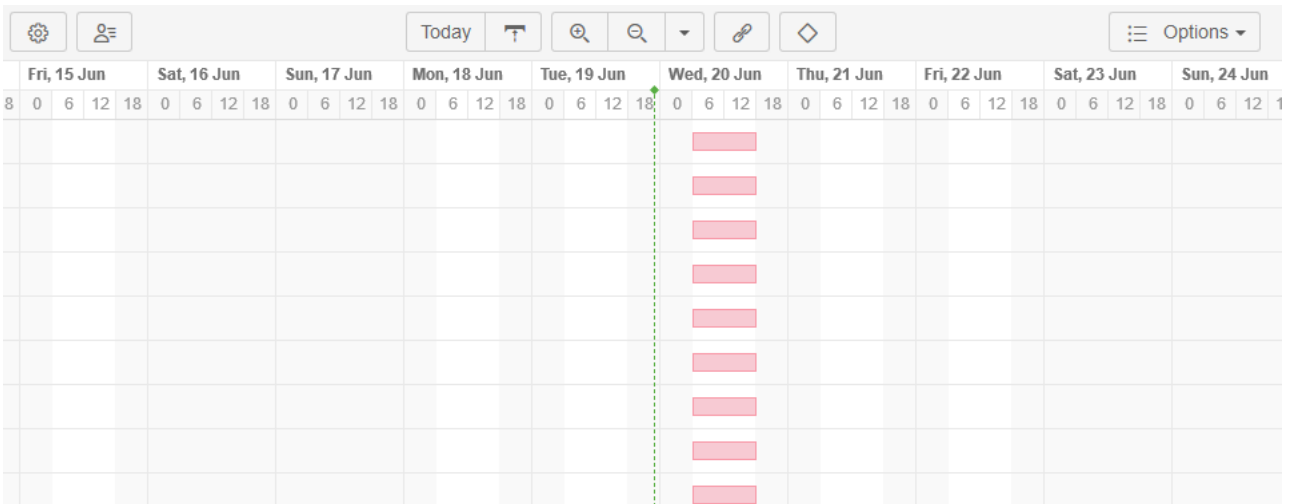
4.1.1 Scheduling Tasks

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.

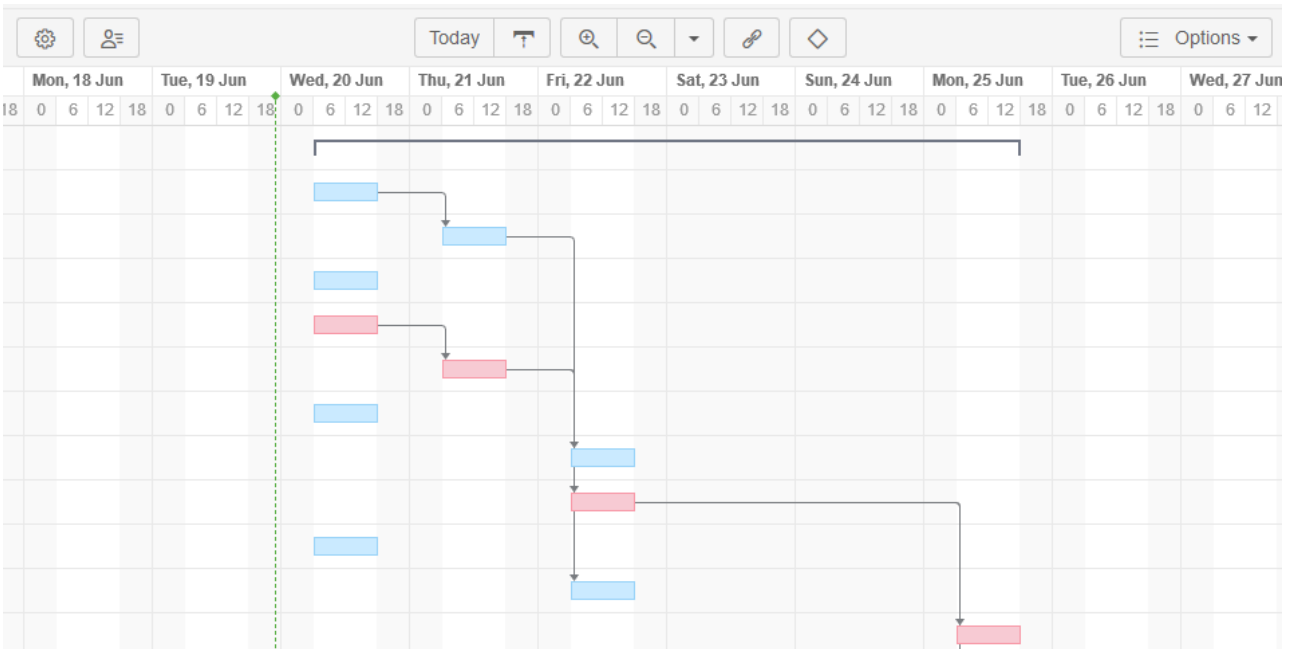
- [Automatic Scheduling](#)(see page 31)
- [Manual Scheduling by Start or Finish Date](#)(see page 32)
- [Planning with Sprints](#)(see page 34)
- [Fixed Duration](#)(see page 39)

4.1.1.1 Automatic Scheduling


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



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



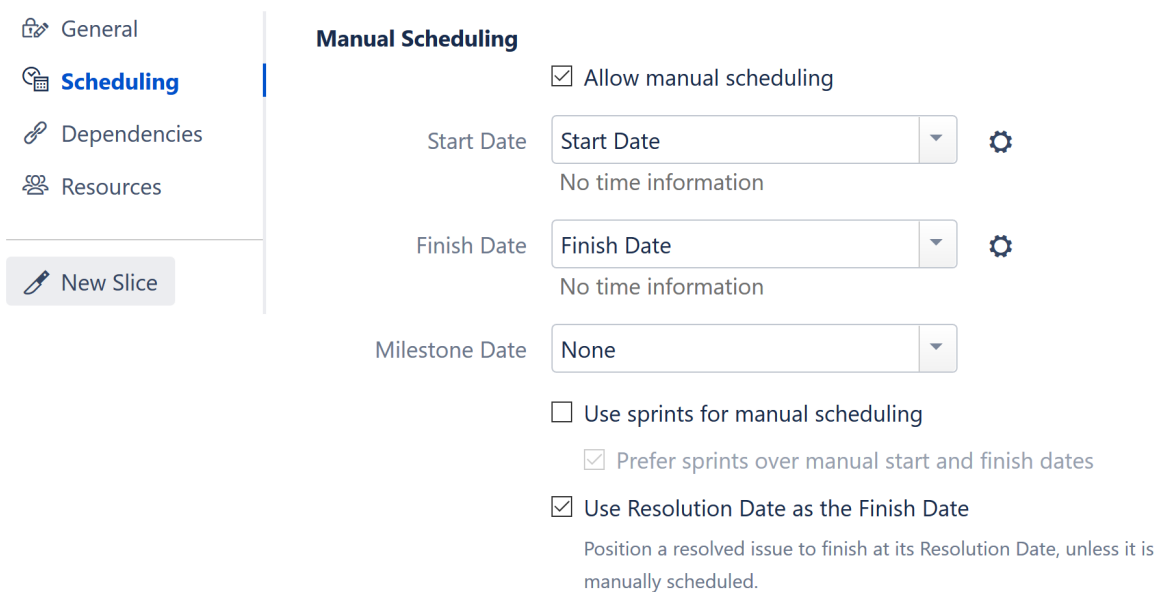
As you move items around in your structure or change dependencies, your tasks will move within your timeline as well.

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

4.1.1.2 Manual Scheduling by Start or Finish Date


Manual Scheduling


While automatic scheduling 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.



Manual Scheduling

Allow manual scheduling

Start Date 
No time information

Finish Date 
No time information


Milestone Date


Use sprints for manual scheduling

Prefer sprints over manual start and finish dates

Use Resolution Date as the Finish Date
Position a resolved issue to finish at its Resolution Date, unless it is manually scheduled.

To manually edit task Start and Finish dates, you must first enable Manual Scheduling in [Gantt Configuration in Details](#)(see page 105):

1. Click the Gantt Chart Settings button  on the left side of the chart toolbar
2. Under Gantt Chart Configuration, click **Edit** to update the current configuration (click **Manage Configuration** to select a different configuration or create a new one)
3. On the Scheduling screen, check the **Allow manual scheduling** box
4. Select the Jira fields that will be used for your Start and/or Finish dates

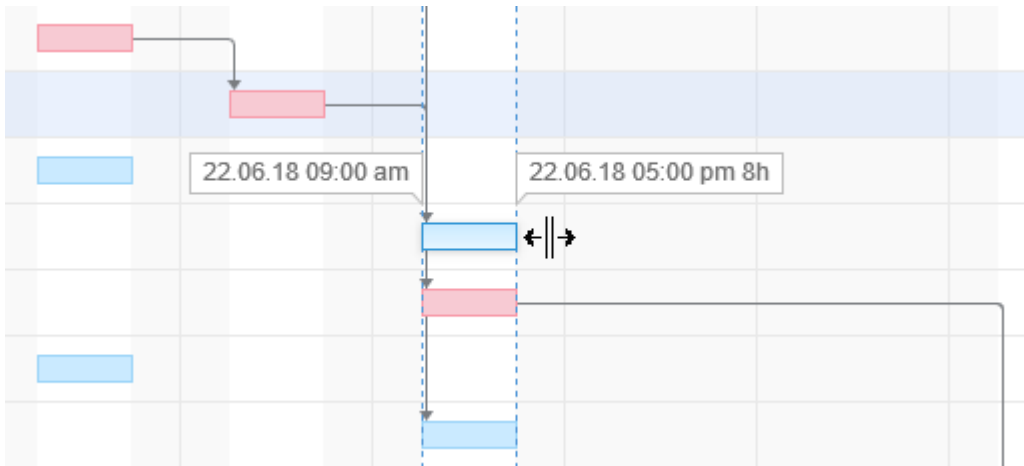
 If **Use sprints for manual scheduling** is selected, Structure.Gantt will also consider sprint dates when scheduling tasks. The article below explains how Structure.Gantt behaves when that option is not selected or tasks are not assigned to a sprint. To learn more about sprint-based scheduling, see [Planning with Sprints](#)(see page 34).

Once you have enabled manual scheduling, you can quickly adjust a task's schedule by dragging the task to a desired location in your timeline. As you move the task bar, one of three things will happen to your corresponding Jira fields:

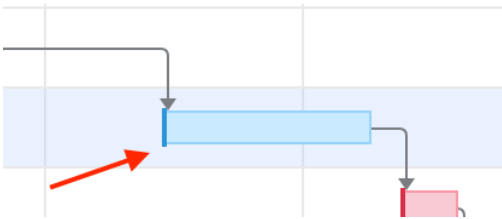
- If you have manually set both Start and Finish dates, both date fields will be updated

- If you have only manually set the Start Date, only the Start Date field will be updated (the Finish Date will continue to be automatically scheduled based on task estimates and dependency types)
- If you have only manually set the Finish Date, only the Finish Date field will be updated (the Start Date will continue to be automatically scheduled based on task estimates, predecessors and dependency types)

You can also adjust the Start and Finish dates by changing the corresponding Jira fields - either on the issue page or right in the structure (you'll need to [add the columns](#)⁹ containing your date fields).



Once you schedule a task manually, Gantt will place a visual indicator (dark, vertical line) at the corresponding end of the task bar, so you can quickly identify manually scheduled tasks.

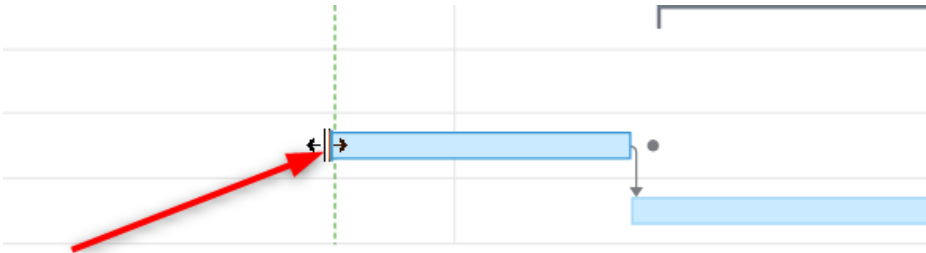


To adjust a task's Finish Date (without changing the Start Date), hover over the right edge of the bar. Once the mouse pointer changes to the resize tool, click and drag left or right to set the new Finish Date. Since the Start Date remains unchanged, this process also updates the task's Original Estimate (if the task hasn't been started) or Remaining Estimate (if the task is in progress).



⁹ <https://wiki.almworks.com/display/structure2gmaster/Customizing+Columns>

You can also adjust a task's Start Date (without changing the Finish Date) by dragging the left side of the bar. In this case, the Finish Date remains unchanged, while the Original Estimate/Remaining Estimate or custom estimate is updated.



Manual Scheduling uses the following rules:

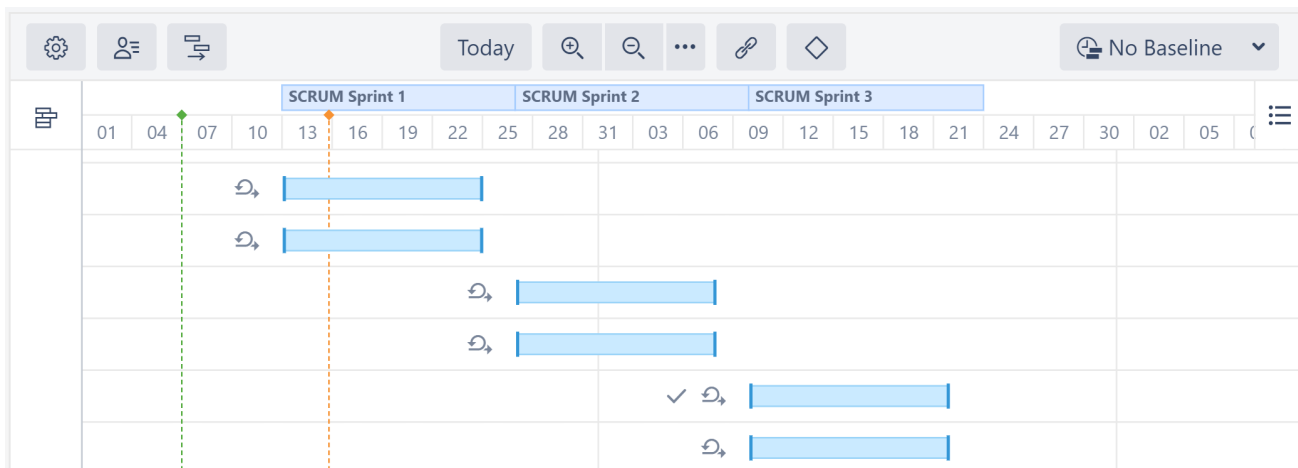
- If neither Start nor Finish dates are defined, the task is scheduled automatically to start either at the Project Start Day you selected when configuring your Gantt chart or based on the task's dependencies. For example, in the case of a Finish to Start dependency, the task will be scheduled to start immediately following the Finish Date for the task it depends on. (Note: If [Use sprints for manual scheduling](#) (see page 113) is selected and the task is assigned to a sprint, the task will be [scheduled based on its sprints](#) (see page 34).)
- 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 39), 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 60) 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.

4.1.1.3 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 113) 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 38) 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

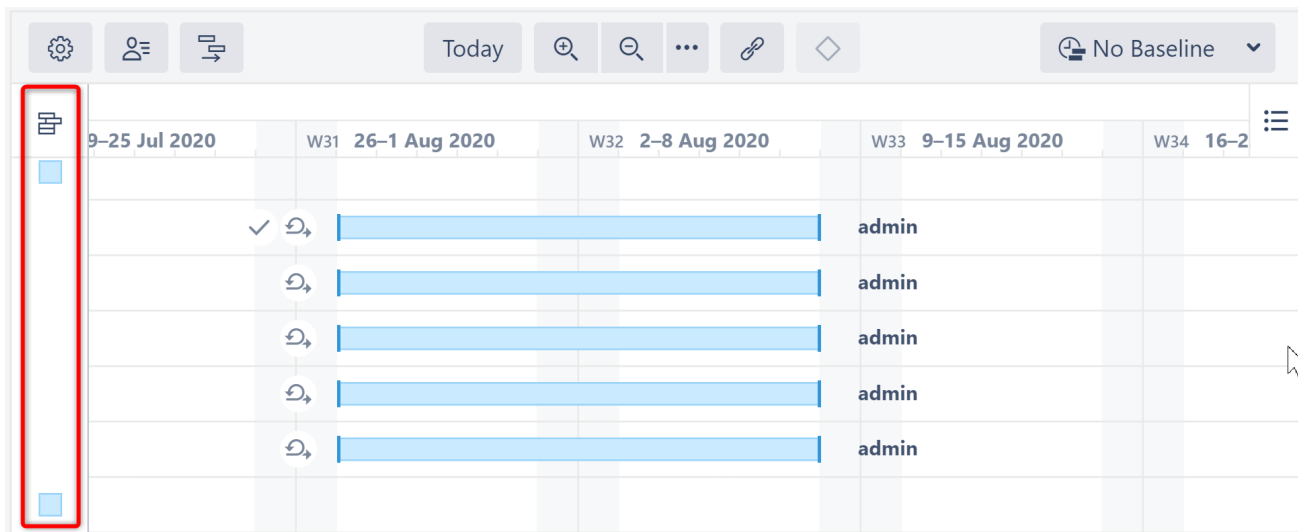
At some zoom levels, sprints will not be shown due to space limitations. To view sprints, simply zoom in.

Future Sprints

Jira does not allow you to specify dates for future sprints, so Structure.Gantt schedules future sprints based on your [Sprint configuration](#) (see page 103) 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 60).

i An issue can be assigned to sprints from the Backlog board selected in the [Gantt configuration](#) (see page 113). If you don't see the sprint you want, you may need to adjust the configuration or add a custom [Slice](#) (see page 127).

Fixed Duration

Tasks that are scheduled by sprint have a [Fixed Duration](#) (see page 39). 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 69), Structure.Gantt spreads the work for each task evenly across the sprint.

See [Fixed Duration](#) (see page 39) 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 113), 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 35), its Start/Finish dates will be removed

See [Scheduling Precedence](#) (see page 114) for more information.

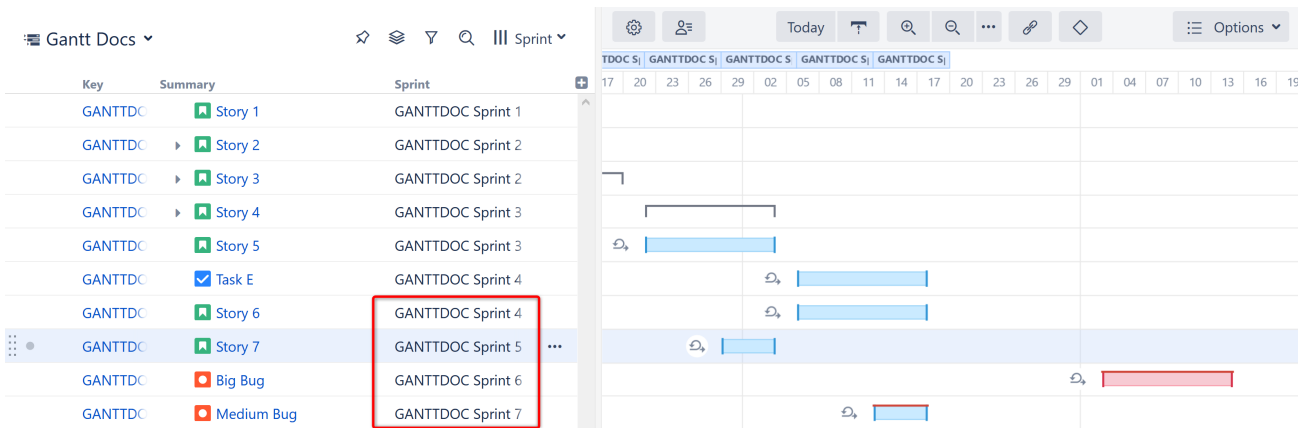
Parallel Sprints

If you're working with Parallel Sprints, please note that at this time Structure.Gantt only supports parallel sprints with the same start dates and durations. When dragging a task from a board with parallel sprints, Structure.Gantt will always check which sprint you wish to reassign the task to.

⚠️ Parallel sprints with different start dates and/or durations are not currently supported in Structure.Gantt. While tasks from such sprints will still appear in your Gantt chart, their sprint dates may not be displayed correctly. Structure.Gantt will take the earliest start date and latest finish date and treat all parallel sprints as having these dates when visualizing them within your chart.

Same Sprint on Multiple Boards

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 103) for the 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](#)

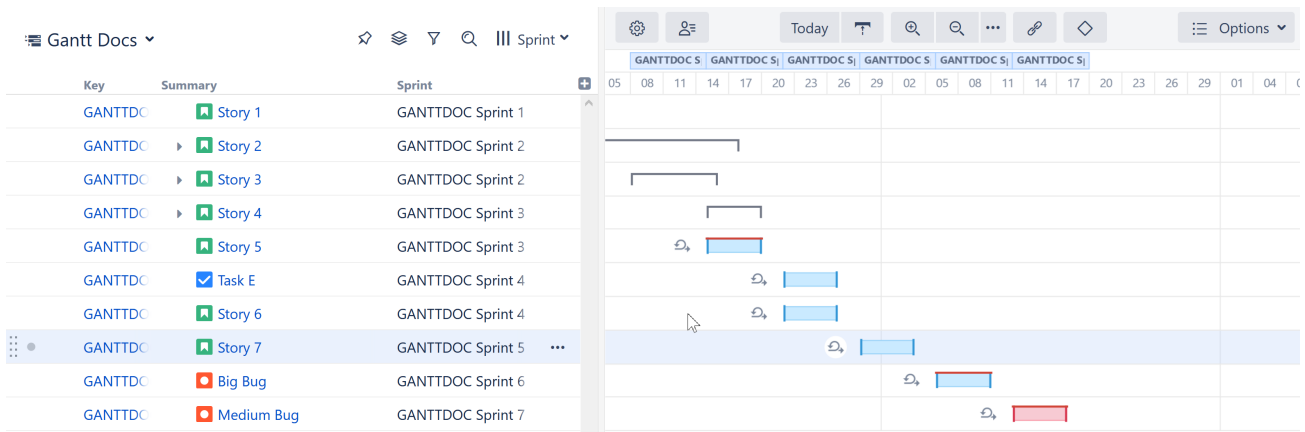
- When setting up board-specific configurations, be sure to include all board copies. This way, future sprints will be scheduled the same, regardless of where they were created.

Boards 

Sprint start day Duration week(s)

[Add sprints configuration](#)

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

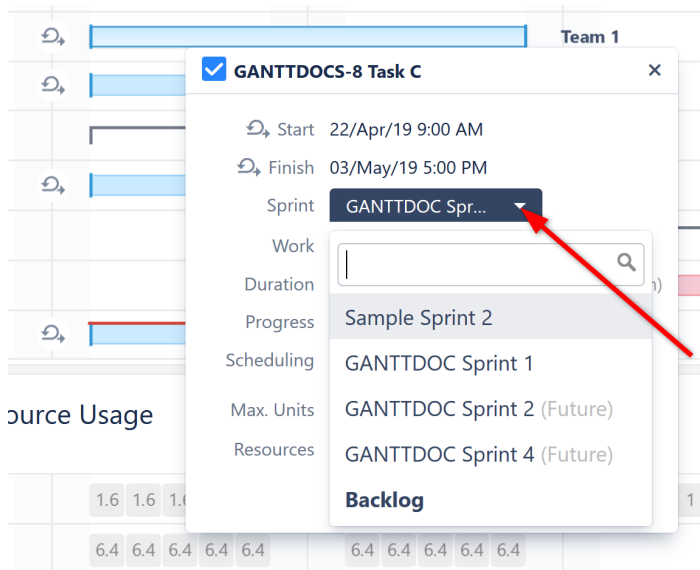


i If a custom configuration is not created for a specific board, sprints from that board will be scheduled using the default configuration.

Reassigning Sprints with Structure.Gantt

If tasks are [manually scheduled by sprints](#), (see page 34) 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 60) and change the Sprint selection to **Backlog**. Once a task is moved to the backlog, it will be [automatically scheduled](#) (see page 31) within your Gantt chart.

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

4.1.1.4 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 41)). When updating a fixed duration task:

- Adjusting the amount of work required for the task does not affect its duration.

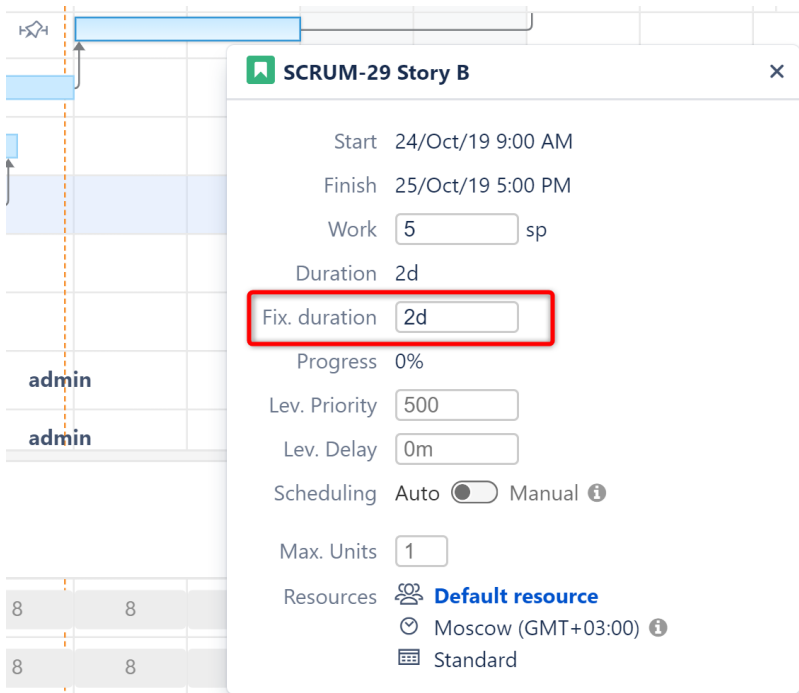
- Moving the task's Start or Finish Date, or changing the duration, will not change the work requirement.

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.

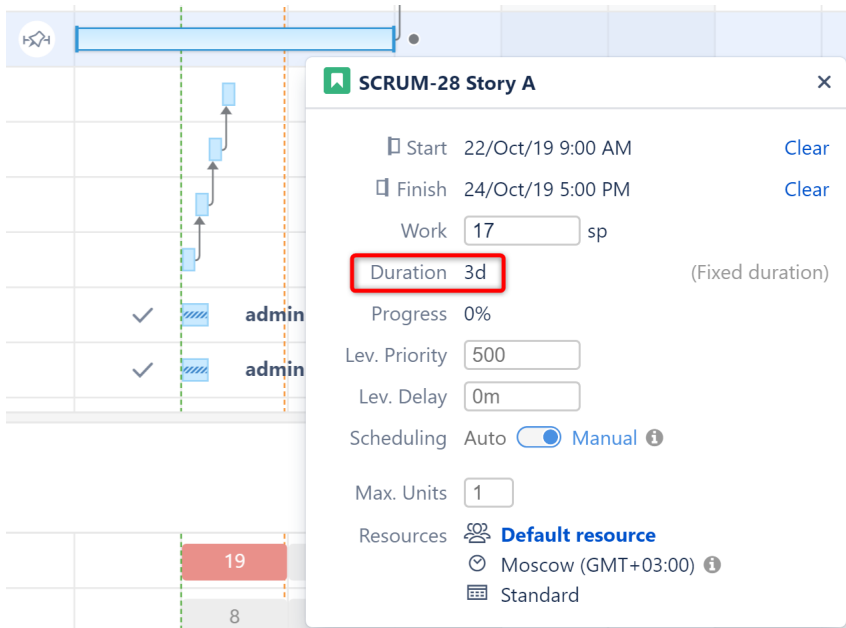


This task can be automatically scheduled, or you can manually assign a Start or Finish date.

i You can also set the duration value for tasks based on a Jira field or formula, by configuring the [Duration Attribute](#)(see page 114).

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.

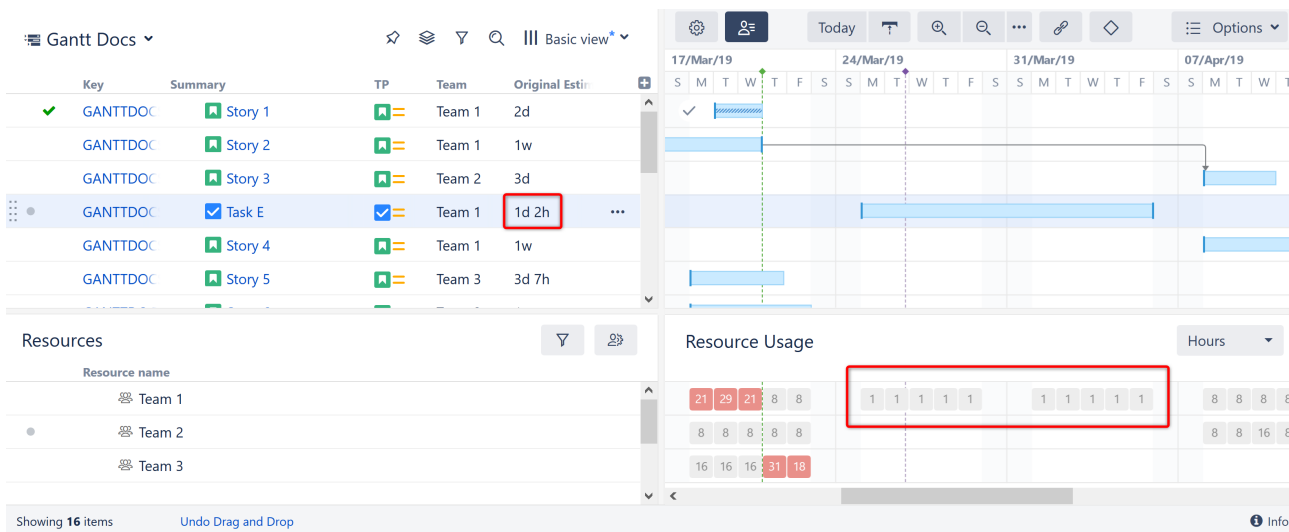
3. Using Sprint-based Scheduling

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 34) 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 69). 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 52).

4.1.2 Adjusting Duration

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

- [Automatically](#)(see page 42)
- [Based on Start and Finish Dates](#)(see page 43)
- [Based on Sprints](#)(see page 43)
- [Manually Setting Duration](#)(see page 43)

4.1.2.1 Automatically

By default, task durations are calculated automatically, based on each task's work estimate, the calendar, resource availability and the [Work Estimates settings](#)(see page 108).

To adjust the duration of these tasks:

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

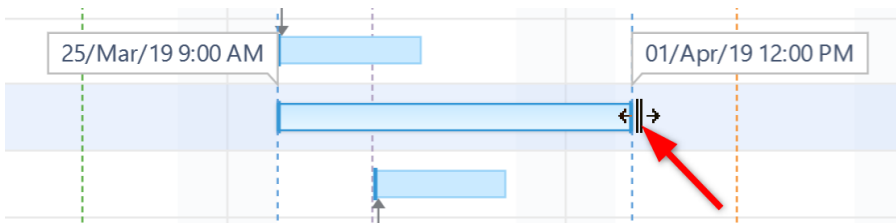


Dragging the right side of a task bar will cause the task's work to be updated and its duration to be recalculated.

4.1.2.2 Based on Start and Finish Dates

When tasks are [manually scheduled](#) (see page 111) and have both a manual Start and Finish Date, the task has a [fixed duration](#) (see page 39), 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.



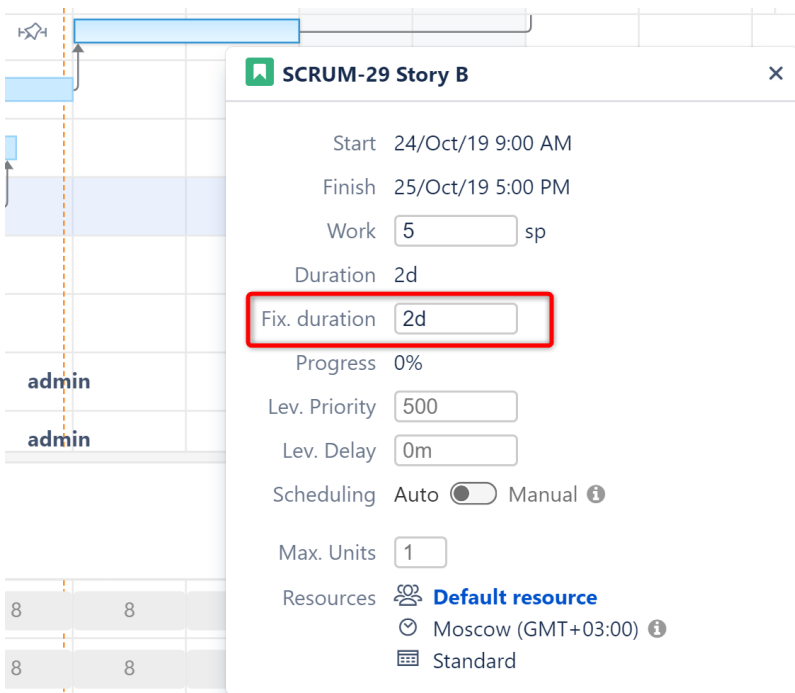
i Adjusting the duration of a fixed duration task does not affect its work estimate.

4.1.2.3 Based on Sprints

When tasks are [scheduled based on sprints](#) (see page 34), they have a [fixed duration](#) (see page 39) 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 103) settings.

4.1.2.4 Manually Setting Fixed Duration

You can set a [fixed duration](#) (see page 39) for an individual task by updating the **Fix. Duration** field in the [Task Details Panel](#) (see page 60).



Tasks can also be assigned a fixed duration based on a Jira field or formula, by assigning a [Fixed Duration Attribute](#) (see [page 114](#)) in the Gantt Configuration.

4.1.3 Working With 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 105](#))).

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

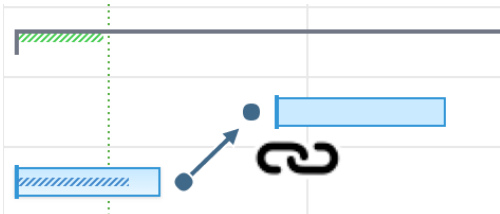
By default, the dependency transition happens immediately. For example, in an FS dependency, the second item starts as soon as the first item finishes. If you need to delay a start/finish or begin it early, you can configure a [lead/lag time](#) (see [page 47](#)) for dependencies.

4.1.3.1 Finish to Start Dependencies

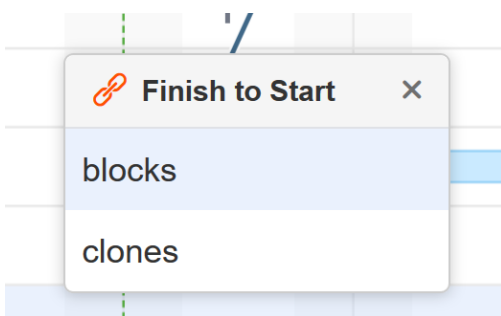
Structure.Gantt uses Finish to Start dependencies by default. To enable other types of dependencies, see [Gantt Configuration | Dependencies](#) (see [page 117](#)).

To create a Finish to Start dependency:

1. Mouse over the task bar until a black circle appears to the right of the bar.
2. Press the circle and drag your dependency line to the task you want to link to. Once you release the mouse button, the dependency (and the corresponding Jira link) is created.



If you have more than one link type associated with Finish to Start dependencies, you will be asked which link type you want to use.



You can use favorites to streamline the selection process:


- If you favorite one Finish to Start link type, Structure.Gantt will skip the popup and use that type every time
- If you favorite multiple Finish to Start link types, only your favorites will be listed in the popup

See [Dependencies](#)(see page 117) for more information.

i If [Resource Leveling](#)(see page 79) is active, any leveling delays affecting the newly-linked items will be removed.

4.1.3.2 Other Dependency Types

To create other types of dependencies:

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 47), if necessary.
5. Click **Create Dependency**

New Dependency

Select tasks to be linked and dependency type.

From

KAN-12 Subtask MN

}

To

Start typing issue key, summary or folder name

}

} swap

Type

Finish to Start (blocks)

Lead/Lag Time

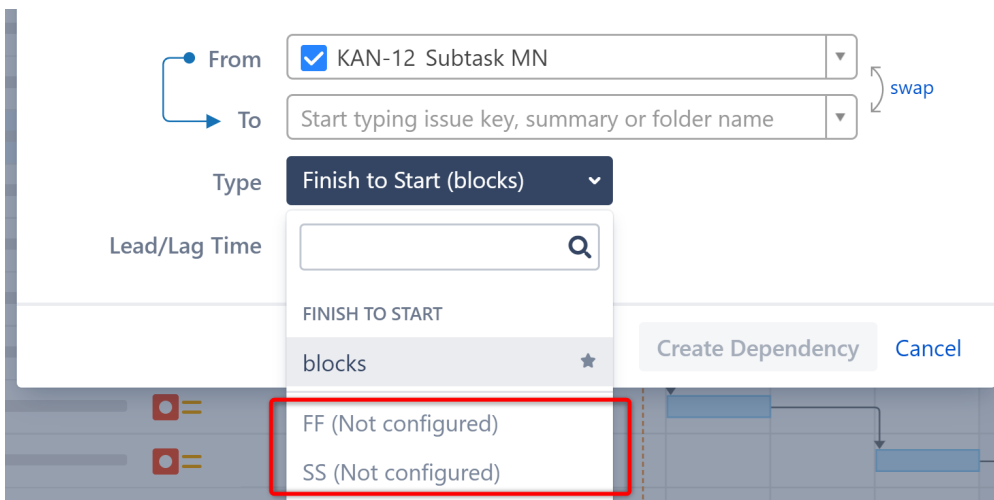
0m

i

Create Dependency

Cancel

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



In order to use these dependency types, you first need to configure them in your [Gantt Configuration](#) (see page 117).

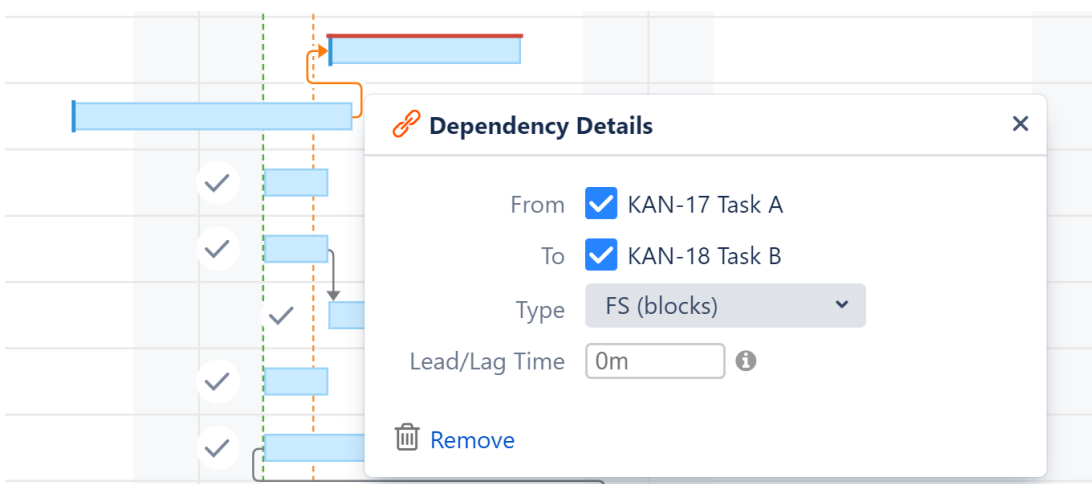
⚠ Start to Finish and Finish to Finish dependencies are currently not supported between tasks and [groups](#) (see page 116).

4.1.3.3 Non-Issue Dependencies

It is also possible to create dependencies between non-issues items (Structure [Folders](#)¹⁰ and [Memos](#)¹¹), as well as between issues and non-issues. These dependencies are stored inside Structure.Gantt and are not visible outside of the chart.

4.1.3.4 Dependency Details

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



¹⁰ <https://wiki.almworks.com/display/structure/Folders>

¹¹ <https://wiki.almworks.com/display/structure/Memo>

4.1.3.5 Deleting Dependencies

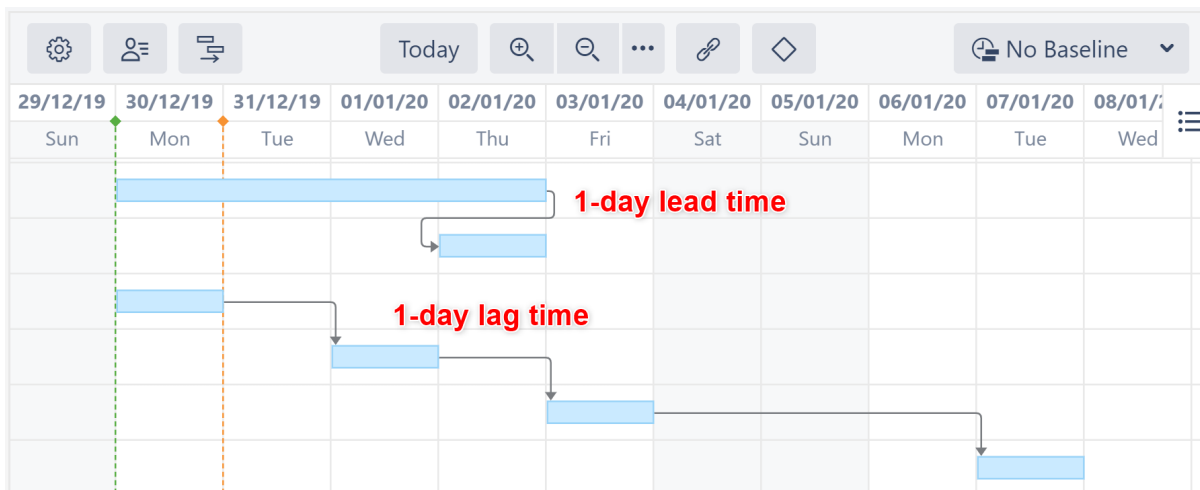
To delete a dependency, click the **Remove** link in the Dependency Properties panel.

i If [Resource Leveling](#) (see page 79) is active, any leveling delays affecting the previously-linked items will be removed.

Next Step: [Gantt Chart Elements](#) (see page 53)

4.1.3.6 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).



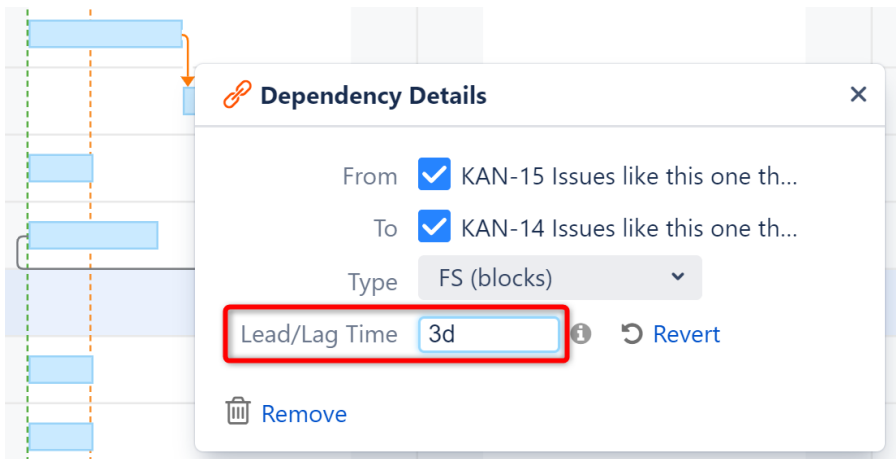
You can accomplish this in Structure.Gantt by configuring the lead/lag time for dependencies.

i Lead/Lag works with all types of dependencies.

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.

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"/>	
		Add Type ▼		
FF	<input type="text" value="0"/>	Add Type ▼		
SS	<input type="text" value="0"/>	Add Type ▼		
SF	<input type="text" value="0"/>	duplicates	<input checked="" type="checkbox"/>	
		relates to	<input type="checkbox"/>	
		Add Type ▼		

Save as...
Save Cancel

You can also assign a unique Lead/Lag time to a subset of items by creating a [Slice](#)(see page 127).

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

Lead/Lag Times and Resource Leveling

Running [Resource Leveling](#)(see page 79) may affect lead/lag times:

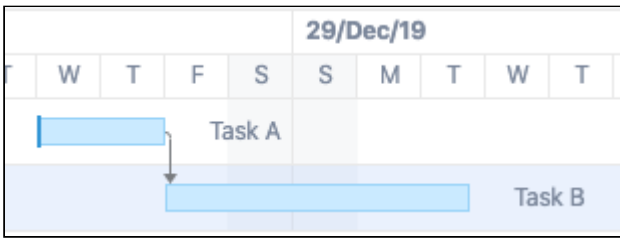
- Lead times may be removed if both items in the dependency share the same resource.
- Lag times may be extended to resolve overallocations.

4.1.3.7 Dependency Types Supported by Structure.Gantt

Structure.Gantt supports the following dependency types:

Finish to Start

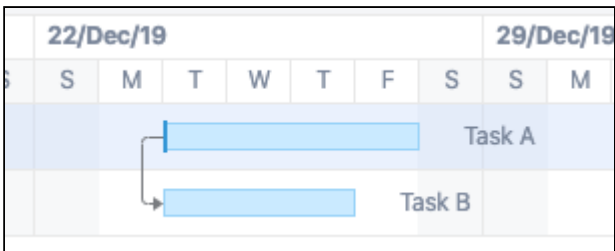
Finish to Start is the most commonly used dependency type. In a Finish to Start dependency, a task's start date is based on when the task it depends on finishes.



Task B starts after Task A finishes.

Start to Start

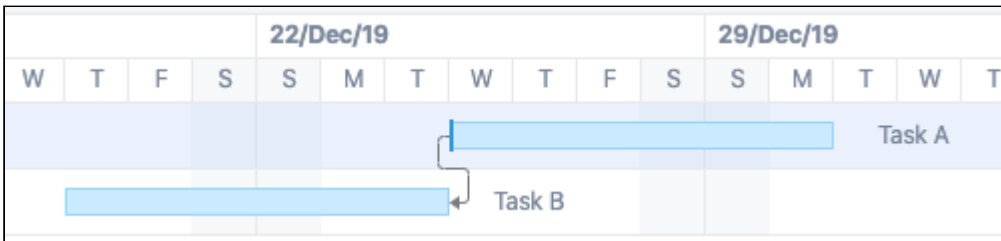
In a Start to Start dependency, a task's start date is based on when the task it depends on starts.



Task B starts at the same time Task A starts.

Start to Finish

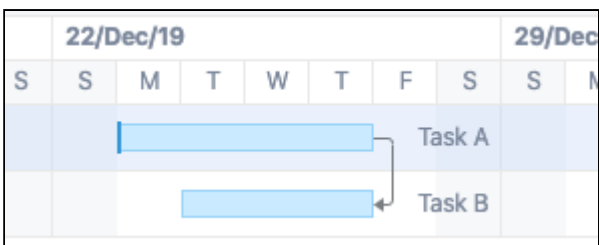
In a Start to Finish dependency, a task's finish date is based on when the task it depends on starts.



Task B finishes before Task A starts.

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.

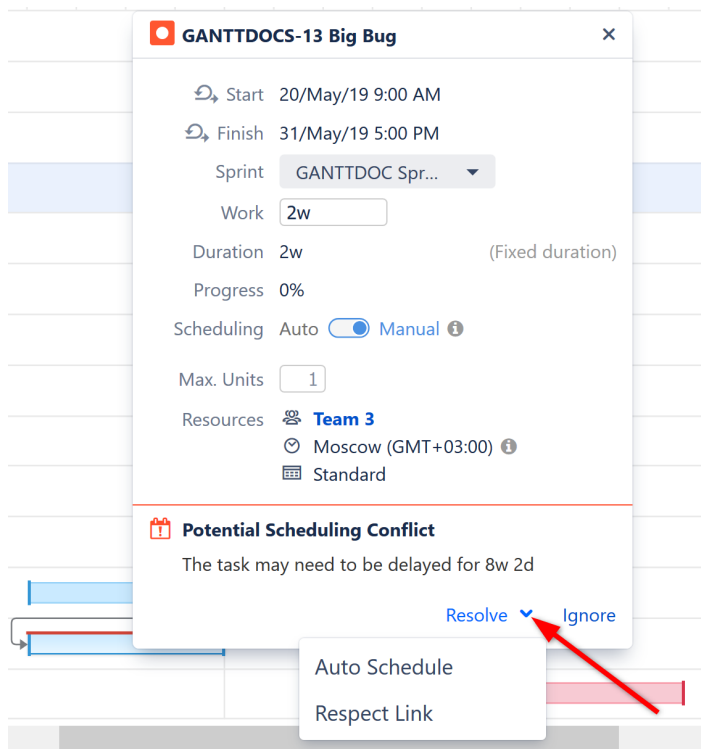
i The above examples show tasks within a dependency starting or finishing in sync with one another. It is also possible to configure a [lead or lag time](#) (see page 47) for these. For example, setting a 1-day lead time for Finish to Start dependencies would cause a task to begin one day before the task it depends on finishes.

4.1.4 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.

4.1.4.1 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 31) 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 113) 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 79) is active, any leveling delays affecting the item will be removed when **Respect Link** or **Auto Schedule** is selected.

4.1.4.2 Duration/Work Estimate Conflicts

If a task is scheduled for a [fixed duration](#)(see page 39) shorter than its work estimate, you will receive an error message.

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

- **Auto Schedule** - Removes manual scheduling.
- **Reduce Estimate** - Reduces the task's work estimate to match its duration.
- **Increase Duration** - Increases the tasks duration to match its work estimate. If the task was [scheduled based on sprints](#)(see page 34), 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.

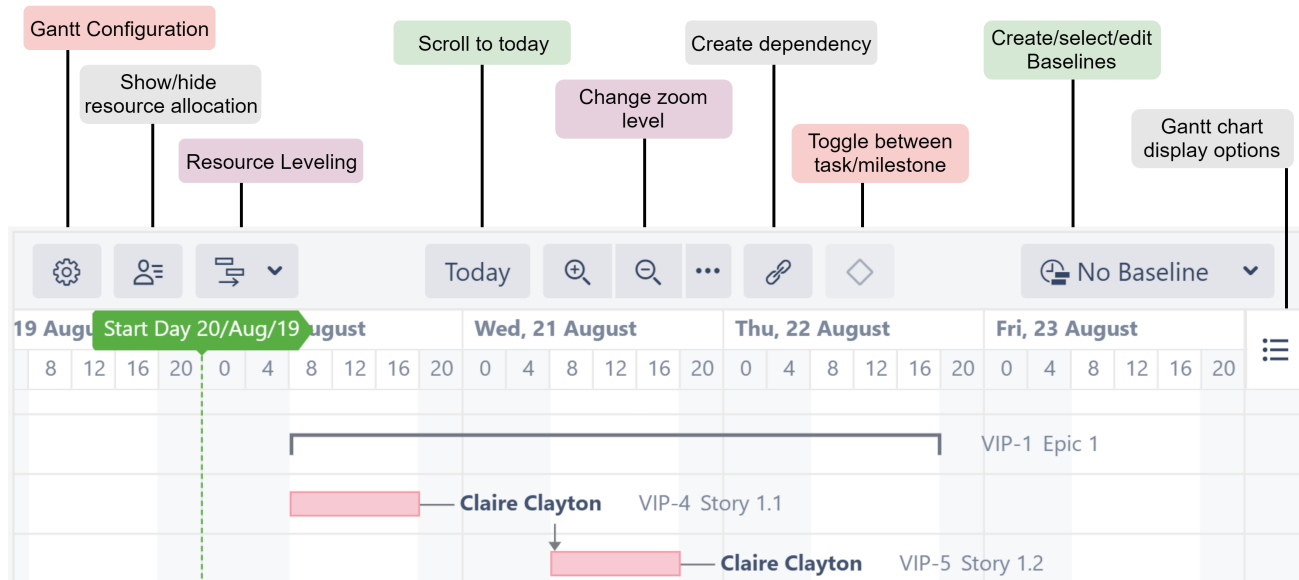
4.2 Gantt Chart Elements

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

4.2.1 Toolbar

Using the toolbar, you can:

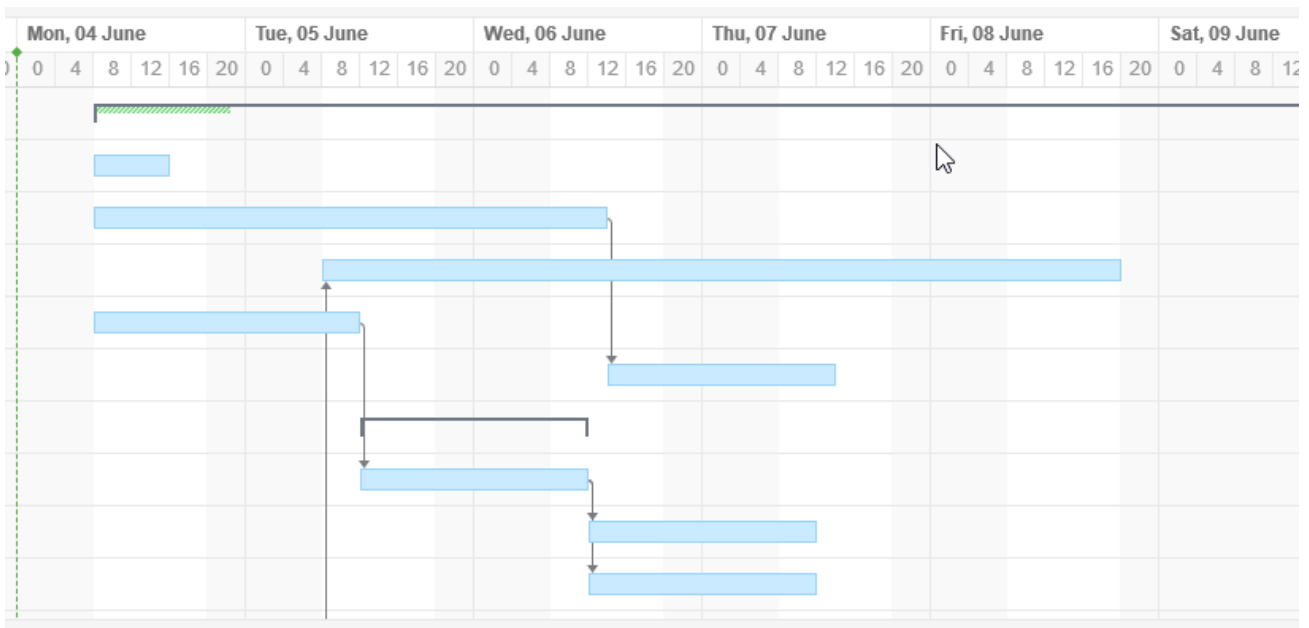
- Access Gantt Chart Settings
- Show/hide resources
- Adjust the chart's appearance
- Select which elements are shown within your timeline
- Create [dependencies](#)(see page 44)
- Turn tasks into [milestones](#)(see page 66)
- Apply [Resource Leveling](#)(see page 79)
- Manage [Baselines](#)(see page 74)



4.2.2 Timeline

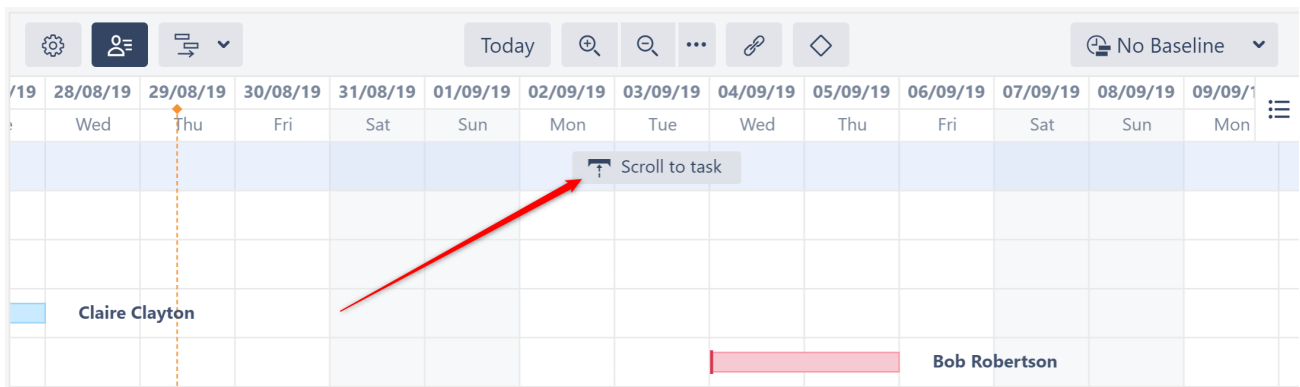
Your timeline contains visual representations of tasks, dependencies, progress, milestones and other key dates.

It is also where you will do most of your work. As you saw in [Working with Tasks](#)(see page 30), you can adjust tasks and dependencies directly from your timeline.



4.2.2.1 Scroll to task

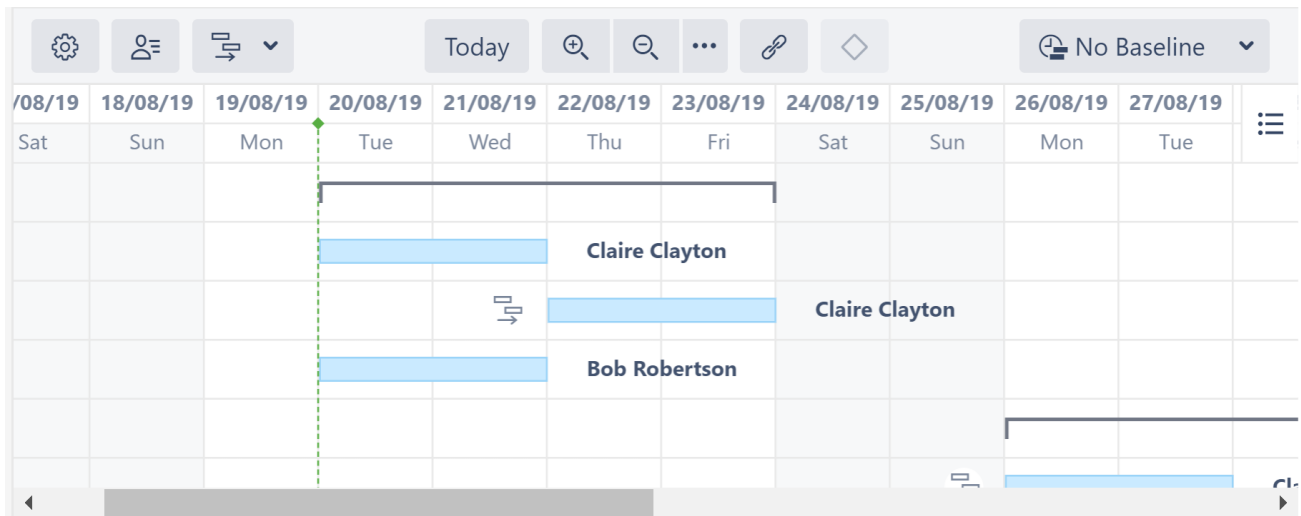
If you move the timeline to a point where the currently-selected task is no longer visible, a **Scroll to task** button will appear, allowing you to quickly return to that task's point in the timeline.



4.2.3 Time Scale

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

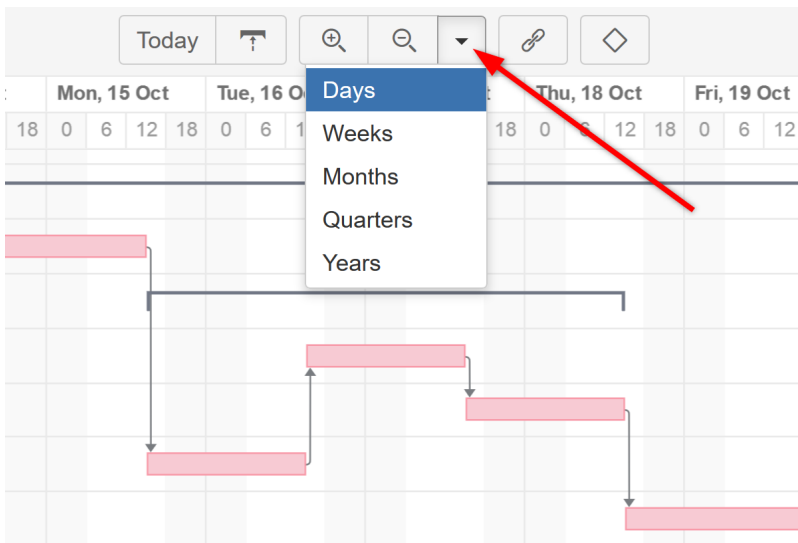
- Zoom in or out to see more or less of your timeline
- Scroll horizontally or vertically
- Hold the **Shift** key and drag the chart with your pointer
- Focus in on the current date with the **Today** button



4.2.3.1 Zoom Level

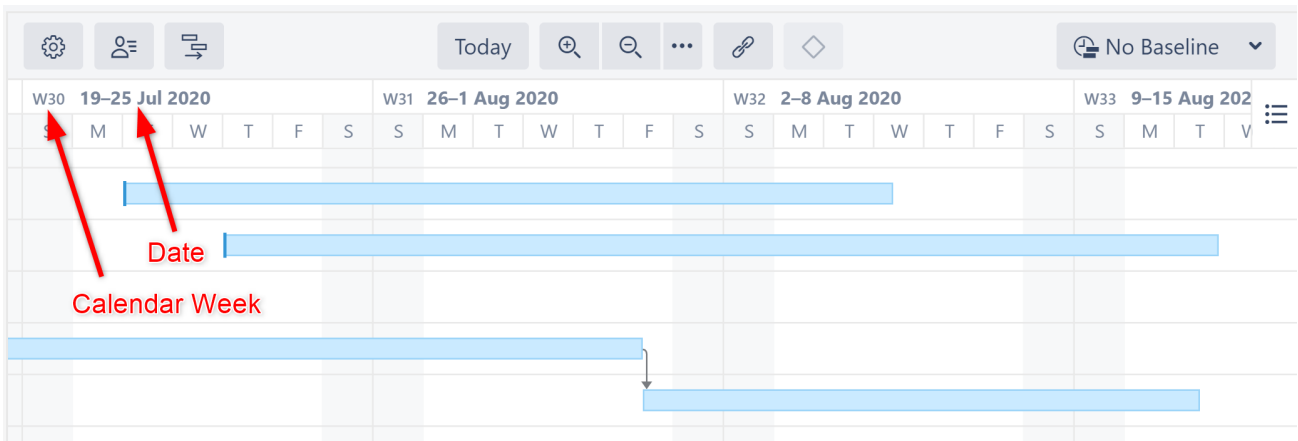
To adjust the zoom level of your chart, use the + or - magnification buttons in the toolbar. You can also zoom in or out using your mouse wheel, by holding down the **ctrl** button (**cmd** on macs).

To view issues based on a specific time scale, such as weekly or monthly, use the drop-down menu beside the magnification buttons.



4.2.3.2 Week Numbers

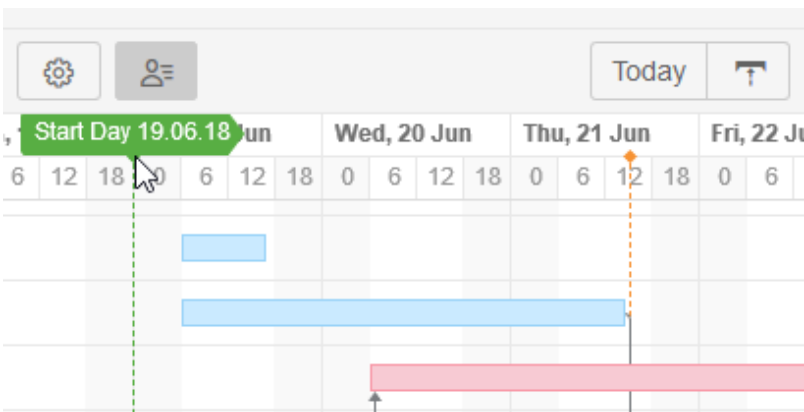
If you zoom out to a point that weeks are shown, Structure.Gantt will list both the dates and the corresponding week numbers:



4.2.4 Start Day and Current Date

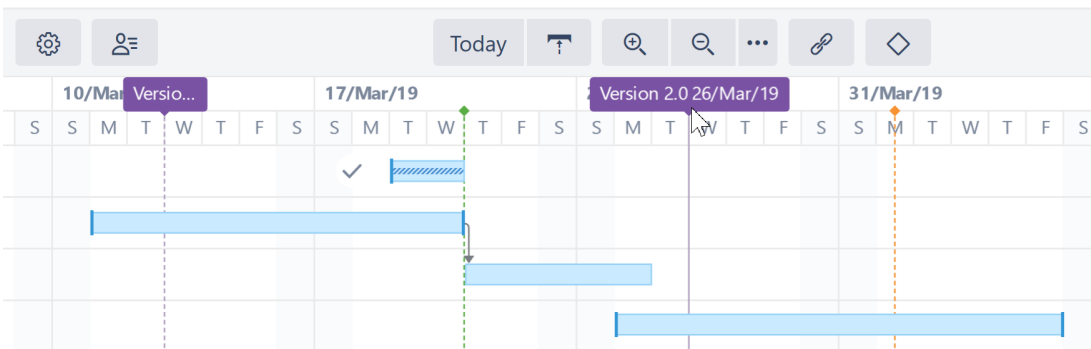
The project start date is indicated by a green vertical dashed line. The current date/time is indicated by an orange vertical line.

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



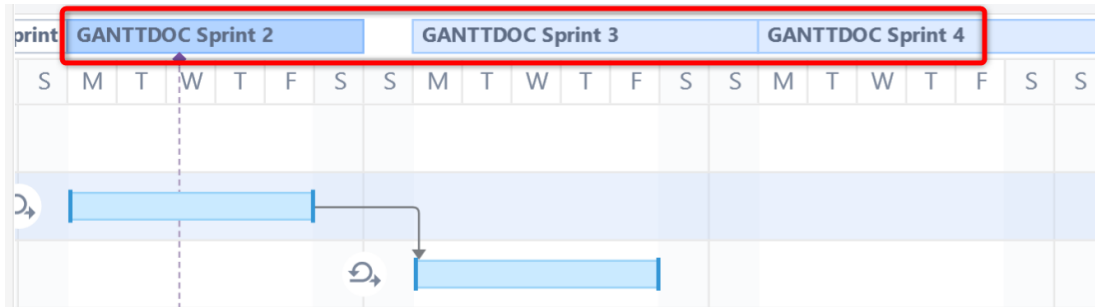
4.2.5 Fix Versions

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).



4.2.6 Sprints

If the highlighted task is [manually scheduled by sprints](#) (see page 34), 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 101) for instructions on specifying sprint timelines.)

4.2.7 Task Bars

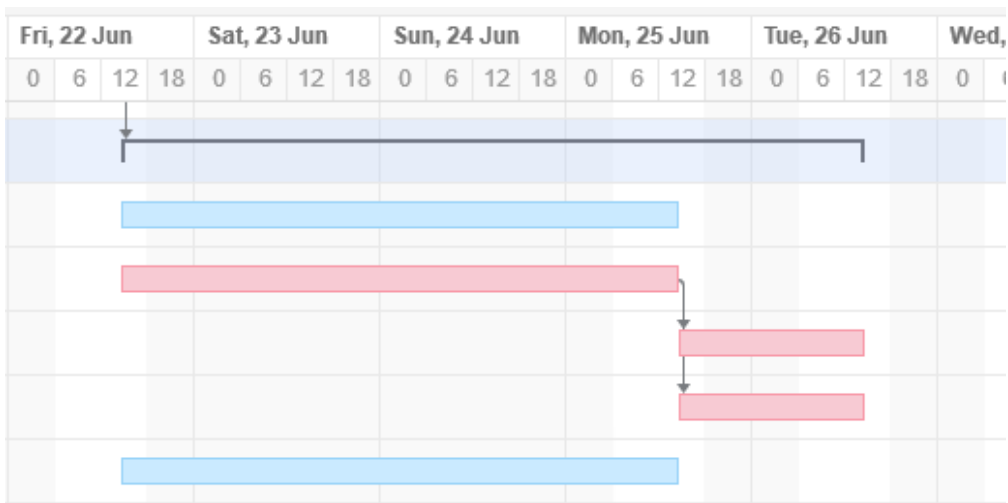
Structure items are represented in the chart as task bars.

- A task's position on the timeline is based on its [dependencies](#) (see page 44), [manually-set Start or/and Finish dates](#) (see page 32) or [sprint dates](#) (see page 34), and [Leveling Delay](#) (see page 79).
- 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 59).
- Completed tasks can be marked with a check icon (see page 64). To show or hide Task Indicators, use the [Display Options menu](#) (see page 59).
- If a task is a part of the [critical path](#) (see page 58), it is shown red. You can show or hide critical path highlighting using the .

4.2.8 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.



⚠ In order to display child/parent relationships as a group, you first need to enable grouping in [Gantt configuration](#)(see page 105).

4.2.9 Dependencies

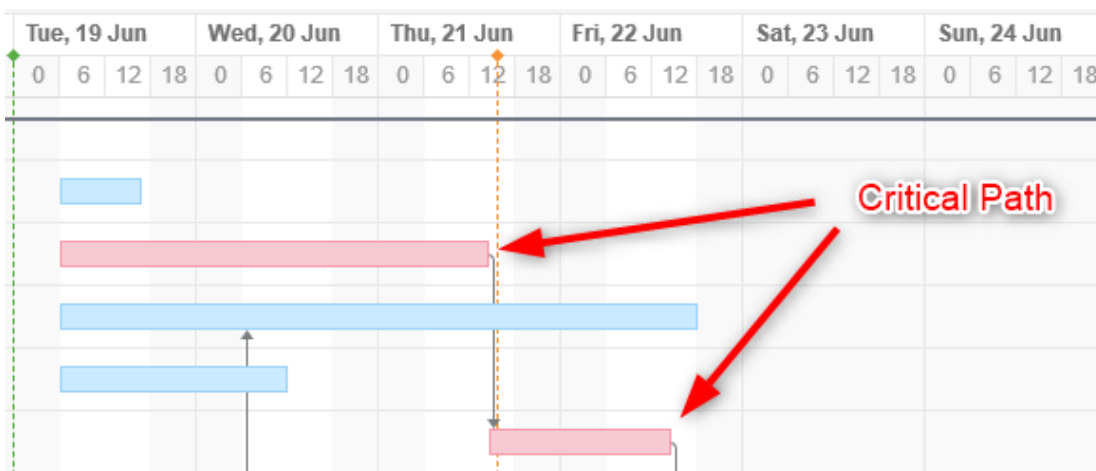
Dependencies are displayed as arrows between task bars.

- Click the arrow to show the Dependency Properties
- To show/hide dependency arrows, use the [Display Options menu](#)(see page 59). This will hide the arrows, but the position of the task bars will be unaffected.

For more information about managing dependencies, see [Dependencies](#)(see page 117).

4.2.10 Critical Path

If a task is part of the critical path, it will have a red task bar. A task is considered part of the critical path if delaying that task would extend the project's end date.

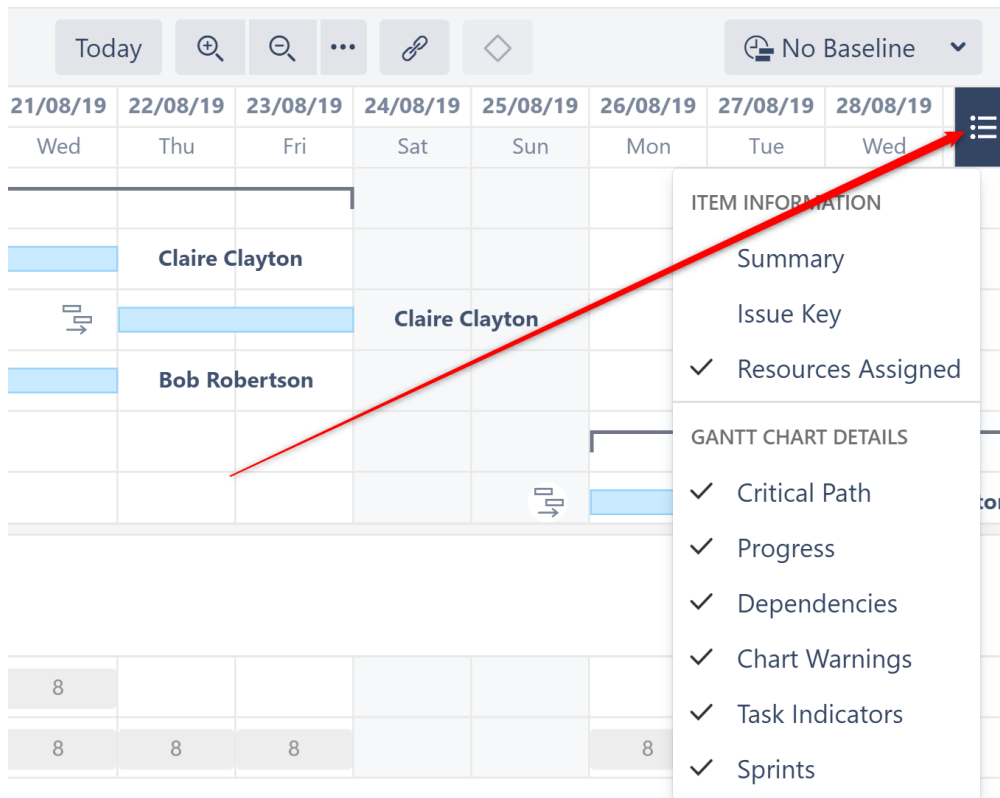


To switch off Critical Path highlighting:

1. Select the [Display Options menu](#)(see page 59)
2. Uncheck **Critical Path**

4.2.11 Display Options


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

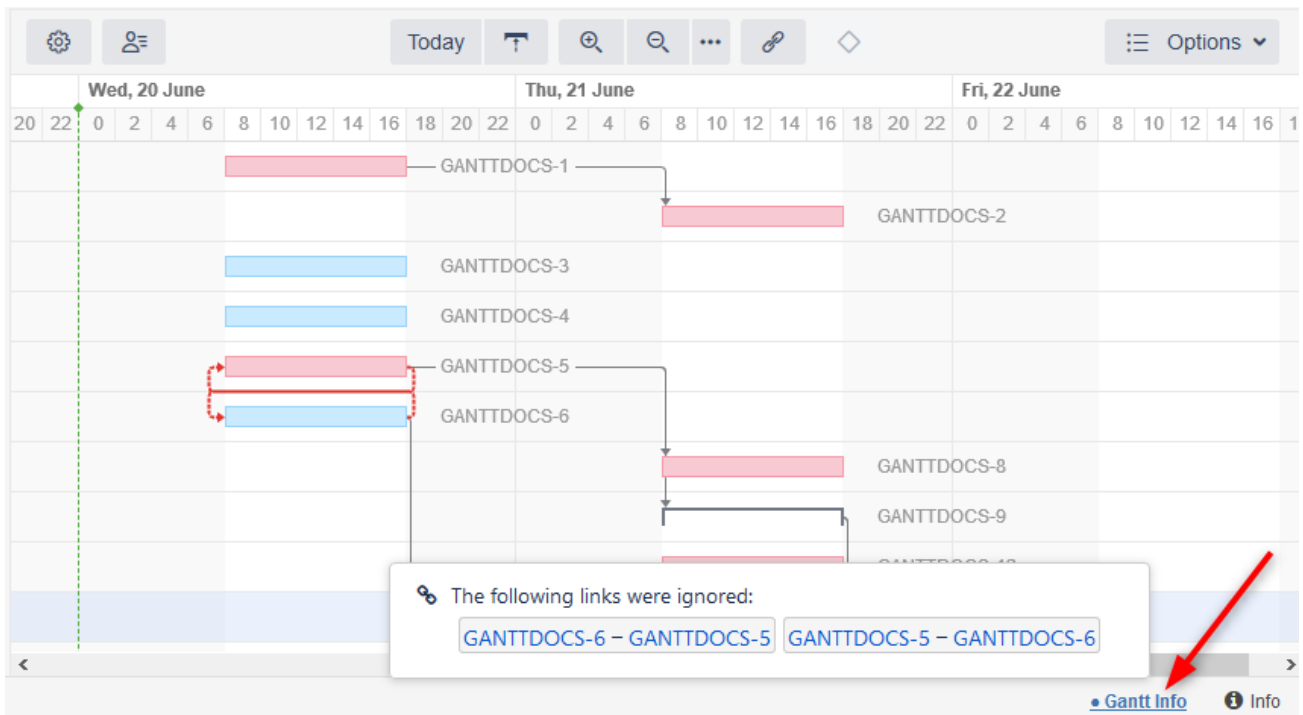


You can show/hide:

- 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 64))
- Sprints (Note: If this option is switched off, sprints will still be displayed when dragging sprint-scheduled tasks.)

4.2.12 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.

4.2.13 Task Details Panel

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

DT-30 Task 3
✕

SCHEDULING

Start 28/Oct/20 9:00 AM
 ⌵

Finish 28/Oct/20 2:00 PM
 ⌵

Sprint Backlog ⌵ ⌵

Work 5h

Cust. Est.

Duration 5h

Fix. duration ⌵

Progress 0%

Mode Auto Manual ⓘ

RESOURCES

Lev. Priority

Lev. Delay

Max. Units

...

[Show only fields affecting task](#)

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

4.2.13.1 Scheduling

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

SCHEDULING

Start 28/Oct/20 9:00 AM
 ⌵

Finish 28/Oct/20 2:00 PM
 ⌵

Sprint Backlog ⌵ ⌵

Work 5h

Cust. Est.

Duration 5h

Fix. duration ⌵

Progress 0%

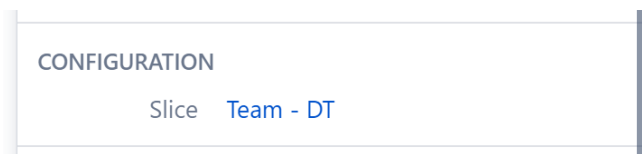
Mode Auto Manual ⓘ

- **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 111). (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 108), 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 108)).
- **Duration** - The time it takes to complete the task.
- **Fixed duration** - If the task has a specified [fixed duration](#)(see page 39), it will be listed here.
- **Progress** - This can be calculated based on the [Gantt Configuration](#)(see page 110).
- **Mode** - Allows you to override the current [scheduling mode](#)(see page 30). If toggled to "Auto," the task will be scheduled based on the project start day, duration and dependencies. If toggled to "Manual," the task will be scheduled based on its Start/End date or sprint, if these values are available.

4.2.13.2 Configuration

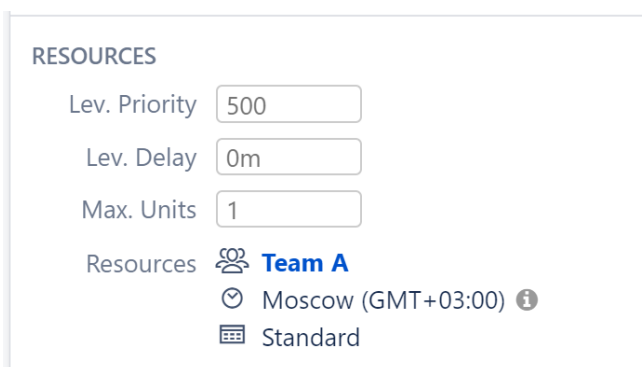
This section is only displayed when the task is affected by a [Configuration Slice](#)(see page 127).



- **Slice** - If the task's appearance or behavior is based on a [Slice configuration](#)(see page 127), the slice name is listed here.

4.2.13.3 Resources

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




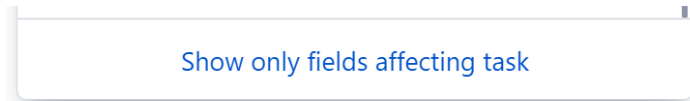
- **Leveling Priority** - Weight given to the task for [Resource Leveling](#)(see page 79). A higher number equals a higher priority.
- **Leveling Delay** - Leveling delay applied to the task by [Resource Leveling](#)(see page 79).
- **Maximum Units** - Shows the maximum resource capacity which can be 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](#)(see page 121) for more information about assigning and tracking resources.)

- **Resources** - Shows the resource assigned to the task, the resource time zone and calendar.





4.2.13.4 Show More/Less Fields

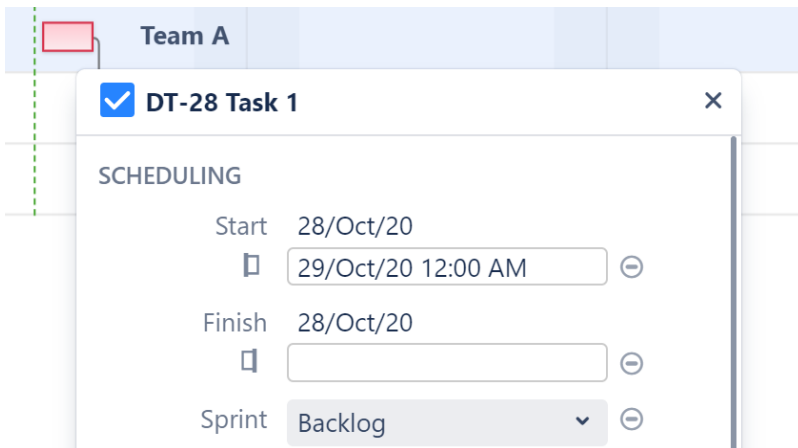
At the bottom of the Task Details panel, you can choose to show only those fields that affect the task (this will hide fields with the  icon), or all fields.



4.2.13.5 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



4.2.13.6 Clear Start or Finish Date

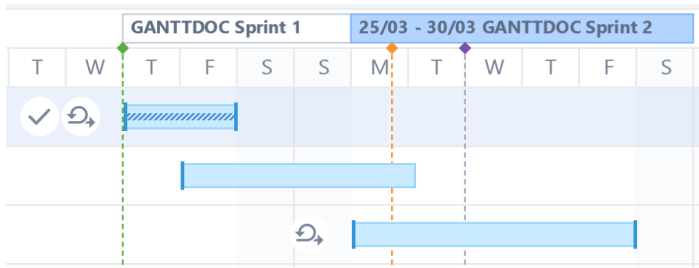
If a task has a manually scheduled Start or Finish date, clearing this date will remove the manual date from Jira and:

- 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 114) for more information.

4.2.14 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.



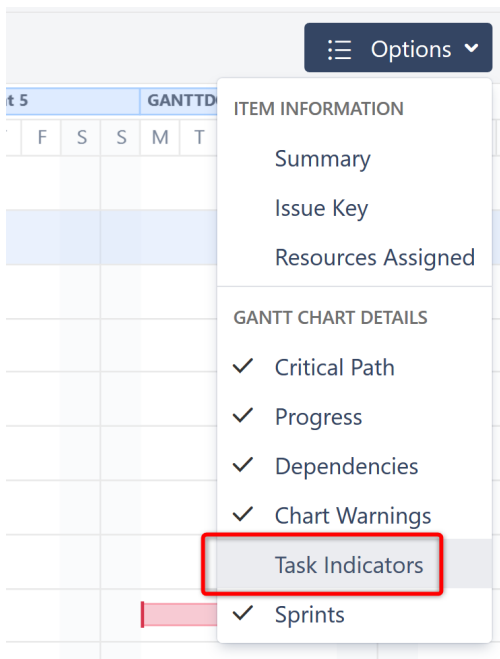
You may see the following indicators on your Gantt Chart:

- ✓ 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 79).
- 🔒 The task has a [Fixed Duration](#)(see page 39).
- 🔍 The task is [hidden](#)(see page 65).
- 📅 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!

4.2.14.1 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**.



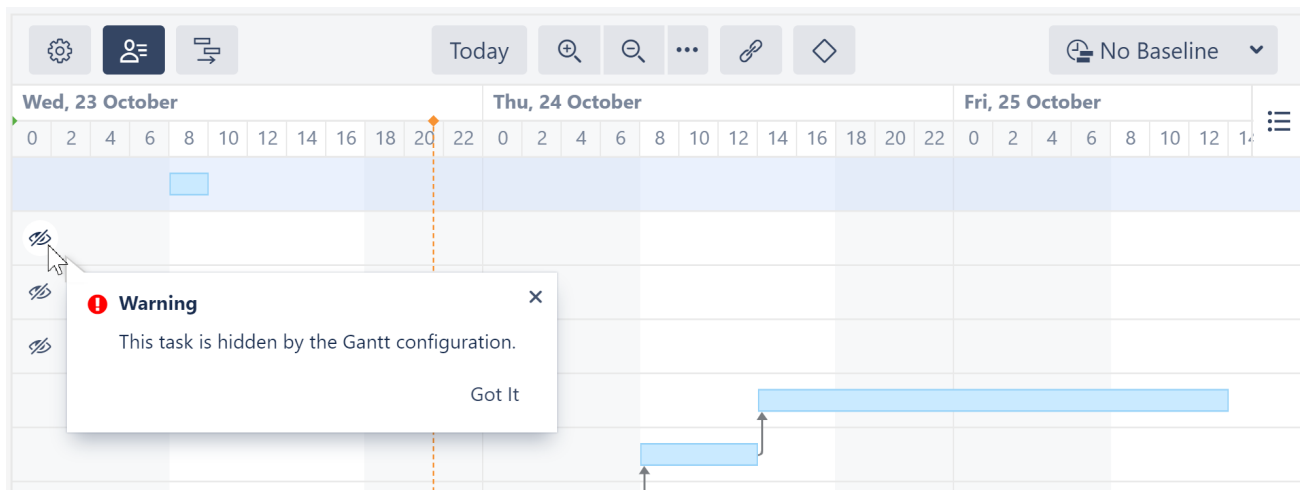
4.2.14.2 Hidden Tasks


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 127).
- The structure owner does not have permission to view the task.

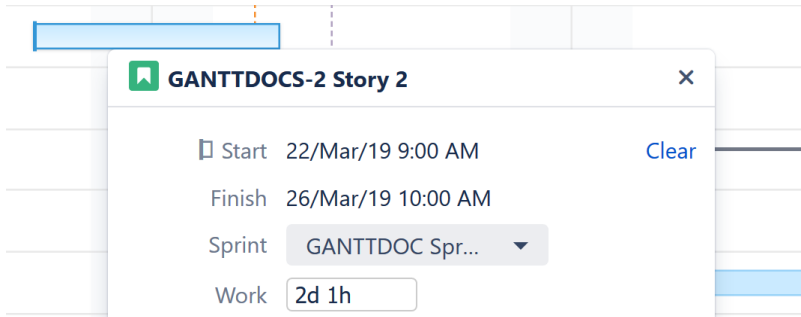
To see why a task is hidden, hover over its Hidden Task icon.






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

4.2.14.3 Indicators in the Task Details Panel

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

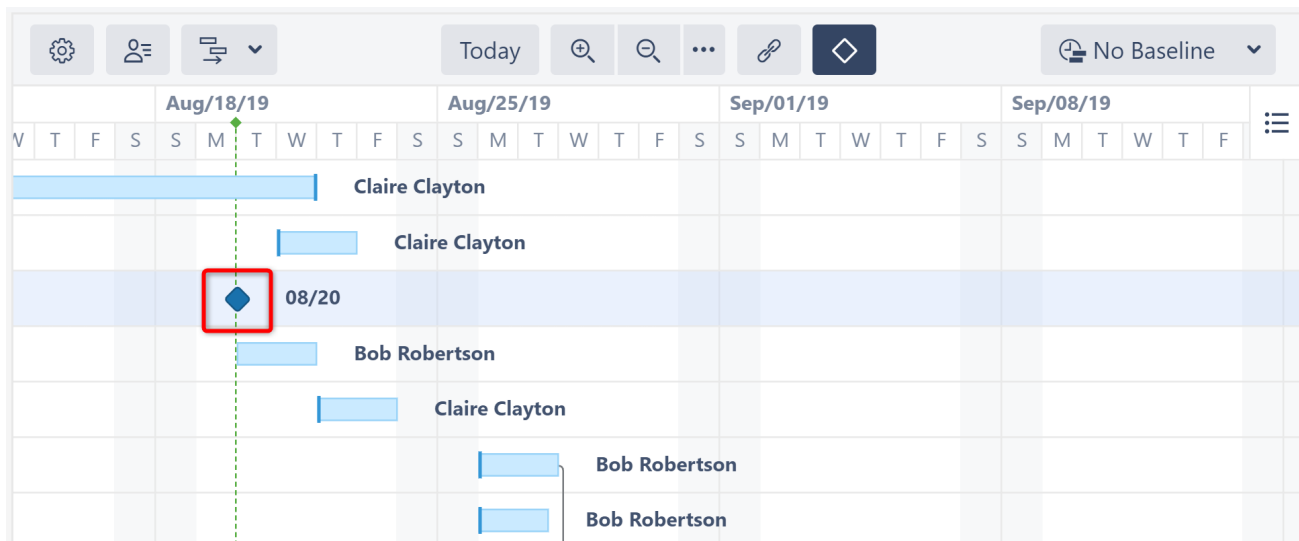


Next to the Start/Finish dates, you may see the following:

-  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

4.2.15 Milestones

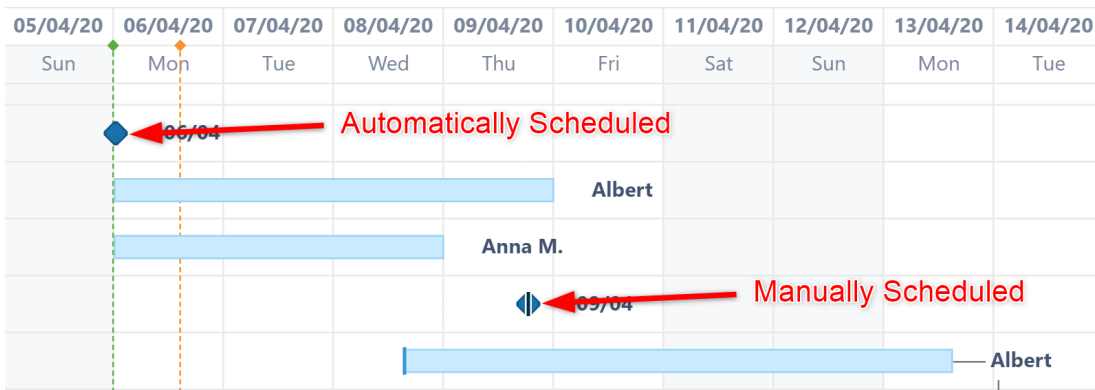
Milestones allow you to mark key points within a project plan. They can be created from issues, [folders](#)¹² or [memos](#)¹³ in the structure.



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:

¹² <https://wiki.almworks.com/display/structure/Folders>

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

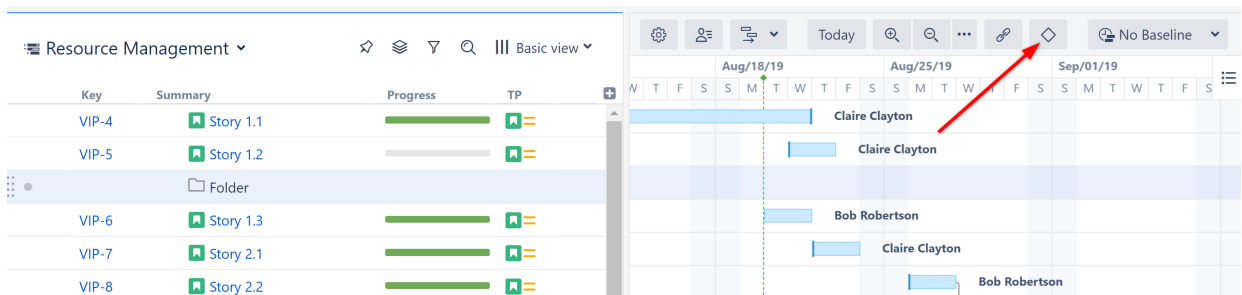


i In order to manually schedule a milestone, you first need to set the Milestone attribute under the [Manual Scheduling](#)(see page 111) configuration.

4.2.15.1 Creating a Milestone

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

1. Configure the chart so that tasks with zero duration are automatically turned into milestones. See [Scheduling | Behavior](#)(see page 116).
2. Display specific tasks as milestones using [slice-based configurations](#)(see page 127).
3. Use the Milestone button to manually convert a selected item into a milestone.

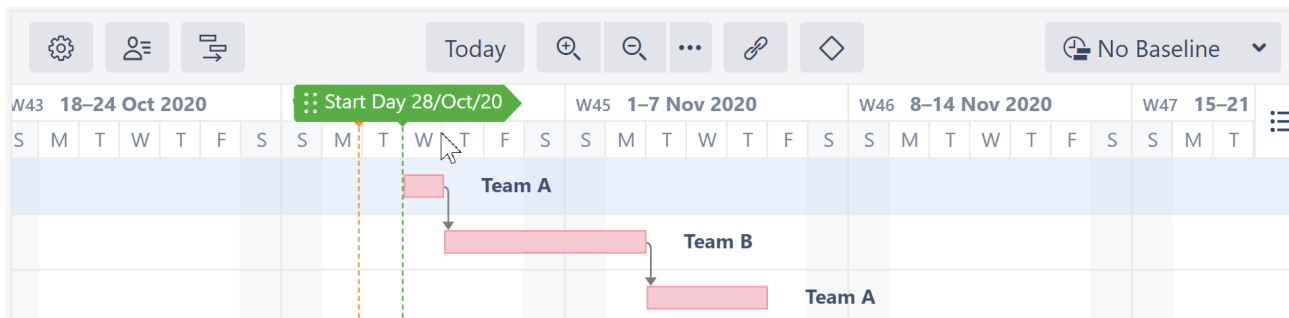


i Since there is no concept of milestone in Jira, milestones are only visible within Structure.Gantt. However, their dates can be exported using Structure [Effectors](#)¹⁴.

4.2.16 Project Start Day

The Project Start Day is used as the starting point for [automatic scheduling](#)(see page 31). 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.

¹⁴ <https://wiki.almworks.com/display/structure/Effectors>

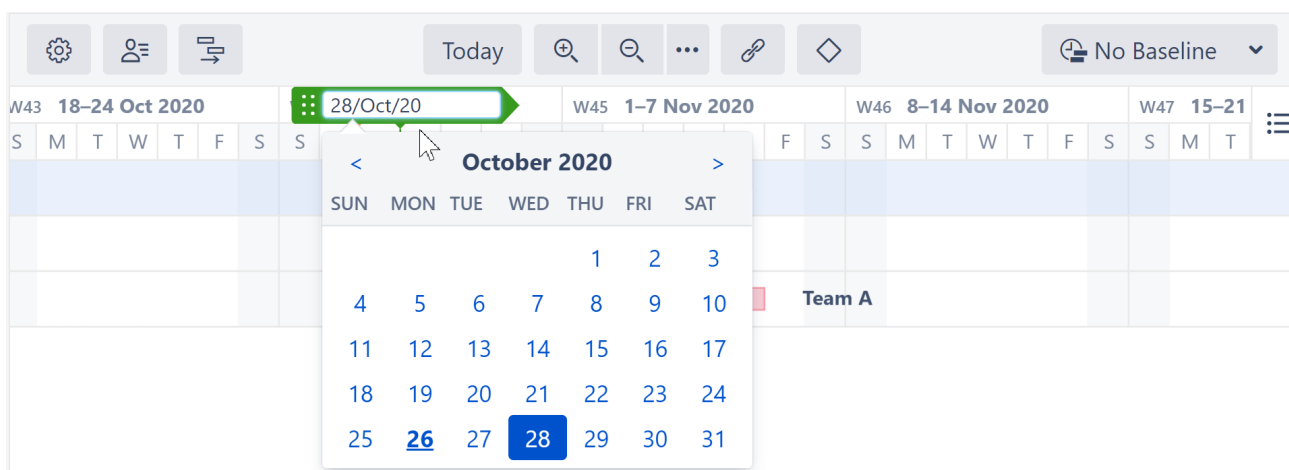


4.2.16.1 Setting the Project Start Day

The Project Start Day is initially selected when you [create a new Gantt chart](#)(see page 22). 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 101) and enter a new date
- Click the Start Day Marker and enter the date, or simply drag it to a new location



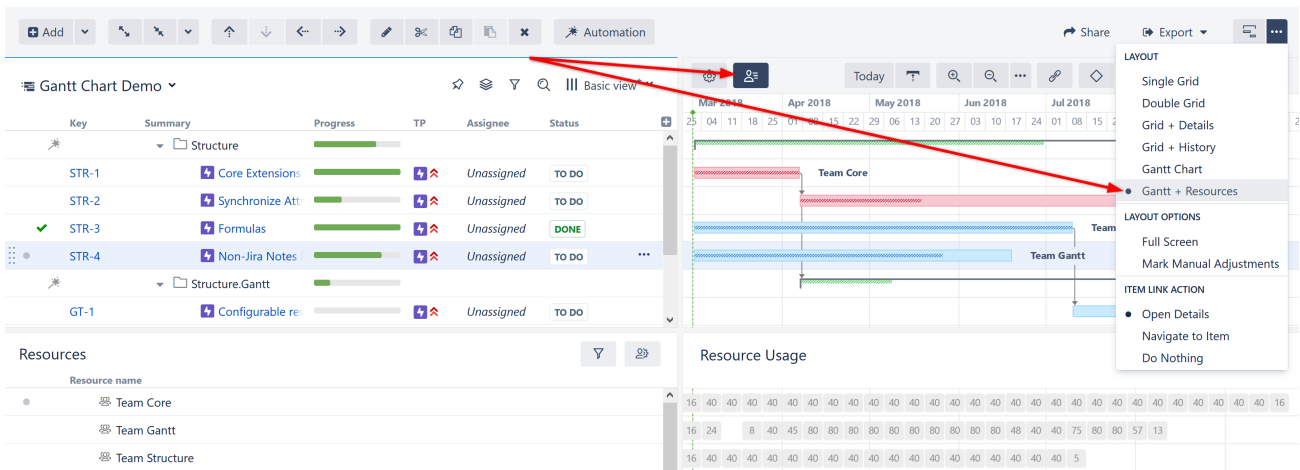
i In order to adjust the Start Day, users must have [control access for the structure](#)¹⁵.

4.3 Resource Management

Structure.Gantt allows you to track resource usage on a project (or multiple projects). If you used the [Structure Wizard](#)(see page 23) 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 121) to assign resources to your tasks.

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

¹⁵ <https://wiki.almworks.com/display/structure/Structure+Permissions>



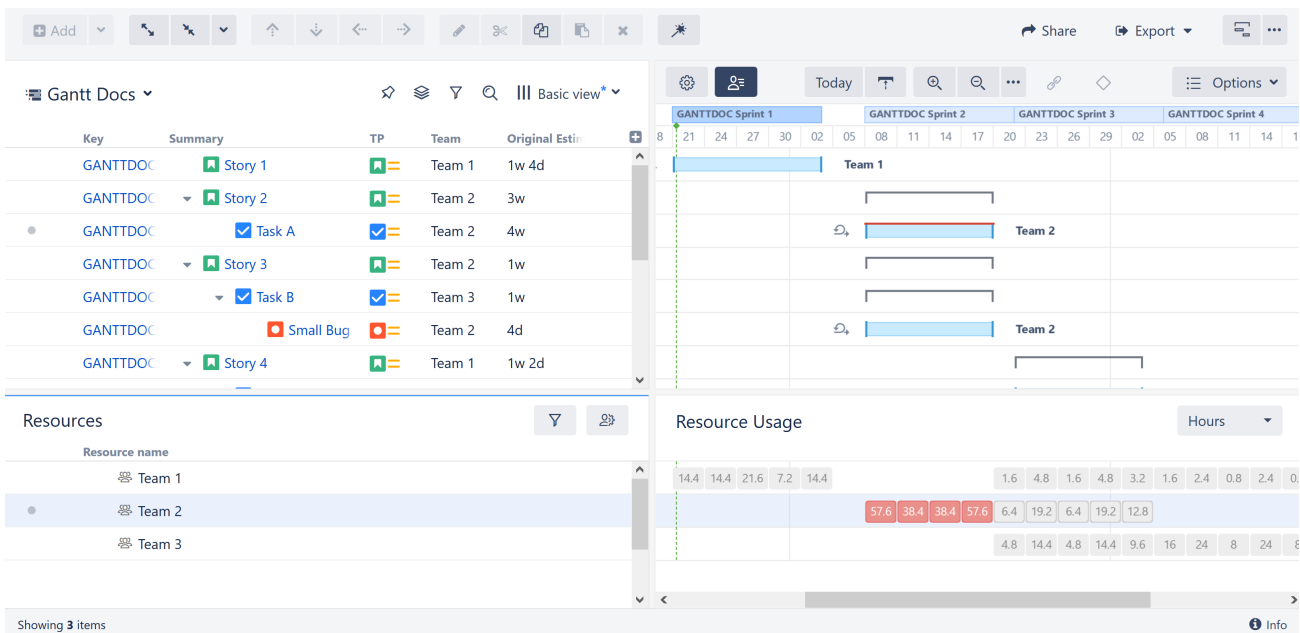
4.3.1 Learn More About Working With Resources

- [Resources and Resource Usage](#)(see page 69)
- [Resource Settings](#)(see page 71)
- [Filter by Resource](#)(see page 72)
- [Navigating to a Resource from the Gantt Chart](#)(see page 73)

4.3.2 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 into the field you assigned for resources.
- **Resource Usage** - Displays the work load for each resource at a given time.



- ✔ You can also display the allocation numbers in the Gantt chart itself. To do that, simply [group](#)(see [page 69](#)) your tasks by the attribute you used to define the resources. *Note: You cannot group by Formula values.*

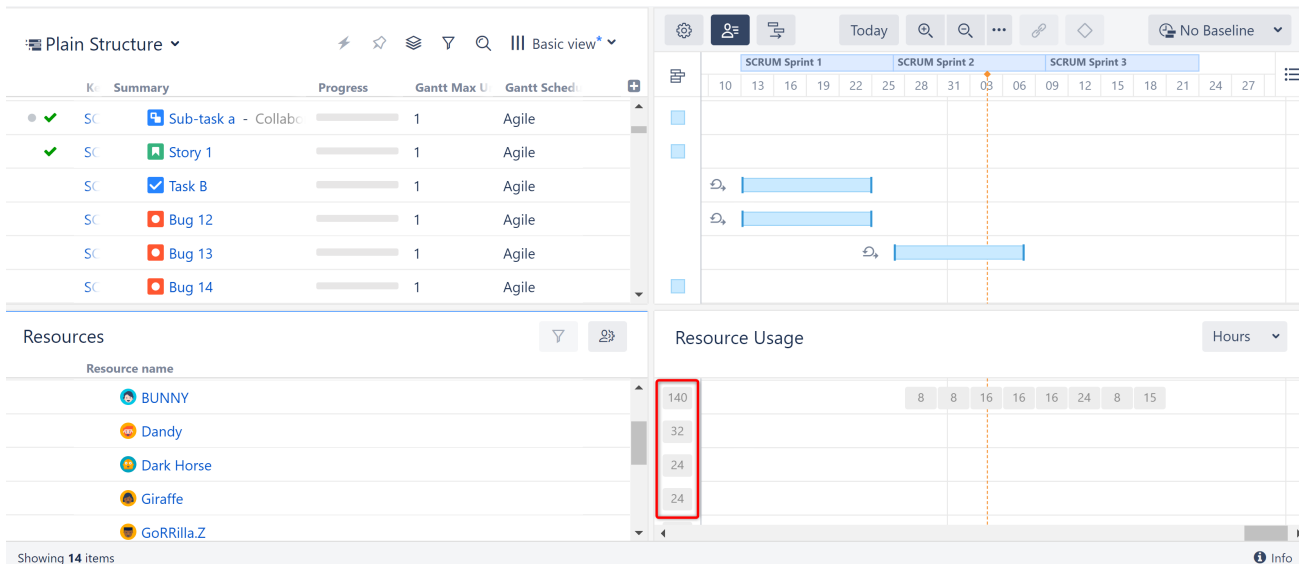
4.3.2.1 Hidden Resources

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

1. The [structure has been filtered](#)¹⁶ - in this case, the Resource panel will only include those resources assigned to the items left in the structure
2. [Resource Filtering](#)(see [page 72](#)) has been applied

4.3.2.2 Backlog Panel

When using [sprint-based scheduling](#)(see [page 34](#)) 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 unassigned work has been assigned to each resource, so you can make adjustments *before* tasks are added to the schedule.



- ⚠ Backlog resource requirements are only available when [displaying resource usage in hours](#)(see [page 71](#)).

4.3.2.3 Overallocation

If there is more work assigned to a resource than the resource can handle, the Usage square for that block of time will be highlighted (See Team 2's usage above). This allows you to quickly identify places where you may need to revisit your timeline or work distribution.

To resolve the overallocation, manually adjust the tasks or their resources, or use the [Resource Leveling](#) (see [page 79](#)) tool.

¹⁶ <https://wiki.almworks.com/display/structure/Filter>

4.3.2.4 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.

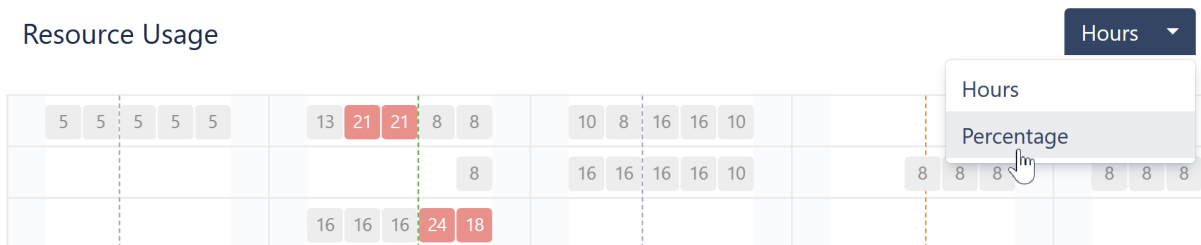
To learn more about assigning resources to tasks, see [Resource Assignment](#).(see page 121)

4.3.2.5 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 71)) that is being used at a given time

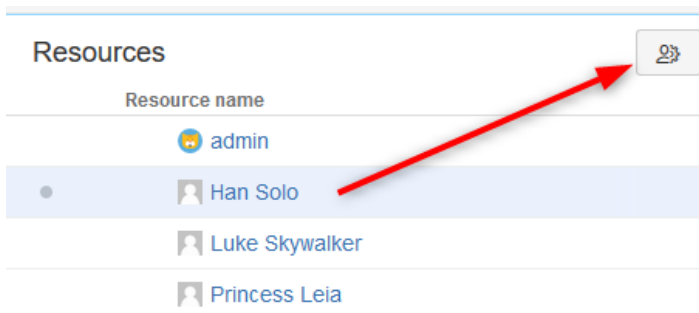
To change how resource usage is displayed, simply click on the drop-down menu in the upper-right corner of the Resource Usage panel.



⚠ 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.

4.3.3 Resource Settings

Each resource has a number of parameters that are taken into account when calculating task start and finish dates, duration and resource allocation. The default values for these parameters are set in [Gantt configuration](#)(see page 105). 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:

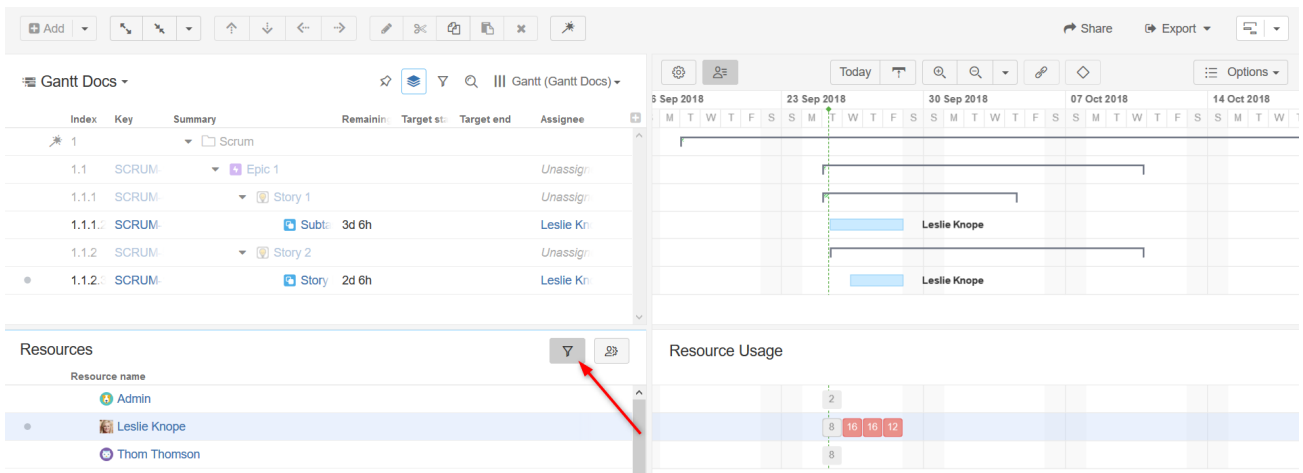
- **Units** - Determines how much work this resource can do in one hour. By default, it is set to 1, which corresponds to one person. If your resource is a team of 5, you should set this value to 5. A resource only able to commit 2 hours of work during a standard 8-hour work day would have a value of 0.25.
- **Time Zone** - Defines the time zone of the resource.
- **Work Calendar** - Defines [working and non-working times](#)(see page 124) 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.

The screenshot shows a 'Resource Settings' dialog box with two tabs: 'Properties' and 'Availability'. The 'Availability' tab is active. The 'Name' field is 'Han Solo'. The 'Units' field is a text box containing '1'. Below it is a descriptive text: '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.' The 'Time Zone' field is a dropdown menu showing '(GMT+00:00) UTC (Default)'. The 'Work Calendar' field is a dropdown menu showing 'Standard (Default)'. At the bottom right, there are 'Save' and 'Cancel' buttons.

All these parameters, as well as a task's [Maximum Units](#)(see page 53), 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.

4.3.4 Filter by Resource

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



When you filter by resource:

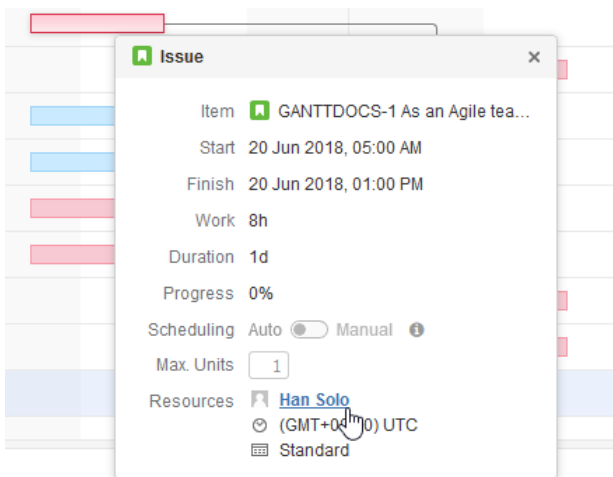
- Issues assigned to that resource will be visible in the WBS and Gantt chart
- Issues above those in the hierarchy will be visible but grayed out
- All other issues will be hidden

4.3.4.1 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.

4.3.5 Navigating to a Resource from the Gantt Chart

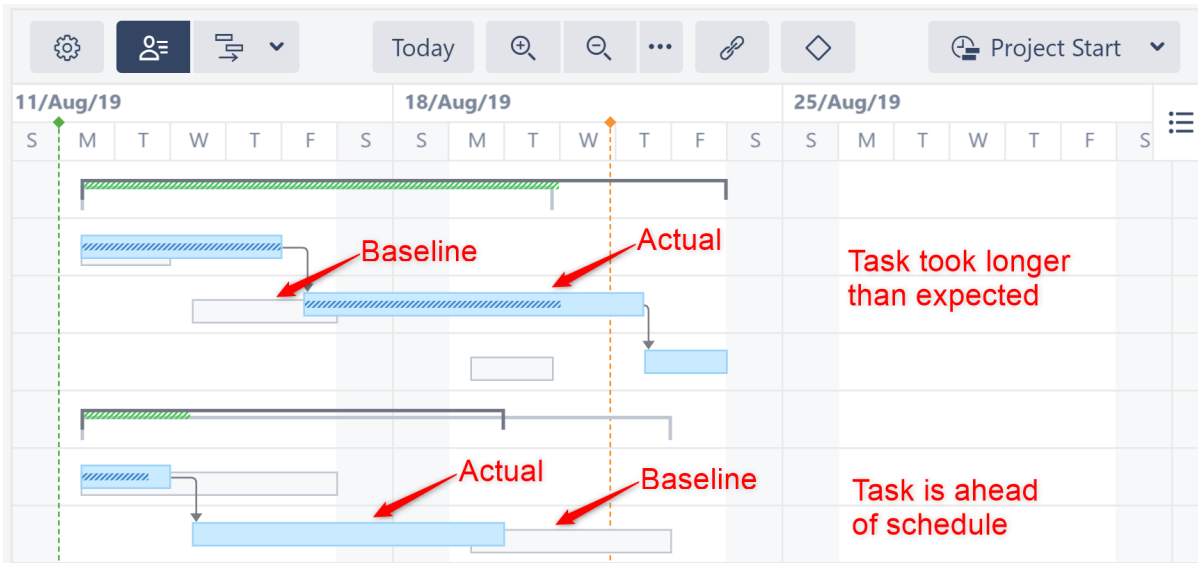
You can quickly navigate to a resource in the Resources panel (and open the Resources panel itself, if it's not yet open) by clicking on the resource name displayed in the Task Info Pop-up.



4.4 Baselines

Baselines allow you to compare the positions of tasks, groups and milestones in the timeline today vs. sometime in the past. This means you can track schedule changes over time, or compare two schedules for the same project (ex. manager's schedule vs. developer team's).

By creating a snapshot of the Gantt chart at a particular moment in time, and then showing it alongside the current chart, you can see at a glance which tasks are behind or ahead of schedule - and how that impacts the project's timeline.



The grayed-out tasks are the original locations from our baseline, while the full-color tasks are their positions today. In this example, the top set of tasks are behind schedule, while the bottom tasks are ahead of schedule.

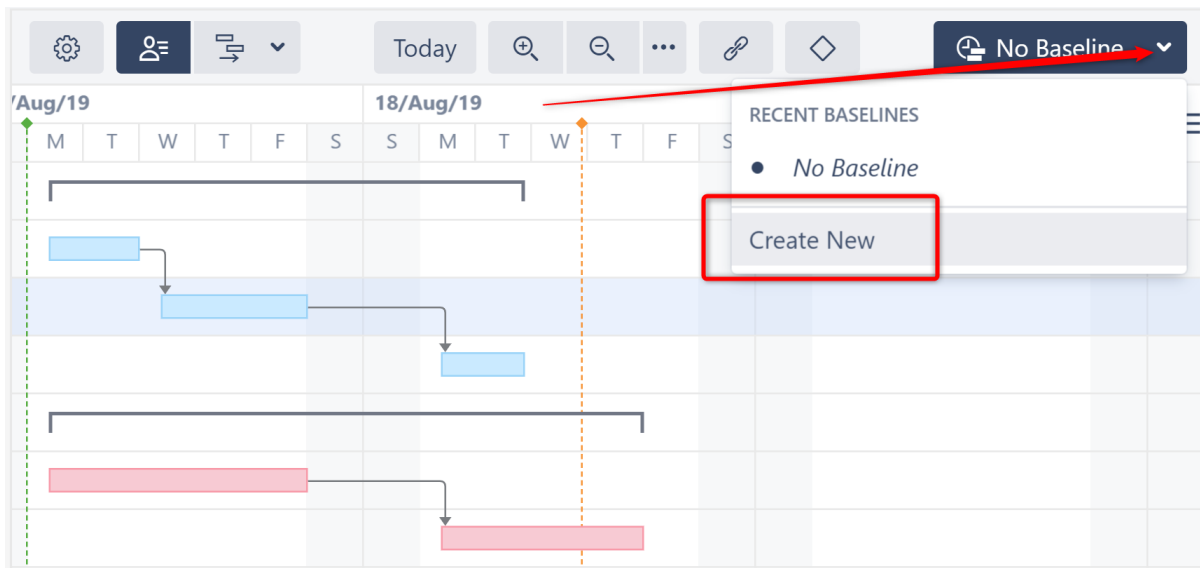


Sorry, the widget is not supported in this export.
But you can reach it using the following URL:

<https://www.youtube.com/watch?v=D1MgV4Ajav8>

4.4.1 Creating a 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 click **Create**.

Create Baseline

Baseline name

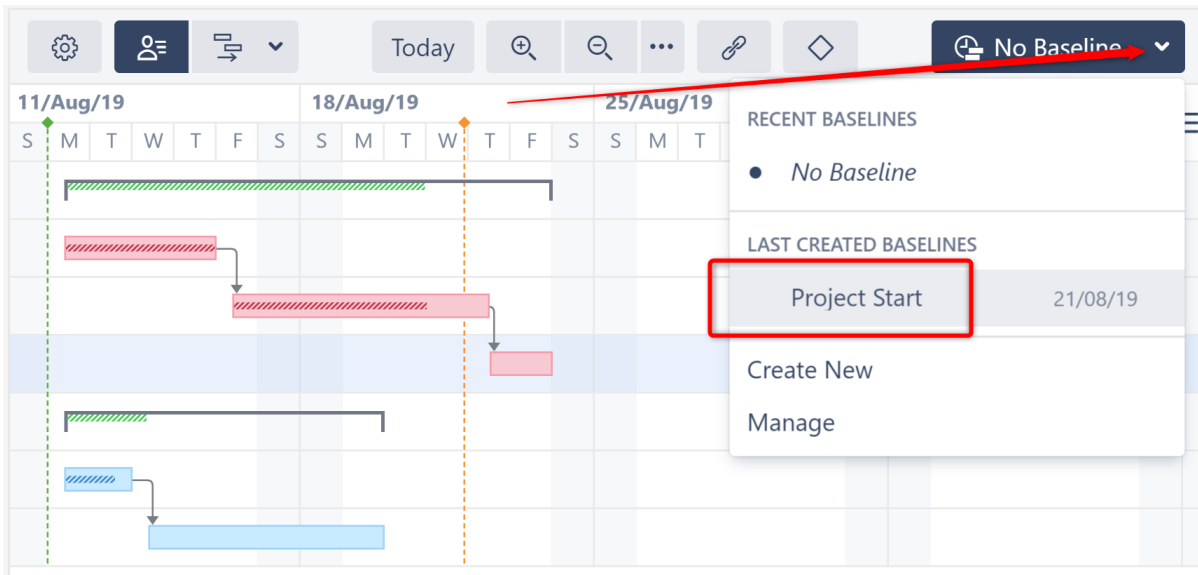
i In order to create a baseline, you must be the structure owner or have [Edit permissions](#)¹⁷ for the structure.

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

4.4.2 Comparing Current Chart to a Baseline

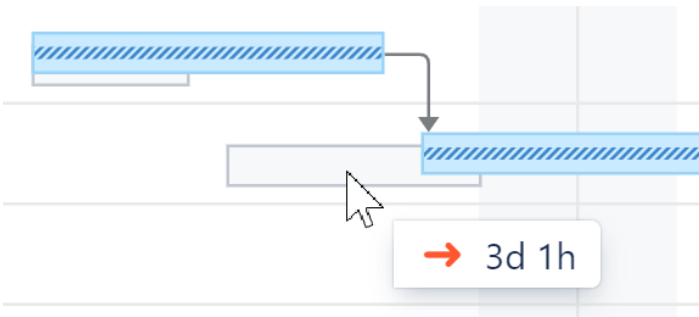
To compare the current chart to a baseline, open the Baseline menu and select the baseline you wish to use.

¹⁷ <https://wiki.almworks.com/display/structure/Structure+Permissions>



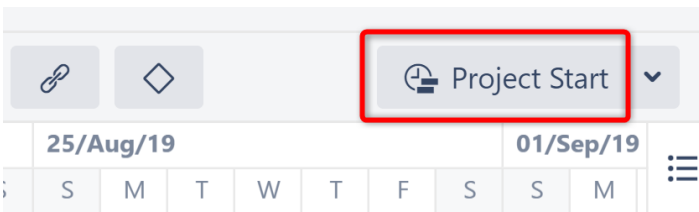
4.4.3 Baseline Offset

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.

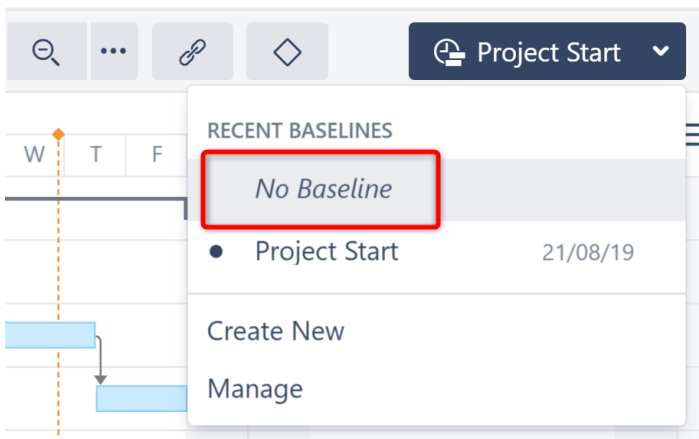


4.4.4 Hiding Baselines

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

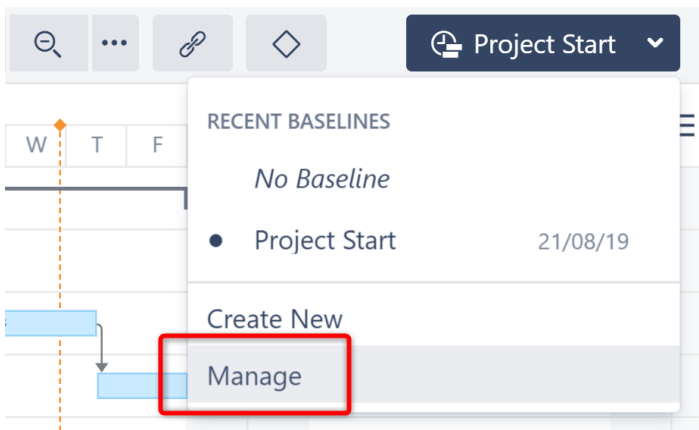


To hide the baseline (so you just see the current chart), open the Baseline menu and click **No Baseline**.



4.4.5 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](#)

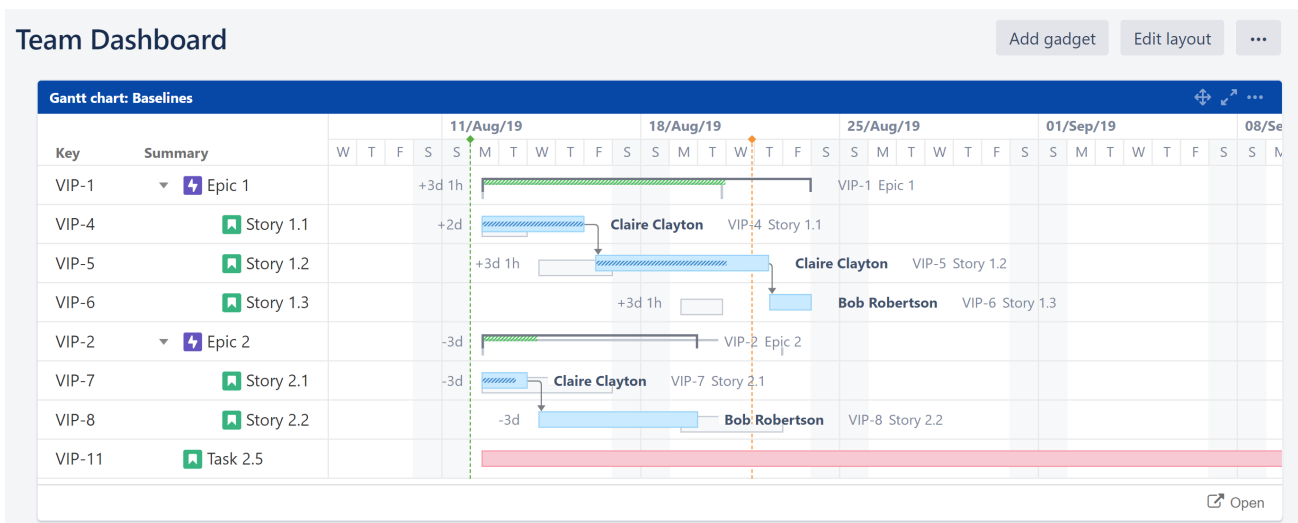
You can:

- 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.

4.4.6 Gantt Gadget

Baselines can be included in [Dashboard gadget](#)(see page 89)s and [Confluence gadgets](#)(see page 92).



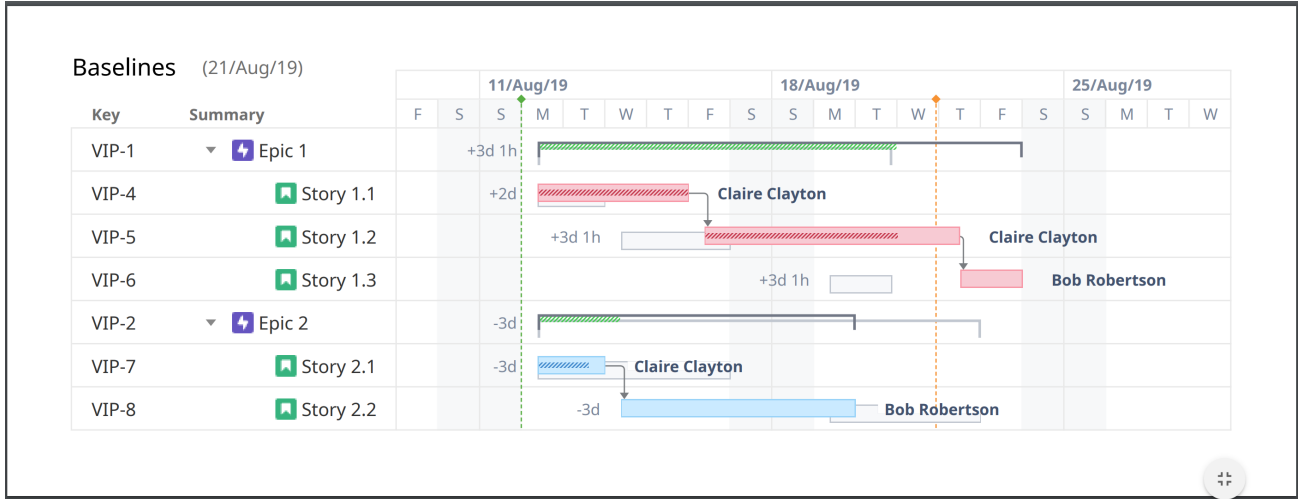
To enable baselines, simply select the baseline you want to include in the gadget settings dialogue.

The screenshot shows the settings for the 'Gantt chart: Baselines' gadget. The settings are:

- Structure: **Baselines** (dropdown)
- Visible Rows: **20** (input field)
- Hierarchy Level: **3** (input field)
- Start From: **Project Start** (dropdown)
- Zoom Level: **Weeks** (dropdown)
- Baseline: **Project Start** (dropdown, highlighted with a red box)

4.4.7 Exporting Baselines

Baselines can also be included when [exporting a Gantt chart](#)(see page 84).

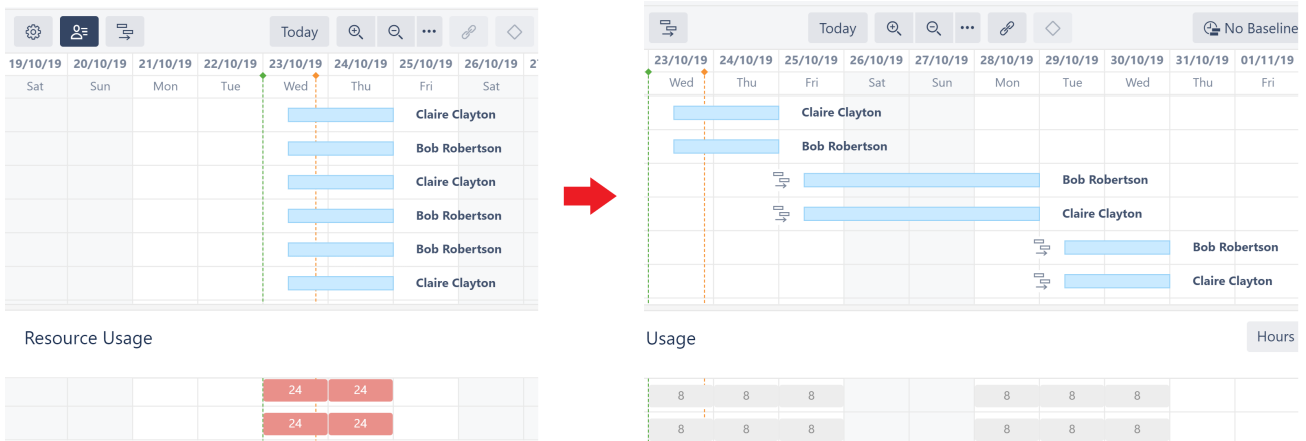


When including baselines in an export:

- 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

4.5 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.



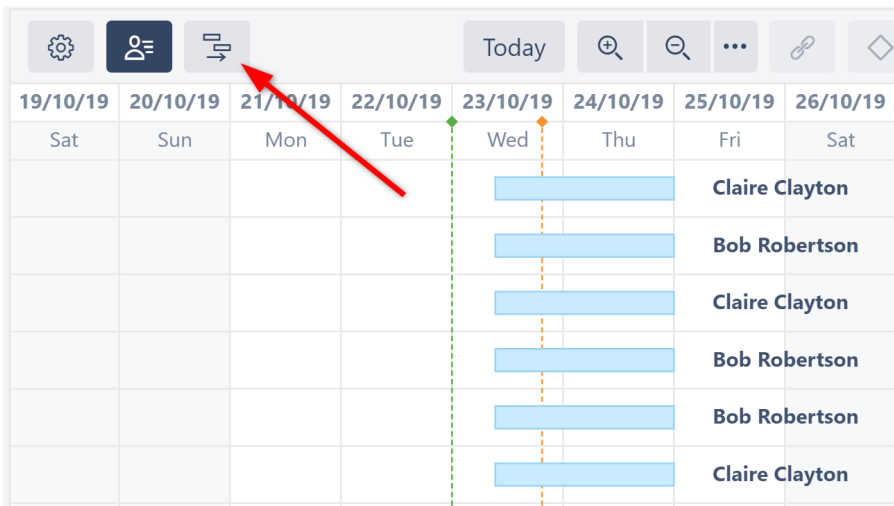
Sorry, the widget is not supported in this export.
But you can reach it using the following URL:

<https://www.youtube.com/watch?v=AB79MBjtjA>

⚠ 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.

4.5.1 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 34) 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 123).
- **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.

4.5.1.1 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.

4.5.2 Removing Leveling Delays

To remove [leveling delays](#)(see [page 83](#)) 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.

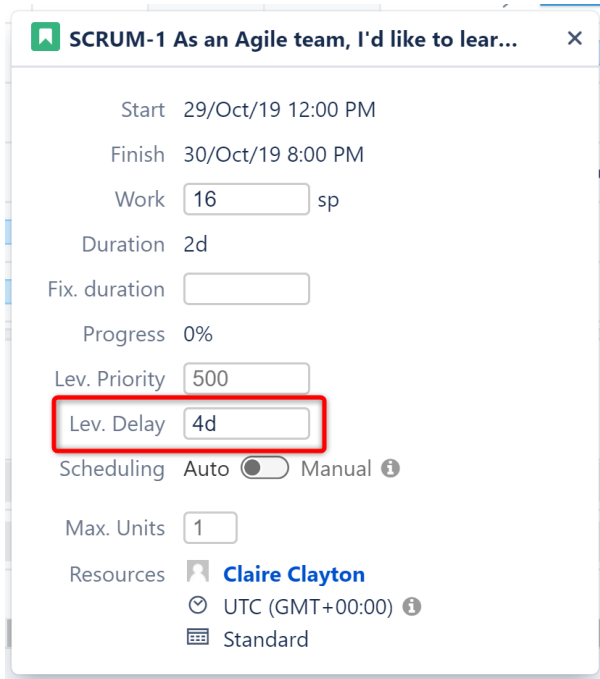
Completed tasks

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.

4.5.3 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 60).



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.

4.5.4 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 121), or adjusted for individual tasks via the [Task Details Panel](#)(see page 60).

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.

4.5.5 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.

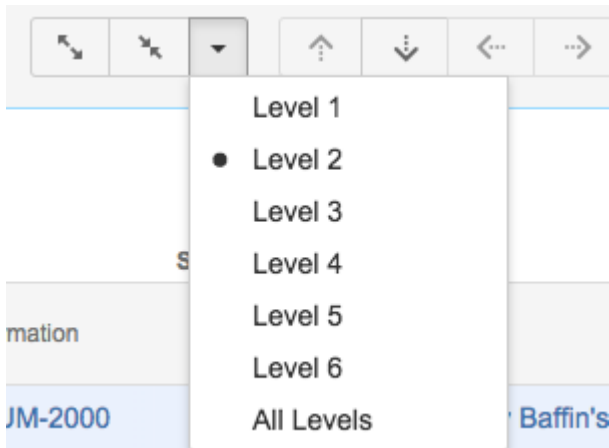
4.6 Exporting to a Printable File

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

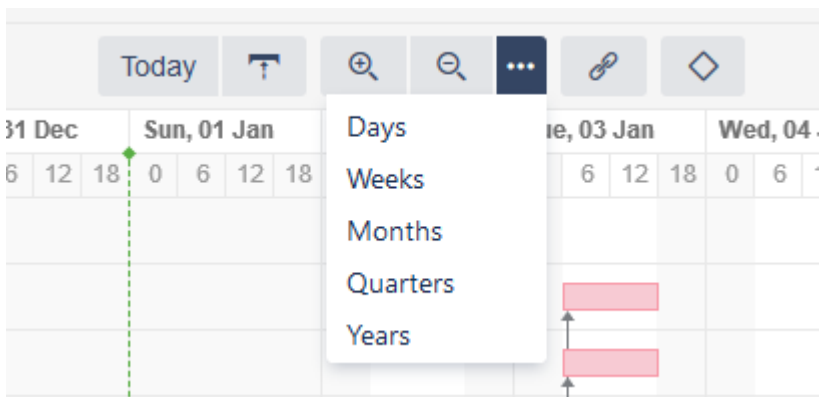
4.6.1 Configuring Hierarchy Level and Zoom

Certain parameters of your Gantt chart export are based on the layout of the structure and chart on your screen, including the [hierarchy level](#)¹⁸ and [zoom level](#) (see page 53). 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**.



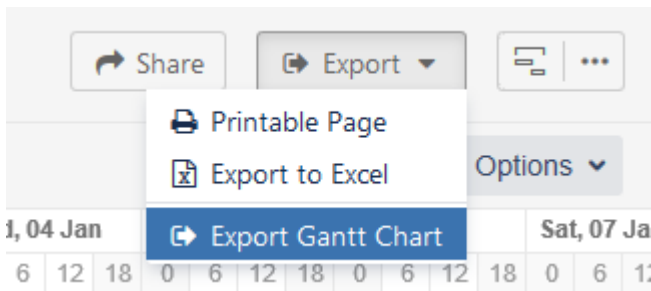
To configure the chart's zoom level, use the Gantt chart zoom toolbar buttons. You can zoom in, zoom out or select a specific unit for your time scale.



4.6.2 Export Gantt Chart

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

¹⁸ <https://wiki.almworks.com/display/structure/Navigating+Between+Items>



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

Export Gantt chart

Output Format PDF

Color Scheme Standard

Range Whole Chart

yy-mm-dd - yy-mm-dd

Item Information Summary
 Issue Key
 Resources Assigned

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

WBS Include Key and Summary

Width auto
Maximum width of the WBS section (in pixels). Leave empty for no limit.

Export Cancel

- **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).
- **Time 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.


- **Item information** and **Gantt Chart Details** - These allow you to choose which details will be shown on your exported chart.
- **WBS** - Check this box to include the work breakdown structure (including the Key and Summary columns) alongside the chart.
- **Width** - This allow you to specify the width (in pixels) of the included work breakdown structure.


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

4.6.3 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.

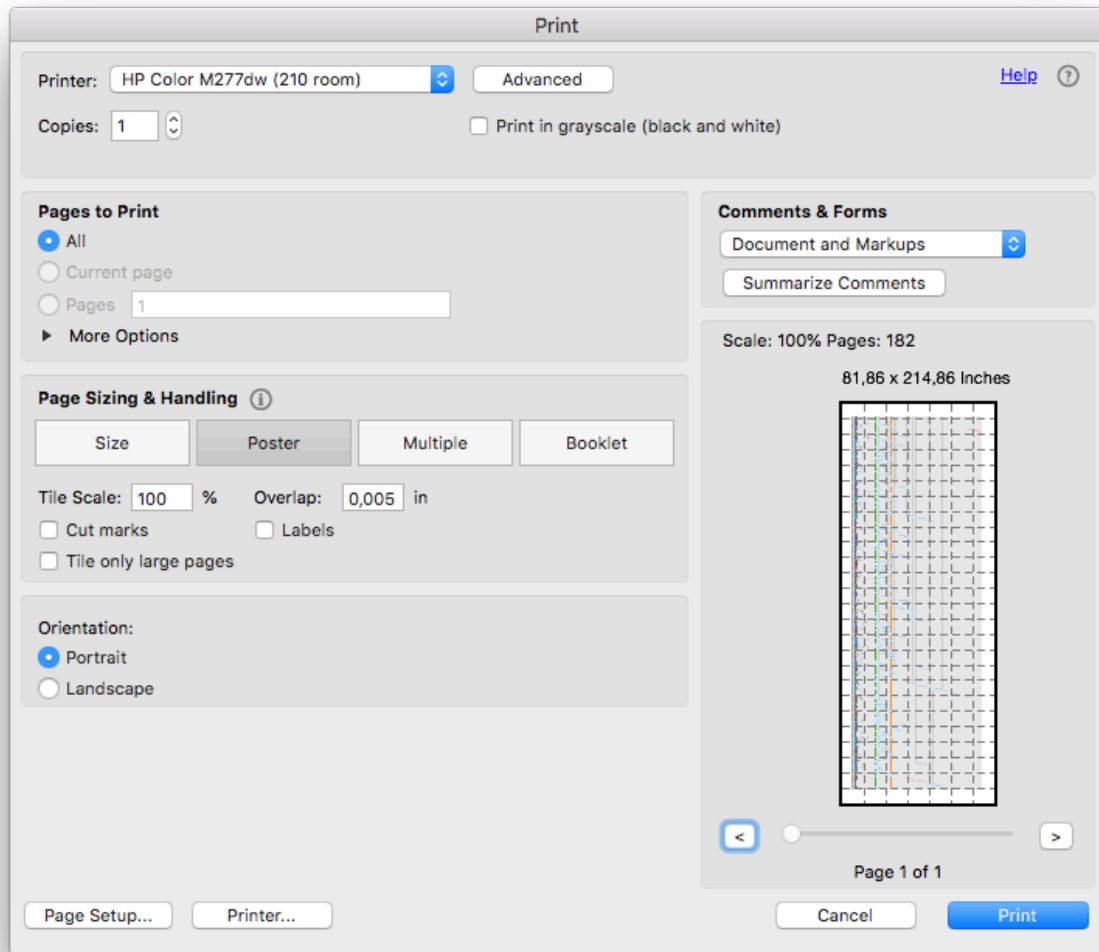
 If you are not prompted for a download location, check your browser's default download location for the exported chart. The download file should have the same name as the exported structure.

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

4.6.4 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](https://acrobat.adobe.com/us/en/acrobat/pdf-reader.html)¹⁹.

¹⁹ <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.

4.7 Using 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 89)

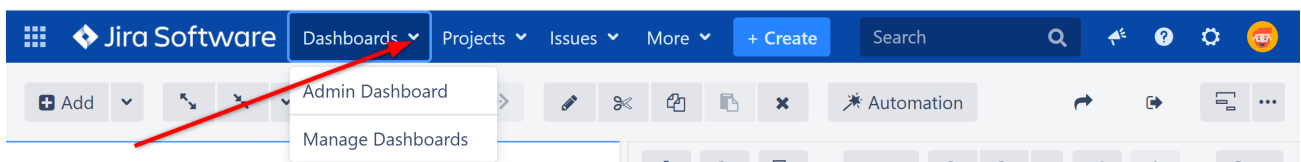
- [Confluence Gadget](#)(see page 92)

⚠ Important!

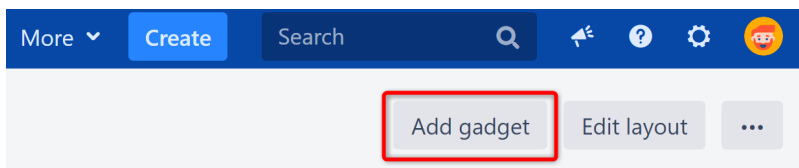
The Structure.Gantt gadget has limited functionality and is mostly dedicated to viewing. It is not possible to alter a schedule or see task details using the gadget (users should continue to use Jira or Structure.Gantt for these tasks). Additionally, if your gadget is not refreshing or is not refreshing frequently enough, make sure you have properly configured your gadget's refresh interval. See [Jira Dashboard Gadget](#)(see page 89) for more details.

4.7.1 Jira Dashboard Gadget

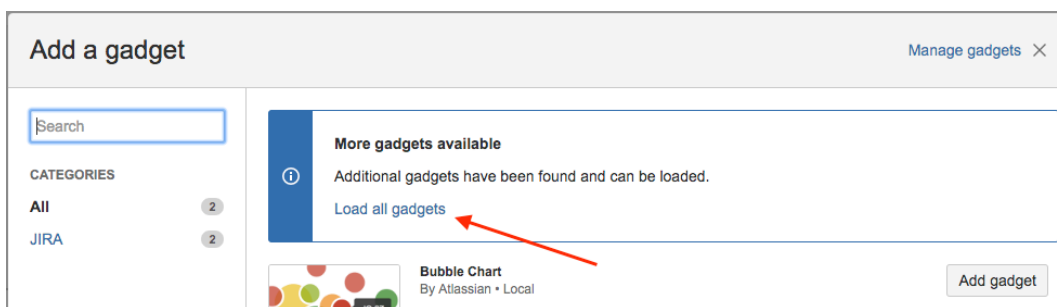
To add the Structure.Gantt gadget to a Jira Dashboard, click **Dashboards** in the top menu and select the desired dashboard, or click **Manage dashboards** to create a new one (see [Atlassian documentation](#)²⁰ for more details on how to manage dashboards).



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

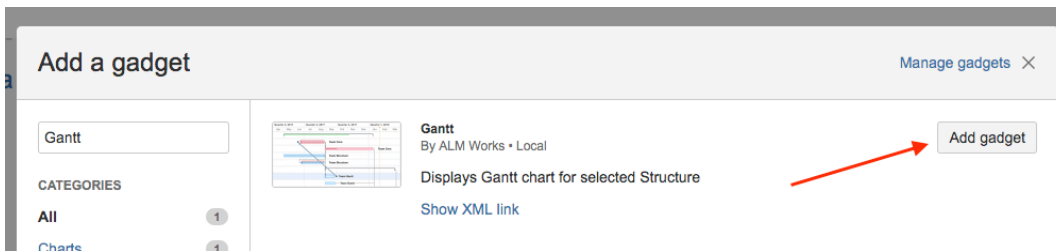


Click **Load all gadgets** to display a list of all available gadgets.



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

²⁰ <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.

4.7.1.1 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](#)²¹ 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, Years.
- **Baseline** - Specifies whether or not to include a [Baseline](#)(see page 74) 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.

²¹ <https://wiki.almworks.com/display/structure/Structured+JQL>

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

Baseline

Item Information Summary
 Issue Key
 Resources Assigned

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

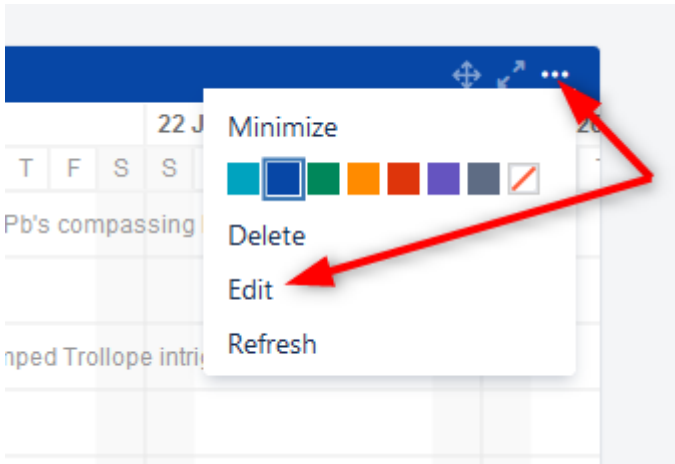
WBS Include Key and Summary

Width
Maximum width of the WBS section (in pixels). Leave empty for no limit.

Refresh Interval:
How often you would like this gadget to update

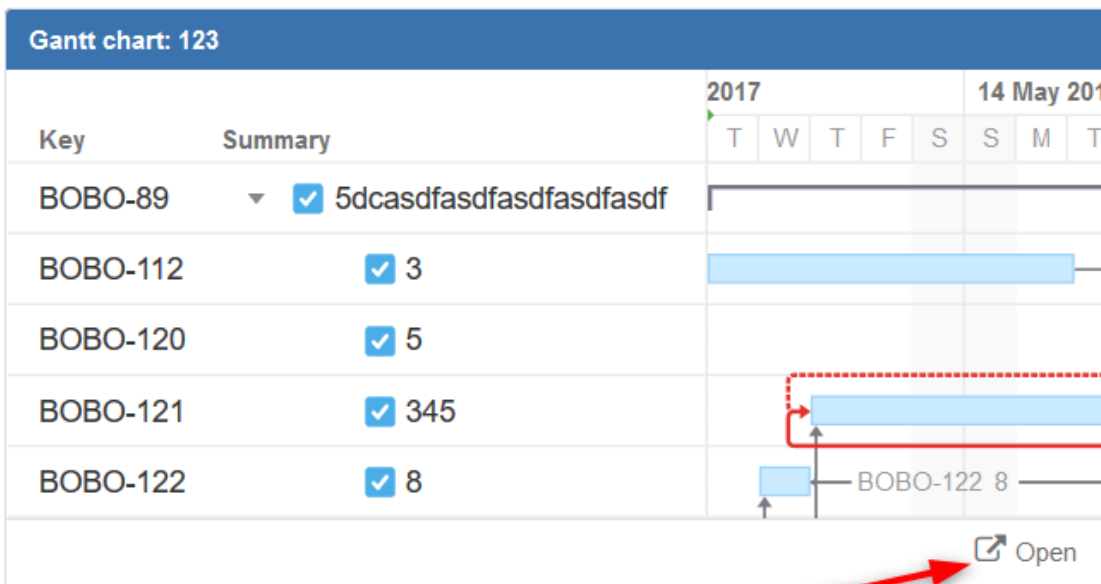
4.7.1.2 Editing Configuration for an Existing Gadget

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



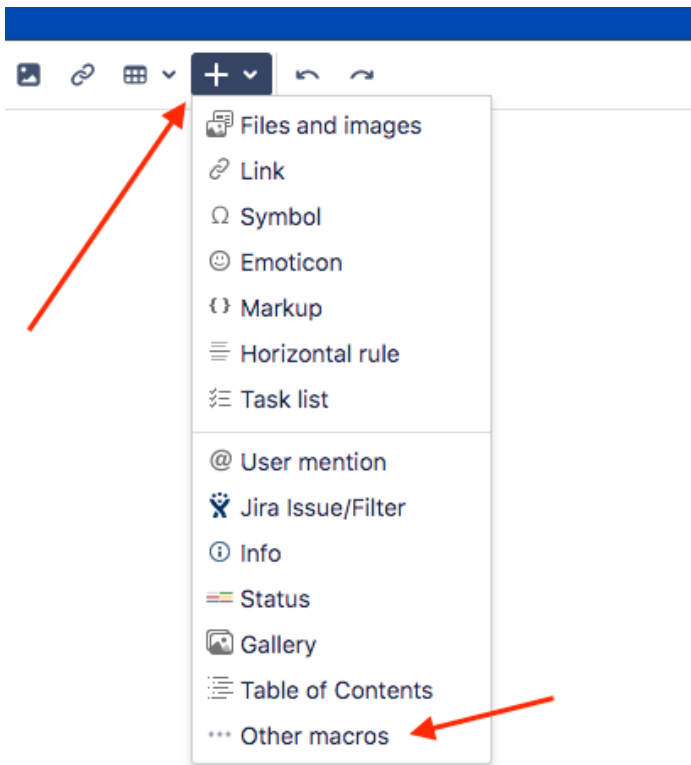
4.7.1.3 Open the Gantt Chart from the Gadget

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



4.7.2 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 146).

4.7.2.1 Initial Configuration

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

Insert 'Structure.Gantt' Macro

Shows a Structure-based Gantt chart.

Use the parameters below to configure your gadget's properties.

This gadget may also have configurable properties that can only be accessed on the gadget itself. Use the gadget preview on the left to access them.

Width

Examples: "300" (300px), "300px", "50%", "auto"

Border

Whether or not to surround the gadget with a thin border

author

↻ Preview

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

Select macro
⚠ Please complete the configuration in the preview area first
Insert
Cancel

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](#)²² query.
- **Visible Rows** - Defines how many rows of your structure will be visible in the chart at a time. (To see additional rows, you can hold Shift+Left Mouse Button and drag the chart.) Set this value to "0" to 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 74) 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 53)).

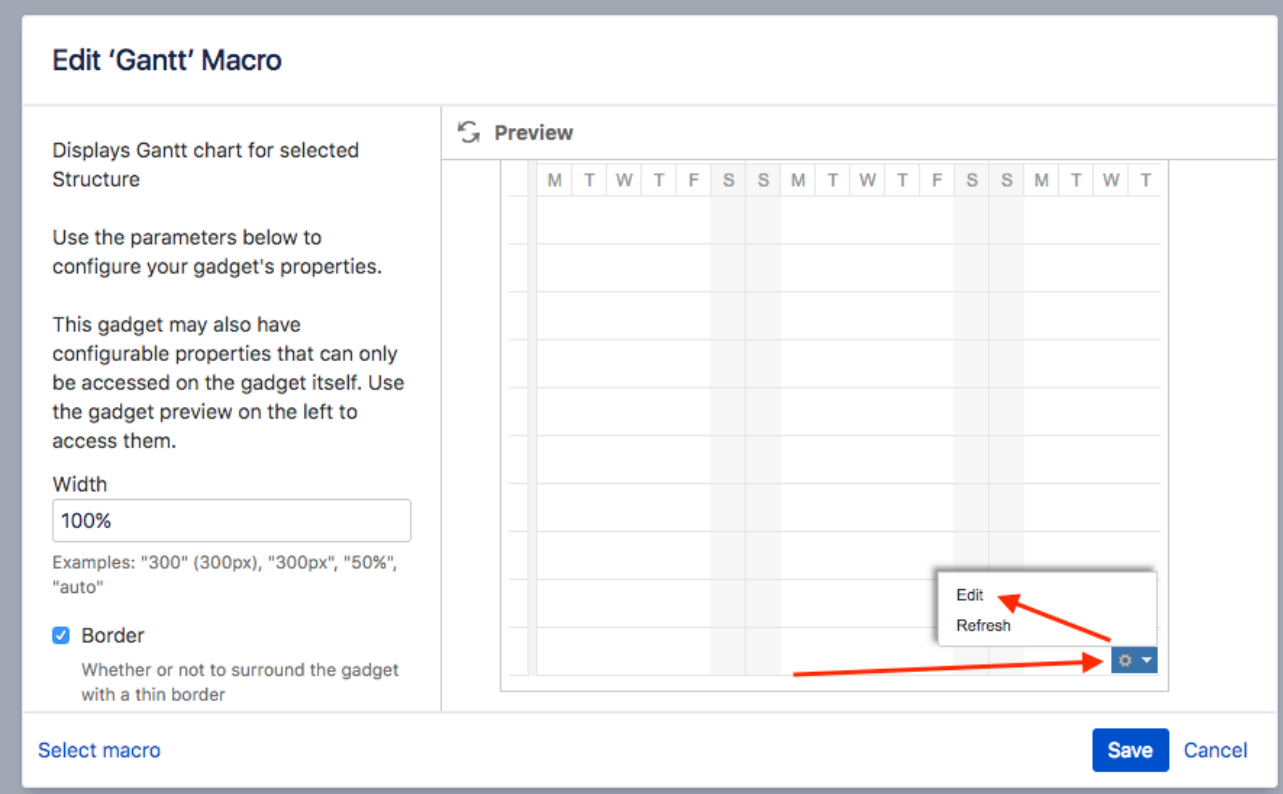
²² <https://wiki.almworks.com/display/structure/Structured+JQL>

- **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.

4.7.2.2 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**.



4.8 Using 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 99).

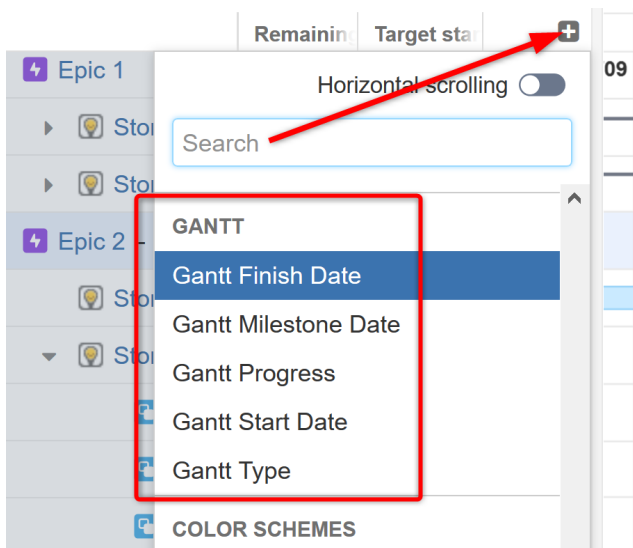
Index	Key	Summary	Gantt Start Date	Gantt Finish Date	Gantt Progress	Gantt Type
1.1	SCRUM-1	Epic 1	25/Sep/18 12:00	25/Sep/18 12:00		Milestone
1.1.1	SCRUM-4	Story 1	25/Sep/18 8:00 A	04/Oct/18 2:00 P		Group
1.1.2	SCRUM-5	Story 2	25/Sep/18 8:00 A	10/Oct/18 2:00 P		Group
1.2	SCRUM-2	Epic 2 - dfa	10/Oct/18 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 99).

⚠ It is not possible to use Gantt attributes in Structure [Automations](#)²³.
 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.

4.8.1 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](#)²⁴. Scroll down to the Gantt section, or begin typing the attribute name in the search field, and select the desired attribute.



²³ <https://wiki.almworks.com/display/structure/Automation>

²⁴ <https://wiki.almworks.com/display/structure051/Customizing+Columns>

4.8.2 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.

The screenshot shows the 'Time to Complete' formula editor. The formula is: `If(GanttType != "Milestone", GanttFinishDate - GanttStartDate)`. A dropdown menu is open, showing a list of Gantt attributes: Gantt Type, Gantt finish, Gantt Finish Date, Gantt Milestone Date, Gantt Progress, Gantt Start Date, Gantt Type, and Issue Type. The 'Gantt Type' option is highlighted.

To learn more about using formulas and variables in Structure, see [Formula Columns](#)²⁵.

4.8.3 Using Gantt Attributes in Transformations

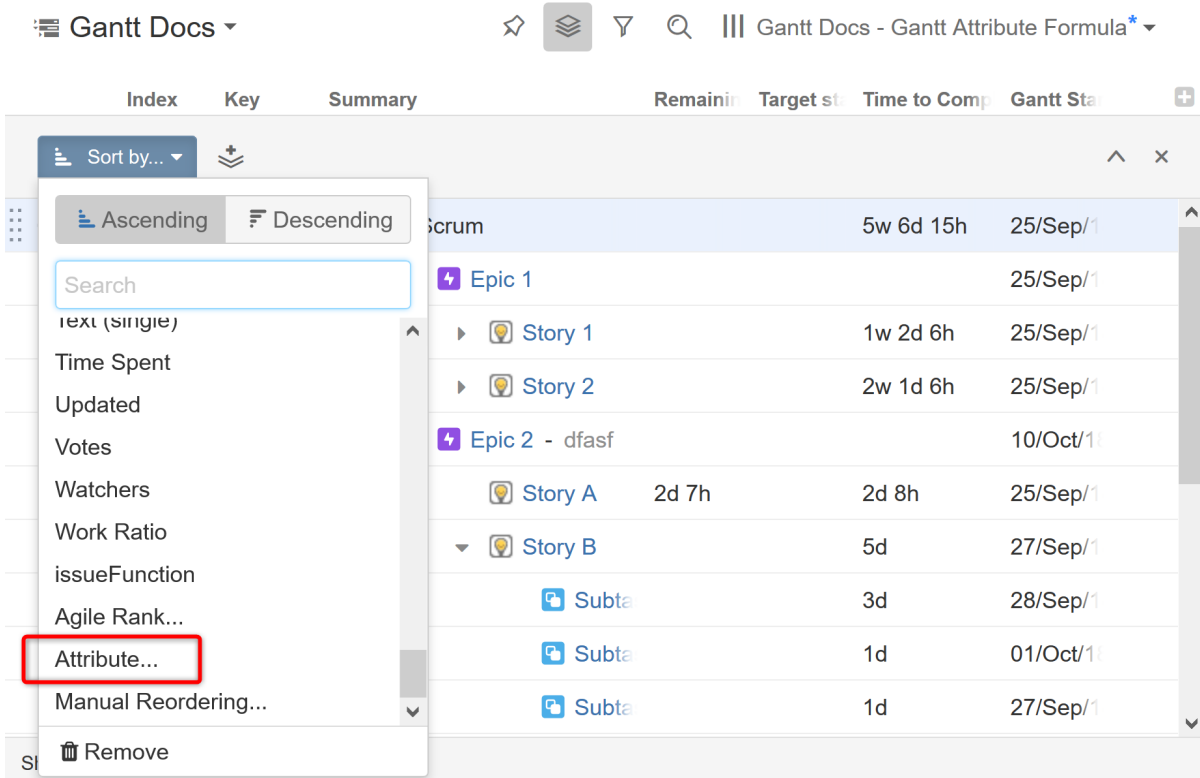
Using Transformations, you can sort items in your structure by their Gantt attributes. To do so, open the Transformations panel and select **Add Transformation | Sort**.

The screenshot shows the 'Gantt Docs' Transformations panel. The 'Add transformation' dropdown menu is open, and the 'Sort' option is highlighted. The background shows a table with columns: Key, Summary, TP, Team, and Original Estimation. The table contains several rows of data, including 'Story 1', 'Story 2', 'Story 3', 'Task E', and 'Story 4'.

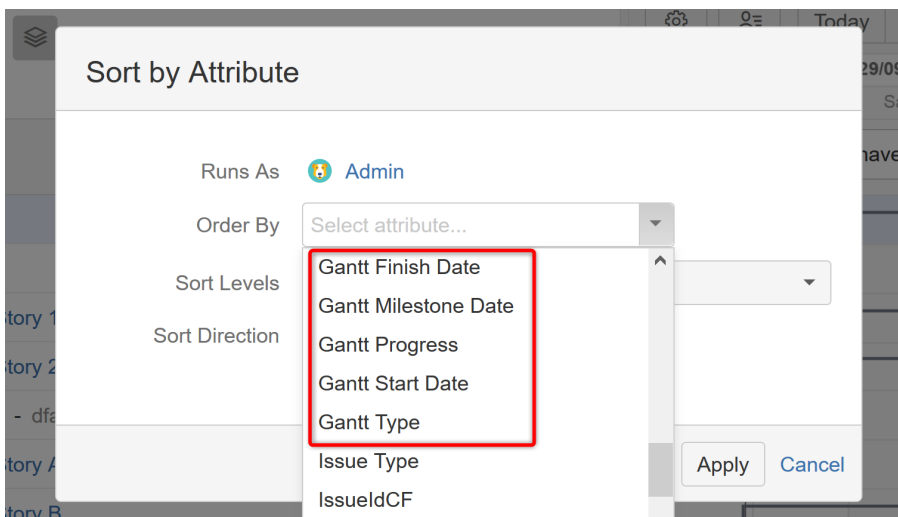
Key	Summary	TP	Team	Original Estimation
	Story 1	🟢 =	Team 1	2d
	Story 2	🟢 =	Team 1	1w
	Story 3	🟢 =	Team 2	3d
	Task E	🟢 =	Team 1	3w
GANTTDOCS-4	Story 4	🟢 =	Team 1	1w

²⁵ <https://wiki.almworks.com/display/structure/Formula+Columns>

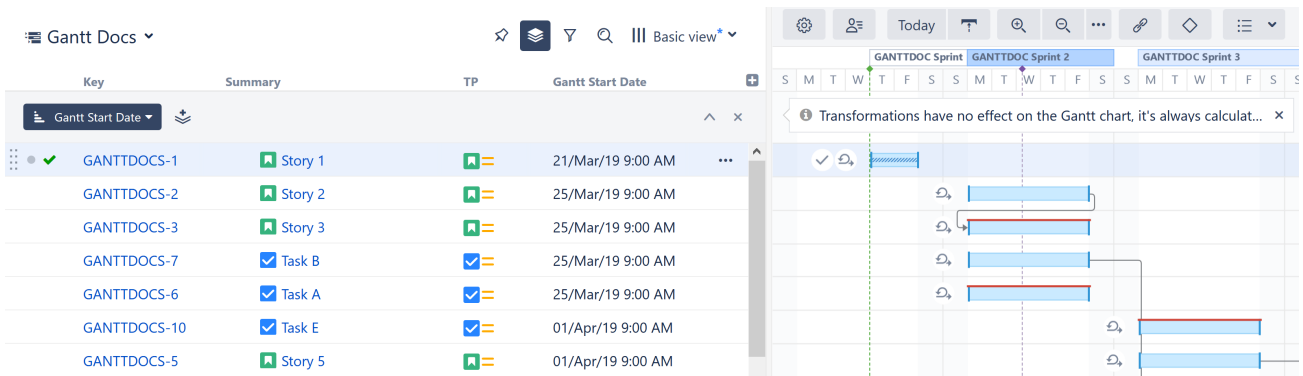
In the **Sort by...** menu, select **Attribute...**



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



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



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

4.8.4 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](#)²⁶. This way, these values can be viewed and utilized by anyone, whether they have access to Structure or not.

Sorry, the widget is not supported in this export.
But you can reach it using the following URL:
<https://www.youtube.com/watch?v=oE1dSkLl9D8>

See [Attribute to Issue Field Effector](#)²⁷ for more information.

4.8.5 List of Gantt Attributes Available in Structure

The following Gantt Attributes can be used within Structure columns, formulas, transformations and Effectors. To learn more, see [Using Gantt Attributes in Structure](#)(see page 95).

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 127) 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.

²⁶ <https://wiki.almworks.com/display/structure/Effectors>

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

Name	Result
Gantt Fixed Duration	The task's fixed duration ²⁸ , if the task has a fixed duration.
Gantt Leveling Delay	The delay applied to the task by resource leveling.
Gantt Manual Finish Date	If a task has a manual finish date, returns that date value.
Gantt Manual Milestone Date	If a task has a manual milestone date, returns that date value.
Gantt Manual Start Date	If a task has a manual start date, returns that date value.
Gantt Max Units	The maximum number of resource units that can be allocated for the task at any given time (see Configuration Resources ²⁹).
Gantt Milestone Date	If an item is visualized as a milestones (see page 66) within the chart, returns the milestone date.
Gantt Progress	The calculated progress ³⁰ for the task.
Gantt Resource	The resource ³¹ 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 ³² , "Manual" if the task is manually scheduled ³³ , "Agile" if scheduled by sprint (see page 34).
Gantt Slice	If the task's behavior or appearance is effected by a configuration slice ³⁴ , 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 ³⁵ (returned as a time value), based on the Gantt configuration. If Work has been manually entered in the Task Details Panel ³⁶ , returns this value.

28 <https://wiki.almworks.com/display/ganttmaster/Fixed+Duration>

29 <https://wiki.almworks.com/display/ganttmaster/Resources>

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

31 <https://wiki.almworks.com/display/ganttmaster/Resources+and+Resource+Usage>

32 <https://wiki.almworks.com/display/ganttmaster/Automatic+Scheduling>

33 <https://wiki.almworks.com/display/ganttmaster/Manual+Scheduling>

34 <https://wiki.almworks.com/display/ganttmaster/Slice-based+Configurations>

35 <https://wiki.almworks.com/display/ganttmaster/Work+Estimates>

36 <https://wiki.almworks.com/display/ganttmaster/Task+Details+Panel>


5 Settings and 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 101)
- [Gantt Configuration in Details](#)(see page 105)
 - [General Settings](#)(see page 107)
 - [Scheduling](#)(see page 107)
 - [Work Estimates](#)(see page 108)
 - [Progress](#)(see page 110)
 - [Manual Scheduling](#)(see page 111)
 - [Use Sprints for Manual Scheduling](#)(see page 113)
 - [Scheduling Precedence](#)(see page 114)
 - [Fixed Duration Attribute](#)(see page 114)
 - [Precision](#)(see page 115)
 - [Grouping](#)(see page 116)
 - [Dependencies](#)(see page 117)
 - [Resources](#)(see page 121)
 - [Calendars](#)(see page 124)
- [Slice-based Configurations](#)(see page 127)
 - [Creating a Slice](#)(see page 128)
 - [Customizing a Slice](#)(see page 130)
 - [Removing a Slice](#)(see page 138)
 - [Order of Operation](#)(see page 138)
- [Managing Gantt Configurations](#)(see page 140)
 - [Copy Configuration](#)(see page 140)
 - [Deleting Gantt Configurations](#)(see page 142)
 - [Charts and Configurations Permissions](#)(see page 143)

5.1 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.

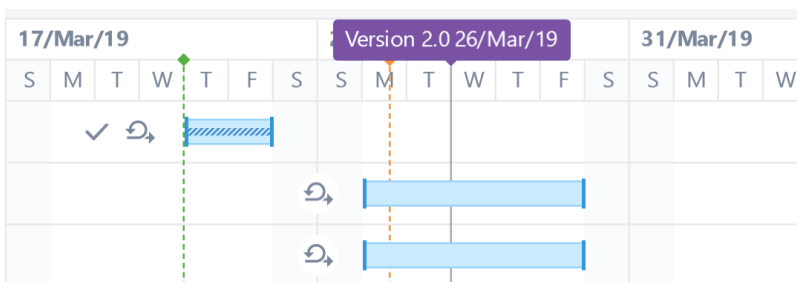
The [Gantt Chart Configuration](#) (see page 105) determines how items operate within your chart. This is where you set how scheduling, dependencies, and resources should work.

- 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 in Details](#) (see page 105).

5.1.1 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.

Fix Version Timeline Settings

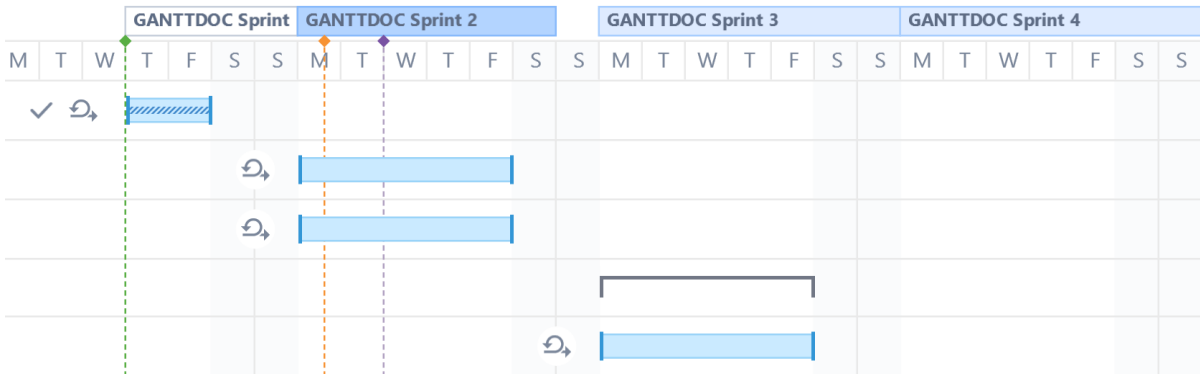
Projects

Fix Versions from the selected projects will be displayed 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.

5.1.2 Sprints

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



To configure future sprints, you need to specify:

- **Sprint start day** - the day of the week your sprints usually start on
- **Duration** - how long sprint lasts, in weeks

Sprints configuration

Sprint start day Duration week(s)

Default sprint start day and duration for Agile tasks

[Add sprints configuration](#)

5.1.2.1 Future Sprint Scheduling

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.

i 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.

5.1.3 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 37) for more details.

5.1.4 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.

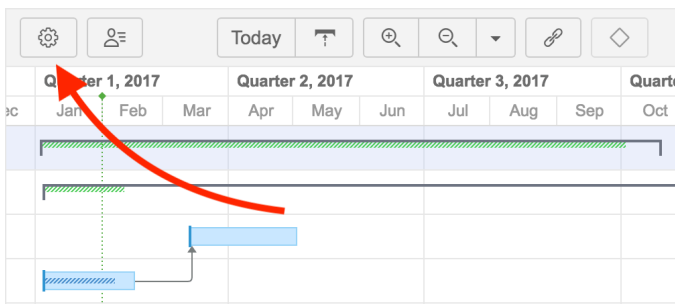
5.2 Gantt Configuration in Details

Using Gantt configuration, the chart properties you define can be stored, shared and reused for other charts.

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.

5.2.1 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 101](#)) 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

Search



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 142) 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 143) 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.

5.2.1.1 Customize a Configuration

Gantt configuration has several important groups of properties. You can define all of them as you go through the Configuration dialog tabs:

- [General Settings](#)(see page 107)
- [Scheduling](#)(see page 107)
 - [Work Estimates](#)(see page 108)
 - [Progress](#)(see page 110)
 - [Manual Scheduling](#)(see page 111)
 - [Use Sprints for Manual Scheduling](#)(see page 113)
 - [Scheduling Precedence](#)(see page 114)
 - [Fixed Duration Attribute](#)(see page 114)
 - [Precision](#)(see page 115)
 - [Grouping](#)(see page 116)
- [Dependencies](#)(see page 117)
- [Resources](#)(see page 121)
- [Calendars](#)(see page 124)

Once you are happy with your configuration, click the Save button to save your configuration and select it in the [Gantt Chart Settings](#)(see page 101) to use it in your Gantt chart.

5.2.2 General Settings

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

My Custom Configuration ×

General

- Scheduling
- Dependencies
- Resources

Name*

Description

Chart Calendar* ▼

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

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.

Shared configuration

Shared configurations can be viewed and used by any user.

- **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.
- **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 124) section.
- **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.

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 143) for more details.

5.2.3 Scheduling

The Scheduling section of the Gantt configuration allows you to define how the Gantt chart works with task Start and Finish dates, duration and other parameters:





- [Work Estimates](#)(see page 108)
- [Progress](#)(see page 110)
- [Manual Scheduling](#)(see page 111)
- [Fixed Duration Attribute](#)(see page 114)




- [Precision](#)(see page 115)
- [Grouping](#)(see page 116)

5.2.3.1 Work Estimates

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

Gantt Docs

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


-  New Slice
-  Purple Epics
-  Project A Resou...

Work Estimates

- Use time tracking
- Use Remaining Estimate only

Default Estimate (for example, 1d)

- Use custom estimate

Estimate attribute 


Format

Hours Ratio (hours in one story point)

Default Estimate (story points)

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 [Resource Management](#)(see page 68) 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 60), 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 not been logged

⚠ Changing the size of a task bar does not affect the work estimate for [fixed-duration](#)(see page 39) tasks. Additionally, it is not possible to change the size of a task bar for tasks [scheduled by sprints](#)(see page 34).

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. If the Remaining Estimate reaches zero, the Default Estimate will be used, unless the "Treat zero duration tasks as milestones" option is enabled (see [Grouping](#)(see page 116)).

Default Estimate

The Default Estimate value is used when no other work estimate values are available for a task, or when the work estimate equals zero.

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 60), 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 60), Structure.Gantt will update the value of the preferred estimate only:

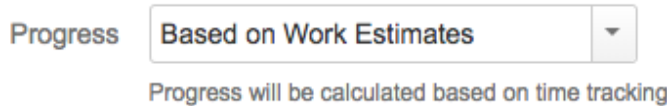
- Time Tracking values will be updated, if **Prefer Custom Estimate over Time Tracking** is unchecked
- Custom Estimate values will be updated, if **Prefer Custom Estimate over Time Tracking** is checked

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.

5.2.3.2 Progress

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

Progress Calculation

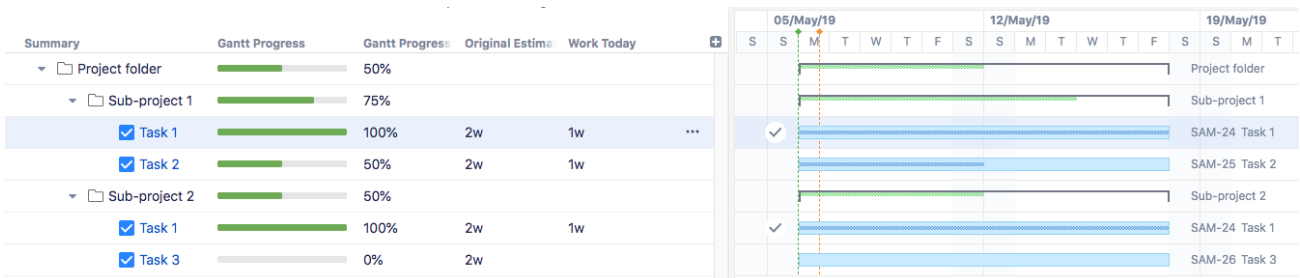


By default, progress is calculated using the same settings as [Work Estimates](#)(see page 108). In this case, progress will be calculated based on the values (Time Tracking, Story Points, etc.) you selected in the Work Estimates section.

If you prefer, you can specify a different field from Work Estimates or use a [Formula](#)(see page 110) 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.

Progress Calculation



When Time Tracking is used, a task's progress is calculated in the following way:

- For non-finished tasks, progress is based on Work and Time Spent values. In the above example, **Task 2** has a progress of 50% (2 week Original Estimate / 1 week Time Spent).
- Tasks are treated as 100% complete if their resolution date is not empty.

When Story Points are used for work estimation, a task's progress is calculated in the following way:

- 0% progress is shown for any non-finished task.
- 100% progress is shown for any complete task (i.e. tasks with a non-empty resolution).

For groups, the progress is calculated as a total progress of all unique tasks within the group:

- **Sub-project 1** has a total progress of 75%, the average between **Task 1** (100%) and **Task 2** (50%).
- **Sub-project 2** has a total progress of 50%, the average between **Task 1** (100%) and **Task 3** (0%).
- **Project folder** has a total progress of 50%, the average of **Task 1** (100%), **Task 2** (50%) and **Task 3** (0%).
Notice that Task 1 appears twice (under Sub-project 1 and Sub-project 2), but each task is only counted once when determining a group's progress.

5.2.3.3 Manual Scheduling

By default, Structure.Gantt will auto-schedule tasks based on your project start date, task estimates, predecessors and dependency types. If a task needs to be scheduled for a specific time or date, its start or finish date can also be set manually.

In order to use manual start and finish dates 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.

Default

The screenshot shows the 'Manual Scheduling' settings panel. On the left is a navigation menu with 'General', 'Scheduling' (selected), 'Dependencies', and 'Resources'. Below the menu is a 'New Slice' button. The main panel has the following settings:

- Manual Scheduling** (Section Header)
- Allow manual scheduling
- Start Date**: Start D (dropdown menu), No time information (text), gear icon
- Finish Date**: None (dropdown menu)
- Milestone Date**: None (dropdown menu)
- Use sprints for manual scheduling
- Prefer sprints over manual start and finish dates
- Backlog Board**: DT board (dropdown menu)
- 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.

Once Manual Scheduling is enabled, you can adjust Start, Finish and Milestone dates directly from your Gantt chart either by dragging your tasks or milestones or by specifying the desired dates in the Jira Custom Field.

To learn more about manually scheduling from within your Gantt chart, see [Scheduling Tasks](#)(see page 30).

⚠ 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

No time information, 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 113) for more information.

Use Resolution Date as the Finish Date

When this option is enabled, all resolved tasks and issue-based [milestones](#)(see page 66) that are not scheduled manually will be scheduled using the issue resolution date as the Finish Date.

Backlog Board None ▼

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.

Default

- General
- Scheduling**
- Dependencies
- Resources

New Slice

Manual Scheduling

Allow manual scheduling

Start Date Start D ▼ ⚙️
 No time information

Finish Date None ▼

Milestone Date None ▼

Use sprints for manual scheduling

Prefer sprints over manual start and finish dates

Backlog Board DT 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.

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 103). 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 34).

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 114).

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 60). 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 130).

Scheduling Precedence

By default, tasks in Structure.Gantt are [automatically scheduled](#)(see page 31) based on the project start date, work estimates and dependencies. If Manual Scheduling is selected in the [Gantt configuration](#)(see page 105), tasks will be scheduled in the following manner, depending on the [Manual Scheduling](#)(see page 111) 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

5.2.3.4 Fixed Duration Attribute

The Fixed Duration Attribute determines how [fixed durations](#)(see page 39) 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 60).

Agile Gantt: SCRUM board

The screenshot shows the settings for the Agile Gantt: SCRUM board. On the left is a navigation menu with options: General, Scheduling (selected), Dependencies, Resources, New Slice, and Bugs are not vis... The main content area is titled 'Fixed Duration' and contains three sections:

- Fixed Duration:** A dropdown menu for 'Duration Attribute' is set to 'Store in Gantt chart'.
- Precision:** A dropdown menu for 'Precision' is set to '1 Hour'. Below it, a note states: 'All dates will be rounded based on selected precision.'
- Groups:** A checkbox labeled 'Treat parent issues as groups' is checked. Below it, a note states: '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.'

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

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

Format

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

Docs

The screenshot shows the settings for the Docs section. On the left is a navigation menu with options: General, Scheduling (selected), Dependencies, Resources. The main content area is titled 'Fixed Duration' and contains two sections:

- Fixed Duration:** A dropdown menu for 'Duration Attribute' is set to 'Story Points'.
- Format:** A dropdown menu for 'Format' is set to 'Hours'.

 A gear icon is visible to the right of the 'Duration Attribute' dropdown.

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).

5.2.3.5 Precision

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).

The screenshot shows the settings for the Precision section. On the left is a navigation menu with options: General, Scheduling (selected), Dependencies, Resources. The main content area is titled 'Precision' and contains one section:

- Precision:** A dropdown menu for 'Precision' is set to '1 Hour'.

 Below the dropdown, a note states: 'Precision defines the minimal amount of work used in planning. All time values will be rounded based on selected precision.'

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, 2018 9:45 AM would be shown as September 12, 2018 9:00 AM.

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

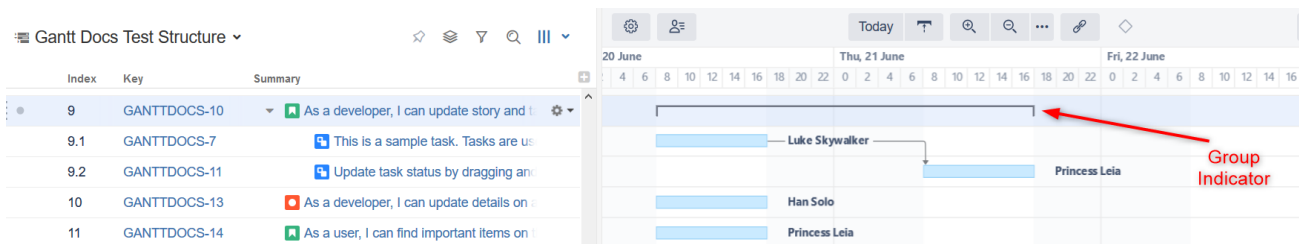
5.2.3.6 Grouping

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

- [Treat parent issues as groups](#)(see page 116)
- [Treat tasks of zero duration as Milestones](#)(see page 117)

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.

Behaviour

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.

Treat tasks of zero duration as Milestones

Tasks with Estimate set to 0 or tasks with Fixed Duration set to 0 will be displayed as milestones

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.

Treat tasks of zero duration as Milestones

By default, Structure.Gantt considers tasks with an Estimate of zero as invalid and assigns the Default Estimate to those tasks (see [Work Estimates](#)(see page 108)). If you prefer, such tasks can be treated as [Milestones](#)(see page 66), making it clear that no time is required to complete them. To do so, check the "Treat tasks of zero duration as Milestones" checkbox.

Behaviour

- 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.

- Treat tasks of zero duration as Milestones

Tasks with Estimate set to 0 or tasks with Fixed Duration set to 0 will be displayed as milestones

If this option is selected, [Fixed Duration](#)(see page 39) tasks with zero duration will also be treated as milestones. This includes:

- Tasks with '0' entered in the Fixed Duration field on the [Task Details Panel](#)(see page 60). (Entering zero is only allowed if "Treat tasks of zero duration as Milestones" is selected.)
- Manually-scheduled tasks with identical start and finish dates, if time is included in the date. (If only the date is used, without the time, these are considered one-day tasks.)

i If this option is selected, it overrides any [Slice](#)(see page 127) that may otherwise affect an issue's behavior - tasks with zero duration will be treated as a Milestone in the chart, even if they are included in a slice that specifies they should be treated as tasks.

⚠ Tasks with no estimates set or incorrect estimate values will still be assigned the Default Estimate.

5.2.4 Dependencies

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 <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="0"/>	<input type="button" value="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 [Working With Dependencies](#)(see page 44).

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

5.2.4.1 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	<input checked="" type="checkbox"/>
		clones	<input 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="0"/>	is cloned by	<input checked="" type="checkbox"/>
		is duplicated by	<input type="checkbox"/>

Add Type

Search

BLOCKS


is blocked by

CLONERS

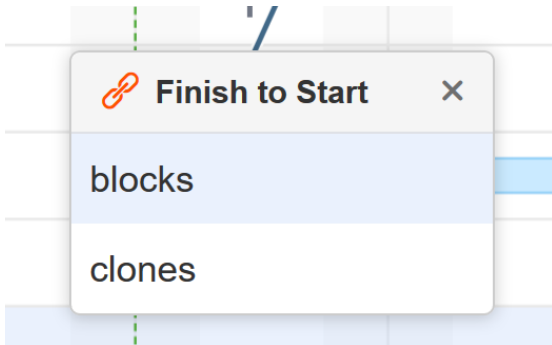
is cloned by

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, Structure.Gantt creates a Finish to Start dependency by default. If you have more than one link type associated with Finish to Start dependencies, the one marked as [favorite](#)(see page 119) will be used, or a pop-up will appear for you to select the appropriate type.



5.2.4.2 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"/>	<input type="button" value="🗑"/>
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"/>	<input type="button" value="🗑"/>

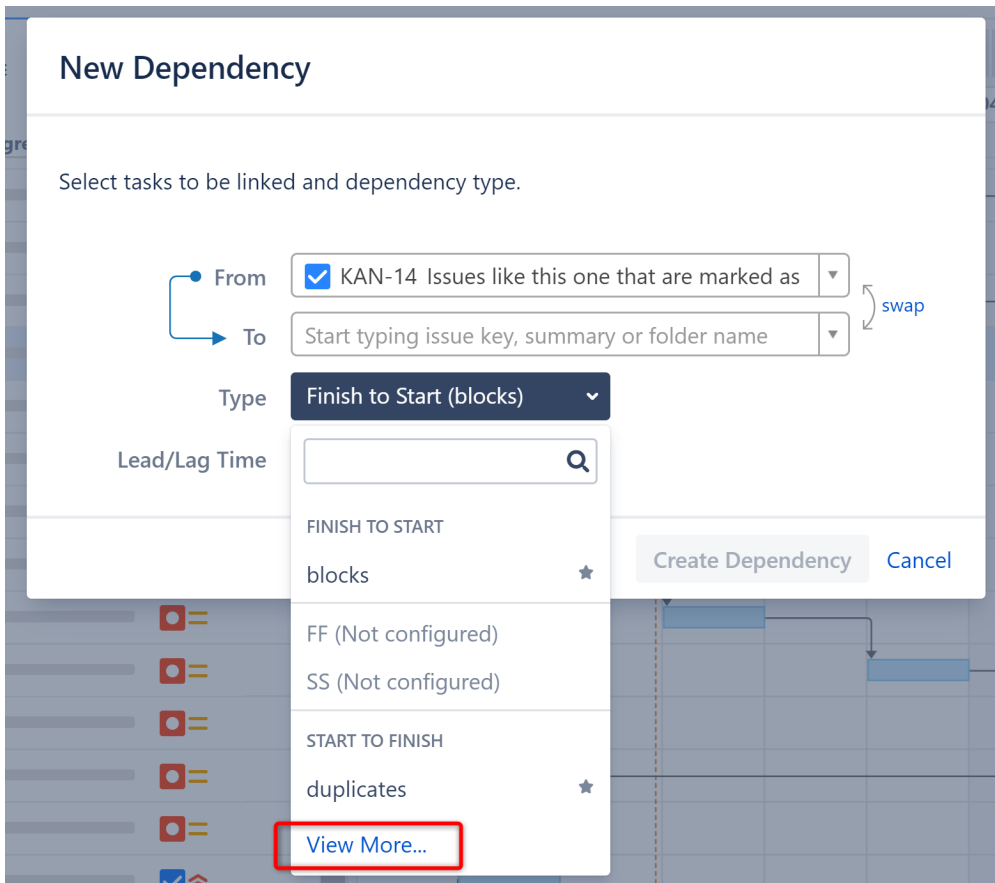
To learn more, see [Dependency Lead/Lag Time](#)(see page 47).

5.2.4.3 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 [Working With Dependencies](#)(see page 44) 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.

5.2.5 Resources

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

The screenshot shows the configuration interface for resources. On the left is a sidebar with navigation options: General, Scheduling, Dependencies, and Resources (which is highlighted). The main content area is titled "Resource Assignment" and features a "From Attribute" dropdown menu set to "Assignee". Below this is a descriptive text: "A single resource will be automatically assigned to a task, based on the value in the selected Jira field or Structure attribute." Underneath is the "Default Resource Settings" section, which includes a "Units" input field containing the value "1". A descriptive text below the input field states: "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 [Resource Management](#)(see page 68).

5.2.5.1 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](#)³⁷.

Here are a few common examples of resource assignments:

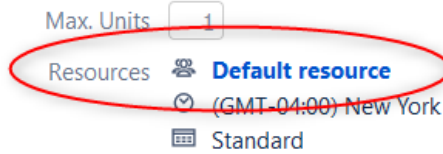
- To use each task's assigned user as its resource, select Assignee.
- To use teams as resources, create a text custom field called "Teams" and populate it with team names accordingly. Structure.Gantt will automatically merge similar values.
- You can also combine these using a simple [formula](#)³⁸: "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.

³⁷ <https://wiki.almworks.com/display/structure/Formula+Columns>

³⁸ <https://wiki.almworks.com/display/structure/Formula+Columns>

- ⓘ 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:



5.2.5.2 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 [Resource Management](#)(see page 68) for more information.

5.2.5.3 Task Settings

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

Task Settings

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.

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.

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 [Gantt Chart Elements](#)(see page 53)). 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.

Leveling Priority

Leveling Priority allows you to prioritize certain tasks when using the [Resource Leveling](#) (see page 79) 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 60).

- **Standard Attributes** - Priority can also be assigned based on an attribute, such as a custom field, Jira Rank, Story Points or [Structure Index](#)³⁹ (in this case, the leveling priority is calculated as `maximum structure index - current item index`).
- **Formula** - Using [Structure formulas](#)⁴⁰, 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 60). 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 127).

5.2.6 Calendars



Please bear with us as we improve this feature.

At the moment, there is no good user interface for editing calendars. We are going to ship it in future versions.

Currently, if you need to define a calendar, please refer to the technical documentation about JSON format or write us to support@almworks.com⁴¹ so we can help you.

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

- [Gantt chart itself](#)(see page 107)
- [Default resource](#)(see page 121) calendar
- [Individual resource](#)(see page 68) 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.

5.2.6.1 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.

Basic structure


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

³⁹ <https://wiki.almworks.com/display/structure/Sequential+Index+Column>

⁴⁰ <https://wiki.almworks.com/display/structure/Formula+Columns>

⁴¹ <mailto:support@almworks.com>


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

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

Week schedule

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

```
"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": 20170301,  
    "workPeriods": []  
  },  
  {  
    "date": 20170305,  
    "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).

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

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.

5.3 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.

Gantt Docs

Project A Active [Delete](#) [Add Section](#) ▼

JQL ✓

Progress Calculation [Delete Section](#)

Progress ⚙️

Appearance [Delete Section](#)

Color Scheme ● ● ● ● ● ●

[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 128)
- [Customizing a Slice](#)(see page 130)
- [Removing a Slice](#)(see page 138)
- [Order of Operation](#)(see page 138)

5.3.1 Creating a Slice

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

Gantt Docs

✕

- 🔗 **General**
- 📅 Scheduling
- 🔗 Dependencies
- 👤 Resources
- ✍️ **New Slice**

Name*

Description

Chart Calendar* ▼

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

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.

Shared configuration

Shared configurations can be viewed and used by any user.

5.3.1.1 Slice Name

All new slices are named "New Slice" by default. To give your slice a custom name, click the current name or the edit icon beside it.

Gantt Docs

✕

- 🔗 General
- 📅 Scheduling
- 🔗 Dependencies
- 👤 Resources
- ✍️ **New Slice**
- 🎯 **New Slice**

New Slice Active Delete Add Section ▼

Issue Types ▼

5.3.1.2 Assigning Issues

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

Gantt Docs

✕

The screenshot displays the 'Gantt Docs' configuration window. On the left, a sidebar contains navigation links for 'General', 'Scheduling', 'Dependencies', and 'Resources'. Below these are two buttons: 'New Slice' and 'My Slice'. The main content area is titled 'My Slice' and features a toggle switch for 'Active' and a 'Delete' button. A dropdown menu labeled 'Issue Types' is open, listing several issue types with corresponding icons: Story, Sub-task, Bug, Epic, New Feature, Task, and Improvement. At the bottom of the window, there are three buttons: 'Save as Copy', 'Save', and 'Cancel'.

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

⚠ JQL Limitations

JQL queries should be based on issue properties.

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

5.3.2 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 **Add Section** menu and selecting the properties you want to customize.

Gantt Docs ×

- 🔗 General
- 📅 Scheduling
- 🔗 Dependencies
- 👤 Resources

✎ New Slice

🎯 **Project A**

💾 Save as...

Project A 🔘 Active 🗑️ Delete

JQL ▼ ✔

This query is executed on behalf of structure owner.

Add Section ▼

- 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 131)
- [Progress Calculation](#)(see page 132)
- [Manual Scheduling](#)(see page 133)
- [Dependencies](#)(see page 133)
- [Lead/Lag Times](#)(see page 134)
- [Resource Assignment](#)(see page 135)
- [Task Settings](#)(see page 136)
- [Appearance](#)(see page 136)
- [Item Behavior](#)(see page 137)

📘 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.

5.3.2.1 Work Estimates

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

Gantt Docs

- General
- Scheduling
- Dependencies
- Resources

New Slice

Project A

Project A
 Active Delete
Add Section ▾

JQL ▾ ✔

Work Estimates Delete Section

Use time tracking

Default Estimate (for example, 1d)

Use custom estimate

Estimate attribute ▾

Value ▾

Hours Ratio (hours in one story point)

Default Estimate (story points)

In the example above, time estimates for issues in "Project A" will be calculated based on Story Points, regardless of what the default configuration is for other projects.

To learn more about setting work estimates, see [Work Estimates](#)(see page 108).

5.3.2.2 Progress Calculation

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

Gantt Docs

- General
- Scheduling
- Dependencies
- Resources

New Slice

Project A

Project A
 Active Delete
Add Section ▾

JQL ▾ ✔

Progress Calculation Delete Section

Progress ▾

Progress will be calculated based on time tracking

For more information about configuring progress calculation, see [Progress](#)(see page 110).

5.3.2.3 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 31), [manual](#)(see page 111) or [sprint-based](#)(see page 34)) for different sets of issues.

Gantt Docs

The screenshot shows the 'Gantt Docs' interface for 'Project A'. On the left is a sidebar with navigation options: General, Scheduling, Dependencies, Resources, and Project A (selected). The main area is titled 'Project A' and includes an 'Active' toggle and a 'Delete' button. Below this is the 'Manual Scheduling' section, which has a 'Delete Section' button. The configuration includes:

- Allow manual scheduling
- Start Date: (dropdown) No time information
- Finish Date: (dropdown) No time information
- Milestone Date: (dropdown)
- Use sprint dates for manual scheduling
 - Prefer sprint dates over manual start and finish dates
- Use Resolution Date as the Finish Date

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

To learn more about manual scheduling, see [Manual Scheduling](#)(see page 111).

5.3.2.4 Dependencies

You can set up custom link types to be used with each type of dependency within your slice. To set a default link type for a dependency type, check the **Favorite** box.

Gantt Docs



- General
- Scheduling
- Dependencies
- Resources

New Slice

Project A

Project A Active Delete

Add Section

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	relates to <input type="text" value="Add Type"/>	<input type="checkbox"/>	

To learn more about using dependencies, see [Working with Dependencies](#).(see page 44) To learn more about configuring dependencies, see [Dependencies](#)(see page 117).

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

5.3.2.5 Lead/Lag Times

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

Gantt Docs



- General
- Scheduling
- Dependencies
- Resources

New Slice

Project A

Project A Active Delete

Add Section

JQL Project = "Project A"

This query is executed on behalf of structure owner.

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 47).

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

5.3.2.6 Resource Assignment

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

Gantt Docs

- General
- Scheduling
- Dependencies
- Resources

New Slice

Project A

Project A Active Delete

Add Section

JQL Project = "Project A"

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](#)(see page 121).

5.3.2.7 Task Settings

Task Settings allows you to specify how resources are allocated for tasks and set custom [leveling](#)(see page 79) priorities.

Gantt Docs



General

Scheduling

Dependencies

Resources

New Slice

Project A

Project A Active Delete

Add Section ▾

Task Settings

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.

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 task settings, see [Resources](#)(see page 121)

5.3.2.8 Appearance

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

Gantt Docs ×

General

Scheduling

Dependencies

Resources

New Slice

Epics

Epics Active Delete Add Section ▾

Issue Types ▾ ⚡ Epic ×

Appearance Delete section

Color Scheme

◆

Save Cancel

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

i Slices are the only way to set up custom color schemes.

5.3.2.9 Item Behavior

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

Gantt Docs ×

General

Scheduling

Dependencies

Resources

New Slice

Epics

Epics Active Delete Add Section ▾

Issue Types ▾ ⚡ Epic ×

Item Behavior Delete Section

Treat As Default Configuration ▾

Default Configuration

Group

Milestone

Task

Do Not Show

Save 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 130), 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.*

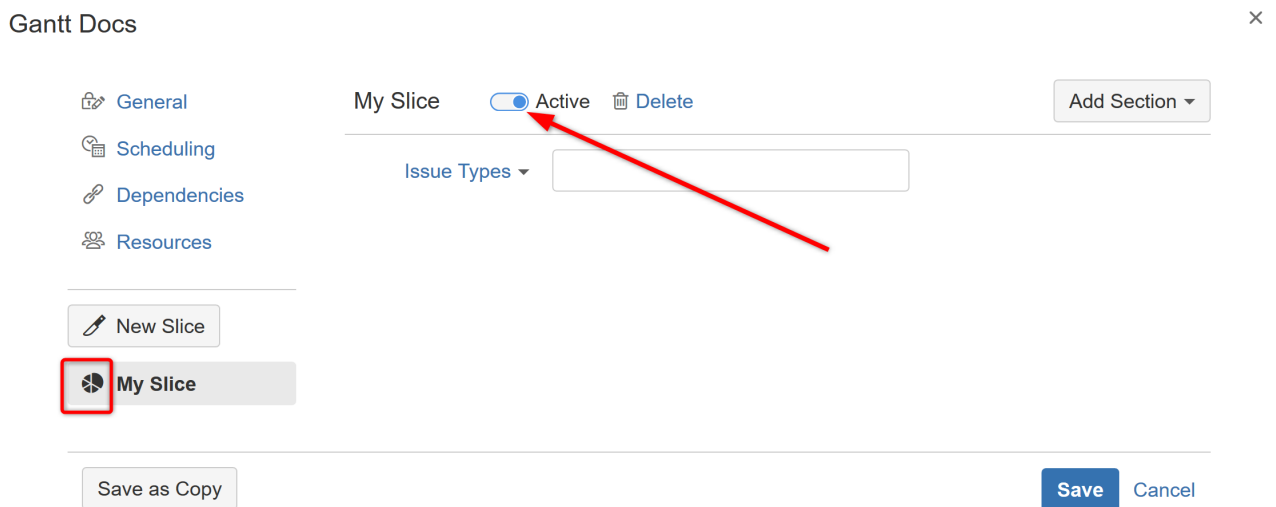
- **Task** - This will display matching issues as task bars. This can be useful if you have selected Grouping for your general configuration and want to display specific parent issues as task bars instead of groups - for example, you may want to display Epics as task bars, but Stories with sub-issues as groups.
- **Do Not Show** - This will remove the issues from your Gantt chart.



5.3.3 Removing a Slice

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

5.3.3.1 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.



When a slice is active, the pie icon beside its name is filled in . When the slice is inactive, the pieces are empty .

5.3.3.2 Deleting a Slice





To delete a slice, click the trashcan icon or the **Delete** text beside it.

5.3.4 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.

Gantt Docs ×

-  General
-  Scheduling
-  Dependencies
-  Resources

 New Slice

-  **Purple Epics**
-  Project A Resour...
-  Orange Tasks


Purple Epics Active  Delete

Add Section ▼

Issue Types ▼

 Epic ×

Appearance

 Delete Section

Color Scheme



Save as...

Save

Cancel

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 Project A epics, 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.

5.3.4.1 Rearranging Slices

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

Gantt Docs

General Scheduling Dependencies Resources

New Slice

Project A Resour... Purple Epics Orange Tasks

Purple Epics Active

Issue Types

Appearance

Color Scheme

5.4 Managing Gantt Configurations

- [Copy Configuration](#) (see page 140)
- [Deleting Gantt Configurations](#) (see page 142)
- [Charts and Configurations Permissions](#) (see page 143)

5.4.1 Copy Configuration

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

5.4.1.1 Create an Exact Copy

If you want to create an identical copy of an existing configuration, open the [Gantt Chart Settings](#) (see page 101) 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**.

Gantt chart Configurations

Active	Name	Actions
<input checked="" type="radio"/>	Gantt Docs Gantt configuration for structure "Gantt Docs"	Edit ...
<input type="radio"/>	Gantt Q&A	
<input type="radio"/>	Great New Name Custom configuration for perfect Gantt charts!	Edit ...

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

5.4.1.2 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 105) and make any necessary changes. Instead of clicking the **Save** button, click **Save as Copy**.

Custom Configuration ×

General

Scheduling

Dependencies

Resources

Name*

Description

Chart Calendar*

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

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.

Shared configuration

Shared configurations can be viewed and used by any user.

Save as Copy
Save Cancel

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.

Create Copy

Name* 1

2 Make new config active

Create Cancel

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

5.4.2 Deleting Gantt Configurations

You can delete an existing Gantt configuration from the Manage Configurations dialog (see [Gantt Configuration in Details](#)(see page 105)).

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.

5.4.3 Charts and Configurations Permissions

5.4.3.1 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.

5.4.3.2 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.

The screenshot shows the configuration settings for a Gantt chart. On the left, a sidebar lists the configuration categories: General (selected), Scheduling, Dependencies, and Resources. The main content area contains the following fields:


- Name***: My Custom Configuration
- Description**: Gantt configuration with customized settings!
- Chart Calendar***: Standard (with a dropdown arrow)
- Owner**: admin (with a user icon)

Below the Owner field, there is explanatory text: "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."

At the bottom, there is a checkbox labeled **Shared configuration**, which is checked. A red arrow points to this checkbox. Below the checkbox, it says: "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 142) for more details.

 Jira admins can see and edit all configurations.

6 Administrator's Guide

- [System Requirements and Installation](#)(see page 145)
- [Enterprise Deployment](#)(see page 145)
- [Confluence Configuration for Gadgets](#)(see page 146)
- [Resource Leveling Troubleshooting](#)(see page 147)
- [Advanced Configurations for Structure.Gantt](#)(see page 147)

6.1 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](#)⁴²
- For specific version requirements, see our [Release Notes](#)(see page 158)
- Both apps can be installed via the App Manager, or by visiting our [Structure](#)⁴³ and [Structure.Gantt](#)(see page 152) download pages

6.2 Enterprise Deployment

6.2.1 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.

6.2.1.1 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.

⁴² <https://marketplace.atlassian.com/apps/34717/structure-project-management-at-scale?hosting=server&tab=overview>

⁴³ <https://wiki.almworks.com/display/structure/Download>

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.

6.2.1.2 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

6.2.2 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.

6.2.2.1 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.

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

6.3 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](#)⁴⁴
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**

6.4 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
SK (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**.

6.4.1 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 147).

6.5 Advanced Configurations for Structure.Gantt

The following custom configurations can be set using the [Structure Dark Features and Fine Tuning interface](#)⁴⁵.

⁴⁴ <https://confluence.atlassian.com/adminjiraserver071/using-applinks-to-link-to-other-applications-802592232.html>

⁴⁵ <https://wiki.almworks.com/display/structure/Advanced+Configuration+and+Dark+Features>

6.5.1 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](#)⁴⁶ to further investigate the cause. In some rare cases, tuning of these facilities may be needed.

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

⁴⁶ <https://support.almworks.com/>

Property	Explanation	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 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

6.5.2 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

Property	Explanation	Default value
structure.gantt.settings.leveling.threadPoolSizeFactor	<p>Maximum number of threads allocated for Resource Leveling calculations on every node.</p> <p>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.</p>	0.5

7 FAQ

- [Does Structure.Gantt support Jira Data Center?](#)(see page 151)
- [Does Structure.Gantt support Portfolio for Jira hierarchy?](#)(see page 151)
- [I have increased the capacity \(Units\) of the resource, but the task still takes the same amount of time to complete](#)(see page 151)

7.1 Does Structure.Gantt support Jira Data Center?

Both Structure and Structure.Gantt support Jira Data Center.

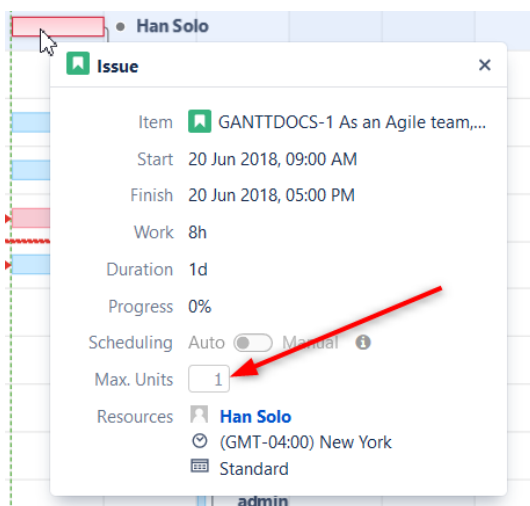
7.2 Does Structure.Gantt support Portfolio for Jira hierarchy?

The work breakdown structure used for building your Gantt chart is created using the Structure app functionality, which supports Parent links used in Portfolio plans.

You can visualize Parent links using either [Extend](#)(see page 151) or [Group](#)(see page 151) generators of Portfolio type when building your structure.

7.3 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 53)
- To learn about setting the default Maximum Units value, see [Gantt Configuration | Resources](#)(see page 121).

8 Download

 [Structure App](#)⁴⁷ version 6.1 or later is required to run Structure.Gantt.

8.1 Download Structure.Gantt

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	2.6.0	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.6.0.jar ⁴⁸ md5 4992634003f96297 87b0756fc4039607	2020-11-05	2021-11-05

[End-User License Agreement \(PDF\)](#)⁴⁹

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.

8.2 What's Next?

See [Quick Start Guide](#)(see page 16)

8.3 Download Archive

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

⁴⁷ <https://marketplace.atlassian.com/plugins/com.almworks.jira.structure/server/overview>

⁴⁸ <https://d1.almworks.com/.files/structure-gantt-2.6.0.jar>

⁴⁹ <http://almworks.com/EULA-Structure.pdf>

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	2.6.0	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.6.0.jar ⁵⁰ md5 4992634003f9629787b0756fc4039607	2020-11-05	2021-11-05
Structure.Gantt	2.5.2	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.2.jar ⁵¹ md5 4780b7629e2d3c0e2bb3e21ef08c5383	2020-08-26	2021-08-26
Structure.Gantt	2.5.1	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.1.jar ⁵² md5 584d57bc5762cd5190fc4d4231ad5bde	2020-08-17	2021-08-17
Structure.Gantt	2.5.0	Jira 7.13+ Structure 6.1.0+	structure-gantt-2.5.0.jar ⁵³ md5 c50a9896008c2fc8ee8b840bc3bad66b	2020-08-06	2021-08-06
Structure.Gantt	2.4.1	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.4.1.jar ⁵⁴ md5 255fb18403d2f1079899cee11ad3a0ec	2020-08-17	2021-08-17
Structure.Gantt	2.4.0	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.4.0.jar ⁵⁵ md5 b27ee09ba8837e9371493d034c5bf56e	2020-05-19	2021-05-19

⁵⁰ <https://d1.almworks.com/.files/structure-gantt-2.6.0.jar>

⁵¹ <https://d1.almworks.com/.files/structure-gantt-2.5.2.jar>

⁵² <https://d1.almworks.com/.files/structure-gantt-2.5.1.jar>

⁵³ <https://d1.almworks.com/.files/structure-gantt-2.5.0.jar>

⁵⁴ <https://d1.almworks.com/.files/structure-gantt-2.4.1.jar>

⁵⁵ <https://d1.almworks.com/.files/structure-gantt-2.4.0.jar>

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	2.3.0	Jira 7.13+ Structure 6.0.0+	structure-gantt-2.3.0.jar ⁵⁶ md5 c5765b171c605fe39fea0b0a36176dc1	2020-03-26	2021-03-26
Structure.Gantt	2.2.2	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.2.jar ⁵⁷ md5 44b6d0aee8327d5083f4fc143505fa18	2020-08-17	2021-08-17
Structure.Gantt	2.2.1	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.1.jar ⁵⁸ md5 95339d5f8b8c9b4cea3a210300c1681e	2020-02-17	2021-02-17
Structure.Gantt	2.2.0	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.2.0.jar ⁵⁹ md5 58dd5106de5b6afaff015850832d9bbb	2020-01-23	2021-01-23
Structure.Gantt	2.1.2	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.2.jar ⁶⁰ md5 f3ea41ce0c9d7c777544b3415ea79fe8	2020-08-17	2021-08-17
Structure.Gantt	2.1.1	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.1.jar ⁶¹ md5 247d335328cf118a9dfad1f7f5375c5a	2019-11-18	2020-11-18

⁵⁶ <https://d1.almworks.com/.files/structure-gantt-2.3.0.jar>

⁵⁷ <https://d1.almworks.com/.files/structure-gantt-2.2.2.jar>

⁵⁸ <https://d1.almworks.com/.files/structure-gantt-2.2.1.jar>

⁵⁹ <https://d1.almworks.com/.files/structure-gantt-2.2.0.jar>

⁶⁰ <https://d1.almworks.com/.files/structure-gantt-2.1.2.jar>

⁶¹ <https://d1.almworks.com/.files/structure-gantt-2.1.1.jar>

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	2.1.0	Jira 7.6+ Structure 5.6.0 - 5.6.3	structure-gantt-2.1.0.jar ⁶² md5 8bfdcf75856726cd9bf8cdbc64878f66	2019-11-11	2020-11-11
Structure.Gantt	2.0.1	Jira 7.6+ Structure 5.5.0+	structure-gantt-2.0.1.jar ⁶³ md5 2b23956d7f939c3eee469f4a3cfd46bd	2019-09-25	2020-09-25
Structure.Gantt	2.0.0	Jira 7.6+ Structure 5.5.0+	structure-gantt-2.0.0.jar ⁶⁴ md5 b19e2c92bbf23ef987e3dc80936af126	2019-09-06	2020-09-06
Structure.Gantt	1.4.1	Jira 7.6+ Structure 5.3.0+	structure-gantt-1.4.1.jar ⁶⁵ md5 96cffffa09a80d568f54e5425eb7e701d	2019-05-29	2020-05-29
Structure.Gantt	1.4.0	Jira 7.6+ Structure 5.3.0+	structure-gantt-1.4.0.jar ⁶⁶ md5 59de792659fc8c701896f6b23d4ecdea	2019-04-05	2020-04-05
Structure.Gantt	1.3.2	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.2.jar ⁶⁷ md5 b313702b59b92d42b34f161edc44b31a	2018-12-29	2019-12-29

62 <https://d1.almworks.com/.files/structure-gantt-2.1.0.jar>

63 <https://d1.almworks.com/.files/structure-gantt-2.0.1.jar>

64 <https://d1.almworks.com/.files/structure-gantt-2.0.0.jar>

65 <https://d1.almworks.com/.files/structure-gantt-1.4.1.jar>

66 <https://d1.almworks.com/.files/structure-gantt-1.4.0.jar>

67 <https://d1.almworks.com/.files/structure-gantt-1.3.2.jar>

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	1.3.1	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.1.jar ⁶⁸ md5 e917819629c91ebce29f451017fa4aca	2018-12-11	2019-12-11
Structure.Gantt	1.3.0	Jira 7.2+ Structure 5.1.0+	structure-gantt-1.3.0.jar ⁶⁹ md5 3eb992f181993a3504245e2d72410ab0	2018-11-14	2019-11-14
Structure.Gantt	1.2.1	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.2.1.jar ⁷⁰ md5 1a86fe8b88d63d97c959ca8f3244c943	2018-08-21	2019-08-21
Structure.Gantt	1.2.0	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.2.0.jar ⁷¹ md5 e8d3c476d2f501b836eab089fc8b0671	2018-07-18	2019-07-19
Structure.Gantt	1.1.1	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.1.1.jar ⁷² md5 91b8a3b977b6e75b3be7dbc95ca3ec2a	2018-06-14	2019-06-14
Structure.Gantt	1.1.0	Jira 7.2+ Structure 4.6.0+	structure-gantt-1.1.0.jar ⁷³ md5 809247311df529c874360e6d427d71c7	2018-05-17	2019-05-17

68 <https://d1.almworks.com/.files/structure-gantt-1.3.1.jar>

69 <https://d1.almworks.com/.files/structure-gantt-1.3.0.jar>

70 <https://d1.almworks.com/.files/structure-gantt-1.2.1.jar>

71 <https://d1.almworks.com/.files/structure-gantt-1.2.0.jar>

72 <https://d1.almworks.com/.files/structure-gantt-1.1.1.jar>

73 <https://d1.almworks.com/.files/structure-gantt-1.1.0.jar>

Extension	Version	Compatibility	Download link	Publish Date	End of Life
Structure.Gantt	1.0.1	JIRA 7.2+ Structure 4.5.0+	structure-gantt-1.0.1.jar ⁷⁴ md5 3362753649c095f401087a3dd8ab8833	2018-02-05	2019-02-05
Structure.Gantt	1.0.0	JIRA 7.2+ Structure 4.5.0+	structure-gantt-1.0.0.jar ⁷⁵ md5 d68b5ec669b1b9d9e7107de0de2c103c	2017-12-29	2018-12-29
Structure.Gantt	0.7.0 (Beta)	JIRA 7.3+ Structure 4.2.0+	structure-gantt-0.7.0.jar ⁷⁶ 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.

⁷⁴ <https://d1.almworks.com/.files/structure-gantt-1.0.1.jar>

⁷⁵ <https://d1.almworks.com/.files/structure-gantt-1.0.0.jar>

⁷⁶ <https://d1.almworks.com/.files/structure-gantt-0.7.0.jar>

9 Release Notes

- [Structure.Gantt 2.6 Release Notes](#)(see page 158)
- [Structure.Gantt 2.5 Release Notes](#)(see page 160)
 - [Structure.Gantt 2.5.1 Release Notes](#)(see page 163)
 - [Structure.Gantt 2.5.2 Release Notes](#)(see page 164)
- [Structure.Gantt 2.4 Release Notes](#)(see page 165)
 - [Structure.Gantt 2.4.1 Release Notes](#)(see page 167)
- [Structure.Gantt 2.3 Release Notes](#)(see page 168)
- [Structure.Gantt 2.2 Release Notes](#)(see page 170)
 - [Structure.Gantt 2.2.1 Release Notes](#)(see page 172)
 - [Structure.Gantt 2.2.2 Release Notes](#)(see page 173)
- [Structure.Gantt 2.1 Release Notes](#)(see page 174)
 - [Structure.Gantt 2.1.1 Release Notes](#)(see page 177)
 - [Structure.Gantt 2.1.2 Release Notes](#)(see page 177)
- [Structure.Gantt 2.0 Release Notes](#)(see page 178)
 - [Structure.Gantt 2.0.1 Release Notes](#)(see page 182)
- [Structure.Gantt 1.4 Release Notes](#)(see page 183)
 - [Structure.Gantt 1.4.1 Release Notes](#)(see page 188)
- [Structure.Gantt 1.3 Release Notes](#)(see page 189)
 - [Structure.Gantt 1.3.1 Release Notes](#)(see page 193)
 - [Structure.Gantt 1.3.2 Release Notes](#)(see page 194)
- [Structure Gantt 1.2 Release Notes](#)(see page 194)
 - [Structure.Gantt 1.2.1 Release Notes](#)(see page 196)
- [Structure.Gantt 1.1 Release Notes](#)(see page 197)
 - [Structure.Gantt 1.1.1 Release Notes](#)(see page 200)
- [Structure.Gantt 1.0 Release Notes](#)(see page 201)
 - [Structure.Gantt 1.0.1 Release Notes](#)(see page 202)

9.1 Structure.Gantt 2.6 Release Notes

[ALM Works Business Continuity During the COVID-19 Outbreak](#)⁷⁷

i 05th of November, 2020

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

[Download App](#)(see page 152)

[Structure.Gantt on Atlassian Marketplace](#)⁷⁸

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁷⁹

⁷⁷ <http://alm.works/covid19>

⁷⁸ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁷⁹ <http://alm.works/gantt-demo>

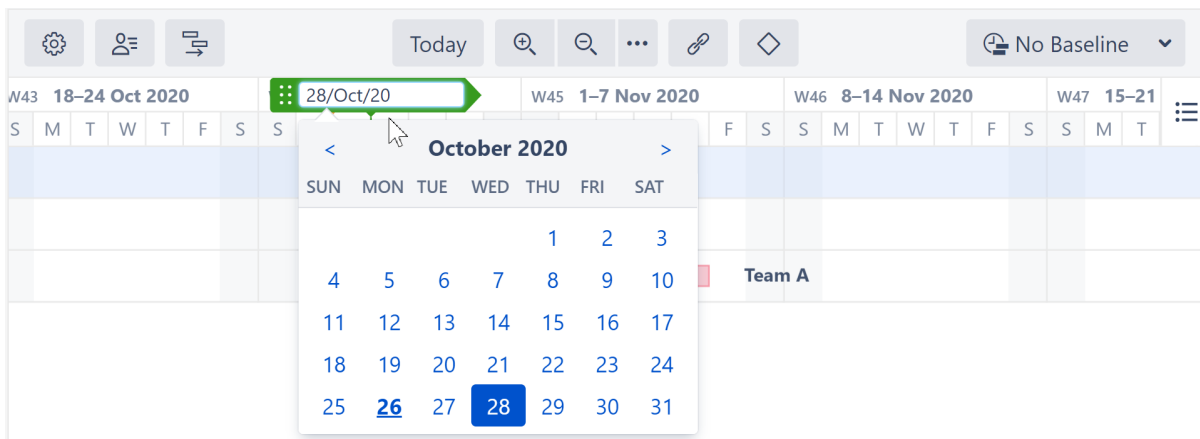
9.1.1 Version Highlights

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

9.1.2 Changes in Detail

9.1.2.1 Draggable Project Start Date

It is now possible to quickly reschedule Project Start by simply dragging the Project Start Day marker, or clicking the marker to enter a new date.



Documentation: [Project Start Day](#)(see page 67)

9.1.2.2 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 60)

9.1.2.3 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

9.1.3 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.

9.1.4 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.

9.1.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

9.1.6 Enterprise Deployment Notes

In Structure.Gantt 2.6 we have reduced memory consumption for charts with a lot of duplicate issues in the WBS. There are no other significant changes in terms of stability or performance. There are no particular special areas of interest for load testing and stress testing. We advise running the same testing procedures as you've done for previous upgrades.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com⁸⁰.

9.2 Structure.Gantt 2.5 Release Notes

[ALM Works Business Continuity During the COVID-19 Outbreak](#)⁸¹

 **6th of August, 2020**

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

[Download App](#)(see page 152)

[Structure.Gantt on Atlassian Marketplace](#)⁸²

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁸³

⁸⁰ <mailto:support@almworks.com>

⁸¹ <http://alm.works/covid19>

⁸² <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁸³ <http://alm.works/gantt-demo>

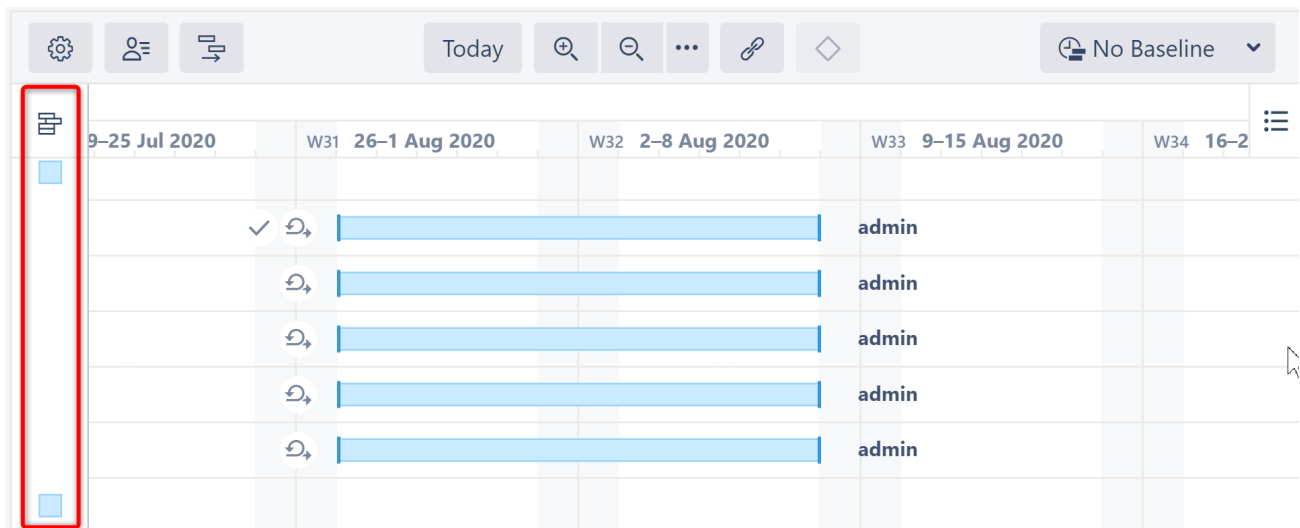
9.2.1 Version Highlights

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

9.2.2 Changes in Detail

9.2.2.1 Agile Backlog

When [Sprint-based scheduling](#) (see page 113) is used, Structure.Gantt now places issues that aren't assigned to sprints into the Backlog panel:



Issues can be dragged out of the Backlog panel and assigned to the desired sprint.

Documentation: [Planning with Sprints](#)(see page 34)

9.2.2.2 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.

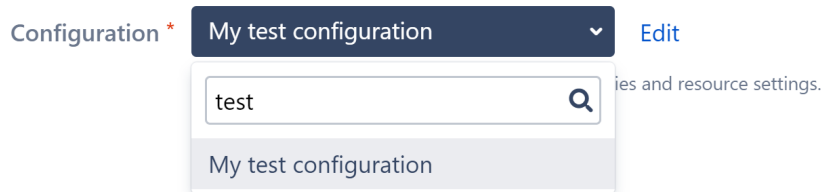
Note: Notifications must be enabled in Jira.

Documentation: [Gantt Chart Settings](#)(see page 101)

9.2.2.3 Configuration Search

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

Gantt chart Configuration



Documentation: [Gantt Configuration in Details](#)(see page 105)

9.2.2.4 Notable Improvements and Fixes

- It is now possible to select multiple resources when [filtering by resource](#)(see page 72).
- 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

9.2.3 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.

9.2.4 Installation and Upgrade

If you already have production data from a previous version of Structure.Gantt, please back up your database or Jira before upgrading.

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

9.2.5 Known issues

Below are a few known issues and non-obvious cases.

- If a Structure column is selected as the source for the resource assignment formula, any changes made to this column after the resource list has been built will be ignored.
- User icons from external sites (like Gravatar) will be replaced with uniform user icons during PDF/SVG export.
- Quick filter functionality isn't working properly with the Filter by Resource action, so it is recommended that users avoid saving filters produced by this action.

9.2.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.4.0. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.5. We advise running the same testing procedures as you've done for previous upgrades.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com⁸⁴.

9.2.7 Structure.Gantt 2.5.1 Release Notes

[ALM Works Business Continuity During the COVID-19 Outbreak](#)⁸⁵

 **17th of August, 2020**

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

[Download App](#)(see page 152)

[Structure.Gantt on Atlassian Marketplace](#)⁸⁶

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁸⁷

9.2.7.1 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.

9.2.7.2 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.

9.2.7.3 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.

⁸⁴ <mailto:support@almworks.com>

⁸⁵ <http://alm.works/covid19>

⁸⁶ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁸⁷ <http://alm.works/gantt-demo>

9.2.7.4 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring any changes compared to version 2.5.0. We advise you to perform the usual testing on a staging server.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com⁸⁸.

9.2.8 Structure.Gantt 2.5.2 Release Notes

[ALM Works Business Continuity During the COVID-19 Outbreak](#)⁸⁹

 **26th of August, 2020**

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

[Download App](#)(see page 152)

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

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

9.2.8.1 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.

9.2.8.2 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.

9.2.8.3 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.

9.2.8.4 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

⁸⁸ <mailto:support@almworks.com>

⁸⁹ <http://alm.works/covid19>

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

⁹¹ <http://alm.works/gantt-demo>

when many users are accessing Structure.Gantt or its data (through Structure columns) at the same time, causing Structure.Gantt to produce too many blocking tasks.

This release does not introduce any other changes related to stability and performance compared to version 2.5.1. We advice you to perform the usual testing on staging server.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com⁹².

9.3 Structure.Gantt 2.4 Release Notes

[ALM Works Business Continuity During the COVID-19 Outbreak](#)⁹³

 **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 152)

[Structure.Gantt on Atlassian Marketplace](#)⁹⁴

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)⁹⁵

9.3.1 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

9.3.2 Changes in Detail

9.3.2.1 Additional Gantt attributes available in Structure

In this release, we have expanded the number of Gantt attributes available to use in Structure columns, [formulas](#)⁹⁶ and [effectors](#)⁹⁷.

Some of the new attributes include:

- Gantt Work
- Gantt Duration

⁹² <mailto:support@almworks.com>

⁹³ <http://alm.works/covid19>

⁹⁴ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

⁹⁵ <http://alm.works/gantt-demo>

⁹⁶ <https://wiki.almworks.com/display/structure/Formula+Columns>

⁹⁷ <https://wiki.almworks.com/display/structure/Effectors>

- Gantt Resource
- Gantt Leveling Priority
- Gantt Maximum Units
- Gantt Scheduling Mode
- Gantt Slice

And many more!

Documentation: [Using Gantt Attributes in Structure](#)(see page 95) and [List of Gantt Attributes Available in Structure](#)(see page 99)

9.3.2.2 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:

The screenshot shows the configuration interface for the Structure.Gantt gadget. A red rectangular box highlights the filtering options. At the top, there is a 'Structure' dropdown menu. Below it, the 'Filter Type' is set to 'JQL' with a dropdown arrow. Underneath, the 'Query' field contains the text 'type in (Epic, Story)' and has a green checkmark icon to its right. Below the filter section, there are two more configuration fields: 'Visible Rows' is set to '20' with the text 'Leave empty to see all rows' below it, and 'Hierarchy Level' is set to '3' with the text 'The maximum hierarchy level of items shown on the chart. Leave empty to include everything.' below it.

Documentation: [Using Gadgets](#)(see page 88)

9.3.2.3 Notable Improvements and Fixes

- [Resource Leveling](#)(see page 79) 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 121))
- It is now possible to use only the Remaining Estimate for Task Estimation (see [Work Estimates](#)(see page 108))
- Tasks with zero Estimate or a Fixed Duration of zero can be automatically treated as milestones (see [Grouping](#)(see page 116))
- 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

9.3.3 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.

9.3.4 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.

9.3.5 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.

9.3.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.3.0. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.4. We advise running the same testing procedures as you've done for previous upgrades.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com⁹⁸.

9.3.7 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 152)

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

⁹⁸ <mailto:support@almworks.com>

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

9.3.7.1 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.

9.3.7.2 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.

9.3.7.3 Enterprise deployment notes

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

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹⁰⁰.

9.4 Structure.Gantt 2.3 Release Notes

[ALM Works Business Continuity During the COVID-19 Outbreak](#)¹⁰¹

 **26th of March, 2020**

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

[Download App](#)(see page 152)

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

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

9.4.1 Version Highlights

- Support for Structure 6.0
- Other improvements and bug fixes

¹⁰⁰ <mailto:support@almworks.com>

¹⁰¹ <http://alm.works/covid19>

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

¹⁰³ <http://alm.works/gantt-demo>

9.4.2 Changes in Detail

9.4.2.1 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](#)¹⁰⁴

9.4.2.2 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 168](#)) was in use

9.4.3 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.

9.4.4 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.

9.4.5 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.

¹⁰⁴ <https://wiki.almworks.com/display/structure/Effectors>

9.4.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.2.1. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.3. We advise running the same testing procedures as you've done for previous upgrades.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹⁰⁵.

9.5 Structure.Gantt 2.2 Release Notes

 **23th of January, 2020**

Structure.Gantt 2.2 introduces Dependency Lead/Lag time and other improvements and bug fixes.

[Download App](#)(see page 152)

[Structure.Gantt on Atlassian Marketplace](#)¹⁰⁶

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁰⁷

9.5.1 Version Highlights

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

9.5.2 Changes in Detail

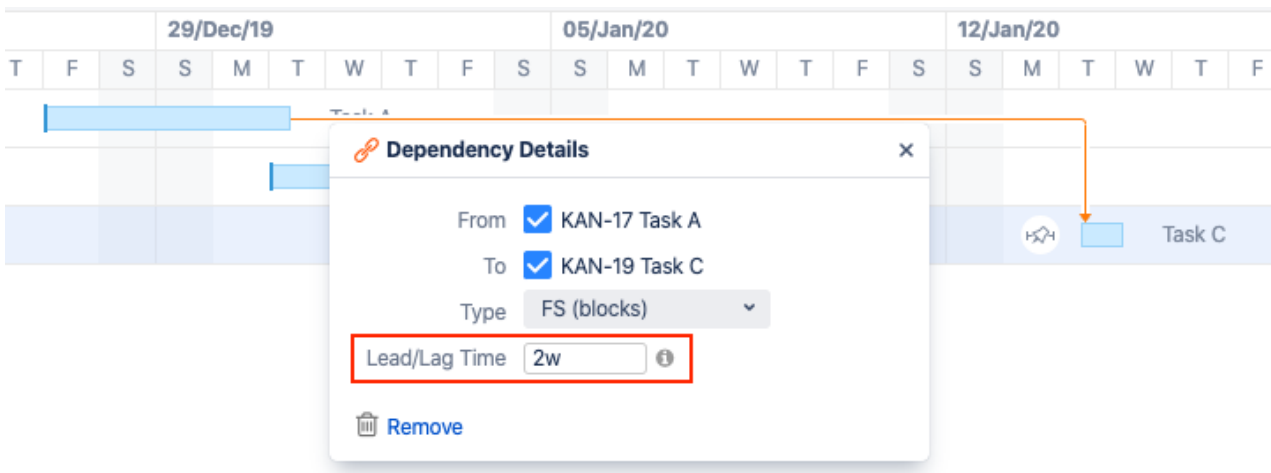
9.5.2.1 Dependency Lead/Lag Time

It is now possible to specify lead or lag time for dependencies.

¹⁰⁵ <mailto:support@almworks.com>

¹⁰⁶ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁰⁷ <http://alm.works/gantt-demo>

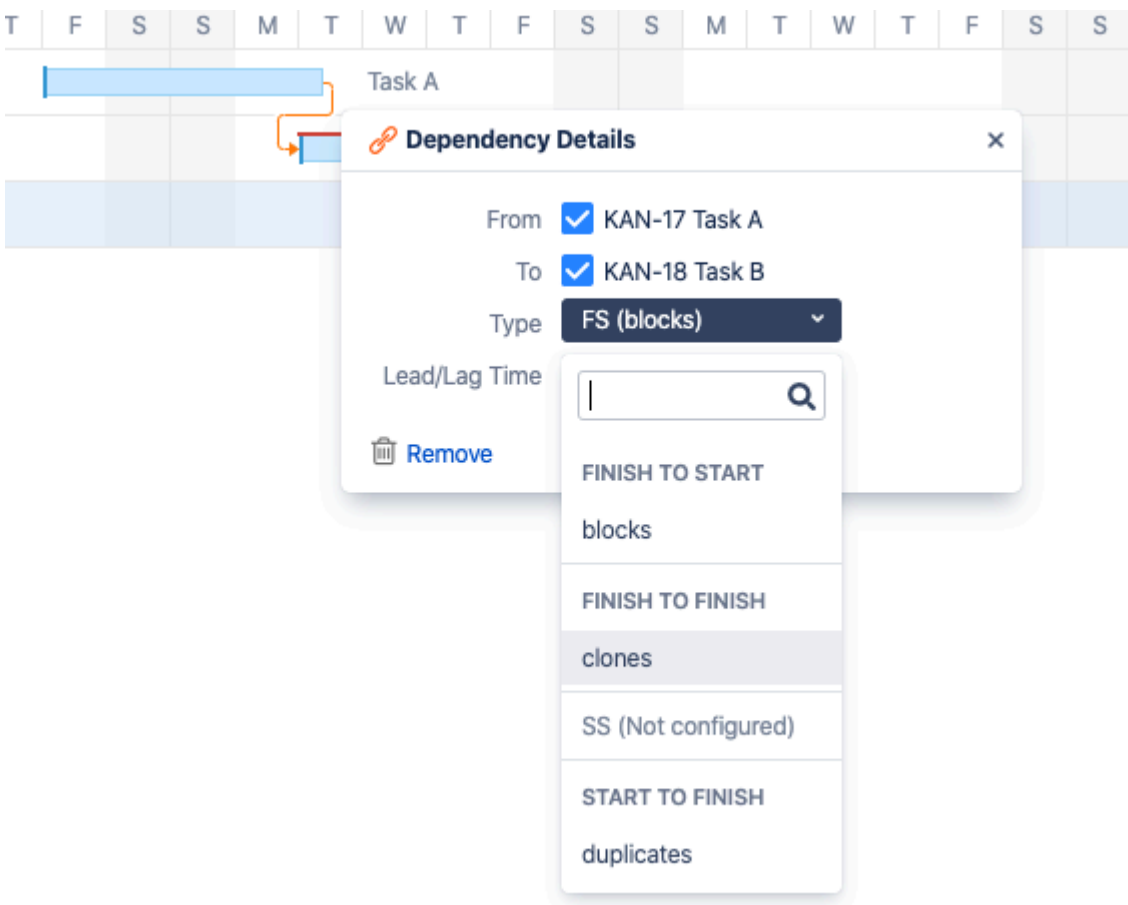


Dependency Lead/Lag times can be applied to individual issues, tailored for specific types of issues using Slices, or set globally through the Gantt configuration.

Documentation: [Dependency Lead/Lag Time](#)(see page 47)

9.5.2.2 Change Dependency Type

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



Documentation: [Working With Dependencies](#)(see page 44)

9.5.2.3 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

9.5.3 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.

9.5.4 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.

9.5.5 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.

9.5.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.1.1. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.2. We advise running the same testing procedures as you've done for previous upgrades.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹⁰⁸.

9.5.7 Structure.Gantt 2.2.1 Release Notes

 **17th of February, 2020**

Structure.Gantt 2.2.1 introduces user anonymization support for Jira 8.7.

¹⁰⁸ <mailto:support@almworks.com>

[Download App](#)(see page 152)
[Structure.Gantt on Atlassian Marketplace](#)¹⁰⁹

9.5.7.1 Patch Release

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

9.5.7.2 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.

9.5.7.3 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.

9.5.8 Structure.Gantt 2.2.2 Release Notes

 **17th of August, 2020**

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

[Download App](#)(see page 152)
[Structure.Gantt on Atlassian Marketplace](#)¹¹⁰

9.5.8.1 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.

9.5.8.2 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.

¹⁰⁹ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹¹⁰ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

9.5.8.3 Enterprise deployment notes

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

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹¹¹.

9.6 Structure.Gantt 2.1 Release Notes

 **11th of November, 2019**

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

[Download App](#)(see page 152)

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

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹¹³

9.6.1 Version Highlights

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

9.6.2 Changes in Detail

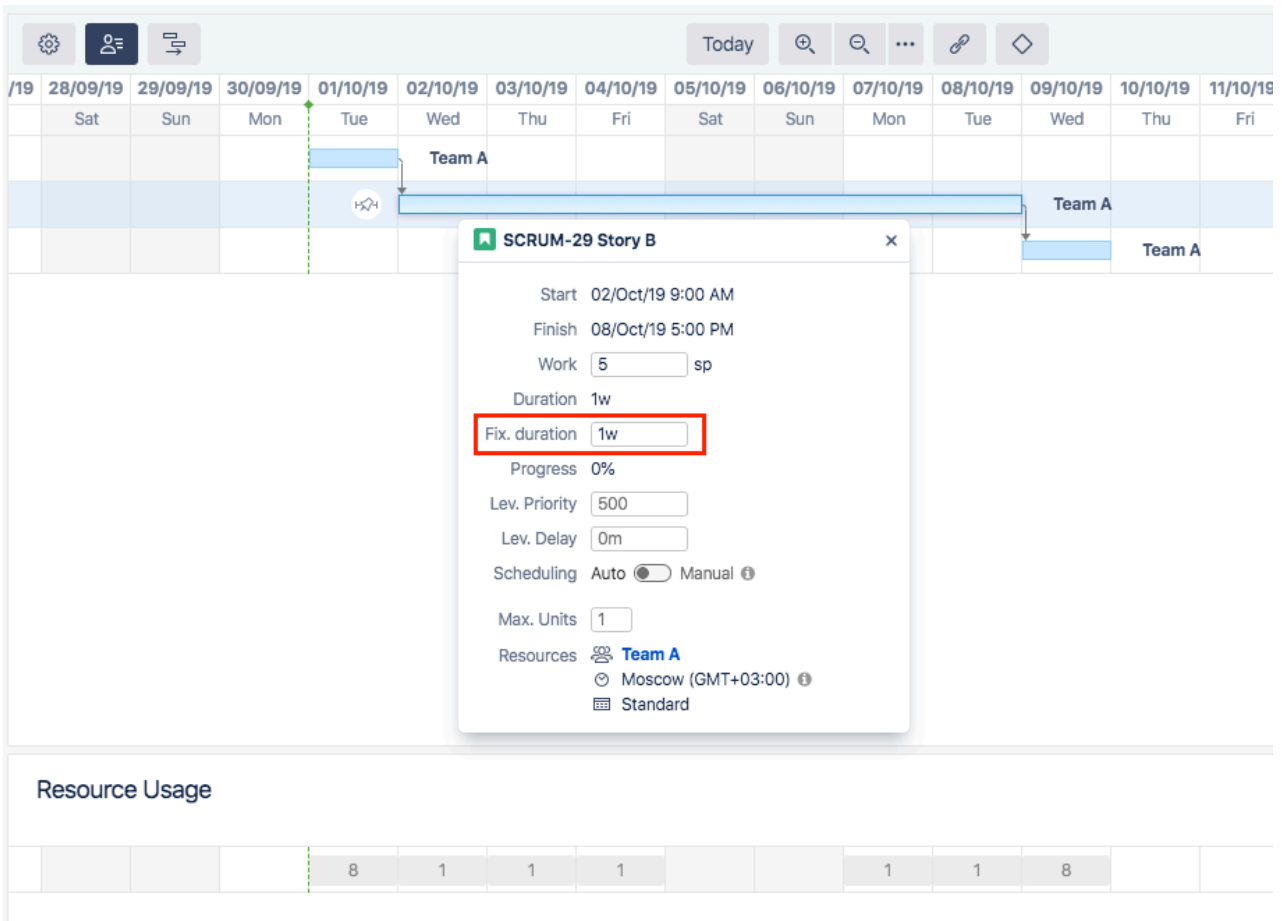
9.6.2.1 Auto-scheduled Fixed Duration tasks

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.

¹¹¹ <mailto:support@almworks.com>

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

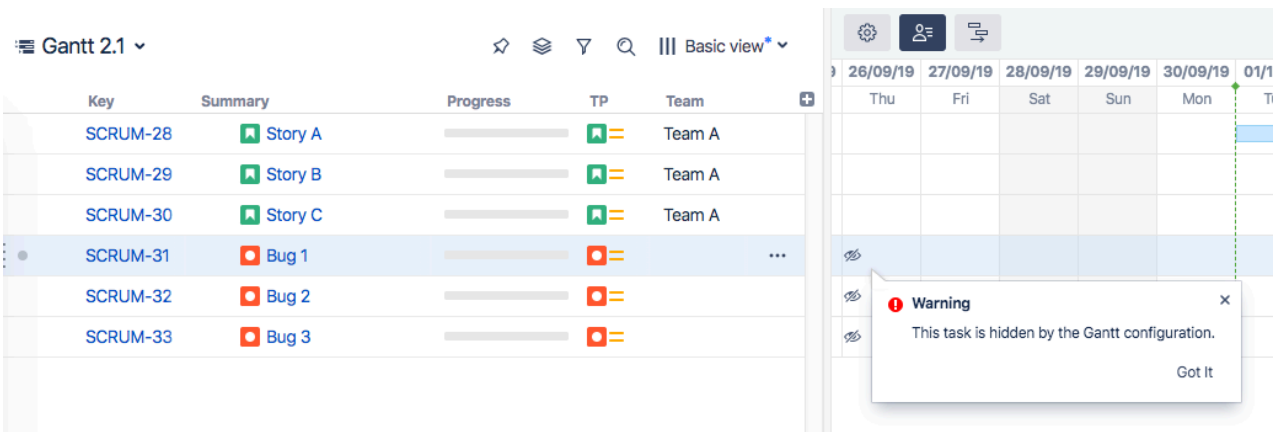
¹¹³ <http://alm.works/gantt-demo>



Documentation: [Fixed Duration](#)(see page 39)

9.6.2.2 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 64)

9.6.2.3 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

9.6.3 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.

9.6.4 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.

9.6.5 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.

9.6.6 Enterprise Deployment Notes

In terms of stability and performance, this release does not bring significant changes compared to version 2.0. There are no particular special areas of interest for load testing and stress testing Structure.Gantt 2.1. We advise running the same testing procedures as you've done for previous upgrades.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹¹⁴.

¹¹⁴ <mailto:support@almworks.com>

9.6.7 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 152)

[Structure.Gantt on Atlassian Marketplace](#)¹¹⁵

9.6.7.1 Patch Release

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

9.6.7.2 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.

9.6.7.3 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.

9.6.8 Structure.Gantt 2.1.2 Release Notes

17th of August, 2020

Structure.Gantt 2.1.2 is a patch release based on Structure.Gantt 2.1.1

[Download App](#)(see page 152)

[Structure.Gantt on Atlassian Marketplace](#)¹¹⁶

9.6.8.1 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.

¹¹⁵ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹¹⁶ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

9.6.8.2 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.

9.6.8.3 Enterprise deployment notes

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

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹¹⁷.

9.7 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 152)

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

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

9.7.1 Version Highlights

- Structure.Gantt becomes a paid app
- Resource Leveling
- Baselines
- Fix Version markers for Gadget
- Other improvements and bug fixes

9.7.2 Changes in Detail

9.7.2.1 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,

¹¹⁷ <mailto:support@almworks.com>

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

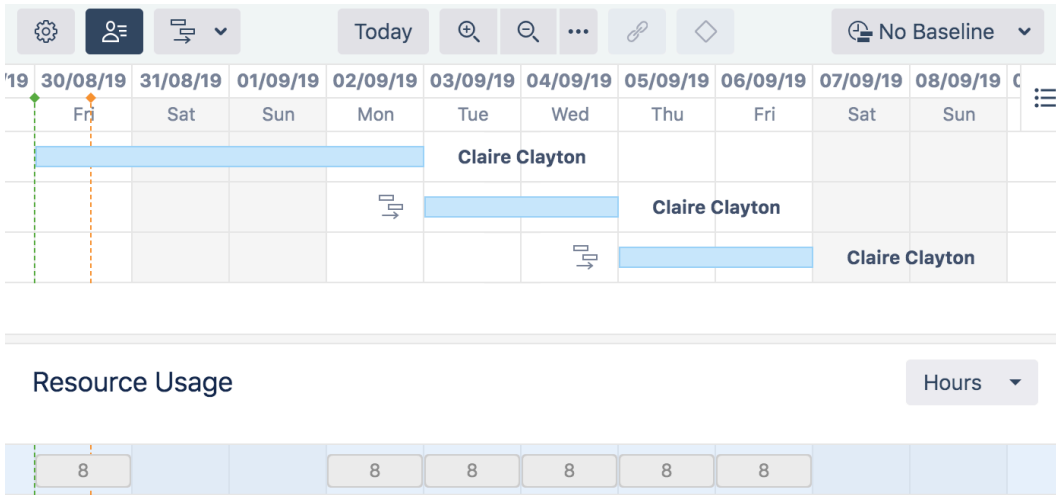
¹¹⁹ <http://alm.works/gantt-demo>

which make our Gantt offering uniquely competitive. We believe this warrants a fair price that will enable us to continue investing in its development.

You can see the new pricing on the [Atlassian Marketplace](https://marketplace.atlassian.com/apps/1217809/structure-gantt-planning-at-scale)¹²⁰.

9.7.2.2 Resource Leveling

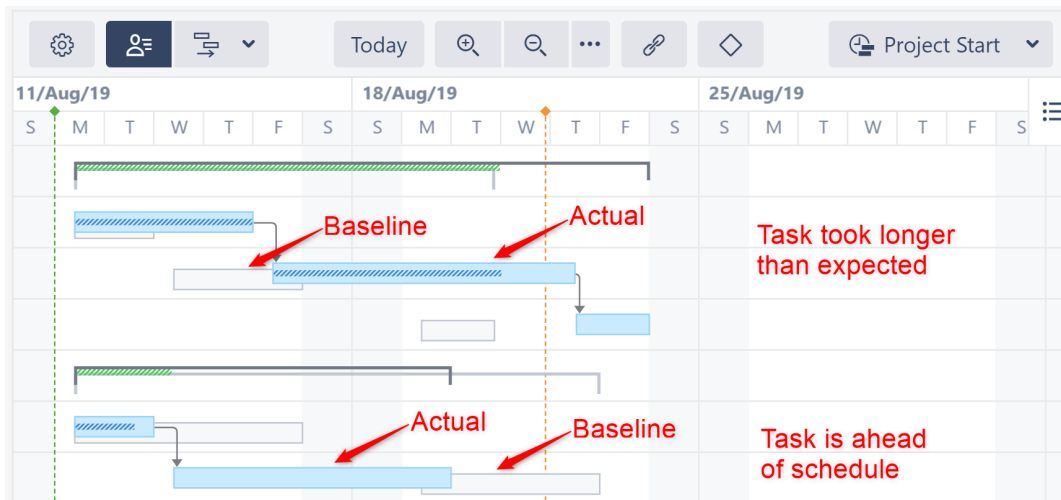
Resource Leveling allows you to automatically resolve overallocations for a single resource or group of resources. When run, Resource Leveling identifies overallocation and applies Leveling Delays to tasks in order to resolve it.



Documentation: [R](#)(see page 34)[esource Leveling](#)(see page 79)

9.7.2.3 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.



¹²⁰ <https://marketplace.atlassian.com/apps/1217809/structure-gantt-planning-at-scale>

Documentation: [B](#)([see page 39](#))[aselines](#)([see page 74](#))

9.7.2.4 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 92](#))

9.7.2.5 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

9.7.3 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.

9.7.4 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.

9.7.5 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.

9.7.6 Enterprise Deployment Notes

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

9.7.6.1 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 147) 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 147)). 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 147) page for more information.

9.7.6.2 Testing on a Staging Environment

For high load installations, we advise testing and running Resource Leveling on the most popular Gantt charts and adjusting Resource Leveling using the properties described above.

The usual load and stress testing are also recommended.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹²¹.

9.7.7 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 152)

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

9.7.7.1 Patch Release

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

9.7.7.2 Installation and Upgrade

Structure.Gantt 2.0.1 requires Structure 5.5 or above.

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

9.7.7.3 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.

¹²¹ <mailto:support@almworks.com>

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

9.8 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 152)

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

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

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

9.8.1 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

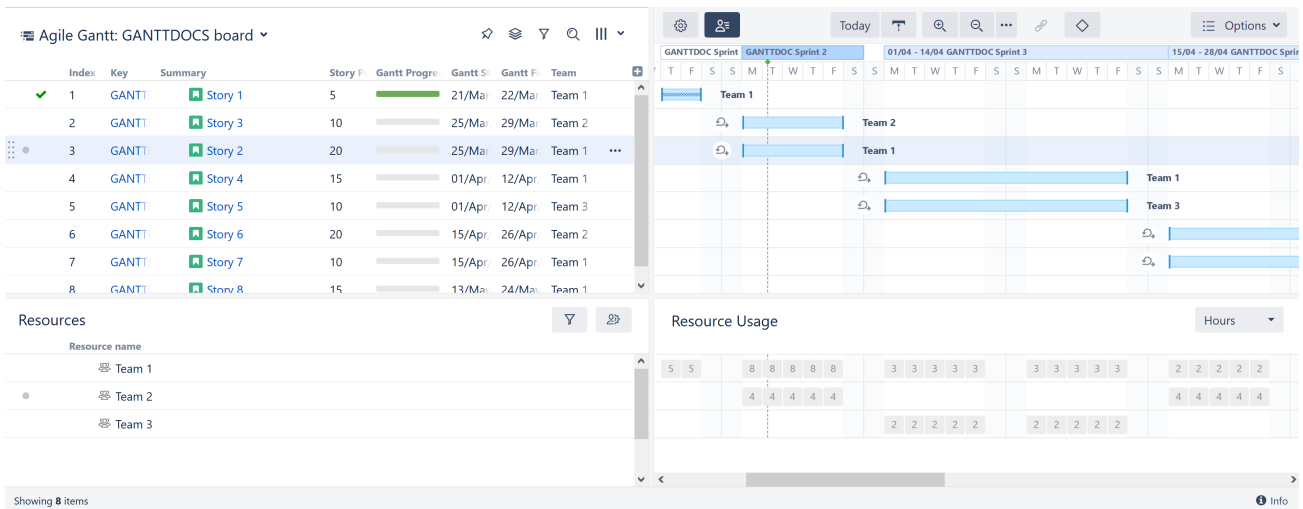
9.8.2 Changes in Detail

9.8.2.1 Agile planning

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

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

¹²⁴ <http://alm.works/gantt-demo>

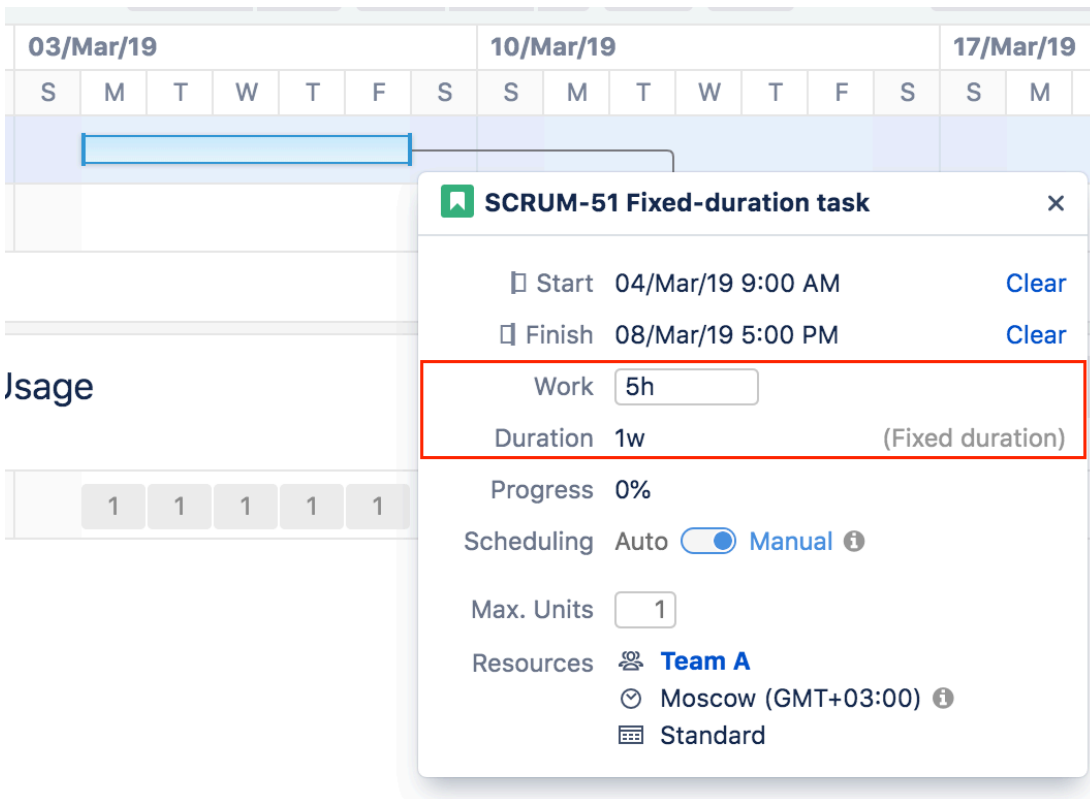


Tasks can be moved between sprints by drag and drop or by changing the sprint in the Task Details panel.

Documentation: [Planning with Sprints](#)(see page 34)

9.8.2.2 Fixed-duration tasks

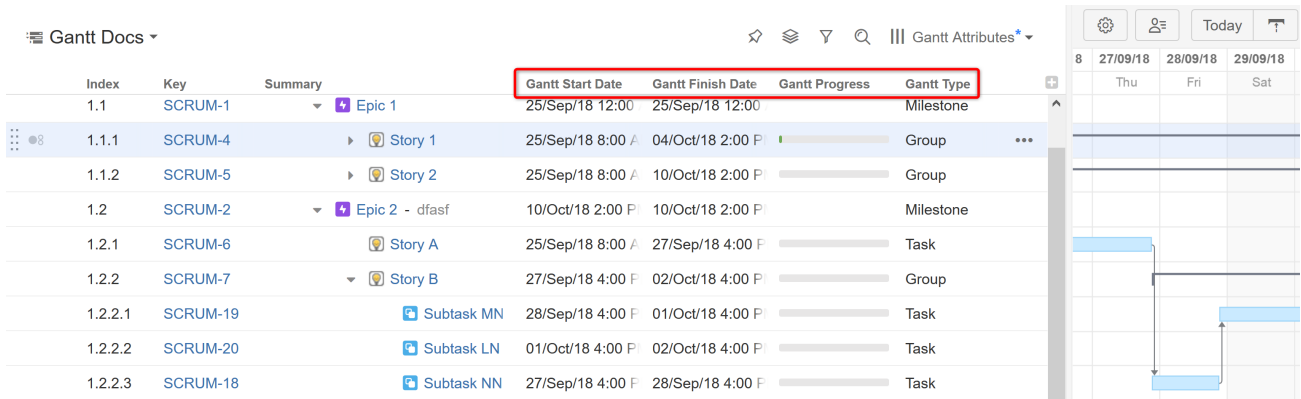
Tasks that are **scheduled by sprint dates** or **manually scheduled with both start and finish dates defined** now have work equally distributed across their duration. Adjusting the duration for these tasks will not affect their work (that can be adjusted separately in the Task Details panel or in Jira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



Documentation: [Fixed Duration](#)(see page 39)

9.8.2.3 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 95)

9.8.2.4 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.



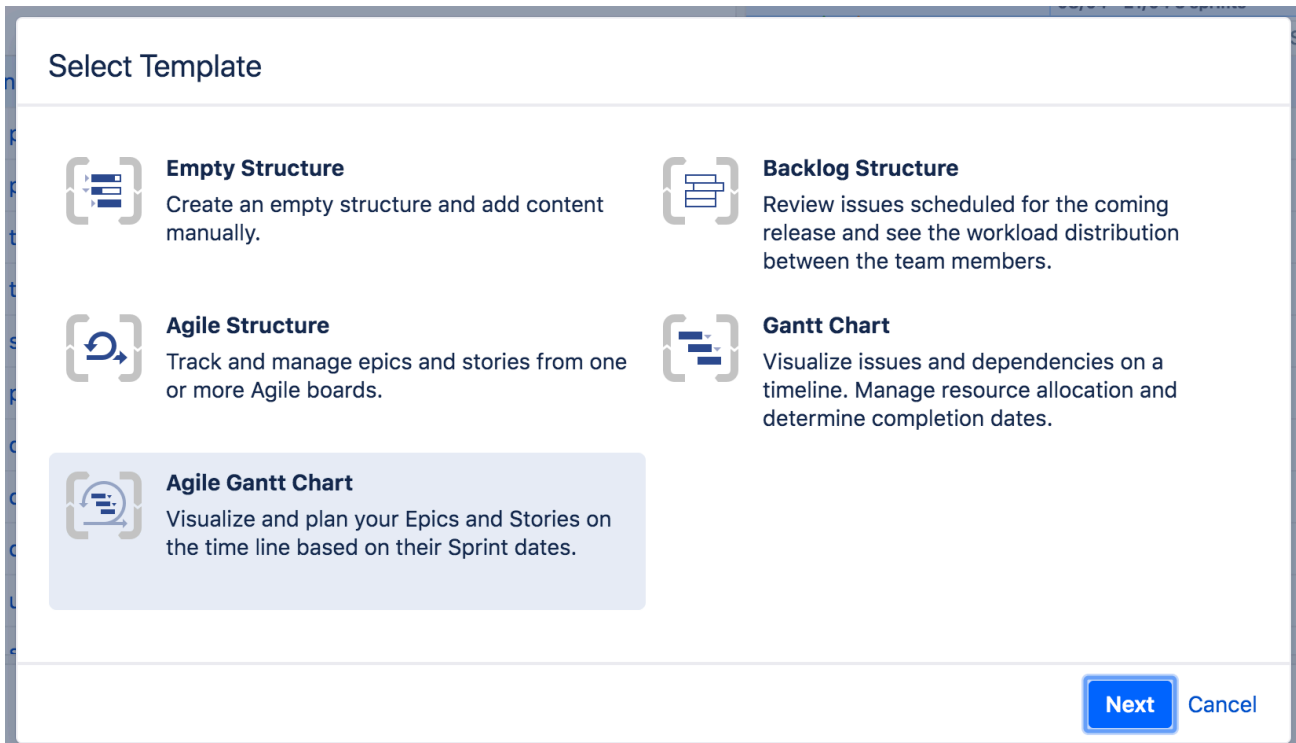
Documentation: [Resources and Resource Usage](#)(see page 69)

9.8.2.5 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



9.8.2.6 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 108))
- 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 32))
- 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 39))
- For completed tasks, a checkmark indicator is shown; this is also applies to milestones backed by an issue (see [Task Indicators](#)(see page 64))
- 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

9.8.3 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.

9.8.4 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.

9.8.5 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.

9.8.6 Enterprise Deployment Notes

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

9.8.6.1 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.

9.8.6.2 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.

9.8.6.3 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](#)¹²⁵). 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.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹²⁶.

fff


9.8.7 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 152)

[Structure.Gantt on Atlassian Marketplace](#)¹²⁷

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

9.8.7.1 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)

¹²⁵ <https://wiki.almworks.com/display/structure/Using+Transformations>

¹²⁶ <mailto:support@almworks.com>

¹²⁷ <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 188](#)) for more details.

9.8.7.2 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.

9.8.7.3 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 188](#)) for details on how to adjust it.

To ensure this timeout does not affect your charts, it is recommended to perform the following operations at the staging environment before updating production servers:

- Choose several large structures with configured Gantt charts
- For every structure from the list, open it, switch layout to Gantt chart and wait it to fully load. Then perform regular operations like adding new tasks, adding/removing dependencies, adjusting task positions or adjusting the configuration
- Observe results and ensure that charts are calculated and visualized normally

In the event that you receive a "Scheduling has been paused" message, the corresponding timeout may need to be increased.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹²⁸.

9.9 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.

[Download App](#)(see page 152)

[Structure.Gantt on Atlassian Marketplace](#)¹²⁹

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹³⁰

9.9.1 Version Highlights

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

9.9.2 Changes in Detail

9.9.2.1 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' (checked) 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 127)

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

¹³⁰ <http://alm.works/gantt-demo>

9.9.2.2 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.

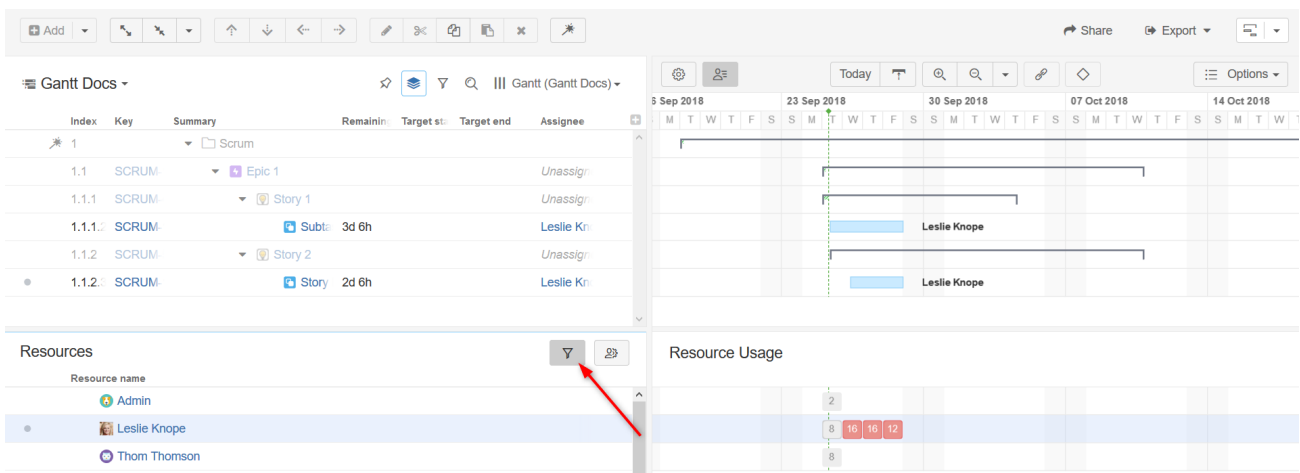
Dependency Type	Link Type	Favorite	Actions
Finish to Start	blocks	<input type="checkbox"/>	Remove
	depends on	<input checked="" type="checkbox"/>	Remove
Add New Type ▾			
Finish to Finish	Add New Type ▾		
Start to Start	Add New Type ▾		
Start to Finish	Add New Type ▾		

Documentation: [Dependencies](#)(see page 117)

9.9.2.3 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: [Resource Management](#)(see page 68)

9.9.2.4 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

9.9.3 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.

9.9.4 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.

9.9.5 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.

9.9.6 Enterprise Deployment Notes

Structure.Gantt 1.3 introduces Slice-based Configurations, which allow users to divide their chart into groups of items (slices) and adjust configurations for those slices separately. Separating items into slices as well as performing separate data access for items of different slices may affect system performance. It is recommended to test slice-based configurations on staging servers before using them in production.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹³¹.


9.9.7 Structure.Gantt 1.3.1 Release Notes

 **11th of December, 2018**

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

[Download App](#)(see page 152)

[Structure.Gantt on Atlassian Marketplace](#)¹³²

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

9.9.7.1 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

9.9.7.2 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.

9.9.7.3 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.

¹³¹ <mailto:support@almworks.com>

¹³² <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

9.9.8 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 152)

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

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

9.9.8.1 Patch Release

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

9.9.8.2 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.

9.9.8.3 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.

9.10 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 152)

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

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

¹³³ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

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

¹³⁵ <http://alm.works/gantt-demo>

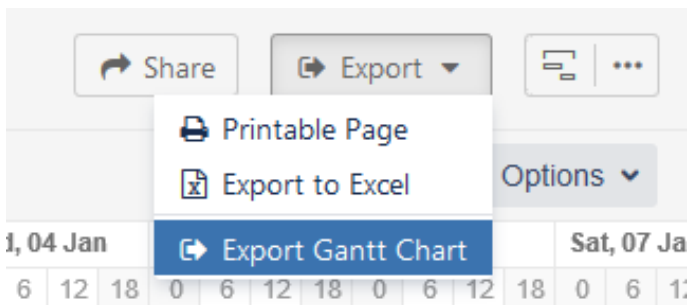
9.10.1 Version Highlights

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

9.10.2 Changes in Detail

9.10.2.1 Export Gantt chart into a PDF or SVG file

It is now possible to export Gantt chart into a PDF or SVG file.



Documentation: [Exporting to a Printable File](#)(see page 84)

9.10.2.2 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: [Using Gadgets](#)(see page 88)

9.10.3 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.

9.10.4 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.

9.10.5 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.

9.10.6 Enterprise Deployment Notes

Structure.Gantt 1.2 does not introduce changes that could affect performance. We advise you to perform the usual testing on a staging server.

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹³⁶.

9.10.7 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 152)

[Structure.Gantt on Atlassian Marketplace](#)¹³⁷

9.10.7.1 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

9.10.7.2 Installation and Upgrade

Structure.Gantt 1.2.1 requires Structure 4.6 or above.

¹³⁶ <mailto:support@almworks.com>

¹³⁷ <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.

9.10.7.3 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.

9.11 Structure.Gantt 1.1 Release Notes

i 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 152)

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

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹³⁹

9.11.1 Version Highlights

- Visualization of Sprints and Fix Versions on the timeline
- Redesigned Gantt Configuration dialog
- Ability to use Custom Fields or [Formulas](#)(see page 197) as a source for Task Progress
- Greatly improved performance

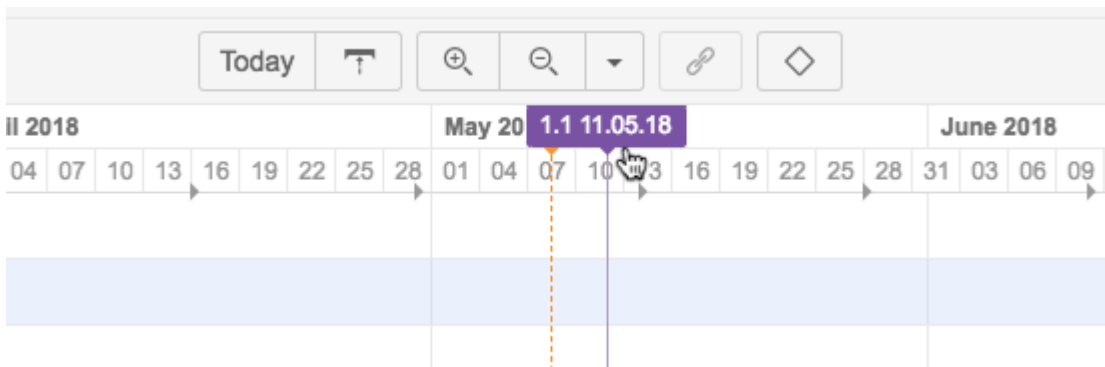
9.11.2 Changes in Detail

9.11.2.1 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.

¹³⁸ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹³⁹ <http://alm.works/gantt-demo>



Documentation: [Gantt configuration in Details](#)¹⁴⁰.

9.11.2.2 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](#)¹⁴¹.

9.11.2.3 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](#)(see page 197) for Progress.

Documentation: [Progress configuration](#)(see page 110)

9.11.2.4 Performance improvements

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

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

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

9.11.3 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.

9.11.4 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.

9.11.5 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.

9.11.6 Enterprise Deployment Notes

Structure.Gantt 1.1 introduces functionality for defining progress calculation based on custom fields or a Structure Formulas. Using such configurations may require more complex calculations and result in higher performance load. It is recommended to test Structure.Gantt 1.1 with different progress configurations at staging servers before using them in production.

The following configurations may require special attention:

- Progress based on complex Structure Formulas
- Progress based on scripted fields

 Should you have any questions on Enterprise Deployment, let us know at support@almworks.com¹⁴².

¹⁴² <mailto:support@almworks.com>

9.11.7 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 152)

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

9.11.7.1 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

9.11.7.2 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.

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

9.11.7.3 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.

9.12 Structure.Gantt 1.0 Release Notes

i **29th of December, 2017**

ALM Works is happy to release Structure.Gantt 1.0, our first General Availability release.

[Download App](#)(see page 152)

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

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁴⁵

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.

9.12.1 Version Highlights

- First ever Gantt Charts extension to [Structure](#)¹⁴⁶!
- 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

9.12.2 Getting Started

To start using Structure.Gantt on your Jira, follow a 5-minute installation and setup instructions in [Quick Start Guide](#)(see page 201).

9.12.3 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.

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

¹⁴⁵ <http://alm.works/gantt-demo>

¹⁴⁶ <https://marketplace.atlassian.com/plugins/com.almworks.jira.structure/server/overview>

9.12.4 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.

9.12.5 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).

9.12.6 Enterprise Deployment Notes

See [Enterprise Deployment](#)(see page 145) notes in the product documentation.

9.12.7 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 152)

[Structure.Gantt on Atlassian Marketplace](#)¹⁴⁷

[Try Structure.Gantt at Our Demo Server - No Installation or Sign-up Required](#)¹⁴⁸

¹⁴⁷ <https://marketplace.atlassian.com/plugins/com.almworks.structure.gantt/server/overview>

¹⁴⁸ <http://alm.works/gantt-demo>

9.12.7.1 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

9.12.7.2 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.

9.12.7.3 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.


10 Structure.Gantt Roadmap

Updated On	December 2020
Next Update	December 2020

In this roadmap, we'd like to share some features the Structure.Gantt team is going to work on in the near to mid term. The scope of this roadmap is 6 months to 1 year.

A few notes and disclaimers about the roadmap:

- We only list **new, important functionality**– we are also going to work on other stuff, such as improving existing features, improving quality, improving user interface and adding minor features.
- This document lists only upcoming features in Structure.Gantt. We're also working on Structure for Jira and other Structure extensions, which have their own roadmaps.
- The roadmap is subject to change. We will update it periodically so it reflects our current vision.
- We only describe features briefly. If you are interested in the details of some specific feature or can provide feedback and ideas, please let us know at gantt@almworks.com¹⁴⁹

 It is our general approach at ALM Works to focus on the quality of the product. Sometimes this means delivering a product later or changing plans and priorities, as unexpected dependencies and challenges appear. Therefore, while we try to adhere to the announced roadmap, by no means should it be considered an obligation from ALM Works, and it should not be relied upon when making purchasing decisions.

If you have any questions about our roadmap policy, please write to info@almworks.com¹⁵⁰.


10.1 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 Month	Dec'20	Feb'21	Apr'21	Jul'21	Sep'21	Nov'21
Version	2.7	3.0	3.1	3.2	3.3	3.4

10.2 Roadmap

Here's the list of major features that we're planning to work on in Structure.Gatt 2.x series up until Structure.Gantt 3.0

- **Agile Backlog** – more convenient way to work with agile tasks that weren't yet assigned to any sprints ( Structure.Gantt 2.5)
- **Fiscal Year Support** – visualize fiscal year on the timeline header
- **Jira-based Baselines** – baselines that are based on Jira Custom Fields or Structure Formulas
- **Actual Task Start and Finish** – ability to see when work on a task started and when it was finished

¹⁴⁹ <mailto:info@almworks.com>.

¹⁵⁰ <mailto:info@almworks.com>

- **Sandbox Mode** – ability to play with "what-if" scenarios, without affecting the data seen by other users

Planned for later:

- **Multiple Resources** – ability to specify several resources along with their usage
- **Artificial Tasks** – ability to create tasks not backed by Jira issues
- **Resource Management** – more flexible way to manage resources and share them between several charts
- **Editable Work Calendars** – a UI for managing calendars
- **Milestone-Driven and Non-Binary Critical Path** – a way to calculate critical paths for a specific milestone and calculate a relative risk for a task to become critical
- **Split Tasks** – supporting a way to break down a task into pieces when dependencies change and the task already has non-zero progress
- **Calendars Integration** – integration with major providers of work calendars, such as Tempo, Portfolio
- **Structure of Structures, Gantt of Gantts** – support configurations where a structure contains other structures and its Gantt imports the pre-calculated Gantt charts from those structures

11 Features and Limitations

Structure.Gantt is a relatively new product at the beginning of its journey. On this page, we list the features that are currently available *and* the features that will be coming later. Our goal is to continuously improve the power of Structure.Gantt and the benefits it provides, with each new release.

11.1 Features

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

11.2 Current Limitations / Roadmap

The following capabilities are **not** available, yet. We plan to introduce them in later versions. Keep an eye out for new releases!

- Roadmapping: Version planning
- What-if Exploration (*what happens if I change these values*)
- Import from Microsoft Project (or other tools)
- Calendar Importing from other Jira apps
- As-late-as-possible scheduling
- Resource mapping
- Split tasks and rescheduling of the remaining time
- Actual Start and Finish dates
- Copying a Gantt chart

See [Structure.Gantt Roadmap](#)(see page 204) for additional information.

12 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) ¹⁵¹	Apache 2.0 ¹⁵²
Apache Commons ¹⁵³	Apache 2.0 ¹⁵⁴
Apache Derby ¹⁵⁵	Apache 2.0 ¹⁵⁶
blob-stream ¹⁵⁷	MIT license ¹⁵⁸
Canvas2SVG ¹⁵⁹	MIT license ¹⁶⁰
CharFunk ¹⁶¹	MIT license ¹⁶²
ES6-Promise ¹⁶³	MIT license ¹⁶⁴
Font Awesome ¹⁶⁵	SIL OFL 1.1, MIT license ¹⁶⁶
Jackson ¹⁶⁷	Apache 2.0 ¹⁶⁸
jQuery ¹⁶⁹	MIT license ¹⁷⁰
Kotlin ¹⁷¹	Apache 2.0 ¹⁷²

151 <https://github.com/JetBrains/java-annotations>

152 <https://www.apache.org/licenses/LICENSE-2.0>

153 <https://commons.apache.org/>

154 <https://www.apache.org/licenses/LICENSE-2.0>

155 <https://db.apache.org/derby/>

156 <https://www.apache.org/licenses/LICENSE-2.0>

157 <https://github.com/devongovett/blob-stream>

158 <https://github.com/devongovett/blob-stream/blob/master/LICENSE>

159 <https://gliffy.github.io/canvas2svg/>

160 <https://github.com/gliffy/canvas2svg/blob/master/LICENSE>

161 <https://github.com/joelarson4/CharFunk>

162 <https://github.com/joelarson4/CharFunk/blob/master/LICENSE>

163 <https://github.com/stefanpenner/es6-promise>

164 <https://github.com/stefanpenner/es6-promise/blob/master/LICENSE>

165 <https://fontawesome.com/>

166 <https://fontawesome.com/v4.7.0/license/>

167 <https://github.com/FasterXML/jackson>

168 <https://www.apache.org/licenses/LICENSE-2.0>

169 <https://jquery.com/>

170 <https://jquery.org/license/>

171 <https://kotlinlang.org/>

172 <https://github.com/JetBrains/kotlin/blob/master/license/LICENSE.txt>

Component / Library	License
moment-jdateformatparser ¹⁷³	MIT license ¹⁷⁴
Moment.js ¹⁷⁵	MIT license ¹⁷⁶
PDFKit ¹⁷⁷	MIT license ¹⁷⁸
tslib ¹⁷⁹	Apache 2.0 ¹⁸⁰

ALM Works is a proud participant of [Pledge 1%](#).¹⁸¹ As a part of our pledge to donate 1% of equity, product and time to the community, we're offering all our products free of charge to open-source projects and community projects. You can request a license through Atlassian's [Open Source License Request](#)¹⁸² page or [Community License Request](#)¹⁸³ page. Should you have any questions or need assistance, please let us know at support@almworks.com¹⁸⁴.

¹⁷³ <https://github.com/MadMG/moment-jdateformatparser>

¹⁷⁴ <https://github.com/MadMG/moment-jdateformatparser/blob/master/LICENSE>

¹⁷⁵ <https://momentjs.com/>

¹⁷⁶ <https://github.com/moment/moment/blob/develop/LICENSE>

¹⁷⁷ <https://pdfkit.org/>

¹⁷⁸ <https://github.com/foliojs/pdfkit/blob/master/LICENSE>

¹⁷⁹ <https://github.com/microsoft/tslib>

¹⁸⁰ <https://github.com/microsoft/tslib/blob/master/LICENSE.txt>

¹⁸¹ <https://pledge1percent.org/>

¹⁸² <https://www.atlassian.com/software/views/open-source-license-request>

¹⁸³ <https://www.atlassian.com/software/views/community-license-request>

¹⁸⁴ <mailto:support@almworks.com>

13 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 209)
- [Chart elements](#)(see page 210)
- [Schedule](#)(see page 211)
 - [Group Scheduling](#)(see page 212)
 - [Task Adjustments Due to Non-working Time](#)(see page 212)
- [Automatic vs. Manual scheduling](#)(see page 213)
 - [Identifying automatic and manually scheduled tasks](#)(see page 213)
 - [Manual Scheduling Mode](#)(see page 213)
- [Work Estimate vs. Task Duration](#)(see page 214)
 - [Fixed Duration](#)(see page 214)
- [Resources](#)(see page 215)
 - [Resource Units \(Capacity\)](#)(see page 216)
 - [Availability](#)(see page 216)
 - [Work Calendar and Time Zone](#)(see page 216)
 - [Task's Maximum Units](#)(see page 216)
 - [Resource Usage](#)(see page 217)
- [Resource Leveling](#)(see page 218)
 - [Leveling Priority](#)(see page 218)
 - [Leveling Delay](#)(see page 218)
- [Customizing the Chart with Configuration Slices](#)(see page 219)
- [Work Calendars](#)(see page 220)
 - [Best practices for creating calendars](#)(see page 220)
 - [Day and Week Conversions in Jira and in Structure.Gantt](#)(see page 220)
- [More reading](#)(see page 221)

13.1 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](#)¹⁸⁵ 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:

¹⁸⁵ 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](#)¹⁸⁶ enables users to easily build and maintain very complex dynamic hierarchies. For more information on building hierarchies, please refer to our [Structure documentation](#)¹⁸⁷.

13.2 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](#)¹⁸⁸ and [Memos](#)¹⁸⁹, 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 66) allow you to mark key points within a project plan.

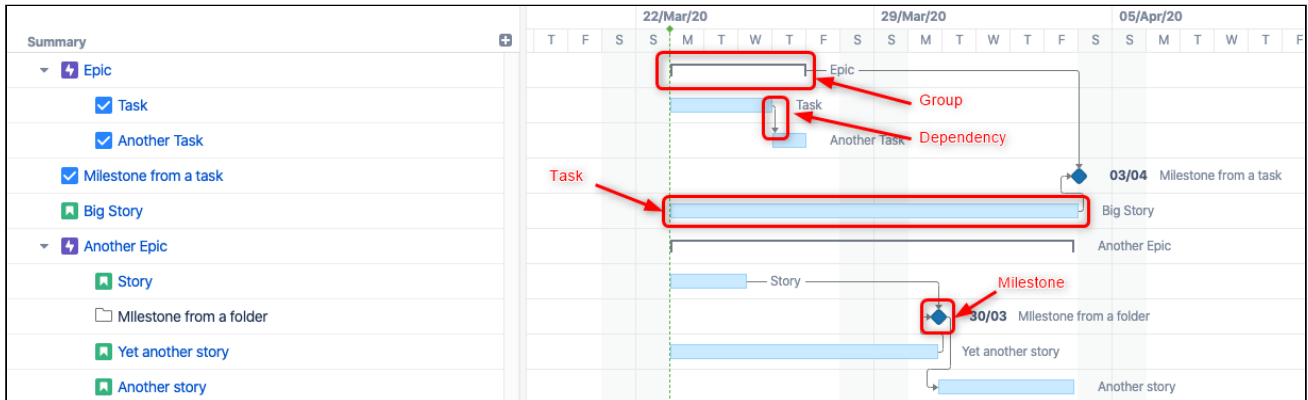
¹⁸⁶ <https://marketplace.atlassian.com/apps/34717/structure-project-management-at-scale>

¹⁸⁷ <https://wiki.almworks.com/x/t7DrAQ>

¹⁸⁸ <https://wiki.almworks.com/display/structure/Folders>

¹⁸⁹ <https://wiki.almworks.com/display/structure/Memo>

- Dependencies - [Dependencies](#)(see page 44) 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 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 53).

13.3 Schedule

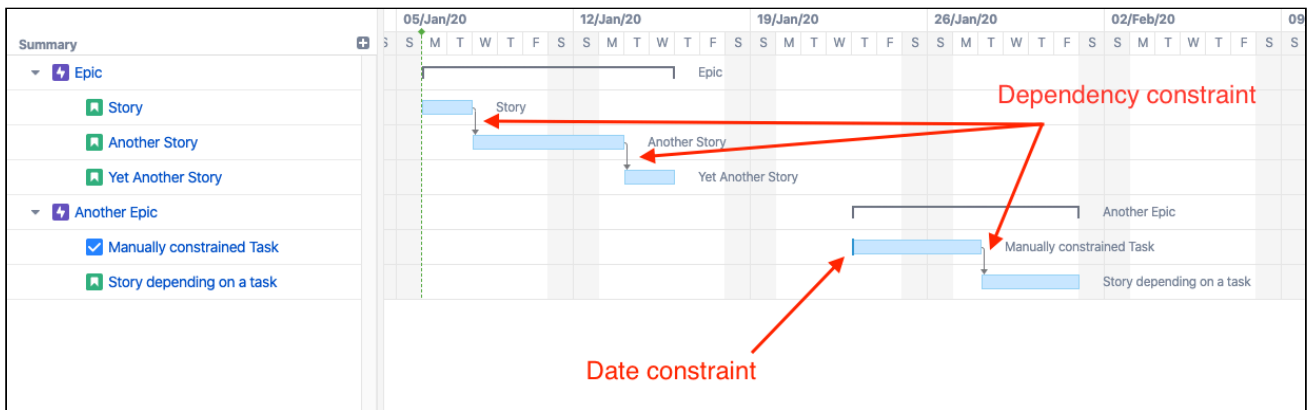
Elements that are visualized on the timeline form the Schedule. Within the schedule, every task or group of tasks has its own start and finish dates, and the project has a start date (configured in the chart settings) and finish date (the finish date of the latest task). Once visualized, the schedule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

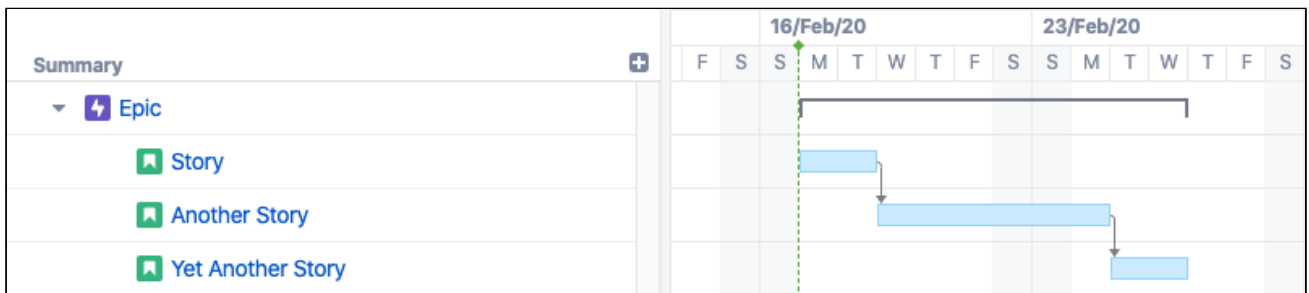
1. It takes the task and tries to determine its duration based on its properties (Work estimate, Resource assigned, etc.).
2. It looks for any start and/or finish constraints and schedules tasks based on those (see [Automatic vs. Manual Scheduling](#)(see page 213)).
3. If there is no start/finish constraints, 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.

13.3.1 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.

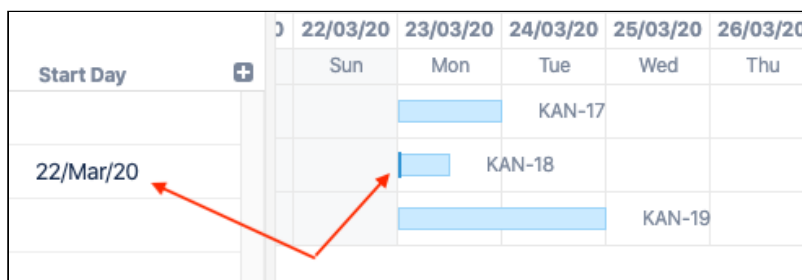


13.3.2 Task Adjustments Due to Non-working Time

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).



13.4 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:

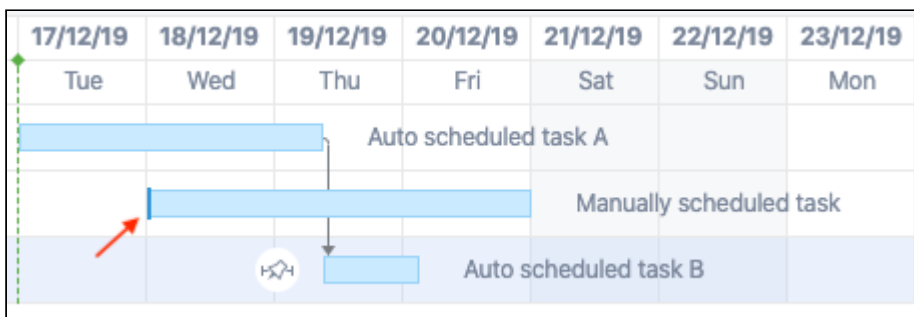
- Tasks with start and/or finish dates listed within the Jira field(s) specified in the configuration will be scheduled based on those dates
- If there are no values provided for a task, it will be automatically scheduled
- Dragging a task within the chart will reschedule the task and update the associated 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 79) is run, if the leveling is set up to include manually-scheduled tasks.

13.4.1 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 39).

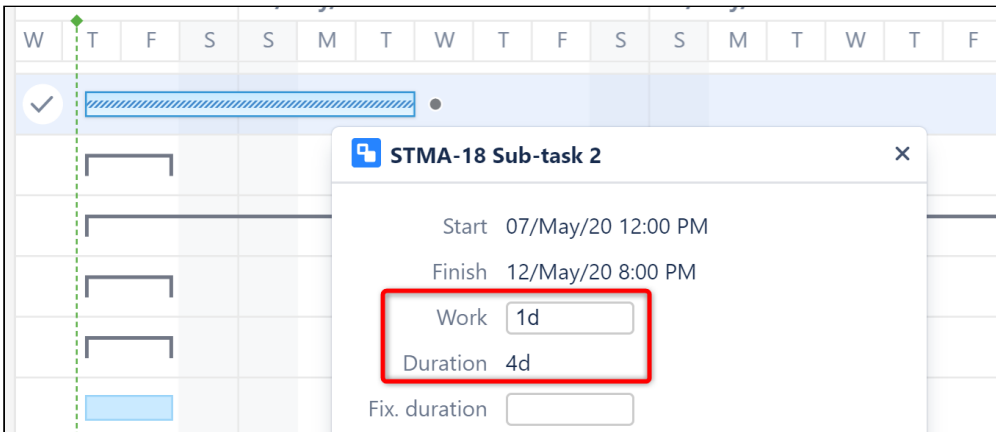
13.4.2 Manual Scheduling Mode

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

13.5 Work Estimate vs. Task Duration

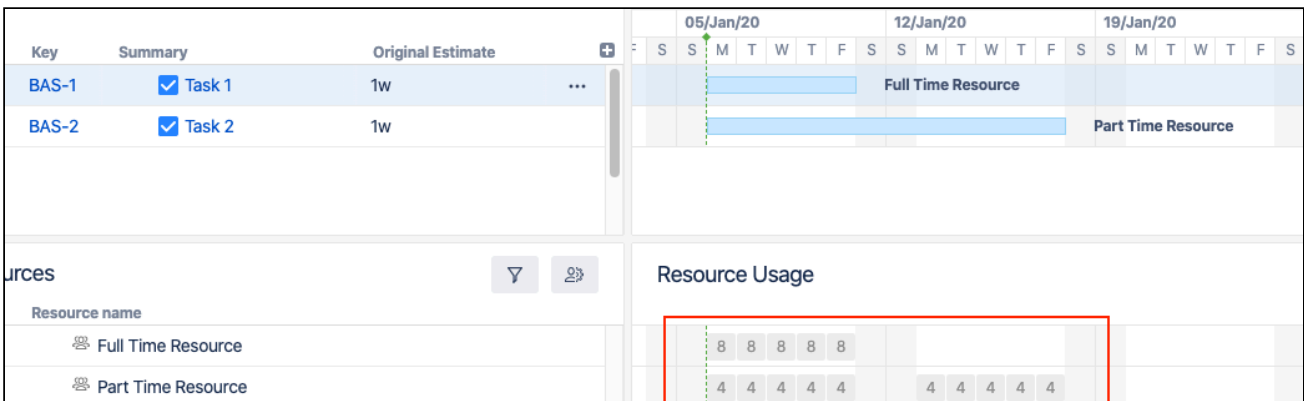
Work Estimate is an estimation of the effort required to complete a task. It does not take into account things like resource availability, work schedule, etc. Task Duration, on the other hand, is an actual projection of the task estimate, considering these other factors. For example, if Task A has a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



13.5.1 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 39):

- 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 34).

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.

The screenshot displays the 'Resource Usage' table and the 'Task Details' panel for 'KAN-19 Task 3'. The Resource Usage table shows a fixed duration task with a work estimate of 5 and a duration of 1 week. The Task Details panel shows the task's start and finish dates, work estimate, and duration.

Resource	23/Mar/20	24/Mar/20	25/Mar/20	26/Mar/20	27/Mar/20
1 person	1	1	1	1	1
	8				
	8				

Task Details: KAN-19 Task 3

- Start: 23/Mar/20 9:00 AM
- Finish: 27/Mar/20 5:00 PM
- Work: 5 sp
- Duration: 1w
- Fix. duration: 1w
- Progress: 0%
- Lev. Priority: 500
- Lev. Delay: 0m
- Scheduling: Auto (Manual)
- Max. Units: 1
- Resources: 1 person (Moscow (GMT+03:00), Standard)

i If you drag the edge of a fixed duration task, you adjust its 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.

13.6 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:

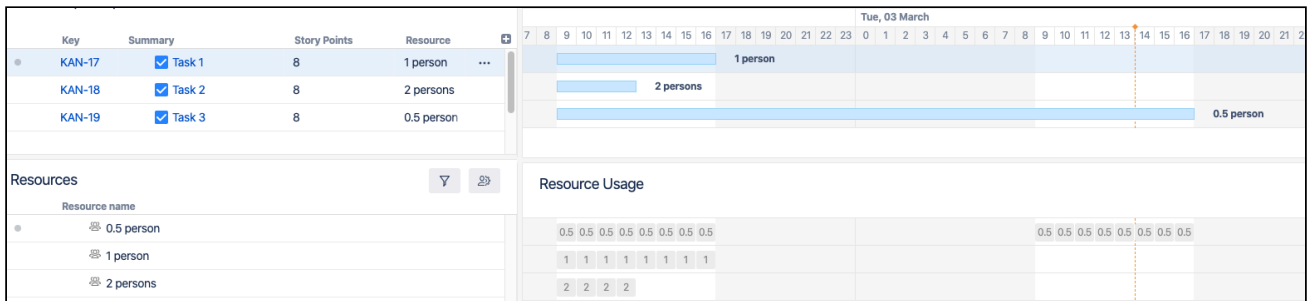
- Capacity
- Availability
- Work Calendar
- Time Zone

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.

13.6.1 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



13.6.2 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.

13.6.3 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.

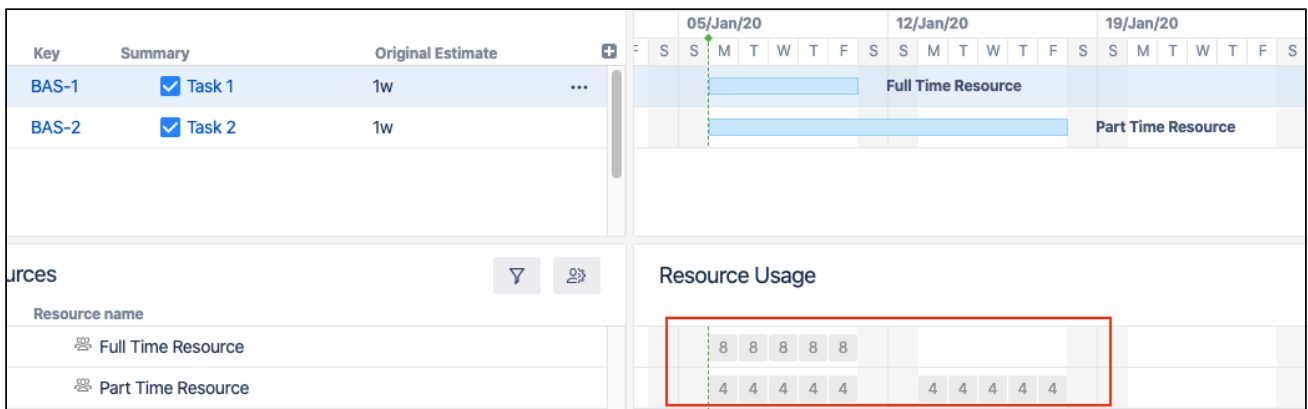
13.6.4 Task's Maximum Units

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:

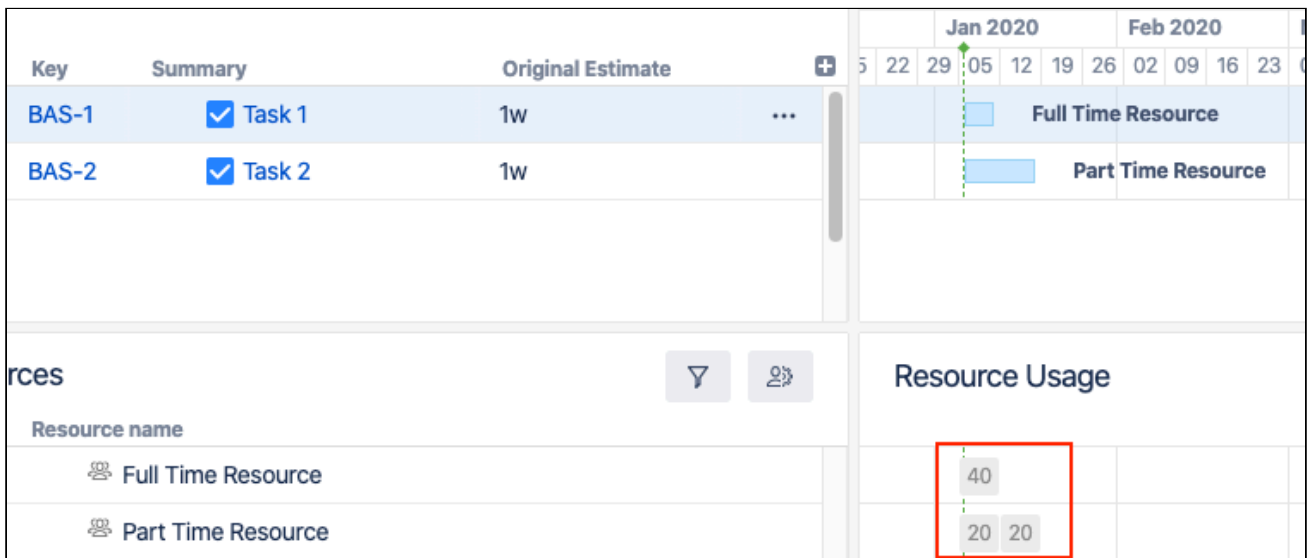
- If you have a resource with a capacity of 2 units and a task's maximum units is set to 1, that means that only 1 unit of the resource will be allocated for the task and the remaining unit will remain available.
- If you have a resource with a capacity of 1 unit and a task's maximum units is set to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

13.6.5 Resource Usage

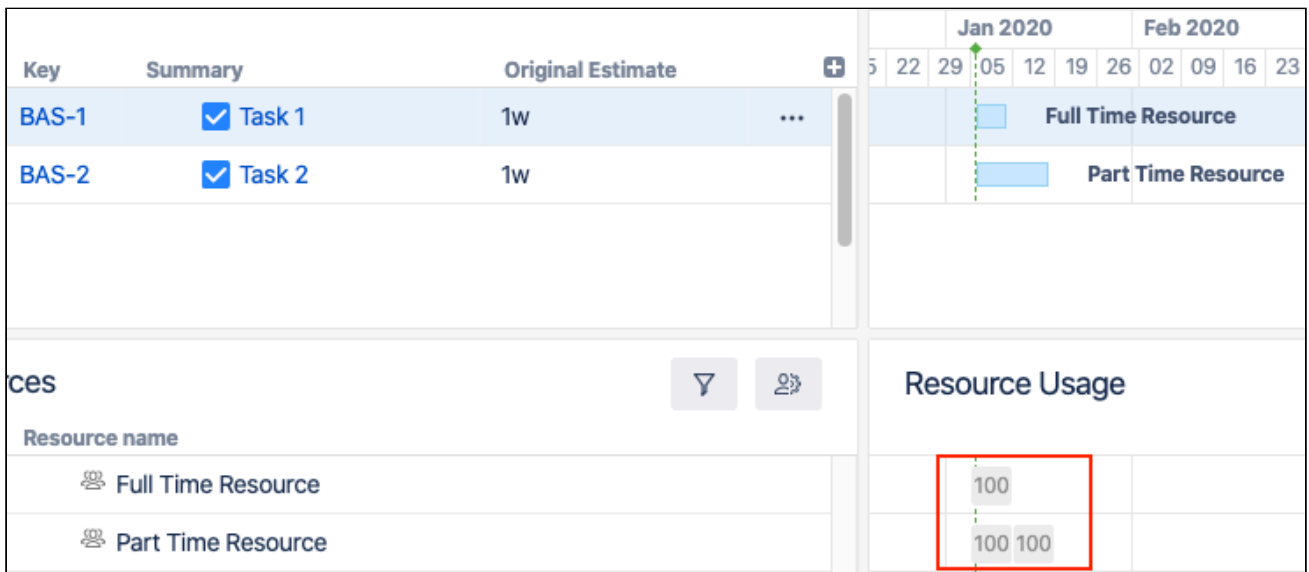
The Resource Usage section of the Gantt chart shows how much of a resource's time is allocated during a set time frame. In the following screenshot, "Full Time Resource" is allocated for 8 hours each day, while "Part Time Resource" is allocated for only 4 hours.



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 216) 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%).

13.7 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 79).

13.7.1 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.

13.7.2 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.

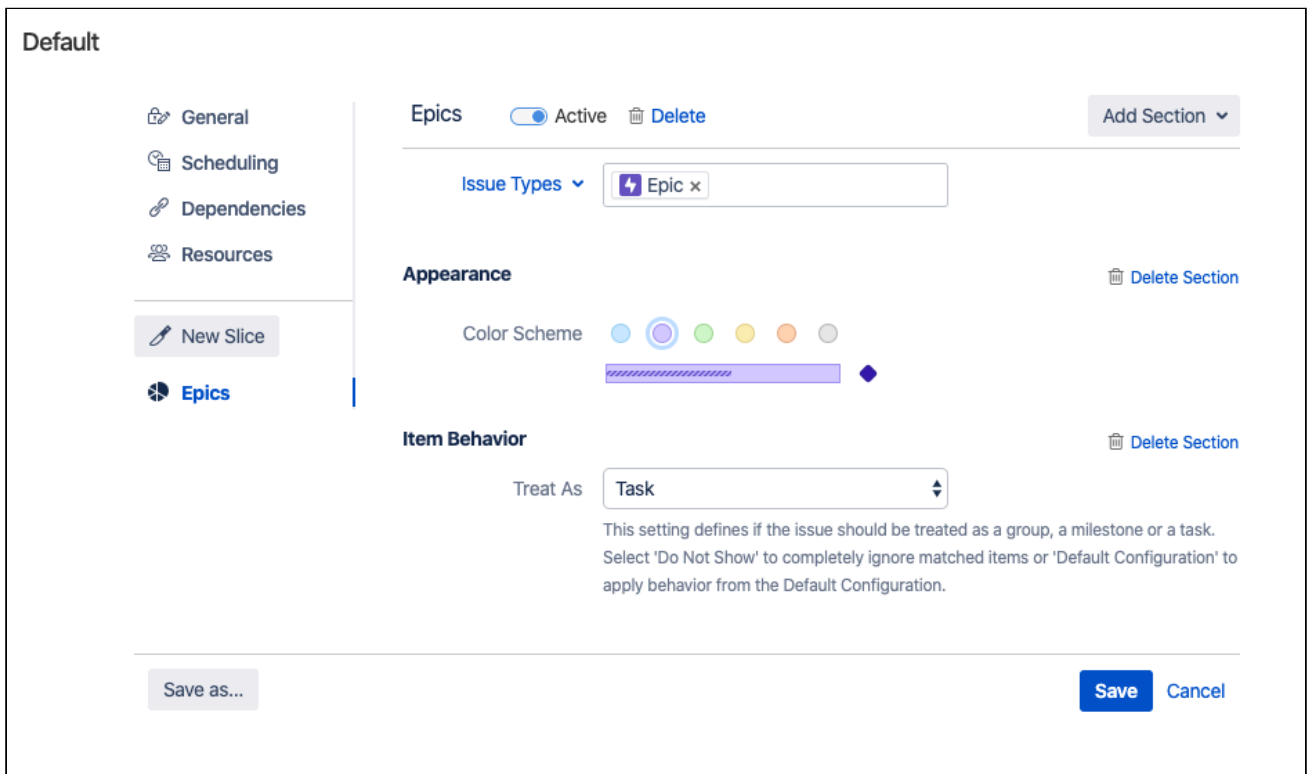
Leveling Delay values are stored in Structure.Gantt's own storage and are independent from other task properties, such as Manual Start Date or Manual Finish Date.

13.8 Customizing the Chart with Configuration Slices

The [Gantt configuration](#) (see page 105) defines how items are scheduled and displayed within the Gantt chart. If your WBS includes items from multiple projects or teams, it may be necessary to have some custom setting for certain projects, teams, or issues. For example:

- Each project may use different custom fields to assign resources
- Some teams may use different custom fields, link types, etc.
- Sprints may have different names or timelines

Configuration Slices allow you to define specific settings for a subset of items, thus overriding the main Gantt configuration. For example, you can set a unique Leveling Delay setting for one project, use different link types for another, and change the color of certain issue types to highlight them within the chart.



In the above screenshot, we've created a slice that affects all epics in the chart. If an item's issue type is Epic, the chart will:

- Color the item purple
- Treat the item as a task even if they have child stories beneath them in the WBS

Aside from these two custom settings, epics in our chart will follow all other setting from our main configuration.

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 138) for more information.

Learn more about [Slice-based Configurations](#)(see page 127).

13.9 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 216) 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 124).

13.9.1 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.

13.9.2 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.

13.10 More reading

To learn more about creating and configuring a Gantt chart, see [Creating Your First Gantt Chart](#)(see page 22) and [Gantt Configuration in Details](#)(see page 105).