

What is Capacity Planning? An Introduction

Capacity Planning is a workspace and a tool for top-down resource planning and forecasting.

Get a full picture of your organization's capacity versus demand, with full visibility into your teams' availability, so that you can better plan and optimize the assignment of resources across projects. Main features include:

- For the Project Manager
 - Request resources by job title, team or named resources
 - Manage all your requests in one workspace. Add, update and remove requests using your preferred time resolution (day, week, month, quarter, year, custom) and unit type (hours, FTE, Person days)
- For the Resource/Portfolio Manager
 - View capacity vs demand by teams, job titles and named resources
 - Update and approve requests per resource, per time period, per project
 - Assign resources directly on projects based on current availability and assignments
 - Plan and forecast utilization of resources for future tasks

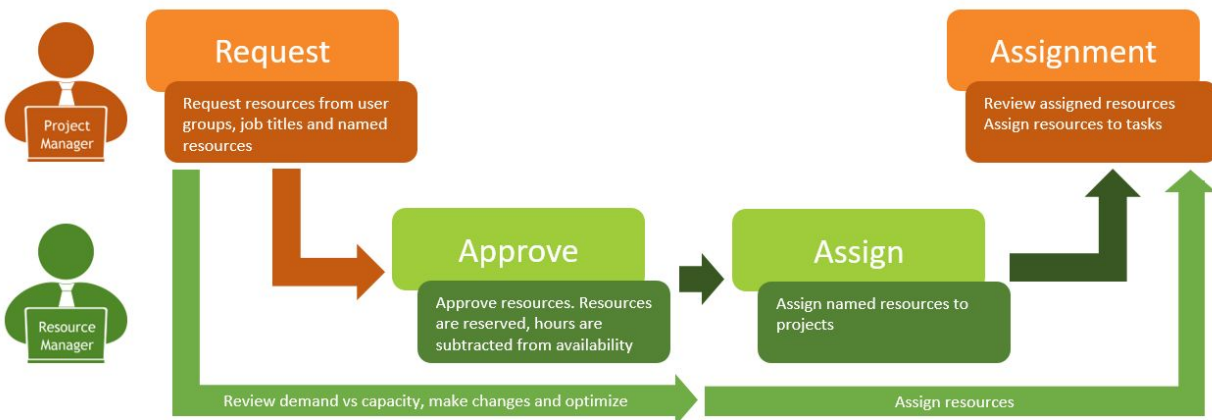
More in this section

- [Capacity Planning Lifecycle](#)
- [Terminology](#)
- [Preparations](#)

Capacity Planning Lifecycle

The Capacity Planning lifecycle begins with requests for resources, and continues with approving requests and assigning named resources, however, it's not a guessing game. As such Capacity Planning provides tools at every step in the process to help you make the right resource utilization decisions. Tools include visualisations that update as you

review and update requests, so that you get the full picture and see impacts on projects and teams.



To learn more more about requesting resources, [click here](#).

To learn more about working with Capacity Planning, approving requests and assigning resources, [click here](#).

Terminology

- Total Capacity - The maximum possible workload of the resource(s), based on users' calendars
- Requested Demand - The requested work deriving from all requests for the resource(s)
- Approved - Approved requests used in the planning stage, before assigning named resources. Resources are locked down (reserved) and hours reduced from availability.
- Assigned - Assigned work on named resources on the Project level. Hours are reduced from availability.
- Total Demand - Equals approved, assigned and requested work for the resource(s).
- Availability - The availability of the resource(s) equals the capacity minus approved and assigned work

Preparations

Capacity Planning requires some initial setup steps in Clarizen. These include:



To learn more, see [Getting Started - Preparing Your Environment](#)

Getting Started - Preparing Your Environment

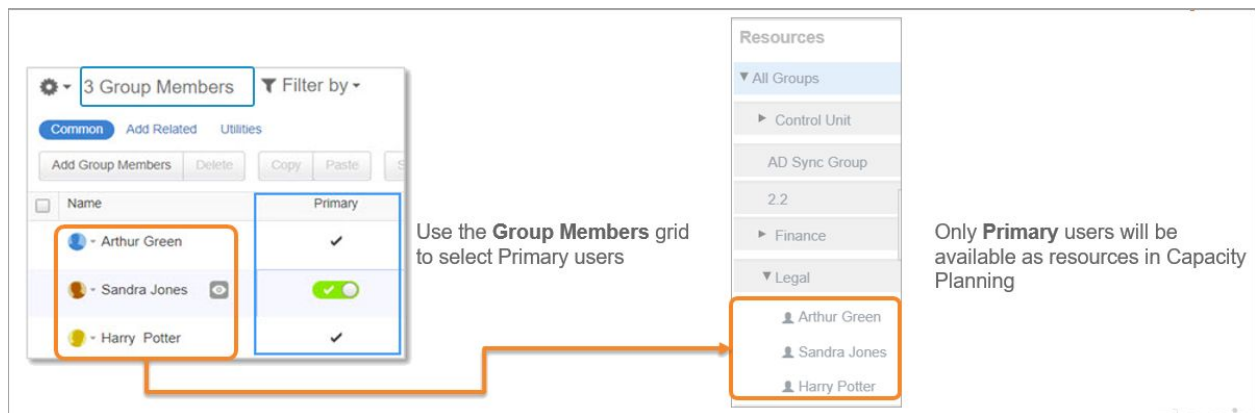
If you're new to Capacity Planning, you must prepare your organization in Clarizen. This includes creating and setting up new entities, and defining relationships between them and existing entities such as user groups and job titles.

Mandatory steps

- **[Clarizen Settings](#)**: Enable the following settings in Clarizen:
 - Capacity Planning - enables the Capacity Planning module.
 - Resource Planning - enables the Staffing Request option in the Project's Resource Planning view
- **[Profiles](#)**: Add the Capacity Planning module to the navigation panel of relevant Profiles.
- **[Resourcing Groups](#)** - Define which of your user groups to include in the Capacity Planning process. For example, if your projects are R&D related, include all R&D groups, but exclude the Finance group, as they are not relevant to your projects.
- **[Primary Groups and Primary Users](#)** - Define Primary Groups for your resources. A resource can belong to multiple user groups, however only one group can be used for resource allocation in Capacity Planning; this is the resource's primary group. On the Group level, a group can have

users, of which only some are Primary users, and therefore will be available for resource allocation in Capacity Planning.

- [Resource Manager Role](#) - Assign the Resource Manager role. The Resource Manager can approve and update requests, and assign resources to projects. You can have multiple Resource Managers per user group. In the Capacity Planning module, the Resource Manager will only be able to see groups of which he/she is Resource Manager.
Note: The Direct Manager of the group automatically gets the Resource Manager role of the group and its sub-groups if they exist.



Optional and Recommended Steps

- **Job Title** - If you are going to use job titles for resource allocations, verify all resources have been assigned a job title. To learn more about assigning job titles, [click here](#).
- **Skills** - When requesting or assigning resources, you can use Skills to easily identify the resources you need by skillset. If not already defined, add one or more skills to named resources. To learn more, [click here](#).
- **Create Projects** - If you previously created projects by way of requests as part of the intake process, we recommend creating your projects at an earlier stage, so that you can begin your capacity planning on projects already in Clarizen. In Capacity Planning, you can work on projects in different states including draft and active projects.

Enabling Capacity Planning in Clarizen

1. Go to **Settings > System Settings > Clarizen Labs (17.3)**, and enable **Capacity Planning**. This setting enables the Capacity Planning module for Resource Managers.

2. Go to **Settings > System Settings > Resource Management**, and enable **Resource Planning** (system setting 8.7). This setting enables the **Staffing Request** panel in the Project's **Resource Planning** view.
3. Click **Save**.

Adding the Capacity Planning Module to Profiles

1. Go to **Settings > Profiles**.
2. Select a profile to which you want to add the Capacity Planning module to the navigation panel. Under **General > Navigation**, move **Capacity Planning** to selected columns.
3. Click **Save**.

The screenshot displays the 'Settings' application with the 'Profiles' tab selected. The interface is divided into several sections:

- Left Sidebar (1):** A list of profiles including 'Master (All profiles)', 'Basic Admin', 'Client Portal', 'Execs', 'External', and 'Full Admin (Default)'. The 'Full Admin (Default)' profile is selected and marked with a blue circle '3'.
- Navigation Panel (4):** Under the 'GENERAL' section, the 'Navigation' sub-section is selected and marked with a blue circle '4'.
- Available Modules (2):** A list of modules available for selection, including 'Name', 'Approvals', 'Discussion Groups', 'Milestones', 'Programs', 'Settings', 'Templates', 'Topics', and 'Work Items'. The 'Milestones' module is currently selected.
- Your Selections (5):** A list of modules that have been added to the profile's navigation panel. The 'Capacity Planning' module is selected and marked with a blue circle '5'. Other modules listed include 'Reports', 'Skills', 'Job Titles', 'Data Model Explorer', 'Recycle Bin', 'Dashboard', 'Customers', and 'Alerts'.
- Bottom Right (6):** A blue 'Save' button is visible, marked with a blue circle '6'.

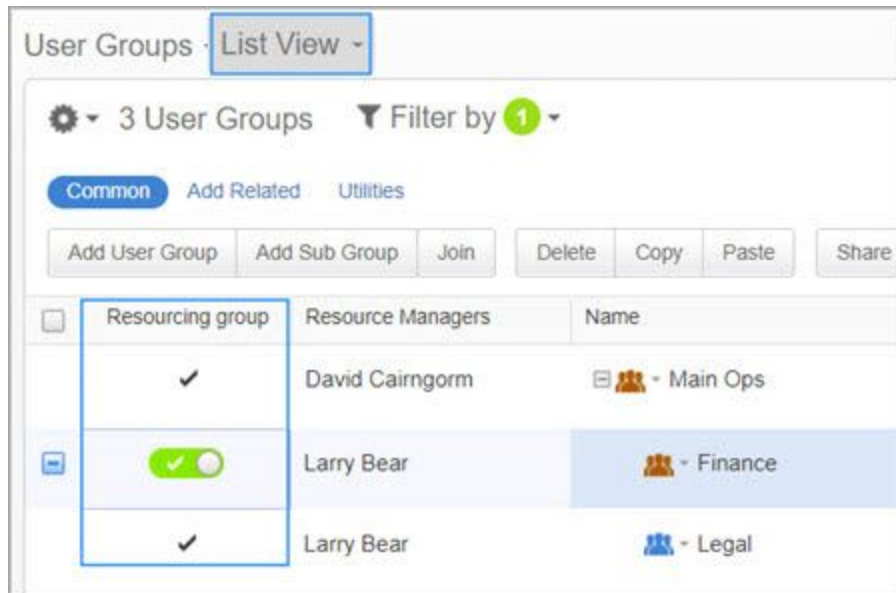
Enabling Resourcing Groups

You can define which groups will be resource groups from various modules and views.

In this example, enable Resource Groups for multiple groups using the User Groups **List View**.

To enable a Resource Group:

1. From the main navigation panel, select **User Groups**.
2. Select the **List View** (default view).
3. Click the gear icon and then select **Columns**. Add **Resourcing Group** to the list of selected columns.
4. For each group that you want to enable, toggle the **Resourcing Group** option on or off.



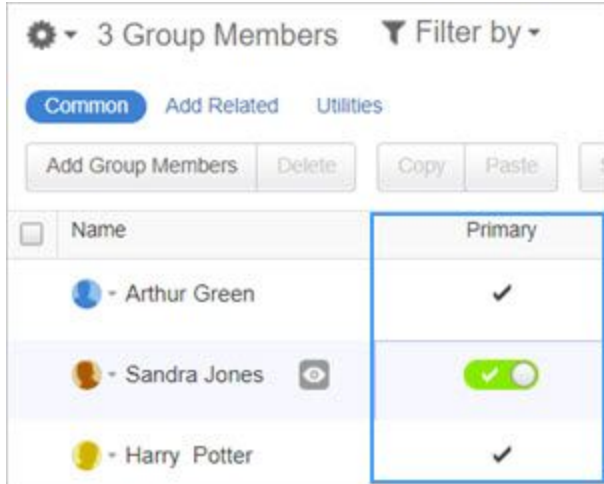
Defining the Primary Group for Resources

To define the Primary Group for resources:

You can define whether a resource is a primary user in a group from various modules and views.

In this example, the **Group Members** panel is used to determine which users in the group are Primary users.

1. From the main navigation panel, select **User Groups**.
2. Open a User Group and go to the **Group Members** panel.
3. Click the gear icon and click **Columns**. Add **Primary** to your selected columns.
4. For each team member, toggle the **Primary** option on or off.



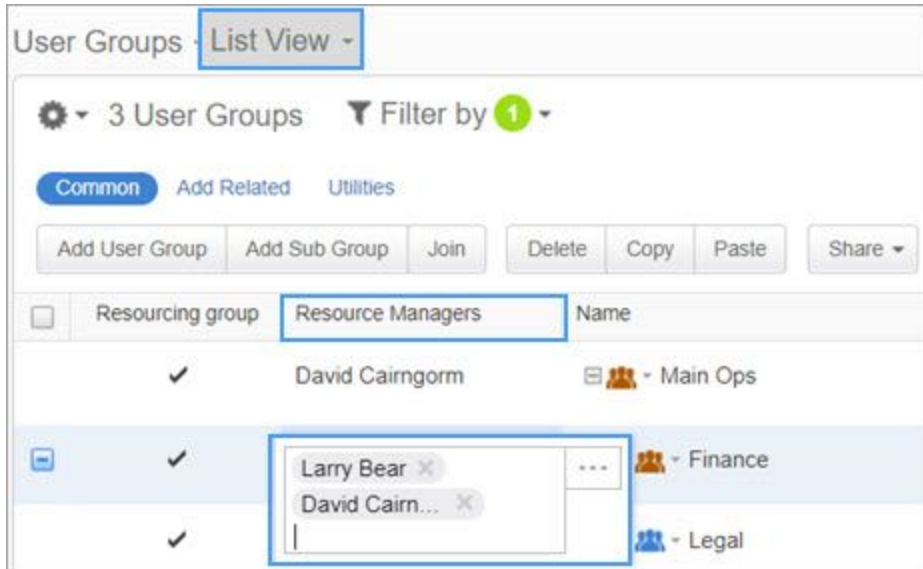
Assigning the Resource Manager Role

To assign the Resource Manager role:

You can assign one or more Resource Managers to groups from a number of modules and views.

For example, assign Resource Managers to multiple groups using the User Groups **List View**.

1. From the main navigation panel, select **User Groups**.
2. Select the **List View** (default view).
3. Click the gear icon and then select **Columns**. Add **Resource Managers** to the list of selected columns.
4. Add Resource Managers to groups as needed.



Another example is to open the **People** List View, and select the **Resource Manager of Groups** column, allowing you to select managed resource groups for users.

Requesting Resources

This section describes how to request resources for a project, by user group, job title or named resources. Requests will be available to Resource Managers in the Capacity Planning module.

Note: Users with edit permissions on a project can request resources.



See also:

- [Adding Staffing Requests to a Project Template](#)
- [Cancelling a Request](#)
- [Email Notifications](#)

To request resources for a project:

1. Open the project in the **Resource Planning** view.
2. By default, a **Project Assignment** panel appears below the **Work Plan** panel. Click **Project Assignment** and select **Staffing Request**.

Project Details - Resource Planning View - 1

Basic Project

Work Plan Standard display Filter by

Common Resourcing Add Related Custom Actions Utilities

Add Insert Mark As Email Report Time Delete Link

<input type="checkbox"/>	Name	Skills	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Architect S2		<input type="checkbox"/>



3. Click **Add Staffing Request**, and select from named resources, user groups or job titles. When done click **OK**.

- In the **Project Role** field, you can enter an additional title or description that defines the nature of the request, or the specific role in the project. This field will appear in the Capacity Planning module for Resource Managers.

Example: For a **Job Title** that is *Developer*, you can add *Technical Team Leader* as the **Project Role**.

Note: By default the **Project Role** has the Resource name.

- Add additional details to the request, such as **Skills** or custom fields. If necessary, add additional columns to the Requests grid with the additional fields.

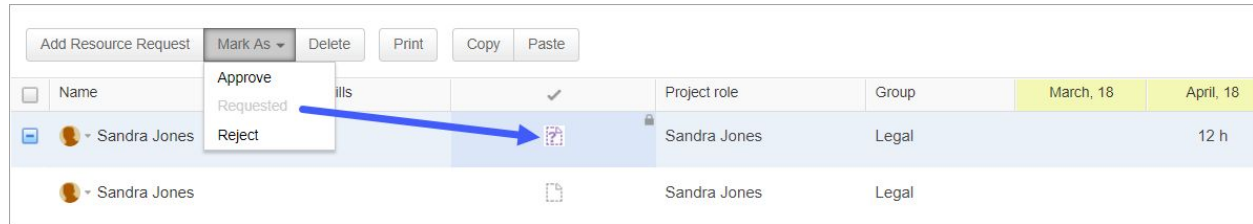
Add Resource Request		Mark As ▾	Delete	Copy	Pa
<input type="checkbox"/>	Name	Skills			
	James Richard	French			
	Architect	Development			

- For each request, enter the requests per time period (Months, Weeks, etc.). You can enter *Hours*, *FTE* or *Person Days*. Change the time resolution as needed.

Note: You cannot enter amounts for past or current periods.

March, 18	April, 18	May, 18	June, 18
	<input type="text" value="100"/> Hours		60 h
	5 h	5 h	5 h

- Select the rows of Resources to make the requests. Click **Mark As > Requested**. Once requested, the request will be available to the Resource Manager in the Capacity Planning module.



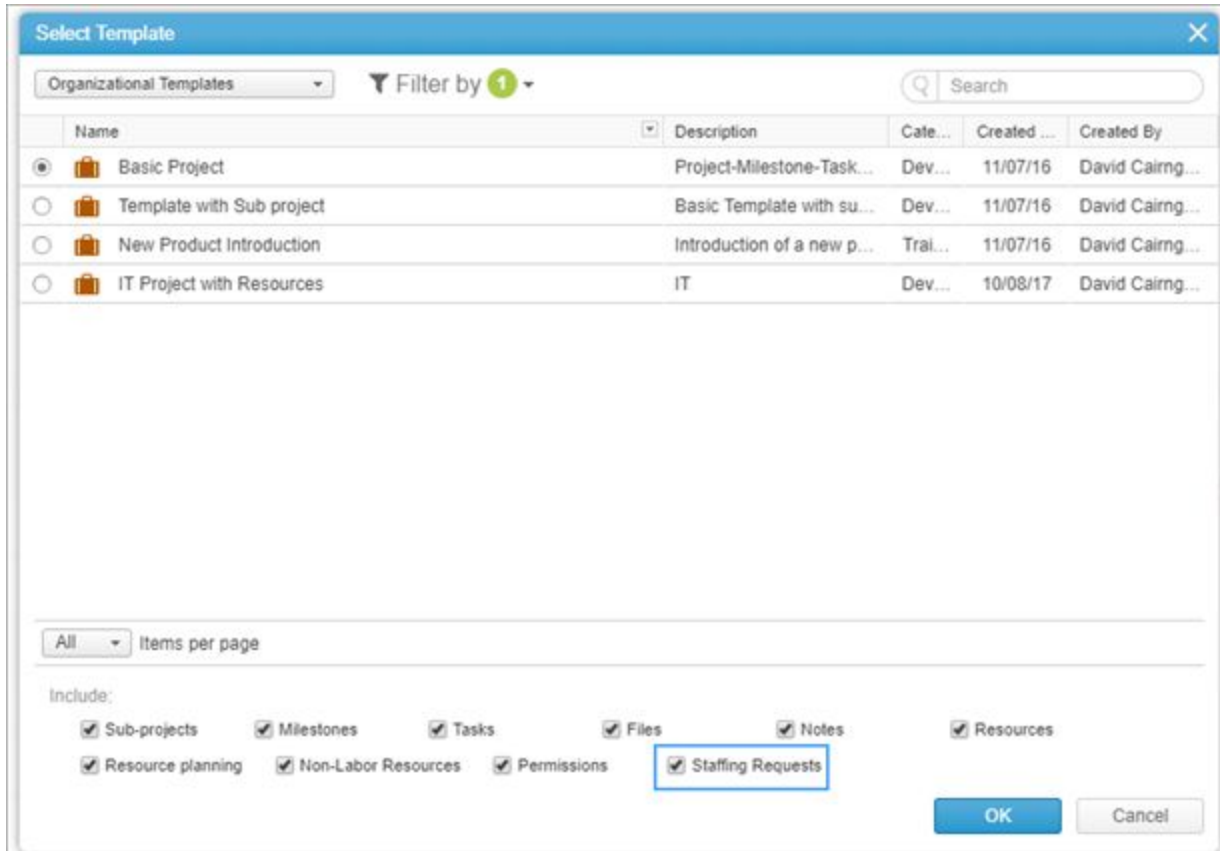
8. The *state* icon changes from *Draft* to *Requested*.

Depending on your role and permissions, you can change the state of the request.

Draft		Users with edit permissions on the Project
Requested		Users with edit permissions on the Project and Resource Manager of the requested users or groups
Approved		Resource Manager
Rejected		Users with edit permissions in the Project and Resource Manager of the requested users or groups

Adding Staffing Requests to a Project Template

Staffing Requests can be added to Project templates. On creating a new Project from a template, include **Staffing Requests** to bring in the resource requests from the template. For more about templates, [click here](#).



Cancelling a Request

You can cancel a request before it has been approved.

To cancel a request:

1. Select the resource row.
2. Click **Mark As > Reject**.
3. The request returns to Draft state.

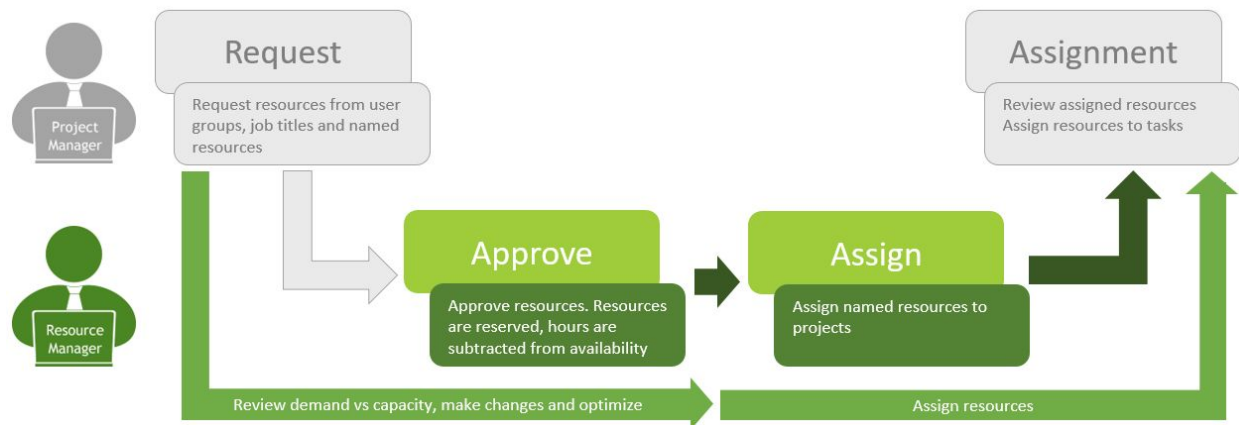
Email Notifications

Project Managers are notified daily about changes to requests, rejected requests and requests awaiting approval.

Managing Requests and Optimizing Resource Utilization

As Resource Manager, you can manage requests, identify resource bottlenecks, shift and update resources, and assign resources all from the Capacity Planning module.

Note: Only users with the Resource Manager role have access to the Capacity Planning module.

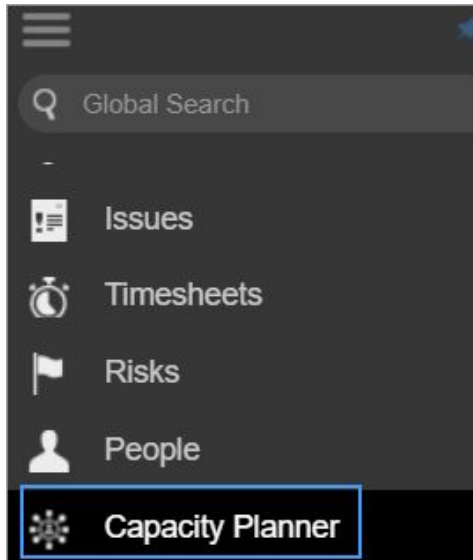


See the following sections:

- [Getting to know the Capacity Planning Workspace](#) - Learn about the Capacity Planning workspace and the tools that will help you make resourcing decisions
- [Optimizing Resource Utilization](#) - See how to use the Capacity Planning tools in a typical workflow, step by step.
- [Email Notifications](#)

Getting to know the Capacity Planning Workspace

You can access the Capacity Planning module from the main navigation menu.



The Capacity Planning module

clarizen *Get With The Program* Show Me Larry Bear Chat (0)

Capacity Planning

Groups

All Groups

Total Demand vs Total Capacity | Hours | Monthly

Demand / Capacity	270.5 / 1.5k	120 / 1.7k	120 / 1.5k
Resources	APR-2018	MAY-2018	JUN-2018
Architect S2	0 / 0	0 / 0	0 / 0
Operations	0 / 0	0 / 0	0 / 0
Legal	13 / 504	0 / 552	0 / 504
Finance	17.5 / 336	0 / 368	0 / 336
2.2	0 / 0	0 / 0	0 / 0
Developers Group	40 / 336	60 / 368	60 / 336

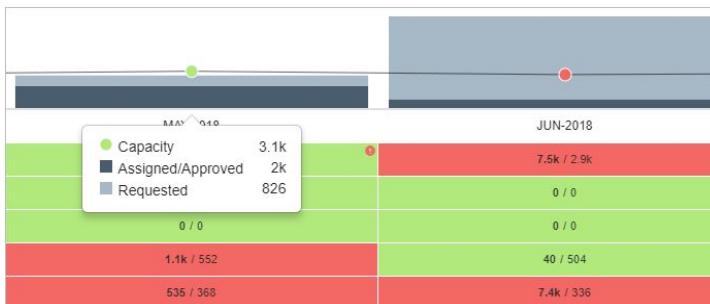
Mark As

Demand	270.5	120	120
<input checked="" type="checkbox"/> Sandra Jones	12	-	-
<input type="checkbox"/> CP group1	40	50	60
<input type="checkbox"/> cp3	32	-	-
<input type="checkbox"/> cp3	100	20	-
<input type="checkbox"/> cp3	-	10	-
<input type="checkbox"/> Dev Group Q	17.5	-	-
<input type="checkbox"/> James Richard	68	40	60

REVERT SUBMIT

Inside the Capacity Planning module

All Groups provides a full picture of the current availability, capacity and requests of all resources.



Heatmap and Charts

Bar charts display requests and assignments. The line chart displays the capacity of your resources. Below the charts, the heatmap represents demand vs capacity of your resources.


Requested Demand vs Availability – The charts display requests / remaining availability of the resources. In the heatmap, begin by viewing the totals at the top of the column. An orange box means the overall demand vs availability status may be ok, however, digging deeper into the Resources/Job Titles/Users below will show that one of the above is overloaded (red) or partially overloaded (orange). This means there are bottlenecks or conflicts, and redistributing resources is advised. A red indication in the totals represents a general overload on resources for the time period.

Total Demand vs Total Capacity - The charts show open and approved requests, and assigned work / total capacity of the resource. The heatmap view is useful when making changes after resources have been assigned as it displays the current load. After assigning resources, the approved hours are subtracted

from the remaining availability, and added to the assigned/approved work in the bar chart.

Demand

The Demand panel displays staffing requests on the project. This is where you can approve and update requests, as well as assign named resources. Click on the Project's name to manage resources.

The project's state is indicated to the right of the project name, for example: *Active* 

Here you can update the requests and view the changes in the heatmap as you do so. Toggle between **Requested Demand vs Availability** and **Total Demand vs Total Capacity** to see how your changes affect capacity.

You can then:

- Approve requests - Resources are reserved and their hours are subtracted from their availability.
- Reject a request - Rejecting a request removes it from the **Demand** panel
- Assign named resources

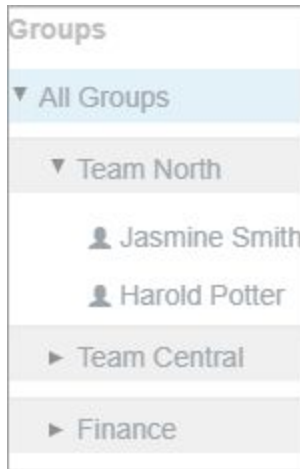
Click the filter icon to view all requests or only open requests, approved requests, or assigned resources.

Demand			270.
22			1
Museum New Wing Stage 1			269.
<input checked="" type="checkbox"/>	Sandra Jones	<input type="radio"/>	12
<input type="checkbox"/>	CP group1	<input type="radio"/>	40
<input type="checkbox"/>	cp3	<input type="radio"/>	32
<input type="checkbox"/>	cp3	<input type="radio"/>	100
<input type="checkbox"/>	cp3	<input type="radio"/>	-
	Dev Group Q	<input checked="" type="radio"/>	17.5

Mark As ▾

▾ Demand

- Requested
- Approved
- Assigned



Teams and Users

Expand **All Groups** to drill down to specific groups and named resources. The chart, heatmap and requests update accordingly.

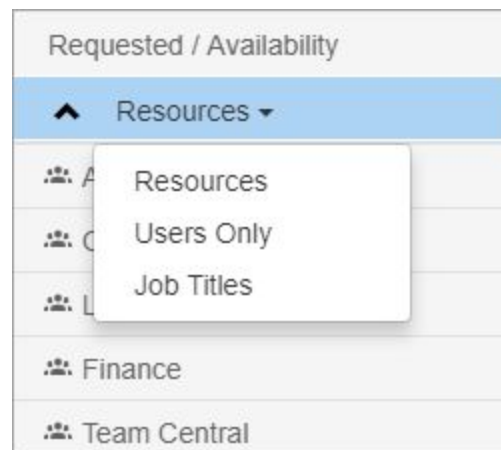
Note: The user group's capacity is aggregated from all participating resources in the group and sub-groups.

Resources, Users Only, Job Titles

View resources by **Resources**, **Users** or **Job Titles**.

Notes:

- When viewing **Job Titles**, **Not Assigned** displays all requests without job titles.
- The work capacity of a group or job title is based on the calendars of resources in the group or with the job title.



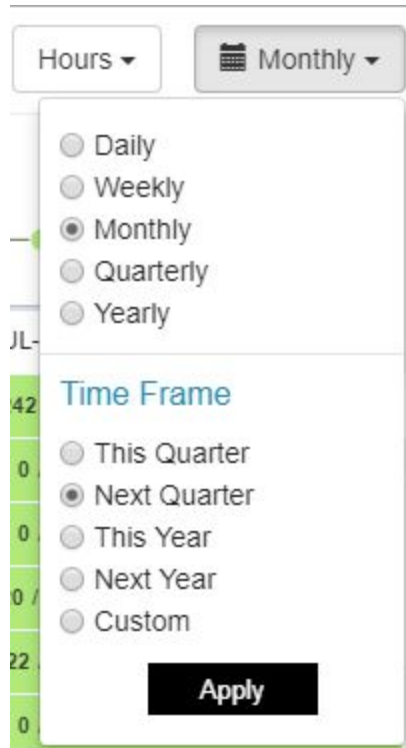
Submit

Making changes to requests update the chart and heatmap on the fly. To submit request updates and resource assignments, click **Submit**. Your updates will reflect the project's requests and assignments in the related project views.

Revert - Reverts all updates to before the last Submit.

Resource Planning Units

Display work in FTE, Hours, or Person Days



Time Frames

Select a time resolution and time frame

Optimizing Resource Utilization

Let's take a closer look by going through a step-by-step workflow.

1. Begin by selecting **All Groups** to see the current state of your requests for all resources in all projects.
2. Select **Requested Demand vs Availability**. Use the heatmap to review open requests and remaining availability.

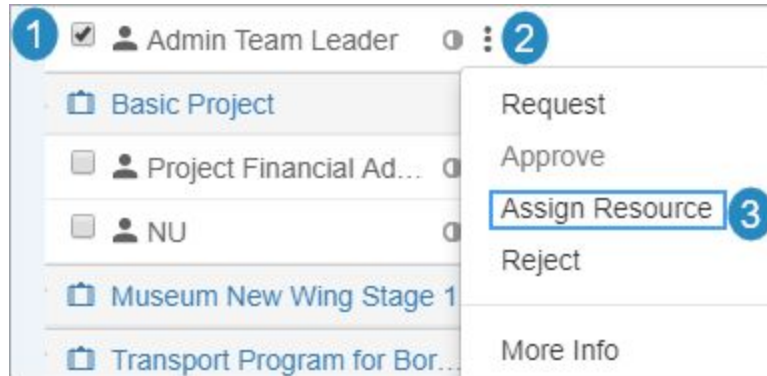
- Under **Requested/Availability**, select **Resources**, **Users** or **Job Titles**. For example, in **Resources** view, you may see a partial overload when looking at the totals column of the heatmap for a time period. Moving to **Users Only** view will show you which resource is partially or even overloaded.

Requested / Availability	5 / 1.3k	Requested / Availability	5 / 1.3k
Resources	APR-2018	Users Only	APR-2018
CP group 2	5 / 136	cp3	0 / -32

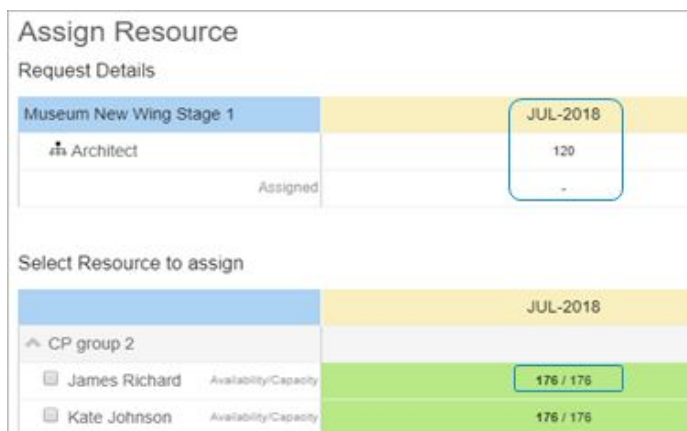
- Move to **Total Demand vs Total Capacity** to see the full capacity of resources including already assigned work.
- This is a good starting point for updating requests, and then approving or rejecting them. In the **Demand** section, open the projects to see how resources are distributed over time.
- Review the heatmap to compare availability for your resources. Under **All Groups**, you can select teams or resources for an in-depth view of resource availability and capacity.
- Make changes to request amounts.

Demand	245
<input type="checkbox"/> CP Job title 2	5
<input checked="" type="checkbox"/> cp3	100
<input type="checkbox"/> cp3	32

- To approve a request, select the 3 dots and then **Approve**. To select multiple resources, select the checkboxes next to the resource names and click **Mark as > Approve**. Resources are reserved and their hours are subtracted from their availability.
- To commit the changes, click **Submit**.
- Repeat the above process as more requests are added, and when you're ready to assign resources, select the resources, click the three dots, and **Assign Resource**.



11. In the **Assign Resource** window, review the requests and select the resources to assign. Their available hours will be assigned to the project.



12. If your resources are fully booked and / or you want to use resources from other groups, click **Sub Groups** or **All Groups** to view additional resources.



13. Update the assignment numbers if necessary. Select all resources and click **Add and Apply to Project**.

14. Click **Submit**. This will allocate the resources to the project(s) and remove the requests from the **Requested Demand vs Availability** view.

15. The Project assignments can be seen by the Project Manager in the Project Assignment panel of the Project view. See [Project and Task Assignment](#).
16. Move again to **Total Demand vs Total Capacity** to view resource utilization including assignments and open requests. Continue to optimize the plan as needed.

Email Notifications

Resource Managers are notified daily about requests awaiting approvals and requests awaiting assignments.

Project and Task Assignment

When the request for a resource is approved and assigned, you can view the assignment in the project's **Resource Planning** view, in the **Project Assignment** panel.

In the example below you can see Project assignments for the resource on the project level.

Note: In the Work Plan panel, the Project should be selected.

Project Details **Resource Planning View**

South Wing

Work Plan Standard display Filter by

Common Resourcing Add Related Custom Actions Utilities

Add Insert Mark As Email Report Time Delete Link Unlink Cut Copy Paste Share Indent Outdent Expand Collapse Following Favorite

Name	Resources	Work	Successors	Pred...	Duration	Start Date	Due Date	2018	April 2018	May 2018
South Wing	David Cairngorm, Jane...	40 h			89 d	05/01/18	08/31/18	19	26 02 09 16 23 30	07 14 21
Enter task (not linked to milestone)		8 h			1 d	05/01/18	05/01/18			
Enter task (not linked to milestone)		8 h			1 d	05/01/18	05/01/18			
1st Milestone	Kate Johnson	16 h			23 d	05/01/18	05/31/18			
1st Task of 1st Milestone	Kate Johnson	8 h	Last Task of 1st ...		1 d	05/01/18	05/01/18			

South Wing: 4 **Project Assignment** in Hours Filter by

Add Resources Delete Restore Work Resource Load Resource Planning Resource Calendar Export Print Copy Paste Apply Task Assignment

Name	Work	Units(%)	Role	Maximum Project Availab...	May, 18	June, 18
David Cairngorm			Resource	100		
Jane Downing			Resource	100	25 h	20 h
Kate Johnson			Resource	100	90 h	

As Project Manager, you can now assign individual tasks to resources. Task assignments are displayed below the Project assignments.

Maximum Project Availab...	May, 18	June, 18
100		
100	25 h	20 h
	16 h	19 h