Deltek People Planner

People Planner 4.6 Web Components
Performance Considerations

June 28, 2024

Contents

Overview

This document is intended for readers that have a need to configure the People Planner Web Components with focus on optimizing the performance.

The key to enhancing the performance of the People Planner Web Components lies in limiting the data displayed at any given moment. Users on installations with many projects, resources, assignments, and bookings, might find their system sluggish if the configuration allows for all data to be displayed simultaneously.

Particularly, the Resource Management and Resource Plans workspaces, without proper configuration, display all events and resources, including every assignment and booking. The Assign Resource and Reassign Resource dialogs, sharing many functionalities with the Resource Management workspace, are similarly affected.

It is important to understand that performance optimization is relevant not just when a user opens the workspace for the first time, but also every time an edit is made and the page refreshes.

While external factors like poor network latency can certainly impact performance, they are beyond the scope of this document. Here, we are only concerned with configuration that you can do inside the People Planner installation.

Additional Readings

The focus of this document is on performance: For a general discussion of how to use the People Planner Web Components, you should refer to the *Deltek People Planner Web Components Guide* document.

Similarly, refer to the *Deltek People Planner Admin Guide* document for how to use the People Planner Admin Tool in general.

Limit Currently Displayed Data

When restricting the data that is to be shown, the following tools should be considered.

Tool	Implications on Performance
Data Limitations	Data limitations provide a general filtering on data and restrict what data need to be loaded from the People Planner database and be displayed.
Assignment Filter	The Assignment Filter limits what assignments are shown depending on the current visible period.
Collapsing or Hiding the Capacity Pane	When the capacity pane is not displayed, People Planner does not spend the resources on calculating values that would otherwise be needed.
Job Display	When unfiltered, the Resource Plans workspace displays all projects and events. The two job display buttons provide a means of filtering which projects are shown.
Page Size	By selecting a page size, you can limit how many events or resources are shown.
Width of the Visible Period	You can configure the width of the visible period. A narrower visible period means less bookings to be displayed.
Layouts	When you rearrange a page for better performance, the layout is a convenient way to save the choices.
Filtering on Columns	Filtering on one or more columns reduces how much data needs to be displayed.
Available Columns	To facilitate filtering, the data of all columns is loaded. This holds even if the columns are not currently displayed. You should therefore be careful about what columns you make available and limit this as much as possible (potentially utilizing different layouts for different use cases instead).
Admin Tool settings	People Planner has a lot of settings that can be used to trim the performance by limiting or changing the behavior of the Web Components in various ways.

Each of these is discussed in further details in the following sections.

Project Manager and Resource Manager

Different types of users typically access different parts of the Web Components to work with their workflows. This means that users may have different performance experiences.

Project Managers typically use the Resource Plans workspace, while **Resource Managers** use the Resource Management workspace. If only the Resource Plans workspace is experiencing performance issues, the Resource Managers may be unaffected by this. When needing to deal with reported

performance issues, you should consider which part of the Web Components are affected and aim your performance tweaks accordingly.

Common Usage Patterns

You should also examine how the users are using their Web Components and determine whether that is the most optimal way.

Notably, this applies to when users edit allocations. Whenever the user enters a new allocation or changes an existing allocation, this need to be saved to the People Planner database. Furthermore, other values that depend on the allocations, then need to be updated such as the summed-up allocations. This means that the page needs to be partially updated to display all changed values.

When a Web Components page is reloaded, it is subject to the same performance restrictions as when the page is initially opened. Even if the page is otherwise reasonably responsive, this can still become an issue when the user edits an allocation, saves it, and then must wait for the page to be ready again.

For this reason, it is worth considering how you can minimize when edited allocations are saved and make a roundtrip to the People Planner database.

For example, entering the same value into multiple cells can be done more effectively by selecting all the cells using the CTRL or SHIFT keys before entering the allocation. In this case, the allocations are saved once in total, instead of once per cell.

Another option to consider is the **Automatically save changes in Web Components** setting. When this is enabled in the People Planner Admin Tool, there are no **Save** button. Instead, the system automatically saves progress whenever the user updates a cell.

When the setting is disabled, the **Save** button is available, and the user decides when to actively press the **Save** button.

Data Limitations

Refer to the *Deltek People Planner Fundamentals Guide* for a general description of how **Data Limitations** and **Roles** work.

Data limitations act as filters to control the scope of data extracted from the People Planner database, serving two main purposes:

- Enhancing security by restricting user access to certain data.
- Improving user experience and system performance by narrowing down the data to what is specifically required or desired by the user.

The discussion here focuses on the latter type, termed **Public Data Limitations**, hereinafter just referred to as **Data Limitations**.

Users can select data limitations through the **User Data Limitation Filter** icon in the toolbar:
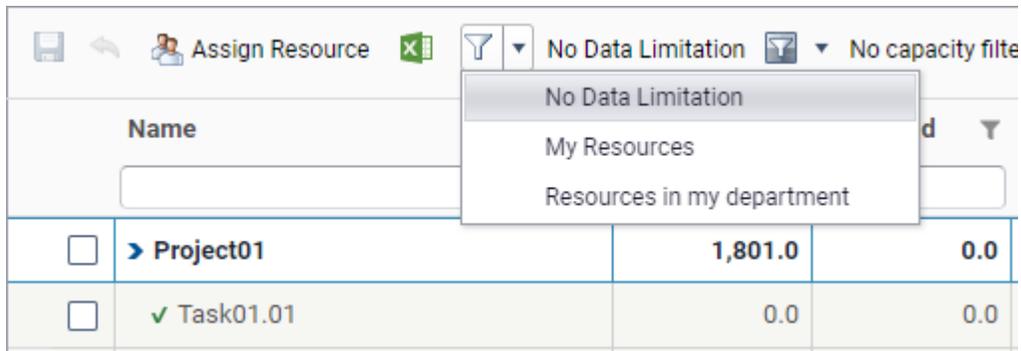
Data limitations are created and defined by the People Planner Administrator, and currently this can only be done through the People Planner Windows Application in the **Roles and Data Limitations** view. Refer to the *Deltek People Planner Fundamentals Guide* for the details.

The available public data limitations can either be assigned directly to a user, or they can be assigned to roles. When the roles are assigned to a user, the data limitations become available to the user:
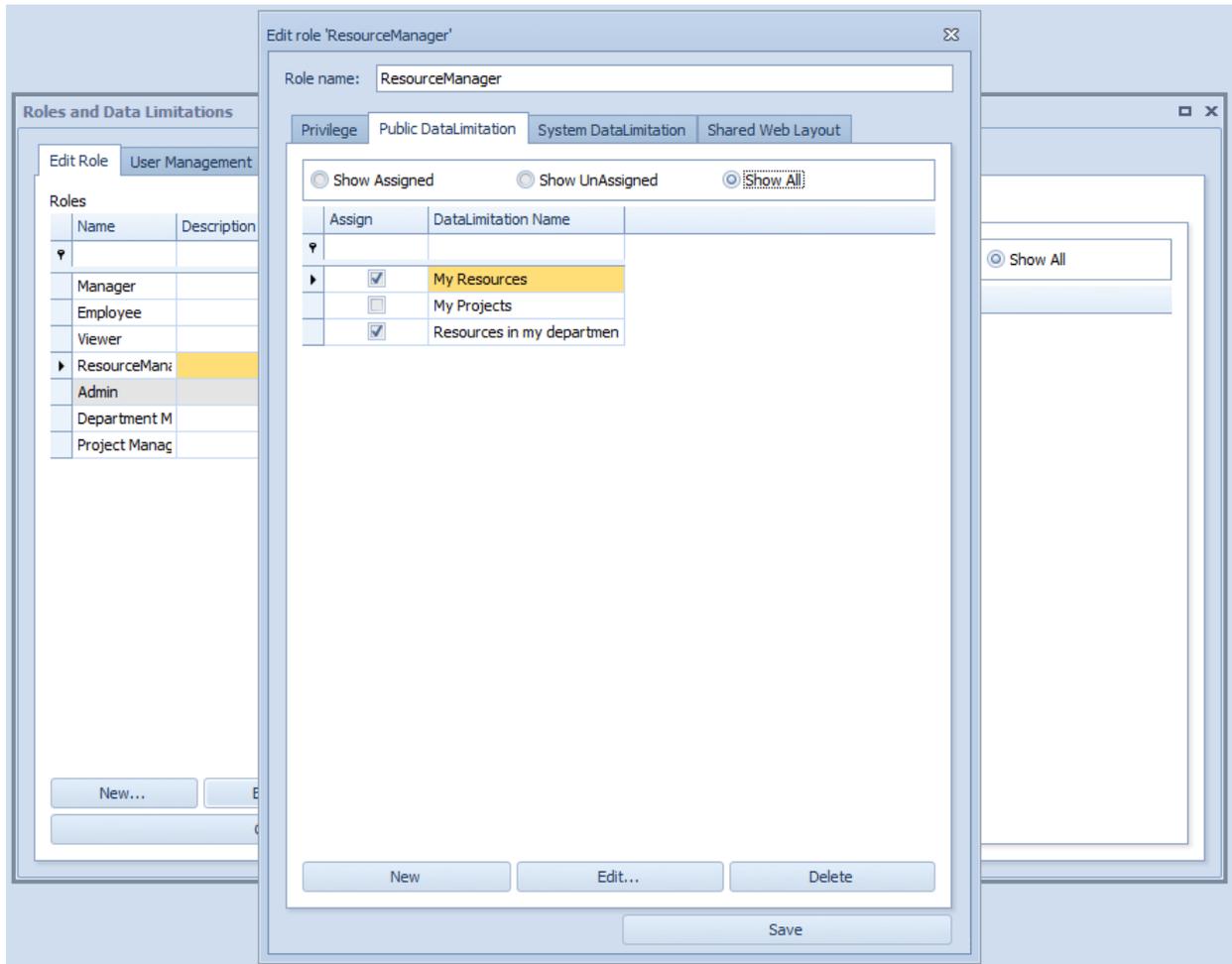
When you define a data limitation, you have various options available. The document does not attempt to cover them all here but below are the most important one for project manages and resource managers:

For a data limitation intended for project managers, you can select the **Projects where I am project manager** or **Projects where the main projects department is my department** checkboxes.

For resource managers, you can select either the **Resources where I am resource manager** or **Resources with same department as my department** checkboxes.
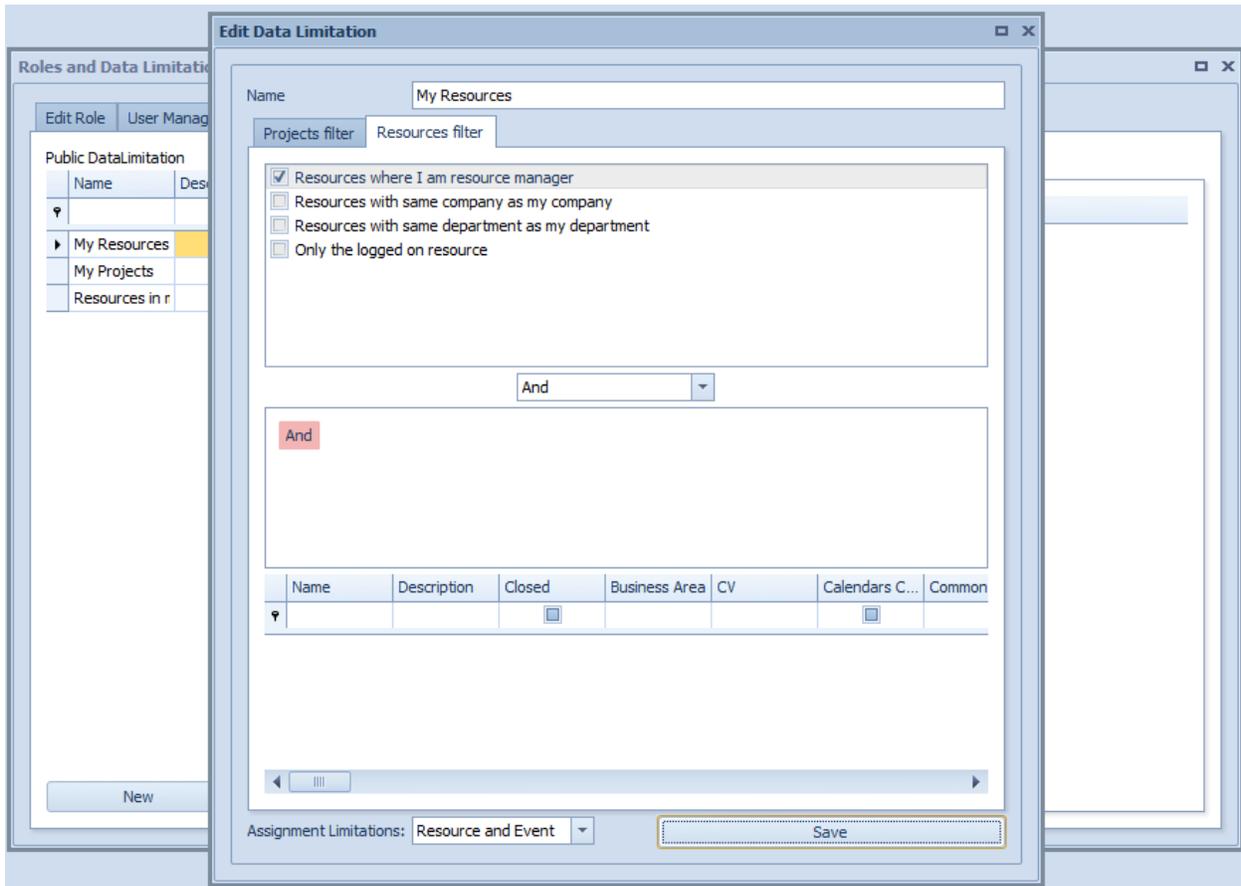
Also, when defining a data limitation, Deltek recommends setting the **Assignment Limitations** control to **Resource and Event**.

Assignment Filters

Over time, as resources are allocated to an increasing number of tasks, having People Planner display all these assignments could significantly strain the system.

Consider the following points:

- Is it necessary for users to view assignments on projects that have been closed?
- Should users see assignments for tasks outside the currently visible period?
- Is it important for users to view assignments involving resources no longer employed?

People Planner must also retrieve any bookings associated with each displayed assignment.

The available assignment filters can be selected from the **Assignment Filter** icon in the toolbar:
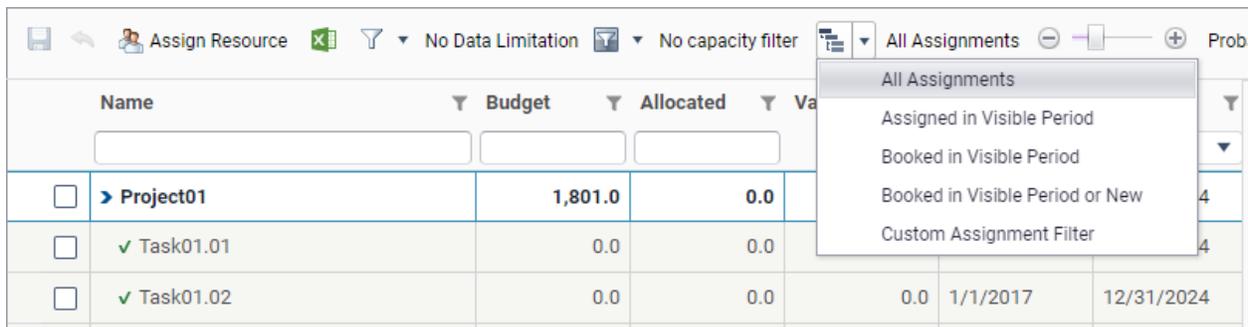
By default, the **All Assignments** filter is selected. However, it is advisable to avoid using this filter unless there is a specific need to view all assignments.

Assignment Filter	Function
All Assignments	Displays every assignment.
Assigned in Visible Period	Shows only those assignments that overlap with the visible period.
Booked in Visible Period	Filters to only display assignments with bookings within the visible period.
Booked in Visible Period or New	Includes assignments that either have bookings within the visible timeframe or are entirely new (without any bookings).
Custom Assignments Filter	Allows for the creation of personalized assignment filters.

Deltek recommends using either the **Booked in Visible Period or New** or the **Assigned in Visible Period** filters. It is important to note that the **Booked in Visible Period** filter does not display newly created assignments, as they do not have bookings yet.

> **Note:** The selected assignment filter is saved when creating a new layout. When selecting a layout, the previously chosen assignment filter, including any **Custom Assignment Filters**, will be applied. This feature allows for different layouts to incorporate distinct Assignment Filters.

The Capacity Pane

The **Resource Plans** and the **Resourcing Overview** workspaces both have an upper half, which show the projects and events, and a lower half where you can see the resources that are assigned to the events together with their allocations. The lower half is often referred to as the **Capacity Pane**.

> **Note:** The capacity pane is also referred to as the **Resource Gantt** (RG).

When the capacity pane is displayed, all relevant assignments and bookings are fetched from the People Planner database so that the load and the available capacity can be calculated and be displayed. This necessarily cost on the performance.

With People Planner 4.5, various improvements are introduced to the capacity pane:

- What resources are shown is filtered whenever an event is selected in the upper part.
- Whether the capacity pane is collapsed or expanded is saved as part of a layout.
- The capacity pane can be disabled entirely.

The Resource Plans workspace shows all the projects, and prior to People Planner 4.5, the capacity pane would show all the resources assigned regardless of project. When the user selects an event, the capacity pane now shows only the resources that is assigned to the project that the event belongs with.

The capacity pane can be collapsed, and it can even be hidden entirely. When you do that, People Planner does not spend effort on the calculations that is associated with the capacity pane.

Collapsing the Capacity Pane

The capacity pane can be collapsed by pressing the arrow-down button in the horizontal line that divides the upper and lower half of the Resourcing Overview workspace.

This was already possible before People Planner 4.5, but now when you create a layout, the open/closed state of the capacity pane is saved with it, and when the user selects the layout, this state is reapplied.

You should therefore consider collapsing the capacity pane whenever a new layout is created, and let the user decide if they later want to expand it. This speeds up the process of switching between layouts.

Disabling the Capacity Pane

People Planner 4.5 introduces two settings to hide the capacity pane entirely, and these can be set from the People Planner Admin Tool.

Setting	Function
Hide Capacity pane in Projects	This setting hides the Capacity Pane in the Resourcing Overview, the Budgeting Assistant, and the Progress Evaluation Assistant.
Hide Capacity pane in Assign Resource	This hides the Capacity Pane in the Assign resource and Reassign Resource dialogs.

Resource Plans

Unfiltered, the **Resource Plans** workspace shows all projects and events in the database. This is useful for getting an overview, but when you want to work with a specific project, the added effort for displaying everything is not needed.

To assist with this, People Planner 4.5 introduced the Job Display control, which provides you with a means on filtering which projects and events you are seeing.

Job Display

The Job Display control is available from the toolbar, and it contains two buttons that controls how the Resource Plans workspace is filtered.

Button	Function
Display Main Project and its Subprojects	When you select an event, the events in the Resource Plans are filtered to show the project that the event belongs to. In addition, you will see any parent project up to the main project, as well as any subprojects, and their subprojects.
Display Selected Projects Excluding Subprojects	When you select an event, the events in the Resource Plans are filtered to show the project that the event belongs to. You will not see any parent projects or subprojects.

To display all the projects, you can simply press the button a second time to release it.

> **Note:** By default, the Job Display control is not included in the toolbar. This is because of the Deltek strategy of only including new features that the users actively opt-in.

Page Sizes

The People Planner Web Components feature pagination to manage the display of events or resources efficiently. Users have the flexibility to select the quantity of items displayed simultaneously, with options for page size including 10, 20, 30, 40, and 50. Administrators can configure default page sizes using the People Planner Admin Tool.

The larger the chosen page size, the more data the system needs to load and render at once. It is crucial to find a balance between the convenience of fewer pages and the performance impact of loading more data. A smaller page size can lead to quicker load times and a more responsive interface, particularly in environments with slower internet connections or when accessing the system remotely.

This consideration is important for optimizing the user experience and system performance. Selecting an appropriate page size can significantly reduce the amount of data processed and displayed, making the application more efficient and user-friendly.

> **Note:** When expanding the list of assignments linked to an event or a resource, the subgrids displaying the assignments currently do not support pagination, meaning all assignments are shown at once. To manage the number of displayed assignments effectively, Deltek recommends the utilization of the Assignment Filter or Data Limitations. These tools help in limiting the display to only the most relevant assignments, thus mitigating potential performance issues and enhancing the usability of the People Planner interface.

The default page sizes can be configured in the People Planner Admin Tool.

Visible Period

Where the page size controls how many events or resources to show at a time, the visible period controls the horizontal slice of how many bookings to show. The user can navigate to the previous or the next visible period from the toolbar.

The user can select to show the visible period in Day, Week, Month, or Year view. Each of these have a default visible period.

View	Visible Period	Setting Granularity
Day	1 month	1 month
Week	2 quarters = 26 weeks	1 quarter = 13 weeks
Month	2 years	1 year
Year	5 years	1 year

The size of each visible period can be configured in the People Planner Admin Tool.

Before changing any of the four settings, you should consider how this will impact the performance. Likewise, shortening the visible period could be a means to improve performance.

Layouts

Layouts is the main mechanism to configure how the People Planner Web Components look like. Initially, the layouts controlled what columns to show.

From People Planner 4.5, the web layouts control the following:

What is Saved in a Layout	Effect on performance?
What columns to show	Columns can be added or removed from the Column Chooser dialog.
	By switching to one of the standard layouts, the Available Columns menu is enabled in the column context menu, and it can be used to include additional columns in the Column Chooser.
	When adding new columns from the Available Columns dialog – even if they are only available and not actually displayed – means that the values must be retrieved from the People Planner database and need to be computed. This has the potential to impact the performance negatively, and you should show restraint in carefully decide what columns is needed.
What controls to include in the toolbar	By selecting a standard layout, you can configure what controls to include in the toolbar.
	Before People Planner 4.5, this was mainly useful from usability and does not have any impact on performance.
State of controls in the toolbar	From People Planner 4.5, saving a layout also saves the current state of any of the controls such as if the current view is Day or Month, or what Assignment Filter is selected.
	You can use this, for example, to select the Assignment Filter, and then remove it from the toolbar, before saving the result in a layout.
	This can be used to trim the performance and hide the controls .
Selected display views	Similar to the state of controls in the toolbar, the layout also saves what display view was currently selected.
	Note: Maconomy can also control what display view is selected.
State of the Capacity Pane	Whether the capacity pane is expanded or collapsed is saved with the layout, and when the user selects the layout, this state is reapplied.

Filters on columns

Typically, users employ column filtering to limit the rows displayed. Since this restricts what data to display, it can also be used to improve on performance.

Applying a filter to a column remains effective even if the column is subsequently hidden. This is a technique already utilized by People Planner, which filters out closed projects or blocked resources from view. By adding the **Closed** or **Blocked** columns back into the view, you can observe that these columns have been filtered to exclude rows marked accordingly.

The fact that active filters are saved with a layout means you can leverage this feature to optimize performance. You can introduce a column, apply a filter, and save this configuration as a layout. You can also remove the column before finalizing the saved layout.

> **Note:** People Planner still must fetch the data database in order to filter it. However, People Planner does not spend the resources on displaying the filtered-away data. The means that filtering is not as efficient as using a data limitation.

Available Columns

Since People Planner needs to be able to potentially apply filters to any of the available columns, including those not visible, it retrieves and calculate the values on each of the columns.

For this reason, you should consider carefully before adding new available columns. Simply including a column can adversely affect performance. Do not add any columns that the users are not going to use.

If a column is essential for a particular workflow, Deltek suggests designing a specialized layout that includes this column exclusively. This approach ensures the column is available, when necessary, without burdening other layouts with unnecessary data processing.

Allow Personal Version of Standard Layout

This setting in the People Planner Admin Tool controls whether users are allowed to make their own layouts.

Allowing it is great for usability, but you run the risk that the users inadvertently create layouts that perform subpar. Enabling the setting should therefore be followed with general guidelines for the users.

Miscellaneous

Admin Tool settings

Most of the settings that may have an impact on performance have already been covered above.

Setting	Effect
Allow changing allocated time/amount columns in PG grid	With this setting, you can add the Allocated columns. Instead of entering allocations in individual cells, you can edit directly in the column. This reduces the number of allocations that you need to do.
Allow personal version of standout layout	If you allow this, you potentially risk that individual users create layouts that perform poorly. The setting is discussed in the section on layouts.
Automatically save changes in Web Components	If you disable this setting, the users decides when to save edits.
Hide Capacity pane in Assign Resource [dialog]	Hiding the capacity pane in the Assign Resource dialog ensures that the Web Components does not spend resources on calculations that the user might not find useful. This can streamline the experience of assigning resources.
Hide Capacity pane in Projects	Hiding the capacity pane in the Resourcing Overview ensures that the Web Components does not spend resources on calculations that the user might not find useful.
Resource Capacity Filter Limit	This setting sets an upper limit on how many resources you can sort on in the Required Skills column. When there are many resources, this sorting can take a long time, and the setting avoids this by setting a limit for when it is possible.
Show Months in Day View Show Quarters in Week View Show Years in Month View Show Years in Year View	These settings control how many cells are displayed in the visible period.
Timeout Grouping in RG	The grouping summary in the RG is computationally expensive. This setting sets an upper limit on how long the Web Components will spend before aborting.

Setting	Effect
Default page size for Events in Resourcing Overview	These settings set the default page sizes on various lists or events and resources in the Web Components.
Default page size for Resources in Budgeting Assistant	
Default page size for Resources in Progress Evaluation Assistant	
Default page size for Resources in Resourcing Overview	
Default page size for Resources in Resource Assignment	
Default page size for Resources in Resource Management	
Page Size for Resources in Assign Resource Dialog	
Page Size for Events in Assign Task Dialog	

Maconomy Web Client vs. Maconomy Workspace Client

The People Planner Web Components are either part of the **Maconomy Web Client** or the **Maconomy Workspace Client** (WSC). This means that the performance is also influenced by the choice of browser. Unfortunately, the WSC uses an older browser, and the Web Components generally performs worse than when it is part of the Maconomy Web Client.

Grouping

You can apply grouping where many events or resources are grouped together depending on some shared property. This can even be saved as part of a layout.

Although this adds to the functionality, it also comes with the added performance cost that People Planner then must add values from all the grouped events/resources together to calculate the sum over each group.

Calendars

People Planners calendars are an important component in how the capacity of individual resources is calculated. It is therefore important that the calendars are maintained in an as efficient way as possible.

In older versions of People Planner, you could not import calendars from Maconomy, and it was left to consultants and users to define their own imports. If your system is an old one, you should determine if this is still the case, and switch to using People Planner's own calendar import. Refer to the *People Planner Integration Guide* for further details.

About Deltek

Better software means better projects. Deltek delivers software and information solutions that enable superior levels of project intelligence, management and collaboration. Our industry-focused expertise makes your projects successful and helps you achieve performance that maximizes productivity and revenue. www.deltek.com

Deltek