Deltek

Deltek People Planner 4.2.1

Administration Guide

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Contents

Overview

Deltek People Planner is a proven business application aimed towards providing project-based organizations with consolidated insight into project planning and resourcing. Through an engaging graphical user interface, you can instantly determine where you have available capacity, drill into the detail of existing task allocations, and plan for the future resource needs of your business.

Deltek People Planner can be used by customers large or small, as a standalone application, or integrated with an ERP system; it is also available as part of Deltek's cloud offerings. Out-of-the-box the application comes preconfigured with a mature and powerful integration with Deltek Maconomy, where you can take project management to the next level using resource plans to plan, monitor, and follow up on a project's financial and delivery performance.

The suite of People Planner programs includes the following:

- **People Planner Admin Tool** — A tool that is used to perform the initial setup and maintenance of People Planner.
- **People Planner Windows Application** — Historically, this is sometimes referred to as the People Planner Client; this is the most comprehensive user interface, covering all available business functionality.

  > **Note:** Throughout this guide, the terms "People Planner" and "People Planner application" refer to the Windows-based application unless otherwise noted.

- **People Planner Security Service** — This service is new beginning with Release 3.8.6.

  The People Planner Windows Application uses the Security Service to get information about which People Planner System to connect to.

- **People Planner Web Components** — Also known as the People Planner WSC Components. A Web component that is embedded and integrated into existing workspaces that reside in the Maconomy Workspace Client (WSC). These components enable Maconomy Project Manager and Resource Manger users to access People Planner functions to support their requirements from within Maconomy, with no need for rollout of, and training in, the Windows Application. These are not available to access as Web pages.
- **People Planner MyPlan** — Similar to the People Planner Web Components, but designed for Employees and Resource Managers. This is also available to access as a Web page.
- **People Planner API** — A Web service that is used to integrate People Planner with other applications, including Maconomy.
- **People Planner Outlook Web Service** — A Web service that is used to integrate People Planner with Microsoft® Exchange® and Outlook®.
- **People Planner Outlook AddIn** — An add-in for Outlook. The People Planner Outlook Web Service, the People Planner Service, and this add-in form the components of the integration between People Planner and Exchange/Outlook.
- **People Planner Service** — A Windows service that is responsible for scheduling tasks.

Content and Scope of this Guide

The following table describes the information that this guide provides.

Section	Content
Overview	This section.
System Architecture	A helicopter view of the architecture of a People Planner installation.
Installation and Update	See the *Deltek People Planner Technical Installation Guide* for general information about how to install the People Planner software and perform the basic configuration. The section in this document about installation and update covers some special situations that are not already described in the Technical Installation Guide.
Admin Tool and People Planner Settings	You use the People Planner Admin Tool for setup and maintenance. This tool enables you to create and maintain the People Planner database, add People Planner users, and create the configuration files that the People Planner applications use.
Roles and Privileges	See the *Deltek People Planner Fundamentals Guide* for information about how to work with roles and privileges in People Planner. This section describes some of the specific privileges.
Authentication	See the *Deltek People Planner Technical Installation Guide* and the *Deltek People Planner Integrations Guide* for descriptions of how to choose authentication methods in the People Planner applications.
People Planner in the Cloud	This section describes how you can configure the People Planner software in the cloud. It also describes how this impacts performance. The focus of this section is primarily on the People Planner Windows Application and the database.
Best Practices for Performance and Perspectives	The way that you set up perspectives can affect performance. This section describes best practices for configuring a view before saving the result in a perspective. This section is only relevant to the People Planner Windows Application.
Using the 1HourDemo Database	Using the People Planner Admin Tool, you can create a demo database, for example to use in a

Section	Content
	sales demonstration. This section describes how to create this database. You can find related documentation about how to present this demo on Kona in the **People Planner | Consulting & PSM** space, under **Documents » Product Management » 3.7**.

System Architecture

Depending on your organization's needs as identified in the sales process and in the initial phases of implementation, a discussion and decision should have been completed to determine which components of People Planner the different roles in your organization will use.

If you are rolling out People Planner as an integrated part of Project Management via Maconomy, the recommended solution is to use the newest People Planner Web Components and MyPlan to most effectively support the business processes related to your individual Resources or Employees, Project Managers, and Resource Managers.

The Windows Application is primarily used for Administration; however, if you use it as a standalone, integrated with a third-party ERP system, or based on other specific requirements, Resource Managers and Project Managers can also use it, although this adds complexity and increases maintenance.

Warning: Normally all People Planner installations require the Windows Application, because most of the administration and maintenance of data resides in that application.

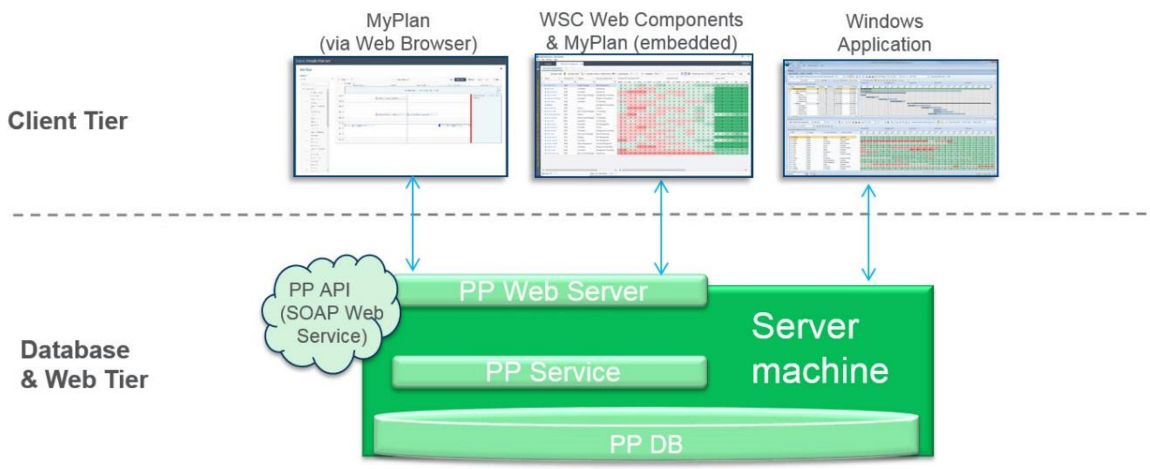
Technology

People Planner is a Microsoft .NET application.

People Planner uses Microsoft's SQL Server for data storage and communicates directly with this from the application.

When configured with a Web-based application interface, this is handled by the Internet Information Server (IIS).

The following illustration is for a setup where the IIS Web Server and the SQL Server have been installed on the same physical machine. The SQL Server hosts the People Planner database, and the Web Server hosts the People Planner Web applications, that is, the People Planner API Web service, the MyPlan Web application, and the People Planner WSC Web Components. The People Planner Windows Service is installed on the same machine so that it is close to the People Planner database, which it imports data into.



This can then be accessed from the Client Tier:

- The People Planner Windows Application accesses the SQL Server directly.
- MyPlan can be called directly from a browser, or
- MyPlan and the People Planner WSC Web Components can be embedded in the Maconomy Workspace Client.

While People Planner can operate as a standalone solution, it typically interacts with the following external systems:

- **ERP** — Projects are usually created in the ERP system, such as Deltek Maconomy, where they are assigned appropriate metadata (project number and so on). The project's baseline budget is also established there. After the project and the baseline budget are created in the ERP back end, they can be copied into the People Planner database, so that the resource management workflow can begin (resource assignments and so on). People Planner can retrieve the information from the ERP system by reading a CSV/XLS file generated by that system, or via direct SQL access to the ERP database. Both of these methods can run on a scheduled basis via a scheduler tool.

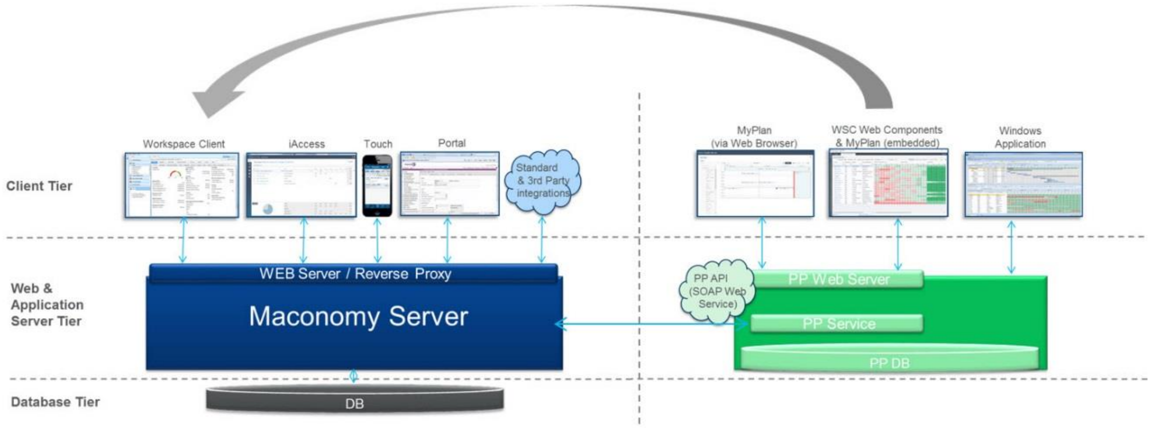
  People Planner can also deliver information back to the ERP system, such as budget updates, changes to project completion dates, and so on.

  > **Note:** The People Planner Web Components are intended to be embedded in the Maconomy Workspace Client (WSC) and cannot be used alone. MyPlan can either be embedded in the WSC or used directly from a browser.

- **Microsoft Exchange** — When People Planner is integrated with Exchange, users can see People Planner bookings (made by the Project Managers) in their Outlook appointments. The integration with Exchange is done via the EWS Exchange Web Service.
- **Microsoft Excel** — People Planner can export data to Excel for further manipulation.
- **Microsoft Project** – People Planner can export a project to a Microsoft Project-compatible file and also import Microsoft Project files as new People Planner projects.
- **BI** — People Planner can deliver data to a business intelligence (BI) system for further analysis. This is typically done on a database level.

The most important integration is the integration with Maconomy. The People Planner database and Web Server can be installed on the same server as the Maconomy-system, or they can be installed on separate hardware.

This illustration shows the setup where they have been installed on separate servers:



In this setup:

1. People Planner calls the MaconomyWS and the Maconomy RESTful Web services to import data from Maconomy, for example, jobs/projects, budgets, and master data such as users and customers.
2. Maconomy calls the People Planner API Web service to import data from People Planner, such as periodic budgets. Maconomy also calls the People Planner API when you click the Send Job to People Planner button in the WSC.
3. MyPlan and the People Planner WSC Web Components are embedded in the Maconomy WSC.

> **Tip:** The People Planner integration with Maconomy is described in detail in the *Deltek People Planner Integrations Guide*.

Compatibility Matrix

Information about platform requirements (as well as supported Maconomy versions) is maintained in the Deltek Product Support Compatibility Matrix, located on the Deltek Customer Care Connect Site.

In the Matrix, search on “People Planner” to quickly navigate to the information that you need.

Internal Link

https://home.deltek.com/sites/products/Documents/DeltekProductSupportCompatibilityMatrix.pdf

External Link – Deltek Customer Care Connect

https://deltek.custhelp.com/app/answers/detail/a_id/38499

Deltek Maconomy Family Supported Products

You can find important announcements, such as products that are being desupported or are not certified, in addition to supported products information in the Deltek Maconomy Family Supported Products document.

Deltek Collaboration Link

https://collaborate.deltekfirst.com/#!/projects/65917/current/forum_topics/3209605/comments

In this Collaboration conversation, click the (Files) tab at the left side and locate the file DeltekMaconomyFamilyProductSupport.pdf.

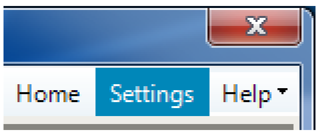
DSM

This document is also included as part of the release download in the Deltek Software Manager (DSM).

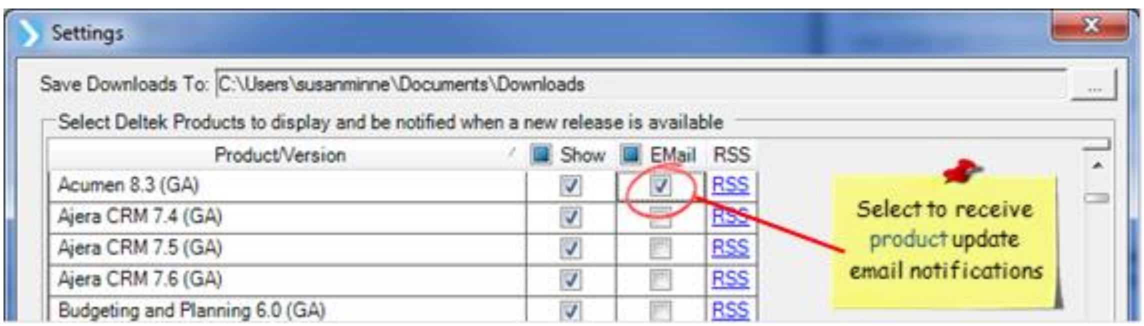
You can subscribe to a product in DSM so that you get an email every time an update is posted. You must subscribe to each version for which you want to receive email notifications. For example, you would subscribe separately to People Planner 3.8 and People Planner 3.9 to receive email notifications for both versions of the product.

To subscribe to a product in Deltek Software Manager (DSM):

1. Log in to DSM.
2. Click **Settings** in the top right corner of the window.



3. Scroll down to the product and version for which you want notifications and select the **EMail** check box.



4. Click **OK**.

When an update is posted, you will receive an email with the product name and release details and a Download link that launches Deltek Software Manager with the release preselected.

Unsupported Configurations

The People Planner installation does not support installing any People Planner components on any of the following servers:

- Domain Controller
- Microsoft Exchange Server
- Proxy, Firewall, or ISA Server
- Microsoft SharePoint Portal Server
- Any Small Business/Essential Business Server

Using these servers can cause significant issues in the performance, reliability, and functionality of the People Planner application and the other applications on your network.

Installation and Update

See the *Deltek People Planner Technical Installation Guide* for general information on how to install the People Planner software and perform the basic setup.

This section covers some of the special situations that are not described in the Technical Installation Guide.

Update an Existing People Planner Database

Updating an existing People Planner system is in many ways far easier than a new installation. This is because most of the settings from the existing system can be reused as-is. You only need to run the installers and update the People Planner database.

If you want to start using features that are introduced with the new version of People Planner, you set up the settings that are related to those new features. However, you do not usually need to change any of the existing settings.

Sometimes you do need to change some of the existing settings. In these cases, the database update handles this automatically, and you do not usually need to concern yourself with this. In the few cases where you need to make a manual choice, you are prompted for further action.

Warning: Before you start upgrading a People Planner server solution, you should back up the current database. Use the backup feature provided by the database application.

If you are running People Planner version 3.1 SP1 or newer, you can upgrade directly to version 3.8.5 using the Admin Tool.

To upgrade a People Planner database:

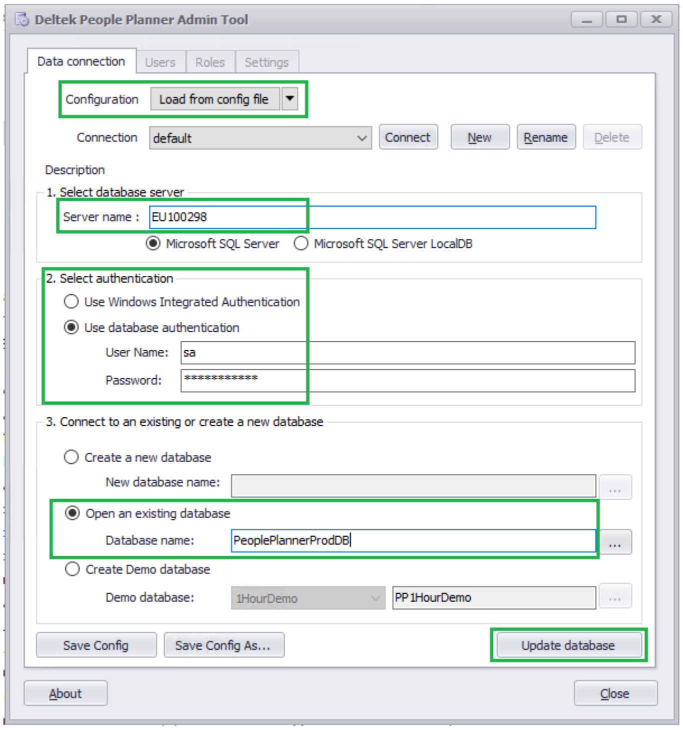
- Open the People Planner Admin Tool and go to the **Data connection** tab.
- Click the **Load from config file** button.
- Navigate to the latest version of the **DataConnection.xml** file and load it.
- In the **Select database server** group, verify the value of the **Server name** field and that **Microsoft SQL Server** is selected.
- In the **Select authentication group**, verify that **Use Windows Integrated Authentication** is selected.

  Note: To use **Windows Integrated Authentication**, you must have privileges to alter the database—that is, to create tables and indexes—rather than just rights to read and write to the database.

  Alternatively, you can log in as a database user who has db_owner membership for the database.

- In the **Connect to an existing or create a new database** group, verify that **Open an existing database** is selected, and that the value of the **Database name** field is the name of the correct database.
- Click the **Update database** button.

The following figure shows an example.



Database Updates and Connection String Conflicts

Tip: This section is only relevant if you update from a People Planner database that is older than Release 3.6.

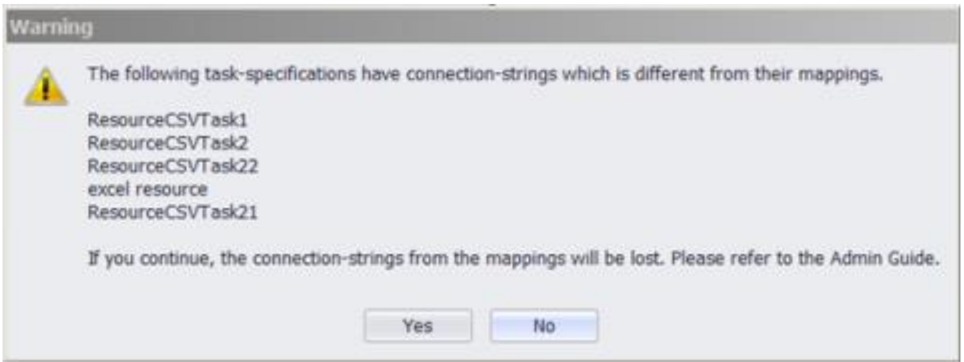
In People Planner 3.6, import mappings and task specifications were streamlined. Before Release 3.6, both the import mappings and the task specifications could have a connection string, and they could be different from each other. This could cause a conflict.

If you have any task specifications whose connection strings are different from the import mapping connection strings, when you update a database to People Planner 3.6 or later, the following occurs:

- If you have multiple task specifications that link to one import mapping, and the connection strings from those task specifications are **not** the same, the update process stops. A message like the following Unresolvable Conflict dialog box is displayed.

You must manually resolve the conflicts among connection strings and then continue the database update.

- After you have resolved those conflicts, the database update process next checks whether the connection string for each task specification is always the same as the connection string for its associated import mapping. If that is **not** the case, a message like the following Warning dialog box is displayed.



You must decide whether to continue or to stop the update. If you click **Yes** to continue, all of the import mappings' connection strings are replaced by the connection strings of their associated task specifications.

Update an Existing Side-By-Side Installation

Beginning with People Planner Release 3.7, you can do a side-by-side installation for the People Planner Windows Application, the Admin Tool, and the People Planner Service. A side-by-side installation installs a new version of People Planner without overwriting the existing installation(s).

Instructions for creating a side-by-side installation are provided in the *Deltek People Planner Technical Installation Guide*.

If you want to update an existing side-by-side installation, you follow the procedure described in the Technical Installation Guide as well. You have the following basic options:

- You can install a new version of People Planner side-by-side with the already installed versions, adding the new version to the existing ones.
- You can replace all of the existing installations with the new installation, replacing all of the previous ones.

However, you cannot update just one of the People Planner versions in a side-by-side installation and keep the other versions in a side-by-side installation.

When installing:

- A side-by-side installation is a standard People Planner installation; there is no need to treat it as a special version.
- An update installation (that is, Overwrite the existing installation(s)) uninstalls all existing versions.

You can uninstall one of the versions in an existing side-by-side installation. To uninstall a specific version, use the installer for that version and choose to uninstall. Alternatively, you can uninstall the version from the Windows Programs and Features window.

Limitations to Side-by-Side Installation

- You cannot install the same version of People Planner twice on the same computer. That is, you can only perform a side-by side installation on the same computer for different versions of People Planner.
- You can only install one MyPlan version. You cannot install a new version of MyPlan using a side-by-side installation.

- You must configure MyPlan to connect to the correct database, and it will not connect to the database of a different version.

  The same holds true for the other People Planner Web applications, such as the People Planner Web Components.

1. You can only have a full integration between Maconomy and one of the People Planner installations. Other People Planner installations can only import data from Maconomy.
2. You can only integrate with one Exchange server.

Update MyPlan from a People Planner Version prior to 3.6.1

You can run MyPlan directly in the browser, as well as embedded in the Maconomy Workspace Client (WSC) and in the Maconomy Portal.

Because of this, there is a need to support different configurations:

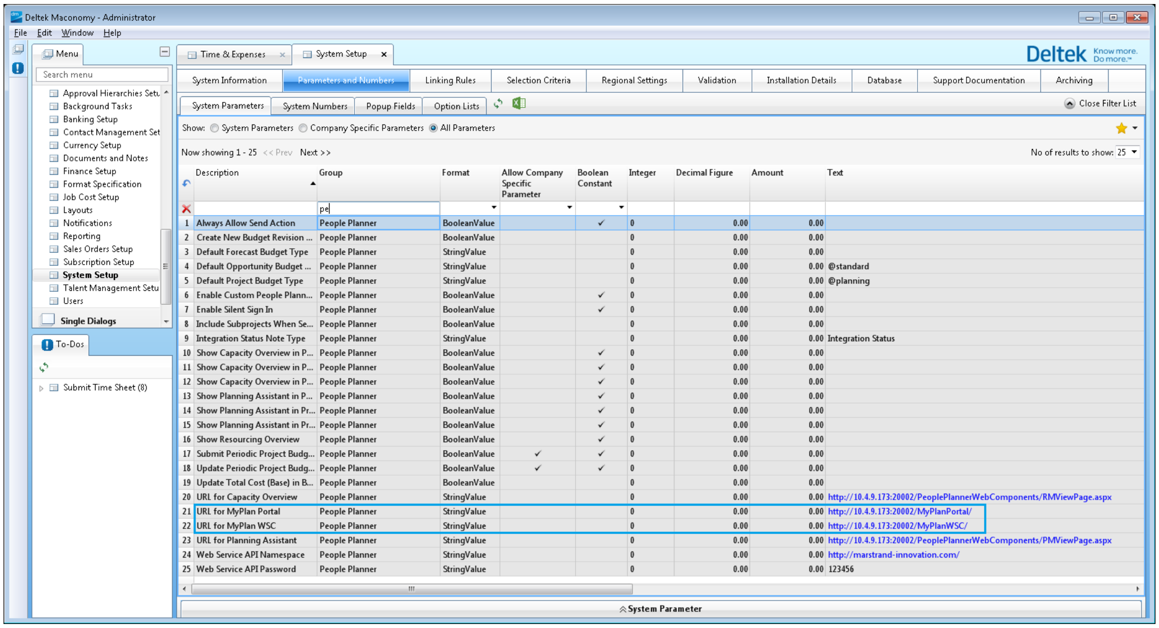
- To use different types of authentication on the IIS—that is, Windows Authentication when running MyPlan from the browser, and Anonymous Authentication when running it embedded in the WSC.
- To skin each version differently—for example, to make MyPlan embedded in the WSC appear like the rest of the WSC, and to Make MyPlan running in the browser look like the iAccess application.

For this reason, there are three versions of MyPlan: MyPlan, MyPlanWSC, and MyPlanPortal.

The MyPlanWSC and MyPlanPortal URLs were introduced with People Planner 3.6.1.

Before that version, the only URL was the original MyPlan URL. Although this URL still works, it is now intended specifically for use when running MyPlan directly from the browser. This makes it unsuited for running MyPlan embedded in the WSC or in the Portal, because it is themed to look like iAccess.

If you update People Planner, including MyPlan, on a system that was running a version prior to People Planner 3.6.1, you should therefore update the URL in the WSC and the Portal from the old MyPlan URL to the new URLs, MyPlanWSC and MyPlanPortal, respectively.



Embed MyPlan in the Maconomy Portal

> **Note:** See the *Deltek People Planner Integrations Guide* for information about how to embed MyPlan in the Maconomy Workspace Client.

If People Planner MyPlan is installed, you can add it to the Maconomy Portal.

To add MyPlan to the Maconomy Portal:

1. Using a Maconomy client (Windows or Java, but not the Portal), create a group called **PeoplePlannerUser**.
2. Make the users members of the group. The name of the role should be **PeoplePlannerUser**.
3. Log in to the Maconomy Portal, open the Portal Designer, and create an External Source with the following link: http://server:port/MyPlanPortal/.
4. Name the Portal Component **Link::PeoplePlanner::MyPlan**.
5. Create a menu called **People Planner**.
6. Change the **PeoplePlannerUser** role and assign **Link::PeoplePlanner::MyPlan** to the role.
7. Add **Link::PeoplePlanner::MyPlan** to the People Planner menu.

All of the users in the PeoplePlannerUser group should now have the Portal menu **People Planner » MyPlan**.

Customize MyPlan

You can customize MyPlan to change its layout.

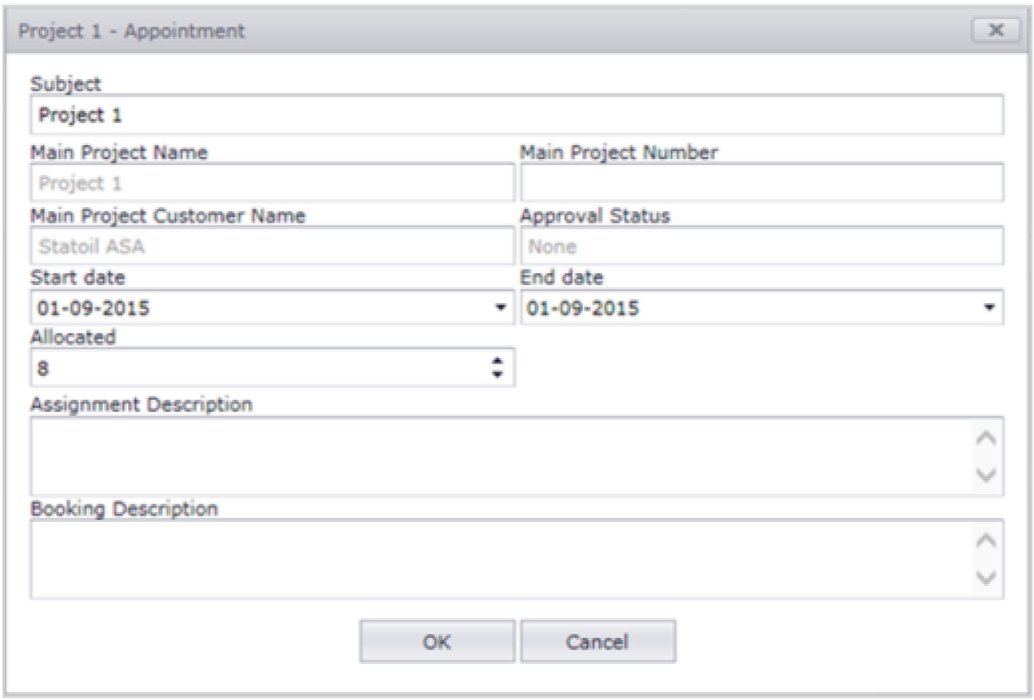
Customize the Layout of the MyPlan Appointment Form

MyPlan Management is a tool that you can use to define a customized layout for the MyPlan Appointment form if you are an administrator. You can customize the default layout controls and rearrange the controls.

To create a customized layout for the MyPlan Appointment form:

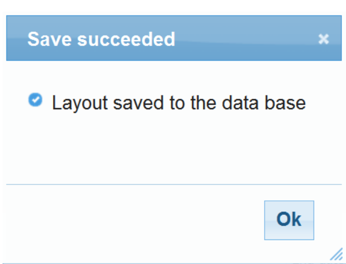
1. Navigate to **/MyPlan/MyPlanManagement/default.aspx**.

   The following figure shows the default layout of the MyPlan Appointment form.

2. Drag and drop controls to customize the layout.
3. After you complete the layout, click **Save layout**.

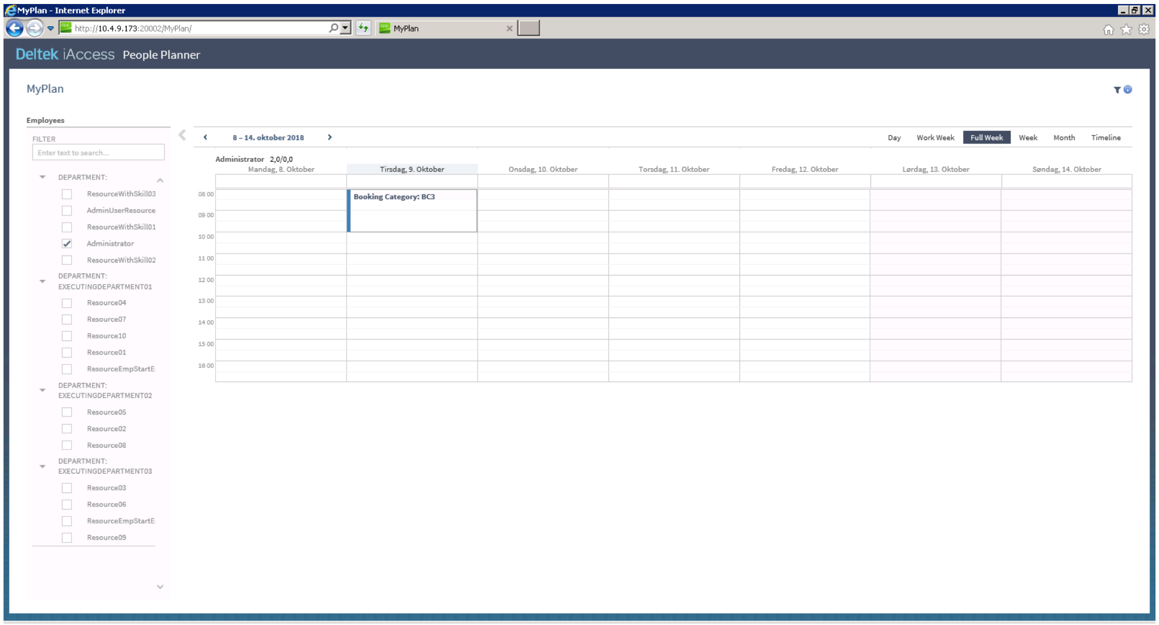
   The following message is displayed when the save succeeds.

4. Click **Ok**.

Customize the Title of a Booking in MyPlan

You can configure the titles of bookings shown in MyPlan—for example, to add the Booking Category field.

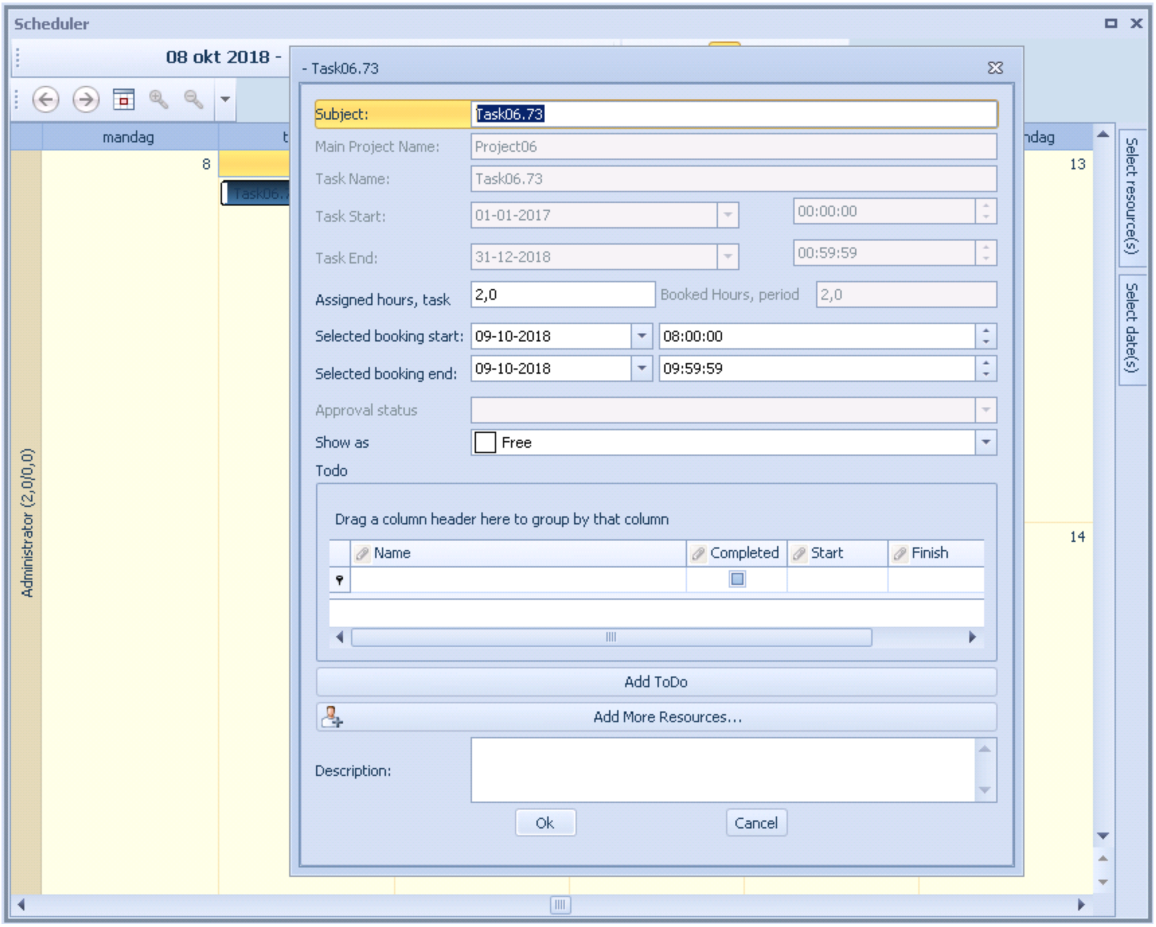


MyPlan and the Scheduler are closely related, and the method by which you configure MyPlan is to edit the Scheduler and save it as a perspective.

To edit how bookings are displayed in MyPlan:

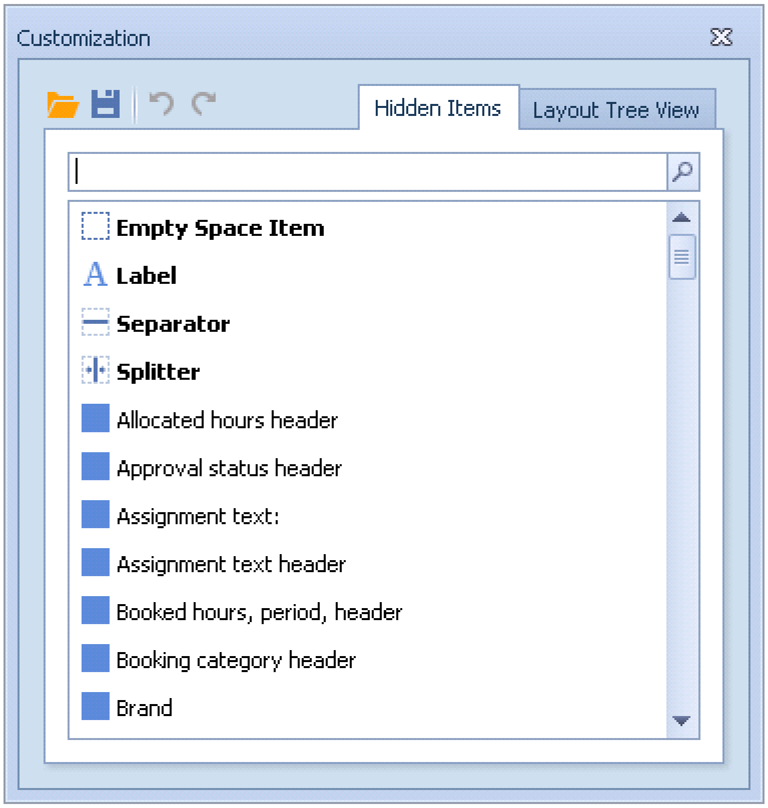
- Open the Scheduler.

- Open an existing booking.

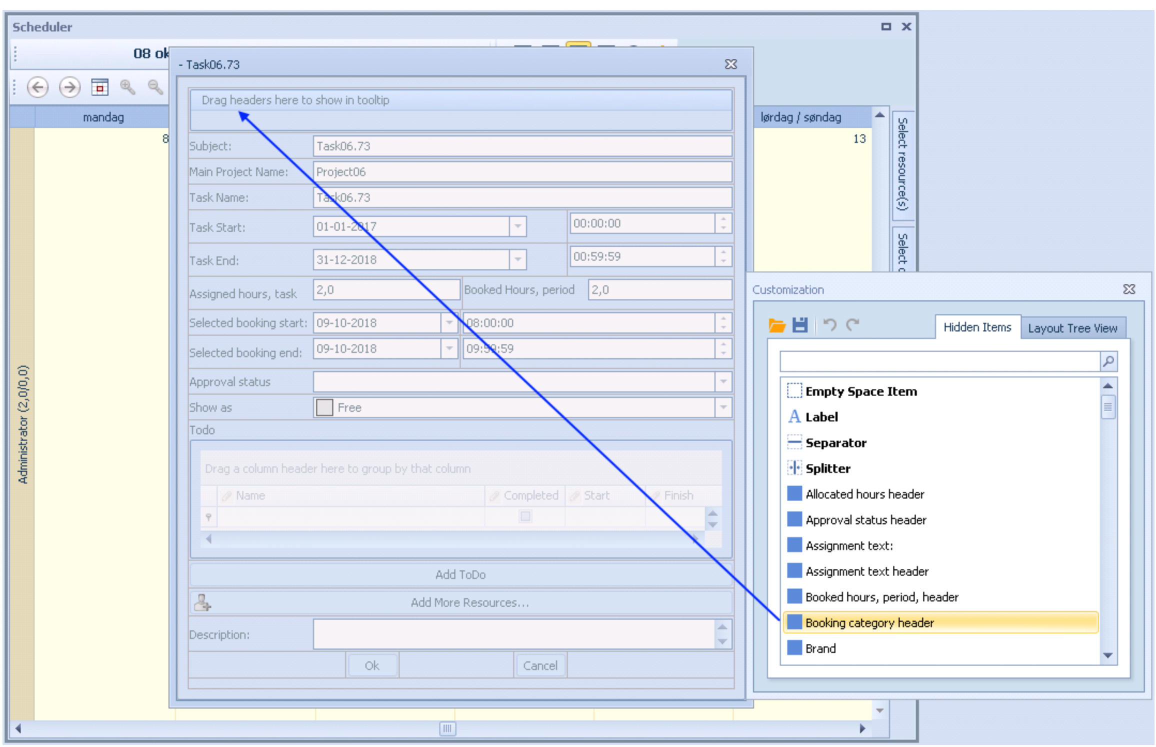


- Right-click anywhere on the booking to open the shortcut-menu.

- Select **Customize Layouts** from the menu. This opens the Customization dialog.



- Drag headers from the Customization dialog to the area named **Drag headers here to show in tooltip**.



- Close the Customization dialog.
- Click **Ok** to save the booking. Although the booking itself has not been modified, its layout has been.
- Save the edits as a perspective.

The next time that you open MyPlan, it will have the changed layout. You can only have a single Scheduler-perspective that controls MyPlan in this way.

Configure the MyPlan Date and Time Format

You can configure the date and time format that is displayed when you create a booking or request leave in MyPlan.

This enables you to display dates and times in the international date and time format that is configured in your browser.

To configure the date and time format:

1. Locate the MyPlan **Web.Config** file on the MyPlan Web server. It is usually located at C:\inetpub\People Planner MyPlan\Web.Config.
2. In the **Web.Config file**, change:

   ```
   <globalization culture="en-GB" uiCulture="en-GB"/>
   ```

   to

   ```
   <globalization culture="auto" uiCulture="auto"/>
   ```

   The date and time format should now follow the preferred browser settings.

Admin Tool and People Planner Settings

The People Planner Admin Tool is where you perform most of the administrative tasks related to maintaining a People Planner system.

The Admin Tool has four main sections (tabs), as described in the following table.

Section / Tab	Description
Data Connection	Use this section to set up the DataConnection.xml file to enable People Planner to connect to its database. See the *Deltek People Planner Technical Installation Guide* for more information about how to do this.
Users	Use this section to add special users to the People Planner database—for example, adding yourself as an Administrator. However, you typically add users by importing them through the Master Data Import. See the *Deltek People Planner Integrations Guide* for information about how to do this.
Roles	Use this section to import and export roles.
Settings	Use this section to edit People Planner settings, including the setting to integrate it with external systems such as Maconomy.

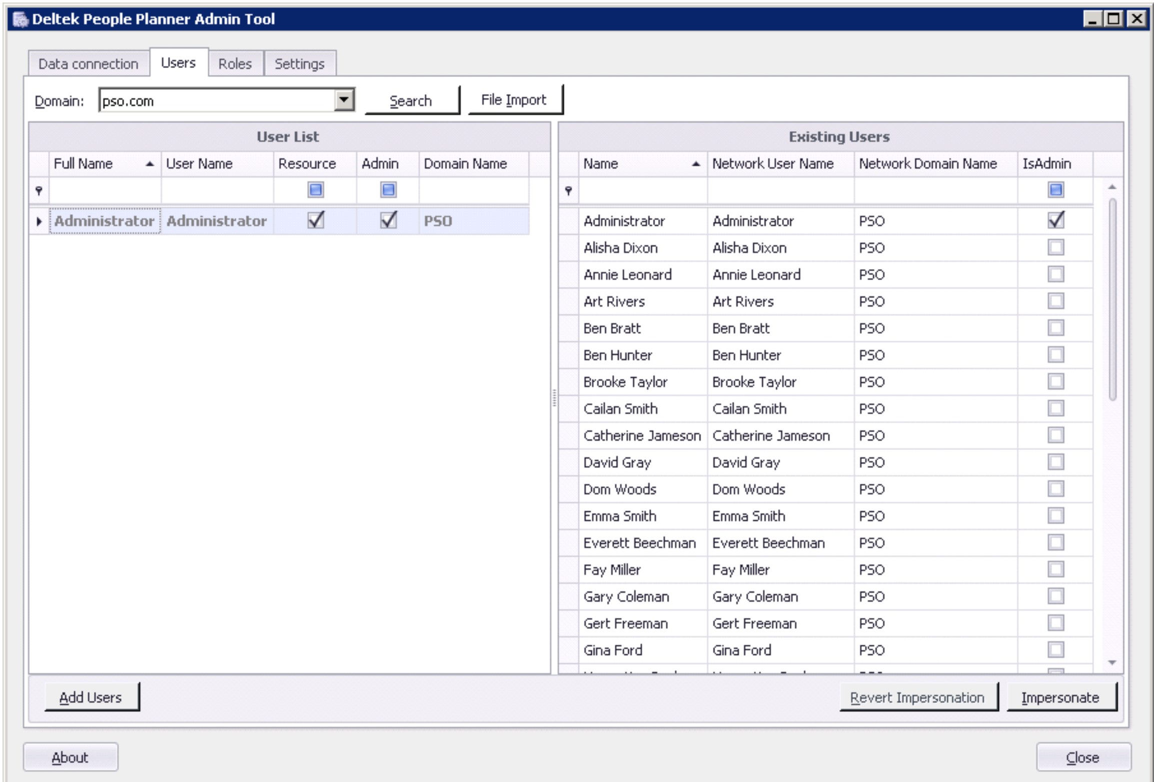
Add People Planner Users

You can import users into a People Planner system in various ways. The *Deltek People Planner Integrations Guide* describes how to import users from a Maconomy system. If instead you need to import users from an Active Directory or import them from a CSV-file, you can do this using the Admin Tool.

To add users using the Admin Tool:

1. On the computer where you installed the Admin Tool, navigate to **Program Files (x86) » Deltek » People Planner Admin Tool**.
2. Start the Admin Tool.
3. On the **Data Connection tab**, click the **Load from config file** button and select the **DataConnection.xml** file in the installation directory of the People Planner Windows Application folder.
4. In the **Select authentication** group box, select **Use database authentication** and enter the **User Name** and **Password** of the admin user that you used when you created the database.
5. In the **Connect to an existing or create a new database** group box, select **Open an existing database** and select the database.
6. Click **Connect** to connect to the database.

7. Click the **Users** tab to add users.



There are two ways to add users:

1. Search the Active Directory.
2. Import from a .csv file.

To add users from the Active Directory:

- On the Users tab, select the domain.
- Click the **Search** button.
- Select the user you want to add on the left side.
- Click the **Add Users** button to add the users.

The user is moved to the user list on the right.

If you selected the **Resource** check box, the user is also added as a resource in People Planner.

To add users from a .csv file:

> **Note:** The .csv file must have the following fields as a minimum:
> <full name>;<network user name>;<network domain name>;<generate resource>
> for example:
> John Doe;johndoe;domain1;TRUE
> Jane Row;janeroe;domain1;FALSE
>
> The delimiter must be a semicolon. The file can have any name.

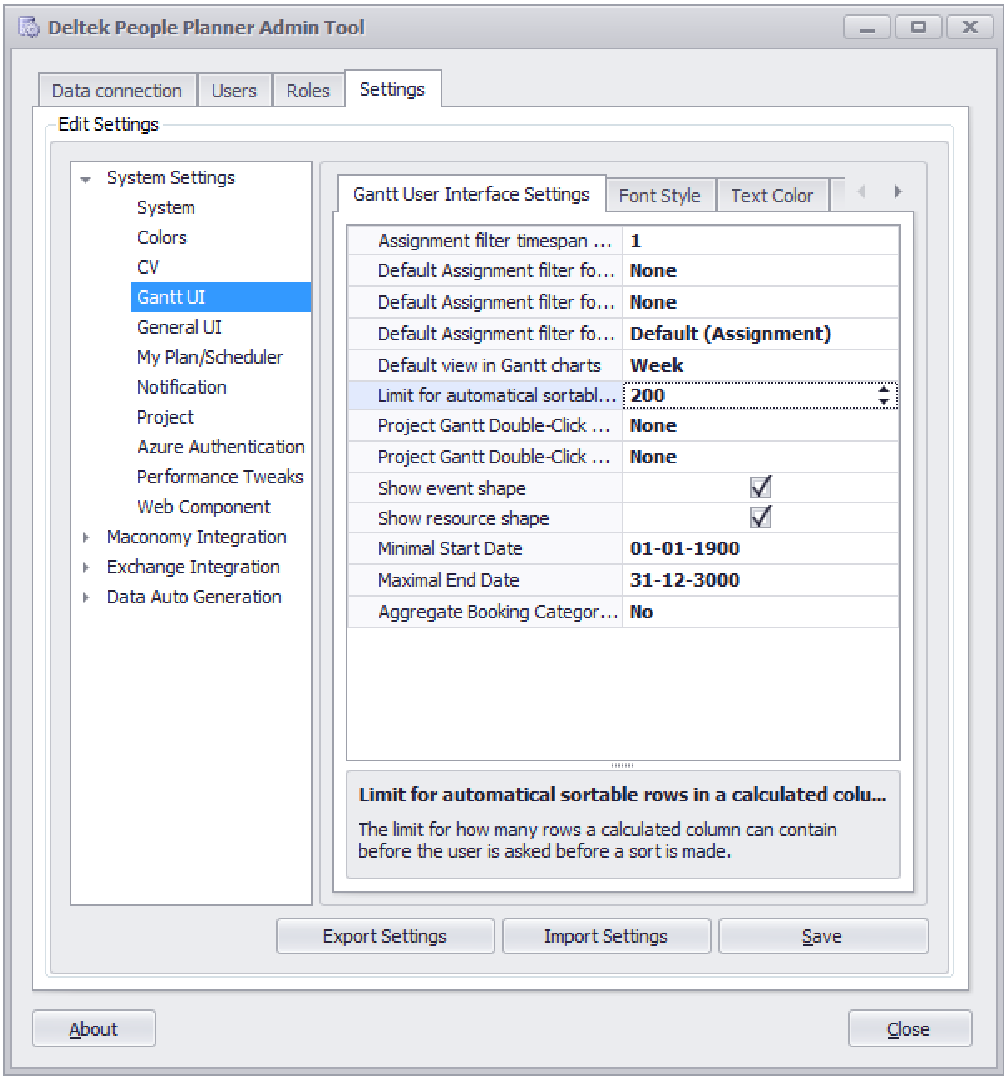
1. On the Users tab, click the **File Import** button.
2. Select the file in the standard file dialog.

   The users from the file are displayed in the list on the left.
3. Select the user you want to add on the left side. You can select multiple users.
4. Click the **Add Users** button to add the users.

   You add the users as regular users without roles and later assign roles in People Planner. A confirmation dialog is displayed when the users have been added.
5. Close the Admin Tool and open People Planner (as the user with the Admin role).
6. Open the Resources window and confirm that the users who were added in the Admin Tool *as resources* are in the list.
7. Open the Users view (under Security) to confirm that the other users from the file have also been added (but not as resources).

People Planner Settings

People Planner has a number of settings that you can use to customize its behavior. You access these settings through the Admin Tool, on the Settings tab.

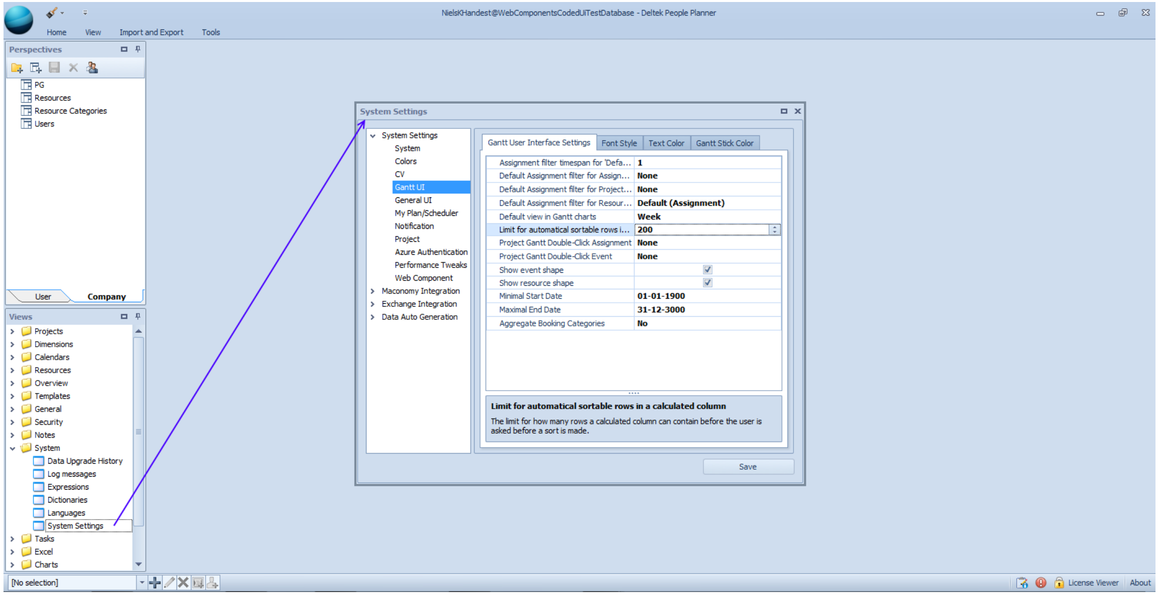


The description of the selected setting is displayed in the box near the bottom of the Settings pane.

Note: The .csv file must have the following fields as a minimum:
<full name>;<network user name>;<network domain name>;<generate resource>
for example:
John Doe;johndoe;domain1;TRUE
Jane Row;janeroe;domain1;FALSE

The delimiter must be a semicolon. The file can have any name.

You can also view these settings inside the People Planner Windows Application by navigating to **Views » System » System Settings**.



You can change some of the settings in the Windows Application. Most settings, however, are read-only in the Windows Application, and you can only set them in the Admin Tool.

To change a People Planner setting in the Admin Tool:

1. Open the Admin Tool.
2. On the Data Connection tab, click the **Load from config file** button, and select the **DataConnection.xml** file in the installation directory of the People Planner Windows Application folder.
3. Click **Connect** and connect to the People Planner database.

   The Users, Roles, and Settings tabs are enabled when you are successfully connected to a valid database.
4. Click the **Settings** tab.
5. Navigate to the setting whose value you want to change.
6. Enter or change the value.
7. Click **Save**.
8. Click **Close** to close the Admin Tool if appropriate.

The settings are organized into four main categories:

- System Setup
- Maconomy Integration
- Exchange Integration
- Data Auto Generation

System Setup » System

This section contains key settings for how the People Planner system should function, for example, where the license file is stored, or what the smallest plannable time unit is.

This section also includes settings that enable you to configure whether the system should use UPN for the user authentication. See User Authentication for more information.

Setting: First Day of Week

By default, People Planner assumes that each week starts with Monday. However, some customers may need the week defined to start on another day, such as Sunday or Saturday.

Use this setting to configure which day on which the week should start.

Setting: MyPlan Use Maconomy SSO

From People Planner 3.9.2 CU2, People Planner supports OAuth2 and OpenId Connect (OIDC) for the stand-alone MyPlan.

To enable OIDC for MyPlan:

1. Select the setting **My Plan Use Maconomy SSO**.
2. Ensure that the Maconomy RESTful URL is configured.
3. Ensure Maconomy is configured for Maconomy generic third-party SSO.

See OIDC Authentication for more information on the OIDC setup.

System Setup » Colors

These settings determine how booking cells should be colored, for example, what color to use when a resource is overbooked.

System Setup » CV

These settings control which file-types can be accepted as part of a resource's CV (Curriculum Vitae).

System Setup » Gantt UI

These settings control how the Gant-bars function and appear.

These settings are organized on four tabs as the following table describes.

Tab	Description
Gantt User Interface Settings	General functionality for Gantt-charts, for example the time span to use with the default assignment filter, or what should happen when a user double-clicks an event.
Font Style	The font style used for event and resource names—that is, whether they should be styled in bold text.
Text Color	The colors used for event and resource names. The default is black.
Gantt Stick Color	The colors used for the different types of Gantt bars.

Setting: Limit for Automatic Sortable Rows in a Calculated Column

You can sort on calculated columns in any of the Gantt views, including detailed views. This includes both custom and standard calculated columns.

However, this sorting requires that all of the column values are calculated before the sort is performed, which can result in a long response time before you see the sorted results. You can limit the maximum number of rows for which the required calculation time represents an acceptable wait time.

If the number of rows involved in the requested sort is fewer than the limit that you set, the values are calculated synchronously, sorted, and displayed. If the number of rows involved in the requested sort is greater than the limit that you set, People Planner asks you to confirm that you want all of the values in the column to be calculated. You can confirm the sort request or choose not to wait for the calculations and sort to be performed. In the latter case, People Planner displays the information without performing the calculations or the sort.

To limit the number of rows for sorting a calculated column:

1. Navigate to the **Admin Tool » Settings » System Settings » Gant UI** section and click the **Gantt User Interface Settings** tab.
2. In the **Limit for automatic sortable rows in a calculated column** field, use the up- or down-arrow to choose the maximum number of rows.

   The default maximum number of rows is 200. You can set this value to any number between 1 and 10,000.
3. Click **Save**.

Settings: Project Gantt Double-Click Assignments/Events

You can configure the functionality that is provided when you double-click in certain areas of the Project Gantt chart (PG).

> **Note:** The double-click behavior is also described in the *Deltek People Planner Fundaments Guide* under **Show Information**.

Use the Admin Tool to set the values of the settings **Project Gantt Double-Click Assignment** and **Project Gantt-Double-Click Event**.

To configure Double-Click Assignment and Double-Click Event in the PG:

1. Navigate to the **Admin Tool » Settings » System Settings »Gantt UI** section and click the **Gantt User Interface Settings** tab.
2. In the **Project Gantt Double-Click Assignment** field, select a value from the drop-down list.

   For new installations, the default value is **None**. Otherwise, the default value is **Go to earliest date**.
3. In the **Project Gantt Double-Click Event** field, select a value from the drop-down list.

   For new installations, the default value is **None**. Otherwise, the default value is **Show information**.
4. Click **Save**.

System Setup » General UI

These settings control more general UI functionality, such as how many decimals should be used to display bookings.

System Setup » MyPlan/Scheduler

These settings control general functionality and the appearance of MyPlan and the Scheduler.

System Setup » Notification

When a scheduled task fails, you can set up the system to send an email. Use this section to configure this.

System Setup » Project

Key settings that affect the behavior of projects—for example if is it mandatory that a project has both a customer and a company, or should a project also be settled when it is closed.

Setting: Avoid Assignments on Projects and Summary Lines

By default, People Planner allows you to plan directly at the project level and on any summation level of a project; that is, you can assign resources and book them, as well.

This is not compatible with Maconomy; in Maconomy, you cannot assign employees or employee categories directly on the job or on a sum/text budget line.

You can enforce the same restrictions in People Planner by selecting the **Avoid Assignments on Projects and Summary Lines** check box.

When this check box is selected, you cannot assign resources on either the project or any summation lines.

> **Note:** There may already be existing assigned resources on either a project or a summation line in the People Planner database. For example, this could happen if you update from an older version of People Planner where the setting did not exist.
>
> Another situation where this could happen is when assignments are created automatically as part of an actuals import. See the *Deltek People Planner Integrations Guide* for more information about actuals imports.

If there are existing assignments, and the origin of the project is "Maconomy," the setting prevents you from making bookings on these assignments.

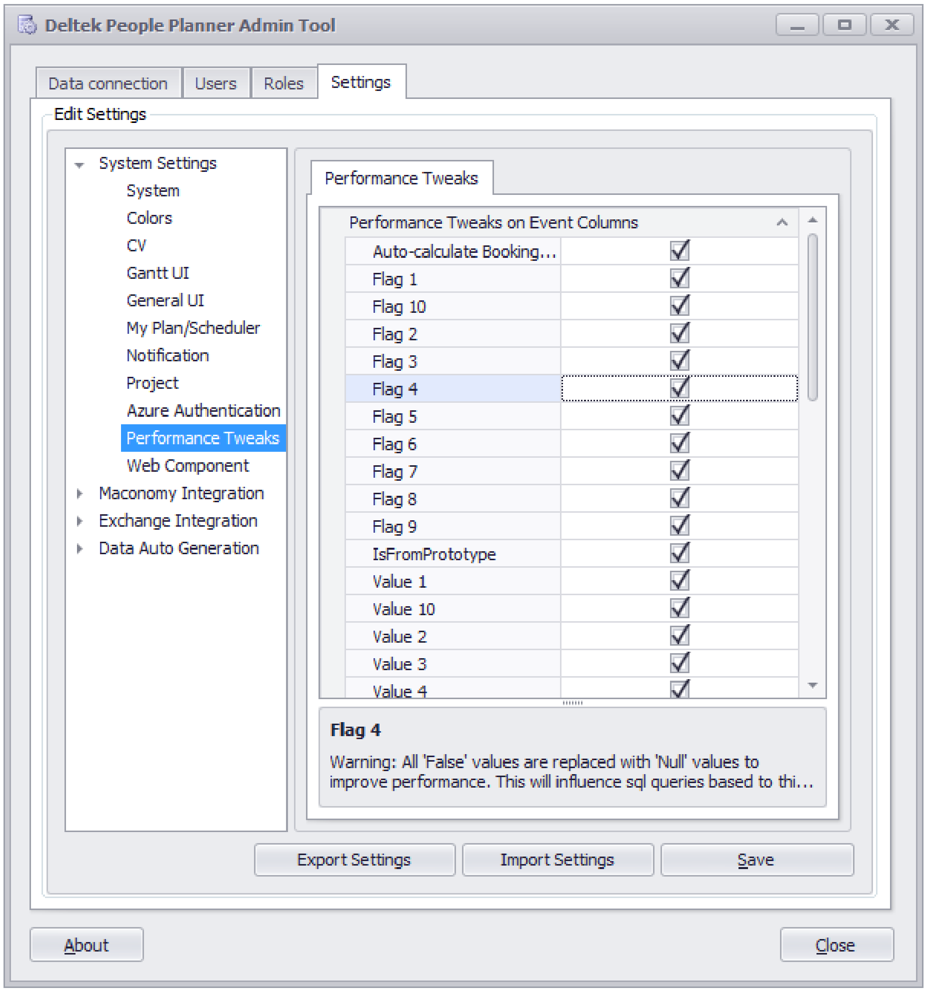
This setting was introduced in People Planner 3.8.6. The default value is off for a new People Planner database.

System Setup » Azure Authentication

See Azure Authentication.

System Setup » Performance Tweaks

These settings enable you to configure how specific data is saved in the People Planner database.



As part of the performance improvements introduced in People Planner 3.6.1 and in People Planner 3.8, the way in which numbers and check boxes are stored in the People Planner database is changed. You can now choose whether to store 0 (zero) values, empty strings, and false values as null values, instead.

When you enable a column for performance tweaking, the default value is changed to being represented by a null. There are three types of columns that this may apply to, as shown in the following table.

Type of Column	Tweak = Off (Use the "Empty Value")	Tweak = On (Use Null Value)
Number	0	null
String	""	null
Boolean/flag	false	null

For rows that contain values other than the empty value, the data remains the same in the database.

When working with data from a performance-tweaked column in the People Planner user interface (UI), it makes no difference to a user whether the column contains empty values or null values. The null values are for all purposes treated as the default values for the type of column.

The use of performance tweaks significantly reduces network traffic; this improves performance. Null values are more efficient to transfer than 0, "", or flags.

The more rows in the columns with empty fields, the more is gained from using the performance tweak.

The only situation where the actual representation of null values makes a difference is when the columns are used in import mappings. There it matters whether you expect to import nulls or zeros. If you have customized SQL scripts that use some of these columns for calculations, those scripts might not work, or in the worst case, they might return wrong values when null is returned instead of 0.

> **Tip:** If you do not use import mappings, be sure to select all of the check boxes in the Performance Tweaks tab in the Admin Tool Settings.

Performance tweaking is supported for the columns shown in the following table.

	Column Name
Events	Value1 – Value10
	Flag1 – Flag10
	Auto-calculate Booking Hours
	IsFromPrototype
Resources	Value1 – Value10
	Flag1 – Flag10
Assignments	IsFromPrototype

When you toggle a column's check box, the database is updated, and the column's value is changed from 0 to null or back again, depending on whether you select the check box or you deselect it.

To ensure the best possible performance, in the Performance Tweaks tab you should select all of the columns that can safely use null instead of 0/false and click Save.

In People Planner 3.6.1 CU04

The performance tweaks were first introduced in People Planner Release 3.6.1.

As the default in that release, all of the performance tweaks were disabled, both for new databases and for existing databases. This was done to ensure backward compatibility with earlier releases.

To get the benefit from the performance tweaks, you needed to go through the manual process of selecting which fields in People Planner to set the tweak on.

In People Planner 3.8

When a system is upgraded to People Planner 3.8, and it is detected that none of the tweaks are selected, it is assumed that no one has done this manual selection of columns to optimize on. When this is the case, the People Planner Admin Tool applies the optimization itself.

As part of the upgrade, all columns that are available for performance tweaks are examined. If a column contains the default value only, the performance tweak is activated for that column.

It is still a good idea to manually go through the columns, and if they are not used in import mappings, activate the performance tweak. If any tweaks are selected by the upgrade, but you plan to use the columns in import mappings, you can remove the tweak setting.

System Setup » Web Component

These settings control general functionality and the appearance of the People Planner WSC Web Components.

Enable Auto-Save in Web Components

You can enable the auto-save setting in the Web Components to ensure that your changes are reflected in the system without having to click the **Save** action. Select the **Automatically save changes in Web Components** check box to use this feature.

This setting automatically saves changes when you edit the following:

- PG main grid – **From** and **To** columns
- PG/RG detail grids – **Assignment Text** column
- PG/RG details Gantt - Bookings

Note that this saves changes each time a cell is edited and will affect the system's response time. When this is enabled, the **Save** and **Undo** buttons in the toolbar are hidden.

Maconomy Integration » General

The settings in the General section are divided into four subsections as described in the following table.

Section	Description
MaconomyWS	Settings used for calling the MaconomyWS Web service. This Web service is used, for example, for importing master data from Maconomy into People Planner.
REST API	Settings used for calling the Maconomy RESTful Web service. People Planner uses this Web service for newer types of imports, for example, for importing absences or calendars.
General	Settings that controls how the combined People Planner and Maconomy work. These settings are mostly relevant where People Planner is embedded in the Maconomy WSC.
Silent Sign In	Settings that control the People Planner Silent Sign In functionality.
Project Manager Substititutes	Settings used for providing project manager access to Maconomy employees assigned as substitute project managers.

MaconomyWS

The *Deltek People Planner Technical Installation Guide* describes how to set up the call from People Planner to the MaconomyWS Web service. The *Deltek People Planner Integrations Guide* provides more details on how this works.

REST API

The *Deltek People Planner Technical Installation Guide* describes how to set up the call from People Planner to the Maconomy RESTful Web service. The *Deltek People Planner Integrations Guide* provides more details on how this works.

General

This section controls how data is logged in People Planner. This includes logging web service messages and results when importing data from Maconomy.

For more details about the log web service, see the *Deltek People Planer Integrations Guide.*

Silent Sign In

The People Planner SI functionality ensures that you can log in to the Maconomy WSC and from there access the embedded People Planner Web Components without having to log in to People Planner as well.

The *Deltek People Planner Technical Installation Guide* describes how to set up the People Planner SSI on both the People Planner and the Maconomy sides of the integration. The *Deltek People Planner Integrations Guide* provides more details on how SSI works.

Project Manager Substitutes

This setting provides project manager access to employees who have been assigned as substitute project managers on a job imported from Maconomy. They are given the same privileges as the project manager for that specific project.

> **Note:** Project manager privileges are enforced on a project level, which means this applies to all tasks under the project. If an employee is a substitute project manager on the project, they can also edit any task, even if they are not set for each individual task.

Maconomy Integration » Master Data

This section controls how master data is imported from Maconomy into People Planner. See the *Deltek People Planner Integrations Guide* for more details about importing Master Data from Maconomy.

The settings of the Master Data section are organized under two tabs as described in the following table.

Tab	Description
Task Type Parameters	These settings are shared among every Task Specification that imports Master Data.
Default Local Parameters	When you create a Task Specification to import Master Data, these parameters are used to set the defaults. You can then edit

Tab	Description
	the Task Speciation where you want something other than the default.

Maconomy Integration » Actuals

This section controls how actuals, that is, time registrations, are imported from Maconomy. See the *Deltek People Planner Integrations Guide* for more details about importing Actuals.

Maconomy Integration » Projects

Importing projects from Maconomy is described in detail in the *Deltek People Planner Integrations Guide*, including the descriptions of the settings that relate to this.

These settings are organized on two tabs, as described in the following table.

Table	Descriptions
Task Type Parameters	These settings are shared among every Task Specification that imports projects.
Default Local Parameters	When you create a Task Specification for importing projects, these parameters are used to set the defaults. You can then edit the Task Specification where you want something other than the default.

Setting: Allow Deletion of Tasks with Planning

You can enable the deletion of budget lines that no longer exist in Maconomy as part of a project import from Maconomy to People Planner by using the **Allow deletion of tasks with planning** task type parameter.

If this parameter is selected, budget lines that no longer exist in Maconomy are deleted from People Planner, even if they contain planning information that was created in People Planner.

Warning: If the **Allow deletion of tasks with planning** task type parameter is selected, and no corresponding budget line exists in Maconomy, the tasks and summary lines are deleted during any project import, even if the task or summary line has assignments or allocations, such as planned hours, that were created in People Planner.

When this information is deleted, it is lost, and the deletion cannot be undone.

If you do not select this parameter, the default behavior is to delete only those budget lines that do not have planning information.

To enable the deletion of budget lines that no longer exist in Maconomy during a project import:

1. Navigate to the **Admin Tool » Settings » Maconomy Integration » Projects** section and click the **Task Type Parameters** tab.
2. Select the **Allow Deletion of Tasks with Planning** check box.
3. Click **Save**.

Setting: Delete Project if Deleted in Maconomy

With this setting, projects are automatically deleted in People Planner when they are deleted in Maconomy.

When—and only when—you have selected the **Delete Project if Deleted in Maconomy** check box, you get access to a new Task Specification type, **Delete Projects Deleted (and Optionally Closed)**. You can use this to set up a scheduled task that performs the actual deletions of the projects in People Planner.

Setting: Delete Project if Closed in Maconomy (After Period)

The option to automatically delete projects from People Planner when they are closed in Maconomy is useful to avoid the accumulation of a large number of projects in People Planner over time.

This functionality deletes all project history, including all planning, and you cannot restore that history later. However, you can specify that a period of time after the project was closed in Maconomy must elapse before the project is deleted from People Planner.

> **Note:** This setting is only enabled if you also select the **Delete Project if Deleted in Maconomy** check box. If you do not select that setting, the value of the **Delete Project if Closed in Maconomy (After Period)** setting is always **Never**.

To enable Delete Project if Closed in Maconomy (After Period):

1. Navigate to the **Admin Tool » Settings » Maconomy Integration » Projects** section and click the **Task Type Parameters** tab.
2. Select the **Delete Project if Deleted in Maconomy** check box.
3. Select one of the options in the **Delete Project if Closed in Maconomy (After Period)** dropdown menu.

   You can choose from the following values for the “after period”:

   - Never
   - Immediately
   - 1 week
   - 1 month
   - 3 months
   - 6 months
   - 1 year
   - 3 years

   The default value is Never, which means that projects are not deleted—even if they are closed in Maconomy. This is the normal behavior before People Planner 3.8, where this setting was introduced.

   If the Delete Project if Closed in Maconomy (After Period) value is set to anything other than Never, and you click Save, the following warning is displayed:

   > Warning: The setting Delete project if closed in Maconomy (after period) will permanently delete ALL project data for all relevant jobs.

4. Click **Yes** to confirm that you want to continue, or click **No** to cancel.
5. Click **Save**.

After you have set selected the setting, you must set up a scheduled task to do the actual deletion of the projects. See the **Delete Project if Deleted in Maconomy** setting for information about how to do this.

The "after period" that you specify for the Delete Project if Closed in Maconomy (After Period) is relative to a project's close date. Depending on when the task is executed, the project might not be deleted exactly after the specified period; thus, the specified period is the earliest time when the project will be deleted.

For example, if you close a project in Maconomy on January 31, and you select the Delete Project if Closed in Maconomy (After Period) setting, and you set the After Period value to 3 months, the project will be deleted from People Planner the first time that the Delete Projects Deleted (and Optionally Closed) in Maconomy task is executed on or after May 1.

The **Delete Project if Closed in Maconomy (After Period)** setting has no dependency on the **Allow Deletion of Task with Planning** setting. Closed projects that have planning are deleted regardless of whether or not you selected the Allow Deletion of Task with Planning setting.

Set the Import Project Default Parameters

Using the Admin Tool, you can set default values for the import project local parameters that are used by the **Update from Maconomy** button in the Project Gantt (PG) and the default parameters that are used in the Import Project view.

You can set default values for these parameters:

1. **Budget type** — Choose a budget type from the drop-down list. The drop-down values are those that have been imported via Master Data import. If no Master Data import has been performed, the drop-down list is empty.

   If you reimport budget types through a Master Data import that no longer contains the budget type that was specified as the default value here, the Master Data import creates a warning in the log file so that you can update the default value to a valid value.

   The value that you set here has no effect when you create import project task specifications or when you use the **Update from Maconomy** button.

2. **Include sub projects** — Select this check box to include sub-projects. The value that you set here is used as the default value when tasks are created in People Planner and via the **Update from Maconomy** button in the Project Gantt and main tool bar.
3. **Use dates from Maconomy** — Select this check box to use dates from Maconomy. The value that you set here is used as the default value when tasks are created in People Planner. However, the **Update from Maconomy** button does not use this setting.

To set import project default parameters:

1. Navigate to the **Admin Tool » Settings » Maconomy Integration » Projects » Default Local Parameters** tab.
2. Select the appropriate setting for the parameter(s) as described in the preceding section.
3. Click **Save**.

Set an Imported Project as Read-Only

Using the Admin Tool, you can set default values to determine whether a project imported from Maconomy should be read-only for all users. You can set up a job in Maconomy as read-only using a Customer Pop-Up or Boolean field before it is imported to People Planner, or you can set this up manually in People Planner for each job.

> **Note:** This setting overrides all other privileges to edit projects, even when the user is a project manager or project manager substitute.

You can set default values for these parameters:

- **Value of field to denote that the project is not editable** – Select one of the following options from the drop-down list:
  - **None** – Choose this option if you do not want to enable the read-only functionality.
  - **Customer PopUp 1-5** – Select the field used in Maconomy to determine whether this project should be read-only.
  - **Boolean 1-5** – Select the field used in Maconomy to determine whether this project should be read-only.
- **Text value of field to denote that the project is not editable** – This field is enabled only when you select a Customer PopUp 1-5 field in the **Value of field to denote that the project is not editable** parameter. If the value of this field is the same as the Customer Popup 1-5 fields on the project from Maconomy, it should be read-only.
- **Boolean value of field to denote that the project is not editable** – This field is enabled only when you select a Boolean 1-5 field in the **Value of field to denote that the project is not editable** parameter. Select this check box to enable the read-only functionality. If the value of this field is the same as the Boolean 1-5 fields on the project from Maconomy, it should be read-only.

To enable the read-only functionality on a project:

1. Navigate to **Admin Tool » Settings » Maconomy Integration » Projects » Task Type Parameters**.
2. Select the appropriate setting for the parameter(s) as described in the preceding section.
3. Click **Save**.

Exchange Integration » General

These settings affect the configuration of the integration between People Planner and Exchange/Outlook. See the *Deltek People Planner Technical Installation Guide* and the *Deltek People Planner Integrations Guide* for more details about how to install and configure this integration.

Data Auto Generation » Performance Data

These settings are used for generating big test databases that are used for evaluating performance.

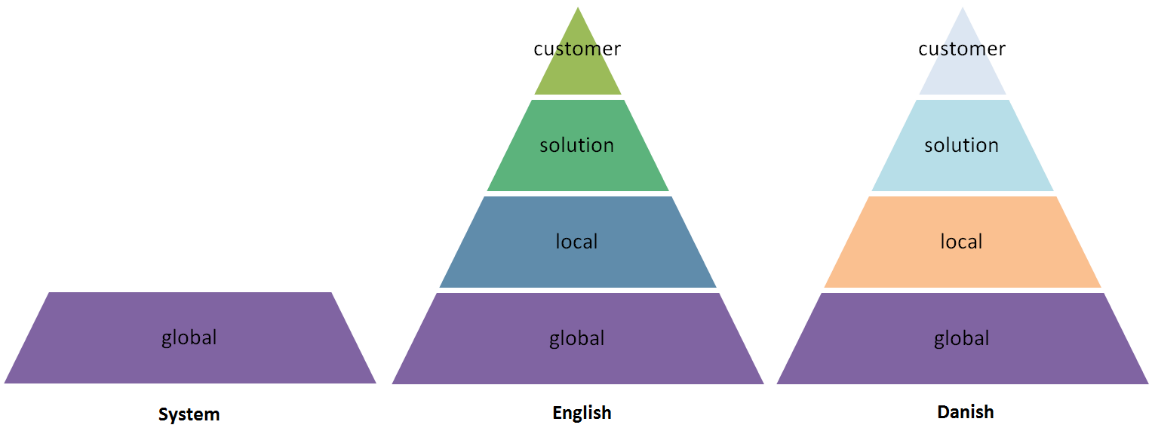
Data Auto Generation » Demo Data

See Using the 1HourDemo Database.

Translation

The text that is shown in the People Planner user interface (UI) is built using four types of dictionaries to satisfy different customers, language, and phrase requirements. Note that the phrase “translation” refers to substituting one text with another. This includes both substituting an English text with a local language text, but also substituting an English phrase/text with another English phrase/text.

By default, People Planner only contains the System (English) language. The System language contains only one pre-built global dictionary, whereas all user-defined languages contain all four dictionaries:

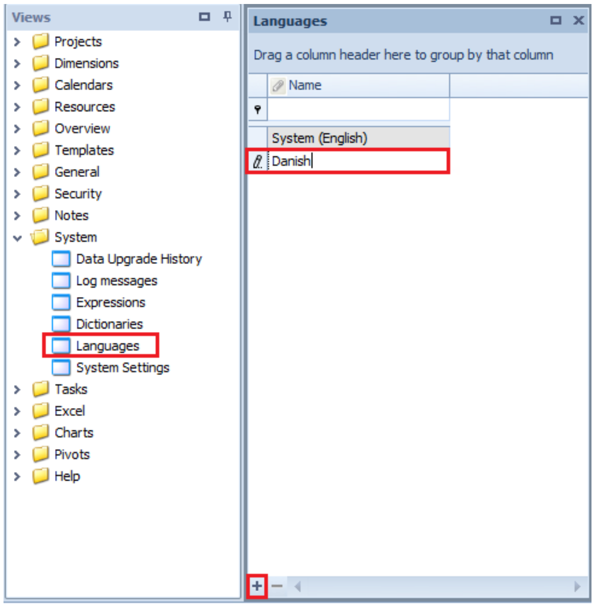


As indicated in the hierarchy shown in the preceding figure, texts are used in the following dictionary order: Custom, Solution, Local, and Global. For example, if a text exists in the customer dictionary, this takes priority over the other dictionaries, and so forth.

People Planner languages/texts are maintained using the People Planner Windows Application views System » Languages and System » Dictionaries.

Languages

Before starting the translation process, you must first create a language. You do this using the People Planner Windows Application System/Languages view. Click the **+** at the bottom to create a language and give it a name:



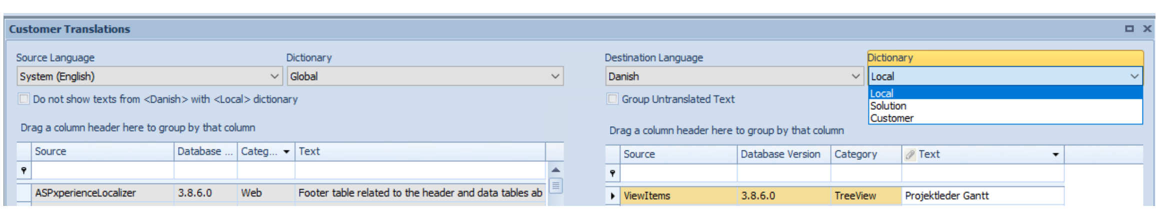
When the language has been created, use the System » Dictionaries view (described in the following section) to translate/change the text.

Dictionaries

People Planner supports four types of dictionaries: Custom, Solution, Local, and Global.

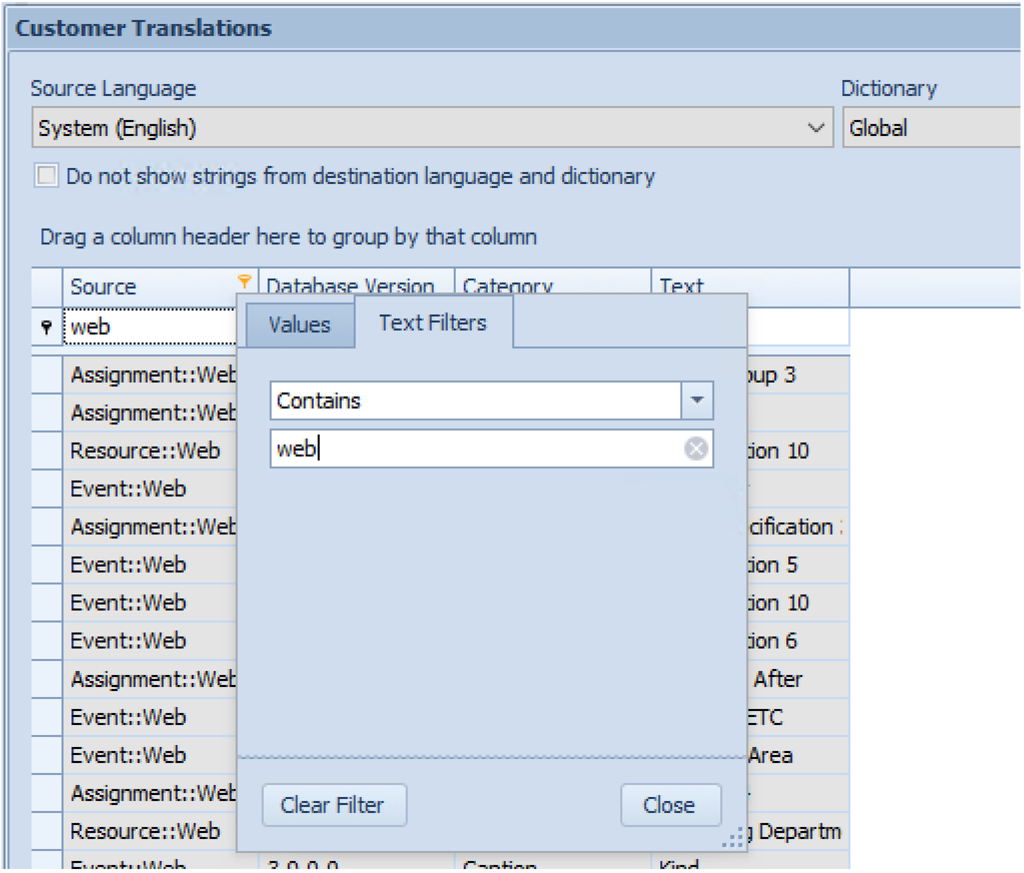
Dictionary	Use
Custom	Used for translations/phrases that are specific to individual customers.
Solution	Used for translations that are specific to an industry—for example, terms used in an Engineering firm, Accounting firm, and so on.
Local	Used for translating English text to a local language.
Global	Used for the list of all translatable texts.

The System » Dictionaries View is divided into two parts: the left side shows the source for the translation, and the right side shows the destination.



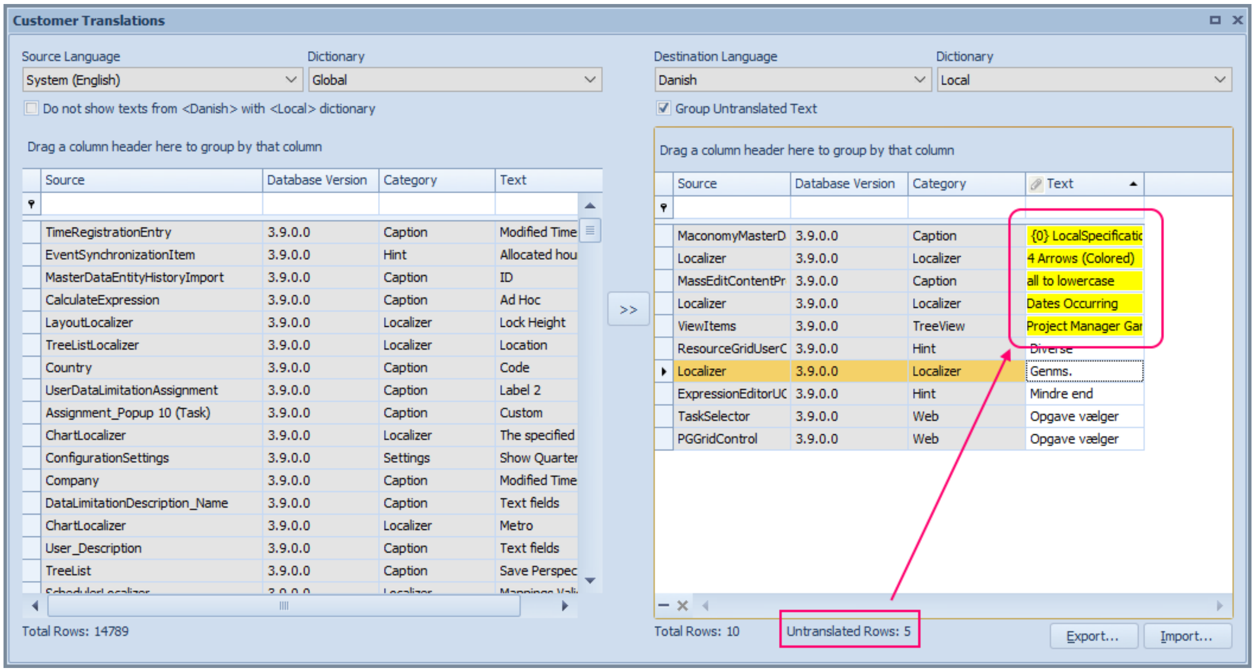
Normally, the source is the System (English) language – Global dictionary, but if you already have another language/dictionary you can use that as the source instead. For example, if you already have Spanish and want to create Portuguese, it might be easier to use Spanish as source.

When you have selected the source and destination language/dictionary, you can select the texts from the source (left-hand side) that needs to be translated. You can use the filter to easily find the text that you want to translate. For example, filter in the Text column to find the original text that you need to translate or filter in the Source column to find all text in a specific area. By default the filter uses “Begin with” for filtering, but you can change this by clicking the pin in the right-hand side of the header. For example, to find all text from the Web Components you can filter the Source column for sources that contain “web” as the following figure shows.



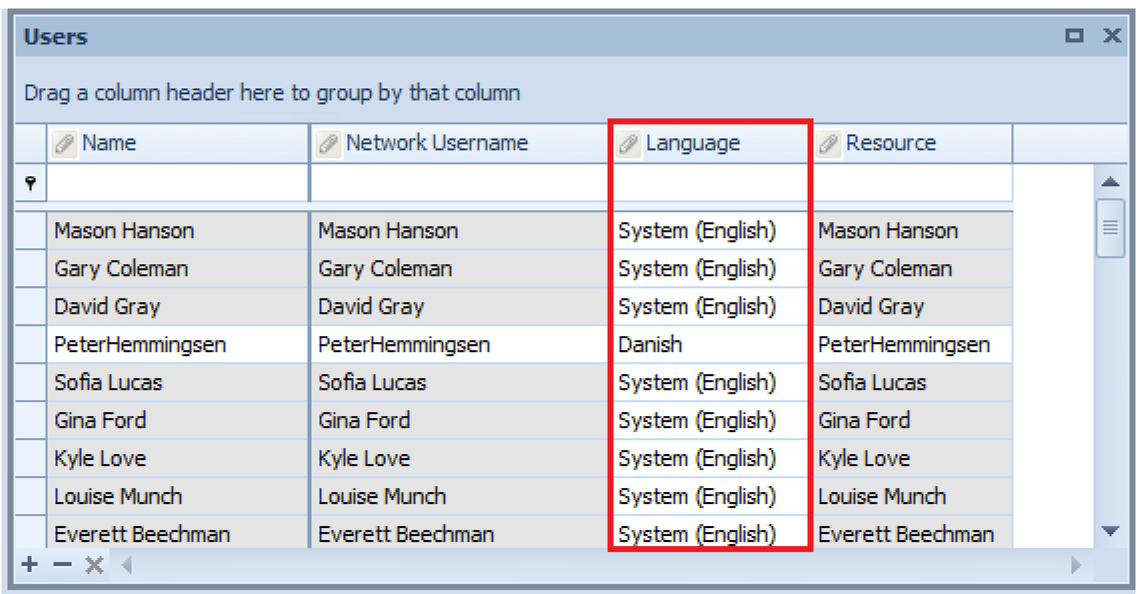
Note: For a new translation to take effect, you must restart the client that is displaying the text. For example, if text for the Web Component is translated, you must restart the Web Components web site.

You can hold down the Shift or Ctrl key to multi-select text, and Ctrl-A to select all text. When you have selected the text, click the **>>** button to copy it to the destination (right-hand side). To remove the text from the destination (that is, if the text should not be translated) selected the line(s) and click the Delete button. The text in the destination is highlighted (yellow) until it has been translated.



You can either translate the text directly in the UI or export all text using the **Export…** button, translate using your favorite tool, and then use the **Import…** button to import the translated text.

Finally, use the Security/Users View to specify each user's language.



Roles and Privileges

You control what a user has access to in People Planner though the Roles to which you assign the user.

The *Deltek People Planner Fundamentals Guide* includes a description of how to work with Roles in People Planner. However, in that guide the focus is on combining Roles with Data Limitations.

Edit Role

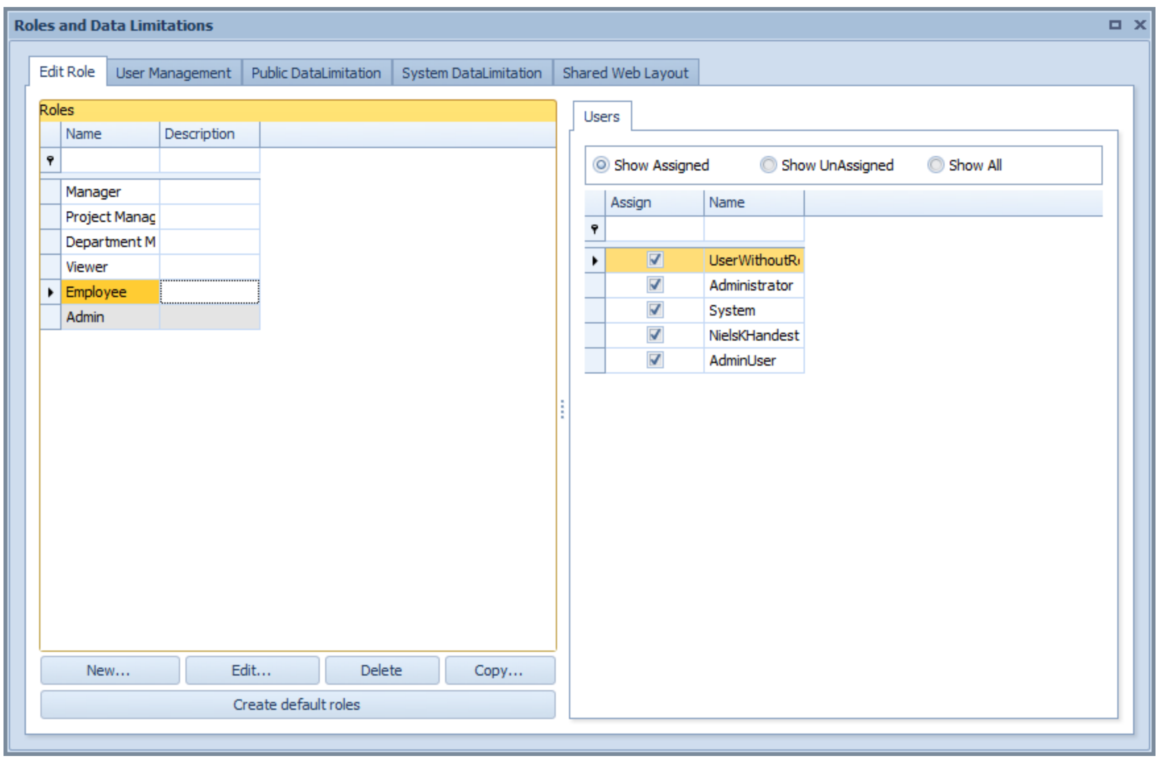
You can edit a role for different purposes:

- Edit the privileges of the role.
- Associate the role with one or more public data limitations.
- Associate the role with one system data limitation.
- Associate the role with one or more Web layouts.
- Assign the role to users.

The way in which you define data limitations is described in the *Deltek People Planner Fundamentals Guide*; it is not be described here. This description only covers how you associate data limitations with a role.

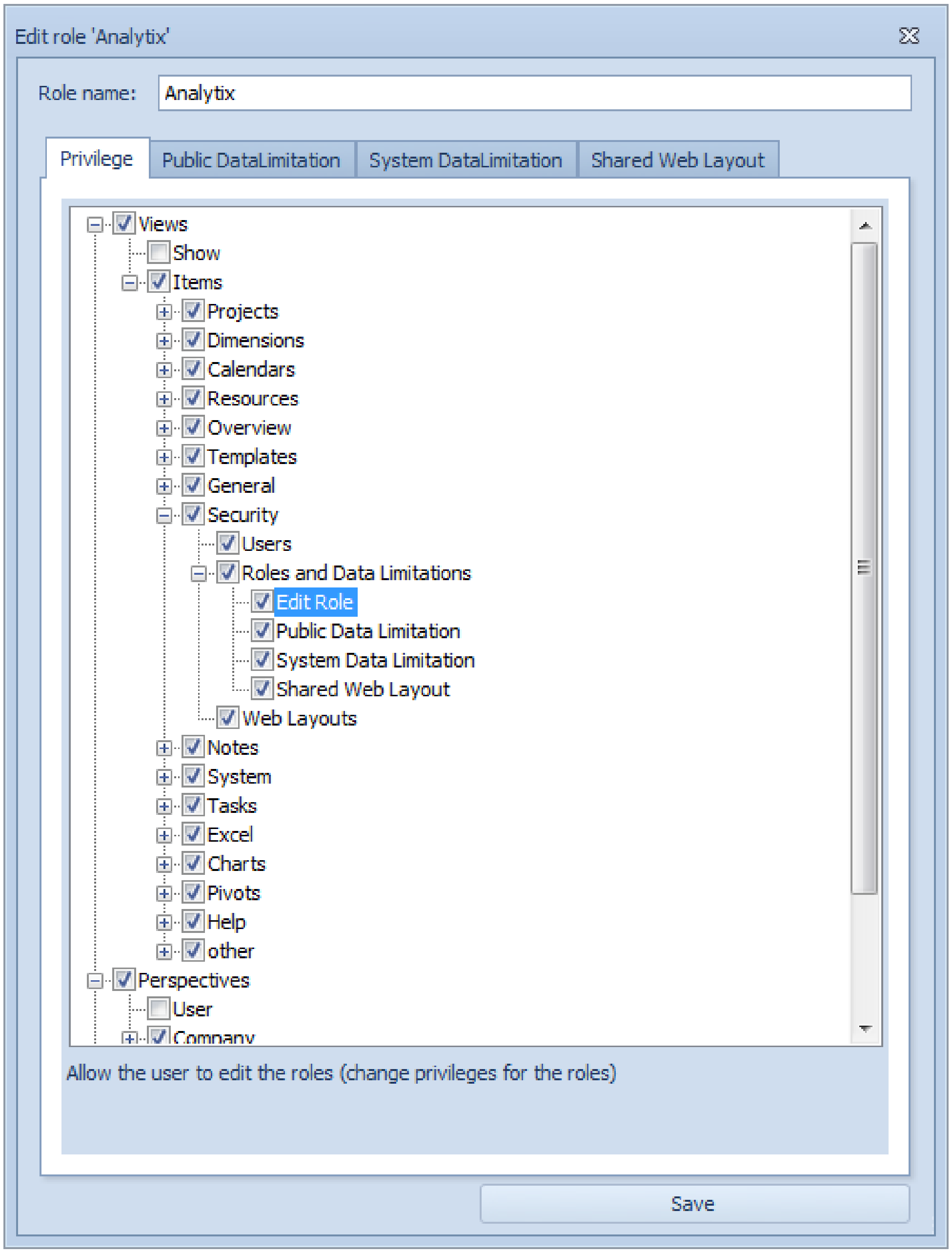
To edit the privileges of a role:

1. Navigate to **Views » Security » Roles and Data Limitations.**



2. On the right side, select the role that you want to edit.

3. Click the **Edit…** button.



You can now edit the role.

To edit the privileges of the role:

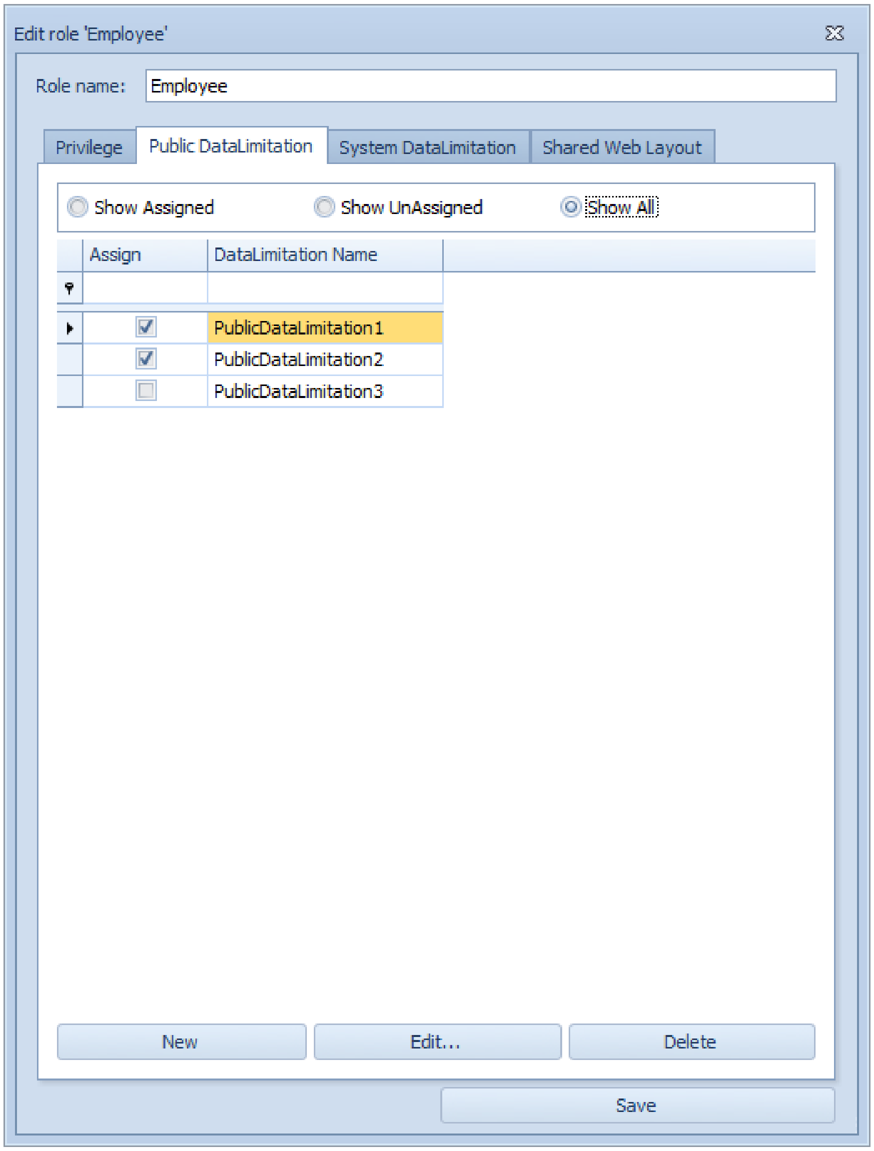
- Click the **Privilege** tab.
- Select or deselect the privileges.
- Click the **Save** button.

To assign one or more public data-limitations to the role:

- Click the **Public DataLimitation** tab.

- Use the three radio buttons, **Show Assigned**, **Show UnAssigned**, and **Show All**, to navigate among which data limitations are currently displayed.

> **Note:** The available data limitations themselves are created and maintained on the **Public DataLimitations** tab in the **Roles and Data Limitations** dialog.

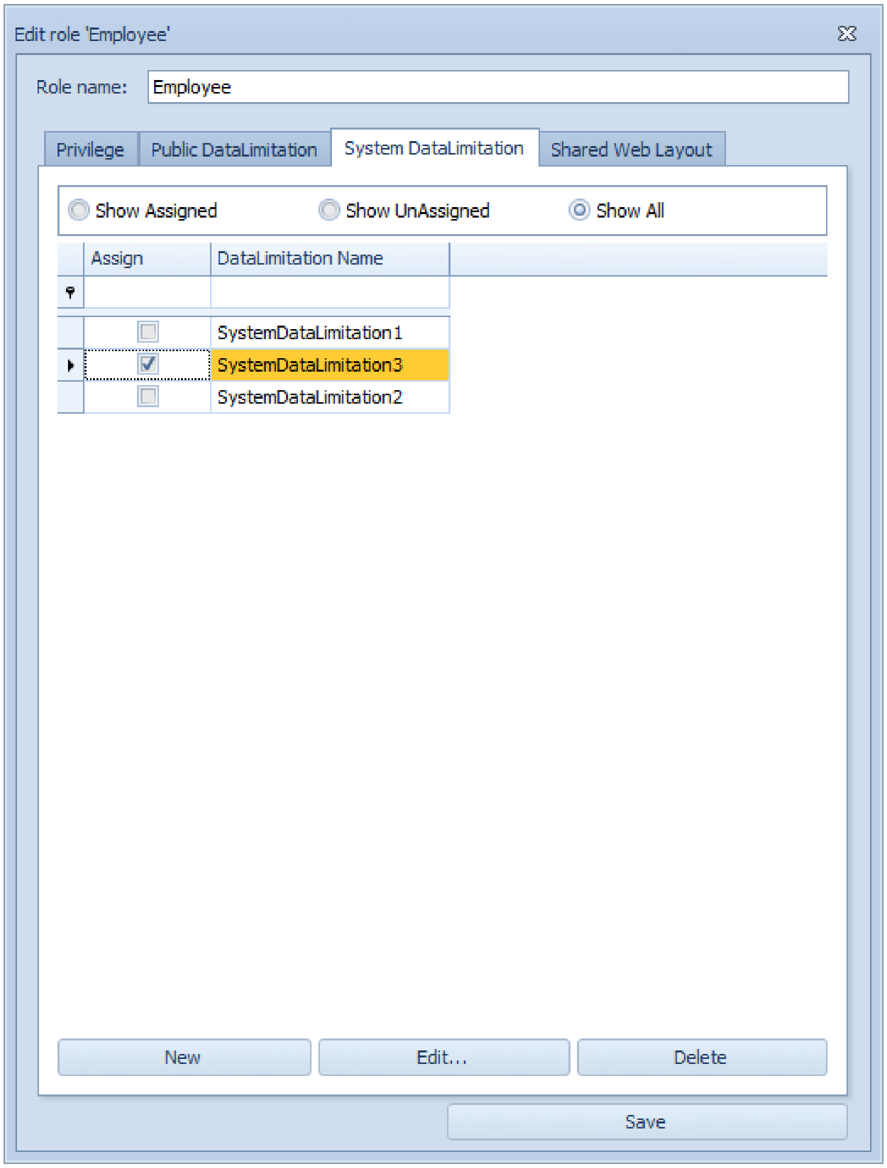


- Select or deselect the check box to assign a data limitation to the role, or to release it.
- Click the **Save** button.

To assign a system data-limitation to the role:

- Click the **System DataLimitation** tab.
- Use the three radio buttons, **Show Assigned**, **Show UnAssigned**, and **Show All**, to navigate among which data limitations are currently displayed.

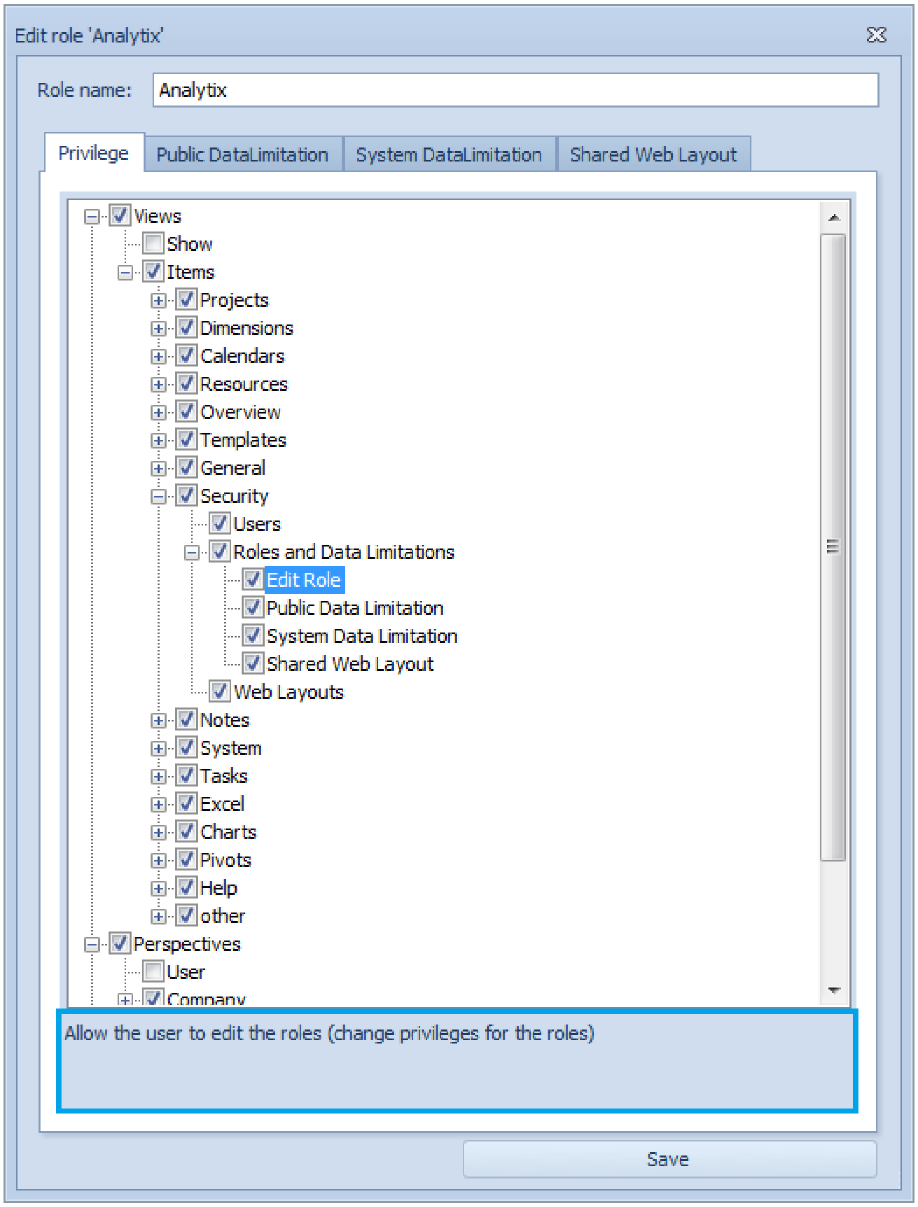
Note: The available data limitations themselves are created and maintained on the **System DataLimitations** tab in the **Roles and Data Limitations** dialog.



- Select or deselect the check box to assign a data limitation to the role, or to release it. You can select only a single system data limitation. If you select one of the check boxes, all the others are automatically deselected.
- Click the **Save** button.

Privileges

The meaning of the selected privilege is displayed in the box near the bottom of the Privilege pane.



Note: A few of the privileges are more advanced; they are described in the following.

Privileges: Enable Deletion of Information Created by Import Mappings

You can choose from two privileges that control the ability to delete events—projects, tasks, summary lines, and milestones—and Master Data if that information did not originate in Maconomy and did not originate in People Planner.

These privileges are:

- Delete Events
- Delete Master Data

To assign or remove the delete privileges:

- Edit the <role> role.

> **Note:** Replace *<role>* with the name of the role in your organization that has access rights to delete events and/or Master Data. Typically, only "super users" are granted these privileges, because deleting Master Data can have serious consequences.

- Click the **Privilege** tab.
- Expand the **Data Manipulation** item in the tree.
- Under **Other External Origins**:
  - Select the **Delete Events** check box to enable users in the Manager role to delete events.
  - Select the **Delete Master Data** check box to enable users in the Manager role to delete Master Data.

  > **Note:** You can select both Delete Events and Delete Master Data if appropriate.

- Click **Save**.

By default, both privileges are selected, which means that users can delete information that originates from other systems.

Privilege: Edit Projects where You are not Project Manager

In some older versions of People Planner, there was no way to prevent a Project Manager from making changes to projects for which he or she was not the Project Manager. This privilege introduces a way to do that.

This privilege is implemented as follows:

- A project can only be edited by its Project Manager or its main project's Project Manager or by a substitute project manager.
- A user who is not the Project Manager for a specific project cannot edit that project unless he or she has this privilege explicitly granted.

Assigned Privileges

A user can have privileges from multiple roles. The Assigned Privileges tab shows a list of all privileges for a specific user, and from which role the privilege has been granted.

The *Deltek People Planner Fundamentals Guide* provides more details about viewing assigned privileges.

> **Note:** You cannot add or edit privileges in this tab. For editing privileges, see Edit Role.

Authentication

Within the topic of authentication, there are different types of concepts that share the same name:

1. **User Authentication.** When a user starts a People Planner application, he or she is authenticated by People Planner as a valid user.

   For People Planner, the supported types of user authentication are:

   a. Windows Authentication

   b. Azure Authentication

   c. People Planner Silent Sign In

2. **Web Server Authentication.** When a user calls one of the People Planner Web applications, such as MyPlan or the WSC Components, he or she is first authenticated by the Web server before being forwarded to the Web application.

   For People Planner, the supported types of IIS authentications are:

   a. Windows Authentication

   b. Anonymous Authentication

3. When the People Planner applications need to access the People Planner database they must authenticate themselves to the SQL Server.

   For People Planner, the supported types of **database authentications** are:

   a. Windows Authentication

   b. SQL Server and Windows Authentication mode

Even though "Windows Authentication" appears in all three cases, it is important that you do not confuse them with each other. Depending on the context, they mean something different.

The *Deltek People Planner Technical Installation Guide* provides more details about each of the types of authentication.

User Authentication

The People Planner user authentication looks up "the user" in the People Planer database User table to determine if "the user" has permission to run People Planner. Because none of the People Planner applications provides a login dialog, "the user" is determined in one of the following ways:

1. Windows Authentication. "the user" = The Windows user name
2. People Planner Silent Sign In (SSI). "the user" = User name encoded in token
3. Azure Authentication. "the user" = UPN returned by Azure

User information is stored in the People Planner database's User table. Users are normally imported from Maconomy as a part of the Master Data import, but they can also be imported from a file, an Active Directory, or typed in manually. See Add People Planner Users for more details about this.

User authentication is essentially invisible to the user because it happens "under the hood." A user only becomes aware that something went wrong if the user authentication fails.

When a user starts People Planner, there are the following possible types of authentication:

- Windows Authentication
- People Planner Silent Sign In (SSI)

- Azure Authentication

Windows Authentication and People Planner SSI

Windows Authentication is used when you have already logged in to Windows, and you then start the People Planner Windows Application.

It is also used when you access MyPlan directly from a browser. If instead you access MyPlan or the People Planner WSC Components via the Maconomy Workspace Client, the system uses the people Planner Silent Sign In functionality to authenticate you.

Both Windows Authentication and PP SSI rely on the following fields in the User table:

1. NetworkUserName
2. NetworkDomainName
3. NetworkDomainAlias (Normally set as a local parameter of the People Planner import task specification).

The properties **NetworkUserName** and **NetworkDomainName** are normally retrieved from Maconomy using a Master Data import task. The **NetworkDomainAlias** is not retrieved from Maconomy, but can be set as a part of defining the Master Data import task.

> **Tip:** People Planner uses the MaconomyWS Web Service to retrieve the users. The default mapping returns UserRoleInformation.NetworkUserName and UserRoleInformation.NetworkDomain.Name.
>
> The **getUsersMQ** Web Service query fetches the users; it is defined in the Maconomy **AccessControl.I** file.
>
> This query uses the **UsersAndGroupsU** universe to request the data. You can customize this universe and map other fields or define default values if the fields are empty.
>
> You can also use the .I file to modify the data that is returned to People Planner. This is important to realize because these properties (NetworkUserName and NetworkDomainName) are used for user authentication.

When running a People Planner application using Windows Authentication or People Planner SSI, the user—"the user" being a Windows Account name, the UPN name, or the name that is embedded in the PP SSI-token—is validated against the NetworkUserName, NetworkDomainName, and NetworkDomainAlias properties. If People Planner can find the user in its database, the user is logged in.

People Planner SSI is described in more detail in the *Deltek People Planner Technical Installation Guide* and in the *Deltek People Planner Integrations Guide*.

Authentication using UPN Name

By default, the People Planner Windows Application uses the **Down-Level Logon Name** for Windows Authentication. In version 3.7.1, an option was added in the Admin Tool to use the **User Principal Name** (UPN) instead.

The **Use UPN name for Authentication** option is located via **Settings » System Setup » System** in the Admin Tool. If you select this setting, when the People Planner Application is started, the method that it uses to get the name of the current logged-in user gets the UPN name, rather than the Windows account name.

In some rare setups, and under special situations, such as using an SSO solution to access People Planner via Citrix, an issue can arise with the length of user names in the Active Directory (AD). For example:

1. A user logs in to Citrix with his or her remote identity provider credentials, such as Azure Active Directory.

   This user also has a shadow account in the Citrix local AD so that he or she can launch the People Planner application. The shadow account has a separate UPN suffix that matches the remote domain name in Azure.

2. The user's account in Azure is JonathanBakerSmithIII@ABCManufacturing.com
3. His account in the Citrix local AD is as follows:
   a. Primary domain: <Local AD domain name>
   b. Windows user name (SamAccountName): JonathanBakerSmithIII
   c. UPN: JonathanBakerSmithIII@ABCManufacturing.com (ABCManufacturing.com is the UPN suffix)

When shadow accounts are created, the SamAccountName in the local AD, the user name, is limited to 20 characters, which is a problem if user names are longer than 20 characters in Azure, as "JonathanBakerSmithIII" is, at 21 characters. When People Planner retrieves the Windows account user name, it gets the truncated user name; as a result, the validation of that name against the database—which has the full name—fails.

> **Note:** The method that is used to retrieve the UPN returns the name of the currently logged in user that is running the process. For People Planner Web applications, this user is the system service account that is running the Internet Information Server (IIS) process, and not the user account. Because of this, you cannot use the UPN Authentication when you are running MyPlan from a browser.

Azure Authentication

Azure Authentication is used as an alternative to Windows Authentication. When a user want to log into People Planner, she is first presented with an Azure login screen. When she fills in this correctly, she is logged into People Planner. This type of authentication can be used in situations where the user are not on the same domain as the People Planner application.

Azure Authentication relies on the following fields in the User table:

- Email
- AzureUPN

When running a People Planner application using Azure Authentication, the user— "the user" being the UPN returned by Azure—is validated against the Email and AzureUPN properties. If People Planner can find the user in its database, the user is logged in.

In the following sections, the authentication process for each of the People Planner components is described.

See Azure Authentication for more information on how to set this up.

The People Planner Windows Application

The Windows Application starts by connecting to the Security Service specified in the Windows Application Configuration file (see the *Deltek People Planner Technical Installation Guide* for more information) using either Windows Authentication or Microsoft AzureAD authentication.

The Security Service uses the configuration file parameters ServerDataConnectionFile and ClientDataConnectionFile to identify the People Planner System (database). It is strongly recommended to use the same Data Connection file for the two parameters, and that the Data Connection file specify only one People Planner system (database). If you are using the recommended configuration, you can ignore the paragraphs that are shown in italics (below). If you need the People Planner Windows Application to be able to connect to different People Planner systems you should simply install a Security Service for each of those systems, in which case the Windows Application prompts you to choose which system before starting.

Based on the People Planner system (database) specified in the ServerDataConnectionFile setting, the Security Service returns a list of supported authentication methods. As of Release 3.8.6, the People Planner Windows Application supports Windows Authentication and Azure Authentication.

*If more than one People Planner system is specified, the one named **default** is used, and if the default does not exist, the first is used.*

If the Azure Authentication parameters in the People Planner database are set for the specified system, the returned list includes Azure Authentication (and the required information to reach the Azure AD). The Windows Application uses Azure if supported; otherwise, it uses Windows Authentication (which is always supported) for all subsequent communication with the Security Service.

Next, the Windows Application queries the Security Service for which People Planner system (database) to use. Normally, this is the same as the one used to get the supported authentication methods, and the Windows Application now connects using the preferred authentication *method as described above.*

If the ClientDataConnectionFile contains multiple connections, the Windows Application shows a Data Connection selection dialog before connecting.

> **Note:** *If the ClientDataConnectionFile contains multiple connections (multiple People Planner Databases) there is a risk that these systems are not configured to use the same authentication method, and hence not work as expected. For example:*
>
> 1. *Security service uses Azure authentication, but the Windows Application uses Windows authentication:*
>
>   *You are prompted for Azure credentials to communicate with the security service, but you will use Windows credentials (silently) to communicate with the People Planner Database.*
>
> 2. *Security service uses Windows authentication, but the Windows Application uses Azure authentication:*
>
>   *You are not prompted for authentication to communicate with the security service, but will be prompted for Azure credentials to communicate with the People Planner Database.*
>
> 3. *Security service uses Azure authentication for "Tenant A," but the Windows Application uses Azure authentication for "Tenant B" (that is, two different People Planner Databases):*
>
>   *You are prompted for Azure credentials for "Tenant A," and will try to use the same Azure credentials to communicate with "Tenant B."*
>
> *This scenario will not work!*

If Azure Authentication is not configured—meaning that the **Azure Login URL**, **Server Resource Id**, **Tenant Domain**, and **People Planner Application Id** are all specified—it uses Windows Authentication instead.

When using Windows Authentication, the People Planner Windows Application gets the identity of the current Windows user from the Windows Account or the UPN. The **Use UPN for Authentication** setting determines which is used.

The retrieved identity (user name and domain name) is validated against the User table of the People Planner database as follows:

1. The user name is validated against the NetworkUserName property.

2. If a match is found, the domain name is then validated against the NetworkDomainName and NetworkDomainAlias fields. If either of these is a match, the user is logged in. Otherwise, the login fails.

When using Azure authentication, the People Planner Application always displays an Azure Login Popup. Execution of the People Planner code is suspended until the user finishes interacting with the login popup.

The People Planner application receives the identity of the user from Azure. The email address that represents this identity is validated against the Email and AzureUPN fields in the User table in the People Planner Database. If a match is found in either of these, the user is logged in; otherwise, the login fails.

The People Planner Windows Application always re-authenticates every time it is restarted. However, no re-authentication is performed for the entire session during which the client remains open.

The People Planner MyPlan Web Application

The MyPlan Web application supports Windows Authentication, Azure Authentication, and People Planner SSI authentication.

When using Windows Authentication, the user validation is the same as described for the People Planner Windows Application. However, if the **Use UPN for Authentication** setting is used, the validation fails. This is a known issue.

When using Azure authentication, MyPlan redirects to an Azure Login Page and receives the identity of the user from Azure. The email address that represents this identity is validated against the Email and AzureUPN fields of the User table in the People Planner Database. If a match is found in either of these, the user is logged in; otherwise, an error page is displayed.

To use People Planner SSI Authentication, an SSI token parameter must be passed as part of the URL. If no token is passed, and Azure Authentication is not configured—meaning that the **Azure Login URL**, **Server Resource Id**, **Tenant Domain**, and **People Planner Application Id** are all specified—it uses Windows Authentication.

Maconomy calls the People Planner API Web service to request to get an SSI token for the current Maconomy user. When Maconomy later calls the embedded People Planner Web application, it then includes the SSI token in the URL.

The current Maconomy user is identified by the Maconomy UserRoleInformation.NetworkUserName and UserRoleInformation.NetworkDomainName in the Maconomy database.

The request to get an SSI token is encrypted, and People Planner must first be able to decrypt it to see which Maconomy user the request is for. If this is successful, the People Planner API returns a valid SSI token, with User name and Network domain name in it. If it is not successful, it returns an empty SSI token instead. The failure is logged in the People Planner API's own log file. Regardless of the success or failure, the returned SSI token is also encrypted.

> **Note:** The Maconomy user in the request is not validated against the People Planner's database at the point of the request, so Maconomy might get a token for a user that does not exist in the People Planner User table. This is a known issue. However, when Maconomy uses the token (as described in the following information) authentication fails.

When Maconomy launches MyPlan, the SSI token is appended to the MyPlan URL. MyPlan decrypts the token to get the user name and network domain name.

It then validates this against the user-table as follows:

1. The user name is validated against the NetworkUserName property.

2. If a match is found, the domain name is then validated against the NetworkDomainName and NetworkDomainAlias fields. If either of these is a match, the user is logged in. Otherwise, the login fails.

The People Planner WSC Components

The People Planner Maconomy WSC Components support Windows Authentication and People Planner SSI Authentication.

> **Note:** Because the WSC Components are intended to be embedded in the Maconomy Workspace Client and cannot run directly in a browser, they are usually configured for People Planner SSI.

To use People Planner SSI Authentication, an SSI token parameter must be passed in the components' URL. If no token is passed, Windows Authentication is used.

Whether using People Planner SSI or Windows Authentication, the user validation works exactly as described for MyPlan.

The People Planner Service

The People Planner Service is a Windows service. During installation, you are required to specify a Windows account under which it will run. This can be a local account, or it can be an account that you specially created for this purpose alone.

When the People Planner Service is started, these credentials are validated against the User table of the People Planner Database. This means that the account must also be a People Planner user.

The People Planner Service validates this against the user table:

1. The user name is validated against the NetworkUserName property.
2. If a match is found, the domain name is then validated against the NetworkDomainName and NetworkDomainAlias fields. If either of these is a match, the user is logged in. Otherwise, the login fails.

See the *Deltek People Planner Technical Install Guide* for more details about how to install the People Planner Service and configure the account.

Web Server Authentication

Because the People Planner Web applications require an Internet Information Server (IIS) and cannot run under Apache, for example, the alternative term of **IIS Authentication** is often used.

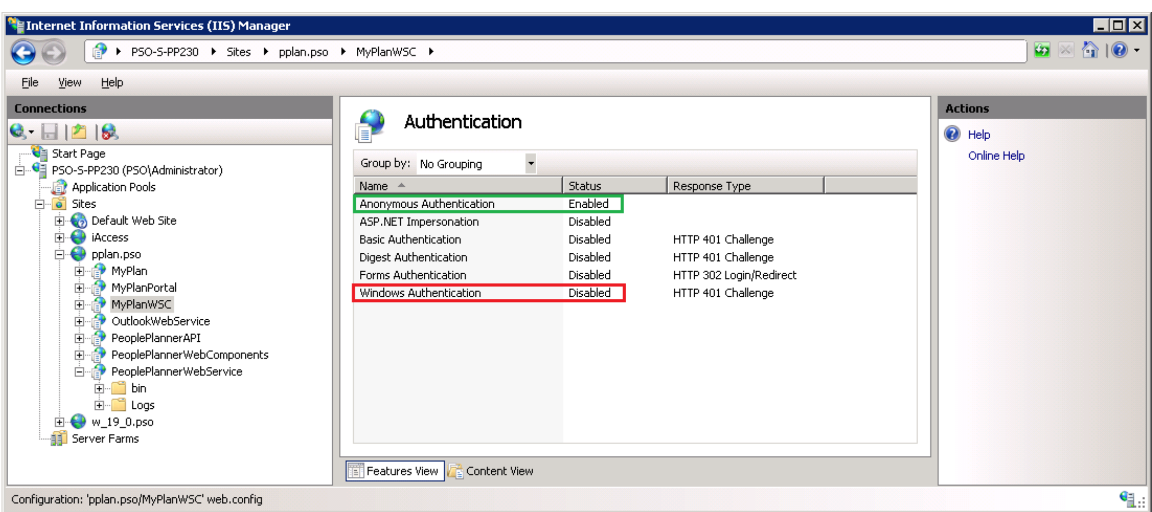
The People Planner installers select the correct type of IIS authentication for the Web components, and you usually do not need to do anything else in addition to the final configurations.

When you configure a Web site or Web service on an IIS, you can choose between different types of authentication. People Planner supports two of the types as described in the following table.

Web Component	Used for	IIS Authentication
MyPlan	Running MyPlan in a browser	Windows Authentication
MyPlanPortal	Running MyPlan embedded in the Maconomy Portal	Windows Authentication

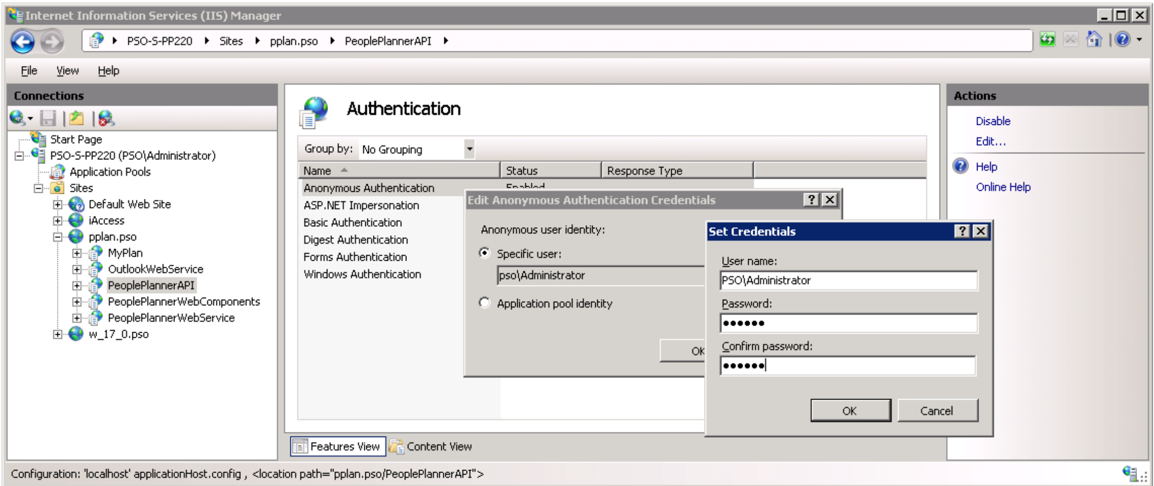
Web Component	Used for	IIS Authentication
MyPlanWSC	Running MyPlan embedded in the Maconomy Workspace Client	Anonymous Authentication
People Planner API	Web service used in the integration with Maconomy	Anonymous Authentication
People Planner Outlook Web Service	Web service used in the integration with Exchange and Outlook	Windows Authentication
People Planner Web Components	Running the Budgeting Assistant, Project Evaluation Assistant, and Project Overview Component, embedded in the Maconomy Workspace Client	Anonymous Authentication
People Planner Web Service	(Only listed here for completeness.) This Web service is used in an extended integration with Maconomy and is only used by a specific customer.	Anonymous Authentication
People Planner Security Service	Required by the People Planner Windows Application to retrieve information about which database to connect to.	Anonymous Authentication Windows Authentication

While you can configure the MyPlanWSC client and the People Planner Web Components for using Windows Authentication, when using SSI you should configure them to use Anonymous Authentication. The following figure illustrates this configuration.



With Anonymous Authentication, you also need to specify a People Planner user. This is a general requirement for Anonymous Authentication, and it makes sense to use the same user for MyPlanWSC and the People Planner WSC Component as you are using for the People Planner API Web service.

The following figure shows an example of setting the People Planner user to be used with Anonymous Authentication.



People Planner SSI and User Credentials

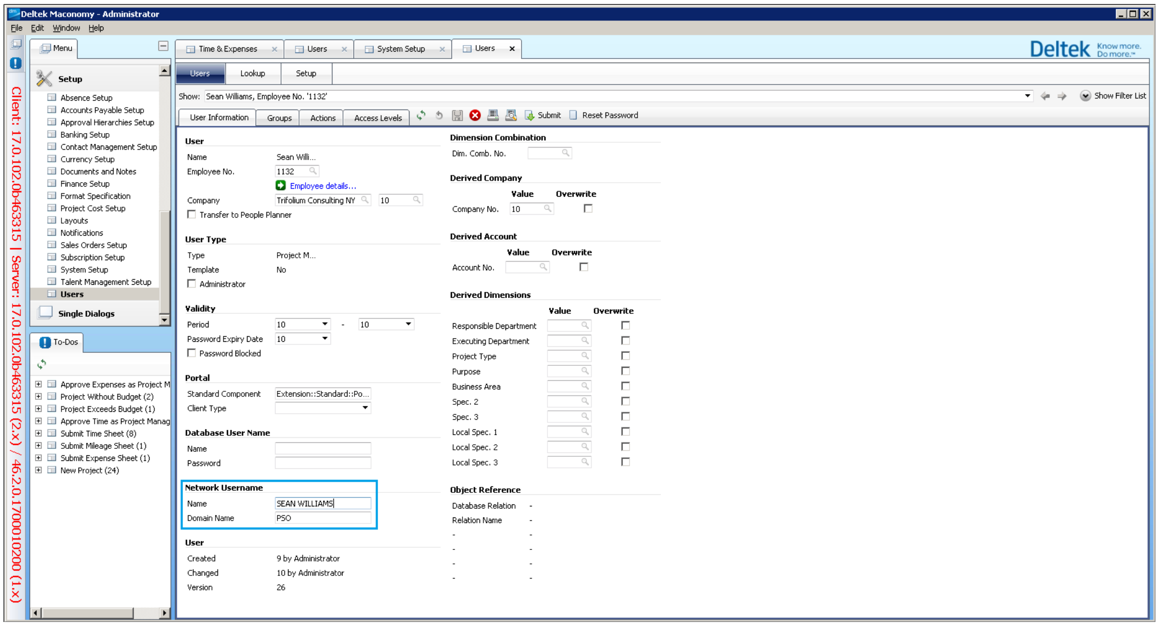
When you start the People Planner Windows Application, you are automatically logged in using your Windows credentials. This mean that you do not need to do anything at all; if you are logged in to Windows, and you are added as a user in the People Planner database, you are automatically logged in without an extra login prompt.

If you use the Maconomy Workspace Client instead, and from there you access the embedded People Planner Web Components, you are logged in to People Planner via the Silent Sign In (SSI) functionality.

Instructions for setting up People Planner SSI are provided in both the *Deltek People Planner Technical Installation Guide* and in the *Deltek People Planner Integrations Guide*; thus, this information is not included here. The following information describes only how user credentials work under SSI.

User Credentials on the Maconomy Side

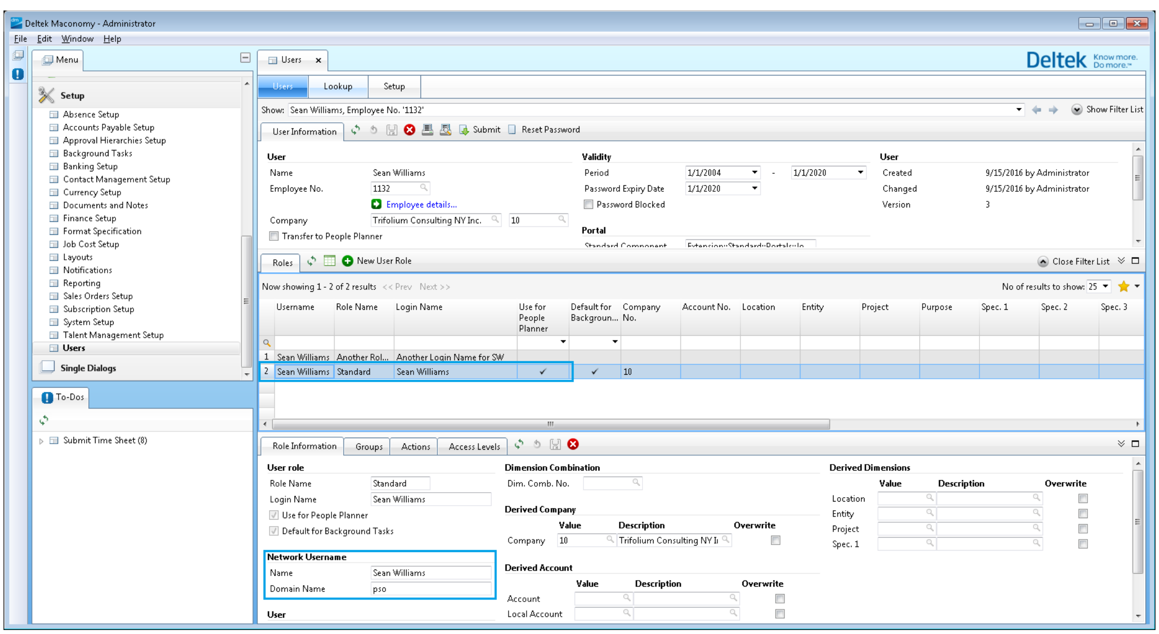
For SSI to work, the fields in the **Network Username** group for user setup must have values in Maconomy. The following figure shows an example.



In addition, these values must be the same in the Users view in People Planner. This is usually achieved automatically by importing Master Data from Maconomy into People Planner, and you do not need to do anything more.

Warning: You should take care to ensure that there is not an .I file that modifies the credentials during the import from Maconomy. If the credentials in Maconomy and in People Planner are not the same, SSI will not work.

Maconomy 2.3 introduced User Roles. Exactly one of the roles can be marked as **Use for People Planner**, and the Network Username is moved to that role.



User Credentials on the People Planner Side

Normally you import users from Maconomy into People Planner as part of the import of Master Data. If this is the setup process that you perform, the fields in the **Network Username** group for user setup are imported as well, which takes care of setting up these values on the People Planner side.

Azure Authentication

By default, People Planner's and MyPlan's method of authentication relies on Windows Authentication for user login. Windows handles the user login, and People Planner and MyPlan compare the username of the currently logged-in Windows user to the list of users in the database. If it finds that username, it loads the People Planner Windows application or MyPlan using the privileges and settings that are defined for that user. To switch to a different user in People Planner or MyPlan, the current Windows user must log out of Windows and then log in using a different user account.

The Azure Authentication functionality introduces an alternative authentication method that enables you to configure People Planner or MyPlan to allow users to log in using their credentials from the Azure Active Directory.

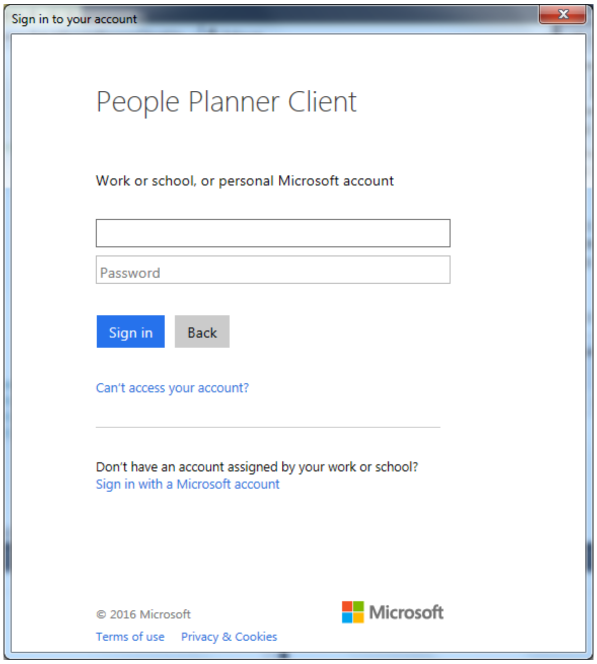
> **Note:** Typically, MyPlan is configured to use Window Authentication in the IIS. When using Azure Authentication, you must enable Anonymous Authentication, and disable Windows Authentication.

When People Planner or MyPlan starts, it displays a login screen instead of retrieving the username of the current Windows user. From that login screen, a user can enter his or her credentials in Azure, which People Planner or MyPlan then matches against the list of users in the database. People Planner or MyPlan then loads with the privileges and settings of the logged-in user with those Azure credentials. When you use this authentication method, users do not need to log out of Windows to switch to a different user account.

> **Note:** When you set up an application—such as People Planner or MyPlan—in Azure, you provide a name for that application. That name appears as the heading in the login dialog. For example, if you give People Planner the name *People Planner Client* when you set it up, the dialog heading becomes *People Planner Client*, although the dialog is actually an Azure login dialog.

Use Azure Authentication with the People Planner Windows Application

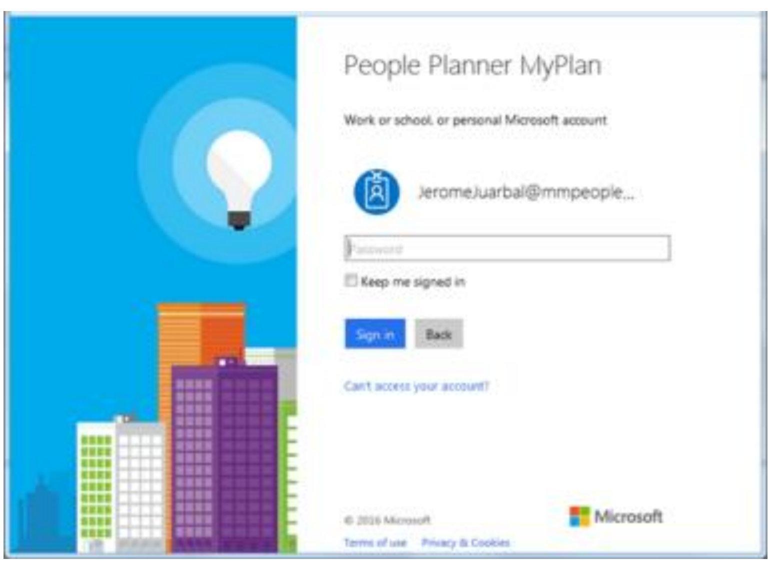
When you have configured Azure Authentication as described in this section, and a user starts the People Planner Windows application, it displays an Azure login popup. The execution of People Planner code is suspended until the user completes his or her interaction with this login popup.



After a user has succeeded in logging in, People Planner receives his or her identity from Azure. The e-mail address that represents this identity is compared to the list of e-mail addresses of People Planner users in People Planner's database. When a match is found, the user record in People Planner is used to load People Planner.

Use Azure Authentication with MyPlan

When you have configured Azure Authentication as described in this section, and a user starts MyPlan, it displays an Azure login popup. The execution of MyPlan code is suspended until the user completes his or her interaction with this login popup.



After a user has succeeded in logging in, MyPlan receives his or her identity from Azure. The e-mail address that represents this identity is compared to the list of e-mail addresses of MyPlan users in MyPlan's database. When a match is found, the user record in MyPlan is used to load MyPlan.

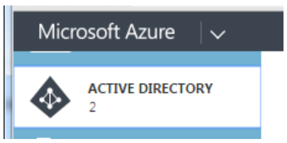
Configure the Azure Active Directory Tenant

To use Azure Authentication, you must set up the Azure Active Directory Tenant, which contains users, user information, registered applications, and security.

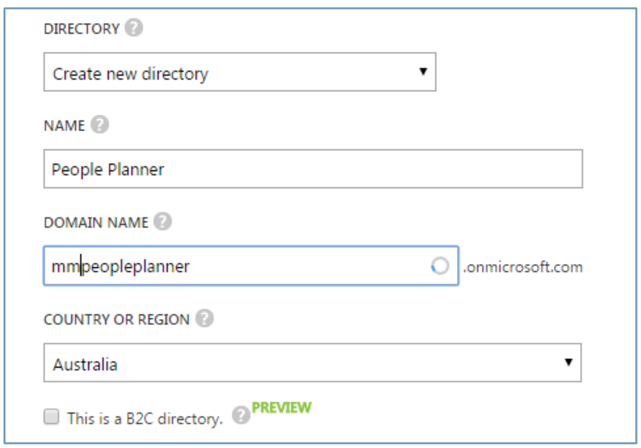
> **Tip:** If you already have an Azure Active Directory Tenant, you can skip this procedure.

To set up an Azure Active Directory Tenant:

1. Log in to manage.windowsazure.com.



2. In the left menu, click **ACTIVE DIRECTORY**.
3. Click **NEW » APP SERVICES » ACTIVE DIRECTORY » CUSTOM CREATE**. The following dialog appears.



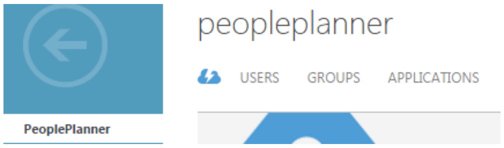
4. Select **Create new directory** from the **DIRECTORY** drop-down.
5. Enter appropriate values for the **NAME**, **DOMAIN NAME**, and **COUNTRY OR REGION** fields. Note that the preceding figure shows example values only; use the values that are appropriate to your organization.
6. Click **OK**.

Set Up Users

People Planner users must exist in the Active Directory Tenant to use Azure Authentication. People Planner uses the user’s e-mail address during authentication and matches it against the e-mail addresses that are contained in People Planner’s own Users table.

To set up users in the Active Directory Tenant, complete the following steps:

1. Open the Active Directory Tenant and navigate to the **USERS** tab.



2. Click **ADD USER** in the bottom menu and follow the wizard's steps.

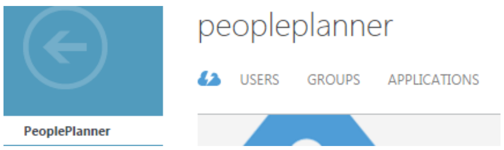
Warning: People Planner does not support automatically importing users from Azure. After you add users to the Azure Active Directory Tenant, you must manually configure those users in People Planner. Using People Planner's Admin Tool, you can import users from a file.

Set Up the People Planner Azure Authentication Server

The People Planner Azure Authentication Server is the common application against which People Planner Windows application users and MyPlan users authenticate.

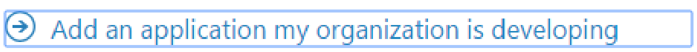
To set up the Azure Authentication Server, complete the following steps:

1. Open the Active Directory Tenant and navigate to the **APPLICATIONS** tab.

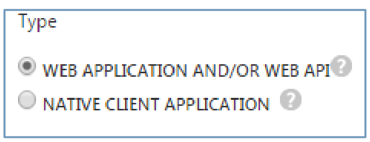


2. Click **ADD** in the bottom menu.

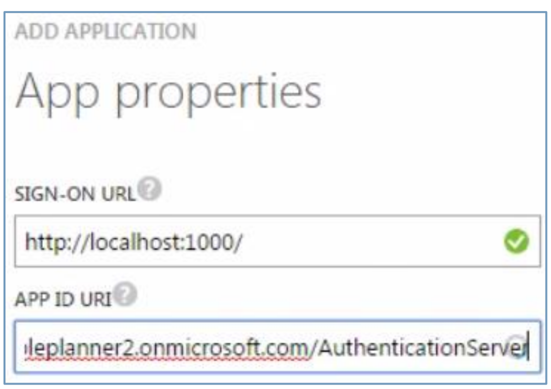
3. Select **Add an application my organization is developing**.



4. Enter a name for the application, such as People Planner Authentication Server.
5. Make sure that the **WEB APPLICATION AND/OR WEB API** radio button is selected under **Type**.



The ADD APPLICATION dialog is displayed.



6. In the **APP ID URI** field enter the domain of the Active Directory Tenant, followed by a string to represent the application, for example:

`https://mmpeopleplanner.onmicrosoft.com/peopleplannerauthenticationserver/`

Note: The sign-on URL is not used; thus, it can be any valid URL.

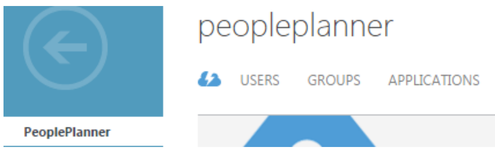
Set Up the People Planner Application in Azure

Register the People Planner Application in Azure

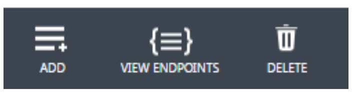
To use Azure authentication, you must register the People Planner application in Azure and configure it to authenticate against the People Planner Azure Authentication Server.

To register the People Planner application and configure it to authenticate against the authentication server:

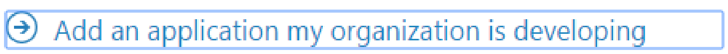
1. Open the Active Directory Tenant and navigate to the **APPLICATIONS** tab.



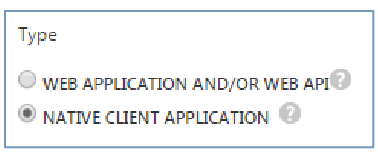
2. Click **ADD** in the bottom menu.



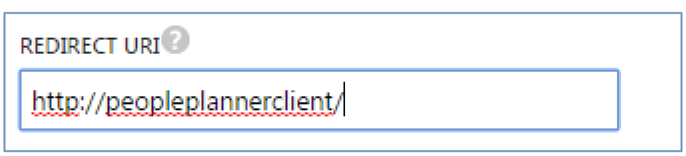
3. Select **Add an application my organization is developing**.



4. Enter a name for the application, such as People Planner Client.
5. Make sure that the **NATIVE CLIENT APPLICATION** radio button is selected under **Type**.



6. Enter any valid URI in the **REDIRECT URI** field, because the redirect URI is not used.

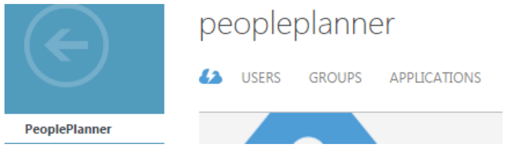


Allow Access to the People Planner Azure Authentication Server

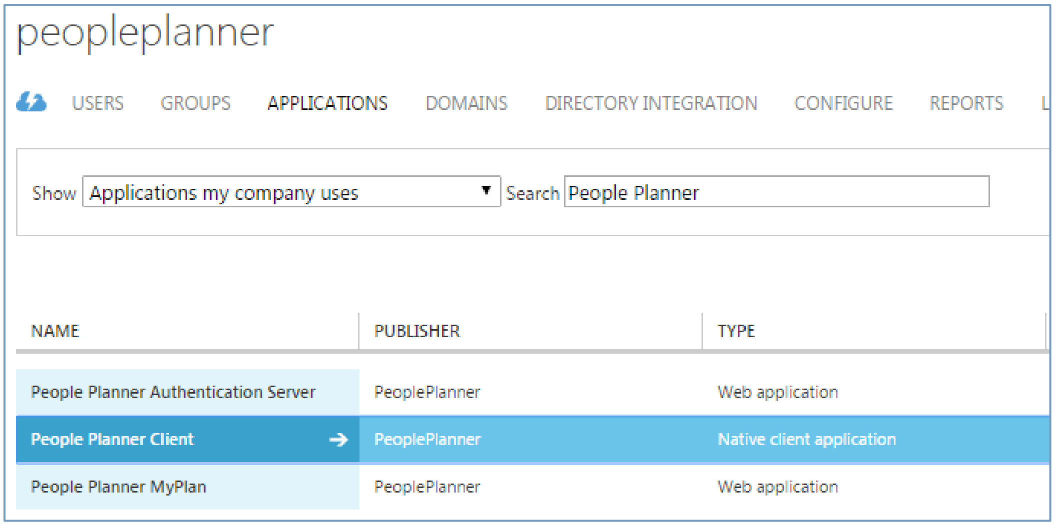
The registered People Planner Windows application in Azure must have privileges to authenticate against the People Planner Azure Authentication Server application.

To set access privileges so that the registered People Planner application can authenticate against the People Planner Azure Authentication Server:

1. Open the Active Directory Tenant and navigate to the **APPLICATIONS** tab.

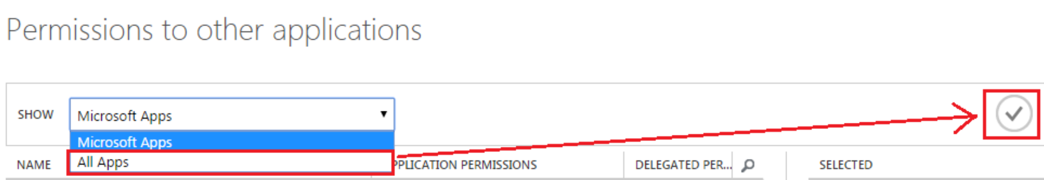


2. Select the People Planner Windows application and click the right arrow next to the name.

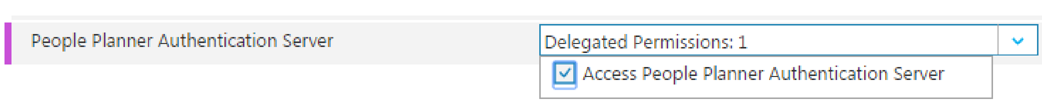


3. Click the **CONFIGURE** tab.

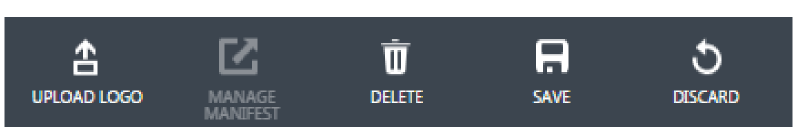
4. Click **Add Application** under **Permissions to other applications**.



5. Select **All Apps** from the **SHOW** drop-down, then confirm by selecting the circle as shown in the preceding figure.
6. Select the People Planner Azure Authentication Server application and then confirm.
7. Select the **Access People Planner Authentication Server** check box in the **Delegated Permissions** drop-down to enable the People Planner Windows application to access the server application.



8. Click **SAVE**.



Set Up the MyPlan Application in Azure

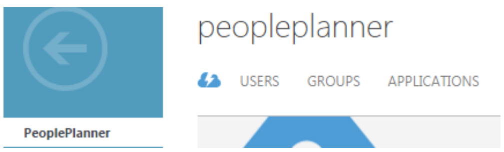
You must also register the MyPlan application with the Azure Active Directory Tenant to enable authentication using Azure. You must also give MyPlan access to the People Planner Authentication Server. In addition, you must configure the MyPlan settings in the People Planner Admin Tool that are required so that MyPlan can communicate with Azure.

Register the MyPlan Application in Azure

To use Azure authentication, you must register the MyPlan application in Azure and configure it to authenticate against the People Planner Azure Authentication Server.

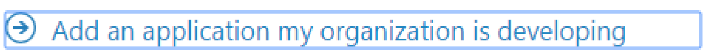
To register the MyPlan application and configure it to authenticate against the authentication server:

1. Open the Active Directory Tenant and navigate to the **APPLICATIONS** tab.

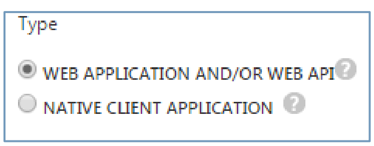


2. Click **ADD** in the bottom menu.

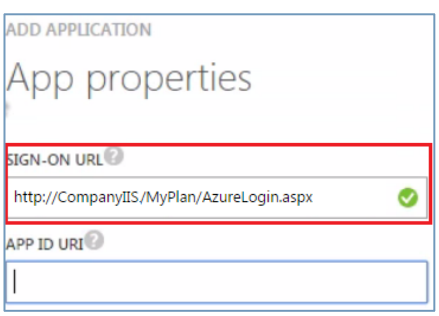
3. Select **Add an application my organization is developing**.



4. Enter a name for the application.
5. Make sure that the **WEB APPLICATION AND/OR WEB API** radio button is selected under **Type**.



6. In the **SIGN-ON URL** field, enter the URL of the login page, as shown in the following example.



7. In the **APP ID URI** field enter the domain of the Active Directory Tenant, followed by a string to represent the application.

This value has the format https://<tenantdomain>.onmicrosoft.com/<applicationname>/

For example:

`http://mmpeopleplanner.onmicrosoft.com/myplan`

Configure Reply URLs

The MyPlan application in Azure must have a valid list of Reply/Redirect URLs. This is used to send authorization codes and logged-in user data to People Planner.

To configure reply/redirect URLs:

- Open the Azure MyPlan application and navigate to the **CONFIGURE** tab.

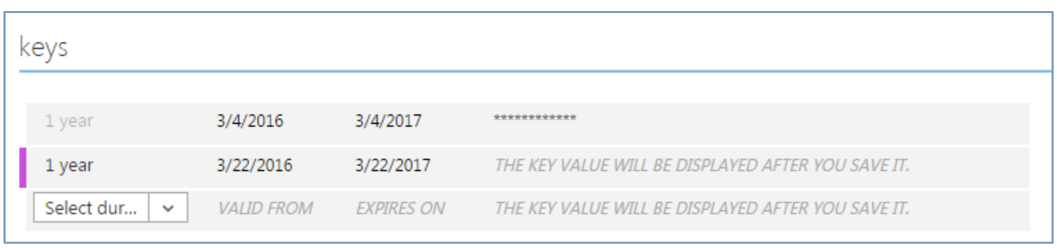
- Under **REPLY URL**, define links to redirect to AzureLogout.aspx and AzureLogin.aspx.

You do this by first retrieving MyPlan’s base URL and then appending **AzureLogout.aspx** and **AzureLogin.aspx**.

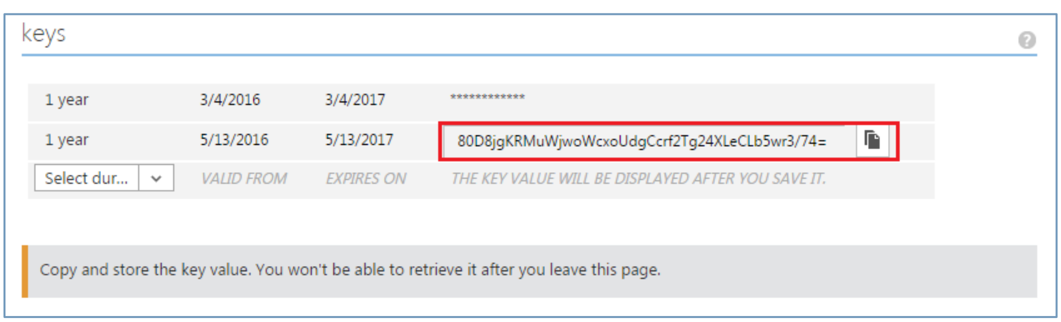
For example, if you access MyPlan via `http://CompanyIIS/MyPlan/` or `http://CompanyIIS/MyPlan/Default.aspx`, the resulting entries are `http://CompanyIIS/MyPlan/AzureLogout.aspx` and `http://CompanyIIS/MyPlan/AzureLogin.aspx`.

- To generate the **MyPlan Client Secret** key, select a duration from the drop-down and click **Save**.

The following dialog appears. Azure creates the secret, which it displays after you click **Save**.



In the following figure, the secret that Azure created is highlighted by a red rectangle.



- Copy and store the key value because you will need to paste it in the People Planner Admin Tool **MyPlan Client Secret** field during the *Settings for the MyPlan Application* steps.
- Click **Save**.

Allow Access to the Authentication Server

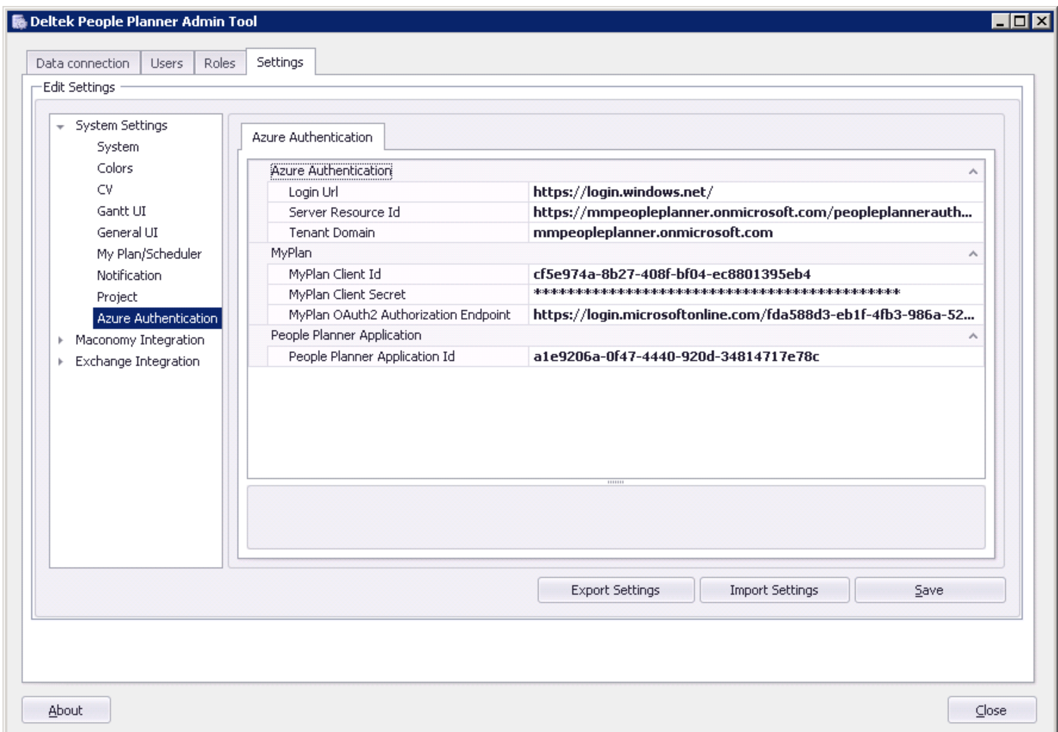
See [Allow Access to the People Planner Azure Authentication Server] for the steps to perform to set access privileges so that MyPlan can authenticate against the People Planner Azure Authentication Server.

Configure People Planner and MyPlan Using the Admin Tool

Shared Settings for both the People Planner Application and MyPlan

To configure the Admin settings to enable People Planner and MyPlan to authenticate using Azure:

- Launch the People Planner Admin Tool and navigate to **Azure Authentication**.

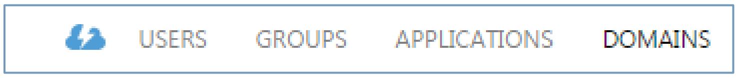


- Enter values for the following in the Azure Authentication section:
- **Login Url** — This should always be https://login.windows.net/ unless Microsoft changes the login URL.
- **Server Resource Id** — This value should match the People Planner Authentication Server's App Id Uri. You can obtain this value by opening the application in Azure and navigating to the CONFIGURE tab.

  This value has the format https://<tenantdomain>.onmicrosoft.com/<applicationname>/

  For example: https://mmpeopleplanner.onmicrosoft.com/peopleplannerauthenticationserver/

- **Tenant Domain** — This should contain the domain name of the Azure Active Directory Tenant. You can obtain this value by opening the Azure Active Directory Tenant and navigating to the DOMAINS tab.

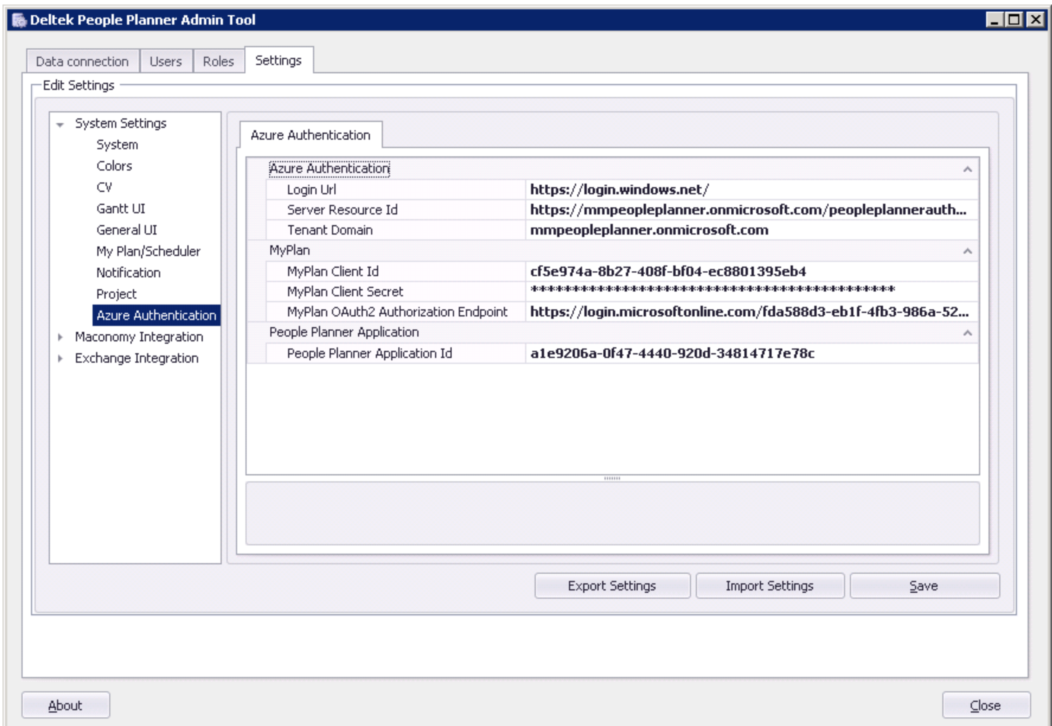


For example: mmpeopleplanner.onmicrosoft.com

Settings for the People Planner Application

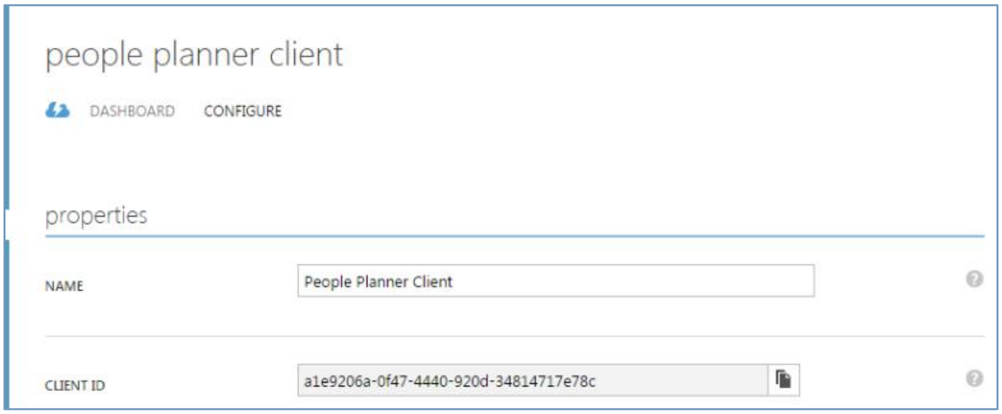
To configure the Admin settings to enable People Planner to authenticate using Azure:

1. Launch the People Planner Admin Tool and navigate to **Azure Authentication**.



2. In the People Planner Application section, enter a value for **People Planner Application Id**.

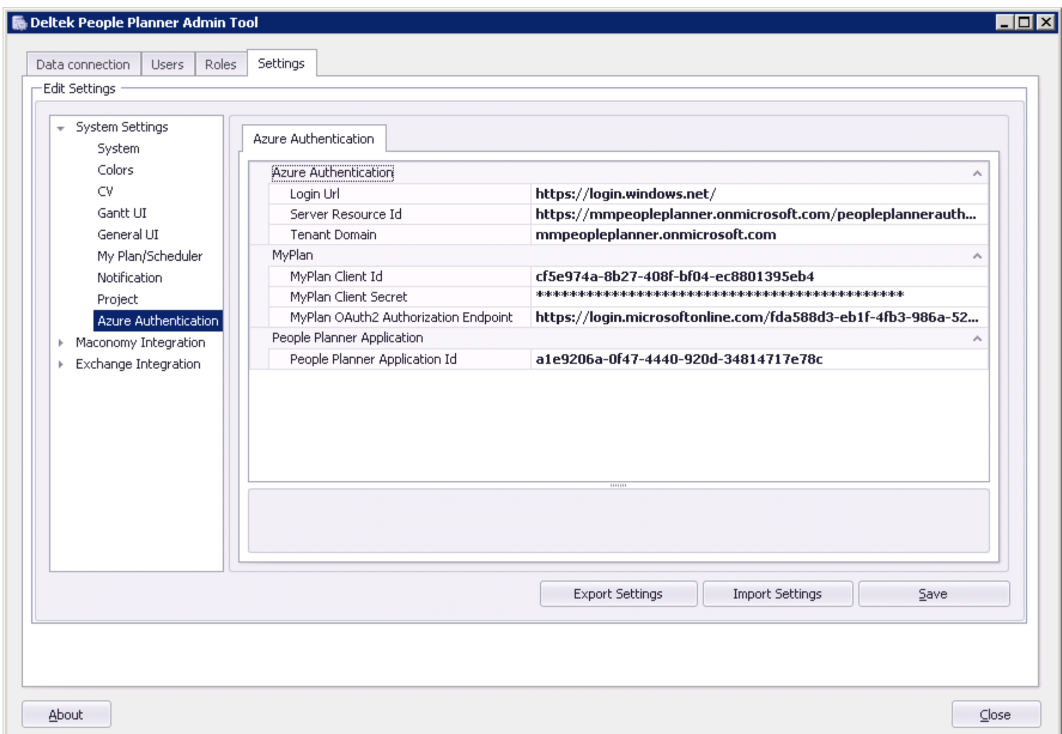
   This should match the application ID of the People Planner application in Azure. You can obtain this value by opening the People Planner application in Azure and navigating to the CONFIGURE tab.



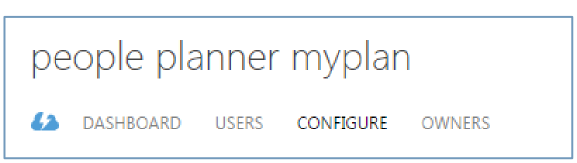
Settings for the MyPlan Application

To configure the Admin settings to enable MyPlan to authenticate using Azure:

1. Launch the People Planner Admin Tool and navigate to **Azure Authentication**.



2. Enter values for the following in the MyPlan section:
   - **MyPlan Client Id** — This should match the ID of the People Planner MyPlan application in Azure. You can obtain this by opening the MyPlan application in Azure and navigating to the CONFIGURE tab.



For example, cf5e974a-8b27-408f-bf04-ec8801395eb4

- **MyPlan Client Secret** — You define the secret key on the CONFIGURE tab of the MyPlan application in Azure. See the *Set Up the MyPlan Application* steps for more information.
- **MyPlan OAuth2 Authorization Endpoint** — You can retrieve this value by opening the MyPlan application in Azure and then clicking **VIEW ENDPOINTS** in the bottom menu.

This displays a list of the endpoints that are available to MyPlan. Copy the OAuth2 authorization endpoint into the Admin Tool.

OIDC Authentication

The stand-alone MyPlan Web Application can be configured to use the Maconomy SSO OAuth 2.0 OpenID Connect authentication protocol.

When MyPlan OIDC authentication is enabled, the user is redirected to authenticate with the identity provider specified in the Maconomy OIDC SSO setup.

Prerequisites

Prior to using MyPlan OIDC, ensure the following:

1. Maconomy generic third-party SSO is set up in Maconomy using MConfig, and it is verified that it works.

   See the *Deltek Maconomy System Admin Guide* for more information.

2. Maconomy RESTful Web Service is enabled and runs on the Maconomy system.
3. People Planner is configured to integrate with Maconomy and import users from Maconomy.

   Note: The users in Maconomy must have the Network Username and the Network Domain name set.

4. Maconomy RESTful URL and the (SSI) Maconomy Secret Key are configured in the Admin Tool.

Setup

To use MyPlan OIDC, set up the following:

1. Add the MyPlan OIDC login page URI to the identity provider configuration as an allowed login redirect URI. The URI has the general form: <scheme>://<server>:<port>/MyPlan/OIDCLogin.aspx. For example:

   https://peopleplanner.mycompany.com/MyPlan/OIDCLogin.aspx.

2. Enable the MyPlan OIDC authentication in People Planner settings using the Admin Tool.

3. Change the authentication setting for the IIS MyPlan web application from Windows Authentication to Anonymous Authentication.

> Notes on using MyPlan OIDC with other People Planner Authentication schemes:
>
> - You are able to use MyPlan OIDC authentication with typical People Planner SSI or JWT token authentication.
> - You are unable to use MyPlan OIDC authentication with Azure AD. If Azure AD authentication is enabled for MyPlan, it takes precedence over the OIDC authentication protocol.

People Planner in the Cloud

Before the release of People Planner 3.6.1, Deltek historically advised customers to use an on-premises setup, that is, an installation where both the People Planner Windows Application and the People Planner database server run on the local network. With increasingly bigger customers—and with their offices spread out geographically—this has become less and less feasible. With People Planner 3.6.1, People Planner was certified for running under Citrix.

> **Note:** This section mainly refers to the performance of the People Planner Windows Application; however, it is also relevant to where the People Planner database is installed. People Planner 3.6 introduced the People Planner Web Components, which are Web applications, and therefore follow a different performance profile.

An alternative to an on-premises installation is to install the People Planner Windows Application in the cloud. If you are considering using the cloud, two main areas must be clarified:

- How it will affect the performance of the People Planner Windows Application.
- How to set it up.

> **Note:** The cloud can be many things. This section describes how you can install and host People Planner with a cloud provider. Specifically, it describes a setup where Citrix is used to host the People Planner application, and where the database is hosted on Microsoft Azure. Deltek does not currently host People Planner for customers.

The ultimate goal should be to ensure the best possible performance; thus, this information describes the performance considerations first. These considerations have consequences for the kind of setup that you should choose.

When you run People Planner on a local network, latency and bandwidth are usually not things that you need to consider. When you move the People Planner installation into the cloud—either completely or partially—much of the network traffic must go via the internet. As a result, latency and bandwidth become concerns.

> **Note:** This is not specific to the cloud; latency can also be an issue if a customer has offices in different geographical locations, and the network traffic must travel from one location to another.

Latency and Bandwidth

The main issue with using the cloud is latency and bandwidth, and how these affect the performance of People Planner. When the SQL Server is “far away” from the People Planner application, each call to the database carries a cost to the performance. With many calls, this adds up, and the performance suffers.

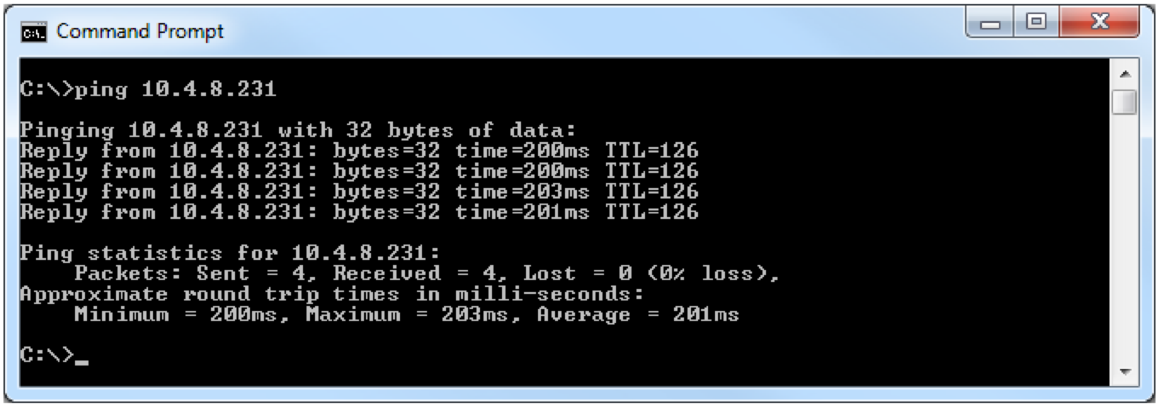
> **Tip:** For a more comprehensive coverage of People Planner’s behavior with latency and restricted bandwidth, see the second half of the Deltek People Planner 3.6.1 Performance and Latency Report.

This is not a unique problem for the cloud; it happens in any network that performs less than optimally. However, when the cloud is involved, the network traffic must pass via the Internet with all of the network problems that this may produce.

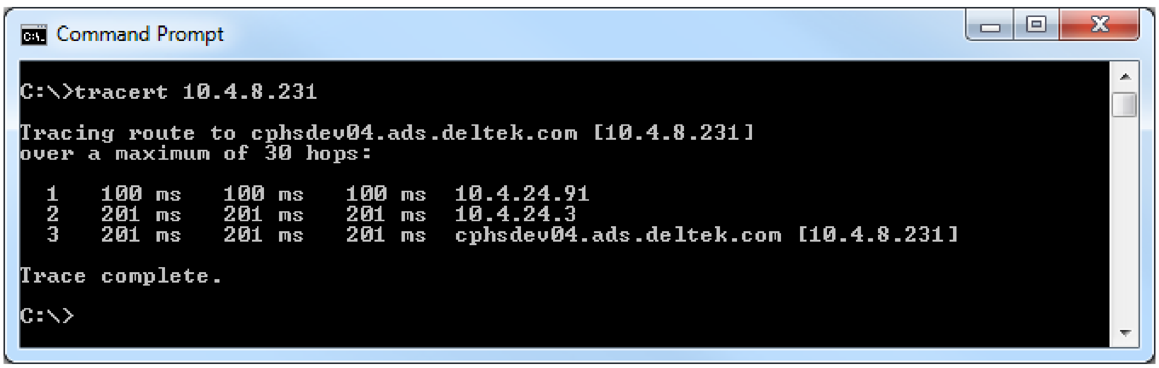
There is no strict definition of what latency is, but the following is the definition used in this document:

Latency is the time that elapses from when a request is sent from the client to the server, and until the reply comes back from the server to the client.

You can use the ping command to get an idea of the latency. In the following example, it is around 200 milliseconds.

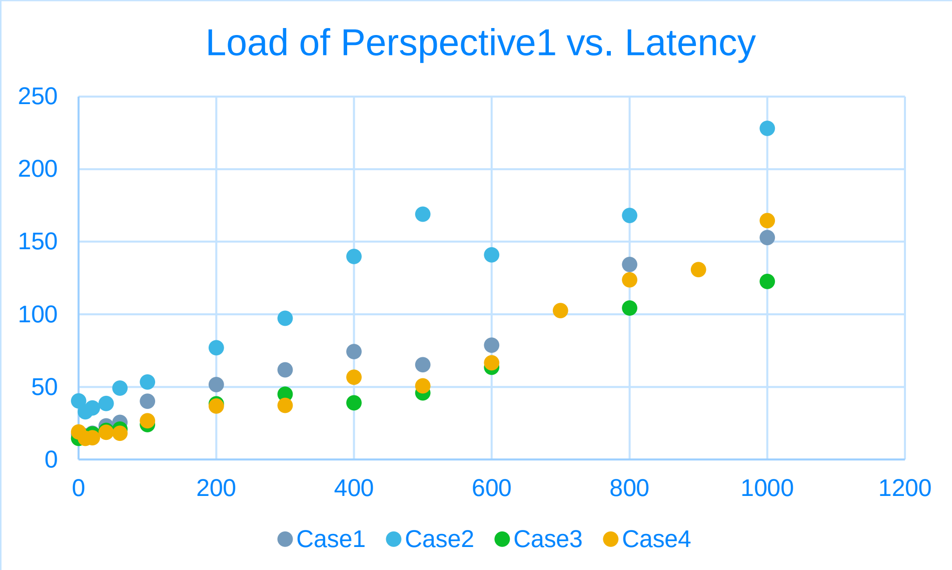


The tracert command is another useful tool that tells you where the latency happens. In the following example, the latency is due to two network hops of 100 milliseconds each.



The following graph shows some case studies of how some actual customer setups would perform on a network with latency.

To be able to compare the results, the same perspective, “Perspective1,” was created in each customer database. This perspective was opened and the time-to-open was measured. This was then repeated while varying the latency of the test network. The value on the x-axis is the latency (given in milliseconds), and the y-axis shows how the time-to-open behaved (measured in seconds).



Note: The differences among the four cases are due to the different sizes of the returned data; a database with more data cannot perform as well as a smaller database.

Note: In a normal setup, you would have a data limitation for speed, and to limit the data that is shown to what is actually relevant for the user. This feature was deliberately disabled in the test, and this explains the high numbers on the y-axis.

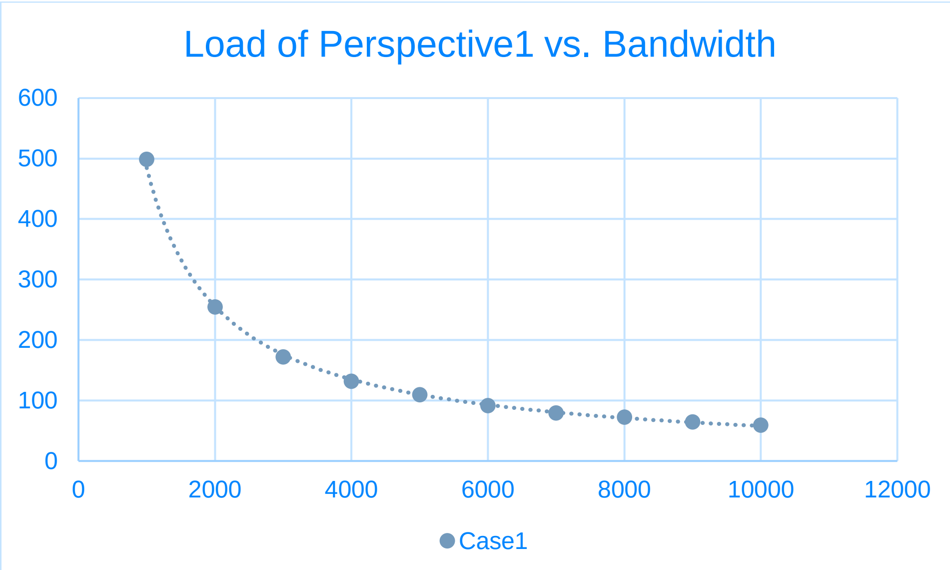
The graph illustrates how the response time grows proportionally with an increase in latency. It also shows that a latency of approximately 100 milliseconds results in a doubled response time—that is, the performance is halved.

Bandwidth is the amount of data that can pass through the network at a given period. The bandwidth is often measured in Kbps (Kilobit per second) or Mbps (Megabit per second).

Tip: A useful metaphor is to consider the network as a water pipe, and in this case, the bandwidth is the radius of the pipe. The larger the radius, the more water can pass through the pipe at any given time.

When People Planner needs to display a perspective, it often needs to retrieve lots of data from the database. The available bandwidth puts an upper limit on how fast this can be done. Usually the request for the data—initialized by the opening of the perspective—is far less than the reply—that is, the data itself. As a result, the limited bandwidth is mostly a hindering on the return-path.

The next graph, from the same case study, shows how the performance behaves when the bandwidth is limited. The value on the x-axis is the bandwidth (measured in Kbps), and the y-axis again shows the time-to-open (measured in seconds).



On a network with a very low bandwidth, the response time is very slow. The rule is that the response time is reversely proportional to the bandwidth.

The preceding two graphs illustrate why you need to strive for a setup where the latency is as low as possible, and the bandwidth is sufficiently high. Where this is not possible, they provide a tool to predict how the performance is expected to behave.

The Cloud

What is the cloud and what does "running People Planner in the cloud" mean?

In its most simple configuration, the People Planner application stores its data in an SQL database, and the question, therefore, translates to where the People Planner application runs and where the SQL Server runs. Because of this, consider the following cloud-setups.

Setup A:

1. The SQL Server is hosted in the cloud.
2. The People Planner application is installed on-premises, that is, on the user's own computer.

Setup B:

- The SQL Server is hosted in the cloud.
- The People Planner application is hosted in the cloud.
- The users access the hosted People Planner application from their own computers.

The term "the cloud" refers to any cloud provider that supports the Microsoft platforms, for example, Amazon AWS or Microsoft Azure are the two most notable examples.

> **Note:** You can use People Planner as a stand-alone system or together with Maconomy. Deltek has not evaluated the setups where Maconomy is hosted in the cloud.

Classic Setup

In the traditional setup both the People Planner application and the SQL Server are installed on-premises.

Arguments for such a setup:

- The company has full control of the setup.
- Low latency and high bandwidth of the network.

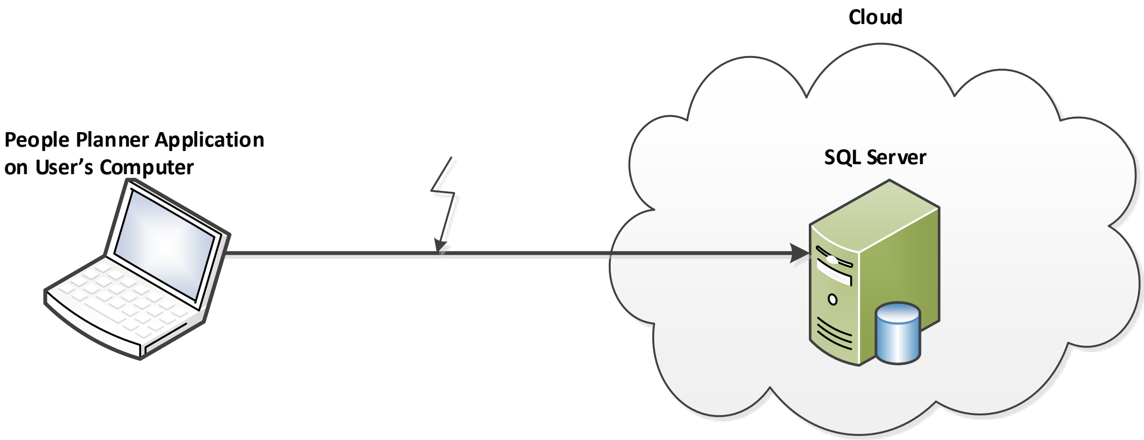
Arguments against such a setup:

- It may not be a possible setup if the company has offices in different geographic locations, especially if there is significant latency between the subnetworks.
- The company may want to move as much as possible of their infrastructure to the cloud.
- The setup would have to fit into the existing network infrastructure, which might not be optimal for various reasons.

Setup A

In this setup, only the People Planner database is hosted in the cloud; the People Planner application is installed locally on the users' computers.

> **Note:** In the following figures, the "lightning strike" indicates where latency and limited bandwidth can affect performance.



The performance primarily depends on the latency and bandwidth between the user's computer and the hosted database.

Arguments for such a setup:

- This is a simple setup, where there is only one extra server—that is, the SQL Server—to consider.
- Offices at different locations can easily connect to the SQL Server.
- The SQL Server can easily be resized as the need requires more or less CPU and disk size.

Arguments against such a setup:

- Latency and bandwidth between the local network and the cloud provider's network impact the performance.

- Offices in different locations may experience different performance as a result of being closer to or farther away from the SQL Server.

Setup B

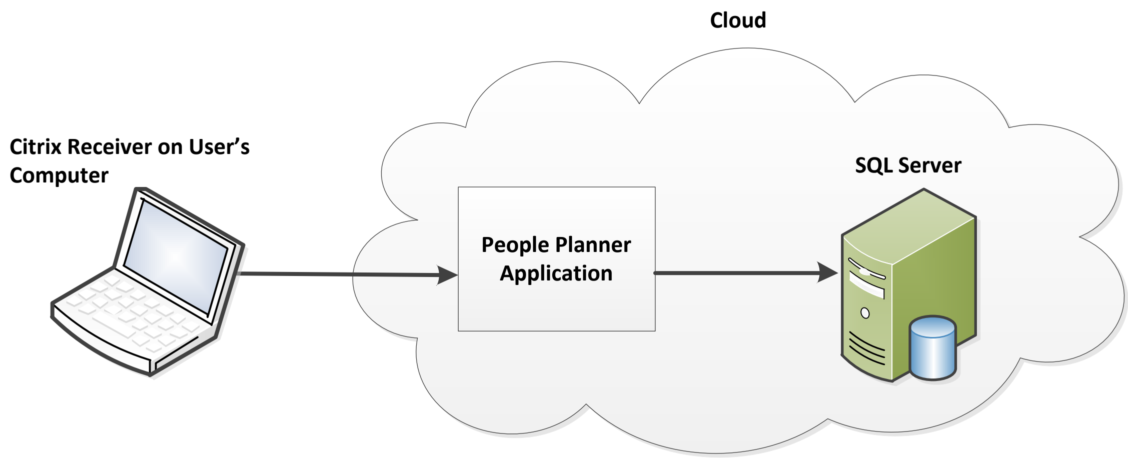
In this setup, both the People Planner application and the SQL Server are hosted in the cloud. The users connect to the People Planner application using either RDS (Remote Desktop) or Citrix.

> **Note:** Citrix is officially supported as of People Planner 3.6.1.

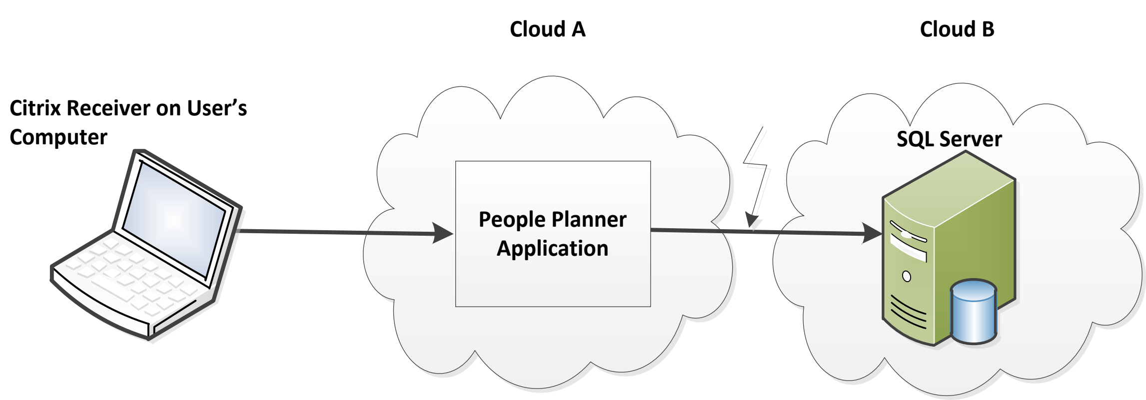
The People Planner application and the SQL Server can be hosted by the same cloud provider, or by two different providers.

- If hosted by the same cloud provider, the provider is usually able to guarantee a setup where the latency and bandwidth between the two correspond to those of an on-premises setup.
- If they are hosted by two different cloud providers, latency and bandwidth between the two networks may become an issue.

Setup B.1



Setup B.2



The users access the hosted People Planner application from their own computers:

1. The People Planner data flows directly between the People Planner application and the SQL Server.
2. What the users see is only the screen of the People Planner application, and no People Planner data is moved between the SQL Server and the user's computer.

This means that the performance of this part of Setup B is determined solely by the Citrix installation, and not by People Planner or the amount of data that it must handle.

The overall performance then depends more on the other part of the setup, the connection between Citrix and the SQL Server. If this connection has a high latency or a limited bandwidth, the performance is affected.

Arguments for such a setup:

1. The customer has offices in different geographical locations.
2. The software can be installed in a virtual network with a much simpler structure compared to the physical one that it would have to fit into if the software were installed on the company's own network. Note that this argument only holds if the software is installed with the same cloud provider.
3. Servers and network can be upgraded as needed.
4. Servers and network are running on the cloud provider's setup, which is most likely of a superior quality to what any company can afford individually.

Arguments against such a setup:

1. Although the software is installed "in the cloud," it is still installed on a physical machine somewhere. This machine may be closer or farther away from the location of the office, and the latency will reflect this.

Setup B.3

Even when the People Planner application and the SQL Server are hosted by the same cloud provider, the servers need not necessarily be placed physically close to each other. There may therefore be latency and bandwidth considerations on the connection between the two.

An example of this is when a customer has offices in different geographical locations. In this case they may want a Citrix server close to each office. However, the People Planner installations still need to connect to the same SQL Server; it may not be possible to achieve a setup where there is a low latency between all of the Citrix servers and the sole SQL Server. As a result, some of the offices will experience a setup that behaves more like B.2, while for others it is B.1.

SQL Server Hosted in the Cloud – Azure Setup

This section describes how to host the People Planner database on Azure and is valid for both Setups A and B mentioned previously. It assumes that you already have an Azure account.

You can either start from scratch by creating a database, or you can migrate an existing database from an on-premises SQL Server to Azure.

Create a People Planner Database in Azure

This process consists of two steps:

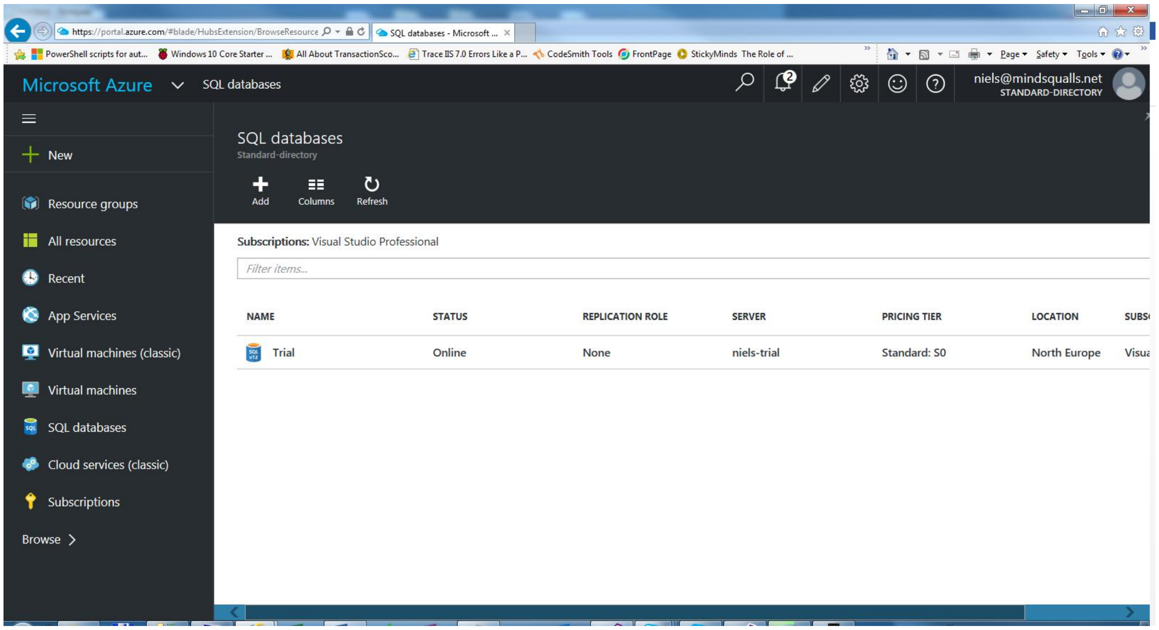
1. Create an empty database.

2. Update this database to a People Planner database.

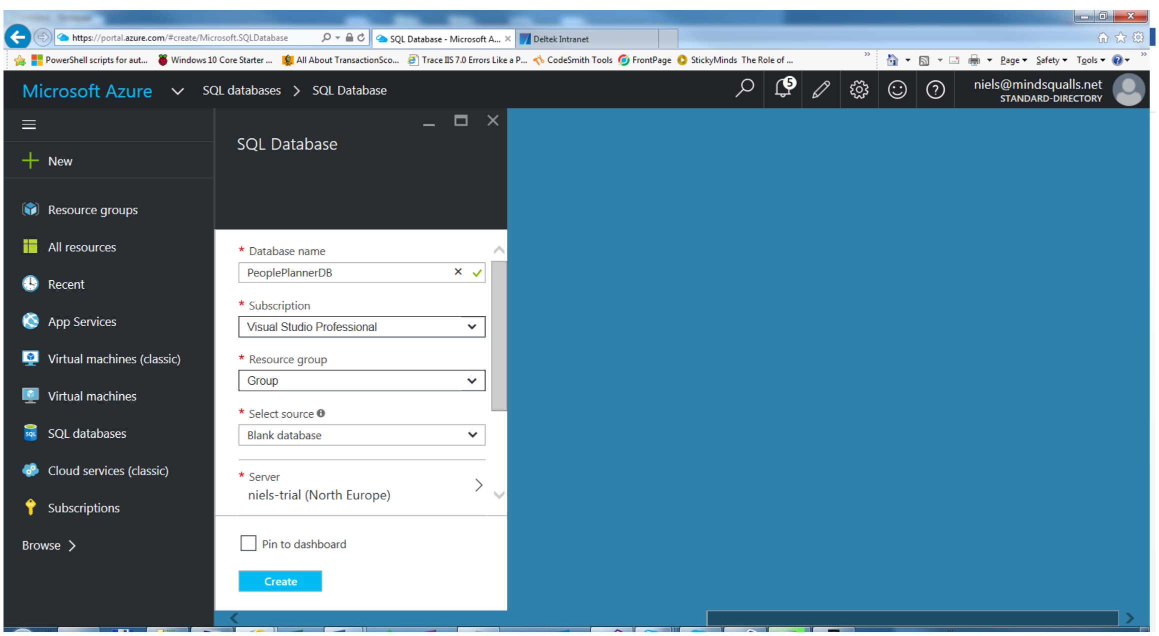
Create an Empty Database using the Azure Portal

To create an empty database using the Azure Portal:

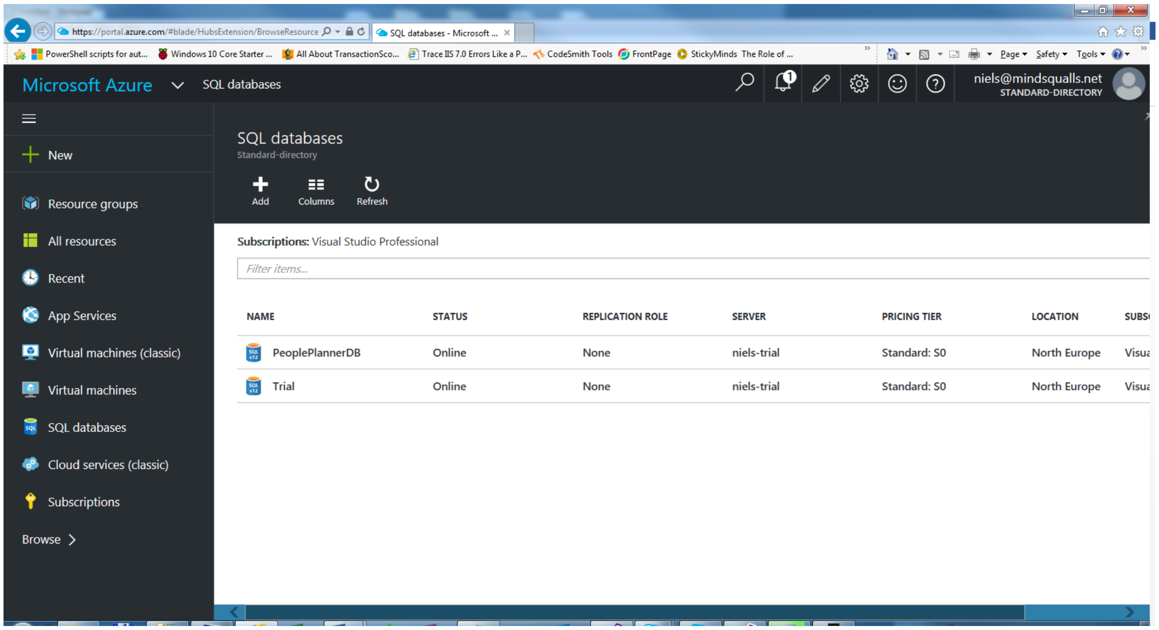
- Log in to the Azure portal, and navigate to the SQL databases tab.



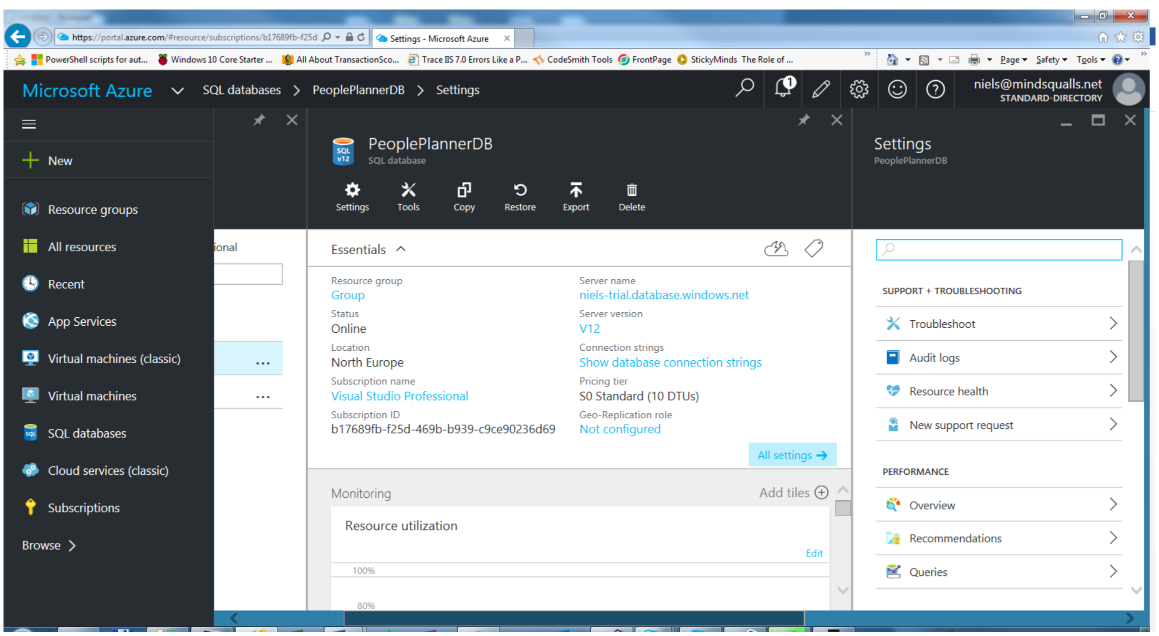
- Click the **Add** button to create a blank database.



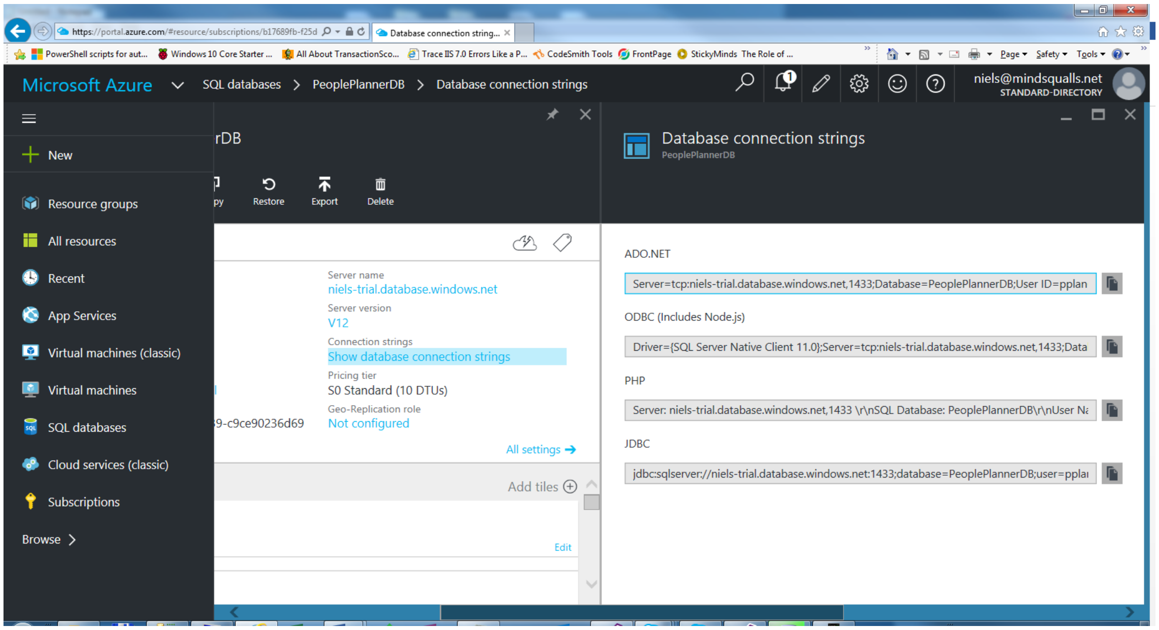
- Give the database a name, such as PeoplePlannerDB, and click the **Create** button to create it. This may take a few minutes; you must click the **Refresh** button.



- Click on the database to get to the Essentials view.



- In the Essentials view, click **Show database connection strings**.



- Make a copy of the ADO.NET connection string.

```
Server=tcp:niels-trial.database.windows.net,1433;Database=PeoplePlannerDB;User
ID=pplan@niels-
trial;Password={your_password_here};Encrypt=True;TrustServerCertificate=False;C
onnection Timeout=30;
```

Note: The value *niels-trial.database.windows.net* is just an example. Replace it with the correct server name for your Azure account.

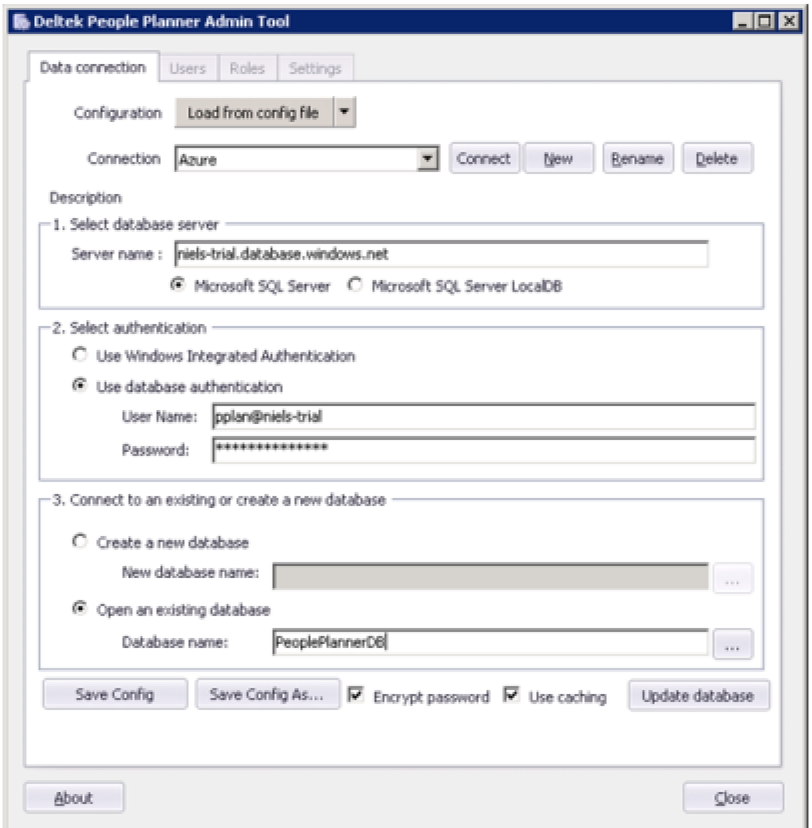
Tip: You need the yellow-highlighted values in the preceding step for the next part.

Update the Empty Database into a People Planner Database

When you have created the empty database, the next step is to update it into a People Planner database.

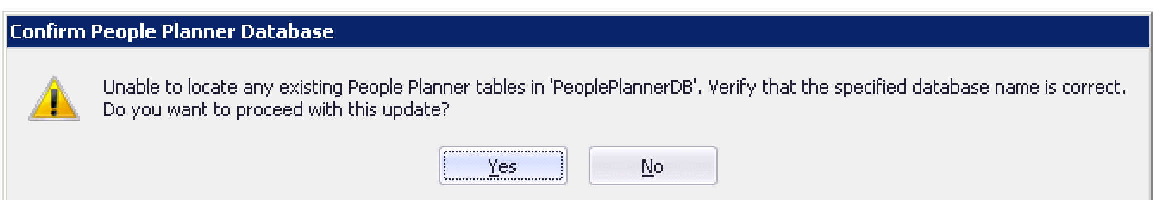
To update the empty database into a People Planner database:

- Enter the values from the ADO.NET string into the People Planner Admin Tool.

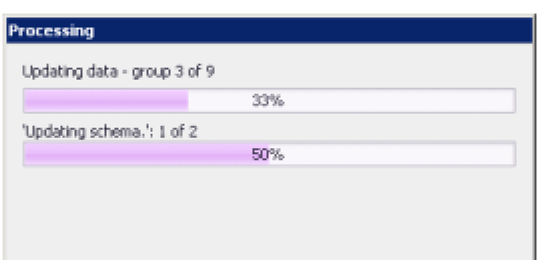


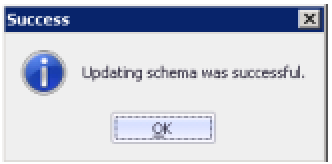
- Click the **Update database** button.

Because the database is empty, People Planner first asks you to confirm that you want to use this database. The purpose of this is to prevent you from accidentally updating an existing database that may belong to some other application.



- Click the **Yes** button to continue. The Admin Tool creates all of the tables and fills them with basic data such as the default-settings.





When the update is complete, you must configure the database in the usual fashion, for example, by adding yourself as administrator, setting up the license path and the URL to the Maconomy Web services, and so on.

Upload an Existing Database to Azure

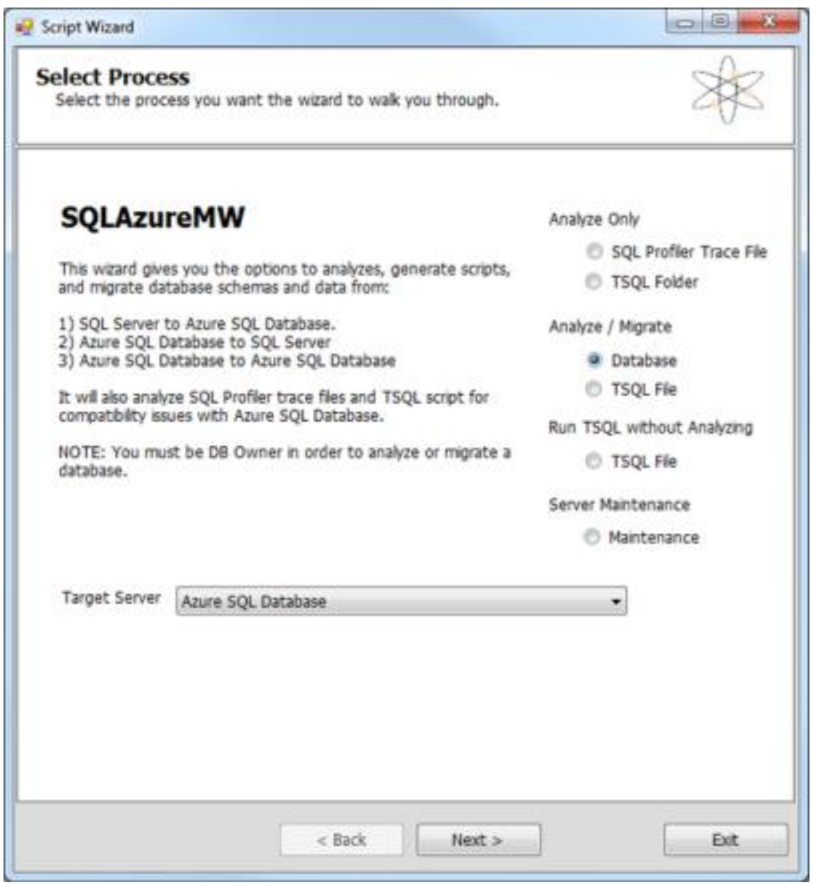
If you already have an existing People Planner database, you can upload it to Azure by using the SQL Database Migration Wizard tool.

You can download SQLAzureMW from CodePlex:

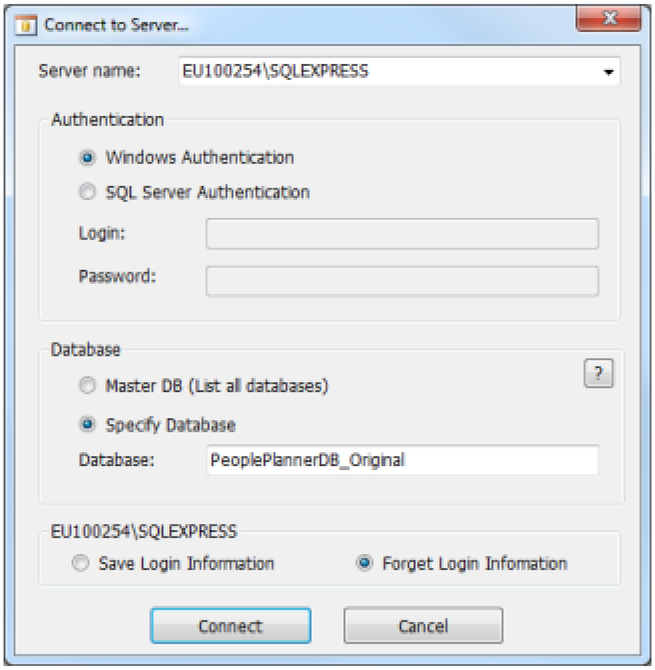
https://sqlazuremw.codeplex.com/

To use the Migrate Database Wizard to upload an existing People Planner database to Azure:

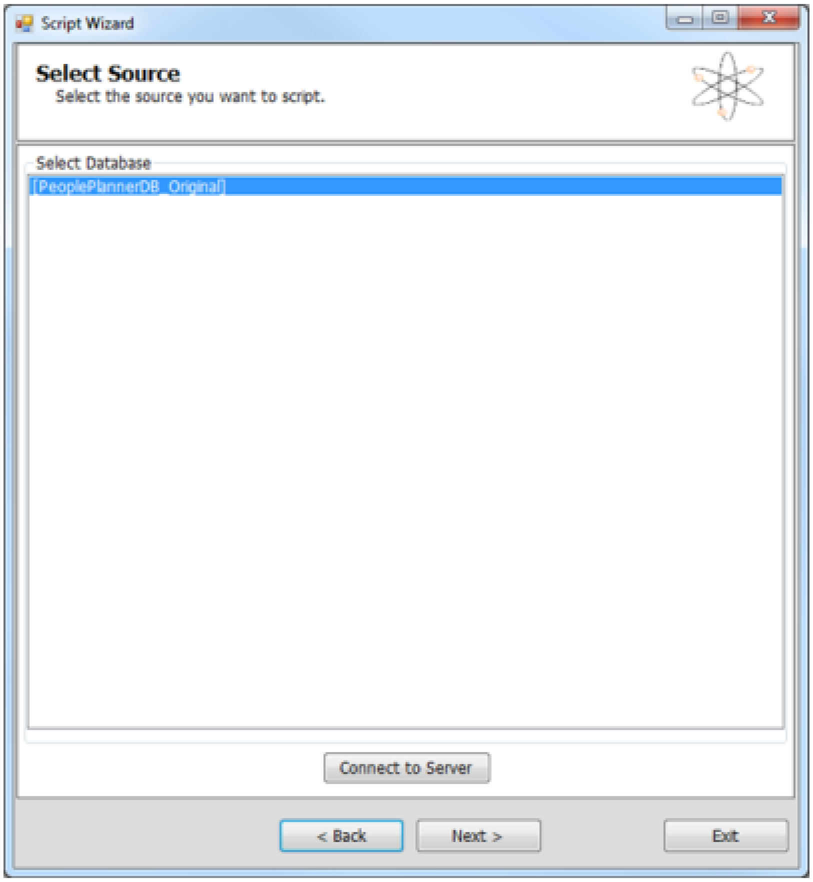
- Start SQLAzureMW.
- Select the **Database** radio button under **Analyze / Migrate**.
- Select **Azure SQL Database** from the drop-down list for **Target Server**.



- Click **Next**. The Connect to Server… dialog is displayed.
- Enter the login details for the source database in that dialog.
- Enter the name of the SQL server where the source database is currently hosted in the Server name field.
- Enter the authentication credentials for accessing the database under Authentication.
- Select the **Specify Database** radio button under **Database** and enter the database name in the **Database** field.

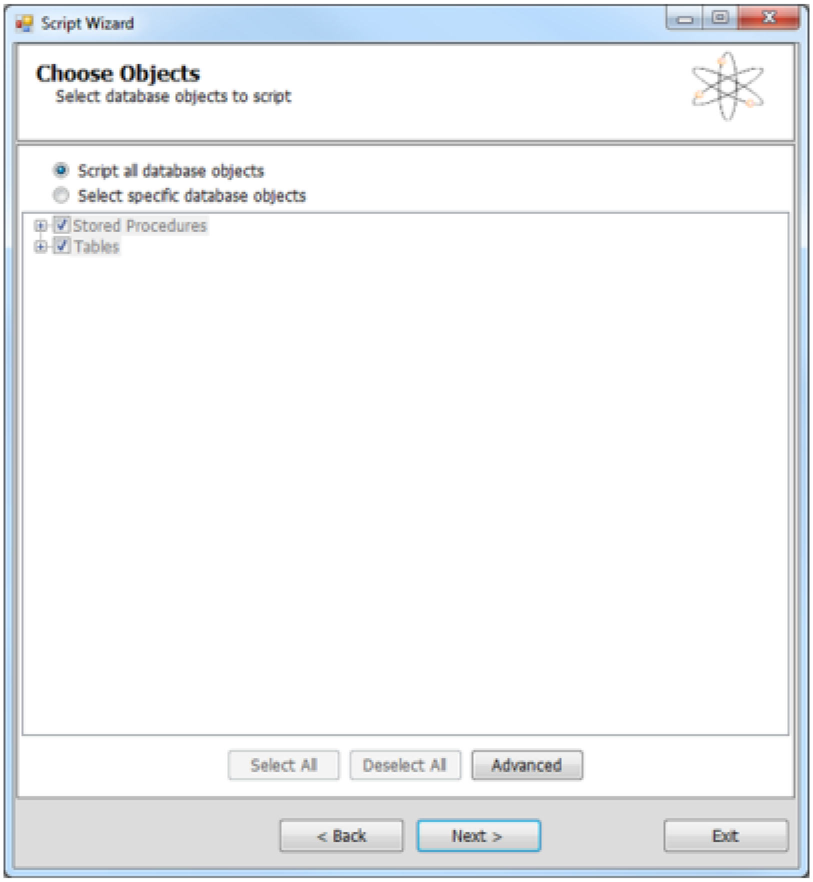


- Click **Connect**.

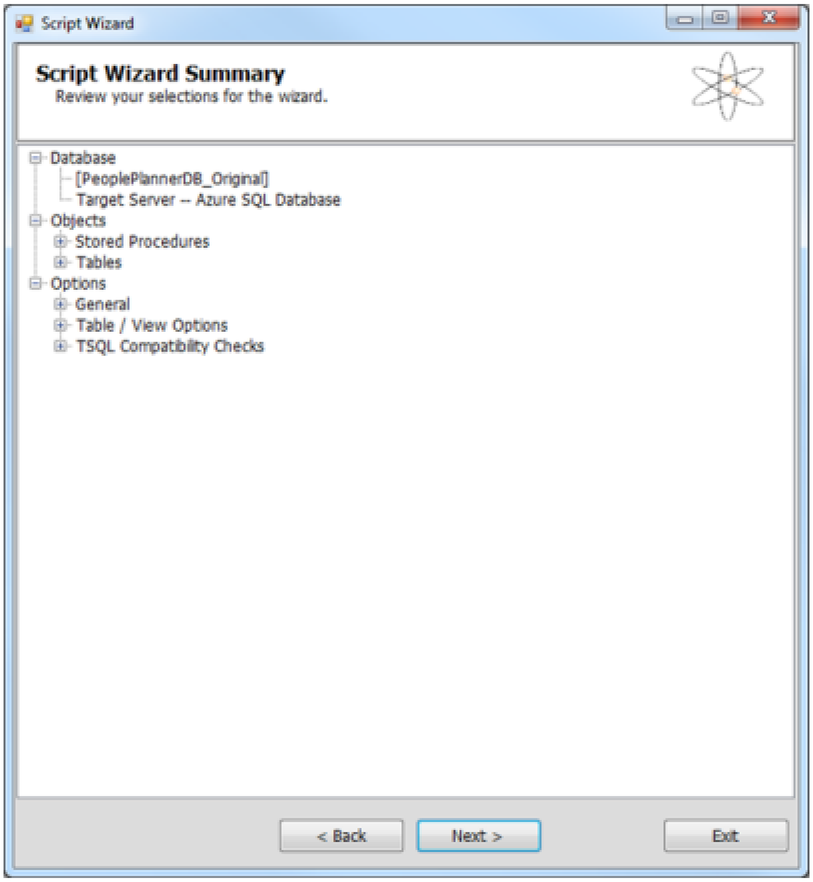


- Click **Next**. The Choose Objects dialog is displayed, where you choose those parts of the database that you want to migrate.

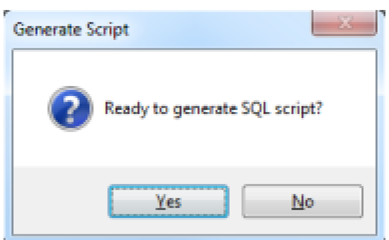
- Select the **Script all database objects** radio button.



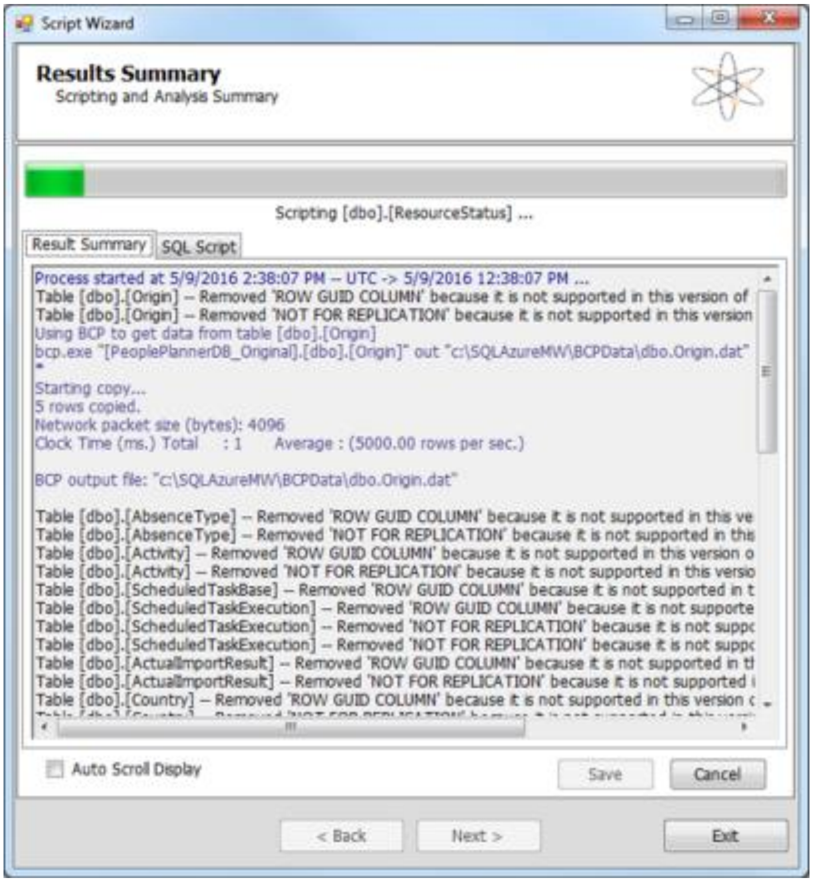
- Click **Next**. The Script Wizard Summary view lists the details of the migration job.



- Click **Next**. The wizard asks for permission to continue.
- Click **Yes**.

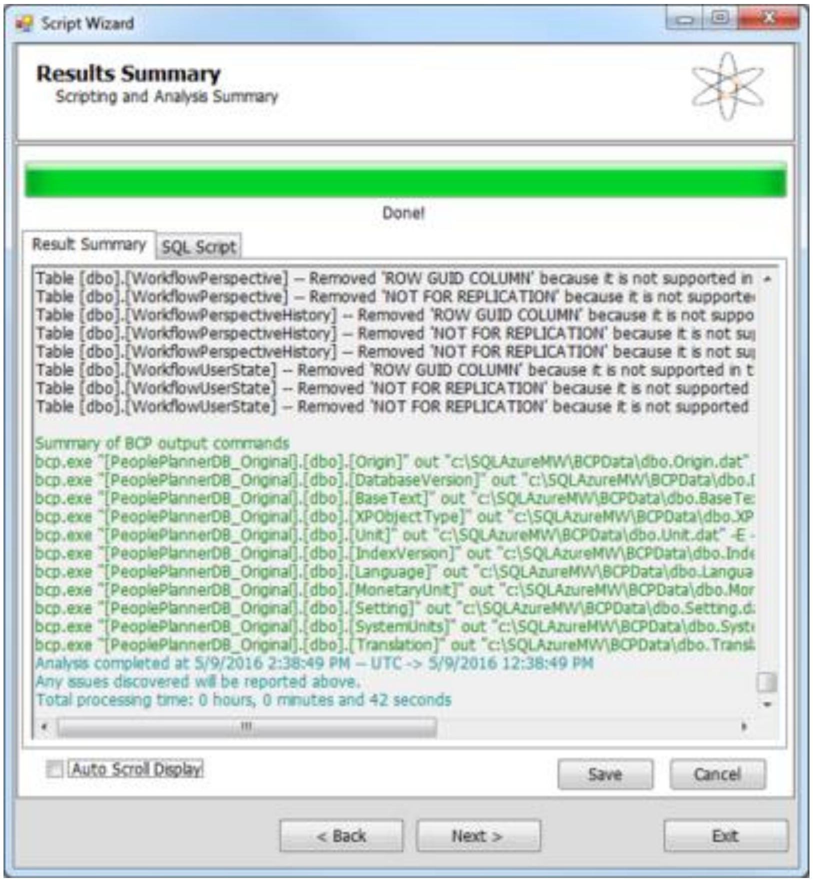


The wizard now works on creating an SQL script for the migration.



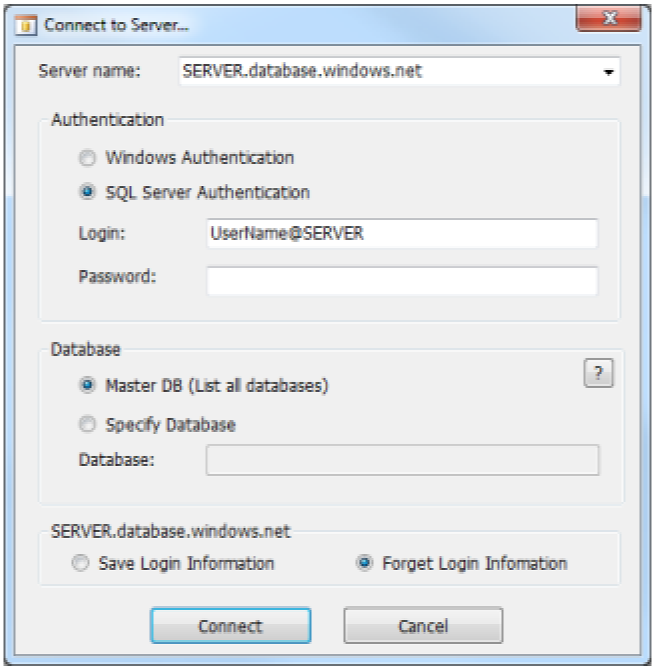
Note: As part of the process, the tool does some deletions: "Removed 'ROW GUID COLUMN" and "Removed 'NOT FOR REPLICATION.'" This occurs because Azure does not support these. The removal of these fields does not affect People Planner.

- Wait for this process to complete.



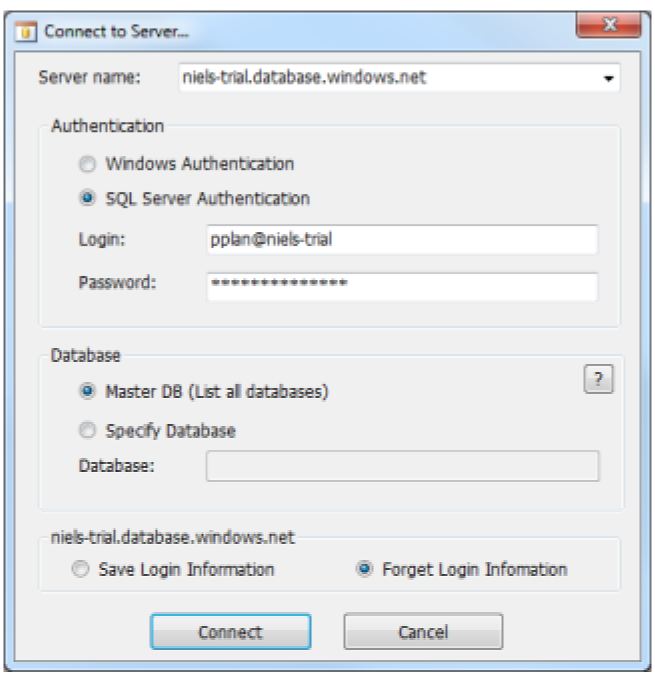
- Click **Next**.

A second Connect to Server… dialog is displayed, where you must enter the login details for the target database. Because you chose Azure SQL Database as the Target Server, the dialog is partially filled in.

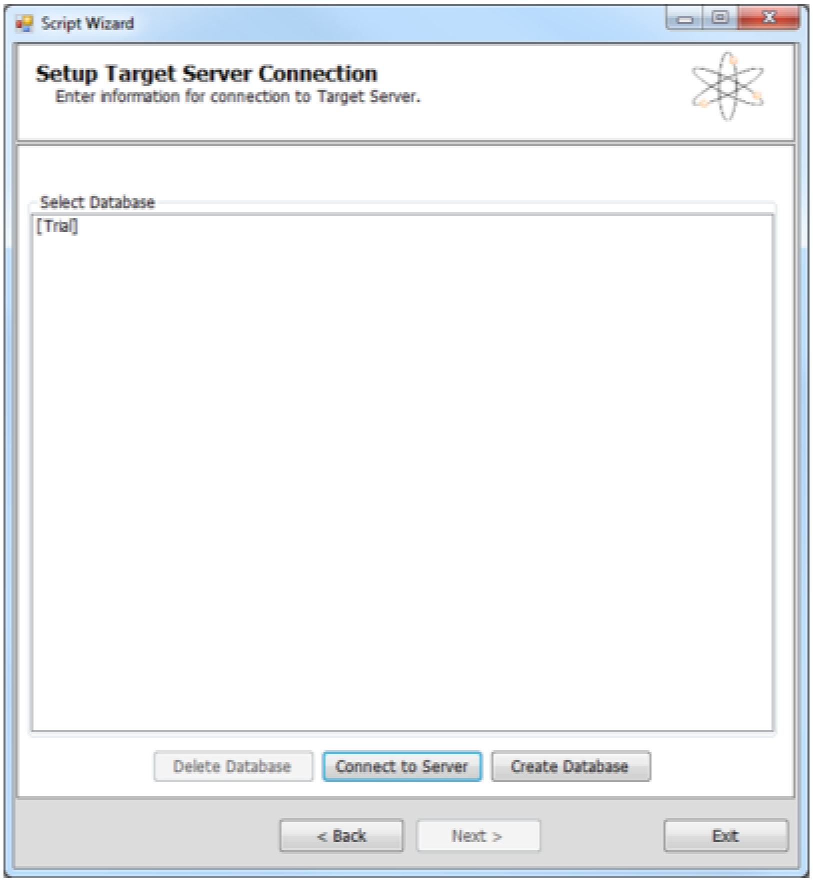


- Correct the server name.
- Correct the authentication credentials.
- Select the **Master DB** radio button under **Database**.

> **Note:** The wizard can create the database or it can upload the database to an existing (empty) database. In the latter case, you should use the Specify Database option and enter the name of the database. Selecting Master DB, on the other hand, guides you through some additional steps to create the database.

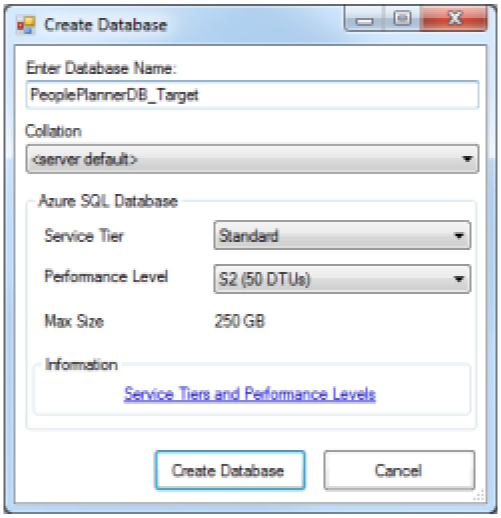


- Click **Connect**.

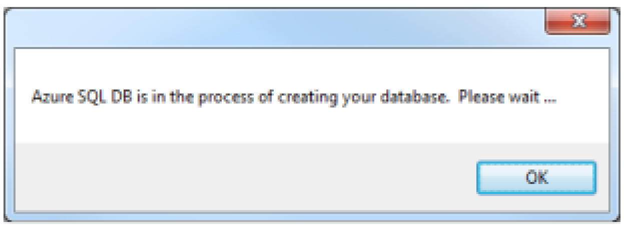


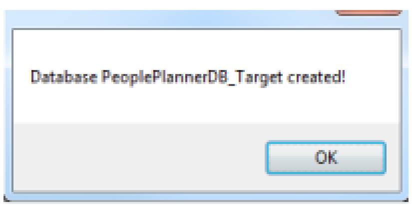
- Click **Create Database**.
- Enter a name for the target database in the **Enter Database Name** field.
- Select a **Service Tier** and **Performance Level** from the drop-downs under **Azure SQL Database**.

> **Tip:** These are specified by your Azure-subscription.



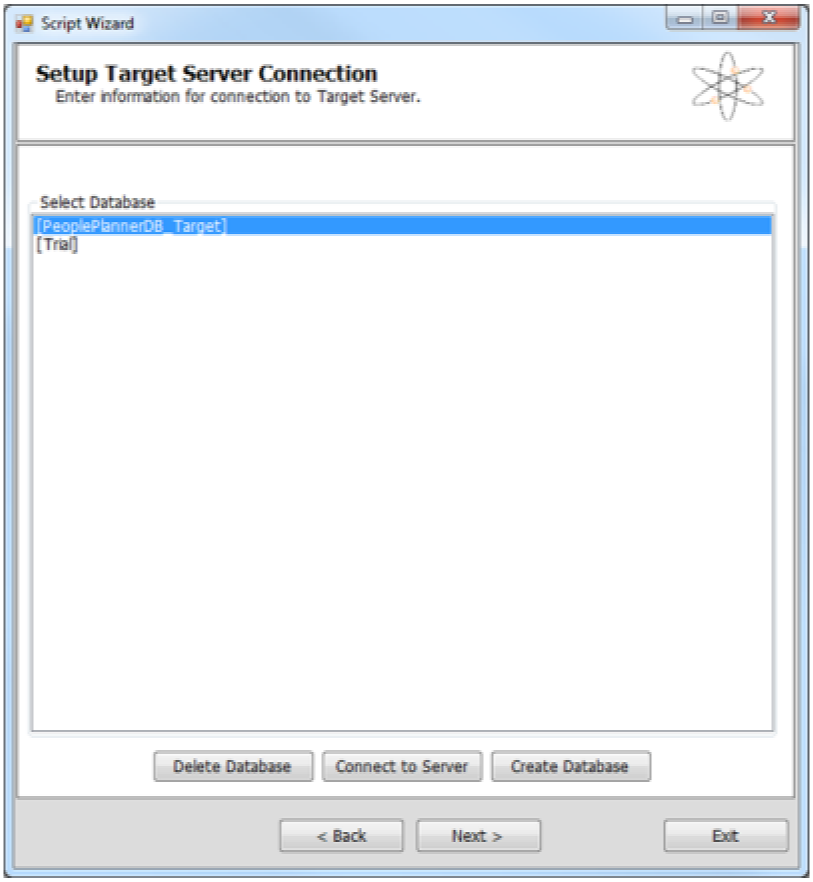
- Click **Create Database**. Azure creates the database, which takes a few moments.



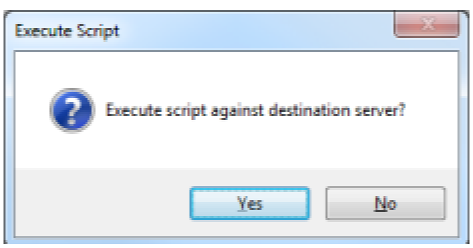


- Click **OK**, and then click **OK** once more. The Script Wizard displays a list of the available databases.

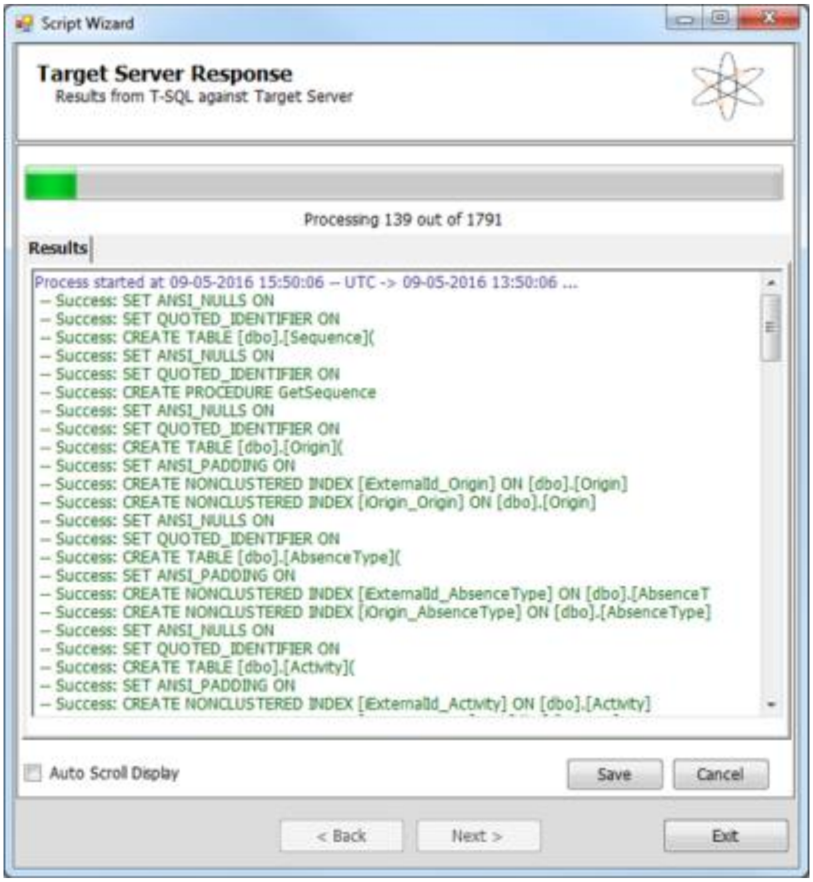
- From this list, select the database that you just created.

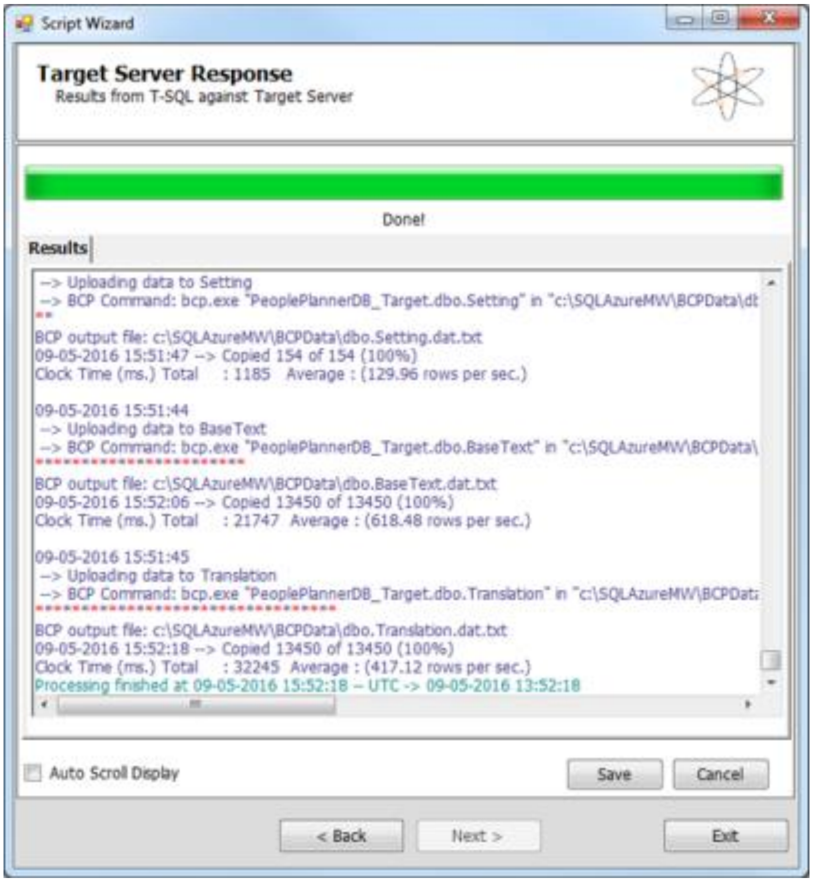


- Click **Next**. The wizard again asks you for permission to continue.
- Click **Yes**.



The migrating starts.


Script Wizard
Target Server Response
Results from T-SQL against Target Server
Processing 139 out of 1791
Results
Process started at 09-05-2016 15:50:06 -- UTC -> 09-05-2016 13:50:06 ...
-- Success: SET ANSI_NULLS ON
-- Success: SET QUOTED_IDENTIFIER ON
-- Success: CREATE TABLE [dbo].[Sequence](
-- Success: SET ANSI_NULLS ON
-- Success: SET QUOTED_IDENTIFIER ON
-- Success: CREATE PROCEDURE GetSequence
-- Success: SET ANSI_NULLS ON
-- Success: SET QUOTED_IDENTIFIER ON
-- Success: CREATE TABLE [dbo].[Origin](
-- Success: SET ANSI_PADDING ON
-- Success: CREATE NONCLUSTERED INDEX [iExternalId_Origin] ON [dbo].[Origin]
-- Success: CREATE NONCLUSTERED INDEX [iOrigin_Origin] ON [dbo].[Origin]
-- Success: SET ANSI_NULLS ON
-- Success: SET QUOTED_IDENTIFIER ON
-- Success: CREATE TABLE [dbo].[AbsenceType](
-- Success: SET ANSI_PADDING ON
-- Success: CREATE NONCLUSTERED INDEX [iExternalId_AbsenceType] ON [dbo].[AbsenceT
-- Success: CREATE NONCLUSTERED INDEX [iOrigin_AbsenceType] ON [dbo].[AbsenceType]
-- Success: SET ANSI_NULLS ON
-- Success: SET QUOTED_IDENTIFIER ON
-- Success: CREATE TABLE [dbo].[Activity](
-- Success: SET ANSI_PADDING ON
-- Success: CREATE NONCLUSTERED INDEX [iExternalId_Activity] ON [dbo].[Activity]
Auto Scroll Display
Save
Cancel
< Back
Next >
Exit



- Click **Exit**.

Citrix

In Setup B, the People Planner application is running in the cloud, and the user connects to it using either Remote Desktop or Citrix.

This section describes how to host the People Planner application on Citrix. It assumes that you have already installed Citrix.

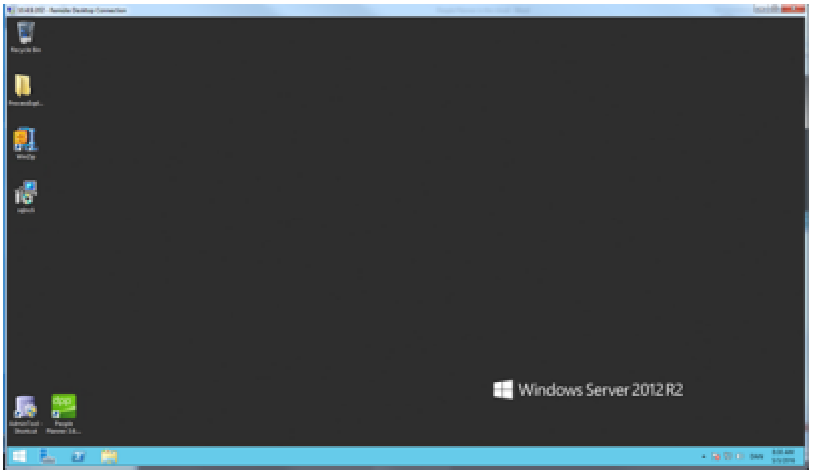
In such a setup, the People Planner software is installed on the Citrix Server, and the user connects to it using the Citrix Receiver application.

Install and Configure the People Planner Software

This procedure installs and configures the People Planner software—both the People Planner application and the Admin Tool.

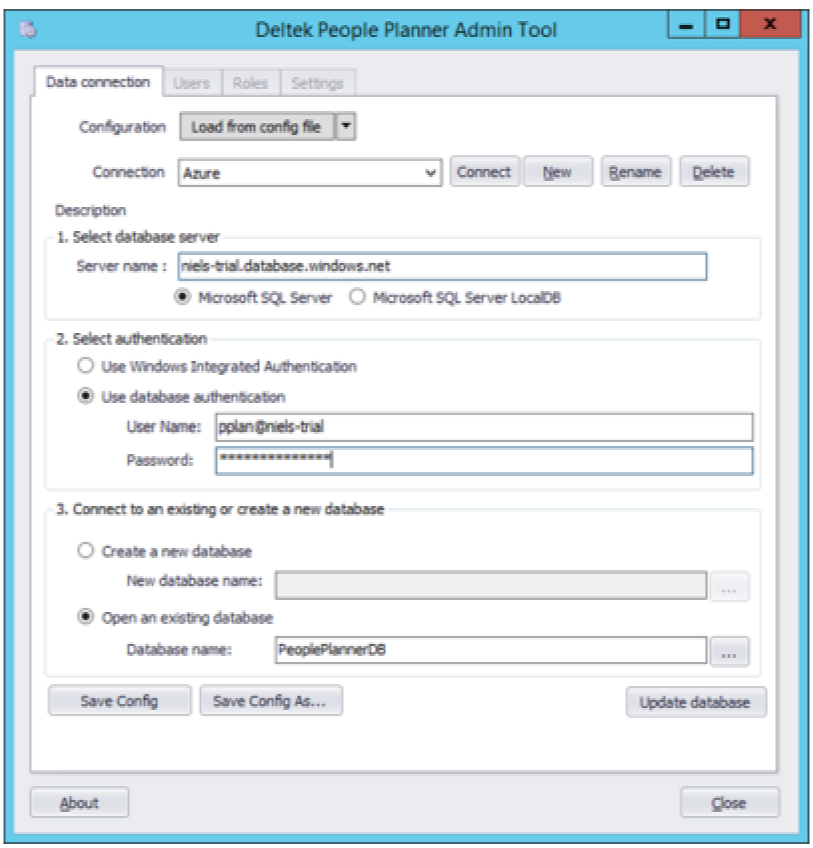
To install and configure the People Planner application and the Admin Tool:

1. Use Remote Desktop to log in to the Citrix Server.

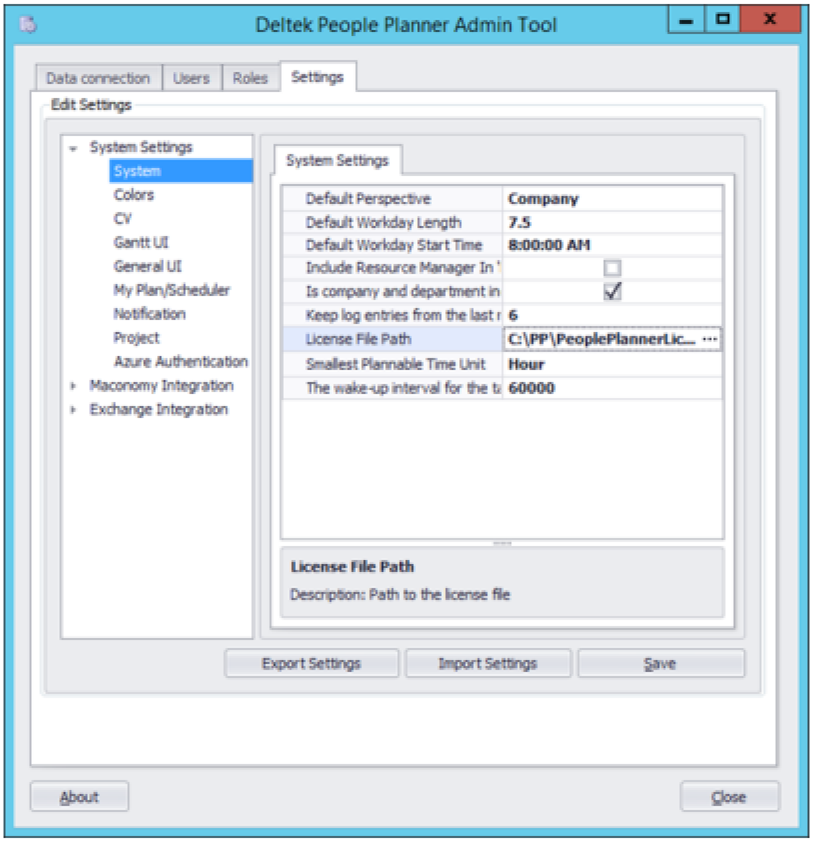


2. Copy the zip file that contains the installers to the desktop. From there, the installation is the same as if you were installing the software on any other computer.

3. To configure the People Planner installation, start the Admin Tool and enter the database information. In the example, you are connecting to the database that you created on Azure in the previous section.



The only setting that requires a brief explanation is the path for the license file. Because People Planner will run on the Citrix server—and not on the users' own computers—you should place the license on that server and then modify the License File Path to point at the location where you have placed it.

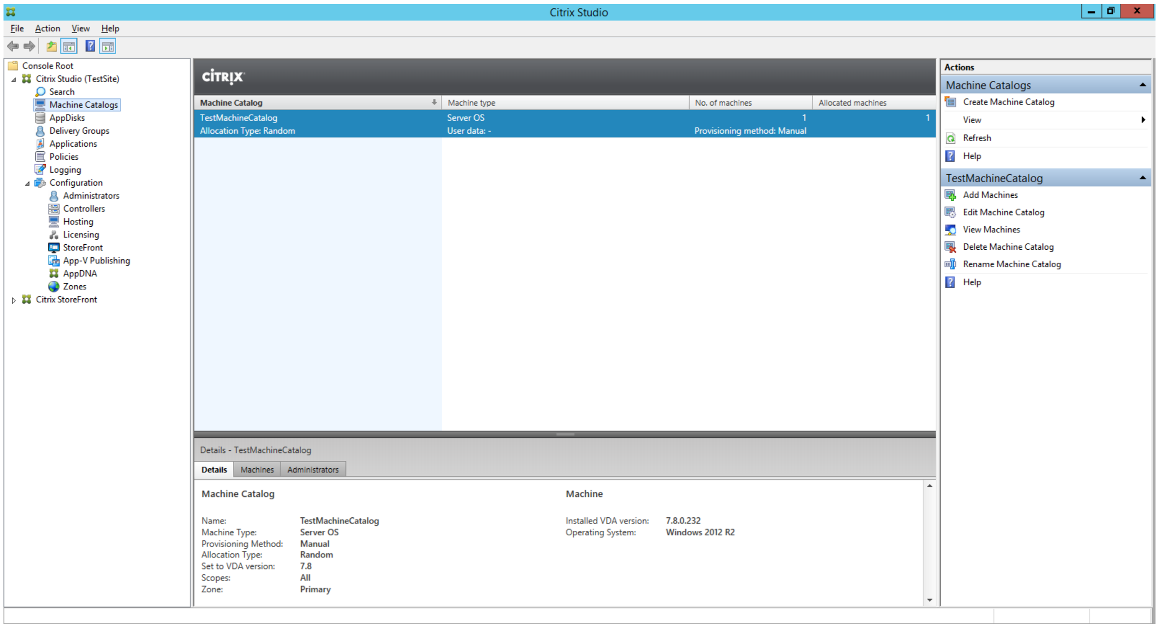


Publish the People Planner Application to the Users

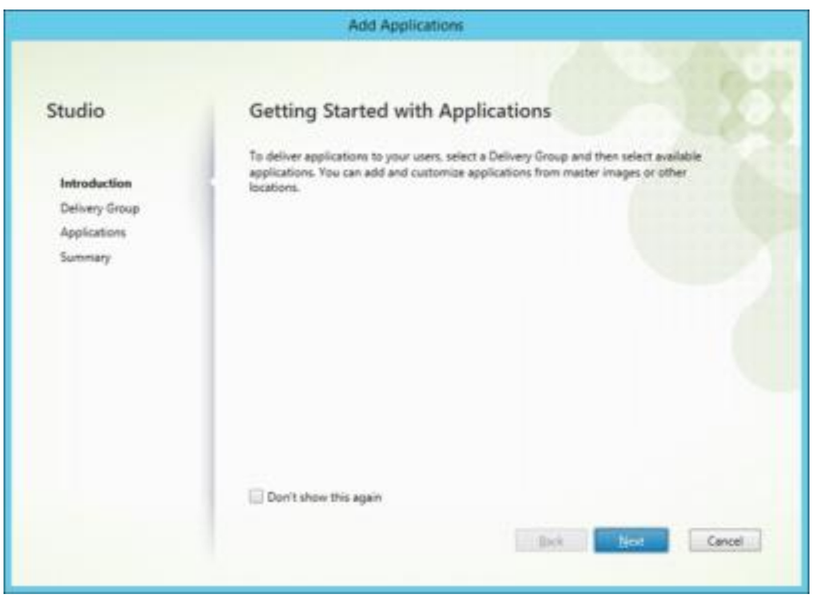
Now that you have installed and configured the People Planner application, the next step is to make the People Planner application available to all of the users.

To publish the People Planner application to the users:

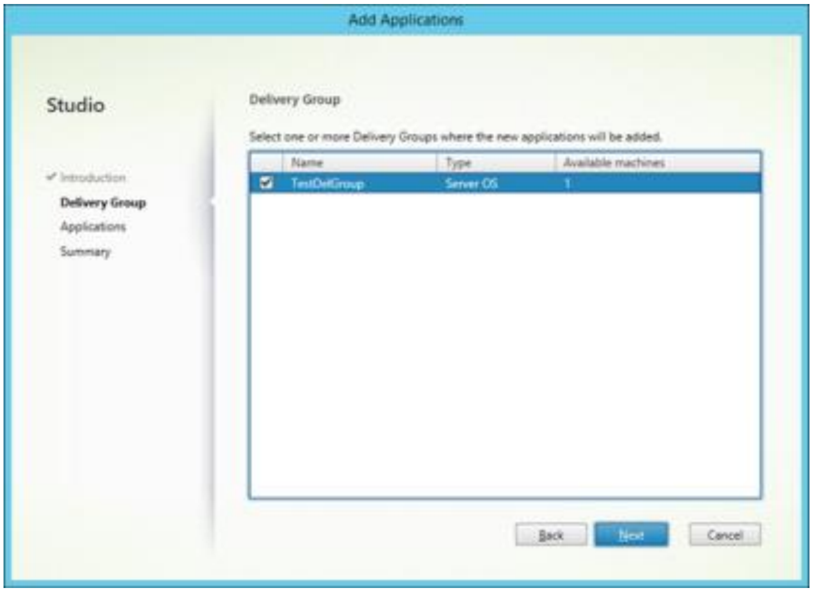
1. Start the Citrix Studio application.



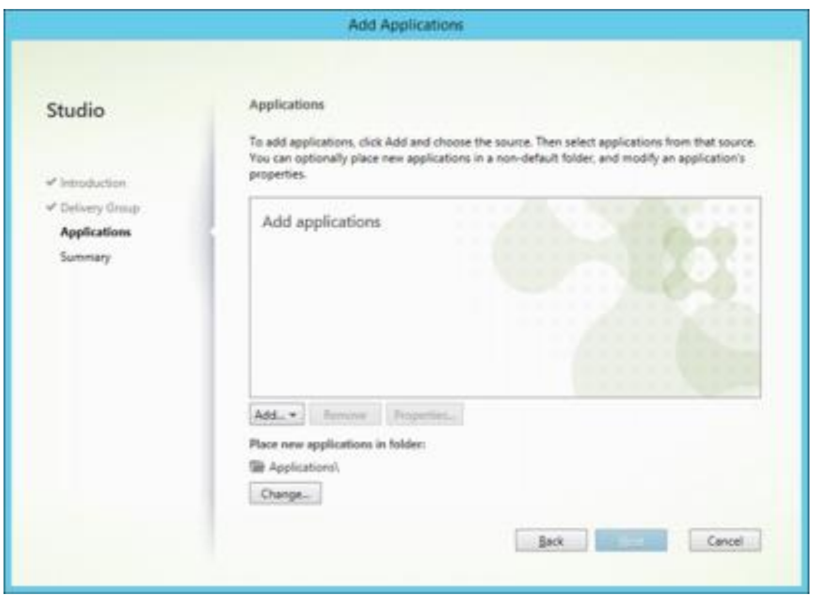
2. Right-click on **Applications** in the left-hand pane. This opens a shortcut menu.
3. Click **Add Application**.



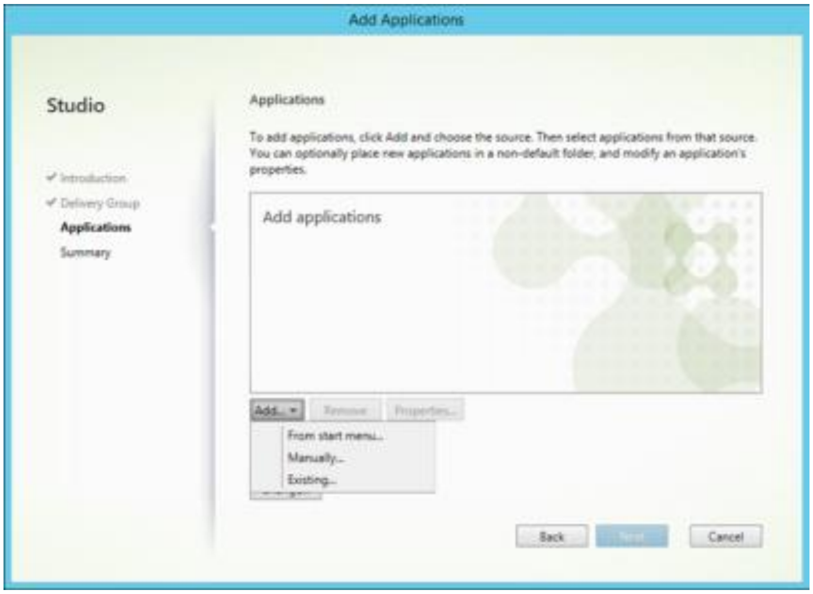
4. Click **Next**.



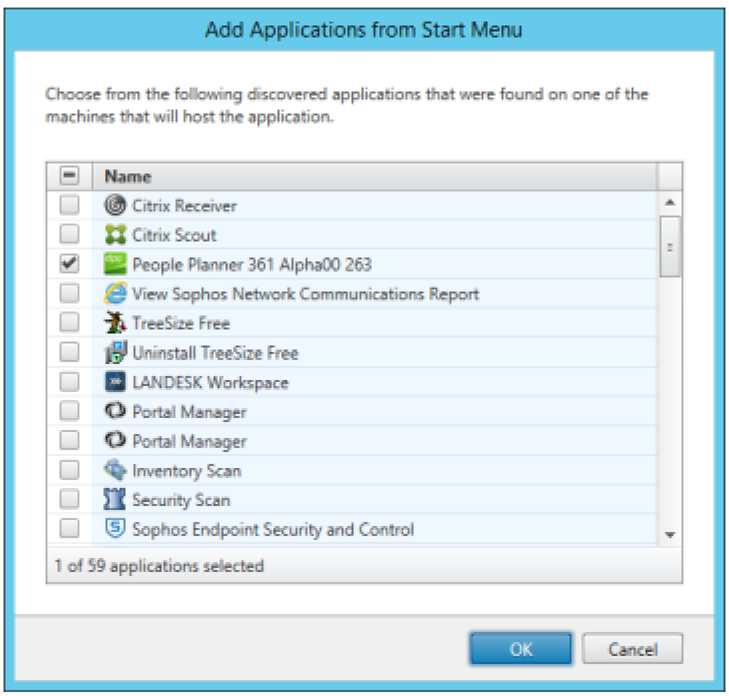
5. Select the check box under **Delivery Group** for the group where you want to add the application; in the example, it is TestDelGroup.
6. Click **Next**.



7. Click **Add** and select **From start menu…** from the **Add…** drop-down.



This opens a dialog where you can select from the installed programs.

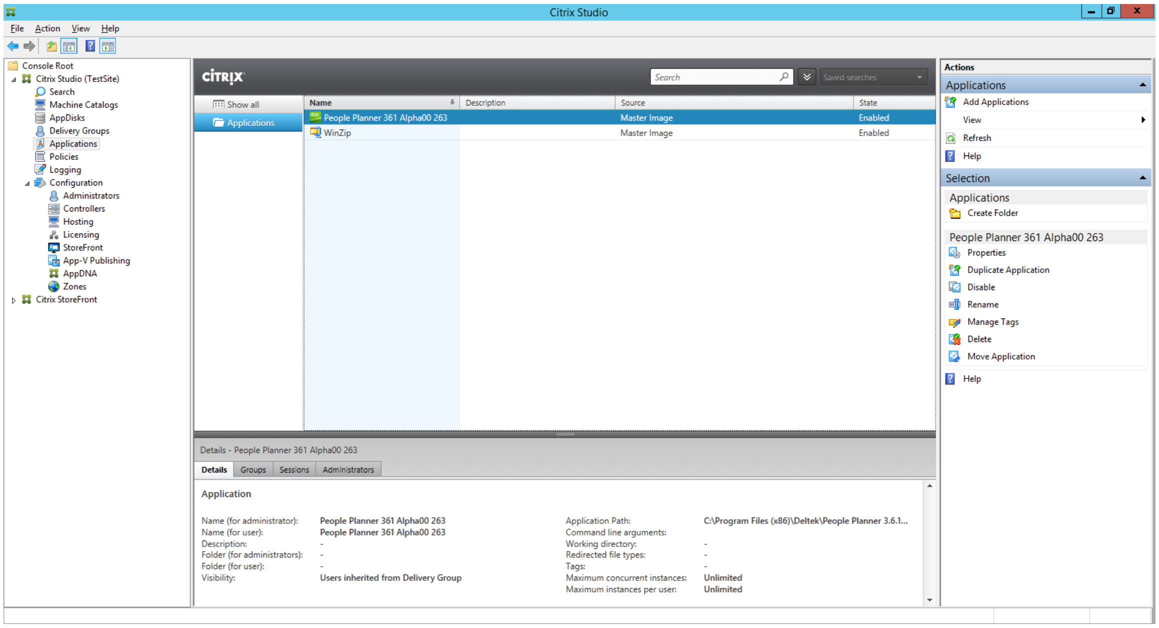


8. Select the **People Planner** application.

> **Note:** The People Planner version and build numbers that appear in example screen images such as the preceding figure are just examples, and do not necessarily represent the current version.

9. Click **OK**. You are now back in the Add Applications dialog.

10. Click **Next** and then click **Finish**.



Verification

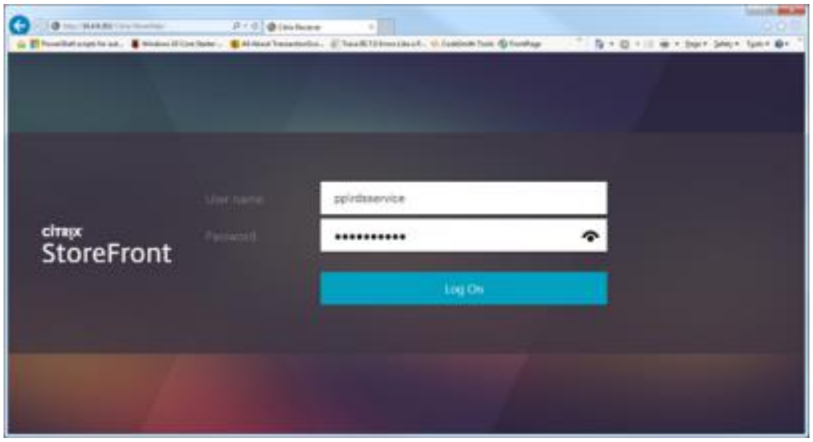
To verify that the installation succeeded, perform the following procedure.

> **Note:** When you do this for the first time, Citrix displays a wizard that guides you through the installation of the necessary components.

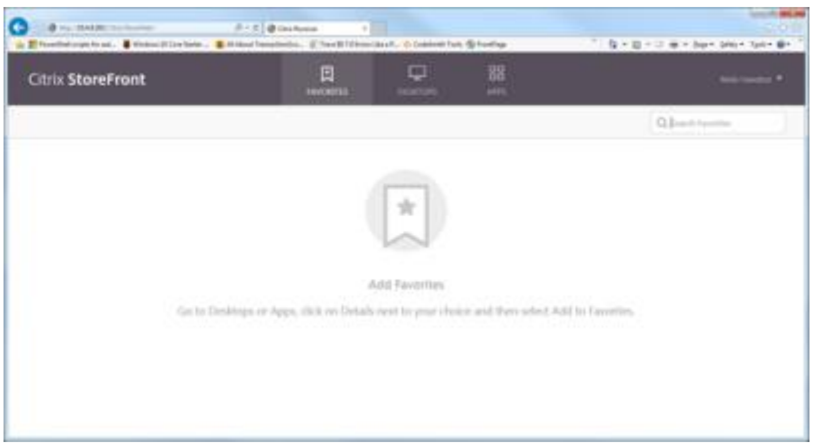
To verify that the installation succeeded:

1. Open a browser and navigate to the URL of the Citrix Receiver.
2. In the login form, enter the credentials that you used when you installed People Planner.

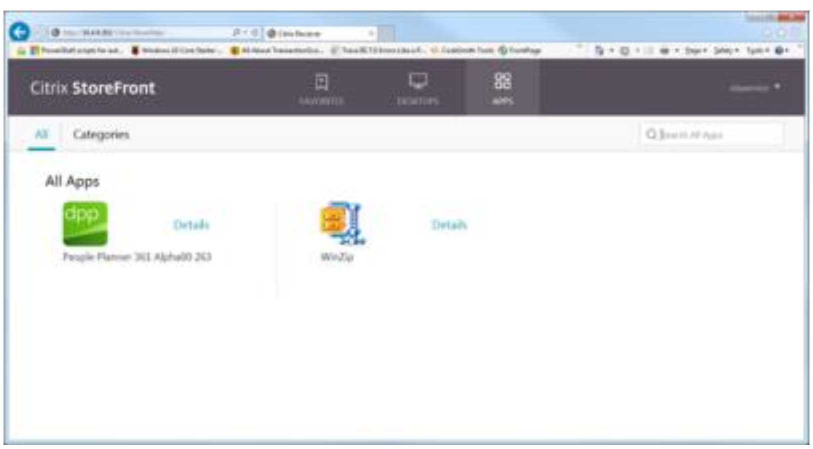
   > **Tip:** In the following example, this account is named rdsservice, and the domain is PP; for your system this is most likely something else. At this point in the setup, you might not yet have added any People Planner users to the database, and you cannot log in as any of them. Of course, you should eventually try to log in as a normal user before you sign off on the installation.



When you log in, the Citrix StoreFront is displayed.

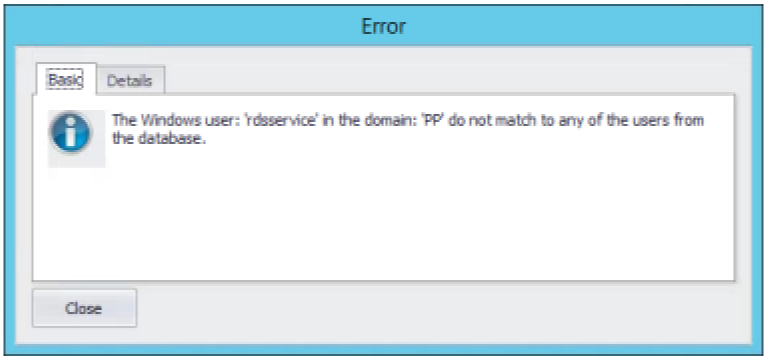


3. Click on the **Apps** tab. This is where users will see the People Planner application.



4. Click on the **People Planner app** to start People Planner.

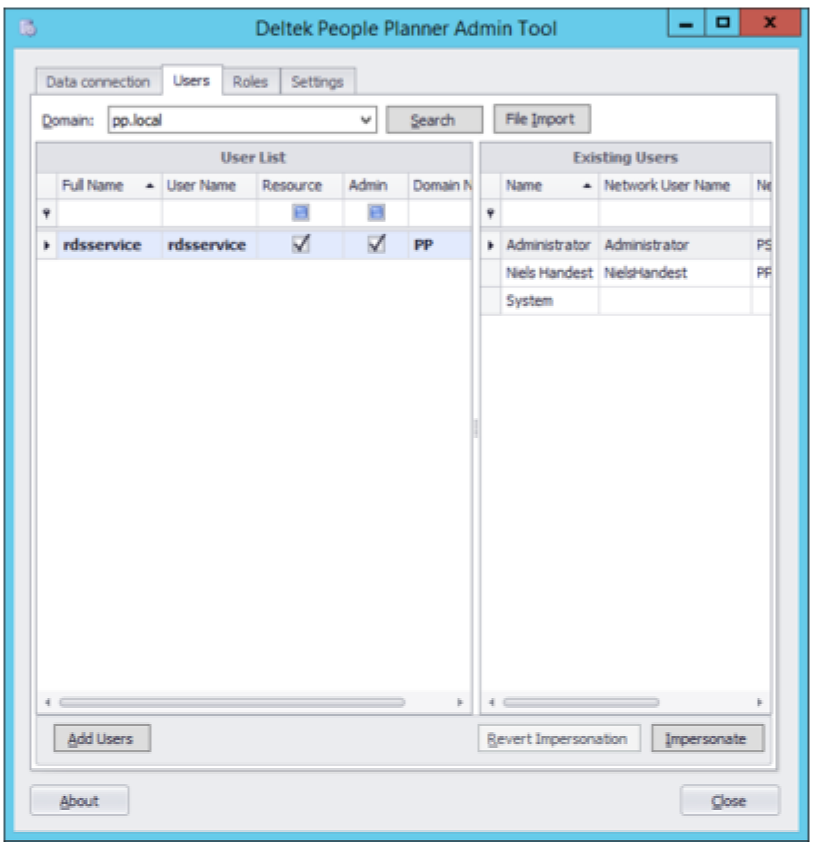
   Unless you have already added the account as a user in the People Planner database, you get the usual error message that indicates that the user does not exist in People Planner.



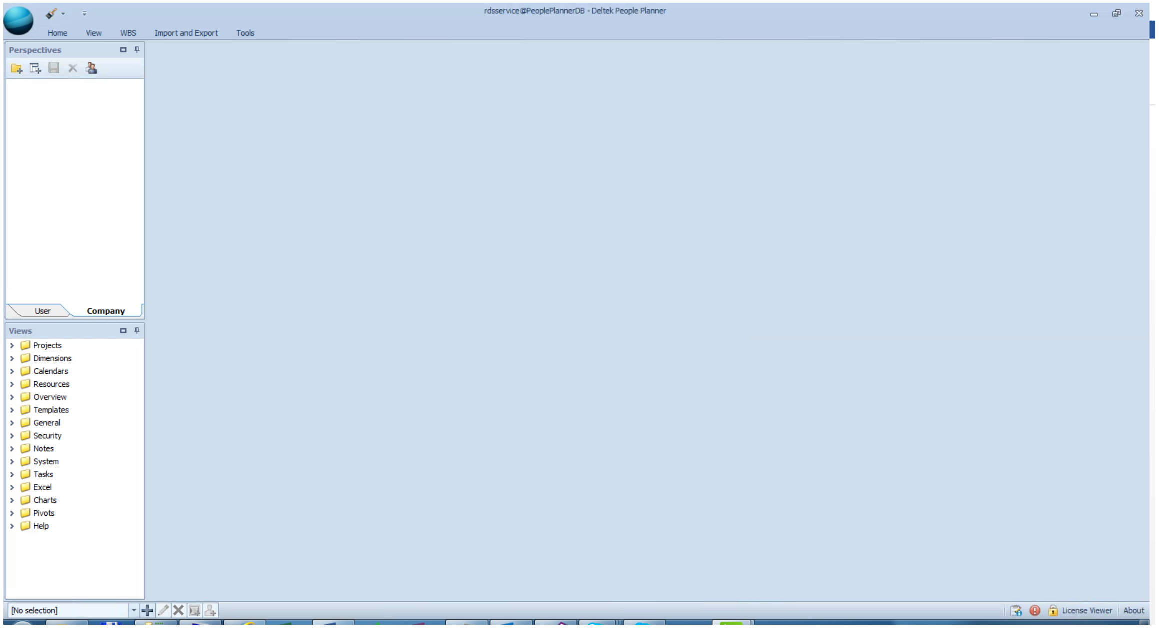
This is proof that People Planner is running and can connect to the database. However, there could still be an issue with the license file; the only way to confirm that the license file is in order is to successfully complete a full login to the People Planner application.

The easiest way is to add the rdsservice account as a user, using the People Planner Admin Tool.

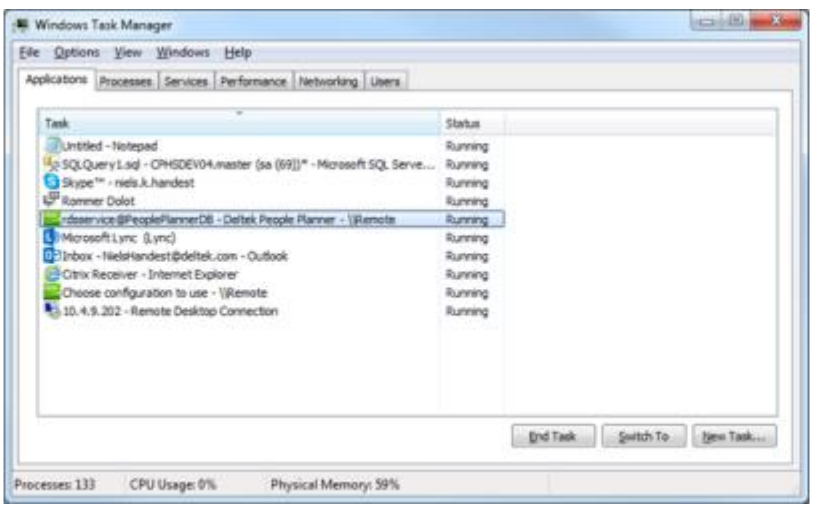
Note: The Users tab was a reorganized in People Planner 3.6.1.



If you have added the rdsservice account, the People Planner application starts when you click the icon.



To the untrained eye, it looks like the People Planner application is running locally. You can verify that this is not the case by starting the Windows Task Manager and looking for the “\\Remote” at the end of the line that represents the People Planner application.



Best Practices for Performance and Perspectives

The performance of the People Planner application is highly influenced by the views that are used to explore the data, for example, which columns are visible and how the data is organized. Performance also depends on the type and amount of data that is displayed. It is important to be aware of how performance is affected when building perspectives.

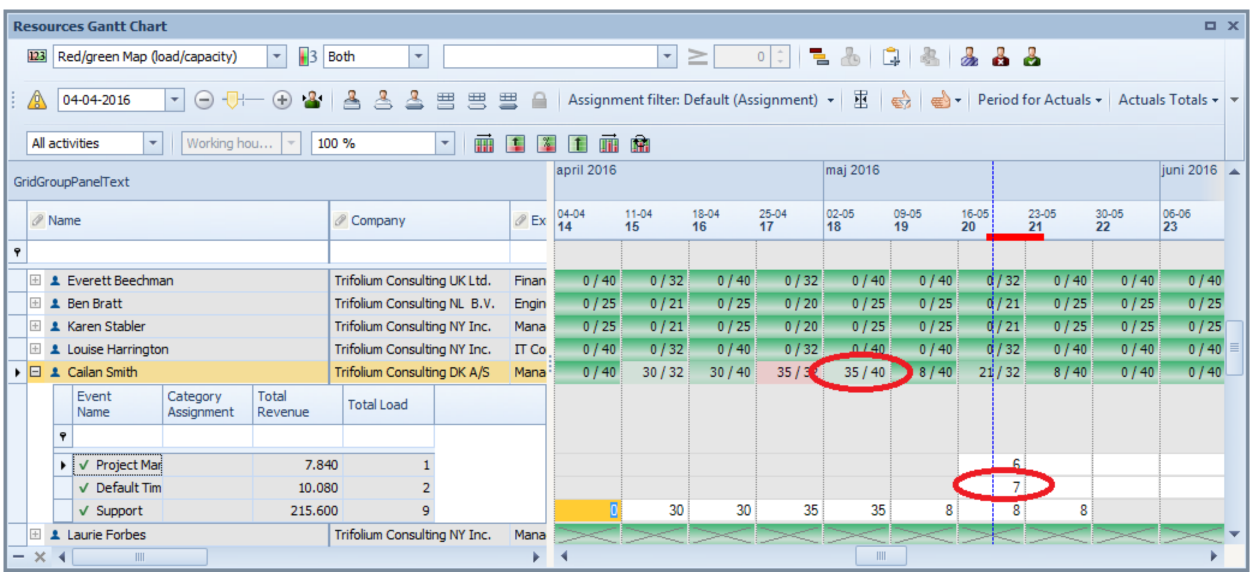
The following information describes where to be careful to maintain good performance. People Planner supports very advanced functionality, but if it is not used with care, it can have a negative impact on performance. When using this functionality it is important to limit the amount of data and/or only use a small subset of the expensive functionality in a perspective.

Calendars

People Planner works with three different kinds of calendars:

2. **Work week** calendar — Describes a generic work week in the number of hours to work for each of the seven days in a week.
3. **Common** calendar — Describes special days off, such national holidays. This calendar contains information for each year. Holidays are not duplicated from one year to the next.
4. **Individual** calendar — Describes special days off for one resource. This calendar can be used for planned absences.

The Resources Gantt chart (RG) shows resources and information related to the resources. The RG is divided in two parts: The left part shows specific information such as name, address, resource type, and so on, including information calculated based on the resource. The right side shows the bookings for the resource, distributed over time.

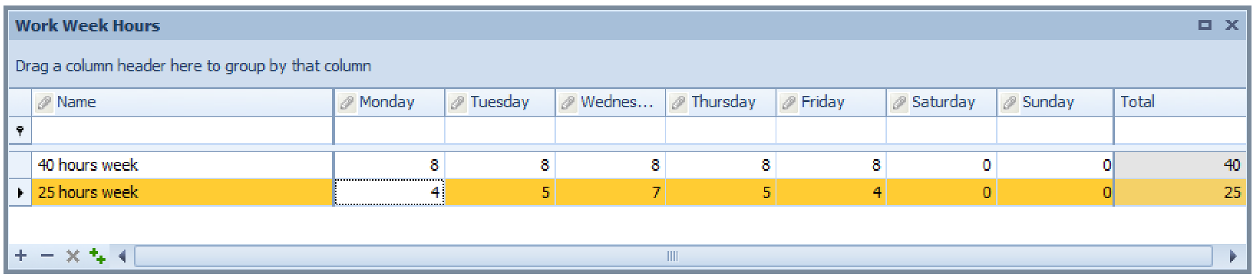


The two red ovals indicate two kinds of numbers calculated based on bookings and the calendars. When you scroll through the resources or through the time in the Gantt chart, the resource's capacity for the visible period must be calculated.

The capacity for a resource is determined by the resource's calendars. To optimize the calculation it is important to have the least number of different combinations of work week calendars and common calendars as possible.

> **Note:** To show bookings distributed over time in the Gantt, the real bookings—as they are saved in the database—are scattered on all of the days with capacity, and then summarized according to the chosen granularity view (day, week, or month). To determine the days with capacity, the calendars for each resource are inspected.
>
> To optimize this process, resources are internally (not in the UI) grouped by the calendars that they use during the calculation. If the capacity is already calculated for a resource with a specific combination of work week calendar and common calendar, this calculation is reused the next time that a resource with this combination is shown.

It is recommended to create only one work week calendar for each work week scenario, instead of creating one work week calendar per resource. For example, all resources who work 40 hours per week, equally divided on the days from Monday to Friday, should share the same 40-hours work week calendar.


Work Week Hours

Drag a column header here to group by that column

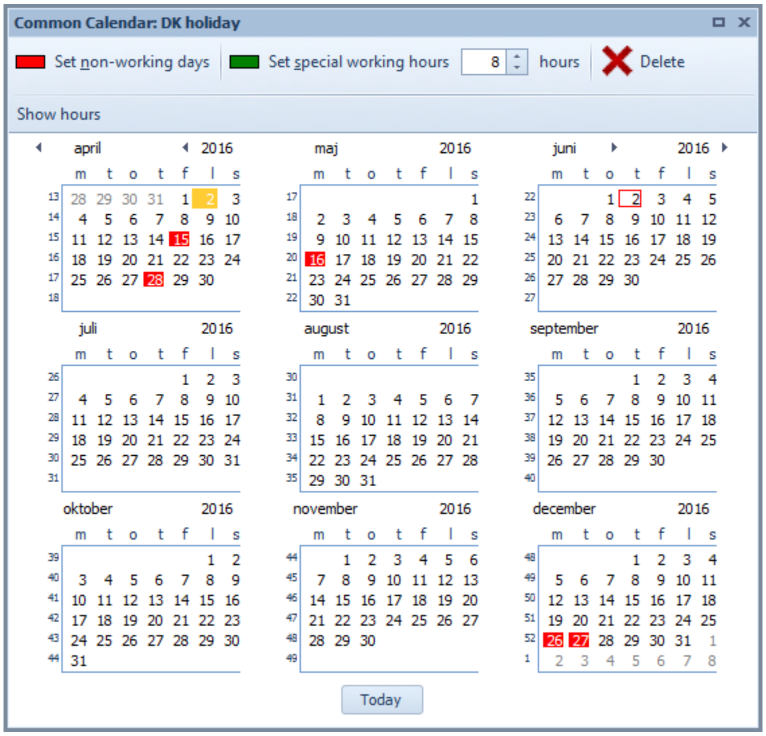
Name	Monday	Tuesday	Wednes…	Thursday	Friday	Saturday	Sunday	Total
40 hours week	8	8	8	8	8	0	0	40
25 hours week	4	5	7	5	4	0	0	25

Create as few common calendars as possible. Normally a company needs at least one common calendar per country to define public holidays for that country; perhaps more than one might be needed if not all employees share the same contract for public holidays. As for the work week calendars, avoid creating a common calendar per resource.

Also, avoid using common calendars to define weekends or other weekly repeated days off; use the work week calendars instead, and specify 0 hour capacity.

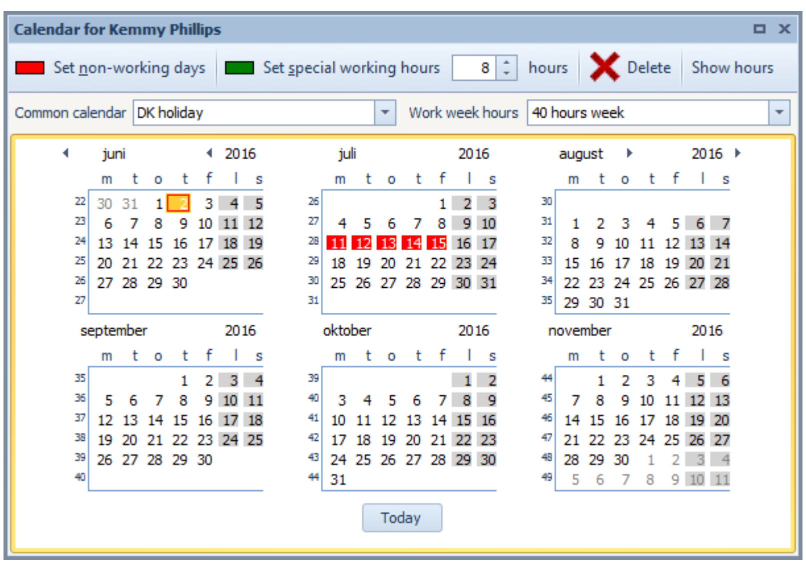
> **Tip:** If you save the information as part of the common calendar, the same information must be repeated for each week, instead of being saved once and for all in the work week calendar. Because the number of calendars, as well as the number of entries in the calendars, affects performance, you should avoid repeated entries.

The following is an example of a common calendar. The days off are shown with red boxes. A red box on May 16 shows that May 16, 2016, is a public holiday in Denmark, but this does not mean that May 16, 2017, is also a holiday.



The purpose of individual calendars is to add special days off for an individual resource. Every resource has by default an individual calendar, but that should be used only for special days for that specific resource. A typical use could be to register absence; planned leave, vacation, and so on. This type of absence could, on the other hand, also be added as planning on absence tasks, which makes it more visible why a resource is not available. People Planner has absence management integration with Maconomy; this integration uses planning on absence tasks and does not integrate with the individual calendars.

The following is the individual calendar for resource Emmy Philips. This resource has five days off in July, indicated with red boxes just as it is for days off in the common calendar.



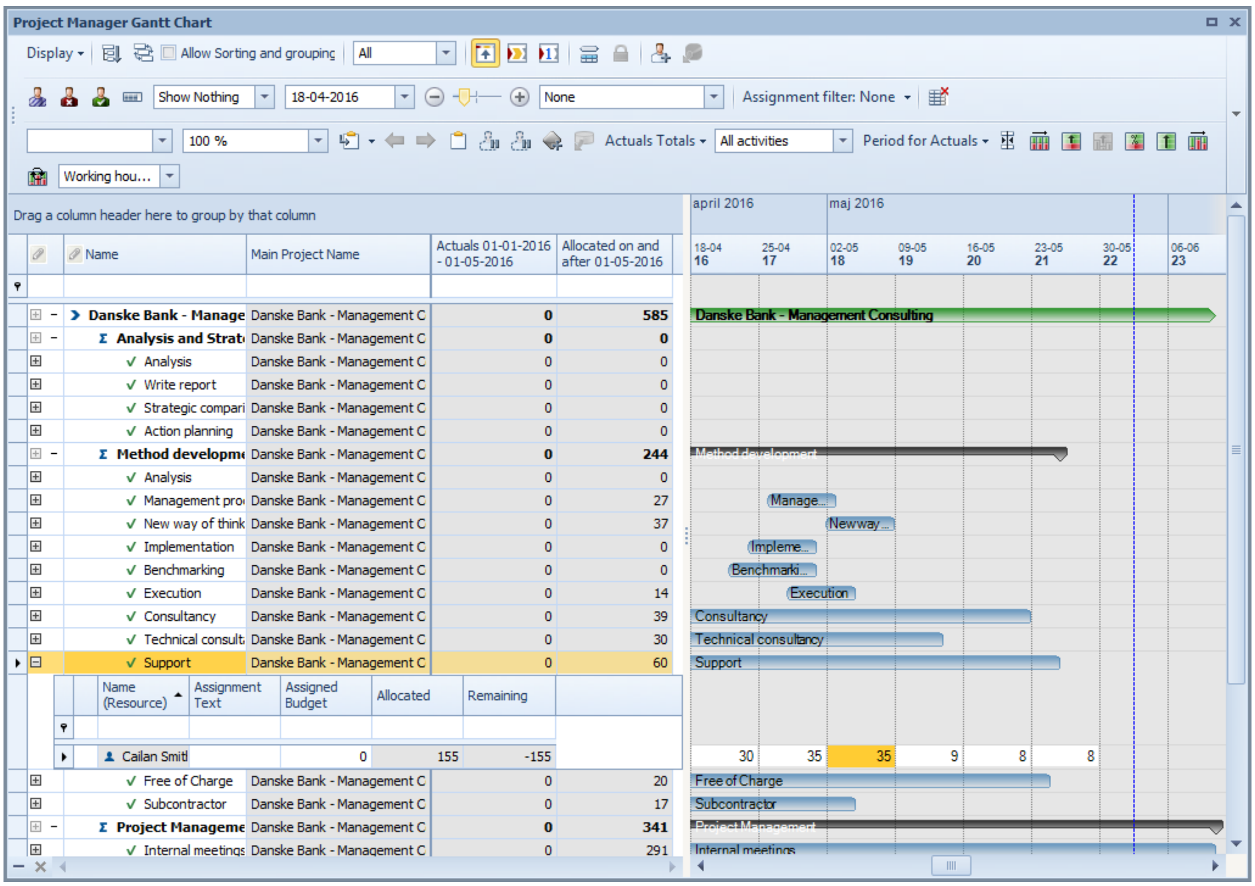
Because People Planner does not have a built-in integration with Maconomy calendars, some customers have used import mapping to import Maconomy calendars. The preceding calendar guidelines apply to both manually created calendars in People Planner and calendars created through integration with other products such as Maconomy.

People Planner does have an absence management integration with Maconomy. Absence is treated as bookings on absence tasks in People Planner, and does not use individual calendars. It is recommended to use this built-n integration to get planned absence from Maconomy, instead of using a custom-made calendar integration.

Calculated Columns

In the People Planner views, you can add and remove columns. Most of these columns display data directly related to values in the database, but some of them are calculated based on values in several tables and are often taken as the sum of bookings in a certain time range. These columns are called calculated columns.

Some examples are “Allocated hours on and after …” and “Actuals in period …” Those two columns have been added to the Project Manager Gantt (PG) chart shown in the following figure. The numbers in “Allocated on and after 01-05-2016” show the summation of the booking when you open the detailed views. For the line that is in focus, the value 60 is calculated as a sum of the 4 bookings after May 1 (35+9+8+8).



Because calculating the values for these columns may require several lookups in the database, these calculations are not performed at load time; instead, they are added to a queue for calculation when the row is visible on the screen. In order not to freeze the user interface (UI) until all calculations have been completed, this queue is handled asynchronously. But even so, the overall UI experience degrades with the more calculated columns that a view contains.

Tip: Synchronous versus Asynchronous Execution

When an application runs synchronously, it performs each activity in a strict sequence. It does not proceed to the next activity before the previous activity has been completed. In contrast, an application is said to run asynchronously if the activities are allowed to be performed out of order.

People Planner uses the asynchronous technique in various places. You can see an example by adding a calculated column in the PG and then watching how the values of the column are updated one-by-one. If it were not performed in this way, users would experience the PG to "freeze" while People Planner was busy calculating all of the values of the column before it could display them.

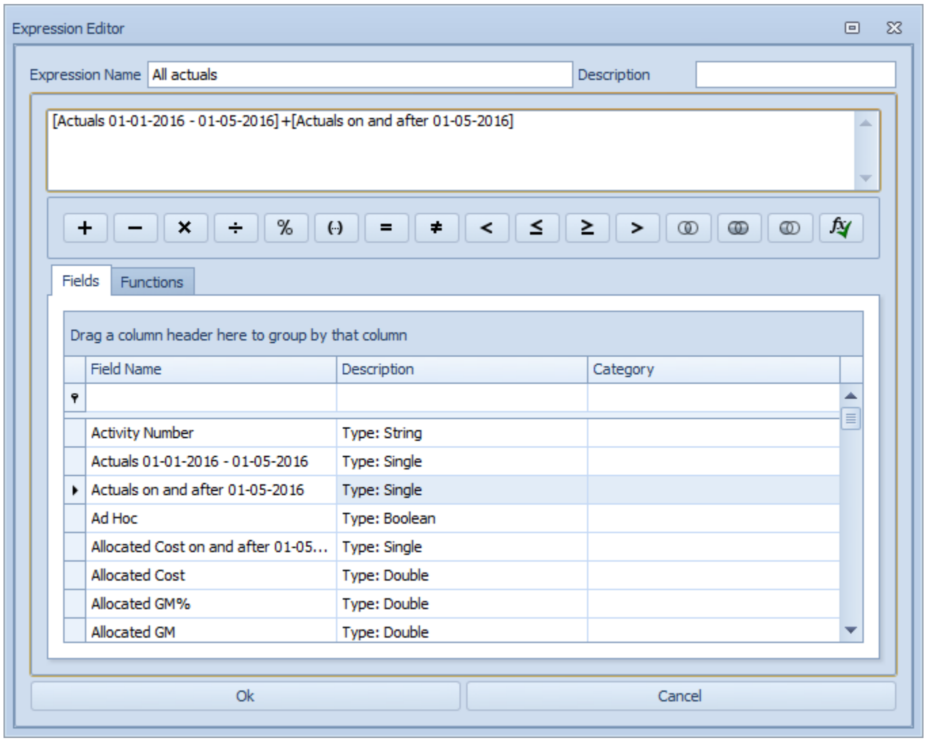
Asynchronous execution is a way to ensure that the UI remains responsive. Asynchronous execution is usually preferred, but sometimes People Planner is forced to switch to synchronous mode. For example, this can happen if a user tries to sort on a calculated column. In that case, People Planner must calculate all of the values of that column before it can sort them.

The default available calculated columns are sums of different bookings for a specific time range. Some calculations require bookings to be scattered on days in the range based on the capacity of the resource. As described previously, this is done using calendars. The more calendar entries, the more calculation is required to scatter the bookings, and the slower the calculation becomes.

As a further optimization, the values for the calculated column is only calculated for the visible rows (unless the perspective also includes sorting on this column, summation of the values in the column or similar, but this is described later). Therefore, the performance is not affected if only a few rows are visible. For perspectives where the amount of data has somehow been limited, it might not be an issue to have several calculated columns. For example, if a perspective contains a PG, but the chart only shows one main project at the time, which is selected in a Project Selector, it is manageable to calculate several calculated columns.

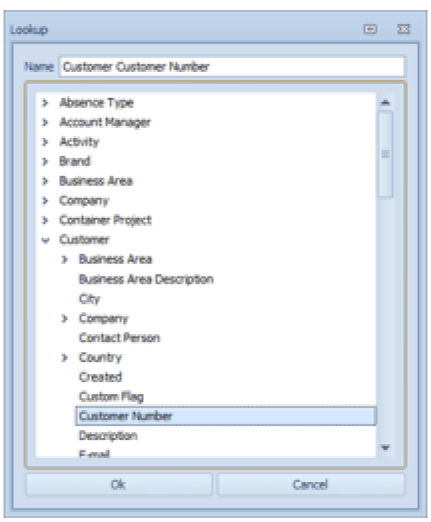
Custom-made calculated columns are often more demanding than the built-in calculated columns. When custom-made calculated columns depend on existing built-in calculated columns, those must be computed before the custom calculated columns are computed.

A custom-made calculated column is created through the menu when you open the "Column Customization." The columns caption is the same as the Expression Name, and the content is as a calculation on values in other columns. In the following example, the new column "All actuals" is the sum of the two built-in calculated columns "Actuals 01-01-2016 – 01-05-2016" + "Actuals on and after 01-05-2016."



Lookup columns are the last type of calculated columns. They contain values that are found in other objects than those that are represented in the view. For example, for a task, you can find the project's customer and display this to the user. These columns require more database access, but do not require calculation and are the fastest type of calculated columns.

Lookup columns are also defined through the "Column Customization." The following figure shows how to add a column that displays the customer number. As the default, you can display the name for the customer, but if the customer number is the way by which the user references customers, you can also display the customer number in the PG.

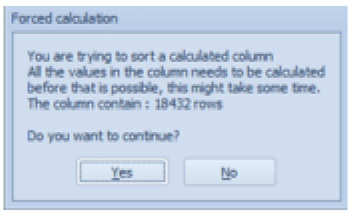


Sorting Calculated Columns

If the data that is displays must be sorted based on a calculated column, all of the values must be calculated for all of the rows—even those that are not visible—before the data can be displayed in the correct order. As a result of this, the calculations are no longer running in the background and slow down the overall UI experience.

Sorting on calculated columns also performs well if the amount of rows is limited. To avoid freezing the system, a warning is displayed if many rows must be calculated before the data can be displayed. You can define the threshold for this warning in the Admin Tool; the default is 200.

Be aware that calculations are performed every time that new rows must be displayed. For example, if sorting is used on detailed views in the PG or RG, the performance will not only be affected when loading the perspective, but also every time that a new detailed view is expanded and new rows must be displayed. Similarly, if the sorting is used on a view that contains grouping, the performance will be affected every time that a group is expanded.



Calculation on Footer for Calculated Columns

As happens when you sort on a calculated column, People Planner must load all rows to be able to calculate the correct sum or average—even those that are not visible. The sum or average is shown in grey until the calculation has been completed. Normally only data for visible rows is calculated, but to calculate a sum or average on the footer, values for all rows are required.

The footer may contain other types of calculations, but for calculated columns the functions are limited to summation, average, and count. The count does not need any values to be calculated and does not slow down the application, whereas the average and summation functions require all values and thus could be time-consuming.

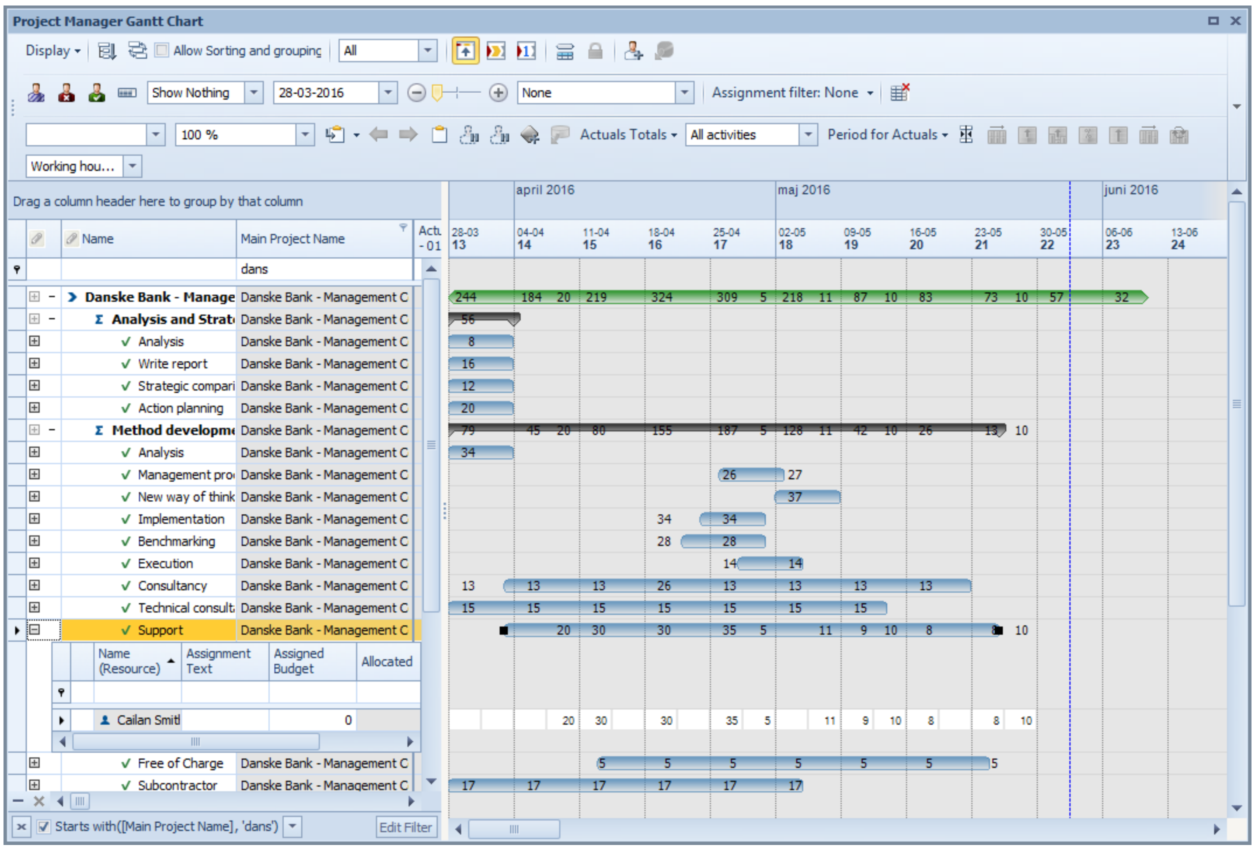
Even though a calculated column is computed in the background, the experience can degrade if the view contains many rows. Just as when adding many calculated columns to a view, adding a sum on a footer for calculated columns works well as long as the amount of data is somehow been limited.

Sum on Gantt Bar, Sum on Grouping, and So On

Any kind of summation on Gantt bars, directly on resources, on grouping, and so on, requires that the underlying data is loaded to perform the calculation. Even when a group is not expanded, the rows in the group are loaded along with all of the bookings that are required to perform the calculation. The bookings must be scattered to fit the granularity chosen for the Gantt part to make the right summations.

Scattering bookings and making these summations can be time-consuming. They might be necessary to give the decided overview, but you should reduce the amount of data shown in the perspective and only make the required summation, and not on too many accounts at the same time.

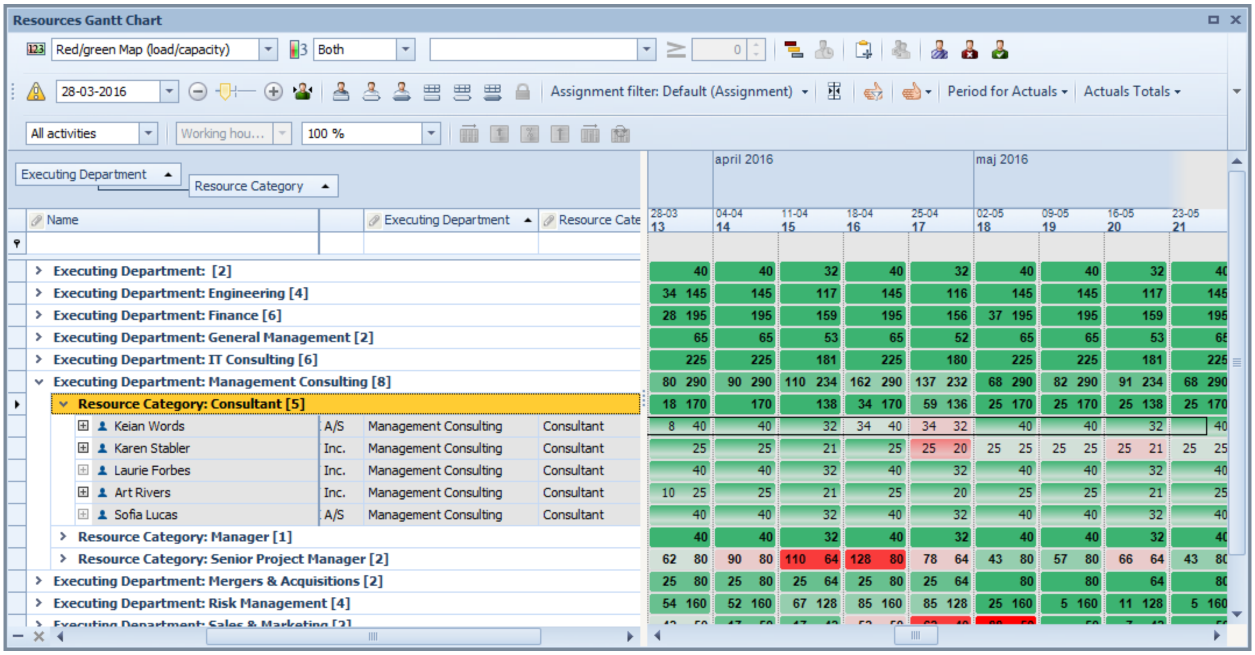
In the following example, the Gantt bars show the sum, bottom up, of the hours on the two accounts that are shown—in this case, working hours (man hours) and budget man hours.



Grouping

It can be very convenient to use grouping to make it easier to find the right data and give a good overview. Be aware that rows are only hidden in the groups; the data is still loaded to determine which groups rows belong to. If only some of the groups are relevant for the user, it can be a good idea to hide the data rows in another way.

When grouping is combined with summation of data of the groups, it becomes even more important to reduce the amount of data to what is required in the perspective.



Scrolling to Navigate

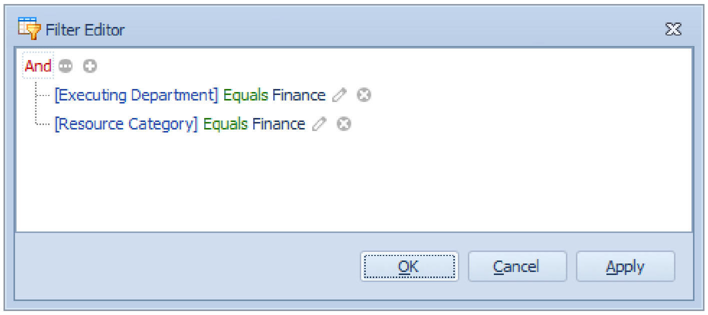
By default all views show all existing data of the given type. The amount of data can be overwhelming, and it can be difficult to find the data in which you are interested.

One method for finding that data is to scroll through the rows of the view. This can be slow if the view contains many rows, because any calculated columns trigger a calculation when new rows become visible. In addition, the Gantt part of any of the Gantt charts trigger calculations to show bookings/capacity for the rows that are scrolled into the screen. Even if capacity is not shown it must be calculated (based on calendars) to create the red/green map.

If the number of rows is limited to what is relevant to the user, the application becomes easier to use. In most companies, no one needs to see data for all employees; they normally only need to see employees from their own department, for a specific country, or the employees who are working on specific projects. If the data is limited to show only a subset of the resources, the perspective loads faster, the right data is found more easily, and it is faster to navigate in the data that is displayed.

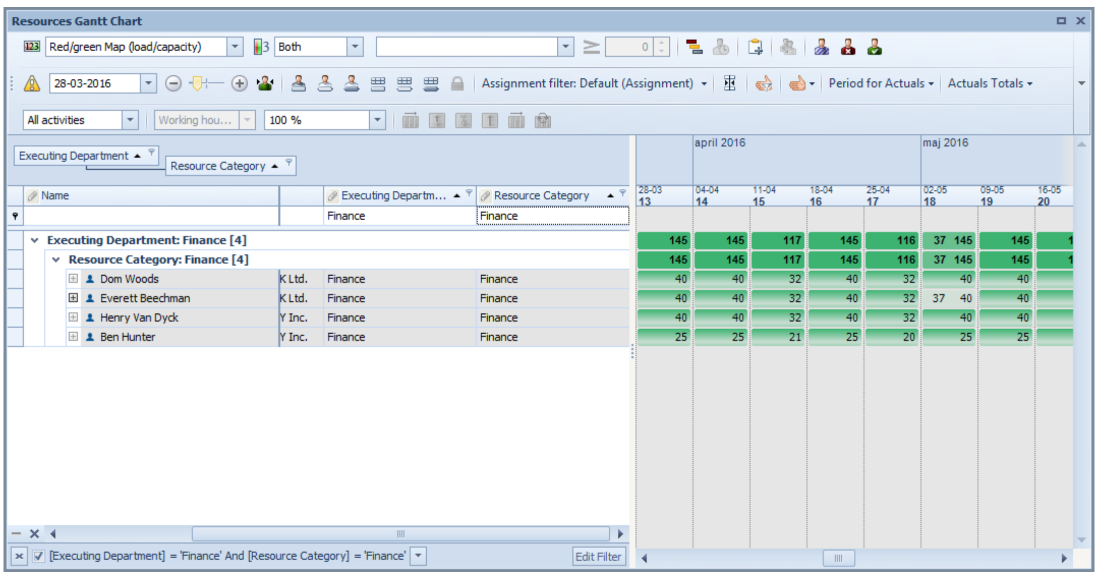
Filtering

Another method to navigate the data is to use search filters in each column of a view. When using the quick filter fields in columns, the filter criteria become visible in the lower-left corner of the view, where you can also possible modify the filter expression. You can save these filters as part of the perspective and make it easier to find the relevant data.

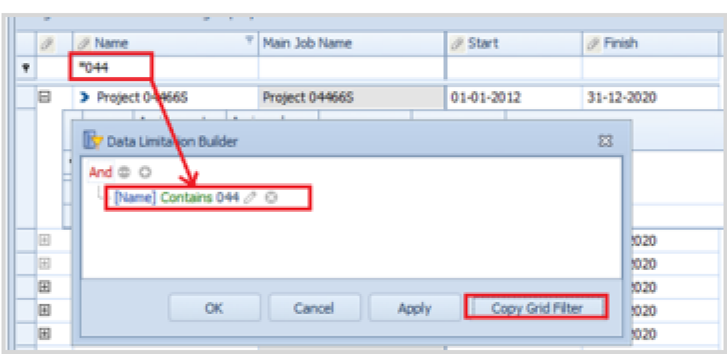


Be aware that filters only hide the rows. This is not a filter on how much data is loaded. You cannot use filters to reduce the amount of data that is loaded, and the load time for a perspective with a filter and one without a filter is almost the same. However, because calculated columns and bookings shown in the Gantt part are only calculated for visible rows, it might be displayed slightly faster.

You should normally use filters only if they are intended to be modified as a part of the work process. If filters are static and not changed during the work process, it is much better to use a data limitation. A data limitation reduces the amount of loaded data and speeds up the loading of the perspective.



When you create a perspective, it is easy to start by creating a filter on the views, and later turn the filter into a data limitation. When you create a data limitation directly on a view in a perspective, you can select the existing filter for a view and make that the data limitation for the view.



Data Limitations

The best method for reducing the amount of data that is loaded is to use a data limitation. There are three different types of data limitation:

1. User data limitation
2. System data limitation
3. View data limitation

The user and system data limitations can only be used to reduce:

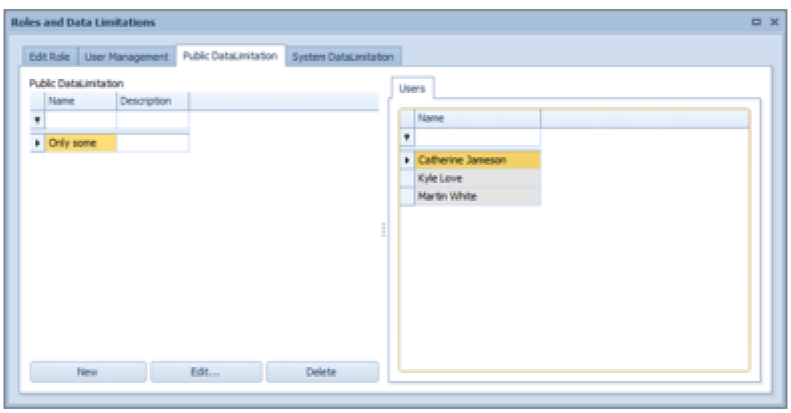
- Events (projects, tasks, summary lines, and milestones)
- Resources
- Assignments (only expressed by the limitations on the events/resources).

Any other type of data cannot be reduced by using these data limitations. That is, the view that shows customers is not influenced at all.

User data limitations are created by each user. A special type of user data limitation, the public data limitation, is created by the super user—any user who has the Admin role—and pushed out to individual users or to user roles. User data limitations are shown in the lower-left corner of the People Planner application, and users can switch between them, depending on which data they need to look at. For some users the same perspective can be used for different work processes, and the data that is shown in the perspective can then be controlled manually by changing the user data limitations.

A system data limitation is not visible to the individual user. These data limitations are created by an administrator and are applied to the data no matter how a user looks at it. You might think that this is a way to hide the data, and it almost is. However, you should not use it as security, because the data might be visible in a few situations. It can, on the other hand, be a powerful method to hide information from a user who never needs this data, to improve load time and make it easier to navigate the data.

Both system data limitations and user data limitations are controlled by the "Roles and Data Limitations" dialog found under "Home." In this dialog an administrator can distribute data limitations and roles to all users and also assign data limitations to specific roles.



The last type of data limitations is the view data limitation. This type is created on a view and saved as part of a perspective. You can apply a view data limitation to any view (it is not linked to events, resources, and assignments only). You can create a data limitation for each level of the view, if the view contains both a main view and detailed views; you can create a data limitation for the main view and one for all of the detailed views. This type of data limitation fits very well when the displayed data is closely related to the workflow that the perspective is meant for.

Project Selector

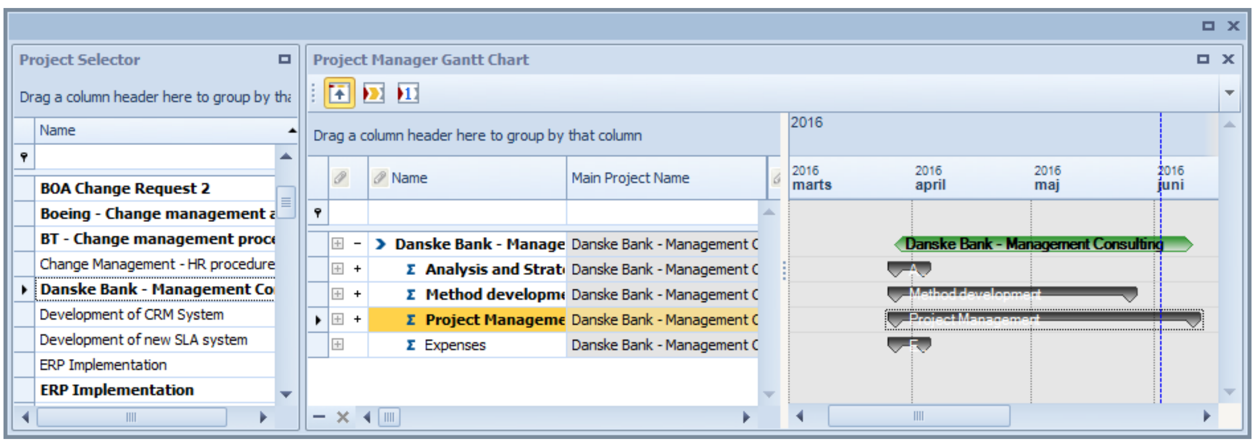
The PG has three filters that are designed to load data only for projects that are selected from other views (such as the Project Selector) that are faster to load. These filters are found as the three buttons "Display Main Projects and its Subprojects," "Display Selected project Including Subprojects," and "Display Selected Project Excluding Subprojects."

The Project Selector view was created especially for this purpose. The Project Selector does not contain any Gantt part, and it only contains a subset of the columns that are available to the PG, thus it is much faster to load.

The Project Selector does not contain calculated columns, but even columns like customer, departments, or other columns linking to other object types can increase load time; add these columns only in the Project Selector if required. If a PG only shows the selected projects from the Project Selector, information like customer, department, and so on can be loaded in the PG for only the selected project.

Because the Project Selector only loads project information, and not the underlying project structure or assignments and bookings, it can load a much larger list of projects without performance issues. However, it can still be a good idea to limit the list to projects that are of special interest to the user, to improve the user experience.

The following is an example of a perspective with the Project Selector and a PG that show only a selected project.



One Perspective per Workflow

To make a perspective load quickly and easily and be fast to navigate, and to make the functionalities inside it as smooth as possible, you should make the perspective as simple as possible. Each workflow should be handled by a separate perspective, so the perspective needs only to contain views and data that are related to that workflow.

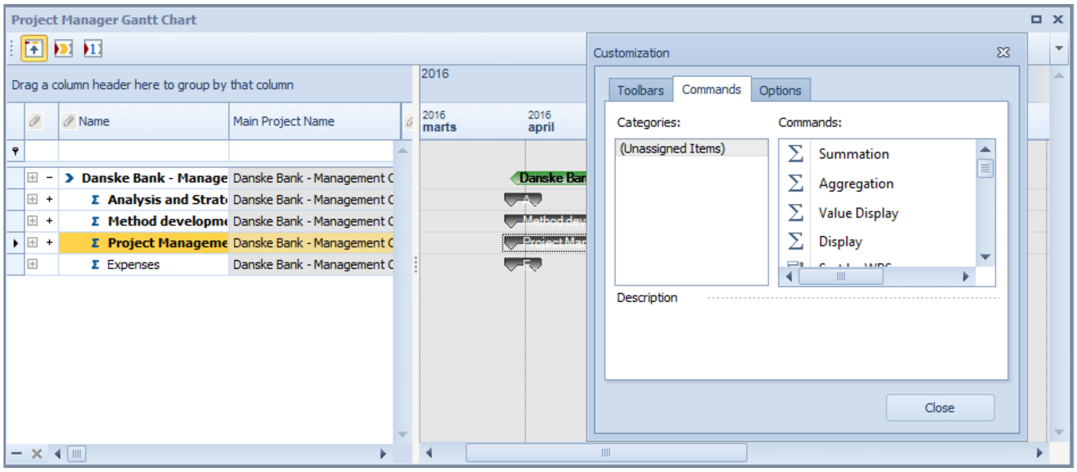
It can be tempting to include many views in a perspective, to allow users to use the same perspective for all that they need to do, but each view loads data and other UI setup information, making the perspective slow and cumbersome to work with. Instead, use fewer views and fewer columns; and the fewer the calculations in a perspective, the faster it loads.

That is even the case when views are tabbed behind each other. The load time is the same as if the views were all visible.

Removing all unused buttons from a perspective makes it easier for users to find the button they need and avoid accidental, unintended changes; however, it does not improve performance. Note that buttons that are removed from a perspective still remember their state. Views that only contain buttons that are relevant for the workflow make it easier to understand what the perspective is intended for, and this prevents users from “misusing” a view for other purposes for which there are other dedicated perspectives.

An example of a common perspective is one with both a synchronized PG and an RG. When the synchronize buttons have been activated, you can safely remove them from the views; their states are saved in the perspective.

To customize the buttons in a view, right-click in the light grey area with buttons and open the Customize dialog. When the dialog is open, you can drag the buttons in and out of the view.



Privileges, Roles, and Users

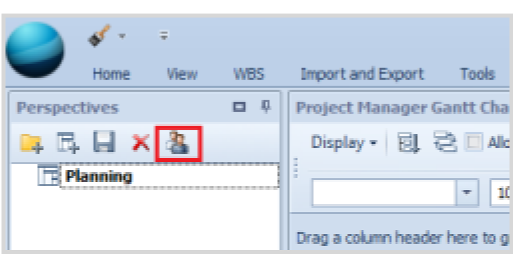
Functionality that is not used should be hidden. Even though users are told not to click a button, it can happen by mistake. This can cause problems if a user accidently imports data into People Planner, pushes data to Maconomy, or overrides/deletes data in People Planner.

Use privileges to control the visibility of buttons and to ensure that users have access to different types of functionality according to their roles. Assign privileges to specific roles, and then give users different roles. If a user needs a combination of privileges, you can give that user several roles.

You can control system data limitations and user data limitations by roles or by user.

When you create company perspectives, you can control which users should get access to a perspective. This is also a very efficient method for hiding data and functionality from users. If a user does not have access to the views and does not have a perspective that includes a specific view—such as a customer view—they cannot modify customers.

The Assign to roles button at the top of the Perspectives view is used to control which roles or users should have access to a specific perspective.



Using the 1HourDemo Database

Beginning with People Planner 3.7 and going forward, the Admin Tool has been expanded with an option to generate a special demo database called the 1HourDemo database.

As the name implies, the 1HourDemo database is intended to provide Sales staff and others with a setup for performing demos of People Planner. This demo system does not have an integration with a Maconomy system. For that, you need a complete PSO demo system.

> **Note:** You can find the instructions for the demo on Kona in the People Planner **|** Consulting & PSM space. Look under **Documents » Product Management » 3.7.**

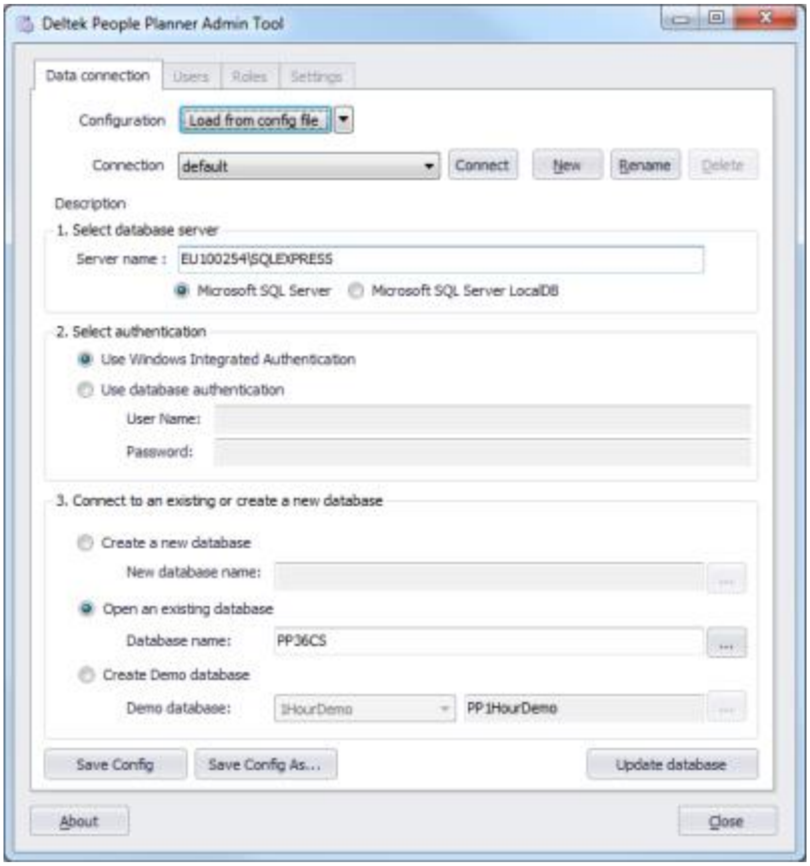
Creating the One-Hour Demo Database

Before you can create the 1HourDemo database, you must have installed the People Planner Admin Tool and the People Planner Windows application. You must also have installed an SQL Server.

> **Note:** You can download the free SQL Server 2016 Express version from Microsoft's home page.

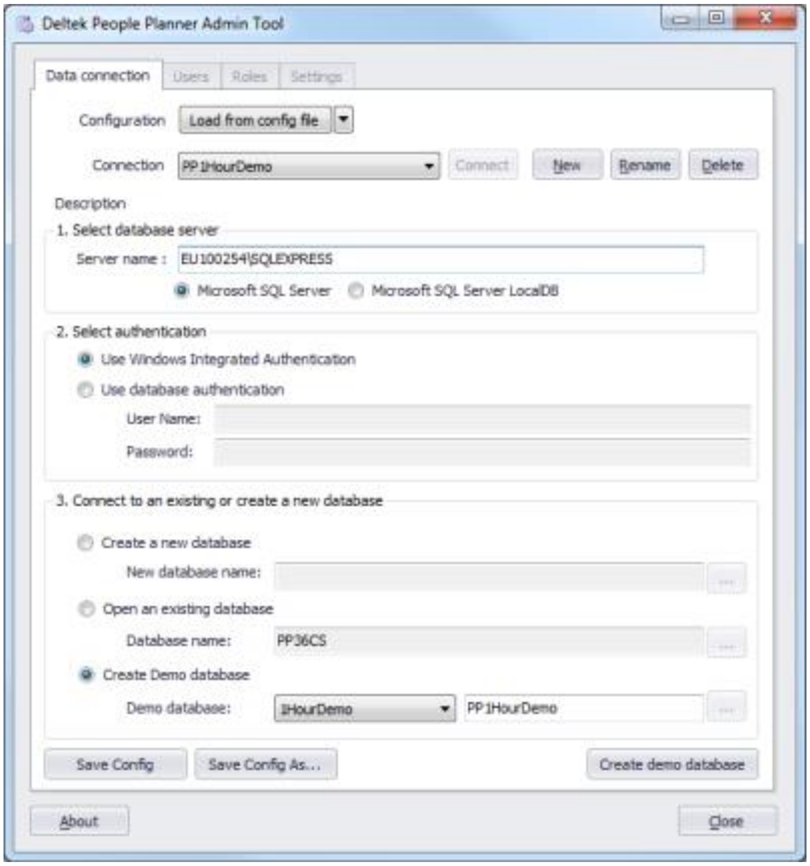
To generate a People Planner 1HourDemo database, complete the following steps:

1. Start the People Planner Admin Tool.
2. Click the **Load from config file** button and select the **DataConnection.xml** file from the People Planner Windows application installation directory.



You can skip the next step if you are not already using the People Planner Application to connect to another People Planner database.

3. If you are using the People Planner Application to connect to another database, you should now create a connection for the 1HourDemo database by using the **New** button to add a connection to the one that you already have.



4. Select a database server by entering its name in the **Server name** field. You can choose to use an SQL server or a LocalDB database.

5. Select a database authentication.

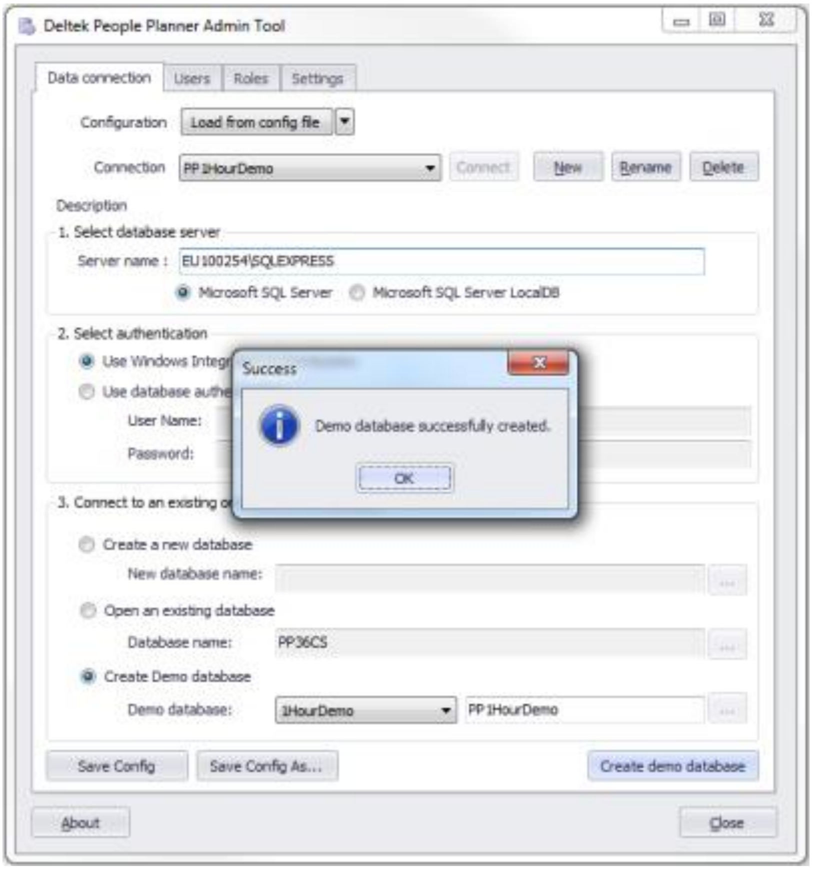
> **Note:** For a demo database, using Windows Authentication is most likely your best choice.

6. Select the **Create Demo database** radio button.

7. You can change to a different name for the database, or you can keep the default name, PP1HourDemo.

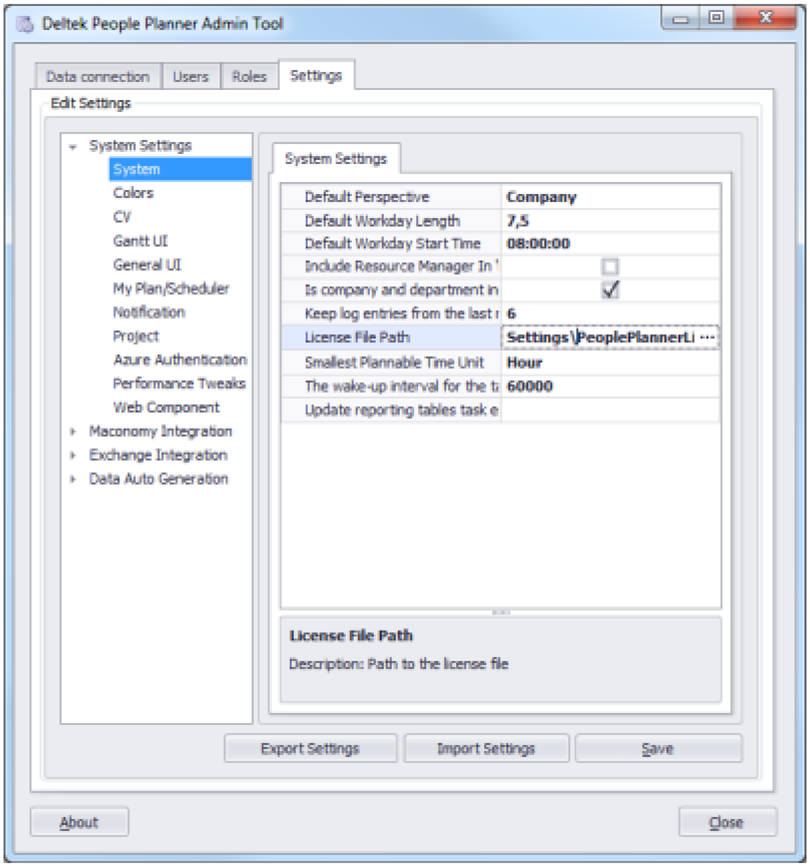
8. Click the **Create demo database** button.

   The People Planner Admin Tool creates the database.



9. When the database has been created, click the **Save Config** button to save the updated DataConnection.xml file.
10. Click the **Settings** tab.

11. Set the **License File Path** to the location where you have placed the People Planner license file.



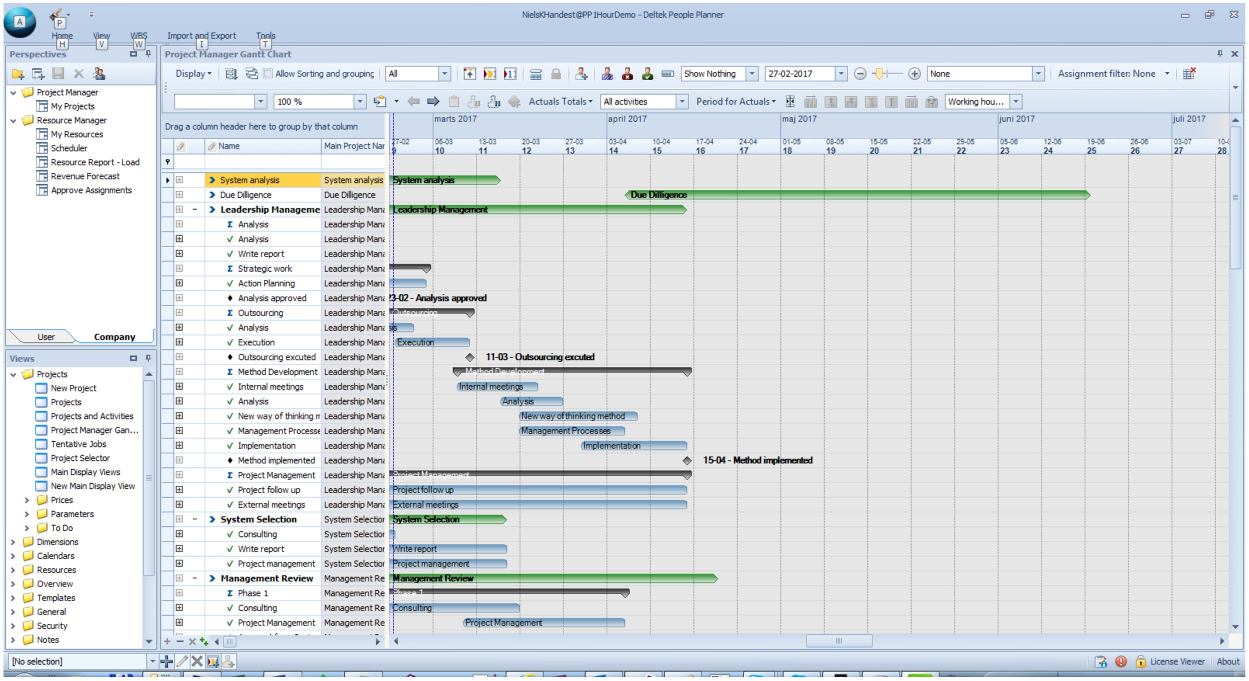
12. Click the **Save** button.
13. Close the Admin Tool.

Note: You are automatically added as an admin user when the demo database is created; you do not need to do this yourself.

Note: Although you can open the Data Auto Generation section, and from there select the Demo Data subsection, you do not need to change these settings. Changing them does not have any effect on the 1HourDemoDatabase that you have created; these settings are used for advanced database-generation scenarios.

Understanding the Database

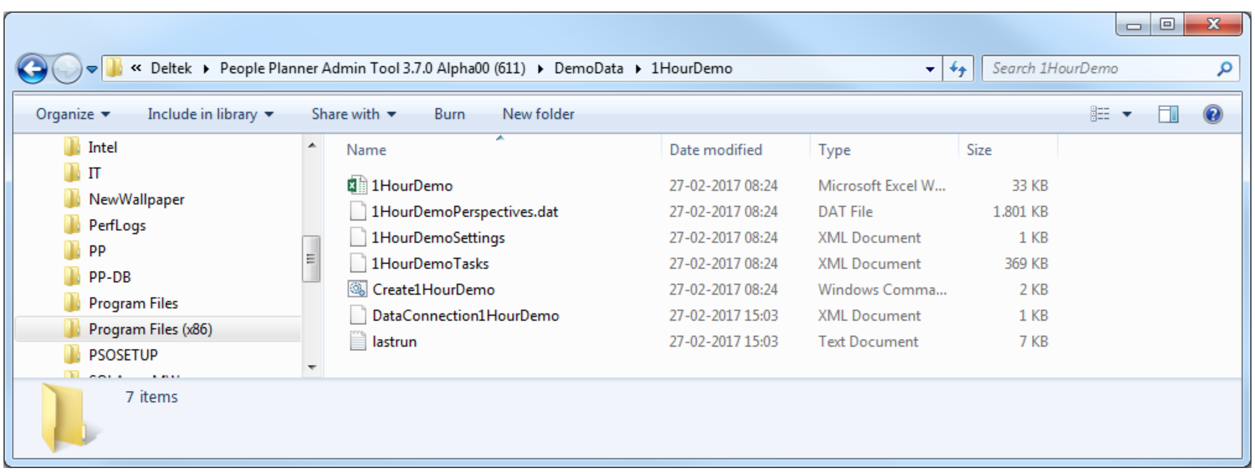
You can now start the People Planner application. People Planner opens, and you are the administrator.



The 1HourDemop database contains the following:

- Resources
- Projects and tasks
- The resources have been assigned to the tasks
- Bookings of the resources on the assignments
- Predefined company perspectives

The way in which the Admin Tool creates these is controlled by the files in the 1HourDemo subfolder.



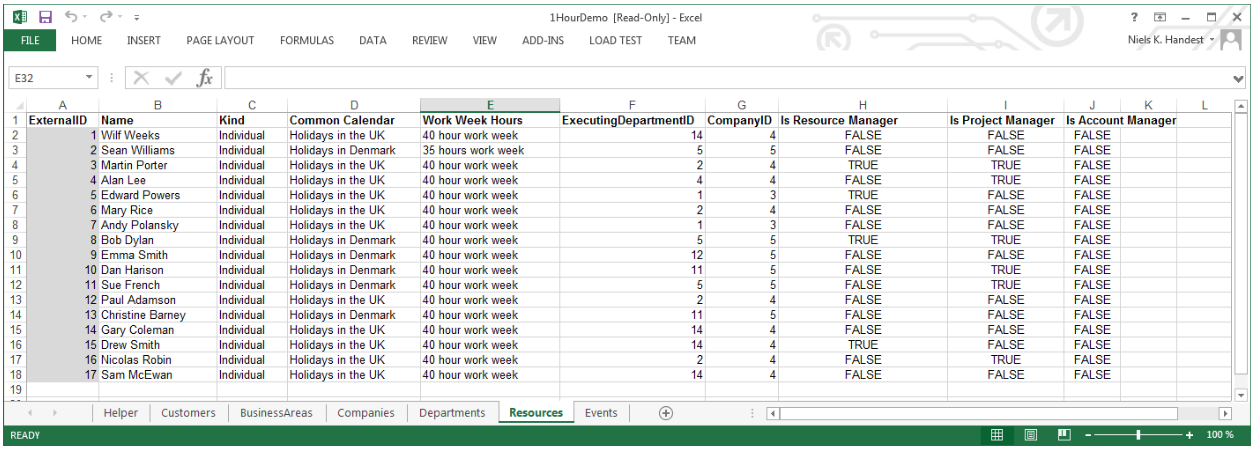
The central files in this folder are:

- 1HourDemo.xmlx
- 1HourDemoPerspectives.dat
- 1HourDemoSettings.xml

The function of each file is described in the next section.

The 1HourDemo.xmlx Excel File

This file has tabs that define the basic data of the demo database:



ExternalID	Name	Kind	Common Calendar	Work Week Hours	ExecutingDepartmentID	CompanyID	Is Resource Manager	Is Project Manager	Is Account Manager
1	Wilf Weeks	Individual	Holidays in the UK	40 hour work week	14	4	FALSE	FALSE	FALSE
2	Sean Williams	Individual	Holidays in Denmark	35 hours work week	5	5	FALSE	FALSE	FALSE
3	Martin Porter	Individual	Holidays in the UK	40 hour work week	2	4	TRUE	TRUE	FALSE
4	Alan Lee	Individual	Holidays in the UK	40 hour work week	4	4	FALSE	TRUE	FALSE
5	Edward Powers	Individual	Holidays in the UK	40 hour work week	1	3	TRUE	FALSE	FALSE
6	Mary Rice	Individual	Holidays in the UK	40 hour work week	2	4	FALSE	FALSE	FALSE
7	Andy Polansky	Individual	Holidays in the UK	40 hour work week	1	3	FALSE	FALSE	FALSE
8	Bob Dylan	Individual	Holidays in Denmark	40 hour work week	5	5	TRUE	TRUE	FALSE
9	Emma Smith	Individual	Holidays in Denmark	40 hour work week	12	5	FALSE	FALSE	FALSE
10	Dan Harison	Individual	Holidays in Denmark	40 hour work week	11	5	FALSE	TRUE	FALSE
11	Sue French	Individual	Holidays in Denmark	40 hour work week	5	5	FALSE	TRUE	FALSE
12	Paul Adamson	Individual	Holidays in the UK	40 hour work week	2	4	FALSE	FALSE	FALSE
13	Christine Barney	Individual	Holidays in Denmark	40 hour work week	11	5	FALSE	FALSE	FALSE
14	Gary Coleman	Individual	Holidays in the UK	40 hour work week	14	4	FALSE	FALSE	FALSE
15	Drew Smith	Individual	Holidays in the UK	40 hour work week	14	4	TRUE	FALSE	FALSE
16	Nicolas Robin	Individual	Holidays in the UK	40 hour work week	2	4	FALSE	TRUE	FALSE
17	Sam McEwan	Individual	Holidays in the UK	40 hour work week	14	4	FALSE	FALSE	FALSE

The available tabs are:

- A list of customers
- Business areas
- Companies
- Departments
- Resources
- Events

If you want different names for your resources, you can edit the Resources tab of the file before you create the database. Likewise, if you want a different project structure, you can edit the Events tab.

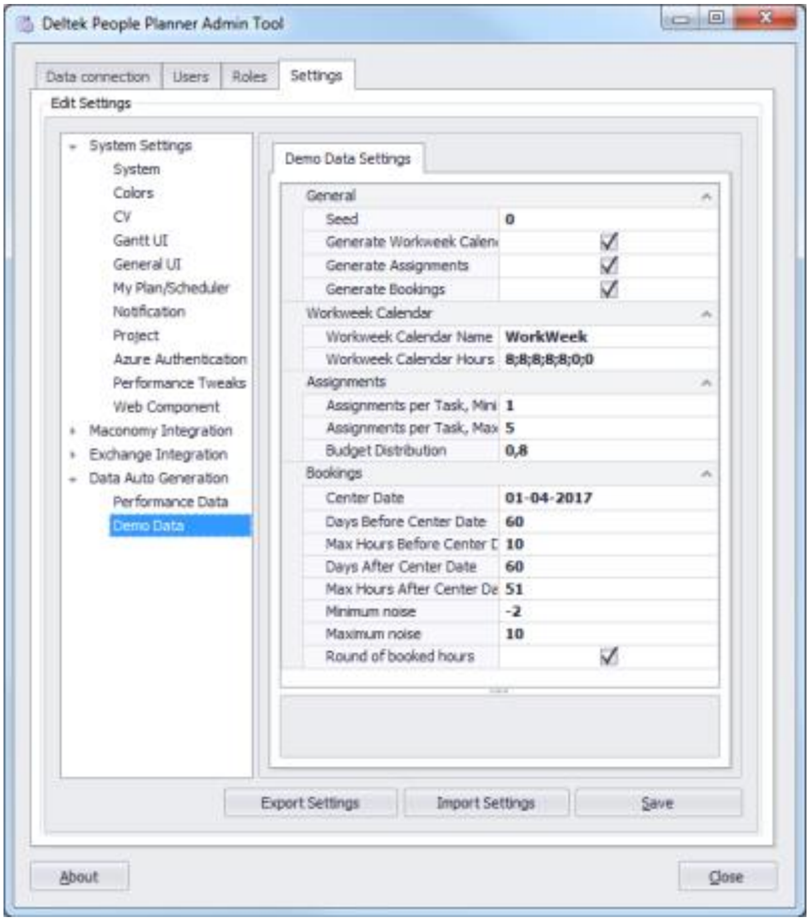
The 1HourDemoPerspectives.dat File

The perspectives are loaded from the 1HourDemoPerspectives.dat file. You can create your own file with perspectives, and replace this file with your file.

The 1HourDemoSettings.xml File

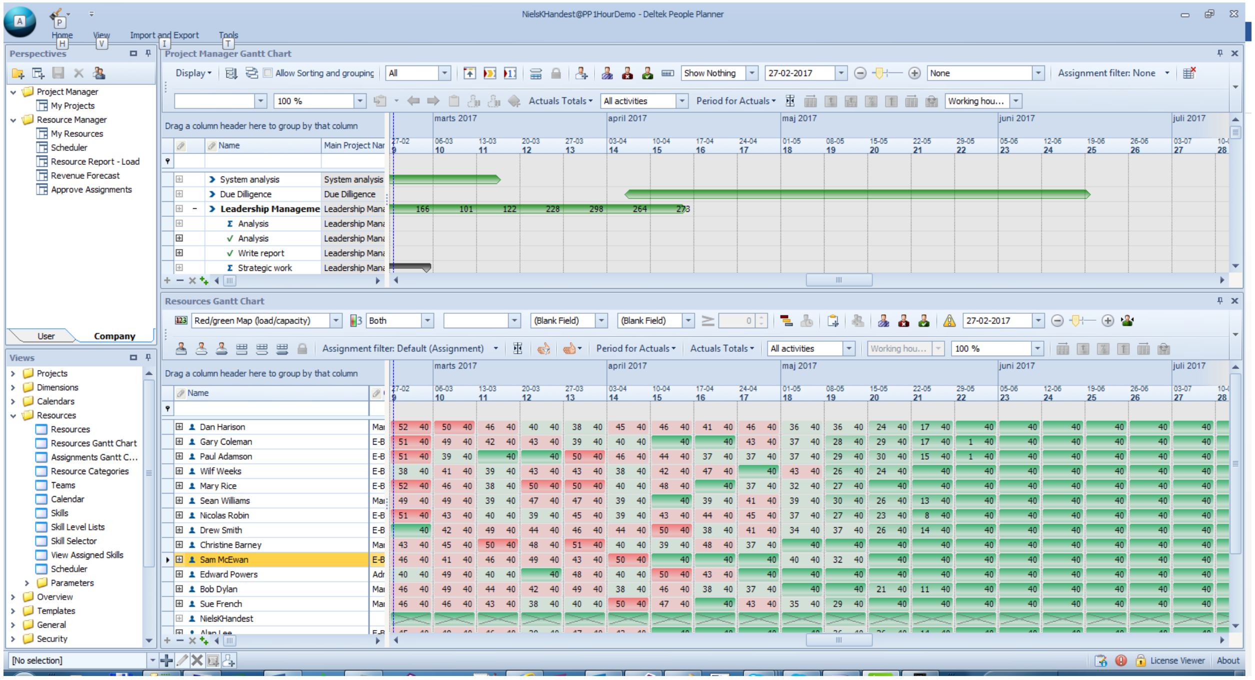
This file contains the settings for creating the demo database.

The settings are imported into the demo database as the first thing. If you want to inspect them, you can see them in the Demo Data section of the Admin Tool.



The settings are not described here, except for the most central one.

The demo database has a **Center Date**, which serves as the “today” of the database. Bookings are created relative to this center date; resources tend to be slightly overbooked before the center date and underbooked after it.



If you want to use a different center date, edit the 1HourDemoSettings.xml file before you use the Admin Tool to create the 1HourDemo database.

Changing the center date only influences the bookings. If you also want to change the start and finish times of the projects and tasks, you can do this by editing the 1HourDemo.xmlx Excel file.

About Deltek

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