Deltek People Planner 3.7.1

Administration Guide

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Contents

Overview

Deltek's People Planner is an application that combines graphical project and resource planning for your entire resource pool and project portfolio on a company-wide scale.

You can integrate People Planner with the Maconomy application so that the graphical planning capabilities are combined with the advanced project economy management features of Maconomy.

The suite of People Planner programs includes the following:

- **Deltek People Planner** — Sometimes this is called the "People Planner Client," although it is not strictly a client because there is no server; People Planner is not a client/server application. A more accurate name is the "People Planner Windows application." It is sometimes just called "People Planner," which can cause some confusion as to whether the reference is to the Deltek People Planner product or the entire suite of programs.

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

- **People Planner Admin Tool** — A tool that is used to perform the initial setup and maintenance of People Planner.
- **Deltek MyPlan** — A light web page application.
- **Deltek People Planner API** — A web service that is used to integrate People Planner with the Deltek Maconomy software.
- **Deltek People Planner Outlook Web Service** — A web service that is used to integrate People Planner with Microsoft® Exchange® and Outlook®.
- **Deltek 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.
- **Deltek People Planner Service** — A Windows service that is responsible for scheduling tasks.
- **Deltek People Planner Web Components** — Also known as the **People Planner WSC Component**. A web component that is intended to be embedded in three places the Maconomy Workspace Client (WSC) as a "lighter" version of the People Planner Gantt charts. This component enables you to create assignments and book resources directly from the WSC instead of having to open the People Planner application.

This guide describes:

- The requirements for installing People Planner
- How to perform the installation
- How to configure People Planner
- How to configure the People Planner integrations with Maconomy, Exchange/Outlook, and BPM

People Planner Admin Tool

Use the People Planner Admin Tool for the initial 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 are used by the People Planner applications.

System Architecture

People Planner is based on Microsoft technology and is, in essence, a .NET application. Users can choose a Windows application and a Web application. The Windows application offers significantly more functionality over the web-based application. The Windows application is primarily used by Resource Managers and Project Managers, whereas the web-based application is used by the individual employees (resources). It is possible to configure a People Planner installation where everybody uses the Windows application, allowing the web-based application to be optional.

You cannot deploy a People Planner solution without the Windows application, because all of the resource management functionality resides in that application.

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

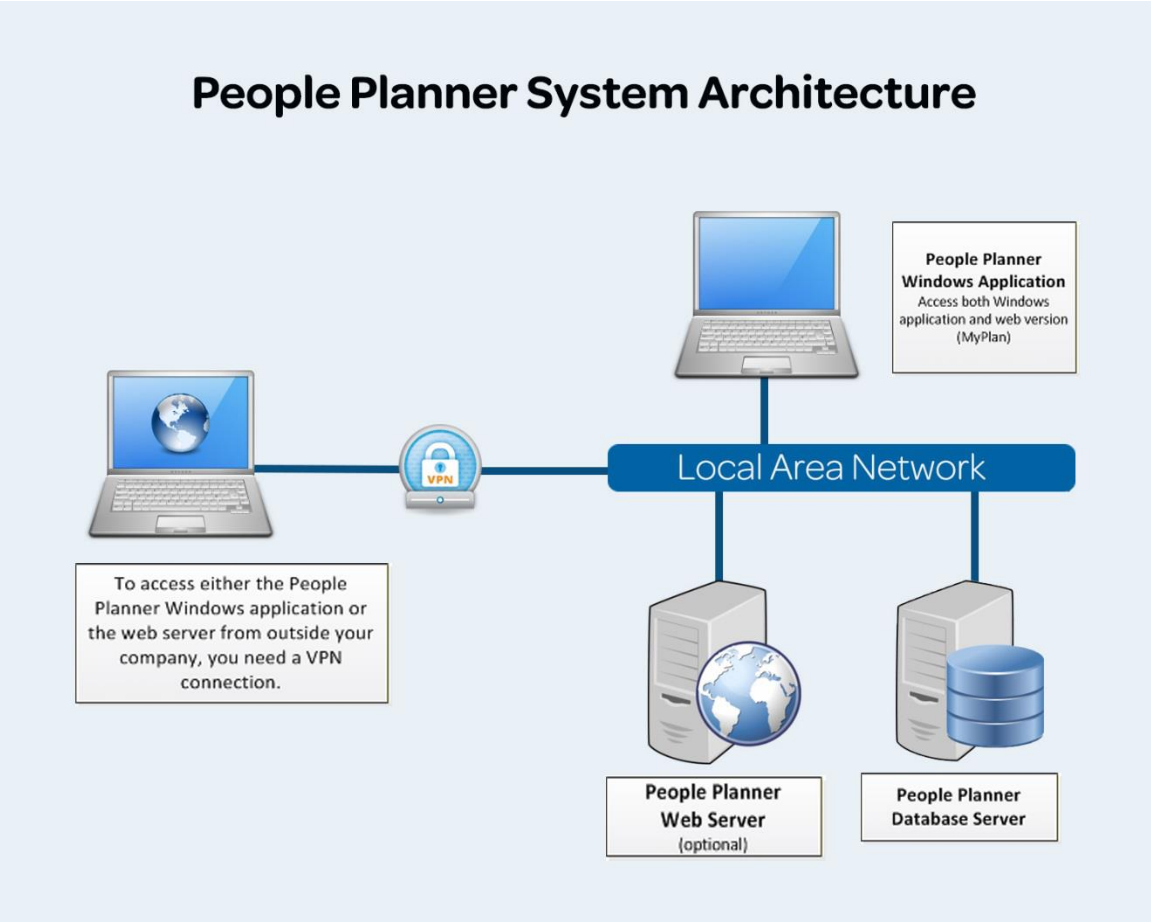
When configured with a web-based application interface, this is handled by Internet Information Server (IIS).

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.
- **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 following information describes the logical tiers that are depicted in the following illustration. People Planner's tiers are all logical tiers, which can be collapsed or allocated to as many physical servers as needed by your firm. Those determining factors are discussed in more detail as part of the sizing planning section of this document and can include user concurrency, location, access expectations, and business needs.



Deltek has designed several People Planner deployment models to ensure the best fit with your firm's environment and user access expectations.

People Planner Applications and Technologies

Deltek offers two ways to access the People Planner application. Deltek uses Microsoft's .Net technology to deploy the Windows application. In addition, you can access People Planner via the People Planner MyPlan using Internet Explorer.

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.

Kona Link

https://www.kona.com/#!/projects/65917/current/forum_topics/3209605/comments

In this Kona 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).

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.

Deployment Requirements

The number of employees who are using People Planner, the People Planner modules that they are using, and the size of your database all affect the hardware and software requirements for your deployment.

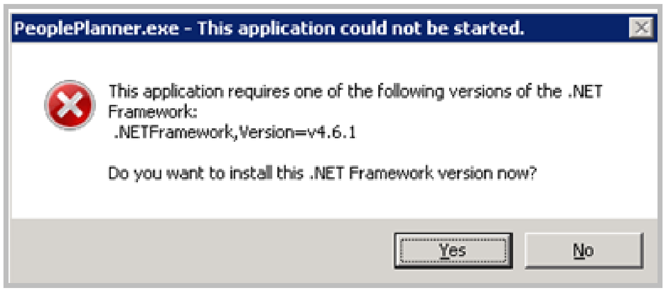
Your hardware and software requirements are affected by the deployment model that you choose, where those users are located, and the expected user concurrency. To make these decisions, it is also important that you understand what type of information each user needs to access and the capabilities that are required for him or her to perform the required functions.

Prerequisite for Installers

As of People Planner 3.6.1, you must have the .NET 4.6.1 (or newer) framework to install and run the People Planner software. When you run any installer components from the People Planner installation ZIP file, the installer first checks whether an appropriate version of .NET is installed on the computer where you are running the installer.

If the version is correct, the normal installation process continues. Otherwise, a dialog box informs you that you must install the correct version of .NET before continuing. If you click **Yes**, you are redirected to the Microsoft download page so that you can download and install the correct version of .NET and then resume the People Planner installation. If you click **No**, the installation process ends.

If your computer has .NET 4.6 installed, *but not .NET 4.6.1*, the installer erroneously recognizes it as the correct version and continues the installation process. However, you will see a runtime exception like the following that is related to the missing .NET 4.6.1.



According to Microsoft, this is likely to happen to Windows 10 users who do not have the "November Update." This is planned to be corrected in the near future.

Prerequisites for Web Components

The People Planner web components consist of:

- People Planner MyPlan
- People Planner Outlook Web Service
- People Planner API Web Service
- People Planner Web Components (sometimes referred to as the People Planner WSC Components)

The following are the prerequisites for the server(s) that are used to run the server part(s) of People Planner web components.

- Windows Server 2008 R2 SP1 or newer.
- The Microsoft Windows server is installed on the same Windows Domain as the People Planner application.
- Microsoft Internet Information Services (IIS) 6.0—or the IIS 6.0 Management Compatibility Components if you use IIS 7.0 or 7.5—is installed on the server (see the following.
- The database-based version of People Planner is installed.
- The IIS is configured for using ASP.NET 4.0.

In addition, on Windows Server 2008, Vista with IIS 7.0, and other newer versions of the operating systems, such as Windows Server 2012 R2, you must install the IIS 6.0 Management Compatibility Components (see the following steps).

Windows Server 2008 R2 SP1 or Newer

1. Click **Start » Administrative Tools » Server Manager**.
2. In the left navigation pane, expand **Roles**, right-click **Web Server (IIS)**, and select **Add Role Services**.

3. In the Select Roles Services pane, scroll down to IIS 6 Management Compatibility.
   a. Select the check boxes for **IIS 6 Metabase Compatibility** and **IIS 6 Management Console**.
   b. Click **Next**.
4. In the Confirm Selections pane, click **Install**.
5. Click **Close** to leave the Add Role Services wizard.

Deployment Models

A complete People Planner deployment can include the following:

- Client workstation Windows application.
- Web server using Internet Information Services (IIS).
- The database server is the core to the system and the storage location of all of the data that is entered into the system.
- People Planner requires an Active Directory Domain that allows for users to authenticate to the application.

A separate infrastructure for a test/training environment is strongly recommended.

Windows Application

The following table lists the recommended minimum hardware and software requirements for the Windows application.

Hardware/Software Required	
Minimum	**Recommended**
Intel 1.6 GHz or higher 4GB RAM 100 Mb Network Card Resolution 1024 x 768 or higher Windows 7 32/64-bit or Windows 8 64-bit Internet Explorer 9 or 10	Intel 2.0 GHz or higher 8 GB RAM 1 Gb Network Card Resolution 1920 x 1080 or better Windows 7, Windows 8, Windows 8.1, or Windows 10 Internet Explorer 11 or Firefox ESR

People Planner Installation Profile: 1–100 Users

People Planner Database Server	
Database Software	Microsoft SQL Server 2008/2008 R2/2012 Standard/Enterprise 32-bit or 64-bit
Operating System	Windows 2008 R2 SP1 or newer
Server	Business Class Server 1 x Quad Core 3.33 GHz or greater CPU
Memory	8+ GB RAM
Storage	People Planner itself does not impose requirements for hard disks and capacity. The database server has the following requirements. High-performance disk array—RAID commonly used with high-end array controller, with 256MB or more of read/write cache for performance and fault tolerance. Example: 8 X 72 GB 15k rpm SAS drives in a RAID 10 configuration for data, RAID 1 for operating system, 1 drive configured as a hot spare.
Additional	1000 Gb network card

People Planner Web Server (Optional)	
Operating System	Windows Server 2008 R2 SP1 or newer
Server	Business Class Server 1 X Quad Core 2.5 GHz or greater CPU
Memory	4+ GB RAM
Storage	People Planner itself does not impose requirements for hard disks and capacity. The database server has the following requirements. 2 X 72.3 GB SCSI drives in RAID 1 array. For fault tolerance and performance, more than for capacity, consider adding an additional hard drive to perform as a hot spare for the RAID set.
Additional	100 Gb network card

People Planner Installation Profile: 100–250 Users

People Planner Database Server	
Database Software	Microsoft SQL Server 2008/2008 R2 Standard/Enterprise 32-bit or 64-bit
Operating System	Windows Server 2008 R2 SP1 or newer
Server	Business Class Server 1-2 X Quad Core 3.33 GHz or greater CPU
Memory	8+ GB RAM

People Planner Database Server	
Storage	People Planner itself does not impose requirements for hard disks and capacity. The database server has the following requirements. High-performance disk array—RAID commonly used with high-end array controller, with 256MB or more of read/write cache for performance and fault tolerance. Example: 8 X 72GB 15k rpm SAS drives in a RAID 10 configuration for data, RAID 1 for operating system, 1 drive configured as a hot spare.
Additional	1000 Gb network card

People Planner Web Server (Optional)	
Operating System	Windows Server 2008 or 2008 R2
Server	Business Class Server 2 X Quad Core 2.5 GHz or greater CPU
Memory	8+ GB RAM
Storage	People Planner itself does not impose requirements for hard disks and capacity. The database server has the following requirements. 2 X 72.3 GB SCSI drives in RAID 1 array. For fault tolerance and performance, more than for capacity, consider adding an additional hard drive to perform as a hot spare for the RAID set.
Additional	1000 Gb network card

People Planner Installation Profile: 250 Users or More

For Enterprise Deployments (more than 250 users) of People Planner, you should contact the Technical Systems Engineering team so that a Deltek Systems Engineer can make custom recommendations based on your firm’s specific needs.

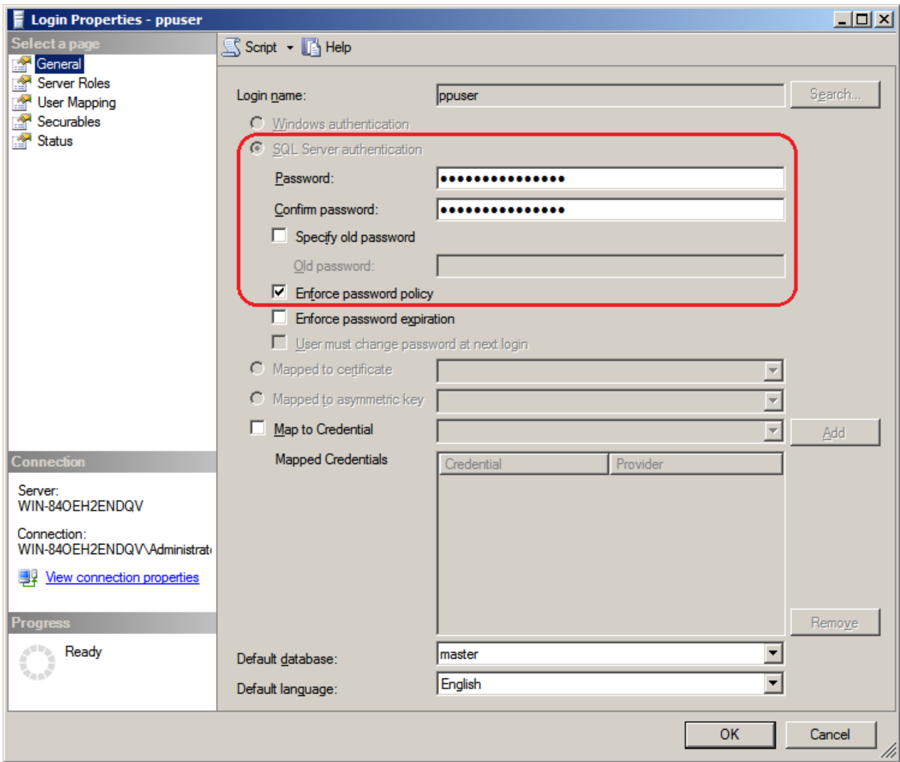
Contact Information

Contact a Deltek Technical System Engineer at techse@deltek.com for more information.

Security

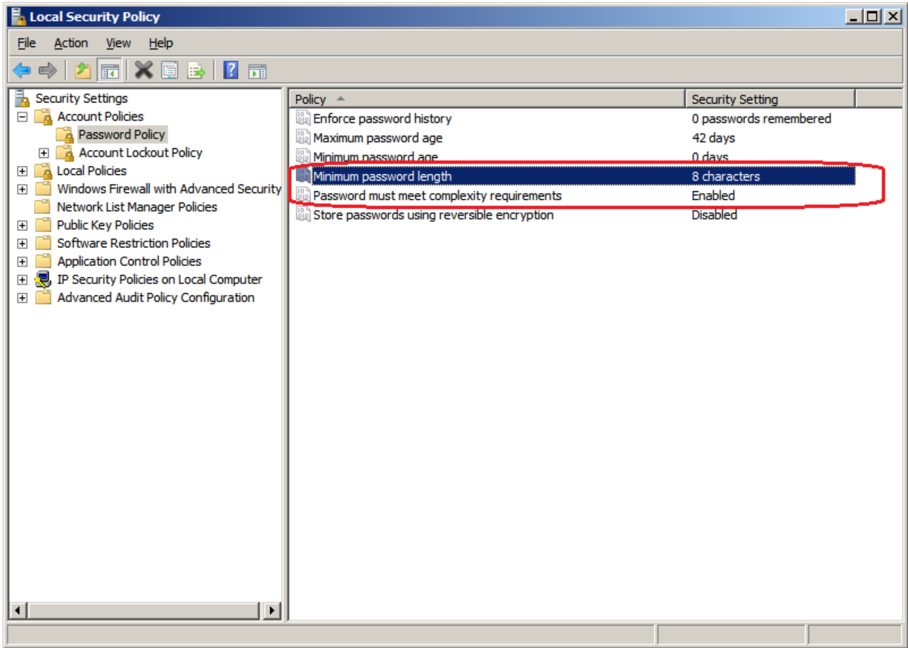
Microsoft SQL Server Account Password

For security reasons, you should configure the Microsoft SQL Server account that People Planner uses to enforce password policy. This forces the SQL server to follow the local Windows password policies.



To determine the password polices of the computer:

1. Click the **Start** button and type **Run** in the Search Programs and Files box to open the Run dialog box.
2. Enter **secpol.msc**. This opens the Local Security Policy window.
3. Click **Security Settings » Account Policies » Password Policy**.
   - Set a minimal password length and complexity enforcement.
   - If you set a maximum password age in Local Security Policy, this does not have any effect on SQL Server unless you select Enforce password expiration.



Microsoft SQL Server and Authentication

SQL Server supports the following types of authentication:

- Windows Authentication
- SQL Server Authentication

Both the People Planner Assistant and the People Planner Admin Tool can use Windows Authentication to connect to the database. However, other clients like MyPlan and the People Planner WSC Component cannot. Deltek therefore recommends that you generally use SQL Server Authentication to connect to the People Planner database.

While you can use Windows Authentication under certain circumstances, Deltek does not recommend it. People Planner 3.7 does not support Windows Security groups. This means that you must add each People Planner user individually as an SQL Server login and give him or her access to the People Planner database. This is not a viable solution for a People Planner installation that has many users, or in a dynamic organization.

Normally, you would use Windows Authentication for maintenance tasks like updating the People Planner database when an existing People Planner is updated to a new version. This type of maintenance requires a login with special privileges on the SQL Server.

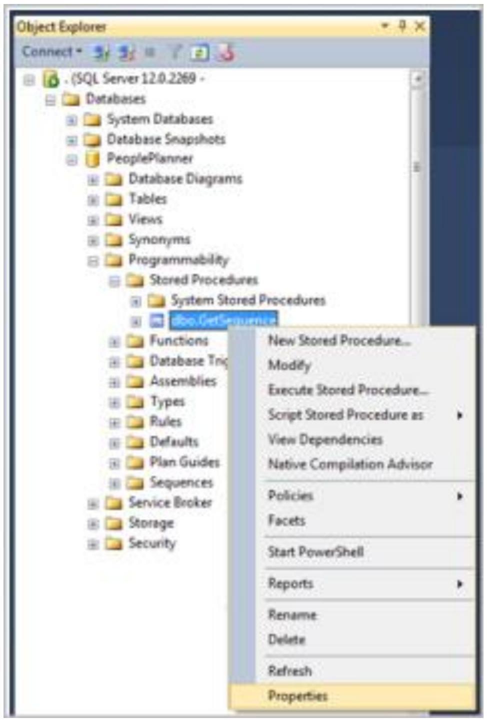
You would then use SQL Server Authentication for daily usage of People Planner. This only requires a login with the db_datareader and db_datawriter privileges.

The GetSequence Stored Procedure

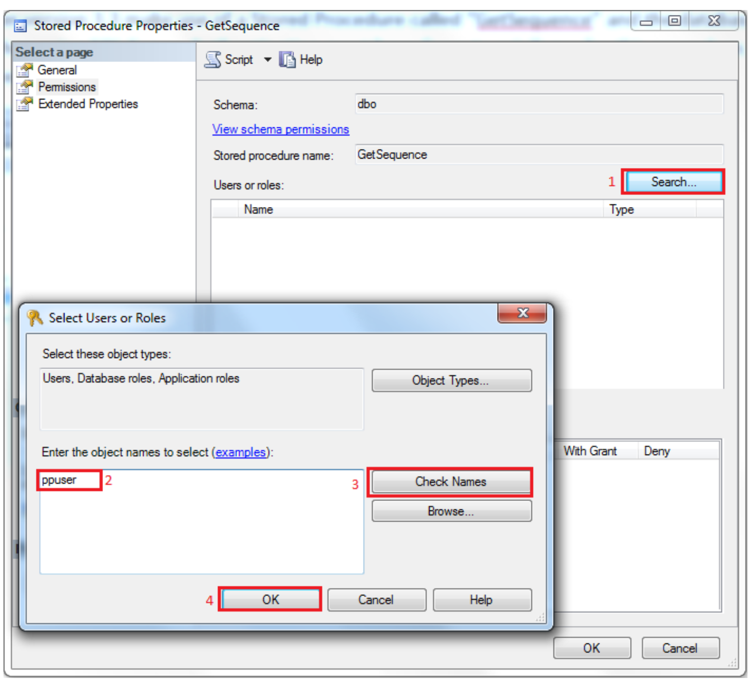
People Planner 3.7 uses a stored procedure called GetSequence. The database user that you configure when using SQL Server Authentication must have Execute privileges for this procedure. Use Microsoft SQL Server Management Studio to accomplish this as follows.

To assign the Execute privilege for the GetSequence stored procedure:

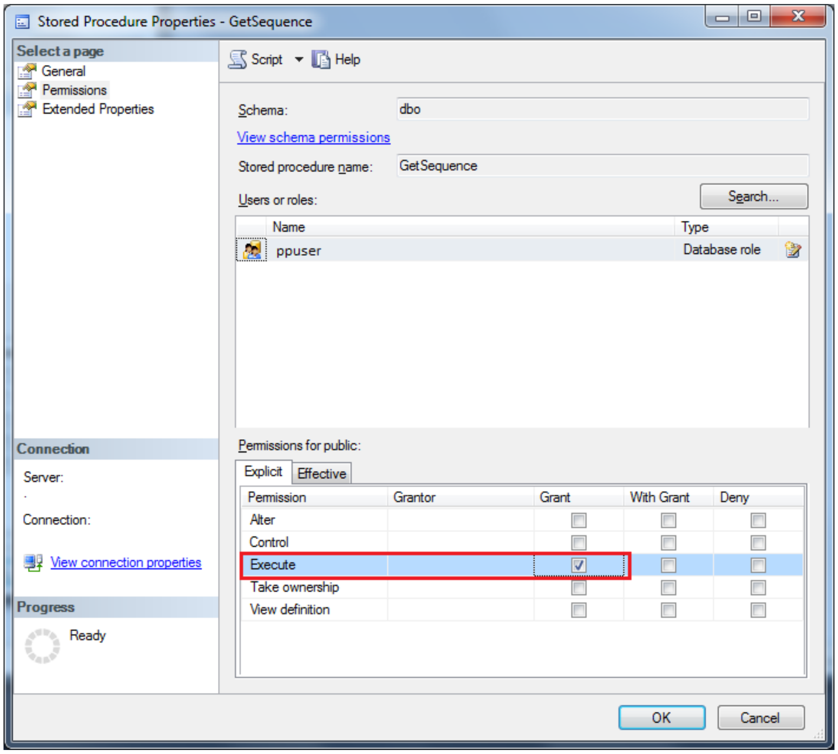
1. Select the **GetSequence** stored procedure; right-click and select **Properties**.



2. In the properties dialog, click **Search** and enter the name of the database user that is used to connect to People Planner. You can verify the name by clicking **Check Names**. Then click **OK**.



3. Select the **Execute** permission for the People Planner database user and click **OK**.



Microsoft SQL 2014 Security Best Practices

For more information about configuring security for the SQL server, see SQL Server 2012 Security Best Practice - Operational and Administrative Tasks by Bob Beauchemin.

Using Transport Layer Security

The People Planner package includes programs that run under an Internet Information Services (IIS) server. To protect against network sniffing, you should configure the IIS to run with Transport Layer Security (TLS). This requires that you acquire a TLS certificate and install it on the IIS server.

The normal installation configuration does not use TLS. You must configure TLS afterward. Each component comes with one of the following:

- Two web.config files (web.config and web.SSL.config) — In this case, configuring for TLS means that you must rename the web.SSL.config file to web.config.
- One web.config file — In this case, you must edit the file to change the configuration to TLS. The file contains the necessary information about which sections should be commented out and which should be commented in.

Currently Maconomy does not support TLS. You might therefore experience problems when calling the People Planner web services from the Maconomy end, for example, when sending a project from the Maconomy Portal to People Planner.

Enable HttpOnly with TLS Encryption for MyPlan

HttpOnly is a technique that is used to protect against the most common types of XSS attacks, including session hijacking. The web.config file for MyPlan contains the following block:

```
<!--Note: enable the following 3 lines if SSL certificates are available-->
<!-- <httpCookies domain=""
httpOnlyCookies="true"
requireSSL="true" /> -->
```

You can enable HttpOnly cookies even if there is no TLS certificate installed on the server. However, if TLS is enabled, you can use it to encrypt the HttpOnly cookies and strengthen the security. To do this, you must comment in the specified block.

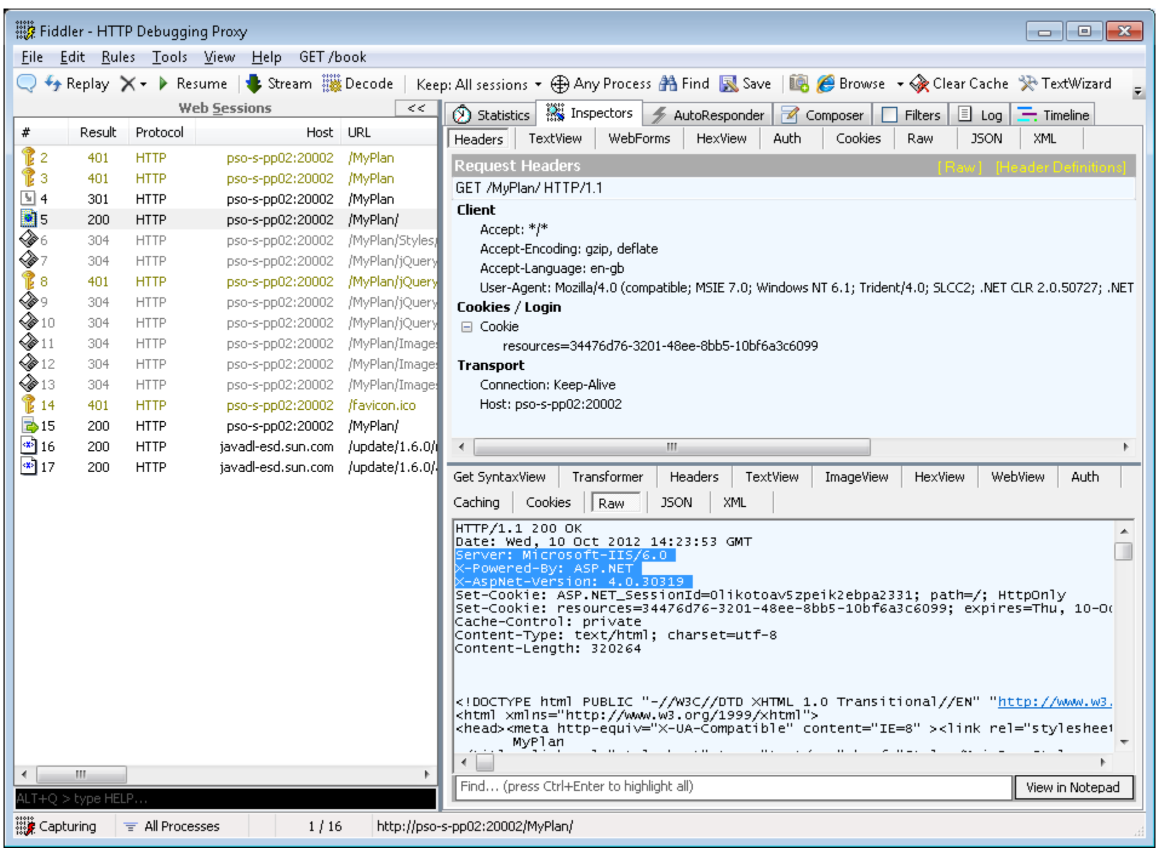
Remove Unnecessary Headers

Although security should not rely sole on this, it is always prudent to secure the system by not revealing any unnecessary details.

The web server includes a number of HTTP headers when it sends back the contents of the requested page. The browser uses these headers to determine how to render the content and for how long to cache the content. The web server also sends back identifying information. These identifying headers indicate the web server version, along with the ASP.NET version being used.

While some of the HTTP headers are necessary, the web server's identifying HTTP headers are not. Providing identifying information can pose a security risk; the less information an attacker has about the system, the better.

The following figure shows an example of the three identifying headers.



The following sections describe how to remove these headers in both IIS 6 and IIS 7.x. Although the preceding figure is based on MyPlan, the steps also apply to the People Planner web services and the People Planner WSC Components.

Server Header

The Server header broadcasts that it is an Internet Information Server and provides its version. The browser does not require this information. The procedure to remove the Server header is the same for IIS 6 and IIS 7.

To remove the Server header:

1. Download UrlScan from the Microsoft web site:

   http://www.microsoft.com/technet/security/tools/urlscan.mspx

2. Install it on the server that runs the Internet Information services where it will be installed as an ISAPI filter.
3. To configure UrlScan:
   a. Open the file in a text editor such as Notepad.
   b. Make the appropriate changes. To remove the Server header, change the “0” to a “1” in the following line:

      RemoveServerheader=0

   c. Save the file.

   You perform all configuration of UrlScan through the UrlScan.ini file, which is located in the %WINDIR%\System32\Inetsrv\URLscan folder.

4. When you have completed editing, restart the IIS for the changes to take effect.

X-Powered-By Header

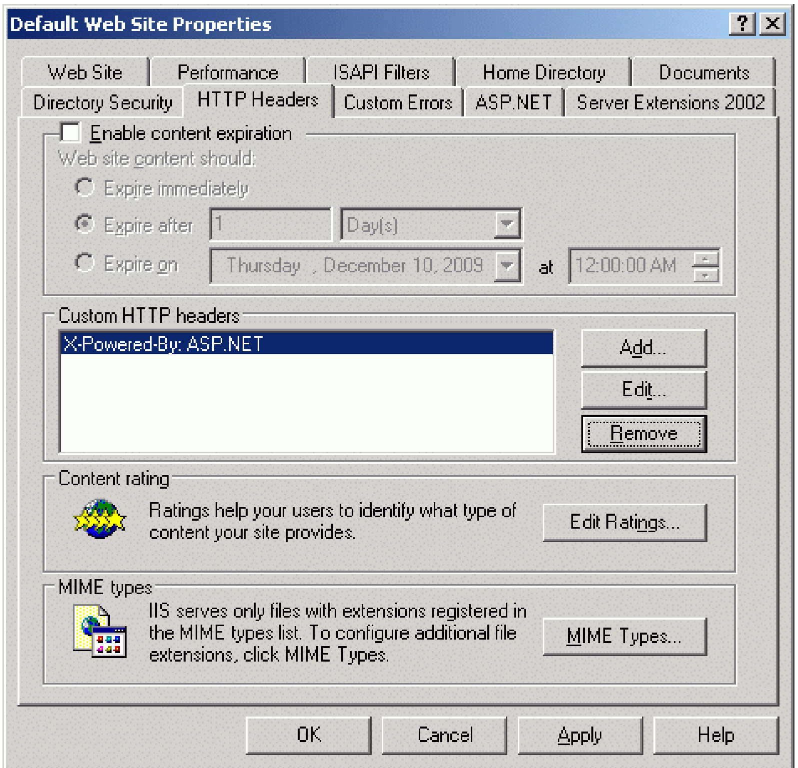
The X-Powered-By header broadcasts that the application is based on ASP.NET. The browser does not require this information. The procedure for removing this header differs slightly for IIS6 and IIS 7.x.

IIS 6

To remove the X-Powered-By header in IIS 6:

1. Start the Internet Information Services (IIS) Manager.
2. Navigate to the People Planner web site.
3. Right-click on the web site and select **Properties**.
4. Click the **HTTP Headers** tab.
5. Highlight the header in the Custom HTTP headers box and click **Remove**.

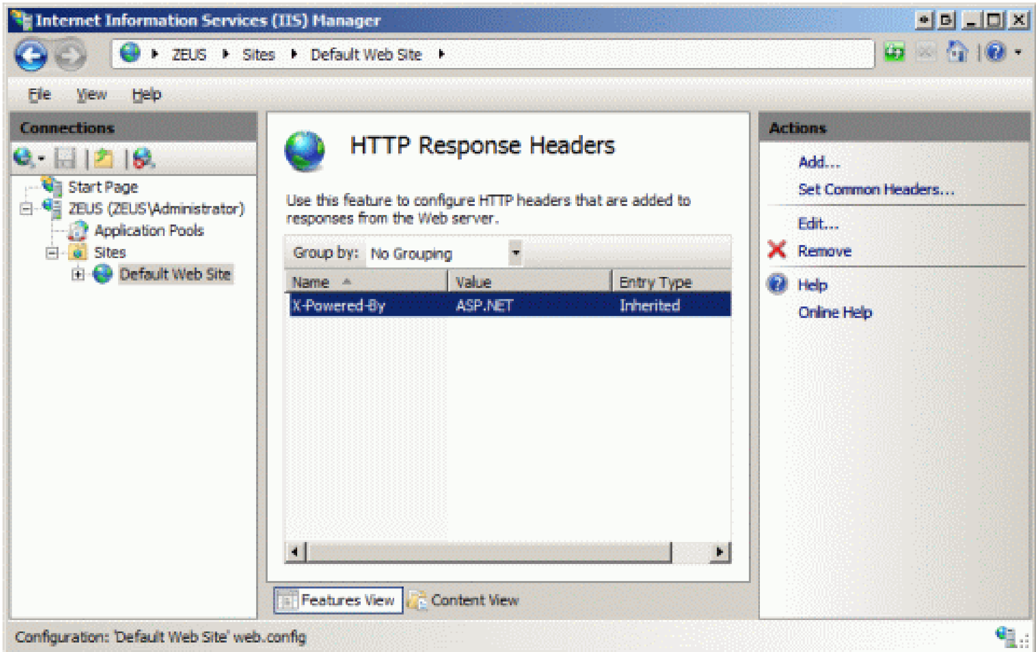
6. Click **OK**.



IIS 7 and Newer

To remove the X-Powered-By header in IIS 7:

1. Start the Internet Information Services (IIS) Manager.
2. Navigate to the People Planner web site.
3. Open the HTTP Response Headers icon in the IIS grouping.
4. Highlight the X-Powered-By header and click **Remove**.



X-AspNet-Version Header

The X-AspNet-Version HTTP header broadcasts what version of ASP.NET the web server uses. The browser does not require this information.

To remove the X-AspNet-Version header:

- Edit the web.config file and add the following inside the <system.web> element:

  ```
  <httpRuntime enableVersionHeader="false" />
  ```

Prevent Clickjacking / Dragjacking

By default, the Web.config file for MyPlan and the People Planner WSC Component includes a safeguard to prevent it from being framed within another application to avoid clickjacking / dragjacking or confuse end users to perform unwanted actions. However, when updating an existing version of MyPlan, you must add this manually by adding the following to your site’s Web.config file.

```
<system.webServer>
    ...
    <httpProtocol>
        <customHeaders>
            <add name="X-Frame-Options" value="SAMEORIGIN" />
        </customHeaders>
    </httpProtocol>
    ...
</system.webServer>
```

For more information, see https://developer.mozilla.org/en-US/docs/Web/HTTP/X-Frame-Options.

Service Account Privileges

The *Principle of Least Privilege* dictates that Windows services should run under a user account that has the least-set privileges that are required to do the task. This applies to the People Planner Service as well.

The following process achieves this:

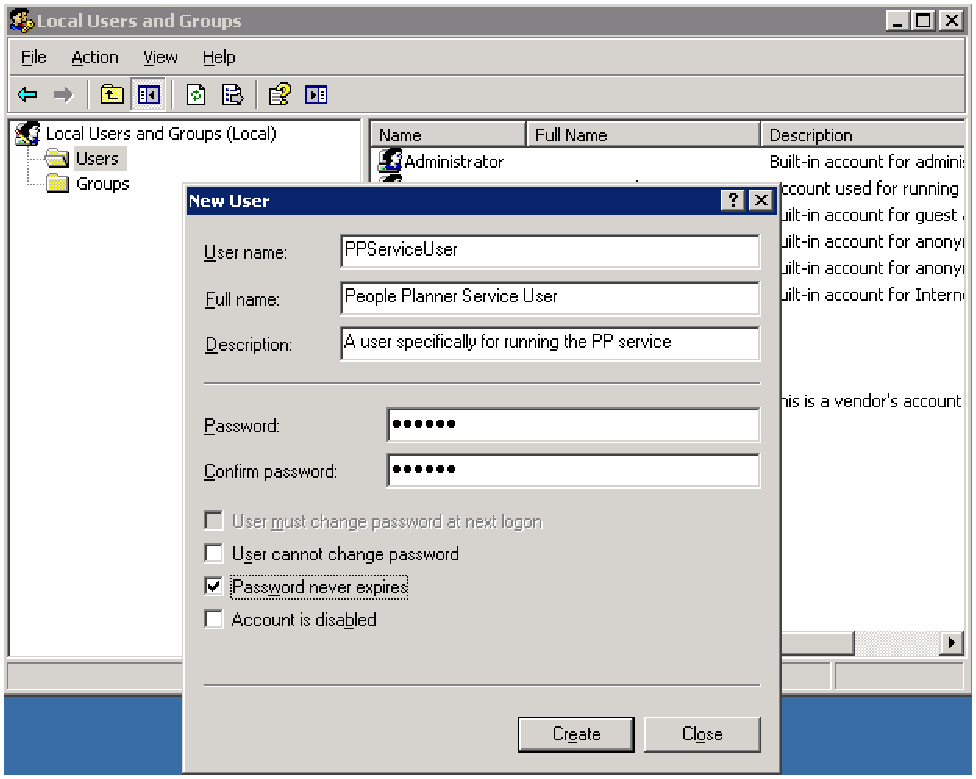
1. Create a local account on the server.
2. Give the account the necessary privileges to the directory where the People Planner Service is installed.
3. Give the account access to the People Planner database.
4. Add the account as a People Planner user.
5. Configure the People Planner service to run under the account.

Create a Local Account

To create a local account on the server:

1. Click the **Start** button and type **Run** in the Search Programs and Files box to open the Run dialog box.
2. Type **lusrmgr.msc** in the Run dialog box to open the Local Users and Groups window.
3. Right-click on the **Users** node and select **New User…** to open the New User dialog box.
4. Give the user a name and set the properties.

   Make sure that the password that you enter fulfills the requirements for a strong password.
5. Click **Create**.



6. Right-click on the new account and click **Properties**.

7. By default the new account is a member of the Users group. You can change this if needed.

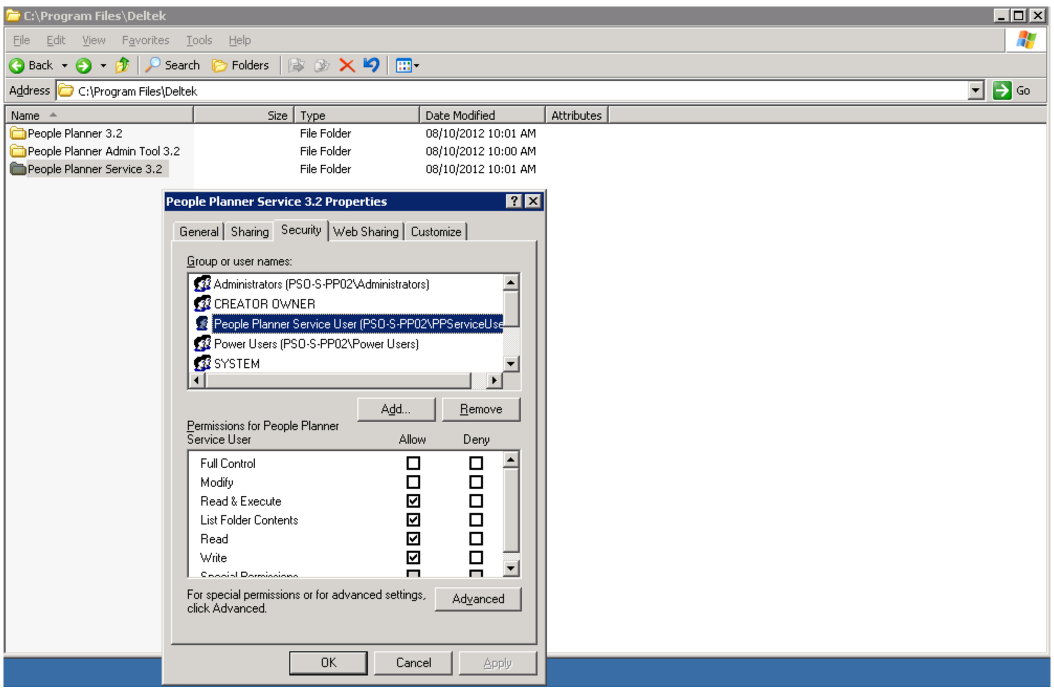
This account needs Read privileges to any other folder that it needs to read, for example, when a scheduled task is set up to import from a particular .csv file.

Assign People Planner Service Folder Privileges

To assign privileges to the People Planner Service folder:

1. Right-click on the folder where the People Planner Service is installed and click **Properties**.
2. Add the account and set the privileges.

The account must have Read & Execute access to run the service, and it must have Write access to write to the log.



Give the Account Access to the People Planner Database

Use the Admin Tool to give the account access to the database. The method is the same as for granting any other account privileges to log in as an administrator in People Planner.

Add the Account as a People Planner User

You must add the account as a user to People Planner. You can assign the user an Admin role; however, a lesser role might fit your needs. For example, the user may not need to have rights to any of the views.

You can add users to People Planner in two ways via the Admin Tool:

- Search AD

Using Search AD to add users would normally work, because they are controlled via the AD. In this case, using Search AD does **not** work, because the account is a local admin and is therefore not controlled via the AD.

- Import from file… — This method requires that the administrator is familiar with the format of the .csv file.

Another option is to temporarily add the account as a remote login and use Remote Desktop to log in as the account. In this case, you can use the **Add myself** button. Remember to remove the remote login for the account afterward.

Configure the Service to Run Under the Account

To change the login for the People Planner Service:

1. Click **Start » Administrative Tools and Services**.
2. Right-click the **People Planner Service** and select **Properties**.
3. In the Log On tab, select the account and click **Ok**.
4. Right-click on the account and click **Start**.

Backup Procedures

People Planner does not include features for performing backups. You must establish a backup procedure using the tools that the database management system that you are using provides. You must back up the database that you created with the administration tool.

Install the People Planner Database and First People Planner Windows Application

Installing People Planner involves the following steps:

- Install the People Planner Admin Tool on a PC.
- Use the Admin Tool to create the People Planner database.
- Use the Admin Tool to add users to the People Planner database.
- Install a license file on a file server.
- Prepare a configuration file for each Windows application instance, with information about the database connection.
- Install People Planner application instances as needed.

Deltek best practice recommends that if you have large amounts of data to transfer, you change your timeout options before installation. See *Before You Begin* for details.

Prepare for the Installation

You need the following for the initial installation of the first application instance:

- A Windows PC with this software, where you will do the initial People Planner installation. The requirements are outlined in People Planner Applications and Technologies and Deployment Requirements.
- A file server for the license file.
- A database server for the People Planner database. Deltek recommends that you do *not* use the same physical machine as you use for your Maconomy installation.

The user who installs the People Planner database using the Admin Tool must have the **sysadmin** role—that is, privileges to create and update databases.

All People Planner application instances should access the database using only one set of user credentials, but they should not use the Admin user credentials.

For Microsoft SQL Server, the People Planner application user needs at least **public**, **db_datareader**, and **db_datawriter** roles in the People Planner database.

You must create the Admin user by using a database administration tool *before* you install People Planner. You should set up the application user *after* you install the database.

Before You Begin

If you have large amounts of data to transfer (that is, more than 20,000 rows), Deltek best practice is to change your timeout options before installation.

To change your timeout options:

1. Navigate to the folder <Drive>\Maconomy\Inifiles.
2. Open the MaconomyServer.<environment>.I file in notepad.

Back up this file before you make any changes.

3. Update the MaconomyServer.<environment>.I file as follows:
    a. If the timeout section already exists, increase it to the following, but do not increase it if it already exceeds the amounts listed here:
        - -w300000 (indicates five minutes)
        - -r20000 (indicates 20,000 rows)
    b. If the timeout section does not exist, insert a line and add the following code:
        - -w300000 (indicates five minutes)
        - -r20000 (indicates 20,000 rows)
4. Ensure that there is a blank line at the end of the file after you add or adjust the timeouts.
5. Save and close the file.
6. Restart the system (all Maconomy daemons).

Install the Admin Tool

You must install the People Planner Admin Tool first.

To install the Admin Tool:

1. Double-click the Admin Tool installer file (**Deltek People Planner Admin Tool version 3.7.msi**) to start the installation.
2. On the Welcome screen, click **Next**.

    If an Admin Tool was already installed, you might see a message asking if you want to remove the earlier version or keep it.

3. On the Destination Folder screen, click **Next** to accept the default location, or specify a new location and then click **Next**.
4. On the Ready to install Deltek People Planner Admin Tool screen, click **Install**.

    The wizard completes the Admin Tool installation.

6. Click **Finish** to close the installation wizard.

Create or Update a People Planner Database

Use the Admin Tool to Create a Database for People Planner

You must have the **SYSADMIN** role so that you can create a database.

To create a People Planner Database:

1. On the computer where you installed the Admin Tool, navigate to **Program Files » Deltek People Planner » Deltek People Planner Admin Tool**.
2. On the **Data connection** tab, complete the following steps.

> Deltek recommends installing SQL Server 2016 Express for the purposes where “Single” was previously used.
>
> Alternatively, you can install SQL Server 2016 LocalDB. **However, this feature is only usable for single-user scenarios**, such as a sales person who wants to demonstrate People Planner from his or her laptop and does not want to install a full SQL Server to be able to do this.

a. In the **Server name** field, enter the name of the database server and select **Microsoft SQL Server**.

b. In **Select Authentication**:

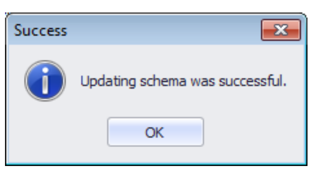
> This section is disabled when using Local DB.

- **Use Windows Integrated Authentication** — You can select this option if you are running Microsoft SQL Server, and you are the administrative database user.
- **Use database authentication** — Select this option if you do not select Windows Integrated Authentication.

c. In the **New database name** field, enter a database name, for example, **PeoplePlanner**.

> Avoid using spaces and special characters in the database name. You should also consider (according to the general policies of your company) not using a standard such as “sa” for the administrative user.

d. Click **Create database** to create the database. A confirmation message is displayed.



e. Click **OK** to close the dialog. The database creation is complete.

> You may need to return to the Admin Tool Database connection tab from time to time to do maintenance on the database.

> The database user that is used in the preceding setup has quite wide-ranging privileges in the database. **Do not** save this configuration to a file. When you, for example, need to update the database schema or add users, enter your credentials in this form again.

Use the Admin Tool to Update an Existing Database for People Planner

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. Optionally, export the database to a dataset file using the “Export” feature in the People Planner Admin Tool (from the current version).

If you are running People Planner version 3.1 SP1 or newer, you can upgrade directly to version 3.7 using the Admin Tool.

To upgrade a People Planner database:

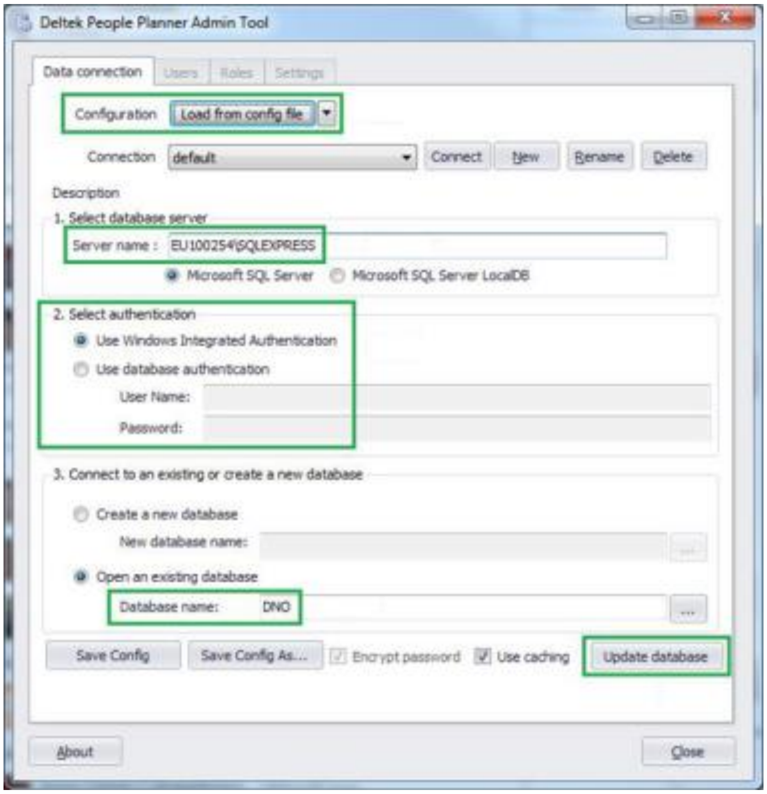
1. Open the People Planner Admin Tool and go to the **Data connection** tab.
2. Click the **Load from config file** button.
3. Navigate to the latest version of the **DataConnection.xml** file and load it.
4. In the **Select database server** group, verify the value of the **Server name** field and that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

   To use **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.

6. 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.
7. Click the **Update database** button.

The following figure shows an example.



Database Updates and Connection String Conflicts

This information applies to updating a database in which both import mappings and task specifications can have connection strings—that is, a database from a version of People Planner that is earlier than 3.6. As of 3.6, connection strings are only stored in import mappings.

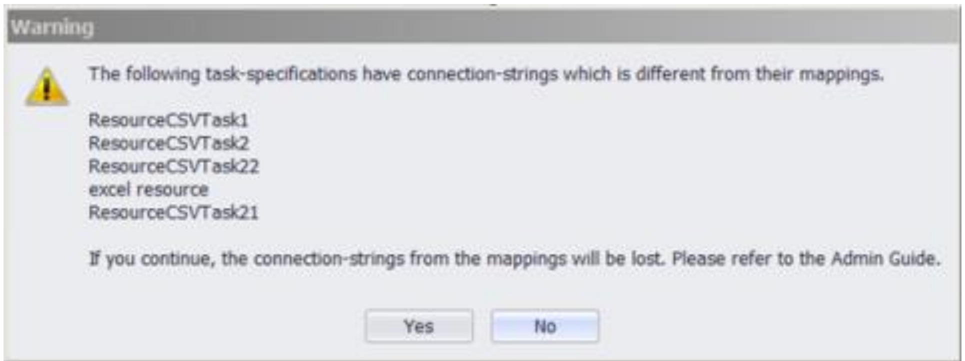
Before People Planner 3.6, there could be connection strings for import mappings and other connection strings for task specifications. If you have any task specifications whose connections strings are different from the import mapping connection strings, when you update a database to People Planner 3.6 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.

Create an Initial People Planner User

A user with administrative rights usually creates and manages users from within the People Planner application; however, you must create the first user and assign it to the Admin role outside of People Planner. This role can administer users and roles within People Planner, and so forth.

You can use the Admin Tool for this task.

To create the first People Planner user:

1. Open the Admin Tool and enter the credentials for the administrative user.

   In the General users tab, the **Domain** field is the Windows domain of the current logged-in user. You can select a list of other domains if the current machine is a member of other domains.

2. There are two ways to add a user from the Active Directory:
   - Click **Add myself** to add the current Windows user (you) from the Active Directory.
   - Click **Search AD** to search the Active Directory for users. Select a user in the left column and click **»**.

   The selected user is moved to the user list on the right and marked as a resource. This means that this user will also be added as a resource in the People Planner application. The user has not yet been created in the database at this point.

   You can add users who are not resources. This means that they can use the People Planner application, but they cannot be added to projects, nor can they use the People Planner's Outlook integration.

3. Click **Add with Admin** role. A confirmation message is displayed.

The next step is to install the first instance of the People Planner application.

Install the First People Planner Application Instance

Before you install People Planner, confirm that the People Planner database has been set up and that there is at least one Admin user in the People Planner database.

To install the first People Planner application instance, complete the following steps:

1. Double-click the **Deltek People Planner version 3.7.msi** installer.
2. On the Welcome Screen, click **Next.**

   If a previous version of People Planner was already installed, you might see a message asking if you want to remove the earlier version or keep it.

3. On the Destination Folder screen, click **Change…** if you want to change the destination folder. Click **Next** when you are done.
4. On the Ready to install Deltek People Planner 3.7 screen, click **Next** to continue with the installation.
5. When the installation is complete, click **Finish** to close the installation wizard.

The Installation Process

During the People Planner installation, if the installation wizard detects that a previous People Planner installation already exists, a message screen is displayed.

On that message screen, choose from the following options:

- **Overwrite the existing installation(s)** — Select this option to upgrade all of the existing versions. The user-generated files are migrated from the latest installation to the new installation. For example, if you have both People Planner 3.6 and People Planner 3.6.1 installed, the installation updates from the People Planner 3.6.1 files. After the new version is installed, it removes all existing installations.

  The migrated files are:

  - People Planner application:
    - Logs*.log
    - Settings\DataConnection.xml
    - Settings\PeoplePlannerLicense.lic
  - People Planner Admin Tool:
    - Logs*.log

  Some of the user-generated files are not removed for the old versions, and the administrator must manually delete the folders.

- **Keep the existing installation(s)** — Select this option to perform a side-by-side installation. The installer will create an installation in a new directory and will not touch any previous installations. None of the user settings and logs from the existing installations will be migrated to this new installation. A shortcut is created on the desktop and in the Start menu.

  You can have an unlimited number of side-by-side installations.

Test the First People Planner Application Instance

Before you use People Planner, you must establish a data connection from this application instance to the People Planner database that you created as described in Use the Admin Tool to Create a People Planner Database.

Deltek recommends testing to confirm that People Planner can connect to the People Planner database before you install a large number of users.

To do this, you need a data connection file. You create this file in the Admin Tool. Remember that:

- Deltek recommends that all People Planner application instances use database authentication. When using Microsoft SQL Server, Windows Authentication *is* possible, but it requires that you give each Windows user explicit permissions in the database.
- All People Planner application instances should use the same database user (with the privileges that were described previously).
- This database user should *not* be the same as the administrative user who set up the database.

To confirm that People Planner can connect to the People Planner database:

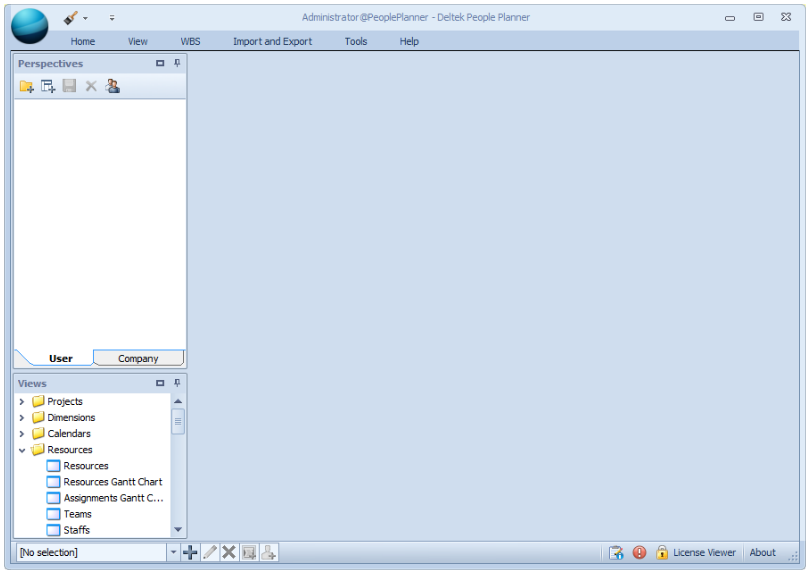
1. On the computer where you installed the Admin Tool, navigate to **Program Files » Deltek People Planner » Deltek People Planner Admin Tool**.
2. On the Data Connection tab, enter the relevant information:
    a. In the **Server name** field, enter the server name and select **Microsoft SQL Server**.
    b. In the **Select authentication** group box, select **Use database authentication** and enter the **User Name** and **Password** of the People Planner database user.
    c. In the **Connect to an existing or create a new database** group box, select **Open an existing database** and select the database that you created earlier.
    d. Click the **Connect** button.

    If the test is successful, the other tabs—Users, Roles, and Settings—are enabled.
3. Click **Save configuration** to save these settings to a data connection file called **DataConnection.xml**.
4. Close the People Planner Admin Tool.
5. In Windows Explorer, open the Settings folder that is located in the folder where you installed People Planner.

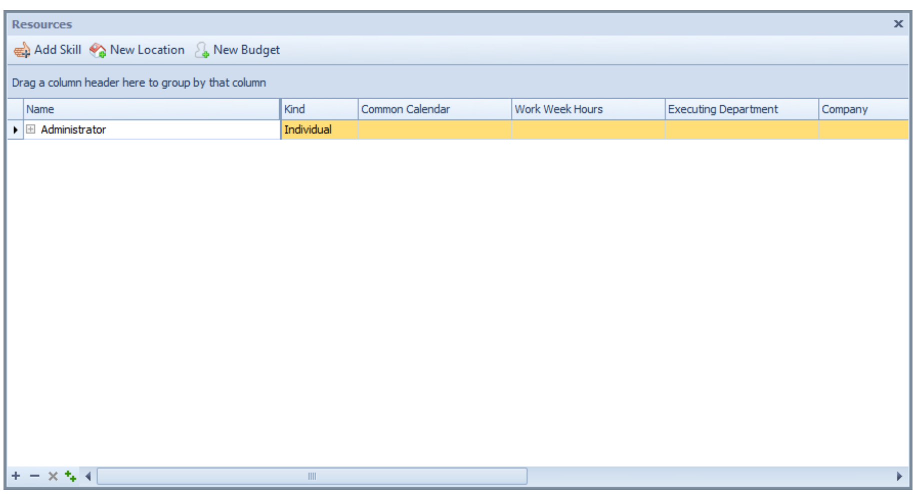
    If you did not change the location of the program during installation, it is C:\Program Files (x86)\Deltek\People Planner 3.7.
6. Copy the **DataConnection.xml** file to this location.

7. Start People Planner when you have set the configuration file to point to the data connection file.

   After People Planner has started, you should see something similar to the following figure, with your name in the title bar.



8. If you marked yourself as a resource when adding yourself as a user in the Admin Tool, you should also see something similar to the following example when you open the Resources view.



You have now verified that:

- The People Planner database has been created correctly.
- People Planner can access the database.
- There is an Admin user defined.

Side-By-Side Installation

In People Planner 3.7, you can do a side-by-side installation for People Planner, 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).

Before People Planner 3.7, you could not install the People Planner Service as side-by-side.

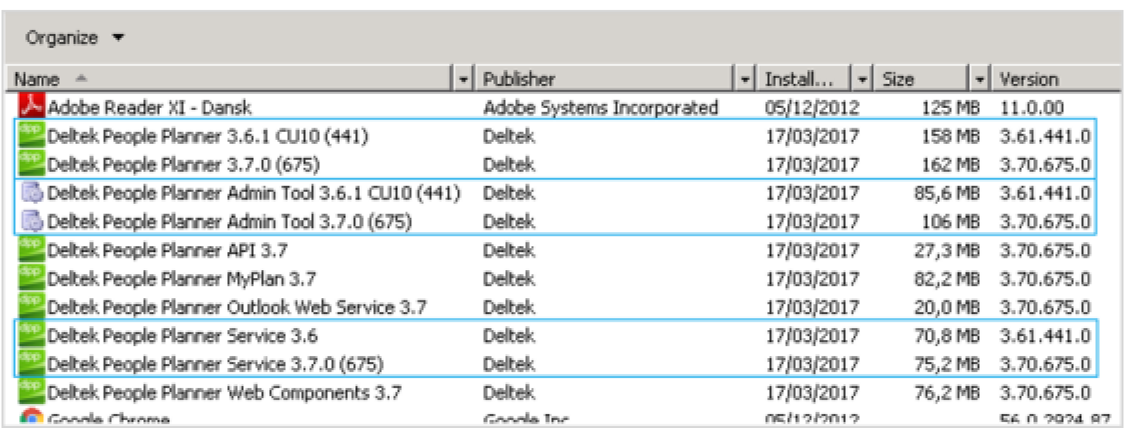
Side-by-side installation makes it possible to install and try out a new version, such as a service pack, without losing the existing version in the process. Side-by-side installation is primarily intended for use on your test installation.

The following table indicates which products support the side-by-side feature.

Software	Side-by-Side Feature
People Planner Windows application	Yes
People Planner Admin Tool	Yes
People Planner MyPlan	No
People Planner API	No
People Planner Outlook Web Service	No
People Planner Outlook AddIn	No
People Planner Web Service	No
People Planner Service	Yes
People Planner Web Components	No

How Side-by-Side Installations Work

The following figure shows how side-by-side installations of different versions of People Planner and the Admin Tool appear in the Programs and Features window.



For a side-by-side installation to work, two conditions must be met:

- The different installed programs must be installed in different directories.
- Each installable program must use its own database.

Directories

The People Planner application directory, the Admin Tool installation directory, and the People Planner Service directory are named using the following conventions (where **31** is the build number):

- People Planner 3.7 (675)
- People Planner Admin Tool 3.7 (675)
- People Planner Service 3.7 (675)

Previous versions of People Planner did not include the build number in the directory name (for example, People Planner 3.2). This format helps administrators differentiate between the side-by-side People Planner installations.

Databases

In addition to installing the side-by-side programs in different directories, you must also create a database for the new installation, because there is no guarantee that two side-by-side installations will be able to work with the same database, and trying to do so is not recommended.

To create a database:

1. Open SQL Server Management Studio.
2. Make a backup of the original database.
3. Use the restore function to load the backup back into SQL Server; choose a new name in the process. Deltek recommends that you choose a name for the database that reflects the People Planner version, for example, PeoplePlanner37.
4. Use the People Planner Admin Tool to update the new database.
5. Use the Admin Tool to configure the new People Planner installation to use the new database.

Update an Existing Side-By-Side Installation

If you want to update an existing side-by-side installation, you follow the same procedure described in the preceding sections. You can install a new version of People Planner side-by-side with the already installed versions, or you can replace all of the existing installations with the new installation.

You cannot update a specific feature of an already installed version and keep the rest.

- 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.

To uninstall a specific version, use the installer for that version and choose to uninstall. Alternatively, you can uninstall the version from the Programs and features window.

Limitations

- 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 People Planner web services.
- 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.
- You can only integrate with one Exchange server.

Add Users and Application Instances to People Planner

After you have installed the first application instance, verified that you can access the database, and verified that you are an Admin user, you can install additional People Planner users.

The following tasks are involved:

- Add users to the People Planner database.
- Install People Planner on additional computers.
- Install the configuration file and the data connection file on each application instance.
- Install the license file on a file server.

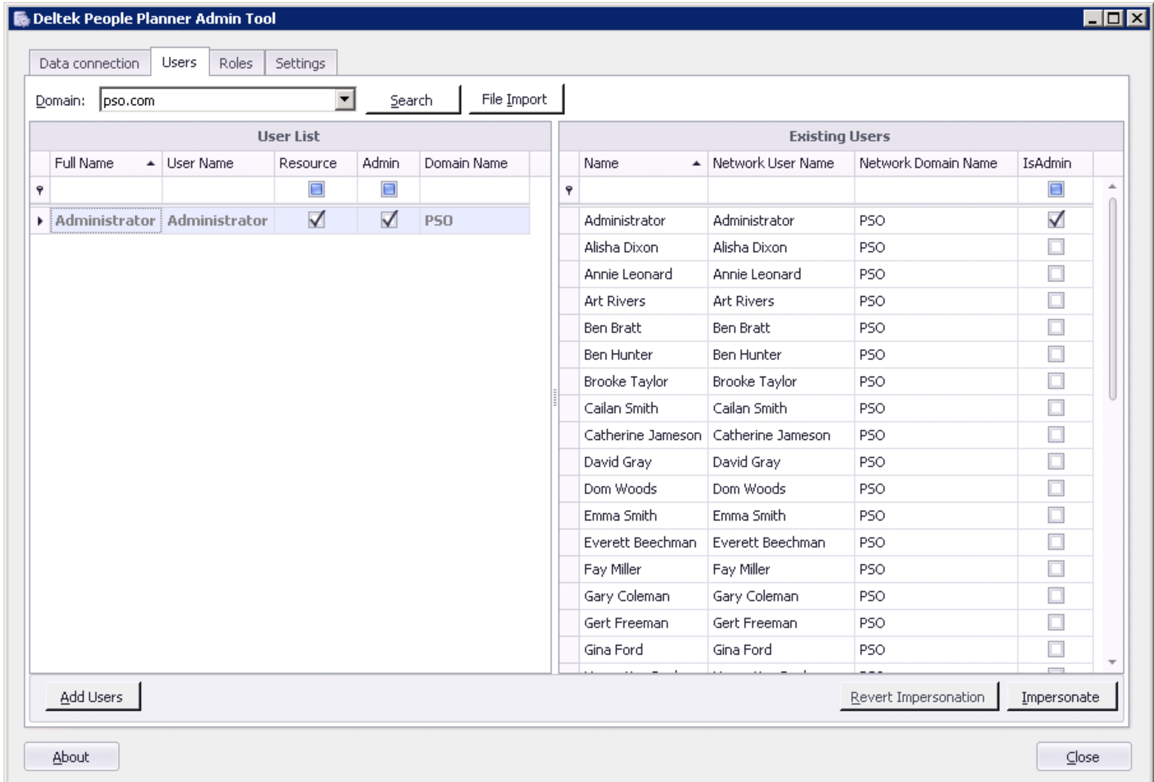
When these steps are complete, you must assign roles to the users.

See the People Planner online help for information about assigning roles to users.

Add People Planner Users

To add users using the Admin Tool:

1. On the computer where you installed the Admin Tool, navigate to **Program Files » Deltek People Planner » Deltek People Planner Admin Tool**.
2. On the Data connection tab, 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 earlier.
3. In the **Connect to an existing or create a new database** group box, select **Open an existing database** and select the database that you created earlier.
4. Click **Connect** to test access to the database.
5. Select the **Users** tab to add users.



There are two ways to add users:

- Search the Active Directory.
- Import from a .csv file.

To add users from the Active Directory:

1. On the Users tab, select the domain.
2. Click the **Search** button.
3. Click the **Add Users** button to add the user.

   The user is moved to the user list on the right and marked as a resource if you selected the **Resource** check box. This means that this user is also added as a resource in People Planner.

To add users from a .csv file:

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 **Import from file…**.
2. Select the file in the standard file dialog.

   The users from the file are displayed in the list on the left.

3. Select one or more users in the list.
4. Click **»** to move the selected users to the user list on the right.

   The selected user is moved to the user list on the right and marked as a resource. This means that this user is also added as a resource in People Planner.
5. Select one or more users in the list on the right, and click either **Add with Admin role** or **Add without role**.

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

Install and Configure Additional People Planner Application Instances

You install additional application instances for People Planner by running the installer on each computer. Each application instance needs information about how to connect to the database, how to connect to Maconomy, where the license file is, and so on.

Except for the data connection, all of this information is stored in the database and set up using the People Planner application. A few settings that are displayed in the application are set in the Admin Tool.

Each application instance needs a DataConnection.xml file that points to the People Planner database. This makes it easier to maintain the settings for all application instances.

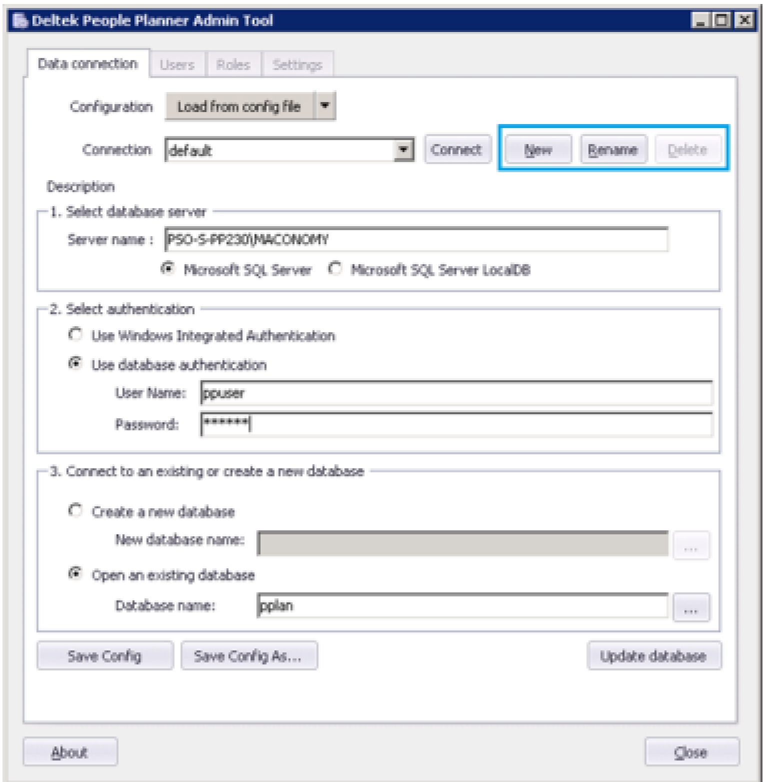
The People Planner License File

The **License File Path** field on the Admin Tool’s Settings tab specifies where the license file is located. Certain types of licenses require the file to be readable *and* writable. This file could get corrupted; therefore, you should always keep a copy of the file.

If the license file is a multi-user license, it is convenient to store the license file on a file server, because all users need the same license file.

The Connection File when Using Multiple Databases

In the People Planner application, the connection to a database is specified in the DataConnection.xml connection configuration file. That file can contain one or more connection configurations. Using the Admin Tool you can add, rename, or delete a connection configuration item in that file.

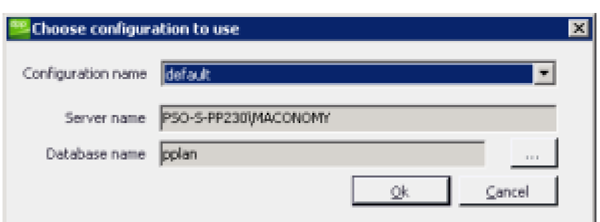


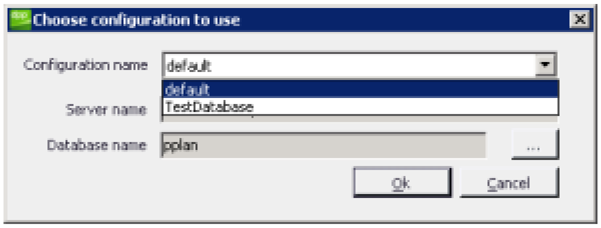
This enables you to provide a choice of databases when a user starts People Planner.

The ability to specify more than one connection configuration is intended to enable users who want or need to work with two databases at the same time, such as a production database and a test database.

If you use this feature, both databases must be of the same People Planner version.

If a user starts People Planner using a configuration file that contains multiple connection configurations, a dialog box prompts him or her to choose a connection configuration.





If a connection configuration does not have a database associated with it, a dialog box prompts you to provide one.

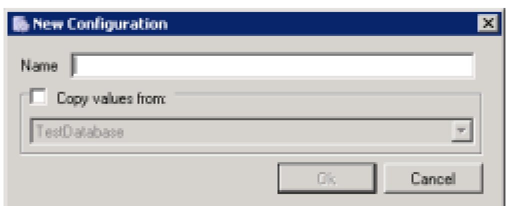
One of the configurations is named **default**. If you copy the DataConnection file to one of the People Planner components that only supports a single database—for example, to MyPlan—it is the **default** section that is used.

Define a Connection Configuration

To define a connection configuration:

1. Navigate to the **Admin Tool » Data connection** tab.
2. Click the **New** button.

   A dialog box prompts you for a name for the connection configuration and allows you to choose a connection configuration item to copy.

3. Enter a name for the connection configuration. This field must contain a value, and that value must be unique.

   To create a connection configuration "from scratch," leave the **Copy values from** check box unselected. To copy information from another connection configuration, continue with the next step.

4. To copy another connection configuration's information, select the **Copy values from** check box.

   Selecting this check box enables a drop-down list from which you can choose the name of an existing connection configuration. Choose the appropriate connection configuration to copy from the list.

5. Click **OK** to create the connection configuration and close the dialog.

Rename a Connection Configuration

To rename a connection configuration:

1. Navigate to the **Admin Tool » Data connection** tab.

   When you open the Admin Tool, the default connection is selected. To choose a different connection configuration, use the Connection drop-down list.

2. Click the **Rename** button.

3. Enter a new name for the connection configuration in the **New name** field. This field must contain a value, and that value must be unique.
4. Click **OK** to save the change and close the dialog.

Delete a Connection Configuration

To delete a connection configuration:

1. Navigate to the **Admin Tool » Data connection** tab.

   When you open the Admin Tool, the default connection is selected. To choose a different connection configuration, use the Connection drop-down list.
2. Click the **Delete** button.

   A dialog box prompts you to confirm the deletion.
3. Click **Yes** to delete the connection configuration and close the dialog.

Choose a Connection Configuration to Use

When you start a People Planner application instance that has multiple connection configurations defined in its DataConnection.xml file, you are asked to choose the configuration to use.

To choose a connection configuration:

1. Start People Planner.
2. When People Planner prompts you to choose a configuration connection, choose the appropriate connection configuration from the **Configuration name** field's drop-down list.

   The **Server name** field displays the name of the server for that connection configuration. You cannot change this value.

   The **Database name** field displays the name of the database if one is associated with the connection configuration. If a value appears in this field, you cannot change it.

   If there is no database associated with the connection configuration that you chose, a dialog box prompts you to provide a database name. Click the ... (ellipsis) button next to the Database name field. Depending on the type of connection configuration, either a Database Lookup or a File Browser Dialog displays a list of accessible databases.

   Choose the appropriate database. The lookup process prevents you from choosing an incompatible database.
3. Click the **OK** button to start People Planner using the connection configuration that you chose.

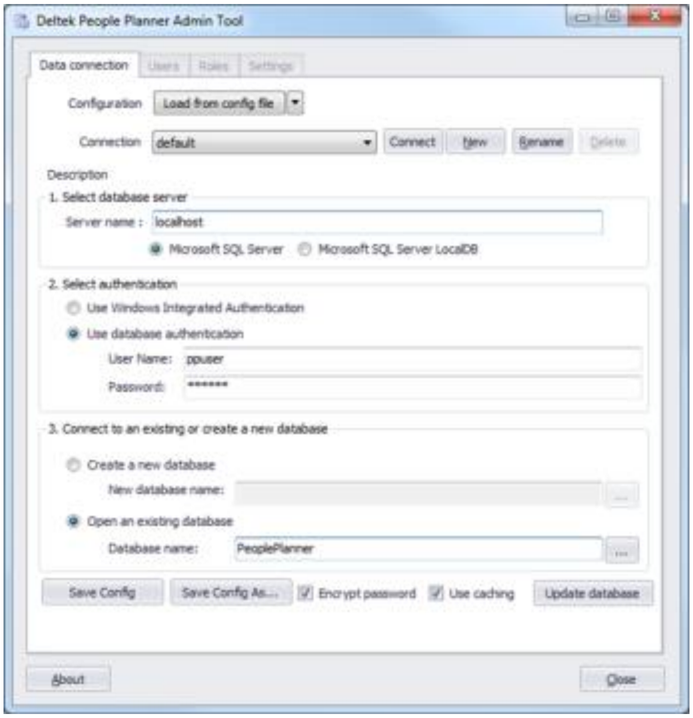
The Data Connection File

There are a number of scenarios for the data connection file. The simplest is for all users to share the same data connection file. During setup with the Admin Tool, you saved such a data connection file.

See Test the First People Planner Application Instance for more details.

One important setting is **Use caching**. When this setting is turned on, People Planner does not read data on every request. Instead, it keeps an in-memory cache that is tried first, so that if the data has been retrieved recently, the cache is used. The cache is flushed automatically, so data is not kept for long periods of time. This has no impact when saving data.

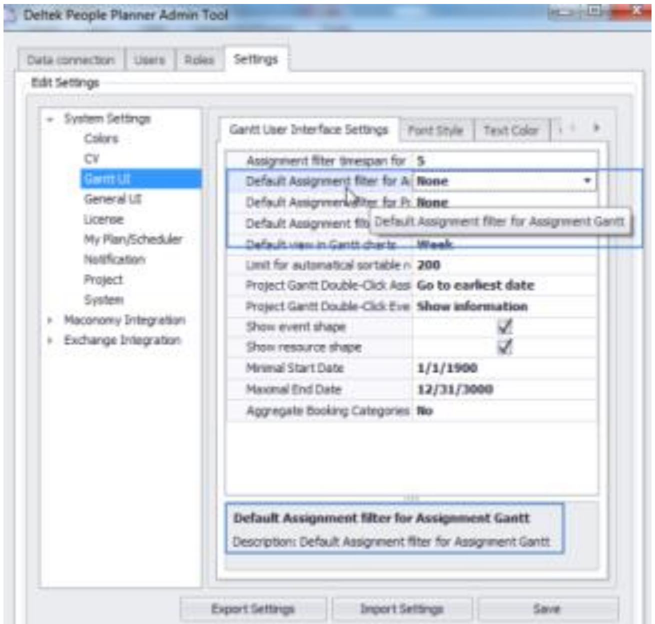
You can use the Admin Tool to generate data connection files for you. The following figure shows an example of typical data connection information that you enter to have the Admin Tool generate a data connection file for you.



This file causes People Planner to access the database as the user **ppuser**, using the stored password.

Admin Settings

People Planner uses many admin settings. You can view the list of settings in the Admin Tool. If you hover your cursor over a setting name in the Admin Tool, you can read a brief description of that setting. The following figure shows an example.



The description of the selected setting is displayed in a tool-tip-like pop-up and in the box near the bottom of the Settings pane.

Almost all settings are stored in the database and are set by using the Settings view in People Planner or by using the Admin Tool. A few settings, however, are read-only in the application, and you must set them in the Admin Tool.

To change an admin setting in the Admin Tool:

1. Open the Admin Tool.
2. Click **Connect** and connect to a valid People Planner database.

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

People Planner Silent Sign-In

Previously, although you could embed the MyPlan application in Maconomy clients, when users navigated to the location where MyPlan was embedded, they were prompted for an extra login. This happened even if the users were already logged in to the Maconomy client.

Beginning with the release of People Planner 3.6, silent sign-in (SSI) enables users of the Maconomy Workspace Client (WSC) to access the embedded MyPlan functionality without having to log in again. This is also true for the People Planner WSC Component introduced in People Planner 3.6.

How SSI Works

The following is the sequence of steps that occurs when SSI is used.

1. A user logs in to the Maconomy WSC.
2. He or she navigates to a page where MyPlan or the People Planner WSC Component is embedded.
3. The Maconomy Coupling Service asks the People Planner API for an SSI token.
    a. The Maconomy Coupling Service sends a request with information about the user to the People Planner API.
    b. The request is encrypted with the Maconomy Secret Key to prevent snooping by third parties.
4. The People Planner API constructs an SSI token and returns it to the Maconomy Coupling Service.
    a. People Planner decrypts the request for an SSI token.
    b. People Planner validates the user against its own list of valid users.
    c. If the user is allowed to log in to People Planner, an SSI token is created.
    d. The reply is encrypted with the People Planner Secret Key to prevent snooping by third parties.
    e. The encrypted reply is returned to Maconomy.
    f. The SSI token is valid for a certain number of hours, after which it must be renewed by Maconomy. You can configure that number of hours in the People Planner Admin Tool.
5. The Maconomy Workspace Client appends the SSI token to all calls to MyPlan or the People Planner WSC Component.

    Maconomy does not know the People Planner Secret Key and cannot decrypt the SSI token. It simply appends the token, as is, to the calls.
6. When the user navigates to where MyPlan or the People Planner WSC Component is embedded, MyPlan or the People Planner WSC Component validates the SSI token and logs the user in.
    a. The SSI token is decrypted using the People Planner Secret Key.
    b. MyPlan or People Planner then validates the user against its own list of valid users.
    c. If the user is a valid People Planner user, he or she is logged in to MyPlan or the People Planner WSC Component.

d. If the token is too old, it is rejected, and the user is not logged in.

It is Maconomy's responsibility to know when the SSI token must be renewed.

Configure Maconomy and People Planner Settings to Enable SSI

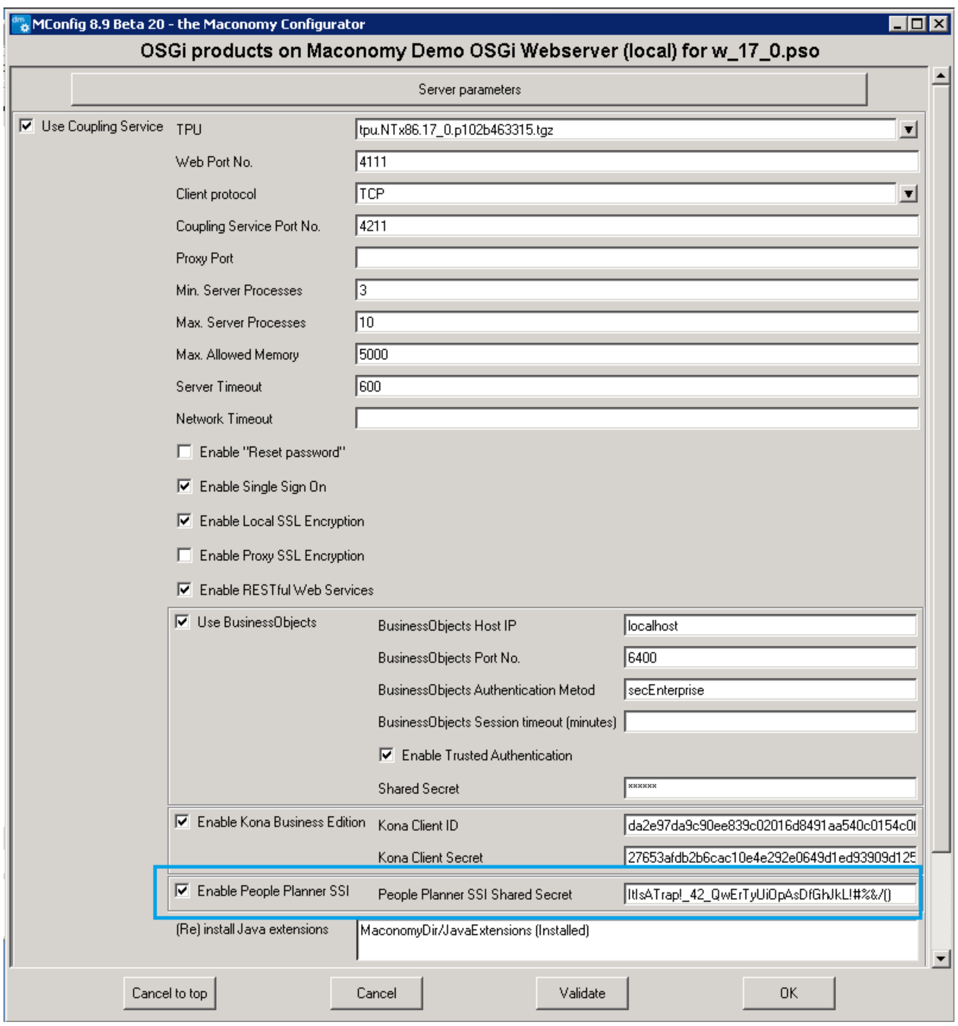
You must configure the People Planner SSI on both the People Planner side and the Maconomy side.

Maconomy SSI Settings

On the Maconomy side, you use the MConfig Maconomy Configurator. The following figure shows the settings that you must choose and the values that you must enter in MConfig to enable SSI.

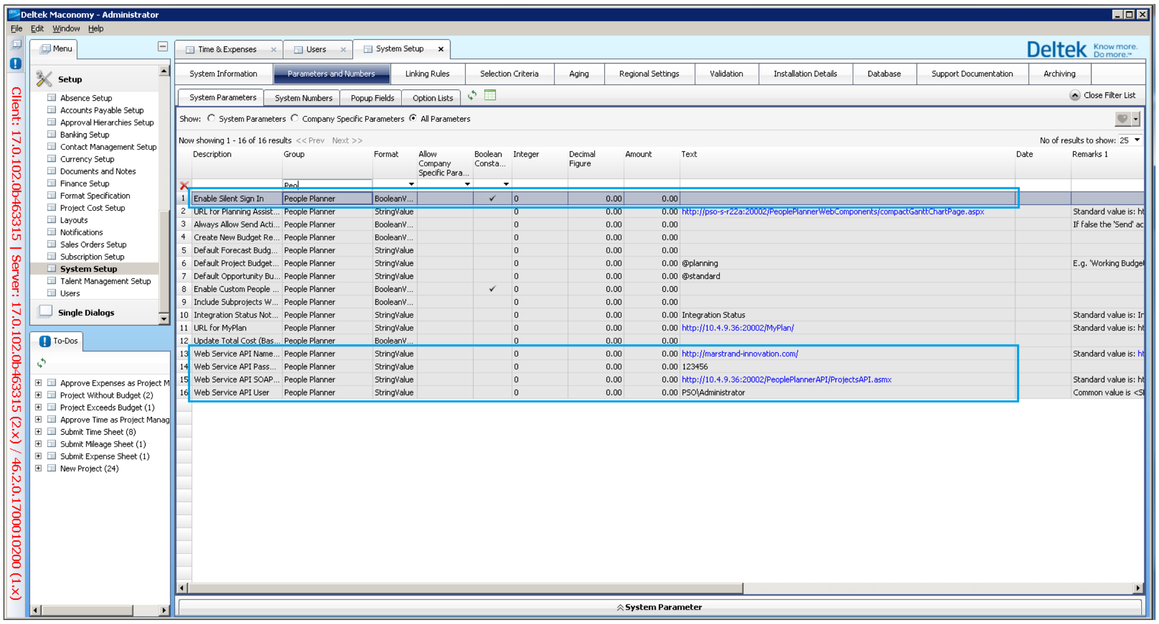
The Silent Sign In (SSI) Maconomy Secret Key is the key that Maconomy uses to encrypt the request to the People Planner API web service.

The value that you select for the **People Planner SSI Shared Secret** setting must be the same as the value that you set for People Planner's **Silent Sign In (SSI) Maconomy Secret Key** via in the People Planner Admin Tool. Otherwise, People Planner cannot decode the requests from Maconomy.



Also on the Maconomy side, you must set the **Enable Silent Sign In** system parameter in the People Planner group of system settings.

The following figure shows the SSI settings in the Maconomy Workspace Client (WSC) system parameters.



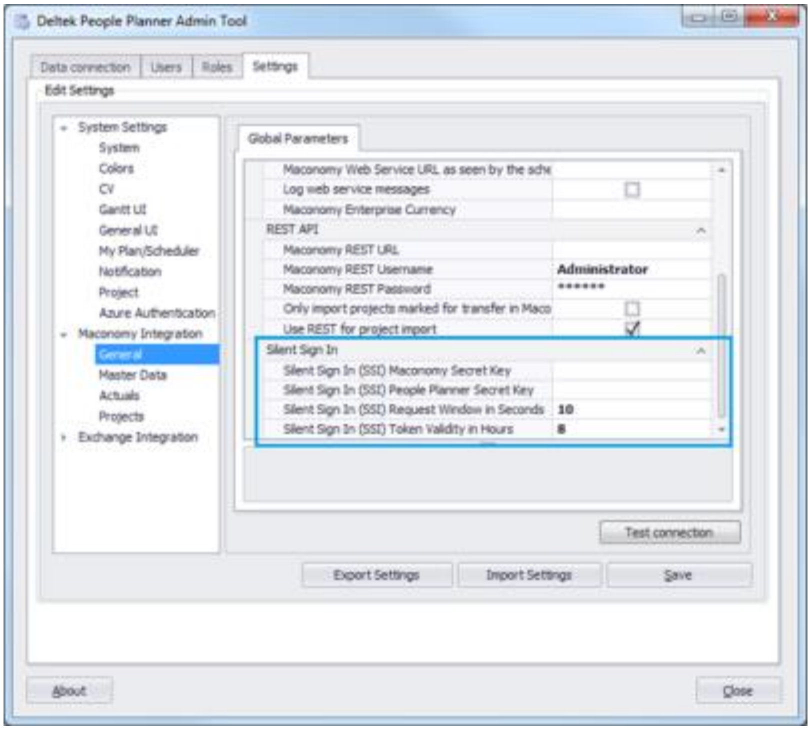
The People Planner API is responsible for issuing the SSI tokens. Thus, Maconomy must know how to call this web service. These are the settings:

- **Web Service API Name** — This name is always http://marstrand-innovation.com for historical reasons. If you change it, the People Planner API web service stops working.
- **Web Service API User** — The name of a user who has login rights to People Planner.
- **Web Service Password** — The password of that user.
- **Web Service API SOAP Address** — The URL for the People Planner API web service.

The People Planner API is also used when a user clicks the **Send to People Planner** button on a project to push it to People Planner. Therefore, existing installations that use this feature already have these settings in place. See Setup in the Maconomy WorkSpace Client for details.

People Planner SSI Settings

You use the People Planner Admin Tool to manage the SSI settings from the People Planner side. They are located on the Settings tab, in the Maconomy Integration group, as the following figure shows.



These settings are:

- **Silent Sign In (SSI) Maconomy Secret Key** — The key that Maconomy uses to encrypt the request to the People Planner API web service.

> The value in **Silent Sign In (SSI) Maconomy Secret Key** must be the same as the value in Maconomy's **People Planner SSI Shared Secret** setting (entered via MConfig). Otherwise, People Planner cannot decode the requests from Maconomy.

- **Silent Sign In (SSI) People Planner Secret Key** — The key that People Planner uses to encrypt the SSI token before returning it to Maconomy. Maconomy does not know this secret key and cannot decrypt the SSI token, nor does it need to.
- **Silent Sign In (SSI) Request Window in Seconds** — The number of seconds during which a request from Maconomy is valid. When Maconomy asks the People Planner API for a new SSI token, the encrypted request includes a time stamp. The request is only valid within the small time period of that time stamp. This prevents third parties from using a stolen request to get an SSI token at a later point in time.
- **Silent Sign In (SSI) Token Validity in Hours** — The number of hours during which the SSI token is valid. After this time period elapses, Maconomy must request a new SSI token.

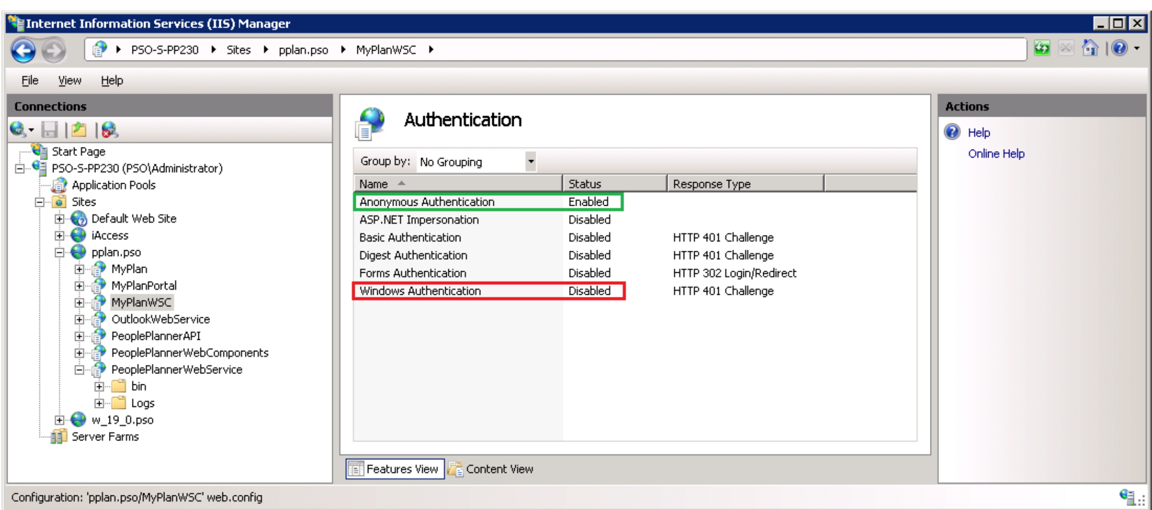
IIS Authentication

The 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.

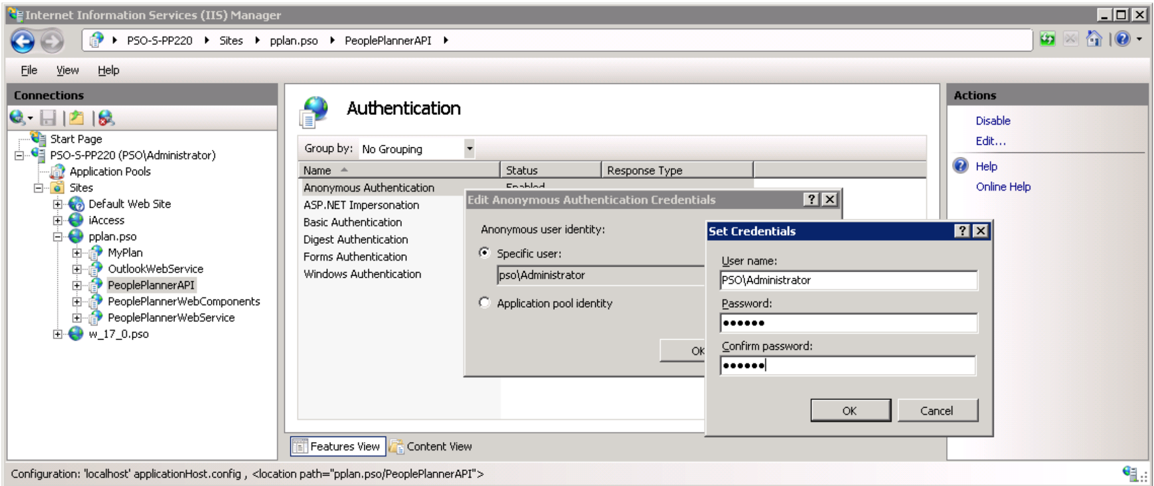
Web Component	Used for	IIS Authentication
MyPlan	Running MyPlan in a browser	Windows Authentication
MyPlanPortal	Running MyPlan embedded in the Maconomy Portal	Windows Authentication
MyPlanWSC	Running MyPlan embedded in the Maconomy Workspace Client	Anonymous Authentication
People Planner API	Web service 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

While you can configure the MyPlanWSC client and the People Planner Web Component 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.

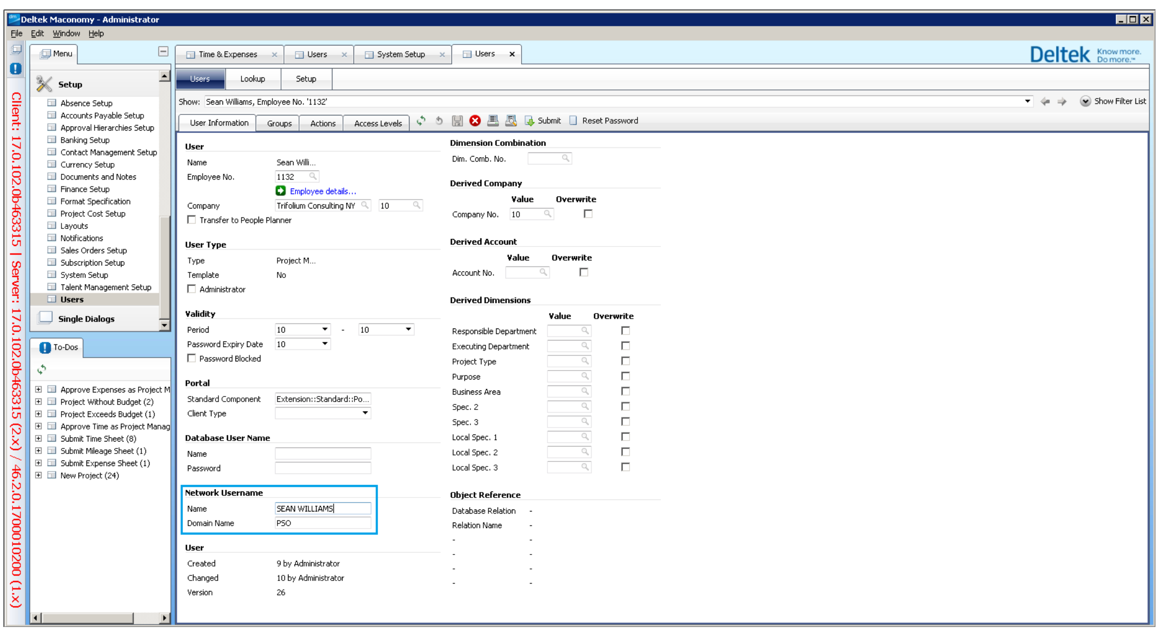


User Credentials

You must set these up in both Maconomy and People Planner.

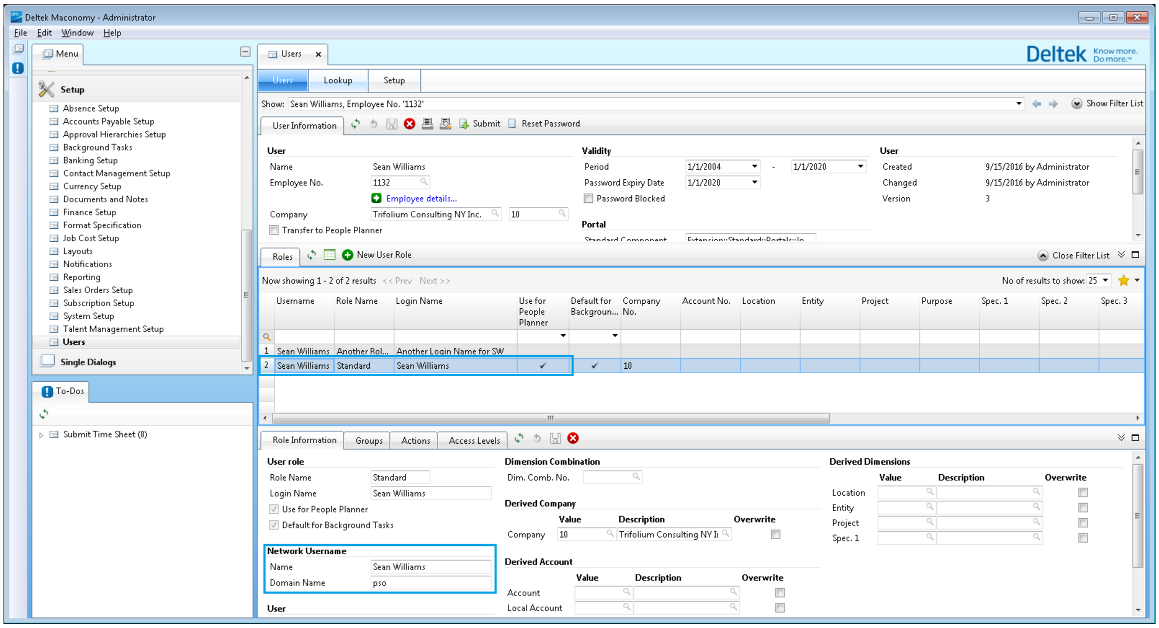
User Credentials on the Maconomy Side

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.



These values must be the same as in the Users view in People Planner.

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.

Install MyPlan

MyPlan is a product that enables access to People Planner data in a web browser and over the network (including from outside a firewall).

MyPlan Applications / Environments

When you run the MyPlan installer, you can specify names for three MyPlan applications that map to three environments, and choose preferred themes for each MyPlan application (except when using the Workspace Client integration):

- **MyPlan** — The application / environment that runs MyPlan in standalone mode.
- **MyPlanWSC** — The application / environment that runs MyPlan integrated with the Maconomy Workspace Client.
- **MyPlanPortal** — The application / environment that runs MyPlan integrated with the Maconomy Portal.

Before version 3.6.1, when you configured the Maconomy Workspace Client and told it where to find MyPlan, you gave it a URL with “MyPlan.”

Beginning with version 3.6.1, you must use “MyPlanWSC” instead of “MyPlan.”

IIS Authentication

By default the three MyPlan applications use the following IIS authentications:

- MyPlan — Windows Authentication
- MyPlanPortal — Windows Authentication
- MyPlanWSC — Anonymous Authentication

MyPlan Themes

MyPlan can run under two themes: the Dev Express (DevEx) theme and the iAccess theme, which is consistent with other Deltek iAccess products, such as the Maconomy iAcess interface. The following are the recommendations for theme usage.

- **MyPlan in standalone mode** — Use the iAccess theme.
- **MyPlan within the Maconomy Workspace Client** — Use the DevEx theme.
- **MyPlan within the Maconomy Portal** — Use the DevEx theme.

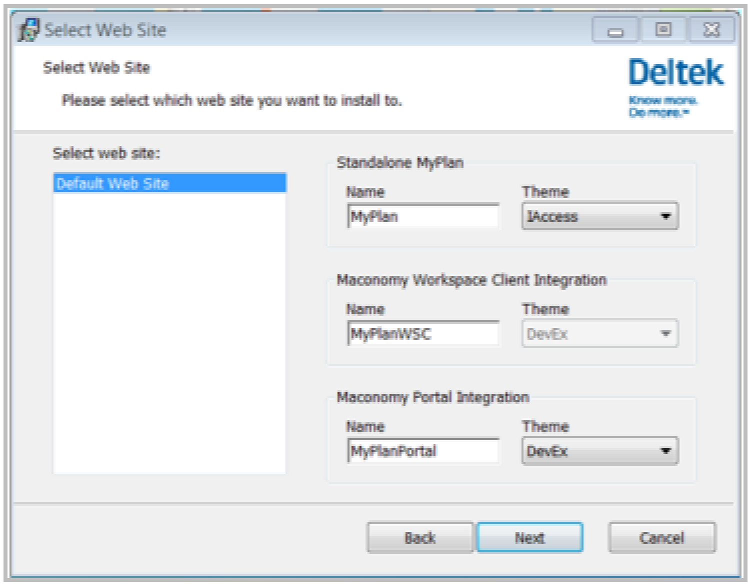
Recommended Configuration of Applications and Themes

The following table provides the recommended configuration of these MyPlan applications and themes.

	Standalone MyPlan	Workspace Client MyPlan	Maconomy Portal MyPlan
Theme	iAccess	DevEx	DevEx

Run the MyPlan Installer

During the installation process, the installer prompts you to specify the both the application / environment and the theme that you want to use. The following figure shows the default configurations.



After installation, if you have system administrator access and you are using MyPlan in standalone or Maconomy Portal mode, you can modify the theme in the web.config file.

This section describes how to set up the components that are required for running MyPlan.

Make sure that the prerequisites for the server that is used to run the server part of MyPlan are in place before you install MyPlan. See Prerequisites for Web Components.

To install MyPlan:

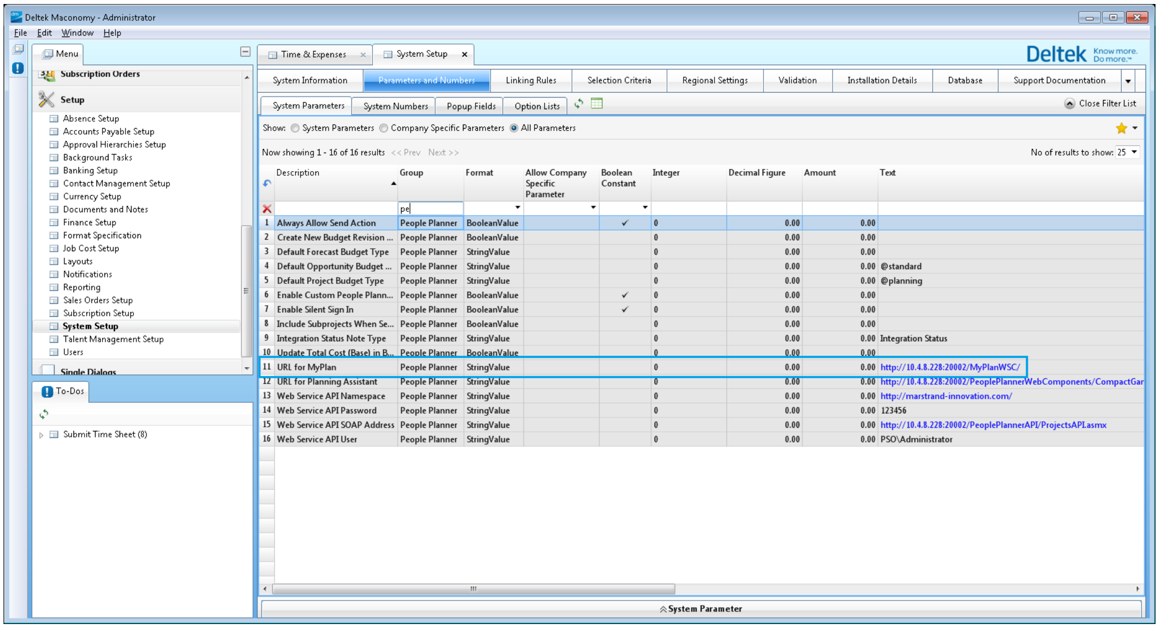
1. Run the **Deltek MyPlan version 3.7.msi** installer.
2. Make sure that the domain users have read access to the MyPlan folder.
3. Copy the **DataConnection.xml** file from the People Planner installation to the bin\Settings folder under MyPlan.

Setup in the Maconomy WorkSpace Client

If you want to embed MyPlan in the Maconomy WSC, you must configure the URL in the System Parameters.

You should use the MyPlanWSC URL here:

- It is configured for use with People Planner SSI.
- The theme is chosen to match that of the WorkSpace Client.



Setup for the Maconomy Portal

In addition to the Maconomy WorkSpace Client, MyPlan can also be embedded in the Maconomy Portal. Please see the Maconomy documentation for how to do this.

You should use the MyPlanPortal URL here:

- The theme is chosen to match that of the Maconomy Portal.

Updating from a People Planner Version prior to 3.6.1

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.

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.

Install a Second People Planner MyPlan

The MyPlan installation program only supports the installation and setup of one environment; however, you can set up more environments for testing, development, or other purposes.

To manually install another environment:

1. Copy the folder **C:\InetPub\Deltek MyPlan** to a new folder, for example, to the virtual folder of the web site.
2. Open the Internet Information Services Manager and select or create the virtual web site.
3. In the root folder, create a virtual directory or Application (in IIS 7.x), named **MyPlan** that points to the MyPlan folder that you created earlier.
4. Select **Read** and **Run** scripts in the Virtual Directory Access Permissions.
5. After the creation, from the MyPlan folder, click **Properties » Directory Security » Edit Authentication » Access Control**.
6. Confirm that **Integrated Windows Authentication** is the only selected option.

The next step is to test MyPlan, then add it to the Maconomy Portal. The following sections provide information about completing these tasks.

Test MyPlan

You can test MyPlan by accessing the following URL in a browser:

```
http://<server>:<port>/MyPlan
```

where:

- <server> is the name of the server on which you installed MyPlan.
- <port> is the port number on which MyPlan is running (it should be 80, unless you configured the IIS otherwise).

When running MyPlan, it is not enough that you are a user; you must also be a resource.

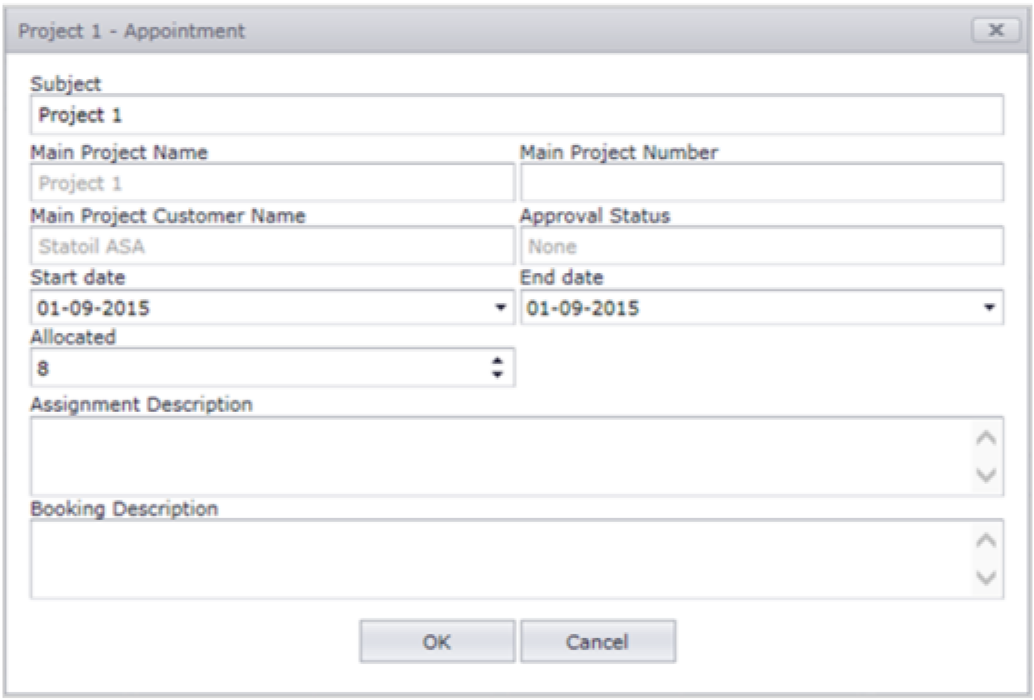
Create a Customized Layout for the MyPlan Appointment Form

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:

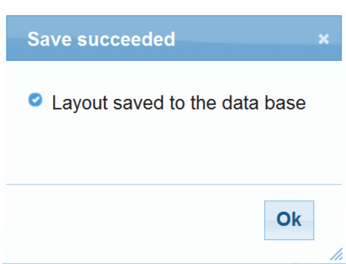
1. Navigate to **/MyPlan/MyPlanManagement/default.aspx**.

   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**.

Add MyPlan to the Maconomy Portal

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

See Install MyPlan for more details about installing MyPlan.

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**.

Install the People Planner WSC Component for the Maconomy Workspace Client

The People Planner WSC Component for the Maconomy Workspace Client is a web component that enables you to use a “lighter” version of the People Planner Gantt charts from within the Workspace Client (WSC) to view and change task assignments.

The WSC Component consists of three parts:

- Budgeting Assistant
- Progress Evaluation Assistant
- Planning Overview Component

Before Maconomy 2.4, only the Budgeting Assistant was supported. Maconomy 2.4 adds support for the Progress Evaluation Assistant and the Planning Overview Component as well, but this additionally requires People Planner 3.7.

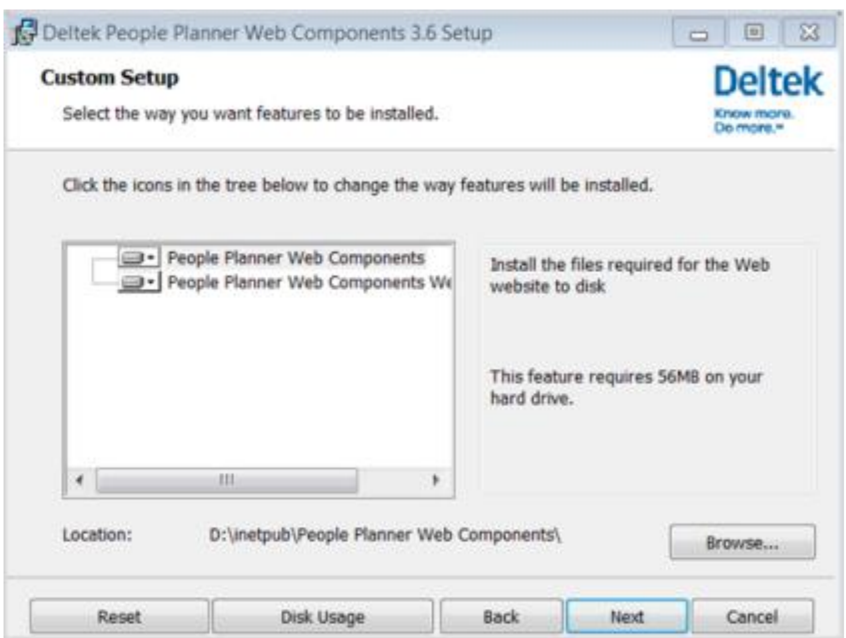
This section describes how to set up the components that are required for running the People Planner WSC Component.

Make sure that the prerequisites for the server are in place before you install the People Planner WSC Component. See Prerequisites for Web Components.

To install the People Planner WSC Component:

1. Run the **Deltek People Planner Web Components version 3.7.msi** installer.
2. Click **Next**.

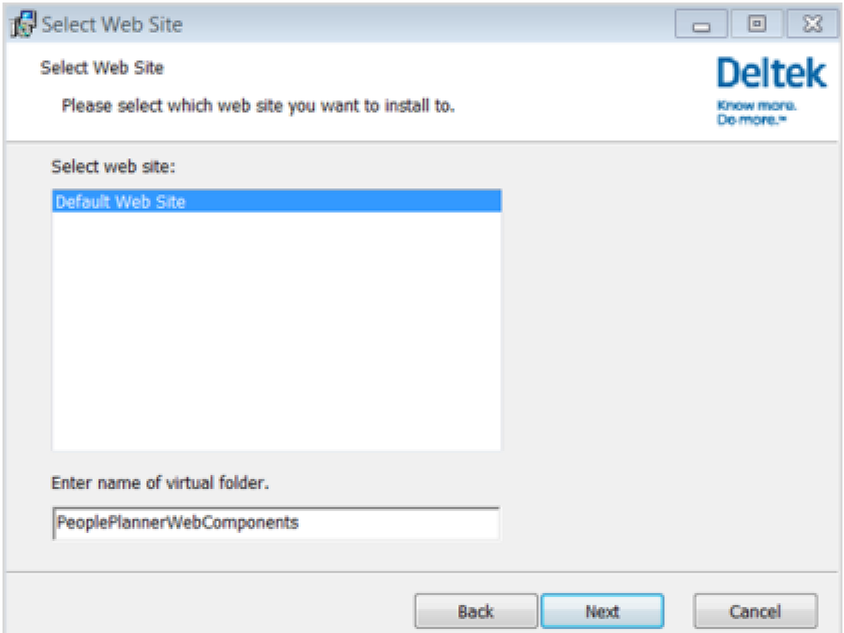
   The Custom Setup window appears, as shown in the following figure.



3. Make any appropriate changes to the default installation information (optional).

4. Click **Next**.

   The Select Web Site dialog appears, as shown in the following figure.



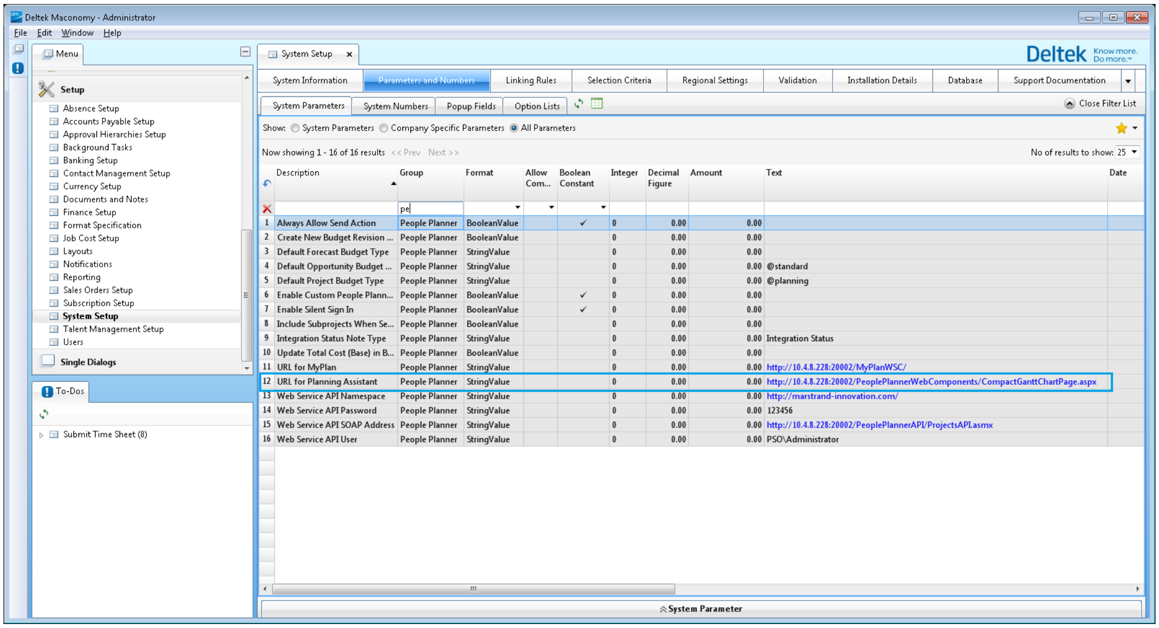
5. Accept the default web site name in the **Select web site** box or enter a different web site name.
6. Enter the name of the virtual folder in the **Enter name of virtual folder** box.
7. Click **Next**.
8. Set up the DataConnection file in the following location:

   `..\PeoplePlanner Web Component\Bin\Settings\DataConnection.xml`

Because this web component is typically embedded in the Maconomy Workspace Client, Deltek recommends that you use the SSI setup. See People Planner Silent Sign-In.

Setup in the Maconomy WorkSpace Client

If you want to embed the People Planner WSC Component in the Maconomy WSC, you must configure the URL in the System Parameters.



The general format of the People Planner WSC Component URL looks like the following:

```
http://<host>:<port>/PeoplePlannerWebComponents/CompactGanttChartPage.aspx
```

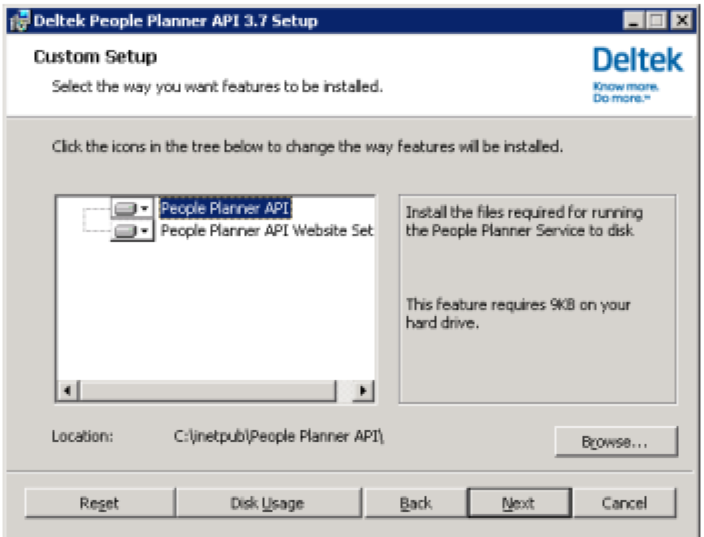
Install the People Planner API Web Service

The People Planner API web service is used by the integration with Maconomy.

To install the People Planner API web service:

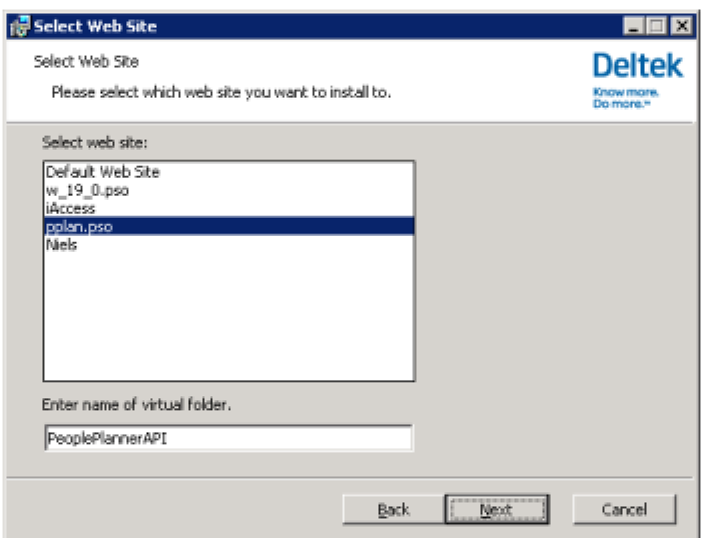
1. Run the **Deltek People Planner API version 3.7.msi** installer.
2. Click **Next**.

   The Custom Setup window appears, as shown in the following figure.

3. Make any appropriate changes to the default installation information (optional).
4. Click **Next**.

   The Select Web Site dialog appears, as shown in the following figure.

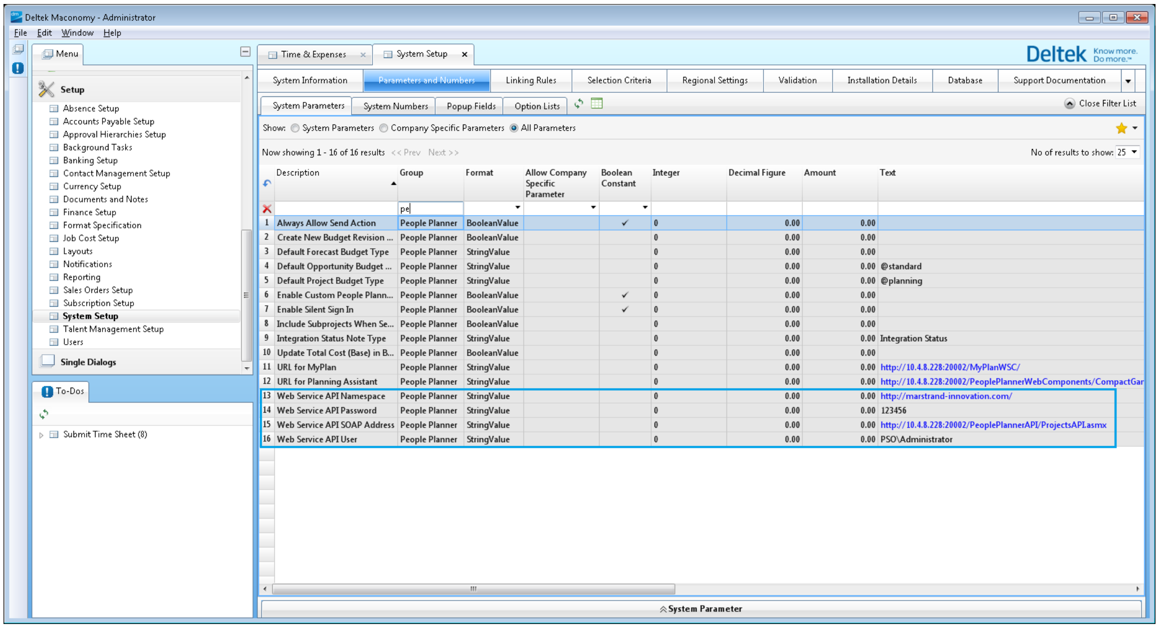
5. Accept the default web site name in the **Select web site** box or enter a different web site name.
6. Enter the name of the virtual folder in the **Enter name of virtual folder** box.

7. Click **Next**.
8. Set up the DataConnection file in the following location:

   `..\People Planner API\Bin\Settings\DataConnection.xml`

Setup in the Maconomy WorkSpace Client

On the Maconomy side of the integration, you must configure the PeoplePlannerAPI URL in the System Parameters, as the following image shows.



The general form of the People Planner API URL is as follows:

`http://<host>:<port>/PeoplePlannerAPI/ProjectsAPI.asmx`

The Web Service API Namespace must be http://marstrand-innovation.com/ or it will not work.

Integrations

You can integrate People Planner with other systems as follows:

- Integration with Maconomy
- Integration via import from external sources – Excel/CSV/SQL Server/Oracle
- Integration with Exchange/Outlook
- Integration with BPM

Integration with Maconomy

You can use People Planner as a standalone resource planning tool; however, it can also be integrated with Maconomy. This integration enables People Planner to import master data from Maconomy that is relevant for project and resource planning.

See the *Deltek People Planner Integrations Guide* for information about integrating People Planner with Maconomy.

Using the Maconomy RESTful Web Service with People Planner

As of Maconomy 2.2, the Maconomy RESTful web service is available as an alternative to the MaconomyWS.

People Planner requires Maconomy version 2.2.2 or later to use the Maconomy RESTful web service.

People Planner can use the Maconomy RESTful web service for importing:

- Projects and their budgets, both for the classic budget and the matrix budget.
- Absences.

People Planner cannot use the Maconomy RESTful web service for:

- Importing master data.
- Exporting favorites.
- Importing actuals, such as time registrations.

People Planner must instead use the MaconomyWS web service for these tasks.

Enable the Maconomy RESTful Web Service on the Maconomy Side

You use MConfig to enable the Maconomy RESTful web service.

To enable the RESTful web service on the Maconomy side:

1. In Maconomy, start MConfig.
2. Navigate to the OSGi products window.
3. Select the **Enable RESTful Web Services** check box.
4. Click **OK**.

Enable Use of the Maconomy RESTful Web Service on the People Planner Side

See Prerequisites for Web Components to ensure that the appropriate prerequisites are in place before you enable this Web Service.

You use the People Planner Admin Tool to specify how to connect to the Maconomy RESTful web service. You provide values for the following settings:

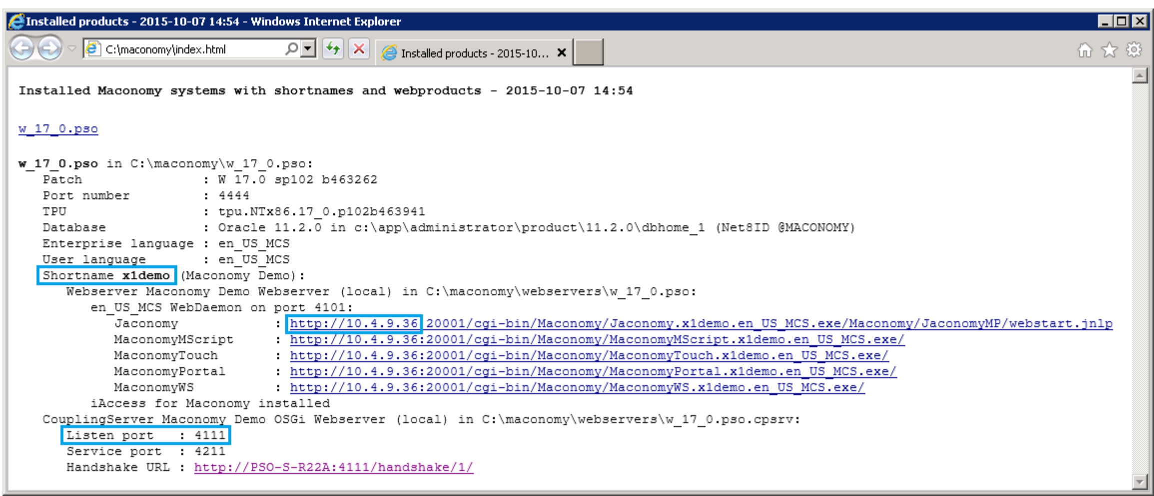
- **Maconomy REST URL** — This is the URL for the Maconomy RESTful web service.
- **Maconomy REST Username** — Typically the same as the username for the MaconomyWS web service.
- **Maconomy REST Password** — Typically the same as the password for the same username for the MaconomyWS web service.

Construct the Maconomy REST URL

The complete Maconomy RESTful web service URL is not listed on the index.html page, so you must construct it from available information. Its general form is:

```
http://<server>:<listen port>/containers/v1/<shortname>/
```

You can locate the required pieces of information on the index.html page. The following figure shows an example of that page, with the important pieces of information that you need to assemble the Maconomy REST URL highlighted in blue boxes.



Using the highlighted information from this example, the value of the Maconomy REST URL setting becomes:

```
http://10.4.9.36:4111/containers/v1/x1demo/
```

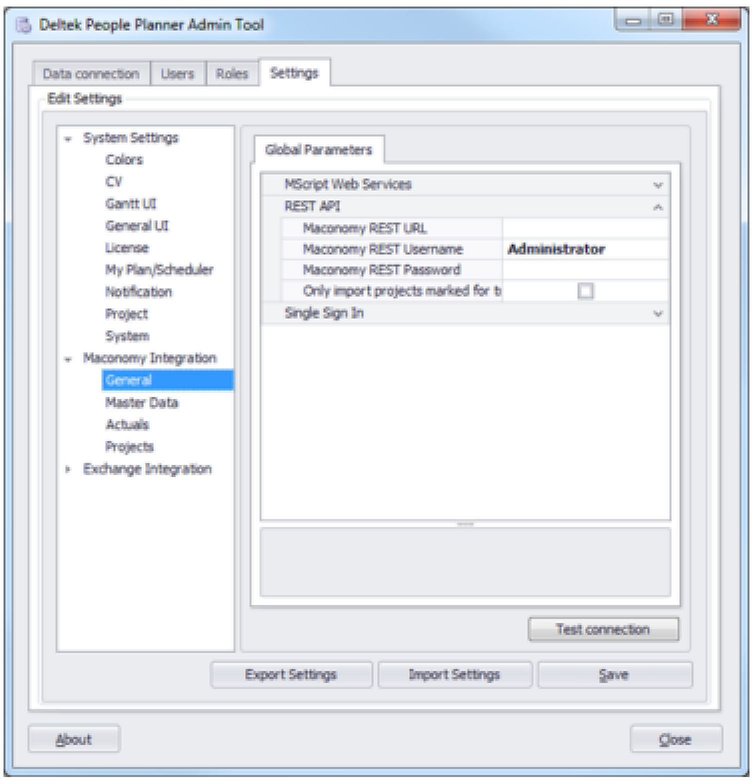
Configure the People Planner Settings for the Maconomy RESTful Web Service

To configure People Planner to use the Maconomy RESTful web service:

1. Follow the example in Construct the Maconomy REST URL to obtain the value for the Maconomy REST URL setting and note that value.
2. Access the People Planner Admin Tool.

3. On the Settings tab, in the Maconomy Integration group, in the Global Parameters pane, enter the following values:
   - **Maconomy REST URL** — Enter the value that you obtained and noted in step 1.
   - **Maconomy REST Username** — Enter the username, typically the same username as for the MaconomyWS web service.
   - **Maconomy REST Password** — Enter the password, typically the same password for the same username as for the MaconomyWS web service.
4. Click **Test connection** to verify the connection settings.
5. Click **Save**.

The following illustrates the settings for how People Planner should call the Maconomy RESTful Web Service.



Import Master Data

The general process for getting Master Data from Maconomy via the Maconomy integration is as follows:

- A Maconomy web service is used to get all of the data for the selected Master Data Types.
- Each entity (such as Resource, Company, and Location) is committed to the People Planner database, one by one. Thus, if there is an error, only the failing entity is affected.
- If you cancel the import during the import process, all processed entities are still imported and updated accordingly, while all unprocessed entities are not imported and are marked with the corresponding error status (New Failed, Updated Failed, Remove Failed, or Blocked Failed). Remaining types that are skipped are not changed.

Import Approved Absences from Maconomy

This process uses the Maconomy REST API; see Using the Maconomy RESTful Web Service with People Planner to ensure that you have enabled this web service.

Only approved absences are imported from Maconomy into People Planner. You use the **Import Absences from Maconomy** task specification type to import Maconomy absences. This task specification type has one parameter, **Import the last number of months**. Its default value is 1, which retrieves absences records beginning one month before the current date.

The general process is as follows:

1. In the Maconomy Workspace Client, define absences in the Employee Absence Calendars view.
2. Ensure that absences are approved.
3. In People Planner, in the Project Manager Gantt chart (PG), create a project to hold absence events:
   - **Project name** — Maconomy Absence Project
   - **Kind** — Project
   - **Origin** — Maconomy
4. Maconomy absences are imported to absence tasks in People Planner.

   You can submit Import Absences from Maconomy tasks to the People Planner scheduler through the Schedule Tasks view.

   The value of the **Import Absences from Maconomy** setting is converted to a REST request that filters the list of absences using the **FirstDayOfAbsence** field.

   The absence import only places bookings on absence tasks that are under the Maconomy Absence Project.

   - **Name** — Maconomy Absence Type
   - **Kind** — Absence
   - **MainProject** — Maconomy Absence Project
   - **Absence Type** — *<absence type from Maconomy>*
   - **Origin** — Maconomy

If you delete the project, running the absence import again recreates the project and any used absence tasks that are used for the import period. The People Planner administrator can rename the project or tasks; that does not affect succeeding imports.

Absence Types

If the Maconomy absence type of the booking does not already exist in People Planner, it is created:

- **Name** — *<absence type from Maconomy>*
- **External ID** — *<absence type from Maconomy>*
- **Origin** — Maconomy

Assignments

In People Planner, bookings are associated with assignments. When an absence is imported from Maconomy, this association between a task and a resource is made using the Maconomy Absence Type and the Employee Number, respectively. If this assignment is missing in People Planner, it is created:

- **Event** — <Maconomy Absence Type Task >
- **Resource** — <Maconomy Absence Type Employee Number>
- **Creation Kind** — Automatically Created by Absence Import

You cannot edit bookings for absence assignments imported from Maconomy in People planner.

The import process displays warnings if the resource that corresponds to the Maconomy Employee Number cannot be found in People Planner.

Bookings

Absences in Maconomy are expressed as working days. During the import process, People Planner books the full capacity of the resource from the first day of the absence to the last day of the absence. To prevent double bookings, the import process first removes entries that are greater than or equal to the date of the import. Absences that start before and end after the import date are cut at the import date.

The booking is created as:

- **Event** — <Maconomy Absence Type Task>
- **Resource** — <Maconomy Absence Type Employee Number>
- **Origin** — Maconomy
- **Value** — *<calculated resource capacity>*

The import process retrieves the following information from Maconomy:

- **Absence Type** — Identifies the absence task in People Planner.
- **EmployeeNumber** — Identifies the resource in People Planner.
- **FirstDayOfAbsence** — Gets the starting date of the absence.
- **LastDayOfAbsence** — Gets the ending date of the absence.
- **LastDayHalfDay** — When true, the booking's first day is half of the resource capacity.
- **FirstDayHalfDay** — When true, the booking's last day is half of the resource capacity.
- **DurationInWorkingDays** — Used to check whether the resource matches the days where the resource has capacity in People Planner. Otherwise, a warning is issued.

Integration with Exchange/Outlook

The purpose of this integration is to allow People Planner users to use Outlook as their personal planning tool. This means that the people in an organization can see which projects they are booked on, and they can book themselves on People Planner projects.

People Planner supports Exchange 2010, and Outlook 2010.People Planner also supports Office 365 when the included Exchange server is Exchange 2010.

Installing the integration between People Planner and Exchange/Outlook involves the following steps:

1. Install the People Planner Outlook Web Service.
2. Configure the Exchange server to accept synchronization connections from People Planner.
3. Configure a Scheduled Task in People Planner to synchronize with the Exchange server.
4. Install the People Planner Outlook AddIn on each user's computer.

Configure the Exchange Server

Requirements

The requirements for the People Planner Exchange integration are as follows:

- Microsoft Exchange 2010
- Microsoft Exchange Web Services (EWS)

No tests have been performed in organizations where there is more than one Exchange server.

Installation

The installation of the Exchange Server 2010 system depends on the company infrastructure and setup requirements, which are not covered in this document.

The requirement for the People Planner Exchange integration is the Exchange Web Services API, which is included in a default installation of Exchange Server.

Example

The following is an example of an Exchange Server installation:

1. To install required components before installing Exchange Server, run the following scripts:
   a. ServerManagerCmd -i RSAT-ADDS

   A reboot is required after you run the preceding script.

   b. ServerManagerCmd -i Web-Server
   c. ServerManagerCmd -i Web-ISAPI-Ext
   d. ServerManagerCmd -i Web-Metabase
   e. ServerManagerCmd -i Web-Lgcy-Mgmt-Console
   f. ServerManagerCmd -i Web-Basic-Auth
   g. ServerManagerCmd -i Web-Digest-Auth
   h. ServerManagerCmd -i Web-Windows-Auth
   i. ServerManagerCmd -i Web-Dyn-Compression
   j. ServerManagerCmd -i PowerShell

2. Install Exchange Server with the following roles:
    a. Mailbox
    b. Hub transport
    c. Client Access
3. Ensure that a network request of **autodiscover.[FullDomainName]** resolves to the installed Exchange server.

Configuration

The People Planner Exchange integration uses a Windows Domain user to connect to the Exchange Server, which has access to create/edit/read appointments in the mailboxes for the Exchange users. The user that is used for the People Planner Exchange integration is not required to have a mailbox.

For the maintenance of the access to the users' mailboxes in the People Planner Exchange integration, Deltek recommends that you create a Windows Domain Group and make all users members of that group. When a resource is enabled for the Exchange Synchronization in People Planner, the same user should be added to the Windows Domain Group and removed when the Exchange Synchronization is disabled.

The initial setup of the Exchange Server depends on the version of Exchange, and is described in the following.

Configure Exchange 2010 and Exchange 2013

To configure Exchange 2010 and Exchange 2013:

1. Create a Windows Domain user named **PPexchange** (used in the following example).
2. Create a Windows Domain group named **PeoplePlannerExchangeUsers** (used in the following example), and make users/mailbox users members of the group that has the Exchange Synchronization enabled in the Resources view in the People Planner system.
3. On the Exchange Server, create a Management Scope and Role Assignment that will allow the **PPexchange** user to impersonate other users and be able to modify the users' mailboxes.

   You do this by running the following script on the Exchange Server in the Exchange Management Shell:

   ```
   $PPuser = "PPexchange"
   $PPgroup = "CN=PeoplePlannerExchangeUsers,CN=Users,DC=<theServer>,DC=com"
   new-ManagementScope -name:PeoplePlannerExchange -
   RecipientRestrictionFilter:
   "MemberOfGroup -eq '$PPgroup'"
   new-ManagementRoleAssignment -Name:PeoplePlannerExchangeRole –
   Role:ApplicationImpersonation -User:$PPuser –
   CustomRecipientWriteScope:PeoplePlannerExchange
   ```

   The **PeoplePlannerExchange** and **PeoplePlannerExchangeRole** names are used as example names in the preceding script.

   The value that is used for the $PPgroup must be the Active Directory Distinguished Name (ADDN) of the PeoplePlannerExchangeUsers security group. To get this, use the following dsquery command:

   ```
   dsquery group "People*"
   ```

If the new-ManagementScope and new-ManagementRoleAssignment commands have been run with incorrect values, you might need to remove the incorrect ones as part of correcting the problem:

```
remove- ManagementRoleAssignment -Identity PeoplePlannerExchangeRole
remove- ManagementScope -Identity PeoplePlannerExchange
```

Configure Office 365

People Planner 3.7 supports Office 365 as long as the Exchange server is Exchange 2010.

As of the publication of this document, the Exchange server that is included in Office 365 is Exchange 2010. Office 365 has an update cycle of 90 days, and with the release of Exchange 2013 being imminent, it is uncertain when Microsoft will make the transition.

The following assumes that Office 365 uses Exchange 2010. The steps are the same as those that were described in the previous section, with one possible exception.

In the Microsoft data centers, certain objects are consolidated to save space. When you try to use Windows PowerShell to modify one of these objects for the first time, you might encounter the following error message:

- This operation is not allowed for the organization with disabled customizations. To enable this operation, you need to execute Enable-OrganizationCustomization task first.

This is likely to happen when you run the new-ManagementRoleAssignment-command. In this case, you must run the following extra command:

- Enable-OrganizationCustomization

You only need to run this once. On subsequent runs, it will generate the following error message:

- This operation is not available in the current service offer.

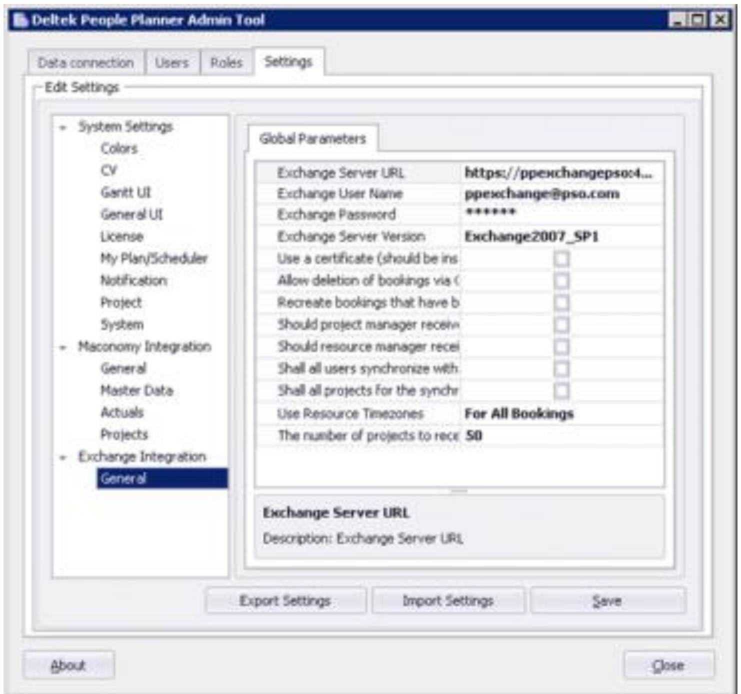
Configure People Planner

This task involves setting up a scheduled task to take care of the synchronization. This in turn requires that the People Planner Service is installed.

See Install the People Planner Service for installation steps.

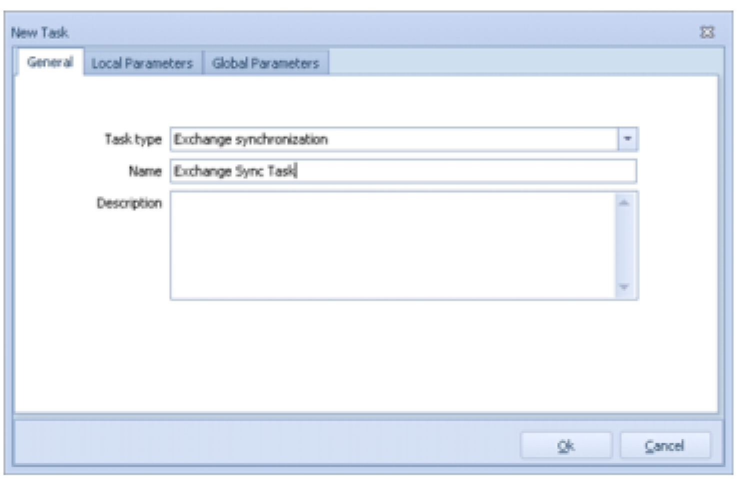
To set up the Exchange Synchronization:

1. Start the Admin Tool and go to the **Settings** tab.
2. Use the Settings tab to set the values for the Exchange Synchronization. The following figure shows an example.



You must use the People Planner application to create the scheduled task to perform the synchronization with Exchange. The values that you used for the settings in the Admin Tool appear in the People Planner application when you go to create the scheduled task; however you cannot change them in the application.

3. In the Task Specification view, double-click on the **New Task** view to create a Task Specification for the Exchange Synchronization, as the following example figure shows.

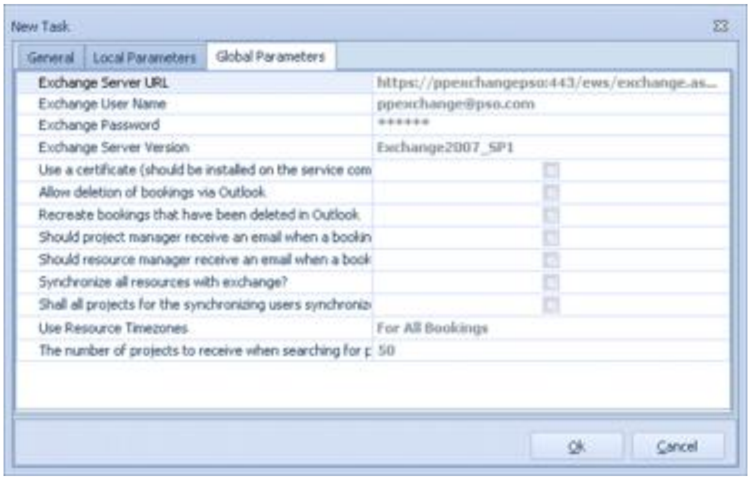


4. Enter the required information.

   In the preceding figure, the task type has been selected as Exchange synchronization.

5. Click the **Local Parameters** tab to set parameters—such as the maximum number of items to request at a time, the number of days to include, and so on—for this task specification.

6. Click the **Global Parameters** tab to review the parameters that were set in the Admin Tool to make sure that they are correct. You cannot change these values here; you must set them in the Admin Tool. The following figure shows an example.

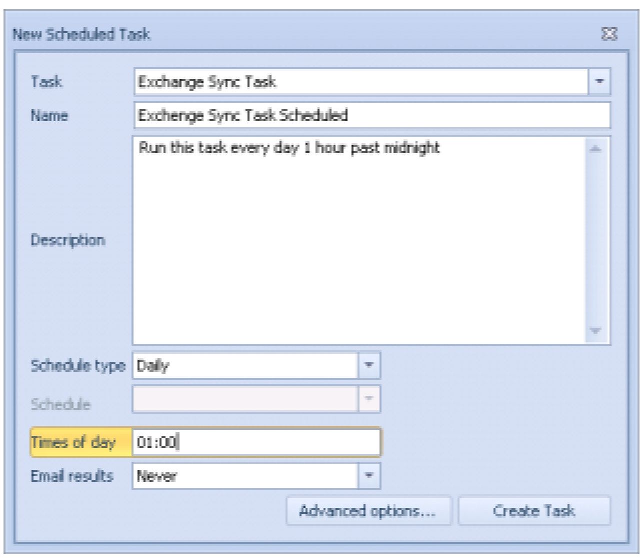


The **Exchange Server URL** field should contain the fully qualified domain name suffixed by the path to the Exchange web services (usually ews/exchange.asmx).

You must have set up a special Exchange user name and password for the Exchange integration; see Configure the Exchange Server. The **Exchange User Name** and **Exchange Password** fields should contain that user name and password, respectively.

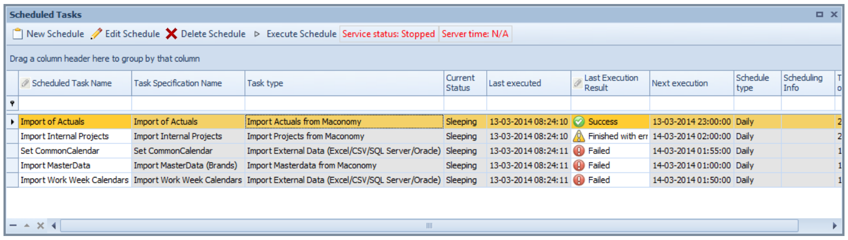
7. Click **Ok**.
8. Open the **Scheduled Tasks** view and click the **New Schedule** button.

   This opens the **New Scheduled Task** view so that you can create a scheduled task for the Exchange Synchronization that is based on the task specification that you just created. The following figure shows an example.



9. Enter the information, and then click **Create Task**.

10. After the scheduled task (job) has been created, click **Execute Schedule** to start the job within one minute.



The **Last Execution Result** field contains **Success** if the job completes successfully.

Install the People Planner Outlook Web Service

The Outlook Web Service provides the Outlook AddIn with projects for the Outlook user. It is installed on a web server as a Windows Communication Foundation service and uses the user's Windows credentials to authenticate the request.

The Outlook Web Service was previously called People Planner Exchange Service.

Prerequisites for Outlook Web Service

See Prerequisites for Web Components to ensure that the prerequisites are in place before you install the Outlook Web Service.

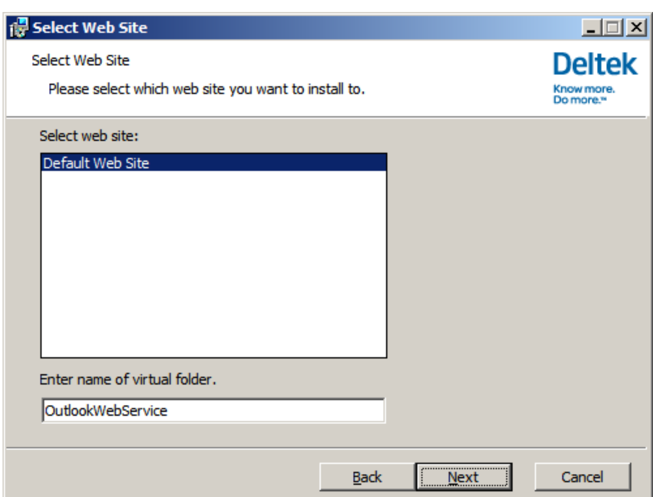
Installation

To install the Outlook Web Service:

1. Run the **Deltek People Planner Outlook Web Service version 3.7.msi** installer.

   When doing the installation, you must select a web site and enter the virtual directory under which the service should be installed.

   The name of the virtual folder is needed during the installation of the Outlook AddIn.



2. Click **Next** to continue with the installation.
3. Confirm that the domain users have read access to the installation site.
4. Complete the installation.
5. Copy a **DataConnection.xml** file from a People Planner application installation to bin/Settings/.
6. In the **web.config** file, confirm that the reference to **DataConnection.xml** is correct.

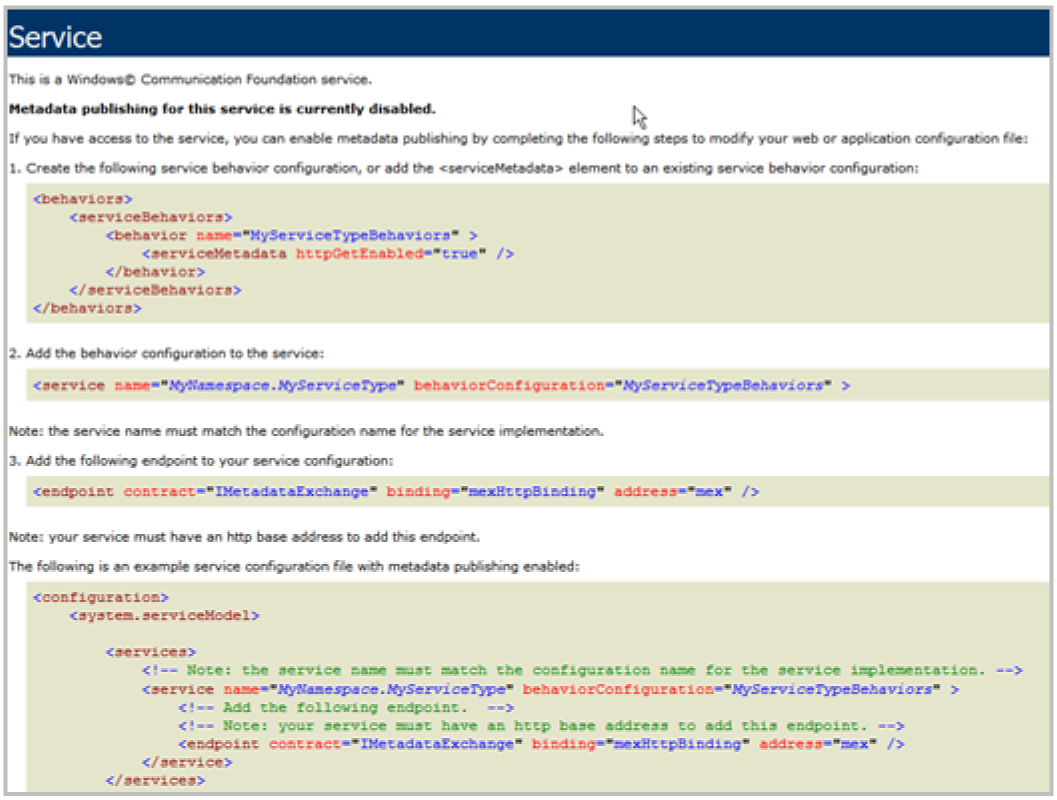
Test the Outlook Web Service

To test the Outlook Web Service:

1. Open Internet Explorer and enter the URL to the service:

   `http://<YourServer>/<VirtualFolder>/service.svc`

   If it was installed successfully, you should see something like the following example.



Service

This is a Windows© Communication Foundation service.

Metadata publishing for this service is currently disabled.

If you have access to the service, you can enable metadata publishing by completing the following steps to modify your web or application configuration file:

1. Create the following service behavior configuration, or add the <serviceMetadata> element to an existing service behavior configuration:

```
<behaviors>
    <serviceBehaviors>
        <behavior name="MyServiceTypeBehaviors" >
            <serviceMetadata httpGetEnabled="true" />
        </behavior>
    </serviceBehaviors>
</behaviors>
```

2. Add the behavior configuration to the service:

```
<service name="MyNamespace.MyServiceType" behaviorConfiguration="MyServiceTypeBehaviors" >
```

Note: the service name must match the configuration name for the service implementation.

3. Add the following endpoint to your service configuration:

```
<endpoint contract="IMetadataExchange" binding="mexHttpBinding" address="mex" />
```

Note: your service must have an http base address to add this endpoint.

The following is an example service configuration file with metadata publishing enabled:

```
<configuration>
    <system.serviceModel>

        <services>
            <!-- Note: the service name must match the configuration name for the service implementation. -->
            <service name="MyNamespace.MyServiceType" behaviorConfiguration="MyServiceTypeBehaviors" >
                <!-- Add the following endpoint.  -->
                <!-- Note: your service must have an http base address to add this endpoint. -->
                <endpoint contract="IMetadataExchange" binding="mexHttpBinding" address="mex" />
            </service>
        </services>
```

Install the People Planner Outlook Addin

The Outlook AddIn supports MS Outlook 2010.

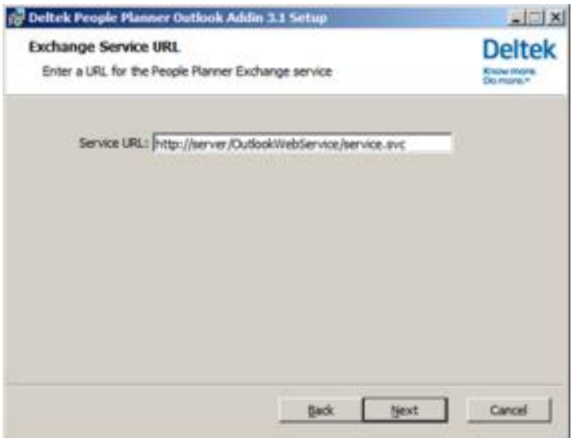
There are several prerequisites that must be met before you install the AddIn. The following prerequisites require Administrator rights on the computer to install; you only need to install them once.

- Microsoft .NET Framework 4.6.1.
- Microsoft Visual Studio Tools for Office Runtime 2010: vstor_redist.exe

- The file C:\Program Files\Common Files\microsoft shared\OFFICE12\MSO.DLL must be version 12.0.6520.5000 or newer. If it is not, it can be updated here: http://support.microsoft.com/kb/2289158.

The Outlook AddIn installer itself does not require administrative rights to install. It is installed for each user; each user who needs to use the AddIn must run the installer.

During the installation, on the Exchange Server URL screen, you must enter the URL to the People Planner Outlook Web Service.



The Outlook Web Service should be installed on the server before any users start installing their Outlook AddIns, so that they can know which URL to use here.

Integration with BPM

Maconomy BPM supports extracting reports from People Planner and correlating them with data from Maconomy.

This is a one-way integration; People Planner does not import anything from BPM.

For more information about setting up the BPM side of the integration, see the BPM documentation.

On the People Planner side of the integration, you must install a set of database views and create and configure a scheduled task.

Install the External Views in the Database

The integration from Maconomy BPM requires that the external views are installed in the People Planner database.

To install the external views:

1. Locate the external views in the folder where the Admin Tool is installed, usually:

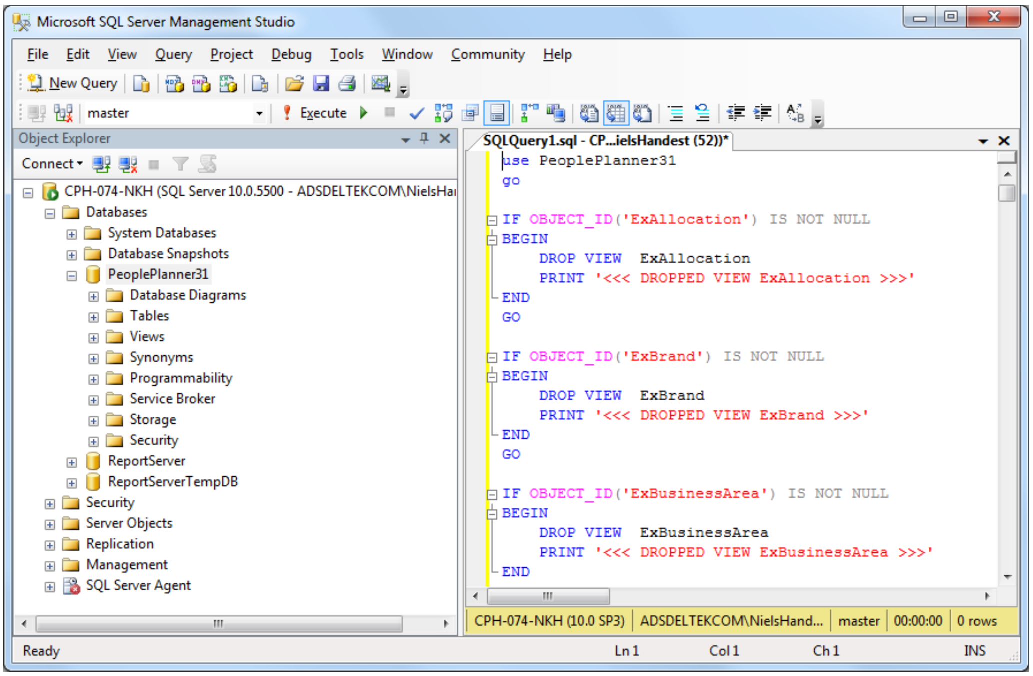
   <People Planner Admin Tool install-directory>\SQL Scripts\ExternalViewsSql, where <*People Planner Admin Tool install-directory*> is the path to the directory where you installed the Admin Tool, for example:

   C:\Program Files (x86)\Deltek\People Planner Admin Tool 3.7\Sql Scripts\ExternalViewsSql.

2. Run the **CreateExternalViewsMSQL** SQL script.

The CreateExternalViewsMSQL script automatically drops existing views, so you do not need to run the DropExternalViewsMSQL script unless you want to remove the views entirely.

   a. Start SQL Server Management Studio.
   b. Create a Database Engine Query.
   c. Paste the SQL code into the new Database Engine Query.
   d. Add a use clause in front of it before executing the code.



Set Up the Update Reporting Tables Scheduled Task

When you install People Planner, the **DayIntervalEntry** table is created in the People Planner database. This table is empty until you run a task specification of the type Update Reporting Tables to populate it. After it has been populated, run that task to keep this table updated.

See Task Specifications for more information.

Install the People Planner Service

The People Planner service is a component that runs as a Windows service. It is used for running scheduled tasks—for example, to import from external files and databases—and for the Exchange/Outlook integration.

Therefore, you must install it on a server computer, not on a People Planner Windows application computer.

To install the People Planner Service:

1. Run the **Deltek People Planner Service version 3.7.msi** installer.
2. On the splash screen, click **Next**, and accept the license agreement.

3. On the Destination Folder screen, change the location or keep the default and click **Next**.
4. On the Username and Password screen:
    a. Enter the username and the password of the domain user that the service should use.

    There is no universal username. Each People Planner installation should define its own passwords and usernames.

    b. Grant logon as service right to this user.
    c. Click **Next** to display the Destination Folder screen.

As part of the general security setup, you should create the chosen account specifically for running the service and give it the least of set privileges for performing the task. See Security for more information about how to do this.

5. Click **Next** to accept the destination folder or click **Change** to select a different folder, then click **Next** to continue with the installation.
6. On the Ready to Install… screen, click **Install** to begin the installation.
7. When the installation is complete, click **Finish** to exit the Setup Wizard.

    Before you can use the service, it needs a data connection file.
8. Copy a DataConnection.xml client data connection file into the Settings subfolder of the folder where you installed the executable for the service.

Tasks

The Tasks folder provides the ability to create, schedule, run, and monitor the results of various tasks. This folder contains several views as described in the following sections.

The Import Results sub-folder in the Tasks folder enables you to check import task status for Master Data, Project, and Actuals imports.

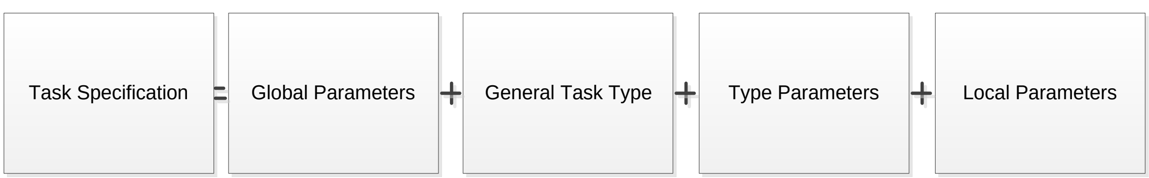
Task Specifications

You can specify and use the following task types:

- Batch Task Specifications
- Exchange Synchronization
- Export Favorites to Maconomy
- Import Absences from Maconomy
- Import Actuals from Maconomy
- Import External Data (Excel/CSV/SQL Server/Oracle)
- Import Master Data from Maconomy
- Import Projects from Maconomy
- Update Reporting Tables

The Task Specification holds information about which task is to be executed and various parameters that determine how data should be handled during the execution. A Task Specification consists of the following components:

- Global Parameters
- General (Task Type)
- Task Type Parameters
- Local Parameters



Global Parameters — Global parameters are defined using the Admin Tool. These include items such as a Maconomy URL, Maconomy credentials, and web service maximum response size.

General (Task Type) — General task type determines one of the predefined types that are supported by People Planner. This includes Import Master Data (Maconomy), Import Actuals (Maconomy), Import Jobs (Maconomy), Import Absences from Maconomy (Maconomy), and Exchange Synchronization.

Task Type Parameters — These settings apply to a Task Type and are used for all tasks of the specified type. Task Type Parameters are set using the Admin Tool. They are applicable for all tasks of the specified type and cannot be changed from the People Planner application (such as granularity when importing actuals from Maconomy).

Local Parameters — These parameters only apply to a specific Task Specification and can be set in the People Planner application. The number and type of task parameters depends on the Task Type. For some Task Types (such as Maconomy Import Task Types), default values can be set for Local Parameters, yet still be changed from within the People Planner application. For the other Task Types, there are no default values, and the values must be set when defining the Task Specification in the People Planner application.

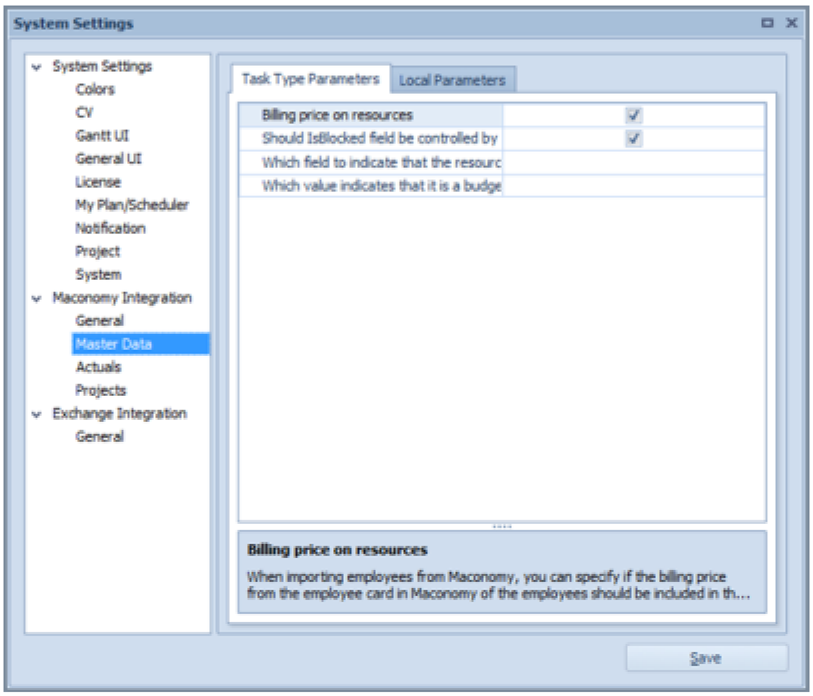
Task specifications are created and maintained using the Task Specification view.

Views

System Settings View

Release 3.4 updated the System Settings view in the System folder, and the organization of all settings. The updated System Settings view is identical to the previous Settings tab in the Admin Tool, except that the Task Type Parameters are read-only in the People Planner application.

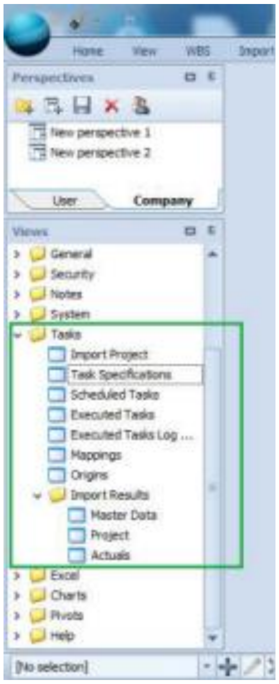
The following figure shows the System Settings view.



Task Views

The Import/Export and Schedule Tasks view folders that were provided in versions of People Planner prior to release 3.3 were combined into one view folder called Tasks.

The task views that are shown in the following figure are available.



The Task views are used for the following types of integrations:

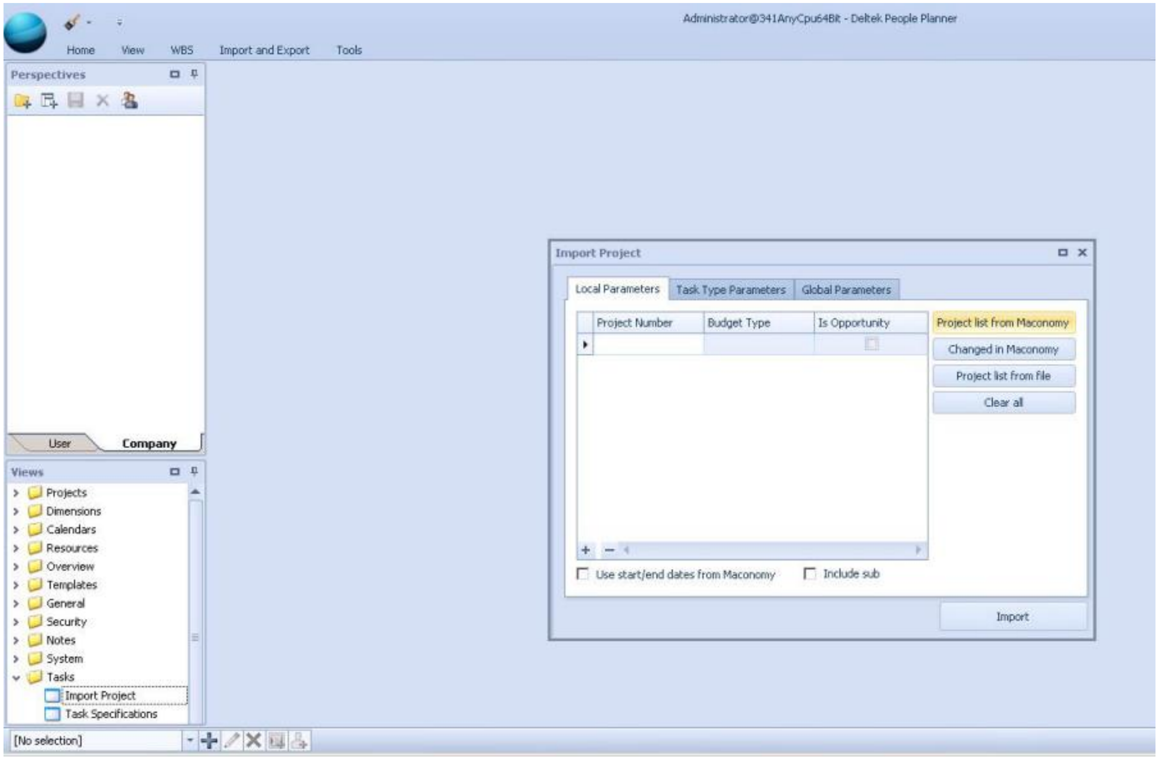
- The Maconomy integration.
- File integration—importing data from Excel or .csv files. This includes importing data from an external SQL server and from an Oracle database.
- Synchronization with an Exchange server.

This list includes the views that were introduced or modified by People Planner Release 3.3:

- Import Project — Maconomy integration. This view was further modified by People Planner Release 3.4.
- Task Specifications — Maconomy integration, file integration, and Exchange integration.
- Scheduled Tasks — Maconomy integration, file integration, and Exchange integration.
- Executed Tasks
- Executed Tasks Log Messages — Maconomy integration, file integration, and Exchange integration.
- Mappings — File integration.
- Origins — Maconomy integration, file integration, and Exchange integration.

Import Project View

This view is a combination of the previous Import Multiple Job Budgets and Import Job Budget views. Use this view to select the project numbers (Maconomy job numbers) to be imported into People Planner. The following figure shows an example of the Import Project view.



You import each project, one by one, and each project is committed to the database one by one. If the import of a project fails, only that project is rolled back; the import then continues with the next project in the list.

You can also include subprojects when you import a project. Each subproject is imported and committed one by one. If the import of a subproject fails, only that subproject is rolled back; the import then continues with the next subproject in the list.

You can start the import of a project in several ways:

- Use the **Update from Maconomy** button in the Project Gantt chart to update/reimport projects that have previously been imported.
- Use the **Update from Maconomy** button in the Import and Expand menu in the ribbon to update/reimport projects that have previously been imported.
- Use the features of the Import Project view in the Task folder to import projects based on their project number, budget type, and whether the project is an Opportunity.

When the list of job numbers to import is complete, select whether to **Use start/end dates from Maconomy**, and select **Include sub** to import subprojects. When you have completed the selection of criteria, click **Import**.

Task Specifications View

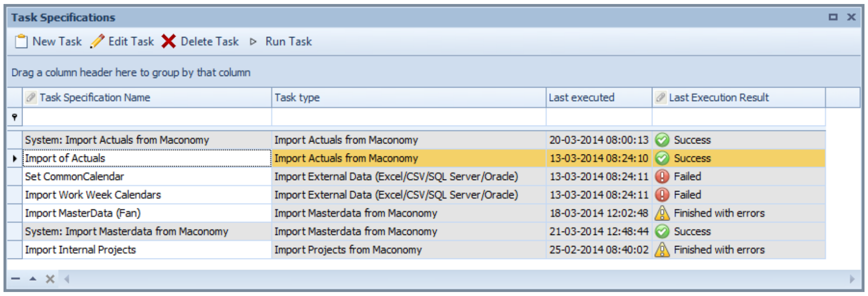
At the top of this view are three actions to maintain Task Specifications (New, Edit, and Delete) and a button to execute a task (Run Task).

- **New Task** — Click to create a task.
- **Edit Task** — Click to edit an existing task.
- **Delete Task** — Click to delete the selected Task Specification(s). Note that a task specification cannot be deleted if it is currently used in a scheduled task, or if it is referenced by the latest Import Results set.

If the task has previously been executed, all associated history is also deleted. A confirmation messages allows you to accept or cancel the deletion.

- **Run Task** — Click to immediately execute the task directly from the People Planner application. Note that you can execute any of the non-system Task Specifications (defined by its Task Type and Parameters) with this option. However, you can execute System Task Specification using the ribbon buttons.

The following figure shows the Task Specifications dialog.



Both Type Parameters and Global Parameters are shown in the dialog, although they cannot be changed. Only local parameters can be changed from the People Planner application.

Run Batch Task Specifications

The performance of a single task specification accomplishes a single task. In some cases, you need multiple tasks to be grouped and then executed in a specific sequence. The use of Batch Task Specifications enables you to group task specifications and run them in order. This is called *running a batch task specification*.

If any one of the component task specifications in a batch task specification fails, the execution of the batch task specification stops. You cannot nest a batch task specification within another batch task specification. The same task specification can only appear once in a particular batch task specification.

You use the Task Specification list view to create batch task specifications. You choose **Batch Task Specification** from the **Task type** drop-down in the New Task dialog and provide the appropriate information. (The name is the only required field.) When you provide the appropriate information and confirm the dialog, the batch task specification appears in list of tasks in the Task Specifications dialog. You can then select the batch task specification and add the appropriate tasks to it, in the appropriate sequence.

You execute a batch task specification by clicking the **Run Task** button in the Task Specifications dialog. You can also schedule the execution of a batch task specification using the Scheduled Task view.

The Task Specifications dialog displays the results of the batch task specification execution; you can view more detailed information via the Executed Tasks view and the Executed Tasks Log Messages view.

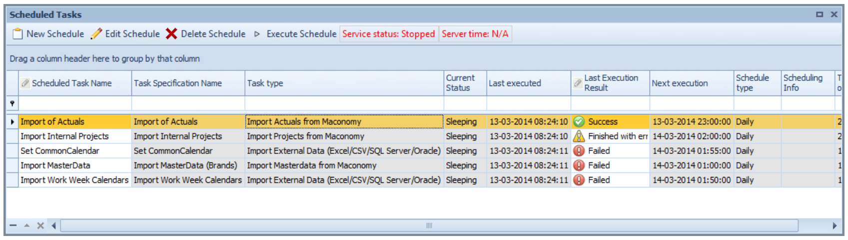
Scheduled Tasks View

A Scheduled Task adds a scheduling part to a Task Specification. You can run Task Specifications (referred to as “Tasks”) manually. However, if you want to automate a task so that it runs at a set time—such as during the night when the system is otherwise idle—you can create a Scheduled Task.

At the top of this view are three actions to maintain Task Schedules (New, Edit, and Delete) and a button to execute a task (Run Task).

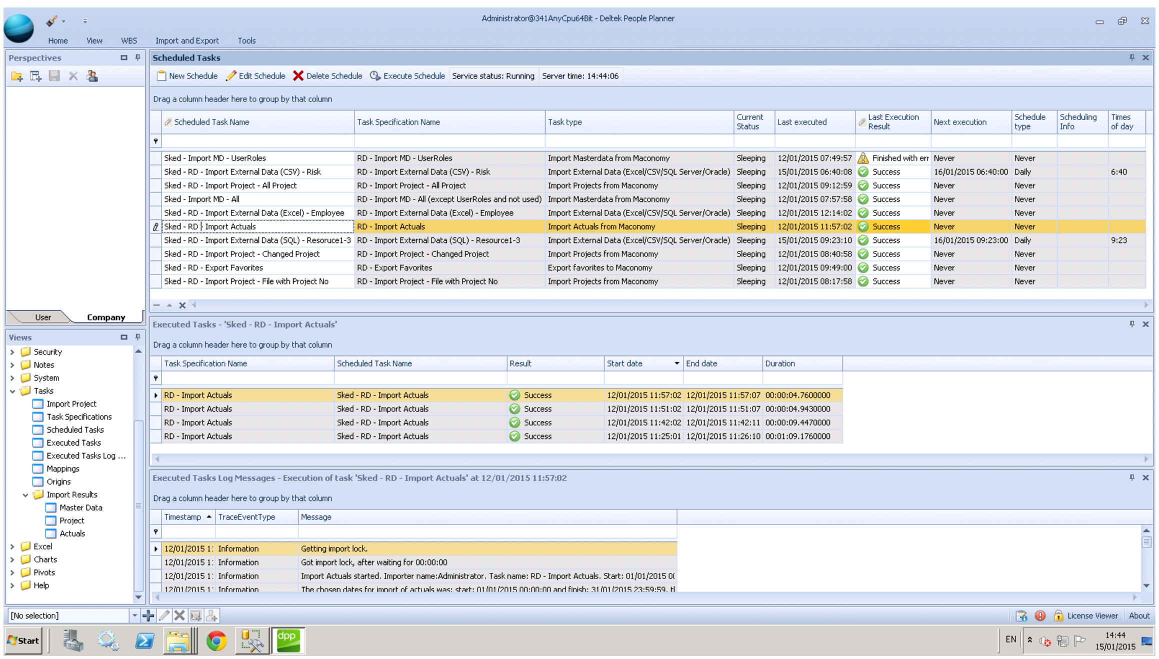
- **New Schedule** — Click to schedule a task defined by its Task Specification.
- **Edit Schedule** — Click to edit an existing schedule.
- **Delete Schedule** — Click to delete the selected Task Schedule(s). A confirmation messages allows you to accept or cancel the deletion.
- **Execute Schedule** — Click to schedule the task to be run immediately by the People Planner Service.

The following figure shows the Schedule Tasks dialog.



Executed Tasks View and Executed Tasks Log Messages View

The Executed Tasks view shows the history of executed tasks, whether they were completed manually or through a scheduled task. Use the Task Specification view and Scheduled Tasks view to determine the task types that are shown.



If you select a task in the Task Specification / Scheduled Task view (the top view in the preceding figure), that updates the Executed Tasks view to be updated with a list of executions of that task.

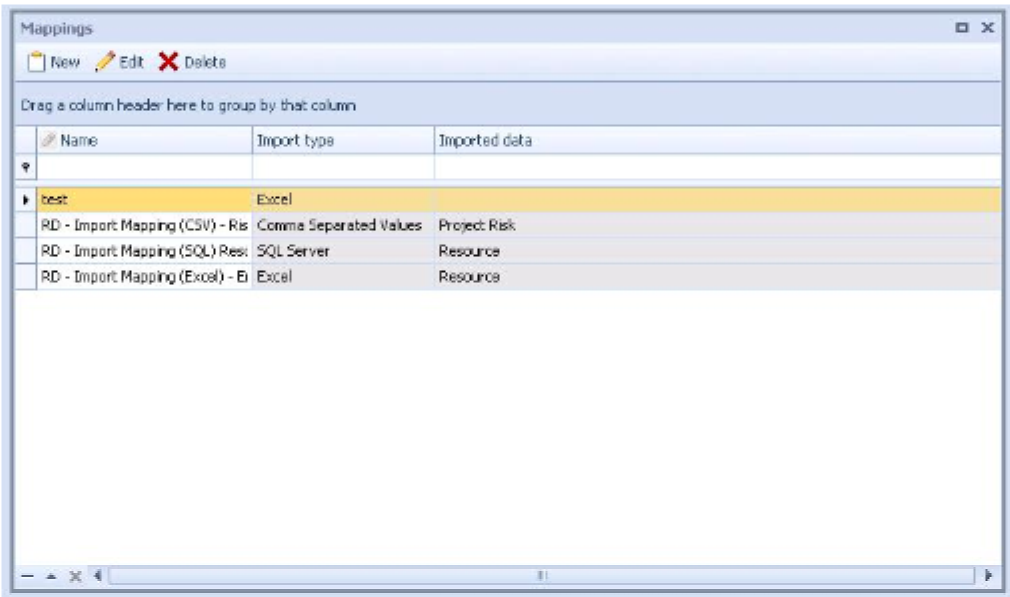
If you select an execution in the Executed Tasks view, that causes the Executed Tasks Log Messages view to be updated with the log from that execution.

Mappings View

This view is almost identical to the previous Import Mappings view in the Import/Export view folder. However, instead of a separate New Import Mapping view, the New button is added.

- At the top of this view are three actions:
  - **New** — Click to add an import mapping.
  - **Edit** — Click to edit an existing import mapping.
  - **Delete** — Click to delete the selected import mapping(s). A confirmation message allows you to accept or cancel the deletion.

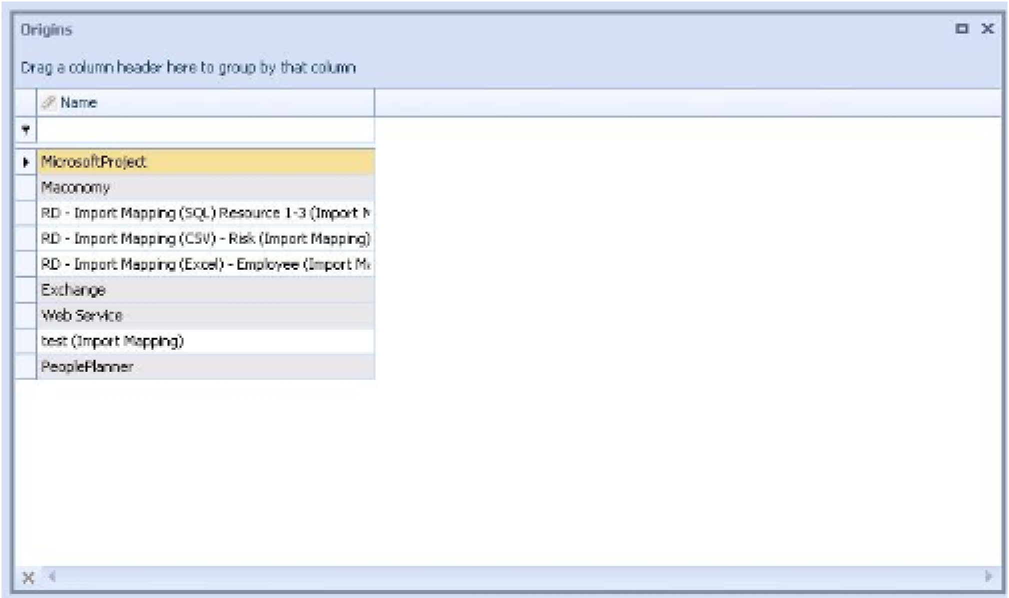
The following figure shows the Mappings View dialog.



Origins View

This view is identical to the Import Origins view previously found in the Import/Export view folder.

This view shows all existing origins. Origins are automatically created when import mappings are created, but you can use this view to get a list of all existing origins and to rename them.



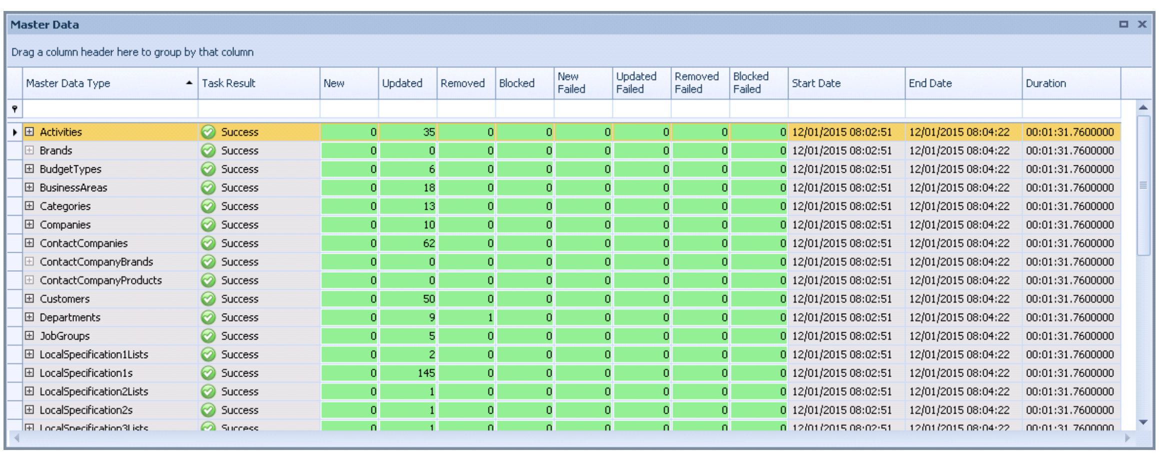
Import Result Views

In addition to the Executed Tasks and Executed Tasks Log Messages views, you can see the status of tasks that have been run by using the data-centric views that the Import Results folder provides: Master Data, Project, and Actuals.

While the Executed Tasks view is useful to determine the status of individual task executions, using this view to get the current status of specific data (such as the status of a specific resource) unrelated to any specific task execution can be cumbersome. The results views alleviate this issue by providing an easy way to get the current status of specific data entries imported from an external system and also to see the data that is not in People Planner, even though it was part of an import task.

Master Data View

Master Data import can import any combinations of 34 types of People Planner entities from corresponding fields in Maconomy. This view shows a list that contains each kind of master data, which is the result of all entities affected by an import.


Master Data

Drag a column header here to group by that column

Master Data Type	Task Result	New	Updated	Removed	Blocked	New Failed	Updated Failed	Removed Failed	Blocked Failed	Start Date	End Date	Duration
Activities	Success	0	35	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
Brands	Success	0	0	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
BudgetTypes	Success	0	6	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
BusinessAreas	Success	0	18	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
Categories	Success	0	13	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
Companies	Success	0	10	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
ContactCompanies	Success	0	62	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
ContactCompanyBrands	Success	0	0	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
ContactCompanyProducts	Success	0	0	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
Customers	Success	0	50	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
Departments	Success	0	9	1	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
JobGroups	Success	0	5	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
LocalSpecification1Lists	Success	0	2	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
LocalSpecification1s	Success	0	145	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
LocalSpecification2Lists	Success	0	1	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
LocalSpecification2s	Success	0	1	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000
LocalSpecification3Lists	Success	0	1	0	0	0	0	0	0	12/01/2015 08:02:51	12/01/2015 08:04:22	00:01:31.7600000

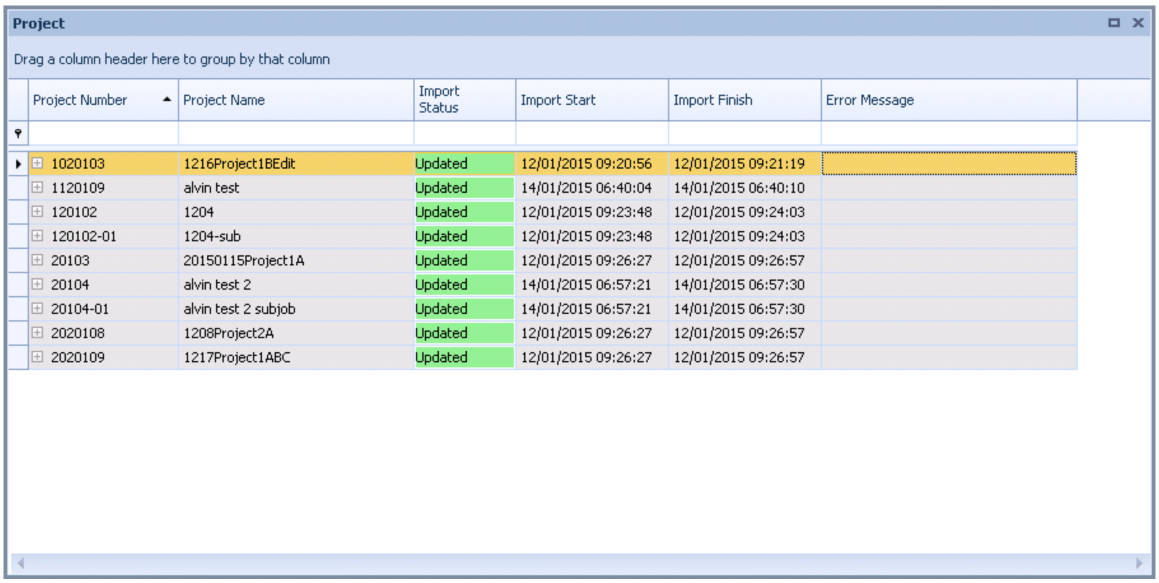
Synchronize Master Data Result View to Executed Tasks View

To synchronize from the Master Data Result view to the Executed Tasks view, select a row in the Master Data Result view. This action automatically synchronizes with the Executed Tasks view to show the associated task execution.

You can use this view *only* to see an overview of the import results. If an object (for example, a resource) is “blocked” in Maconomy and then imported to People Planner, it is not marked as Blocked in the Result view. Instead, if the object already exists in People Planner, it is marked “updated” or “updated failed.” If the object does not exist in People Planner it is marked “new” or “new failed.”

Project View

The Project view is a status view that shows how the importing of a project or projects went.



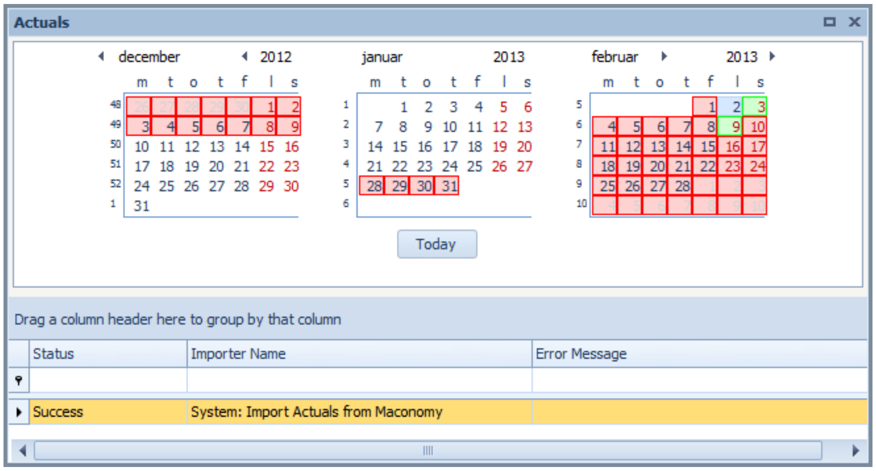
Project Number	Project Name	Import Status	Import Start	Import Finish	Error Message
1020103	1216Project1BEdit	Updated	12/01/2015 09:20:56	12/01/2015 09:21:19	
1120109	alvin test	Updated	14/01/2015 06:40:04	14/01/2015 06:40:10	
120102	1204	Updated	12/01/2015 09:23:48	12/01/2015 09:24:03	
120102-01	1204-sub	Updated	12/01/2015 09:23:48	12/01/2015 09:24:03	
20103	20150115Project1A	Updated	12/01/2015 09:26:27	12/01/2015 09:26:57	
20104	alvin test 2	Updated	14/01/2015 06:57:21	14/01/2015 06:57:30	
20104-01	alvin test 2 subjob	Updated	14/01/2015 06:57:21	14/01/2015 06:57:30	
2020108	1208Project2A	Updated	12/01/2015 09:26:27	12/01/2015 09:26:57	
2020109	1217Project1ABC	Updated	12/01/2015 09:26:27	12/01/2015 09:26:57	

Actuals View

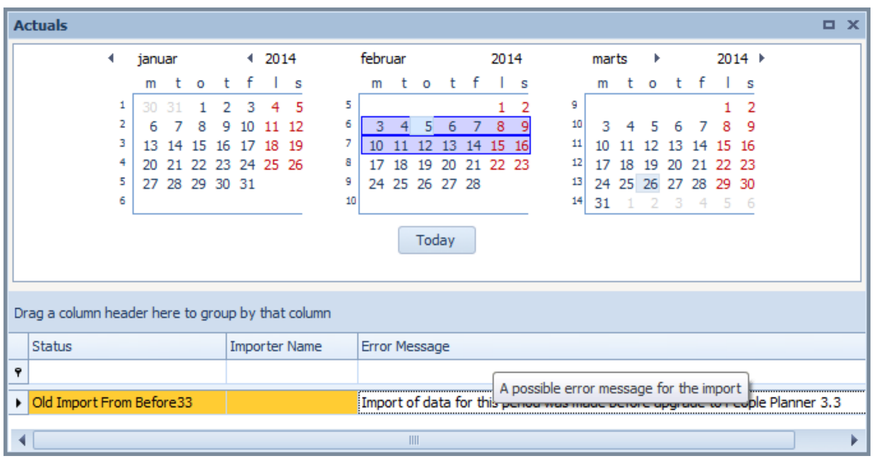
When importing actuals, the data is imported for specific time periods. You can set the granularity of the time periods (called “Time unit” in the current Task Parameter) to **day**, **week**, or **month**. This means that the time period that you import must be a whole fraction of the granularity/time unit. For example, if the granularity is **week**, the specified time period must start on a Monday and end on a Sunday. The granularity is a Task Type Parameter, and thus it is equal for all imported actuals data. When actuals are imported, the old actuals data for the same period in People Planner is deleted before the new actuals data is saved.

For the visual overview, the data from this table is shown in a calendar view with colors to indicate the current status for each granularity period.

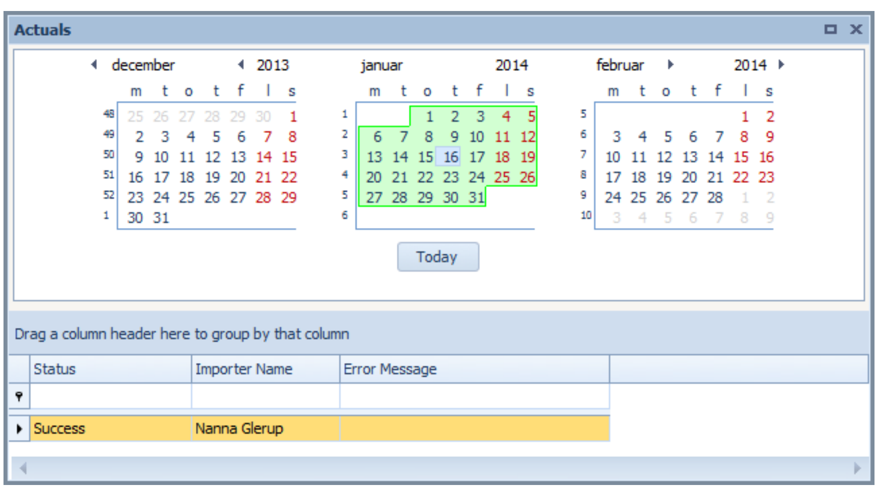
Day



Week



Month



Color indicators:

- **Green** — All succeeded, or the period succeeded, but a few entries were invalid and were never created in People Planner. If some entries failed, the error message column contains information about which entries failed and why.
- **Yellow** — The data is correct, but it is not updated in the latest attempt to import; for example, perhaps the Maconomy server was unavailable, the import was canceled, and so forth.
- **Red** — The period contains data that is incorrect; for example, old data was deleted, but new data was not imported.

Actuals Data

This section describes the process of working with actuals data from Maconomy.

Actuals data (such as Timeregistration, Amount, and Invoicerevenue) is always requested from Maconomy for one granularity period at a time (that is day, week, or month). If the Maconomy web service call to get this data fails, it continues with the next granularity period and leaves the data for the failed period as is in the People Planner database. This means that the data for this period is not updated. The period is marked yellow.

However, if either an OutOfMemory or Canceled By User error is encountered, the entire import is aborted, and all skipped periods are marked yellow.

Deleting Old Data

When data for a granularity period has been successfully retrieved from Maconomy, all existing actuals for the period are deleted. For some accounts (such as time entries), deleting entries can be both time- and memory-consuming. This is because the associated event must be loaded into memory, recalculated, and committed when actuals are deleted. For each of the 12 accounts, 100 (hard-coded) random entries are deleted at a time to avoid memory problems. If one of these deletions fails, it aborts the entire delete/import process for the specific granularity period (not just the chunk of 100 entries that failed). This leaves the system with invalid data for this period, because some of the data might be successfully deleted, while other data might contain values from the last successful import. The granularity period is marked **red**. If the failure is either OutOfMemory or CancelledByUser, it aborts the entire Actuals Import process (all subsequent granularity periods) and marks the skipped granularity periods with **yellow**. Otherwise, it continues with the next granularity period.

Updating the Database

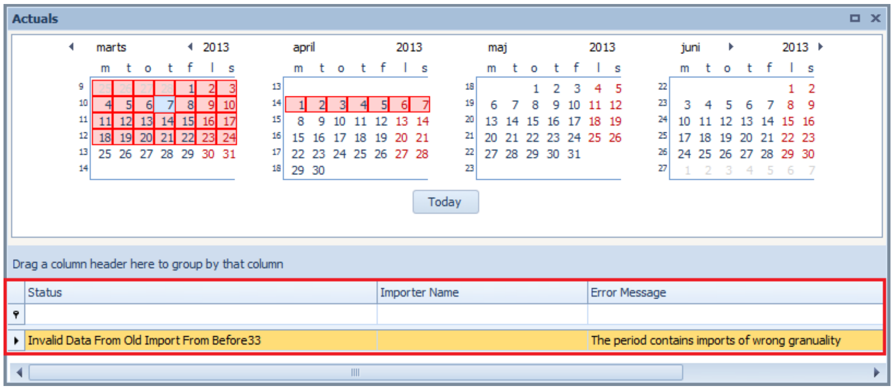
After all of the data for a specific granularity period is successfully deleted, the People Planner database is updated with the new values that are received from Maconomy. When it updates the database with the new data from Maconomy, this is done in chunks of “packetsize” data, as set in Admin. Each packet consists of many lines that have different values. If one of these values is invalid (that is, the mapping from Maconomy to People Planner fails) only the value in question is not updated. This is logged, and the granularity period is marked **green**, but with the information for the entries that failed in the column for error messages.

If committing one of these chunks fails (for example, a start date was after a finish date, or the number of resources exceeds the license), the import of the whole granularity period is aborted (not just the chunk). In this case, old values have already been deleted, so the system is left with random data for this period, and hence the granularity period is marked **red**. If the failure is either OutOfMemory or CancelledByUser, it aborts the entire Actuals Import process and marks the skipped granularity periods with **yellow** and the current granularity period with **red**. Otherwise, it continues with the next granularity period.

When the database is successfully updated the granularity period is marked **green**.

All actuals that were imported before People Planner version 3.4 are marked **blue** to indicate that data exists, but because it was imported with a previous version, People Planner cannot show the details; actuals are marked **red** if there is a mismatch in granularity (such as a week and day import covering the same day).

When you select a granularity period (Green, Yellow, or Red), the corresponding task import information and status are shown at the bottom, as the following figure illustrates.



If the Executed Tasks view is open, the specific import assumes focus when you select a period. The Executed Task view is in turn synchronized with the Executed Tasks Log Message view.

When you double-click on a period, the Import Actuals view is opened with start and finish dates set to match this period. You can choose to import the selected period.

By default, the Actuals view contains three months, but if you change the size of the view, more months are added. When saving the view into a perspective, you can control how many months are shown.

When you open the view, it contains the current month and the past two months. You can use the arrows in the top, next to month and year, to navigate to other periods. Click the Today button to return to the default overview.

Configure Deletion of Old Log Entries

When you import data—from Maconomy or via import mapping—and when you delete resources and events, People Planner creates log entries. By default, those log entries are never deleted; as a result, the table that contains them continues to grow. If you do not want to retain the entire content of this constantly growing table, you can configure People Planner to delete old log entries.

You use the Delete Old Log Entries task specification type to delete old log entries. You can run this both as a task specification and as a scheduled task.

You use this task in conjunction with the Admin Setting **Keep log entries from the last months**. You set its value to the number of months whose log entries should be retained—that is, prevented from being deleted.

When the task is executed, that value is used to calculate a deletion date. Log entries that were created before that date are deleted.

The deletion process looks at all task specifications of any kind. If a task executed successfully after the calculated deletion date, this process deletes the log entries that are related to the older executions of that task.

Log entries that are not related to any task specifications, or that are related to task specifications that no longer exist, are deleted if they are older than the calculated deletion date.

Log entries that are related to task executions that are referenced from import result views—master data, projects, or actuals—are never deleted.

Set 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:

- **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.
- **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.
- **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. Choose the appropriate setting for the parameter(s) as described above.
3. Click **Save**.

Set Privileges to Enable Deletion of Information Created by Import Mappings

You can select 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 privileges that enable a user to delete information that did not originate in Maconomy and People Planner:

1. Navigate to the **Admin Tool » Edit role <role> 'Managers' » Privilege** tab.

   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.

2. Expand the **Data Manipulation** item in the tree.
3. 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.
4. Click **Save**.

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

Enable Deletion of Budget Lines that are Deleted from Maconomy

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.

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 » Task Type Parameters** tab.
2. Select the **Allow deletion of tasks with planning** check box.
3. Click **Save**.

Set Maximum Rows to Sort on Calculated Columns in Gantt Views

Users 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 column values are calculated before the sort is performed, which can result in a long response time before a user sees 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 the user to confirm that he or she wants all of the values in the column to be calculated. The user 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 » 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**.

Configure Double-Click Functionality in the Project Gantt Chart

You can configure the functionality that is provided when a user double-clicks in certain areas of the Project Gantt chart (PG). 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 » Gantt User Interface Settings** tab.
2. In the **Project Gantt Double-Click Assignment** field, choose 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, choose 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**.

Azure Authentication

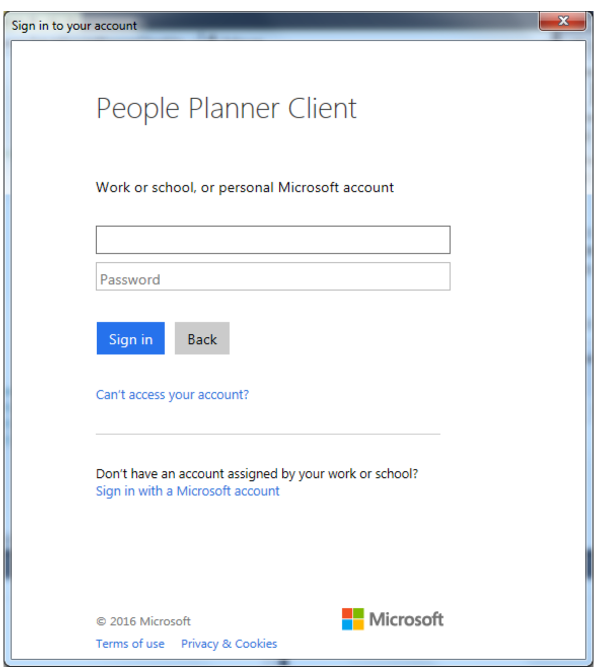
By default, People Planner's and MyPlan's method of authentication relies on Windows Authentication for user login. Windows handles the user login, and People Planner and MyPlan compare the username of the currently logged-in Windows user to the list of users in the database. If it finds that username, 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. 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.

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

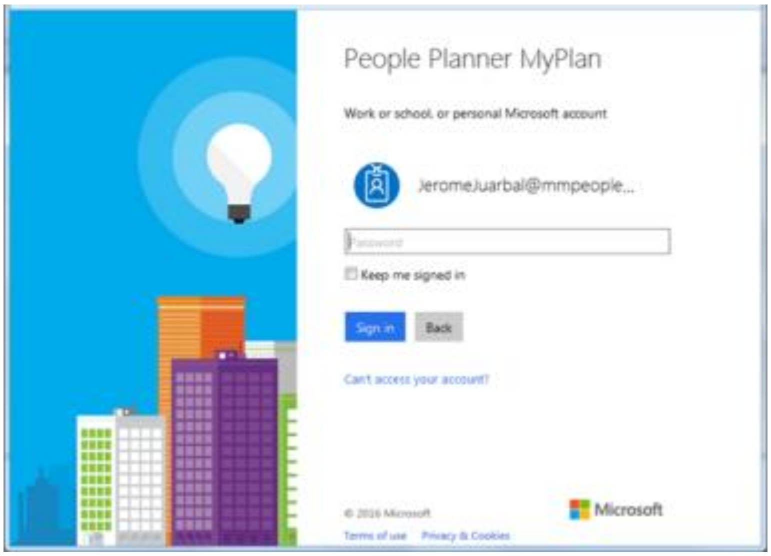
When you have configured Azure Authentication as described in this section, and a user starts the People Planner Windows application, it displays an Azure login popup. The execution of People Planner code is suspended until the user completes his or her interaction with this login popup.



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.

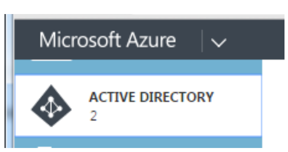
Configure the Azure Active Directory Tenant

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

If you already have an Azure Active Directory Tenant, you can skip this procedure.

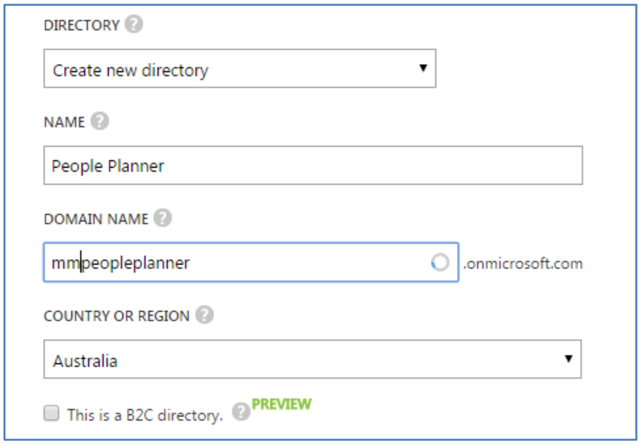
To set up an Azure Active Directory Tenant:

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.



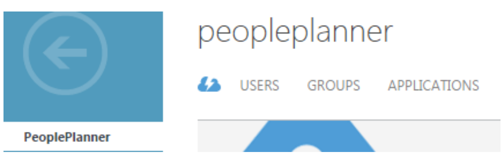
4. Choose **Create new directory** from the **DIRECTORY** dropdown.
5. Enter appropriate values for the **NAME**, **DOMAIN NAME**, and **COUNTRY OR REGION** fields. Note that the preceding figure shows example values only; use the values that are appropriate to your organization.
6. Click **OK**.

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.

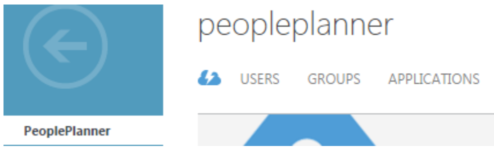
People Planner does not support automatically importing users from Azure. After you add users to the Azure Active Directory Tenant, you must manually configure those users in People Planner. Using People Planner's Admin Tool, you can import users from a file.

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.

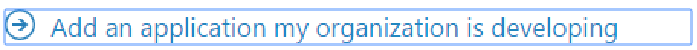
To set up the Azure Authentication Server, complete the following steps:

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

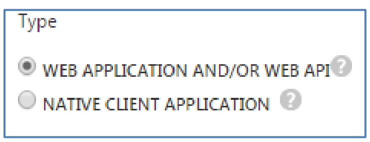


2. Click **ADD** in the bottom menu.

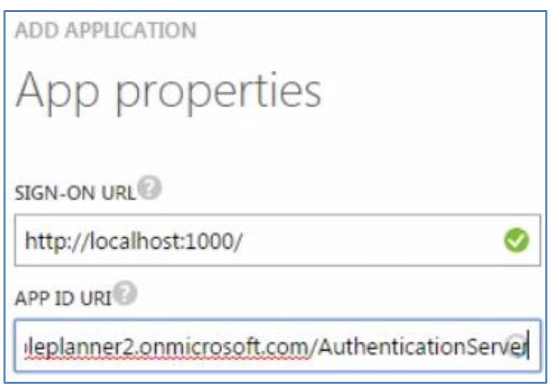
3. Choose **Add an application my organization is developing**.



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/
```

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

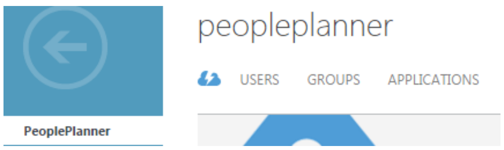
Set Up the People Planner Application

Register the People Planner Application in Azure

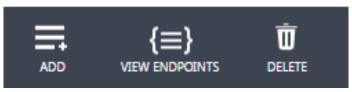
To use Azure authentication, you must register the People Planner application in Azure and configure it to authenticate against the People Planner Azure Authentication Server.

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

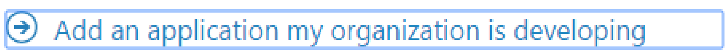
1. Open the Active Directory Tenant and navigate to the **APPLICATIONS** tab.



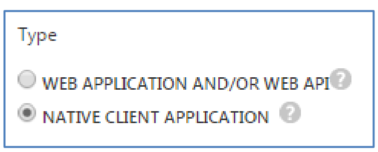
2. Click **ADD** in the bottom menu.



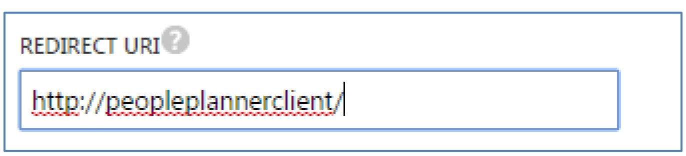
3. Choose **Add an application my organization is developing**.



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.

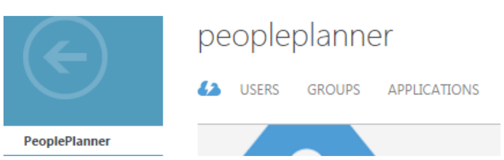


Allow Access to the People Planner Azure Authentication Server

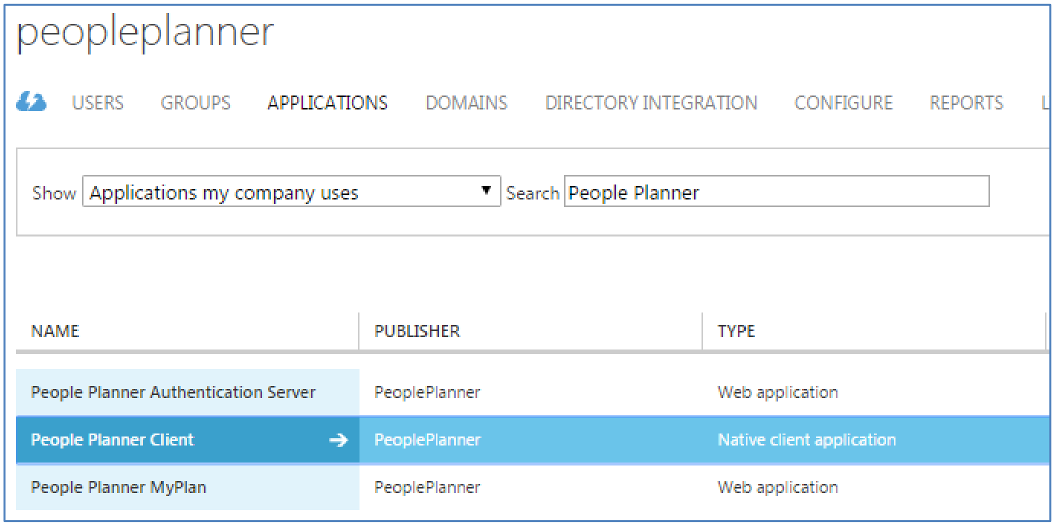
The registered People Planner Windows application in Azure must have privileges to authenticate against the People Planner Azure Authentication Server application.

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.

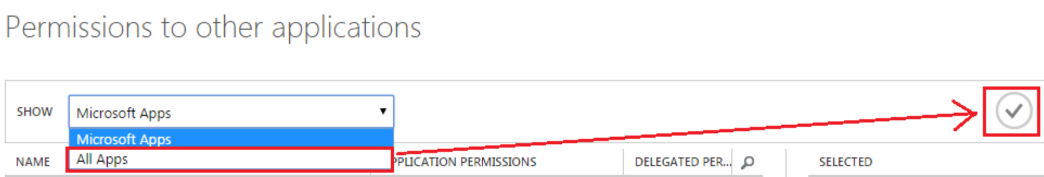


2. Choose the People Planner Windows application and click the right arrow next to the name.

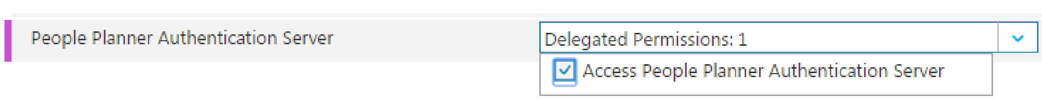


3. Click the **CONFIGURE** tab.

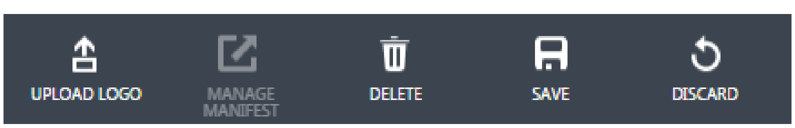
4. Click **Add Application** under **Permissions to other applications**.



5. Choose **All Apps** from the **SHOW** dropdown, 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** dropdown to enable the People Planner Windows application to access the server application.



8. Click **SAVE**.



Set Up the MyPlan Application

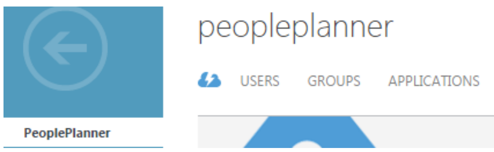
You must also register the MyPlan application with the Azure Active Directory Tenant to enable authentication using Azure. You must also give MyPlan access to the People Planner Authentication Server. In addition, you must configure the MyPlan settings in the People Planner Admin Tool that are required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

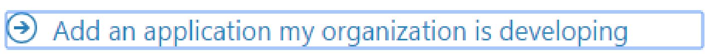
To register the MyPlan application and configure it to authenticate against the authentication server:

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

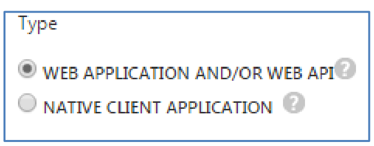


2. Click **ADD** in the bottom menu.

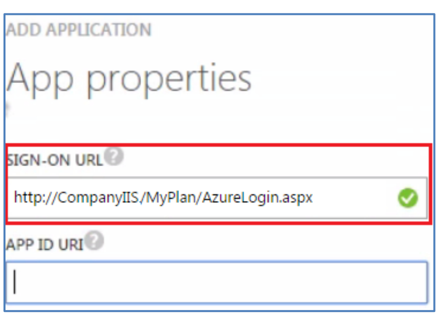
3. Choose **Add an application my organization is developing**.



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:

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

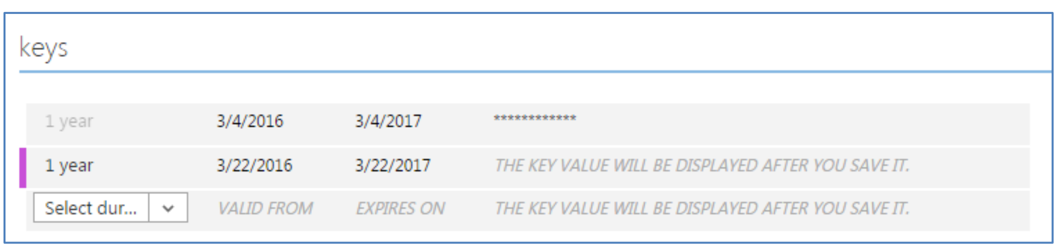
2. Under **REPLY URL**, define links to redirect to AzureLogout.aspx and AzureLogin.aspx.

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

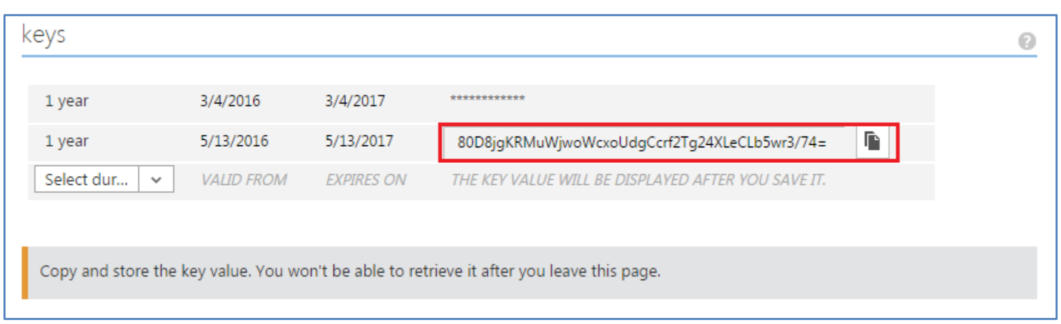
   For example, if you access MyPlan via `http://CompanyIIS/MyPlan/` or `http://CompanyIIS/MyPlan/Default.aspx`, the resulting entries are `http://CompanyIIS/MyPlan/AzureLogout.aspx` and `http://CompanyIIS/MyPlan/AzureLogin.aspx`.

3. To generate the **MyPlan Client Secret** key, choose a duration from the dropdown 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.



4. 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.
5. Click **Save**.

Allow Access to the Authentication Server

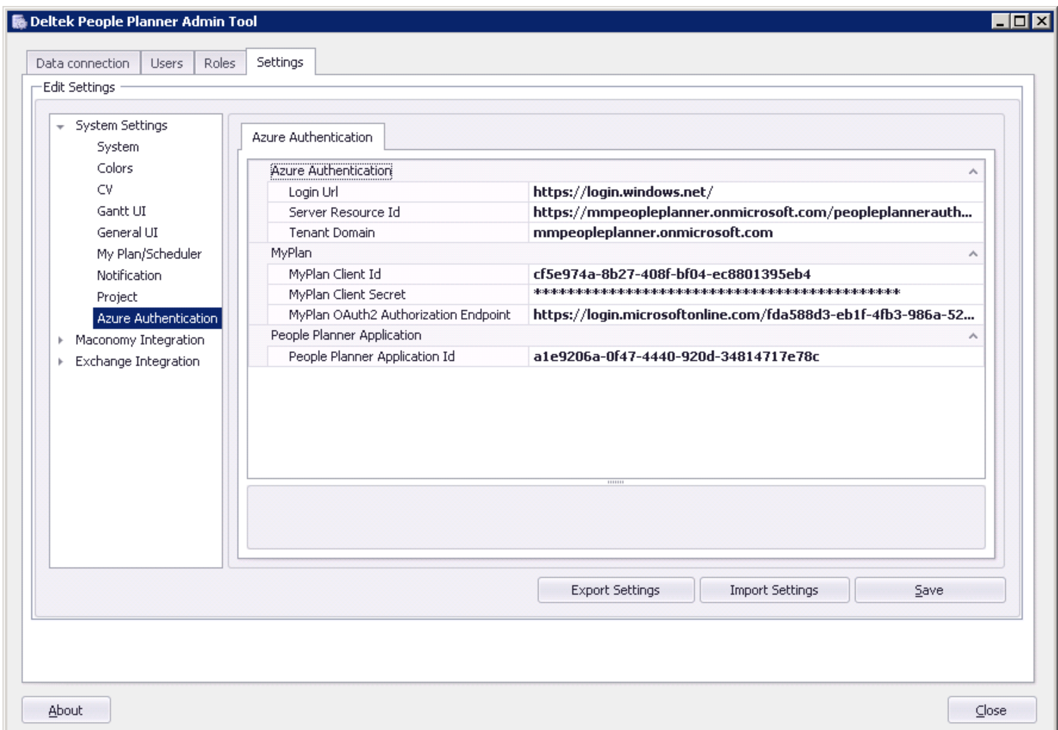
See Allow Access to the People Planner Azure Authentication Server for the steps to perform to set access privileges so that MyPlan can authenticate against the People Planner Azure Authentication Server.

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:

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

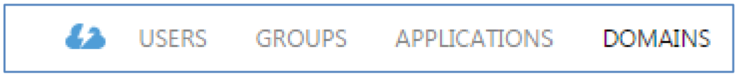


2. Enter values for the following in the Azure Authentication section:
   - **Login Url** — This should always be https://login.windows.net/ unless Microsoft changes the login URL.
   - **Server Resource Id** — This value should match the People Planner Authentication Server's App Id Uri. You can obtain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

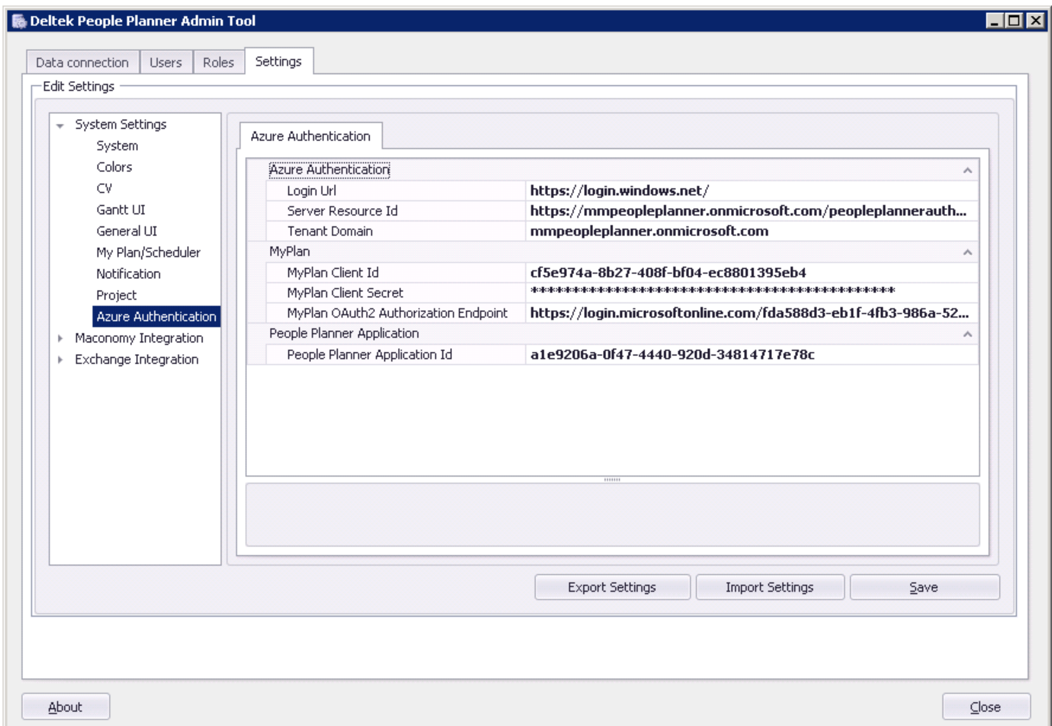


For example: mmpeopleplanner.onmicrosoft.com

Settings for the People Planner Application

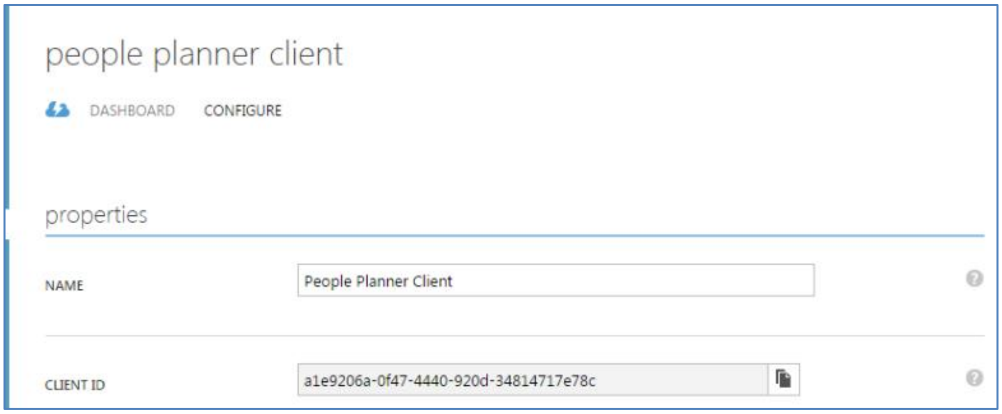
To configure the Admin settings to enable People Planner to authenticate using Azure:

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**.

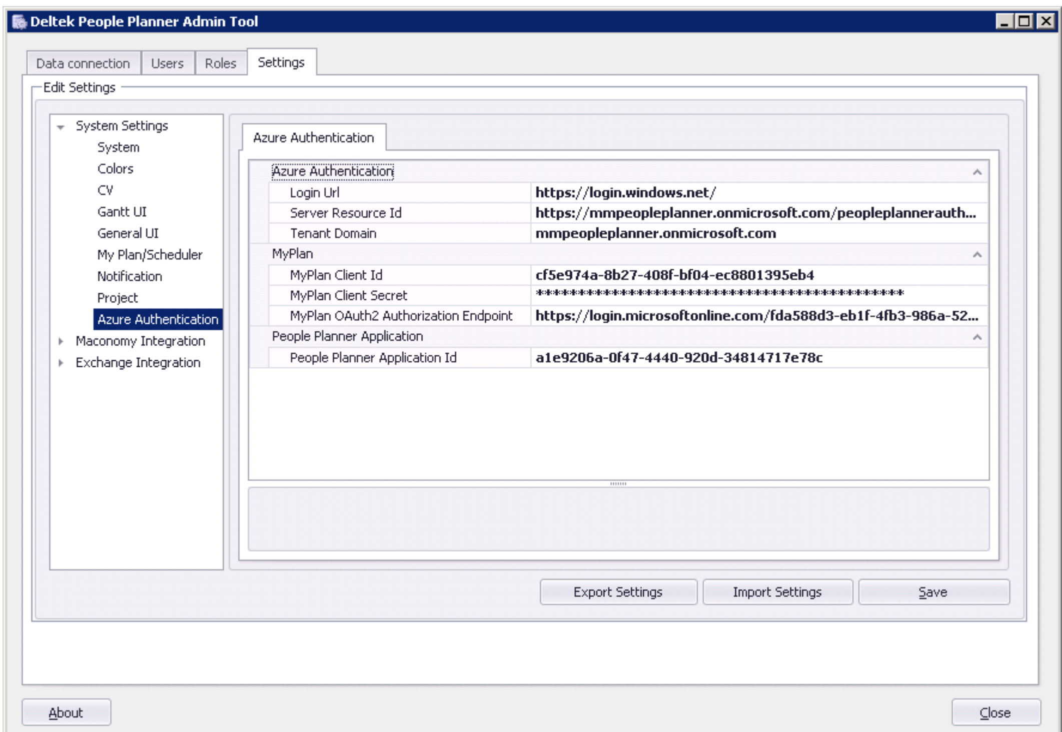
   This should match the application ID of the People Planner application in Azure. You can obtain this value by opening the People Planner application in Azure and navigating to the CONFIGURE tab.



Settings for the MyPlan Application

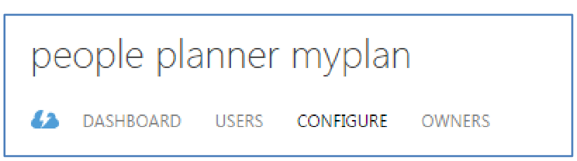
To configure the Admin settings to enable MyPlan to authenticate using Azure:

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.

Enable Support for LocalDB

People Planner supports the use of Microsoft SQL Server LocalDB to connect to databases.

This feature is intended for use in single-user setups, such as for a sales person who wants to demonstrate People Planner on his or her laptop.

To use this feature you must:

- Download and install LocalDB; you can obtain SqlLocalDB.msi from the Microsoft web site.

You use the Admin Tool to set this up.

Set Up Use of SQL Server LocalDB

To set up the use of LocalDB to connect to a People Planner database:

1. Access the **Admin Tool » Data connection** tab.
2. Select the **Microsoft SQL Server LocalDB** radio button.

   Selecting this button:

   - Changes the **Server name** field in the **Select database server** pane to a drop-down list of the available LocalDB instances.
   - Enables the ellipsis buttons in the **Connect to an existing or create a new database** pane.
   - Disables the **Select authentication** pane because user password authentication is not supported.
3. Choose the appropriate server from the **Server name** drop-down list.
4. Perform **one** of the following:

   a. For a new database, click the ... (ellipsis) button next to the **New database name** field to access a Save File dialog and specify the full path of the new database.

   b. For an existing database, click the ... (ellipsis) button next to the **Database name** field below the **Open an existing database** radio button to access an Open File dialog and select the database file to load.
5. Click **Close** to save the information and close the Admin Tool.

If you try to use LocalDB to connect to a People Planner database, and you receive the error message “No process is on the other end of the pipe” in Microsoft SQL Server, it is likely that the server that you are trying to connect to is unavailable or is not accepting remote connections. It can also indicate that the LocalDB process is busy.

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 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.

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

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

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 our 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.

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.

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.

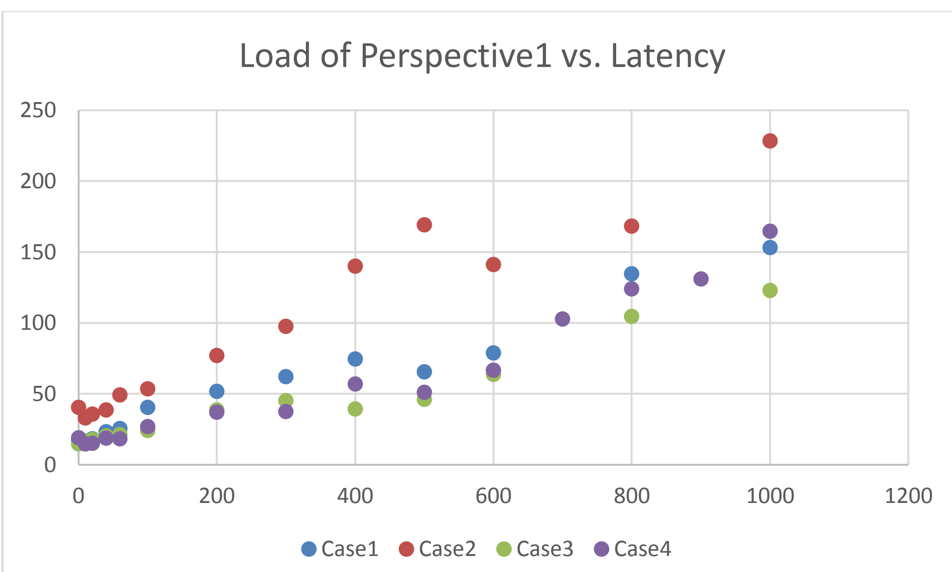
```
C:\>ping 10.4.8.231

Pinging 10.4.8.231 with 32 bytes of data:
Reply from 10.4.8.231: bytes=32 time=200ms TTL=126
Reply from 10.4.8.231: bytes=32 time=200ms TTL=126
Reply from 10.4.8.231: bytes=32 time=203ms TTL=126
Reply from 10.4.8.231: bytes=32 time=201ms TTL=126

Ping statistics for 10.4.8.231:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 200ms, Maximum = 203ms, Average = 201ms

C:\>_
```

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.

```
C:\>tracert 10.4.8.231

Tracing route to cphsdev04.ads.deltek.com [10.4.8.231]
over a maximum of 30 hops:

  1   100 ms   100 ms   100 ms  10.4.24.91
  2   201 ms   201 ms   201 ms  10.4.24.3
  3   201 ms   201 ms   201 ms  cphsdev04.ads.deltek.com [10.4.8.231]

Trace complete.

C:\>
```

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).



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.

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.

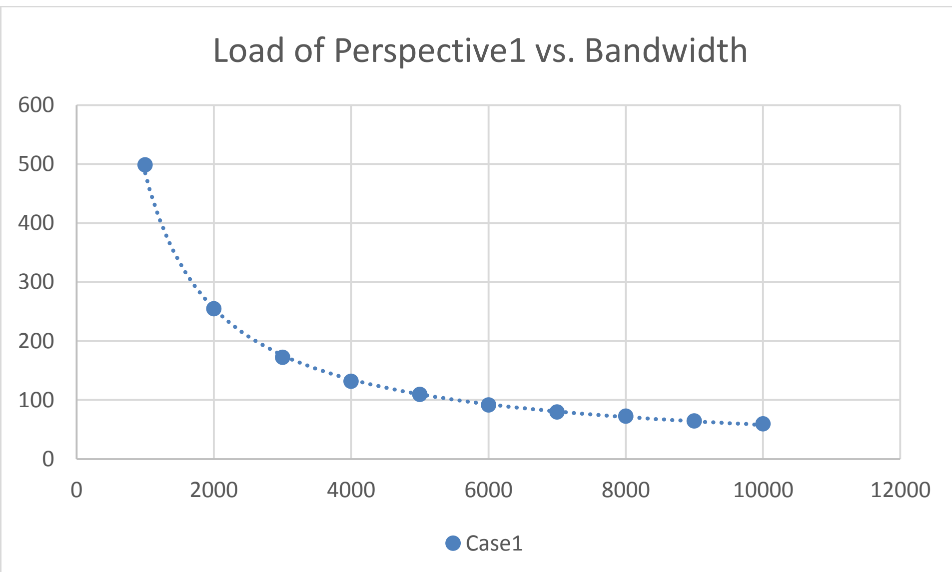
The graph illustrates how the response time grows proportionally with an increase in latency. It also shows that a latency of approximately 100 milliseconds results in a doubled response time—that is, the performance is halved.

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).

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:

- The SQL Server is hosted in the Cloud.
- 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.

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.

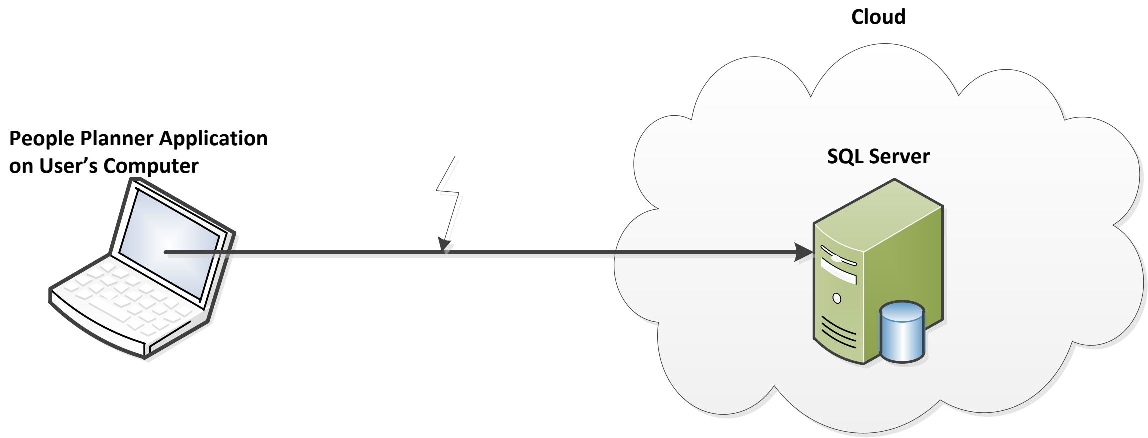
Arguments against such a setup:

- 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.

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

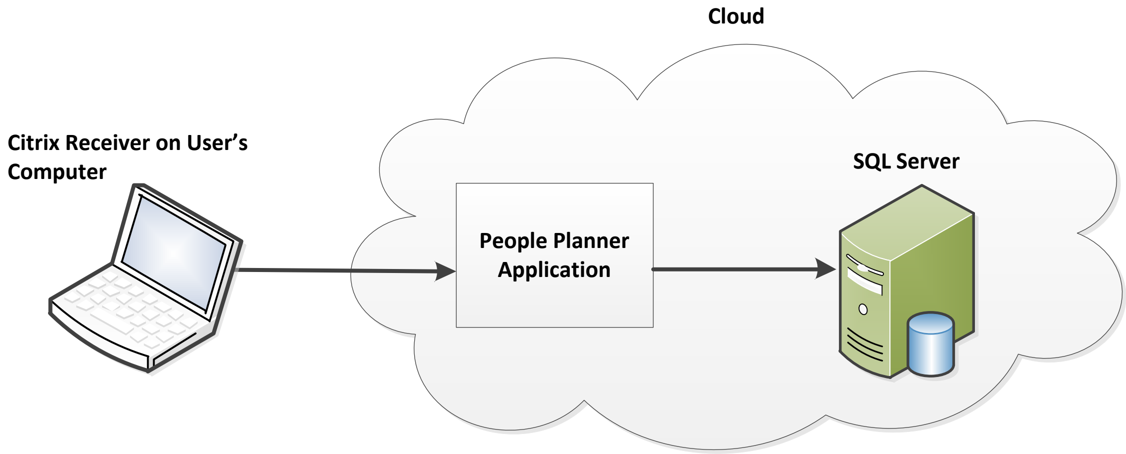
In this setup, both the People Planner application and the SQL Server are hosted in the Cloud. The users connect to the People Planner application using either RDS (Remote Desktop) or Citrix.

Citrix is officially supported as of People Planner 3.6.1.

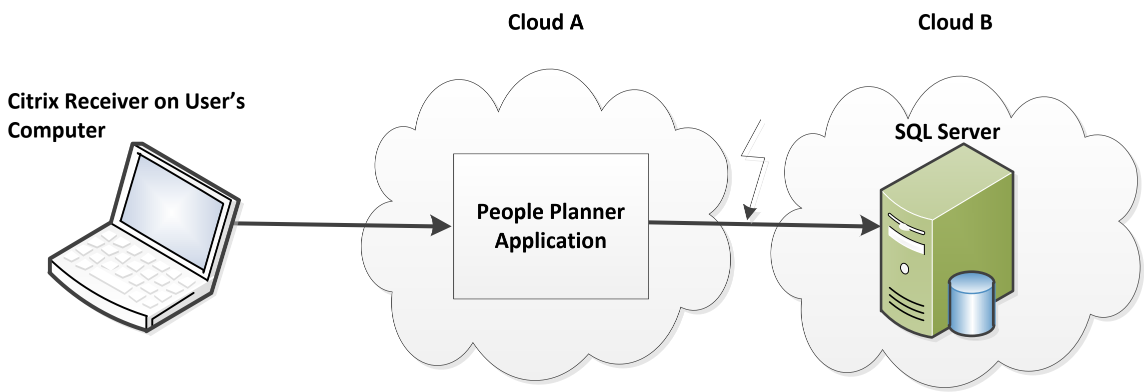
The People Planner application and the SQL Server can be hosted by the same Cloud provider, or by two different providers.

- 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:

- The People Planner data flows directly between the People Planner application and the SQL Server.
- 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:

- The customer has offices in different geographical locations.
- 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.

- Servers and network can be upgraded as needed.
- 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:

- 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

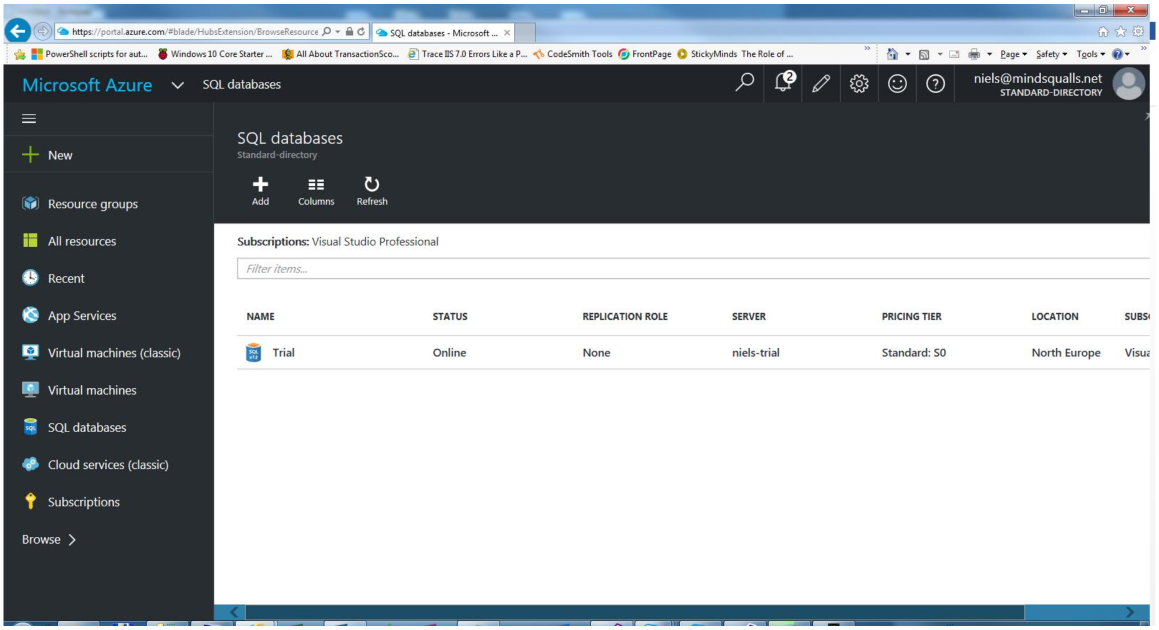
This process consists of two steps:

1. Create an empty database.
2. Update this database to a People Planner database.

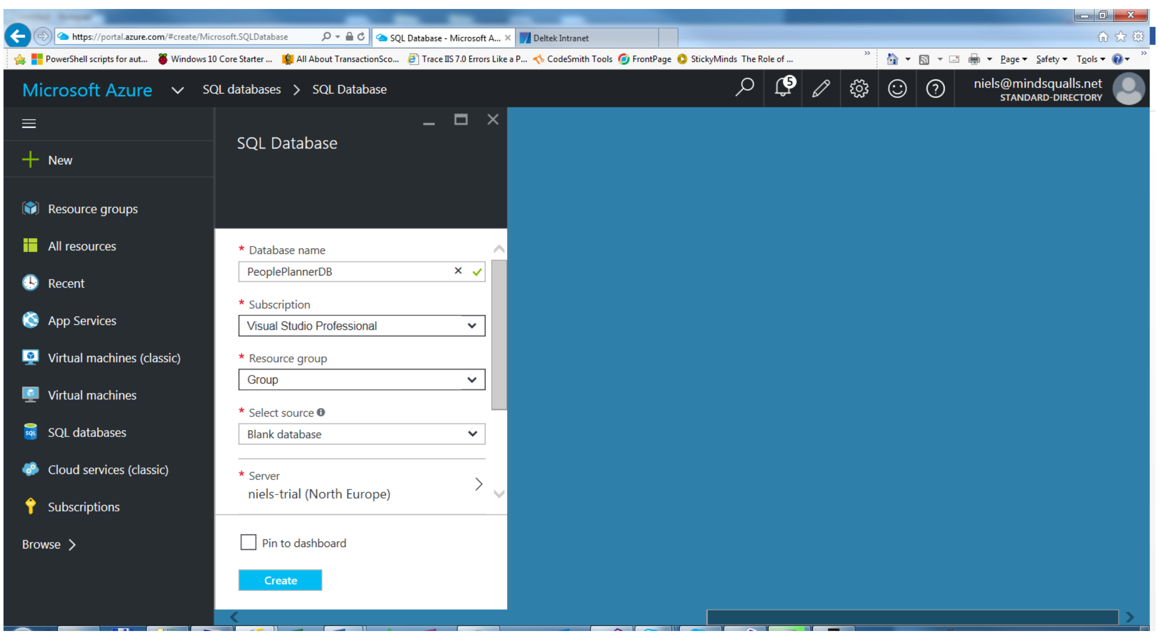
Create an Empty Database using the Azure Portal

To create an empty database using the Azure Portal:

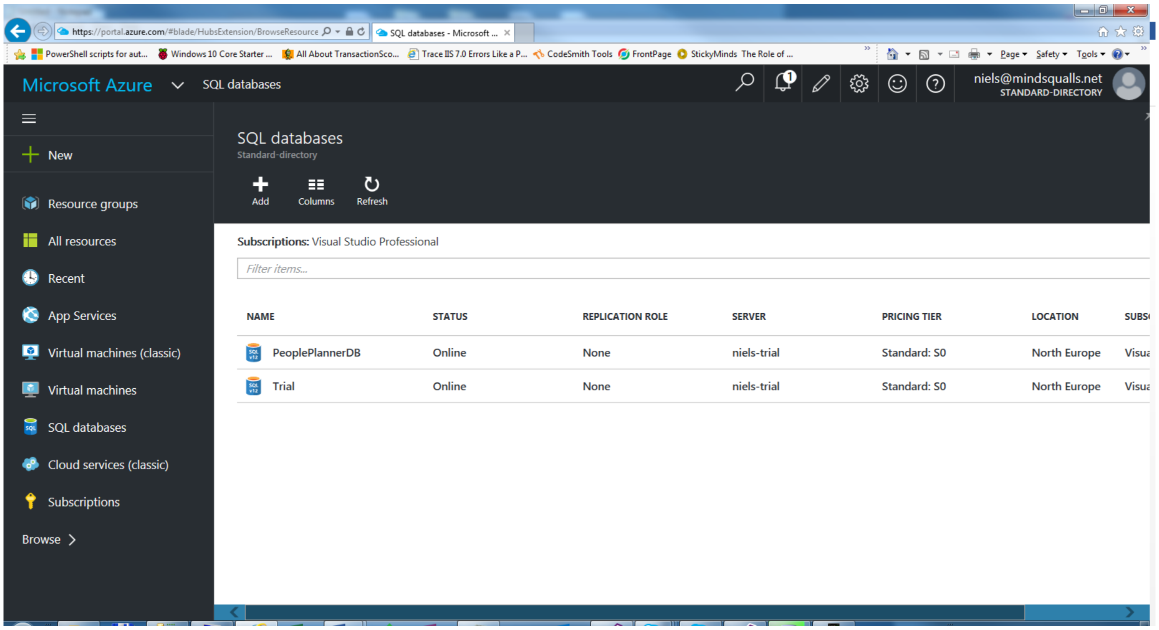
1. Log in to the Azure portal, and navigate to the SQL databases tab.



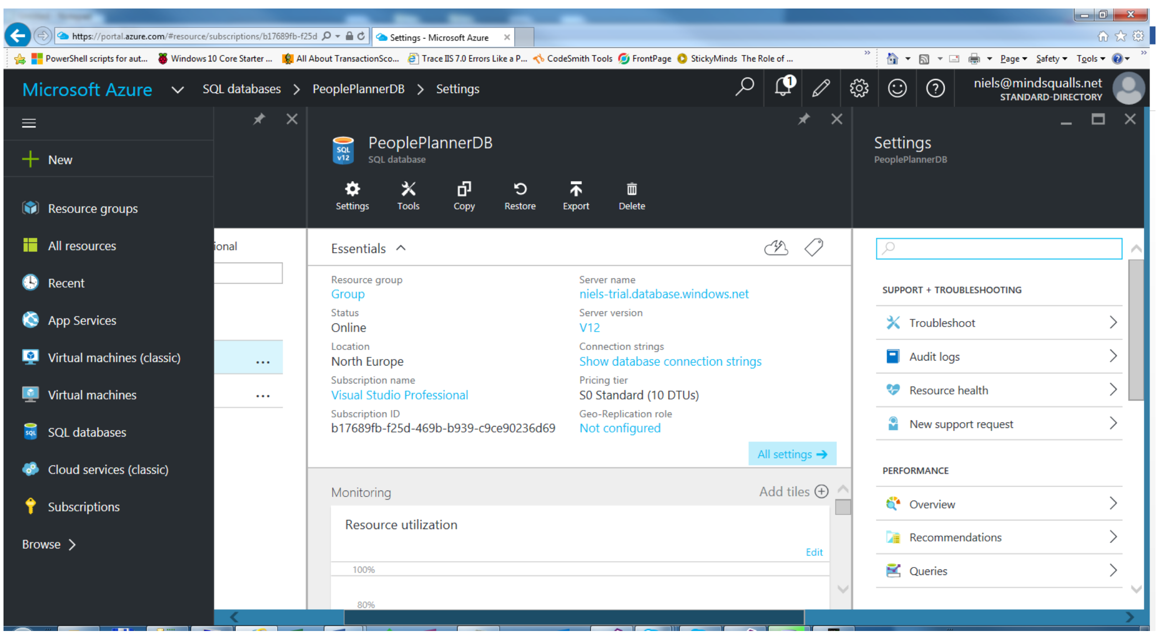
2. Click the **Add** button to create a blank database.



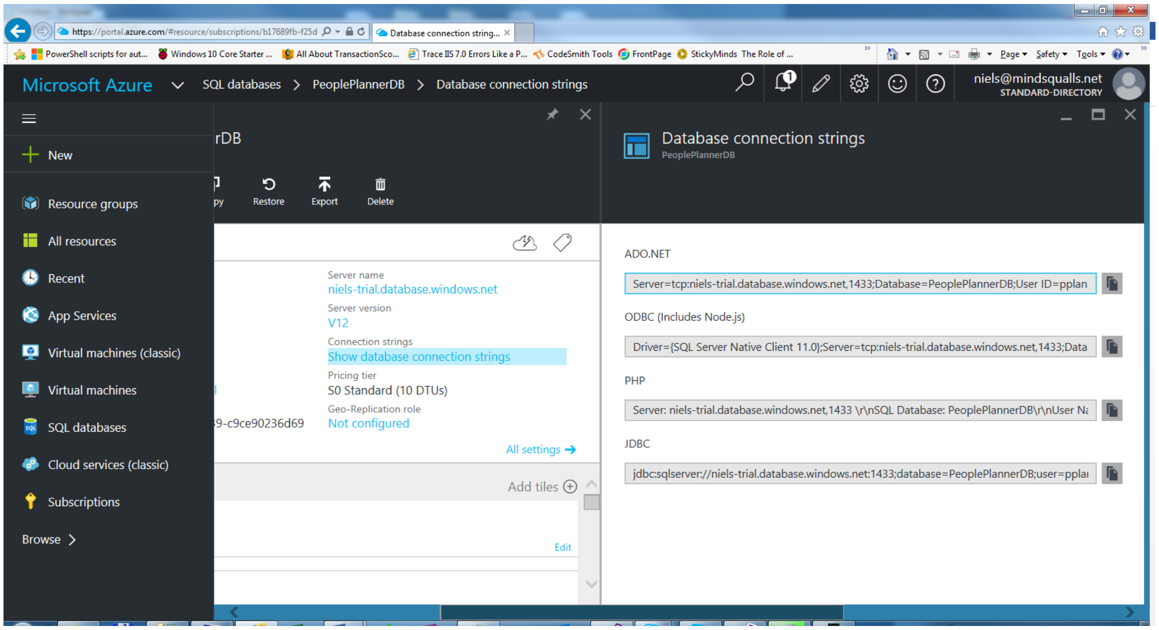
3. Give the database a name, such as PeoplePlannerDB, and click the **Create** button to create it. This may take a few minutes; you must click the **Refresh** button.



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



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



6. Take 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=F
alse;Connection Timeout=30;
```

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

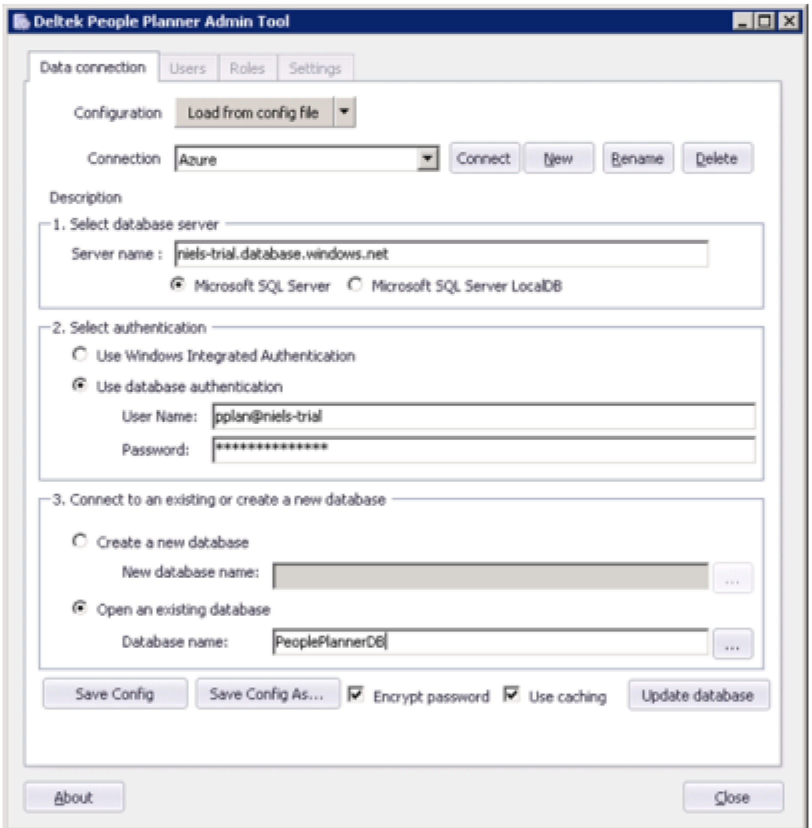
You need the yellow-highlighted values in the preceding step for the next part.

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.

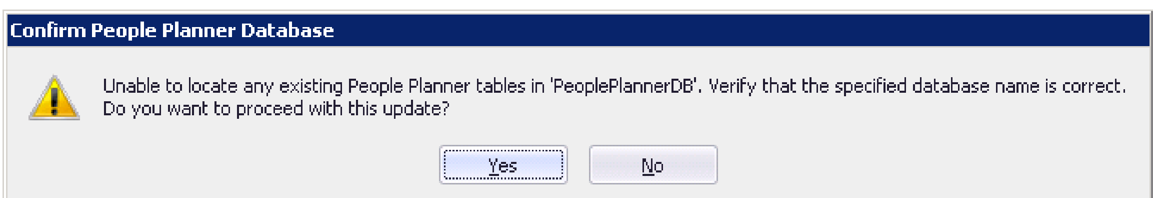
To update the empty database into a People Planner database:

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

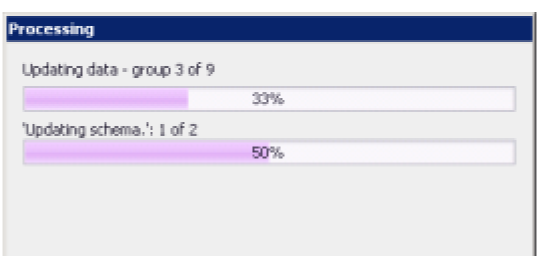


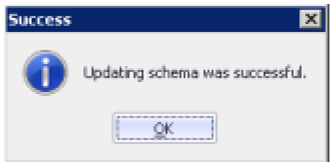
2. Click the **Update database** button.

   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.



3. 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

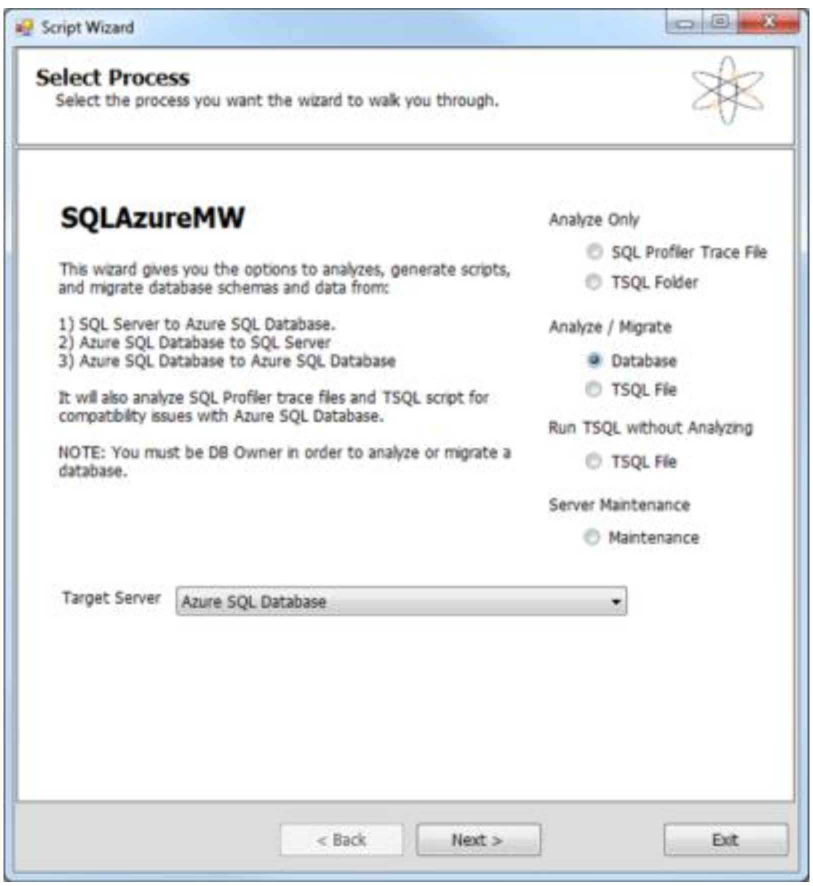
If you already have an existing People Planner database, you can upload it to Azure by using the SQL Database Migration Wizard tool.

You can download SQLAzureMW from CodePlex:

https://sqlazuremw.codeplex.com/

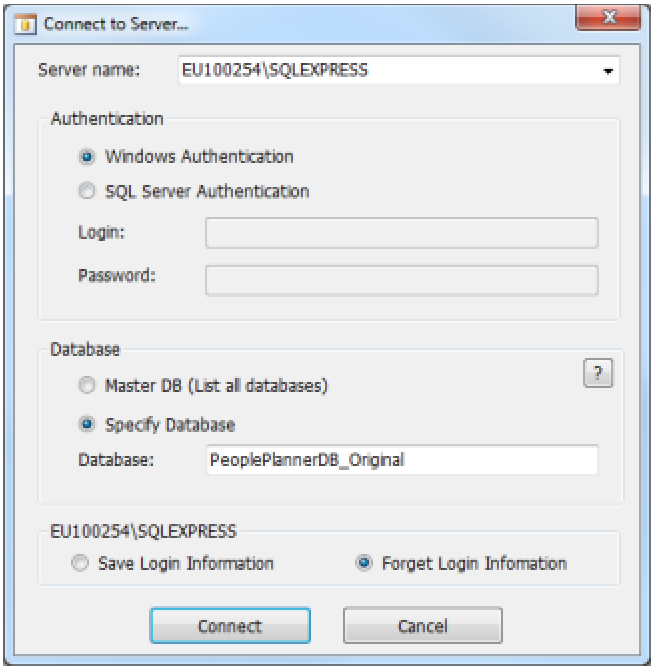
To use the Migrate Database Wizard to upload an existing People Planner database to Azure:

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

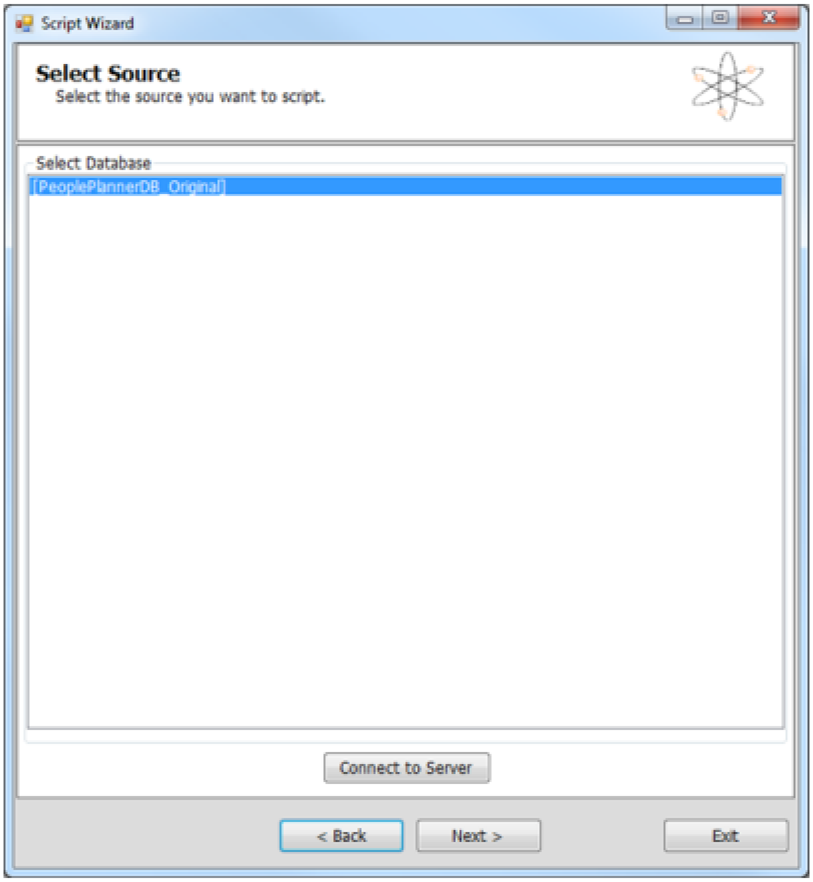


4. Click **Next**. The Connect to Server… dialog is displayed.

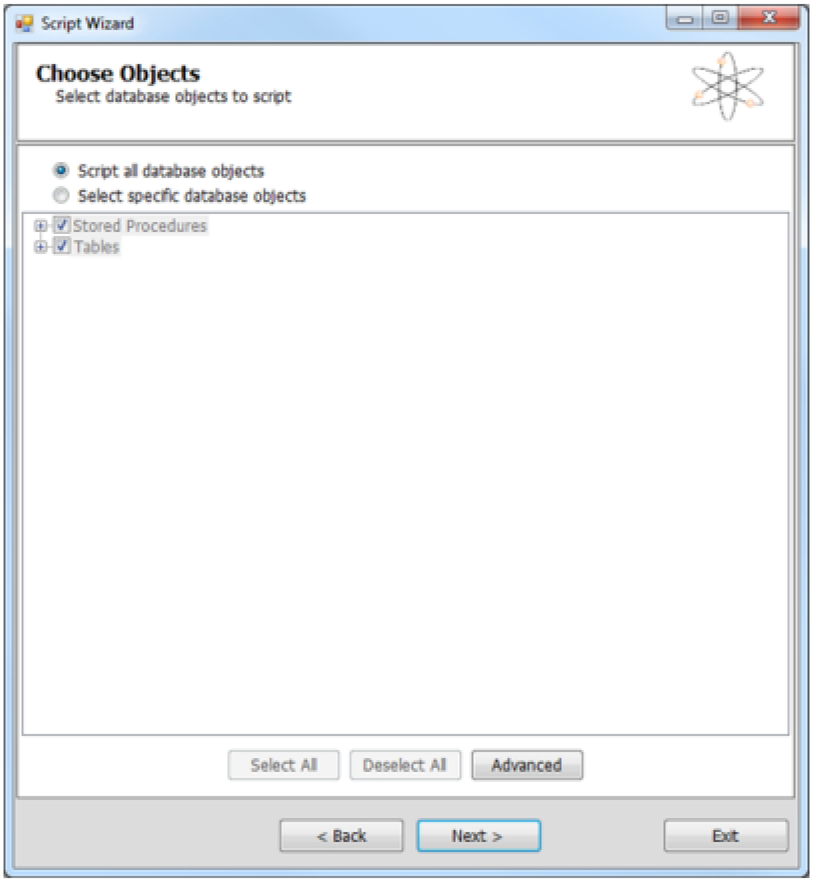
5. Enter the login details for the source database in that dialog.
6. Enter the name of the SQL server where the source database is currently hosted in the Server name field.
7. Enter the authentication credentials for accessing the database under Authentication.
8. Select the **Specify Database** radio button under Database and enter the database name in the Database field.



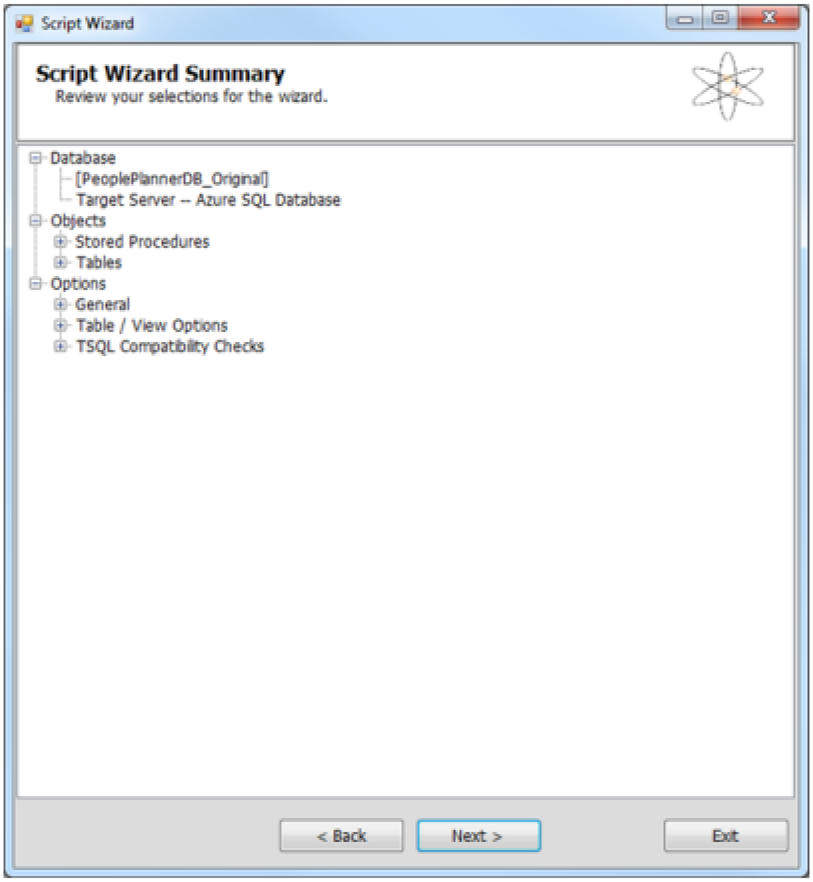
9. Click **Connect**.



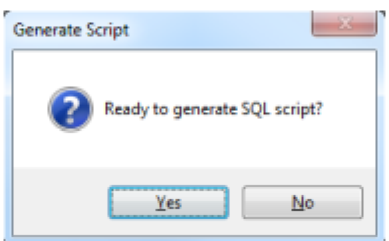
10. Click **Next**. The Choose Objects dialog is displayed, where you choose those parts of the database that you want to migrate.
11. Select the **Script all database objects** radio button.



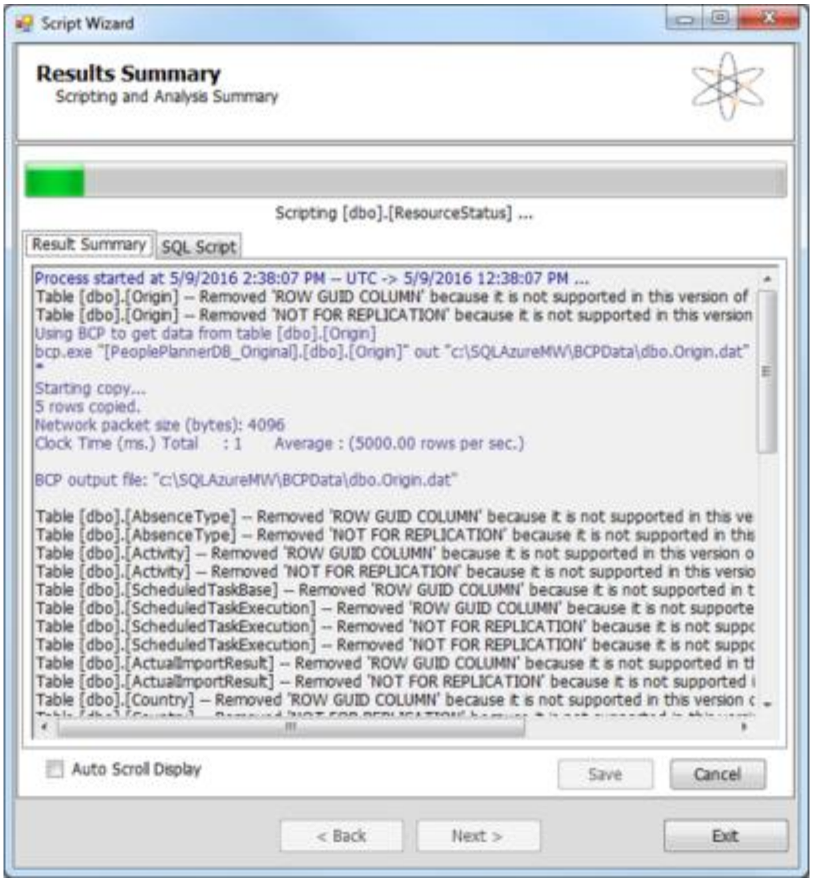
12. Click **Next**. The Script Wizard Summary view lists the details of the migration job.



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

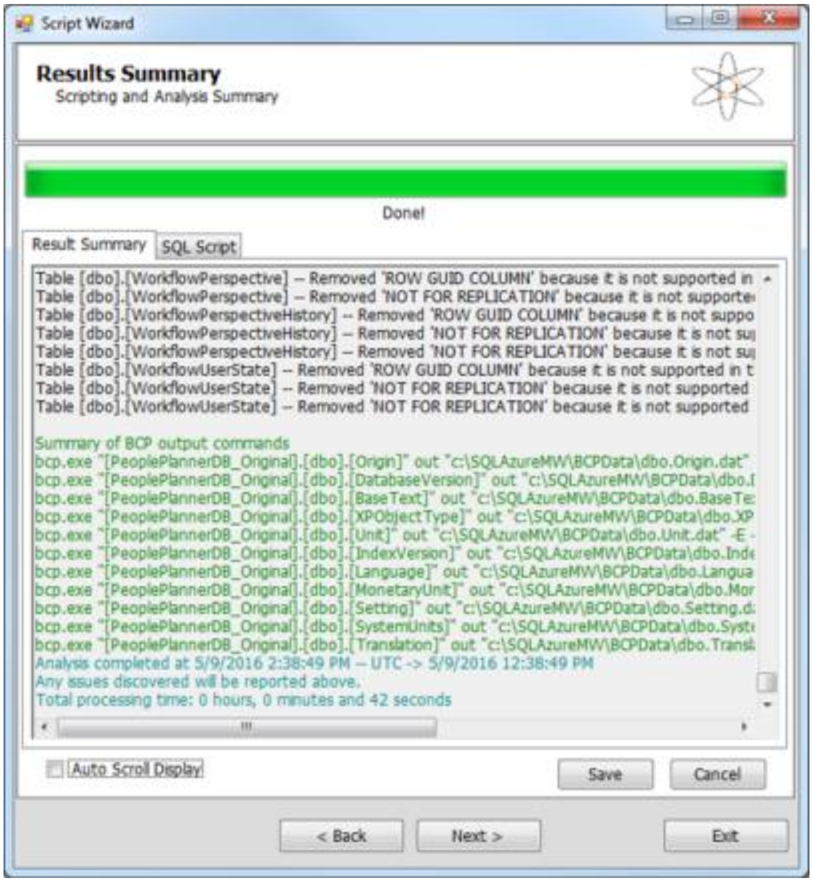


The wizard now works on creating an SQL script for the migration.



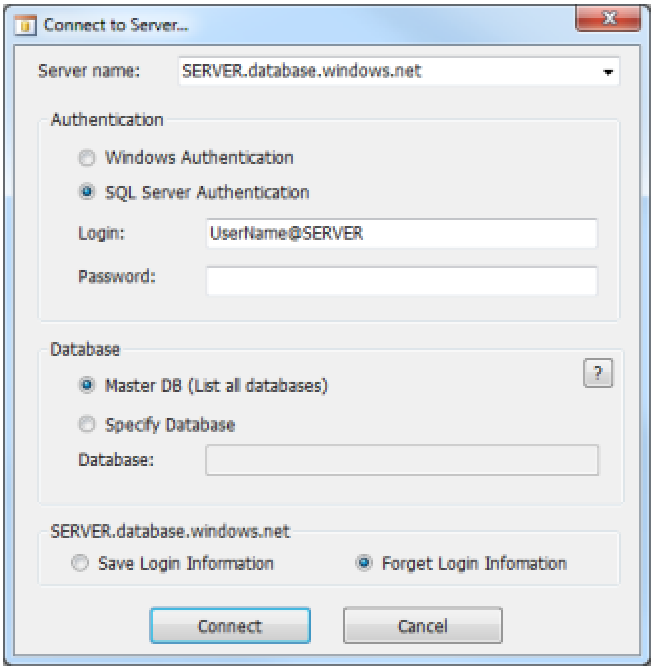
As part of the process, the tool does some deletions: “Removed ‘ROW GUID COLUMN” and “Removed ‘NOT FOR REPLICATION.’” This occurs because Azure does not support these. The removal of these fields does not affect People Planner.

15. Wait for this process to complete.



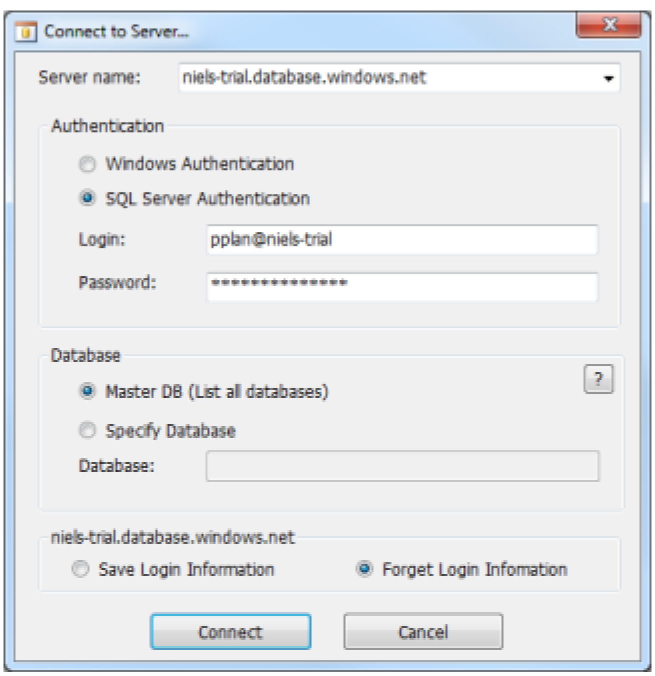
16. Click **Next**.

    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.

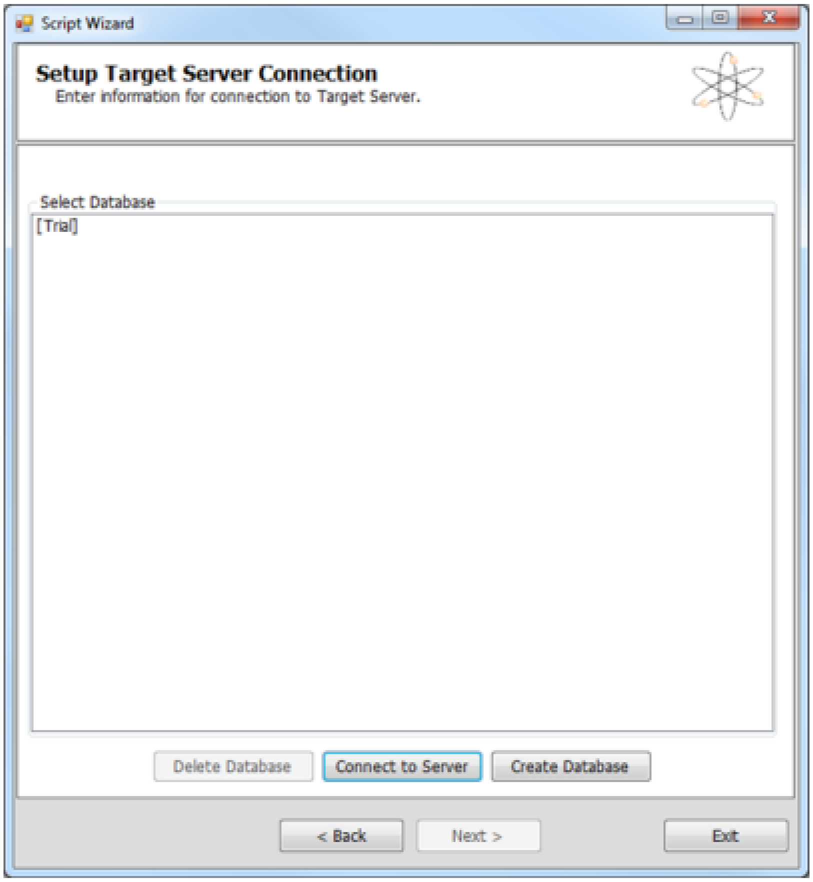


17. Correct the server name.
18. Correct the authentication credentials.
19. Select the **Master DB** radio button under Database.

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.

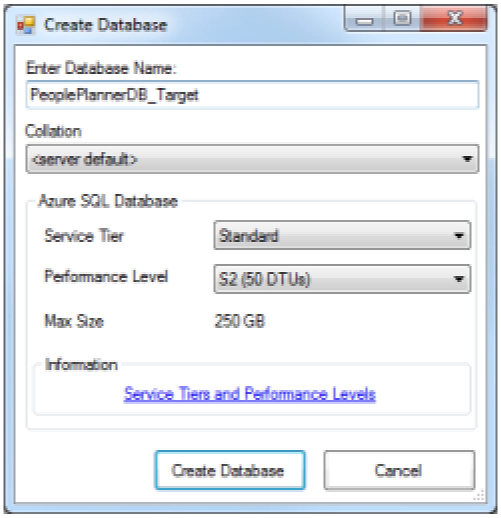


20. Click **Connect**.

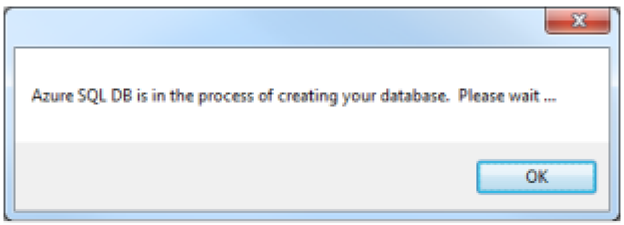


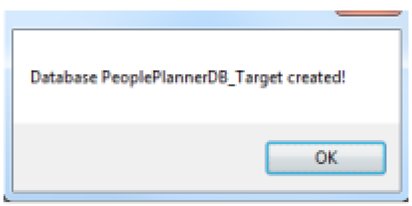
21. Click **Create Database**.
22. Enter a name for the target database in the Enter Database Name field.
23. Select a **Service Tier** and **Performance Level** from the dropdowns under Azure SQL Database.

These are specified by your Azure-subscription.

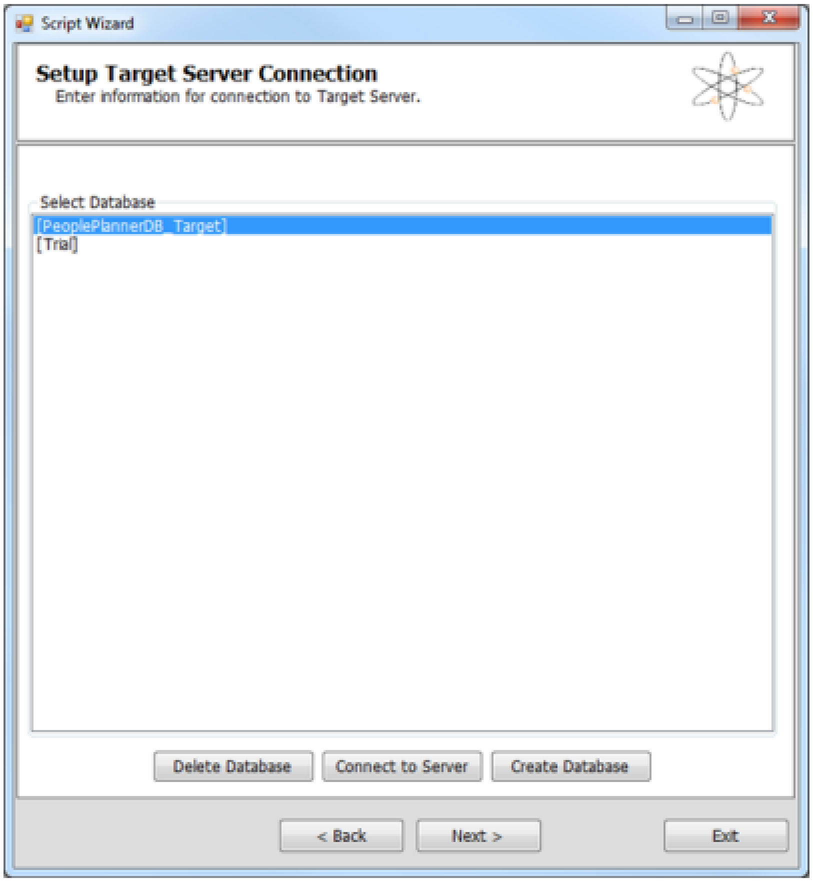


24. Click **Create Database**. Azure creates the database, which takes a few moments.

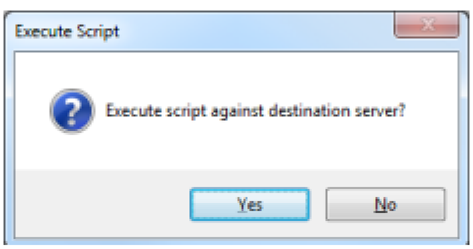




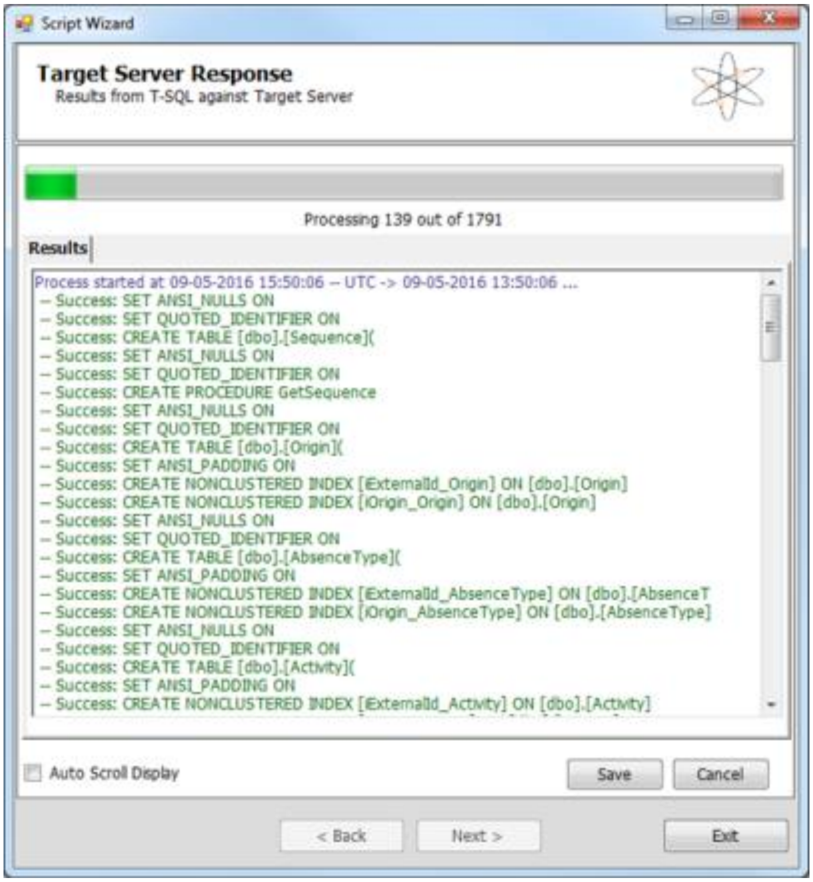
25. Click **OK**, and then click **OK** once more. The Script Wizard displays a list of the available databases.
26. From this list, select the database that you just created.

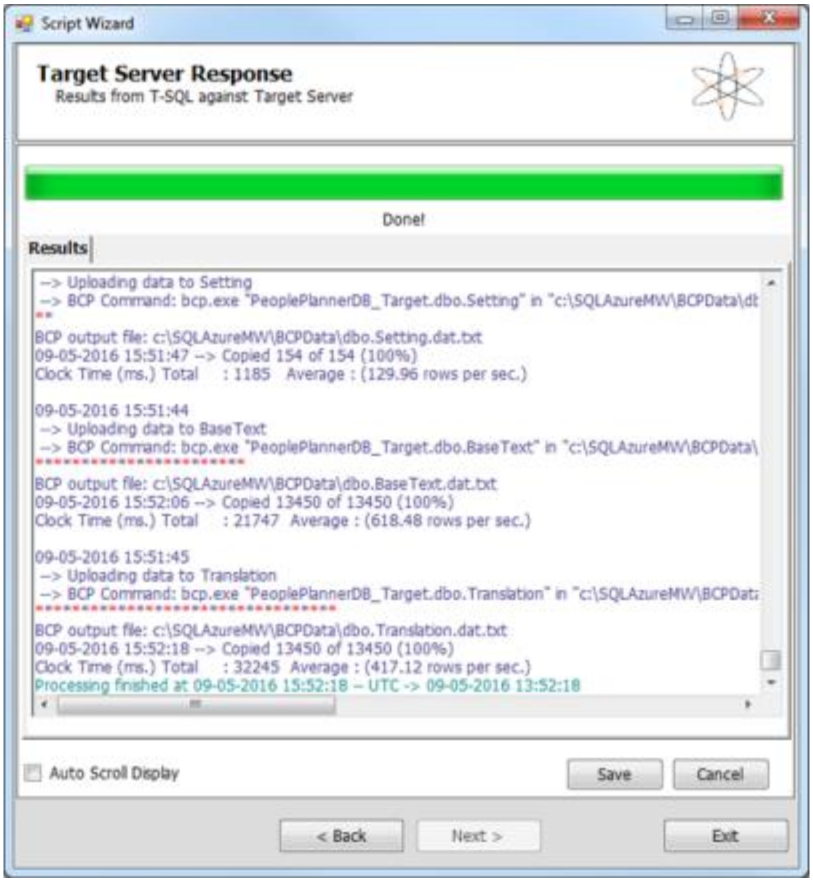


27. Click **Next**. The wizard again asks you for permission to continue.
28. Click **Yes**.



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 [ExternalId_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 [ExternalId_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 [ExternalId_Activity] ON [dbo].[Activity]
Auto Scroll Display
Save
Cancel
< Back
Next >
Exit



29. 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.

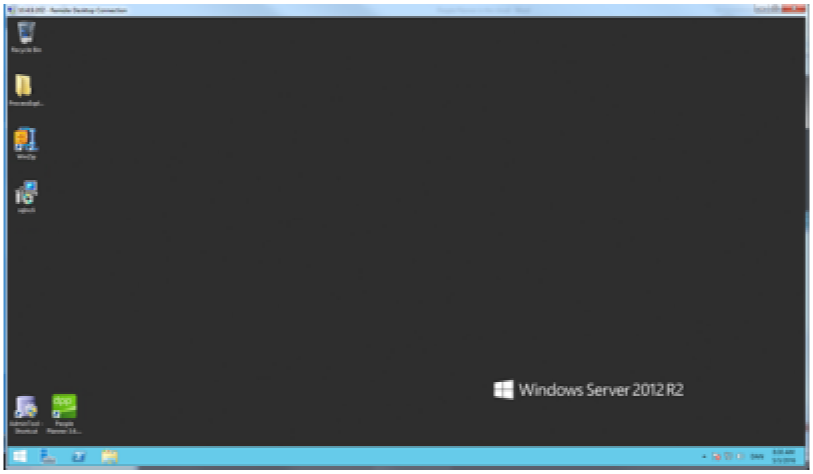
In such a setup, the People Planner software is installed on the Citrix Server, and the user connects to it using the Citrix Receiver application.

Install and Configure the People Planner Software

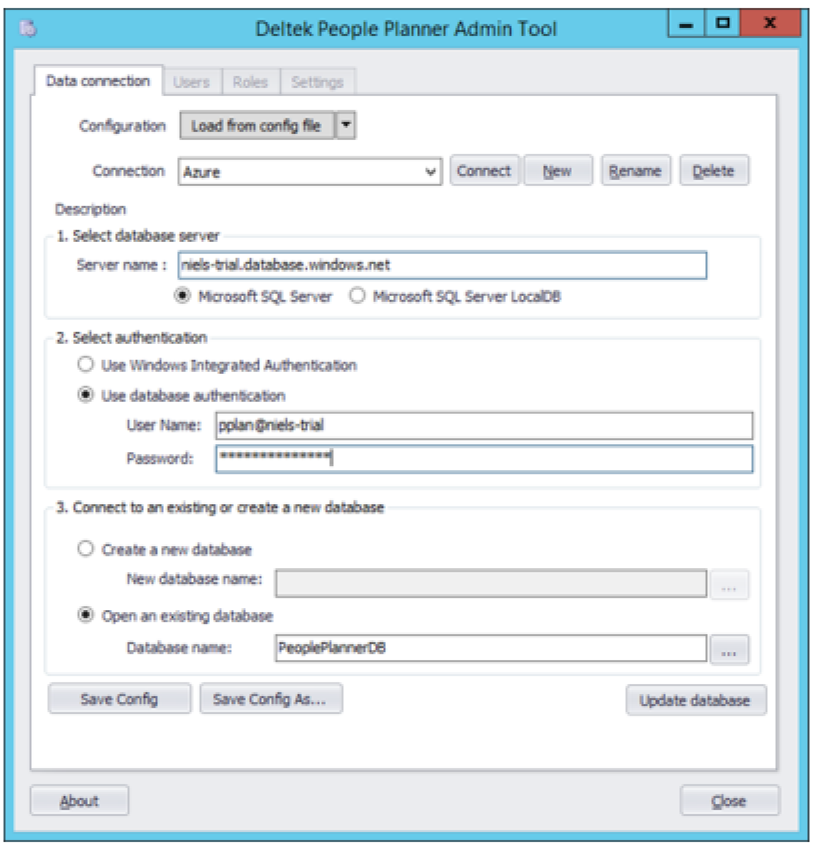
This procedure installs and configures the People Planner software—both the People Planner application and the Admin Tool.

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

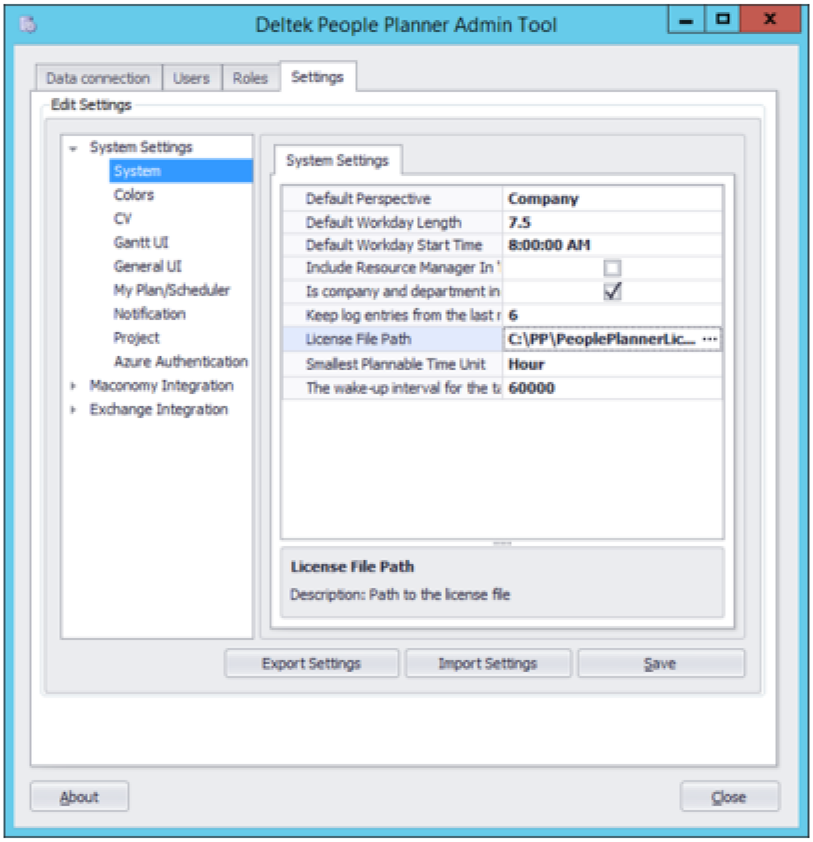
1. Use Remote Desktop to log in to the Citrix Server.



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 be running 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.

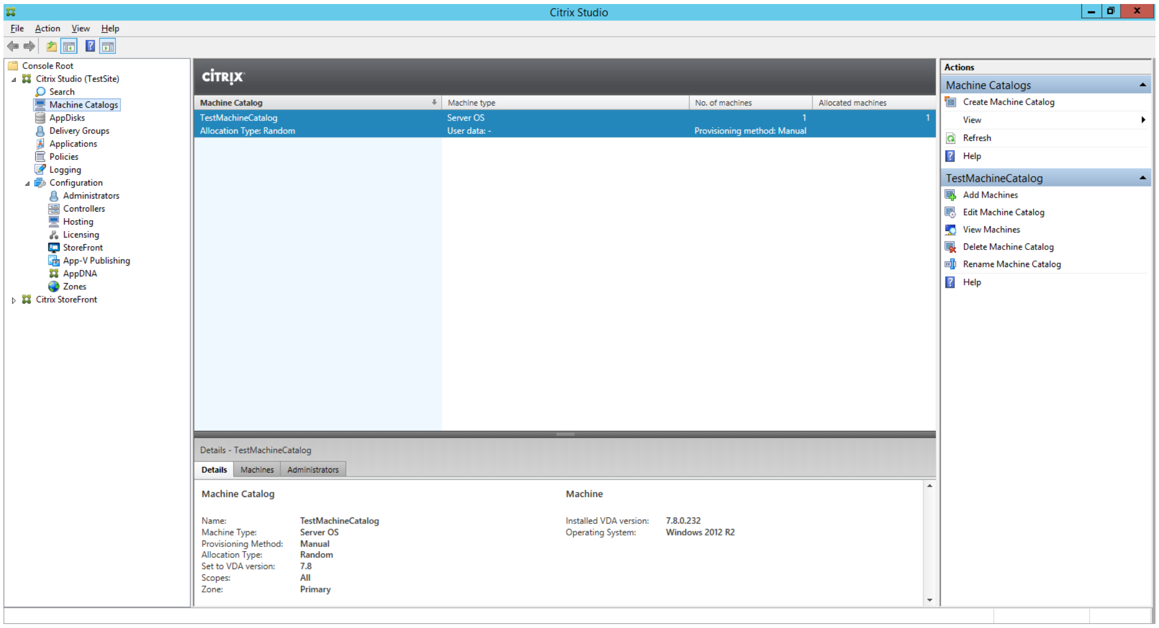


Publish the People Planner Application to the Users

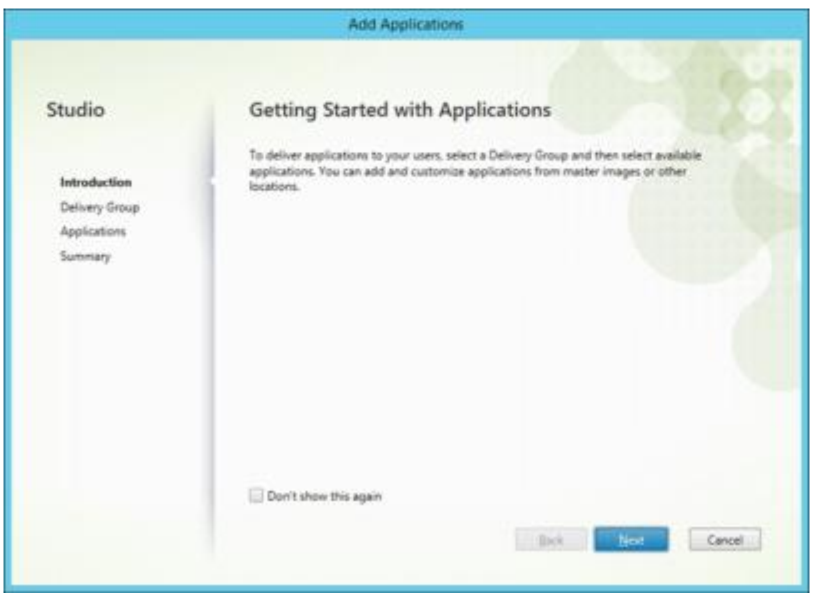
Now that you have installed and configured the People Planner application, the next step is to make the People Planner application available to all of the users.

To publish the People Planner application to the users:

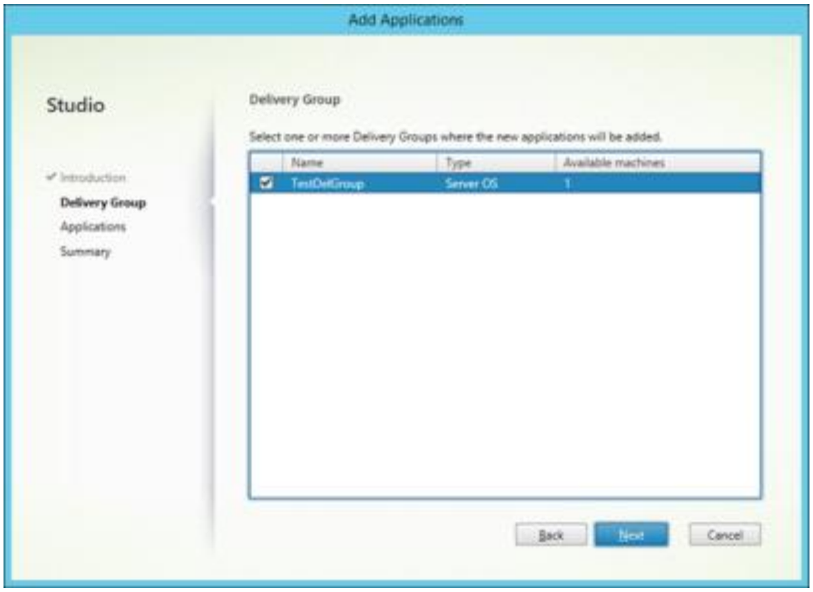
1. Start the Citrix Studio application.



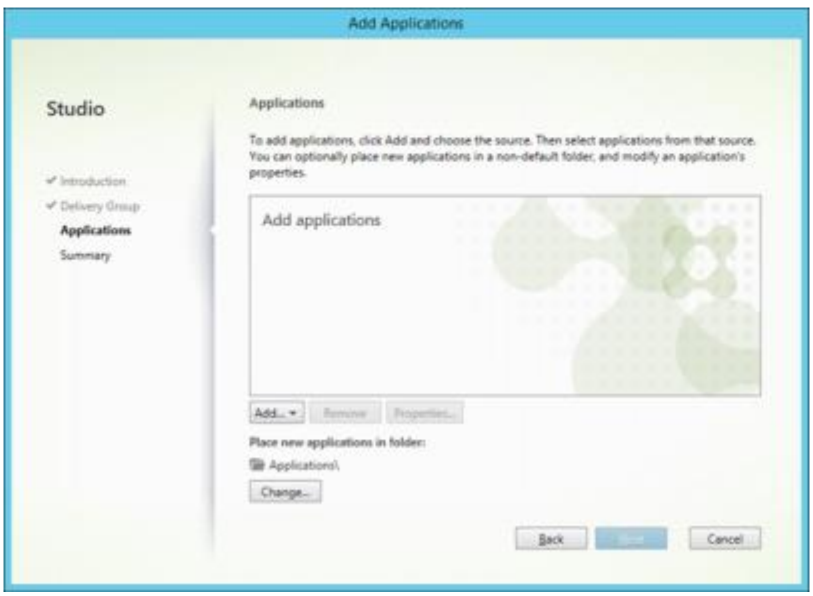
2. Right-click on **Applications** in the left-hand pane. This opens a context menu.
3. Click **Add Application**.



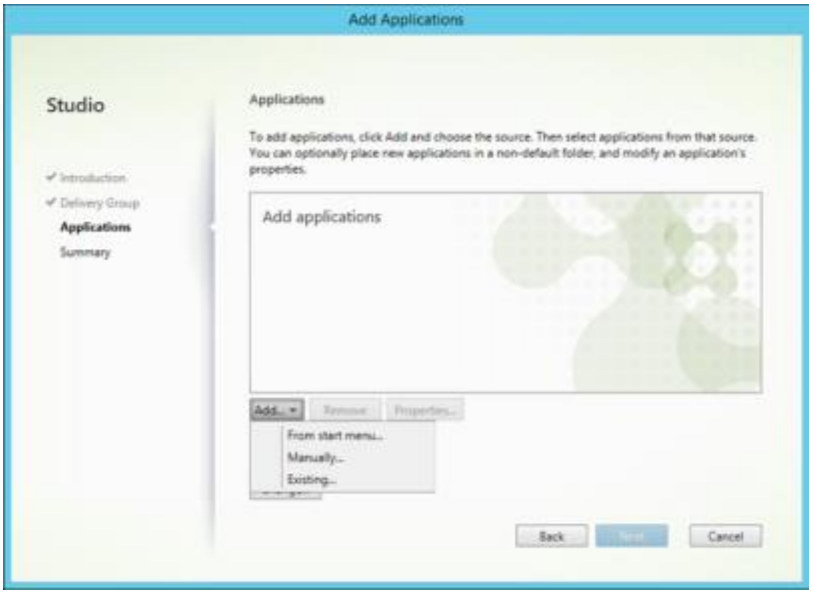
4. Click **Next**.



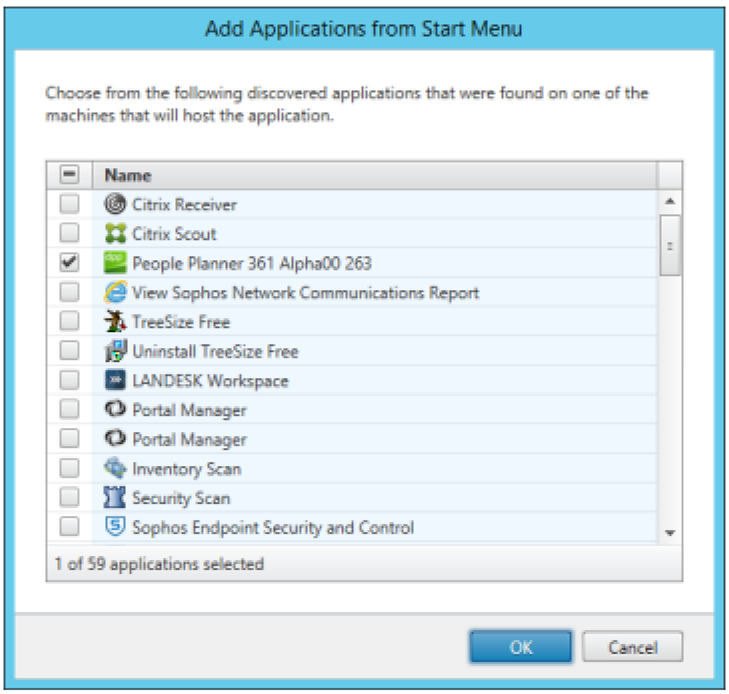
5. Select the check box under **Delivery Group** for the group where you want to add the application; in the example it is TestDelGroup.
6. Click **Next**.



7. Click **Add** and select **From start menu…** from the Add… dropdown.



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

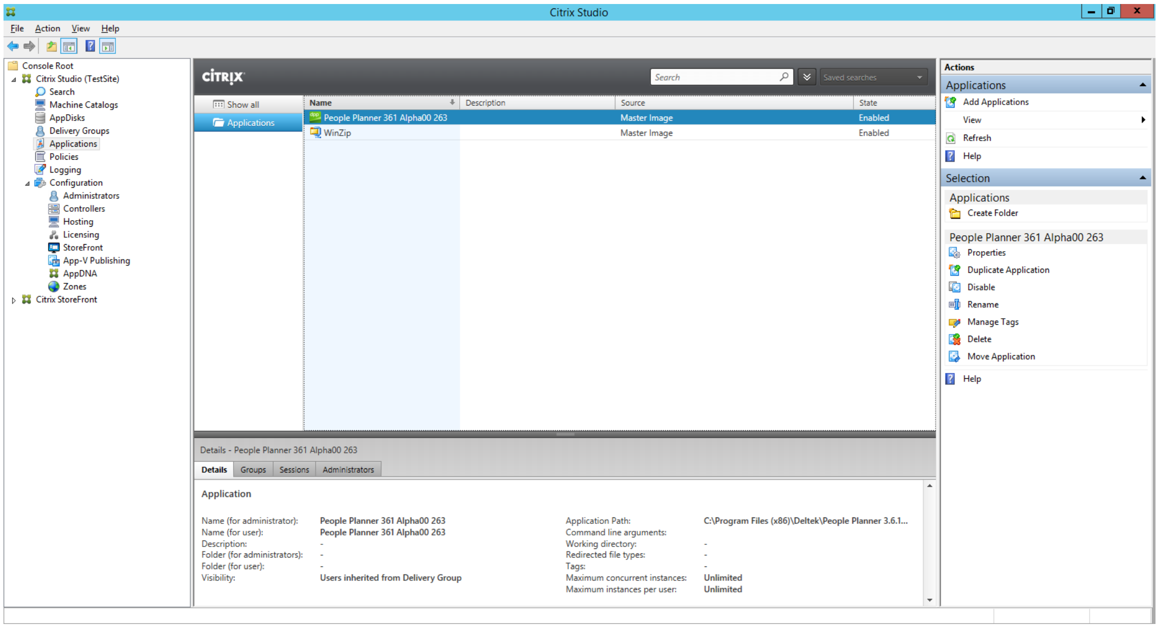


8. Select the **People Planner** application.

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

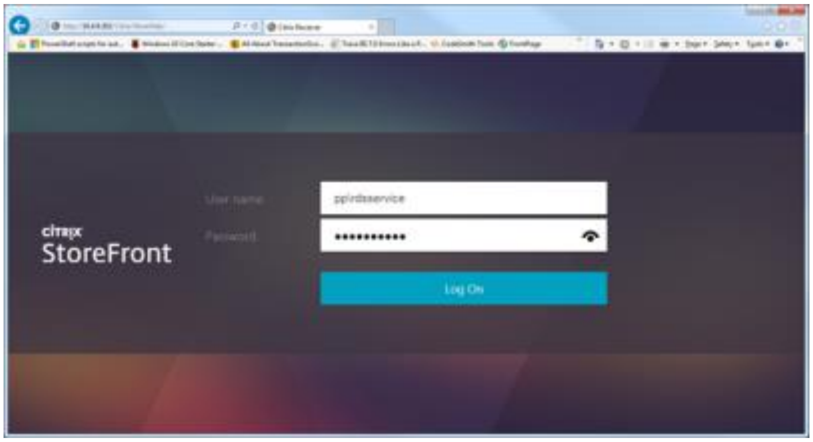
To verify that the installation succeeded, perform the following procedure.

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:

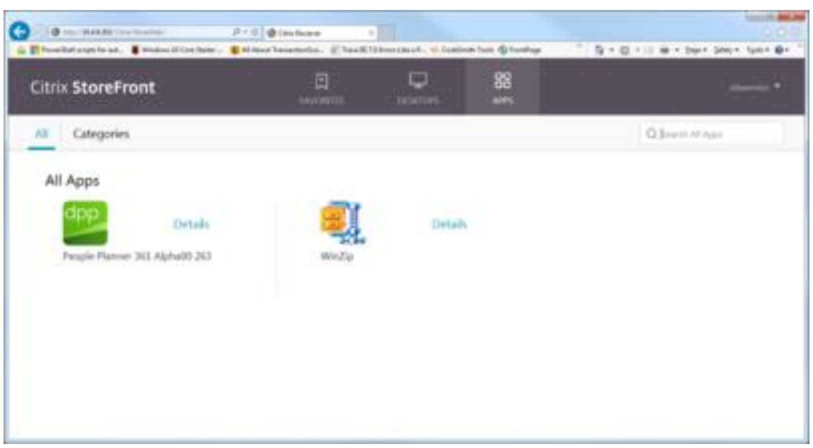
1. Open a browser and navigate to the URL of the Citrix Receiver.
2. In the login form, enter the credentials that you used when you installed People Planner.

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.



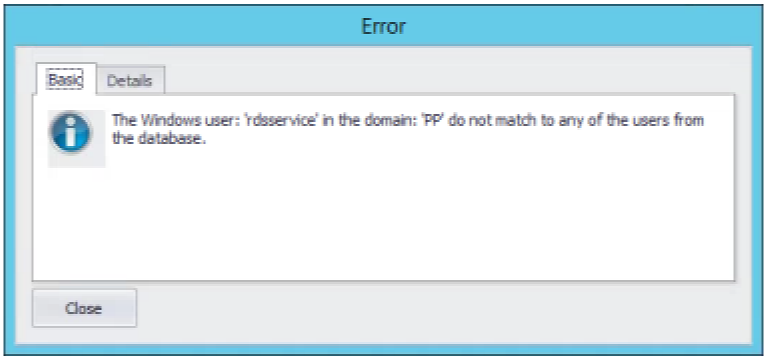
When you log in, the Citrix StoreFront is displayed.

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.

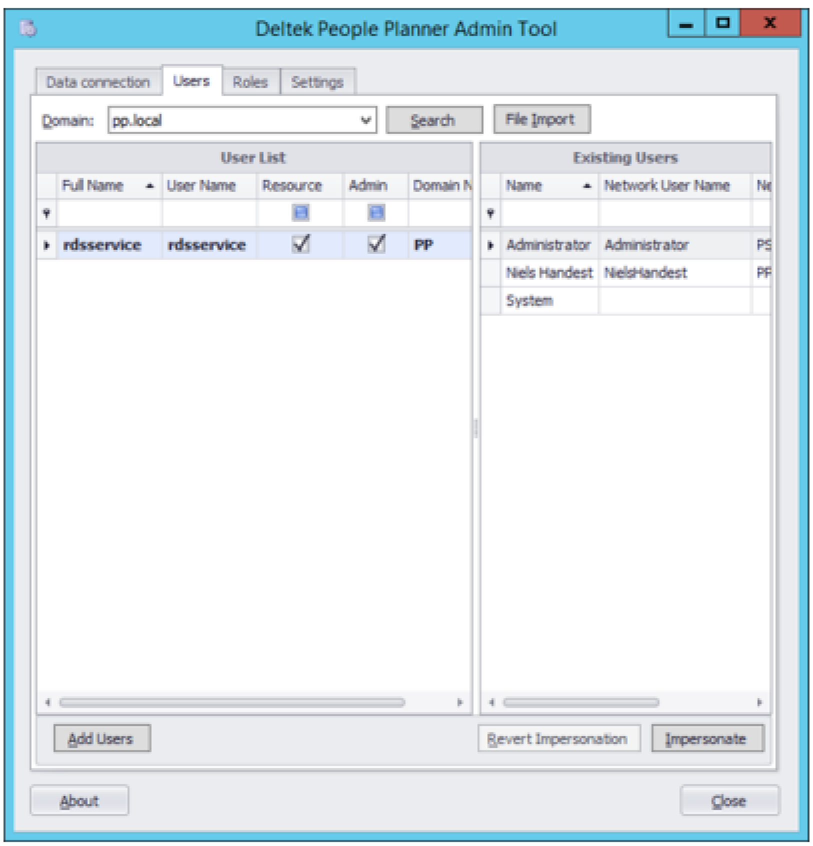
   Unless you have already added the account as a user in the People Planner database, you get the usual error message that indicates that the user does not exist in People Planner.



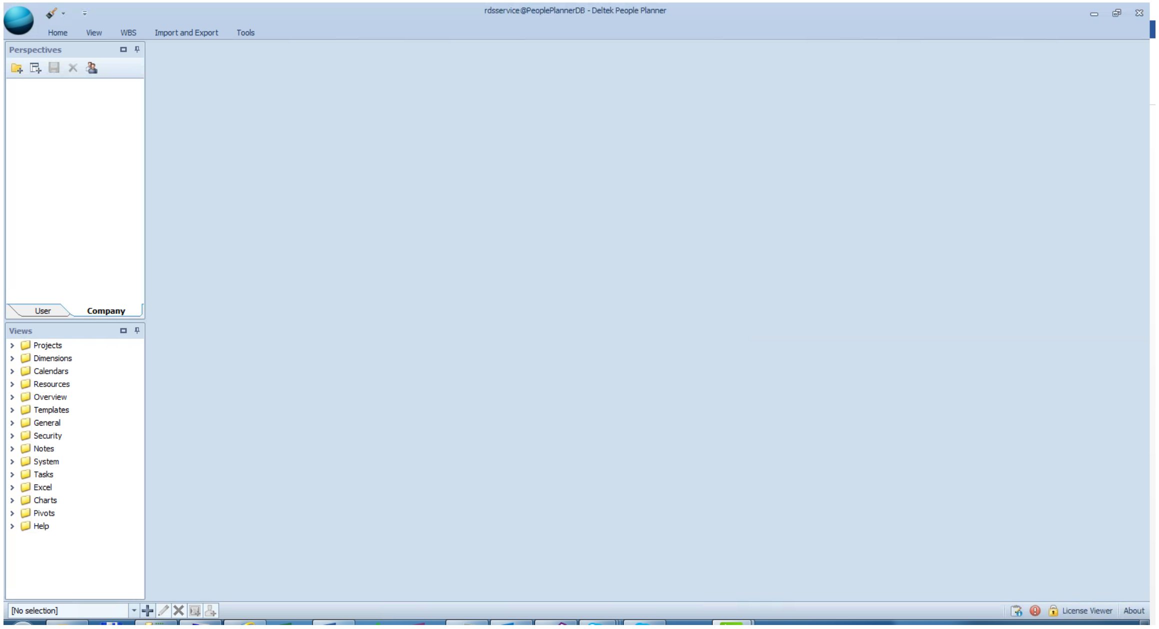
This is proof that People Planner is running and can connect to the database. However, there could still be an issue with the license file; the only way to confirm that the license file is in order is to successfully complete a full login to the People Planner application.

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

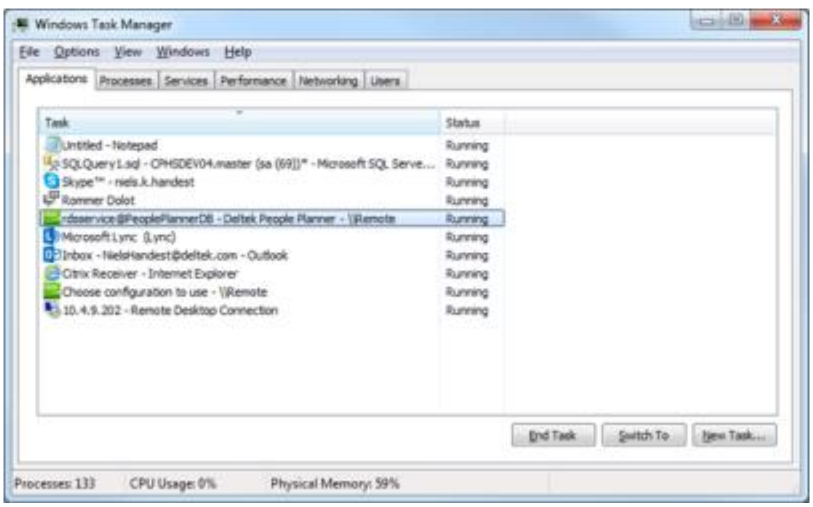
The Users tab was a reorganized in People Planner 3.6.1.



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.

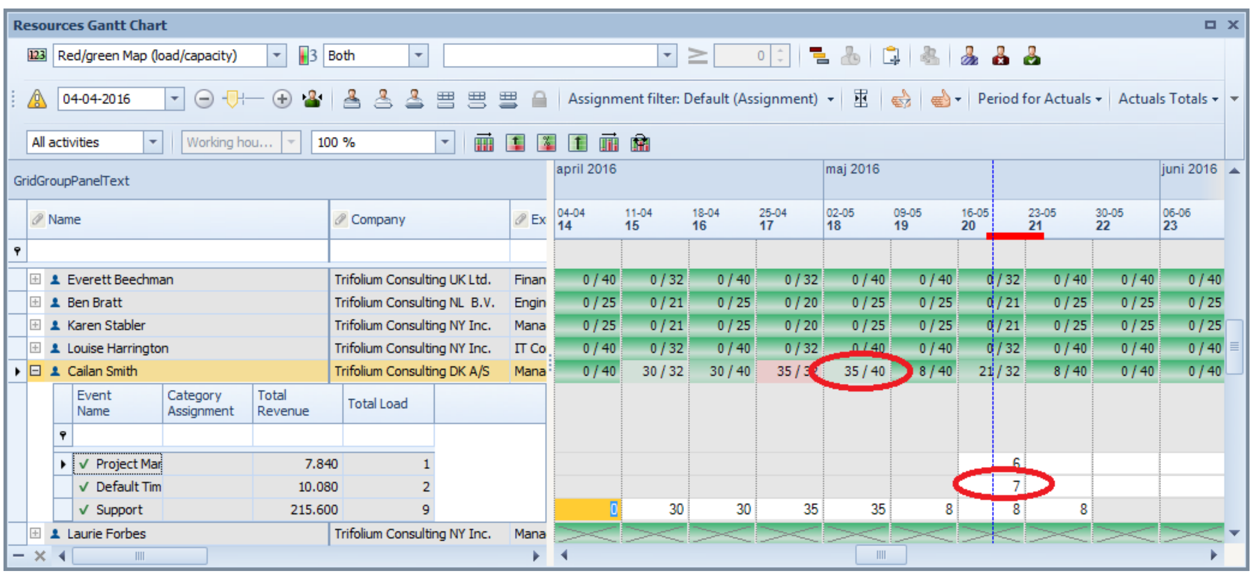
The following information describes where to be careful to maintain good performance. People Planner supports very advanced functionality, but if it is not used with care, it can have a negative impact on performance. When using this functionality it is important to limit the amount of data and/or only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

Calendars

People Planner works with three different kinds of calendars:

- **Work week** calendar — Describes a generic work week in the number of hours to work for each of the seven days in a week.
- **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.
- **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.



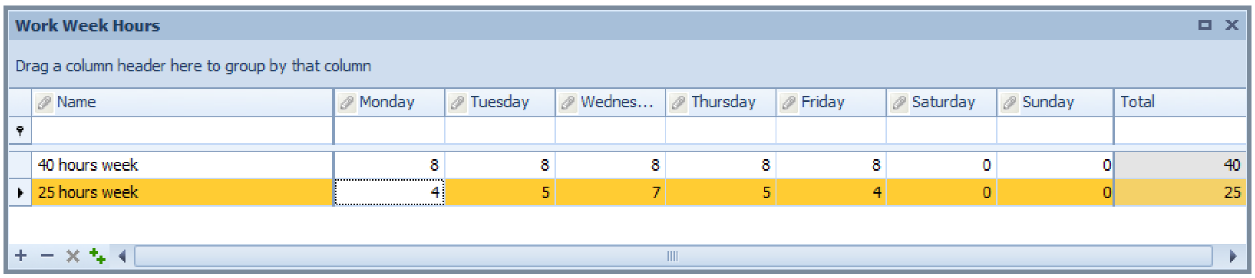
The two red ovals indicate two kinds of numbers calculated based on bookings and the calendars. When you scroll through the resources or through the time in the Gantt chart, the resource's capacity for the visible period must be calculated.

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.

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.

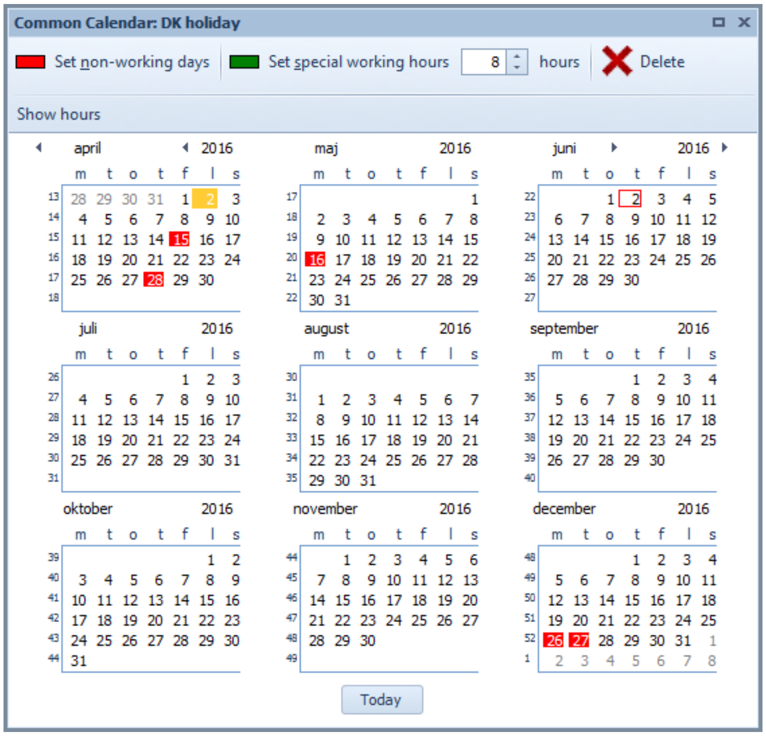


Create as few common calendars as possible. Normally a company needs at least one common calendar per country to define public holidays for that country; perhaps more than one might be needed if not all employees share the same contract for public holidays. As for the work week calendars, avoid creating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

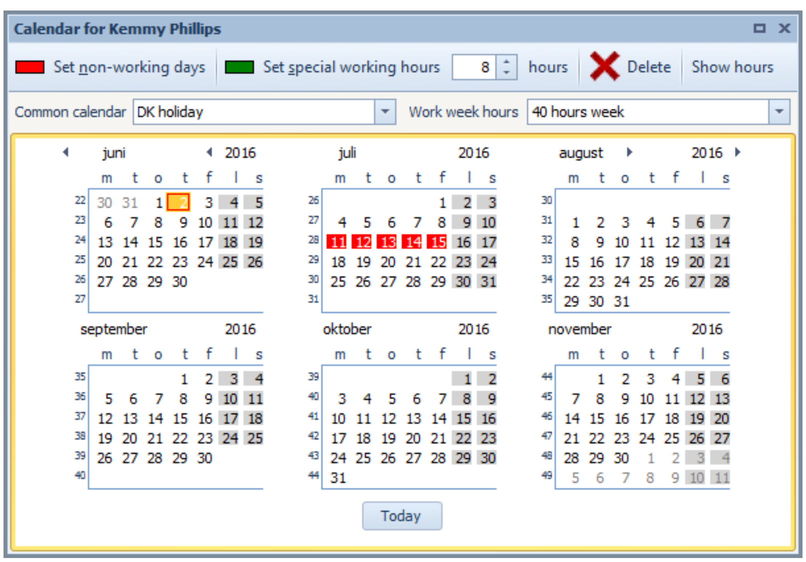
If you save the information as part of the common calendar, the same information must be repeated for each week, instead of being saved once and for all in the work week calendar. Because the number of calendars, as well as the number of entries in the calendars, affects performance, you should avoid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



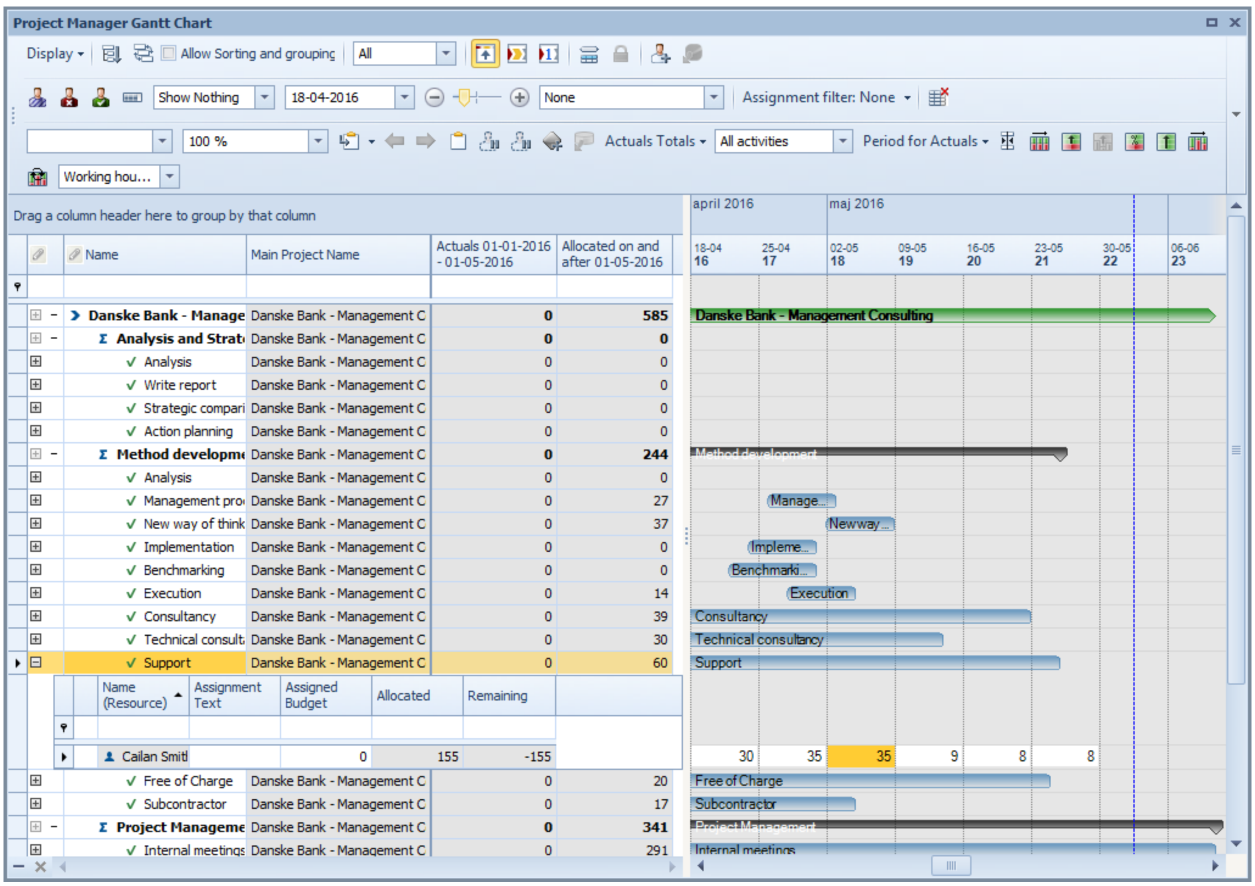
Because People Planner does not have a built-in integration with Maconomy calendars, some customers have used import mapping to import Maconomy calendars. The preceding calendar guidelines apply to both manually created calendars in People Planner and calendars created through integration with other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

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.

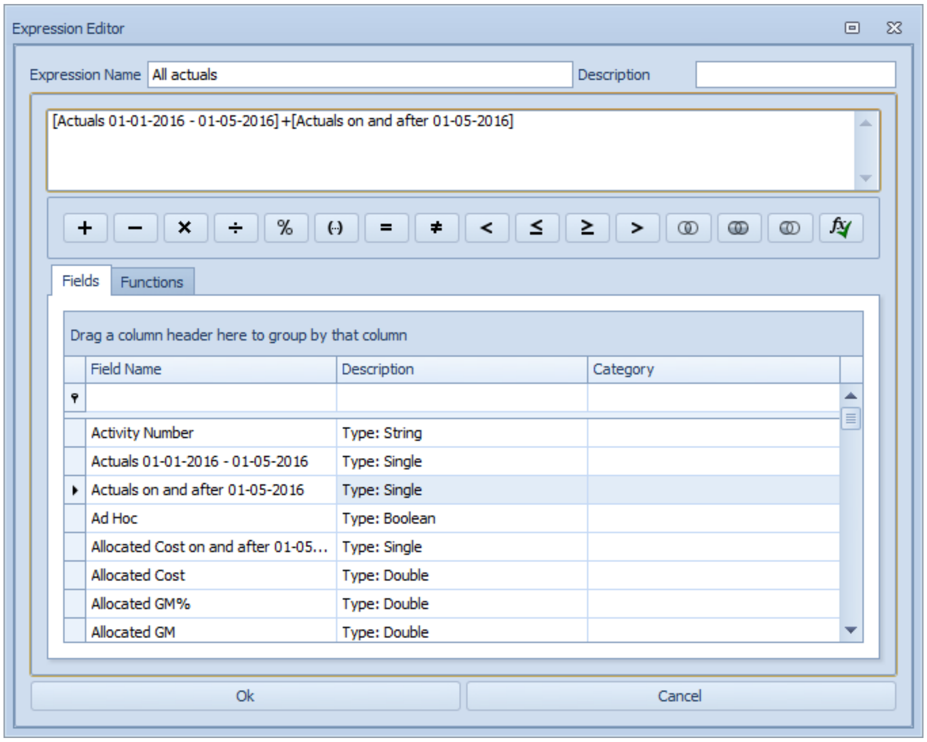
Asynchronous execution is a way to ensure that the UI remains responsive. Asynchronous execution is usually preferred, but sometimes People Planner is forced to switch to synchronous mode. For example, this can happen if a user tries to sort on a calculated column. In that case, People Planner must calculate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

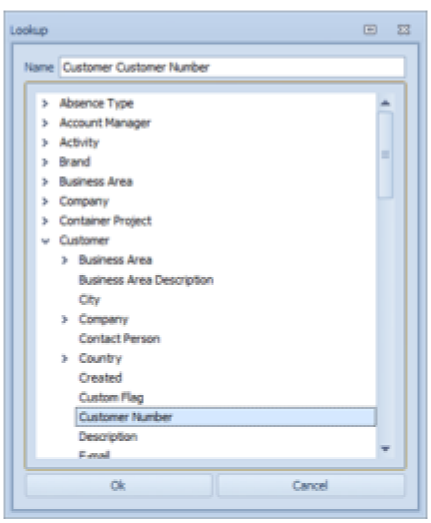
Custom-made calculated columns are often more demanding than the built-in calculated columns. When custom-made calculated columns depend on existing built-in calculated columns, those must be computed before the custom calculated columns are computed.

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.

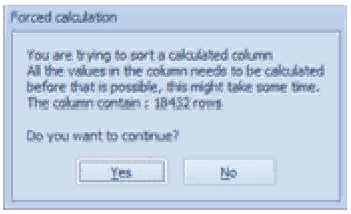


Sorting Calculated Columns

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.

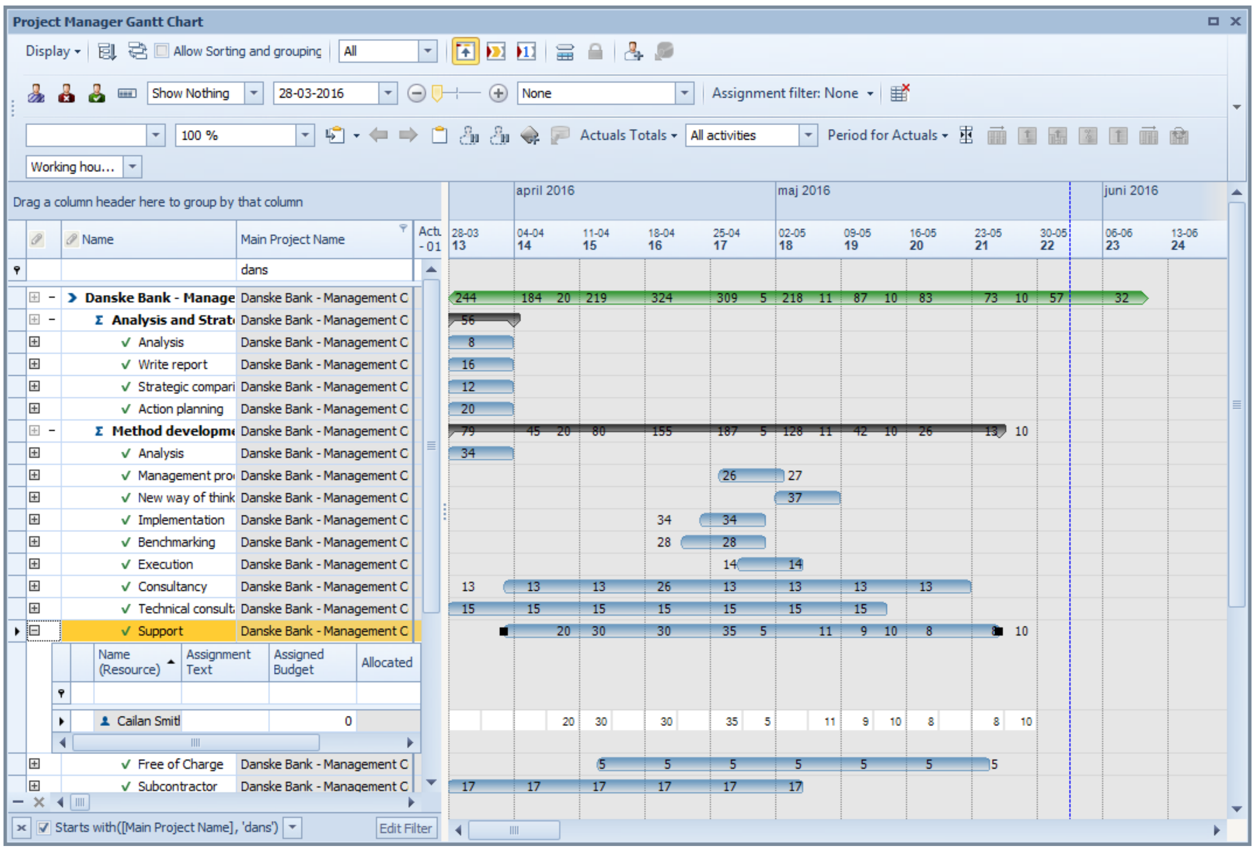
Even though a calculated column is computed in the background, the experience can degrade if the view contains many rows. Just as when adding many calculated columns to a view, adding a sum on a footer for calculated columns works well as long as the amount of data is somehow been limited.

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.

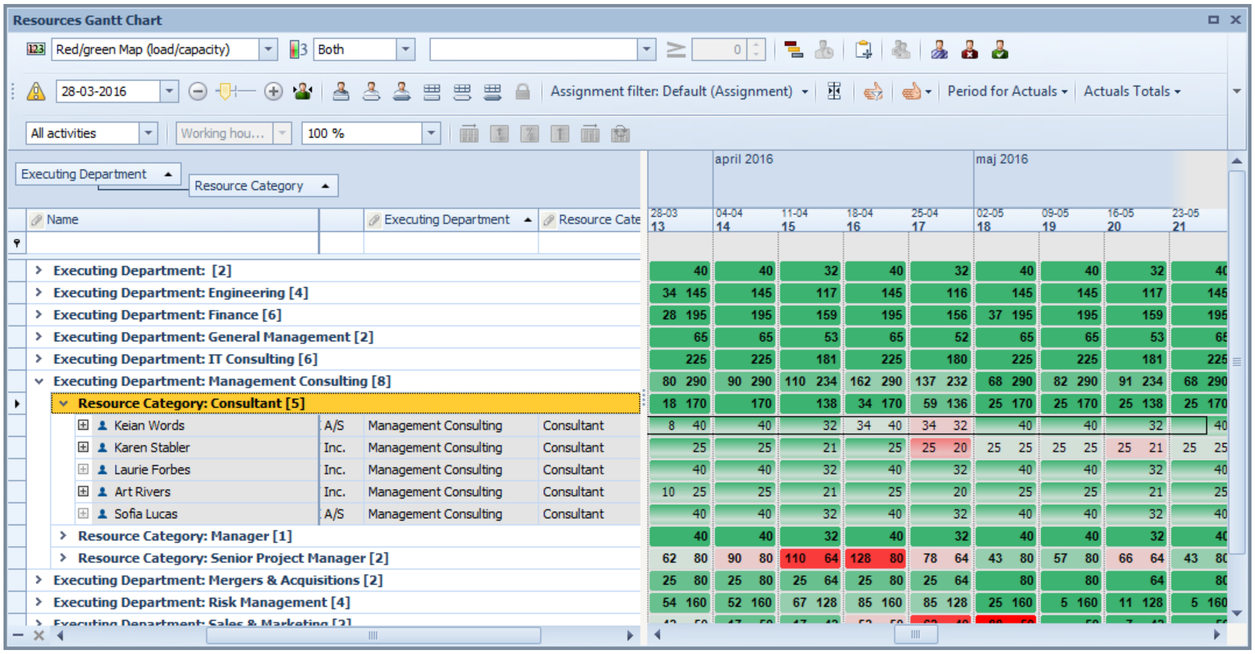
In the following example, the Gantt bars show the sum, bottom up, of the hours on the two accounts that are shown—in this case, working hours (man hours) and budget man hours.



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

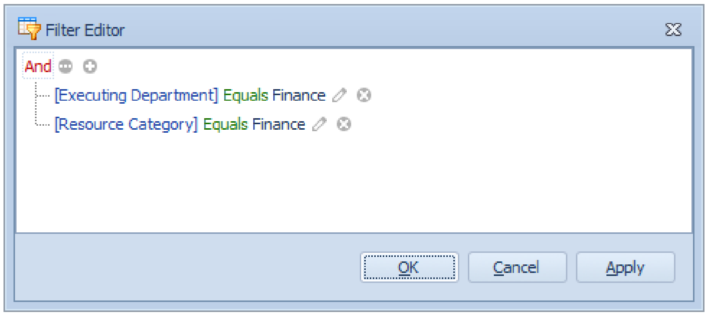
By default all views show all existing data of the given type. The amount of data can be overwhelming, and it can be difficult to find the data in which you are interested.

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.

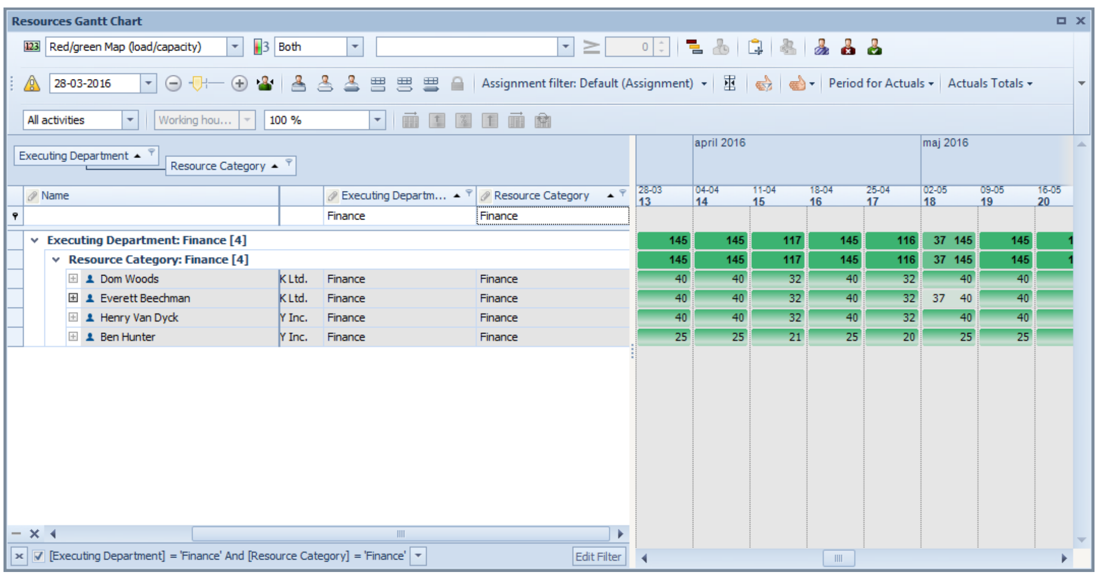
Filtering

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.

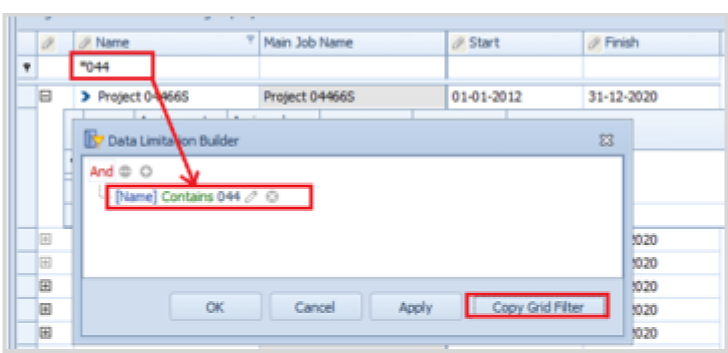


Be aware that filters only hide the rows. This is not a filter on how much data is loaded. You cannot use filters to reduce the amount of data that is loaded, and the load time for a perspective with a filter and one without a filter is almost the same. However, because calculated columns and bookings 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:

- User data limitation
- System data limitation
- View data limitation

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

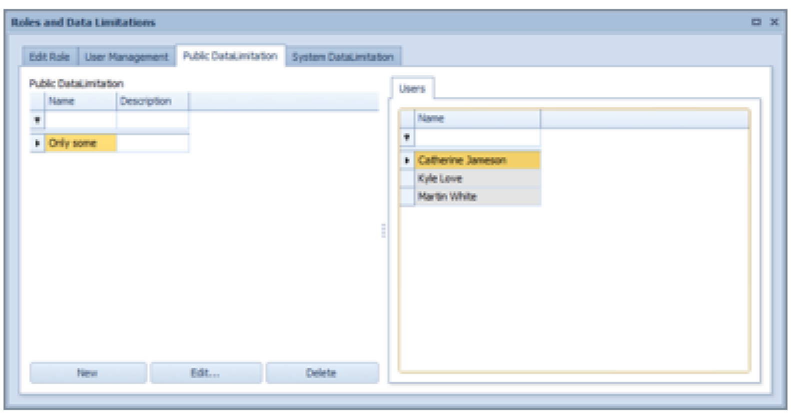
- Events (projects, tasks, summary lines, and milestones)
- Resources
- Assignments (only expressed by the limitations on the events/resources).

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

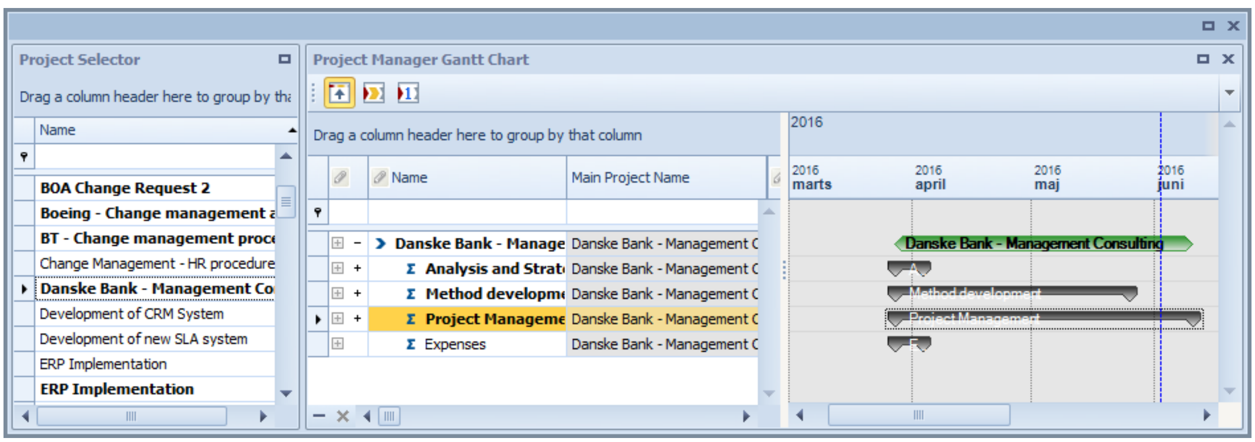
The PG has three filters that are designed to load data only for projects that are selected from other views (such as the Project Selector) that are faster to load. These filters are found as the three buttons “Display Main Projects and its Subprojects,” “Display Selected project Including Subprojects,”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

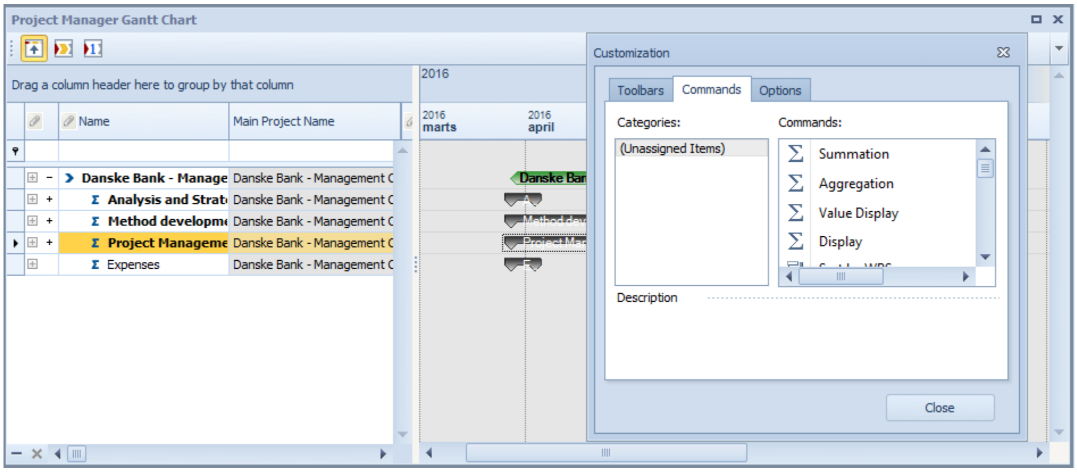
It can be tempting to include many views in a perspective, to allow users to use the same perspective for all that they need to do, but each view loads data and other UI setup information, making the perspective slow and cumbersome to work with. Instead, use fewer views and fewer columns; and the fewer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

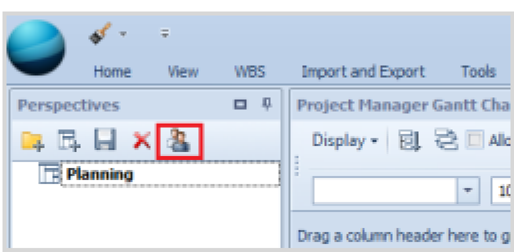
Functionality that is not used should be hidden. Even though users are told not to click a button, it can happen by mistake. This can cause problems if a user accidently imports data into People Planner, pushes data to Maconomy, or overrides/deletes data in People Planner.

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.

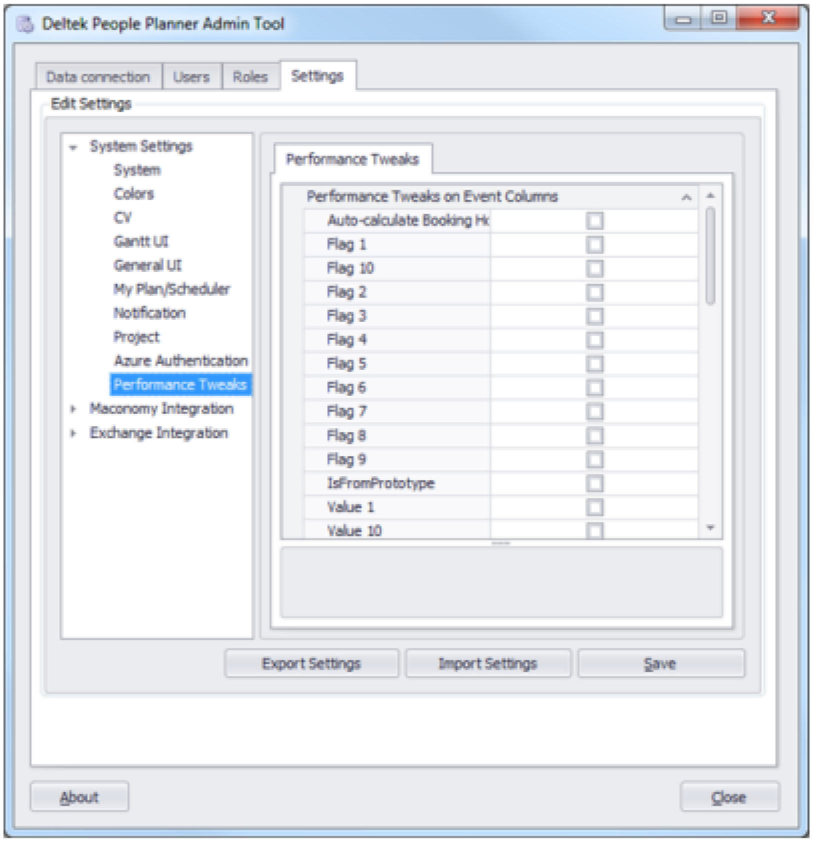
When you create company perspectives, you can control which users should get access to a perspective. This is also a very efficient method for hiding data and functionality from users. If a user does not have access to the views and does not have a perspective that includes a specific view—such as a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



Performance Tweaks

The Performance Tweaks tab of the Admin Tool settings allows 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, the way that numbers and check boxes are stored in the People Planner database was changed. You can now choose whether to store 0 (zero) values and false values as null values instead for the following columns.

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

This change significantly reduces the amount of data that the server must return to the Windows application and thus improves the performance.

However, if you have customized SQL scripts and so on that use some of these columns for calculation, these scripts might not work and, worst case, they might return wrong values when null is returned instead of 0.

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.

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.

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.

The 1HourDemo database is accompanied by a document that describes the individual parts of the one-hour demo. This document is located in the DemoData\1HourDemo directory, which is a subfolder of the directory where the People Planner Admin Tool is installed:

```
C:\Program Files (x86)\Deltek\People Planner Admin Tool 3.7.0
(611)\DemoData\1HourDemo
```

Creating the One-Hour Demo Database

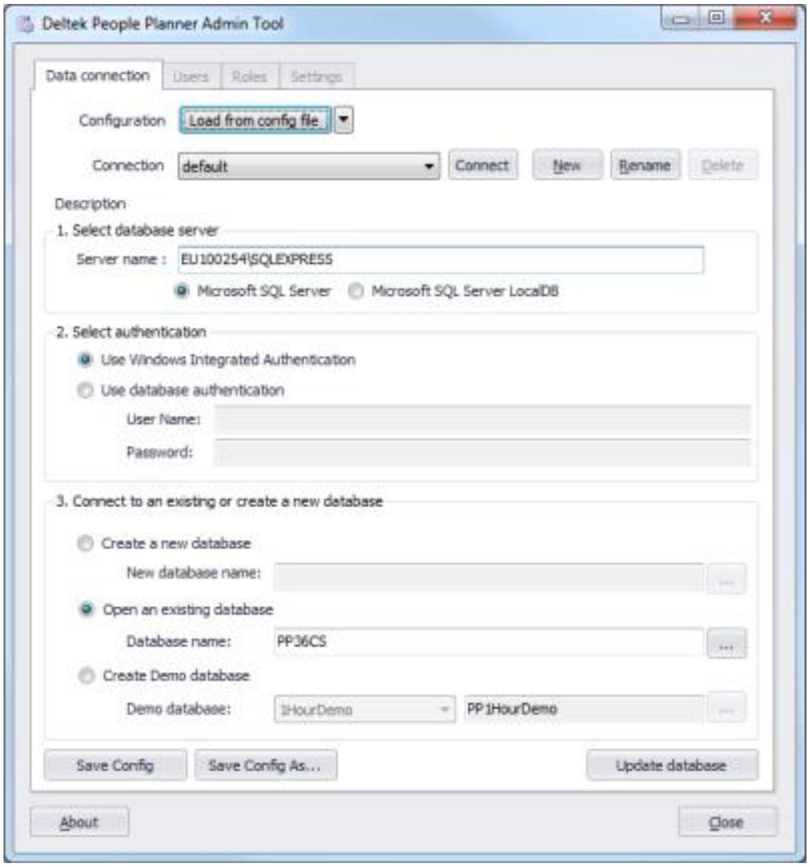
Before you can create the 1HourDemo database, you must have installed the People Planner Admin Tool and the People Planner Windows application. You must also have installed an SQL Server.

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

As an alternative to the full SQL Server 2016 Express, you can install the smaller SQL Server 2016 Express LocalDB.

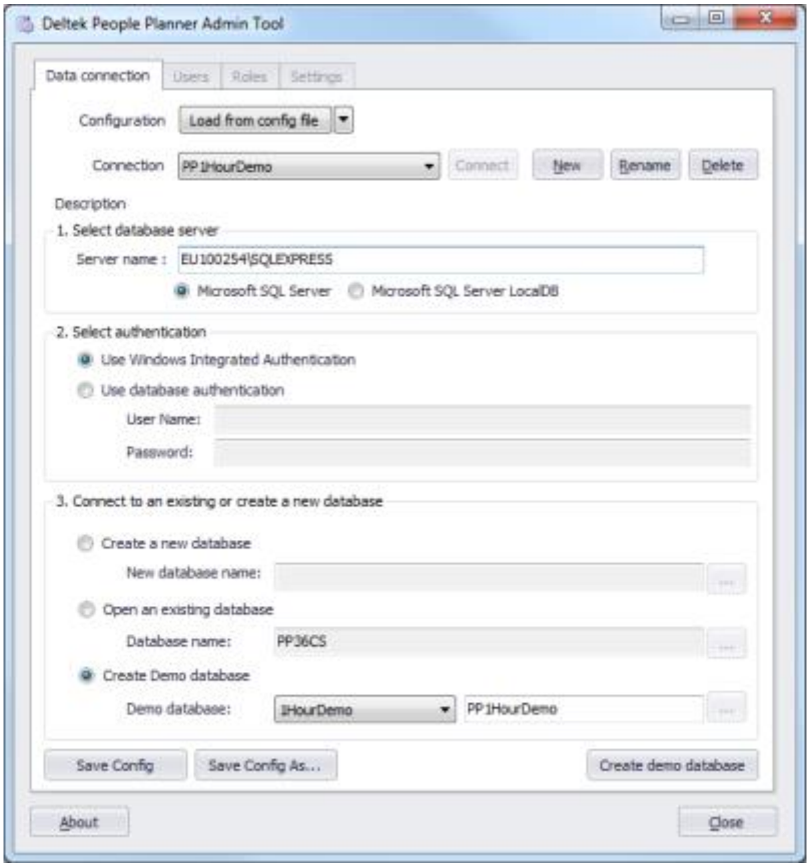
To generate a People Planner 1HourDemo database, complete the following steps:

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.



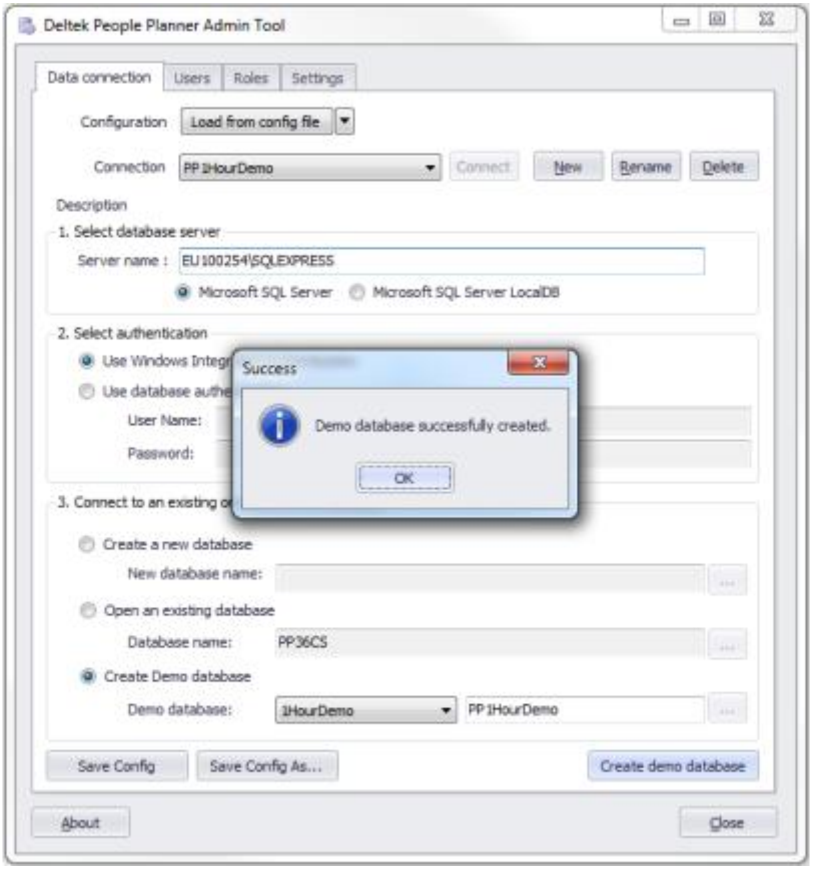
4. Select a database server by entering its name in the **Server name** field. You can select to use an SQL server or a LocalDB database.
5. Select a database authentication.

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.

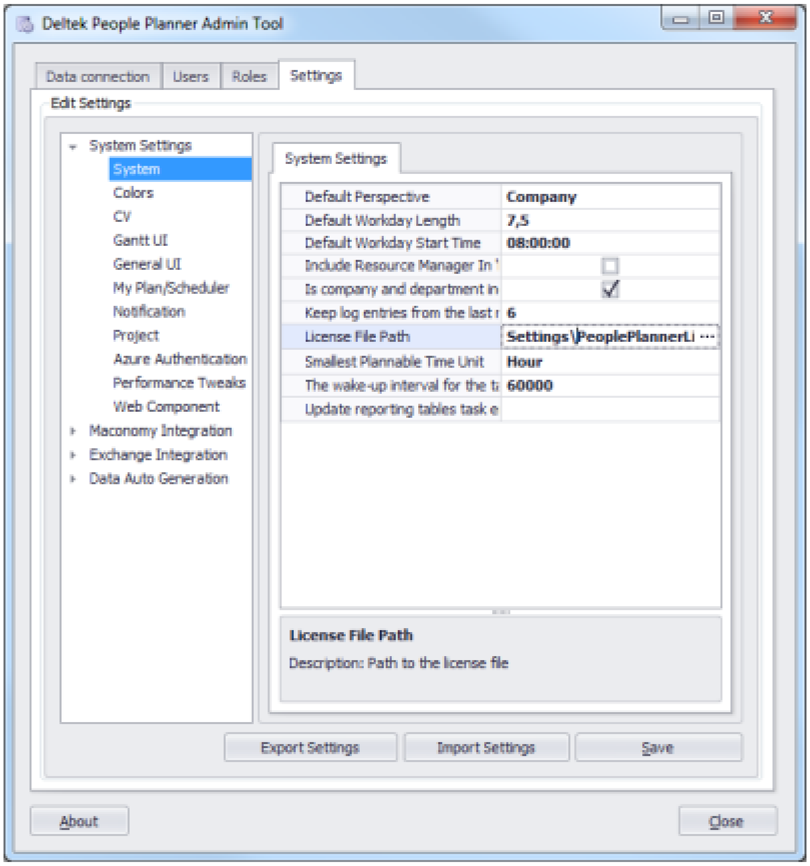
8. Click the **Create demo database** button.

   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 the People Planner license file.



12. Click the **Save** button.

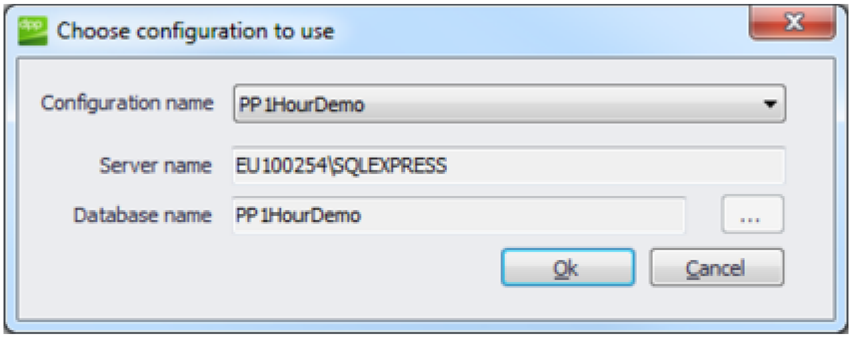
13. Close the Admin Tool.

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

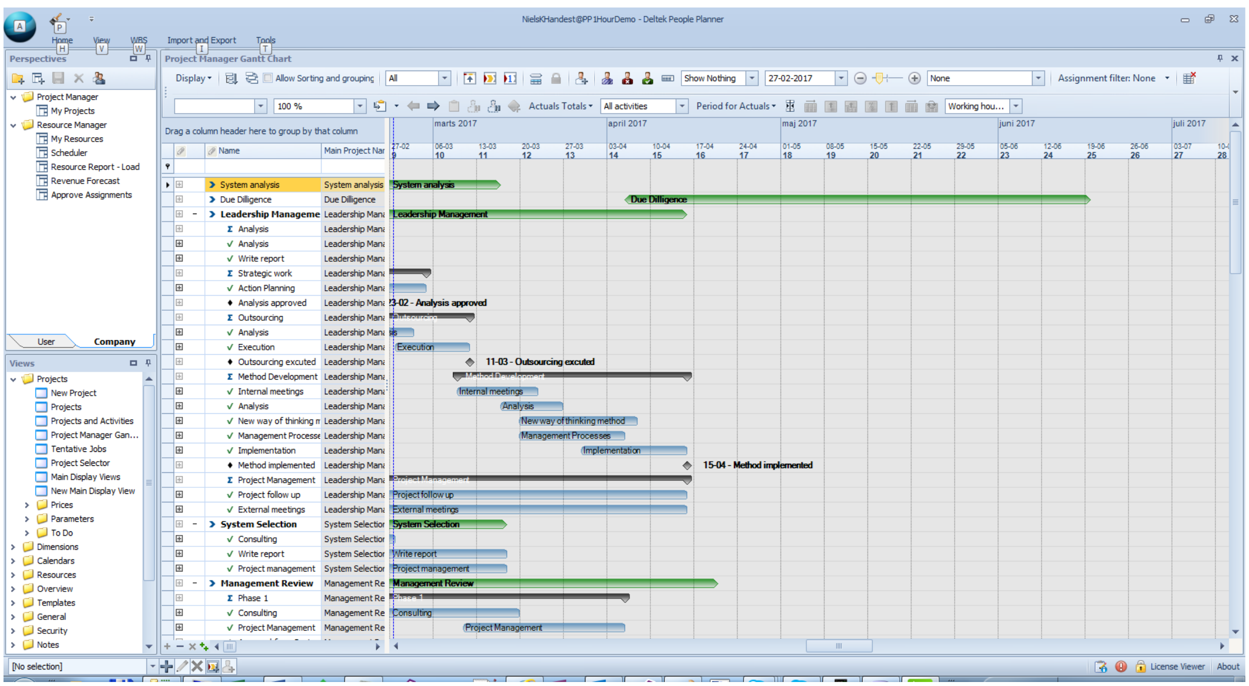
Although you can open the Data Auto Generation section, and from there select the Demo Data subsection, you do not need to change these settings. Changing them does not have any effect on the 1HourDemoDatabase that you have created; these settings are used for advanced database-generation scenarios.

Understanding the Database

You can now start the People Planner application. If you have more than a single configuration in your DataConnection file, you are asked which one you want to select. If you only have one, People Planner simply starts.



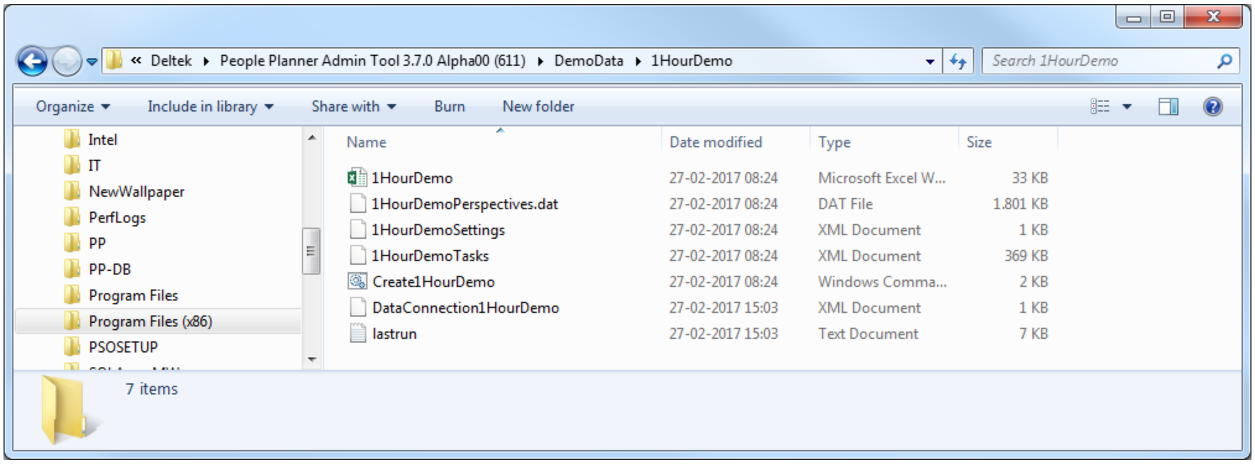
People Planner opens, and you are the administrator.



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.



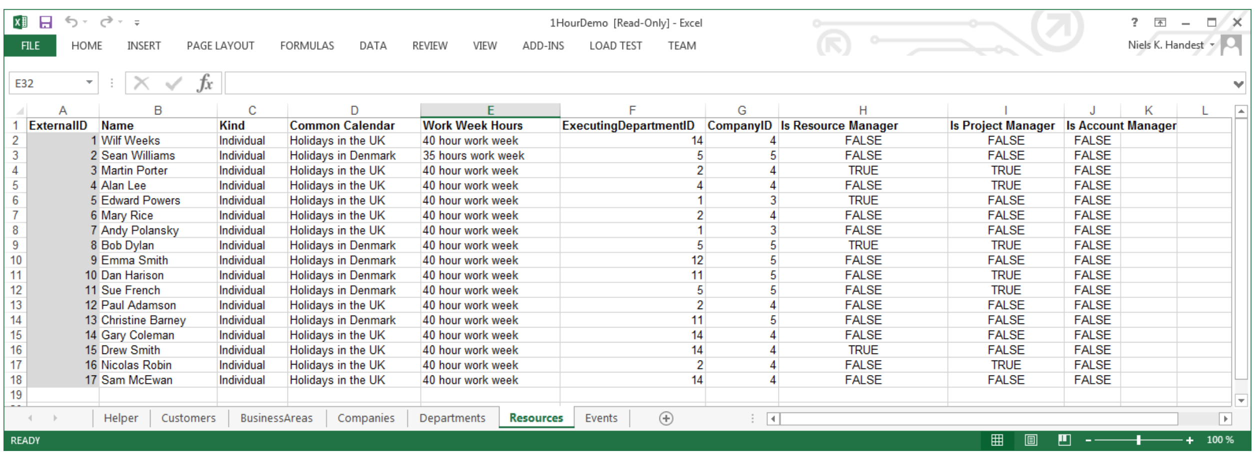
The central files in this folder are:

- 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.

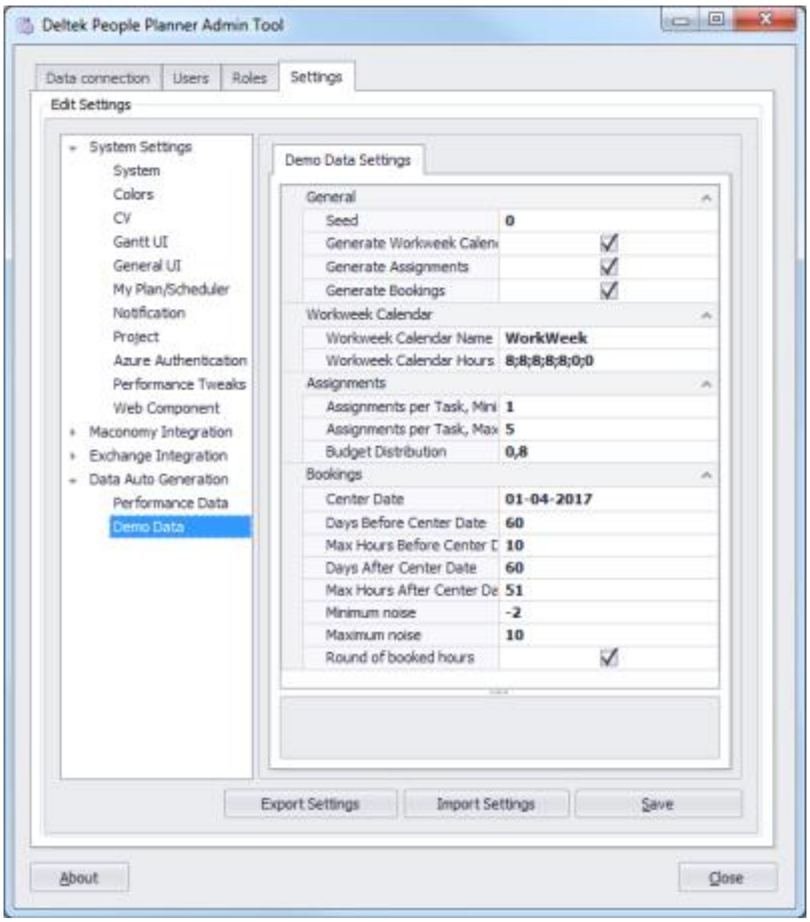
The 1HourDemoPerspectives.dat File

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

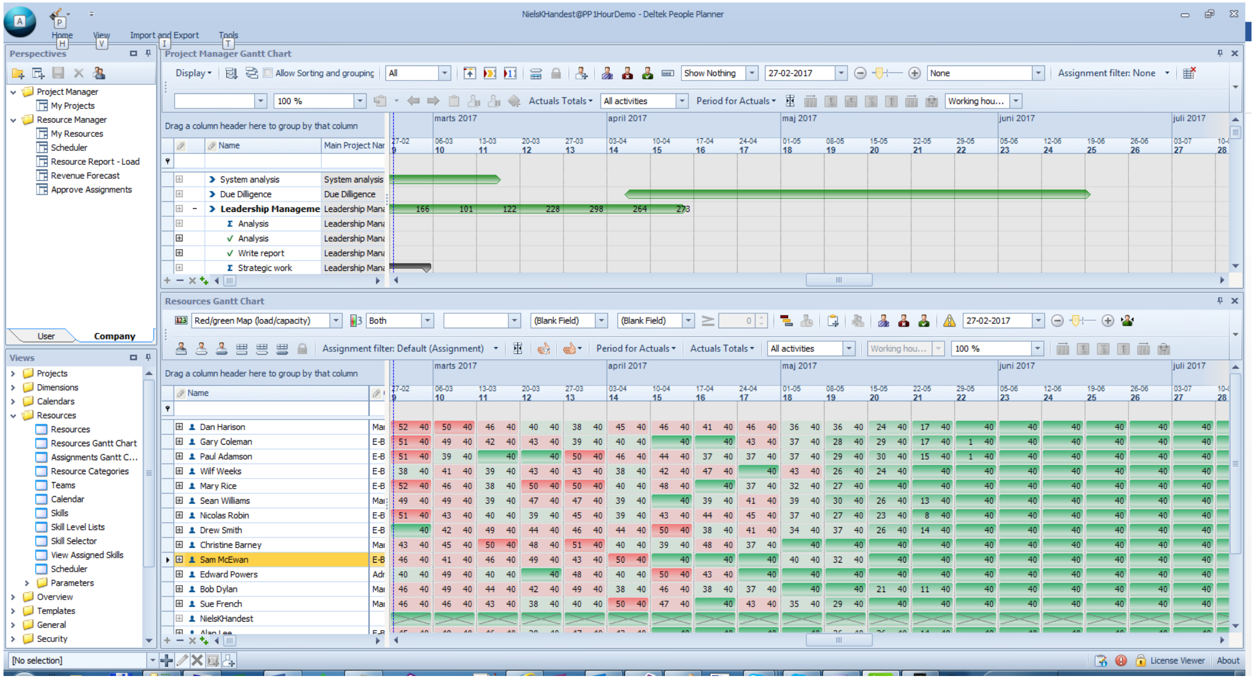
This file contains the settings for creating the demo database.

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 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.

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