

# **ProjectWise Explorer User Guide**

## **The New Line Copenhagen - Ringsted**

**1. January 2015**



## Contents

1	General.....	4
2	Starting.....	4
2.1	Connecting.....	5
2.2	The application window.....	7
3	Folders.....	10
3.1	Structure.....	10
3.2	Folder contents - Project.....	12
3.3	Folder contents - Resources.....	14
4	Workflow.....	14
5	Basic concept.....	14
5.1	Locks.....	15
6	Document manipulation.....	15
6.1	Open / Open with.....	15
6.2	Check out / Copy out / Export.....	16
6.3	Check in.....	17
6.3.1	New versions.....	17
6.4	Update server copy.....	18
6.5	Free.....	18
6.6	Create new.....	19
6.7	Delete.....	20
6.8	Copy / Copy to / Move to.....	20
6.9	Rename.....	21
6.10	Local Document Organizer.....	21
7	Document wizard.....	22
7.1	Setting up.....	22
8	Document code.....	24
8.1	Document names.....	24
9	Attributes.....	24
9.1	CAD documents.....	25



## 1 General

ProjectWise is a document management system used for project collaboration for The New Line Copenhagen – Ringsted and is the place to store all CAD files. In this guide all types of files is named: **documents**.

Sections that need special attention are marked with the symbol:



Issues regarding user creation and access rights must be addressed to:

Lone Skaaning  
Banedanmark  
Den nye bane København-Ringsted  
[LSKB@bane.dk](mailto:LSKB@bane.dk)  
+45 4187 9986

The reasons to use ProjectWise for storing documents in the project are:

- Always to find the newest version of the document.
- All old versions of a document are saved for historical reasons.
- All stakeholders in the project can access documents.
- There will never be 2 documents with the same name which makes it easy to find a given document.
- The documents (CAD files) will retain the references.

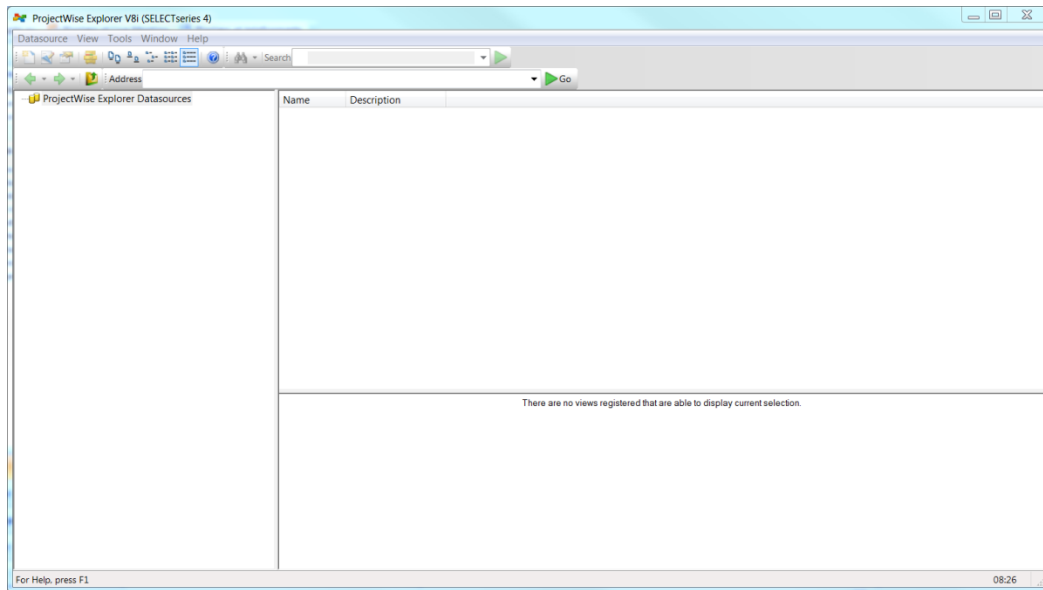
## 2 Installing

For installing ProjectWise Explorer, see guide provided with the installation files.

## 3 Starting

ProjectWise is started by selecting the entry: **ProjectWise Explorer** from Windows **start menu**→**Bentley**→**ProjectWise V8i (SELECTseries 4)**.

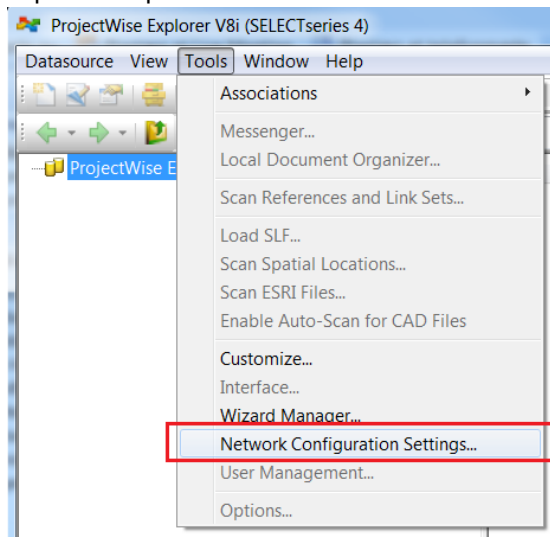
When starting the application for the first time you will see this screen:



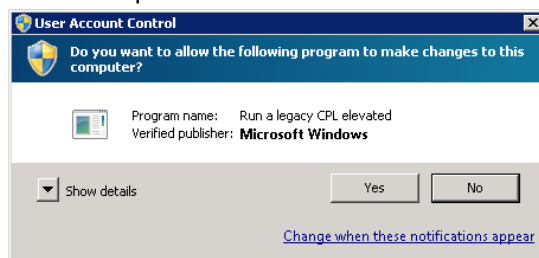
## 3.1 Connecting

Because ProjectWise is build upon database tables, there must be a connection from the local machine to the ProjectWise Integration Server which is the service that controls all access to and from the database.

For creating the connection, select **Tools->Network Configuration Settings..** from ProjectWise Explorers top menu.

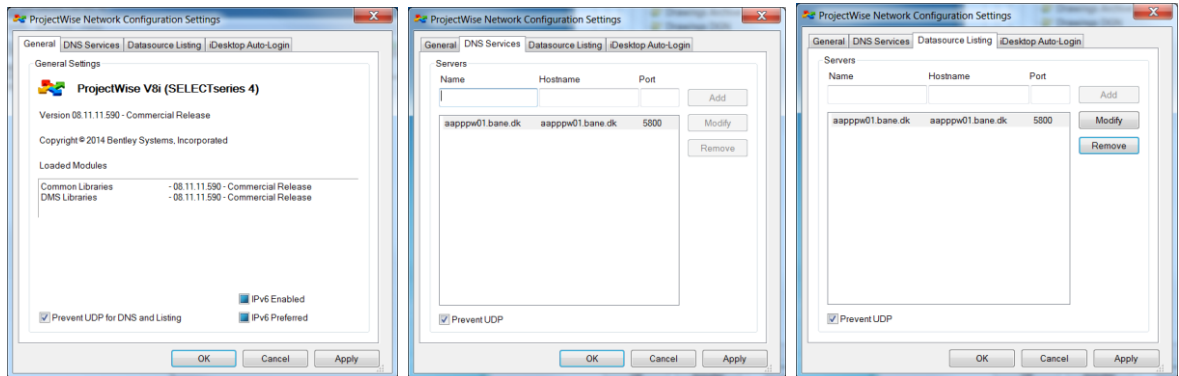


If windows present a User Account Control dialog box, Press: **Ja** or **Yes** here.

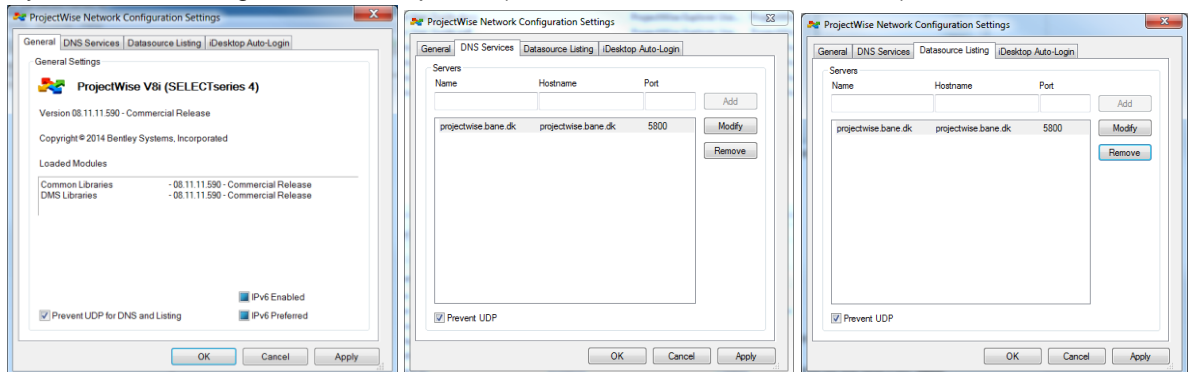


There are four tabs in the form for Network Configuration; there must be changed settings on three of these. The one not to be modified is: **iDesktop Auto-Login**. The other three tabs must be set like shown below.

If you are connecting via a Banedanmark computer (from the domain **bane.dk**):



If you are connecting via other computers (from other domains than bane.dk):

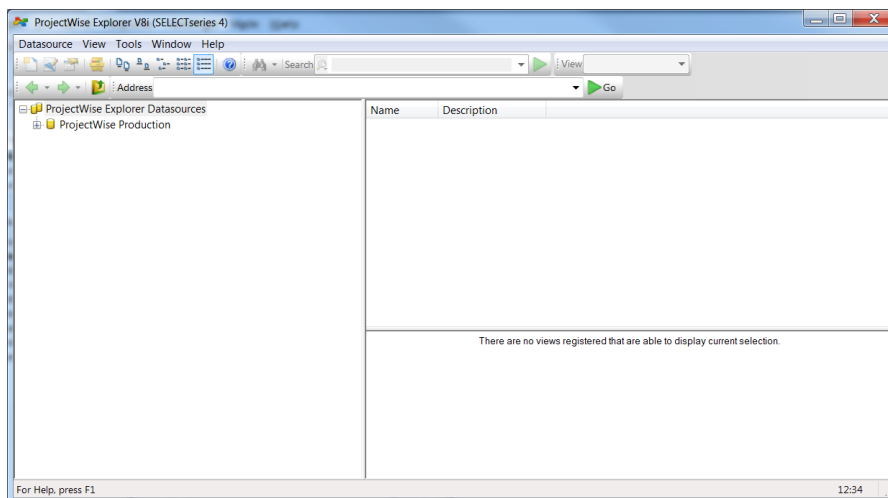


For setting the **DNS Service** and **Datasource Listing** type the desired values in the fields: **Name**, **Hostname** and **Port** and press: **Add**.

The value for both Name and Hostname is: **aappw01.bane.dk** and for the field Port: **5800**.

When the values are entered, press the **OK** button and press the **F5** key on the keyboard for refresh of the screen.

You should now see this screen:



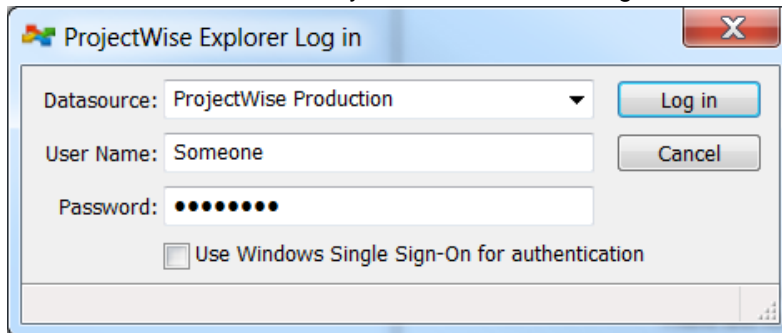
If this screen is shown you are successfully connected to the ProjectWise server, otherwise please contact the ProjectWise Administrator for support.

Everyone using ProjectWise Explorer must connect to the ProjectWise Integration Server with a username and a password.

If you are a Banedanmark user (i.e. created in the bane.dk domain and can logon to this network) ProjectWise will use your logon credentials already given for the bane.dk network. Are your user not created in the bane.dk domain or are you logging into ProjectWise from outside the firewall, you will be asked for username and password.

Double-click on: **ProjectWise Production** in the left side of the application window and the following will happen:

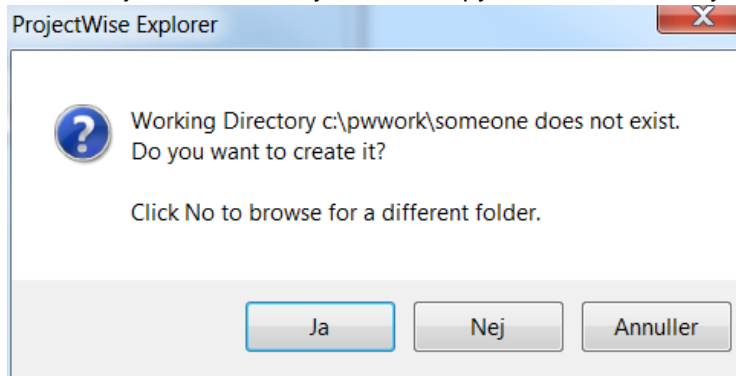
For non Banedanmark users you will be asked for login credentials



Type the username and password you received from the ProjectWise administrator and press: **Log in**.

Banedanmark users will not be presenting this log in form, but will be automatically logged in.

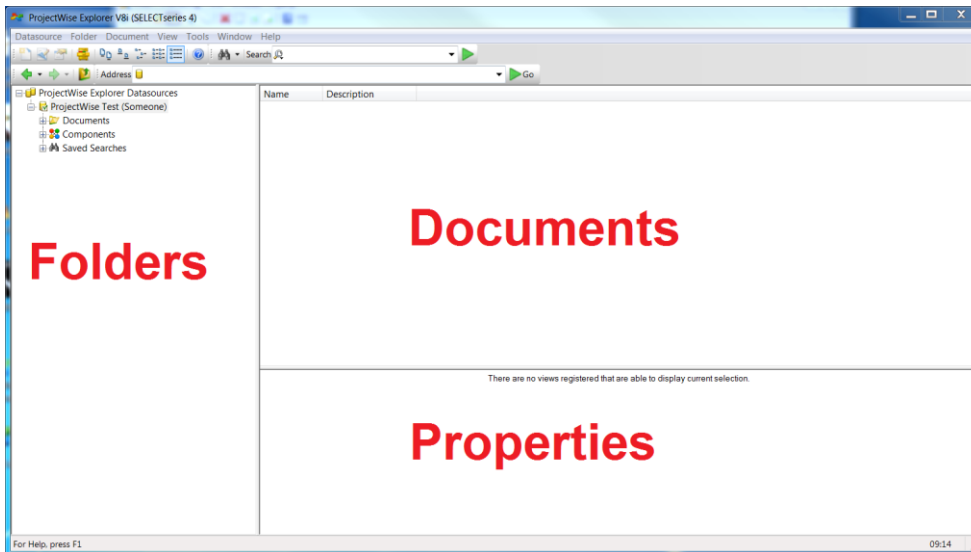
The first time ProjectWise is started, you will be asked to create a local folder on you c-drive. This is where ProjectWise stores your local copy of the documents you are working on.









Accept the suggested folder by pressing: **Ja** or **Yes**.

## 3.2 The application window



ProjectWise Explorers user interface is split into three areas: Folders, Documents and Properties.



In the Folder area you can navigate to the desired folder and in front of the different entries there are shown an icon. The explanations of these icons are listed here:












-  The ProjectWise database. Contain all datasources.
-  Datasource. The storage area for all documents.
-  Project folder. A projects top level folder.
-  Folder. Contain sub-folders and/or documents.
-  Saved searches. Search criteria saved for later reuse.
-  Components. Contain lists of components (if any) in the whole datasource.

All projects created in ProjectWise, are created under the folder: **Documents**.

To see the projects the folder **Documents** must be expanded (opened), this is done by double-clicking on the folder, or by clicking on the plus sign in front of the folder.   **Documents**











The operations in the document area could be: open folder, open document, free document, create new document, delete document, change the state of a document or show attributes (drawing-/model informations etc.) for a document.

The icons in the document area are shown below:

-  Checked out. The document is locked by me for editing.
-  The document has no associated application.
-  Document set. A list of documents which will be checked out together.
-  The document is exported outside ProjectWise for editing.
-  Folder. Contain sub-folders and/or documents.
-  The document is locked by another user and can be opened as read-only.
-  Project folder. The projects top level folder.
-  The document is read-only. Also used for old versions of a document.
-  The document can be checked out and edited.
-  Adobe Acrobat pdf document.
-  AutoCad dwg Cad file.





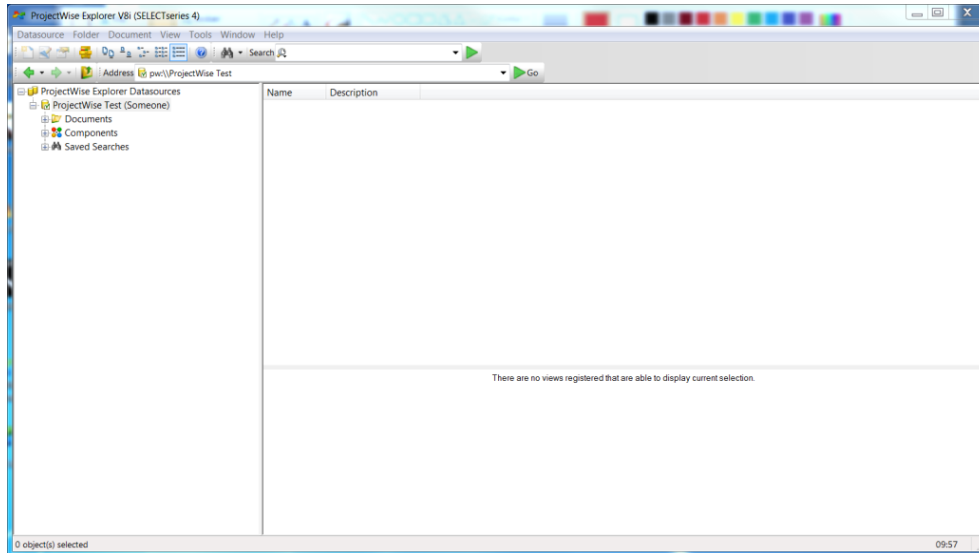
-  Notepad document, Plain ASCII (text).
-  MS Paint Image document (bmp, jpg etc.)
-  MS Access database.
-  MS Excel spreadsheet.
-  PowerPoint presentation.
-  MS Word document.
-  MicroStation dgn Cad file.
-  Outlook mail message.
-  Internet web page or xml document.
-  Zip compressed file.

The properties area is showing properties on the project, the folder or the document selected in the folder or the document area. These properties can be: created by, created date, version, locked by etc. for pdf, bitmap images and dgn documents can the area also show a preview of the document.

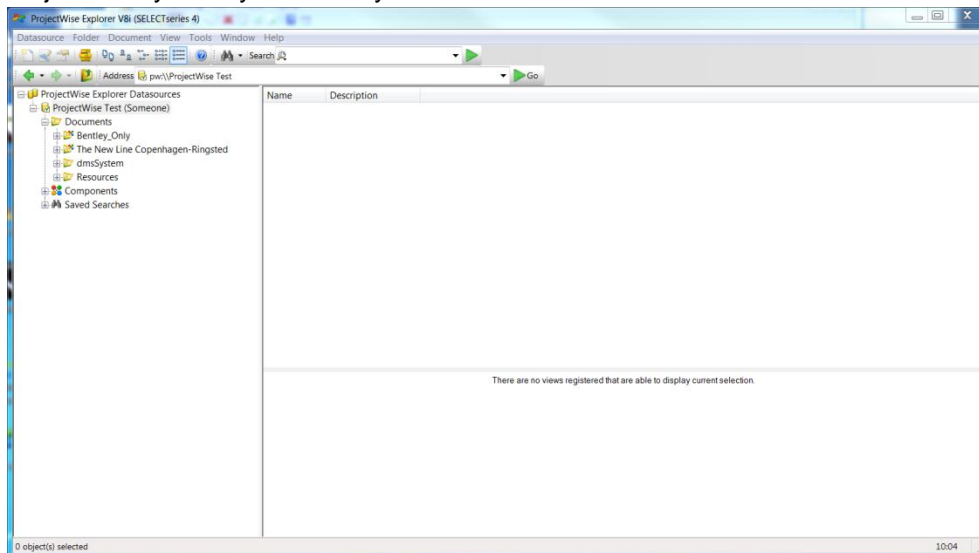
## 4 Folders

### 4.1 Structure

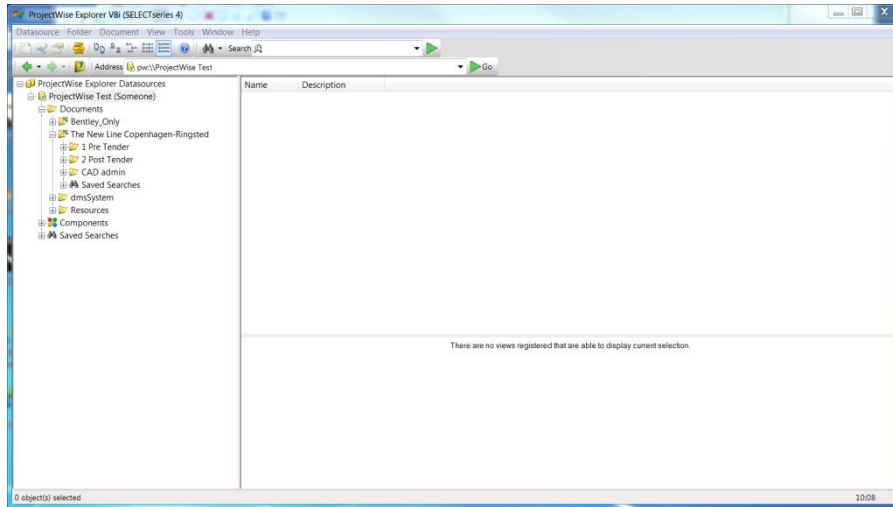
The first time ProjectWise is started, the folder structure is collapsed.



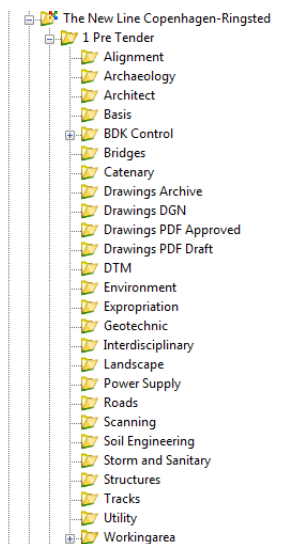
Open the folder: **Documents** in the folder area, project folders, folders, saved searches and component folders are shown. What exactly is shown here is depending on you rights, in ProjectWise you only see what you can access.



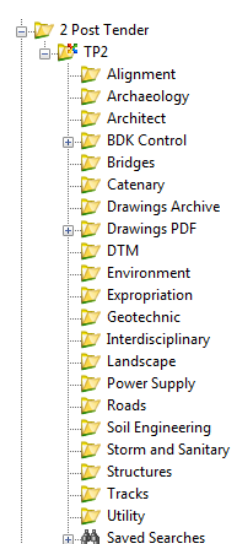
By opening the project: **The New Line Copenhagen-Ringsted** at least 2 folders are shown (again depending on your access rights). The folder **CAD admin** is the place to find all MicroStation and AutoCad resource files for the specific project. Resource files used generally in Banedanmark (ex. Drawing borders and printer driver) are stored in the top folder: Resources.



Depending on what type of access you are giving, you will see either a **1 Pre Tender** or **2 Post Tender** folder. Below these folders are the projects documents stored. The **2 Post Tender** folder is sub divided into multiple tender package projects. Every one of these sub-projects (ex. TP21) has special access assigned. This is done for isolating the participants of a certain tender packages from the rest of the tender packages. In the **1 Pre Tender** folder is all the documents used for all the tender processes. This folder cannot be seen by participants in any of the tender projects. No matter which category you are in, you will not be able to see the other categories folders and documents (e.g. Post Tender cannot see Pre Tender and Pre Tender cannot see Post Tender).



Folder structure for Pre Tender



Folder structure for Post Tender



## 4.2 Folder contents - Project

The access control on every folder is specified individually, and only those with the proper rights can access documents in the folders. All users created to attend in Pre Tender access can, by default, read all documents and sub-folders in the **1 Pre Tender** folder, but only the users belonging to a specific discipline can create documents in the disciplines folder (ex. Users under the ART contract can create documents in the sub-folder: **Alignment**).

Beside the folder and document access control there are workflow access control on both the folders and the documents. The workflow access control on folders is set so all users in the Pre Tender group can read the contents of all the sub-folders in **1 Pre Tender**.

There are created 6 groups for controlling the access to both the folders and the documents. These groups are:

- |                      |                                                       |
|----------------------|-------------------------------------------------------|
| - CR_Pre_ART         | Users under the Alignment Railway Technology contract |
| - CR_Pre_CDC         | Users under the CDC contract                          |
| - CR_Pre_EKS         | Users under the Expropriation contract                |
| - CR_Pre_LED         | Users under the Utility Relocations contract          |
| - CR_Pre_SNC         | Users under the Soil & Nature contract                |
| - CR_Pre_BDK_View    | Banedanmark View-Only users                           |
| - CR_Pre_BDK_Approve | Banedanmark Approver users                            |

The group: **CRE\_Pre\_ART** have access to write, when documents are in **Draft state**, to the following folders: **Alignment, Catenary, Drawings DGN, DTM, Power Supply, Roads, Storm and Sanitary, Structures** and **Tracks**.

The group: **CRE\_Pre\_CDC** have access to write, when documents are in **Draft state**, to the following folders: **Architect, Bridges, Drawings DGN, DTM, Power Supply, Roads, Storm and Sanitary, Structures** and **Tracks**.

The group: **CR\_Pre\_EKS** have access to write, when documents are in **Draft State**, to the following folders: **Drawings DGN** and **Expropriation**

The group: **CR\_Pre\_LED** have access to write, when documents are in **Draft State**, to the following folder: **Drawings DGN, DTM** and **Utility**

The group: **CR\_Pre\_SNC** have access to write, when documents are in **Draft State**, to the following folders: **Drawings DGN, DTM, Environment, Landscape, Soil Engineering** and **Structures**.

The group: **CR\_Pre\_BDK\_Read** have access to read document, independent of the workflow state, in all folders.

The group: **CRE\_Pre\_BDK\_Approve** have access to write metadata, not to the actual file, when documents are in **Pending Approval BDK** and **Approved state**, to the following folders: **Alignment, Archaeology, Architect, Bridges, Catenary, Drawings DGN, DTM, Environment, Expropriation, Geotechnic, Landscape, Power Supply, Roads, Soil Engineering, Storm and Sanitary, Structures, Tracks** and **Utility**.

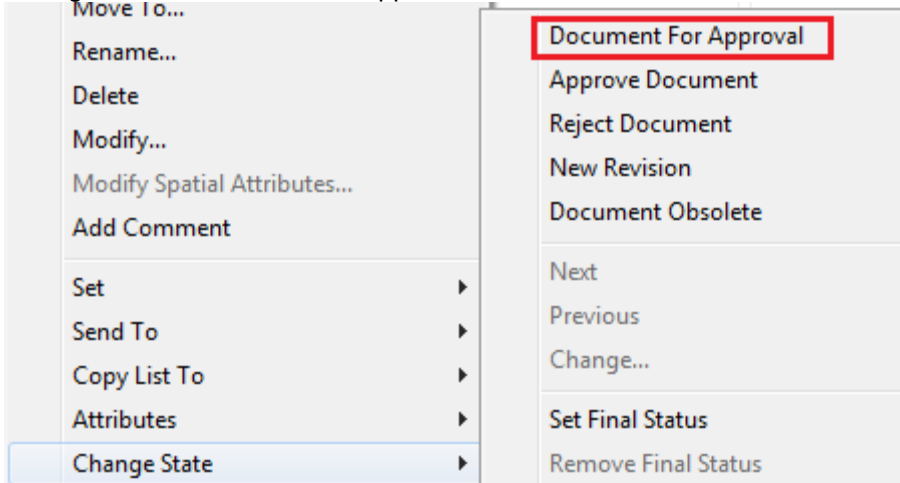
All Groups, except for **CR\_Pre\_BDK\_Read**, can create and delete documents in the folder: **Interdisciplinary**.

The groups: **CRE\_Pre\_ART, CRE\_Pre\_CDC, CRE\_Pre\_EKS, CRE\_Pre\_LED** and **CRE\_Pre\_SNC** all have their own workingfolder. No one else but the group owning the folder can read the content of these folders. The group members are free to create subfolders to the workingfolder.

The users belong to the groups: **CR\_Pre\_ART, CR\_Pre\_EKS, CR\_Pre\_LED** or **CR\_Pre\_SNC** can delete documents in folders they can create documents in, long as the documents are in Draft State.

As soon as the documents leave Draft State and enter another state, the documents become read-only for these groups.

When a document is ready for approval by BDK, the user rightclick on the document, and select: Change State → Document for Approval

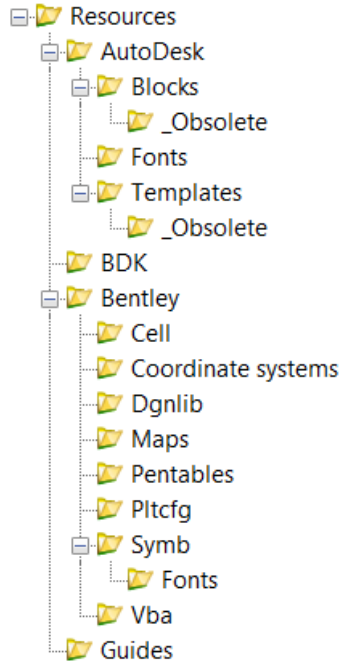


When this state is selected a mail form is shown. In this form you can type in the email address of the person that need to approve this document. This approval is only Banedanmarks CAD approval, not the technical approval.

When the approver response to the approval process, two options are possible choice. Either the document can be approved, then the approver is changing the state to: **Approved**, or the approver can reject the document. In this case the document returns to **Draft** state, a new version is created and the minor revision number is changed. If the document is approved, a new version is created and the major revision number is changed.

## 4.3 Folder contents - Resources

The folder structures for the resource (MicroStation and AutoCad) documents are:

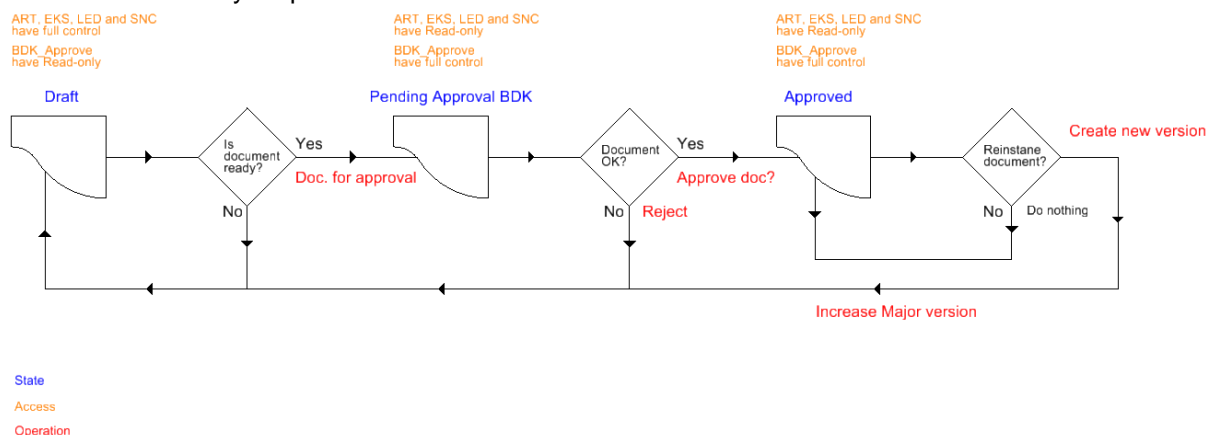


Standard resources for Banedanmark

Resources placed in folders under the projects are used specific for this project.

## 5 Workflow

All folders in the Pre Tender part of the project, except for: **Drawings Archive** and **Interdisciplinary**, have by default set the state: **Draft**. This means that when a new document is created it will initially be put into the state: **Draft**.



## 6 Basic concept

The basic concept for ProjectWise is to share informations in projects. This is done by storing all documents in the same physical area throughout the projects lifetime, keep track of versions and expand informations with metadata. To make sure that only one user at a time can manipulate the documents ProjectWise is using locks, check out and check in of documents. To edit a document it



needs to be checked out to the user at the local machines c-drive and locked for other user's manipulation on the server. The check out process is run automatically when opening the document. When checking out a CAD file, all references will be copied out as well, but as read-only. Furthermore all the resources, which are specific for Banedanmark and the project, will be copied out as well. All modifications are done to the file on the locale c-drive which makes read and write faster. When the document is closed, only the modified parts of the document are written back to the server, this is again an optimization upon speed and network traffic.

## 6.1 Locks

When a document is opened from the user's computer, a lock is set on the document stored on the server. As long as this lock is set no other users can modify the document, it is however possible to read the document.

When modifications to the document are finished the corrections must be written back to the server and the document must be released. This is done by: **Check in** of the document.

By doing this other users are then able to check out the document for corrections.

If you want to update the copy placed on the server, but will keep the document locked to you self, you can perform an: **Update Server Copy** function. This gives other users the ability to see the newest corrections in the document, but the document will still be locked for modifications.



If you do not want your corrections to be written back to the server but just want to release the lock on the document, you can perform a **Free** command. Remember that all corrections will be lost.

For an explanation of these commands, see chapter 6.

## 7 Document manipulation

Manipulations are done by selecting one or more documents in the document area and right clicking your mouse. The only command available without right clicking is: **Open** which opens the document in the standard application for the specific file type.

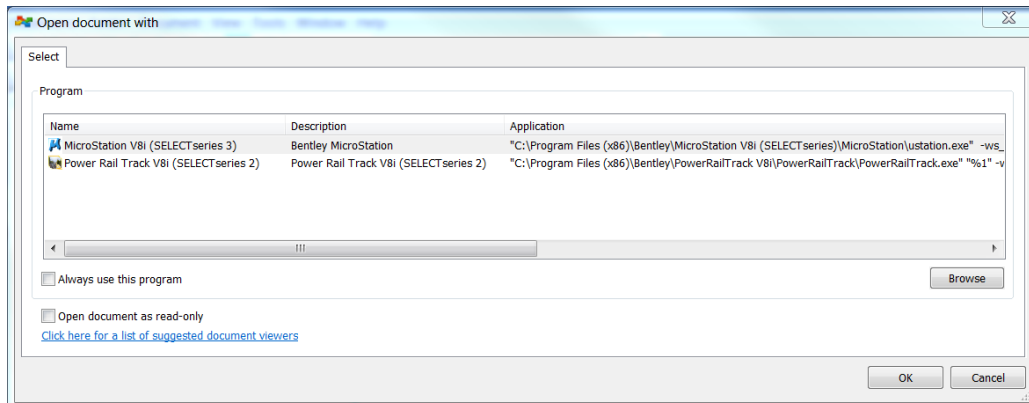
### 7.1 Open / Open with



Open the selected document by choosing one of the following methods:

**Open** (or double click on the document) will copy the document to the locale computer (as shown in chapter 4) and opens it with the application associated with the documents prefix (ex. .dgn = MicroStation. .pdf = Adobe Acrobat Reader, .docx = Microsoft Words).

Right click and select: **Open With**. This gives a list of all the application able to open the specific file type. This could be useful if different applications are able to open documents with the specific prefix.



Chose the desired application and click on the **OK** button. The document will then be copied out and opened as described above.

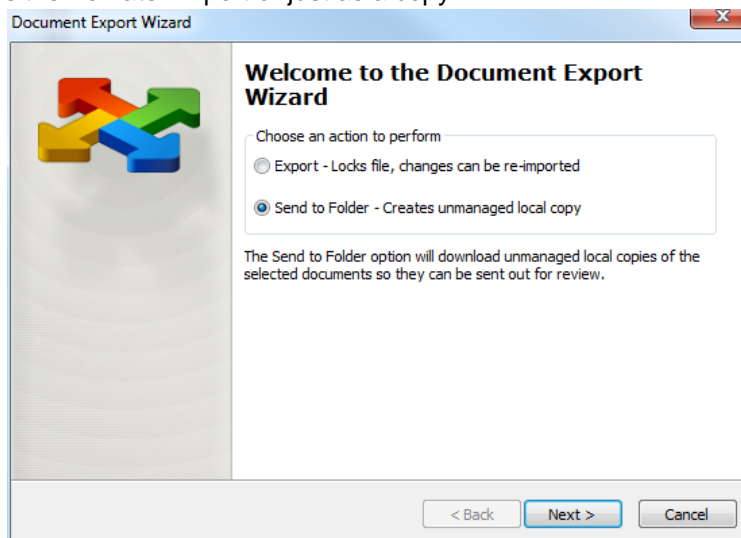
When the document is **checked out** there will be shown an icon in front of the document name in ProjectWise document area. For the user whom has checked the document out, the icon is: ✓ and for all other users: 🗝

## 7.2 Check out / Copy out / Export...

The **Check out** command copy the selected document to the locale computer and lock the document on the server, but do not start the application associated with the documents prefix.

The **Copy out** command copies the selected document to the locale computer, but do not lock the document on the server.

The **Export...** command starts a wizard to copy the selected document to the locale computer, either for later import or just as a copy.



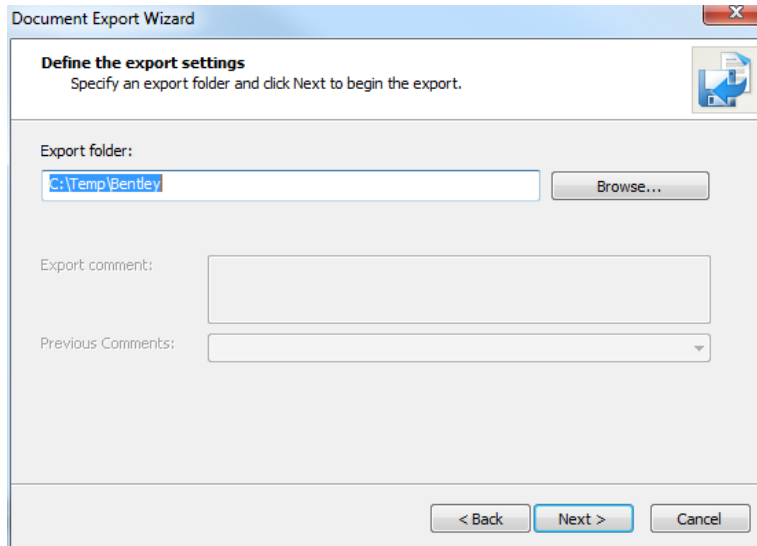
The **Export** function is used when the document shall be modified in “off-line mode” and later “imported” to the server. This method locks the document on the server, and do not release it until the document is “imported” again.



The **Send to Folder** function copy out the document to a folder by your own selection, but do not set a lock on the document on the server. The document cannot be “imported” again.



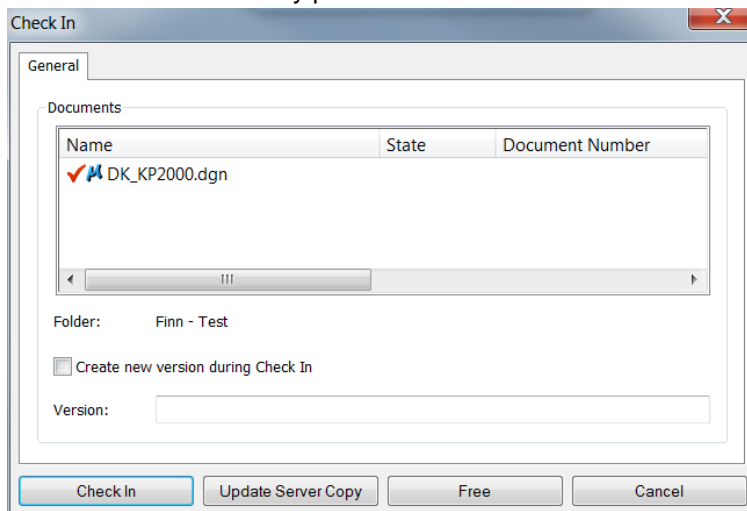
When the method is selected, press: **Next >** select a folder on the locale computer for placing the document and press: **Next >**



## 7.3 Check in



**Check in** copy the document back to the server and release the lock. The command will automatically be run when the application, in which the document is opened, is closed. It is however possible to run the command from ProjectWise by selecting the locked document, right click and chose **Check in**. It is only possible to check in documents checked out by your self.



### 7.3.1 New versions



The function: **Create new version during checkin** do not work in BDK projects due to the workflow states. All version changes are done through the workflow.



## 7.4 Update server copy

**Update server copy** can, for some applications, be executed from inside the application by selecting: **File** from the main menu and perform: **Update server copy**



Or when the document is closed in the associated application. (See the figure in chapter 6.3)

This command writes the corrected data from the locale copy of the document back to the server, but do not release the lock. This can be used so other users can read the new contents in the document and see progress in the project, but not edit the contents.

## 7.5 Free



The **Free** command removes the lock on the document on the server, but do not copy any corrections back to the server. The **Free** command can be executed when the document is closed in the associated application. (See the figure in chapter 6.3) or by selecting the document in ProjectWise document area, right clicking and selecting **Free**.

Only in special occasions must **Free** be used as NOTHING is copied back to the server, it rejects all modifications performed to the document in the active session.

**Free** can be used when no corrections are made, ex. If the document is checked out for print only.

## 7.6 Create new

There are two ways to create a document in ProjectWise. The document can be imported or it can be created (born) inside ProjectWise.

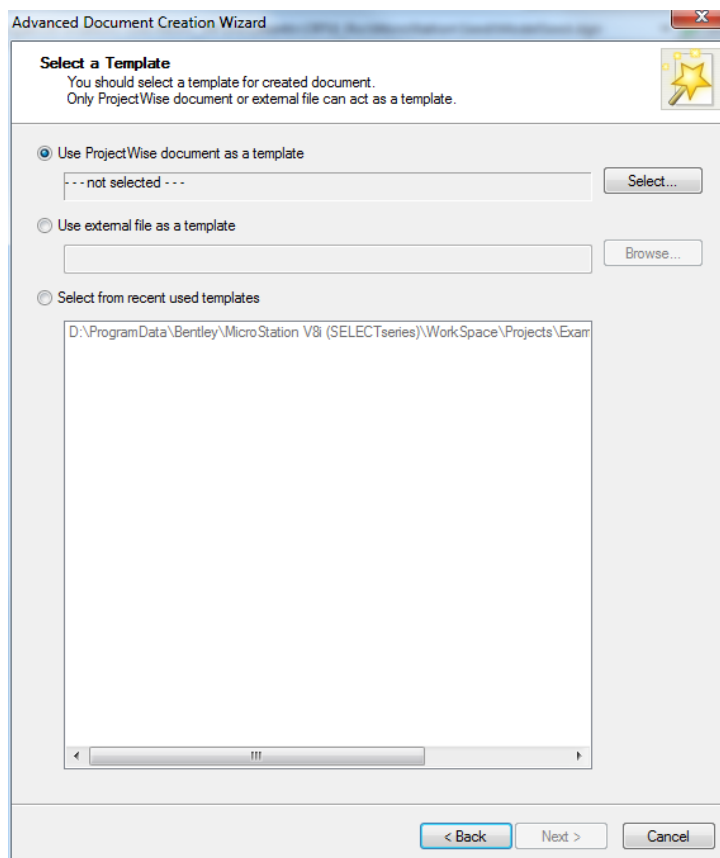
To import a document, select and drag the document outside ProjectWise and drop it in ProjectWise document area for the desired folder. Use then the wizard starting after worth.



To create a document inside ProjectWise, select **Document->New->Document** from ProjectWise menu bar.

A wizard guiding the user through the steps in creating the document is started; this is the same wizard as for importing documents described above. If no wizard is starting please set the default wizard as described in chapter 8. Documents must always be created using **Advanced Wizard**.

If the document is created inside ProjectWise, the first step in the wizard will be **Use ProjectWise document as a template** if the document is imported the first step will be: **Use external file as a template**.



If the document is imported do not change the settings. If the document is created inside ProjectWise press the **Select** button and browse to the template you will be using.

After selecting the template you will be asked for a **Document Code**. The document code is a unique name for a document throughout the whole database. Document code and document name must be the same. (For more information about document coder, see chapter 8)

The next step in document creation is the attribute page. On this page are some of the metadata stored together with the document. These metadata will be synchronized with the title block or the model block of the CAD files. (For more information about the metadata, see chapter 9)

## 7.7 Delete

If a document shall be deleted this is done by selecting the document, right click and select **Delete**. Be aware that all old versions of the documents will be deleted along with the current version of the document.

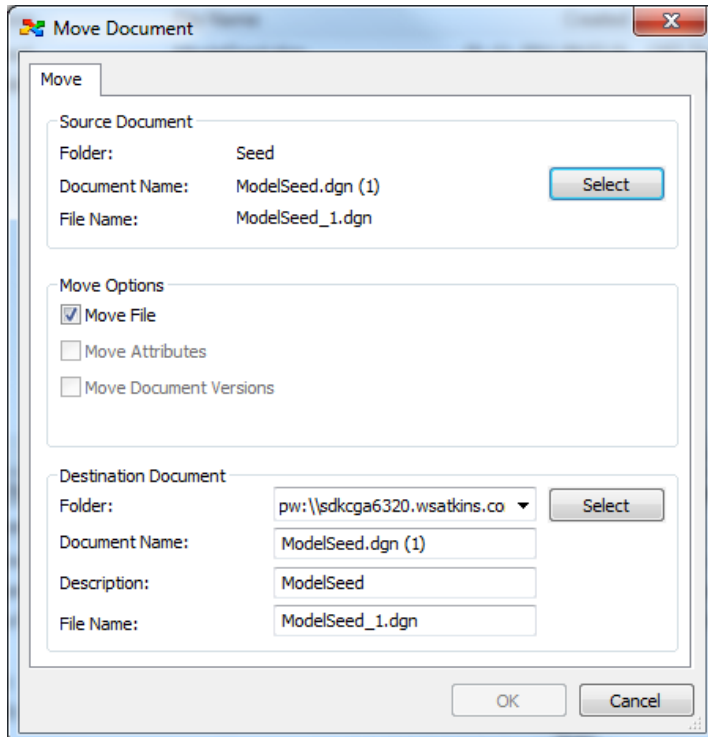
## 7.8 Copy / Copy to / Move to

There are different ways to move a document from one folder to another.

**Copy** puts a copy of the document in ProjectWise clipboard, you then navigate to the destination folder and select the command: **Paste**.

**Copy to** works in a similar way as Copy, but you will be guided through the process via a wizard.

**Move to** show a form where destination folder and name must be supplied.



**Copy** leaves the original document in the source folder, **move to** do not.

To use the: **Move to** you need to have Delete rights to the document.

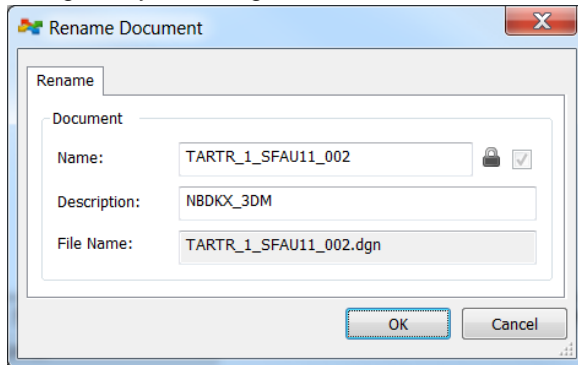
Remember to change document code and filename if necessary.



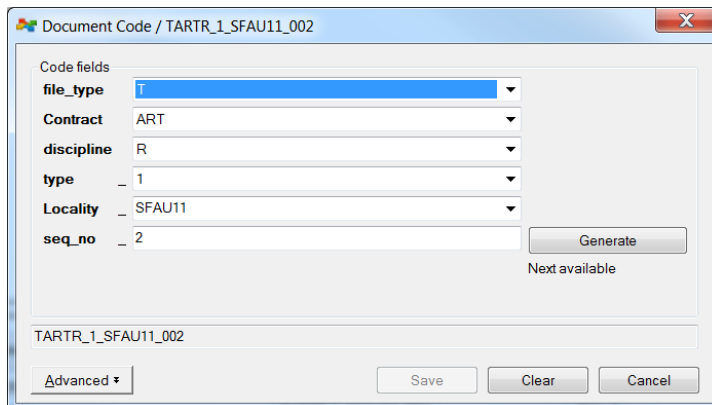
## 7.9 Rename



When a document need to have a new name, both the document code and the name must be changed. By selecting the command: **Rename**; only the name can be changed.



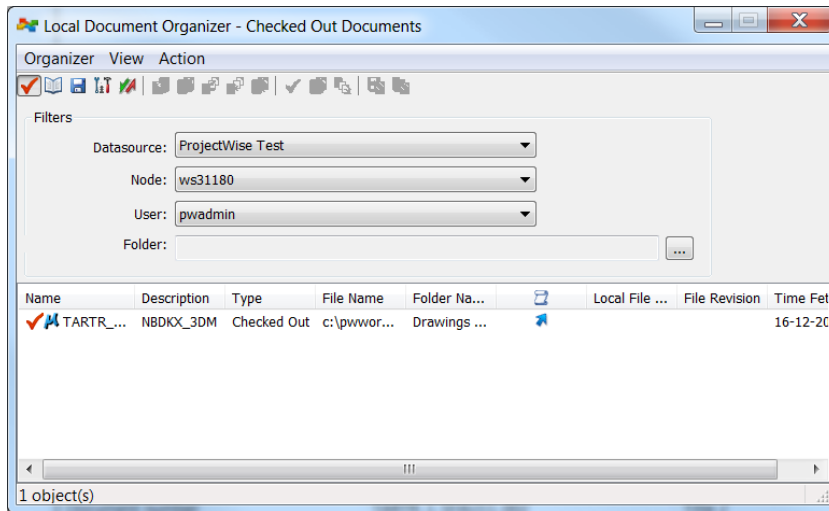
To change the document code, you must select: **Attributtes->Document code**



## 7.10 Local Document Organizer

**Local Document Organizer** is used to create an overview of which document are checked out and which document are copied out on the local computer. With **Local document organizer** you can free disk storage by purging the documents you have copied out, update servercopies or check in documents.

**Local Document Organizer**



Filter buttons: **Checked out**, **Copied** and **Exported**. The window shows the local copies according to the filter selected.



For *checked out* documents: **Update server copy**, **Check in**, **Check in – Leave copy**, **Free – Leave copy** and **Free**.



For copied out documents: **Check out**, **Refresh copy** and **Purge copy**.



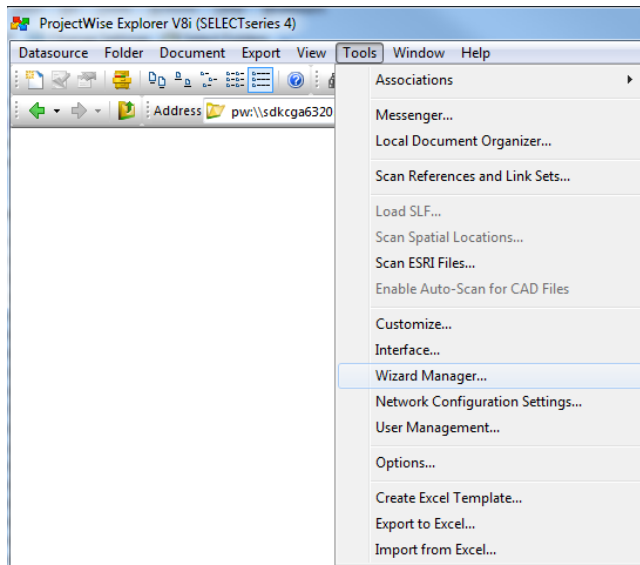
For Exported documents: **Import** and **Import from**.

## 8 Document wizard

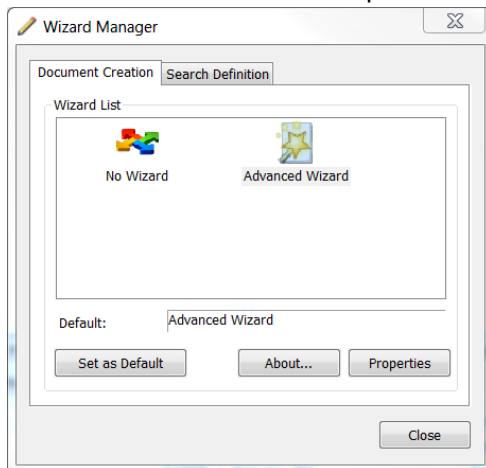
Document wizard, or **Advanced wizard**, must be used for creation of all documents. The wizard's purpose is to supply the document with document code. The alternative to this wizard is: **No wizard** which do not supply the documents with document code but only create a document with the same name as the template. **Advanced wizard** must always be used when creating new documents in ProjectWise.

### 8.1 Setting up

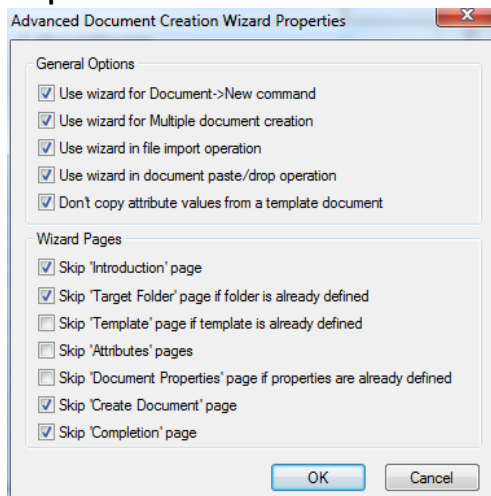
To set up ProjectWise to use **Advanced wizard** the following must be done. Select: **Tools->Wizard Manager..** from the ProjectWise menu.



Select **Advanced Wizard** and press: **Set as Default**.



To remove some of the pages in the wizard, containing informations never used, click on: **Properties**.



The settings can, as a minimum, be set as shown above, when finished press: **OK**.

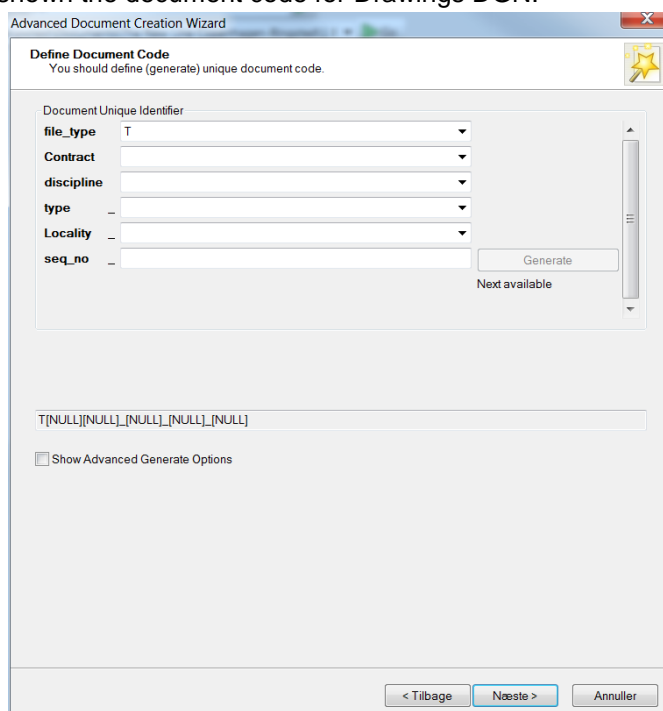
## 9 Document code



Document code is a unique value, across the database, and used for identifying a document. Document code is generated of one or more attributes defined for the folders environment. Document code is being used to secure that there is only one document stored in the datasource with that specific name. If no document code was defined, documents with the same name could exist in different folders in the datasource. When creating a document the document code will also be the documents physical filename.

### 9.1 Document names

The document code is depending on which folder the document is created in. As an example is shown the document code for Drawings DGN:

To create the document code select values from the drop down picklists to the different fields, and type in, and press the **Generate** button, for setting a serial number.

## 10 Attributes

Attributes are metadata stored in the database along with the document. Attributes are defined in the folders environment. Some of these attributes are part of the document code while others are pure additional data. Some of the attributes are initialized at document creation manually others get their values automatic.

Attributes are shown under the tab: **Attributes** in the dialog box that popup when right clicking on the document and selecting: **Properties..**

Drawings and models have additional attributes for revisions on the tab: **More Attributes**.

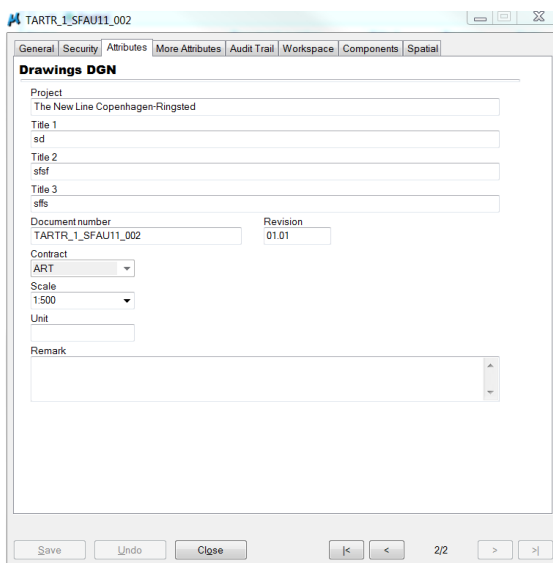


## 10.1 CAD documents

For CAD documents most of the attributes are equal to the informations stored in either the model block or the title block.



As some attributes are part of the document code they cannot be modified through the properties dialog box. Informations, not part to the document code, shown in the title block or model block can be modified here, and will the next time the document is opened in the CAD application, be synchronized in the document with informations supplied in this dialog box.



**Drawings DGN**

Project: The New Line Copenhagen-Ringsted

Title 1: sd  
Title 2: sfsf  
Title 3: sfs

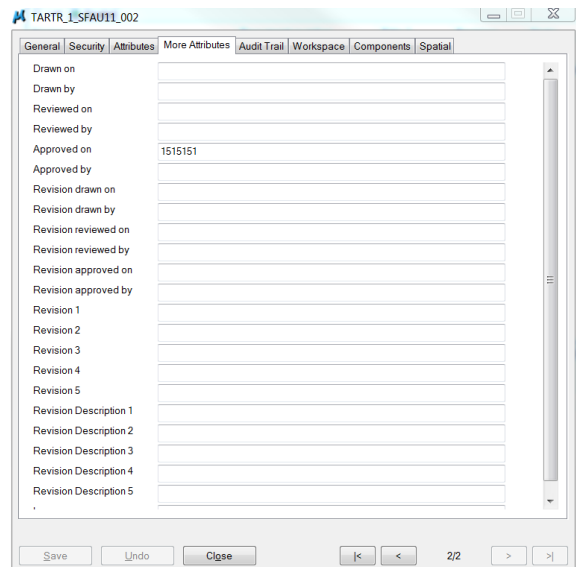
Document number: TARTR\_1\_SFAU11\_002      Revision: 01.01

Contract: ART

Scale: 1:500

Unit: [ ]

Remark: [ ]



**More Attributes**

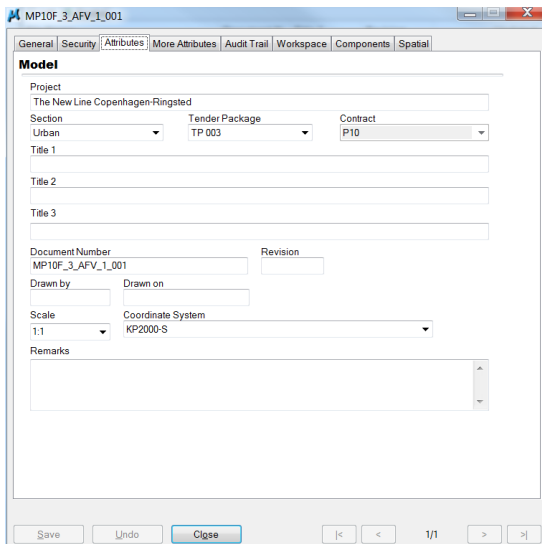
Drawn on: [ ]  
Drawn by: [ ]  
Reviewed on: [ ]  
Reviewed by: [ ]  
Approved on: 1515151  
Approved by: [ ]  
Revision drawn on: [ ]  
Revision drawn by: [ ]  
Revision reviewed on: [ ]  
Revision reviewed by: [ ]  
Revision approved on: [ ]  
Revision approved by: [ ]

Revision 1: [ ]  
Revision 2: [ ]  
Revision 3: [ ]  
Revision 4: [ ]  
Revision 5: [ ]

Revision Description 1: [ ]  
Revision Description 2: [ ]  
Revision Description 3: [ ]  
Revision Description 4: [ ]  
Revision Description 5: [ ]

Attributes for a drawing file

The tab: More Attributes



**Model**

Project: The New Line Copenhagen-Ringsted

Section: Urban      Tender Package: TP 003      Contract: P10

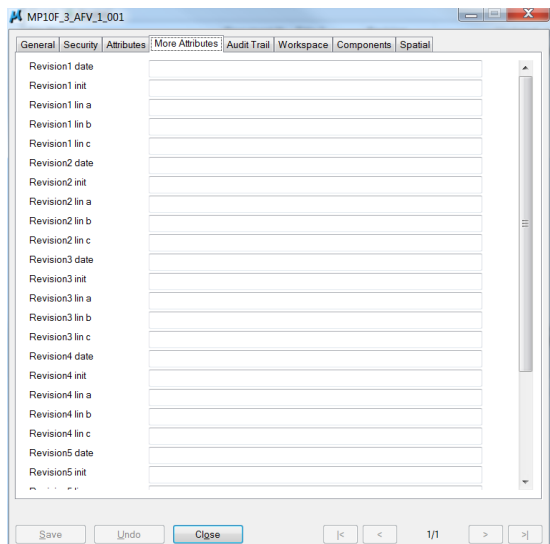
Title 1: [ ]  
Title 2: [ ]  
Title 3: [ ]

Document Number: MP10F\_3\_AFV\_1\_001      Revision: [ ]

Drawn by: [ ]      Drawn on: [ ]

Scale: 1:1      Coordinate System: KP2000-S

Remarks: [ ]



**More Attributes**

Revision1 date: [ ]  
Revision1 init: [ ]  
Revision1 lin a: [ ]  
Revision1 lin b: [ ]  
Revision1 lin c: [ ]  
Revision2 date: [ ]  
Revision2 init: [ ]  
Revision2 lin a: [ ]  
Revision2 lin b: [ ]  
Revision2 lin c: [ ]  
Revision3 date: [ ]  
Revision3 init: [ ]  
Revision3 lin a: [ ]  
Revision3 lin b: [ ]  
Revision3 lin c: [ ]  
Revision4 date: [ ]  
Revision4 init: [ ]  
Revision4 lin a: [ ]  
Revision4 lin b: [ ]  
Revision4 lin c: [ ]  
Revision5 date: [ ]  
Revision5 init: [ ]

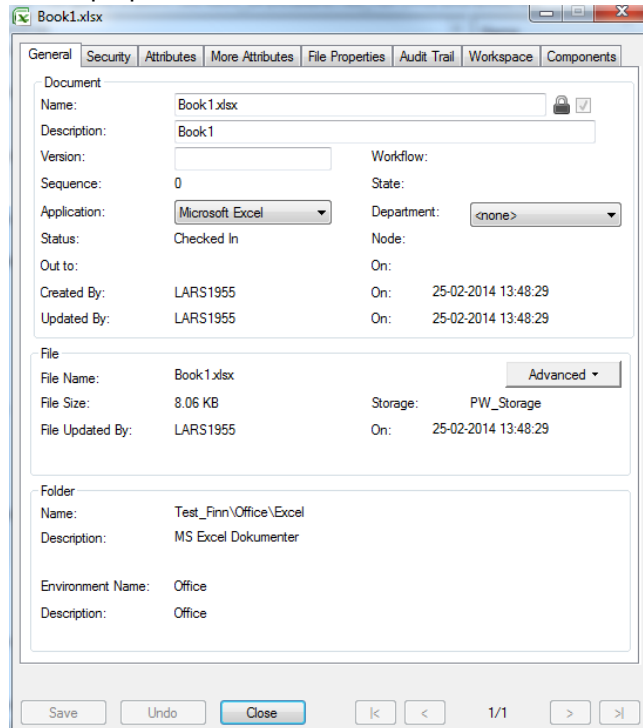
Attributes for a model file

The tab: More Attributes

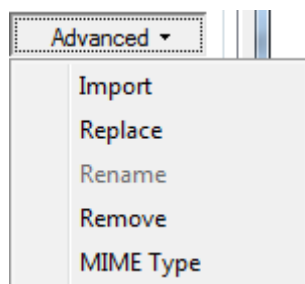
## 11 Replacing documents

Along with the document, several metadata are saved. If a physical document (the disk copy) need to be replaced with another one, but the metadata need to be retained, this can be done the following way.

Select properties on the document:



From the tab: **General**, press the drop-down menu: **Advanced**.



For replacing the document with another document stored inside ProjectWise, select **Replace**. From replacing the document with another document, stored outside ProjectWise, select **Import**.

In both cases you need to confirm the operation.

