

IndustrialIT Freelance

CBF Viewer 2013 (Build 158) Installation Guide



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1. Introduction

The CBF Viewer Tool is an additional software package to the product software of DigiVis or system 800xA. It shows the function block diagrams on an operator workplace in the same way as it is shown on the Control Builder F engineering workplace. Live values are overlayed.

Function Scope:

- The CBF Viewer shows function block diagrams in an unchanged form, i.e. they are shown exactly as is the case with the Control Builder F. It supports the languages function block diagram (FBD), instruction list (IL), Ladder diagram (LAD), structured text (ST) as well as sequential function charts (SFC)
- Ladder diagram and the structured text (ST) is supported in offline mode
- Furthermore, multiple projects are possible.
- Additionally, the CBF Viewer is able to indicate the project tree and the variable and tag lists.
- The operator can, at any time, navigate within the project and call up other views. With the aid of cross references, it is possible to navigate very easily within one project.
- Detailed tool tips in the function block diagrams make diagnostics easier.
- The CBF Viewer can be put into a lock mode. In this case, the Viewer only shows those signals and modules of a function block diagram that belong to the protection input signals of a module, e.g. of an IDF. All other signals are hidden.
- Perfect tool during commissioning phase. Loop check can be done from various working places.
- Own user rights administration using existing Windows users
- The CBF Viewer Tool is not redundancy capable

Software structure:

For the configuration of the Viewer, the CSV-Export-File of the Control Builder F is used. A configuration or modification in the function block diagram is not necessary. User-defined blocks are unnecessary, either. In order to show the online values in the function block diagrams, an OPC-gateway of the Control Builder F is necessary.

Configuration:

The Configuration Wizard helps to achieve all important settings of the CBF-Viewer. It leads step by step through the configuration data and enables the user to test the Viewer and its settings.

Demo modus (CBF Viewer without license) does not allow to display variable list, tag list and parameter list. Furthermore commissioning modus is not possible

An extension of the aspect menu of the HSI objects makes it possible to integrate the CBF Viewer into System 800xA or DigiVis. On the other hand, the CBF Viewer allows to call up the faceplates of the tags.



When installing CBF Viewer, configuration and commissioning knowledge of Control-Builder F and of DigiVis or System 800xA are presupposed.

1.1 Order management and license handling

- CBF Viewer is not part of the DigiVis or System 800xA basic software
- CBF Viewer can be ordered via tech-support-system-solution@de.abb.com
- Each Process Portal operation workplace needs a CBF Viewer license. Nodes without a working place don't need licenses.
- Each System requires one Freelance 800F OPC-Server license. Please order separately from CBF Viewer.

1.2 Release and Update Notes

Requirements and Restrictions are summarized within the release notes. They need to be observed.

Current Version of the Control Builder F Viewer is Version 2013. The CBF Viewer is released for the following Freelance-Versions (including all Service-Packs):

- Freelance V9.2
- Freelance 2013

The CBF Viewer is release for the following HSI systems:

- System 800xA (as of Version SV5.1)
- DigiVis (as of Version 9.2)

Please remove older versions of the CBF Viewer before installing a new set.

As from this version the CBF Viewer supports two different license modes:

- Full license: All features available
- Light license or DigiVis mode: Only read access to all signals. Display of other diagrams, views or diagnostics not allowed. Can only be called up from DigiVis or System 800xA.

1.3 New features in Version 9.2

These are the new features in version 9.2:

- New access right "lock diagrams only". With this right it is possible to use the CBF Viewer to show only lock/protection diagrams. Function block diagrams will be hidden.
- The language of the CBF Viewer depends from the regional settings from the interactive user.
- Support of Chinese, French, Spain und Russian language
- Support of Freelance V9.2
- Interlock displays support the closed circuit current principle.

1.4 New features in Version 9.2 SP1

These are the new features in version 9.2 SP1:

- Support of WinMation HT600
- Support of Windows 7
- Freelance project Backup files can be used as csv-file.

1.5 New features for CBF Viewer 2013

These are the new features in version 2013:

- Support of Freelance 2013
- New groups "PGIMVariables" and "PROFIBUS" in parameter list
- New context menu item for value window in function block diagram

2. Installation

2.1 CBF Viewer

Run the "Autoplay.exe" program from CD labeled "CBF Viewer" and follow the instructions.



For *DigiVis* and *System 800xA* use the installation folder
„c:\Program Files (x86)\ABB Industrial IT\CbfViewer”.

Install the CBF Viewer on every machine of your system.

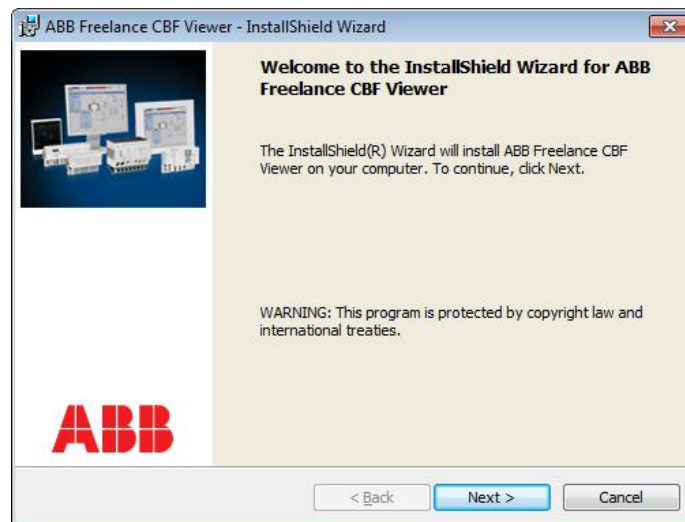
At first you select your preferred language:



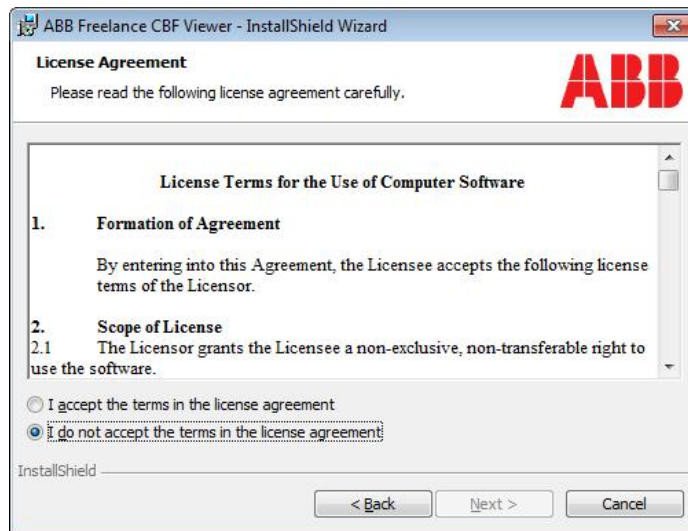
Start of the installation by selecting “CBF Viewer” followed by a click on CBF “Viewer Software Installation”.



Having started the setup, you will see the following dialogue:

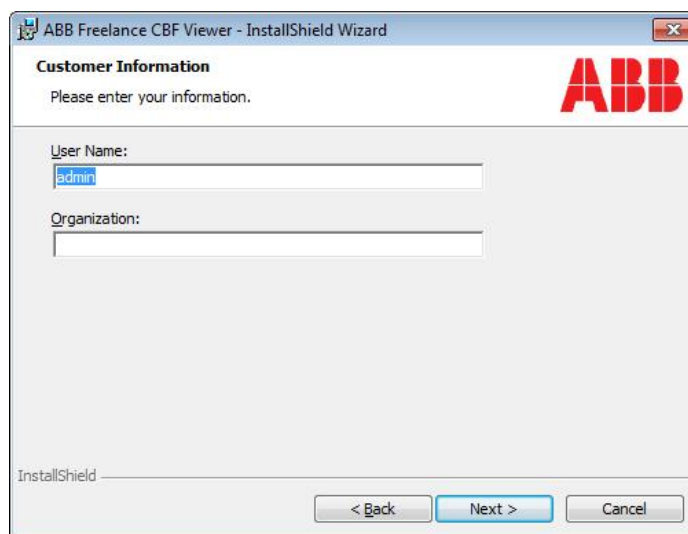


You will get to the next dialogue with „Next“.



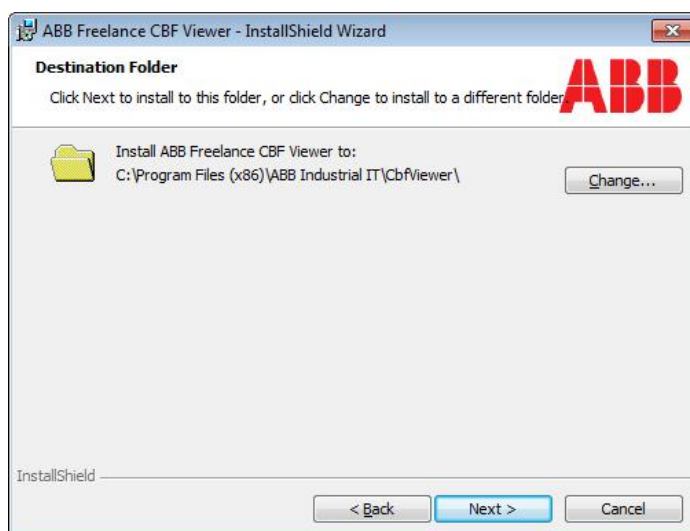
After accepting the terms in the license agreement you will get to the next dialogue with „Next“.

In this dialogue, you have to enter your name and company. Confirm the entry with „Next“.



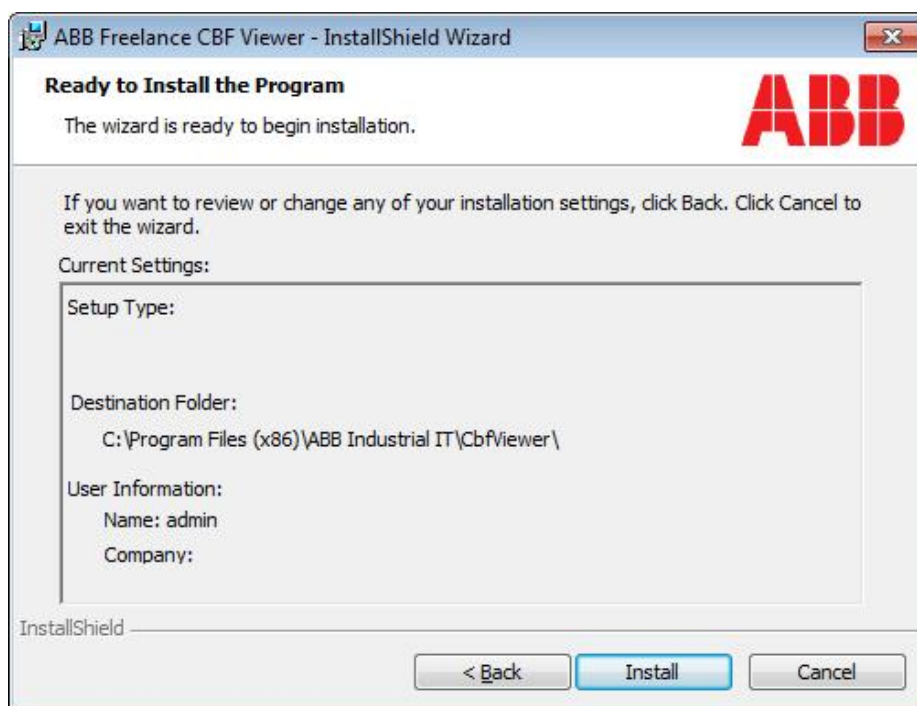
Confirm the entry with „Next“.

In the next dialogue, you can modify the installation folder

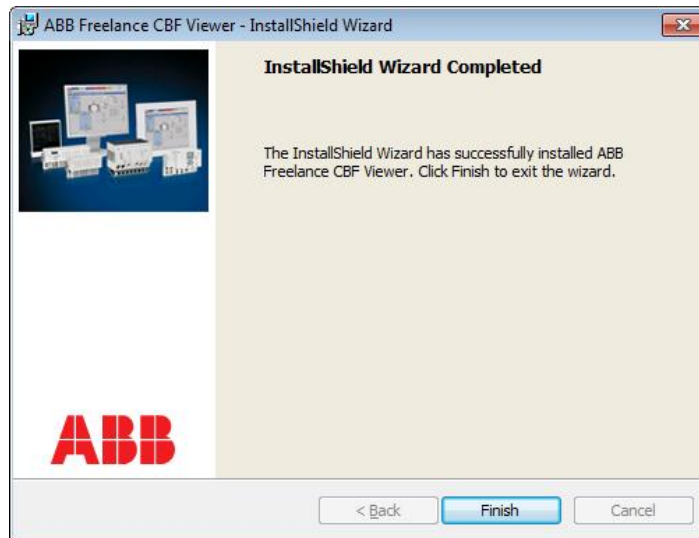


The installation path for DigiVis and System 800xA is „c:\Program Files (x86)\ABB Industrial IT\CBFViewer”

In this dialogue, all settings for the setup are shown once again. If you click on „Install“, all files are installed into your installation folder.



The installation is now completed. You can terminate the setup with „*Finish*“.



After installing the CBF Viewer, the OPC Server still needs to be installed and configured. (See Chapter 2.2 Freelance OPC-Server).

2.2 Freelance OPC-Server Installation

In order to show online values of the controller, an OPC server has to be installed on each PC where the CBF Viewer is installed. In this context, it is sufficient if a local Freelance 2013 OPC server is installed on only one PC of the whole HSI system whereas, on all the other PCs, the remote OPC server is installed. This remote OPC server is connected with the local Freelance 2013 OPC server via the network and thus reads the current values. In this case, only one OPC gateway has to be configured in the Control Builder F.



The connection to the OPC server cannot be configured redundantly. If the PC with the local OPC server breaks down, no CBF Viewer is in a position to ascertain online values from the process station.

The OPC server version for installation must accord with the version of Control Builder F.

Important:

We recommend to use the trend server instead of the OPC-Servers. In this case, only a single trend server per system is required. Please enter the trend server resource in the ControlBuilder F configuration dialogs. Since a trend server has only read rights, values cannot be written from CBF Viewer to the controller. If however, this is required use OPC Server with appropriate access rights.

Installation:

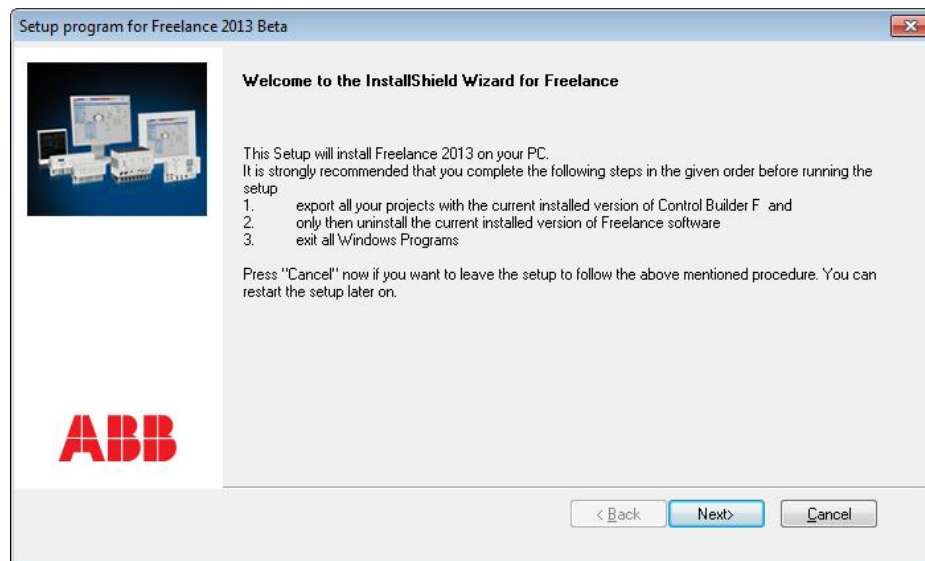
Start the “autoplay.exe” program from Freelance Setup CD. Select your language.



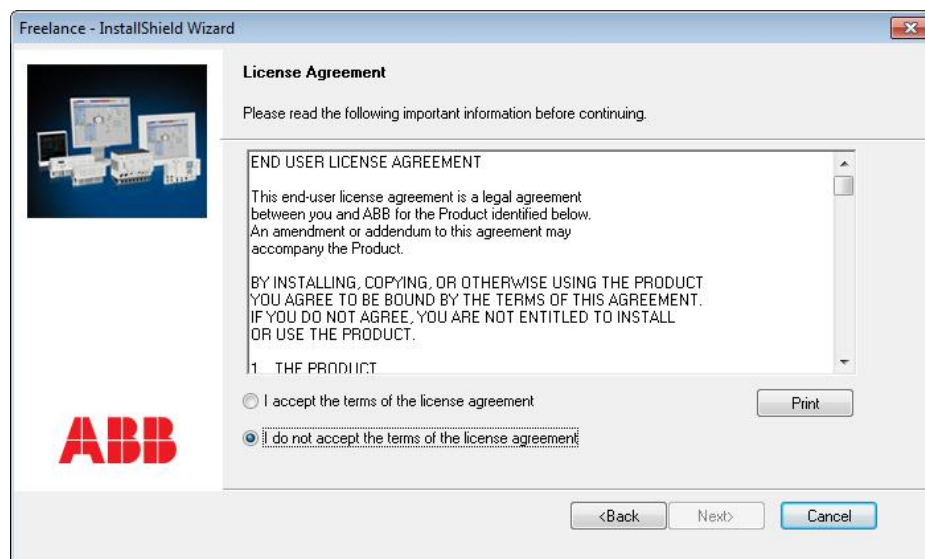
Start installation with “Freelance Software”.



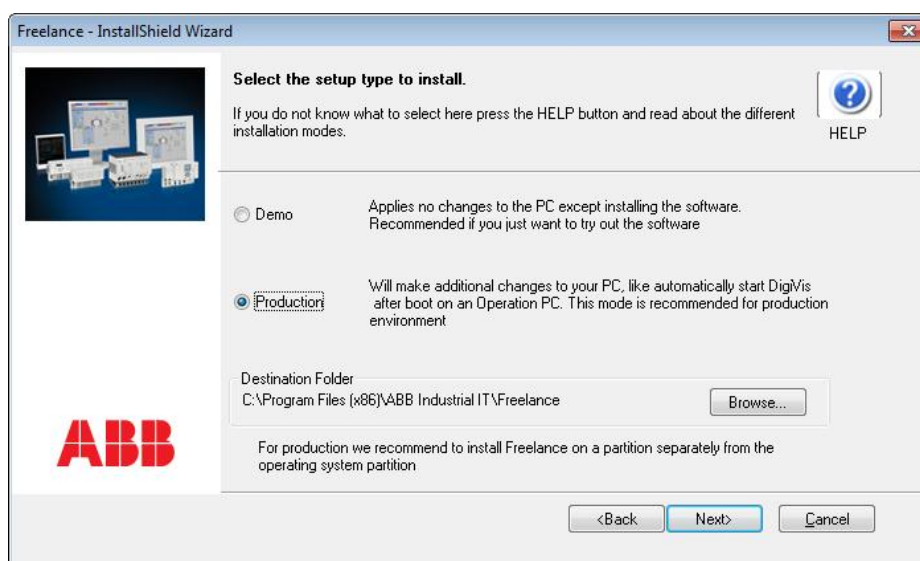
You will get to the next dialogue with “Next”.



Accept the license agreement and press “Next”.

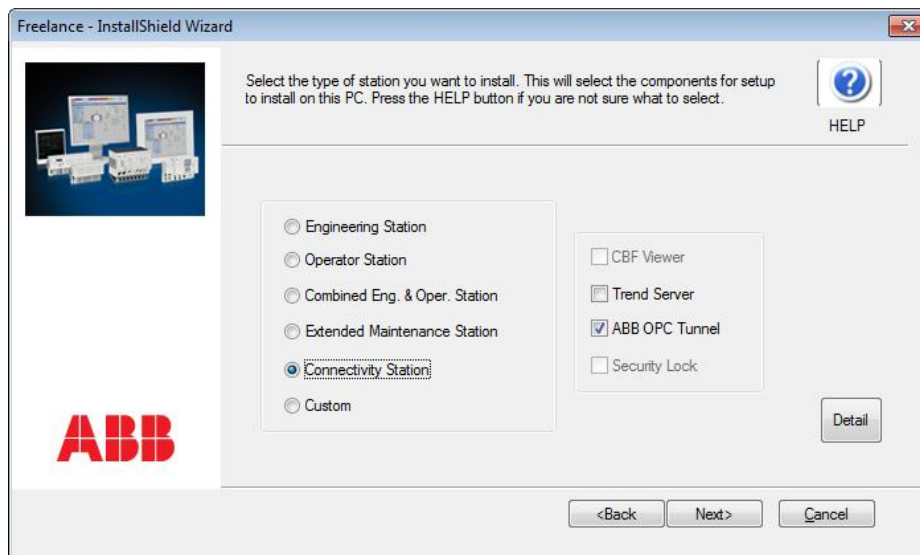


Select *“Production”* and press *“Next”*:

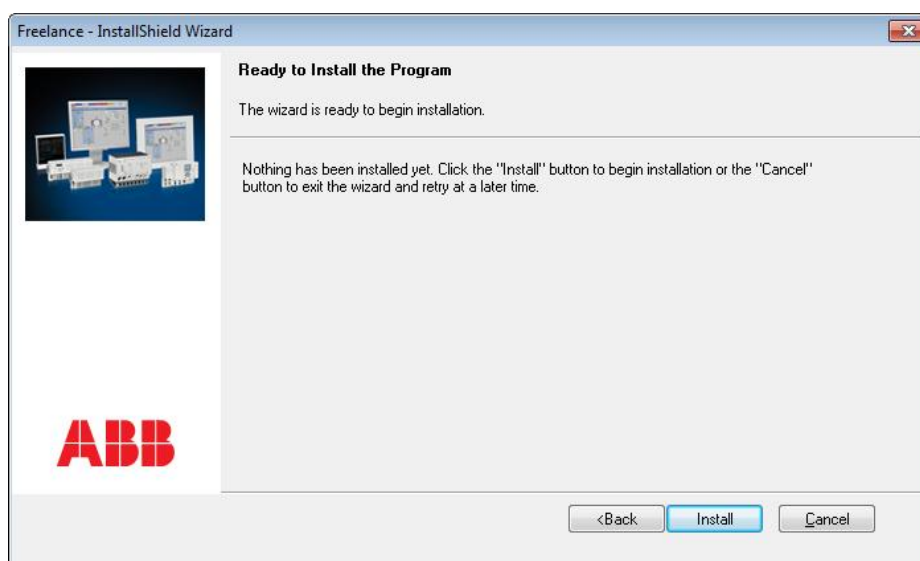


Select *“Connectivity Station”*, activate *“Trend Server”* and press *“Next”*.

In case of installing the OPC on the connectivity server (800xA), *“Trend Server”* and *“ABB OPC Tunnel”* shouldn't be selected (see Chapter 2.2).

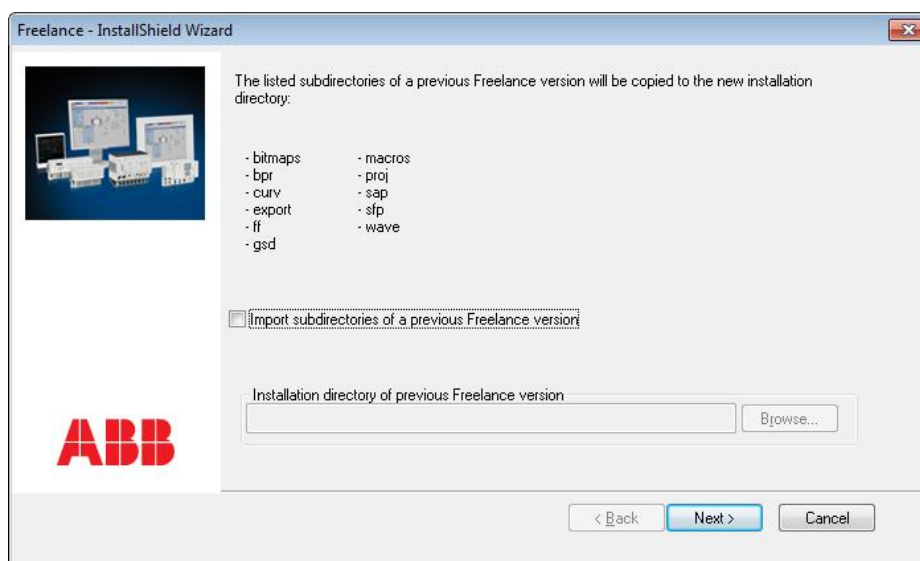


You will get to the next dialogue with „*Install*“.



Wait until setup completes.

You will get to the next dialogue with „*Next*“.



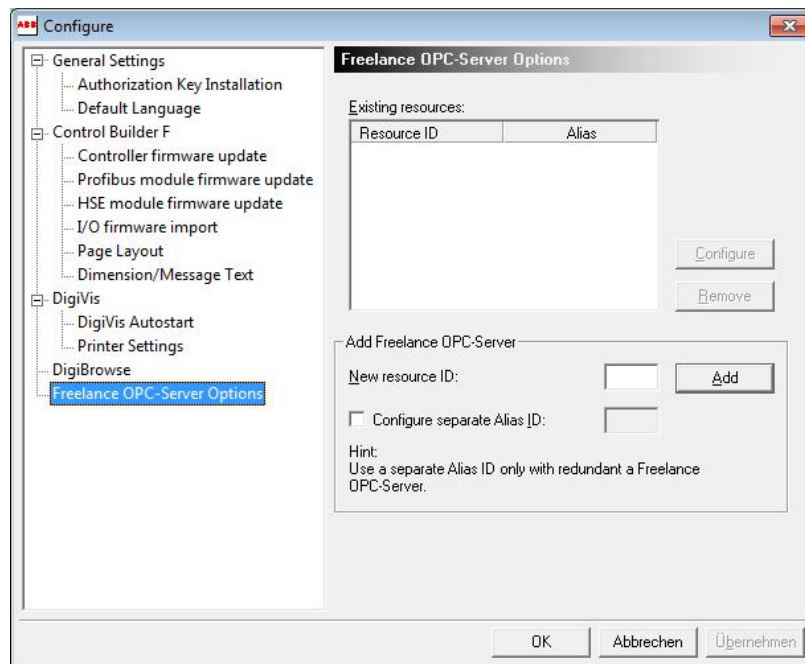
You will get to the next dialogue with „*Next*“.

Configuration of the local OPC server:

Subsequently after the installation the Freelance Configuration Tool should start automatically in order to configure the Freelance OPC Server.

Select the option „*OPC-Server Options*“ and enter the new resource id. Then press the “*add*” button. Select the new opc-server in the list of existing resources and press the “*Configure*” button.

Enter the username and password of the operation system (800xA service account). DigiVis does not require this setting.



The name of the service account under 800xA can be obtained by calling the Start menu → "ABB Industrial IT 800xA" → "System" the "Configuration Wizard". In the opened window, select "System software User settings" and confirm by clicking on "Next". The user name for the service account is found under "Service Account".

Configuration of the remote OPC server:

This option is only available up to Freelance Version 9.1. As of Version 9.2 the OPC Server settings will be done by means of the CBF Viewer Configuration Wizard. The necessary configuration of the remote OPC-server will be done by the CBF Viewer Configuration Wizard, executed on the remote machine (compare chapter 2.4 – Example for 800xA)!

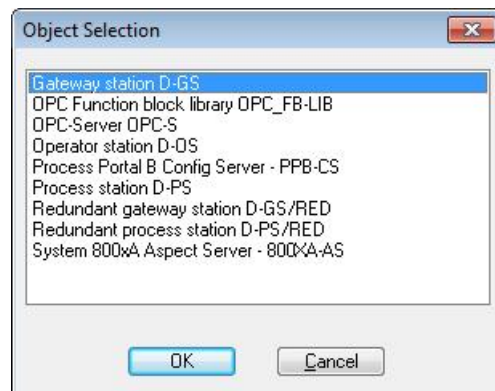
Continue by clicking “OK” and finish the setup in the next windows by clicking on “Finish”.

2.3 Integration into Control Builder F

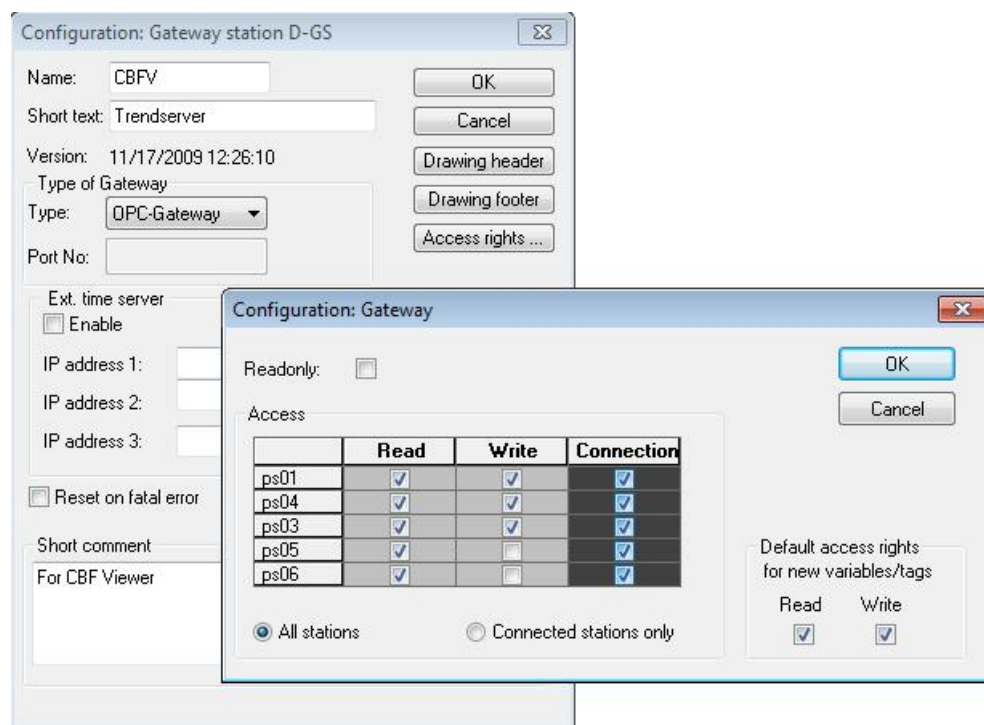
In order to integrate the CBF Viewer into the Control Builder F, you only have to insert an OPC gateway with read access to all variables and tags (default settings of the gateway). After that, the whole project is exported (CSV). This csv-file is used as configuration file for the CBF Viewer.

Insertion of an OPC Gateway into the Control Builder F:

Open your project, go to the project tree in the configuration mode and insert a gateway station (D-GS) on the resource level:



Configure as type an OPC gateway with the following access rights (for DigiVis where necessary a trend server gateway. Refer to Chapter 2.2 Freelance OPC-Server)

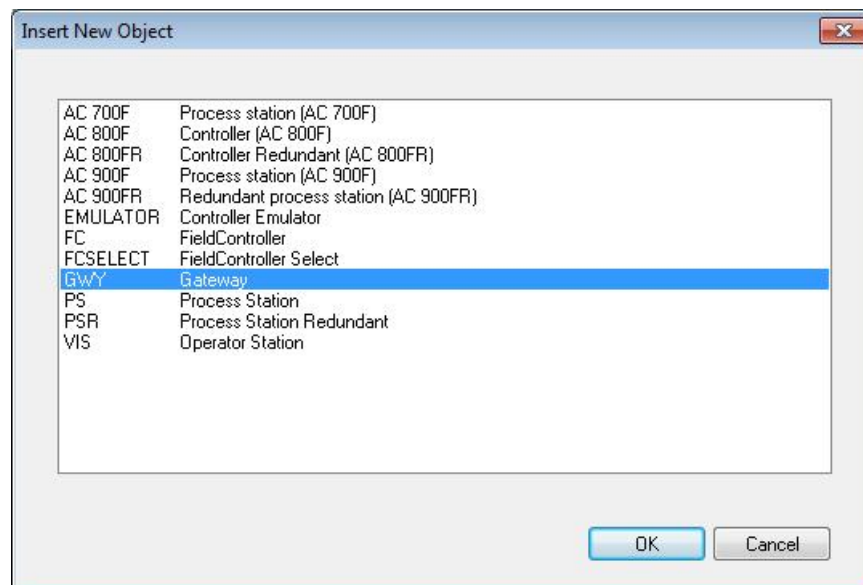


If read and write access is not desired for all variables and tags, configure the access to variables and tags in the variable and tag lists of the Control Builder F as default.

Bear in mind that a read access must be configured for the CBF-Viewer for all variables and tags so that the CBF-Viewer can ascertain and display the corresponding value.

Confirm all your entries with “OK” and go to the hardware structure.

Insert a gateway station into the hardware structure:



Allocate the resource to the respective station. After that, you have to configure your network structure. Check your whole project and load all resources. Finally, export the whole project (csv-file).



If there is more than one active network card in the PC, always enter the address which can be accessed by all PCs as the IP address in the network structure. This is normally the address of the control system network and not the address of the controller network. Refer to Chapter 4 Example for System 800xA Installation Layout

2.4 Integration in System 800xA

In order to integrate the CBF Viewer into the operating system *Industrial IT System 800xA*, the two aspects *CBF Viewer* and *CBF Function* are added to the Freelance object types.

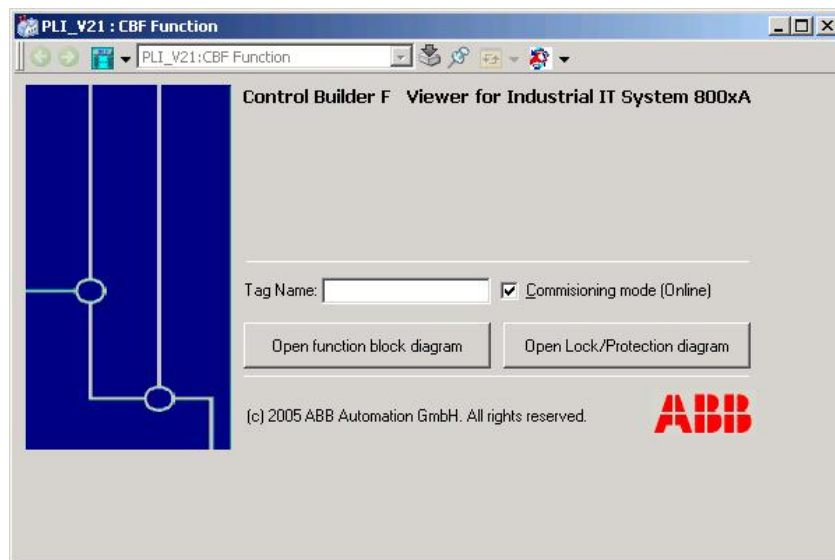
This can be effected by means of the Configuration Wizard

Making a double-click, the aspect *CBF Viewer* Element allows the start of the CBF Viewer including the display of the corresponding tag in the online mode:



This aspect is very small in the display and thus can be placed in the graphic display.

The aspect *CBF Function* looks as follows:

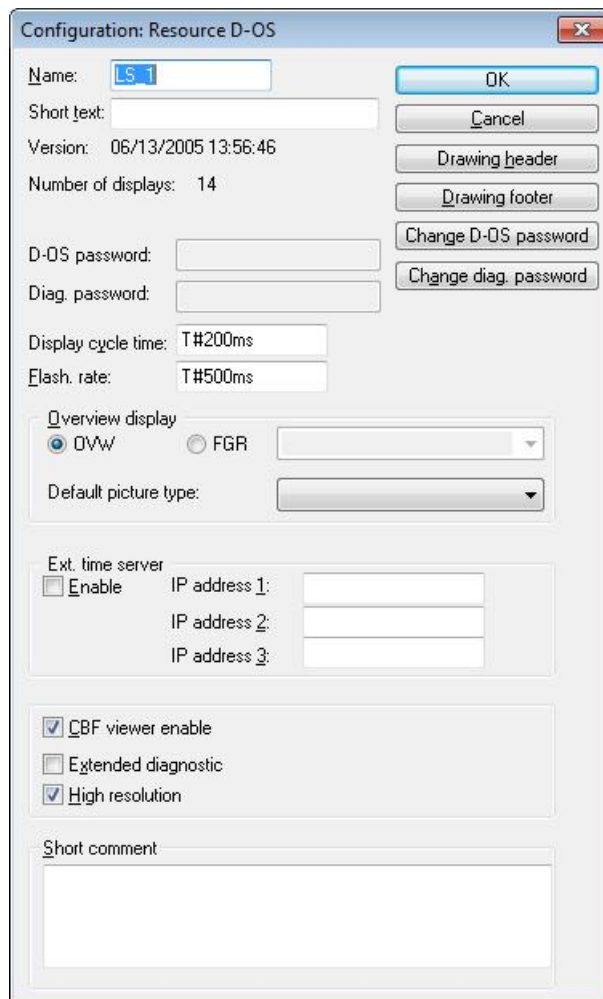


Insert the corresponding tag into the edit field *Tag Name*. Call up the function block diagram of the tag with the button *Open function block diagram*. Call up the Lock/Protection diagram of the tag with the button *Open Lock/Protection diagram*. With the option *Commissioning mode (Online)*, you can choose whether to start the CBF Viewer in the configuration mode or in the commissioning mode (online).

2.5 Integration into DigiVis

The CBF Viewer does not require special configuration as it was necessary in earlier versions. It integrates with DigiVis automatically. Please check the option “CBF View enable” in the console resource header of the Control Builder F project tree in order to activate the CBFViewer call up in DigiVis.

Please note: Running in DigiVis environment, the CBFViewer does not support to switch between Function Block diagrams or windows and to change parameters.



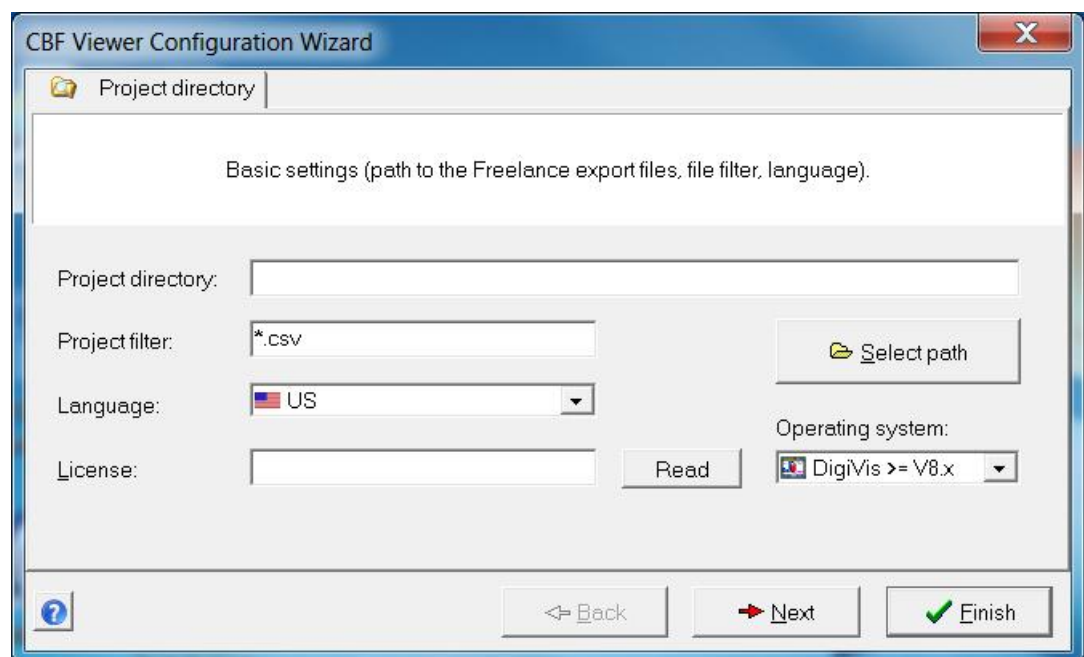
The image shows a Windows-style dialog box titled "Configuration: Resource D-OS". It contains various configuration options for a resource. The "Name" field is set to "LS 1". The "Short text" field is empty. The "Version" is "06/13/2005 13:56:46". The "Number of displays" is "14". There are fields for "D-OS password" and "Diag. password", both empty. The "Display cycle time" is "T#200ms" and the "Flash. rate" is "T#500ms". Under "Overview display", the "OVW" radio button is selected, and the "FGR" radio button is unselected. There is a dropdown menu for "Default picture type". Under "Ext. time server", the "Enable" checkbox is unselected, and there are three empty fields for "IP address 1:", "IP address 2:", and "IP address 3:". At the bottom, there are three checked checkboxes: "CBF viewer enable", "Extended diagnostic", and "High resolution". There is also a "Short comment" text area at the very bottom. On the right side of the dialog, there are buttons for "OK", "Cancel", "Drawing header", "Drawing footer", "Change D-OS password", and "Change diag. password".

3. Configuration

The Configuration Wizard helps to achieve all important settings of the CBF-Viewer. It leads step by step through the configuration data and enables the user to test the Viewer and its settings. It has to be started at least once on each PC where the CBF Viewer has been installed.

3.1 Starting of the Wizard:

- *Start → Programs → ABB Industrial IT → CBF Viewer → Configuration Wizard* or
- Start of the program „CbfViewerWizard.Exe“ in the installation folder



Indicate the path to the Freelance Export files as well as the filter for the files or select an Export file of the Control Builder F. The path can also refer to other PCs. In this context, you have to enter for the path the UNC name and the folder (e.g. \\iit\CbfView). The „*Project filter*“ can either contain wild cards or one single file name. If the operating system „*DigiVis V8.x*“ is selected, the project folder is the installation folder of Freelance with subfolder „proj“; (e.g. *C:\Program Files (x86)\Abb Industrial IT\Freelance\proj*). Choose *CBFViewerVis.csv* as project filter.



Decisive for the CBF Viewer and CBF Viewer Wizard language is the language setting in the regional settings in Windows. In the second place the language of the „Language“ field is taken. This is only if the language setting in Windows is not German (GR), English (US), Japanese (JP), Chinese (CN), Portugese (PT), Russian (RU) or French (FR).

In the edit box „*Licence*“, you have to enter the license string which can be found on the Hw-dongle or you can create it with the button „Read“ if the dongle is connected to

the PC. Without a valid license string, it is not possible to represent current values.

If the hard key driver will not be installed (Hard key is plugged in and no license could be found), it can have two reasons:



1. Load the newest dongle drivers. You can find them on the CBV Viewers Product CD in folder "Patches"
2. You can install the driver manually. Please start the hidden program hldrv32.exe locating in installation folder of the CBF Viewer.

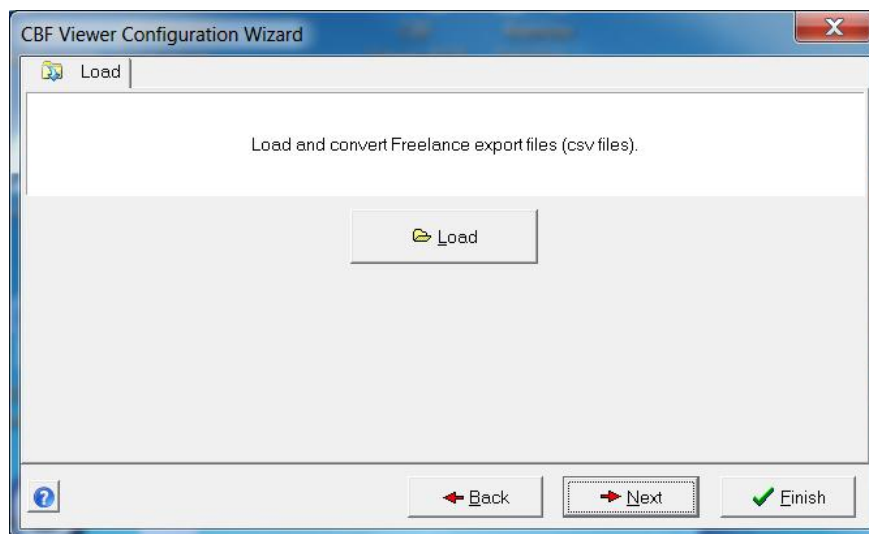
In the field *operating system* the CBF Viewer program indicates the installed Freelance version. This can manually be changed.



As to the project folder, you should always enter the folder of the PC that contains the export files since, by doing so, you do not have to copy the export files to all PCs with the CBF Viewer.

With the „Next“ button, you get to the next dialogue.

3.2 Loading csv-Files



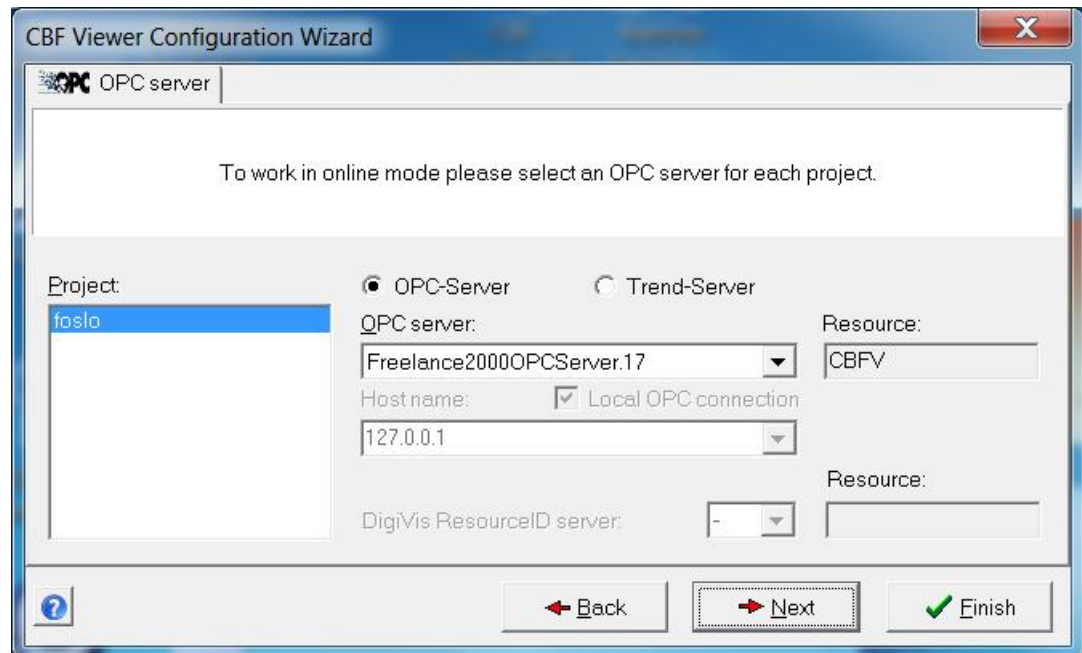
Press the „Load“ button in order to convert and load the Freelance Export files.



When starting the CBF Viewer, it is automatically checked whether it is necessary to convert and load the export files once again. In the affirmative case, they are loaded when the CBF Viewer is started.

With the „Next“ button, you get to the next dialogue.

3.3 OPC-Server-Settings



In this dialogue, you have to enter for each project the OPC Server for the online mode. In this context, you first have to select the corresponding project in the „*Project*“ list before selecting an available „*OPC-Server*“ from the list of OPC Servers (Select the configured OPC-Server for the CBFViewer in the Freelance project). Enable the check box „*Local OPC connection*“ in case you have installed the respective Remote OPC Server on this PC.

The trend server's resource ID has to be selected if and only if *DigiVis* is chosen as system in the folder „*Directories*“. An entry of an OPC-Server has in this case no impact. If an OPC-Server is used for *DigiVis*, select the entry „-“ for *DigiVis ResourceID*. In this case the server out of the OPC-Server list will be used.

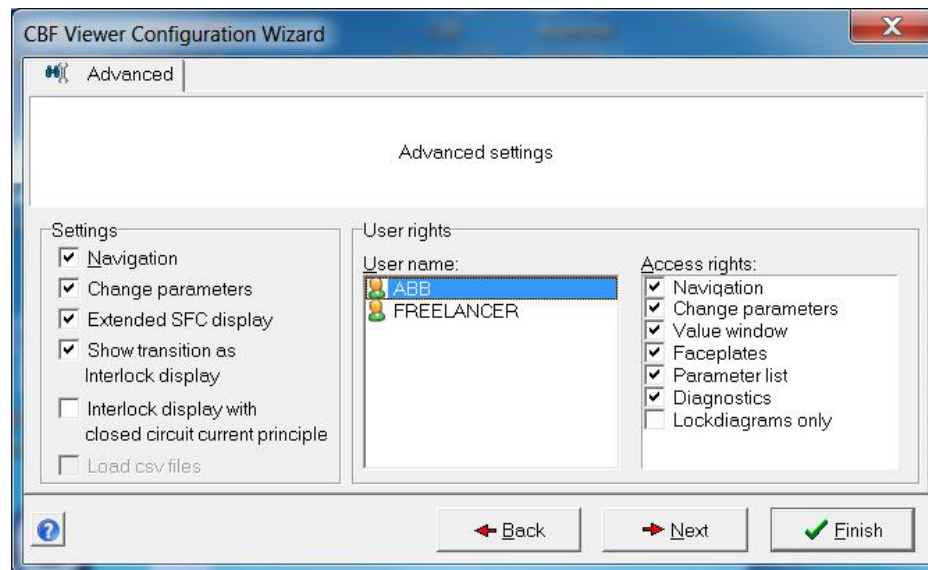
For other system types this entry field is not visible.



In case several Freelance Export files are found, every Freelance project has to have a unique project name. This is, at the same time, also a prerequisite for the coupling of several Freelance systems with 800xA.

With the „*Next*“ button, you get to the next dialogue.

3.4 Additional Settings and user rights



In this dialogue, it is possible to configure additional settings.

Enable the check box „*Navigation*“ in case you would like to allow the changing to other function block diagrams or displays on this PC (default).

Enable the check box „*Change Parameters*“ in case you would like to allow the changing of parameters of a function block. Dies feature is only possible with the CBF viewers full version.

Enable the check box „*Extended SFC-Display*“ in case you would like to activate the extended SFC display with the display of the action and transition function chart. This includes the possibility to operate the SFC.

Disable the check box „*Load csv-Files*“, if you only want to load the csv-Files from this wizard. Further information about the option load csv-file refer to chapter 3.7 Optimization of the loading procedure for CSV files. If 800xA is chosen as system in the folder „*Directories*“ and the option Load csv-file has been activated, the dialogue for username and password entry of the CBFViewerLoadService (refer to chapter 3.7) is shown one time. Enter the same username as for the 800xA Service Manager service (Start -> Execute -> services.msc -> ABB Services Manager -> Properties -> Login).

Please unselect the “load CSV file” checkbox for all installations.

In the group box “*User right*“, you can modify the settings for single users. The user right possibilities are „*Navigation*“, „*modify Parameter*“, „*show value window*“, „*Faceplates*“, „*show Parameter list*“ and „*Interlock display only*“. New users are brought in with the command „enter new user“ by means of the context menu of the user list. Enter an explicit user name and choose subsequently the user rights. Existing users can be removed from the context menu. User rights settings in have no impact when using the control aspect software (CBF Viewer light modus). The operator can view the Function Block Diagram. Configuration changes are not supported.

Activate the option „*Interlock display with closed current principle*“, if the interlock view for closed loop controller and individual drive functions is requested in this way (Logical 1 = good condition, Logical 0 = bad condition).

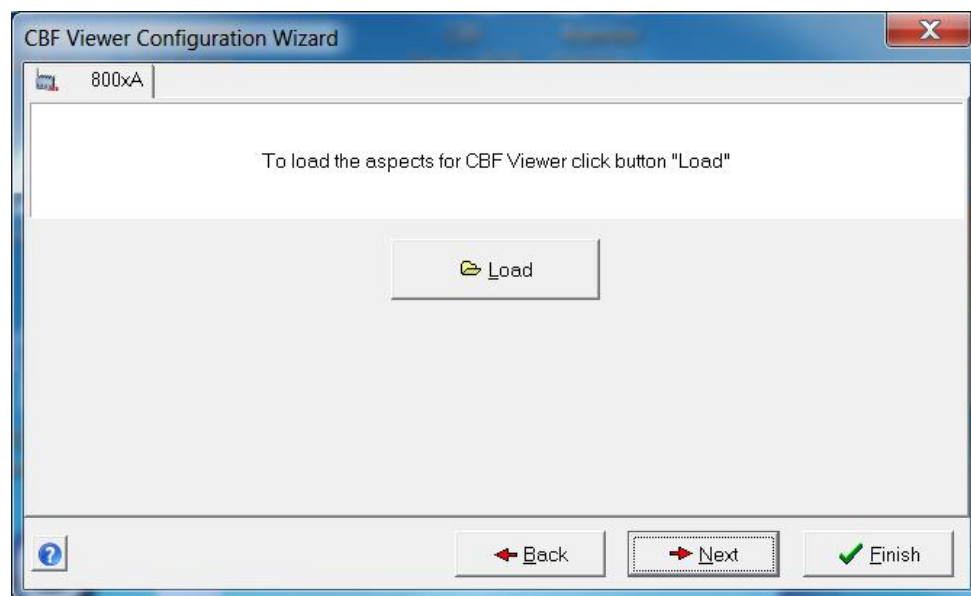


The above settings are not effective in case of using CBF Viewer and system 800xA. Users must not be configured.

Attention: The option „Load CSV-files“ is not supported when „System 800xA“ is selected. This option should be deactivated!

With the „Next“ button, you can get to the next dialogue.

3.5 Configurations for system 800xA

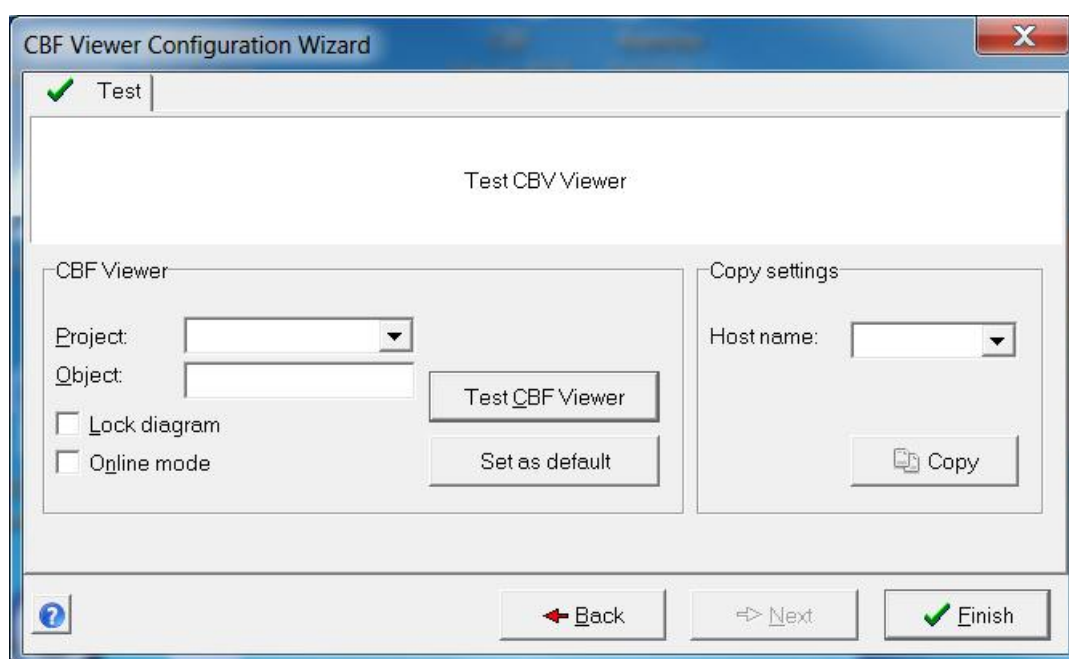


This dialogue is only shown if the operating system *Industrial IT System 800xA* has been selected. With the button *Load*, the aspects are added to the Freelance tag types. If the Loading procedure was not successful restart the Wizard and push the Load button again.

If you perform an update from earlier version of the CBF Viewer, delete the following 800xA objects and aspects:

800xA Structure	Object	Aspect
Object Type Structure	Control System\Freelance 800F Connect	CBF Function CBF Viewer Element
Object Type Structure	Control System\Freelance 800F Connect\ CBF Viewer	all
Aspect System Structure	CBF Viewer	all
Aspect System Structure	Process Graphics\Graphic Element\ CBF Viewer Element	all
Library Structure	Alarm & Event List Configurations\ Freelance Alarm & Event List Configurations\ CBFViewer Audit List	all
Library Structure	System Messages\ Messages\CBFViewerMSG	all
Admin Structure	Inventory Object\Permission\CBFViewer	all
Admin Structure	Inventory Object\ ImplBind\CBFViewerControl	all
Admin Structure	Inventory Object\Operation\ _CBFViewerControl	all

3.6 Test the settings



You can now test the settings for the CBF Viewer.

In this context, you have to select from the list of „*Projects*“ a project and enter a tag name or variable name of the project in the edit box „*Object*“. Enable the option „*Lock diagram*“ in case you would like to start the CBF Viewer in the lock mode. Enable the option „*Online-Mode*“ in case the CBF Viewer should display the current values. In order to start the Viewer, press the „*Test CBF-Viewer*“ button.

Press the button *Set as default* to save the options to start the CBF Viewer as the default values.

In the group *Copy settings* you can copy all settings from this pc to another pc. Enter the hostname of the pc and press *copy*.

You can leave the Wizard by pressing the „*End*“ button.

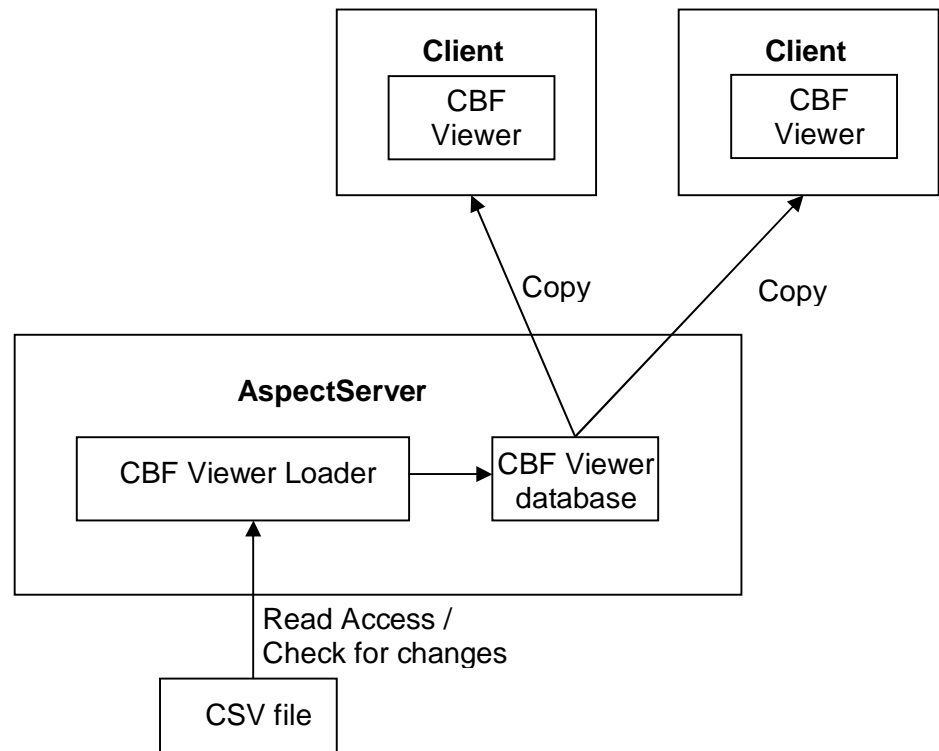
3.7 Optimization of the loading procedure for CSV files

In order to simplify the loading procedure of the Freelance export file into the CBF Viewer database, start the application „*CbfViewerLoader.exe*“. This program is located in the installation folder of the CBF Viewer with the parameter „*-800xA*“. This program is loading the new csv-file into the CBF Viewer database and after that the database will be copied to all clients. The hostnames of the clients can be edited in the file *cbfviewer.ini* section *setup* key *nodes*. In addition the list „*PC-Name*“ shows the corresponding entries in the .ini file.



During this process the CBF Viewer icon will be displayed in the windows notification area.

This activity can take dependant on the size of the csv-file between 10 and 30 minutes or even longer.



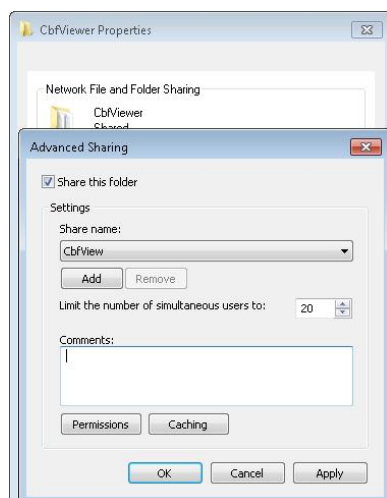
3.8 Network File and Folder Sharing with Windows 7

Within the installation of CBF Viewer the program folder has automatically been shared within the network. Since Windows 7 the default configuration of network folders has been changed to read only due to security reasons. The CBF Viewer Configuration Wizard needs to have read/write access on the remote machine to distribute the *.csv files properly.

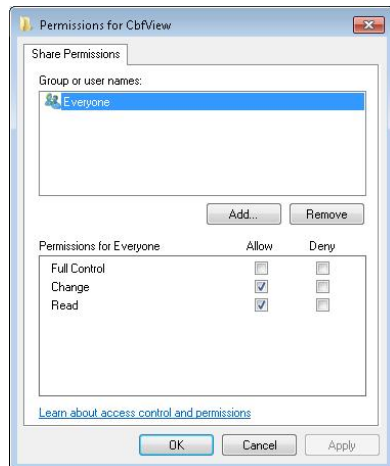
You can fix this conflict by manually changing the sharing permissions for all users.

Therefore you open the windows explorer and navigate to C:\Program Files (x86)\ABB Industrial IT. With a right-click on the program folder (CBF Viewer) you can select *“properties”*.

You now navigate to the tab *“sharing”* and click on *“advanced sharing”*.



By clicking on “*permissions*” you now can select advanced sharing options. In order to have read/write access you select “*Allow change*”.



Afterwards you close all windows by clicking “*ok*”. The new sharing options are now set.



For DigiVis optimization of the loading procedure is not necessary! After the Control Builder F download to a DigiVis node the new CSV file will automatically be copied and loaded.

Optimization by means of the loading procedure is not possible for older CBF Viewer versions. In this case the option Load CSV files must be activated in the configuration wizard on each PC with CBF Viewer.

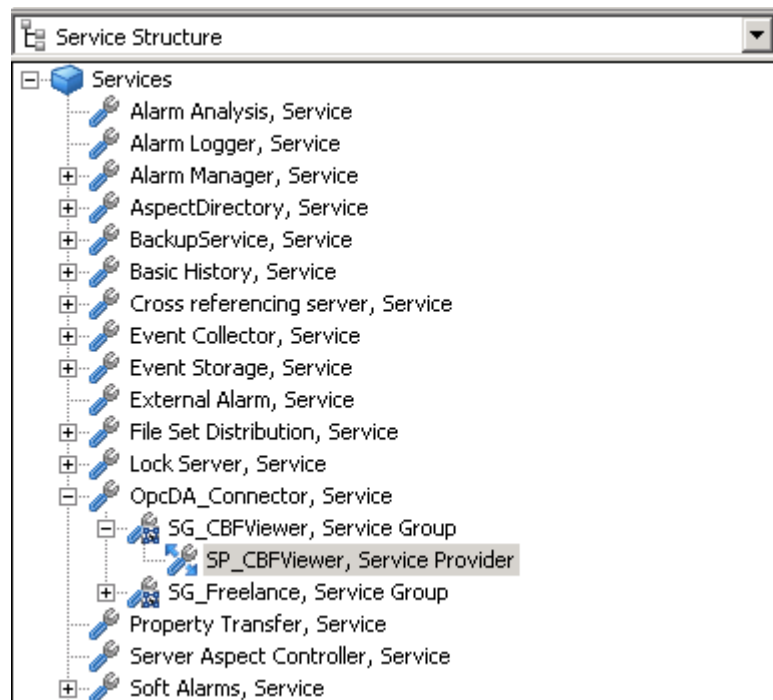
The option Load CSV files is no longer supported with operations system 800xA. Deactivate this option!

3.9 Optimizing CBF Viewer call-up-time in 800xA

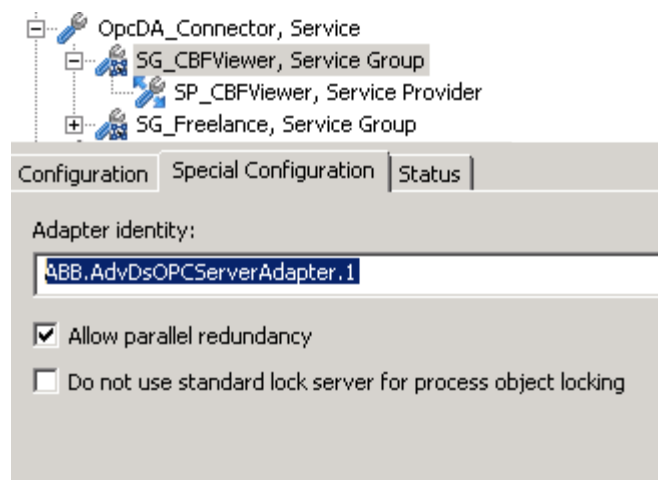
Each time the CBF Viewer is called, results in a restart of the OPC Server on the connectivity server. The loading time is therefore delayed accordingly.

This section explains how to establish a service in 800xA in that way that the OPC Server remains online.

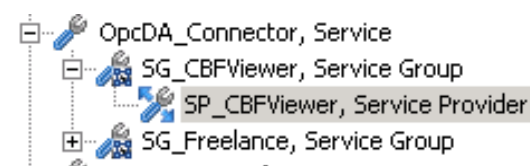
For this purpose, a new object within the Service Structure is created. An object "Service Group" is created with the name "SG_CBFViewer" below the OpcDA_Connector service. The level underneath is another object named "SP_CBFViewer" created. This is the service provider.



Enter the adapter identity „*ABB.AdvDsOPCServerAdapter.1*“ in the Special Configuration tab of the Service Group.



Within the Object "SP_CBFViewer" the OPC server identity must be entered. Under the Configuration tab and field Node, the host is to be selected, or the connectivity server on which the OPC server is running.



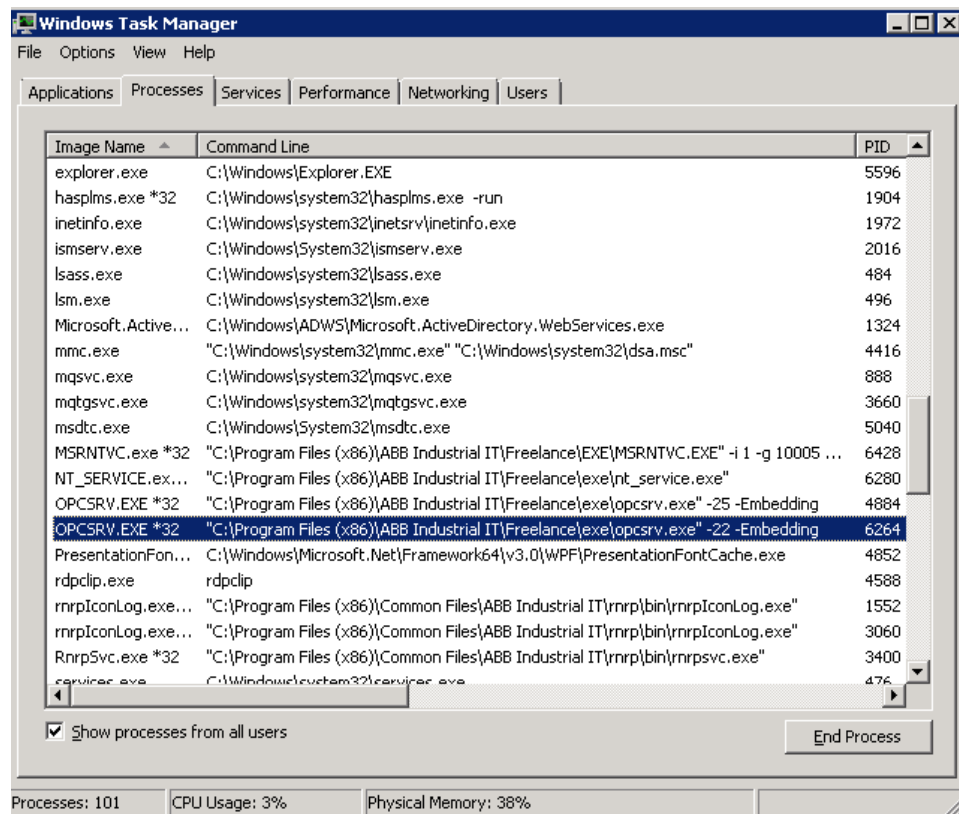
Click on the button Refresh in the Special Configuration tab and select the OPC Server.

To ensure whether the service is running do the following:

- Uncheck the Enable parameter in the Configuration tab of the object „SP_CBFViewer“
- *Apply*
- Check the Enable parameter and apply again

“Current” indicates if the service is running accordingly.

Additionally the OPC server can be checked via the Windows Task Manager. Within the tab „Processes“ the OPC Server service is found.

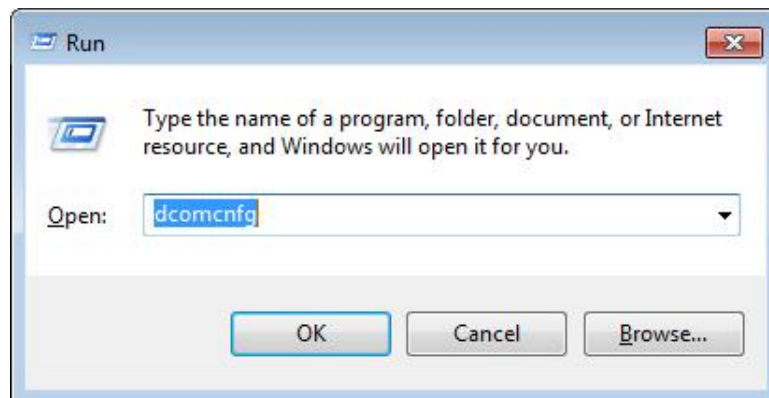


3.10 Checking DCOM settings

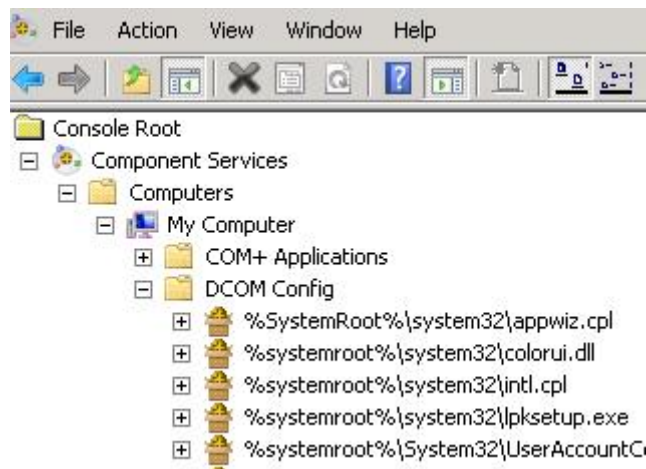
The DCOM settings of every single node need to be checked when CBF Viewer software is installed in system 800xA.

Do the following on every Client and Server node:

1. Start the DCOM settings via the Start Menu (as of Windows 7)
Start → enter „dcomcnfg ohne“ and acknowledge the input
Alternativ: Start → Run → dcomcnfg → „OK“



2. Navigate to „DCOM Config“ on the left pane via *Console Root* → *Component Services* → *Computers* → *My Computer* → *DCOM Config*

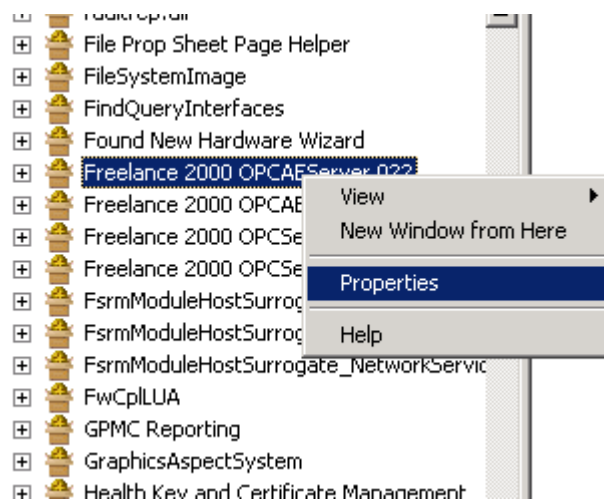


3. Search for the Freelance OPC Server entries which were created for using the CBF Viewer. There are two entries per server: Freelance 2000 OPCServer xxx and Freelance 2000 OPCAEServer xxx.



The following settings are required for both OPCAEServer and OPCServer. Data that are entered are identical.

Select OPC Server and choose „*Properties*“ via the right mouse key.



4. Check the configuration in the following window.

Select „Identity“ tab and check the parameter „This user“

Enter the name of the service account (compare Installation of a Freelance OPC Server). This setting is identical on every node in the system.

General Location Security Endpoints Identity

Which user account do you want to use to run this application?

☐ The interactive user.

☐ The launching user.

☒ This user.

User: 800xA\800xAService Browse...

Password:

Confirm password:

☐ The system account (services only).

Learn more about [setting these properties](#).

OK Cancel Apply

5. Select tab „Location“ and choose the setting according to the following table.

	CS	AS	PC4 Client	PC5 Client
Run application on the computer where the data is located	0	0	0	0
Run application on this computer	0	0	0	0
Run application on the following computer	0	✓ IP of CS	✓ IP of CS	✓ IP of CS

For example:

Settings on the Connectivity Server

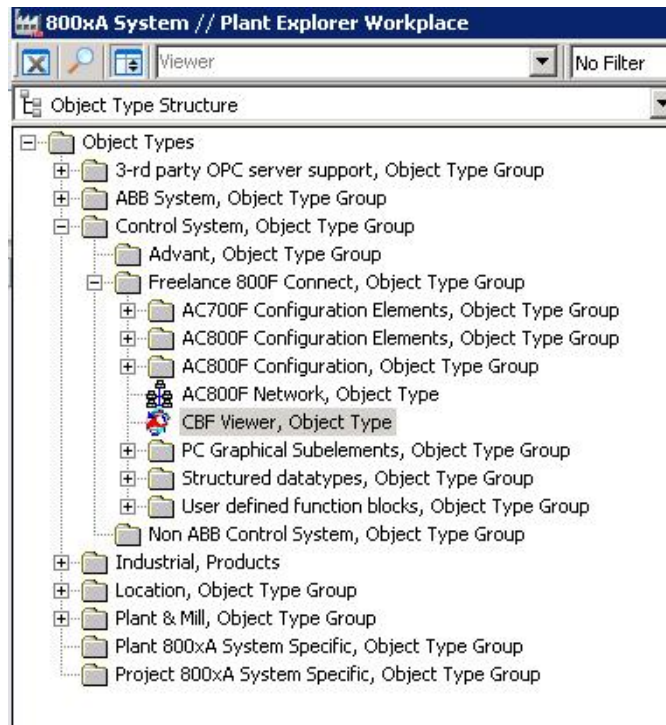
Settings on the Aspectserver and Clients.

6. Save this configuration and exit DCOM settings. Check whether this configuration was made for both **OPCAE Server** and **OPCServer**.

3.11 Advanced settings and user right configuration on 800xA

Unlike the use under Freelance, the read and write permissions must be assigned to user groups within the 800xA Workplace.

The CBF Viewer creates a new object in the Object Type Structure. This object has, among other aspects, the "Security Definition" and "CBF Viewer Settings".



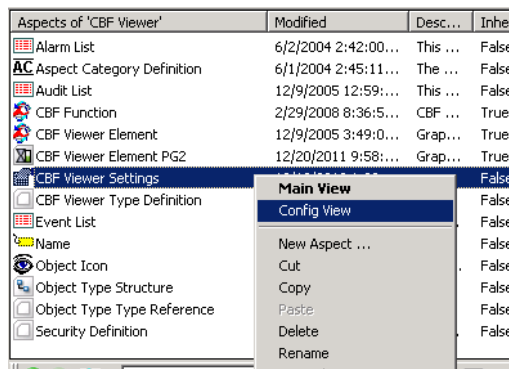
Within the "security definition" aspect the permissions are assigned to the user groups.

Next, the assignment from these permissions to individual functions is done within the aspect "CBF Viewer Settings".

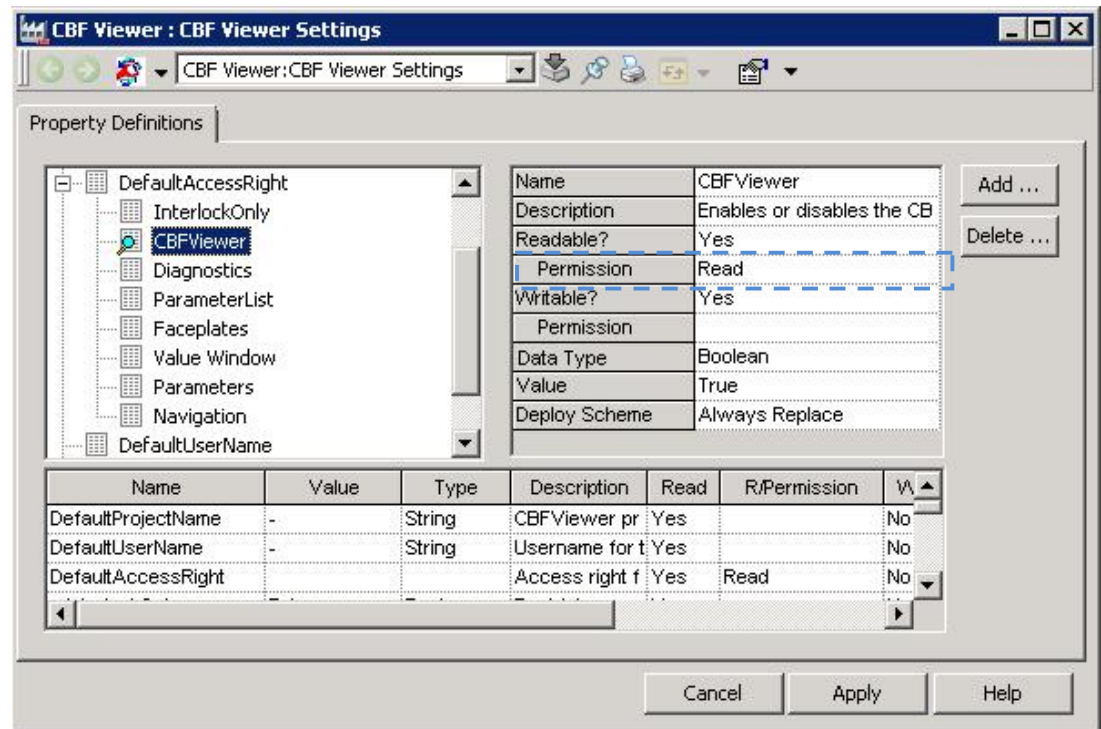
The properties of this aspect allow assigning rights to user groups.

In the "CBF Viewer Settings" aspect, permissions must be assigned for every individual function of CBF Viewer. In this aspect it is defined which permissions of the user / user group is required to call up the CBF Viewer. For this purpose the "Config View" of the "CBF Viewer Settings" aspect is called.

Right mouse-click → „Config View“

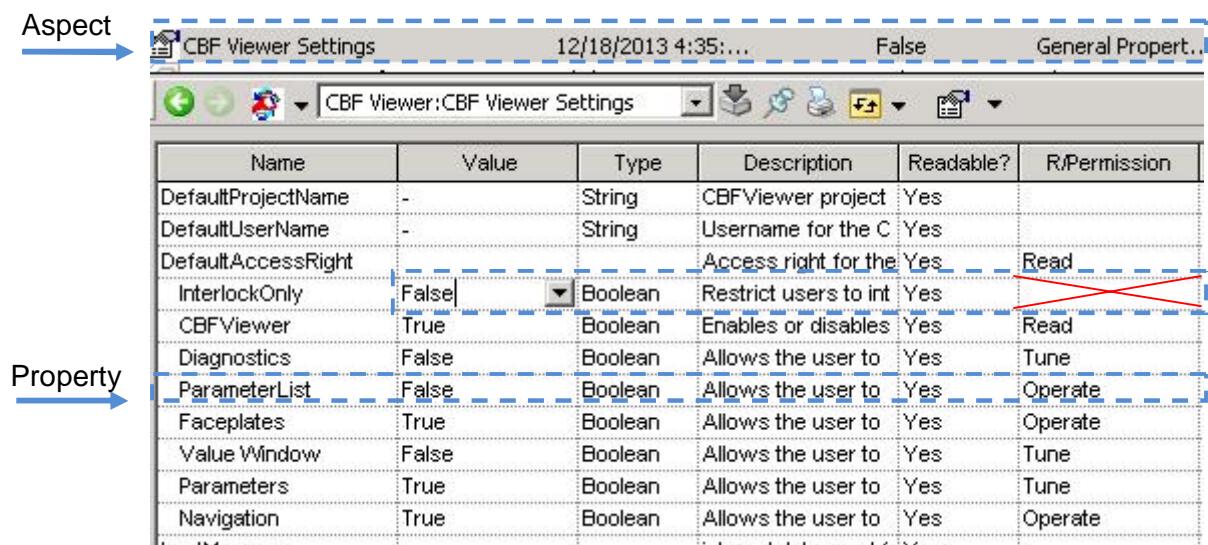


In the window that opens, navigate to "Default Access Right". Here, the corresponding properties are listed. Each property below the point "Default Access Directive" represents a function of the CBF Viewer by selecting one of the properties. The permissions can be changed on the right side. This determines what permissions the user / user group needs to access the function.



Acknowledge by „OK“ and „Apply“.

Via the aspect „CBF Viewer Settings“ all configured permissions are visible.

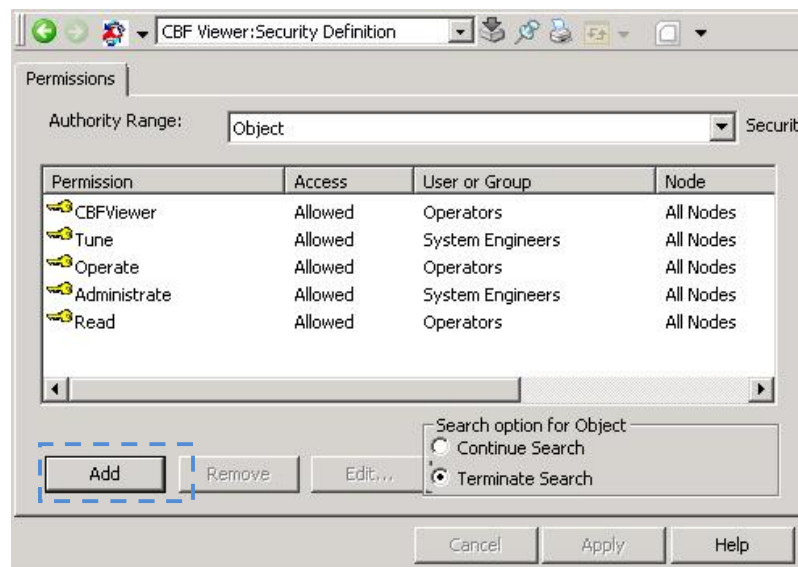




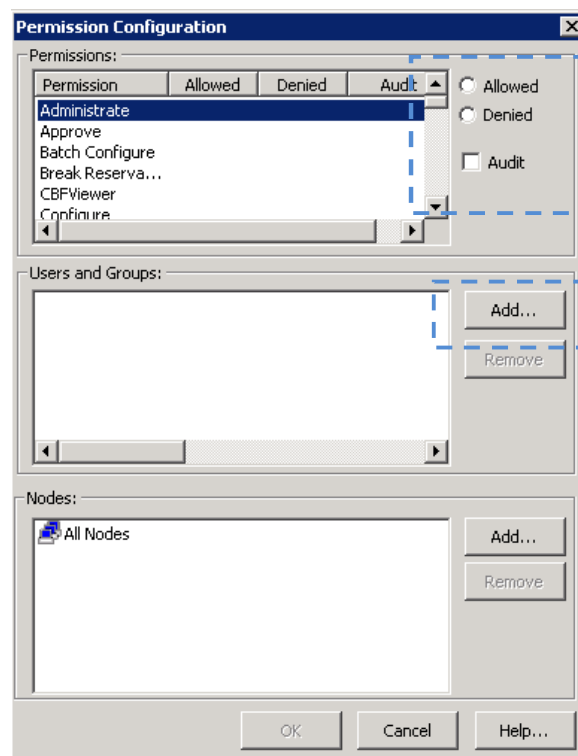
"InterlockOnly" can only be enabled or disabled globally. There shall be no entry in the "Permissions"!

Upon configuring the permissions for each function of the CBF Viewer in the "Default Access Right" aspect, the permissions must be assigned to the users and user groups.

Select the "Security definition" aspect. With the "Add" button you get into the "Permission Configuration".



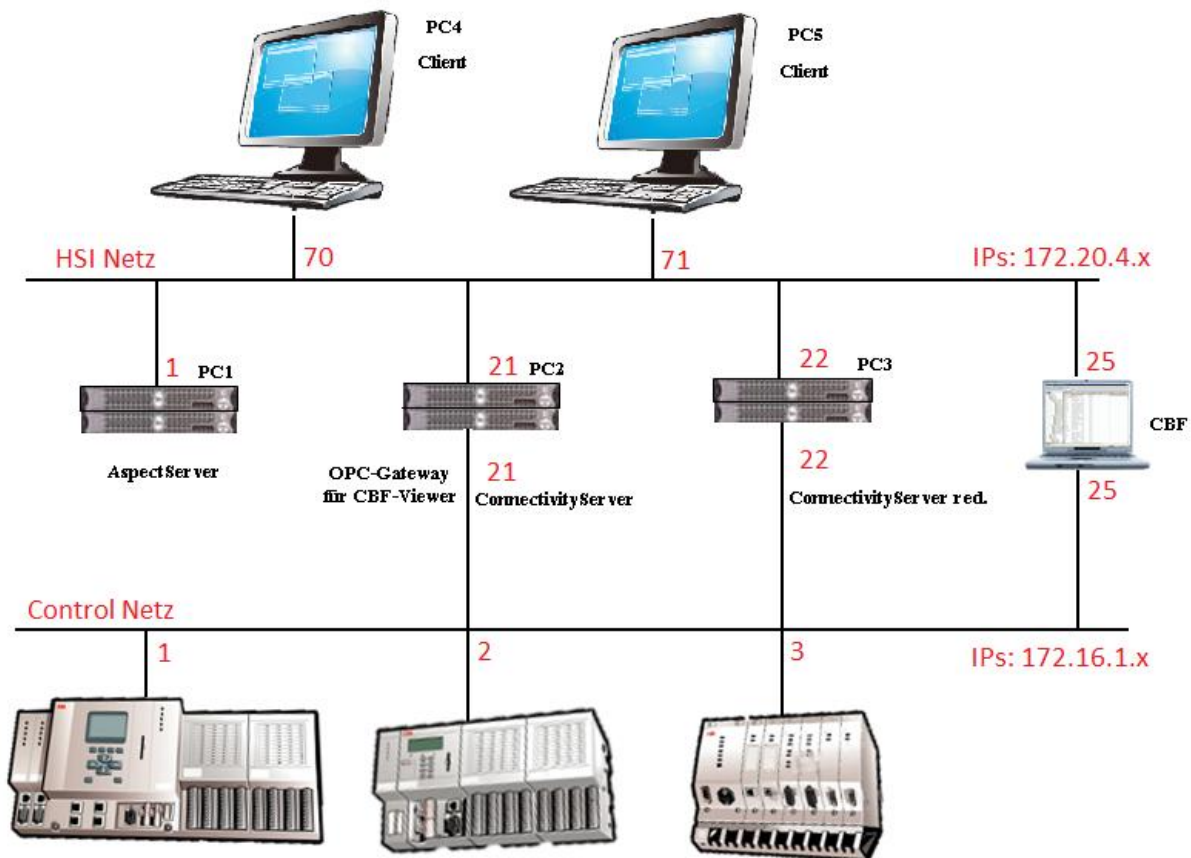
In the "Permission Configuration" window you can select the permissions and assign it to a user or user group with the „Add“ Button. Select „Allowed“ box to get the permission active.



Acknowledge your entries with „OK“ and „Apply“.

4. Example for System 800xA Installation Layout

In both of the following examples a typical configuration is displayed with the options for selection in the configuration wizard.



	Install CBF Viewer	OPC server type	CBF Viewer-Loader service	Execute configuration Wizard
PC1	Yes	Remote	Yes	Yes
PC2	Yes	Local version	No	Yes
PC3	Yes	Remote	No	Yes
PC4	Yes	Remote	No	Yes
PC5	Yes	Remote	No	Yes

5. Uninstallation

5.1 Uninstall CBF-Viewer

Select:

- Start the configuration wizard, call up the tab *Extended* by thrice-clicking the
- *Next* button, disable the option “ *Load csv-files*”.
- Close all CBF Viewer programs
- Start Window 7 or Server 2008 control panel (*Start* → *Control Panel*)
- Start the “*Uninstall a Software*” application
- Select the application “*ABB Freelance CBF-Viewer*” and click the *Remove* button

If there are files in the installation folder of the CBF Viewer, you can delete these files. You can also delete the registry key *HKey_Local_Machine\Software\ABB Automation\CbfViewer* in the registry database (Program *regedit.exe*).

5.2 Complete uninstall of all Freelance Components

You can completely uninstall of features and components of Freelance by following the steps:

- Start Window 7 or Server 2008 control panel (*Start* → *Control Panel*)
- Start the “*Uninstall a Software*” application
- Select the application “*ABB Freelance 2013*” and click the *Remove* button

5.3 Uninstallation of installed OPC-servers

Since Freelance 2013 it is possible to remove single components of the software. Therefore you have to rerun the setup from the Freelance 2013 CD and select “*Change*”. In the next window you have to unselect OPC-gateway and hit “*next*”. The install wizard will now uninstall the OPC component of Freelance.

5.4 Removing integration at control level

5.4.1 Removing from System 800xA

- Delete the object CBF Viewer in the ObjectType Structure.
- Delete the aspects CBF Viewer and CBF Function of the object AC800F in the Control Structure.

5.4.2 Removing from DigiVis

Delete all web displays in Control Builder F which refer to the CBF-Viewer HTML file (*CbfViewerVis.htm*).

6. Configuration files

All settings of the CBF Viewer are saved in the following files:

CbfViewer.ini:	language-independent settings
CbfViewer.gr.ini:	settings concerning the German language
CbfViewer.us.ini:	settings concerning the English language

All modifiable settings can be changed via the Configuration Wizard. Many parameters are modified when the Freelance 2013 Export files are loaded. Nevertheless, in case a project contains user function blocks (UFB's), it might be necessary to make changes of the configuration files. In the following, it is described how to insert a UFB into the INI-files:

6.1 Settings for the file CbfViewer.ini:

Section [LockMode]:

Enter the class name of the UF and, as values, the pin names which are to be analyzed in the lock mode. The pin names have to be separated from each other by semicolons.

Section [Conditions]:

Enter the class name of the UF and, as values, the pin names which are to be analyzed in the interlock and condition display. The pin names have to be separated from each other by semicolons.

Section [USERPINS]:

Enter the class name of the UFB and, as values, the pin name, from top left to bottom right. The pin names have to be separated from each other by semicolons.

Section [PARAMETER]

Enter the class name of the function block and, as values, the selector names. The selector names have to be separated from each other by semicolons. IF you want to enter a description for each selector, insert the description into the files "*CbfViewer.gr.ini*" or "*CbfViewer.us.ini*" into the section "[PARADESC]"

6.2 Settings for the file CbfViewer.gr.ini or CbfViewer.us.ini:

Section [BLOCKS]:

Enter the class name of the UFB and, as value, the description of the block type.

Section [USERPINSDESC]:

Enter the class name and the pin name of the UFB, both being separated by a ".", and, as value, the description of the pin.

Section [PARADESC]:

Enter the class name and the selector name of the function block, both being separated by a ".", and, as value, the description of the selector.

6.3 Settings for the subfolder "Images":

In order to show a bitmap in the UFB, a bitmap has to be copied into the folder "Images". In this context, the name of the bitmap file has to match with the UFB class name.

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