Oracle® Hospitality Hotel Property Interface
IfcBusi.Net.dll Release 8.15.3.0

ORACLE®

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Contents

Preface

Purpose

This guide explains the common handling of the Ifc8.Net IfcBusi module.

Audience

This document is intended for system administrators, support, and users familiar with the Hotel Property Interface application IFC8.

Customer Support

To contact Oracle Customer Support, access Customer Support Portal at the following URL:

https://iccp.custhelp.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at

http://docs.oracle.com/en/industries/hospitality/

Table 1 Revision History

Date	Description
May 2022	• Review for 8.15.0.0 Release
July 2023	• Review for 8.15.3.0 Release

1
General

IfcBusi.dll is the dynamic library used by **Suite8 PMS** to communicate with each IFC8 instance. It is used to send out actions from the Suite8 PMS client workstation to IFC8 such like check-in/checkout notification, Key Requests, Credit card requests.

Therefore, it is required to have IfcBusi.dll installed on all Suite8 PMS client workstations who perform check in / out or any other action that requires IFC8 Interfaces.

Installation of IfcBusi.Net.dll will be done via the IFC8.15.x Install wizard.

It is required to install .NET Desktop Runtimes version 6.x on the PC where IfcBusi.Net.dll will be installed.

> **NOTE:**
>
> For connections with **Opera PMS / Opera Cloud** the installation of IFCBusi.Net.dll on the Opera Workstations is NOT necessary.

2

Install IfcBusi.Net.dll on the Suite8 Client Workstation

> ✏ **NOTE:**
>
> Please verify that .Net Runtimes Version 6.0 or higher is Installed on your machine prior to preceding.

1. Download the IFC8.15.0.0 (or higher) Install Wizard and store it on the Suite8 Client PC.

2. Right Click and Execute Ifc8setup.exe as administrator (FULL Local Admin rights are required)
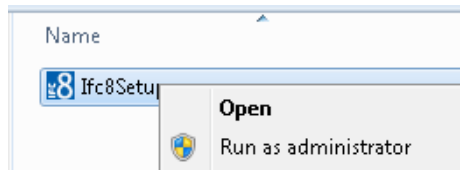
The Installer will start
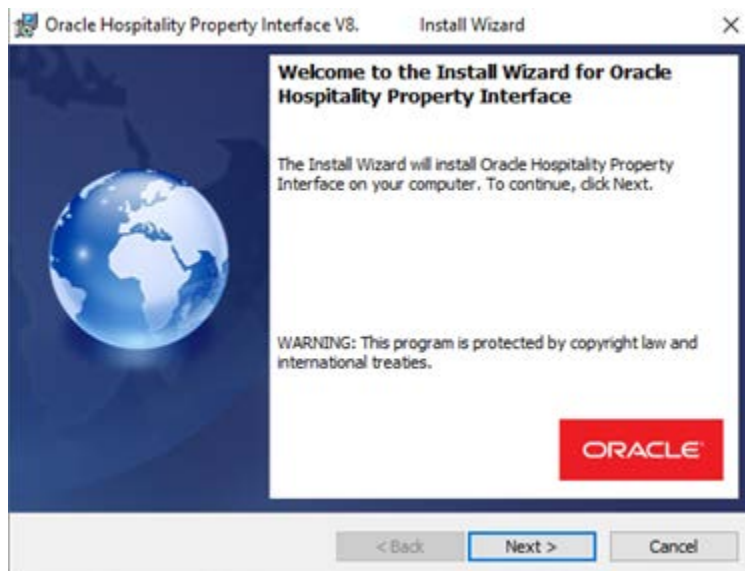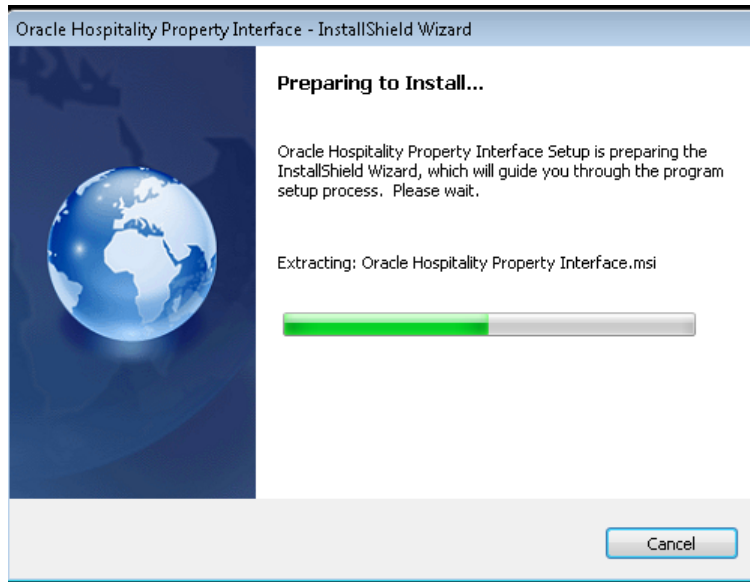
3. Select Next

4. Choose the path where to install IfcBusi.Net.dll (default & recommended is C:\Fidelio\ifc8.Net\)
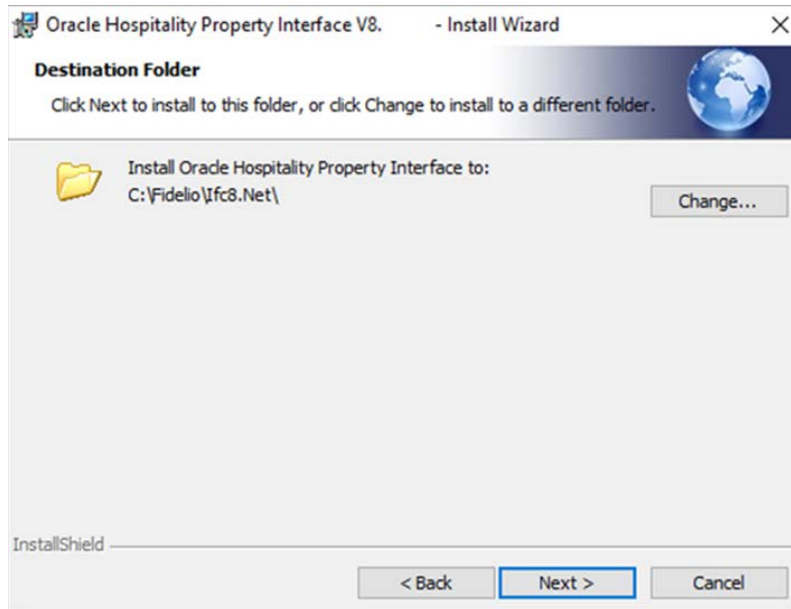
5. Select Next
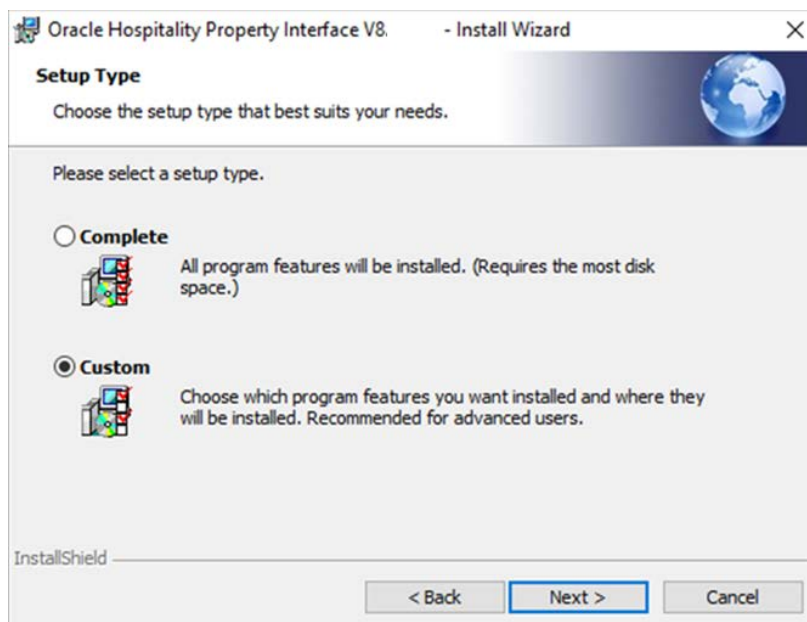
6. Choose **Custom** Setup type and select Next.

All setup options will be displayed.
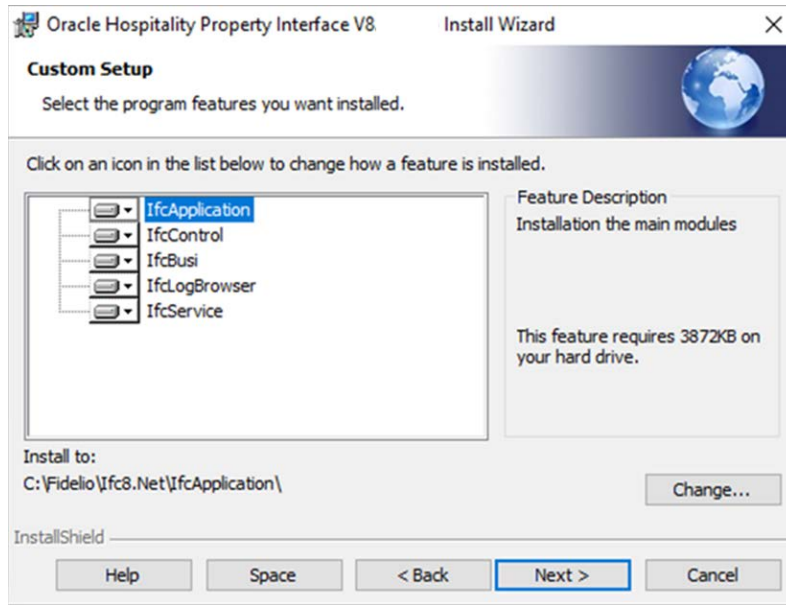
As only the IfcBusi.Net.dll is needed to be installed on the Suite8 Client Workstations select the LOV icon of "IfcApplication" and select the option pointer.

X This feature will not be available "
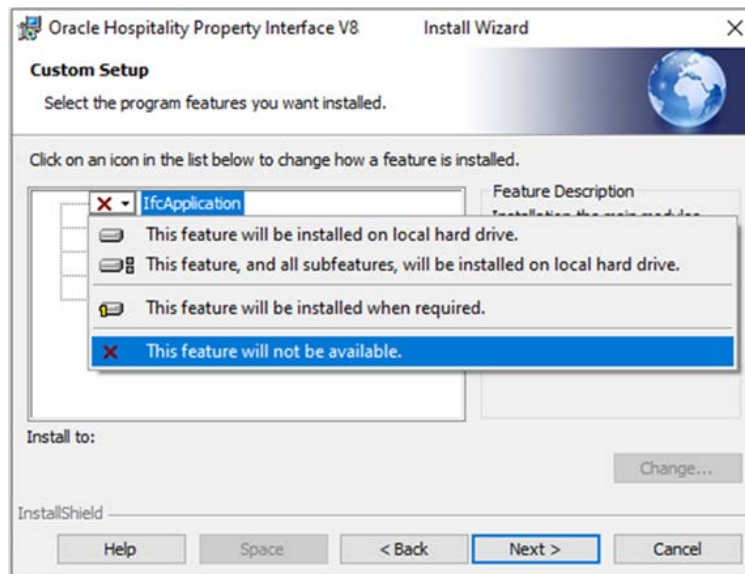
7. Repeat this step for the other modules which should not be installed.
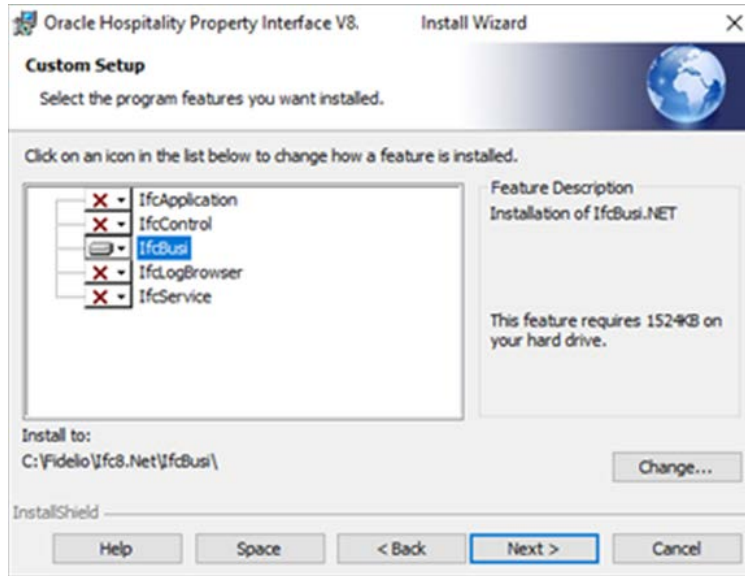
8. Select **Next**.

9. Select **Install** to confirm installation.

   The Installation will commence.

   The Installation Wizard form will show that installation of IfcBusi.Net.dll was successfully completed.

10. Select **Finish** to close the installer.

Files have been installed to the defined path:

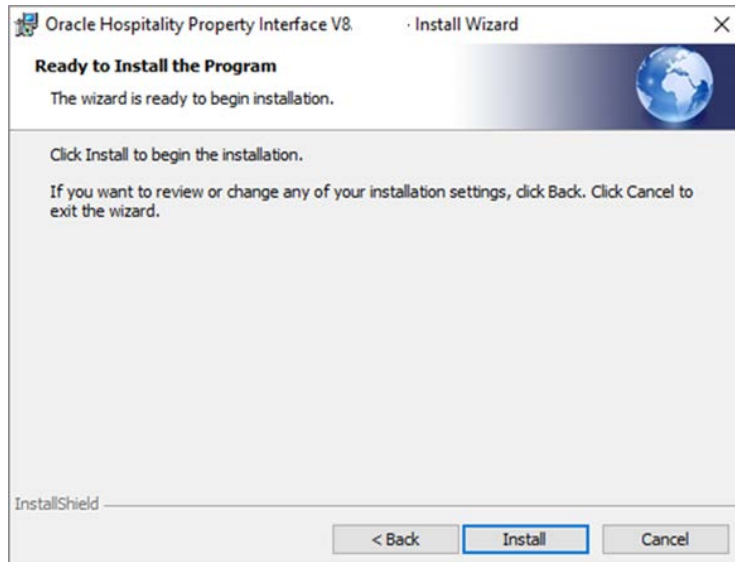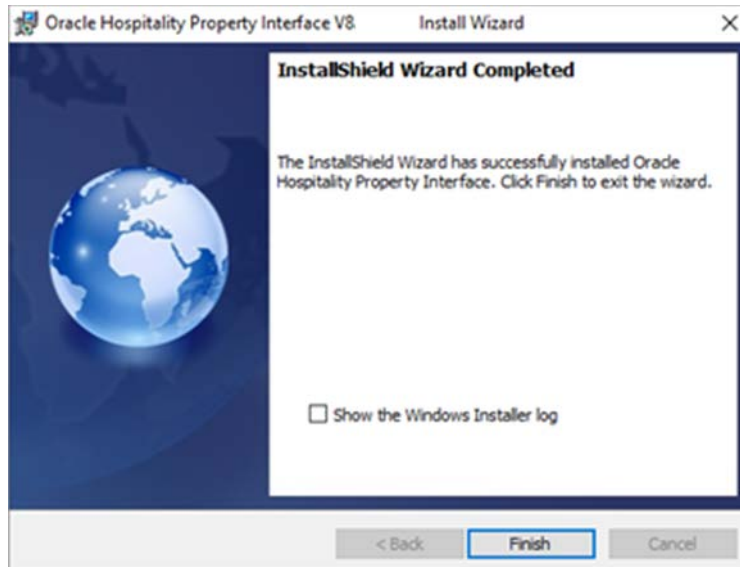| Name	Date modified	Type	Size
IfcBusi.Net.comhost.dll	17/05/2022 14:56	Application exten...	156 KB
IfcBusi.Net.deps.json	17/05/2022 14:49	JSON File	3 KB
IfcBusi.Net.dll	17/05/2022 14:56	Application exten...	1,506 KB
IfcBusi.Net.runtimeconfig.json	17/05/2022 14:49	JSON File	1 KB
IfcBusi.Net.tlb	23/02/2022 06:09	TLB File	5 KB
IfcBusi.Net.X.manifest	17/05/2022 14:49	MANIFEST File	1 KB
IfcSuite8Wrapper.dll	17/05/2022 14:56	Application exten...	39 KB
Interop.FidelioDatabase.dll	17/05/2022 14:56	Application exten...	24 KB
Interop.fidelioerror.dll	17/05/2022 14:56	Application exten...	14 KB
Interop.fidelioGlobalStatus.dll	17/05/2022 14:56	Application exten...	46 KB
Interop.FidelioIfcAction.dll	17/05/2022 14:56	Application exten...	16 KB
Interop.FidelioPostings.dll	17/05/2022 14:56	Application exten...	27 KB
System.Management.dll	17/05/2022 14:57	Application exten...	284 KB

> ✏️**NOTE:**
>
> : IfcBusi.Net.dll uses an own set of dll's which will be installed and located on the same path where IfcBusi.Net.dll is located.

- IfcSuite8Wrapper.dll
  a set of Interop.fidelio….dll

These. dll's will communicate with the Fidelio .dlls located in the programs folder of the PMS client.
These .dll's do not need to be registered.

3
Suite8 PMS configuration

The new IfcBusi.Net.dll is supported as of Suite8 PMS version 8.14.0.0 or higher.

Suite8 PMS Version 8.14.0.x also supports older IfcBusi.dll versions. This ensures compatibility of older IFC8 version with Suite8.14.0.0 version and higher.

For this Suite8 PMS must be configured to either support old IfcBusi.dll or the new IfcBusi.Net.dll.

A new configuration parameter has been added in Configuration > Global Settings > Interfaces > 1 Interfaces (IFC8).

Under General settings tick the "Use IfcBusi.Net.dll" tick box to activate using the IfcBusi.Net.dll instead of old IfcBusi.dll.
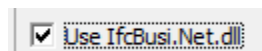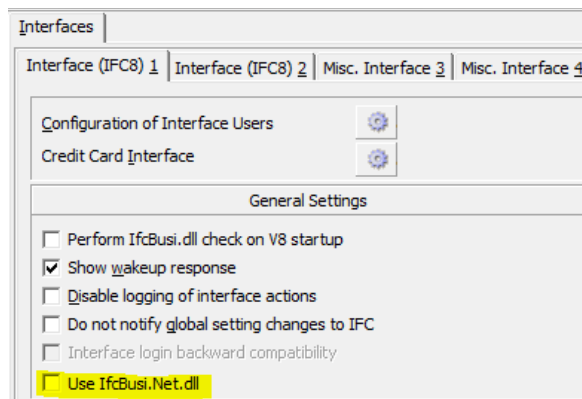
1. Save the changes, close the Configuration and restart Suite8 client on all workstations.

4
IfcBusi.Net.dll sys tray icon

Suite8 client will load an instance of installed IfcBusi.Net.dll upon login of Suite8 user.

The IfcBusi.Net.dll instance will load a sys tray icon which is used to display its status to the user.
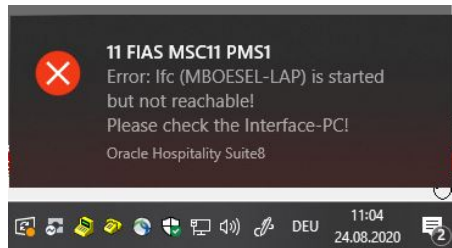
IfcBusi Notifications

Upon IfcBusi.Net instance initializing (at time Suite8 PMS clients does start) it will display notifications the user should not always ignore.

Sample 1:

Sample 2:
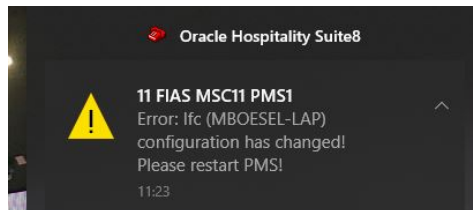
Sample 3:

To always see such notifications related to Suite8 PMS IfcBusi.Net ensure the Windows 10 Focus Assist option is set to "OFF"

Or in the case that Focus assist shall be set to specific applications (Priority only) the Suite8 application is added to the priority list of applications:

IfcBusi status information

The IfcBusi sys tray icon will display the version, the Parser loaded by IFC8 and the communication status with IFC8 instance when you move mouse over the icon.
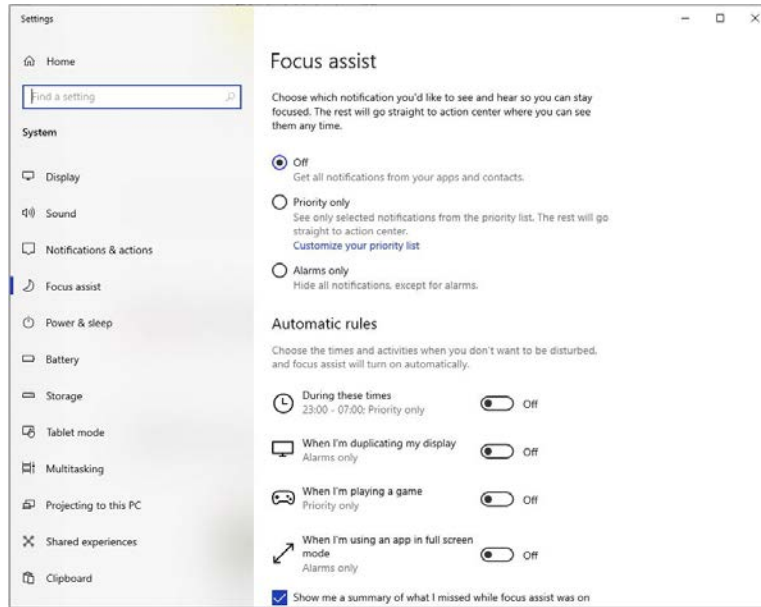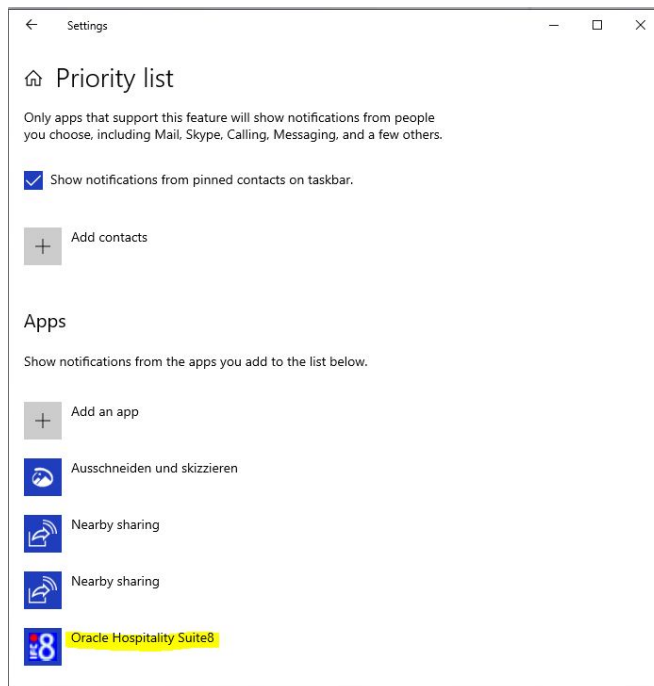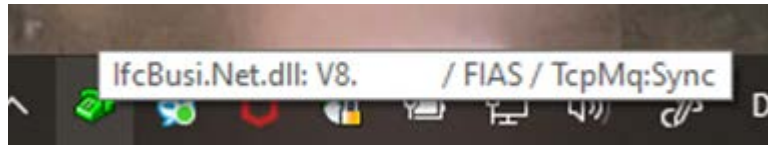

IfcBusi.Net.dll: V8.   / FIAS / TcpMq:Sync

The sys tray icon will be displayed in various colors to show the status of the Interface instance.

Icon Color	Description	Notes
Green	Communication to IFC8 and with vendor is established	
Yellow	Communication Suite8 client to IFC8 not established or vendor system not connected. (Not LinkAlive)	Check communication Suite8 client/ IfcBusi able to connect to IFC8 instance (network) Check Ifc8 instance started
		Check vendor able to connect to IFC8 instance

The IfcBusi sys tray icon also has a context menu for some optional settings.

Rick click on the sys tray icon to open context menu.
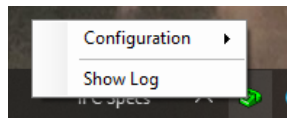
The following are the available Menu options.

Menu Option	Description
Configuration	Opens the Log file options
Show Log	Opens the IfcBusi Log Monitoring

Menu Option - Configuration

To use:

- to enable or disable logging IfcBusi communication (3 level available),
- to disable IfcBusi Icon Balloon Info popping up,
- to disable Internal printer setup check in Database.
- to save current set configuration (of above options).
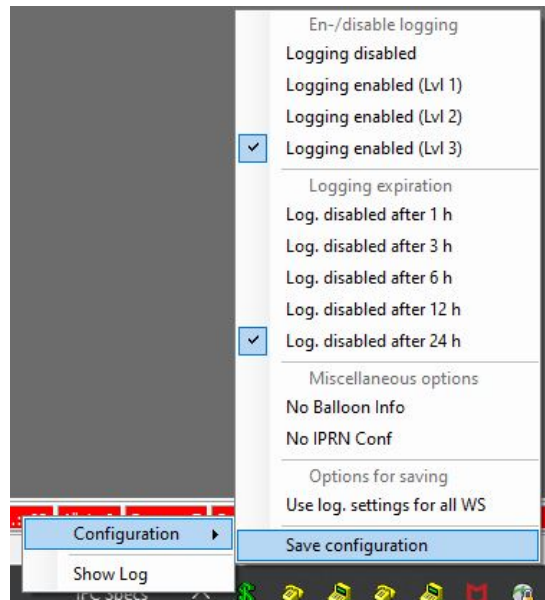
IfcBusi Icon Context menu Options:

Menu option	Description	Notes
Logging disabled	No IfcBusi log will be created (default)	
Logging enabled (Lvl 1)	IfcBusi log will be created with log level 1	
Logging enabled (Lvl 2)	IfcBusi log will be created with log level 2	
Logging enabled (Lvl 3)	IfcBusi log will be created with log level 3	

Log. Disabled after 1 h	Time after IfcBusi logging will automatically disabled	
Log. Disabled after 3 h		
Log. Disabled after 6 h		
Log. Disabled after 12 h		
Log. Disabled after 24 h		
No Balloon Info	Disables balloon info on Busi icon	
No IPRN Config	Disables Printer setup check on Busi start	Set only when issues with IfcBusi loading slowly and no printing necessary for this interface
Use log. Settings for all WS	Define logging settings for all Workstations IfcBusi.Net.dll is installed	
Save Configuration	Save the chosen configuration	On next start of IfcBusi the settings will be used again

To set above values, do the following steps:

1. Choose the Logging enabled value (Lvl1, 2 or 3)

2. Access the Config again

3. Choose the Log Disabled after… time

4. Access the Config again

5. Select the Save configuration option

If the Logging shall be enabled for IfcBusi.Net.dll instances on all Suite8 client workstations select the "Use log. Settings for all WS".

The above configuration will be stored in the Database and all IfcBusi.Net.dll instances will read the values after next restart of Suite8 client.

Menu Option - Show Log

By selecting this menu option, you can load the IfcBusi Log Monitoring based on the chosen Log Level of the Menu Option: Configuration

The right hand of the Monitoring header displays the time when current monitoring will expire, and monitoring will be disabled again

The IfcBusi.Net.dll monitoring displays the communication with the IFC8 instance and the messages from and to Suite8 client

The **Ifc** column logs the xml messages to IFC8.

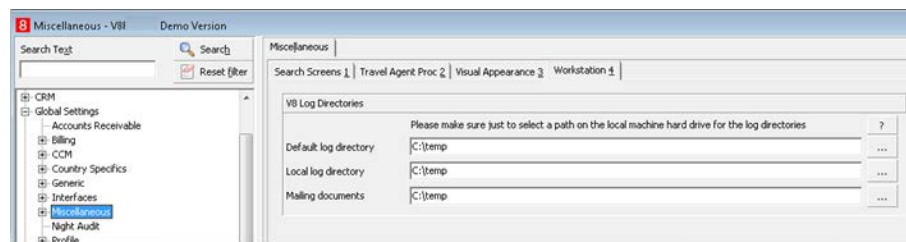The **PMS** column displays the Database actions when **DbAction** filter flag is activated

The **Main** column logs the PMS events and data transmitted to IfcBusi for execution.

5
IfcBusi log

Ifc Busi Log location

Define the path where IfcBusi log file shall be stored on the client PC in Suite8 > Configuration > Global Settings > Miscellaneous > Workstation 4 tab.
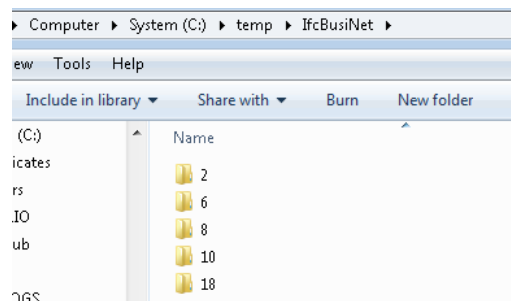

✏ **NOTE:**

The path is valid for all Client PC's.

For IfcBusi.NET a subfolder \IfcBusiNet will be automatically created.

Example: C:\temp\IfcBusiNet

Within this subfolder another folder will be created as per linked Interface instance number (ICFG_ID).

In this folder the log files will be created and stored.

Name	Date modified	Type	Size
IfcBusi_PMS_MBOESEL-PC[DS][8].bak	31.01.2019 10:38	BAK File	239 KB
IfcBusi_PMS_MBOESEL-PC[DS][8].evt	31.01.2019 10:41	Classic Event Log	271 KB
IfcBusi_PMS_MBOESEL-PC[DS][8].xml	22.01.2019 14:51	XML File	1 KB
IfcBusi_PMS_MBOESEL-PC[DS][8].xsl	07.12.2018 08:38	XSL Stylesheet	74 KB
IfcBusi_PMS_MBOESEL-PC[DS][8]_07_11.26.evt	07.12.2018 08:38	Classic Event Log	1 KB
IfcBusi_PMS_MBOESEL-PC[DS][8]_07_15.30.evt	07.12.2018 11:26	Classic Event Log	1.954 KB
IfcBusi_PMS_MBOESEL-PC[DS][8]_08_00.00.evt	07.12.2018 15:30	Classic Event Log	1.954 KB
IfcBusi_PMS_MBOESEL-PC[DS][8]_08_11.00.evt	08.12.2018 00:00	Classic Event Log	1.510 KB

Current Log file: IfcBusi_PMS_PCNAME[DS][IFCnumber]**. evt**

Backup log file: IfcBusi_PMS_PCNAME[DS][IFCnumber]**.bak**
will be opened together with current. evt log file

Old log file: IfcBusi_PMS_PCNAME[DS][IFCnumber]_**DD_HH_MM.evt**

Log file Style sheet: IfcBusi_PMS_PCNAME[DS][IFCnumber]**.xsl**

Monitoring config file: IfcBusi_PMS_PCNAME[DS][Ifcnumber]**.xml**

Only. evt Log files can be opened using the IfcLogBrowser.exe which can be installed via the IFC8 installer.

IfcBusi log encryption status:

The IfcBusi.Net monitoring header shows if the connection uses **parser encryption** or **TCP SSL encryption** with the Ifc8.Net instance.

The Link Status LED displays an umbrella character ( ) to indicate internal parser encryption (internal AuthKey) between IFC8.Net and IfcBusi.Net.

No SSL Connection.

The Comm Status LED displays an umbrella character (🔒) to indicate TCP SSL communication between IFC8.Net and IfcBusi.Net.

No parser encryption active.

6

IfcBusi.Net SSL connection with Ifc8.Net

Overview

As of Ifc8.Net Version 8.14.7.0 IfcBusi.Net and Ifc8.Net Application and Service can communicate via a secure TCP/IP connection using certificates.

Secured TCP/IP connection with IfcBusi.Net will be created by using SSL certificates.

For best security official CA certificates are recommended, it is also possible to use self-signed /self-created certificates.

If CA certificates shall be used, ensure that they will be created as .pfx and .crt files.

The certificates will not be added to the Microsoft cert store (mmc) but stored on the local PC or on any other PC which is available in the local network.

The certificates will be defined via IfcApplication configuration editor.
IfcBusi.Net.dll will get the certificate information from Suite8 database IMSQ table upon instance load.

TCP/IP SSL connection is not supported by older IfcBusi.Net.dll versions.

Suite8 IMSQ Table Changes

As of IFC8.14.7.0 additional columns were added to IMSQ table

Column Name	Format	Note

IMSQ_CERT_PRIV_IFC	CLOB	Certificate used for IfcBusi SSL (Ifc8 private key)
IMSQ_CERT_PUBL_IFC	CLOB	Certificate used for IfcBusi SSL (Ifc8 public key)
IMSQ_CERT_IFC_LOGIN	VARCHAR2(1024 BYTE)	Authorization data used by Ifc8 for IfcBusi SSL
IMSQ_CERT_PRIV_BUSI	CLOB	Certificate used for IfcBusi SSL (IfcBusi private key)
IMSQ_AUTH_CERT	VARCHAR2(128 BYTE)	IfcBusi SSL/TLS connection authorization information
IMSQ_CERT_PRIV_IFC	CLOB	Certificate used for IfcBusi SSL (Ifc8 private key)

IFC8.NET V.8.14.7.0 will automatically add these columns to the table when starting up and connecting to Suite8 Database.

Create Certifcate for IfcBusi.Net

Create Certificate Through Ifc Application

In the IfcApplication slect the Options Menu and choose "Create certificate".
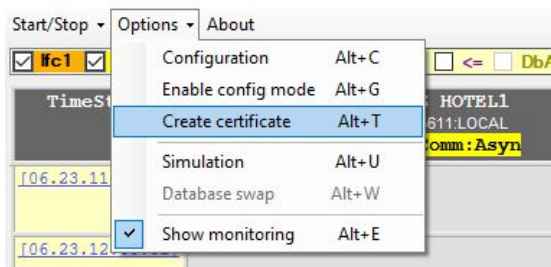
A new form "Create a new certificate" opens.
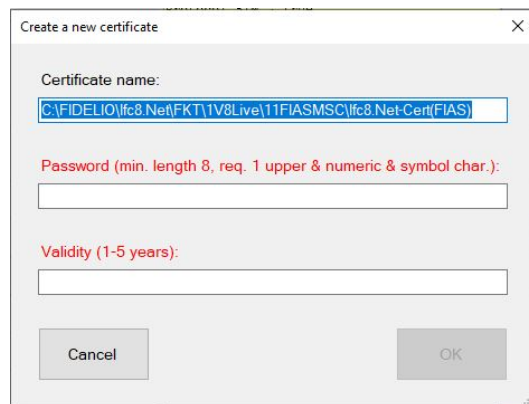
Certificate name: Define path and name of the certificates.

Certifcate password: define the certificate password

> ✏ **NOTE:**
>
> Password must have min, length of 8 character,
> must contain 1 upper letter, 1 numeric char. And 1 symbol char.

> ✏ **NOTE:**
>
> **Validity:** define the validity of the certificate (in years). must **NOT** be more than **5 years**!!
>
> Do not forget to properly note down the password and insure it is passed on to the person(s) responsible on site.

1. Click **Cancel** to revert.

2. Click **OK** to confirm certificate definition.

A confirmation window will open with the certificate path and name.
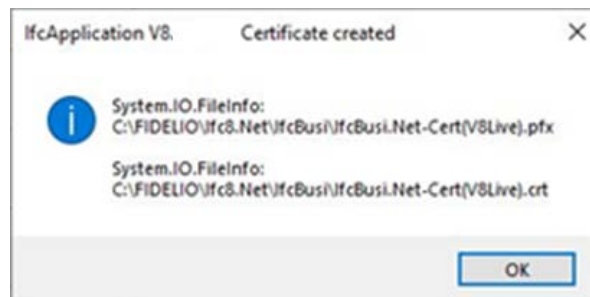
Find the certificates in the defined directory

Import certificate

To assign a certificate to the IfcBusi.Net connection open the Configuration editor and go to PMS1 – COMM – DBS node.

Mark the SslConfig attribute name

In the "Selected Attribute" section select the "Open SSL/TLS configuration for IfcBusi" button

New value

Open SSL/TLS configuration for IfcBusi

If Configuration Editor has been accessed using the Windows Authentication another **Suite8** user authentication is required now
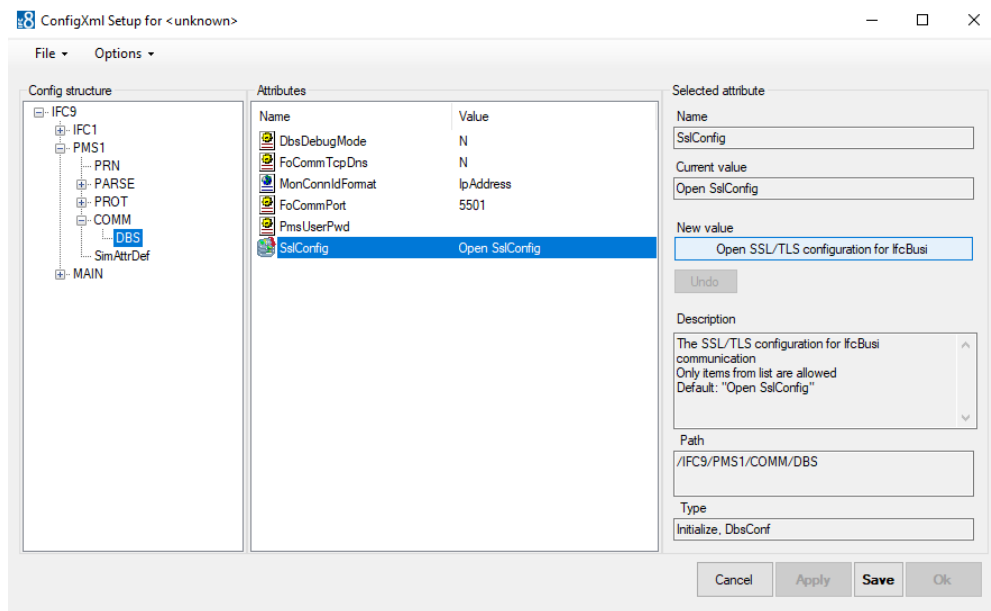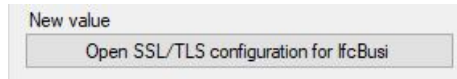
Authentication by Suite8 user ✕

User Name: S8user

Password: ••••••••
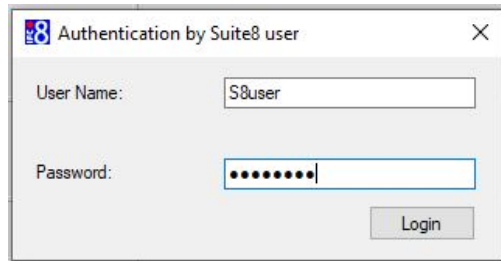
Login

After successful login a new form will open:

SSL/TLS Setup for communication between Ifc8.NET and Suite8 (IfcBusi.NET) — ☐ ✕

Details of server certificate

Current: No certificate defined!

New: No certificate selected!

Import certificate from file

Import certificate from cert store

Details of certificate used for mutual authentication (optional)

Current: No certificate defined!

New: No certificate selected!

Import certificate from file

Import certificate from cert store

Cancel   Clear certificates   Apply

This form enables user to select and assign certificates for the connection IfcBusi.NET to IFC8.NET.

Details of server certificate

Status	Status Detail	Notes

Status	Status Detail	Notes
Current	No certificate defined!	In case no certificate assigned
	Certificate details	In case certificate assigned
New	No certificate defined!	In case no certificate assigned
	No certificate defined!	In case certificate assigned but no other certificate chosen
	Certificate details	In case certificate re-assigned
	Certificate will be removed!	In case certificate will be removed

Details of certificate used for mutual authentication (optional)

Status	Status Detail	Notes
Current	No certificate defined!	In case no certificate assigned
	Certificate details	In case certificate assigned
New	No certificate defined!	In case no certificate assigned
	No certificate defined!	In case certificate assigned but no other certificate chosen
	Certificate details	In case certificate re-assigned
	Certificate will be removed!	In case certificate will be removed

Cancel button

1. Select to revert close form. This will revert changes done before pressing Apply button

Clear certificates button

2. Select this to remove assigned certificates

Apply button

3. Select to confirm changes. Form will close then.

4. Apply button is only available when changes were made.

It is possible to assign a certificate from a file (.pfx) or a certificate imported on local certificate store.
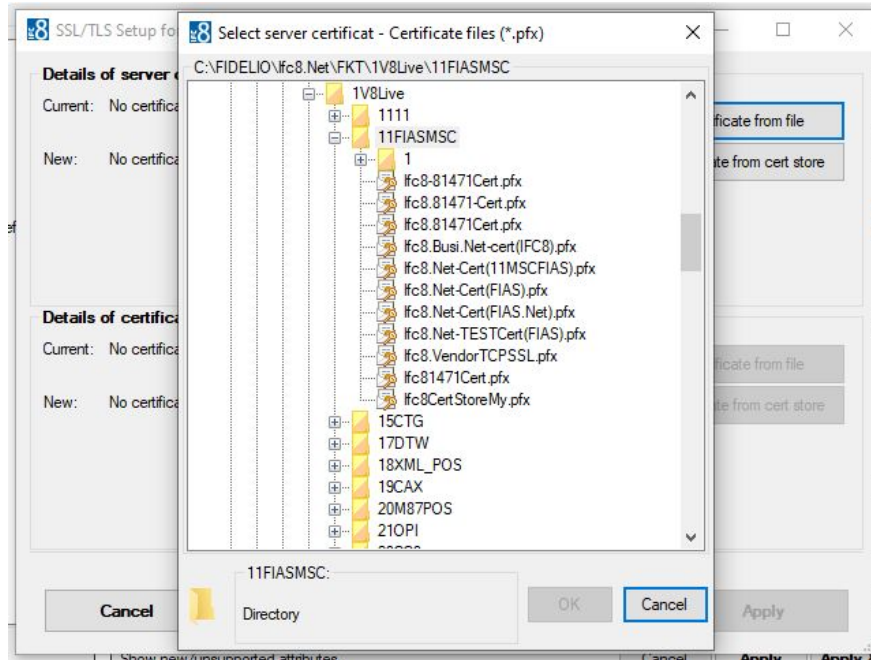
Import certificate from file

Import certificate from cert store
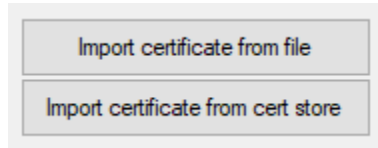
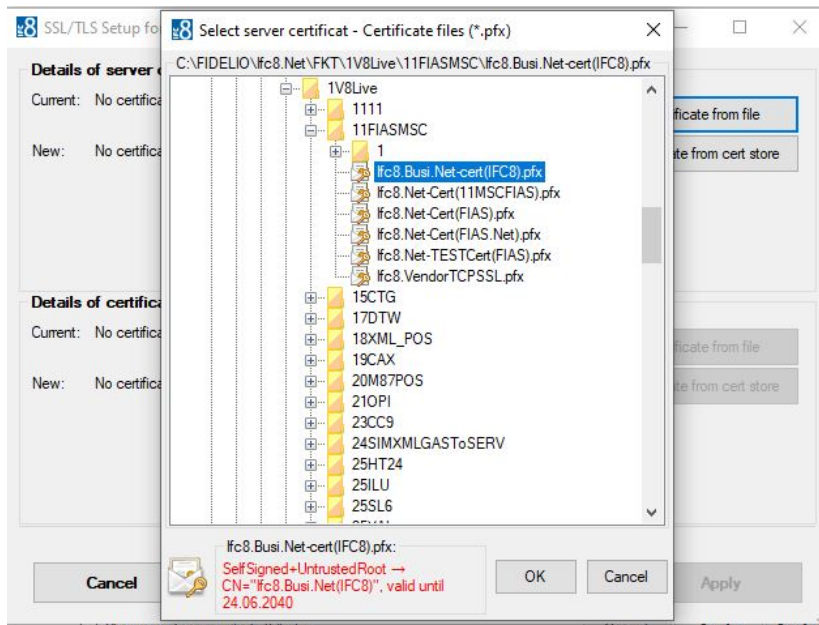# Import certificate from file
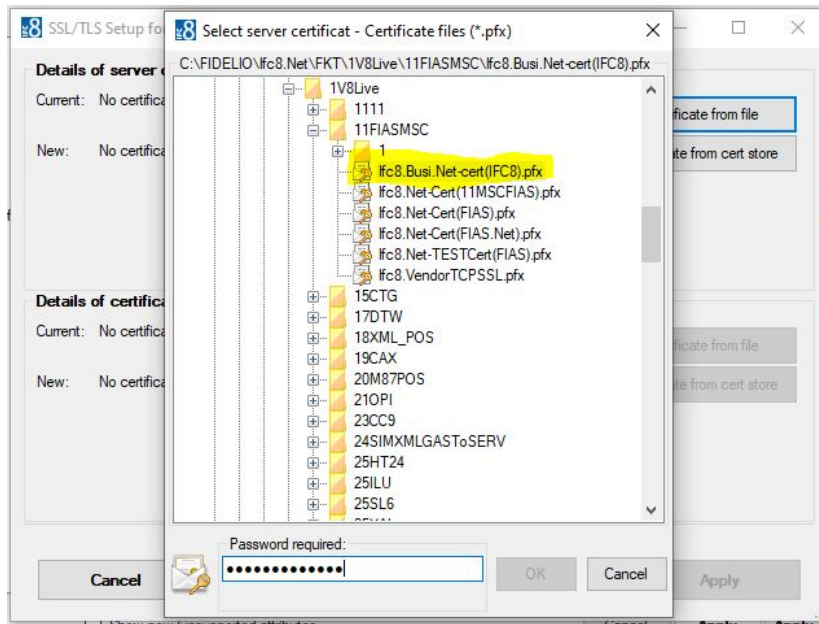
Add Server certificate

This is the server certificate of IfcApplication.

1. Select the "**Import certificate from file**" The Select file form will open
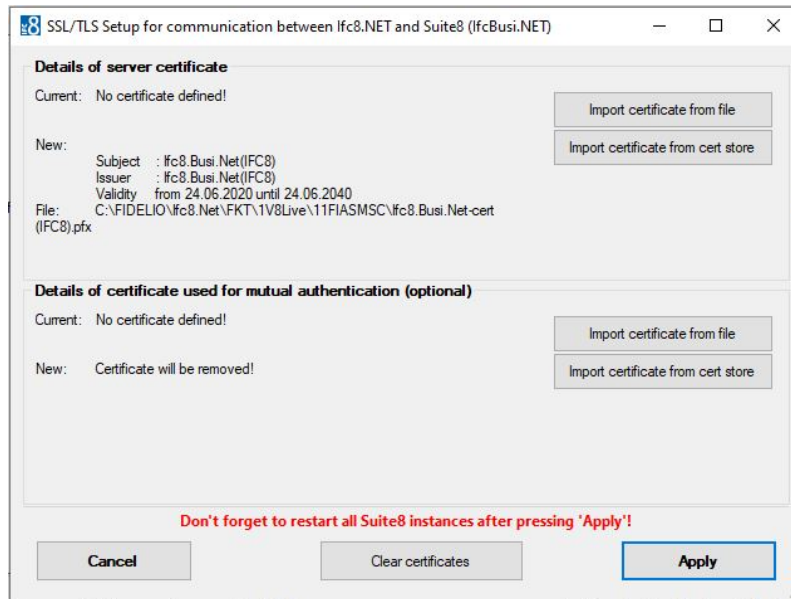

2. Choose the certificate (pfx file) to assign.

   As the pfx certificate requires a password

3. Select **OK** to confirm certificate choice.

   The form will now display the certificate information.

If no mutual authentication is desired select Apply to import the certificate into IFC Configuration.

> ✏️**NOTE:**
>
> Adding certificates requires a restart of all Suite8 Workstations having IfcBusi.Net installed, as the IfcBusi.Net must be reloaded to read the new settings.

Add certificate for mutual authentication:
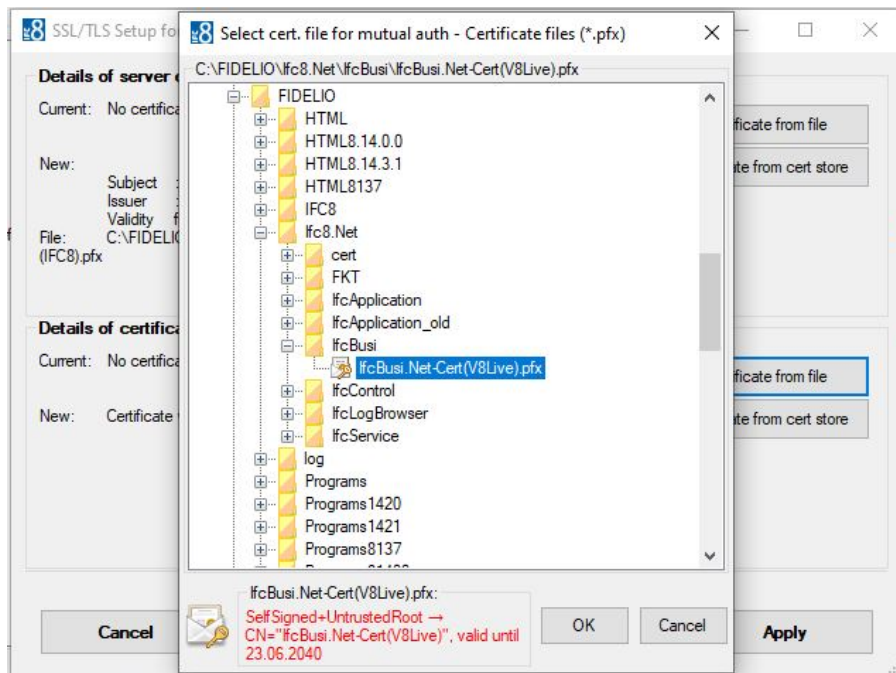
This is the Server Certificate of IfcBusi.Net

> ✏️**NOTE:**
>
> It is only possible to assign a certificate for mutual authentication at same step od assigning the Server certificate.

1. Select the "Import certificate from file" button

2. The Select file form will open

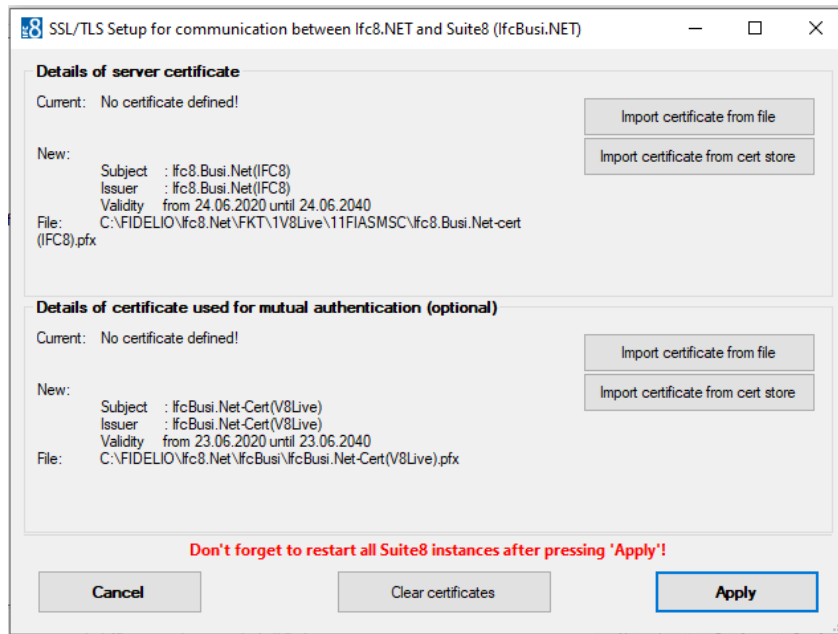3. Search the certifiate file to assign and enter the required password.
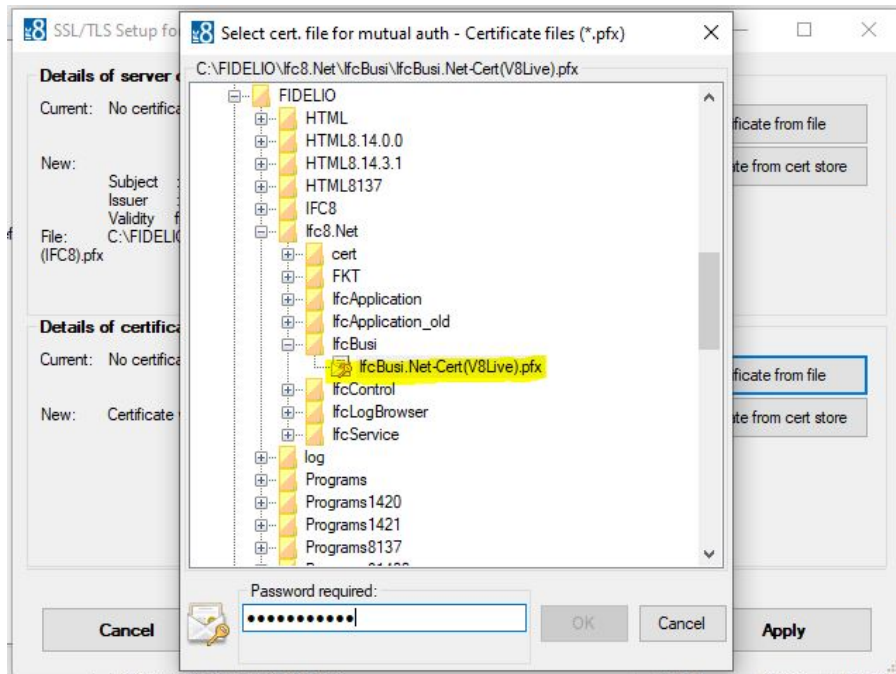
4. Press **Enter.**

If the password is correct the form displays the certificate information

5. Select **OK** to confirm certificate choice.

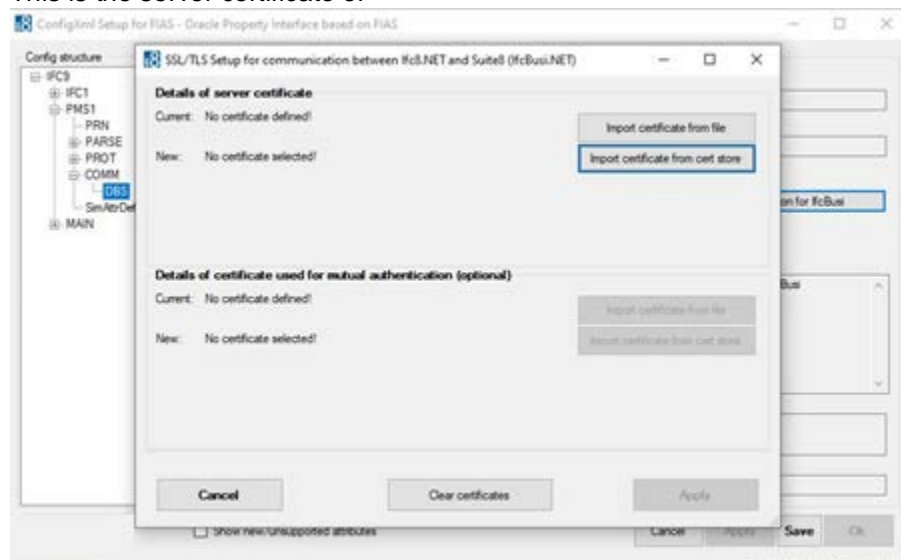6. Select **Apply** to import the certificate into IFC Configuration.

Import Certificate From Cert Store

Requirements

- The certificate to assign must be available in the local Certificate store of the IFC PC.

- The certificate must be a .pfx one using the private key

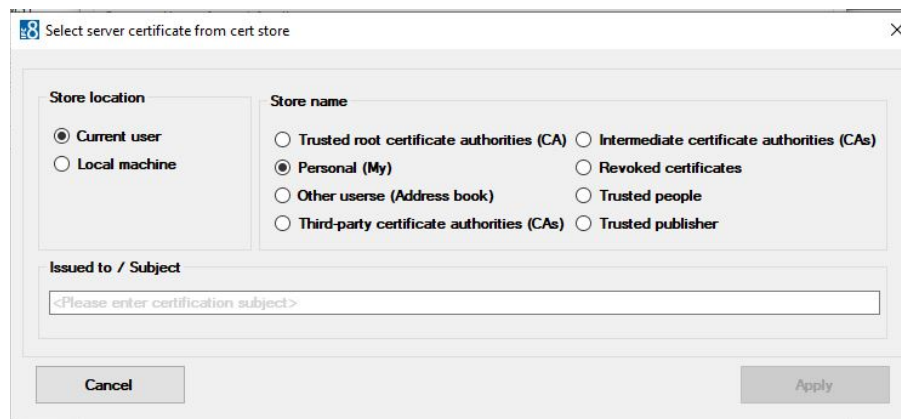- The certificate must be imported into either CurrentUser or LocalMachine Personal store

Add Server certificate

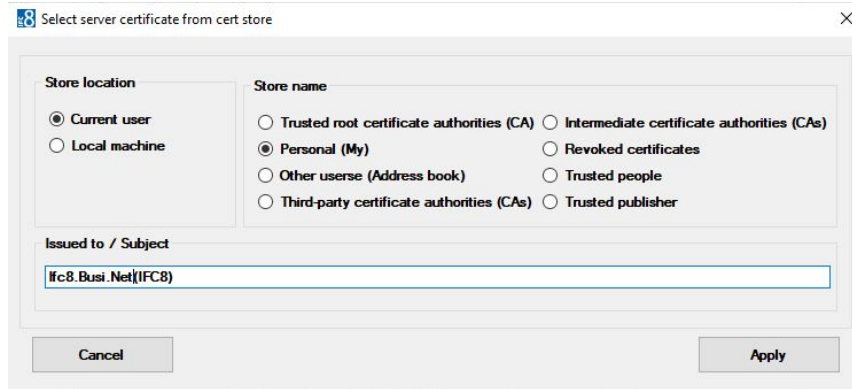This is the server certificate of

IfcApplication.

1. Select "Import certificate from cert store" button:
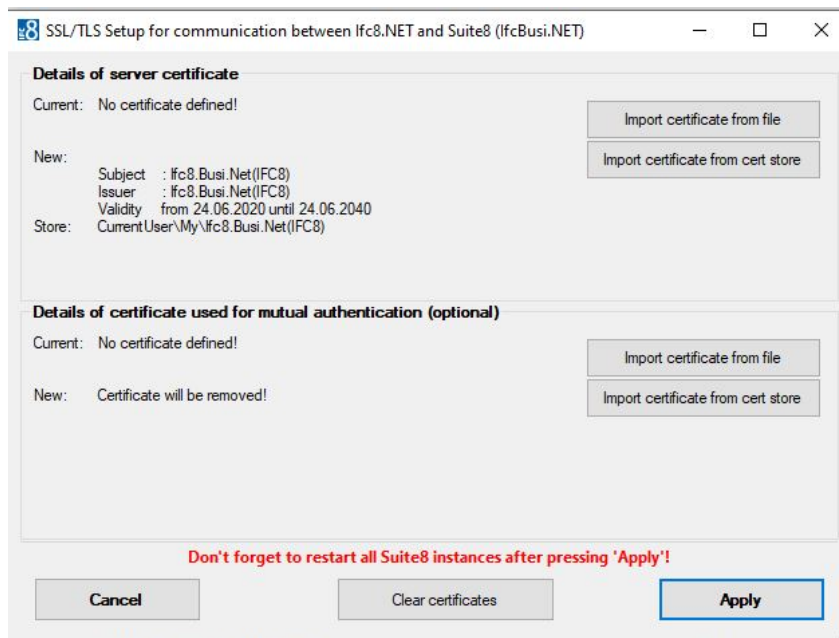

2. Choose the Store location and Store name the certificate is located at.

3. Enter the certificate name / Issued to value

4. Select **Apply**.

If the certificate is found the form displays the certificate details.

If no mutual authentication is desired select Apply to import the certificate into IFC Configuration.

Add certificate for mutual authentication:
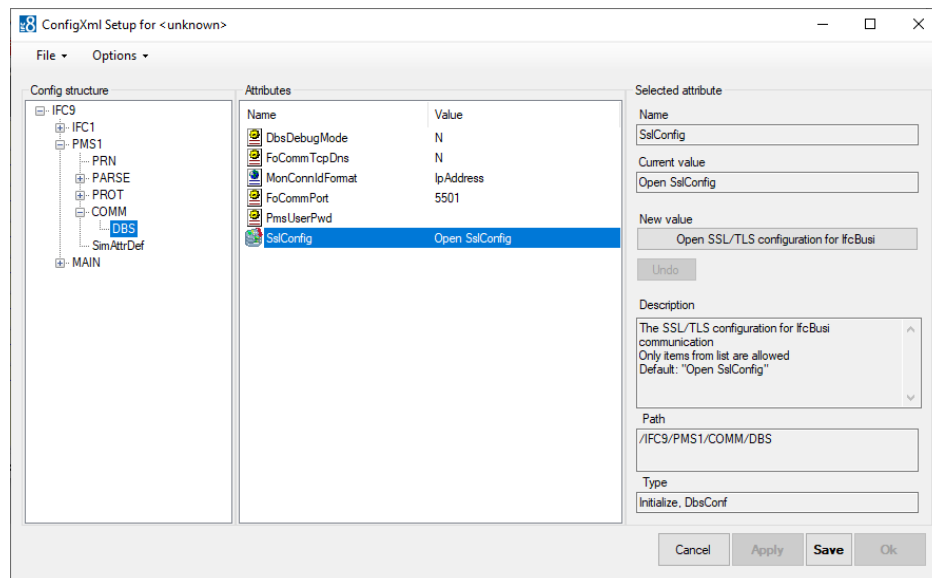
This is the Server Certificate of IfcBusi.Net

> ✏ **NOTE:**
>
> It is only possible to assign a certificate for mutual authentication at same step of assigning the Server certificate.

5. Choose the Store location and Store name the certificate is located at.

6. Enter the certificate name / Issued to value.
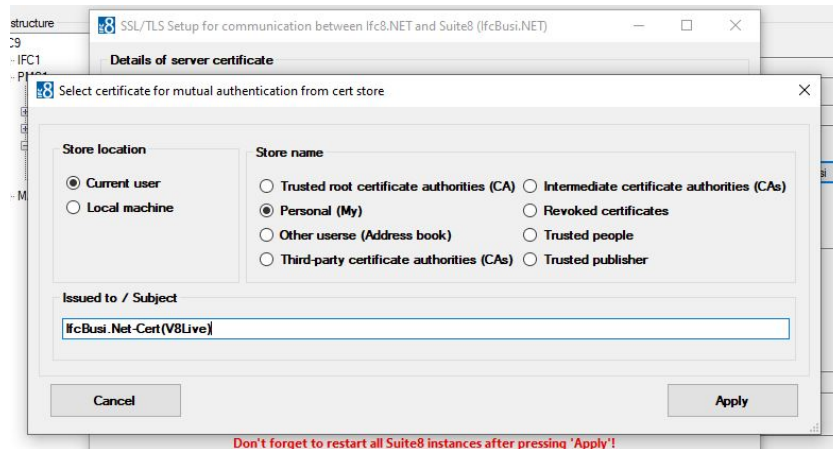
7. Select **Apply** to import the certificate into IFC Configuration.

8. Select **Apply** or **Apply & Save** to confirm changes.

The IFC will reinitialize.

> **✎ NOTE:**
>
> Adding certificates requires a restart of all Suite8 Workstations having IfcBusi.Net installed, as the IfcBusi.Net must be reloaded to read the new settings.

After importing the certificates from the cert store the certificates can be removed from the cert store as IFC8.Net and IfcBusi.net.dll read the certificates from the database.

This ensures that these certificates will not be used by other systems.

Re-assign Certificates

In case existing certificates will be replaced with new ones, the re-assignment will work the same way.

New value

Open SSL/TLS configuration for IfcBusi
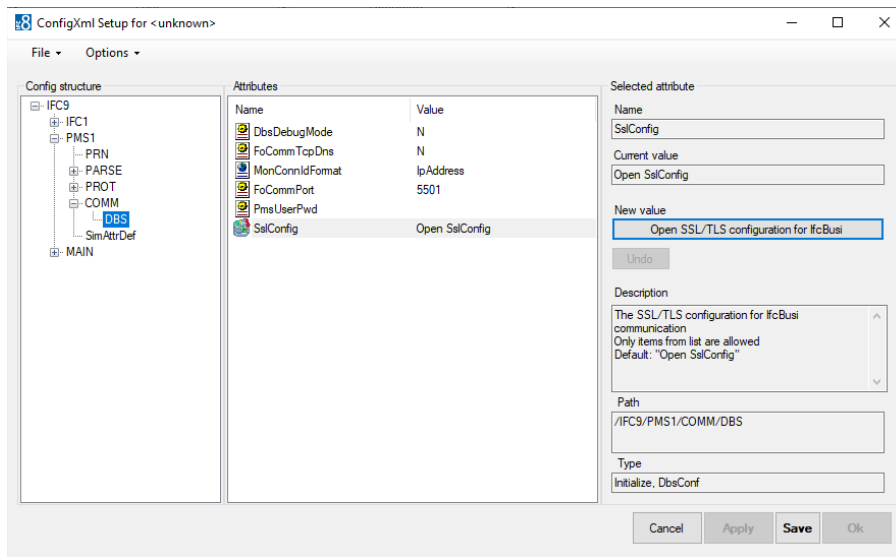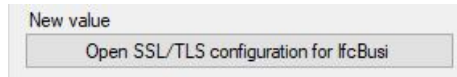
Ifc Configuration Editor has been accessed using the Windows Authentication another Suite8 user authentication is required

To change the Certificates select the "**Import certificate from file**" or the "**Import certificate from cert store**" button and follow the steps as described in above section.

> ✏ **NOTE:**
>
> Changing existing **certificate for mutual authentication** is currently not possible without re-assign the server certificate.
> For this the buttons to "import certificate from file" and "**Import certificate from cert store**" for mutual authentication are not available.

Clear Certificates
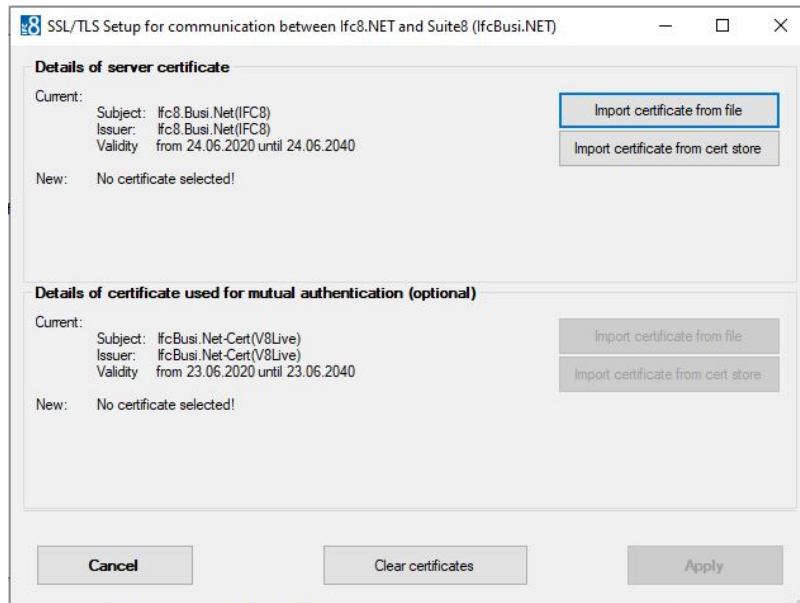
1. To remove/clear all certificates select the "Clear certificates" button.

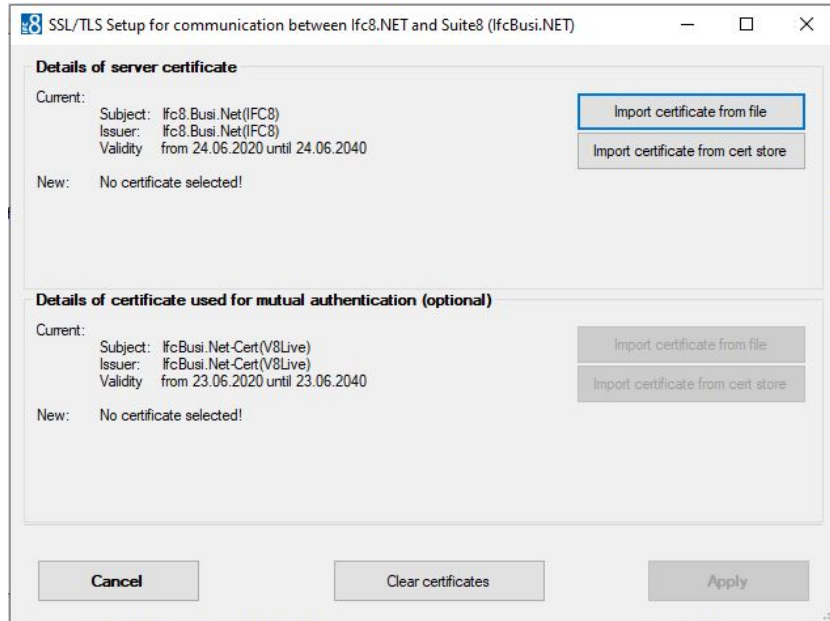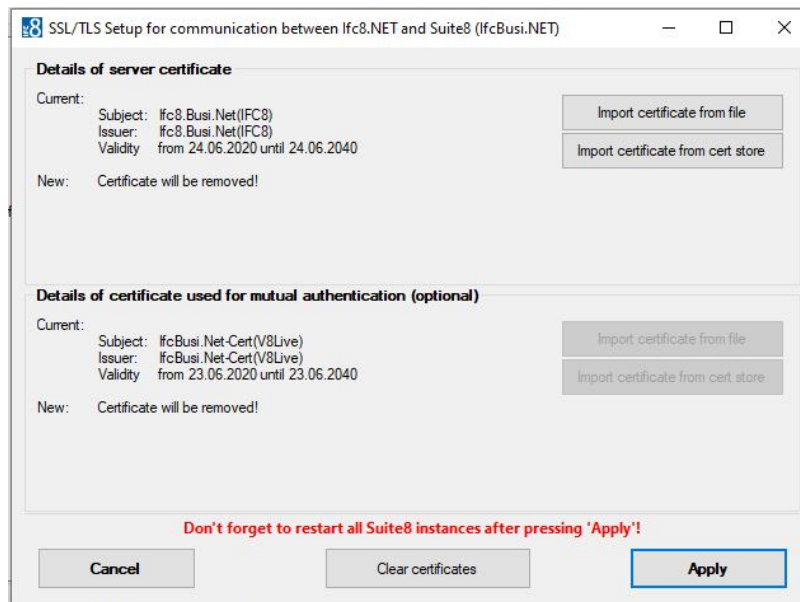2. To confirm certificate settings select Apply to save changes.

> ✏️ **NOTE:**
>
> Adding certificates requires a restart of all Suite8 Workstations having IfcBusi.Net installed as the IfcBusi.Net must be reloaded to read the new settings.

Certificates When Moving IFC Instance

In case the IFC8.Net Instance or service has been moved to another PC/Server the certificates must be defined again in the Ifc8Config as the defined certificate values will not be valid anymore!

Related Error message might occur in IFC8 instance Pms object:

<App_Config_InvValue_Exception>[TcpFoWsConnect.Init/6]

-Description: Server certificate can not be retrieved from IMSQ table value → The specified network password is not correct.

Follow the steps as for Re-assign certificates.

First Start of IfcBusi.Net with SSL Settings Changed

When starting Suite8 Client the first time after **adding/re-assigning/clearing** certificates the following notification pops up upon IfcBusi.Net instance loading **for EFT Interface**:
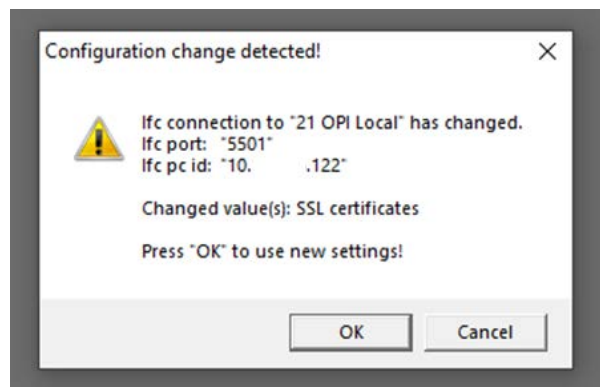
Press OK to confirm new settings and continuing loading IfcBusi.Net instance.