FIXEdge installation on Windows. Step by step instruction

Prerequisites and System Requirements

1. Hardware:
   Any modern Intel-based server or workstation with 64 bit CPU
2. Supported operating systems:
   - Windows 7
   - Windows 8
   - Windows Server 2008 R2
   - Windows Server 2012
   - Windows Server 2016
3. The list of packages that should be installed before FIXEdge's installation:
   - VS 2010 C++ Redistributable Package (x64) https://www.microsoft.com/en-us/download/details.aspx?id=5555
   - VS 2015 C++ Redistributable Package (x64) https://www.microsoft.com/en-us/download/details.aspx?id=48145. It can be found in FIXEdge's \Redist directory
4. The list of ports that should be opened:
   - TCP: 8901, 8902, 8903, 8905
   - UDP: 1234

Deployment of FIXEdge

FIXEdge Components

- FIXEdge-x.x.x.zip
- engine.license

    fixaj2-license.bin

Steps to Install

> ⓘ The installation assumes that FIXEdge will be installed in C:\B2BITS directory.

1. Unpack the FIXEdge-x.x.x.zip archive
2. Put the engine.license file into the FIXEdge's root directory

    Put the fixaj2-license.bin into the root folder of FIXICC Agent

3. Open cmd.exe as Administrator and switch the current directory to the C:\B2BITS\FIXEdge\fixicc-agent\bat

    a. Execute the following scripts in the console:

    ```
    installService.FIXEdge1.bat
    startService.FIXEdge1.bat
    ```

    It can take up to several minutes to start at the first time:

```
C:\WINDOWS\system32>cd C:\B2BITS\FIXEdge\fixicc-agent\bat

C:\B2BITS\FIXEdge\fixicc-agent\bat>installService.FIXEdge1.bat

C:\B2BITS\FIXEdge\fixicc-agent\bat>pushd C:\B2BITS\FIXEdge\fixicc-agent\bat\

C:\B2BITS\FIXEdge\fixicc-agent\bat>call setenv.FIXEdge1.bat
"../../jre/bin/java.exe" -Xmx30m -Djna_tmpdir="C:\B2BITS\FIXEdge\fixicc-agent
jar "C:\B2BITS\FIXEdge\fixicc-agent\bat\/../wrapper.jar" -i "C:\B2BITS\FIXEdge
nf\wrapper.conf"
YAJSW: yajsw-stable-12.08
OS   : Windows 7/6.1/amd64
JVM  : Oracle Corporation/1.8.0_131/C:\B2BITS\FIXEdge\jre/64
Jul 13, 2017 6:35:16 PM org.apache.commons.vfs2.VfsLog info
INFO: Using "C:\Users\Elena_Bickunova\AppData\Local\Temp\vfs_cache" as tempor
*********** INSTALLING FIXICC - Agent FIXEdge1 *********************

service cmd: C:\B2BITS\FIXEdge\jre\bin\java.exe -classpath C:\B2BITS\FIXEdge\
=true -Dwrapper.working.dir=C:\B2BITS\FIXEdge -Djna_tmpdir=C:\B2BITS\FIXEdge\
S\FIXEdge\fixicc-agent\bat\/.. -Dwrapper.config=C:\B2BITS\FIXEdge\fixicc-age
pper.additional.1x=-Xrs -Djna_tmpdir=C:\B2BITS\FIXEdge\fixicc-agent\bat\/..\
Service FIXICC - Agent FIXEdge1 installed

C:\B2BITS\FIXEdge\fixicc-agent\bat>startService.FIXEdge1.bat

C:\B2BITS\FIXEdge\fixicc-agent\bat>pushd C:\B2BITS\FIXEdge\fixicc-agent\bat\

C:\B2BITS\FIXEdge\fixicc-agent\bat>call setenv.FIXEdge1.bat
"../../jre/bin/java.exe" -Xmx30m -Djna_tmpdir="C:\B2BITS\FIXEdge\fixicc-agent
jar "C:\B2BITS\FIXEdge\fixicc-agent\bat\/../wrapper.jar" -t "C:\B2BITS\FIXEdge
nf\wrapper.conf"
YAJSW: yajsw-stable-12.08
OS   : Windows 7/6.1/amd64
JVM  : Oracle Corporation/1.8.0_131/C:\B2BITS\FIXEdge\jre/64
Jul 13, 2017 6:36:12 PM org.apache.commons.vfs2.VfsLog info
INFO: Using "C:\Users\Elena_Bickunova\AppData\Local\Temp\vfs_cache" as tempor
*********** STARTING FIXICC - Agent FIXEdge1 *********************

Service FIXICC - Agent FIXEdge1 started

C:\B2BITS\FIXEdge\fixicc-agent\bat>
```

b. Switch the current directory to the C:\B2BITS\FIXEdge\bin. Execute the following scripts in the console:

```
FIXEdge1.install.cmd
```

```
C:\B2BITS\FIXEdge\bin>FIXEdge1.install.cmd
FIXEdge 6.2.0.r224 (engine 2.20.0.r57)
```

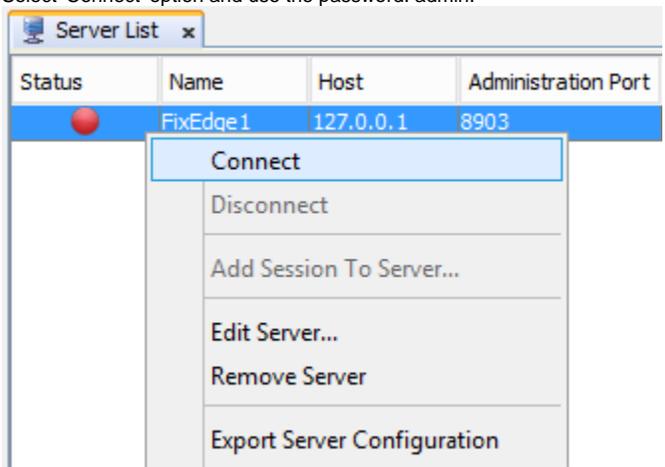4. Launch FIX Integrated Control Center (FIXICC):

```
C:\B2BITS\FIXEdge\fixicc\bin\fixicc.exe
```

5. Open the context menu of the default 'FixEdge1' server on the 'Server List' tab of FIXICC:

   Import the fixaj2-license.bin license in FIXICC GUI:
   Help -> Import license...

   - Select 'Connect' option and use the password: admin.

6. Select 'Start Server' option in the context menu of the server.

Please refer to FIXICC User Guide for detailed instructions.
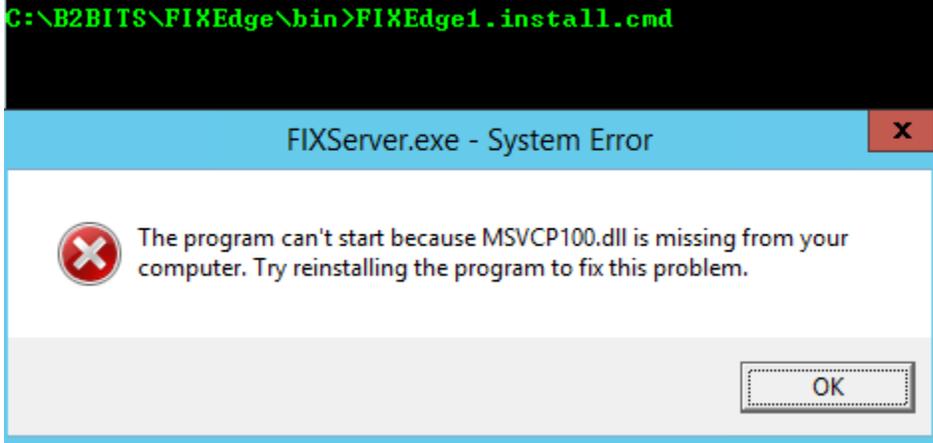
Installation complete.

See also:

[How to setup secure SSL/TLS conntion between FIXEdge, FIXICC-agent and FIXICC](#)

[How to change FIXICC Agent password](#)

Troubleshooting

FIXEdge doesn't install because of missing MSVCP100.dll

1. Make sure that VS 2015 C++ Redistributable Package (x64) is installed if the following System Error appears:

2. The package can be found in C:\B2BITS\FIXEdge\Redist directory

FIXICC doesn't connect to FIXICC agent

1. Go to the C:\B2BITS\FIXEdge\fixicc-agent\FIXEdge1.fixicc-agent\logs directory and open fixicc-agent.log with any text editor.
   a. Check if the following notes exist in the log:

   ```
   INFO|13743/0|Service FIXICC - Agent Server|14-06-19 20:39:15|Agent is started successfully
   INFO|13743/0|Service FIXICC - Agent Server|14-06-19 20:39:15|Agent started on port: 8903
   ```

   b. If the notes are absent then go to the ['FIXICC agent doesn't start'](#) section.
2. Select the 'Edit Server' option in the context menu of the FIXEdge server in FIXICC.
3. Make sure that the value of the 'Port' and 'Host' in the 'Basic Settings' corresponds to the FIXICC Agent port and the host of the FIXEdge machine.

FIXICC agent doesn't start

1. Go to the C:\B2BITS\FIXEdge\fixicc-agent\FIXEdge1.fixicc-agent\logs with any text editor.
2. Find the messages with [ERROR] and [FATAL] level. These messages are able to help with understanding of the possible issues. If there is a requirement for technical assistance then contact the support team SupportFIXProducts@epam.com.

FIXEdge doesn't start from FIXICC

1. Open cmd.exe as Administrator and switch the current directory to the C:\B2BITS\FIXEdge\bin
2. Execute the following scripts in the console:

   ```
   FixEdge1.run.cmd
   ```

3. If the script executed successfully then go to the C:\B2BITS\FIXEdge\fixicc-agent\FIXEdge1.fixicc-agent\logs directory and open fixicc-agent.log with any text editor (otherwise go to the ['FIXEdge doesn't start with 'FixEdge1.run.cmd' script'](#) section).
4. Check if the following note exists in the log and make sure that the path presented below lead to the existing engine.properties file:

   ```
   [INFO ] [main] [UtilProperties] Properties load successful: C:\B2BITS\FIXEdge\.\FIXEdge1\conf\engine.
   properties
   ```

5. If the note is absent find the messages with [ERROR] and [FATAL] level. These messages are able to help with understanding of the possible issues. If there is a requirement for technical assistance then contact the support team SupportFIXProducts@epam.com.

FIXEdge doesn't start with 'FixEdge1.run.cmd' script in case of openssl bug

1. Check the console output it is able to help with understanding of the possible issues.
   - If the output contains the following errors then it is the issue related to third-party openssl bug with openssl.cnf location:

```
C:\Downloads\FIXEdge.6.1.0.windows\FIXEdge\bin>"./FIXServer.exe" -console "../FIXEdge1/conf
/FIXEdge.properties"
FIXEdge 6.1.0.r203 (engine 2.18.1.r54)
Auto configuration failed
12324:error:02001015:system library:fopen:Is a directory:.\crypto\bio\bss_file.c:169:fopen('D:
\environment\openssl-1.0.1l\vc10-x64\ssl\openssl.cnf','rb')
12324:error:2006D002:BIO routines:BIO_new_file:system lib:.\crypto\bio\bss_file.c:174:
12324:error:0E078002:configuration file routines:DEF_LOAD:system lib:.\crypto\conf\conf_def.c:199:
```

To solve the issue add OPENSSL_CONF variable and set it to C:\ . Please, select the method most convenient to you:

   a. Append the following line to the first line of the scripts FIXEdge1.run.cmd and FIXEdge1.service.run.cmd to make FIXEdge runnable manually or via FIXICC:

```
SET OPENSSL_CONF=c:\
```

   b. Add OPENSSL_CONF variable to Environment Variables:
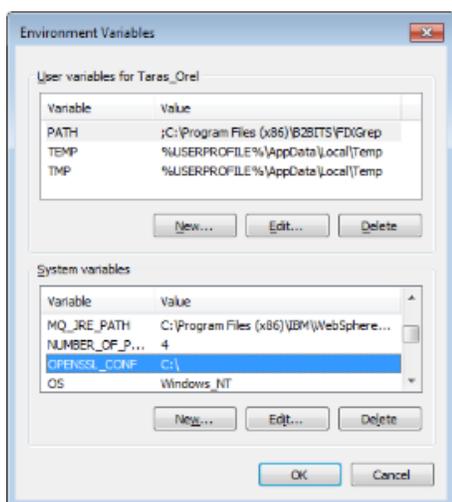
2. Go to the C:\B2BITS\FIXEdge\FIXEdge1\log directory and open FixEdge.log file with any text editor.
3. Find the messages with [ERROR] or [FATAL] level in the log. These messages are able to help with understanding of the possible issues. If there is a requirement for technical assistance then contact the support team SupportFIXProducts@epam.com.

FIXEdge doesn't start with 'FixEdge1.run.cmd' script in case of incorrect FIXEdge.log path

1. Check the console output it is able to help with understanding of the possible issues.
   If the output contains the following errors then it is the issue related to incorrect FIXEdge.log path.

```
FIXEdge 6.4.0.r249 (engine 2.21.0.r60)
ERROR: Unable to register Event source for category 'FIXEdge'. Reason: RegCreateKeyEx: Error while
adding registry records. Access is denied. (Error code = 5)
```

The FIXEdge.log path not correctly set. For this reason FIXEdge tries to log another error through EventLog. If there are no administrator rights, an error occurs.
2. To solve the issue configure proper FIXEdge.RootDir in FIXEdge.properties and Log.File.RootDir in engine.properties.
3. Restart FIXEdge after updating FIXEdge.properties and engine.properties to apply the changes.

FIXEdge cannot start with an incorrect or expired license

1. Go to the C:\B2BITS\FIXEdge\FIXEdge1\log directory and open FixEdge.log with any text editor.

   a. Request a new license file from the sales team sales@btobits.com if the FixEdge.log file contains the following error:

```
ERROR   [Engine]  140410078865152  License is expired – components will be stopped! Please contact
us at SupportFIXAntenna@epam.com for further assistance.
```

b. Make sure that the license file has a correct 'engine.license' name and placed in the root directory of FIXEdge if the FixEdge.log file
contains the following error:

```
ERROR   [FL_FixEngine]  140029176809248  Unable to initialize EngineAdaptor. Reason: Please check
the FIX Engine's settings: Cannot open the file "/home/user/B2BITS/FIXEdge/bin/../engine.license"
(the "LicenseFile" property). No such file or directory. (Error code = 2)
```

2. Restart FIXEdge after updating the license to apply the changes.