# **Encryption Setup Steps for F3420-ECLDBD01**

## RDP onto server F3420-ECLDBD01

## Import an Existing Encryption Key

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| --- | --- |
| **Step** | **Action** |
| **1** | Before getting started:  Ensure you have password to key File.  POC for password to Key File: [Susmitha.palacherla@GDIT.com](mailto:Susmitha.palacherla@GDIT.com) |
| **2** | Launch the Enterprise Library Configuration tool (ELC) from  G:\Data\Coaching\EncryptionInstall\EncryptionService\  WinCrypt (Type Application as shown below and NOT the XML configuration) |
| **3** | Click the “**Maintain Configuration**” button |
| **4** | Click the “**Configure SymmProviders**” buttons |
| **5** | Right click **Symmetric Providers > New > Symmetric Algorithm Provider** |
| **6** | (Type Selector - System.Security.Cryptography.SymmetricAlgorithm) : **RijndaelManaged** is selected by default, change to **AesCryptoServiceProvider** and click **OK** |
| **7** | (Cryptographic Key Wizard):  **Import a password-protected key file**, Click **Next** |
| **6** | (Cryptographic Key Wizard):  Select the originally created Text Key file and enter the password,  **ECLKeyDevProtected.txt** from **G:\Data\Coaching\EncryptionInstall\EncryptionKeys\**  Use separately provided Password.  click **Next** |
| **7** | (Cryptographic Key Wizard):  Enter a filename to save the newly created .Key file to, Click **Save** on “**Choose Keyfile**” dialog. Click **Next**    Use Name **“ECLKeyDev**” and save to **G:\Data\Coaching\EncryptionInstall\EncryptionKeys\** |
| **8** | (Cryptographic Key Wizard) : Please select the **data protection mode** : Choose **Machine mode** or **User mode** (see explanation above), click **Finish** |
| **9** | Right Click on newly imported key and **Rename** to **ECLKeyDev**  Click **Save and exit** from the ELC tool**.**  **C:\Users\hoffra\AppData\Local\Temp\msohtmlclip1\01\clip_image001.png** |

## Maintain Configuration

The next step in the installation process is to provide the configuration settings.

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| **Step** | **Action** |
| **1** | Launch ELC once again by double clicking **WinCrypt** (file type “Application” from G:\Data\Coaching\EncryptionInstall\EncryptionService\ |
| **2** | Click the “**Maintain Configuration**” button  You should see the following screen when you click this button, however some of the default settings may be different. |
| **3** | Please add the following entries here.  **SymmProvider: ECLKeyDev**  \*Choose: Encrypt, Compress, and Move options for all.   |  |  |  |  | | --- | --- | --- | --- | | **Mode** | **SOURCE** | **DESTINATION** | **BACKUP** | | **Encrypt** | G:\Data\Coaching\Encryption\Encrypt\_In\ | G:\Data\Coaching\Encryption\Encrypt\_Out\ | G:\Data\Coaching\Encryption\Backups\ | | **Decrypt** | G:\Data\Coaching\Encryption\Decrypt\_In\ | G:\Data\Coaching\Encryption\ Decrypt\_Out\ | G:\Data\Coaching\Encryption\ Decrypt\_Out\ | | **Encrypt** | G:\Data\Coaching\ETS\Encrypt\_In\ | G:\Data\Coaching\ETS\Encrypt\_Out\ | G:\Data\Coaching\ETS\Backups\ | | **Decrypt** | G:\Data\Coaching\ETS\ Decrypt \_In\ | G:\Data\Coaching\ETS\ Decrypt\_Out\ | G:\Data\Coaching\ETS\ Decrypt\_Out\ | | **Encrypt** | G:\Data\Coaching\Generic\Encrypt\_In\ | G:\Data\Coaching\Generic\Encrypt\_Out\ | G:\Data\Coaching\Generic\Backups\ | | **Decrypt** | G:\Data\Coaching\Generic\ Decrypt\_In\ | G:\Data\Coaching\Generic\Decrypt\_Out\ | G:\Data\Coaching\Generic\Decrypt\_Out\ | | **Encrypt** | G:\Data\Coaching\HrInfo\Encrypt\_In\ | G:\Data\Coaching\HrInfo\Encrypt\_Out\ | G:\Data\Coaching\HrInfo\Backups\ | | **Decrypt** | G:\Data\Coaching\HrInfo\Decrypt\_In\ | G:\Data\Coaching\HrInfo\Decrypt\_Out\ | G:\Data\Coaching\HrInfo\Decrypt\_Out\ | | **Encrypt** | G:\Data\Coaching\IQS\Encrypt\_In\ | G:\Data\Coaching\IQS\Encrypt\_Out\ | G:\Data\Coaching\IQS\Backups\ | | **Decrypt** | G:\Data\Coaching\IQS\Decrypt\_In\ | G:\Data\Coaching\IQS\Decrypt\_Out\ | G:\Data\Coaching\IQS\Decrypt\_Out\ | | **Encrypt** | G:\Data\Coaching\Outliers\Encrypt\_In\ | G:\Data\Coaching\Outliers\Encrypt\_Out\ | G:\Data\Coaching\Outliers\Backups\ | | **Decrypt** | G:\Data\Coaching\Outliers\Decrypt\_In\ | G:\Data\Coaching\Outliers\Decrypt\_Out\ | G:\Data\Coaching\Outliers\Decrypt\_Out\ | | **Encrypt** | G:\Data\Coaching\Quality\Encrypt\_In\ | G:\Data\Coaching\Quality\Encrypt\_Out\ | G:\Data\Coaching\Quality\Backups\ | | **Decrypt** | G:\Data\Coaching\Quality\Decrypt\_In\ | G:\Data\Coaching\Quality\Decrypt\_Out\ | G:\Data\Coaching\Quality\Decrypt\_Out\ | | **Encrypt** | G:\Data\Coaching\Training\Encrypt\_In\ | G:\Data\Coaching\Training\Encrypt\_Out\ | G:\Data\Coaching\Training\Backups\ | | **Decrypt** | G:\Data\Coaching\Training\Decrypt\_In\ | G:\Data\Coaching\Training\Decrypt\_Out\ | G:\Data\Coaching\Training\Decrypt\_Out\ | | **Encrypt** | G:\Data\Coaching\Reports\Encrypt\_In\ | G:\Data\Coaching\Reports\Encrypt\_Out\ | G:\Data\Coaching\Reports\Backups\ | | **Decrypt** | G:\Data\Coaching\Reports\Decrypt\_In\ | G:\Data\Coaching\Reports\Decrypt\_Out\ | G:\Data\Coaching\Reports\Decrypt\_Out\ | |  |  |  |  |   Once settings have been entered, save them by clicking the “Save Settings” button, then close this window by clicking on the red “x” at the top right of the window. This will return you to the main “WinCryptForm” screen. |

## Test Settings

The accuracy and functionality of the above settings can be tested by clicking the button labeled “Start Directory Watchers”. This will cause the WinCrypt application to mimic the functionality of the service that will be installed later.

At this time you can test the functionality by dropping any unencrypted files in to the folder specified in the setting “Encryption Source Directory”(G:\Data\Coaching\Encryption\Encrypt\_In). It should get encrypted, and/or compressed, depending on your selected options, and moved to the directory specified in the setting labeled “Encryption Destination Directory“(G:\Data\Coaching\Encryption\Encrypt\_Out). You can copy and paste this newly created encrypted file in to the “Decryption Source Directory”( G:\Data\Coaching\Encryption\Decrypt\_In), and a decrypted and/or decompressed file should appear in the folder corresponding to the setting labeled “Decryption Destination Directory”( G:\Data\Coaching\Encryption\Decrypt\_In).

Once the WinCrypt application is performing like you expect, you can close the application and continue to the next step. If you experience unexpected behavior, you can click the button to “Stop Directory Watchers”, then click “Maintain Configuration” to review/update your settings. Once you update any settings, save and close that screen and then retest using the method described above. If you still don’t get the results that you expected, contact appropriate support individuals.

**\***Can use Test file ‘**FileForTesting.txt’** atG:\Data\Coaching\Encryption\

## Synchronize Configuration Files

The symmetric key settings are stored in WinCrypt.exe.config by the ELC tool during setup. CryptoService.exe reads symmetric key settings from a different config file (CryptoService.exe.config), so these settings must be synchronized before the service is installed and started, or it will not function properly.

1. Launch a command prompt (CMD.exe).
2. Change drive to G: and CD to the service install files which is ‘Data\Coaching\ EncryptionInstall\EncryptionService\’
3. Once in the directory where the files were extracted, type the following command: **Copy WinCrypt.exe.config CryptoService.exe.config**
4. Once this command is executed we are ready to install the service. You do not need to close the Command Prompt window since it will be used in the next step.

## Install the Service

Service Name: CCOECLEncrypt

**SC CREATE** CCOECLEncrypt **binpath=** "G:\Data\Coaching\EncryptionInstall\EncryptionService\CryptoService.exe"

Once this command executes successfully, you can close the command prompt window. Open up the Windows Services administration tool by clicking *Start>Control Panel>Administrative Tools>Services*

Ensure the Service is set with Startup Type = “Automatic (Delayed Start)” and that the service is started and running.