

ezFMD HSE Installation Guide

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Prerequisites

- Site Configuration File
- PC with Windows 7 or higher
- Serial or “Serial over USB” Scanner
- PC must have one free USB port
- The correct driver for the barcode scanner. Windows 10 supports many USB barcode scanners “out of the box”. Windows 7 and 8 usually need drivers installed. Drivers may also be needed for Bluetooth dongles etc.
- The PC should have passed the ezFMD Firewall Test
- Administrator or elevated privileges to install software on the PC

Installation files

The latest installation files can be downloaded from <http://hse.ezFMD.com/downloads> :

setup.exe - (circa 106Mb) ezFMD setup itself

datalogic.msi - (circa 2Mb) scanner driver for Windows 7 (not required for Windows 10).

(If you find files are not available at the above location, please contact hse.support@ezFMD.com)

Configure Barcode Scanner

ezFMD is compatible with RS232 scanners. If the scanner has a USB interface then you must ensure that it is configured to operate in Serial over USB mode. This may be called Serial USB, USB Serial, USB-COM or USB-COM-STD, Serial over USB, etc. by different manufacturers.

Datalogic wireless scanners supplied to the HSE were pre-configured to use Serial over USB mode. However, this setting can become lost, such as in the event of a flat battery for a period.

In other cases scanners are supplied operating in “Keyboard Wedge” mode. In such a case you must program the scanner with one or more special barcodes to switch it to Serial over USB mode. For some scanners scanning one barcode is enough. For others, you may need to scan an “Enter Setup” barcode first, then scan a barcode to select Serial Over USB mode, and possibly finish by scanning a “Save/Exit Setup” barcode. Each manufacturer has their own way of performing this procedure.

Windows 7 and 8 usually require the installation of a driver in order for the scanner to function in USB Over Serial Mode. You should install the driver before attempting to program the scanner. Once the scanner is visible as a COM port in windows it can be configured with ezFMD.

NOTE: When installing wireless and Bluetooth scanners allow lots of time for the hardware to connect, register and configure. This can take 60 seconds or more.

Example Scanner Setup –

Dialog QuickScan QD2430

If running on Windows 7 then download and install the driver USBCOMInstaller.msi.

The QD2430 requires a barcode to be scanned in order to place it into Serial over USB mode. A booklet is included with the scanner which contains the relevant barcode. It is usually labelled “USB-COM-STD”

NOTE: Windows 7 requires the installation of a driver before the QD2430 can operate in Serial over USB mode. You should install the driver before scanning the barcode to switch it to Serial over USB mode. On older PC’s with Antivirus software it can take a *long* time for the driver to install.

Reset to EU factory Defaults



PERFORM THIS STEP ONLY IF YOU HAVE A WIRELESS SCANNER WHICH IS NOT WORKING

Occasionally, a **wireless Datalogic scanner** will lose the link with the base / cradle, particularly when a battery has run very low.

To re-build the link, scan this code



Unlink

and wait a few seconds, then place the scanner in the base / cradle. After a significant number of beeps, the scanner should stop beeping and the pair will again be linked.

Enable Serial over USB mode



Select USB-COM-STD

Enable scanning of Inverse barcodes



Enter/Exit Setup Mode



Enable Normal & Inverse Scanning



Enter/Exit Setup Mode

Install & Configure ezFMD

If necessary, download the SETUP Package

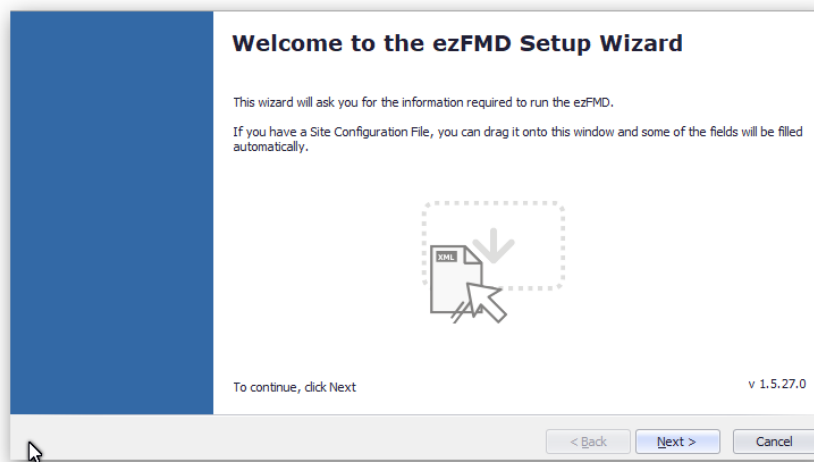
Download <http://hse.ezfm.com/downloads/setup.exe>

Run SETUP Package

Locate the downloaded SETUP.EXE for run it. In some circumstances you may need elevated privileges or Administrator rights to run SETUP. Accept all the defaults suggested by SETUP.

Before starting this segment, ensure that you have a functioning barcode scanner which is visible as a COM port.

Start the “ezFMD Scanner” application. The ezFMD Setup Wizard will run and ask you to provide information that will allow it to perform FMD operations:



Drag and drop the Site Configuration file on to the Setup Wizard.

On the first page on the Setup Wizard you confirm the Service Configuration and should look similar to this example:

Database Configuration
This page gathers information about your organisations database

Storage Path	fmdservice.database.windows.net
Container	MYCONTAINER

Login ID	KJG&8!l2j=
Password	Ej0UirrIUY=

< Back Next > Cancel

On the next page confirm that the Aggregation Site Credentials are correct.

National Aggregation
Site credentials for National Aggregation support

Site ID	H00108
Login ID	H00108ezAgg
Password	*****

Test

<http://hseaggregationservice.azurewebsites.net/ServiceHandler.svc>

< Back Next > Cancel

Click the “Test” button and ezFMD will attempt to connect to the Aggregation Service. If successful it will display the name of the site:

EZFMD

A successful connection was made.
The name of this site is Connolly Hospital Blanchardstown

OK

If the connection attempt fails try again. If after 2-3 attempt you still cannot connect then the firewall/proxy server settings may need to be updated.

On the next screen you select the Location Secret and the User that will normally be scanning packs:

Location Configuration
This page gathers information about the location of this computer and the user who will use it most often

HE Clissmann

Location [Dropdown]
Client ID [HE Clissmann]
Client Secret [Password Field]
Default User ID [DU] No default, a user must login at startup.

< Back Next > Cancel

Select one of the possible PCs for Location and **DU** for the Default User.

On the next page you select the COM port on which the Barcode Scanner is configured:

Scanner Configuration
Configure the barcode scanner

ezFMD can automatically detect an attached barcode scanner. However, there may be situations where you wish to explicitly define which COM port the scanner is connected to. For example, the detection process may be too slow, or is confused by 'ghost' COM ports.

ezFMD should automatically try to detect the barcode scanner at startup

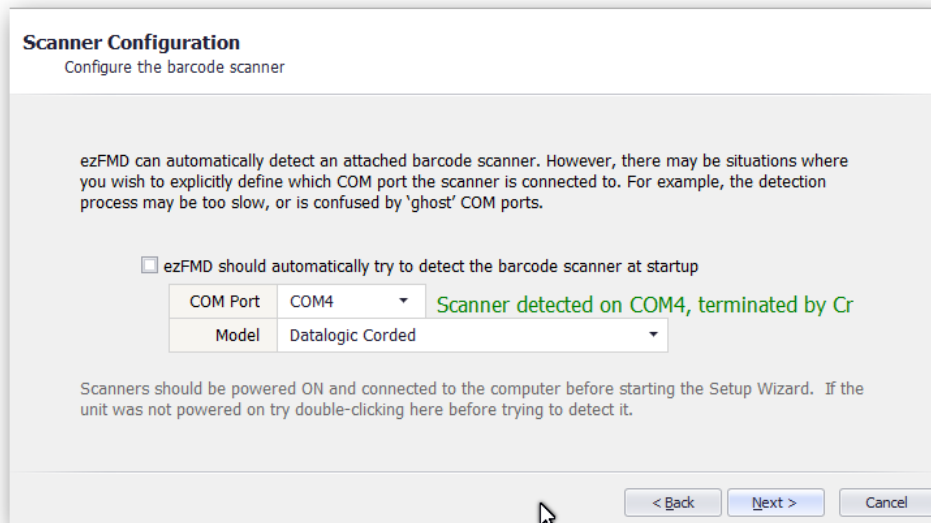
COM Port [Dropdown] [Scan a barcode to try and determine the COM port now](#)
Model [Datalogic Corded]

Scanners should be powered ON and connected to the computer before starting the Setup Wizard. If the unit was not powered on try double-clicking here before trying to detect it.

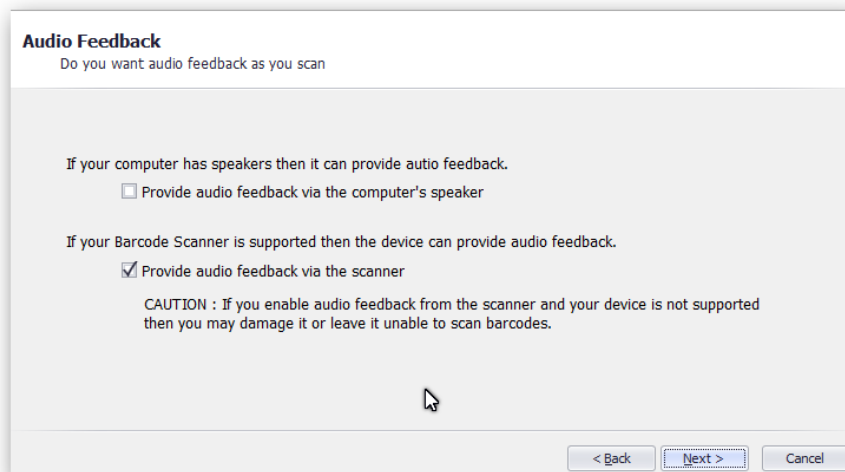
< Back Next > Cancel

Select an appropriate scanner model. For example, when a Datalogic scanner is being used it can provide audio feedback to users to let them know the result of a scan. *If you are not sure then select "Generic". Selecting the wrong model may cause ezFMD to freeze or configure the scanner incorrectly.*

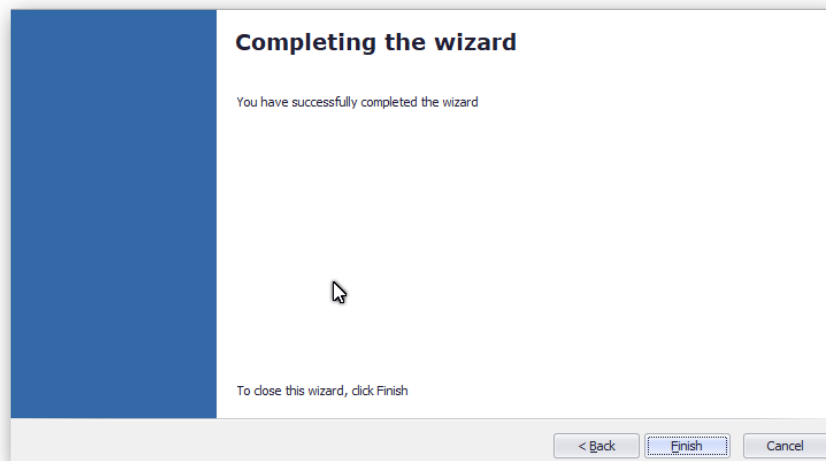
You should now scan a barcode and ezFMD will detect which COM port the scanner is on:



On the next page you configure audio feedback. In some location's a customer may prefer a quiet working environment and wish to disable audio feedback.

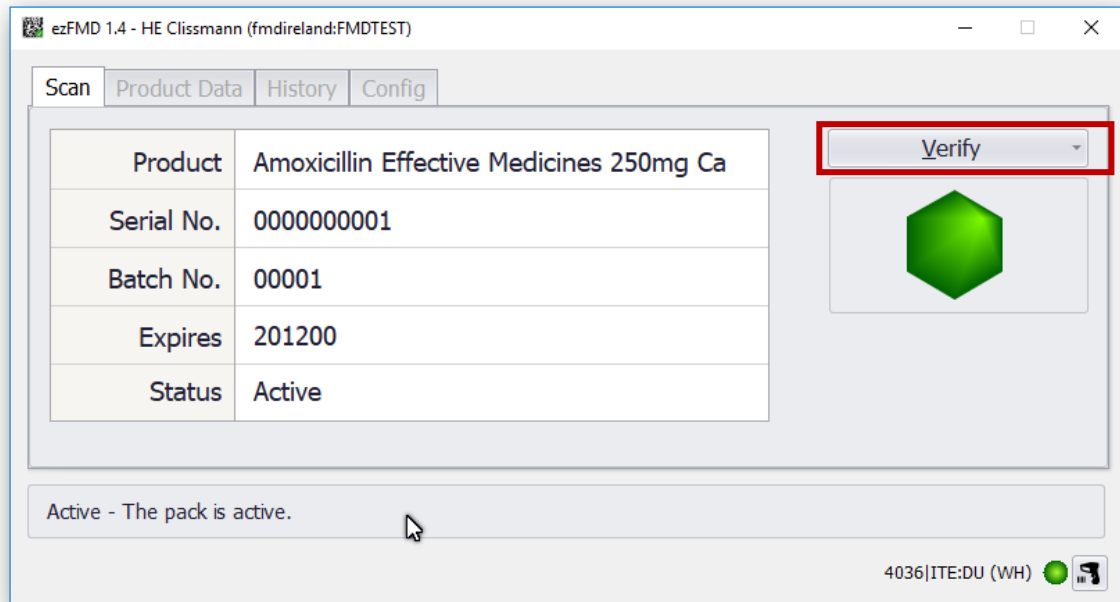


The Setup Wizard is now complete:



ezFMD Scanner – Test Scan

Make sure that ezFMD is in “Verify” mode and scan a pack of medicine that contains a 2D Datamatrix FMD barcode.

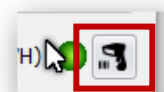


If the scanner is configured correctly then ezFMD should display the contents of the barcode on screen and then contact the FMD National System to determine to current status of the pack. When the status has been determined you should see a green, amber or red light.

The barcode is not read by ezFMD

Note: occasionally a Datalogic scanner does not send the first barcode to the PC after starting ezFMD. You should try repeating the scan a second time to ensure this is not the issue.

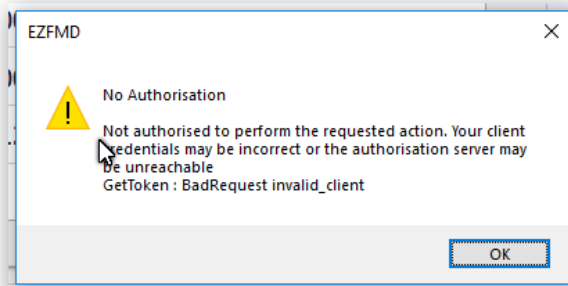
Click on the scanner icon at the bottom right hand corner of the ezFMD window:



5

Then configure the connection and repeat the test scan.

The following message is displayed:



You may have entered the ClientID and Client Secret incorrectly.

Start the “ezFMD Admin” application. Select “Organisation: Location” and make sure that the values are correct.

Another possible problem is that the wrong endpoints are being used. Start the “ezFMD Admin” application. Select “System:NVO Endpoints” and make sure that the Live or Production endpoint is selected. E.g. for the Irish National System the correct endpoint is “IMVO-LIVE”.

Finally, check that the required ports and endpoints are not being blocked (see next)

ezFMD is unable to reach the National System or suggests it may be offline.

Make sure that the following TCP ports are not blocked by the PC or by a Network Security Device:

8978
8637
8640
1433

If website blocking is performed by the PC or Network Security Device then add the following to the appropriate white list:

<https://nbsieprod.emvs-nbs.eu:8978/>
<https://nbsieprod.emvs-nbs.eu:8637/connect/token>

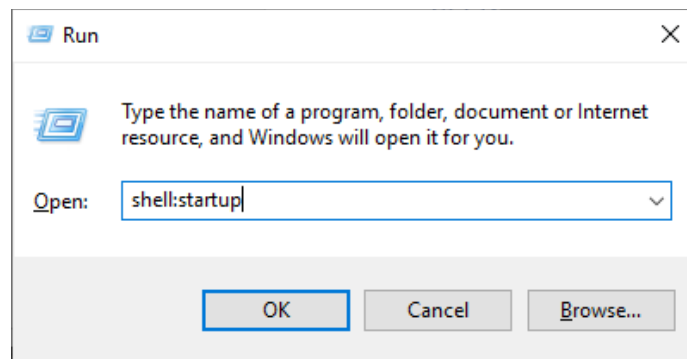
The above URL's are for the Irish National System. The URL's for other National Systems will differ.

Add ezFMD Scanner to Computer Startup

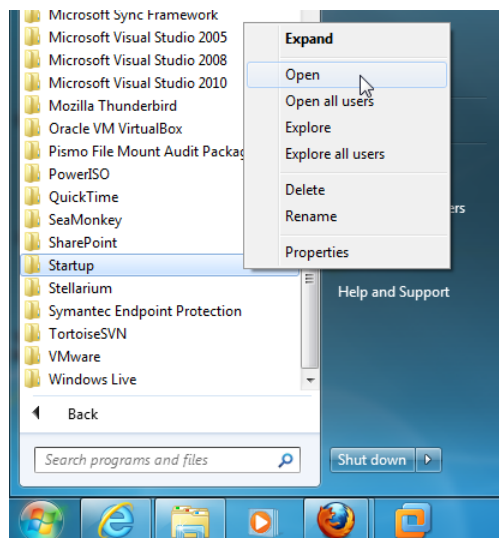
Pin the ezFMD application to the Taskbar. Also pin it to the Startup menu.

Ask the user if they wish to have the scanner application start automatically when they login. If not then you can skip the rest of this section.

Windows 10 - Press **[Windows]R** and in the run dialog box enter "shell:startup"



Windows 7 - select **Start:Startup:Open**



Information : ezFMD –Addresses and Ports

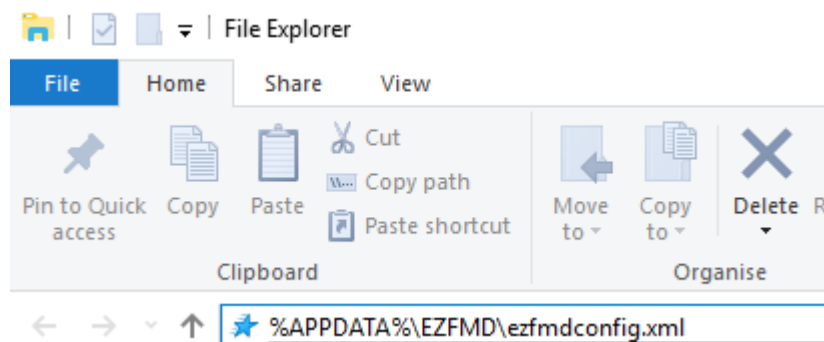
Description	Address	Ports	Critical
ITE API	http://irl-nbs-ite-domname12424.northeurope.cloudapp.azure.com:5000/api	5000	
ITE Authorisation	http://irl-nbs-ite-domname12424.northeurope.cloudapp.azure.com:5001/identity/connect/token	5001	
ITE Reporting	http://irl-nbs-ite-domname12424.northeurope.cloudapp.azure.com:5004/report	5004	
IQE API	https://nbsieiqe1.emvs-nbs.eu:8978/	8978	
IQE Authorisation	https://nbsieiqe1.emvs-nbs.eu:8637/connect/token	8637	
IQE Reporting	https://nbsieiqe1.emvs-nbs.eu:8993/	8993	
PRD API	https://nbsieprod.emvs-nbs.eu:8978/	8978	Y
PRD Authorisation	https://nbsieprod.emvs-nbs.eu:8637/connect/token	8637	Y
PRD Reporting	https://nbsieprod.emvs-nbs.eu:8993/	8993	Y
Database HEC	fmdireland.database.windows.net	1433	
Database HSE	hsefmd.database.windows.net	1433	Y
Aggregation HSE	http://hseaggregationservice.azurewebsites.net	80	Y
	http://hseaggregationservice.azurewebsites.net/ServiceHandler.svc	80	Y
	https://hseaggregationservice.azurewebsites.net	443	Y
	https://hseaggregationservice.azurewebsites.net/ServiceHandler.svc	443	Y
Aggregation TEST	http://fmdaggregateservice.azurewebsites.net	80	
	http://fmdaggregateservice.azurewebsites.net/ServiceHandler.svc	80	
	https://fmdaggregateservice.azurewebsites.net	443	
	https://fmdaggregateservice.azurewebsites.net/ServiceHandler.svc	443	
Ping / ICMP	8.8.8.8		Y

ezFMD Configuration details – location

IT STAFF USE ONLY

All details entered above are saved in %LOCALAPPDATA%\EZFMD\ezfmdconfig.xml

(If not found at this location, try %APPDATA%\EZFMD\ezfmdconfig.xml)



Edit this file with Notepad or similar plain text editor – NOT with Word.

```
<?xml version="1.0" encoding="utf-8"?>
<Config>
  <Scanner>
    <KeepAlive>No</KeepAlive>
    <KeepAliveTimeout>300</KeepAliveTimeout>
    <Terminator>Cr</Terminator>
    <EnableScannerSounds>Yes</EnableScannerSounds>
    <InitString>E{CR}</InitString>
    <COMPort>*</COMPort>
    <Manufacturer>1</Manufacturer>
    <Model>DataLogicSound</Model>
    <SoundGood>B{CR}</SoundGood>
    <SoundBad>F{CR}</SoundBad>
    <SoundBadPauseBeforeEnable>750</SoundBadPauseBeforeEnable>
    <EnableCommand>E{CR}</EnableCommand>
    <DisableCommand>D{CR}</DisableCommand>
    <ReadTimeout>1000</ReadTimeout>
    <WriteTimeout>1000</WriteTimeout>
  </Scanner>
  <Connectivity>
    <PingHost>8.8.8.8</PingHost>
    <OfflinePingCount>5</OfflinePingCount>
    <OfflinePingTimeout>750</OfflinePingTimeout>
    <IgnoreProxyServer>No</IgnoreProxyServer>
  </Connectivity>
  <OfflineMode>
    <AutoPlaybackTime>22:00</AutoPlaybackTime>
  </OfflineMode>
  <Barcode>
    <IFAProductNumberMode>ProductCodeAlways</IFAProductNumberMode>
    <!-- ProductCodeAlways | GTINThenProductCode -->
  </Barcode>
  <General>
    <AutoPrintAlertReport>False</AutoPrintAlertReport>
  </General>
  <Sounds>
    <Enabled>Yes</Enabled>
  </Sounds>
  <Aggregate>
    <AllowLocalAdditionsWhileProcessing>True</AllowLocalAdditionsWhileProcessing>
    <ServiceAddress>
    </ServiceAddress>

    <ServiceAzureProd>http://hseaggregationservice.azurewebsites.net/ServiceHandler.svc</ServiceAzureProd>

    <ServiceAzureITE>http://fmdaggregateservice.azurewebsites.net/ServiceHandler.svc</ServiceAzureITE>
  </Aggregate>

```

```

<ServiceAddressLocal>http://localhost:65261/ServiceHandler.svc</ServiceAddressLocal>
</Aggregate>
<Printers>
  <LabelPrinterName>
  </LabelPrinterName>
  <labelPrinterFormat>Dymo30252</labelPrinterFormat>
</Printers>
<Storage>
  <Path>fmdireland.database.windows.net</Path>
  <Container>FMDHEC</Container>
  <ID>MzUJAAAAICA=</ID>
  <Password>AzNtBwtyEHs=</Password>
  <IntegratedSecurity>No</IntegratedSecurity>
  <Instance>
  </Instance>
</Storage>
<Organisation>
  <LocationID>site-specific</LocationID>
  <UserID>DU</UserID>
</Organisation>
</Config>

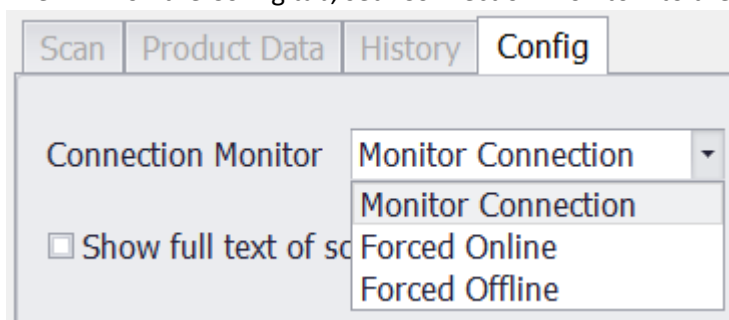
```

Issue with Ping

ezFMD tests for Internet access to determine if it should operate in Online or Offline mode. In Offline mode, scans are stored locally until the PC in question can again reach the Internet, when they are available to be sent to the IMVO. ezFMD by default pings the address 8.8.8.8 to determine if it is online.

In certain sites, this causes an issue with the firewall or other in-house rules. The behaviour of ezFMD may be modified in one of two ways to address this:

- 1) In ezFMD on the Config tab, set "Connection Monitor" to the option Forced Online:



This is easy to do, but it does mean ezFMD will never offer to store scans on the local PC, if the IMVO cannot be reached.

- 2) The **preferred** option is to edit the ezFMD Configuration details – see related section above. Find the section <Connectivity> and edit the value x.x.x.x in <PingHost>x.x.x.x</PingHost> to a suitable value. One possibility is the default gateway for the PC, another would be an external address acceptable to the firewall / in-house rules. Once edited (in a plain-text editor) and saved, re-start ezFMD and this should resolve any issue.