

IM5207 Hanwell Synergy

Installation Manual





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IMPORTANT

You must read Sections 2 and 3 before proceeding with the installation process.

Failure to comply with the instructions in these Sections may cause problems.

The procedures outlined in this manual apply to all operating systems that Synergy can be installed on and operate with.

The style of controls displayed during this process depends on both target operating system type, and the target machine configuration; as such the style of controls shown on your machine may vary from those shown in this manual.

Where a unique procedure needs to be performed for a specific operating system, this is identified in the procedure's description.



Document History

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1.17	14 January 2016	Remove Import / Export section	CRB
1.18	24 May 2016	Add Selsium, WCF, and update to SQL 2014 Express.	CRB



1 RadioLog Concept Differences

Where RadioLog operated on a single site, connecting to a single type of data collection device SR2's or CR2s. Synergy systems can have multiple distributed sites, and allow the connection of multiple distributed data collection devices.

As a result, there are some conceptual differences between RadioLog and Synergy.

1.1 Control Device Groups

A Control Device Group is a collection of one or more control devices and associated sensors; it has a name and defines the polling interval for control devices in the Group. These effectively replace the NetID numbers used in RadioLog.

1.2 Physical Identifier (PID)

PID numbers replace the TxID numbers used in RadioLog. All sensors associated with a Control Device Group must have a unique PID in the range $1 \rightarrow 255$; e.g. there can only be 255 sensors in a Control Device group.

1.3 Control Device Types

There are currently three types of control device, and plans for one more in the immediate future:

SR2, CR2USB, CR2GPRS, and in the near future CR2IP.

SR2 and CR2 USB Control Device types connect to Synergy via their own Windows Service, known as a hardware service; CR2GPRS devices do not have a separate Hardware service.

Hardware Services can be local or remote to the Synergy Server; and with the exception of the CR2 USB Service, Hardware Services can handle connections to multiple control devices, which may themselves be distributed remotely. Each CR2USB device connected to a Synergy system, requires a separate PC with the CR2USB Service installed.

1.4 iSense

iSense sensors are handled as a special sensor in Synergy. They are not part of a Control Device Group, and have a special PID value of zero.

Synergy collects iSense data by making an outgoing TCP/IP connection to the IMC Remote Data Service. As this connection is made to the standard HTTP port – 8081 - on the IMC Remote Data Service, the system operates in the vast majority of cases, with no need to make network or Firewall configuration changes.

1.5 Single Channel Linear Sensor

In RadioLog, the second channel of a Dual Linear Sensor could be removed, by deleting the second channel 'Title' field entry in the calibration data.

This will be replaced in Synergy by the provision of a Single Linear Sensor. To add a single channel Linear Sensor, use the standard Dual Linear Sensor hardware, but add it to the system as a Single Linear Sensor. If RadioLog data is imported, with existing sensors that have had the second channel 'Title' field deleted, these will automatically be converted to Single Channel Linear Sensors. The Single Channel Linear Sensor has a RadioLog sensor type of 14, so 14 will no longer be used for any future sensor designs.



1.6 Alerts

1.6.1 Email Alerts

The Synergy system enables users to use password authenticated logins to the customer's SMTP server; during import of RadioLog data with an Email configuration, the user is asked to provide a username and password for authenticated login to the SMTP server.

The password is stored as encrypted data, using a machine specific key; as such, moving Synergy data from one machine to another will break the key and the password will need to be reset using the E-Alarm Configuration screen in a browser.

If required, and a suitable POP3 or IMAP email server is available, the Synergy system can be configured to enable the use of email replies to acknowledge Alarm alerts.

1.6.2 SMS Alerts

The Synergy SMS Alert messages contain considerably more data than the equivalent RadioLog SMS-Alarms, exceeding the character limit for a single SMS message; and as such are a concatenation of two messages.

Some older phones do not always receive concatenated messages correctly, this is feature of the receiving handset, not the Synergy system, if messages appear to be corrupt, first try a different handset.

RadioLog assigns SMS active days and times to each recipient; in Synergy SMS Alert Group does this. If the customer wants the same alarms, but different active days or times for recipients in a Group, then a separate Alert Group can be created for each set of active days/times.

1.6.3 Email / SMS System Alerts

RadioLog has a number of system alarm options. Synergy currently has System Start up, (includes previous System Shutdown information); and Activity Log entries such as Login Fail, and Edit.

Synergy is a web-based product, with a number of backend services, running on a server; a user closing the programme cannot shut it down, and there are three possible shutdown scenarios: software failure, administrator action, or power fail. In order to facilitate fast shutdown, (reducing the risk of consequential data loss), the Data Service detects and writes details of a shut down to an XML file; this file is then used to generate an activity log entry when the system is next started, and the Data Service will then send SMS / Email Alerts.

Synergy has no concept of timer, online or offline.

1.7 Sites and Zones

Synergy introduces the concept of sites; this enables the collection of data from distributed systems and locales. Sites can have Sub-Sites; there is no functional difference between a Site and a Sub-Site. Sites can have Sensors grouped together into Zones; Zones replace the RadioLog grid system.

1.8 Synergy Management Tools

The Synergy Management Tools are a collection of applications that enable direct communication setup and configuration tasks that cannot be performed from a browser; these are intended for use by Synergy administrators.

The management Tool can be used to Synchronise and Calibrate sensors, set SR2 network settings and view sensor data. Hanlog is an application that allows sensor data to be merged with the database.

1.8.1 Synergy Management Tools Description

Synergy management tools enable Synergy administrators to synchronise sensors and set up SR2s from the Synergy server or computers on the LAN local to the Synergy server.

In general, this tool should be used where there is no hardware firewall/internet connection between the Synergy management tools and the Synergy server.



The use of this tool requires an SQL connection to the Synergy server. IMC recommends that users do not open SQL connections through externally facing firewalls.

1.8.2 Remote Synergy Management Tools Description

Synergy Remote Management Tools enables Synergy administrators to synchronise sensors and setup SR2's on computers that are remote to the Synergy server.

In general, this tool should be used where there is a hardware firewall/internet connection between the Synergy management tools and the Synergy server. The use of this tool requires http :(port80) connection to the Synergy server.

1.9 User Names and Passwords

Because Synergy's primary user interface is browser based, (allowing users to connect from any browser on the local network, and potentially from remote locations as well), all users must login with a User Name and Password.

Synergy Passwords are case sensitive, user names are not.



2 SQL

Synergy uses Microsoft SQL, and is shipped in two variants:

- **W700A** is distributed with a SQL Express 2008 R2, (with tools), Bootstrapper, which will install SQL and Microsoft SQL Server Management Studio on the Synergy server.
- **W700B** is distributed without SQL, and is intended for installation where the customer wishes to use an existing SQL instance.

During **W700A** installation, the SA password is set to P3nd13H0us3. This is done solely to provide a password without user interaction, Synergy does not use the SA account.

Restoring an SQL database requires all other connections to the database to be closed. If doing this from SSMS or similar, run the MS Services MMC (Microsoft Management Console) and make sure Apache 2.2 and all the Synergy services and stopped first; also, close any open SSMS edit windows connected to the database being restored.

2.1 Existing Microsoft SQL Instance

If there is an existing Microsoft SQL server, on the target server or LAN, that you wish to use for Synergy, then the following conditions must be met:

- 1. Synergy W700B must be used.
- 2. SQL Instance must be set to SQL login and Windows Authentication mode.
- 3. The installing Windows login should be a member of the sys admin role, and must have full administrative privileges on the SQL Instance.
- 4. SQL Server Browser service must be running during Synergy install and Synergy Config utility operation.
- 5. SQL Server Management Studio, (SSMS), must be installed.



3 Installation

3.1 Synergy Server Components

When installing the Synergy Server, the install will check for and install the following software:

- .Net framework 4
- .Net framework 3.5
- MS SQL 2008R2
- Synergy Data Service includes various components and Synergy web files.

3.1.1 Multi-Site Example

Figure 1



The above diagram shows a possible multi-site installation, (it assumes the customer has an inter-site VPN in place); in this scenario, the installing engineer would install the following components:

Server: Synergy Server Components, SR2 Service, CR2 USB Service.

Workstation A: SR2 Service.

Workstation B: CR2 USB Service.

The Synergy Management Tools will also need to be installed on a Synergy administrator's workstation, or the Synergy Server; the host machine will need network connection to the Synergy Server, and at least one spare USB port.

When installing distributed Hardware Services, the Synergy IP Address / hostname must be set during installation of the Hardware Service. This must match the address of the Synergy server where the Data Service is installed.

Note: For this system, at least one SR2 Service and one CR2 USB Service will need to have non-default Service names set during installation; the non-default Service name would then need to be added to the *Hardware Service* dialog box, when creating the new system from the Synergy Config Utility.

The Customer is responsible for installing browsers on the **Computers** and **Laptop**, and for configuring **Firewalls** to enable the SQL connection from the Synergy Management Tool to the Synergy Server, inter-site communications and external HTTP access to the Server for the **Laptop**.



3.2 TCP/IP Ports & Addresses

Service		XML Data	Command	Debug
SynergySR2Service			10992 TCP	11002 TCP
SynergyCR2Service			10993 TCP	11003 TCP
SynergyDataService		10991 TCP (DB set)		11004 TCP
SynergyArchiveService	8080 TCP			11010 TCP
SynergyCR2USB			10996 TCP	11007 TCP
Synergy Management Tool - SQL connection	1433 TCP, 1434 UDP			
Apache Web Server	80 TCP			
Synergy WCF Connection	8081 TCP			

There are no IANA registered Port numbers for Synergy; instead it uses unassigned port numbers, (Ref: <u>http://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xml</u> as of 17/12/2012). The SQL and Apache Web Server ports are all IANA registered port numbers, and should be available.

If a conflict arises on the host machine, Synergy TCP/IP ports can be configured during installation; for the majority of systems the default ports will suffice.

Where port numbers need to be changed, care should be taken to avoid well-known and assigned port numbers; consult the IANA website and do not use port numbers below 1024. If port numbers are altered, make a note of any changes, and then modify the matching service data during database configuration. Where Hardware Services are installed on distributed machines, port numbers can be shared amongst the distributed machines.

The Synergy IP Address / hostname and Port number can be set during installation of the Hardware Services; this must match the address of the Synergy server and the Data Service Port No. set for the hardware services during initial system configuration.

The Hardware Service command listening ports will be automatically updated by the Data Service, when each Hardware Service initially makes contact; so these can be altered without manually updating the database.

The Debug ports are solely used by the Service Debug Viewer for IMC maintenance purposes; so again these can be altered without modifying the database. Debug port numbers are altered by editing the Hardware Services *setup.xml* file, found in the services Common Application Data Folder.



3.3 Computer Specification

IMC recommends the below computer specifications as a *minimum* to run Synergy.

Windows 2008 R2 or 2012 R2 Server

Processor	2.5GHz or faster
Ram	8GB
Hard-drive: Physical Machine Virtual Machine	X2 250GB set up as RAID 70GB
Media	DVD-ROM drive
USB	USB ports minimum 2 spare
Network	1GB Ethernet network port

The Host machine must **NOT** be configured as a Web Server (IIS), if the Web Server Role is enabled on the target server, remove the Role before installation, instructions on how to configure this setting can be seen in section 3.3.1.

Synergy W700A or W706A must NOT be installed on a Domain Controller. SQL Server security restrictions mean that the installation will usually fail.

Synergy can NOT be installed, if the operating system GUI has been uninstalled.

Windows 7 Professional/Enterprise, Windows 10 Pro/Enterprise

Very small installations would typically consist of up to 25 sensors, one Site, up to two SR2s, and up to five users with LAN-only browser access. Synergy for such a Site may be installed on a dedicated Windows 7 Service Pack1 or later machine, with the specification below. The operating system must be a Professional or Enterprise variant.

Processor	2.5GHz or faster
Ram	2GB (32-bit) 4GB (64-bit)
Hard-drive	250GB
Media	DVD-ROM drive
USB	USB ports minimum 2 spare
Network	1GB Ethernet network port

Ensure that the host machine for Synergy has all the latest Windows updates before installing the Synergy software.

Failure to meet minimum computer specification may result in poor performance and incorrect operation.

The Customer should provide a backup system, with Microsoft SQL integration, appropriate to their data protection requirements. The IMC Group strongly recommends the use of an appropriately rated uninterrupted power source, with automatic shutdown technology.



3.3.1 Internet Information Services (IIS) Web server configuration

The instructions below describe how to turn off the IIS (Internet information services) on a Windows 7 machine and windows servers.

3.3.1.1 For Windows 7 and Windows 10

- 1. Navigate to the 'Control Panel'
- 2. Select 'Programs and features'
- 3. Navigate to the left hand pane and select 'Turn Windows Features on or off'
- 3. Then uncheck 'Internet information services' and 'Internet information services hostable web core'

See Figure 2.

Figure 2

💪 🗇 🖾 💌 Control Panel 🗧	All Control Pan	el Items + Programs and Features		- Go Sean	ch Programs and I	Features	(0)
Control Panel Home View installed updates	Unin s To uni	tall or change a program nstall a program, select it from the list ar	id then click Uninstal	l, Change, or Re	pair.		
💀 Turn Windows features on or off	Organize	•					- 12
	Name =		- Publisher		+ Install	Size +	Version
	Turn Win To turn a clear its d is turned	vs Features idows features on or off feature on, select its check box. To turn reck box. A filled box means that only p iff.	a feature off, art of the feature	heering Limited pration pration pration	8/22/2013 5/20/2013 5/20/2013 7/2/2013 5/20/2013 5/20/2013	36.5 MB 76.1 MB 2.57 MB 20.8 MB	9.00.204 9.00.304
		Games Indexing Service Internet Explorer 8 Internet Information Services	a Web Core	pration pration neering neering	5/20/2013 2/6/2013 7/16/2013 7/16/2013	687 KB 596 KB 2.63 MB 2.67 MB	9.00.304 9.0.3072 1.3.5 1.1.1
		Media Features Microsoft .NET Framework 3.5.1 Microsoft Message Queue (MSMQ) Se Print and Document Services RAS Connection Manager Administrati Remote Differential Commession	ver	heering	2/6/2013 2/6/2013	2.76 Mp 31.0 MB	8.8.5.180
	<u>ار</u>	OK Currently installed programs Tota 12 programs installed	Cancel]		1	<u>*</u>

3.3.1.2 For Windows Server 2008, 2008 R2, and Severe 2012 R2

- 1. Open *Windows Server Manager*' from the start menu
- 4. Click 'Roles' in the tree on the left
- 5. Click *Remove roles* on the right (if Web server (IIS) is installed)
- 6. Uncheck 'Web Service (IIS)'
- 7. Click 'Remove Dependant Features'
- 8. Click 'Next'
- 9. Click '*Remove*' (a system restart may be required after this process has completed)

See Figure 3 below.



Figure 3



3.4 Windows Server 2008, 2008R2 and Server 2012R2 Prerequisites

The installer includes bootstrappers for the Microsoft .Net Framework (3.5 and 4.5) and will install automatically, where required, during the install process. However, on machines running Windows Server 2008 or Server 2012 onwards, you must enable the .Net Framework manually on the server, prior to Synergy installation.

3.4.1 Checking if .Net 3.5.1 is enabled

The procedure below describes how to **check** if .Net 3.5.1 is enabled on the server:

- 1. Start 'Server Manager'; this can be started from either the Administrative Tools window, or the Taskbar.
- 2. Server 2008 / 2008R2 Within the 'Server Manager' interface, click 'Features' (this will display all installed Features in the right hand pane).

Server 2012 - From the Dashboard select Local Server, and scroll down to Rolls and Features section.

3. Verify that '.Net Framework 3.5.1' is listed.

The instructions below describe how to enable the .Net Framework if it is not listed as stated above.

3.4.2 Enabling .Net Framework 3.5.1

- 1. Start 'Server Manager'; this can be started from either the Administrative Tools window, or the Taskbar.
- 2. Server 2008 / 2008R2 Within the Server Manager Interface, select 'Add Features' (this will display a list of possible features)

Server 2012 - From the Dashboard select Add roles and features; on the Add Roles and Features Wizard, select Server Selection, make sure the local server is selected, then select Features.

- 3. In the Select Features Interface, 'expand .Net Framework 3.5.1 Features'
- 4. Once expanded you will see two tick boxes, one for .Net Framework 3.5.1 and the second for WCF Activation. Check the box next to '.Net Framework 3.5.1' and click **Next**.
- Note: If you do not expand '.*Net Framework 3.5.1 Features*' and check it, you will get a pop-up titled '*Add Features Wizard*' as shown, see Figure 4 below.



Figure 4



Click Cancel and expand .Net Framework 3.5.1 Features and then check .Net Framework 3.5.1 tick box below it

You cannot install .NET Framework 3.5.1 Features unless the required role services and features are also installed.

In the **Confirm Installation Selections** interface, review the selections and then click **Install**. Allow the installation process to complete and then click **Close**. Where IMC is supplying a pre-built system, this can be done using the Server manager Microsoft Management Console.



4 Installation/Upgrade Procedure

4.1 Synergy W700B Preparation

4.1.1 User Credentials

If W700B is to operate a Microsoft SQL server running on a separate machine; then Synergy will require Windows network login credentials to operate. The login username and password will be required at various stages during the installation process.

The login used for Synergy **MUST** have password set to never expire. This login **MUST not** be the login used to install Synergy, using the same login causes database creation to fail (and would in any case result in a worse security situation post install, as the Notion Pro services would be left running as Administrator on the local system, and as an SQL Administrator on the SQL server).

Customers should **not** add this Synergy System login to their SQL Server. The login will be added automatically during Synergy installation (allowing the installation to add the Synergy service logins to the SQL server gives the best security situation, because the service login will only be granted access to the databases created for Synergy, with the minimum roles required to operate the system).

IMC recommends that customers create a network user login specifically for the Synergy system.

4.1.2 W700B SQL LAN Connection

Various Synergy services and tools will need connectivity to the Microsoft SQL Server. The Customer **MUST** ensure connectivity to the SQL Server from the Synergy Server machine. This may include the necessity to create Firewall rules to allow TCP and UDP access on either port 1433 or Customer specified instance port number to the SQL Server (port 1434 for client install).

4.1.3 Installation Issues

Some antivirus programs may detect a false positive on the Synergy installer. If this happens, you should disable your antivirus program during the installation process.

If installation of the Synergy Server Components is interrupted or fails for any reason; then you should perform a complete removal of the Synergy Server Components, before attempting a re-installation. Follow the procedure described in section *13 Synergy Server Removal* to completely remove any existing Synergy Server Components.

4.2 Upgrades

4.2.1 Preparation

IMC recommends that customers back up all their data, prior to any major maintenance task, such as a system upgrade.

If new columns and/or tables need to be added to the database, then the Install will detect that the system is being upgraded and add the required objects.

Note: Unless specifically instructed to do so by IMC, do **NOT** uninstall Synergy components prior to an upgrade. Doing so may result in incorrect operation after the system has been upgraded

4.2.2 Upgrading

To upgrade a Synergy Server installation, run the latest version of the Synergy Install on the existing host machine.

Do NOT attempt to upgrade a Synergy W700A system with Synergy W700B, or vice versa.

Do NOT attempt to upgrade a Synergy W700 system with Synergy W706, or vice versa.

The upgrade process is largely the same as the primary system installation, except for as follows:



4.2.2.1 Synergy 1.4.10 or Earlier

When upgrading Syerngy version prior to version 1.5.0, the installer will need to find and uninstall the old versions of Apache and PHP. A dialog will show with the message **Existing Synergy install detected; install will now look for and uninstall Apache HTTP Server, and PHP**. Select **Ok** to continue uninstalling Apache and PHP; if you cancel out of this dialog, the installation cannot proceed and will stop at this point,

4.2.2.2 SQL Express/.Net Framework

Where these are already installed, the Install will detect this and quietly move on to the next installation step.

4.2.2.3 Same Version Components

Where a component with the same version is already installed, the Install will detect this and either: give the user the option to keep or repair the current installation; or show an error that the component cannot be installed, this is normal, and should be ignored.

Unless you believe the current version of a component to be damaged, it is recommended that you keep the current version.

4.2.2.4 Service Shutdown

During Upgrade the installer will need to stop Synergy Services that are running, in order to upgrade the executable code. In these cases, you will be presented with dialog boxes similar to the ones below.

Figure 5

🖶 SynergyServer Setup		×
Files in Use Some files that need to be updated are currently in use.		0
The following applications are using files that need to be upd Setup Wizard dose them and attempt to restart them or rebo	ated by this setup oot the machine lat	. You can let ter.
SynergyDataService		
$\ensuremath{}$ Close the applications and attempt to restart them.		
O Do not close applications. A reboot will be required.		
	ОК	Cancel
🖓 SynergyServer Setup	×	
The setup must update files or services that cannot be updated while the system is running. If you choose to continue, a reboot will be required to complete the setup.		
OK Cancel		

Keep the default selections and click **OK** to continue.

4.2.2.5 Settings

The Install will read your current settings, and use these values to populate the initial values of user entry fields.



4.3 Step by step installation procedure sections

You must follow each installation step carefully, and ensure you fully understand what you are changing if making a change during the installation, as an incorrect change could potentially render Synergy non-functional.

4.3.1 Windows 7 and Windows 10 - USB Suspend Disable Procedure

Note: If you planning to connect a CR2 or AW04 device through USB, then USB Suspend must be disabled in Advanced Power Settings on all machines that the CR2(s) or AW04 are connected to.

This procedure is not applicable to Server operating systems.

Proceed as follows:

- 1. Select **Start>Control Panel** to give the Windows Control Panel.
- 10. Select View by: Small icons (or Large icons).
- 11. Select Power Options.
- 12. Select Change plan settings (for either power plan).
- 13. Select Change advanced power settings.
- 14. The windows Power Options dialog box is displayed, see Figure 6



- 15. Click the + sign next to USB settings.
- 16. Click the + sign next to USB selective suspend setting
- 17. Select Enabled
- 18. Select Disabled from the pull-down menu.
- 19. Click **OK**.





4.3.2 Synergy Installation Procedure

Insert the Synergy DVD and click run installation, if user account control is enabled click **Yes**, see Figure 7 below. If user account control is not enabled, skip this step.

Figure 7

0	Do you want unknown pul	to allow the following program from an blisher to make changes to this computer
	Program name: Publisher: File origin:	Install.exe Unknown Hard drive on this computer
e) s	how details	Yes

If this is the Synergy Server select 'Install Synergy Server Components', see Figure 8 below.

Figure 8



If you wish to Synchronise sensors from this machine, select 'Install Synergy Management Tools'. The Management Tools must be installed on a machine on the Synergy Server LAN, with any necessary firewall changes made to allow SQL access to the Synergy server, see Figure 9 below.

If SR2s will be controlled from this machine, select 'Install SR2 Service'. Any necessary firewall changes must be made to allow data and command port connections between the *SR2 Service* and the *Synergy Server*, see Figure 9 below.

If you wish to use connect to a CR2 via USB from this machine, select 'Install CR2_USB Service'. Any necessary firewall changes must be made to allow data and command port connections between the *CR2_USB Service* and the *Synergy Server*, see Figure 9 below.

If you are installing Selsium, an IMC ARB Module, or an IMC SMS Module, you will need to install the IMC Base Utility on either the Synergy server, or another machine on the LAN; see *IM5653 IMCBaseUtilityManual* for further details.

It is usual to make multiple selections for a single install. However; the **Remote Management Tools** may not be selected, with the **Synergy Server Components** or Synergy **Management Tools** as shown in Figure 9 below.



Figure 9



If the machine is remote to the **Synergy Server**, and will be used to Synchronise sensors, select **Install Synergy Remote Management Tools**; there must be a HTTP, (port 80), connection enabled between the **Remote Management Tools** and the **Synergy Server**, see Figure 10 below.

Figure 10

ို Synergy Install	
Install Synergy Server Components Install Synergy Management Tools Install SR2 Service Install SR2 Servic	
Install CR2_USB Service	
☑ Install Synergy Remote Management Tools	
Next	Cancel

4.3.3 Installing Synergy Server Components

Click **Next** on the **Synergy Install** dialog. The **Microsoft ODBC Driver 11 for SQL Server Licence** window may appear, see Figure 11 below.



Figure 11



Read the licence agreement, select 'I accept the terms in the licence agreement' then click Next.

Figure 12



4.3.3.1 Synergy W700B Install

Synergy will install Microsoft SQL Express 2008 R2, if not already installed on this machine. Read the licence agreement and then click **Accept**, this will allow the SQL server 2008 R2 Express to be installed, see Figure 13 below.



Figure 13

Synergy Setup				
For the following components:				
SQL Server 2014 Express				
Please read the following license agreement. Press the page down key to see the rest of the agreement.				
MICROSOFT SOFTWARE LICENSE TERMS				
MICROSOFT SQL SERVER 2014 EXPRESS				
These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above. which includes the media on				
View EULA for printing				
Do you accept the terms of the pending License Agreement?				
If you choose Don't Accept, install will close. To install you must accept this agreement.				
Accept Don't Accept				

After a short delay, the Visual C++ 2012 Runtime Libraries (x86) panel may appear. See Figure 14 below.

Figure 14



Click Install.

After a short delay, the **Microsoft Visual C++ 2012 Redistributable (x86)** window may appear, see Figure 15 below.

Figure 15



Read the licence agreement, select 'I agree to the licence terms and conditions' then click Install.

After a short delay, **Setup Successful** appears in the **Microsoft Visual C++ 2012 Redistributable (x86)** window, see Figure 16 below.



Figure 16



Click **Close**. If SQL Express is to be installed, the **Notion Pro Server Setup** window appears, with a progress bar for SQL Server 2014 installation. SQL installation will take several minutes.

4.3.3.2 Windows 10 Onwards

During SQL install, the **Windows Features** window may appear see Figure 17 below; select 'Download and Install the feature'. Downloading .NET Framework 3.5 is internet access speed dependant and can take several minutes.

Figure 17



Once .NET Framework 3.5 installation has completed, the **Windows Features** window will display as Figure 18 below; click **Close** to continue and install SQL Server.

		×
-	🔟 Windows Features	
	The following feature was successfully installed:	
	.NET Framework 3.5 (includes .NET 2.0 and 3.0)	
	You might need to restart apps that require this feature.	
		Close



The installation of Microsoft .NET and SQL components could take up to 20 minutes to install, please be patient, see Figure 19 below.

Figure 19

3 Synergy Setup	<u>x</u>	Synergy Setup	×
Installing Microsoft .NET Framework 4 (x86 and x64)		Installing SQL Server 2014 Express	
-			
	Cancel		Cancel

The next section will install the Synergy Server. Click Next, see Figure 20 below.

Figure 20



Tick 'I accept the terms in the License Agreement' and then click Next, see Figure 21 below.





4.3.3.3 Synergy W700B

Enter the user credentials you have set up for the Synergy System to use and click **Check Credentials** then click **Next**. If Synergy is being installed on the SQL Server machine, you may select Use Local Service Accounts.

Figure 22

🗒 SynergyServer Setup	- • 💌
Service Account Enter service account details.	°
Enter the Windows user credentials, for the Synergy System user. If this is the SQL Server machine, you may select the 'Use Local Service Accou	nts' checkbox.
User Name (Example: domain(user):	
Passwora: Check Credentials Check Credentials to continue.	
Back Next	Cancel

4.3.3.4 W700B

The Destination Folder dialog shows, see Figure 23. If required, the installation folder can now be changed; clicking **Change...** display a folder browser dialog, allowing the destination folder to be changed. When completed click **Next**.

Figure 23

讨 SynergyServer Setup	- • 💌
Destination Folder Click Next to install to the default folder or click Change to choose another	
Install SynergyServer to:	
C:\Program Files (x86)\The IMC Group Ltd\SynergyDataService\ Change	
Back Next	Cancel

The next stage will proceed with installing the Synergy server Instance, click Install, see below.

= 4
<u>_</u>
r change any of your

Installing SynergyServer		î
Please wait while the Setup Wiza	ard installs SynergyServer.	
Status: Copying new files		



4.3.3.5 Synergy W700A

When installing to a machine with **NO existing** Microsoft SQL Express installation, leave the settings shown in Figure 25 at the default values.

When installing to a machine with **an existing** Microsoft SQL Express installation, the Server name and Instance name fields shown in Figure 25 must be set to the existing Microsoft SQL Express Server name and Instance name. These can be obtained from your System Administrator or from the connection information shown in Microsoft SQL Server Management Studio, (SSMS); the connection information is displayed in the format [*server name*]. For help with using SSMS use the help and tutorial provided with SSMS.

If port 8081 is unavailable for the WCF service, enter the port number required for this installation.

Once completed click Next, see Figure 25 below.

Figure 25

Synergy Setup			
Synergy Database Information Please enter your Synergy SQ	L Server details.	•	
SQL Server name: WIN-1BF8PAT05HA	SQL Instance name: SQLEXPRESS		
Database name: webLogger			
WCF Port Number WCF Port Number 8081			
	Next Car	icel	

4.3.3.6 Synergy W700B

The Server name, and either an Instance name or Port Number fields shown in If port 8081 is unavailable for the WCF service, enter the port number required for this installation.

Figure 26 must be set to the Microsoft SQL Server name, and Instance name or Instance port number, for the Microsoft SQL Server that Synergy will be using. If you do not know your SQL Server details, ask your System Administrator or IT support provider.

If port 8081 is unavailable for the WCF service, enter the port number required for this installation.

Synergy Setup	
Synergy Database Information Please enter your Synergy SQ	L Server details.
SQL Server name: WIN-1BF8PAT05HA	SQL Instance name: SQLEXPRESS
Database name: webLogger	Use Port Number
WCF Port Number WCF Port Number 8081	
	Next Cancel



Ensure the required locale is set correctly, otherwise date and times sent in SMS and Email messages may be incorrectly formatted, see Figure 27 below.

Figure 27

Insta	lling SynergyServer	4
ſ	Synergy Setup	ľ
Please	Synergy Location Information Please select your required location setting.	
-	Location setting:	L
	English (United Kingdom)	
	Next Cancel	

Click Finish, Synergy server is now complete, see Figure 28 below.

Figure 28



4.3.4 Installing Synergy Management Tools

The Synergy Management Tools provide connectivity tools to Synchronise, Calibrate and Merge sensors, and to set up SR2s.

This should be installed on a machine on the Synergy Server's LAN, or on the Synergy Server itself. Attempting to install and use the Management Tools on a remote machine is not recommended. This can result in loss of Tool functionality and/or pose security risks, use Remote Sensor Management instead.

A Synergy Management Tools setup dialog box will appear, click Next, see Figure 29 below.



Figure 29



First, Read the agreement and then tick 'I accept the terms in the Licence Agreement', and then click **Next**, see Figure 30 below.

Figure 30

ind-User License Agreement Please read the following license agreement carefully	2
Synergy Management Tools End User License Agreement	Ď
THE SOFTWARE LICENCE	
By installing upon your computer the Software supplied with Synergy Management Tools system you are deemed to have accepted all the terms of this Licence and you and your emp will be bound by the terms of this Licence. If you do not wish accept the terms return the Software in its package unopene	the e read and loyees to d to

Unless absolutely necessary, it is recommended leaving the pre-set default location for the installation of Synergy management tools, see Figure 31 below for default location.

Once the location has been decided or left default as recommended click Next, see Figure 31 below.

Figure 31

SynergyManagementTools Setup			23
Destination Folder Click Next to install to the default fold	er or click Change to choose anoth	ar,	2
Install SynergyManagementTools to:			
C:\Program Files (x86)\Hanwell Instrum	ments\SynergyManagementTools\	-	-
Change			

Click Install to begin the installation of Synergy Management Tools, see Figure 32 below.



Figure 32



The Synergy Management Tools will need to connect to the database when it's run. To do this it needs to know the information below, ensure if you have made any changes during the Synergy Server installation you make the same changes here. (*Previous changes would have been made in* Figure 25 above. Otherwise, leave this box as the pre-set default information and click **Next**, see Figure 33 below.

4.3.4.1 Synergy W700A

The correct sever name and Instance name, (as entered previously, at Figure 25), **MUST** be entered here. If your SQL installation does not have an instance name, delete the default **SQL Instance name** field entry, and leave it blank.

Figure 33

SynergyManagementTools Setu	• - • •
Synergy Database Information Please enter your Synergy SQ	L Server details.
SQL Server name: WIN-EKDKR4L8UA8 Database name: webLogger	SQL Instance name: SQLEXPRESS
	Next Cancel

4.3.4.2 Synergy W700B

The correct sever name, and Instance name or Instance port number, (as entered previously, at If port 8081 is unavailable for the WCF service, enter the port number required for this installation.

Figure 26), **MUST** be entered here. If your SQL installation does not have an instance name, delete the default **SQL Instance name** field entry, and leave it blank.

Figure 34

SynergyManagementTools Setu	ip 🗖 🗾 🗾
Synergy Database Information Please enter your Synergy SG	n QL Server details.
SQL Server name: WIN-EKDKR4L8UA8	SQL Instance name: SQLEXPRESS
Database name: webLogger	Use Port Number
	Next Cancel

The Synergy Management Tools installation has now completed. Click **Finish**, see Figure 35 below.



Figure 35



4.3.5 Installing Synergy SR2 Service

If the SR2 service has been selected on the **Synergy Install** dialog box (see Figure 10) the next stage will begin the installation of the Synergy SR2 server, this is necessary to allow Smart Receiver devices to communicate with the Synergy server locally or remotely.

Click **Next**, this will install the Synergy SR2 service, see Figure 36 below.

Figure 36



Read the Licence Agreement, see Figure 37 below, tick 'I accept the terms in the Licence Agreement' and then click **Next**.

Figure 37

End-User License Please read the fol	Agreement lowing license agree	ment carefully		2
SynergySR2 Se	wice End User Li	icense Agree	ment	
THE SOFTWAR	E LICENCE			
By installing upo SynergySR2 Se accepted all the will be bound by accept the terms	in your computer rvice system you terms of this Lic the terms of this s return the Softv	the Software i are deemed ence and you Licence. If y vare in its pac	supplied with the to have read and and your employ ou do not wish to ckage unopened to	ees
I accept the term	is in the License Agr	eement		
	-			-

Unless absolutely necessary, it is recommended leaving the pre-set default location for the installation of the Synergy SR2 service, see Figure 38 below, then click **Next**.



Figure 38

SynergySR2Service Setup		-	. 22
Destination Folder Click Next to install to the default folde	r or click Change to choose another		0
Install SynergySR2Service to:			
C:\Program Files (x86)\Hanwell Instrum	ents\Synergy5R2Service\		-
Change			
	Back	1 c	aprel

The next stage will begin the installation of the Synergy SR2 Service, click **Install**, see Figure 39 below.

Figure 39

of your
of your

Unless absolutely necessary, it is recommended leaving the pre-set allocated port numbers as default. If the customer already has a different program running on the same port numbers as below, then these can be changed in this section to your IT department's specification.

Refer to the allocated port section show in section 3.2 of this document and ensure no other ports are currently in use on another program on the host machine.

If installing the SR2 Service on multiple machines, then each service must have a different name entered in the service unique name text field.



Keep a list of the Service names used, as each unique service name needs to be added to the list of Hardware Service names in the *Config Utility*. For single SR2 Service installations, the default is recommended, see Figure 40 below.

Note: When installing distributed Hardware Services, the Synergy IP Address / hostname must be set during installation of the Hardware Service. This must match the address of the Synergy server where the Data Service is installed. For this system, at least one SR2 Service will need to have non-default Service names set during installation; the non-default Service name would then need to be added to the *Hardware Service* dialog box (see Figure 75 for remote SQL servers, Figure 95 for RadioLog data import), when creating the new system from the Synergy Config Utility.

Once the service names have been decided on and logged or the default service names have been used, click **Next**.

Figure 40

ddress and Port Information Please enter your Synergy Address and	Port; and Service Listening Port.
Synergy: IP Address / Hostname: Iocalhost Port No: 10991	Service Commands: Listening Port No.: 10992 🛨
Service Unique Name (3 to 80 characters SynergySR2Service	<u>ŀ</u>

The next stage will complete the installation of the Synergy SR2 service, click **Next**, see Figure 41 below.

Figure 41



4.3.6 Installing CR2 USB Service

If CR2 USB service has been selected, the next stage will begin the installation of the Synergy CR2 USB service, this is necessary to allow Synergy to communicate with a CR2 device using USB. Click **Next**, this will install the Synergy CR2 service, see Figure 42 below.



Figure 42



Read the Licence agreement, see Figure 43 below, tick 'I accept the terms in the Licence Agreement', and then click **Next**.

Figure 43

SynergyCR2USBServic	e Setup			
End-User License Ag	reement			0
Please read the following	ig license agreem	ent carefully		ΙĹ
-				
SynergyCR2USB Se	ervice End Us	er License Ag	reement	_
THE SOFTWARE L	CENCE			
By installing upon y SynergyCR2USB So accepted all the terr will be bound by the accept the terms ret	our computer ervice system ns of this Lice terms of this urn the Softwa	the Software you are deen nce and you Licence. If yo are in its pack	supplied with the ned to have read and your employ u do not wish to cage unopened t) and (ees o
▼ I accept the terms in	the License Agre	ement		
	Print	Back	Next	Cancel

The next stage will begin the installation of the Synergy CR2 USB Service. Click Next, see Figure 44 below.

Figure 44

🖶 SynergyCR2USBService Setup	_ 🗆 🗵
Destination Folder Click Next to install to the default folder or click Change to choose another.	0
Install SynergyCR2USBService to:	
C:\Program Files (x86)\Hanwell Instruments\SynergyCR2USBService\	
Change	
Back Next	Cancel

Unless absolutely necessary, it is recommended leaving the pre-set allocated port numbers as default. If the customer already has a different program running on the same port numbers as below, then these can be changed in this section to your IT department's specification.

Refer to the allocated port section show in section 3.2 of this document and ensure no other ports are currently in use on another program on the host machine.





Figure 45



If installing the CR2 USB Service on multiple machines, then each service must have a different name entered in the service unique name text field.

Keep a list of the Service names used, as each unique service name needs to be added to the list of Hardware Service names in the *Config Utility*. For single CR2 USB Service installations, the default is recommended, see Figure 46 below.

Once the service names have been decided on and logged or the default service names have been used, click **Next**.

Figure 46



The next stage will complete the installation of the Synergy CR2 USB service click **Finish**, see Figure 47 below.



Figure 47



4.3.7 Install Completion

On completion of an install that includes *Synergy Server Components*, the server requires a reboot to ensure correct operation, select **Yes** to the reboot request, see Figure 48 below.




4.3.8 Server 2008, 2008R2 and 2012R2 - Disabling Internet Explorer Enhanced Security Configuration

Some features of Synergy will not work correctly if Internet Explorer Enhanced Security Configuration is left ON, so it is advisable to turn this OFF prior to using Synergy.

- 1. Start Server Manager; this can be started from either the Administrative Tools window.
- 2. Server 2012 has a Server Manager Dashboard, select Local Server on the Dashboard, to get to the server properties.

Figure 49

es	Server Manager (W2K8R2-X64)		
atures gnostics	Get an overview of the stat	us of this server, perform top management tasks, and add or remov	e server roles and features.
nfiguration prage	-		
	Server Summary		Server Summary Help
	Computer Information		Change System Properties
	Full Computer Name:	W2K8R2-x64	View Network Connections
	Workgroup:	IMC	Configure Remote Desktop Configure Server Manager Remote
	Local Area Connection:	Assigned by DHCP	Management
	Remote Desktop:	Enabled	
	Server Manager Remote Management:	Disabled	
	Product ID:	55041-507-7212097-84722 (Activated)	
	☑ Do not show me this console a	it logon	
	Security Information		😭 Go to Windows Firewall
	Windows Firewall:	Public: On	Configure Updates
	Windows Updates:	Install updates automatically using Microsoft Update	Run Security Configuration Wizard
	Last checked for updates:	Today at 1:38 PM	Configure IE ESC
	Last installed updates:	10/2/2014 3:10 PM	

 Select Configure IE ESC. The Internet Explorer Enhanced Security Configuration dialog box appears. See Figure 50 below.

Figure 50



4. Select the 'Off' option buttons under Administrators and Users. Click **OK**.



4.4 Service Reinstall

If a Service has to be re-installed, first uninstall the Service using the Windows Control Panel and then Uninstall Programs. Then run the Install.exe from the DVD. And follow your Operating System's installation instructions, see section 4.2 onwards.

4.5 Remote Management Tool

4.5.1 Install Synergy Remote Management Tools

The Remote Sensor Management application provides connectivity tools to Synchronise, Calibrate and Merge sensors, and to setup SR2s on a network remote from the Synergy Sensor. This application requires http, (port 80), access to the Synergy Server. If the Customer wishes to use the Remote Sensor management application, then the Customer must ensure that Firewalls are configured to allow http, (port 80), access from the remote network to the Synergy Server.

4.5.2 Remote Management Installation Procedure

Run the Synergy DVD install.exe, then if user account control is enabled, click **Next**, see Figure 51 below. If user account control is disabled skip this step seen in Figure 51 below.

Figure 51

D	Do you want unknown pul	to allow the following program from an plisher to make changes to this computer?
	Program name: Publisher: File origin:	Install.exe Unknown Hard drive on this computer
s	how details	Yes No

Note: the Figures in this section are for a Windows 7 or Windows 2008 installation. The appearance of the Windows for a Windows Server 2012 installation will be slightly different.

Check **'Install Synergy Remote Management Tools'** box and then click **Next**, see Figure 52 below. Note: The installation package will not allow you to install the **Remote Management Tools** and other services.

Figure 52



The next stage will begin the process of installing the Synergy **Remote Management Tools**. Click **Next**, see Figure 53 below.



Figure 53

🖶 SynergyRemoteManageme	entTools Setup
*	Welcome to the SynergyRemoteManagementTools Setup Wizard
	The Setup Wizard will install SynergyRemoteManagementTools on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
	Back Next Cancel

Read the Licence Agreement, then tick 'I accept the terms in the Licence Agreement'. Click **Next**, see Figure 54 below.

Figure 54

👹 SynergyRemoteManagementTools Setup	- 🗆 🗙
End-User License Agreement	
Please read the following license agreement carefully	IЦ
	<u> </u>
Synergy Remote Management Tools End User License Agreement	1
THE SOFTWARE LICENCE	
By installing upon your computer the Software supplied with the Svnergy Remote Management Tools system you are deemed to have	
read and	
will be bound by the terms of this Licence. If you do not wish to	•
• Faccept the terms in the License Agreement	
Print Back Next C	ancel

Unless necessary, it is recommended leaving the pre-set default location for the installation of the Synergy **Remote Management Tools** service.

Once the location of the **Synergy Management Tools** has been decided and changed or the default location has been selected, click **Next**, see Figure 55 below.

Figure 55

🚏 SynergyRemoteManagementTools Setup	
Destination Folder Click Next to install to the default folder or click Change to choose another.	•
Install SynergyRemoteManagementTools to:	
C:\Program Files (x86)\Hanwell Instruments\SynergyRemoteManagementTools\	_
Change	
Back Next	Cancel

The next stage of the process will install the Synergy **Remote Management Tools**. Click **Install**, see Figure 56 below.



Figure 56



The installation for the Synergy Remote Management Tools will now run to the completed stage. Click **Finish**, see Figure 57 below.





5 Firewall Configuration

After installing the Synergy Server Components, any software Firewall needs to be configured to allow connection to the Apache Server.

The Customer must add a rule to allow incoming HTTP connections on Port 80. Rule needs to apply to all networks that the Customer intends to allow browser access from.

If the Synergy server has a local Firewall, then this may need configuring to allow internal connections for the WCF Service, on either the default port - 8081 - or the port number selected by the Customer for WCF Service use on install.

In addition, the Firewall may need to be configured to allow MS SQL connections, the default connections are **TCP port 1433**, and **UDP port 1434**. If using **Synergy W700B** to connect to an SQL server on a separate machine on the LAN; then any Firewall on the SQL server machine will also need to be configured to allow the incoming SQL connections.

If the Customer wishes to connect to remote SR2 or CR2 USB units where no intranet is in place, then the Customer must ensure that all Firewalls are configured to allow connections between the remote networks over the requisite TCP/IP ports. Customers can use the table in section **3.2 TCP/IP Ports & Addresses** to assist with this process.

Use of CR2GPRS and/or iSense sensors requires an outgoing connection from the Synergy server on port 8081 TCP.



6 New Database Configuration

Follow this section if this is a new installation of Synergy and you are **not** Importing RadioLog data in to the Synergy database. If you wish to import RadioLog data, see **section 7** of this manual.

After the Synergy installation is completed and the server has been rebooted use the Synergy configuration Utility to create and initialise the Synergy database. To access the Synergy configuration Utility navigate to windows **Start menu - All Programs - Hanwell Instruments Ltd - Synergy Config**, follow the steps below to configure the Synergy database.

To run Synergy Config, the user must be an administrator on the local machine.

Also, if configuring a **Synergy W700B** install; either the user's Windows login must map to a sys admin role on the SQL server, or the user must able to login to an SQL account with the sys admin role on the target SQL server.

If the host machine has user account control enabled then the User Account Control window appears, click **Yes**, see Figure 58 below. If the host machine does not have user account control enabled then the User Account Control window does not appear and the new database procedure go straight to the Synergy Services window, see Figure 59.

Figure 58



A message will appear suggesting that services will be stopped throughout the duration that the Synergy Config is running, see Figure 59 below.

Figure 59



Another message will be shown suggesting it can take up to a minute for the active services to be stopped, Click **OK**, and see Figure 60 below.

Figure 60



The next message tells you NOT to attempt to start any of the Synergy services while the Synergy Config is running. Click **OK**, see Figure 61 below.



Figure 61



You may find that Synergy services will be stopped during the period which Synergy Config Utility is open.

Do not try to restart any services during this period; all services will restart themselves once Synergy Config utility is closed.

The Synergy Configuration utility will search for SQL servers, This may take some time.

6.1.1 Synergy W700A

Synergy W700A must use an SQL server on the Local machine, and this should appear at the top of the list, see Figure 62 below.

Figure 62

e Synergy	Configuration V	er: 1.5.2.0				
Database	Synergy Tools	Import / Export	Archive	Licence	Help	
Root Data p	ath:					
C:\Users\co	olin.bumell\Docum	ents				
SQL Server:		-	New Dat	abase	RL8 to	XML
WIN-1BF8P	AT05HA\SQLEXF	RESS	Sensor N	lodels	RL8 Impo	nt Setup
webLogger]	HW Ser	vices	RL8 Impo	ort Data
					RL8 Impo	ort Audit
						Exit

6.1.2 Synergy W700B

Synergy W700B can use an SQL server on either the local machine, or another machine on the LAN. The SQL Search function will only work if SMO components have been installed as part of an SQL Server or SQL Server Manager Studio installation on the local machine.

If SQL Servers are shown, continue at section 6.1.4

Typical SQL Servers shown above.

6.1.3 Synergy W700B No SQL Servers Shown

If no Servers are shown in the **SQL Server** control, select the **Manual Connection** menu item from the **Database** menu, see Figure 63 below. This will display the **Manual Connection** dialog box, see Figure 64 below.

Database	Synergy Tools	Import / Export
New [Database	
Backu	ip Database	
Resto	re Database	-
IMC N	Aaintenance	ř.
Manu	al Connection	



In the **Manual Connection** dialog, see Figure 64 below; enter the required SQL Server machine name and SQL server Instance name in the appropriate text fields.

Figure 64

Please enter the red	quired SQL con	nection de	tails.	
Server:	-			
Instance:	J			
Lucia Data	ile l	r	Cancel	Accent

Then click Login Details to display the SQL Administrator Account dialog box, see Figure 65 below.

Figure 65

Please enter SQL Adm user.	inistartor Login details; leave blank to a	thenticate as current windows
Usemame:	1	
Password: Confirm password:		_
	Windows Account	Accent

Generally **Windows Account** should be selected to use a Windows integrated login. However, if necessary a SQL **Username** and **Password** can be entered in the appropriate text fields.

Now click **Accept** to return to the **Manual Connection** dialog box, then click **Accept** on the **Manual Connection** dialog box to continue.

The Config Utility application will now test the SQL connection details.

If the test is successful Figure 66 below will be displayed. Continue at section 6.1.5 below.

Figure 66

nual Connection	X
Successfully cor	nnected to SQL Server.

If the test is unsuccessful Figure 67 below will be displayed. Check you connection and login details, and retry.

Figure 67



If you are sure that your connection and login details are correct and the process still fails, check all associated Firewall settings and check that the SQL server is configured to accept remote connections. Check that a connection can be routed from the Synergy Server to the SQL Server.

If you are unsure how to do this, ask your System Administrator or IT support provider for assistance. Please do **NOT** ask IMC for assistance until you have established that an SQL connection can be made from the Synergy Server to the SQL Server.



6.1.4 SQL Servers Shown

If the SQL Servers are shown, select the required SQL server instance from the drop down list, (Figure 68 below). If the required SQL server is not shown, check Firewall settings on the local and SQL server machines, and make sure the *SQL Server Browser* service is running on the SQL server.

Figure 68

? Synergy	Configuration V	er: 1.5.2.0				
Database	Synergy Tools	Import / Export	Archive	Licence	Help	
Root Data pa	ath:					
C:\Users\co	lin.bumell\Docum	ents				
SQL Server:			New Dat	abase	RL8 to	XML
WIN-1BF8P	AT05HA\SQLEXF	RESS	Sensor N	lodels	RL8 Impo	rt Setup
webLogger]	HW Ser	vices	RL8 Impo	ort Data
					RL8 Impo	ort Audit
						Exit

6.1.4.1 W700B Remote SQL Server

If connecting to an SQL server on another machine on the LAN, the SQL Administrator login dialog box, see Figure 69 below, may appear.

If the user's Windows login maps to a Sys Admin role on the SQL server, leave the text boxes blank, select the **Windows Login** checkbox, and click **Accept** to continue.

If the user's Windows login does **NOT** map to a Sys Admin role on the SQL server, enter the **Username** and **Password** for the required SQL Sys Admin account, make sure the **Windows Login** checkbox is deselected, and click **Accept** to continue.

Figure 69

SQL Administrat	orAccount	
Please enter SQL Adm user.	iinistartor Login détails; leave blank to a	authenticate as current windows
Username:	Ī	
Password:		
Confirm password:		
	Windows Account	Accept

6.1.5 New Database

Click **New Database** on the main dialog box, (see Figure 68 above), and you will be prompted with the Product Sector box.

Select the sector relevant to the Customer, Heritage, Industrial, Pharmaceutical or Healthcare from the drop down menu, see Figure 70 below.



Figure 70

Synet Product Sector	_ 🗆 🗡	
Databa Please select the required product sector?		Help
Root Da Industrial		
SQL Sei	Accept	RL8 to XML
Database Name:	Sensor Wodels	RL8 Import Setup
webLogger 💌	HW Services	RL8 Import Data
		RL8 Import Audit
		Exit

In the next section, you will be asked to enter the company and site information.

The time zone needs to reflect the Site's time zone, the value displayed by default will be the time zone used by the host PC. It is important that this is set correctly, as dates in the database are stored using GMT.

Complete the Company Details form shown below (Figure 71), then click **Accept**. Users entering address data should adhere to local data protection requirements and regulations.

Figure 71

o Synergy	Configuration Ve	er: 1.5.2.0				
Database	Synergy Tools	Import / Export	Archive	Licence	Help	
Root Data C:\Users\ SQL Serve WIN-1BFE Database I webLogge	Company Name Company Name Site Name Location Address post / Zip Code Time Zone	tails Example :- The Example :- Pen (UTC) Dublin, E	IMC Group dle House	Ltd		XML t Setup rt Data rt Audit
				Ac	cept	
						Exit

The port used to listen for IMC devices – Selsium Receivers, IMC ARB Module, and IMC SMS Module – needs to be configured; the default port is 10997, if this is unavailable set the required port number, remember that you **must** configure all IMC base type devices to use the port number set here.

Figure 72

9 Synergy	Configuration Ve	er: 1.5.2.0			_ 🗆 🗙
Database	Synergy Tools	Import / Export	Archive	Licence	Help
Root Data p C:\Users\cd SQL Serve WIN-18E	ath: Din.bumell\Desktop (MC Listen Port	o\Site B	an (default	,	XI RL8 to XML
Database	Set the port to lis you change from your IMC devices	ten for IMC devices the default value, y s to use the new po	on, (default ou MUST o nt number.	: 10997); if :onfigure Accept	3 Import Setup 8 Import Data 8 Import Audit
					Exit

The database has now been created successfully. The below message below indicates that the Synergy database has been created successfully, see Figure 73.



Figure 73



Click **Sensor Models**. This will Import the entire range of Hanwell sensor types into the database. Once this process is complete the below message below will state that the tables have been created successfully. See Figure 74 below.

Figure 74



Click **HW Services**. The box below box will appear, see Figure 75.

Figure 75



Click **Default** and three hardware services will be selected, as in Figure 76 below.

Click **Accept**. This will import the hardware services to the database. This allows for certain types of hardware to be functional within Synergy.





Figure 76

ူ Hardware Service			_ 🗆 🗵
Service Name	Data Service Po	Accept Legacy	
SynergySR2Service	10991	True	
SynergyCR2USBService	10991	True	
Name		De	fault
Data Service Port No. 10991 - Accept	Legacy Upd	late Ac	cept

Under the **Synergy Tools** tab, select **Reports Folder**. The Reports Folder is where Synergy will store copies of the **Scheduled Reports**, which Synergy Users can set up and run.

The Reports Folder information notice will be displayed, see Figure 77 below.

Figure 77

? Synergy	Configuration V	er: 1.5.2.0			
Database	Synergy Tools	Import / Export	Archive	Licence	Help
Deat Date of	Sensor Mo	dels			
Root Data p	HW Service	25			
JC. YOSHIS YOU	Create CF	G File			
SQL Server:	Reports Fo	lder	New Det	-h	DI Sta VMI
WIN-1BF8P	GPRS GUIE	· 1	New Date	abase	
, Database Na	Images	▶ [Sensor M	odels	RL8 Import Setup
webLogger	7]	HW Sen	vices	RL8 Import Data
					RL8 Import Audit
					Exit

The message below will pop up, stating that the permissions will need to be changed (automatically) to enable the services to write to this location. Click **Ok**, see Figure 78 below.

Figure 78



The next step in the procedure is to decide on a location that generated reports will be saved on the host network. The options are either a pre-existing location of your choice, or select **Make New Folder** and name this as required.

Once the location has been decided and selected click **Ok**, see Figure 79 below.







7 RadioLog Data Import

7.1 **Pre Conversion and Import**

This section describes a step by step guide for customers currently running RadioLog and who wish to Import the data in to the Synergy database.

When Importing RadioLog data to an existing Synergy installation or importing two or more RadioLog systems to a single Synergy system, back up the Synergy database prior to each import. Import each RadioLog system to its own Site or sub-Site. Use the same Site for every control device associated with each RadioLog import. Imported RadioLog Grids become Zones in Synergy.

There are 5 stages to importing RadioLog data, which must be completed in order: obtaining the require set of RadioLog data files, Data Conversion, Setup Import, Data Import, and Audit Import.

Where data import is not required, Setup can be imported and used as the base starting point for a Synergy system. It is possible to import the RadioLog setup, check the system is up and running, and then go back and import the RadioLog data at a later date.

Importing a large RadioLog installation with a lot of data takes considerable time; be prepared for the import to run for several hours. At the start of the data import, if the system has sensor names containing invalid file name characters, you will be asked to confirm import file names. During RadioLog import, all Admin Users will be given access to the imported Data and Setup.

7.1.1 Log File Warnings

Importing an established RadioLog installation will produce Log File warnings. This is due to various RadioLog settings, and data files becoming orphaned, as changes are made and sensors changed over the life of the RadioLog system. The Log file should be checked after an Import, to make sure that all warnings can be referenced to deviations from the current state of the imported system.

7.1.2 SMS Group Import

Because SMS active days and times are set for each SMS Alert Group in Synergy, imported RadioLog SMS Groups will have SMS active days and times set to match one of the Group's recipient configurations from the RadioLog Address Book. The Customer will need to check, and reconfigure SMS Alert active days and times to your specific requirements, post import.

7.1.3 Preparing RadioLog Data

When importing data from an existing RadioLog system you **MUST** ensure that each net ID has at least one active SR2 device set in RadioLog, see Figure 80 below.

The active checkbox as indicated in red will need to be checked as active in RadioLog as per the statement above before importing the RadioLog data to the Synergy database.

If there are no SR2 devices active in RadioLog then when importing to Synergy the net.def file will not match the sensor IDs and hence no Zones or Sensors will be seen when logging in to Synergy.

RadioLog does not differentiate between Hanwell Radio type sensor and iSense sensors; and as a result, iSense sensors cannot be imported from RadioLog to Synergy. You **MUST** remove any iSense sensors from RadioLog prior to the import process.

In most cases, any existing iSense sensors used with RadioLog will need new SIM cards supplied by IMC; and need to be reconfigured by IMC prior to use with Synergy.



Figure 80

C Cor	figuration					23
× Rec	Description	IP Address	Port No	Net ID	Active	Debug
1	Example Site One	192.168.1.100	3010 🚖	0		
2	Example Site Two	192.168.1.101	3011 🚖	0	Ī	
3	Example Site Three	192.168.1.102	3012 🚖	0 🔹	6	Γ
4			3013 🚖	0 🔹	Г	
5			3014 🚖	0 🜲		
6			3015 🚖	0 🔹		
7			3016 🜲	0 🔹		
8			3017 🚖	0 🔹		
9			3018 🚖	0 🔹		
10			3019 🚖	0 🔹		
11			3020 🚖	0 🔹		
12			3021 🚖	0 🔹		
13			3022 🜲	0 🔹		
14			3023 🚖	0 💠		
15			3024 🚖	0 🔹		
16			3025 🚖	0 🔹		

7.2 Obtaining the RadioLog Data File Set

RadioLog data must be converted to XML with the *RL8 to XML* before it can be imported to Synergy. To do this follow the instructions below.

All files described below are found in the RadioLog Local folder located C:\RadioLog8\Local.

- 1. Create a folder on the host machine and name this **Data conversion**. To avoid confusion later in the process, this folder can be created on the desktop.
- 2. Navigate to the RadioLog directory C:\RadioLog8, and copy the following files:
 - Hanind.ini file within the RadioLog directory
 - **net.def** file within the RadioLog directory
 - All the data files ending with (*.rl8) within the RadioLog directory
 - All the text (*.txt) files within the RadioLog directory.
 - The most recent **layout (*.ly8)** file from the RadioLog local folder to the Root Data path. Do not copy any other files from this location.
- 3. Then copy all the log files (*.log) from (C:\RadioLog8\local\Audit) folder to the Data Conversion folder.

No other files except for those mentioned above should be in the Data Conversion folder.

7.3 RadioLog Data Conversion Instructions

7.3.1 Synergy Config

To run Synergy Config, the user must be an Administrator on the local machine.

Also, if configuring a **Synergy W700B** install, either the user's Windows login must map to a Sys Admin role on the SQL server, or the user must able to login to an SQL account with the Sys Admin role on the target SQL server.

Open the Synergy Configuration tools.



7.3.2 Synergy W700A

Synergy W700A must use an SQL server on the Local machine, and this should appear at the top of the list, see Figure 81 below.

Figure 81

9 Synergy	Configuration V	er: 1.5.2.0				_ 🗆 🗙
Database	Synergy Tools	Import / Export	Archive	Licence	Help	
Root Data p	ath:					
C:\Users\co	olin.burnell\Docum	ents				
SQL Server:		-	New Dat	abase	RL8 to	XML
WIN-1BF8F	AT05HA\SQLEXF	RESS	Sensor N	lodels	RL8 Impo	ort Setup
webLogger]	HW Ser	vices	RL8 Imp	ort Data
					RL8 Imp	ort Audit
						Exit

7.3.3 Synergy W700B

Synergy W700B can use an SQL server on either the local machine, or another machine on the LAN. The SQL Search function will only work if SMO components have been installed as part of an SQL Server or SQL Server Manager Studio installation on the local machine.

If SQL Servers are shown, continue at section 7.3.6 Convert RadioLog Data below.

7.3.4 Synergy W700B No SQL Servers Shown

If no Servers are shown in the **SQL Server** control, select **Manual Connection** from the **Database** menu, see Figure 82 below. This will display the **Manual Connection** dialog box.

Figure 82

e Synergy	Configuration V	er: 1.5.2			
Database	Synergy Tools	Import			
New D	atabase				
IMC Maintenance					
Manua	al Connection	s			
SQL Server:					
WIN-1RE8P	AT05HA\SQLEXP	RESS			

In the **Manual Connection** dialog box, see Figure 83 below, enter the required SQL Server machine name and SQL server Instance name in the appropriate text fields.

Figure 83

ease enter the re	quired SQL connection details.	
Server:	_	
Instance:	j.	

Then click Login Details to display the SQL Administrator Account dialog box, see Figure 84 below.



Figure 84

Please enter SQL Adr user.	ninistartor Login details; leave blank to a	uthenticate as current windows
Usemame:	(_
Password:		
Confirm password:		
	Windows Account	Accent

Generally **Windows Account** should be selected to use a Windows integrated login. However, if necessary an SQL **Username** and **Password** can be entered in the appropriate text fields.

Now click **Accept** to return to the **Manual Connection** dialog box, then click **Accept** on the **Manual Connection** dialog box to continue.

The Config Utility application will now test the SQL connection details.

If the test is successful, the **Manual Connection** window, see Figure 85 below, will be displayed. Continue at section **7.3.6**.

Figure 85

Manual Connection	X
Successfully con	nnected to SQL Server.
	ОК

If the test is unsuccessful Figure 86 below will be displayed, check you connection and login details, and retry.

Figure 86



If you are sure that your connection and login details are correct and the process still fails, check all associated Firewall settings, and check that the SQL server is configured to accept remote connections. Check that a connection can be routed from the Synergy Server to the SQL Server.

If you are unsure how to do this, ask your System Administrator or IT support provider for assistance. Please do **NOT** ask IMC for assistance until you have established that an SQL connection can be made from the Synergy Server to the SQL Server.



7.3.5 SQL Servers Shown

If the SQL Servers are shown, select the required SQL server instance from the drop down list, (Figure 87 below). If the required SQL server is not shown, check Firewall settings on the local and SQL server machines, and make sure the *SQL Server Browser* service is running on the SQL server.

Figure 87

Database S	vnerav Tools					
		Import / Export	Archive	Licence	Help	
Root Data path	:					
C:\Users\colin	.burnell\Docum	ents				
SQL Server:			New Dat	abase	RL8 to	XML
WIN-1BF8PAT	05HA\SQLEXP	RESS	Sensor N	lodels	RL8 Impor	rt Setup
webLogger	v]	HW Ser	vices	RL8 Impo	rt Data
					RL8 Impo	rt Audit
						Exit

7.3.5.1 W700B Remote SQL Server

If connecting to an SQL server on another machine on the LAN, the SQL Administrator login dialog box, see Figure 88 below, may be shown.

If the user's Windows login maps to a Sys Admin role on the SQL server, leave the text boxes blank, select the **Windows Login** checkbox, and click **Accept** to continue.

If the user's Windows login does **NOT** map to a Sys Admin role on the SQL server, enter the **Username** and **Password** for the required SQL Sys Admin account, make sure the **Windows Login** checkbox is deselected, and click **Accept** to continue.

Figure 88

Please enter SQL Adm user.	inistartor Login details; leave blank to a	authenticate as current windows
Username: Password:	1	
Confirm password:		_
	Windows Account	Accept

7.3.6 Convert RadioLog Data

1. Edit the Root Data path field and point this to the newly created folder '**Data Conversion**' see Figure 89 below.



Figure 89

? Synergy	Configuration V	er: 1.5.2.0				
Database	Synergy Tools	Import / Export	Archive	Licence	Help	
Root Data pa	ath:					
C:\Users\co	lin.bumell\Docum	ents				
001.0						
SQL Server:			New Dat	abase	RL8 to	XML
Database Na	ame:	11233	Sensor M	lodels	RL8 Imp	ort Setup
webLogger	-	7		-	PI 9 Imp	ort Data
		-	HW Sei	vices	nuo imp	
					RL8 Imp	ort Audit
						Ev#
						EXIL

2. Click the **RL8 to XML** button and the left box will appear, see Figure 90 below.

Figure 90

Source folder:	Convert Data
<u>←</u> C:\ בי Users	Convert Audit(Log) Files
🗁 imc.support 🏱 Desktop	Convert Layout
data conversion Audit	Convert Address Book
Data	

- 3. Select **Convert Data**, the tool will now begin to convert the files from RadioLog to Synergy format.
- 4. Once data conversion is complete select Convert Audi(Log) Files
- 5. Once Audit log file conversion is complete, select Convert Layout
- 6. Once Layout conversion is complete, if importing Email and SMS data select Convert Address Book.

7.4 Importing Converted RadioLog Setup and Data

There are 3 steps to fully importing converted RadioLog data into Synergy, Setup Import, Data Import and Audit Import; the Setup must be imported before Data, and the Data must be imported before Audit data.

As each step completes you can choose to continue to the next step; you can stop and come back to the import later; or you can choose not to complete the following steps, and leave the system in its current state. However; each preceding step **MUST** have been completed before moving on to the next.

Thus, if RadioLog Setup Import has been completed, you may click the **RL8 Import Data** button and proceed to the *RadioLog Data Import* step; and if RadioLog Data import has been completed, you may click **RL8 Audit Import** and proceed to the *RadioLog Audit* Import step.

7.4.1 RadioLog Setup Import

Synergy installation, start at step one below, otherwise proceed to step 2.

Click '**New Database**', this creates a new Synergy database on the SQL Server, at which point you will be asked to select the Product Sector required for your application, (*Healthcare, Industrial, Pharmaceutical, Heritage*), see Figure 91 below.



Figure 91

Accept

If the error message: 'Cannot drop database "Synergy" because it is currently in use' is displayed the application stopped Synergy Services at start-up and has only just started, try again after a few seconds.

Next you will be asked to enter Company and Site information, see Figure 92 below.

Figure 92

Company Name	1
Site Name	
Location	
Address	
post / Zip Code	

Company Name and Site Name are required entries.

Time Zone - select the Sites Time Zone, the value displayed by default will be the Time Zone used by the host PC. It is important that this is set correctly, as dates in the Database are stored using GMT.

Click Accept to accept you entries and continue.

Click the **RL8 Import Setup** button on the **Synergy Configuration** window, this will take you through the RadioLog Import process detailed below.

The Select Control Device dialog box will be displayed, See Figure 93 below.

Select the control device type used by the original RadioLog installation. If the RadioLog data only has iSense sensors, select 'Unknown'.

If the previous RadioLog system used an SR2 for collecting data select 'SR2' and if the system used a variant of the 'CR2' then select the appropriate CR2 variant.

Click **Accept** see Figure 93 below.

P Select Co	ontrol Device	- 🗆 ×
Device:	SR2 💌	
	UnKnown SB2	
Enter CR2	CR2IP CR2GPRS	
	CR2USB	
	Cancel	Accent
		hecept



A message will appear to confirm that the Sensor model table has been created in the database click **Accept**, see Figure 94 below.

Figure 94



Once you clicked ok to message shown in (Figure 94) above the **Hardware Service** dialog box will be displayed, see Figure 95 below.

For most reasonably simple installations, the default Hardware Services will suffice. For complex systems, consult the Synergy documentation for more information.

To add the Default Hardware Services click **'Default'**, then click **Accept**. Otherwise, use the **new** column to manually add required Services with implementing their service name.

You will need to create an **SR Group** for the first RadioLog Net ID in the import data; you will then need to create or assign an **SR Group** each subsequent RadioLog net ID encountered during the import.

Figure 95

P Hardware Service			
Service Name	Data Service Po	Accept Legacy	
SynergySR2Service	10991	True	
SynergyCR2USBService	10991	True	
New			
Name		De	fault
Data Service Port No. 10991 🗧 🗌 Accept	Legacy Upd	late Ac	cept

Note: Import each RadioLog system to its own Site, use the same Site for every control device associated with each RadioLog import.

In Synergy, there is no difference between a Site and a sub-Site, so you can use a sub-Site for your RadioLog import, if you so wish.

The New SR Group dialog box will be displayed for each RadioLog Net ID, see Figure 96 below.

Hardware Service is the name of the Hardware Service installed on this or another PC, that you wish to manage data collection for the **SR Group**. The software will take a guess at the Hardware Service, based on the previously selected Control Device type. However, it is the responsibility of the operator to ensure that the selected service is of the correct Control Device type, and is the Hardware Service installed on the required target PC.

New SR Group		_ 🗆 X
Please select an SR Group fe	or the RadioLog Net ID: 0	
SR Group Enter name: Pendle SR2	Site Name Pendle House	Create
Group Interval (Sec's):	Hardware Service SynergySR2Service Create	Accept Cancel



Figure 97



To create a new 'SR Group' enter a unique name under 'Enter name', then set the 'Group Interval', this is the time in seconds that the Hardware Service will leave between polling Control devices - e.g. SR2, CR2 - for sensor data updates. As a guide we would recommend this to be 90 Seconds.

To assign the Net ID to an existing SR Group, simply select the required group from the Enter name combo box, Click **Accept**. See Figure 96 above.

Once the service has been accepted a message will appear advising that a copy of the sensor list map has been saved. Make a note of the file name for future use reference, click **OK**, see Figure 97 above.

The **Import Site** dialog box will be displayed, select the site you wish the RadioLog data to be imported to, use the site you selected in the New SR Group dialog box, (see Figure 96) above then implement it in to the **Import Site** box, see Figure 98 below.

Figure 98

e Impo	ort Site	_ 🗆 X
Please	e select the target Site for the imported F	RadioLog data.
Site:	Pendle House	_
		Accept

A default Zone, Zone1, is added when the Synergy database is created. If no sensors have been added to the Zone, it can safely be deleted during the RadioLog import, (this is a clean-up task and it has no impact on the system operation), see Figure 99 below.

Click **Yes** to delete the default Zone, or **No** to keep the default Zone 1.

Figure 99



If importing contacts, choose the Contacts import Method. Select **Yes** to import Email contacts as External contacts, select **No** to create Synergy users with logins for imported Email contacts, see

Figure 100 below.

A similar message will be displayed later, for any SMS contacts.





If Importing Email contacts, then the SMTP Account dialog box will be displayed, see Figure 101 below.

Enter the SMTP account details to use with the imported SMTP server connection.

Figure 101

SMTP Account		_ 🗆 🗵
Please enter the SMTP	Login details.	
Usemame:		
Password:		
Confirm password:		
	Windows Account	Accept

A dialog will display showing the result of the Setup Import; the result can be successful with no warnings, successful with warnings, or failed with errors. It is normal for a RadioLog Setup Import to produce warnings, these usually relate to previously deleted RadioLog files, and missing RadioLog contact information.

Figure 102

RL8 Imp	ort Setup	×
Å	Warnings were generated during the RadioLog data Import; see Log file for details.	
	OK	

If the RadioLog Setup import is successful, a dialog will be displayed asking if wish to import the RadioLog data; at this point, you may import the Data now, wait and import the Data later, or not import the existing RadioLog data at all. To continue importing the Data click **Yes** and go to **Data Import Process** below, otherwise click **No**.

7.4.2 RadioLog Data Import

If you clicked **RL8 Import Data** on the main dialog, then the **Open Sensor List** dialog will display, see Figure 103 below; select the sensor list file you saved when importing the RadioLog Setup and click **Open** to continue.

Figure 103

rganize 🔻 New folder			BEE -	- 🛄 🤅
Favorites	Name +	Date modified	Туре	Size
E Desktop	1.3.0.0	06/01/2014 16:39	File folder	
Downloads	1.5.2.0	23/05/2016 13:03	File folder	
2 Recent Places	MyRadioLog.SZSL	23/05/2016 16:39	SZSL File	
Documents Music Pictures Videos Computer				
Local Disk (C:)				
Shared Folders (\\\				
Network				

7.4.2.1 Data Import Process

A dialog will display enabling you to import all RadioLog data – select the **Import All Data** checkbox – or you set a start and end date for the data import.



Figure 104

? Select RL8 Imp	oort Da	te Ran	ge	×
Enter date and times, import; dates and time applicable include da	, for the s es select ly light sa	start and ed are le aving.	l end of the RadioLog ocal to the import site) data , and if
🔲 Import All Data	1			
Start Date:	23	May	2015 16:03:14	•
End Date:	23	May	2016 16:03:14	•
			Accept Car	ncel

Select the required settings, and click **Accept** to continue. The RadioLog sensor data will now be imported, progress is indicated on the progress bar, see Figure 105 below.

Note: RadioLog data import uses considerable system resources, and the server may become slow and unresponsive during import, this is normal; IMC strongly recommends that uses do **NOT** attempt to use machines doing a RadioLog data import for any other purpose during the import.

Figure 105

SQL Server:	:		New Database	RL8 to XML
WIN-18F8F Database N	PAT05HA\SQLEXI lame:	PRESS	Sensor Models	RL8 Import Setup
webLøgger		3	HW Services	RL8 Import Data
				RL8 Import Audit

Once the Data Import has completed, a dialog will display showing the result of the Data Import; the result can be successful with no warnings, successful with warnings, or failed with errors. It is normal for a RadioLog Data Import to produce warnings, these usually relate to previously deleted RadioLog data files, and indeterminable RadioLog time stamps due to daylight saving.

Figure 106



If the Data Import was successful, a dialog will be displayed asking if wish to import the RadioLog Audit data; at this point, you may import the Audit now, wait and import the Audit later, or not import the existing RadioLog Audit at all. To continue importing the Audit click **Yes** otherwise click **No**.



7.4.3 RadioLog Audit Import

If you clicked **RL8 Import Audit** on the main dialog, then the **Open Sensor List** dialog will display, see Figure 107 below; select the sensor list file you saved when importing the RadioLog Setup and click **Open** to continue.

Figure 107

ganize 🔻 New folder			823	- 🔟 🤅
Favorites	Name +	Date modified	Туре	Size
🧮 Desktop	1.3.0.0	06/01/2014 16:39	File folder	
Downloads	1.5.2.0	23/05/2016 13:03	File folder	
Recent Places	MyRadioLog.SZSL	23/05/2016 16:39	SZSL File	
Music Pictures Videos Computer Local Disk (C:) Shared Folders (\\				
				1

7.4.3.1 Audit Import process

A dialog may display showing that there are Audit entries outside of the valid data range; this is normal where only a partial set of data has been imported, or RadioLog data has previously been archived.

Figure 108



7.5 iSense Sensors.

If the Import includes a control device and iSense sensors, then the iSense sensors will need to have their ID Numbers set to zero using a browser, this will need to be done once logged in to Synergy interface. See operation manual for editing sensors.



8 Reports Folder

The Reports Folder is where Synergy will store copies of the Scheduled Reports, set-up and run by your users.

Within the Synergy Configuration tool select 'Synergy Tools' then 'Reports Folder' from the tab, which is where the system will store copies of the Scheduled Reports run by users, see Figure 109 below.

Figure 109

P Synergy	Configuration Ver: 1.5.2.0				- 🗆 🗵
Database	Synergy Tools Import / E	Export Archive	Licence	Help	
Reat Data a	Sensor Models				
Root Data p	HW Services				
JC. (Osers (CC	Create CFG File				
SQL Server:	Reports Folder	New Dat	abase	PI Sto 1	an I
WIN-1BF8P	GPRS GUID	1		TLO LO 7	
Database Na	Images 🕨	Sensor M	lodels	RL8 Import	Setup
webLogger	7	HW Ser	vices	RL8 Impor	t Data
				RL8 Impor	t Audit
					Exit

The Reports Folder information notice will be displayed, see Figure 110 below. Click **OK** to continue.

Select the required folder from the folder browser dialog box, or select **Make New Folder** and name this as required, then click **OK** to accept.





9 Licensing

Synergy feature and user licences are activated using the Synergy Config Utility's Licence menu options. Customers are strongly advised to keep copies of all Licence IDs and associated passwords, purchased for the Synergy system.

Note: Activating the licence for the Validated variant of Synergy (Synergy version 2.0.0 and higher) requires a different procedure to be followed. See 9.2 for details of this procedure.

9.1 Online Activation (Basic Procedure)

The easiest and safest way to activate licences is online. IMC recommends this method if possible.

To activate a licence online, the Synergy Server needs access to the internet.

- 1. Open the **Synergy Configuration** tool, select the 'Licence' tab then select 'Activate Online'. After a few seconds, the **Activate Online** dialog box will be shown, see Figure 111 below.
- 2. Enter the required Licence ID and Password, and then click **Activate**. After a few seconds you will see a message stating that the licence has been activated.

Figure 111

word given to you to activate. An Internet inter an error, please double-check that the a, and temporarily disable any personal
(Optional - e.g.: "My Laptop")

9.2 Online Activation (Synergy Validated)

Prior to activating the validated licence, a Counter Signature user account must be added to the system.

1. Enter Synergy, **User Name** Admin User, **Password** Admin, click **Login**. The Synergy opening screen appears, see Figure 112 below.

Figure 112



2. Select Admin>User Management. The User Details window appears, see Figure 113 below.



Figure 113

User Full Name	
User Name:	
Password.	
Confirm Password	
Password Never Expires	8
Email	
Telephone No.	
Calibration Technician:	OY ON
Reset Lockout	11
	Liser Full Name User Name Password Confirm Password Password Never Expires Email Telephone No Calibration Technician: Reset Lockout.

3. :

- i. Enter a username into the User Name: field; for the purposes of this section, the manual uses 'User1' as the username.
- ii. Enter a password consisting of at least four letters (one of which must be uppercase) and four numbers. Make a note of the username and password for 'User1'.
- iii. Enter the same password into the Confirm Password: field.
- iv. Click Add User. The View Users window appears, showing Admin User and User1. See Figure 114 below.

Figure 114

View Us	sers		
Delete	Users		
	Username	Email	Actions
	Admin User	Not Available	[Edit][Delete][Privileges]
	User1	Not Available	[Edit][Delete][Privileges]

4. Select Admin>Access Control. Click on Anage Users . The Select a User to Manage window appears. See Figure 115 below.

Figure 115

Permissions Overview Manage Users	Select a User Io Manage	
+ Manage Roles	Search User Name: User Name	Action
	Admin User	I Select I
	User 1	[Select]

5. Click on **Select** under the **Action** column for User1. The **Managing User1** window appears, see Figure 116 below.

Figure 116 Menaging User1 Existing Roles for User [Manage Roles] No Role has been assigned. Existing Permissions for User [Manage Permissions] No Permission has been assigned.

6. Click Manage_Permissions. The Manage User Permissions User1 window appears, see Figure 117 below.



Figure 117

Permission	Status	
Access Archive Database	Inherit (Deny)	\checkmark
Access Control	Inherit (Deny)	\checkmark
Access Logs	Inherit (Deny)	V
Access Reports	Inherit (Deny)	\checkmark
Access Reports - Sensor Groups	Inherit (Deny)	V
Access Settings	Inherit (Deny)	\checkmark
Access Sites	Inherit (Deny)	~
Acknowledge Alarms	Inherit (Deny)	~
Activate privileged Access	Inherit (Deny)	~
Bulk Acknowledge Alarms	Inherit (Deny)	\checkmark
Change Alarm Settings on Reset	Inherit (Deny)	~
Counter Signature	Inherit (Deny)	~
Device Configuration	Inherit (Deny)	\checkmark
Disable User	Inherit (Deny)	\checkmark
Edit View	Inherit (Deny)	\checkmark
Email Alert Group	Inherit (Deny)	\checkmark
Live View	Inherit (Deny)	\checkmark
Live View - Sensor Groups	Inherit (Deny)	\checkmark
Password Security Settings	Inherit (Deny)	\checkmark
Plan View	Inherit (Deny)	\checkmark
SMS Alert Group	Inherit (Deny)	V
System Configuration	Inherit (Deny)	\checkmark
User Group Management	Inherit (Deny)	V
User Management	Inherit (Deny)	\checkmark

7. Select Allow from the pull-down list in the Counter Signature row, see below.

Figure 118



8. Click **Save**. The **Managing User1** window appears again, showing User1 as having the Counter Signature permission. See Figure 119 below.

Figure 119

 Permissions Overview Manage Users 	Managing Useri	
Manage Roles	Existing Roles for User	1 Manage Roles 1
	No Role has been assigned.	
	Existing Permissions for User	[Menage Permissions]
	Counter Signature	

9. Click Log Out.

Now follow the procedure given at section 9.1.



9.3 Manual Activation

Where necessary manual activation is possible.

1. Open the Synergy Configuration tool, select the 'Licence' tab then select 'Activate Online'. After a few seconds, the **Activate Manually** dialog box will be shown, see Figure 120 below.

Step 1: Ente	er your activation inform	ation and click General	e Request:	
Licence ID	Î.			
Password				
	Consists Remote	a i		
	Cienerale neques			
Step 2: Cop	y the activation reques	t and paste it into the ad	tivation web page:	
Activation F	Request			
				~
			Form Deserver	-
	In Assess		Copy Dpen Ad	- tivehon Web Page []
Er Bopy od	br = browner:		Copy Dpen Ac	(waton Web Poge
Cr Bopy of https://sec	line browner ane softwareleev com/s	olozeustomens/Manual	Cope) Cipen Ac	waton Web Pager]
Chi Booy ort https://sec Step 3: Cop	in a browne anesoftwareless come y the Activation Code f	noloxetustemeses/Mamtali	Cons Dipen Ac	treation Web Pager]
C/ Booyrol hillos //sec Step 3: Cop Activation C	Ime bit www. are software law comme y the Activation Code f Code	olovoustamens/Manvall	Cons DipentAc Pequest same e it below, and click Activ	atrivation Web Poger)
Cr Booycol Hilps://sec Step 3: Cop Activation C	ime for www. ane softwareless common y the Activation Code f Code	oloveustomesc/Manyael	Epperi Anno Epperi	trivahon Web Poger
Crepson Hilps://sec Step 3: Cop Activation C	Inter Extravent une softwarelow common y the Activation Code f Code	oloveustomers/Manual	Eone Diservice	trivation Web Poger
Cr Bouy or Mits://sec Step 3: Cop Activation C	In a business and software levy common y the Activation Code f Dode	oloxetustmeser/Manual	Cope Deen Ac	triveluon Web Poger
Cr Bouy of Hitts: //sec Step 3: Cop Activation C	In a furnious anesoftwarelesy common y the Activation Code f Code	oloxeustoness/Man/tall	Eons Deem Arc	Rielon Meb Poge.] /dig
Creacy of http://sec Step 3: Cop Activation C	In a Leaven are sourced by Control w the Activation Code f Gode	international (Many Lali	Eans Deem rec	mesten Web Foge
Gr Bouvor Hilbs //sec Step 3: Cop Activation C	In a foreward amenative converse by the Activation Code f Code	oloceutimes (Manual	Corps Generation Produces Janos e it below, and click Activ	trivation Midd Foger.

- 10. Enter the required License ID and Password, then click Generate Request.
- 11. The activation request text will be displayed, copy this text to a text file and transfer it to a machine with internet access.
- 12. Open a browser and navigate to <u>https://secure.softwarekey.com/solo/customers/Manualrequest.aspx</u>; and either copy the request text into the textbox, or upload it to the server, click **Submit**.
- 13. The server will generate and present an XML licence text; copy this licence to a text file.
- 14. Return to the Synergy server, and paste the licence text into the textbox provided at the bottom of the **Activate Manually** dialog box.



9.4 Online Deactivation

Synergy licences can be deactivated to assist in migrating Synergy to a new server.

Note: Most Synergy licence types are limited to five deactivations; some licence types cannot be deactivated.

1. Open the Synergy Configuration tool, then select the 'Licence' tab then click on 'Deactivate Online'. The **Deactivate Licence** dialog will be displayed, see Figure 121.

Figure 121

eactivate Licence	- - X
Licence Type	
Additional Users / OEM Licent	ce
W701 or W704 Licence	
	Accept
Licence ID:	Cancel

- If you wish to deactivate a Synergy Variant licence e.g. W704 select the lower check box and click Accept. If you wish to deactivate an Additional Users or OEM licence – e.g. W702 or W715 – select the Additional Users checkbox, enter the Licence ID in the text box, and click Accept
- 3. A warning dialog will be displayed. Click **Yes** to deactivate Synergy variant licence, or **No** to cancel the operation.
- 4. Deactivation may take a few seconds; when complete, a Deactivate Licence -see Figure 122 will be displayed.

Deactivate Licence	×
Licence has been d	eactivated successfully.
	ОК



10 Custom Reports Logo

Customers may choose to add their own logos to Synergy Scheduled PDF Reports. For best results, use an image that scales well to 46mm wide by 12mm high.

To load a logo for use on Synergy Scheduled Reports:

Open the Synergy Configuration tool; select Synergy Tools \rightarrow Images \rightarrow Load Reports Logo.

An **Open** file dialog will display; navigate to and select the required image file; then click the **Open** button to load the file.

A dialog will display, showing approximately how the logo will look on PDF Reports; if you are happy with the image click **Accept**, or click **Cancel** to go back to the **Open** file dialog.

Note: Custom Reports Logos will only appear on Scheduled PDF Reports; Custom Reports Logos will not appear in CSV Reports, or Browser Reports.



11 Database – IMC Maintenance

The menu items shown in this sub menu provide functions and tools for database maintenance operations. These functions should only be used by, or on instruction from, IMC Support personnel.

11.1 Upgrade

This function will upgrade the database to the latest version provided by the Database Upgrade script. It is provided for emergency recovery purposes only, and should generally not be required.



12 Connection Test

After installation and Configuration, test the connection to Synergy with a web browser. Open a browser window and enter the name or IP address of the machine followed by /Synergy into the address bar.

For example, if this was installed on a server and you were also working from the server the address you will need to place in the web browser would be <u>http://Localhost/Synergy</u> if you were performing this from a client it will be http://<hostname>/Synergy.

If this does not work on a remote machine, try on the Synergy host machine, to test if a Firewall is blocking access.

12.1.1 Default Administrator User

User name: Admin User

Password: Admin

You are now ready to configure Synergy for daily use, see the User Manual (doc.no. IM5207) for further instructions.



13 Synergy Server Removal

It may on occasion, (such as if moving from one variant of Synergy to another variant), be necessary to do a complete removal of the Synergy Server components.

Note: You must be logged in as an Administrator on the local system to carry out this process.

13.1 Uninstall Synergy all Operating Systems

Open *Control Panel*, then click on *Programs and Features* or *Uninstall a program* – the option displayed will depend on your computer setup. The *Uninstall or change* a program MMC will display.

Select *SynergyServer* and click *Uninstall*. If the *Programs and Features* dialog box displays – see Figure 123 below. Click **Yes** to continue.

The operation to remove the SynergyServer program can take several minutes.

Figure 123



If the User Account Control dialog box displays, click 'Yes'.

Figure 124



If the SynergyServer information dialog box is displayed, see Figure 125 below, click **OK**.

Figure 125



If a *Command Prompt* is displayed with a fatal error message, click in the command prompt and press Enter. This may happen more than once.







A series of SynergyServer dialog boxes will; until the uninstall operation has completed and the *Programs and Features* MMC is left displayed.