

RELEASE NOTES

VibroSight® software version 2.9.2



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REVISION RECORD SHEET

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PREFACE

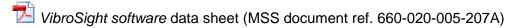
About these release notes

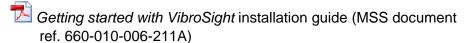
These release notes provide important information about the VibroSight® software from Meggitt Sensing Systems. They are applicable to all installations using the versions of VibroSight software described by this document, namely:

• VibroSight 2.9.2 (CD part number 609-004-000-012).

The release notes contain information about changes from previous versions, such as new features and improvements, solved problems, bug fixes, and compatibility (hardware and software).

For more general information on the actual software, or the entire condition monitoring system (CMS), please refer to the following Meggitt Sensing Systems (MSS) documentation:







DibroSight application notes and technical notes.

Users who are familiar with previous versions of VibroSight may also find it useful to refer to the respective release notes included in their installation.

Structure of the release notes

This version of the VibroSight release notes presents the information in the following order: general items first, then in terms of the software modules that constitute VibroSight, such as Configurator, Server, Vision and so on.

You should read those sections that are most relevant to you and then keep the document for future reference.



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1. Licensing

In general, the licence key required to enable purchased product options remains unchanged for upgrades between patch level releases (for example, from version 2.9.1 to version 2.9.2).

However, a new licence key is required for upgrades between minor version releases (for example, from version 2.8.x to version 2.9.2).

To obtain a new VibroSight licence key file or for further information on licence keys, contact Meggitt Sensing Systems customer support (see section 6).

2. New features

General

2.1. Universal Plug and Play (UPnP)

Universal Plug and Play (UPnP) networking protocols have been introduced to replace the use of Apple Bonjour for the networking related to VibroSight software module discovery and inter-module communications. This change was made to ensure more reliable discovery and communications.

Apple Bonjour continues to be used for the networking related to VibroSight hardware (VM600 cards and VibroSmart DMS modules and devices) discovery and VibroSight Server to hardware communications.



3. Solved problems and bug fixes

General

3.1. Computer identification number

VibroSight Server and Host Services use a computer identification number (the Install Number) to identify the computer on which they are running. This identification number is subsequently used by the zero configuration networking software (Bonjour and UPnP) for automatic device discovery and as a server identifier for VibroSight software modules.

Up until now, this identification number was derived from the name of the computer on which the VibroSight Server or "Host Service" was installed. However, this method of Install Number generation could result in identification conflicts on the network, so a new method of Install Number generation, based on a 128-bit globally unique identifier (GUID), is now implemented by VibroSight.

NOTE:

As a result of the new GUID based computer identification number, project files for VibroSight Vision, VibroSight Scope and VibroSight Event Viewer that were created using versions of VibroSight earlier than version 2.9.2 need to be manually corrected before they can be used with VibroSight version 2.9.2 or later.

Refer to VibroSight technical note 005 *VibroSight computer identification number* for further information.

3.2. Unit preferences

The Unit Preferences window was not updating correctly after a new (different) unit preference set was set as active. This bug has now been eliminated.

3.3. Stabilisation and bug fixes

General stability improvements and minor bug fixes.



3.4. Unit preferences

The selection or clearing of Used units in order to customize the unit preferences available for a VibroSight project were not remembered (saved) when VibroSight Configurator was exited, and the default unit preferences units were always used when VibroSight Configurator was restarted. This bug has now been eliminated.





VibroSight Server

3.5. Modbus RTU client

VibroSight's implementation of the Modbus RTU protocol for the serial-based exchange of data between software applications was not working correctly. These bugs have now been eliminated and the Modbus client of VibroSight Server can now import data using Modbus RTU (Serial Modbus device), in addition to the Modbus TCP (TCP/IP Modbus device).



VibroSight Event Viewer

3.6. Time range criteria in the event filter

In certain circumstances, the selection of live data or historical data (using the drop-down list box in the Time Range of the Criteria Selection pane) in the Event Filter is ignored and the previous event filter settings continue to be used. This bug has now been eliminated.

3.7. Listed events in Autorun

In certain circumstances, when an Event Viewer project that had previously been saved with Autorun set to on and the Time Range of the Criteria Selection pane in the Event Filter set to historical data with a Specific Time period is re-opened, the number of events returned in the Count Items box on the toolbar is correct but only one event is actually listed. This bug has now been eliminated.

3.8. Scrolling and the most recent event

The default behavior of Event Viewer was to always keep any selected (highlighted) event on the display. However, this meant that it was possible for more recent events to be missed, as the auto-scrolling would stop when the selected event reached the bottom of the screen.

Event Viewer has been modified so that the scroll bar can now be moved to the top or bottom of the scroll box and become "locked". By default, the scroll bar is locked at the top, which allows Event Viewer to be used as a simple monitor of latest events without any user input. If the user moves the scroll bar to an intermediate position then the scrolling stops.



VibroSight System Manager

3.9. Database copy 1



In certain circumstances, copying a database using the Copy tool in the Database group box resulted in an empty database even when measurement data was data available in the specified time range. This bug has now been eliminated.

3.10. Database copy 2

In certain circumstances, copying a database using the Copy tool in the Database group box failed and resulted in the following message: "An error occurred: Error during table content copy for table CmScalarData", depending on the measurement data contained in the time range specified to be copied. This bug has now been eliminated.

3.11. Command-line information in the database copy log report file

When copying a database using the Copy tool in the Database group box, the Create Log Report File option can be selected in the Database Copy Wizard in order to create a log file of the individual operations performed by VibroSight in copying the database.

The Parameters Employed section of this log report file records the command-line equivalent to the database copy operation configured using the database copy wizard. This command can be used at a Windows command prompt (for example, allowing scheduled database operations) instead of using System Manager. However, there were syntax errors in these commands which prevented them from working. This bug has now been eliminated.

3.12. Timestamp information in the database copy summary file

In certain circumstances, copying a database using the Copy tool in the Database group box resulted in unusual date and timestamps for the *AnalysisParameters in the summary file. This bug has now been eliminated.



4. Compatibility

4.1. VibroSight software

VibroSight 2.9.2 is a minor version release in the 2.x.x series and replaces VibroSight 2.9.1.

Compatibility with existing databases is achieved using the database **Update** tool (from VibroSight System Manager's **Database** tools) which supports the continued used of configurations and data from previous versions (see section 5.1.1).

NOTE:

Refer also to the latest version of the VibroSight software data sheet or the Getting started with VibroSight installation guide for further information on VibroSight's compatibility and prerequisites.

4.1.1. Microsoft Windows operating systems

VibroSight 2.9.2 is compatible with the 32-bit versions and the 64-bit versions of Microsoft ® Windows ® operating systems.

4.1.1.1. Microsoft .NET Framework

VibroSight 2.9.2 requires that the Microsoft .NET Framework 4.0 is installed on the computer.

NOTE:

Microsoft .NET Framework 3.5 SP1 is required for VibroSight 2.9.1 or earlier.

Microsoft .NET Framework 4.0 is required for VibroSight 2.9.2 or later.

4.1.2. Apple Bonjour

VibroSight uses Apple ® Bonjour to discover and locate network-enabled devices from Meggitt Sensing Systems, such as VM600 cards and VibroSmart DMS modules and devices.

VibroSight 2.9.2 remains compatible with the previously deployed version of Bonjour, namely Bonjour version 3.0.

NOTE:

The 64-bit version of Bonjour must be installed on 64-bit Windows operating systems.

Only Apple Bonjour for Windows version 1.0.106 should be used with VibroSight 2.7.x or earlier.

Only Apple Bonjour for Windows version 3.0 or later should be used with VibroSight 2.8.x or later.



4.1.3. Sybase SQL Anywhere software

VibroSight uses the Sybase ® SQL Anywhere database software in its standard configuration. VibroSight 2.9.2 remains compatible with the previously deployed version of SQL Anywhere, namely SQL Anywhere version 11.0.1.

For VibroSight systems that have been installed and running with previous versions, upgrading or reinstallation of the database software is not mandatory when upgrading to VibroSight 2.9.2. However, if you are still using SQL Anywhere 11.0.0, Meggitt Sensing Systems recommends upgrading to version 11.0.1 (see section 5.2).

4.2. VibroSight hardware

4.2.1. VM600 card firmware

There are no firmware (embedded software) updates for the VM600 cards (XMC16, XMV16 and XMVS16) corresponding to VibroSight 2.9.2.

The latest firmware for the CPUR card is:

Applications: applications-640-012-001-003.tgz

Base System: base-system-640-011-001-003.tgz.

The latest firmware for the XMC16, XMV16 and XMVS16 cards is:

Applications: applications-640-010-001-004.tgz

Base System: base-system-640-003-001-005.tgz.

Therefore, for earlier versions of the XMC16, XMV16 and XMVS16 cards, no firmware upgrades are required (see section 5.3.1).

4.2.2. VibroSmart DMS device firmware

There are no firmware (embedded software) updates for the VibroSmart DMS modules and devices corresponding to VibroSight 2.9.2.

The latest firmware for the VSI010 module is:

• 642-002-001-001.xmsifw.

The latest firmware for the VSN010 switch is:

• 642-004-001-001.redboxfw.

The latest firmware for the VSV300 and VSV310 modules is:

642-001-001-001.xtranfw.

Therefore, for earlier versions of the VibroSmart DMS modules and devices, no firmware upgrades are recommended (see section 5.3.2).



5. Upgrade procedure

This section describes the procedure for upgrading a VibroSight system from a previous version. Perform the steps in the given sequence in order to complete a system upgrade.

NOTE:

It is strongly recommended to verify the version of firmware running in the related hardware (VM600 cards and VibroSmart DMS modules and devices) before starting a VibroSight system upgrade, in order to establish if a firmware update is also required (see section 5.3.3).

5.1. Upgrading the VibroSight software

- 1. If it is not necessary for the VibroSight-based system to remain operational during the upgrade procedure, back up any important (required) VibroSight databases in the following way:
 - Exit all VibroSight software modules (clients and servers) no VibroSight applications (such as Vision, Configurator or Server) should be running.
 - Copy the three files (*.db, *.config and *.log) from the directory where your
 database files are located to another location, for example, to a specific backup
 directory.

NOTE: The default data (data path) directory is C:\VibroSight Data

Or if it is necessary for the VibroSight-based system to remain operational for as long as possible during the upgrade procedure, back up any important (required) VibroSight databases in the following way:

- Exit all VibroSight software modules (clients) no VibroSight applications (such as Vision or Configurator) should be running.
- Start VibroSight System Manager and use the database Backup tool from VibroSight System Manager's Database tools, and follow the instructions presented by the Database Backup Wizard.

NOTE: It is necessary to be logged in to System Manager as 'Admin' in order to have the user rights to access the database tools:

Select your VibroSight Host (computer) in the System Explorer tree structure and click Login (from VibroSight System Manager's Access Rights tools).

NOTE: Refer also to the Backing up a database topic in the VibroSight help.



- 2. Make backup copies of any important (required) VibroSight Vision projects in the following way:
 - Create an archive file (for example, *.zip) containing all of the files (*.xml and *.xmsproj) in the directory where your project files are located.

NOTE: The default project directory is:

C:\Documents and settings\username\My Documents
\VibroSight\Projects

- 3. Ensure that no VibroSight software modules are running.
- 4. Remove the currently installed version of the VibroSight software (for example, VibroSight Standard Edition) using Windows Add or Remove Programs, in one of the following ways:
 - Click Start > Settings > Control Panel and then double-click Add or Remove Programs.
 - Or click Start, click Control Panel and then double-click Add or Remove Programs.
- 5. Install the latest version of the VibroSight software by inserting the VibroSight CD into the CD/DVD drive of the computer and follow the instructions presented by the VibroSight installation wizard.

NOTE:

Refer to the Getting started with VibroSight installation guide for information on installing the VibroSight software.

- 6. Restart VibroSight Server and ensure that the required communications are enabled. For example, enable the card, module and device drivers according to the hardware in the system:
 - For example, click Data > Acquisition > XMC16/XMV16 Card Driver or Data > Acquisition > VibroSmart Module Driver.
- 7. Restart VibroSight Vision and ensure that live data is being received from the hardware and displayed in Vision.
- 8. The VibroSight system is now up and running.

5.1.1. Updating the internal structure of a VibroSight database

When VibroSight Server is started, it checks the status of the database and will automatically inform the user if any internal structures of the database need to be updated before proceeding.

1. Update a VibroSight database in the following way:



• Start VibroSight System Manager and use the database Update tool from VibroSight System Manager's Database tools, and follow the instructions presented by the Database Update Wizard.

NOTE:

It is necessary to be logged in to System Manager as 'Admin' in order to have the user rights to access the database tools:

Select your VibroSight Host (computer) in the System Explorer tree structure and click Login (from VibroSight System Manager's Access Rights tools).

NOTE:

Refer also to the *Updating a database* topic in the **B** VibroSight help.

5.2. Upgrading the SQL Anywhere software

VibroSight software is compatible (and extensively tested) with SQL Anywhere versions 11.0.0 and 11.0.1.

However, there are two known issues (an exception when loading historical data and the database update tool not working correctly) which might occur in isolated (rare) circumstances. The correction for these issues is available in SQL Anywhere 11.0.1.2044. Therefore, it is recommended to upgrade all VibroSight systems to this version of SQL Anywhere.

Determine the version of the SQL Anywhere database engine installed on a computer in the following way:

1. From the Start menu, click **Start > All Programs > SQL Anywhere 11 > Sybase Central**.

The Sybase Central window appears. Sybase Central is a GUI-based management tool for Sybase products.

2. Click **Help > About Sybase Central**.

The About Sybase Central windows appears, displaying the version information for SQL Anywhere (and any other installed Sybase products).

NOTE: Refer also to the *Determining the version of SQL Anywhere installed on a computer* topic in the *VibroSight help.*



Upgrade the SQL Anywhere 11 software by first removing the existing version of SQL Anywhere and then installing the new version, as follows:

WARNING:

Do not use the SQL Anywhere 11.0.1 setup to upgrade directly to software version 11.0.1 from software version 11.0.0. Instead, it is recommended to upgrade the Sybase database software as follows:

- 1. Remove SQL Anywhere 11.0.0, using the Windows Add or Remove Programs tool.
- 2. Install SQL Anywhere 11.0.1, using the Sybase SQL Anywhere 11.0.1 CD.

Refer also to the Getting started with VibroSight installation guide for information on installing the Sybase software.

1. Exit all VibroSight software modules (clients and servers) – no VibroSight applications (such as Vision, Configurator or Server) should be running – as this also stops the SQL Anywhere database engine.

The !! lightning icon that appears in the notification area (at the far right of the task bar) to indicate that a Sybase database engine is running should no longer be shown.

- 2. Remove the currently installed version of Sybase SQL Anywhere using Windows Add or Remove Programs, in one of the following ways:
 - Click Start > Settings > Control Panel, then double-click Add or Remove Programs
 - Or click Start, click Control Panel and then double-click Add or Remove Programs.

And remove F SQL Anywhere 11.

- 3. Restart the computer.
- 4. Install Sybase SQL Anywhere VibroSight 11.0.1.2044 by inserting the Sybase CD into the CD drive of the computer and follow the instructions presented by the SQL Anywhere 11 installation wizard.
- 5. Restart the computer.

Without this final computer restart, VibroSight Server may not be able to start the SQL Anywhere database engine.



5.3. Updating the VibroSight hardware

Appropriate files and tools are included in the installation package to allow VM600 cards (CPUR, XMC16, XMV16 and XMVS16) and VibroSmart DMS devices (VSI010, VSN010, VSV300 and VSV310) to be updated to the latest standard, in order to take advantage of improvements to the VibroSight software.

5.3.1. VM600 card firmware

The latest VM600 card firmware files are copied to a directory on your computer as part of the VibroSight installation process.

NOTE: The default firmware directory for VM600 cards is:

C:\Program Files\Meggitt\VibroSight 2\Firmware\VM600

The firmware files for a VM600 card can be found in the appropriate subfolder and identified by their .tgz file name extension. For example, the XMV16 subfolder contains the applications and base system firmware for use by XMV16 cards. Any additional firmware updates received from Meggitt Sensing Systems should also be stored in these directories.

Table 1 shows the compatibility between VibroSight software and VM600 card hardware (that is, XMC16, XMV16 and XMVS16 card pair firmware).



Table 1: VibroSight 2.9.2 and VM600 card firmware compatibility

	VM600 card firmware				
VibroSight client-server software	applications- 640-004-001- 003.tgz	applications- 640-010-001- 001.tgz	applications- 640-010-001- 002.tgz	applications- 640-010-001- 003.tgz	applications- 640-010-001- 004.tgz
(VibroSight version CD part number)	base-system- 640-003-001- 001.tgz	base-system- 640-003-001- 002.tgz	base-system- 640-003-001- 003.tgz	base-system- 640-003-001- 004.tgz	base-system- 640-003-001- 005.tgz
1.0.0 609-004-000-001	1	×	Х	×	Х
2.0.0 609-004-000-003	Х	✓	Х	Х	х
2.0.5 609-004-000-004	х	√	х	Х	х
2.0.6 609-004-000-005	Х	√	Х	×	Х
2.5.0 609-004-000-006	×	✓	Х	×	×
2.7.5 609-004-000-008	×	✓	✓	Х	Х
2.8.0 609-004-000-007	×	✓	✓	Х	Х
2.9.0 609-004-000-010	Х	Х	Х	✓	Х
2.9.1 609-004-000-011	×	×	Х	×	✓
2.9.2 609-004-000-012	×	×	Х	×	✓



5.3.2. VibroSmart DMS device firmware

The latest VibroSmart DMS device firmware files are copied to a directory on your computer as part of the VibroSight installation process.

NOTE: The default firmware directory for VibroSmart DMS devices is:

C:\Program Files\Meggitt\VibroSight 2\Firmware\VibroSmart

The firmware files for a VibroSmart DMS device can be found in the appropriate subfolder and identified by their .*fw file name extension. For example, the VSV-300 subfolder contains the firmware for use by VSV300 modules. Any additional firmware updates received from Meggitt Sensing Systems should also be stored in these directories.

Table 2 shows the compatibility between VibroSight software and VibroSmart DMS device hardware (that is, VSI010, VSN010, VSV300 and VSV310 device firmware).

	VibroSmart DMS device firmware				
VibroSight client-server software	VSI010	VSN010	VSV300	VSV310	
(VibroSight version CD part number)	V31010	VSNUTU	V3V300	V3V310	
2.8.0 609-004-000-007	642-002-001- 001.xmsifw	642-004-001- 001.redboxfw	642-001-001- 001.xtranfw		
2.9.1 609-004-000-011	642-002-001- 002.xmsifw	642-004-001- 002.redboxfw	642-001-001- 002.xtranfw	642-001-001- 002.xtranfw	
2.9.2 609-004-000-012	642-002-001- 002.xmsifw	642-004-001- 002.redboxfw	642-001-001- 002.xtranfw	642-001-001- 002.xtranfw	

Table 2: VibroSight 2.9.2 and VibroSmart DMS device firmware compatibility

5.3.3. Updating the firmware using VibroSight System Manager

When performing VibroSight software upgrades, it is strongly recommended to systematically upgrade the firmware of VM600 cards and VibroSmart DMS devices to the latest compatible version.

Failure to perform a necessary VibroSight card firmware update may lead to incoherent system behaviour and affect the proper functioning of data acquisition in a system. It is only in systems where the firmware running on the VM600 cards and VibroSmart DMS devices already corresponds to the latest available version that no firmware update is required. Therefore, it is strongly recommended to verify the version of firmware running on the hardware before starting a VibroSight system upgrade, in order to establish if a firmware update is also required.



WARNING:

Changing the firmware of the VibroSight hardware is a special administrative task that can – if performed unintentionally – affect the proper functioning of data acquisition in a system.

It is therefore strongly recommended to change the firmware of the VibroSight hardware only when it is necessary. For example, when the devices must be updated to be compatible with a VibroSight software upgrade.

Update the firmware on a VibroSight device using the Change Firmware tool (from VibroSight System Manager's Maintenance tools):

- 1. Ensure that the computer running the VibroSight software is on the same network as the hardware (VM600 card or VibroSmart DMS module or device) to be updated.
- Start VibroSight System Manager and navigate to the Devices tree structure in the System Explorer window.

The Devices tree lists all of the VibroSight compatible hardware that VibroSight can see on the network. If there are no VM600 cards or VibroSmart DMS devices in the tree structure or some cards are missing, please verify your network connections.

3. Select the card or device that requires its firmware to be changed.

The Actions tool window updates to show the available tools.

4. Click Change Firmware in the Maintenance tools group of the Actions window.

The Change Firmware dialog box appears.

5. Click the **Add** button and select the new firmware files for the card or new firmware file for the device.

NOTE:

The Change Firmware dialog box automatically opens the firmware folder corresponding to the VM600 card or VibroSmart DMS device selected.

. $\pm gz$ files are for VM600 cards and . $\pm fw$ files are for VibroSmart DMS devices.

6. Click the **Finish** button to start the firmware upgrade process.

For VM600 cards and VibroSmart DMS devices, the firmware upgrade process can take up to 5 minutes, during which:

- The IP address beside the device's serial number in the Devices tree structure can disappear.
- The LEDs on the front panel of the device can change to reflect the status of the upgrade.



7. Repeat steps 3 to 6 for each device that requires a firmware update.

NOTE: Although the firmware for each VibroSight device must be changed

individually using the Change Firmware tool, as each device updates its firmware independently of the VibroSight software (once the process has started), firmware updates can be performed on several devices in parallel.

8. After the firmware upgrade, verify that the VibroSight system is acquiring data from the cards.

NOTE: Refer also to the *Changing the firmware* topics in the *VibroSight* help.

The Change Firmware tool can be used to load a VibroSight device with any version of firmware. It is therefore possible to change a device's firmware to any previously available version, as well as the latest update.

This feature can be useful in certain situations, for example, swapping spare VibroSight hardware between different VM600 racks or VibroSmart DMSs, where systems are operating with different versions of VibroSight.

5.4. Final check

After upgrading the VibroSight software, it is recommended to open the configuration and run a consistency check in order to ensure that the configuration has not been inadvertently modified by any changes to the VibroSight software, internal database structure and firmware for the hardware (VM600 cards and VibroSmart DMS modules).



6. Customer support

6.1. Contacting us

Meggitt Sensing Systems' worldwide customer support network offers a range of support including Technical support and Sales and repairs support. For customer support, please contact your local Meggitt Sensing Systems representative. Alternatively, contact our main office:

Customer support
Meggitt SA
Route de Moncor 4
PO Box 1616
CH-1701 Fribourg
Switzerland

Telephone: +41 (0) 26 407 11 11 Email: energysupport@ch.meggitt.com Web: www.meggittsensingsystems.com

6.2. Technical support

Meggitt Sensing Systems' technical support team provide both pre-sales and post-sales technical support, including:

- General advice
- Technical advice
- Troubleshooting
- Site visits.

6.3. Sales and repairs support

Meggitt Sensing Systems' sales team provide both pre-sales and post-sales support, including advice on:

- New products
- Spare parts
- Repairs.