RELEASE NOTES

VibroSight® software
version 2.9.0

VibroSight
Total Monitoring
Solution

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REVISION RECORD SHEET

SW version / RN edition	Date of issue	Written and modified by	Description	Signature
2.9.0 / 1	13 July 2012	P. Ward / A. Fernandez	This document corresponds to the following versions of the VibroSight software: 2.9.0.	PW
2.9.0 / 2	19 July 2012	P. Ward / A. Fernandez	Correction to 64-bit operating system support. Clarification of default location for firmware files. Combined all licensing information in one section. Addition of Bonjour compatibility.	PW

	Department	Name	Date	Signature
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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 2.9.0.

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:

 *VibroSight software* data sheet (MSS document ref. 660-020-005-206A)

 *Getting started with VibroSight* installation guide (MSS document ref. 660-010-006-209A)

 *VibroSight* help

 VibroSight 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 2.0.x to version 2.0.5).

However, a new licence key is required for upgrades between minor version releases (for example, from version 2.8.x to 2.9.0).

NOTE:	Upgrading to VibroSight 2.9.0 from any previous version of VibroSight requires a new licence key.

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. Support for 64-bit Windows operating systems

Support for the 64-bit versions of Windows ® operating systems has been added to VibroSight, as shown in the table below.

<table>
<tr><th colspan="2"></th><th>VibroSight 2.8.1
(or earlier)</th><th>VibroSight 2.9.0</th></tr>
<tr><td colspan="2">Windows 98
Windows ME
Windows 2000</td><td colspan="2">Not supported</td></tr>
<tr><td rowspan="2">Windows XP</td><td>32-bit (x86)</td><td>Supported</td><td rowspan="2">Supported</td></tr>
<tr><td>64-bit (x64)</td><td>Not supported</td></tr>
<tr><td rowspan="2">Windows Server 2003
Windows Server 2008</td><td>32-bit (x86)</td><td>Supported</td><td rowspan="2">Supported</td></tr>
<tr><td>64-bit (x64)</td><td>Not supported</td></tr>
<tr><td rowspan="2">Windows 7</td><td>32-bit (x86)</td><td>Supported</td><td rowspan="2">Supported</td></tr>
<tr><td>64-bit (x64)</td><td>Not supported</td></tr>
</table>

32-bit versions of Windows have a limited memory space (< 4 GB) that must be shared between all software running on the computer.

However, 64-bit Windows can address much more memory and allows separate programs running on the computer to use up to 4 GB. When VibroSight runs on 64-bit Windows, the individual software modules such as Server and Vision, and SQL Anywhere can all use up to 4 GB each, which helps to eliminate memory and performance issues that can occur due to the limitations of the 32-bit memory space.

2.2. Unit preferences

A separate new window has been added for viewing and editing the unit preferences. To access the Unit Preferences window, click **Tools > Unit Preferences** on the menu bar.

Previously, the unit preferences were available from the Options window (**Tools > Options**).

 VibroSight Configurator

2.3. Data logging based on alarm severity levels

Alarm severity levels can now be added as conditions to the following data logging rules:

- Time base
- Value based
- Step changed.

2.4. Improved support for data aging

Data aging rules have been extended to include the following data types stored on a VibroSight Server: full spectra, orbits, post-processed data spectra and waveforms.

Previously, the data aging rules were limited to scalar data types only.

2.5. Support for XMV-S16 cards

Support for the new XMV-S16 card has been added.

An XMV-S16 card can be added to a configuration by right-clicking on a Vm600 Rack in the Hardware view and clicking **New XMV-S16 card**.

NOTE:	The XMV-S16 card has the same capabilities and features as the XMV16 card, except that the XMV-S16 card cannot access and therefore cannot configure anything on the raw bus. Like the XMV16 card, the XMV-S16 card uses the XIO16T input/output card to form a card pair.

When configuring a XMV-S16 card using VibroSight Configurator, the **Raw Bus Routing** field in the Dynamic Input Channel parameters window is not available, thereby preventing users from internally routing the signal through the raw bus.

VibroSight Server

2.6. Activating a configuration

It is no longer necessary to restart VibroSight Server (that is, exit and restart the server) after a configuration has been activated, as any changes to the configuration are now automatically updated in the server upon activation.

VibroSight Vision

2.7. Addition of a Mimic menu

A **Mimic** menu has been added to the menu bar for easier access to Mimic documents.

Mimics can still be created by right-clicking on the Project Explorer in VibroSight Vision and clicking **New > Mimic**, as before.

2.8. Simplification of the dual configuration tree

The tree structure view of the configuration displayed in the Data Pool Explorer has been simplified, for both the Hardware view and the Machinery view.

For example, in the Hardware view, the upper pane shows the hardware (rack, cards and processing block) and the lower pane shows the processed outputs and data extractions.

2.9. Simplification of the project wizard

The New Project Wizard (**File > New Project**) has been simplified for faster project generation.

Additional project information can still be added to a project by double-clicking on **Properties** in the tree structure view of the Project Explorer and entering data in the Project Properties dialog box that appears.

VibroSight Event Viewer

2.10. Redesign of the Event Details dialog box

The Event Details dialog box has been redesigned to present the event information more clearly.

The Event Details dialog box for an event is displayed by double-clicking on an event (row) in VibroSight Event Viewer.

2.11. Pre-loading of historical data when working with live data

The event filter can be used to pre-load a buffer of historical events when working with live data.

This buffer can be used to load either a fixed number of events or the events from a fixed time period.

VibroSight System Manager

2.12. Copying a database

It is now possible to copy a database in one of the following two ways:

- Using System Manager
- Using a command-line tool.

2.13. Purging a database

It is now possible to purge (truncate) a database in one of the following two ways:

- Using System Manager
- Using a command-line tool.

2.14. Backing up a database

It is now possible to back up a database in one of the following two ways:

- Using System Manager
- Using a command-line tool.

The introduction of these command-line tools enables a task scheduler (such as Windows Task Scheduler) to automate the management of VibroSight databases on your computer.

3. Solved problems and bug fixes

VibroSight Server

3.1. Stabilisation and bug fixes

- Modbus driver (data acquisition)
- NTP settings
- Combustion monitoring post-processing.

VibroSight Vision

3.2. Stabilisation and bug fixes

- Plots (bode, correlation, orbit, polar, spectrum, waterfall, waveform)
- Alarm state list
- Cursors
- Project on network drives.

VibroSight Event Viewer

3.3. Stabilisation and bug fixes

- General.

4. Compatibility

4.1. VibroSight software

VibroSight 2.9.0 is a minor version release in the 2.x.x series and replaces VibroSight 2.8.x.

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 2.9.0 is now compatible with the 64-bit versions of Microsoft ® Windows ® operating systems (as discussed in section 2.1).

4.1.2. Apple Bonjour

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

VibroSight 2.9.0 remains compatible with the previously deployed version of Bonjour, namely Bonjour version 3.0.

NOTE: 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 2.9.0 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 2.9.0. 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

There is a firmware (embedded software) update for the VibroSight cards (XMV16 / XIO16T and XMC16 / XIO16T card pairs) corresponding to VibroSight 2.9.0.

The latest firmware for the XMC16 and XMV16 cards is:

- Applications: applications-640-010-001-003.tgz
- Base System: base-system-640-003-001-004.tgz.

Therefore, for earlier versions of the XMC16 or XMV16 cards, a firmware upgrade is recommended (see section 5.3).

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 XMV16 / XMC16 cards before starting a VibroSight system upgrade, in order to establish if a firmware update is also required (see section 5.3).

5.1. Upgrading the VibroSight software

1. Exit all VibroSight software modules (clients and servers) – no VibroSight applications (such as Vision, Configurator or Server) should be running.
2. Back up any important (required) VibroSight databases in one of the following ways:

   - 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*.

   - Create an archive file (for example, `*.zip`) containing the three files (`*.config`, `*.db`, `*.log`) in the directory where your database files are located.

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

3. 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`, `*.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`

4. Remove the currently installed version of the VibroSight software 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**.

   And remove VibroSight Standard Edition.
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, select the XMC16 / XMV16 card driver for communications with XMC16 and XMV16 cards, the OPC device driver for systems using OPC and so on:
   - For example, click **Data > Acquisition > XMC16/XMV16 Card Driver Panel**, click **Data > Acquisition > OPC Device Driver** and so on.
7. Restart VibroSight Vision and ensure that live data is received from the cards and displayed in Vision.
8. The VibroSight system should now be 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 *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  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 – XMC16 and XMV16 card firmware

Appropriate files and tools are included in the installation package to allow VibroSight cards to be updated to the latest standard, in order to take advantage of improvements to the VibroSight software.

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

NOTE:	The default firmware directory is: `C:\Program Files\Meggitt\VibroSight 2\Firmware\XMC16`

The firmware files for any VM600 card can be identified by their .tgz file name extension. Any additional firmware updates received from Meggitt Sensing Systems should also be stored in this directory.

NOTE:	The `XMC16` directory contains the applications and base system firmware for use by XMC16, XMV16 and XMV-S16 cards.

The table below shows the compatibility between VibroSight software and hardware (that is, XMC16 / XMV16 card pair firmware).

	VibroSight card firmware			
VibroSight client-server software (VibroSight version CD part number)	applications-640-004-001-003.tgz base-system-640-003-001-001.tgz	applications-640-010-001-001.tgz base-system-640-003-001-002.tgz	applications-640-010-001-002.tgz base-system-640-003-001-003.tgz	applications-640-010-001-003.tgz base-system-640-003-001-004.tgz
1.0.0 609-004-000-001	✓	✗	✗	✗
2.0.0 609-004-000-003	✗	✓	✗	✗
2.0.5 609-004-000-004	✗	✓	✗	✗
2.0.6 609-004-000-005	✗	✓	✗	✗
2.5.0 609-004-000-006	✗	✓	✗	✗
2.7.5 609-004-000-008	✗	✓	✓	✗
2.8.0 609-004-000-007	✗	✓	✓	✗
2.9.0 609-004-000-010	✗	✗	✗	✓

When performing VibroSight software upgrades, it is strongly recommended to systematically upgrade the firmware of XMV16 / XMC16 cards 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 XMV16 / XMC16 cards 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 cards before starting a VibroSight system upgrade (see section 5.1), in order to establish if a firmware update is also required.

WARNING: Changing the firmware of a VibroSight card 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 VibroSight cards (XMV16 / XMC16) only when it is necessary. For example, when the cards must be updated to be compatible with a VibroSight software upgrade.

Update the firmware on a VibroSight card 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 VM600 rack(s) containing the VibroSight cards.
2. Start VibroSight System Manager and navigate to the Devices tree structure in the System Explorer window.

   The Devices tree lists all of the cards that VibroSight can see on the network. If there are no cards in the tree structure or some cards are missing, please verify your network connections.
3. Select the  card that requires its firmware to be changed.

   The Actions tool window updates to show the available card options.
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 (`*.tgz`) for the card.

NOTE: On a Windows XP computer, the default directory for the VibroSight card firmware is:
`C:\Program Files\Meggitt\VibroSight 2\Firmware`

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

   The firmware upgrade process can take up to 5 minutes per card, during which:

   - The IP address beside the card's serial number in the Devices tree structure disappears.
   - The STATUS LED on the card becomes orange, while intermittently, there will be some short phases where the LED turns red and blinks.

   Once the upgrade process has finished:

   - The IP address is reappears in the Devices tree structure.
   - The STATUS LED on the card becomes green again.

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

NOTE: Although the firmware for each VibroSight card must be changed individually using the **Change Firmware** tool, as each card updates its firmware independently of the VibroSight software (once the process has started), firmware updates can be performed on several cards 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* topic in the *VibroSight help*.

The **Change Firmware** tool can be used to load a VibroSight card with any version of card firmware. It is therefore possible to change a card'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 cards between different racks, when the racks are operating with different versions of VibroSight.

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
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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.