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Customer Service Bulletin

Product: Welch Allyn Connex® Vital Signs Monitor 6000 Series™ Welch Allyn Connex® Integrated Wall System	
Subject: CVSM/CIWS 2.45.01 SWF Release Notes	
HW Version(s) Affected: P3,P5,P6	SW Version(s) Affected: N/A
Serial Numbers Affected: N/A	Lot or Date Code Affected: N/A

Classification: Information Only
Distribution: <input checked="" type="checkbox"/> Customer Care <input checked="" type="checkbox"/> Product Service <input checked="" type="checkbox"/> Field Service <input checked="" type="checkbox"/> ASPs <input checked="" type="checkbox"/> Distributors <input checked="" type="checkbox"/> Customers <input type="checkbox"/> Company Confidential

Summary:

Release Details

CVSM software 2.45.01 includes new features, including support for:

- New feature in Continuous Profile allowing a user to perform a manual save of vitals, parameters, and modifiers and send to the host as a confirmed record
- Option to use DTLS 1.2 encryption on the connection with a host in Continuous profile
- Option for server authentication with the host used in Continuous profile
- Option to use TLS 1.2 encryption on the service connection
- Allow option to “Clear clinician information on manual save” when using Single Sign On
- Include ECG Life Threatening Alarms (LTA), EtCO2 no breath, and Early Sense bed exit alarms as part of the Continuous trend captured when the device is disconnected from a host
- Update timestamps of vitals captured on ECG printouts to display “HH:MM” of the time of capture instead of “XX min” showing how old they are.
- Remove the clinician context completely from Continuous profile as the clinician is not used during continuous capture. NOTE: clinician information is used to confirm records as part of the new manual save process (described in the first bullet), but that has a separate workflow for entering clinician information



Episodic Save in Continuous Profile – FAQ

How it works?

- There are three steps to save a set of episodic vitals when patient is continuously monitored



Step 1:
Capture episodic vitals on the Home screen



Step 2:
Enter manual parameters and modifiers



Step 3:
Authenticate clinician to save the record

What are the preconditions?

- CVSM is configured with “Connect to CS” enabled in Advanced Settings
- Connected to a Connex CS that supports the episodic save feature, i.e. v1.8.7 or beyond

What data on Home screen are saved?

- All current visible parameter readings from the Home screen excluding ECG waveforms
- Any parameter data that is stale when the Save button is pressed will not be part of the captured data

Is Early Warning Score supported?

- No

Episodic Save in Continuous Profile – FAQ

What happens to NiBP intervals running in Continuous profile?

- NiBP intervals are suspended upon entry into the manual parameter/modifier entry screen, and will remain suspended until this screen is removed either by completing a successful episodic save operation, or by taking action to cancel the operation
- While suspended, the NIBP interval timer continues to run. If the timer hits zero, an information message appears at the top of the screen informing the user that a reading has been skipped. The timer will then reset and begin counting again.

What happens if no data is entered in the Home screen and the manual parameter/modifier screen?

- A blank record will be saved

Can barcode scanner or RFID scanner be used for clinician authentication?

- Clinician can use barcode scanner to scan their clinician ID barcode
- If SSO is enabled, clinician can use RFID scanner scan their RFID badge
 - NOTE: RFID is not support if SSO is disabled

What happens if Connex CS connection was interrupted when save is pressed?

- The record will be saved for future send, provided clinician entry does not require a connection



This Software release will be deployed via Partner Connect.

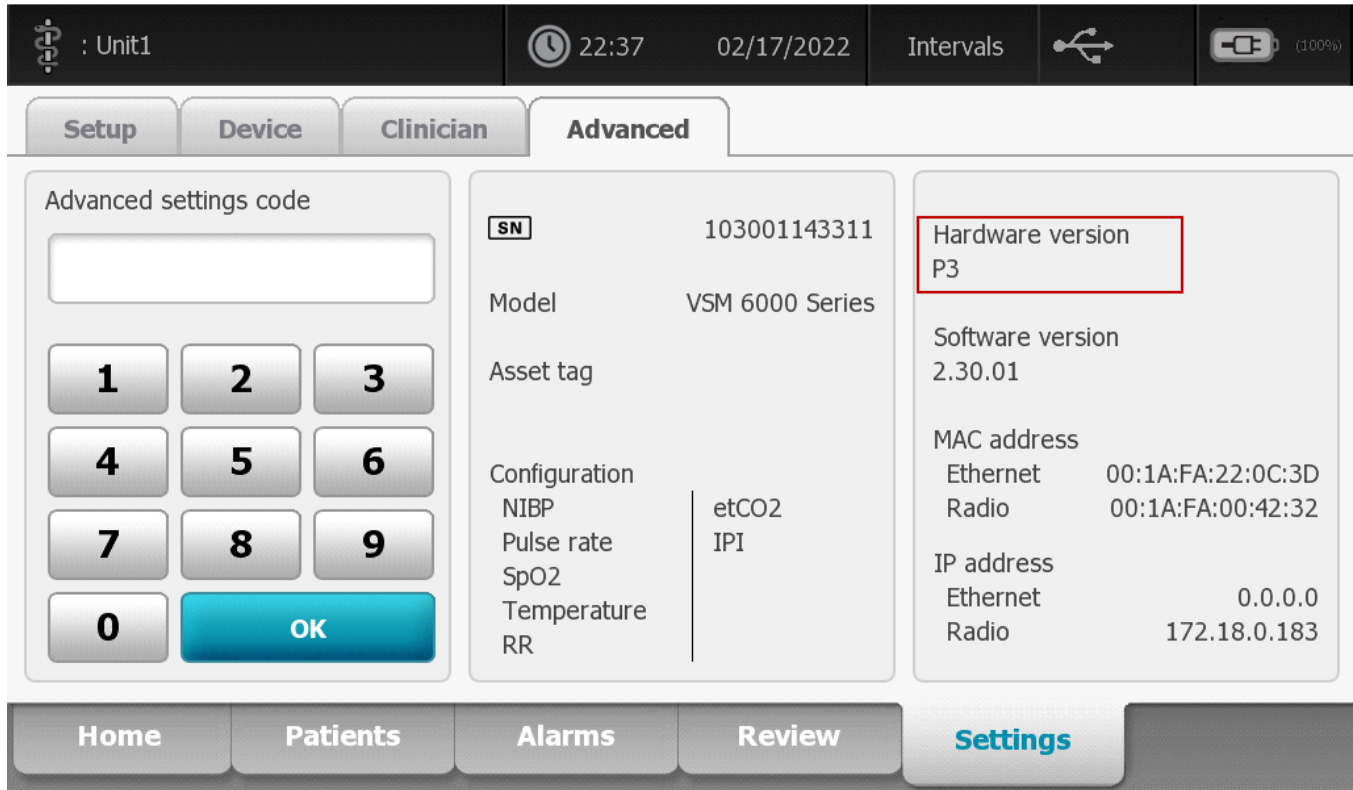
Devices can be updated in the field using the Welch Allyn Service Tool (WAST). The latest Service Manual can be downloaded from our website (link below).

<https://www.hillrom.com/en/services/welch-allyn-service-tool/>

Hardware/Software Compatibility

Please note P2 Hardware is not compatible with this software revision. To view what hardware level your device currently has please follow the following steps prior to upgrade:

1. Press the settings tab
2. Press the advanced tab
3. Hardware version will be displayed on the right-hand side of the screen as seen in the image below.



It is expected that the CVSM 2.45.01 software is compatible with the below listed or newer versions until superseded by a future CVSM software update. See Table 1 below along with CVSM MIN HW/SW Requirements (DIR 20012631) Revision AL or higher.



For 1.71.03 or 2.10.01 devices to qualify for a 2.45.01 upgrade, the CVSM/CIWS must meet the minimum hardware.

Table 1

Compatible Versions

Subsystem Description	Software Version	Hardware Version	Welch Allyn Part Number
Main Board		P3 and greater	106839, 107231
Braun 6000 Software	5.25	N/A	
Braun 4000 Software	1.00.03	N/A	
Lammar Comm's module	1.00.00 A0003	P2 and greater	Not Available
Newmar Comm's module	V2	P5 and greater	107169
Lammar Radio Software	3.00.03 3.00.05	MAC address starting with:00:1A:FA	Not Available
Newmar Radio Software	2.00.01	MAC address starting with:00:17:23	104560
Masimo SPO2	MX3 - 7.5.1.3 MX5 - 7.10.1.2	P2 and greater	107282
Nellcor SPO2	1.00.13, 1.00.15(4th Edit.)	P3 and greater	107124
EARLY Sense	01.06.007	P3 and greater	105637
SureTemp	2.02	P2 and greater	107258
NIBP	2.05 2.06	P2.P3 P3 and greater	108610
ECG	1.00.05	P5 and greater	6000-ECG3A, 6000-ECG3I, 6000-ECG5A, 6000-ECG5I
CO2 Oridion	1.10.02	P3 and greater	Not Available
C02 Medtronic	1.14.00	P3 and greater	Not Available
C02 Medtronic	1.16.00	P3 and greater	107290
500KL and 522KL Scale Software	1.0.26	N/A	N/A
WA Connectivity SDK	2.4 3.0.0.19	N/A	N/A
NCE	5.0.0.3	N/A	N/A
Connex CS	1.5	N/A	N/A
Configuration Tool	1.8.4	N/A	N/A
DCP Server	3.0.0.3	N/A	N/A
Data Catcher	4.0.0.20	N/A	N/A
Connex VM	2.0.1	N/A	N/A
Welch Allyn Service Tool	1.8.xx (legacy) 1.10.x.x	N/A	N/A

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Hillrom Smart Care Remote Management	6.x.x	N/A	N/A
Welch Allyn Service Monitor	1.3	N/A	N/A

If you are upgrading from version 2.41.xx or earlier, please read the applicable directions for use: *Welch Allyn Connex® Vital Signs Monitor 6000 Series™ information for use Software version 2.4x (DIR 80026006)* available from: <http://www.hillrom.com>

The Welch Allyn Connex® Vital Signs Monitor 6000 Series™ service manual 2.0X-2.4X (DIR 80026025) is available from: <https://www.hillrom.com/en/products-category/patient-monitoring/>

Welch Allyn Connex® Integrated Wall System service manual 2.3X-2.4x (DIR 80026030) is available from: <https://www.hillrom.com/en/products-category/patient-monitoring/>

For additional information on the Welch Allyn Connex Vital Signs Monitor 6000 Series visit: <http://www.hillrom.com>

Upgrade instructions

Use the Welch Allyn Service Tool version 1.10.0.0 or later to update your CVSM or CIWS

1. Launch the service tool.
2. If the simple user interface screen appears, click Service.
3. Log on as ADMIN with no Password if no biomed account has been created, otherwise the biomed account may be used. The User ID is case sensitive; ADMIN must be all upper case.
4. Connect the device to the PC running the service tool with a USB cable.
5. Power on the device.
6. Highlight device on the device list tab and click select to open the device tab. If the device name is replaced with question marks it will be necessary to return the device to factory defaults before upgrading. Remember to save your device configuration and any custom data before restoring factory defaults. See the service manual for additional information.
7. Click the Upgrade Tab.
8. Select Welch Allyn Device from top row table and click the Upgrade all¹ button.
9. When Upgrade is complete², the upgrade table shows “No upgrade available”.
10. If Chinese fonts or CA Root Certificates appear in the right-hand pane they may be added if desired.

Note: Chinese fonts are required to enable trend printing. Add CA Root Certificates if server certificates are to be used.
11. To review the service record, select View log file from the File menu. In the popup dialog select Active log file. Service logs are archived in the servicelogs folder as follows
Windows 10: C:\ProgramData\Welch Allyn Service Tool\ServiceLogs\
12. Close the device tab to complete the service. Wait for tab to close before disconnecting device.
13. Disconnect the USB cable from the device, and power down the device, the upgrade is complete.

Footnotes



1. Upgrades are shown under available firmware. If no upgrade is available verify the PC is connected to the internet and the Partner Connect service is running.
2. If an upgrade fails and the device is still available in the service tool, retry the upgrade process. If the upgrade cannot be completed successfully, contact WelchAllyn Technical Support.

Note: If there is a failure of the upgrade process, it is acceptable to attempt the upgrade process again, because a failure of the upgrade process is not a failure of the module itself.

Summary of Prior Releases

2.44.01 Version Released 06/15/2021

CVSM software 2.44.01 includes new features, including support for SFM mode suppression available in version 1.16.00 of the software for the Medtronic MicroMediCO2 End-tidal CO2 module. This module is IEC 80601-2-55 2nd edition compatible. In addition, there were continuous profile table enhancements

2.44.00 Version Released 06/15/2021

CVSM software 2.44.00 new features include A Hillrom branded splash screen on the startup of the device. Allowing a connection to Connex CS with ECG present to send snapshot of pulse rate and respiratory rate numerics and ECG waveforms captured, and ECG alarms to that host. NOTE: Connex CS support for this feature starts with Version 1.8.6. Automatic setting of patient type based on the date of birth received from a host. Office profile printing of averaged NIBP values for SYS, DIA, and MAP.

2.43.01 Version Released 06/14/2021

CVSM software 2.43.01 includes new features as Active Directory Service (AD) compatibility, Health Level Seven standards (HL7) with Continuous Vitals Transmission and Network Time Protocol (NTP), Support for both with and without clinician login when screen is locked. Including other system enhancements

2.43.00 Version released 05/18/2020

CVSM software 2.43.00 includes new features including Active Directory Service (AD) compatibility. In order to use Active Directory, Single Sign On (SSO) cannot be used. Health Level Seven standards (HL7) with Episodic Vitals Transmission and Network Time Protocol (NTP)

2.42.01 Version released 11/14/2019

The software update enhances the network stack which prevents a rare instance of network communication failures in very specific environments including high traffic and/or low WiFi strength presented in version 2.42.00.

2.42.00 Version released 5/17/2019

The software adds single sign on, support for Jadaq high frequency RFID scanner, improved motion tolerance in pediatric blood pressure, and most licenses are enabled by default.

2.41.00 version released 10/16/2018

Release 2.41.01 added new features and functionality for; security, Early Warning Scoring (EWS), Newmar, Braun, Spot profile and service monitor. Improves string translations, supports use of CSM configuration tool and resolves some anomalies. Legacy devices meeting the upgrade requirements detailed in 20012631 CVSM/CIWS Minimum HW/SW Levels may be upgraded as needed.

2.40.01 version released 06/26/2018

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Release 2.40.01 added security features, Newmar radio, New communications PCBA to support Newmar radio, support for Nellcor PMB05N module, updated device string translations, and software enhancements. New plugins were released for WAST to support Newmar radio, and Nellcor PMB05N module.

2.30.01 version released 11/29/2017

Release 2.30.01 added ECG alarm delay configuration zero delay to meet minimal delay requirement.

2.30.00 version released 08/01/2017

Release 2.30.00 adds Office profile, support for Braun 6000, clear button on home screen, graphical trending, clinician login caching, 3rd edition alarm compliance, single parameter trigger and address anomalies from prior releases.

2.20.03 version released 07/28/2016

Release 2.20.03 increased WPA-PSK passphrase character length to 63 characters.

2.20.01 version released 06/30/2015

Release 2.30.01 turns off backlight before initializing the graphics hardware to mask a display artifact associated with display P/N 411161.

2.20.00 version released 05/28/2014

Release 2.20.00 was a scheduled maintenance release, to address anomalies from prior releases and add feature enhancements including; new bed exit alarm melody, customer-defined custom scores and information messages, remote configuration upgrade, EarlySense* modular solution, and patient rest mode. CVSM 2.20.00 is being released concurrently with Connex CS 1.6, service monitor 1.2, and Service Dashboard 2.0 as some of the new functionality is interdependent.

END OF BULLETIN

Version	Sec, Pg, Para Changed	Change Made	Date Version Created	Version Created By (initials)
A	N/A	Initial Release	2022-02-15	MDB