Document Description: CSB - CardioPerfect on Win10, SQL2012/14	Document Number: Version:	
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Customer Service Bulletin				
Product:	Product: CardioPerfect Workstation Date: 2016-05-2			
Subject:	CardioPerfect has been valida Windows 10, MS SQL Server 2		erver 2014.	
HW Version(s) Affected:	N/A	SW Version(s) Affected:	1.6.6.1146	
Serial Numbers Affected:	s _{N/A}	Lot or Date Code Affected:	N/A	
Classification:	Classification: As Needed			
Distribution:	□ Customer Care	☐ Product Service	⊠ Field Service	
		□ Customers	☐ Company Confidential	
Training Required: ☐ Yes ☒ No				
Summary: Validation testing was performed and established compatibility of CardioPerfect workstation in combination with the following environments for which compatibility was not claimed when the product was initially released: - Microsoft Windows 10 - Microsoft SQL Server 2012 - Microsoft SQL Server 2014 This document provides updated minimum system requirements.				

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Minimum System Requirements for CardioPerfect Workstation 1.6.6

The CardioPerfect WorkStation has been validated to install and run on the operating systems specified. Welch Allyn recommends installing all applicable operating system updates as they become available from Microsoft. Consult your local IT policy.

To work with CardioPerfect software, you need the following minimum recommended configuration.

Item	Resting ECG, ABP, Spiro, Recollect ^{1,2}	Stress ECG ^{1,2}	Server – small office ^{1,4}	Server – enterprise ^{1,4}
Configuration	Tower or desktop PC preferred; laptop or tablet	Tower or desktop PC	Tower or desktop PC	Server
CPU	P4 (or equivalent) or higher	P4 (or equivalent) or higher	P4 (or equivalent) or higher	P4/XEON (or equivalent) or higher
Hard disk	20 GB with 5 GB free space	40 GB with 10 GB free space	120 GB with 40 GB free space	200 GB with 40 GB free space RAID 5 array or RAID array controller with memory backup recommended
RAM	512 MB, 1 GB or higher recommended	1 GB or higher	1 GB or higher	1 GB or higher
Monitor resolution	1024x768 true color, 1280x1024 recommended	1024x768 true color	1024x768 true color	1024x768 true color
Monitor size	15" or higher	17" or higher	N/A	N/A
Ports	2 USB	3 USB and 2 serial	N/A	N/A
Operating system ³	XP SP2 or later, Vista Business SP1 or later, Windows 7 Home Premium, Professional, or Ultimate, Windows 8.1 or Windows 8.1 Pro, Windows 10	XP SP2 or later, Vista Business SP1 or later, Windows 7 Home Premium, Professional, or Ultimate, Windows 8.1 or Windows 8.1 Pro, Windows 10	Windows Server 2003, 2008, 2008 R2; Windows Server 2012, Windows XP SP2 or later; Windows 7 Home Premium, Professional, or Ultimate, Windows 8.1 or Windows 8.1 Pro, Windows 10	Windows Server 2003, 2008, 2008 R2, Windows Server 2012
Peripherals	Color printer recommended Compatible with inkjet and la			Printer optional

An Internet connection is required for the Telemedicine option or to allow Welch Allyn to provide online technical support.

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A PC running only CardioPerfect and EMR applications during tests.

If using CardioPerfect software in a language other than English, select a numerical option for the Windows date format (under Regional Options). Formats that include month names are reliable only in the English version of the software.

Both 32- and 64-bit operating systems are supported.

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If the CardioPerfect client software is to be installed on the server for administrative purposes, then the server must not be configured as Primary or Back-up Domain Controller.



Caution: Welch Allyn CardioPerfect Workstation was not optimized to be operated using a finger

to interact with the touchscreen. User Interface controls are sized for mouse and stylus

use. Finger touch should not be used.

Caution: Do not use Windows 8.1 high contrast theme.

Thin-client system requirements

To work with CardioPerfect software in thin-client environment, you need the following minimum system configuration:

ltem	Resting ECG	Spiro	ABP	Server
Hard disk	5 MB free space	5 MB free space	5 MB free space	40 GB free space
Monitor resolution	1024x768 high color, 1280x1024 recommended	1024x768 high color, 1280x1024 recommended	1280x1024 high color, 1280x1024 recommended	N/A
Ports	USB	USB or serial	USB or serial	N/A
Connection technology	PerfectLink	PerfectLink	COM port forwarding	N/A
Operating system ¹	XP SP2 or later, XP embedded, Vista Business SP1 or later, Windows 7 Home Premium, Professional, or Ultimate, Windows 8.1 or Windows 8.1 Pro, Windows 10	XP SP2 or later, XP embedded, Vista Business SP1 or later, Windows 7 Home Premium, Professional, or Ultimate, Windows 8.1 or Windows 8.1 Pro, Windows 10	XP SP2 or later, Vista Business SP1 or later, Windows 7 Home Premium, Professional, or Ultimate, Windows 8.1 or Windows 8.1 Pro, Windows 10	Windows Server 2003, 2008, 2008 R2 The server must not be configured as Primary or Back-up Domain Controller.
Thin-client Environment	Citrix Receiver (ICA) version 6.30, or later Microsoft Remote Desktop Connection is part of Windows. See the supported Operating system list above.		Citrix XenApp Server Remote Desktop Services	
	Quest vWorkspace Conne	ector version 7.6, or later		Quest vWorkSpace
Peripherals	Color printer recommended for Spirometry Compatible with inkjet and laser printers			
Memory footprint	N/A	N/A	N/A	24-32 MB RAM per session

Both 32- and 64-bit operating systems are supported.

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About the database

CardioPerfect can use these database engines:

- Microsoft SQL Server 2014 and SQL Server 2014 Express
- Microsoft SQL Server 2012 and SQL Server 2012 Express
- Microsoft SQL Server 2008 R2 and Microsoft SQL Server 2008 R2 Express
- Microsoft SQL Server 2008 and Microsoft SQL Server 2008 Express
- Microsoft SQL Server 2005 and Microsoft SQL Server 2005 Express
- Microsoft SQL Server 2000
- Microsoft SQL Server 7
- Microsoft MSDE database (a runtime version of MS SQL Server 7 / 2000)

Note: To use with CardioPerfect, existing SQL Server installations must have mixed-mode authentication enabled.

Database installation

The built-in database installation process installs the Microsoft MSDE database engine, the Microsoft SQL Server 2005 Express engine, or the Microsoft SQL Server 2008 R2 Express engine depending on your installation selection, and creates a database named ccdb in an instance named CARDIOPERFECT. This database contains all information generated by CardioPerfect. A second database called ccdbaudit is installed for maintaining an audit trail when enabled.

If you wish to use a newer SQL Server engine than is distributed with the CardioPerfect installation, or to use an existing SQL Server instance that is already available in your facility, you will need to manually create the CardioPerfect database. After installing the database, install CardioPerfect with the "Client in network" option, which skips the built-in database installation process.

To manually create a SQL Database instance:

- Find the appropriate download of the version you want to use on the Microsoft website and run it. During the installation process, specify mixed mode authentication.
- To use the Database Administration features (backup/restore) in the CardioPerfect Admin tool, you
 will also need to install the SQL Server 2005 Backwards Compatibility pack. You can download this
 from Microsoft.com, and a copy is also available on the CardioPerfect installation DVD in the
 SQL2008R2 folder (SQLServer2005_BCxxx.msi).

To manually create a CardioPerfect database in a SQL server instance:

- Run dbbuilder.exe from the SQL folder on the CardioPerfect DVD. Run the application on the database server itself.
- Specify the SQL Server instance in the edit box at the top left. If installed by CardioPerfect, the instance will be: (local) \CARDIOPERFECT.
- If the SQL server instance was created by the CardioPerfect installation program, then DBbuilder will automatically log on to the server. Otherwise, it will after a few seconds request the username and password for an account with sysadmin privileges. This must be a SQL account and cannot be a domain account.
- In the edit box at the top right, specify a name for the database. Typically, this will be *ccdb*.
- Click the "Create/Update!" button; this will cause the database to be created. If the database already exists, then DBbuilder will check if it has the latest version and perform an update if not.
- Once complete, you can exit DBbuilder and the database is ready for use with CardioPerfect.

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•	Version	Sec, Pg, Para Changed	Change Made	Date Version Created	Version Created By (initials)
	Α	N/A	Initial Release	2016-05-26	FK

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