

# DeltaV™ Workstation Operating System Licensing Implications with Backup and Recovery

This document details the Microsoft Windows Operating Systems licensing models used in the DeltaV system and the DeltaV workstations associated with each operating system licensing model and the implications with use of the Backup and Recovery solution, especially the Universal Restore option.



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## Introduction

The DeltaV™ system uses Dell workstations and servers. For the Dell workstations and servers, there are two operating system license models in use, an older model using a Windows OEM operating system license provided by Dell (“Windows OEM OS”) and a newer model using a Windows embedded operating system license provided by Emerson (“Windows embedded OS”). The Dell workstations adopted the Windows embedded OS licensing model first followed by the Dell servers. All new Dell workstations and server are sold with the Windows embedded OS license.

## Backup and Recovery Universal Restore

Emerson released its Backup and Recovery application in early 2012. Backup and Recovery provides the ability to backup individual files, folders, databases, or create a complete backup image of the PC. Many backup applications provide the ability to take an image backup of a PC. However, with typical data backup applications, you can only restore a backup image taken from one PC to an identical PC. Emerson’s Backup and Recovery application includes an optional feature called **Universal Restore™**. Universal Restore allows you to recover all your data and applications onto a different make or model workstation or server than the one that was originally backed up. Universal Restore has proven to be a very popular option for Backup and Recovery; most Backup and Recovery licenses are sold with the Universal Restore option.

Universal Restore allows you to quickly restore a backup image to a different PC. With any image restore process, including those using Universal Restore, you must ensure you have a valid operating system license for the PC being restored. All Dell workstations and servers purchased from Emerson include a valid operating system license, regardless of whether the operating system license is the Windows OEM OS license provided by Dell or the Windows embedded OS license provided by Emerson.

## Universal Restore and operating system implications

The Windows OEM OS licenses and the Windows embedded OS licenses have different terms of use and thus are not interchangeable. A Windows OEM OS license cannot be used on a workstation or server that was purchased with a Windows embedded OS license and a Windows embedded OS license cannot be used on a workstation or server that was purchased with a Windows OEM OS license.

Due to the non-interchangeability of the operating system license terms, when you use Universal Restore you can only take a backup image from one workstation or server and restore this image to another workstation or server that is licensed using the same operating system license model. By example, if you take a backup image from a Dell server licensed with the Windows OEM OS license you can only restore this backup image to another Dell server licensed with the Windows OEM OS license. Similarly, if you take a backup image from a Dell server licensed with the Windows embedded OS license you can only restore this backup image to another Dell server licensed with the Windows embedded OS license.

It is acceptable to use Universal Restore to restore a backup image from one workstation or server to another workstation or server as long as the workstations or servers were purchased with the same operating system license model. You cannot take a backup image from a workstation or server licensed with one operating system license model and restore it to a workstation or server purchased with the other licensing model. Doing so is a violation of the terms of your Windows operating system license agreement.

The Dell workstations and servers used in a DeltaV system must be purchased from Emerson. Emerson does not support Dell OEM workstations or servers purchased directly from Dell or others to be used as DeltaV workstations. You can no longer purchase DeltaV workstations and servers from Emerson that use the Windows OEM OS license as all DeltaV workstations and servers purchased from Emerson today use the Windows embedded OS license. Thus, unless you already own DeltaV workstations or servers purchased from Emerson that use the Windows OEM OS license, you do not have a supported PC platform available to you to restore a backup image taken from a DeltaV workstation or server that uses the Windows OEM OS license.

**NOTE: Current DeltaV workstations are licensed with the Windows embedded OS license. If you order a current DeltaV workstation to use as a spare or a replacement workstation, you cannot use Universal Restore to take a backup image from an existing DeltaV workstation that is licensed with the Windows OEM OS license and restore this image to a current DeltaV workstation.**

If you have DeltaV workstations or servers that use the Windows OEM OS license (“old PC”) and you need to replace or upgrade these workstations or servers with a current model that uses the Windows embedded OS license (“new PC”), you can still use the Backup and Recovery software to back up data on the old PC and restore this data to the new PC. You cannot use Universal Restore to restore the entire backup image from the old PC to the new PC, but you can use the standard functions of the Backup and Recovery software to back up the data on the old PC and restore this data to the new PC. Details on the data backup and data recovery functions of the Backup and Recovery software can be found in the Backup and Recovery product documentation.

Once you have restored the backup data from the old PC to the new PC, you can take a backup image of the new PC and in the future use Universal Restore to restore this backup image to an even newer PC, assuming in the future the newer PC is using the Windows embedded OS license.

## Physical and virtual machines

The operating system terms of use limitations for restoring a backup image taken with the Backup and Recovery application apply whether the PCs in use are physical computers or virtual machines. The same limitations exist if the old PC is a physical computer and the new PC is a physical computer or a virtual machine. You can only take a backup image from one workstation or server and restore this image to another workstation or server that is licensed using the same operating system license model, regardless of whether the workstations and servers are physical or virtual.

The operating system licenses provided by Emerson for use with the DeltaV virtual machine templates use the Windows embedded OS license model. Thus, if you want to replace a physical computer with a virtual machine by using a backup image taken with the Backup and Recovery application, you can only do this if the physical computer is licensed using the Windows embedded OS license.

## Summary

You cannot use Universal Restore to restore a backup image taken from the old PC to the new PC, but you can use the standard functions of the Backup and Recovery software to back up the data on the old PC and restore this data to the new PC. Details on the data backup and data recovery functions of the Backup and Recovery software can be found in the Backup and Recovery product documentation.

See Tables 1 and 2 for a list of the currently supported Dell workstations and servers and the operating system license model in use.

For more information on the current DeltaV workstations and servers and operating systems, refer to the DeltaV Workstation Hardware Product Data Sheet located on the Emerson Process Management Web site, [www.emersonprocess.com/DeltaV](http://www.emersonprocess.com/DeltaV).

DeltaV Version	DeltaV v9.3.1 Windows XP	DeltaV v10.3.1 Windows XP	DeltaV v11.3.1 Windows 7	DeltaV v12.3 Windows 7 [32-bit]	DeltaV v12.3 Windows 7 [64-bit]
<b>DeltaV Release Date</b>	<b>Dec 2006</b>	<b>Sep 2009</b>	<b>May 2010</b>	<b>Apr 2013</b>	<b>Apr 2013</b>
<b>PCs (Optiplex)</b>					
GX280	OEM	Out	Out	Out	Out
GX620	OEM	OEM	Out	Out	Out
745	OEM	OEM	Out	Out	Out
755	OEM	OEM	Embedded	Out	Out
760	OEM	OEM	Embedded	Embedded	Out
780	See Note	See Note	See Note	See Note	Out
790	Embedded	Embedded	Embedded	Embedded	Out
7010	Embedded	Embedded	Embedded	Embedded	Embedded
<b>Workstations (Precision)</b>					
WS360	OEM	Out	Out	Out	Out
WS370	OEM	Out	Out	Out	Out
WS380	OEM	OEM	Out	Out	Out
WS390	OEM	OEM	Out	Out	Out
T3400	OEM	OEM	Embedded	Out	Out
T3500	See Note	See Note	See Note	See Note	Out
R5400	See Note	See Note	See Note	See Note	Out
R5500	Embedded	Embedded	Embedded	Embedded	Embedded
T3600	Embedded	Embedded	Embedded	Embedded	Embedded

Table 1. Dell workstations and operating system license models

**Note:** The Optiplex 780, Precision T3500 and R5400 PCs were first released with a Windows OEM operating system license then later were delivered with a Windows embedded operating system license. The Certificate of Authenticity (COA) that is affixed to the PC will identify the operating system license model.

**Legend:**

Term	Description
Embedded	Licensed using the Windows embedded operating system license
OEM	Licensed using the Windows OEM operating system license
Out	The workstation or server is not supported in this release

DeltaV Version	DeltaV v9.3.1 Server 2003	DeltaV v10.3.1 Server 2003	DeltaV v11.3.1 Server 2008	DeltaV v12.3 Server 2008 [32-bit]	DeltaV v12.3 Server 2008 R2 [64-bit]
DeltaV Release Date	Dec 2006	Sep 2009	May 2010	Apr 2013	Apr 2013
PE700	OEM	Out	Out	Out	Out
PE800	OEM	Out	Out	Out	Out
PE830	OEM	OEM	Out	Out	Out
PE840	OEM	OEM	Out	Out	Out
T300	OEM	OEM	OEM	OEM	Out
T310	OEM	OEM	OEM	OEM	Out
PE2600	OEM	Out	Out	Out	Out
PE2650	OEM	Out	Out	Out	Out
PE2800/2850	OEM	OEM	Out	Out	Out
PE2900/2950	OEM	OEM	See Note	Out	Out
PE2900/2950 III	OEM	OEM	OEM	Out	Out
T610	OEM	OEM	OEM	OEM	Out
R710	OEM	OEM	OEM	OEM	Out
T620	Out	Out	Embedded	Embedded	Embedded
R720	Out	Out	Embedded	Embedded	Embedded

Table 2. Dell servers and operating system license models

**Note:** PowerEdge PE2900/PE2950 servers were first released with a Windows OEM Server 2003 operating system license; those upgraded for use on DeltaV v11.3.1 required a Windows embedded Server 2008 operating system license provided via an OS Upgrade Kit.

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