

Deltek Vision® 6.1 SP4

Technical Readiness Guide

September 23, 2011

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Overview

This guide contains technical information to prepare technical staff at your company who maintain the hardware and software required to deploy Vision, and those who are responsible for installing and configuring the Vision application for the new technology that Vision 6.0 uses.

You can have the Deltek Global Services team assist you with your system analysis to verify whether or not you are prepared for the upgrade to Vision 6.1. Please contact Deltek's Global Services team at DGSConsultants-PES_Vision@deltek.com.

For prerequisite software installations and information, please refer to the documentation provided by the software distributor.

About This Guide

This guide contains information you need to verify the readiness of your environment for the various components of Vision. Deltek revises this document regularly to provide the most up-to-date technical information and instructions.

Visit the Knowledge Center tab of the Deltek Customer Care Connect site to determine if your copy is the latest copy, and to download the most recent copy, if necessary.



The Deltek Customer Care Connect site is a protected site and requires a username and a password. If you do not know your username, please contact your Deltek Account Manager.

If you forget your username or password, click **Account Assistance** on the Login page.

Changes to Reporting Tier and Introduction of Reporting Services

Deltek Vision 6.1 uses Microsoft SQL Server Reporting Services as the new Report Management and delivery platform. With this change, there are several things to consider when you are planning migrating to Vision 6.1.

- SQL Server Reporting Services is not installed as part of the Deltek Vision installation (as Actuate was). Therefore, setup requires that SQL Server Reporting Services be already installed and configured in order to connect to the Report Server. The next section provides links to Microsoft documentation that you can use in addition to the Microsoft documentation installed with your SQL Server installation. Refer to Appendix C: Connect to Reporting Service Web Service, for basic information on configuring the SQL Server 2008 versions of Microsoft SQL Server Reporting Services.
- SQL 2008 Reporting Services is the optimal and often required platform for full printing capability with Deltek Vision 6.0 and later versions.
- You must use SQL 2005 Reporting Services design tools to modify existing Deltek Vision reports or display your custom reports within the Vision framework. To use SQL 2005 Reporting Services design tools (BIDS), you must download SQL 2005 Express Tools (<http://www.microsoft.com/Sqlserver/2005/en/us/express-down.aspx#tool>).
- The Microsoft SQL Server Edition and type of licensing purchased may impact your SQL Server Reporting Services deployment options.
- If you previously used a two server deployment model (web\application and report server installed on one server and the database installed on another server) with Vision 5.0/5.1, you now have two options for deploying a two server deployment.

Overview of Reporting Services

Microsoft SQL Server 2008 Reporting Services is a server-based reporting platform that you can use to create and manage tabular, matrix, graphical, and free-form reports that contain data from relational and multidimensional data sources. The reports that you create can be viewed and managed over a World Wide Web-based connection. Reporting Services includes the following core components:

- A complete set of tools that you can use to create, manage, and view reports.
- A Report Server component that hosts and processes reports in a variety of formats. Output formats include HTML, PDF, TIFF, Excel, CSV, and more.
- An API that allows developers to integrate or extend data and report processing in custom applications, or create custom tools to build and manage reports.

The reports that you build can be based on relational or multidimensional data from SQL Server, Analysis Services, Oracle, or any Microsoft .NET data provider such as ODBC or OLE DB. You can create tabular, matrix, and free-form reports. You can also create ad hoc reports that use predefined models and data sources.

In Reporting Services, URLs are used to access the Report Server Web service and Report Manager. Before you can use either application, you must configure at least one URL each for the Web service and Report Manager. Reporting Services provides default values for both application URLs that work well in most deployment scenarios, including side-by-side deployments with other Web services and applications.

Reporting Services uses a SQL Server database for internal storage. The database is a required component; it is used to store reports, session data, resources, and server metadata.

The migration to this new tool includes such benefits as:

- **Ease of Deployment and Management** – SSRS is embedded in SQL Server, the database clients already use. This streamlines deployment and updates and provides a platform for delivery of new functionality for years to come.
- **Industry Leading Platform** – SSRS is fast becoming one of the leading Business Intelligence (BI) platforms in the market.
- **Better Technology Alignment with Vision** – SSRS aligns well with the rest of the Microsoft centric technology strategy for Vision.

How to Obtain Information about Reporting Services

The best way to learn about Reporting Services and how to configure it is through your Microsoft documentation included with your SQL Server (Books Online, Microsoft Labs, and so on). The following links provide steps for configuring Reporting Services if necessary:

Configuring SQL Server 2008 Reporting Services (How-to Topics)

- <http://msdn.microsoft.com/en-us/library/bb934490.aspx>
- <http://msdn.microsoft.com/en-us/library/ms157412.aspx>

The following links provide additional information for anyone who wishes to be more familiar with Reporting Services:

- Reporting Services Overview and Tutorials
<http://msdn.microsoft.com/en-us/library/ms159106.aspx>
- Demos, Videos, Virtual Labs, Webcasts
<http://msdn.microsoft.com/sqlserver/2008/en/us/learning.aspx>

Microsoft SQL Server Edition Important Notes

Owners of SQL Server Workgroup Edition and SQL Server 2008 Express Edition with Advanced Services (SQL Server Express) should note the following:

- The report server database must be hosted on the local Machine running the SQL Server Database Engine instance. You cannot use a remote SQL Server instance to host the report server database.
- Data sources used in a report must also be SQL Server databases that run on the local machine running the SQL Server Database Engine instance. You cannot use remote data sources or other data source types. To use additional data source types, you must use a different edition of Reporting Services. This means that your Vision database must reside on the same machine where you Report Server databases reside.
- You will either use the Single Server Deployment Model or Configuration 1 of the Two Server Deployment Model.

Information for Owners of SQL Server Standard or Enterprise Edition

- If you decide to split the Report Server (web service) from the database server hosting the report server database, you need an additional Microsoft SQL Server license. See Report

Server Licensing Requirements for links to Microsoft SQL Server licensing related to SQL Server Reporting Services.

- Report Server scale-out deployment is only available in Microsoft SQL Server Enterprise Edition. A scale-out deployment refers to an installation configuration that has multiple report server instances sharing a single report server database.

The following Microsoft link lists the features supported by the editions of SQL Server 2008:

- <http://msdn.microsoft.com/en-us/library/cc645993.aspx>

Information for Owners of SQL Server Express Edition

In the past, Deltek provided SQL Express to small firms that used Microsoft SQL Server Express Edition for their Vision deployment. Deltek Vision version 6.1 SP4 now supports Microsoft SQL Server 2008 R2 Express Edition with Advanced Services. Because Microsoft provides a download location, user-friendly installation, and prerequisites, Deltek will no longer continue the distribution of the SQL Express Server installation.

Deltek will continue to provide the Deltek MSDE/SQL Express Management Console which gives clients the ability to create and schedule maintenance plans/jobs for creating database backups, performing integrity checks, etc. specifically for their Deltek database.

If you are implementing SQL Server Express Edition, Deltek requires the SQL Server 2008 R2 Express **with Advanced Services** to be used as the Database and Report Server for your Vision implementation.

The SQL Server Express Edition with Advanced Services contains the Database Engine and Reporting Services required for managing the database and running reports.

Direct Links for SQL Server 2008 SP1 R2 Express with Advanced Services Installers from Microsoft

Microsoft has several variations of the SQL Express installation. Download the appropriate SQL Server Express with Advanced Services installation package that matches your Operating System platform (32-bit/x86 or 64-bit/x64). For your convenience and to avoid confusion, we have provided the direct links for the SQL Server 2008 R2 SP1 with Advanced Services installation packages. Click the following link to access the download page:

<http://www.microsoft.com/download/en/details.aspx?id=26729>

When you open this download page, there are only two installations that can be used with Deltek Vision. The product name is SQL Server 2008 R2 Express Edition with Advanced Services, and there is a download for each Operating System platform: 32-bit/x86 or 64-bit/x64. You must download the installation that matches your specific database server operating system. For example, install the 32-bit/x86 on a 32/x86 system only, and the 64-bit/x64 on a 64-bit system only. You cannot mix the operating system types.

Following are the links to the two downloads:

- 64-bit / x64 Installation for 64-bit Operating Systems:
[SQLEXPADV_x64_ENU.exe](#) (980.0 MB)
- 32-bit / x86 Installation for 32-bit Operating Systems:
[SQLEXPADV_x86_ENU.exe](#) (866.0 MB)

After installation, you must download and install the Cumulative update package 1 (CU1) for SQL Server 2008 R2 Service Pack 1 from Microsoft - <http://support.microsoft.com/kb/2544793>

The following Microsoft link provides information on prerequisite requirements, release notes, installation guide, and other helpful links for performing your installation of SQL Server.

<http://technet.microsoft.com/en-us/sqlserver/install>

Report Server Licensing Requirements

The method you use to deploy your Report Server depends on the edition and licenses you own for your Microsoft SQL Server Database. If you plan to host your Reporting Services Web Service on a separate machine from the Reporting Services Report Server Database, you must determine whether your SQL Server edition and licenses purchased can support this deployment.

The following Microsoft link describes the licensing options available with SQL Server and Reporting Services:

Microsoft SQL Server 2008 licensing page

<http://www.microsoft.com/sqlserver/2008/en/us/licensing.aspx>

Supported Databases

A Microsoft SQL Server 2005, 2008, or 2008 R2 database engine is required to run Deltek Vision. The Microsoft SQL Server edition you choose to install is dependent on the number of employees who will use Vision.

- For firms with fewer than 50 employees (five concurrent users), Vision supports Microsoft SQL Server 2008 R2 Express Edition with Advanced Services. The Express Edition with Advanced Services contains the Database Engine and Reporting Services required for managing the database and running reports. Microsoft has several variations of the SQL Express installation. Download the appropriate SQL Server Express with Advanced Services installation package that matches your Operating System platform (32-bit/x86 or 64-bit/x64). For your convenience and to avoid confusion, we have provided the direct links for the SQL Server 2008 R2 SP1 with Advanced Services installation packages. Following are the links to the two downloads:
 - 64-bit / x64 Installation for 64-bit Operating Systems:
[SQLEXPADV_x64_ENU.exe](#) (980.0 MB)
 - 32-bit / x86 Installation for 32-bit Operating Systems:
[SQLEXPADV_x86_ENU.exe](#) (866.0 MB)
- For firms with more than 50 employees (six or more concurrent users), Vision supports Microsoft SQL Server, which must be purchased separately.

The machine on which you install Microsoft SQL Server depends on your firm's deployment model.

Additional Information About SQL Server Reporting Services 2008 R2

If you are using Deltek Vision 6.1 SP4 with Microsoft SQL Server Reporting Services (SSRS) 2008 R2, your invoices will print with extra space in the header when the top margins are expanded. This is a known issue with Microsoft SSRS 2008 R2 and Deltek is currently working with Microsoft to resolve this issue.

This issue does not occur in previous versions of Microsoft SSRS 2008.

If you plan to upgrade to Microsoft SSRS 2008 R2, please carefully review your invoice templates, and wherever possible, reduce the top margins in the Vision Invoice Template Editor to prevent the extra space issue from occurring.

Windows Server 2008 R2

If you deploy Deltek Vision 6.1 SP4 with Windows Server 2008 R2, you must complete the following to configure server-side printing:

Configure the DeltekVisionAppPool Identity (IIS) and the Report Server Windows Username (Report Server tab of Weblink) to be the same domain account. This must also match the domain account profile where your network printers are installed on the Vision web/application server.



If you need assistance using the Customer Care Connect site, the online help available on the site provides answers for most questions.

.NET Architecture

Vision's server-side architecture uses Microsoft's .NET framework. .NET is Microsoft's name for a set of software technologies developed to connect information, people, systems, and devices.



See <http://www.microsoft.com/net/> for more information.

.NET allows Deltek developers and your in-house IT staff to extend Vision's workflow capabilities by calling outside Web services from within Vision. For example, you might send real-time, updated project information from Vision to an external collaboration Web site so that your clients can view current project information. Or you might automatically update your employee self-service system when employee information is changed in Vision.

The .NET framework gives users the power to extend Vision's reach—by developing applications that integrate with Vision, calling Web services from within Vision, and communicating with Vision through mobile devices.

The Vision download manager requires that you install at least Microsoft .NET Framework 2.0 on the Vision tier before you begin the Vision installation. The download is available at:

<http://www.microsoft.com/downloads/details.aspx?familyid=0856eacb-4362-4b0d-8edd-aab15c5e04f5&displaylang=en>.

If Microsoft .NET Framework 2.0 is not detected, the installation will halt and you will be required to install it before you can run the Vision installation. Since all of the tiers require at least Microsoft .NET Framework 2.0 or 3.5 (SP1), if your installation prompts to download Microsoft .NET Framework 2.0, confirm that all the prerequisites for that tier are correctly installed.

Deltek's main client application is deployed using the ClickOnce technology, which requires Microsoft .NET Framework 3.5 SP1. You can download the Microsoft .NET Framework 3.5 SP1 from this link:

<http://www.microsoft.com/downloads/details.aspx?familyid=ab99342f-5d1a-413d-8319-81da479ab0d7&displaylang=en>.

Platform Virtualization

Deltek recognizes the growing use of virtual environments by our customers. Virtual environment software, such as VMware®, resides in the hardware layer underneath the operating system and is used by customers to partition a single server into a multiple server/multiple operating system environment. Deltek's product development makes limited use of virtualized environments at this time. See Deltek's "Virtual Environments Statement" on the Deltek Customer Care Connect site for additional information.

Multiple Languages

Deltek Vision 6.1 allows you to install a blank Vision database in either English (United States) or English (International) on your database server.

- **New Installations** — For customers installing Vision for the first time, the installation routine now includes a step in which you select the English language database version you want to use for the installation— English (United States) or English (International). The database you select will determine the version of English that will subsequently display in the Vision application user interface.
- **Upgrades from Previous Versions of Vision** — For customers upgrading from a previous version of Vision (other than 6.0), the database conversion routine now checks the pre-6.0 custom label spellings for the words labor and check, and then converts the database as English (United States) or English (International), as applicable, based on the custom label spellings.
- **Language Options** — The Vision client installation routine includes options for selecting the following language versions when you run the application: English (United States or International), French, or Spanish.

Deltek Vision Logical Tiers Requirements

Various parts of the Vision application are distributed to logical tiers for performance, scalability, and security purposes. These logical tiers are distinct technologies required to run Vision, such as report server software, or Web server software. They may or may not be hosted on the same machine. The method you use to distribute Vision's logical tiers across physical tiers, or actual machines, depends on your firm's needs.

For the most up to date hardware and software requirements, please see the Deltek Product Support Compatibility Matrix document. This document is available from the Knowledge Center tab of the Deltek Customer Care Connect site (<http://support.deltek.com>).

Tier Name	Description
Client Tier	<p>The client tier platform must be able to run the following:</p> <ul style="list-style-type: none">▪ Microsoft Windows® Vista™ or Vista (SP2) is supported.▪ Windows XP (SP2) or Windows XP (SP3) is supported.▪ Microsoft Internet Explorer® 6.0 (SP2) or later is supported. (Internet Explorer 8.0 is not supported.) <p>Required: Microsoft .NET 3.5 SP1 must be installed on the client workstation in order to launch the Vision ClickOnce client.</p> <p>Deltek Recommends: Windows XP with (SP2 or SP3) running Internet Explorer 7.0 to achieve the highest performance, reliability, and security.</p>
Web/Application Tier	<p>The Web/Application tier can be one of the following:</p> <ul style="list-style-type: none">▪ Windows Server 2003 (SP2) running Microsoft Internet Information Services (IIS) 6.0▪ Windows Server 2008 running Microsoft Internet Information Services (IIS) 7.0▪ Windows Server 2008 R2 running Microsoft Internet Information Services (IIS 7.5) <p>The Application tier always resides on the same physical server as the Web tier.</p> <p>Required: Microsoft .NET 3.5 SP1 must be installed on the Web/Application tier.</p>
Process Server Tier	<p>The process server tier consists of services that can be run on Windows Server 2003 (SP2), Windows Server 2008, or Windows Server 2008 R2.</p> <p>IIS is not required on the process server tier.</p> <p>Required: Microsoft .NET 3.5 SP1 must be installed on this tier.</p>

Tier Name	Description
Report Tier	<p>The report tier consists of services that can be run on one of the following:</p> <ul style="list-style-type: none"> Windows Server 2003 (SP2) Windows Server 2008 Windows Server 2008 R2 <p>Vision uses Microsoft SQL Server 2008 Service Pack 2, or Microsoft SQL Server 2008 R2 with CU1 Reporting Services to generate invoices and reports and to display them in the Web browser.</p> <p>Required: Microsoft .NET Framework 3.5 SP1 must be installed on the Report tier and is installed by default with the SQL Server 2008 Installation.</p> <p>Microsoft IIS is not required for Microsoft SQL Server 2008 Reporting Services.</p>
Database Tier	<p>Vision's database tier can be either of the following:</p> <ul style="list-style-type: none"> Microsoft SQL Server 2008 R2 and the cumulative update package 1 (CU1) from this Microsoft Web site: http://support.microsoft.com/kb/981355 Microsoft SQL Server 2008 SP2 <p>Required: Microsoft .NET Framework 3.5 SP1 must be installed on the Database tier and is installed by default with the SQL Server installation.</p> <ul style="list-style-type: none"> Microsoft SQL Server 2005 SP3 <p>Required: Microsoft .NET Framework 2.0 must be installed on the Database tier. This is installed by default with the SQL Server installation.</p>

Scenarios That Are Not Supported

Deltek does not support the following scenarios because they cause significant issues in the performance, reliability, and functionality of your Vision application as well as other applications on your network.

- Deltek Vision 6.1 does not support using Windows XP, Windows Vista, or Windows 7 for production server installation.
- Deltek Vision 6.1 is not compatible with Microsoft Windows 95, 98, ME, 2000, or NT 4.0 as a client or server Operating System.
- Vision no longer supports Microsoft SQL Server 2000 or Windows 2000 Server.
- Vision no longer supports Actuate.
- You cannot perform a Single Server deployment on the Microsoft Small Business Server 2000/2003. Only the Vision database tier and/or report tier can be installed on this server.
- You cannot install any Deltek Vision tier on the Microsoft ISA server, or any other software-based firewall (except Windows firewall).
- You cannot install any Vision tier on any server with Microsoft Terminal Services (Application Mode Only) running or if Server 2008 R2 configured as a Remote Desktop Session Host Server. Terminal Services in remote administration is fully supported.
- You cannot install any Deltek Vision tier on a Domain Controller.
- You cannot install any Deltek Vision tier on a Microsoft Exchange 5.5/2000/2003/2007 Server.
- Platform Virtualization is a technology that allows multiple operating systems and platforms to run simultaneously as separate virtual machines on a single set of server hardware.



See Deltek's Virtualization Statement, available on the Deltek Customer Care Connect site, for limitations of support for virtualized deployments.

Technical Considerations

- Deltek Vision 6.1 SP4 and previous versions cannot be run at the same time on the same Web/Application server.
- Microsoft .NET Framework 3.5 SP1 must be installed on all client workstations running Deltek Vision 6.1 SP4 and also on the servers hosting the Vision Application and Process servers.
- Deltek Vision 6.1 SP4 supports Windows Server 2008 and Windows Server 2008 R2 (only available in x64).
- Deltek Vision 6.1 SP4 supports Windows Server 2008 R2 Service Pack 1 (SP1) for the Web, Report, Database, and Document Management Server Tiers.
- Deltek Vision 6.1 SP4 now supports the following:
 - Web/application tier installations (including single server installations and 2-tier web/application report tiers) on x64 operating systems, including Windows Server 2003 x64, Windows Server 2008 x64, and Windows Server 2008 R2 (only available in x64).



Deltek Vision 6.1 SP4 supports Windows Server 2003 x64 for the web/application tier. Windows Server 2003 is also supported as a stand-alone Document Management (SharePoint Server). However, it is not possible to have Windows Server 2003 x64 host both the Vision web/application tier and the Document Management tier. For this configuration you must use Windows Server 2008 x64 or Windows Server 2008 R2.

- Deltek Vision 6.1 SP4 supports SharePoint Foundation 2010 for Document Management.
- Deltek Vision 6.1 SP4 supports the following versions of Microsoft SQL Server Database Engine:
 - Microsoft SQL Server 2008 R2, SP1 CU1
 - Microsoft SQL 2008 R2, SP1 Express Edition with Advanced Services
 - Microsoft SQL Server 2008, SP2
 - CU1 and CU8 of Microsoft SQL Server 2008 SP1 Database Engine are also supported.
 - Microsoft SQL Server 2005, SP3
- Deltek Vision 6.1 SP4 supports the following versions of Microsoft SQL Server Reporting Services:
 - Microsoft SQL 2008 R2, SP1 Express Edition with Advanced Services
 - The RTM release of SQL 2008 R2 Reporting Services and Database Engine is also supported.
 - Microsoft SQL Server 2008, SP2
 - CU1 and CU8 of Microsoft SQL Server 2008 SP1 Reporting Services are also supported.
- Microsoft SQL Server Reporting Services must be installed and configured prior to running the Vision 6.1 SP4 installation. Follow the Microsoft documentation for your installation.
- Microsoft SQL Server Reporting Services are supported in Native Mode configuration only. The SharePoint Integrated Mode is not supported.



Deltek recommends using Microsoft SQL Server Reporting Services 2008 or 2008 R2 for your Reporting Services tier. (Your database tier can be 2005 or 2008.)

- Deltek Vision 6.1 SP4 supports Windows Server 2003 with IIS 6.0, Windows Server 2008 with IIS 7.0, and Windows Server 2008 R2 with IIS 7.5.
- Deltek Vision 6.1 SP4 can be run, as a client, on Microsoft Windows XP (SP3), Microsoft Windows Vista (SP2), and Windows 7.
- Deltek Vision 6.1 SP4 supports Windows 7 Service Pack 1 (SP1) as a client.
- Deltek Vision 6.1 SP4 can be run with Microsoft Internet Explorer 6.0, 7.0, 8.0, or 9.0.
- Deltek Vision 6.1 SP4 supports 64-bit processing for all Deltek Vision logical tiers, including the web/application, database and report tiers, and for the client tier (Windows XP, Windows Vista, and Windows 7).
- Deltek Vision 6.1 SP4 supports Microsoft Office 2010. Microsoft Office 2010 is now also supported for use with Vision Connect for Microsoft Outlook.
- Deltek Vision 6.1 SP4 supports Windows Mobile Updates 6.1 and 6.5 for the Mobile Application Suite.



Deltek (Nasdaq: PROJ) is the leading global provider of enterprise software and information solutions for professional services firms, government contractors, and government agencies. For decades, we have delivered actionable insight that empowers our customers to unlock their business potential. Over 14,000 organizations in 80+ countries around the world use Deltek to research and identify opportunities, win new business, optimize resources, streamline operations, and deliver profitable projects. Using Deltek, you will Know More and Do More.

Find out why at www.deltek.com.