

Deltek Vision® 7.1

Technical Installation Guide

October 2, 2013

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This edition published October 2013.

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Overview

This guide contains the information that you need to install Vision 7.1, as well as technical installation and setup information for the staff at your company who maintain the hardware and software required to install Deltek Vision 7.1.

We revise 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.

This guide covers the following areas:

- Planning and Deployment
- Installation
- Troubleshooting and Post Installation

Planning and Deployment

Review this information before you begin installing Vision components. This chapter includes overview information about the Vision architecture and requirements, deployment models, and available Deltek services. Specific steps for performing the installation for the deployment model that you choose are listed in the Installation chapters.

Installation

The installation steps guide you through the various deployment models of the Vision installation. If you have previously deployed a Vision installation, this section does not apply. Instead, review the next section, "Install Vision Upgrades."

Select the chapter or chapters that correspond to your deployment model, and perform the steps as directed in the chapter. At the start of each deployment model chapter, a chart lists all of the prerequisites that are required for the server on which you are performing your installation. You can use the chart to verify that you have all the prerequisites installed, which reduces the likelihood of any unexpected events during the installation. The appendices table provides instructions on configuring prerequisites that are required before Vision can be installed, or when making specific configuration changes after Vision is installed.

The account used to perform the installation needs the following rights and privileges for installations on the tiers below:

- Local Administrator on the Server (All Tiers)
- Member of sysadmin role in SQL Server (Web\Application Tier, Database Tier)
- Member of System Administrator and Content Manager Roles in SQL Server Reporting Services (Web\Application Tier, Reporting Tier)

Install Vision Upgrades

Deltek encourages clients to upgrade to the latest version of Vision because:

- New features are added only to the latest version.
- Except in critical situations, Deltek fixes software issues only in the latest version.
- Deltek support is typically available only for the latest and the next previous versions.
- The latest version incorporates the newest technologies and tools.

Before upgrading, you should first review the Deltek Vision release notes and perform a test conversion and test installation of the new version to ensure that your firm's business processes are working properly in the new version. These release notes contain summaries of new product features, software enhancements, and database changes that have been implemented since the release of Deltek Vision 7.0 SP1.

If you are upgrading to Vision 7.1 from a version earlier than Vision 7.0 SP1, you should read all the Vision 7.0 and other version release notes documents that are newer than your installation to ensure that you understand all the technology and software changes that have been implemented and how these changes may affect you.

You can download the release notes (in PDF format) from the Deltek Customer Care Connect site at <http://support.deltek.com>.

- Knowledge Center article [66930](#) provides a list of all the 7.0 documentation.
- Knowledge Center article [62566](#) provides a list of all the 6.2 documentation.
- Knowledge Center article [64577](#) provides a list of all the 6.1 documentation.



Deltek's Global Services team is available to support you as you plan for this upgrade. We offer both technical and custom services to ensure the best possible Deltek experience. Contact DGSConsultants-PES@deltek.com.

Additional Information

- During the installation, if setup detects a previous 7.0 or 6.x version of Vision, it automatically upgrades the entire installation to the current release. The Web tier and Database tier automatically detect existing 6.x and 7.0 databases and offer the option to upgrade the databases during the installation.
- If you have Vision 7.0 EA (Beta 1 or Beta 2) already installed, you must uninstall for Vision 7.1. Vision 7.1 release will not support in-place upgrades of the previous Vision 7.0 EA/Beta releases.
- Database upgrades from Vision 6.x or 7.0 (LA or GA), and 7.0 SP1 are supported.
- You cannot upgrade any Vision database from version 5.1 or older to Vision 7.1.
- You must uninstall all previous versions of Vision 5.1 or older before installing this Vision 7.1 release.
- Before uninstalling previous versions of Vision, ensure that your hardware and software meet the minimum requirements for running Vision.
- If you are upgrading from version 5.1 or earlier, you must uninstall Actuate Report Server before installing this Vision 7.1 release.
- If you have any Vision databases that are versions prior to 6.0, the Database to Upgrade page will not display. You must manually convert those databases to at least version 6.0 in order to then convert to 7.0. If your database version is prior to 5.0, please Contact Vision Technical Support to obtain the conversion scripts. If your database is Vision version 5.0 or 5.1, you can obtain the script from the Deltek Knowledge Base article # [43088](#) titled [How to upgrade the Vision database](#). Download the Vision 6.1 SP4 conversion script and follow the instructions to apply it against your Vision 5.x database. When the conversion is complete, the Vision 7.1 installation and database conversion will recognize your database and make it available for upgrade.
- If you are using Vision 5.1 and have users connecting from the Internet outside of a Virtual Private Network (VPN), see the *Deltek Vision Advanced Technical Administration Guide* for advanced topics for configuring and securing the connections to Vision.

- Database and Web Server installations create a deltekvisionxx.sql (where xx is your version of Vision) file in the \program files\Deltek\Vision\Databases\Scripts folder that can be used to manually upgrade a 6.x database to the existing version. To convert your database manually, create a backup of your database before you run the database conversion using the Deltekvisionxx.sql script file (where xx is your version of Vision). Do **not** run the UnicodeDeltekVisionxx.sql or other script files unless directed to do so by Customer Care. If you plan to convert your Vision database to Unicode, see the Vision Help documentation for the appropriate steps.

Troubleshooting and Post-Installation

This chapter provides information about the files to send when contacting Deltek if problems occur during installation, as well as common installation errors and suggested solutions. It also provides information about how to verify a successful Vision installation by logging on to and launching Vision successfully.

Appendices

This guide contains the following appendices, which provide detailed installation information for specific application prerequisites and for changes to the Vision configuration after setup

Appendix	Title	Description
A	Microsoft Internet Information Server (IIS) Installation	Provides instructions for enabling IIS on Windows Server.
B	Options When Converting a Database During Installation	Provides information about additional database upgrade options that may occur during the Database Server or Web Server installations.
C	How to Identify your Reporting Service Web Service Connection Information	Provides instructions for identifying the Reporting Service Web Service URLs for SQL Server Reporting Services when setup is unable to identify them automatically.
D	Microsoft SQL Server Reporting Services Configuration Steps	Provides instructions for configuring Microsoft SQL Server Reporting Services (prerequisite before Vision can be installed on the Web or Report Servers).

Appendix	Title	Description
E	Printing in Vision	<p>Discusses the various methods for printing in Vision. This includes steps for:</p> <ul style="list-style-type: none">▪ Saving printout to PDF files▪ Printing to local printers on end-user computers without printing to PDF▪ Printing to network printers that are installed directly on the Web Server. <p>This appendix also includes instructions for modifying the Deltek Vision weblink entries from the default Vision local accounts to domain accounts in order to use network printers for Vision Batch jobs. Steps include creating accounts, assigning local policies, and adding role memberships.</p>
E	Load Standard Vision Reports	<p>Provides instructions for loading standard Vision reports to the report server. This appendix also explains how to identify and resolve connection errors in loading reports.</p>

Adding Custom Notes to This Guide

If you would like to add custom notes to this guide that are specific to your company, Adobe® Reader® X provides this ability. If you do not already use Adobe Reader X, you can download it [here](#) free from Adobe.

To add a custom note using Adobe Reader X, complete the following steps:

1. On the Reader toolbar, click **Comment** at far right.
2. In the **Annotations** pane that displays, click  **Sticky Note**. The cursor changes to match the button.
3. Position the cursor at the location in the guide where you want the note to appear, and click. A note icon is inserted at the location and a text box pops up.
4. Enter your information in the text box.
5. Continue adding notes as needed.
6. Save the document.



Deltek recommends that you save the document to a slightly different filename so as to keep the original from being overwritten.

When reading the document, cursor over a note icon to see the information. Double-click a note icon to edit the information.

If You Need Assistance

If you need assistance installing, implementing, or using Vision, Deltek makes a wealth of information and expertise readily available to you.

Customer Services

For over 20 years, Deltek has maintained close relationships with client firms, helping with their problems, listening to their needs, and getting to know their individual business environments. A full range of customer services has grown out of this close contact, including the following:

- Extensive self-support options through the Customer Care Connect Web portal.
- Phone and email support from Customer Care analysts
- Technical services
- Consulting services
- Custom programming
- Classroom, on-site, and Web-based training



Find out more about these and other services from the Customer Care Connect site.

Customer Care Connect Site

The Deltek Customer Care Connect site is a support Web portal for Deltek customers who purchase an Ongoing Support Plan (OSP).

The following are some of the many options you have at the Customer Care Connect site:

- Download the latest versions of your Deltek products
- Search Deltek's knowledge base
- Ask questions, exchange ideas, and share knowledge with other Deltek customers through the Deltek Connect Customer Forums
- Display or download product information, such as release notes, user guides, technical information, and white papers
- Submit a support case and check on its progress
- Transfer requested files to a Customer Care analyst
- Use Quick Chat to submit a question to a Customer Care analyst online
- Subscribe to Deltek communications about your Deltek products and services
- Receive alerts of new Deltek releases and hot fixes



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

Access Customer Care Connect

To access the Customer Care Connect site, complete the following steps:

1. Go to <http://support.deltek.com>.
2. Enter your Customer Care Connect **Username** and **Password**.
3. Click **Log In**.



If you do not have a username and password for the Customer Care Connect site, contact your firm's Vision Administrator.

If you forget your username or password, you can click the **Account Assistance** button on the login screen for help.

Additional Documentation

Deltek Vision includes an online help system that contains conceptual, procedural, and tab/field-level documentation. Click **Help » Contents** on the Vision toolbar to access the online help.

In addition to the online help system, Deltek provides user guides and quick reference cards (in PDF format) to help you install and use the Vision application. You can download user guides and quick reference cards from the [Deltek Customer Care Connect site](#).

Deltek Vision Guides	
Deltek Vision Getting Started and Concepts Guides	
Deltek Vision Getting Started Guide	This guide contains information about the Vision Web interface and all the Vision applications, with tips for navigating through the system, using the dashboard, and finding and opening records.
Deltek Vision Concepts Guide	This guide describes the concepts underlying the basic accounting, project control, and customer relationship management (CRM) functions of the Vision application.
Deltek Vision Installation and Implementation Guides	
Deltek Vision Advanced Technical Administration Guide	This guide provides IT staff and system administrators with instructions for installing and configuring advanced technical components of Vision.
Deploying Deltek Vision at a Hosting Provider	This guide contains instructions for deploying Deltek Vision at a hosting provider.
Deltek Vision Implementation Guide	This guide contains information about configuring and setting up Vision applications and features.

Deltek Vision Guides	
Deltek Vision Migration Guides	
Deltek Advantage to Deltek Vision Migration Guide	This guide contains information about migrating from Advantage to Vision, including the steps in the migration process and an overview of Vision features.
Deltek FMS to Deltek Vision Migration Guide	This guide contains information about migrating from FMS to Vision, including the steps in the migration process, discussions of the key migration decisions, and procedures for verifying the converted data.
Deltek Sema4 to Deltek Vision Migration Guide	This guide contains information about migrating from Sema4 to Vision, including the steps in the migration process and an overview of Vision features.
Deltek Vision Quick Reference Cards	
Deltek Vision Quick Reference Cards	<p>Quick reference cards provide snapshots of specific business processes or Vision forms, with tips for entering data and using application toolbars. The following quick reference cards are available:</p> <ul style="list-style-type: none"> ▪ Accounts Payable (Create a Voucher from a Purchase Order) ▪ Create Client from Vendor Utility ▪ Dashboard ▪ Desktop and Microsoft Office Integration ▪ Expense Report ▪ Navigation Tree Designer ▪ Project Planning ▪ Purchasing (Create a Standard Purchase Order) ▪ Resource Management (Generic Resource Assignments and Resource Utilization) ▪ Screen Designer ▪ SF330 Proposals ▪ Template Based E-mails ▪ Timesheet ▪ User Options ▪ Visualization
Deltek Vision Document Management Guide	
Deltek Vision Document Management Installation Guide	This guide contains detailed information on the prerequisites, general configuration, and installation procedures required to use the Vision Document Management application.

Deltek Vision Guides	
Deltek Vision Interface to Microsoft Project	
Deltek Vision Interface to Microsoft Project 2010	This guide describes how the manual scheduling feature in Microsoft Project 2010 impacts the two-way interface between Deltek Vision and Microsoft Project 2010.
Deltek Vision Performance Management Guides	
Deltek Vision Installation Guide for Performance Management (Analysis Cubes and Performance Dashboards)	This guide provides instructions on how to install and configure the following components of the Deltek Vision Performance Management module: <ul style="list-style-type: none"> ▪ Analysis Cubes ▪ Performance Management Dashboards
Deltek Vision Performance Management Content and Functionality Overview	This guide provides an overview of Vision Performance Management functionality and the pre-built visualizations that are included with it.
Deltek Vision Reporting Guides	
Deltek Vision Custom Reports and Microsoft® SQL Server Reporting Services	This guide provides instructions for creating, delivering, and generating Vision custom reports with Microsoft SQL Server Reporting Services and its report writing tools.
Deltek Vision Microsoft SQL Server Reporting Services Licensing FAQ	This guide explains the Microsoft SQL Server Reporting Services licensing implications for Vision.
Deltek Vision Connect for Microsoft Outlook Guides	
Deltek Vision Connect for Microsoft Outlook Installation Guide	This guide contains an overview of Vision Connect for Microsoft Outlook, as well as technical installation, setup, and maintenance information.
Deltek Vision Customizing Configuration Settings for Connect for Microsoft Outlook	This guide was formerly named: <i>Deltek Vision Connect for Microsoft Outlook Presets Configuration Guide</i> The guide is intended for system administrators, IT staff, or custom developers. It provides instructions on how to create presets to: configure default behavior for converting Microsoft Outlook contacts; control the display of the Synchronization Control Panel when issues occur during synchronization; and implement default and custom synchronization filters.
Deltek Vision Connect for Microsoft Outlook Frequently Asked Questions	This document contains frequently asked questions (FAQs) on topics regarding deployment, customization, environment, usage, and functionality.

Deltek Vision Guides	
Deltek VisionXtend Guides	
Deltek VisionXtend Web Services and APIs for Deltek Vision	This guide explains how to use the Deltek VisionXtend platform to integrate Vision with other applications, access web services, implement data validation routines, and establish workflow procedures using the Microsoft .NET Framework.
Deltek VisionXtend Testing the Vision Web APIs / Web Services	This guide provides basic information about testing Vision APIs using soapUI.
Deltek Vision Navigator Guides	
Deltek Vision Navigator Installation Guide	This guide contains technical installation, setup, and maintenance information for Vision Navigator.
Deltek Vision Project Connect Guides	
Deltek Vision Project Connect Installation and Administration Guide	This guide contains detailed information on installing and administering Project Connect for integrating Microsoft Project with Deltek Vision.
Deltek Vision Project Connect User's Guide for Microsoft Project 2010	This guide contains information for integrating for integrating Microsoft Project 2010 with Deltek Vision.
Deltek Vision Project Connect User's Guide for Microsoft Project 2007	This guide contains information for integrating for integrating Microsoft Project 2007 with Deltek Vision.

Chapter 1: Before You Begin Deployment

Before you begin deployment, it is important to understand the following:

- Reporting Services
- Deployment Decisions
- Hardware Requirements
- Supported Databases
- Platform Virtualization
- .NET Architecture

Questions to Ask Before You Begin

Before you install Vision, you should understand the Vision architecture, your deployment options, and the Vision recommended hardware requirements. Please see the following documents, which are available from the Knowledge Center tab of the Deltek Customer Care Connect site.

- Deltek Product Support Compatibility Matrix Guide
- Deltek Vision/GovWin CM 7.1 Technical Overview and System Requirements

You should also answer the following questions before you install Vision:

- How many concurrent users do you expect to use Vision?
- Do your servers meet the recommended hardware and software requirements?
 - Do you have the correct versions and Service Packs of Microsoft SQL Server and Reporting Services installed and configured for Vision?
 - Do you have the prerequisites installed on each of your Vision servers?
 - Did you review the prerequisite steps in the Appendices for reporting services and IIS?
- Do your client workstations meet the recommended hardware and software requirements?
- Will you be deploying Vision in an intranet or Internet scenario?
- Will Vision be accessed from a single location or from multiple locations?
- Will you be converting an existing Deltek Advantage, Deltek Award, Deltek CRM and Proposals, or Deltek Sema4 database to Vision?
- Does your technical staff need additional training on Microsoft Internet Explorer, Microsoft Windows Server, Microsoft Internet Information Server, or Microsoft SQL Server?



Database upgrades from Vision 6.x, 7.0 (LA or GA), and 7.0 SP1 are supported.

Reporting Services

Vision 7.1 uses Microsoft SQL Server Reporting Services as the Report Management and delivery platform.

There are several things to consider when you migrate to Vision 7.1:

- SQL Server Reporting Services is **not** installed as part of the Vision installation. 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. See Appendix C for related information.
- Vision 7.1 now supports SQL Server 2008 Business Intelligence Development Studio (BIDS). The SQL 2005 Reporting Services design tools (BIDS) are not supported with Vision 7.1.



If you have Microsoft Visual Studio 2010 installed on your BIDS development machine, Microsoft Visual Studio 2010 does not support Business Intelligence Development Studio Integration Services, Report Services and Analysis Services projects for SQL Server 2008 and SQL Server 2008 R2. To work around this issue, you can install Visual Studio 2008 on the same machine as Visual Studio 2010, and then open the Business Intelligence Development Studio projects in Visual Studio 2008. See the following Microsoft link for details: <http://msdn.microsoft.com/en-us/library/ms173767.aspx>

Microsoft SQL Server Reporting Services and Custom Reports

The software requirements for creating Vision custom reports with Microsoft SQL Server Reporting Services have changed. To create custom Vision reports, use either of the following:

- Vision 7.1 supports Microsoft SQL Server 2012 Standard and Enterprise editions for the core database and reporting services requirements of Vision. However, SQL Server 2012 is not yet supported for Vision custom reports created with SQL Server 2012's report writing tools—Report Builder 3.0 and SQL Server Data Tools (formerly called Business Intelligence Development Studio).
- **Report Builder 2.0** — Report Builder 2.0 is available in Microsoft SQL Server 2008 SP1. See <http://blogs.msdn.com/b/sqlrsteamblog/archive/2009/04/07/sql-server-2008-sp1-and-report-builder-update.aspx> for more information. Report Builder 1.0 is no longer supported for creating Vision custom reports.
- **Microsoft Business Intelligence Development Studio 2008 (also known as BIDS 2008 or Report Designer 2008)** — BIDS 2005 is no longer supported for creating Vision custom reports.

Copying Template Files

When you create custom reports on your workstation with BIDS 2008, you must copy the .rdl template files to the following location on your workstation:

C:\Program Files\Microsoft Visual Studio 9.0\Common7\IDE\PrivateAssemblies\ProjectItems\ReportProject
instead of this location:

C:\Program Files\Microsoft Visual Studio 8\Common7\IDE\PrivateAssemblies\ProjectItems\ReportProject

Modifying Custom Properties

In BIDS 2008, you can now modify custom properties in a report on the Properties window of the report. In the Properties list, navigate to **CustomProperties**. Click the ellipsis button to open the Custom Properties dialog box.

Custom Reports Created with Microsoft SQL Server Reporting Services 2005

You must use BIDS 2008 to upgrade custom reports that were created with SSRS 2005 before you can use the reports in Vision 7.1. Before you upgrade custom reports, Deltek recommends that the creator of the custom reports (Deltek Consulting Services, Deltek partners, or the person at your company) review the reports to ensure that there are no Vision framework changes that need to be applied within the report Business Objects. The Deltek Consulting Services Group can provide assistance with reports that contain custom Business Objects. Contact them at CustomServices@Deltek.com for more information.

The following Vision database tables had a name change in Vision 7.1 if you are migrating from Vision 6.x installations. You must update your report queries with the new table names, or you will receive errors when you run these reports.

Vision 6.x Table Name	Vision 7.1 Table Name
CFGCountry	FW_CFGCountry
CFGCurrency	FW_CFGCurrency
CFGPhoneFormat	FW_CFGPhoneFormat
CFGEnabledCurrencies	FW_CFGEnabledCurrencies
InfoCenterTabHeadings	FW_InfoCenterTabHeadings
ReportPrinters	FW_ReportPrinters
CFGCountry	FW_CFGCountry

After you address framework issues, upgrade the 2005 custom reports. To do this, open them in BIDs 2008 and resave the RDLs.

For custom reports that were created with the SQL 2005 Reporting Services design tools (BIDS), do not open the report (.rdl) file directly with the SQL Server 2008 BIDS. Instead, follow the recommended sequence of steps below.

To upgrade your custom reports after you address any Vision framework changes, complete the following steps:

1. Open and convert the project file (.rptproj) to Visual Studio / Visual Source Safe 2008.
If you do not have the project file (.rptproj) for the custom report, open a new project, and add the RDL file into the project.
2. Open the report file (.rdl) in designer mode.
3. Save the report file (.rdl).



There are many table and schema changes in the Vision 7.1 database that may cause your custom reports not to work properly after you upgrade them to match the SQL 2008 BIDS version supported by Vision 7.1. Deltek recommends that you rebuild your custom reports using the Vision 7.1 reports as a template to ensure that your reports work correctly. The Deltek Consulting Services Group can provide more assistance with custom reports if you need it. Contact them at CustomServices@Deltek.com for more information.

Custom Invoice Templates and Other Custom Forms Created with Microsoft SQL Server Reporting Services 2005

You must use BIDS 2008 to upgrade custom invoice templates and other custom reports used for Deltek forms (such as Purchase Order forms, Purchase Requisition forms, and Request for Price Quotes) that were created with SSRS 2005. You must upgrade them before you can use them in Vision 7.1.

The information in the previous section titled “Custom Reports Created with Microsoft SQL Server Reporting Services 2005” section also applies for invoice templates and other custom Deltek forms. Refer to that section for information on how to upgrade invoice templates and other custom forms.

Overview of Reporting Services

Microsoft SQL Server 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. You view and manage the reports 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 the following benefits:

- **Ease of Deployment and Management** — SSRS is embedded in SQL Server, the database many firms 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 a leading Business Intelligence (BI) platform.
- **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 the Microsoft documentation included with your SQL Server (Books Online, Microsoft Labs, and so on). The following links provide steps for configuring Reporting Services. Select your version of SQL Server.

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

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

Reporting Services Overview and Tutorials:

- <http://msdn.microsoft.com/en-us/library/ms159106.aspx>

Reporting Services 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 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 **Error! Reference source not found.** 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, Microsoft SQL Server 2008 R2, and Microsoft SQL Server 2012. Click **Other Versions** and select the version that you are using:

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

Information for Owners of SQL Server Express Edition

Deltak no longer ships the MSDE/SQL Express Management Console because the SQL Server Management Studio is now included with the SQL Express installations. Although the SQL Express Edition does not provide a way to schedule the automatic maintenance and backup of your database, Microsoft has provided documentation and Open Source tools for creating a

scheduled backup and maintenance plan for SQL Express. The links below provide the details for performing those activities. Refer to these sites for guidance on implementing these tools in your environment.

The Microsoft hosted Open Source Project site (www.codeplex.com) provides a Project/Tool for SQL Express users named ExpressMaint (<http://expressmaint.codeplex.com/>) that can be used to create the maintenance plans. This project maintains two utilities for automating the backup and maintenance of databases for SQL Server 2005/2008/2008R2 Express Edition. They are based on the sqlmaint application that came with SQL Server 2000 but were updated for SQL Server 2005/2008/2008R2.

Microsoft also provides documentation for manually creating a Windows scheduled task to work with SQL Stored Procedures for automating the daily backup and maintenance plans.

- Schedule and Automate Backups of SQL Server Databases in SQL Server Express:
<http://support.microsoft.com/kb/2019698>
- Automate Maintenance Tasks with SQL Server Express:
<http://archive.msdn.microsoft.com/SQLExamples/Wiki/View.aspx?title=ExpressMaintenance>

The Microsoft MSDN article also references another site that includes free tools for creating scheduled jobs. You can use those tools with the information in the [KB 2019698](#) article.

- SQL Server Backup, Integrity Check, and Index and Statistics Maintenance:
<http://ola.hallengren.com/>

Deltek recommends completing the following activities on your database daily:

1. Check Database Integrity:
<http://archive.msdn.microsoft.com/SQLExamples/Wiki/View.aspx?title=ExpressMaintenance#CheckDB>
2. Reorganize/Rebuild Indexes/Update Statistics:
<http://archive.msdn.microsoft.com/SQLExamples/Wiki/View.aspx?title=ExpressMaintenance#IndexStats>
3. Back up your database(s):
<http://support.microsoft.com/kb/2019698>

If you are implementing SQL Server Express Edition, Deltek requires that you use **SQL Server Express Edition with Advanced Services** 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. The other SQL Express Edition installers do not have all the components needed to support Deltek Vision.

Direct Links for SQL Server 2012 SP1 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, this document provides the direct links for the SQL Server 2012 SP1 Express Edition with Advanced Services installation packages. Click the following link to access the download page:

<http://www.microsoft.com/en-us/download/details.aspx?id=35579>

When you open this download page, there are only two installations that can be used with Vision. The product name is SQL Server 2012 SP1 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.

Use these links for the two downloads:

- 64-bit / x64 Installation for 64-bit Operating Systems:
http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPRAVD_x64_ENU.exe (1.9 GB)
- 32-bit / x86 Installation for 32-bit Operating Systems:
http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPRAVD_x86_ENU.exe (1.9 GB)

After you install SQL Server Express, Deltek recommends that you download and install the following cumulative update package 1 (CU1) for SQL Server 2012 Service Pack 1 from Microsoft: <http://support.microsoft.com/kb/2765331>

The following Microsoft link provides information on prerequisite requirements, release notes, installation guide and other helpful links for performing the SQL Server Express 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 (Microsoft SQL Server licensing page) describes the licensing options available with SQL Server and Reporting Services:

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

Deployment Decisions

Review the following details about the deployment models and logical tiers available for Vision.

Vision Deployment Models

There are three different models used to deploy Vision. The model you choose depends on your firm's needs in regard to size, cost considerations, security requirements, and fault tolerance.

Model	Description
One Server	<p>You install all tiers on a single server. Firms choose this model if all users are at a single location and will only access Vision in the office or over a Virtual Private Network (VPN) connection into the corporate network. Infrastructure security is not a concern with this model because all application use is internal to the organization.</p> <p>This model is designed for small firms (fewer than 20 employees) without technical staff or plans to use Vision Server-to-Server Synchronization.</p>

Model	Description
	<p>Begin with Chapter 3 for steps to download and launch the Vision installation. For detailed installation steps, see Chapter 4.</p>
<p>Two Servers</p>	<p>You install on at least two physical tiers. Your purchased licenses and edition of SQL Server determine your two-server deployment configuration.</p> <ul style="list-style-type: none"> ▪ Configuration 1 — Typically, one server will have the Report Server tier and Database Server tier residing on the same server and the web, application, and process server on another server. Configuration 1 may be the recommended method for firms with a single SQL Server license. Infrastructure security is not necessarily a concern in this model, because all application use is internal to the organization. This model is designed for small to medium-sized firms (20 – 150 employees) that may or may not have in-house IT staff and do not plan to use Vision Server-to-Server Synchronization. ▪ Configuration 2 — Some firms may also have the database server as the dedicated server, with the other server acting as the report, application, and Web servers. Based on these variations, this model suits firms where all users are at a single location and will only be accessing Vision in the office or over a Virtual Private Network (VPN) connection into the corporate network. <p>Begin with Chapter 3 for steps for downloading and launching the Vision installation. For detailed installation steps, see Chapter 5.</p>
<p>Three or More Servers</p>	<p>You install on three or more physical tiers. This scenario offers a database server, one or more report servers, one or more Web/application servers, and possibly one or more Process servers. This model is designed for large firms (150 or more employees) with multiple locations that will use Vision on an internal Wide Area Network (WAN). There might be additional report, Web/application, or Process servers required for load balancing, performance, security, or fault tolerance.</p> <p>This model is designed for firms with complex deployment requirements. Firms deploying this model should have in-house technical staff proficient in firewall management.</p> <p>Begin with Chapter 3 for steps for downloading and launching the Vision installation. For detailed installation steps, see Chapter 6.</p>

Changes to your Existing Vision Deployment Models

If your firm previously deployed a two-tier deployment with the Database Server on one machine, and the Web\Application\Report Tier on another machine, you now have the option of two alternative configurations (configuration 1 or 2 in the preceding table) for deploying a two tier installation.

- Your SQL Server Edition and purchased licenses determine your two-server deployment configuration.
- WorkGroup and SQL Server Express Editions require that the Report Server database used by Reporting Services and any external data sources (Vision database) reside on the same machine. If you have either of these editions a single server deployment model or the two server model, Configuration 2 is the option you will migrate to. See page 46 for more information.

- Standard and Enterprise Edition support having the Vision database on a separate database server than the server hosting the Reporting Services Report Server Database. This will allow deployments on two or more tiers. For these editions, review the license information and links above to determine if you have the appropriate number of SQL Server licenses.
- Vision 7.1 uses the Microsoft SQL Reporting Services WinForm report viewer control to render reports. This control requires a direct connection to the server running the SQL Reporting Services web service over Port 80. Your report server (and possibly your database server if they are installed on the same machine) will be directly exposed to the internet, which poses a security risk to your data. It also requires an external FQDN so that the report server can be resolved by the external users.

A reverse proxy that uses Microsoft's Application Request Routing (ARR) extension for IIS 7.0/7.5 in Windows Server 2008/2008R2 allows the direct forwarding of requests through the Vision web server to the reporting services web service with responses back to your Internet clients.



See the [Deltek Vision Advanced Technical Administration Guide](#) for information.

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 that you use to distribute Vision's logical tiers across physical tiers, or actual machines, depends on your firm's needs.



Chapter 2 provides brief technical description and requirements for each logical tier.

For current hardware and software requirements, see the [Deltek Product Support Compatibility Matrix](#) document, which is available from the Knowledge Center tab of the Deltek Customer Care Connect site.

Non-Supported Environments

The following are non-supported environments for Vision 7.1:

- Vision does not support using Microsoft Windows® XP, Windows Vista™, or Windows 7 for production server installation.
- Vision 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 Microsoft SQL Server 2005.
- Vision no longer supports Windows 2000 Server or Windows Server 2003.
- Vision no longer supports Microsoft Office 2003 or earlier versions.
- Vision no longer supports Actuate.
- You cannot perform a Single Server deployment on the Microsoft Small Business Server. Only the Vision database tier or report tier can be installed on this server.
- You cannot install any Vision tier on the Microsoft ISA server, or any other software-based firewall (except Windows firewall).

- You cannot install any Deltek Vision tier on any server with Microsoft Terminal Services (Application Mode Only) running. Terminal Services in remote administration is fully supported.
- You cannot install any Vision tier on a Domain Controller.
- You cannot install any Vision tier on any version of Microsoft Exchange Server.
- You cannot install any Vision tier (except Document Management) on any version of SharePoint Server.
- Vision is not compatible with Microsoft Project 2003. Importing and/or exporting to Microsoft Project 2003 from the Planning application will produce an error.
- Platform Virtualization is a new 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.
- Microsoft's Application Request Routing (ARR) 3.0 is not supported in Windows Server 2012 because at the time of release of Vision 7.1, ARR 3.0 was still in Microsoft Beta.

Technical Considerations

The following are technical considerations for Vision 7.1:

Technical Consideration	Description
Running multiple versions of Vision	Vision 7.0 SP1 and earlier versions of Vision cannot be run at the same time on the same Web/Application server.
Microsoft .NET Framework 3.5 SP1	<p>Microsoft .NET Framework 3.5 SP1 must be installed on the following:</p> <ul style="list-style-type: none"> ▪ All client workstations running Deltek Vision. ▪ The servers hosting the Vision Application and the Process servers.
64-bit processing	<p>Vision supports 64-bit processing for:</p> <ul style="list-style-type: none"> ▪ All Vision logical tiers (web/application, database, and report tiers) ▪ The client tier (Windows 7, Windows Vista, and Windows XP)
Windows Server versions	<p>Vision supports the following Windows Server versions:</p> <ul style="list-style-type: none"> ▪ Windows Server 2012 Document Management is not supported on Windows Server 2012 because SharePoint 2010 is not yet supported on Windows Server 2012. ▪ Windows Server 2008 R2 Service Pack 1 SP1 ▪ Windows Server 2008 SP2
SQL 2012 Availability Groups	<p>Although Vision 7.1 supports SQL 2012, it <u>does not</u> yet support SQL 2012 Availability Groups. If you install Vision 7.1 to a SQL Server that is configured with Availability Groups and you add your Vision database to that Availability Group, you may see a Use Availability Groups check box on the General tab in Vision Weblink. <u>Do not</u> select this check box. Vision support for SQL 2012 Availability Groups, specifically Read-Only Routing, will be announced at a future date.</p>
Microsoft SQL Server Database Engine and Reporting Services and Analysis Services	<p>Vision supports the following versions of Microsoft SQL Server Database Engine and Reporting Services:</p> <ul style="list-style-type: none"> ▪ Microsoft SQL Server 2012 SP1 + CU1 ▪ Microsoft SQL Server 2008 R2, SP2 + CU1 ▪ Microsoft SQL Server 2008, SP3 + CU6 ▪ Microsoft SQL Server 2008, SP2

Technical Consideration	Description
Microsoft SQL Server Reporting Services	<p>Microsoft SQL Server Reporting Services:</p> <ul style="list-style-type: none"> ▪ Must be installed and configured before you run the Vision installation. Follow the Microsoft documentation for your installation. ▪ Are supported in Native Mode configuration only. The SharePoint Integrated Mode is not supported.
Microsoft SQL Server Analysis Services	<p>This is supported in Multidimensional Mode only. The Tabular Mode introduced with SQL 2012 is not supported.</p>
Windows Server with IIS	<p>Vision supports:</p> <ul style="list-style-type: none"> ▪ Windows Server 2012 with IIS 8.0 ▪ Windows Server 2008 with IIS 7.0 ▪ Windows Server 2008 R2 with IIS 7.5
Microsoft Windows	<p>Vision can be run as a client on any of the following:</p> <ul style="list-style-type: none"> ▪ Microsoft Windows XP (SP3) ▪ Microsoft Windows Vista (SP2) ▪ Microsoft Windows 7 SP1 ▪ Microsoft Windows 8
Microsoft Internet Explorer	<p>Vision can be run with Microsoft Internet Explorer versions 10.0, 9.0, 8.0, and 7.0.</p>
Microsoft Office 2010	<ul style="list-style-type: none"> ▪ Vision supports the 32-bit version of Microsoft Office 2010. ▪ Microsoft Office 2010 is also supported for use with Vision Connect for Microsoft Outlook.
Microsoft Project	<p>Vision is compatible with:</p> <ul style="list-style-type: none"> ▪ Microsoft Project 2010 ▪ Microsoft Project 2007
Vision Document Management	<p>Vision supports the following for Document Management:</p> <ul style="list-style-type: none"> ▪ Microsoft SharePoint Server 2010 SP1 ▪ Microsoft SharePoint Foundation Server 2010 SP1 ▪ Microsoft SharePoint Server 2007 SP3 ▪ Microsoft SharePoint Services 3.0 SP3

Technical Consideration	Description
	Document Management is not supported on Windows Server 2012.
Vision Connect for Microsoft Outlook	Vision Connect for Microsoft Outlook: <ul style="list-style-type: none"> ▪ Is not supported with Microsoft Windows 8. ▪ Is supported with Microsoft Office 2010.



Supported versions are the most current, actively tested technologies used to deploy Vision. Compatible versions are recent technologies that have been tested for deploying Vision. However, these are not actively being tested but are believed to be compatible with Vision. For a full explanation of compatible versus supported versions, see the *Deltek Product Support Compatibility Matrix* document that you can download at the Deltek Customer Care Connect site.

Known Issues with the Vision 7.1 Installation

If you are upgrading from a 6.x version of Vision and you use Microsoft SQL Server Session State that is located in a database other than your Vision database, see KB article # 72573 for additional instructions. During the Vision upgrade process, the SessionState table is renamed. However, if the table is not located in the Vision transaction database, it will not be renamed. You must manually rename the table using the instructions in the KB article.

Full List of Supported SQL Server Software

For a full list of Microsoft SQL Server releases (R), service packs (SP), and cumulative updates (CU) that Vision supports, see the Deltek Product Support Compatibility Matrix. You can download this PDF file at the Deltek Customer Care Connect site.

Supported Databases

A Microsoft SQL Server 2008, 2008 R2, or 2012 database engine is required to run 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 Express Edition with Advanced Services.
- For firms with more than 50 employees (six or more concurrent users), Vision supports Microsoft SQL Server.

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

SQL Server Reporting Services 2008 R2 and Invoices

If you are using Vision 7.1 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 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 and Server-Side Printing

If you deploy Vision 7.1 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 can 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 can automatically update your employee self-service system when employee information is changed in Vision.

The .NET framework gives you 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 installer that contains the download manager requires that you install at least Microsoft .NET Framework 3.5 (SP1) on the Vision tier before you begin the Vision installation.

If Microsoft .NET Framework 3.5 (SP1) is not detected, the installation halts and you must install it before you can run the Vision installation. Since all of the tiers require Microsoft .NET Framework 3.5 (SP1), 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. Customers use it 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 Delttek's "Virtual Environments Statement" on the Delttek Customer Care Connect site for more information.

Multiple Languages

Vision 7.1 allows you to install a blank Vision database in either English (United States) or English (International) on your database server. Databases with multiple languages other than English are not supported with Vision 7.1

- **New Installations** — For customers installing Vision for the first time, the installation routine includes a step in which you select the English language database version—English (United States) or English (International)—that you want to use for the installation. The database you select determines the language that subsequently displays 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 checks the pre-6.0 custom label spellings for the words "labor" and "check," and then converts the database based on the custom label spellings.

Language Options — The Vision client deployment includes options for selecting the following language versions when you run the application: English (United States or International). The other languages—French (Canada or France), Spanish, Dutch (Netherlands), and German—are not supported with Vision 7.1.

Chapter 2: Installation Information and Deployment Model Checklists

This chapter contains installation checklists to help you properly set up the machine or machines where you will install Vision software.

About the Vision Installation Programs

The Vision installation program downloaded from the Deltek Distribution site is used to install the Vision software and any of the following deployment models:

- One Server Deployment Model
- Two Server Deployment Model
 - One database/report server and one web/application/process server (configuration 1); **or**
 - One database server and one web/application/process/report server (configuration 2)
- Three or More Server Deployment Model (any supported combination of web/application, report, process server, and database tier)
- Additional Vision Process Server tiers

Download Manager

The Vision installation uses a Download Manager to manage the size of the installation download file. The Download Manager allows prerequisite third party applications and required additional Vision files to be downloaded and installed on the Vision tier only when necessary.

- Examples of third party applications are Microsoft XML 4.0 (SP2), Microsoft SQL XML 4.0 (SP1), and Solid PDF Converter.
- Examples of additional Vision files are the Blank Database, the Sample Database, and the help files.

These files are not part of the Vision download file but are called from a remote FTP server when they are required for successful completion of the installation.

The Download Manager is a Winform application that requires previous installation of the Microsoft .NET Framework 2.0 on the Vision tier. Install Microsoft .NET 3.5SP1, instead of .NET 2.0 since the .NET 3.5SP1 installation also installs .NET 2.0 and .NET 3.0 and is required on all Vision tiers.

- You can download the Microsoft .NET Framework 3.5 SP1 here:
<http://www.microsoft.com/downloads/details.aspx?familyid=ab99342f-5d1a-413d-8319-81da479ab0d7&displaylang=en>
- If your Vision tier has internet connectivity, proceed to the Prerequisite Installation Checklists. If your Vision tier does not have internet connectivity, see the following procedures for downloading your Vision installation and prerequisite files.

Deltek Vision Install Prepare Utility

Use the Deltek Vision Install Prepare Utility (DeltekVisionInstallPrepareUtility.exe) for the following scenarios:

- The Vision Server does not have access to the internet
- Setup is unable to finish because the download manager is unable to download prerequisites needed for the installation to continue.

The Deltek Vision Install Prepare Utility is a self-extracting tool that downloads the prerequisites that are required for use by the installation from a machine other than the installation server.

The process is a combination of two steps:

- You extract the setup files from the DeltekVision71.exe file and
- You use the InstallPrepare Utility to download the files and place them into the extracted folder.

When you are ready to install Vision, you launch the extracted setup.exe file and it automatically finds the downloaded files in the root of the folder where the setup.exe is located and does not try to download the prerequisites.

File Extraction for Multi-Tier Deployments

Previous Vision 6.x releases included an extract option that allowed you to extract the setup.exe and the installation package to a central location that could then be used to launch the setup for multi-tier deployments. For cases where the Deltek Server did not have internet access and the prerequisite components had to be downloaded prior to running setup, you could use the extract option to save the setup files to a central location. Then, you could use the DeltekVisionInstallPrepare utility to download the prerequisite files and store them in the same folder as the extracted setup.exe.

If you prefer to extract the files manually, you can launch the installer using a command line that will extract the setup.exe file along with the rest of the installation into a folder named Disk1.

When you launch the installer, you must specify a destination folder and the Disk1 folder will be created within it. The most common case for this is when the server that you are performing the installation on does not have access to the internet and you must use the DeltekInstallPrepareUtility to download the prerequisite files for the installation. The downloaded files will need to be placed into the uncompressed Disk1 folder with the setup.exe file that were extracted.

To extract the files manually, complete the following:

1. Download the DeltekVision71.exe installer.
2. Copy the file to a local folder.
3. At a DOS prompt, run the following command line:

DeltekVision71.exe/extract_all:c:\destinationfolder

- The /extract_all is the flag that tells the installer to extract the contents of the installation.
- The c:\destinationfolder is the syntax for specifying the location to extract the contents of the installer.
- The following example assumes that the DeltekVision71.exe file was downloaded and saved into a folder named C:\Media and will also be extracted into the same folder: DeltekVision71.exe /extract_all:c:\media

- After the extraction is complete, the C:\Media folder will contain a **Disk 1** subfolder. Copy any downloaded prerequisite files into the folder and launch the setup.exe file.

Download Files and Place in Extracted Folder

To use the Deltek Vision Install Prepare Utility, complete the following steps:

1. On a machine that has access to the Internet, perform the steps to extract the setup.exe and other Vision setup files. By default, the extracted files are created in a folder named Disk1 in the folder where the command line stated to extract the files.
2. Obtain the DeltekVisioninstallPrepareUtility.exe file from a Vision Technical Services support representative.
3. Launch the DeltekVisioninstallPrepareUtility.exe on the same machine and it automatically extracts its contents into the folder in which you saved the .exe file.
4. Change the **Path to Save/Extract** location to point to the Disk1 folder that was created when you ran the extract all switch. This extracts the files and allows it to download the prerequisite components into the same folder in which the setup.exe file is located.
5. Select the type of installation you plan to perform in the **Download all components for** drop-down list. The utility automatically selects the prerequisites required for the installation you have selected.
6. Click the **Download Components** button to download the files into the Vision Setup folder.
7. On the Vision web servers, follow the steps for your deployment model running the extracted setup.exe file.

Prerequisite Installation Checklists

One Server Deployment Model

Because the one server deployment model involves installing all Vision tiers on one server, you install all prerequisite software listed below on that same server. Check off each step as completed. A summary table of the prerequisites is included at the start of each section during the installation steps.

To deploy on one server, complete the following steps:

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install Internet Explorer 7.0 or higher.
3. Install Microsoft Internet Information Services (IIS) 7.0/7.5/8.0 with ASP .NET enabled. See Appendix A: Microsoft Internet Information Server (IIS) Installation on Windows Server 2008/2008 R2/2012 for procedural information. Complete **one** of the following actions:
 - If you are using Microsoft SQL Server 2012, Standard and enterprise editions, install and configure Service Pack 1 from the Microsoft download site (<http://www.microsoft.com/en-us/download/details.aspx?id=35575>) plus Cumulative Update 1 (CU1) for SP1 from the Microsoft website (<http://support.microsoft.com/kb/2765331>).
 - If you are using SQL Server 2008, install Microsoft SQL Server 2008 (SP3) - (<http://www.microsoft.com/en-us/download/details.aspx?id=27594>), plus Cumulative Update package 6 for SQL Server 2008 Service Pack 3 (CU6) - (<http://support.microsoft.com/kb/2715953>) from the Microsoft website.
 - If you are using SQL Server 2008 R2, install Microsoft SQL Server 2008 R2 SP2 (<http://www.microsoft.com/en-us/download/details.aspx?id=30437>) plus Cumulative Update 1 (CU1) (10.50.4260.0) for SQL Server 2008 R2 SP2 from the Microsoft website: <http://support.microsoft.com/kb/2720425>
 - If your firm profile is small enough to support using Microsoft SQL Server Express Edition with Advanced Services, you must use this as the Database and Report Server for your Vision implementation. 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, this document provides the direct links for the SQL Server 2012 SP1 Express Edition with Advanced Services installation packages. Click the following link to access the download page:

<http://www.microsoft.com/en-us/download/details.aspx?id=35579>

Use these links for the two downloads:

64-bit / x64 Installation for 64-bit Operating Systems:

http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPADV_x64_ENU.exe (1.9 GB)

32-bit / x86 Installation for 32-bit Operating Systems:

http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPADV_x86_ENU.exe (1.9 GB)

- Enable the TCP/IP and Shared Memory Network Protocols in SQL Server Configuration Manager on the Microsoft SQL Server. All network protocols are installed by SQL Server Setup, but may or may not be enabled. Use SQL Server Configuration Manager to enable TCP/IP and Shared Memory to allow Vision to connect to the database. For details, see the article on Microsoft's website titled "How to: Enable or Disable a Server Network Protocol (SQL Server Configuration Manager)" - <http://msdn.microsoft.com/en-us/library/ms191294.aspx>
4. Verify the name of your SQL Server Instance. The default installation uses the Server Name for the connection and installs as an instance named "MSSQLSERVER". Sometimes, Microsoft SQL Server is installed using an instance name other than the default (MSSQLSERVER). The SQL Server Express Edition installer from Microsoft installs as the named instance **SQLEXPRESS**. If you do not know the name of your SQL Server Instance (used for connecting to the SQL Server) or you are unable to connect to your database server after installation, see the article on Microsoft's website titled "How to: Determine Whether the Database Engine Is Installed and Started" - <http://msdn.microsoft.com/en-us/library/ms366339.aspx>

When connecting to the Default SQL Server Database Engine instance, you use the name of your Database server. SQL Server automatically maps the Default Instance of the Database Engine to the Server Name when accepting connections.

When connecting to a named instance of SQL Server Database Engine, you must specify the name of the SQL Server plus the instance in the connection in the format of SERVERNAME\INSTANCENAME

For example, if your SQL Server is named SQLSERVER1 and you installed to an instance named SQL2008, you would specify the server connection information in the format of SQLSERVER1\SQL2008

5. If you experience connection errors to your database or report server and have verified the previous steps, verify that Windows (or your) firewall is not blocking access to the SQL Server Database Engine and Reporting Services.



See the following Microsoft links for detailed steps:

How to: Configure a Firewall for Report Server Access - <http://msdn.microsoft.com/en-us/library/bb934283.aspx>

How to: Configure a Windows Firewall for Database Engine Access - <http://msdn.microsoft.com/en-us/library/ms175043.aspx>

6. Configure Reporting Services. (To configure printing to network printers for Vision batch jobs after Vision is installed, see Appendix E: Printing in Vision 7.x.)
7. Install 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>

Two Server Deployment Model

The two server deployment model offers two possible configurations:

- **Configuration 1** — The report server and database server reside on the same server and the web, application, and process server on another server

- **Configuration 2** — You install the web, application, and report tier on one server, and the database tier on a separate server

You perform a different set of steps for each server. A summary table of the prerequisites is included at the start of each section during the installation steps.

- Refer to the Web, Application, and Report Tier Checklist to install prerequisites on your Web, application, and report server machine.
- Refer to the Database Tier checklist (the second checklist below) to install prerequisites on your database server.

Configuration 1 — Database and Report Tier Checklist

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install Internet Explorer version 7.0 or higher.
3. Complete **one** of the following actions:
 - If you are using Microsoft SQL Server 2012, Standard and Enterprise editions, install and configure Service Pack 1 from the Microsoft download site (<http://www.microsoft.com/en-us/download/details.aspx?id=35575>), plus Cumulative Update 1 (CU1) for SP1 from the Microsoft website: (<http://support.microsoft.com/kb/2765331>)
 - If you are using SQL Server 2008, install Microsoft SQL Server 2008 (SP3) - (<http://www.microsoft.com/en-us/download/details.aspx?id=27594>), plus Cumulative Update package 6 for SQL Server 2008 Service Pack 3 (CU6) - (<http://support.microsoft.com/kb/2715953>) from the Microsoft website.
 - If you are using SQL Server 2008 R2, install Microsoft SQL Server 2008 R2 SP2 (<http://www.microsoft.com/en-us/download/details.aspx?id=30437>) plus Cumulative Update 1 (CU1) (10.50.4260.0) for SQL Server 2008 R2 SP2 from the Microsoft website: <http://support.microsoft.com/kb/2720425>
 - If your firm profile is small enough to support using Microsoft SQL Server Express Edition with Advanced Services, you must use this as the Database and Report Server for your Vision implementation. 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, this document provides the direct links for the SQL Server 2012 SP1 Express Edition with Advanced Services installation packages. Click the following link to access the download page:

<http://www.microsoft.com/en-us/download/details.aspx?id=35579>

Use these links for the two downloads:

64-bit / x64 Installation for 64-bit Operating Systems:

http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPADV_x64_ENU.exe (1.9 GB)

32-bit / x86 Installation for 32-bit Operating Systems:

http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPADV_x86_ENU.exe (1.9 GB)

4. Enable the TCP/IP and Shared Memory Network Protocols in SQL Server Configuration Manager on the Microsoft SQL Server. All network protocols are installed by SQL Server Setup, but may or may not be enabled. Use SQL Server Configuration Manager to enable TCP/IP and Shared Memory to allow Vision to connect to the database. For details, see the article on Microsoft's website titled "How to: Enable or Disable a Server Network Protocol (SQL Server Configuration Manager)" - <http://msdn.microsoft.com/en-us/library/ms191294.aspx>
5. Verify the name of your SQL Server Instance. The default installation uses the Server Name for the connection and installs as an instance named "MSSQLSERVER". Sometimes, Microsoft SQL Server is installed using an instance name other than the default (MSSQLSERVER). The SQL Server Express Edition installer from Microsoft installs as the named instance **SQLEXPRESS**. If you do not know the name of your SQL Server Instance (used for connecting to the SQL Server) or you are unable to connect to your database server after installation, see the article on Microsoft's website titled "How to: Determine Whether the Database Engine Is Installed and Started" - <http://msdn.microsoft.com/en-us/library/ms366339.aspx>

When connecting to the Default SQL Server Database Engine instance, you use the name of your Database server. SQL Server automatically maps the Default Instance of the Database Engine to the Server Name when accepting connections.

When connecting to a named instance of SQL Server Database Engine, you must specify the name of the SQL Server plus the instance in the connection in the format of **SERVERNAME\INSTANCENAME**

For example, if your SQL Server is named SQLSERVER1 and you installed to an instance named SQL2008, you would specify the server connection information in the format of **SQLSERVER1\SQL2008**

6. If you experience connection errors to your database or report server and have verified the previous steps, verify that Windows (or your) firewall is not blocking access to the SQL Server Database Engine and Reporting Services.



See the following Microsoft links for detailed steps:

How to: Configure a Firewall for Report Server Access - <http://msdn.microsoft.com/en-us/library/bb934283.aspx>

How to: Configure a Windows Firewall for Database Engine Access - <http://msdn.microsoft.com/en-us/library/ms175043.aspx>

7. Configure Reporting Services. To configure printing to network printers for Vision batch jobs, see Appendix E: Printing in Vision 7.x.

Configuration 1 — Web Application and Process Tier Checklist

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install Internet Explorer version 7.0 or higher.
3. Complete **one** of the following actions:
 - If you are using Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions, install and configure.
 - If you are using SQL Server 2008, install Microsoft SQL Server 2008 (SP3) - (<http://www.microsoft.com/en-us/download/details.aspx?id=27594>), plus Cumulative Update package 6 for SQL Server 2008 Service Pack 3 (CU6) - (<http://support.microsoft.com/kb/2715953>) from the Microsoft website.

- If you are using SQL Server 2008 R2, install Microsoft SQL Server 2008 R2 SP2 (<http://www.microsoft.com/en-us/download/details.aspx?id=30437>) plus Cumulative Update 1 (CU1) (10.50.4260.0) for SQL Server 2008 R2 SP2 from the Microsoft website: <http://support.microsoft.com/kb/2720425>
- If your firm profile is small enough to support using Microsoft SQL Server Express Edition with Advanced Services, you must use this as the Database and Report Server for your Vision implementation. 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, this document provides the direct links for the SQL Server 2012 SP1 Express Edition with Advanced Services installation packages. Click the following link to access the download page:

<http://www.microsoft.com/en-us/download/details.aspx?id=35579>

Use these links for the two downloads:

64-bit / x64 Installation for 64-bit Operating Systems:

http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPADV_x64_ENU.exe (1.9 GB)

32-bit / x86 Installation for 32-bit Operating Systems:

http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPADV_x86_ENU.exe (1.9 GB)

4. Install 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>
5. Configure Reporting Services. (To configure printing to network printers for Vision batch jobs after Vision is installed, see Appendix E: Printing in Vision 7.x.)
6. If you experience connection errors to your database or report server and have verified the previous steps, verify that Windows (or your) firewall is not blocking access to the SQL Server Database Engine and Reporting Services.



See the following Microsoft links for detailed steps:

How to: Configure a Firewall for Report Server Access - <http://msdn.microsoft.com/en-us/library/bb934283.aspx>

How to: Configure a Windows Firewall for Database Engine Access - <http://msdn.microsoft.com/en-us/library/ms175043.aspx>

Configuration 2 — Database Tier Checklist

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install Internet Explorer version 7.0 or higher.
3. Complete **one** of the following actions:
 - If you are using Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions, install and configure.

- If you are using SQL Server 2008, install Microsoft SQL Server 2008 (SP3) - (<http://www.microsoft.com/en-us/download/details.aspx?id=27594>), plus Cumulative Update package 6 for SQL Server 2008 Service Pack 3 (CU6) - (<http://support.microsoft.com/kb/2715953>) from the Microsoft website.
- If you are using SQL Server 2008 R2, install Microsoft SQL Server 2008 R2 SP2 (<http://www.microsoft.com/en-us/download/details.aspx?id=30437>) plus Cumulative Update 1 (CU1) (10.50.4260.0) for SQL Server 2008 R2 SP2 from the Microsoft website: <http://support.microsoft.com/kb/2720425>
- If your firm profile is small enough to support using Microsoft SQL Server Express Edition with Advanced Services, you must use this as the Database and Report Server for your Vision implementation. 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, this document provides the direct links for the SQL Server 2012 SP1 Express Edition with Advanced Services installation packages. Click the following link to access the download page:

<http://www.microsoft.com/en-us/download/details.aspx?id=35579>

Use these links for the two downloads:

64-bit / x64 Installation for 64-bit Operating Systems:

http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPADV_x64_ENU.exe (1.9 GB)

32-bit / x86 Installation for 32-bit Operating Systems:

http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPADV_x86_ENU.exe (1.9 GB)

Configuration 2 — Web Application and Report Tier Checklist

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install Internet Explorer version 7.0 or higher.
3. Complete the following: If your operating system is Windows Server 2008 or Windows Server 2008 R2, install Microsoft Internet Information Services (IIS) 7.0/7.5/8.0 with ASP .NET enabled. See Appendix A: Microsoft Internet Information Server (IIS) Installation on Windows Server 2008/2008 R2/2012 for procedural information.
4. Install and configure Microsoft SQL Server 2008 SP3 + CU6 (10.00.5788.00), Microsoft SQL Server 2008 R2 SP2 + CU1 (10.50.4260.0), or Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions.
5. Configure Reporting Services. (To configure printing to network printers for Vision batch jobs after Vision is installed, see Appendix E: Printing in Vision 7.x for procedural information.)
6. Install 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>

Three or More Servers Installation Checklist

Because the three or more servers deployment model involves installing the Web and application tier on one server, the report tier on a second server, and the database tier on a third server, you perform a different set of steps to install prerequisites on each server. A summary table of the prerequisites is included at the start of each section during the installation steps. Refer to the following for additional information:

- Web and Application Tier Checklist to install prerequisites on your Web and application servers.
- Report Tier Checklist to install prerequisites on your report server.
- Database Tier Checklist to install prerequisites on your database server.
- Process Server Tier Checklist to install prerequisites on your database server.

Check off each step as you complete it.

Web and Application Tier

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install Internet Explorer version 7.0 or higher.
3. If your operating system is Windows Server 2008 or Windows Server 2008 R2, install Microsoft Internet Information Services (IIS) 7.0/7.5/8.0 with ASP .NET enabled. See Appendix A: Microsoft Internet Information Server (IIS) Installation on Windows Server 2008/2008 R2/2012 for procedural information.
4. Install 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>
5. Configure Reporting Services. (To configure printing to network printers for Vision batch jobs after Vision is installed, see Appendix E: Printing in Vision 7.x.)

Report Tier

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install Internet Explorer version 7.0 or higher.
3. Install and configure Microsoft SQL Server 2008 SP3 + CU6 (10.00.5788.00), Microsoft SQL Server 2008 R2 SP2+ CU1 (10.50.4260.0), or Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions.
4. Use SQL Server Configuration manager to ensure that the "TCP/IP" and "Shared Memory" protocols are enabled on your Report Server database server.
5. Configure Reporting Services. (To configure printing to network printers for Vision batch jobs after Vision is installed, see Appendix E: Printing in Vision 7.x.)

Database Tier

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install Internet Explorer version 7.0 or higher.

3. Complete **one** of the following actions:
4. Complete **one** of the following actions:
 - If you are using Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions, install and configure.
 - If you are using SQL Server 2008, install Microsoft SQL Server 2008 (SP3) - (<http://www.microsoft.com/en-us/download/details.aspx?id=27594>), plus Cumulative Update package 6 for SQL Server 2008 Service Pack 3 (CU6) - (<http://support.microsoft.com/kb/2715953>) from the Microsoft website.
 - If you are using SQL Server 2008 R2, install Microsoft SQL Server 2008 R2 SP2 (<http://www.microsoft.com/en-us/download/details.aspx?id=30437>) plus Cumulative Update 1 (CU1) (10.50.4260.0) for SQL Server 2008 R2 SP2 from the Microsoft website: <http://support.microsoft.com/kb/2720425>
 - If your firm profile is small enough to support using Microsoft SQL Server Express Edition with Advanced Services, you must use this as the Database and Report Server for your Vision implementation. 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, this document provides the direct links for the SQL Server 2012 SP1 Express Edition with Advanced Services installation packages. Click the following link to access the download page:
<http://www.microsoft.com/en-us/download/details.aspx?id=35579>

Use these links for the two downloads:

64-bit / x64 Installation for 64-bit Operating Systems:
http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPRAADV_x64_ENU.exe (1.9 GB)

32-bit / x86 Installation for 32-bit Operating Systems:
http://download.microsoft.com/download/5/2/9/529FEF7B-2EFB-439E-A2D1-A1533227CD69/SQLEXPRAADV_x86_ENU.exe (1.9 GB)

 5. Enable the TCP/IP and Shared Memory Network Protocols in SQL Server Configuration Manager on the Microsoft SQL Server. All network protocols are installed by SQL Server Setup, but may or may not be enabled. Use SQL Server Configuration Manager to enable TCP/IP and Shared Memory to allow Vision to connect to the database. For details, see the article on Microsoft's website titled "How to: Enable or Disable a Server Network Protocol (SQL Server Configuration Manager)" - <http://msdn.microsoft.com/en-us/library/ms191294.aspx>
 6. Verify the name of your SQL Server Instance. The default installation uses the Server Name for the connection and installs as an instance named "MSSQLSERVER". Sometimes, Microsoft SQL Server is installed using an instance name other than the default (MSSQLSERVER). The SQL Server Express Edition installer from Microsoft installs as the named instance **SQLEXPRESS**. If you do not know the name of your SQL Server Instance (used for connecting to the SQL Server) or you are unable to connect to your database server after installation, see the article on Microsoft's website titled "How to: Determine Whether the Database Engine Is Installed and Started" - <http://msdn.microsoft.com/en-us/library/ms366339.aspx>

When connecting to the Default SQL Server Database Engine instance, you use the name of your Database server. SQL Server automatically maps the Default Instance of the Database Engine to the Server Name when accepting connections.

When connecting to a named instance of SQL Server Database Engine, you must specify the name of the SQL Server plus the instance in the connection in the format of `SERVERNAME\INSTANCENAME`

For example, if your SQL Server is named `SQLSERVER1` and you installed to an instance named `SQL2008`, you would specify the server connection information in the format of **SQLSERVER1\SQL2008**

7. If you experience connection errors to your database or report server and have verified the previous steps, verify that Windows (or your) firewall is not blocking access to the SQL Server Database Engine and Reporting Services.



See the following Microsoft links for detailed steps:

How to: Configure a Firewall for Report Server Access - <http://msdn.microsoft.com/en-us/library/bb934283.aspx>

How to: Configure a Windows Firewall for Database Engine Access - <http://msdn.microsoft.com/en-us/library/ms175043.aspx>

Process Server Tier

1. Install Windows Server 2008 SP2, or Windows Server 2008 R2 SP1, or Windows Server 2012.
2. Install 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>

Chapter 3: Download Vision and Initiate Setup

This chapter provides informational and procedural details about the process to download Vision and initiate setup.

Before You Begin

Review the following information before you begin the download process.

- Vision 7.1 cannot be installed side by side on the same Web/application or report servers as any previous version.
- If you have a Vision 5.1 or prior installation, you must remove that installation and Actuate before you install Vision 7.1.
- Before installing Vision 7.1, you must uninstall all previous versions of Actuate. Vision does not install on a server that has Actuate installed. If Actuate is detected, Vision cancels the installation.
- If you are upgrading from a prior version of Vision, the installation process will detect the existence of the previous 6.x version and will launch the Upgrade Wizard to upgrade the existing version. If you have a Vision 5.1 or prior installation, you must remove that installation and Actuate before you install Vision 7.1.
- If you are running live on Vision 5.x or 6.x and want to test Vision 7.1, do not convert your live database. Make a backup of your database, restore it as **Vision71** (or any name you choose), and run the conversion utility on that database. Your database version must already be at Vision 6.0 or newer to convert it to Vision 7.1. The Vision 6.x to Vision 7.1 conversion is an in-place conversion.
- If you have any Vision databases that are versions prior to 6.0, the Database to Upgrade page will not display. Those databases must be manually converted to at least version 6.0 in order to be converted to 7.1. Contact Vision Technical Support to obtain the conversion scripts if you have a Vision database version prior to 5.0. If your database is at least at Vision version 5.0 or 5.1 you can obtain the script yourself. Logon to the Deltek Customer Care website for the KB article # [43088](#) titled "[How to upgrade the Vision database](#)" Download the Vision 6.1 SP4 conversion script and follow the instructions to apply it against your Vision 5.x database. Once the conversion is complete, the Vision 7.1 installation and database conversion will recognize your database and make it available for upgrade.
- Vision 7.1 is **not** compatible with Microsoft Windows 95, 98, Me, NT 4.0, or Windows 2000.

Downloading Deltek Products using Deltek Software Manager

Use Deltek Software Manager (DSM) to download complete Deltek products, hot fixes, and sub-releases. You can access DSM directly or through the Deltek Customer Care Connect site.

When you access DSM directly, you are prompted to log on before you can access the application. If you access DSM from within the Deltek Customer Care Connect site, you do not have to log on since you are already logged in to the Customer Care Connect site.

Accessing DSM from within Deltek Customer Care Connect

To access Deltek Software Manager from within Deltek Customer Care Connect, complete the following steps:

1. In your Web browser, go to <http://support.deltek.com>.
2. Enter your Customer Care Connect **Username** and **Password**, and click **Log In**.
3. When the Customer Care Connect site displays, click the Product Downloads tab.
You are automatically logged in Deltek Software Manager.
4. To select the folder where you want to download Deltek products, click **Settings** above the right pane of Deltek Software Manager.
When you log on for the first time, Deltek Software Manager asks you to select a default folder where Deltek products are to be downloaded.
5. Use the Settings dialog box to specify the folder where you want to download Deltek products, and click **OK**. You can change this folder anytime on the Settings dialog box.
6. In the left pane of Deltek Software Manager, expand the Deltek product that you want to download, if it is not already expanded.
7. Select the product type that you want to download. Your options are **Complete**, **HotFix**, and **Sub-Release**.
8. In the table, select the check box that corresponds to the Deltek product that you want to download. The right pane displays a message stating that the product has been added to the download queue. To view the items in the download queue, click **View Download Queue** at the bottom of the left pane.
9. Click **Download** at the bottom of the left pane. Deltek Software Manager downloads the product to the folder that you selected.
10. Proceed to the chapter that describes the type of installation that you are performing:
 - **One Server Installation** – When you select the **One Server** option on the Number of Deltek Vision Servers form, you install all servers (database, Web/application, and report) on a single machine.
 - **Two Server Installation** – Because the two server deployment model involves two sets of configurations (Configuration 1), installing the DB and Report Server on one machine and the Web/Application on another machine or (Configuration 2), installing the Web, application, and report tier on one server, and the database tier on a separate server, you perform a different set of steps for each server.
 - **Three or More Servers Installation** – When you select the **Three or more Servers** option on the Number of Deltek Vision Servers form, you install any combination of a database server, one or more report servers, one or more Web/application servers and one or more process servers, each on its own machine.

DSM Documentation and Troubleshooting

Refer to the following links for additional information:

[Deltek Software Manager online help](#)

[Deltek Software Manager tutorial](#)

[Troubleshooting Deltek Software Manager](#)

Chapter 4: One Server Installation

This chapter provides instructions for installing all Vision tiers on one server for firms who use the One Server deployment model. One server deployment is suitable for demonstration purposes or for small firms.

When you choose the One Server deployment model, you install all Vision tiers (Web, Application, Process Server, Report, and Database) on the same machine. You may want to install all Vision tiers on the same server if your deployment needs are simple; for example, if you are installing Vision on a test machine.

For more information about the various deployment options available, see Vision Deployment Models on page 17 for more information.

Prerequisites

The following prerequisites are recommended before performing the Single Server (All Tiers) Installation.

Setup will not complete without the following components:

Software Prerequisites	Database Server	Report Server - Reporting Services ³	Web/ Application Server ¹	Process Server ²
Microsoft Windows Server 2012	Yes	Yes	Yes	Yes
Microsoft Windows Server 2008 SP2	Yes	Yes	Yes	Yes
Microsoft Windows Server 2008 R2 SP1	Yes	Yes	Yes	Yes
Microsoft SQL Server 2008 SP3 + CU6 (10.00.5788.00)	Yes	Yes		
Microsoft SQL Server 2008 R2 SP2+ CU1 (10.50.4260.0)	Yes	Yes		
Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions	Yes	Yes		
Microsoft .NET Framework 3.5 (SP1)			Yes	Yes

The following prerequisites are optional before performing the Single Server (All Tiers) Installation. They are supplied by the Deltek Download Manager during software installation:

Software Prerequisites	Database Server	Report Server (Reporting Services)	Web/Application Server	Process Server
Microsoft XML 4.0 (SP2) Services	Yes		Yes	Yes
Microsoft SQLXML 4.0 (SP1)	Yes ⁴		Yes ⁴	

¹IIS is required with ASP.NET enabled

²IIS is not required on the Process Server Only Machine

³Microsoft Internet Information Services (IIS) is not required for SQL Server 2008 Reporting Services

⁴If installing on a Windows Server x64 (64-bit) platform, you may need to download and install Microsoft SQL XML 4.0 SP1 on your Web Application Server if you encounter an error in the Vision Planning client application.

About Your Vision Database

The steps in this chapter explain how to install all tiers, including the database tier. The method you use to create your Vision database file during installation depends on whether you are installing Vision for the first time or upgrading from a previous Deltek product. This section provides information about creating or locating your Vision database.

Installing Vision for the First Time

During installation, you must select the **Blank Database** option. Do **not** select the **Restore from converted database** option.

Migrating from Deltek Advantage, Award, or CRM and Proposals

To migrate, complete the following steps:

1. Install the Deltek Advantage to Deltek Vision, Deltek Award to Deltek Vision, or Deltek CRM and Proposals to Deltek Vision migration utility.
2. Install the Vision software. Do **not** select the **Restore database** or **Blank Database** options during database tier installation. During Vision database tier installation, you will need your Microsoft SQL Server, or Microsoft SQL Server Express Edition username and password.
3. Run the Deltek Advantage to Deltek Vision migration utility, Deltek Award to Deltek Vision migration utility, or the Deltek CRM and Proposals to Deltek Vision migration utility.

Migrating from Sema4

Deltek's Data Migration group converts your Sema4 data to create your database backup file (.BAK). For instructions on migrating from Deltek Sema4 to Deltek Vision, contact your Deltek consultant.

In all of the preceding scenarios, you can install a **Sample Database** along with your new or converted database.

Install Vision on One Server

To install Vision tiers on one server, complete the following steps:

1. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager. Setup displays the prerequisites dialog.
2. Review to ensure your environment meets **all prerequisites** and click **Next** to continue.
3. Click **Next** on the Welcome dialog box. The License Agreement page displays.
4. Read the agreement and select **I accept the terms of the license agreement** if you agree. Click **Next**. The Choose Destination Location page displays.
5. Select one of the following actions:
 - Click **Next** to accept the destination displayed on the form.
 - Click **Browse**, select an alternate destination, and click **Next**.

If you do not have at least 1GB of free space in the Destination location, Vision displays an error message. Change the path to select a folder with over 1GB of free space and click **Retry**.
6. Select **One Server**. All server components (database, web/application process and report) are installed on one server.
7. Click **Next**. Vision displays the Reports to Load form.
8. Select the language to load. The Vision installation includes options for selecting the version of English—United States English or International English. The other languages—Dutch, French (Canada), French (France), German, and Spanish are not supported with Vision 7.1.
9. Click **Next**. Setup checks your Microsoft SQL Server Reporting Services configuration.

Setup uses the default Report Server URL when it checks the configuration of Microsoft SQL Reporting Services on the Web Server to the Reporting Services Web Service. If it is unable to make a connection to the Reporting Service Web Service page, setup displays an error message to explain that it is unable to make the connection and then displays the Specify Report Server and Report Server URL Information form. After your configuration is verified, the Database Server (MSSQL) Setup Connection page displays.
10. Set the options as follows:
 - **Database Server** — Enter the name of the database server.
 - **SQL Username** — Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is **sa**. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.
 - **SQL Password** — Enter the password associated with this SQL Username.
 - **Windows Integrated** — Select this check box. Selecting this option means that if you are logged on to the server with the appropriate administrative rights, you can be authenticated to your SQL server via your Windows Account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you use integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems

do not add members of the local administrator's group to the SQL Server Sysadmin role by default.

11. Click **Next**. The Databases to Restore page displays.
12. Select the database that you would like to restore, if any. The database that you select determines the language that displays in the Vision user interface. Vision 7.1 supports only English (United States) and English (International) databases. Databases with multiple languages other than English are not supported.
 - **No Selection** (no boxes checked) — If you already have a Vision database or previous Sample database, you can click **Next** without making a selection to get to the next page of choosing the database to upgrade if the setup detects it.
 - **Blank Database** (Vision – US) — If there are any existing Vision 6.x databases that you would like to upgrade to 7.0 on the database server you specified in step 10, do not select Blank Database. You can upgrade an existing 5.x or 6.x database in the next step. If you don't have an existing Vision database, select this option to start a new Vision database.
 - **Blank Database** (Vision – English International) — Blank database for English Language installations outside of the United States. Select this option to start a new Vision database if you are using an English Language installation and are outside the United States.
 - **Sample Database** (VisionDemo71) — Select this option to install the Vision sample database. It is helpful to have this database installed for troubleshooting purposes. If you already previous version of the Sample Database, the following options are available:
 - Do not select **Sample Database**. The setup will detect supported previous versions of databases (including the Sample database) and give you the opportunity to upgrade your Sample database.
 - In most cases any previous versions of the Sample database may have the Vision database version number in its name (for example, VisionDemo51). If that is the case, when you convert a previous version demo database to Vision 7.1 the version it is upgraded to will no longer match the version number in its name. You can perform one of the following:
 - Rename the database on the SQL Server and in Weblink after the installation to reflect the correct version number or
 - Delete the previous version's Sample database on your SQL Server before continuing, and then choose to restore the Sample database. Deltek recommends this option for Vision 7.1

If the installation program cannot connect to the database using the username/password you entered, a message asking you to try again displays when you click **Next**. Resolve this connection issue before continuing with the installation.
13. Click **Next**. If Vision detects an existing database, the Database to Upgrade page displays. See Appendix B: Options When Converting a Database during Installation, for information. If Vision does not detect an existing database, the Databases Available for Logon page displays.
14. Click **Next** to continue. The Specify Web Site page displays. This page displays only if your Web server contains multiple Web sites. If you do not have multiple Web sites on your Web server, proceed to step 19.

15. Select the Web site to which you will install Vision, and then click **Next**. The Error Reporting page displays.
16. Select **Automatically send fatal error reports to Deltek**, then click **Next**. The Start Copying Files page displays.
17. Review the installation settings and click **Next** to begin installation.
 - The location of the installation Log that tracks all the steps performed during the installation.
 - The installation directory – Where you installed Vision.
 - The Setup Type and the option chosen – If you are performing a multi-server installation, this information is handy to use to know what your next option to choose when performing the installation on your other servers.
 - Information about the Database Server such as:
 - The Database Server Name
 - The Database Login used to perform the installation on the database server
 - Any Vision logins and passwords created in SQL Server during the installation. This information can be used when configuring Weblink. Deltek recommends that you change at the passwords from their defaults and/or change the login name.
 - Any databases that you will be restoring or upgrading are listed

When finished, the Installation Wizard displays a success notice.

18. Click **Finish** to complete the installation.

Review the installation log to check for errors in the installation. The installation creates a logs subfolder located in the Vision installation location that contains the installation log as well as conversion log files created for each database that may have been upgraded during the installation.

If you upgraded any databases during the installation process, verify that a conversion log for that database (filename contains the database name) was created and it does not contain any errors (search for the word “msg” without the quotes in the log file”). If you find any errors, contact Deltek Customer Care with the contents of the log file.



If there are any errors during the installation process, you must confirm that your reports were loaded successfully.

Go to the `\ProgramFiles\Deltek\Vision\Logs` folder and review the latest version of the file named **DeltekVisionCMD_xx-XX.log** (xx-XX represents the language of your loaded reports). Reload your reports if they are not in the log file.

Chapter 5: Two Server Installation

This model is designed for small to medium-sized firms who may not have a technical staff. For more information about the various deployment options available, see Vision Deployment Models on page 29.

There are two methods for installing Vision across two servers:

- **Configuration 1:** Install the database and report components on one server machine and the Web/application and process server components on a separate server machine. Firms with one SQL Server license use this configuration. Firms typically use Method 2 if all users are at a single location and only access Vision in the office or over a VPN connection into the corporate network. Infrastructure security is not necessarily a concern in this model because all application use is internal to the organization. This method is designed for small to medium-sized firms who may not have a technical staff. For more information about available deployment options, see Vision Deployment Models in Chapter 1, on page 17.
- **Configuration 2:** Install the database component on one server machine and the Web/application, process server, and report components on a separate server machine. Configuration 1 has the Reporting Services installed on a separate server from the Database Engine. 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 the licensing section of this document for links to Microsoft SQL Server licensing related to SQL Server Reporting Services.

Important Information to Know Before You Begin

- Before installing Vision tiers across two servers, you must install a certain set of prerequisite software required for the tiers being installed on the Vision servers. See Chapters 1 and 2 for a list of non-supported environments, technical considerations for information on installing prerequisite software on two servers. The table below lists the prerequisite requirements for the installation and a list of the components that are downloaded and installed during the installation process by the installer. Only the Vision database and or Report tier can be installed on this server.
- You cannot install any Vision tier on the Microsoft ISA server, or any software-based 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 Vision tier on a domain controller.
- You cannot install any Vision tier on a Microsoft Exchange Server.
- You cannot install any Vision tier (except Document Management) on any version of SharePoint Server. Microsoft .NET Framework 3.5 SP1 is required prior to running the Vision installation on any machine running the Vision Web/Application or the Process Server Tiers
- Microsoft .NET Framework 2.0 is required prior to running the Vision installation on the Database or Report Server Tiers. If the setup does not detect Microsoft .NET Framework 2.0, then setup will exit. See the Download Manager section on page 26 if you have not yet installed Download Manager.

- Generally, Microsoft .NET Framework 2.0 is already installed on all tiers since it is installed with Microsoft .NET 3.5SP1 (a prerequisite requirement for the Web\Application and Process Server machines), and is also installed as part of the Microsoft SQL Server 2008 Setup routine when the Database Server and Report Server components are installed.
- Microsoft .NET Framework 2.0 is required on any machine that you will be running the DeltekVisionInstallPrepareUtility.exe for those scenarios where the Vision Server does not have access to the internet and setup is unable to finish. This happens because the Download Manager is unable to download prerequisites needed for the installation to continue. This is required by the DeltekVisionInstallPrepareUtility.exe.

Configuration 1, Part 1: Database and Report Installation

Prerequisites

Refer to the following prerequisites before installing the database and report servers.

	Software Prerequisites	Database Server	Report Server ¹ (Reporting Services)
	Microsoft Windows Server 2012	Yes	Yes
REQUIRED Setup will not complete if these are not detected	Microsoft Windows Server 2008 SP2	Yes	Yes
	Microsoft Windows Server 2008 R2 SP1	Yes	Yes
	Microsoft SQL Server 2008 R2 SP2 + CU1 (10.50.4260.0)	Yes	Yes
	Microsoft SQL Server 2008 SP3 + CU6 (10.00.5788.00)	Yes	Yes
	Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions	Yes	Yes
	Microsoft .NET Framework 3.5 (SP1)	Yes	Yes
OPTIONAL Supplied by Deltek Download Manager during Installation	Microsoft XML 4.0 (SP2) Services	Yes	
	Microsoft SQLXML 4.0 (SP1)	Yes	

¹Microsoft Internet Information Services (IIS) is not required for SQL Server 2008 Reporting

About Your Database

Deltek recommends that you install the database server first. In this configuration, because the Database and Report Server Tiers are on the same machine, this step must be performed before the installation of Vision on your Vision Web Server.

Installing Vision for the First Time

During installation, you must select the **Blank Database** option. Do **not** choose the **Restore from converted database** option.

Migrating from Deltek Advantage, Award, or CRM and Proposals

To migrate, complete the following steps:

1. Install the Deltek Advantage to Deltek Vision, Deltek Award to Deltek Vision, or Deltek CRM and Proposals to Deltek Vision migration utility.
2. Install the Vision software. Do not select the Restore database or Blank Database options during database tier installation. During Vision database tier installation, you will need your Microsoft SQL Server, or Microsoft SQL Server Express Edition username and password.
3. Run the Deltek Advantage to Deltek Vision migration utility, Deltek Award to Deltek Vision migration utility, or the Deltek CRM and Proposals to Deltek Vision migration utility.

Migrating from Sema4

Deltek's Data Migration group converts your Sema4 data to create your database backup file (.BAK). For instructions on migrating from Deltek Sema4 to Deltek Vision, contact your Deltek consultant.

Procedure to Install the Database and Report Server

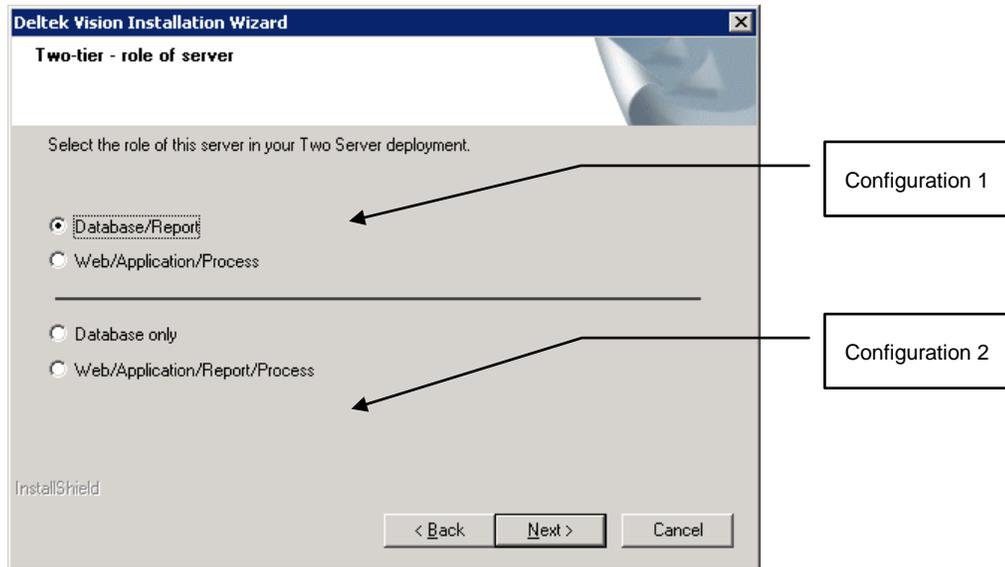
To install the database and report server, complete the following steps:

1. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager. Setup displays the prerequisites dialog.
2. Review to ensure your environment meets **all prerequisites** and click **Next** to continue. The Welcome dialog displays.
3. Click **Next**. The License Agreement page displays.
4. Review the agreement and click the **I accept the terms of the license agreement** option if you agree. Click **Next** to proceed. The Choose Destination Location page displays.
5. Complete one of the following actions:
 - Click **Next** to accept the destination displayed on the form.
 - Click **Browse...**, select an alternate destination, and click **Next**.
 - If you do not have at least 1GB of free space in the Destination location, Vision displays an error message. Change the path to select a folder with over 1GB of free space and click **Retry**.



The Number of Vision Servers page displays.

6. Select **Two Servers** and click **Next**. The Two tier – role of server page displays.

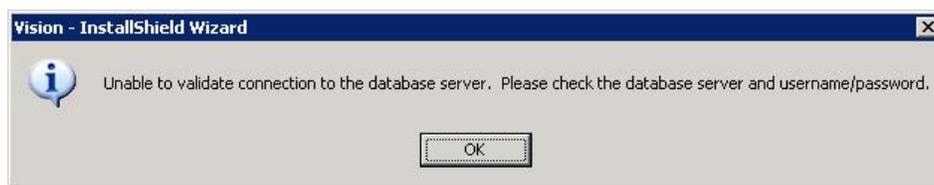


7. Select the Database/Report option and click **Next**. The Database Server (MSSQL) Setup Connection page displays. Setup checks for Microsoft .NET Framework 3.5 (SP1) before displaying the Database Server Setup Connection form. If it does not detect it, then setup exits.

8. Enter the following:

- **Database Server** — Enter the name of the database server.
- **SQL Username** — Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is **sa**. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.
- **SQL Password** — Enter the password associated with this SQL Username.
- **Windows Integrated** — Selecting this option means that if you are logged onto the server with the appropriate administrative rights, you can be authenticated to your SQL server via your Windows account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you are using integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems do not add members of the local administrator's group to the SQL Server Sysadmin role by default.

You must make sure your connection is configured correctly before you can continue. If the installation program cannot connect to the database using the username/password you entered, when you click **Next**, the following message displays asking you to try again.



9. Click **OK**, correct the problem, and continue.
10. Click **Next**. The Databases to Restore page displays:
11. Select the database to restore, if any. The database that you select determines the language that displays in the Vision user interface. Vision 7.1 supports only English (United States) and English (International) databases. Databases with multiple languages other than English are not supported.
 - **No Selection** (no boxes checked) — If you already have a Vision database or previous Sample database, you can click on Next without making a selection to get to the next page of choosing the database to upgrade if the setup detects it.
 - **Blank Database** (Vision - US) — If there are any existing Vision 6.x databases that you would like to upgrade to 7.1 on the database server you specified in step 10, do not select Blank Database. You can upgrade an existing 5.x or 6.x database in the next step. If you don't have an existing Vision database, select this option to start a new Vision database.
 - **Blank Database** (Vision – English International) — Blank database for English Language installations outside of the United States. Select this option to start a new Vision database if you are using an English Language installation and are outside the United States.
 - **Sample Database** (VisionDemo71) — Select this option to install the Vision sample database. It is helpful to have this database installed for troubleshooting purposes. If you already previous version of the Sample Database, the following options are available:
 - Do not select **Sample Database**. The setup will detect supported previous versions of databases (including the Sample database) and give you the opportunity to upgrade your Sample database.
 - In most cases any previous versions of the Sample database may have the Vision database version number in its name (For example, VisionDemo51). If that is the case, when you convert a previous version demo database to Vision 7.1 the version it is upgraded to will no longer match the version number in its name. You can perform one of the following:
 - Rename the database on the SQL Server and in Weblink after the installation to reflect the correct version number or
 - Delete the previous version's Sample database on your SQL Server before continuing and then choose to restore the Sample database. Deltek recommends this option for Vision 7.1
12. Click **Next** to continue. The Checking configuration of Microsoft SQL Reporting Services message displays.

Setup uses the default Report Server URL when it first checks the configuration of Microsoft SQL Reporting Services on the Web Server to the Reporting Services Web Service. If it is unable to make a connection to the Reporting Service Web Service page, setup displays an error message to explain that it is unable to make the connection and will display the Specify Report Server and Report Server URL Information form. See Appendix C: Connect to Reporting Service Web Service for additional information. Continue to the next step when the connection is complete.
13. Setup now checks for Vision databases.
 - If you migrated from another product and restored and/or upgraded your database to this release version prior to running setup, the setup process will detect the versions

of your database and will skip to the Databases Available for Logon displayed in Step 16 of this procedure.

- Otherwise, the setup process checks your SQL Server for Vision Databases version 6.0 or higher that is available for upgrade. See Appendix B: Appendix B: Options When Converting a Database during Installation for additional information.

14. Click **Next**. The Error Reporting page displays:
15. Select **Automatically send fatal error reports to Deltek**, then click **Next**. The Start Copying Files page displays.
16. Review the installation settings. The information on the page is also logged in the Installation Log but can be saved for a quick reference of what was performed. It contains information such as:
 - The location of the installation Log that tracks all the steps performed during the installation.
 - The installation directory, where you installed Vision.
 - The Setup Type and the option chosen – If you are performing a multi-server installation, it is good to know what options were chosen when performing the installation on your other servers. In this scenario, Dual Server with the (Web/Application/Report Tier) Options were selected.
 - Information about the Web/Application/Report Server Configurations such as:
 - Web Site, Virtual Directory, Virtual Directory Security Mode
 - Any Local accounts that were created for the setup including their Password.
 - Report Server Name and Report Server URL.
 - List of Databases that will be converted.
 - List of databases that will appear in the weblink after the installation.
17. Click **Next**.
18. Review the installation log to check for errors in the installation. The installation creates a logs subfolder located in the Vision installation location that contains the installation log as well as conversion log files created for each database that may have been upgraded during the installation. If you upgraded any databases during the installation process, verify that a conversion log for that database (filename contains the database name) was created and it does not contain any errors (search for the word “msg” without the quotes in the log file”. If you find errors, contact Deltek Customer Care with the contents of the log files.



If there are any errors during the installation process, you must confirm that your reports were loaded successfully.

Go to the `\ProgramFiles\Deltek\Vision\Logs` folder and review the latest version of the file named **DeltekVisionCMD_xx-XX.log** (xx-XX represents the language of your loaded reports). Reload your reports if they are not in the log file.

You successfully installed the Database and Report Server tiers on the current server. Proceed to the next section to install the Web/Application and Process Servers on a second server machine.

Important Information about Setting up the Vision Database Tier

During installation of the database tier, the Vision backup device is created on the database server to allow end users to perform *ad hoc* database backups before major data changes or processes take place. To back up the database, select **Utilities » Backup Database** from the Vision Applications menu.

Configuration 1, Part 2: Web/Application and Process Server Installation of Two Server Installation

Follow these steps to install the Vision Web\Application\Process Server tier on one server. During installation, you will be prompted for database information, such as database host name or IP address and Report Server information such as the Report Server Name, and Report Server URL. You must have this information to perform the following installation.

Refer to the following prerequisites before installing the web/application and process servers.

Prerequisites

	Software Prerequisites	Web/Application Server ¹	Process Server ²
REQUIRED Setup will not complete if these are not detected	Microsoft Windows Server 2012	Yes	Yes
	Microsoft Windows Server 2008 SP2	Yes	Yes
	Microsoft Windows Server 2008 R2 SP1	Yes	Yes
	Microsoft .NET Framework 3.5 (SP1)	Yes	Yes
	Microsoft XML 4.0 (SP2) Services	Yes	Yes
OPTIONAL Supplied by Deltek Download Manager during Installation	Microsoft SQLXML 4.0 (SP1)	Yes	

¹IIS is required with ASP.NET enabled.

²IIS is not required on the Process Server Only Machine.

Important Vision Setup Information

Microsoft .NET Framework 3.5 SP1 is required prior to running the Vision installation in this configuration.

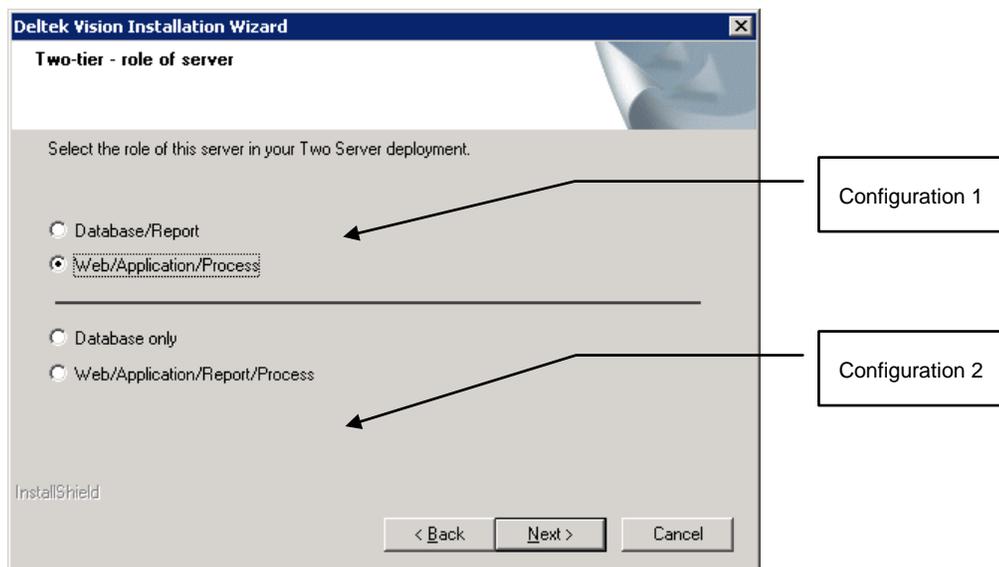
Procedure for Web/Application and Process Server Installation of Two Server Installation

For a two server installation, complete the following steps:

1. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager. Setup displays the prerequisites dialog.
2. Review to ensure your environment meets **all prerequisites** and click **Next** to continue. The Welcome dialog displays.
3. Click **Next**. The License Agreement page displays.
4. Complete one of the following actions:
 - Click **Next** to accept the destination displayed on the form.
 - Click **Browse**, select an alternate destination, and click **Next**.
 - If you do not have at least 1GB of free space in the Destination location, Vision displays an error message. Change the path to select a folder with over 1GB of free space and click **Retry**.

The Number of Vision Servers page displays.

5. Select **Two Servers** and click **Next**. The Two tier – role of server page displays.



6. Select the language for the reports to load. **English – US** is the default. The Vision installation routine includes options for selecting the version of English— United States English or International English. The other languages—Dutch, French (Canada), French (France), German, and Spanish are not supported with Vision 7.1.
7. The Database Server (MSSQL) Setup Connection page displays. Setup checks for Microsoft .NET Framework 3.5 (SP1) before displaying the Database Server Setup Connection form. If it does not detect it, then setup exits.
8. Enter the following:
 - **Database Server** — Enter the name of the database server.
 - **SQL Username** — Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is **sa**. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.

- **SQL Password** — Enter the password associated with this SQL Username.
 - **Windows Integrated** — Selecting this option means that if you are logged onto the server with the appropriate administrative rights, you can be authenticated to your SQL server via your Windows account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you are using integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems do not add members of the local administrator's group to the SQL Server Sysadmin role by default.
9. Make sure your connection is configured correctly before you continue. If the installation program cannot connect to the database using the username/password you entered, when you click **Next**, the following message displays asking you to try again.



10. Click **OK**, correct the problem, and continue. The Checking configuration of Microsoft SQL Reporting Services box displays.
11. Setup uses the default Report Server URL when it first checks the configuration of Microsoft SQL Reporting Services on the Web Server to the Reporting Services Web Service. If it is unable to make a connection to the Reporting Service Web Service page, setup will return an error message with the reason it is unable to make the connection and will display the Specify Report Server and Report Server URL Information form. See Appendix C: Connect to Reporting Service Web Service for additional information. Continue to the next step when the connection is complete.
- Setup now checks for Vision databases.
 - If you migrated from another product and restored and/or upgraded your database to this release version prior to running setup, the setup process will detect the versions of your database and will skip to the Databases Available for Logon displayed in Step 12 of this procedure.
 - Otherwise, the setup process checks your SQL Server for Vision Databases version 6.0 or higher that are available for upgrade. See Appendix B: for additional information.
12. Click **Next**. The Databases Available for Logon screen displays.
- Select the databases you want to make available to your end users on the Vision logon form. The list displayed here includes:
- The databases you have selected to upgrade, along with their current version number (if any were selected).
 - The sample database (if restored or upgraded).
 - The blank database (if you restored).
 - Any Vision 7.1 databases already previously restored or converted on your database server.
 - You must select at least one database. You can use WebLink after installation to add or remove new databases.

- This page does not display if you do not have more than one database or did not choose to upgrade any databases and there is only one existing Vision 7.1 database.
13. Click **Next** to continue. If your Web server contains multiple Web sites, the Specify Web Site page displays. If you do not have multiple Web sites on your server, continue to step 17.
 14. Select the Web site to which you will install Vision and click **Next**. The Error Reporting page displays.
 15. Select **Automatically send fatal error reports to Deltek**, then click **Next**. The Start Copying Files page displays.
 16. Review the installation settings. The information in the page is also logged in the Installation Log but can be saved for a quick reference of what was performed. It contains information such as:
 - The location of the installation Log that tracks the steps performed during the installation.
 - The installation directory — where you installed Vision.
 - The Setup Type and the option chosen. If you are performing a multi server installation, this information is handy to use to know what options were chosen when performing the installation on your other servers. In this Scenario, Dual Server with the (Web/Application/Report Tier) Options were selected.
 - Information about the Web/Application/Report Server Configurations such as:
 - Web Site, Virtual Directory, Virtual Directory Security Mode
 - Any Local accounts that were created for the setup including their Password.
 - Report Server Name and Report Server URL.
 - List of Databases that will be converted.
 - List of databases that will appear in the weblink after the installation.
 17. Click **Next**.
 18. Review the installation log to check for errors in the installation. The installation creates a logs subfolder located in the Vision installation location that contains the installation log as well as conversion log files created for each database that may have been upgraded during the installation. If you upgraded any databases during the installation process, verify that a conversion log for that database (filename contains the database name) was created and it does not contain any errors (search for the word “msg” without the quotes in the log file”. If you find errors, contact Deltek Customer Care with the contents of the log files.



If there are any errors during the installation process, you must confirm that your reports were loaded successfully.

Go to the `\ProgramFiles\Deltek\Vision\Logs` folder and review the latest version of the file named **DeltekVisionCMD_xx-XX.log** (xx-XX represents the language of your loaded reports). Reload your reports if they are not in the log file.

You successfully installed the Web/Application and Process Server tiers on the current server.

Configuration 2, Part 1: Database Server Installation

Deltek recommends that you install the database server first. If you do not want to install the database server first and prefer to install the other tiers first, the setup for the other tiers will require that you know the database server host name or IP address, and have the Microsoft SQL Server user name and password, before you can begin installing the other tiers.

Prerequisites

Refer to the following prerequisites before performing the Database Server Only Installation:

	Software Prerequisites	Database Server
REQUIRED Setup will not complete if these are not detected	Microsoft Windows Server 2012	Yes
	Microsoft Windows Server 2008 SP2	Yes
	Microsoft Windows Server 2008 R2 SP1	Yes
	Microsoft SQL Server 2008 R2 SP2+ CU1 (10.50.4260.0)	Yes
	Microsoft SQL Server 2008 SP3 + CU6 (10.00.5788.00)	Yes
	Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions	Yes
OPTIONAL Supplied by Deltek Download Manager during Installation	Microsoft XML 4.0 (SP2) Services	Yes
	Microsoft SQLXML 4.0 (SP1)	Yes¹

¹If installing on a Windows Server x64 (64-bit) platform, you may need to download and install Microsoft SQL XML 4.0 SP1 on your Web Application Server if you encounter an error in the Vision Planning client application.

During the Vision database tier installation, you must be logged on the database server with an account that has local administrator privileges to perform the installation. In addition, the account must either be a member of the sysadmin role in SQL Server or you will need your Microsoft SQL Server, or Microsoft SQL Server Express Edition “SA” account and password or another SQL Server Login account username and password that is a member of the sysadmin role. This is required because the installation checks for existing Vision databases, creates and assigns a SQL Server Security login with access to the Vision database and creates a SQL Server agent job that performs a nightly backup and maintenance of the Vision database.

If you have not yet enabled SQL Server to allow remote connections, Deltek recommends that you run the Microsoft SQL Server Configuration Manager and verify that the SQL Server Network Configuration properties has at least TCP/IP enabled. This is required to allow connections to the SQL Server. If you are unfamiliar with these steps, consult your Microsoft SQL Server documentation for guidance.

About Your Vision Database

The method you use to create your Vision database depends on if you are installing Vision for the first time or if you are migrating from another product. Refer to the scenario below that most

closely matches your business model. Note that in each of these scenarios you can also install a sample database along with your new or converted database.

Install Vision for the First Time

During installation, you must select the Blank Database option. Do not choose the Restore from converted database option.

Migrate from Deltek Advantage, Award, or CRM and Proposals

To migrate, complete the following steps:

1. Install the Deltek Advantage to Deltek Vision, Deltek Award to Deltek Vision, or Deltek CRM and Proposals to Deltek Vision migration utility.
2. Install the Deltek Vision software. Do not select the Restore database or Blank Database options during database tier installation. During Deltek Vision database tier installation, you will need your Microsoft SQL Server, or Microsoft SQL Server Express Edition username and password.
3. Run the Deltek Advantage to Deltek Vision migration utility, Deltek Award to Deltek Vision migration utility, or the Deltek CRM and Proposals to Deltek Vision migration utility.

Migrate from Sema4

Deltek's Data Migration group converts your Sema4 data to create your database backup file (.BAK). For instructions on migrating from Deltek Sema4 to Deltek Vision, contact your Deltek consultant.

Important Information about Setting up the Vision Database Tier

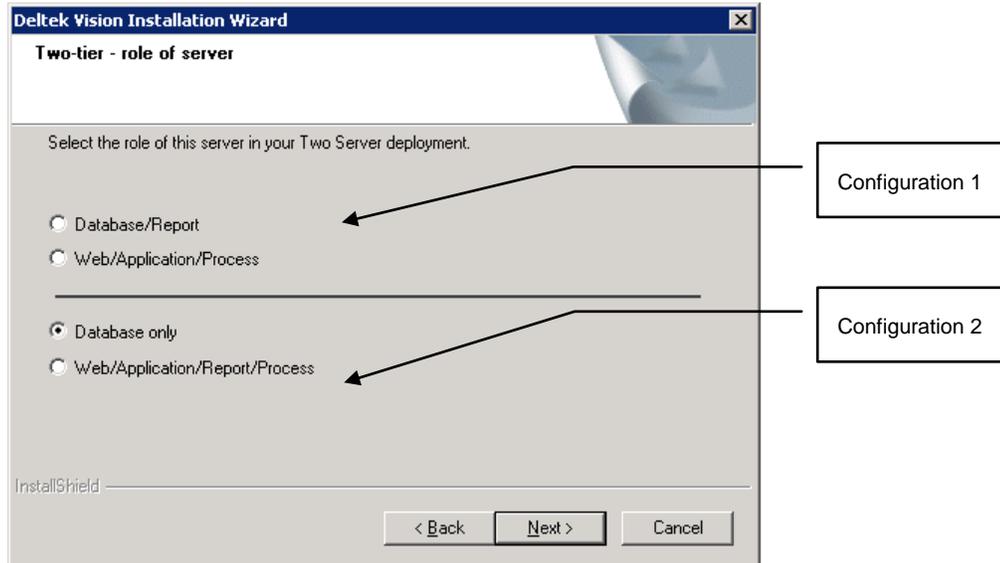
During installation of the database tier, the Vision backup device is created on the database server to allow end users to perform *ad hoc* database backups before major data changes or processes take place. To back up the database, select **Utilities » Backup Database** from the Vision main menu.

Procedure to Install the Database Server for a Two Server Vision Installation

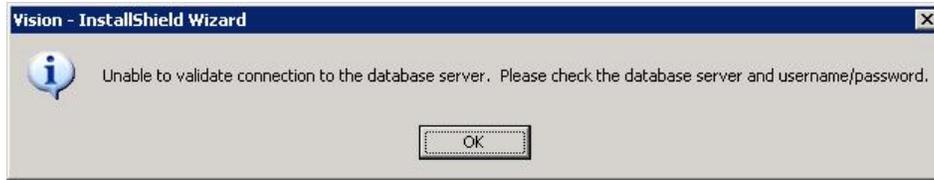
To install the database server, complete the following steps:

1. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager.
2. Review to ensure your environment meets all prerequisites and click **Next** to continue. The Welcome dialog displays.
3. Click **Next**. The License Agreement page displays.
4. Review the agreement and click the **I accept the terms of the license agreement** option if you agree. Click **Next** to proceed. The Choose Destination Location page displays.
5. Click **Next** to accept the default destination folder for the installation, or click **Browse** to browse to and select a different location.

6. If you do not have at least 1GB of free space in the Destination location, Vision displays an error message. Change the path to select a folder with over 1GB of free space and click **Retry**.
7. Click **Next**. The Number of Vision Servers page displays.
8. Select **Two Servers** and click **Next**. The **Two tier – role of server** page displays.



9. Select the **Database only** option and click **Next**. The Database Server (MSSQL) Setup Connection page displays.
10. Enter the following:
 - **Database Server** — Enter the name of the database server.
 - **SQL Username** — Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is **sa**. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.
 - **SQL Password** — Enter the password associated with this SQL Username.
 - **Windows Integrated** — Selecting this option means that if you are logged onto the server with the appropriate administrative rights, you can be authenticated to your SQL server via your Windows account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you are using integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems do not add members of the local administrator's group to the SQL Server Sysadmin role by default.
11. You must make sure your connection is configured correctly before you can continue. If the installation program cannot connect to the database using the username/password you entered, when you click **Next**, the following message displays asking you to try again.



12. Click **OK**, correct the issue, and continue.
13. Click **Next**. The Databases to Restore page displays.
14. Select the database you want to restore, if any. The database that you select determines the language that displays in the Vision user interface.
Vision 7.1 only supports English (United States) and English (International) databases. Databases with multiple languages other than English are not supported.
 - **No Selection (No Boxes checked)** — If you already have a Vision database or previous Sample database, you can click on Next without making a selection to get to the next page of choosing the database to upgrade if the setup detects it.
 - **Blank Database (Vision – US)** — If there are any existing Vision 6.x databases that you would like to upgrade to 7.1 on the database server you specified in step 9, do not select Blank Database. You can upgrade an existing 5.x or 6.x database in the next step. If you don't have an existing Vision database, select this option to start a new Vision database.
 - **Blank Database (Vision – English International)** — Blank database for English Language installations outside the United States of America. Select this option to start a new Vision database if you are using an English Language installation and are outside the United States.
 - **Sample Database (VisionDemo71)** — Select this option to install the Vision sample database. It is sometimes helpful to have this database installed for troubleshooting purposes. If you already previous version of the Sample Database, the following options are available:
 - Do not select **Sample Database**. The setup will detect supported previous versions of databases (including the Sample database) and give you the opportunity to upgrade your Sample database.

In most cases any previous versions of the Sample database may have the Vision database version number in its name (For example, VisionDemo51). If that is the case, when you convert a previous version demo database to Vision 7.1 the version it is upgraded to will no longer match the version number in its name. You can perform one of the following:

 - Rename the database on the SQL Server and in Weblink after the installation to reflect the correct version number or
 - Delete the previous version's Sample database on your SQL Server before continuing, and then choose to restore the Sample database. Deltek recommends this option for Vision 7.1
15. Click **Next**. If Vision detects an existing database, the Database to Upgrade page displays. See Appendix B: Options When Converting a Database during Installation for additional information. If Vision does not detect an existing database, the Error Reporting page displays.

16. Select **Automatically send fatal error reports to Deltek**, then click **Next**. The Start Copying Files page displays.
17. Review and save the installation settings. This page contains the following information:
 - The location of the installation Log that tracks all the steps performed during the installation.
 - The installation directory – where you installed Vision.
 - The Setup Type and the option chosen – if you are performing a multi server installation, this information is handy to use to know what your next option to choose when performing the installation on your other servers.
 - Information about the Database Server such as:
 - Database Server Name
 - Database Login used to perform the installation on the database server
 - Any Vision logins and passwords created in SQL Server during the installation. This information can be used when configuring Weblink. It is recommended that you change at least the passwords from their defaults and/or the login name as well.
 - Any databases that you will be restoring or upgrading will be listed
18. Click **Next** to begin installation of the database server as part of a two server installation.
19. Review the installation log to check for errors in the installation. The installation creates a logs subfolder located in the Vision installation location that contains the installation log as well as conversion log files created for each database that may have been upgraded during the installation. If you upgraded any databases during the installation process, verify that a conversion log for that database (filename contains the database name) was created and it does not contain any errors (search for the word “msg” without the quotes in the log file.” If errors are found, contact Deltek Customer Care with the contents of the log files.
20. Install the Web/Application, Report, and Process Servers on a second server machine. See Configuration 2: Step 2 - Web/Application, Report, and Process Server Installation of Two Server Installation.

Configuration 2, Part 2: Web/Application, Report, and Process Server Installation of Two Server Installation

Prerequisites

Refer to the following prerequisites before performing the Web/Application, Report, and Process Server Installation:

	Software Prerequisites	Report Server (Reporting Services) ³	Web/ Application Server ¹	Process Server ²
REQUIRED Setup will not complete if these are not detected	Microsoft Windows Server 2012	Yes	Yes	Yes
	Microsoft Windows Server 2008 SP2	Yes	Yes	Yes
	Microsoft Windows Server 2008 R2 SP1	Yes	Yes	Yes
	Microsoft SQL Server 2008 SP3 + CU6 (10.00.5788.00)	Yes		
	Microsoft SQL Server 2008 R2 SP2+ CU1 (10.50.4260.0)	Yes		
	Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions	Yes		
OPTIONAL Supplied by Deltek Download Manager during Installation	Microsoft .NET Framework 3.5 (SP1)	Yes ³	Yes	Yes
	Microsoft XML 4.0 (SP2) Services		Yes	Yes
	Microsoft SQLXML 4.0 (SP1)		Yes ⁴	

¹IIS is required with ASP.NET enabled.

²IIS is not required on the Process Server Only Machine.

³Microsoft Internet Information Services (IIS) is not required for SQL Server 2008 Reporting Services

⁴If installing on a Windows Server x64 (64-bit) platform, you may need to download and install Microsoft SQL XML 4.0 SP1 on your Web Application Server if you encounter an error in the Vision Planning client application.

Follow these steps to install the Vision Web\Application\Report\Process Server Tiers on one server. During installation, you will be prompted for database information, such as database host name or IP address. You must have this information to perform the following installation.

Important Vision Setup Information

Microsoft .NET Framework 3.5 (SP1) is required prior to running the Vision installation in this configuration. Setup will not continue if it is unable to detect this.

Procedure to Install the Web\Application\Report\Process Server

To install the process server tiers, complete the following steps:

1. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager. Setup displays the prerequisites dialog.
2. Review to ensure your environment meets **all prerequisites** and click **Next** to continue. The Welcome dialog displays.
3. Click **Next**. The License Agreement page displays.
4. Review the agreement and click the **I accept the terms of the license agreement** option if you agree. Click **Next** to proceed. The Choose Destination Location page displays.
5. Do one of the following:
 - Click **Next** to accept the destination displayed on the form.
 - Click **Browse**, select an alternate destination, and click **Next**.
 - If you do not have at least 1GB of free space in the Destination location, Vision displays an error message. Change the path to select a folder with over 1GB of free space and click **Retry**.



- The Number of Vision Servers page displays.
6. Select **Two Servers** and click **Next**. The **Two tier – role of server** page displays.
 7. Click the **Web/Application Report Process** option. The Reports to Load page displays.
 8. Select the language for the reports to load. Select the language for the reports to load. **English – US** is the default. The Vision installation routine includes options for selecting the version of English— United States English or International English. The other languages—Dutch, French (Canada), French (France), German, and Spanish are not supported with Vision 7.1.
 9. Click **Next** to continue. The Database Server (MSSQL) Setup Connection page displays.
 10. Enter the following:
 - **Database Server** — Enter the name of the database server.
 - **SQL Username** — Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is sa. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.
 - **SQL Password** — Enter the password associated with this SQL Username.
 - **Windows Integrated** — Selecting this option means that if you are logged onto the server with the appropriate administrative rights, you can be authenticated to your

SQL server via your Windows account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you are using integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems do not add members of the local administrator's group to the SQL Server Sysadmin role by default.

11. You must make sure your connection is configured correctly before you can continue. If the installation program cannot connect to the database using the username/password you entered, when you click **Next**, the following message displays asking you to try again.



12. Click **OK**, correct the issue, and continue.
13. Click **Next** to continue. The Checking configuration of Microsoft SQL Reporting Services page displays.
14. Setup uses the default Report Server URL when it first checks the configuration of Microsoft SQL Reporting Services on the Web Server to the Reporting Services Web Service. If it is unable to make a connection to the Reporting Service Web Service page, setup will return an error message with the reason it is unable to make the connection and will display the Specify Report Server and Report Server URL Information form. See Appendix C: Connect to Reporting Service Web Service for additional information. Continue to the next step when the connection is complete.
15. Setup checks for Vision databases.
 - If you migrated from another product and restored and/or upgraded your database to this release version prior to running setup, the setup process will detect the versions of your database and will skip to the Databases Available for Logon displayed in Step 12 of this procedure.
 - Otherwise, the setup process checks your SQL Server for Vision Databases version 6.0 or higher that are available for upgrade. See Appendix B: for more information.
 - If you want to upgrade a database, select the database and click **Next**. The setup process will display the **Databases Available for Logon** form.
16. Select the databases you want to make available to your end users on the Vision logon form. The list displayed here includes:
 - The databases you have selected to upgrade, along with their current version number (if any were selected).
 - The sample database (if restored or upgraded).
 - The blank database (if you restored).

- Any Vision 7.1 databases already previously restored or converted on your database server.
 - You must select at least one database. You can use WebLink after installation to add or remove new databases. This page does not display if you did not choose to upgrade any databases and there is only one existing Vision 7.1 database.
17. Click **Next** to continue. The Specify Web Site page displays only if your Web server contains multiple Web sites.
 18. Select the Web site on which you will install Vision and click **Next**. The Error Reporting page displays.
 19. Select **Automatically send fatal error reports to Deltek**, then click **Next**. The Start Copying Files page displays.
 20. Review the installation settings. The information in the page is also logged into the Installation Log but can be saved for a quick reference of what was performed. It contains information such as:
 - The location of the installation log of all the steps performed during the installation.
 - The installation directory – where you installed Vision.
 - The Setup Type and the option chosen – if you are performing a multi server installation, this information is handy to use to know what options were chosen when performing the installation on your other servers. In this Scenario, Dual Server with the (Web/Application/Report Tier) Options were selected.
 - Information about the Web/Application/Report Server Configurations such as:
 - Web Site, Virtual Directory, Virtual Directory Security Mode
 - Any Local accounts that were created for the setup including their Password.
 - Report Server Name and Report Server URL.
 - List of Databases that will be converted (if any were chosen).
 - List of databases that will appear in the weblink after the installation.
 21. Click **Next**.
 22. Review the installation log to check for errors. The installation creates a logs subfolder in the Vision installation location that contains the installation log as well as conversion log files created for each database that may have been upgraded during the installation. If you upgraded any databases during the installation process, verify that a conversion log for that database (filename contains the database name) was created and it does not contain any errors (search for the word “msg” without the quotes in the log file.” If errors are found, contact Deltek Customer Care with the contents of the log files.



If there are any errors during the installation process, you must confirm that your reports were loaded successfully. Go to \ProgramFiles\Deltek\Vision\Logs folder and review the latest **DeltekVisionCMD_xx-XX.log** (xx-XX represents the language of your loaded reports). Reload your reports if they are not in the log file.

You successfully installed the Web/Application, Report and Process Server tiers on the current server.

Chapter 6: Install on Three or More Servers

The three or more servers installation model is designed for large firms who have multiple locations and will use Vision on an internal Wide Area Network (WAN). There might be additional report, application, or Web servers required for load balancing, performance, security, or fault tolerance reasons.

This model best suits firms with complex deployment requirements. Firms deploying this model must have proficient firewall management. For more information about the various deployment options available, see Vision Deployment Models on page 26 for more information.

For an installation that uses three or more servers, you can install any combination of the following:

- A single database server
- One or more report servers
- One or more Web/application servers
- One or more process servers, each on its own machine.

You must also select the appropriate tier or tiers on each individual server. To install these items, complete the following steps in order as they are listed below:

1. Set up your database server.
2. Set up your report server.
3. Set up your Web/application server.
4. Set up a separate process server (if desired). When you install a Web/application server, a process server is also installed by default. You can, optionally, install as many stand-alone process servers as you would like, on separate machines.

This chapter is divided into three sections:

- Install the Database Tier
- Install the Report Tier on a Second Server
- Install the Web and Primary Application Tiers on a Third Server – You must install the Web/Application tier as the last step. The installation program needs to validate report server credentials and configuration as part of the Web/application tier installation. When you install the Web/application tier, a process server is also installed. If your firm wants to run multiple report, application, or Web servers on additional machines, contact your Deltek Technical Services representative for instructions.

Refer to the following prerequisites before installing each of the servers.

	Software Prerequisites	Database Server	Report Server (Reporting Services)	Web/ Application Server ¹	Process Server ²
REQUIRED Setup will not complete if these are not detected	Microsoft Windows Server 2012	Yes	Yes	Yes	Yes
	Microsoft Windows Server 2008 SP2	Yes	Yes	Yes	Yes
	Microsoft Windows Server 2008 R2 SP1	Yes	Yes	Yes	Yes
	Microsoft SQL Server 2008 SP3 + CU6 (10.00.5788.00)	Yes	Yes		
	Microsoft SQL Server 2008 R2 SP2+ CU1 (10.50.4260.0)	Yes	Yes		
	Microsoft SQL Server 2012 SP1+CU1 (11.0.3321.0) Standard and Enterprise editions	Yes	Yes		
	Microsoft .NET Framework 3.5 (SP1)			Yes	Yes
OPTIONAL Supplied by Deltek Download Manager during Installation	Microsoft XML 4.0 (SP2) Services	Yes		Yes	Yes
	Microsoft SQLXML 4.0 (SP1)	Yes		Yes ³	

¹IIS is required with ASP.NET enabled.

²IIS is not required on the Process Server Only Machine.

³If installing on a Windows Server x64 (64-bit) platform, you may need to download and install Microsoft SQL XML 4.0 SP1 on your Web/Application Server if you encounter an error in the Vision Planning client application.

Step 1: Install the Database Tier

Deltek recommends that you first install the database server. If you do not want to install the database server first, but you know the database server host name or IP address, and the Microsoft SQL Server username and password, you can start by installing the report tier. Follow the instructions in Step 2: Install the Report Server on page 69. You must install the Web/Application tier last, because that installation program validates database and report tier information during installation.

About Your Database

The method you use to install your Vision database server depends on whether you are installing Vision for the first time, or upgrading from a previous Deltek product.

Install Vision for the first time

During installation, you choose the **Blank Database** option.

Migrate from Deltek Advantage, Award, or CRM and Proposals

1. Install the Deltek Advantage to Deltek Vision, Deltek Award to Deltek Vision, or Deltek CRM and Proposals to Deltek Vision migration utility.
2. Install the Deltek Vision software. Do not select the Restore database or Blank Database options during database tier installation. During Deltek Vision database tier installation, you will need your Microsoft SQL Server, or Microsoft SQL Server Express Edition username and password.
3. Run the Deltek Advantage to Deltek Vision migration utility, Deltek Award to Deltek Vision migration utility, or the Deltek CRM and Proposals to Deltek Vision migration utility.

Migrate from Sema4

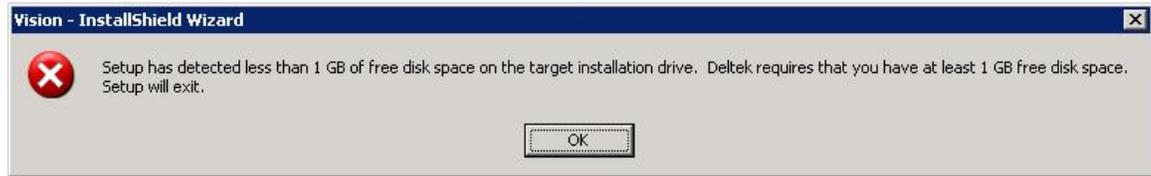
Deltek's Data Migration group converts your Sema4 data to create your database backup file (.BAK). For instructions on migrating from Deltek Sema4 to Deltek Vision, contact your Deltek consultant.

Install the Database Server for Three or More Servers

To install the database server for three or more servers, complete the following steps:

1. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager. Setup displays the prerequisites dialog.
2. Review to ensure your environment meets **all prerequisites** and click **Next** to continue. The Welcome dialog displays.
3. Click **Next**. The License Agreement page displays.
4. Review the agreement and click the **I accept the terms of the license agreement** option. Click **Next**. The Choose Destination Location page displays.
5. Complete one of the following:
 - Click **Next** to accept the destination displayed on the form.
 - Click **Browse**, select an alternate destination, and click **Next**.

- If you do not have at least 1GB of free space in the Destination location, Vision displays an error message. Change the path to select a folder with over 1GB of free space and click **Retry**.



6. The Number of Vision Servers page displays.
7. Select **Three or more Servers** and click **Next**. The Select Server role page displays.
8. Select **Database Server** and click **Next**. The Database Server (MSSQL) Setup Connection page displays.
9. Enter the following:
 - **Database Server** — Enter the name of the database server.
 - **SQL Username** — Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is **sa**. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.
 - **SQL Password** — Enter the password associated with this SQL Username.
 - **Windows Integrated** — Selecting this option means that if you are logged onto the server with the appropriate administrative rights, you can be authenticated to your SQL server via your Windows account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you are using integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems do not add members of the local administrator's group to the SQL Server Sysadmin role by default.



If you encounter errors connecting to the database, see [Chapter 2: Installation Information and Deployment Model Checklists](#) for additional connection information.

10. Make sure your connection is configured correctly before you continue. If the installation program cannot connect to the database using the username/password you entered, when you click **Next**, the following message displays asking you to try again.



11. Click **OK**, correct the problem, and continue.
12. Click **Next** to continue. The Databases to Restore page displays.

13. Select the database you want to restore, if any. The database that you select determines the language that displays in the Vision user interface.
Vision 7.1 only supports English (United States) and English (International) databases. Databases with multiple languages other than English are not supported.
 - **No Selection** (No Boxes checked) — If you already have a Vision database or previous Sample database, you can click on Next without making a selection to get to the next page of choosing the database to upgrade if the setup detects it.
 - **Blank Database** (Vision – US) — If there are any existing Vision 6.x databases that you would like to upgrade to 7.1 on the database server you specified in step 8, do not select **Blank Database**. You can upgrade an existing 5.x or 6.x database in the next step. If you don't have an existing Vision database, select this option to start a new Vision database.
 - **Blank Database** (Vision – English International) — Blank database for English Language installations outside the US. Select this option to start a new Vision database if you are using an English Language installation and are outside the US.
 - **Sample Database** (VisionDemo71VisionDemo71) — Select this option to install the Vision sample database. It is sometimes helpful to have this database installed for troubleshooting purposes. If you already previous version of the Sample Database, the following options are available:
 - Do not select **Sample Database**. The setup will detect supported previous versions of databases (including the Sample database) and give you the opportunity to upgrade your Sample database.
 - In most cases any previous versions of the Sample database may have the Vision database version number in its name (For example, VisionDemo51). If that is the case, when you convert a previous version demo database to Vision 7.1 the version it is upgraded to will no longer match the version number in its name. You can perform one of the following:
 - Rename the database on the SQL Server and in Weblink after the installation to reflect the correct version number, or
 - Delete the previous version's Sample database on your SQL Server before continuing, then choose to restore the Sample database. Deltek recommends this option for Vision 7.1.
14. Click **Next** to continue.
15. Setup now checks for Vision databases.
 - If you migrated from another product and restored and/or upgraded your database to this release version prior to running setup, the setup process will detect the versions of your database.
 - Otherwise, the setup process checks your SQL Server for Vision Databases version 6.0 or higher that is available for upgrade. See Appendix B: for additional information.
16. Click **Next**. The Error Reporting page displays.
17. Select **Automatically send fatal error reports to Deltek**, then click **Next**. The Start Copying Files page displays.

18. Review the installation settings. The information on the page should be saved. It contains information such as:
 - The location of the installation Log that tracks all the steps performed during the installation.
 - The installation directory – where you installed Vision.
 - The Setup Type and the option chosen – if you are performing a multi server installation, this information is handy to use to know what your next option to choose when performing the installation on your other servers.
 - Information about the Database Server such as:
 - Database Server Name
 - Database Login used to perform the installation on the database server
 - Any Vision logins and passwords created in SQL Server during the installation. This information can be used when configuring Weblink. It is recommended that you change at least the passwords from their defaults and/or the login name as well.
 - Any databases that you will be restoring or upgrading will be listed
19. Click **Next** to begin installation of the database server as part of a three or more server installation.
20. Review the installation log to check for errors in the installation. The installation creates a logs subfolder located in the Vision installation location that contains the installation log as well as conversion log files created for each database that may have been upgraded during the installation. If you upgraded any databases during the installation process, verify that a conversion log for that database (filename contains the database name) was created and it does not contain any errors (search for the word “msg” without the quotes in the log file.” If errors are found, contact Deltek Customer Care with the contents of the log files.
21. Proceed to the next section to perform Step 2: Install the Report Server on page 69.

Important Information about Setting up the Vision Database Tier

During installation of the database tier, the Vision backup device is created on the database server to allow end users to perform *ad hoc* database backups before major data changes or processes take place. To back up the database, select **Utilities » Backup Database** from the Vision Applications menu.

Proceed to the next section to install your report server onto a separate machine.

Step 2: Install the Report Server

To install the report server for a three-server or more installation, complete the following steps:

1. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager. Setup displays the prerequisites dialog.

2. Review to ensure your environment meets **all** prerequisites and click **Next** to continue. The Welcome dialog displays.
3. Click **Next**. The License Agreement page displays.
4. Review the agreement and click the **I accept the terms of the license agreement** option if you agree. Click **Next** to proceed. The Choose Destination Location page displays.
5. Complete one of the following:
 - Click **Next** to accept the destination displayed on the form.
 - Click **Browse**, select an alternate destination, and click **Next**.
6. If you do not have at least 1GB of free space in the Destination location, Vision displays an error message. Change the path to select a folder with over 1GB of free space and click **Retry**.
7. The Number of Vision Servers page displays.
8. Select **Three or more Servers** and click **Next**. The Select Server role page displays.
9. Select **Report Server** and click **Next**. The Checking configuration of Microsoft SQL Reporting Services page displays.
10. Setup uses the default Report Server URL when it first checks the configuration of Microsoft SQL Reporting Services on the Web Server to the Reporting Services Web Service. If it is unable to make a connection to the Reporting Service Web Service page, setup will return an error message with the reason it is unable to make the connection and will display the Specify Report Server and Report Server URL Information form. See Appendix C: Connect to Reporting Service Web Service for additional information. Setup will continue to the next step when the connection is complete.

If setup detects a version that is supported but lower than the recommended supported version of Microsoft SQL Server Reporting Services, then it will display a warning message along with the recommended version and will continue.
11. The Start Copying Files page displays.



Important Information about Configuring Report Services

If you will be using the server-side printing functionality of Vision, see Appendix E: Printing in Vision 7.x for instructions on where and how to configure the account.

If you configured the Report Server Service Account to be a domain account, Reporting Services will use Kerberos Authentication by default. You must ensure that you have created an SPN for the account. To configure an SPN, complete the steps in this Microsoft link: <http://msdn.microsoft.com/en-us/library/cc281382.aspx>

Alternatively, you can configure the RSReportServer.config file with the following XML structure that specifies NTLM only. This is for deployments that do not support Kerberos or to work around Kerberos authentication errors (HTTP 401 errors) :

```
<AuthenticationTypes>
<RSWindowsNTLM/>
</AuthenticationTypes>
```

For details about Kerberos related authentication issues, see the following Microsoft documentation: <http://msdn.microsoft.com/en-us/library/cc281253.aspx>

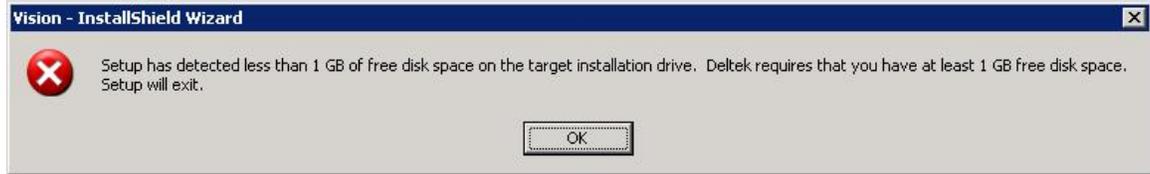
12. Review the installation settings and click **Next** to begin installation of a report server, as part of a three or more server installation.
13. If you want to install additional report servers, repeat these steps on any machine where you want to install additional report servers. Ensure that your SQL Server Edition and number of licenses support multiple report servers.
14. Proceed to the next section to install your Web/Application server on a separate machine.
15. You must install the Vision tiers in this order when performing a three or more servers installation: Install your database server first (instructions: page 65). Then install your report server (instructions: page 69), and finally, install your Web/application server (instructions: page 71) and stand-alone process servers (optional - instructions: page 74).

Step 3: Install the Web/Application Server

To install the web\application server for a three-servers or more installation, complete the following steps:

1. Follow the steps on page 38 to download and launch the setup file.
2. Click **OK** to continue. The Welcome page displays.
3. Click **Next**. The License Agreement page displays.
4. Review the agreement and click the **I accept the terms of the license agreement** option if you agree. Click **Next** to proceed. The Choose Destination Location page displays.
5. Complete one of the following:
 - Click **Next** to accept the destination displayed on the form.
 - Click **Browse**, select an alternate destination, and click **Next**.

- If you do not have at least 1GB of free space in the Destination location, Vision displays an error message. Change the path to select a folder with over 1GB of free space and click **Retry**.



The Number of Vision Servers page displays.

6. Select **Three or more Servers** and click **Next**. The Select Server role page displays.
7. Select **Web/Application Server** and click **Next**. The Reports to Load page displays.
8. Select the language to load. The Vision installation routine includes options for selecting the version of English—United States English or International English. The other languages—Dutch, French (Canada), French (France), German, and Spanish are not supported with Vision 7.1.
9. Click **Next** to continue.
10. The Database Server Setup Connection page displays.
11. Enter the following:
 - **Database Server** – Enter the name of the database server.
 - **SQL Username** – Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is **sa**. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.
 - **SQL Password** — Enter the password associated with this SQL Username.
 - **Windows Integrated** – Selecting this option means that if you are logged onto the server with the appropriate administrative rights, you can be authenticated to your SQL server via your Windows account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you are using integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems do not add members of the local administrator's group to the SQL Server Sysadmin role by default.
12. You must make sure your connection is configured correctly before you can continue. If the installation program cannot connect to the database using the username/password you entered, when you click **Next**, the following message displays asking you to try again.
13. Click **OK**, correct the problem, and continue.
14. The Specify Report Server and Port Information page displays if setup is unable to detect the Report Server.
15. Enter the following report server information:

- **Report Server** — Enter the host name of the server where you installed your Vision report server.
- **Report Server URL** — Setup auto-completes the Report Server URL based on the Server name you enter into the Report Server field and the Instance (If you specified an Instance name).

Setup uses the default Report Server URL when it first checks the configuration of Microsoft SQL Reporting Services on the Web Server to the Reporting Services Web Service. If it is unable to make a connection to the Reporting Service Web Service page, setup will return an error message with the reason it is unable to make the connection and will display the Specify Report Server and Report Server URL Information form. See Appendix C: Connect to Reporting Service Web Service for additional information. Continue to the next step when the connection is complete.

When your configuration is verified, the Database Server (MSSQL) Setup Connection page displays.

16. When you are finished, click **Next**. The Databases Available for Logon page displays.
17. Select the databases you want to make available to your end users on the Vision logon form. The list displayed here includes:
 - Databases you have selected to upgrade
 - The sample database (if you chose to restore that)
 - The blank database (if you chose to restore that)
 - Any Vision 7.1 databases already previously restored on your database server.
 - You must select at least one database. New databases can be added and databases can be removed via WebLink after installation.
 - This page does not display if you did not choose to upgrade any databases and there is only one existing Vision 7.1 database.



If you encounter errors connecting to the database, see [Chapter 4: One Server Installation](#) for additional connection information.

18. Click **Next**. The Error Reporting page displays.
19. Select **Automatically send fatal error reports to Deltek**, then click **Next**. The Start Copying Files page displays.
20. Review the installation settings and click **Next** to begin installation of a Web/application server, as part of a three or more servers installation.
21. Review the installation log to check for errors in the installation. The installation creates a logs subfolder located in the Vision installation location that contains the installation log as well as conversion log files created for each database that may have been upgraded during the installation. If you upgraded any databases during the installation process, verify that a conversion log for that database (filename contains the database name) was created and it does not contain any errors (search for the word “msg” without the quotes in the log file.” If errors are found, contact Deltek Customer Care with the contents of the log files.



If there are any errors during the installation process, you must confirm that your reports were loaded successfully. Go to \Program Files\Deltek\Vision\Logs folder and review the latest **DeltekVisionCMD_xx-XX.log** (xx-XX represents the language of your loaded reports). Reload your reports if they are not in the log file.

22. Repeat the steps in this section on any machine where you would like to install additional Web/application servers, or proceed to the next section to install a stand-alone process server onto a separate machine.
23. You must install the Vision tiers in this order when performing a three or more servers installation: Install your database server first (instructions: page 65). Then, install your report server (instructions: page 69), and finally, install your Web/application server (instructions: page 71) and stand-alone process servers (optional - instructions: page 74).

Step 4: Install the Process Server

To install the process server for a three-servers or more installation, complete the following steps:

1. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager. Setup displays the prerequisites dialog.
2. Review to ensure your environment meets **all** prerequisites and click **Next** to continue. The Welcome dialog displays.
3. Click **Next**. The License Agreement page displays.
4. Review the agreement and click the **I accept the terms of the license agreement** option if you agree. Click **Next** to proceed. The Choose Destination Location page displays.
5. Complete one of the following:
 - Click **Next** to accept the destination displayed on the form.
 - Click **Browse**, select an alternate destination, and click **Next**.
 The Number of Vision Servers page displays.
6. Select **Three or more Servers** and click **Next**. The Select Server role page displays.
7. Click **Next** to continue.
8. If IIS is enabled on the server, the following message displays. Click **OK** to continue



9. Browse to the databases.enc file (located on the Web Server) and click **Next**.

10. Setup displays the warning message that the Process Server should be updated if you change your entries in Weblink on the Web Server. Click **OK** to continue. The Error Reporting page displays.
11. Select **Automatically send fatal error reports to Deltek**, then click **Next**. The Start Copying Files page displays.
12. Review the installation log to check for errors in the installation. The installation creates a log subfolder located in the Vision installation location that contains the installation log. If errors are found, contact Deltek Customer Care with the contents of the log files.



If there are any errors during the installation process, you must confirm that your reports were loaded successfully. Go to \ProgramFiles\Deltek\Vision\Logs folder and review the latest **DeltekVisionCMD_xx-XX.log** (xx-XX represents the language of your loaded reports). Reload your reports if they are not in the log file.

Install Secondary/Backup Servers on Additional Machines

If your firm requires additional Web, application, report, or process servers to handle user load, you can install additional servers on as many machines as needed.

Contact Deltek Customer Care for information about installing additional Web/application or report servers.

Chapter 7: Upgrade from a Prior Version of Vision

If you are upgrading from a prior version of Vision 6.x, the installation process will detect the existence of the previous 6.x version and will launch the Upgrade Wizard to upgrade the existing version. Also, the Web tier and Database tier will automatically detect existing 6.x databases and offer the option to upgrade the databases during the installation.

During the installation process, setup will attempt to automatically connect to the report server to load the Vision reports. If it is unable to make a connection, see Appendix C: Connect to Reporting Service Web Service for troubleshooting steps.

Perform the following steps to update your Vision 6.x. Setup will perform an in-place upgrade to the existing installation and databases. Depending on your deployment model, Deltek recommends performing the installation on the tiers in the following order:

1. Database Server
2. Report Server
3. Web Server
4. Process Server

To launch the setup process, complete the following steps:

1. Perform the steps in Chapter 3: Download Vision and Initiate Setup.
2. Follow the steps on page 38 to download the file. The Download Manager checks to determine if any third-party applications are required. See page 26 for details about the Download Manager.
3. Click **OK** to continue. Setup will detect the previous Vision 6.x existing installation and will launch the upgrade wizard.

If you have a Vision 5.1 or prior installation, you must remove that installation and Actuate before you install Vision 7.1.

Vision 7.1 supports upgrades from Vision 7.0 (LA or GA) but does not support upgrades from the 7.0 EA (Beta) versions.

4. Review to ensure your environment meets all prerequisites and click **Next** to continue. The Welcome dialog displays.
5. If you are deploying on a web tier installation, the Reports to Load page displays. Select the reports to load and click Next to continue. Otherwise, proceed to the next step.
6. Complete one of the following:
 - If you are installing on the database server tier only, skip this step.
 - If you are installing on the process server only, proceed to step 10.
 - If you are installing in a deployment that has either the Web or Report Server or both, the Report Server connection page displays, with the report server and report server URL connection information. Update the information and click **Next** to continue.
 - See the section on identifying your Report Server configuration.
7. Setup verifies that your server meets the recommended prerequisite requirements for Vision. If your report or database server tier does not have all the recommended requirements, the installation displays a warning message but will allow you to continue.

Click **OK** to continue. If you are installing on a Report Server Tier only, proceed to Step 10 to begin the upgrade and file installation process; otherwise, setup continues to the next step.

8. The Database Server connection screen displays. Enter the Database Credentials and click **Next** to continue.
9. Enter the following:
 - Database Server — Enter the name of the database server.
 - SQL Username — Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is SA. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.
 - SQL Password — Enter the password associated with this SQL Username.
 - Windows Integrated – Selecting this option means that if you are logged onto the server with the appropriate administrative rights, you can be authenticated to your SQL server via your Windows account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you are using integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems do not add members of the local administrator's group to the SQL Server Sysadmin role by default.

You must make sure your connection is configured correctly before you can continue. The Databases to Upgrade screen displays.

10. Select the Databases to Upgrade. Click **Next** to continue.
11. Click **Install** to begin the upgrade process.
12. Click **Finish** to complete the installation.

Chapter 8: Troubleshoot Vision

This chapter provides information about contacting Deltek if problems occur during installation. This chapter also includes a list of errors that may occur during installation and possible solutions.

Sending Files to Deltek

If you encounter problems during the Vision installation, contact Deltek Customer Care for assistance. To help us resolve your installation issues as quickly as possible, please send an **Minfo32** log file to Deltek when requesting assistance with troubleshooting an installation. Be sure to note any error messages that display, take screenshots if possible, and send the screenshot files to Deltek.

Minfo32 Log file

To save this file, complete the following steps:

1. Click **Start » Run**.
2. On the Run dialog box, enter **Minfo32**.
3. Click **Enter**.
4. In the top left-hand corner, click **Save**.
5. Name your **System Information File (*.NFO)**.
6. Save this file to C:\ProgramFiles\Deltek\Vision\Logs.
7. Zip and e-mail all files in this folder: C:\Program Files\Deltek\Vision\Logs. A log file called DeltekVisionSetupLogMMDDYY.log is created during all installations.

Troubleshoot Vision Tier Installation Messages

This section documents messages that may display during installation of Vision tiers, with brief explanations and tips how to proceed if you receive these messages. The following sections correspond to Vision tiers.

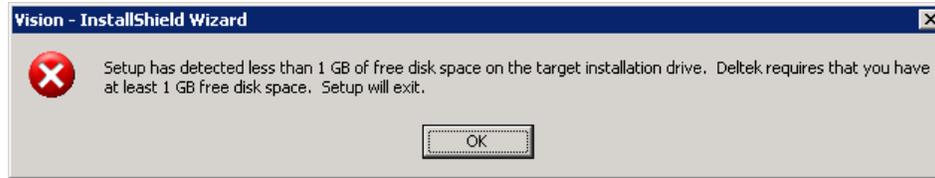
All Tiers

Free Space Error

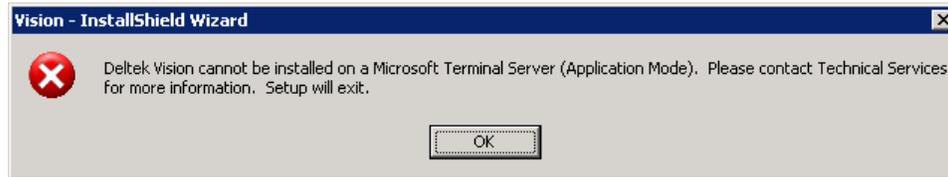
The following warning can display during installation of any Vision Tier, if you have less than 1 GB free on the drive. Deltek recommends having at least 1 GB of free disk space on the drive for any Vision Tier. However, if you choose to continue with setup, you can.



The following message displays when any Vision Tier has less than 1 GB free on the drive. The installation will halt and you will need to remove unneeded files so that there is a minimum of 1 GB free.



The following message displays when Terminal Services is installed. Note that you cannot install Vision on a Windows Server with Terminal Services enabled.

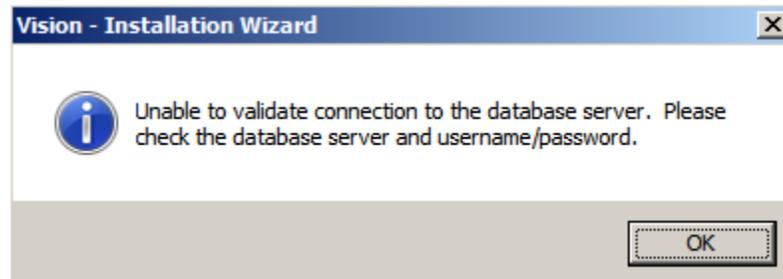


Database Tier

The following messages may display when installing the database tier, whether you install the database alone, or in conjunction with all other tiers.

Cannot Connect to Database

The following message can display after you click **Next** from the database page that contains the **Database Server**, **Database Username**, and **Database Password** fields. This message occurs if setup cannot successfully connect to the database server using that username and password you entered. Setup will exit.

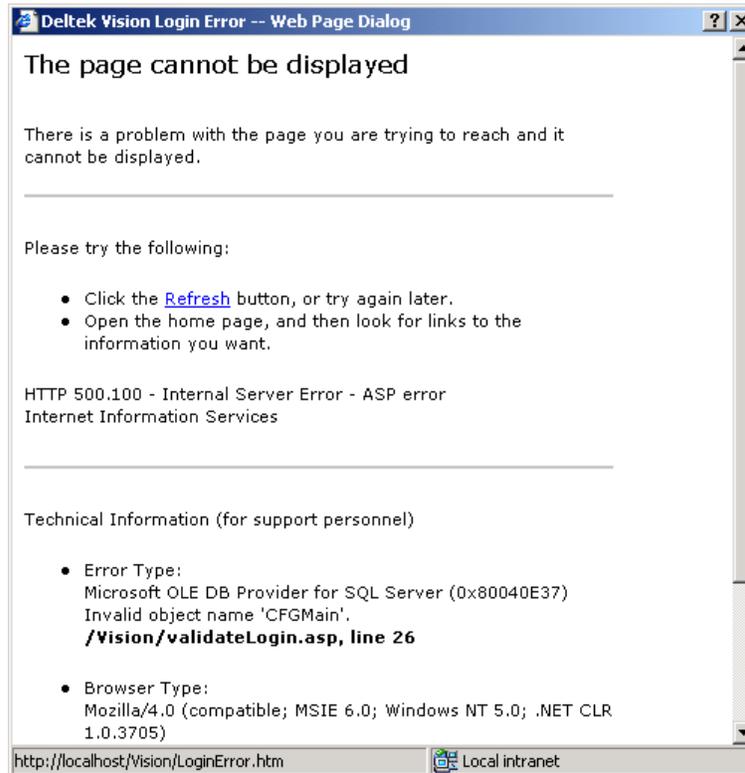


No Database Selected

A message box displays if you have no valid Vision 7.1 databases to upgrade and you do not select to restore a blank or demo database. Click **OK** to return to the restore window. You must either choose to restore a blank or demo database or click the **Back** button and select a database to upgrade to Vision 7.1.

Database Has No Vision Tables

The following page may display if you attempt to log on to a database that has no Vision tables.



Report Tier

If you experience errors connecting to the report server during installation, review the steps in Appendix C: Connect to Reporting Service Web Service.

If you have configured the Report Server service account to be a domain account, Reporting Services will use Kerberos Authentication by default. To prevent HTTP 401 errors when you install the Vision Web Tier, to test the Vision Weblink connections to Reporting Services, or to load reports in Vision, you must perform one of the following:

- Create an SPN for the account.
- Turn off Kerberos authentication in the rsreportserver.config file on the report server.

Complete one of the following steps:

- To configure an SPN, logon to a domain controller as a domain administrator and complete the steps in the following Microsoft link: <http://msdn.microsoft.com/en-us/library/cc281382.aspx>. Do **not** specify a port in the command syntax as suggested from the Microsoft link.

The screen shot below is an example of the syntax used to add an SPN (setspn -a) for the Report Server's NETBIOS and FQDN names with a Domain account as well as the syntax to show a list (setspn -l) of the registered SPNs for the domain account. In the screenshot example below, the domain=applebartlett.com, report server name=CAMOPSK33TRPT and the account name=RSAccount.

```

C:\Program Files\Support Tools>Setspn -a http/CAMOPSK33TRPT.APPLEBARTLETT.COM AP
PLEBARTLETT\RSAccount
Registering ServicePrincipalNames for CN=RS Account,CN=Users,DC=applebartlett,DC
=con
    http/CAMOPSK33TRPT.APPLEBARTLETT.COM
Updated object

C:\Program Files\Support Tools>Setspn -a http/CAMOPSK33TRPT APPLEBARTLETT\RSacco
unt
Registering ServicePrincipalNames for CN=RS Account,CN=Users,DC=applebartlett,DC
=con
    http/CAMOPSK33TRPT
Updated object

C:\Program Files\Support Tools>SEtSPN -l applebartlett\rsaccount
Registered ServicePrincipalNames for CN=RS Account,CN=Users,DC=applebartlett,DC=
con:
    http/CAMOPSK33TRPT.APPLEBARTLETT.COM
    http/canopsk33trpt

C:\Program Files\Support Tools>_
  
```

- Alternatively, instead of setting an SPN, you can configure the RSReportServer.config file with the following XML structure that specifies NTLM only. This is for deployments that do not support Kerberos or to work around Kerberos authentication errors (HTTP 401 errors). By default this file is located in the Reporting Services Installation folder in a “\Reporting Services\ReportServer” subdirectory:

```

<AuthenticationTypes>
  <RSWindowsNTLM />
</AuthenticationTypes>
  
```

You can find details related to Kerberos-related authentication issues and additional steps on how to edit the RSReportServer.config file in the following Microsoft Reporting Services documentation: <http://msdn.microsoft.com/en-us/library/cc281253.aspx>.

Client Tier

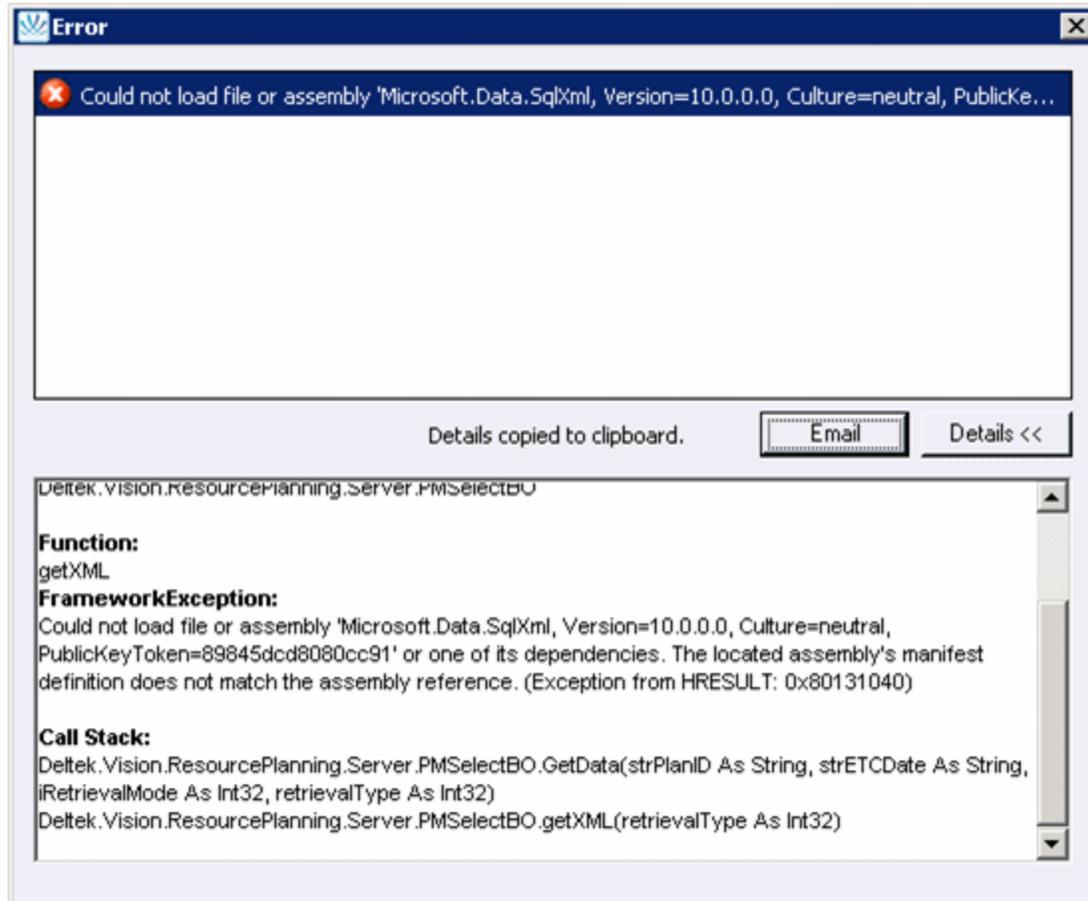
Workstation Reboots when Printing

When printing from Vision on an XP workstation, the workstation will reboot or experience an Operating System STOP Error message requiring a reboot.

This is caused by a Microsoft GDI Security update that affects certain PCL printers and is resolved by downloading and installing the hotfix from the following Microsoft article unto the workstation. <http://support.microsoft.com/kb/935843/>.

Any Client Workstation is Unable to Launch Planning.

When you launch the Vision Planning application, an error similar to the following appears and the end-user is unable to launch planning:



This issue may occur if the Vision Web/Application Server is a 64-bit (x64) platform. To resolve the issue, download and install Microsoft SQL XML 4.0 SP1 on your Web/Application Server if you encounter an error in the Vision Planning Client Application.

You can download it from the Microsoft website:

<http://www.microsoft.com/downloads/en/details.aspx?FamilyId=228DE03F-3B5A-428A-923F-58A033D316E1&displaylang=en>

Scroll to the Microsoft SQLXML 4.0 SP1 section to select and download the package that matches your platform.

Chapter 9: Verify Post Installation

After you complete the installation process, you can verify the installation. This is useful to confirm that all prerequisite software is installed and all installation steps were complete.

To verify that your installation was successful, you must log on to Vision:

1. Open Internet Explorer and enter in the URL to the Vision application. For example, `http:\\<Web Server>\Vision`.
2. Click **Deltek Vision**, or wait while the application loads. Vision displays the Vision logon form.
3. Enter your **User ID**. If you are unsure of your user ID, enter admin.
4. Enter your **Password**. If you are unsure of your password, leave this field blank.
If you do not have a user ID and password, and a user ID of admin and a blank password do not work, please contact Deltek Customer Care.
5. Use the drop-down list to select the **Database** you want to log on to.
6. Click **Login**. If the Vision application opens, displaying the Welcome page, your installation is successful.



If there are any errors during the installation process, you must confirm that your reports were loaded successfully. Go to the Vision installation location folder (`\ProgramFiles\Deltek\Vision\Logs`) and review the latest **DeltekVisionCMD_xx-XX.log** (xx-XX represents the language of your loaded reports). Reload your reports if the log file indicates there were errors during the loading of the reports into Vision.

Chapter 10: Utilities Installation

You can install the following Vision utilities:

- Advantage to Vision conversion utility
- Deltek CRM and Proposals to Vision conversion utility
- SDK

Follow the steps in Download the Vision Installation Files and Initiate Setup to download the Deltek Vision 7.1 Utilities executable file. Then follow the steps in this section to install one or more utilities.

The Deltek Vision 7.1 Utilities can be installed on the Windows client versions that are supported by Vision.

To install the Vision utilities, complete the following steps:

1. Double-click **Deltek Vision 7.1 Utilities** executable file. The confirmation dialog box displays.
2. Click **Yes** to continue. The Welcome page displays.
3. Click **Next** to continue. The License Agreement page displays.
4. Click **I accept the terms of the license agreement** and click **Next**. The Select Features page displays.
5. Select the utility you want to install, then do either of the following:
 - Click **Next** to have Vision copy files for that utility to the destination folder shown, or
 - Click **Browse**, select a different destination, then click **Next**.

The Ready to Install page displays.
6. Click **Install** to begin the installation. Vision begins copying files for the utility you selected, to the location you selected.
7. When complete, the Installation Complete page displays. Click **Finish** to finish the installation and exit the wizard.



For instructions on building Vision reports, please see the Vision online help system, available from within the Vision user interface, or contact Deltek Customer Care.

For instructions on using the conversion utilities to convert an Advantage, Award, or Deltek CRM and Proposals database to Vision, please contact Deltek Customer Care.

Appendix A: Microsoft Internet Information Server (IIS) Installation on Windows Server 2008/2008R2/2012

Follow these instructions to install Microsoft IIS on Windows Serve. These steps are necessary for proper detection of ASP.NET.

To install Microsoft IIS on Windows Server, complete the following steps:

1. Log onto your Microsoft Windows Server as a domain or local administrator.
2. Click **Start » Control Panel » Administrative Tools » Launch Server Manager**.
3. Choose **Add Roles** if IIS is not yet enabled. If IIS is already enabled, select **Add Role Services** (if you need to add any additional components).
4. On the Select Server Roles screen, enable Web Server (IIS) if it is not already enabled. Enable the following sub-options from beneath the Internet Information Services option:

Component	Folder
Static Content	Common HTTP Features
Default Document	Common HTTP Features
HTTP Redirection	Common HTTP Features
Directory Browsing	Common HTTP Features
ASP .Net	Application Development
ISAPI Extension	Application Development
ISAPI Filters	Application Development
.Net Extensibility	Application Development
Windows Authentication	Security
HTTP Monitoring	Health and Diagnostics
Request Monitor	Health and Diagnostics
IIS Management Console	Management Tools
IIS Management Scripts and Tools	Management Tools
Management Service	Management Tools

5. On the Confirm Installation Instructions Screen, click **Install** to begin the process.
6. On the Installation Results screen, click **Close**.



For detailed steps on installing IIS 7.0 on Windows Vista and Server 2008, see the following:

IIS 7.0 or the IIS 7.0 components in Windows Vista:

<http://www.iis.net/default.aspx?tabid=2&subtabid=25&i=957>

(<http://www.iis.net/default.aspx?tabid=2&subtabid=25&i=957>)

IIS 7.0 or the IIS 7.0 components in a Server Core installation of Windows Server 2008:

<http://www.iis.net/default.aspx?tabid=2&subtabid=25&i=956>

Appendix B: Options When Converting a Database during Installation

When completing the database portion of the installation process, Vision checks to see if there are any existing 6.x databases. If so, the Database to Upgrade page displays.

If you have any Vision databases that are versions prior to 6.0, the Database to Upgrade page does not display. Those databases must be manually converted to at least version 6.0 in order to be converted to 7.1. Contact Vision Technical Support to obtain the conversion scripts if you have a Vision database version prior to 5.0. If your database is at least at Vision version 5.0 or 5.1 you can obtain the script yourself. Log on to the Deltek Customer Care website and select the KB article # [43088](#) titled [How to upgrade the Vision database](#). Download the Vision 6.1 SP4 conversion script and follow the instructions to apply it against your Vision 5.x database. When the conversion is complete, the Vision 7.1 installation and database conversion will recognize your database and make it available for upgrade.



If Vision 6.x is already installed, do not uninstall that version. Perform an in-place upgrade from 6.x to the current version.

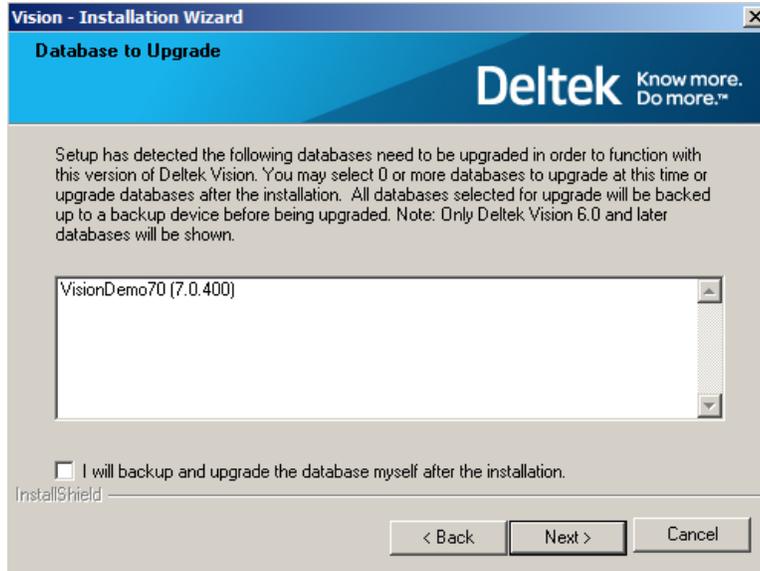
To complete the Database Upgrade process for database version 6.x, complete the following steps:

1. If there are any existing Vision 6.x databases on your database server, setup will detect and display them on the Database to Upgrade page. The database to upgrade dialog box lists the previous version databases found and their version number.



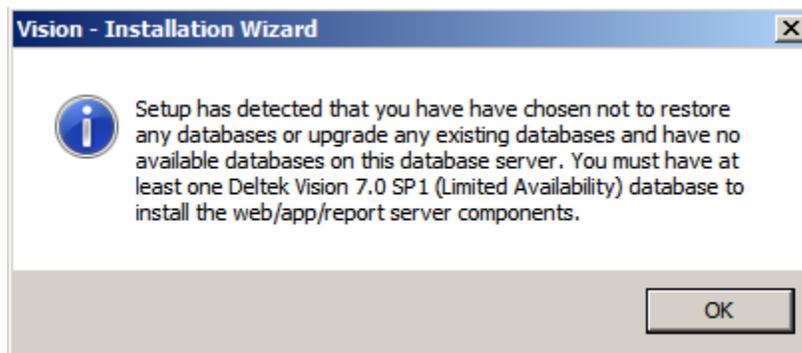
Before displaying the Databases to Upgrade dialog box, setup will display a warning message: "If a database contains custom objects do not select it for automatic upgrade. For those databases you would drop the custom objects, manually run the upgrade scripts, and then re-apply the custom objects..."

If you have added any custom indexes, triggers, etc... to your database you must remove them before performing the conversion to ensure they do not affect the conversion.



2. Complete one of the following:

- Select a database to upgrade. If you upgrade a database, the setup process will make a backup of the database on your SQL Server in the default Backup location before converting the database. If setup is unable to make the backup because of insufficient space or any other reason, the database will not be converted and an error message will display during the installation. This error will also be logged in the log file so that when you review the log file you can be reminded to convert the database manually.
- Click **Next** to bypass this form.
- If you choose the **I will backup and upgrade the database myself after the installation** option, setup will return a message that you will need to convert the database manually.



- If you are installing any Tier that included the Web/Application Tier and did not restore or upgrade a database that is already at the current released version and setup does not detect any existing Vision 6.x databases on your database server, Setup will display a message window stating that a database is required to continue and will exit..

3. Manually create a backup of your database before you run the database conversion using the Deltekvisionxx.sql (where xx is your version of Vision) script file located in the \program files\Deltek\Vision\Databases\Scripts folder. Do not run the

UnicodeDeltekvisionxx.sql (where xx is your version of Vision) or other script files unless directed to by Deltek Customer Care. If you plan to convert your Vision database to Unicode, refer to the Vision Help documentation for the appropriate steps.

Appendix C: Connect to Reporting Service Web Service

SQL Server Reporting Services provides access to the full functionality of the report server through the Report Server Web Service. The Report Server Web Service is an XML Web service with a SOAP API. It uses SOAP over HTTP and acts as a communications interface between client programs and the report server. The Web service provides two endpoints - one for report execution and one for report management. Setup connects to the report execution endpoint.

If it is unable to make a connection to the Reporting Service Web Service page, setup will return an error message with the reason it cannot make the connection and will display the **Specify Report Server and Report Server URL Information form**.

The **Report Server** name is the name of your report server machine. Make sure the Virtual Directory value matches the **Virtual Directory** of the report server displayed on the Reporting Services Configuration Manager page for SQL Server 2008.

For proper connectivity, the Report Server URL must match the format shown on this form.

Complete one of the following actions:

- Verify that the information on the page is correct and click **Next**.
- Update the fields with the correct values.

The following example shows the format of the URL required for the connection to the Reporting Services Web Service on the Report Server.

http://<Report Server Name>/Virtual Directory/reportservice2005.asmx

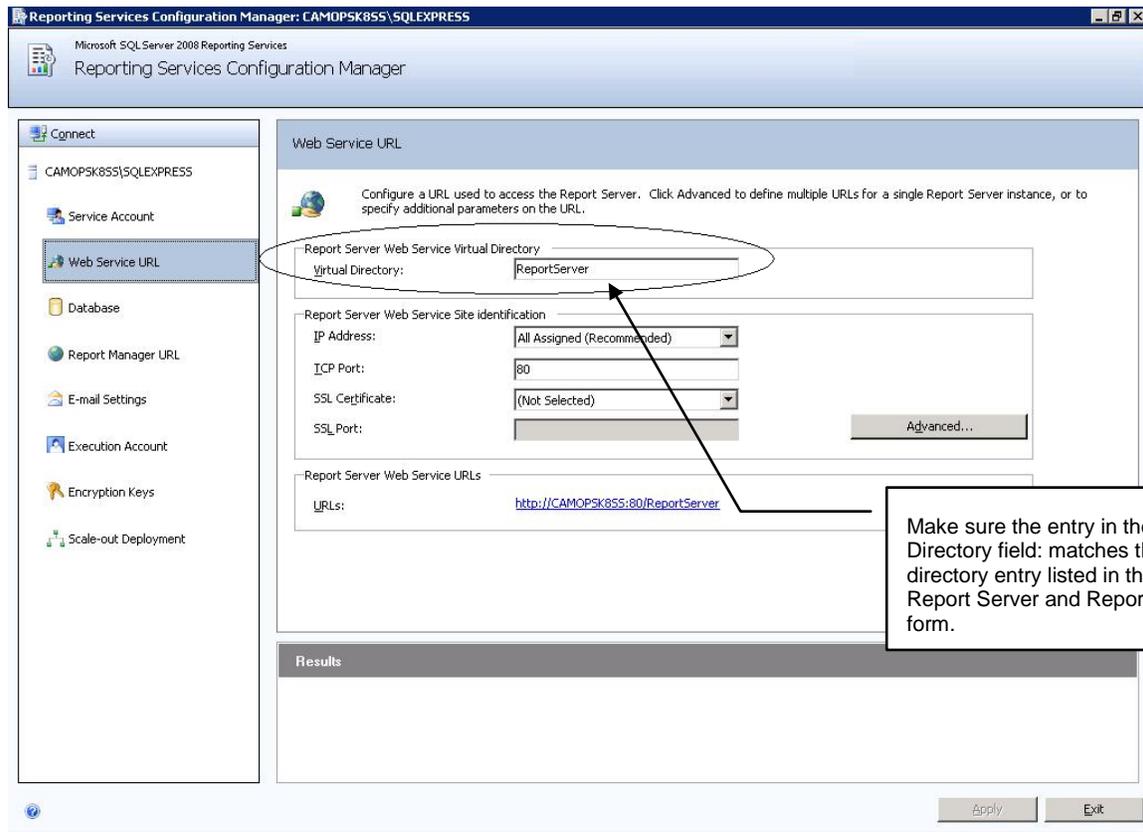


Reporting Services Web Service: The SQL Server Reporting Web Services (ReportingService2005.asmx –it has not been changed for 2008 or 2012) provides the interface for enumerating the reports and report folders. It provides a host of other capabilities for report execution, rendering and management.

The following table describes each element in the URL.

URL Element	Description
Server	The name of the server on which the report server is deployed.
Virtual Directory	<p>The name of the folder that contains the XML Web Service for report execution. This is configured during setup or when you run the Microsoft SQL Server Reporting Services Configuration tool. The default name/virtual directory is named reportserver.</p> <p>If you are unsure of the name of your report server virtual directory, launch the Reporting Services Configuration tool on the Report Server.</p> <p>In SQL Server 2008, select the Web Service URL on the left, then get the entry from the Virtual Directory field on the right. If you install Reporting Services as an instance, the name of the virtual directory may also include the instance name. (For example reportserver_INSTANCENAME) See the following SQL Server 2008 example for more information.</p>
<endpointname>.asmx	<p>The name of the web service endpoint is reportservice2005.asmx</p> <p>This is required in the URL for Vision to confirm the Report Server configuration.</p> <p>Reporting Services Web Service: The SQL Server Reporting Web Services (ReportingService2005.asmx –it has not been changed for 2008 or 2012) provides the interface for enumerating the reports and report folders. It provides a host of other capabilities for report execution, rendering and management.</p>

SQL Server Report Server Configuration Tool



To identify the virtual directory that is required for setup to detect Reporting Services for SQL Server, complete the following steps:

1. Click **Start » All Programs » Microsoft SQL Server 2008 (2008R2 or 2012) » Configuration Tools » Reporting Services Configuration Manager**.
2. Connect to the Report Server Web Service URL on the left menu pane.
3. Check the **Virtual Directory** field on the right.

If you have not configured SQL Reporting Services, click the Help button icon (question mark icon) in the lower left of the Reporting Services Configuration Manager to access Microsoft documentation for configuring Reporting Services.

If setup is unable to connect to the ReportServer Database Server or to identify the Reporting Services databases, then it will display the SQL Reporting Database Server Setup Connection form.

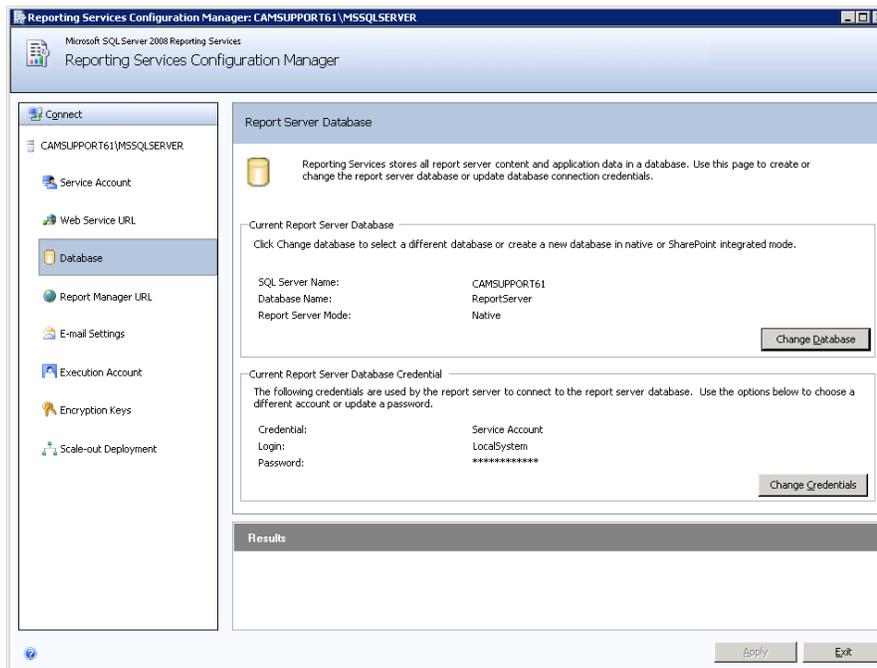
Enter the following:

- **Report Database Server** — Enter the name of the database server that has the Report Server databases.
- **SQL Username** — Enter a Microsoft SQL database server Login/username that is a member of the SQL Server SysAdmin Role. The default sysadmin account for SQL Server is **sa**. If you use the SQL Server Username and Password, ensure that the server security is configured to support Mixed Mode.
- **SQL Password** — Enter the password associated with this SQL Username.

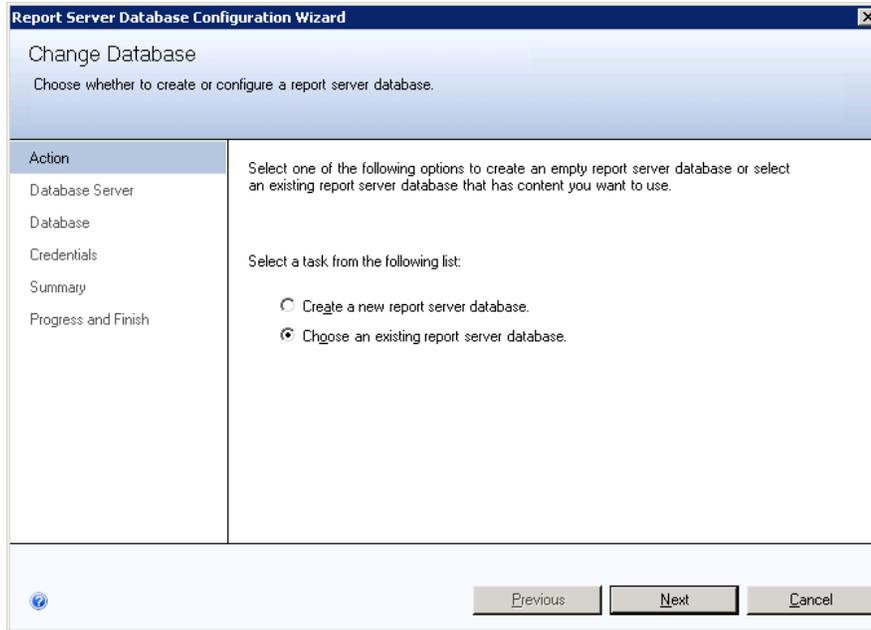
- **Windows Integrated** — Selecting this option means that if you are logged onto the server with the appropriate administrative rights, you can be authenticated to your SQL server via your Windows account. Your current Windows account must also be a member of the sysadmin role in the Microsoft SQL Server to perform the installation. If you are using integrated authentication, ensure that your current logged in account is a member of the sysadmin role in SQL Server. SQL Server 2008 and higher versions installed on Windows Server 2008 or higher Operating Systems do not add members of the local administrator's group to the SQL Server Sysadmin role by default.
 - **ReportServer Database** — Enter the name of your ReportServer Database. Typically, the default name for this database is **ReportServer**.
 - **ReportServerTempDB Database** — Enter the name of your ReportServerTempDB Database. Typically, the default name for this database is **ReportServerTempDB**.
- If you did not choose the default names or you are unable to recall the name of your ReportServer databases, follow the steps below to identify them.

To identify the names of the ReportServer and ReportServer TempDB databases that are required for setup to detect Reporting Services for SQL Server, complete the following steps:

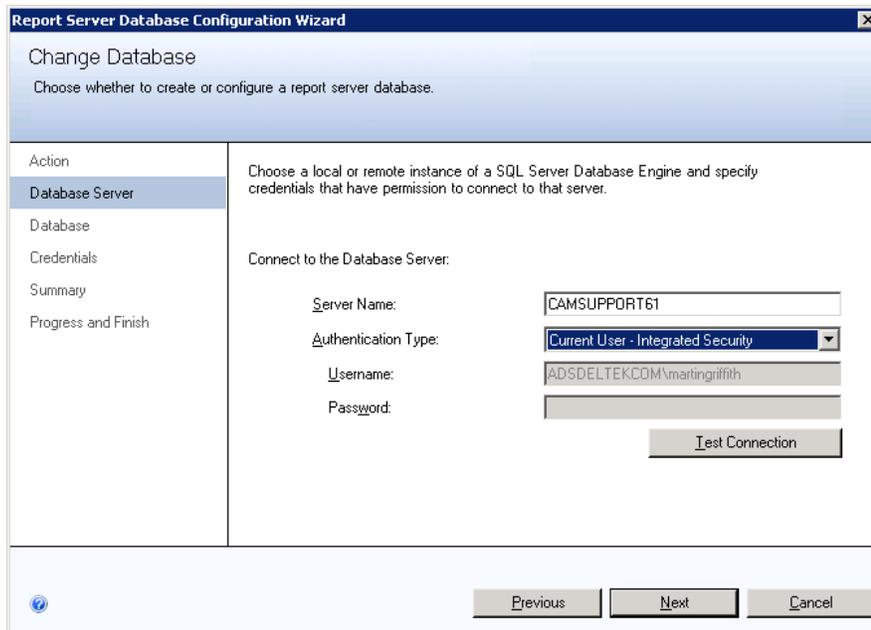
1. Click **Start » All Programs » Microsoft SQL Server 2008 (2008R2 or 2012) » Configuration Tools » Reporting Services Configuration Manager**.
2. Select the **Database** icon on the left menu pane.



3. Click the **Change Database** button on the right. The Change Database page displays.

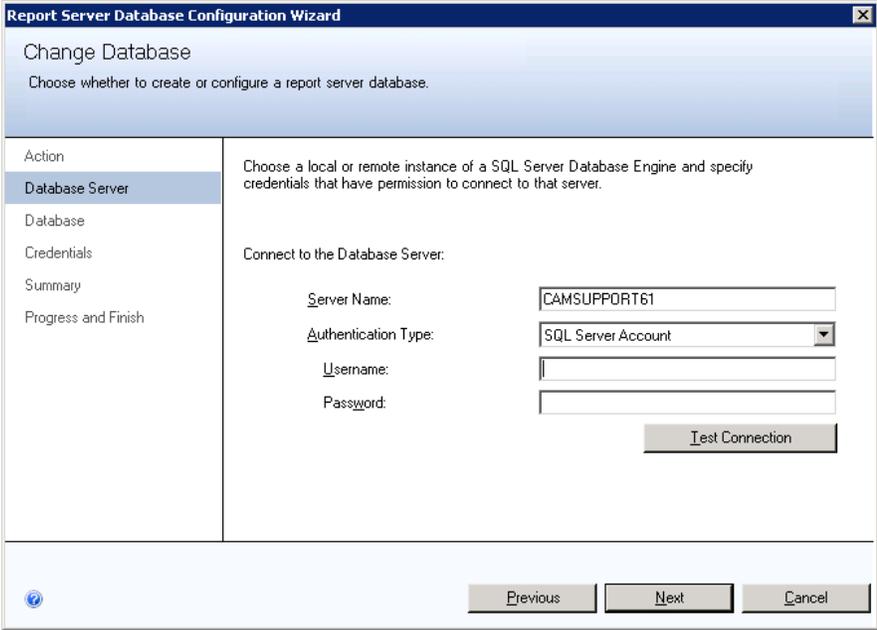


4. Select the **Choose an existing report server database** option and click **Next**. The Change Database/Database Server page displays.

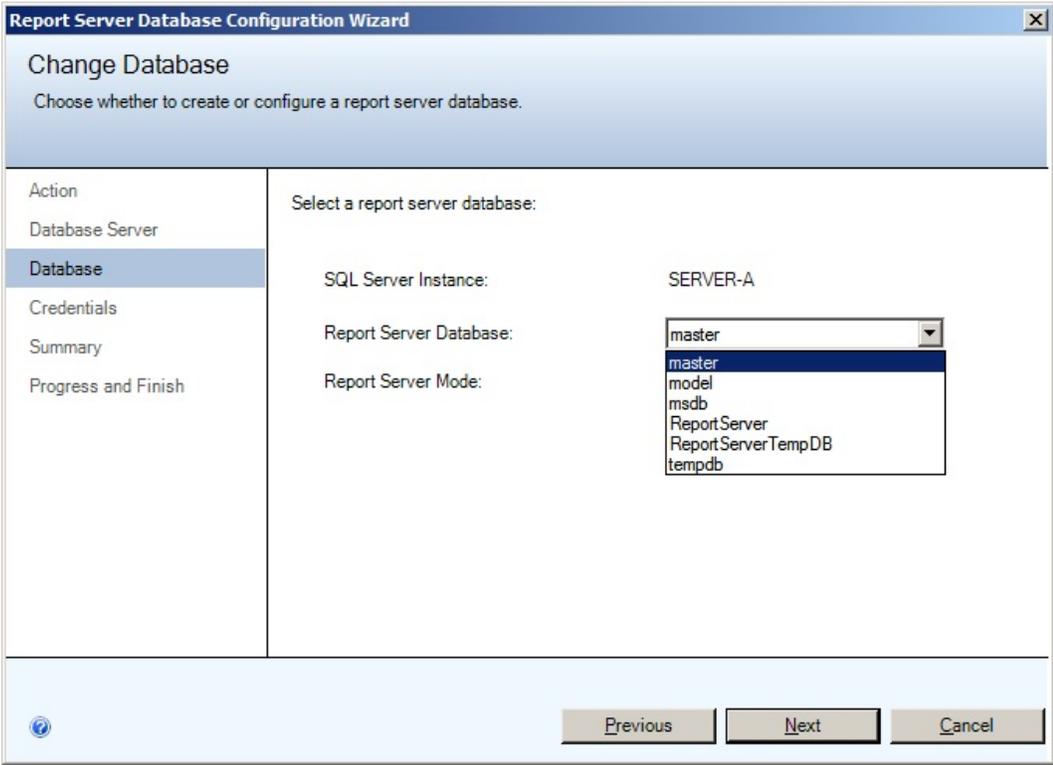


5. If you are logged in as an Administrator, accept the defaults to connect using Integrated Authentication. Continue to step 6.

If you are not logged in as an Administrator, select **SQL Server Account** from the **Authentication Type** drop-down list. Enter the System Administrator (SA) credentials in the **Username** and **Password** fields.



- 6. Click **Next**.
- 7. Use the **Report Server Database** drop-down list to view the names of the **ReportServer** and **ReportServerTempDB** databases.



- 8. Note the name of the **ReportServer** and **ReportServerTempDB** databases.
- 9. Click **Cancel**.

10. Use the name of the ReportServer and ReportServerTempDB databases to populate the **SQL Report Database Server Setup Connection** page that the installation process displays if it cannot identify your Report Server databases. See the procedure on page 92 for additional information.

Error Connecting to Reporting Services

Problem

When connecting to the Reporting Services URL, the page below displays the following error message: "The current identity {NT AUTHORITY\NETWORK SERVICE} does not have write access to "C:\Windows\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files"

```

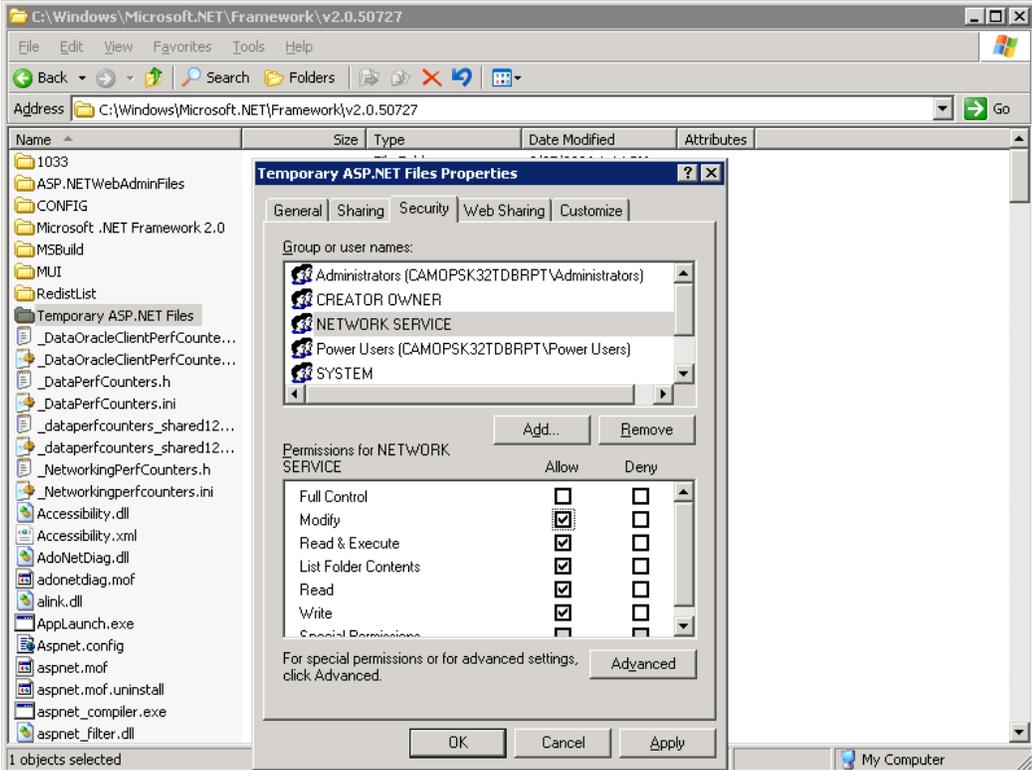
DeltekVisionHelper
Client found response content type of 'text/html; charset=utf-8', but expected 'text/xml'.
The request failed with the error message:
--
<html>
<head>
<title>The current identity (NT AUTHORITY\NETWORK SERVICE) does not have write access to 'C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files'. </title>
<style>
body {font-family:"Verdana";font-weight:normal;font-size: .7em;color:black;}
p {font-family:"Verdana";font-weight:normal;color:black;margin-top: -5px;}
b {font-family:"Verdana";font-weight:bold;color:black;margin-top: -5px;}
H1 { font-family:"Verdana";font-weight:normal;font-size:18pt;color:red }
H2 { font-family:"Verdana";font-weight:normal;font-size:14pt;color:maroon }
pre {font-family:"Lucida Console";font-size: .9em}
.marker {font-weight: bold; color: black;text-decoration: none;}
.version {color: gray;}
.error {margin-bottom: 10px;}
.expandable { text-decoration:underline; font-weight:bold; color:navy; cursor:hand; }
</style>
</head>
<body bgcolor="white">
<span><H1>Server Error in 'ReportServer' Application. <hr width=100% size=1 color=silver></H1>
<h2>< < >The current identity (NT AUTHORITY\NETWORK SERVICE) does not have write access to 'C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files'. </ ></h2></span>
<font face="Arial, Helvetica, Geneva, SunSans-Regular, sans-serif ">
<b> Description: </b><b>An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.
<br><br>
<b> Exception Details: </b><b>System.Web.HttpException: The current identity (NT AUTHORITY\NETWORK SERVICE) does not have write access to 'C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files'. <br><br>
<b>Source Error:</b> <br><br>
<table width=100% bgcolor="#ffffcc">
<tr>
<td>
<code>
An unhandled exception was generated during the execution of the current web request. Information regarding the origin and location of the exception can be identified using the exception stack trace below. </code>
</td>
</tr>
</table>
<br>
<b>Stack Trace:</b> <br><br>
<table width=100% bgcolor="#ffffcc">
<tr>
<td>
<code><pre>
[HttpException (0x80040005): The current identity (NT AUTHORITY\NETWORK SERVICE) does not have write access to 'C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files'.
System.Web.HttpRuntime.SetUpCodegenDirectory(CompilationSection compilationSection) +3474123
System.Web.HttpRuntime.HostingInit(HostingEnvironmentFlags hostingFlags) +226
[HttpException (0x80040005): The current identity (NT AUTHORITY\NETWORK SERVICE) does not have write access to 'C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files'.
System.Web.HttpRuntime.FirstRequestInit(HttpContext context) +3426855

```

Solution

To fix the connection, complete the following steps:

1. Browse to the C:\Windows\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files folder and give the Network Service account write rights to it:



- 2. On the Warning message page box, click **Yes** to continue.
- 3. Retry the connection to Reporting Services.

Appendix D: How to Configure Microsoft SQL Server Reporting Services

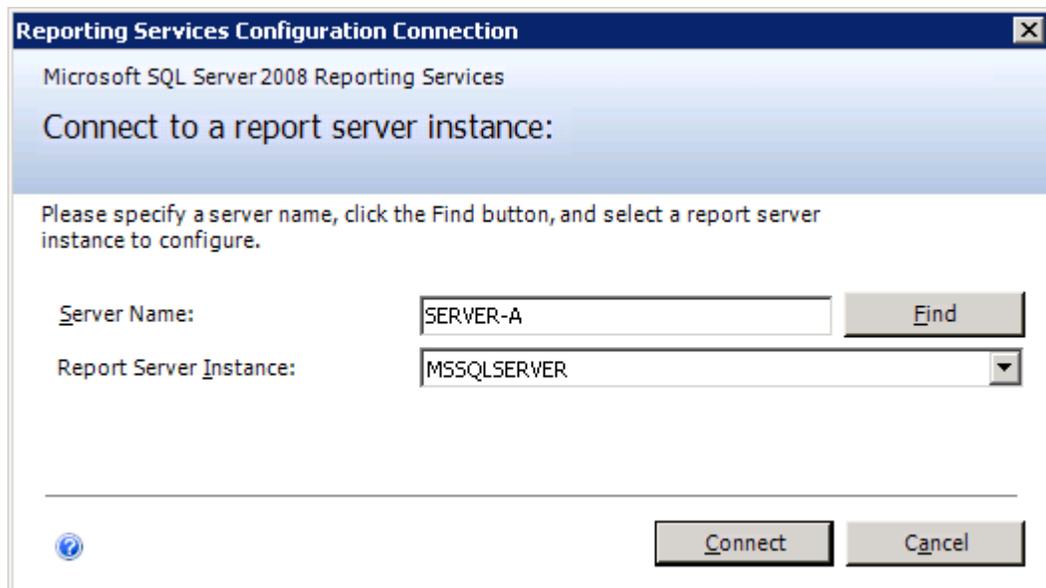
Use these steps to configure your SQL Server Reporting Services initial setup. This only needs to be done for Vision to verify SQL Server Reporting Services. However, Vision will use the accounts specified in the Report Server tab of Weblink to make connections to Reporting Services.



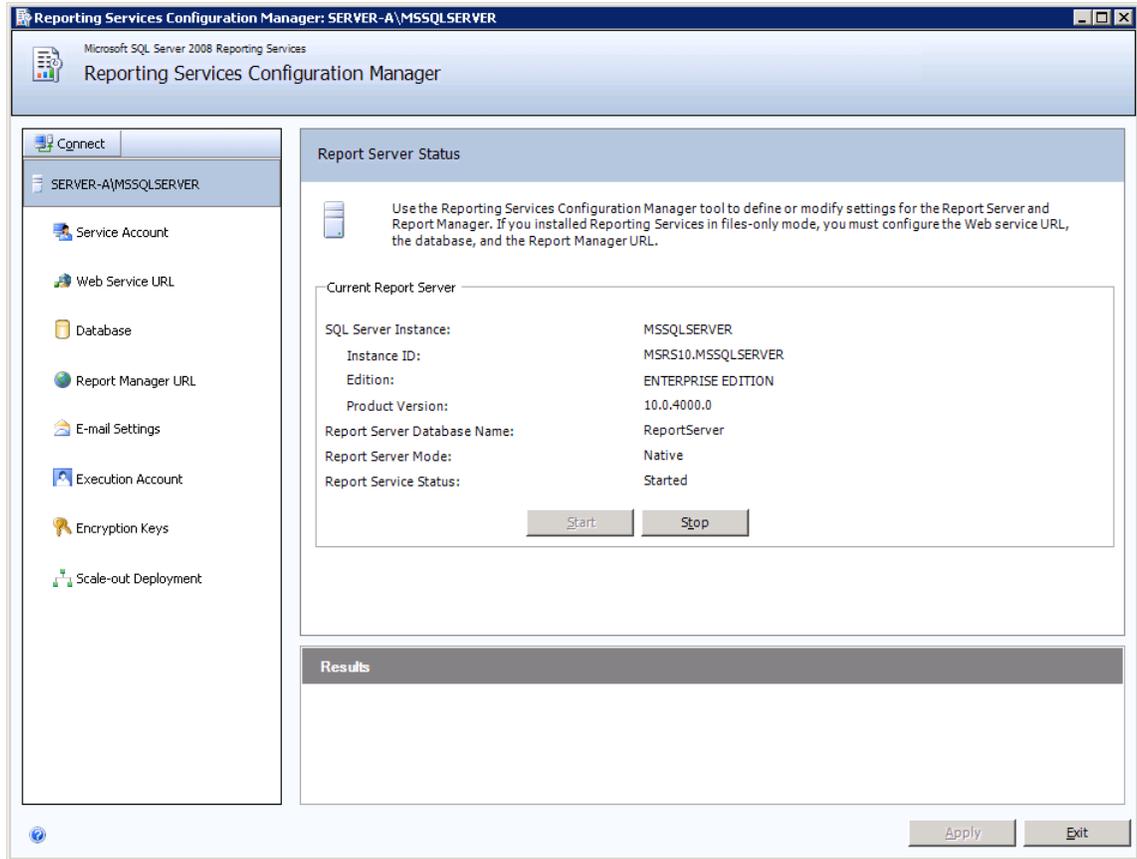
For additional information about configuring Report Services, see [Important Information about Configuring Report Services](#).

To configure your initial setup, complete the following steps:

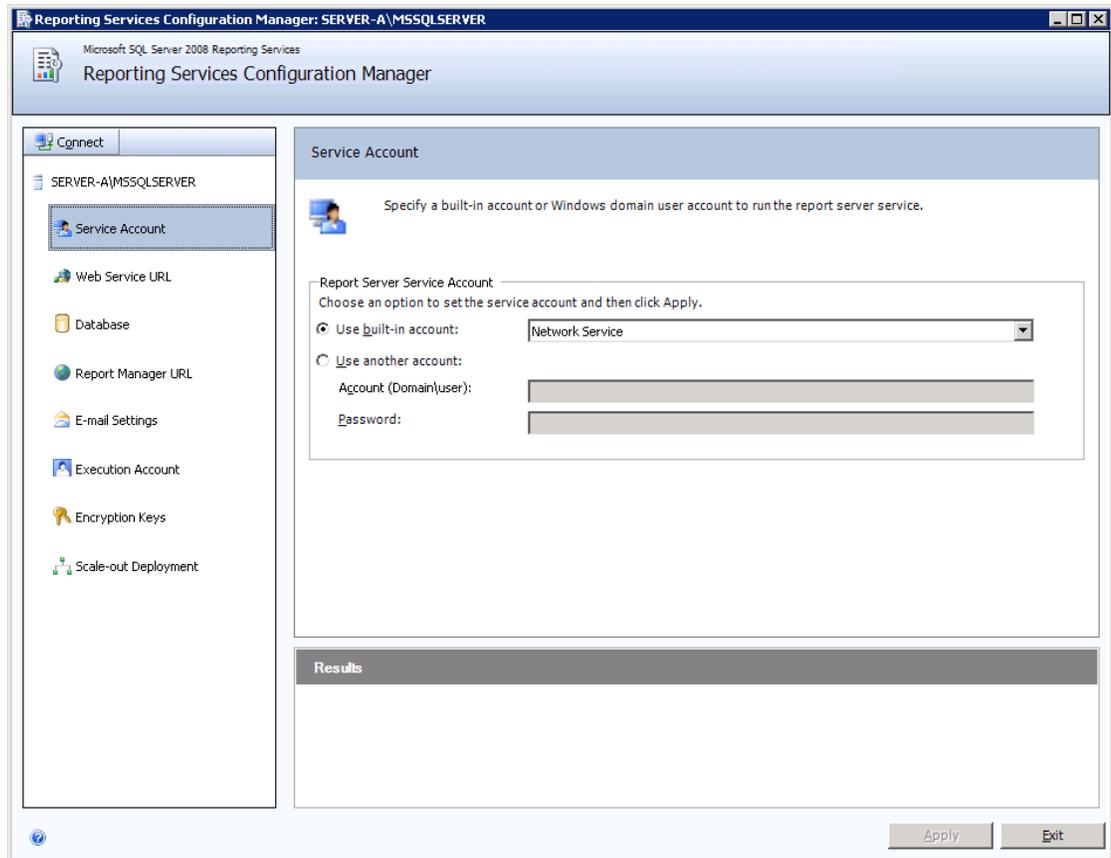
1. Click **Start » All Programs » Microsoft SQL Server 2008 (2008R2 or 2012) » Configuration Tools » Reporting Services Configuration Manager** to launch the Reporting Services Configuration Wizard.
2. On the Reporting Services Configuration Connection dialog box, select your SQL Reporting Services Instance Name. Then click **Connect**. If you have multiple installations of Reporting Services, you may see more than one instance. MSSQLSERVER is the default instance.



3. On the Report Server Status pane of the Reporting Services Configuration Manager dialog box, click **Start** to start the Reporting Services instance. If it is already running, click **Service Account** in the left pane.



4. On the Service Account pane of the Reporting Services Configuration Manager dialog box, choose the appropriate account and click **Apply**. Microsoft recommends using Network Service Account.

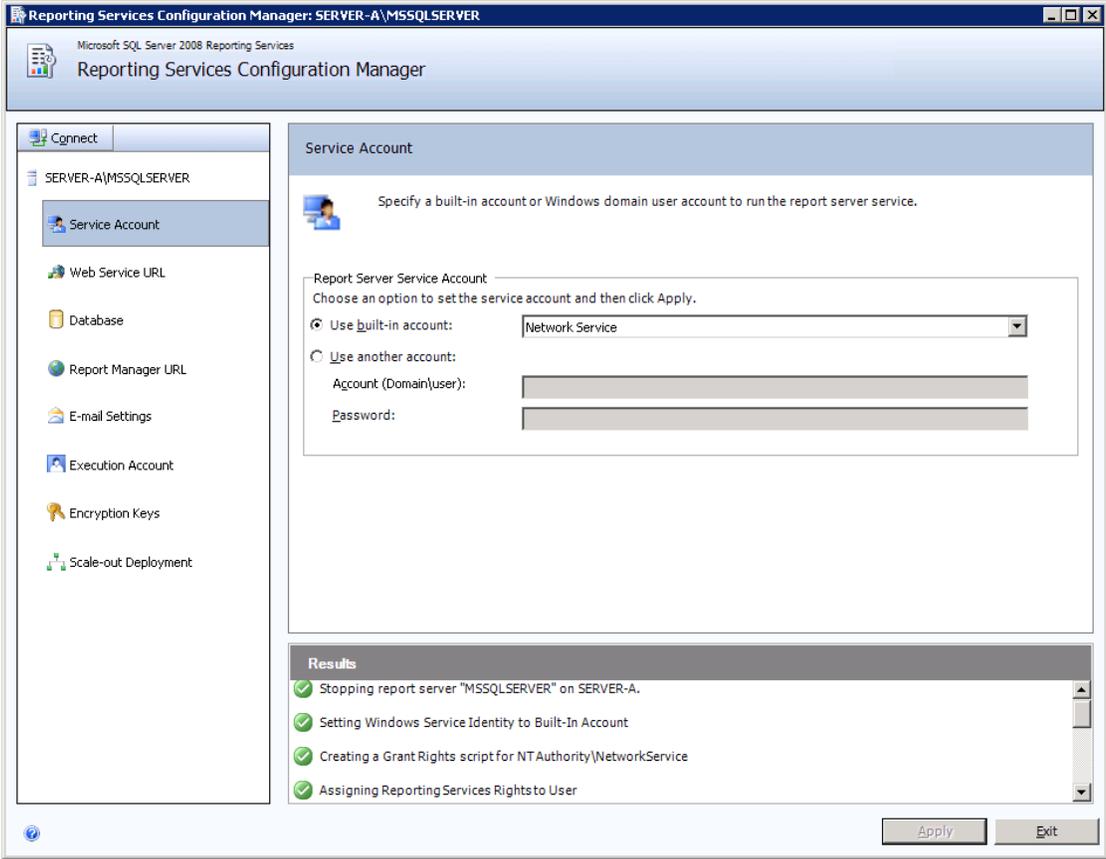


For additional information on choosing a service account, see the [Service Account Reporting Services Configuration](http://msdn.microsoft.com/en-us/library/ms189964.aspx) topic in SQL Server Books Online. Select the version that corresponds to your installation if it is not 2012. (<http://msdn.microsoft.com/en-us/library/ms189964.aspx>).

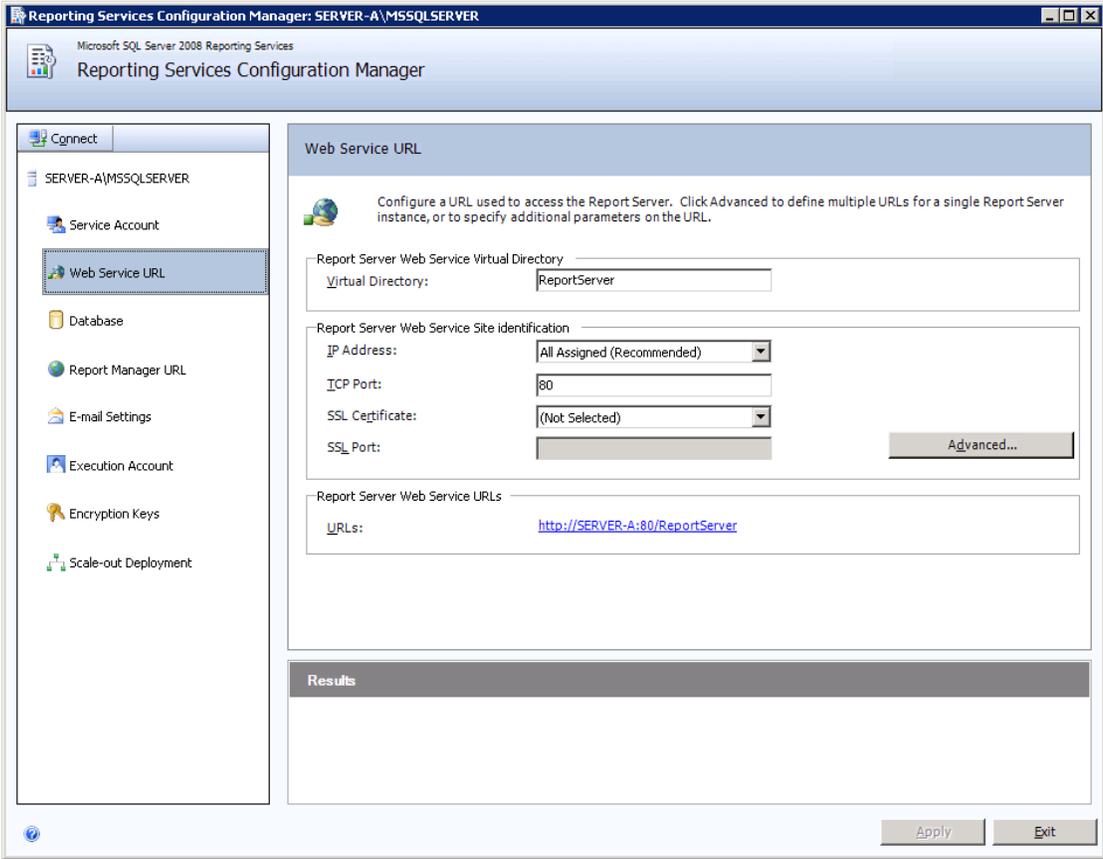
If you have configured the Report Server Service Account to be a domain account, Reporting Services will use Kerberos Authentication by default.

For more information, see Report Tier, page 80, in the Troubleshooting Chapter.

- 5. The Service Account pane of Reporting Services Configuration Manager dialog box displays again showing the results in the bottom pane. Click **Web Service URL** in the left pane.

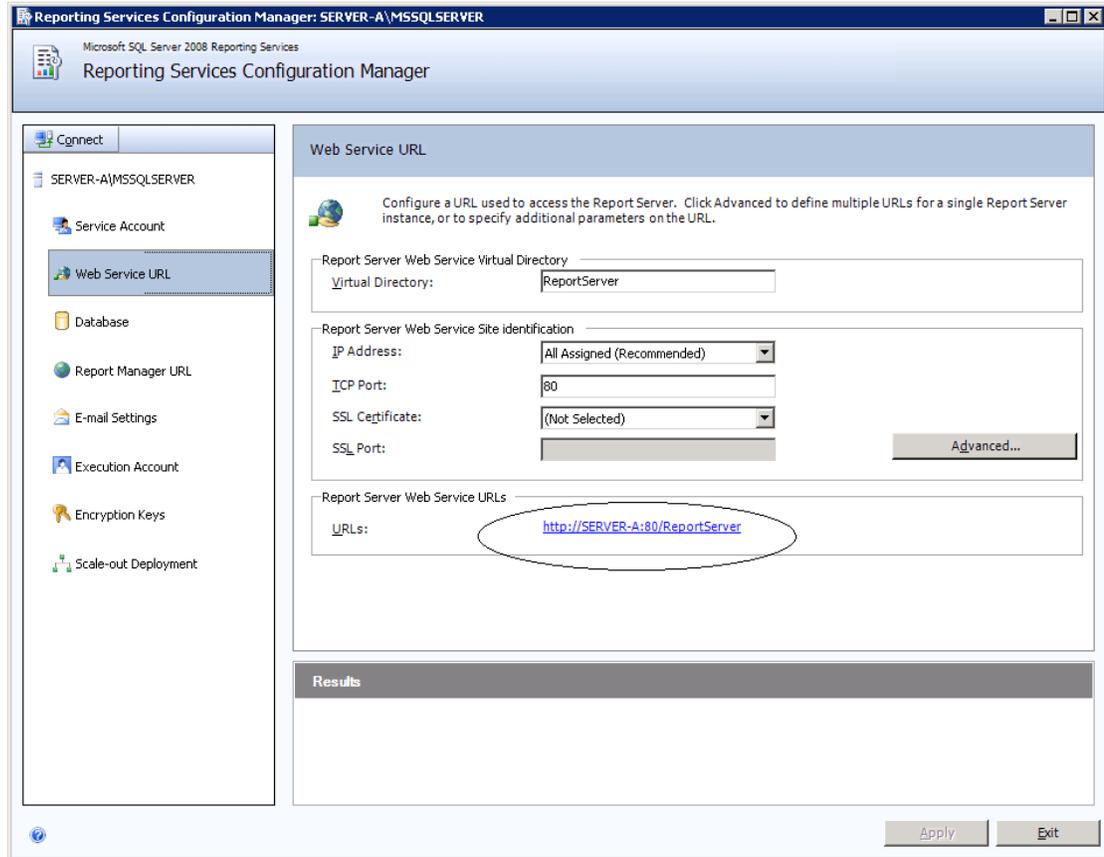


The Web Service URL page displays.



- In the Web Service URL pane of the Reporting Services Configuration Manager dialog box, accept the default values. The default value for **Virtual Directory** is **ReportServer**. If you installed Report Server as an instance, the virtual directory usually starts with ReportServer separated by a character, such as an underscore or dollar sign, and the instance name to differentiate itself from the others.

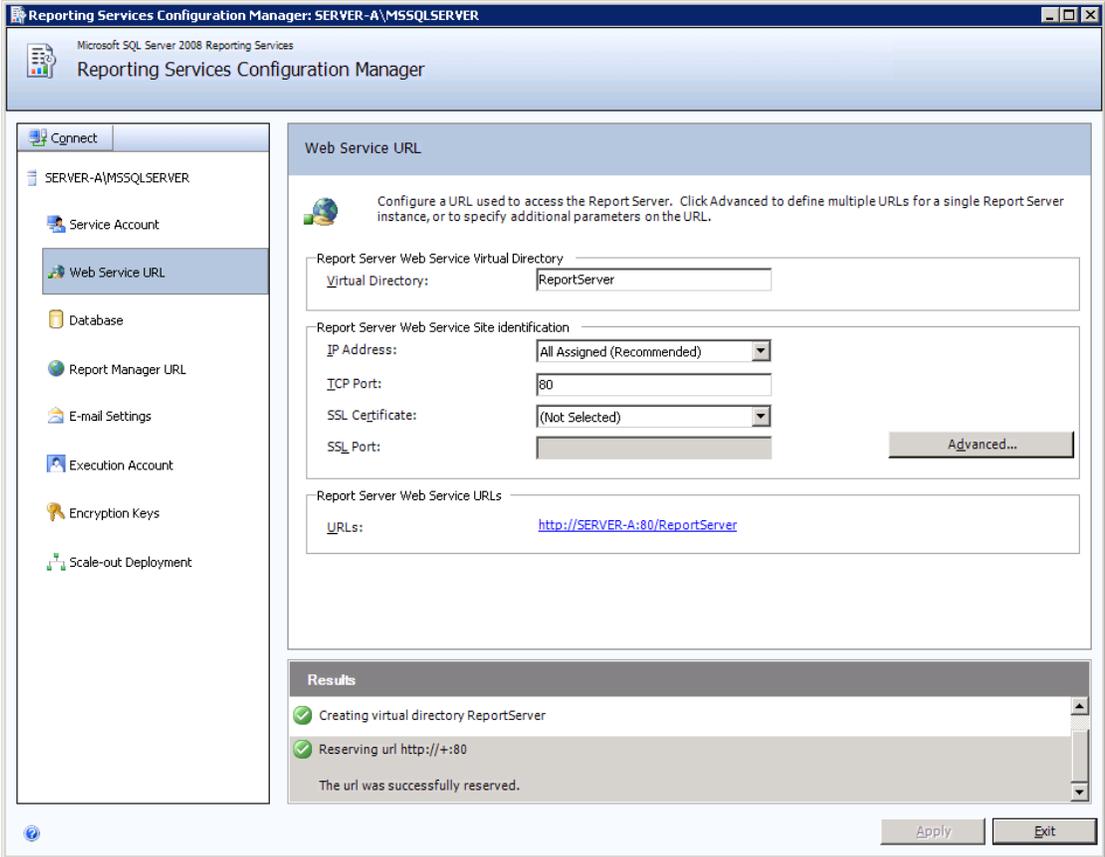
Click **Database** in the left pane.



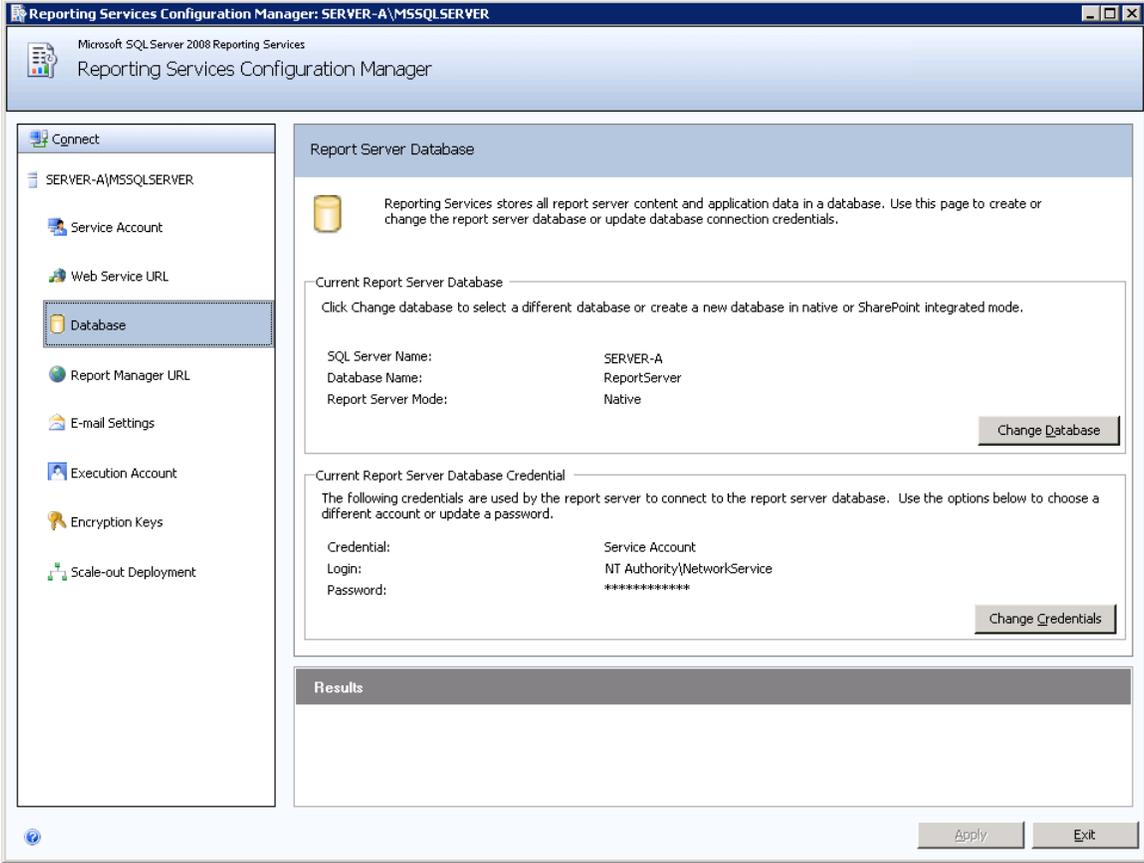
Vision uses the Report Server Web Service URL at the bottom of the dialog box as part of its test connection URL when it tries to connect to the Report Server.

SQL Server 2008, 2008R2 or 2012 Reporting Services does not require IIS to be enabled.

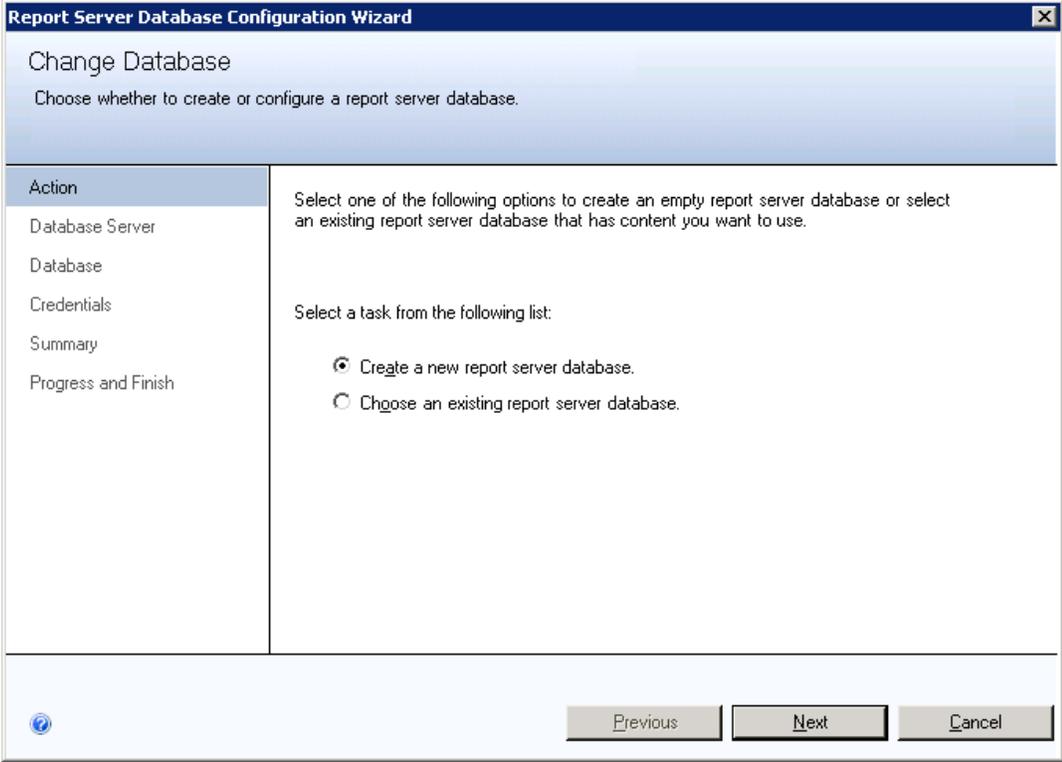
- 7. Take note of the Report Server Web Service URL shown on the Web Service URL dialog box in case Vision is unable to connect to the Report Server during the installation and asks for the correct path. Click **Apply** to accept your settings. If the settings are correct, the Results pane is displays the status.



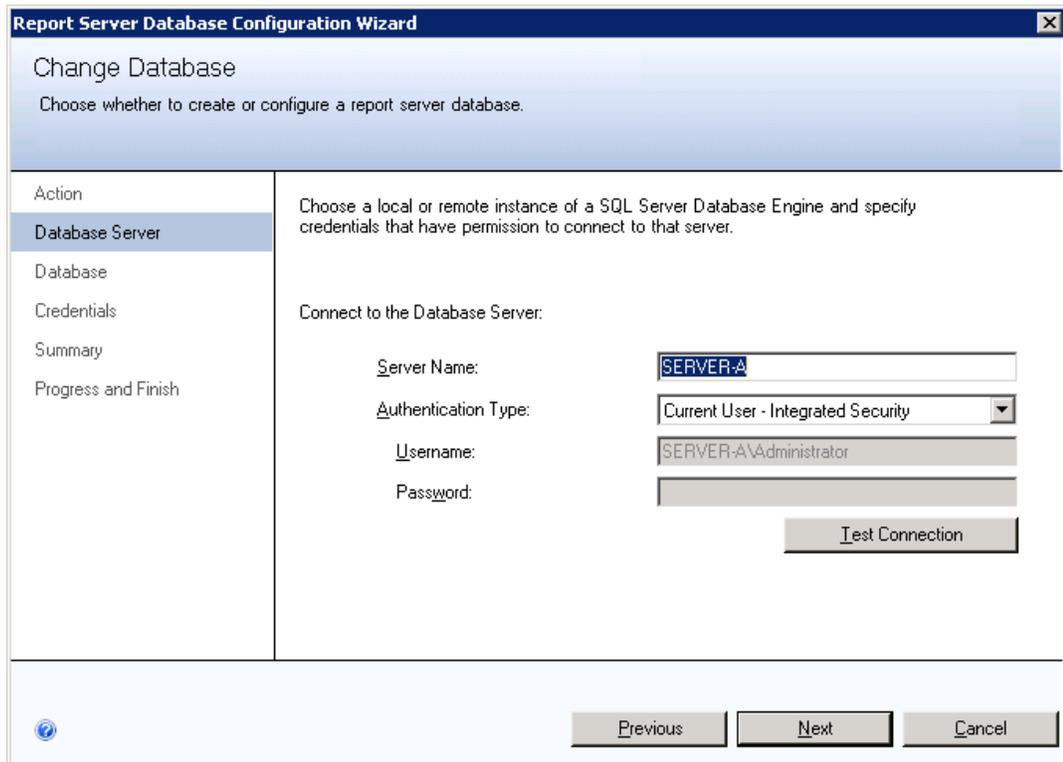
- 8. In the Report Server Database pane of the Reporting Services Configuration Manager dialog box, click **Change Database**. The Change Database page of the Report Server Database Configuration wizard displays.



- 9. On the Change Database page of the Report Server Database Configuration wizard, choose whether to create a new Report Server database or use an existing one. For a new installation, choose **Create a new report server database** option and click **Next**.



- Enter the database **Server Name** and a user account that has the appropriate privilege to create or select the database and assign the required rights.



- Click **Test Connection** to test your credentials. Make the corrections as necessary if the server name or the user credentials are incorrect.



- Click **OK** when you have connected successfully to the database to go back to the Change Database of the page of the Report Server Database Configuration wizard.

13. Accept the default values. Click **Next**.



Only **Native Mode** is supported. Select **Native Mode** if it is not selected by default.

Report Server Database Configuration Wizard

Change Database
Choose whether to create or configure a report server database.

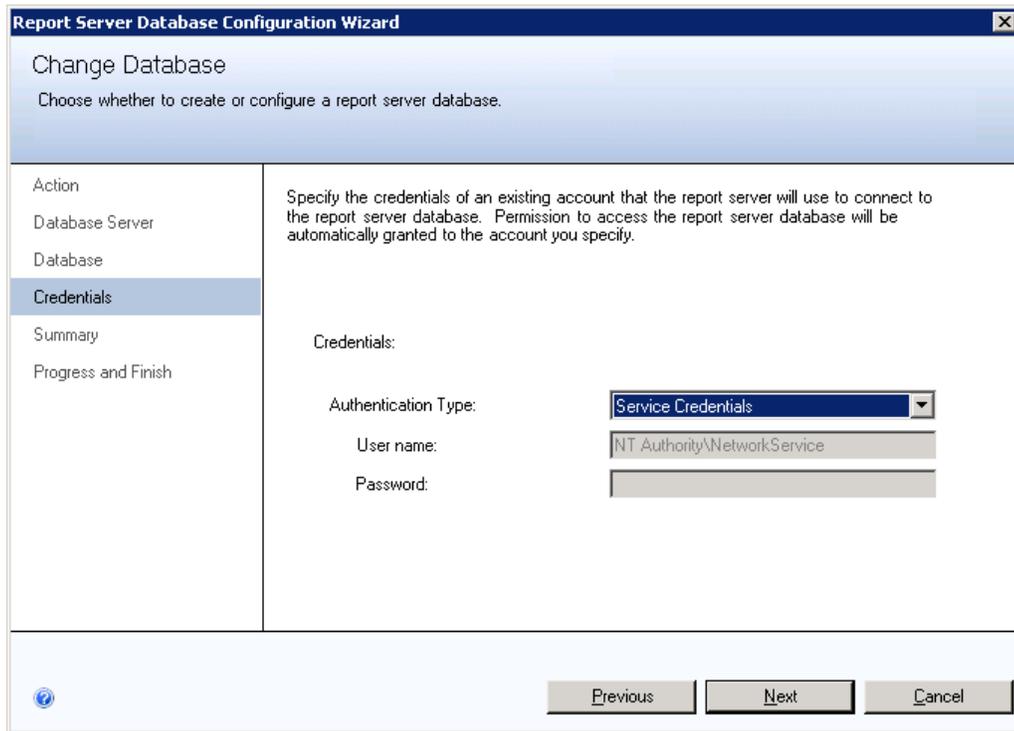
Action
Database Server
Database
Credentials
Summary
Progress and Finish

Enter a database name, select the language to use for running SQL scripts, and specify whether to create the database in native or SharePoint mode.

Database Name: ReportServer
Temp Database Name: ReportServerTemp
Language: English (United States)
Report Server Mode:
 Native Mode
 SharePoint Integrated Mode

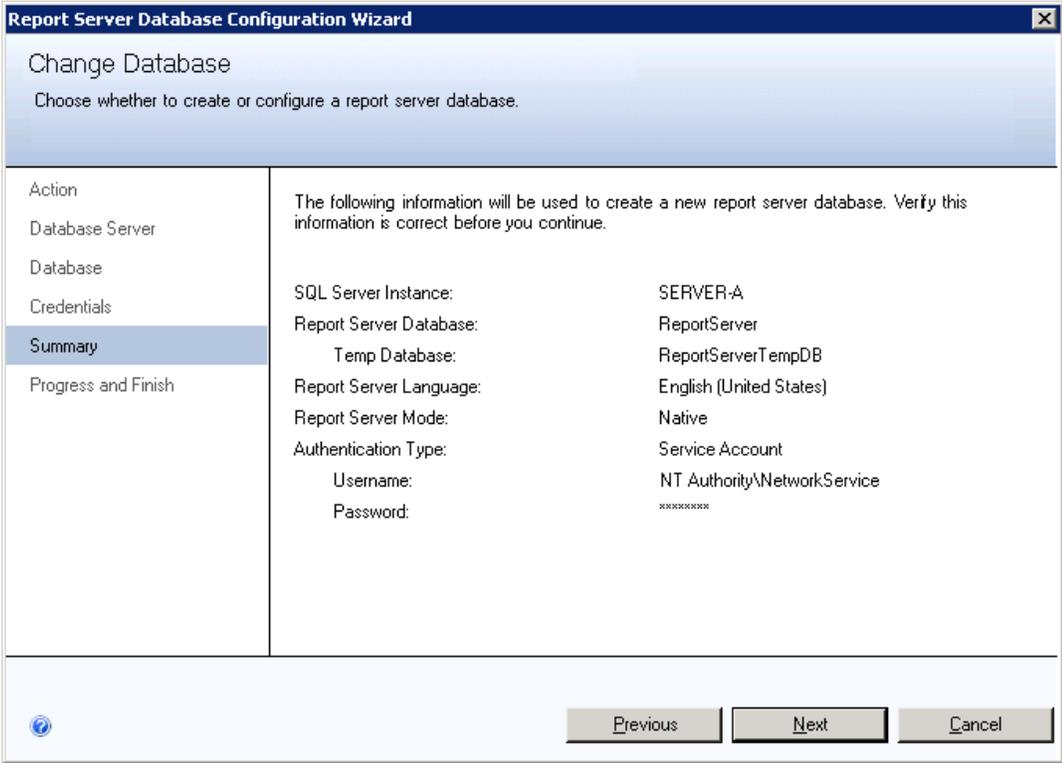
Previous Next Cancel

14. In the Credentials pane of the Change Database page, specify the type of credential and accounts for the Reporting Services connections to the database.



15. Click **Apply**. The SQL Server Connection dialog box displays.
16. On the SQL Server Connection dialog box, specify the SQL Server and administrator logon credential that you will use to enable the accounts you specified to connect to the Database Server. Click **OK** to continue.
17. Click **New**. The Create a New Virtual Directory dialog box displays.
18. On the Create a New Virtual Directory dialog box, click **OK**.

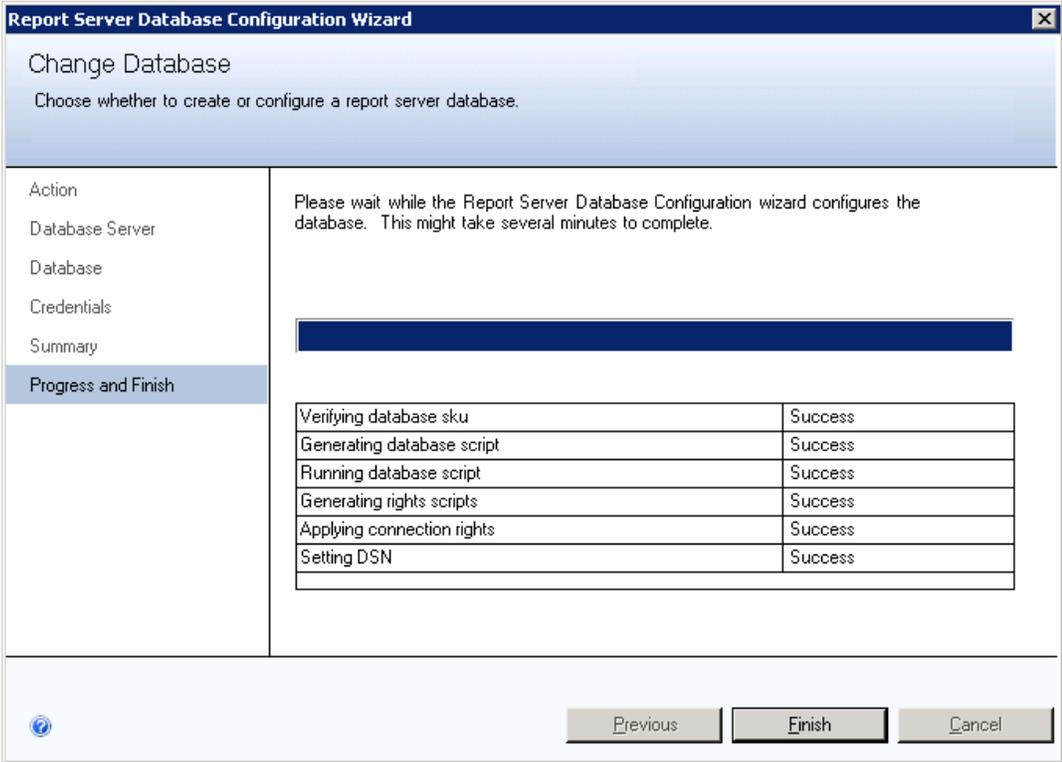
The Change Database page of the Report Server Database Configuration wizard displays the summary of the changes you made.



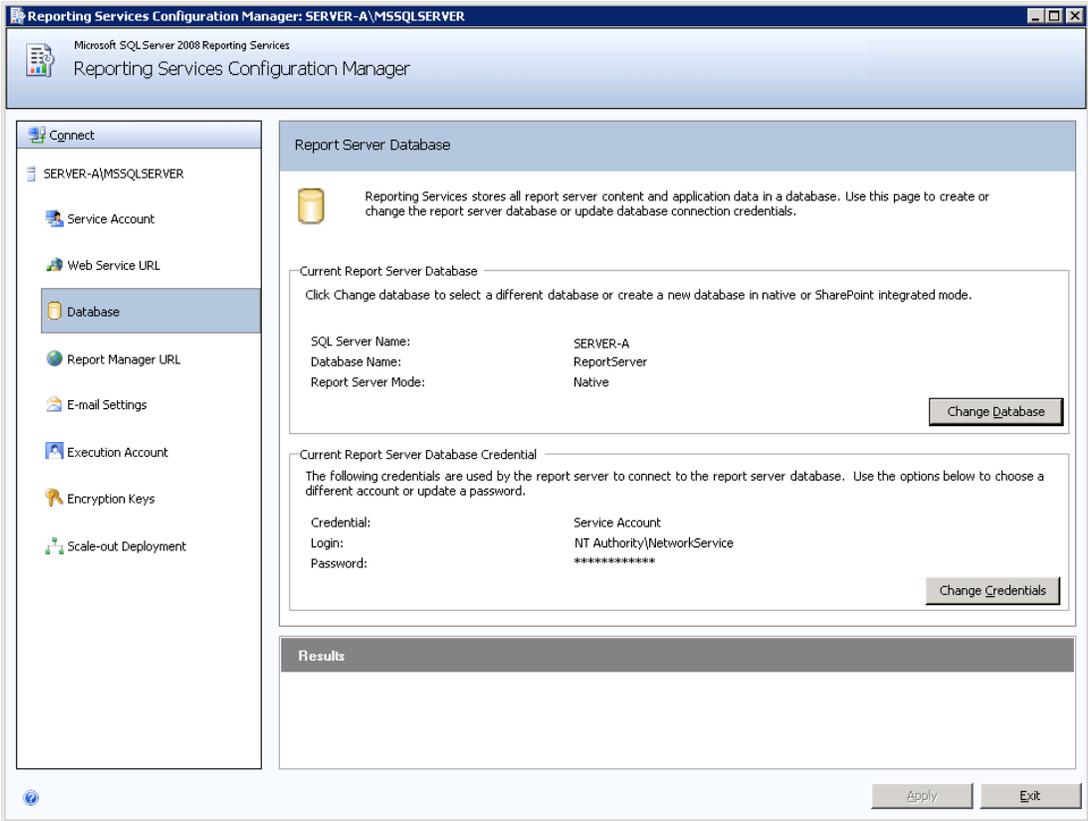
19. Click **Next**.

The Report Server Database Configuration Wizard displays the status of the steps taken to create the Report Server databases.

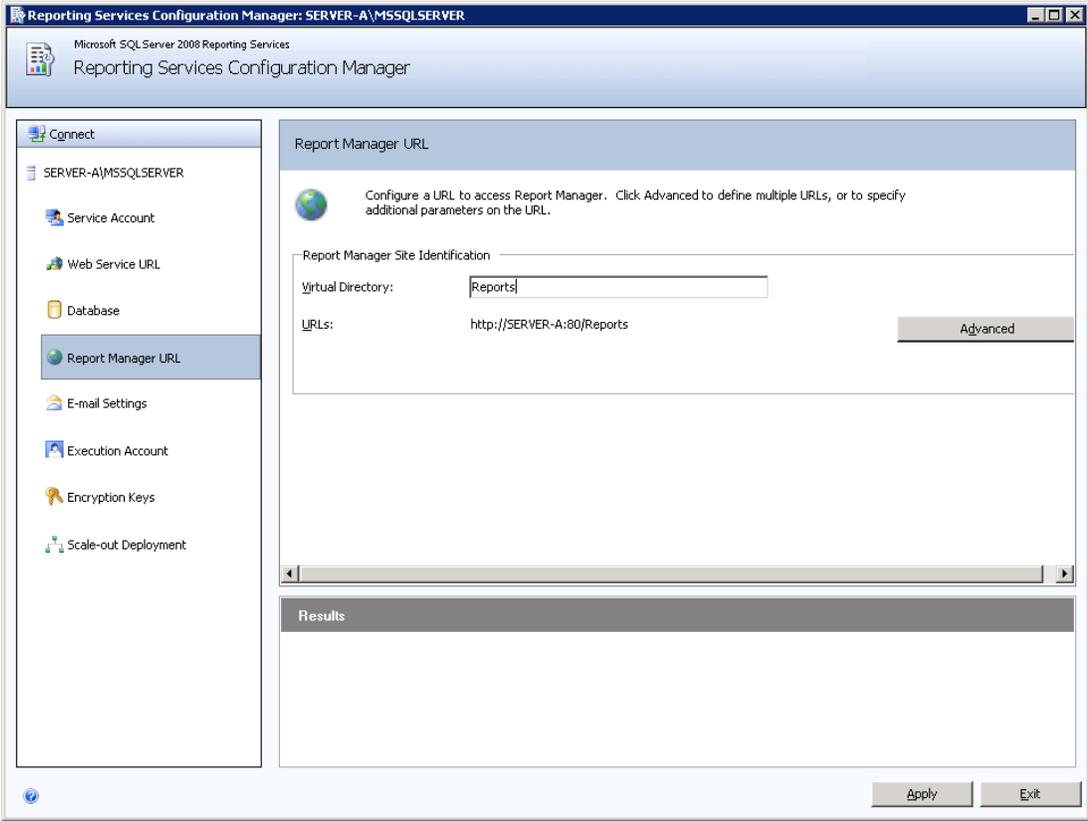
20. Click **Finish** when all steps have been marked as successfully completed.



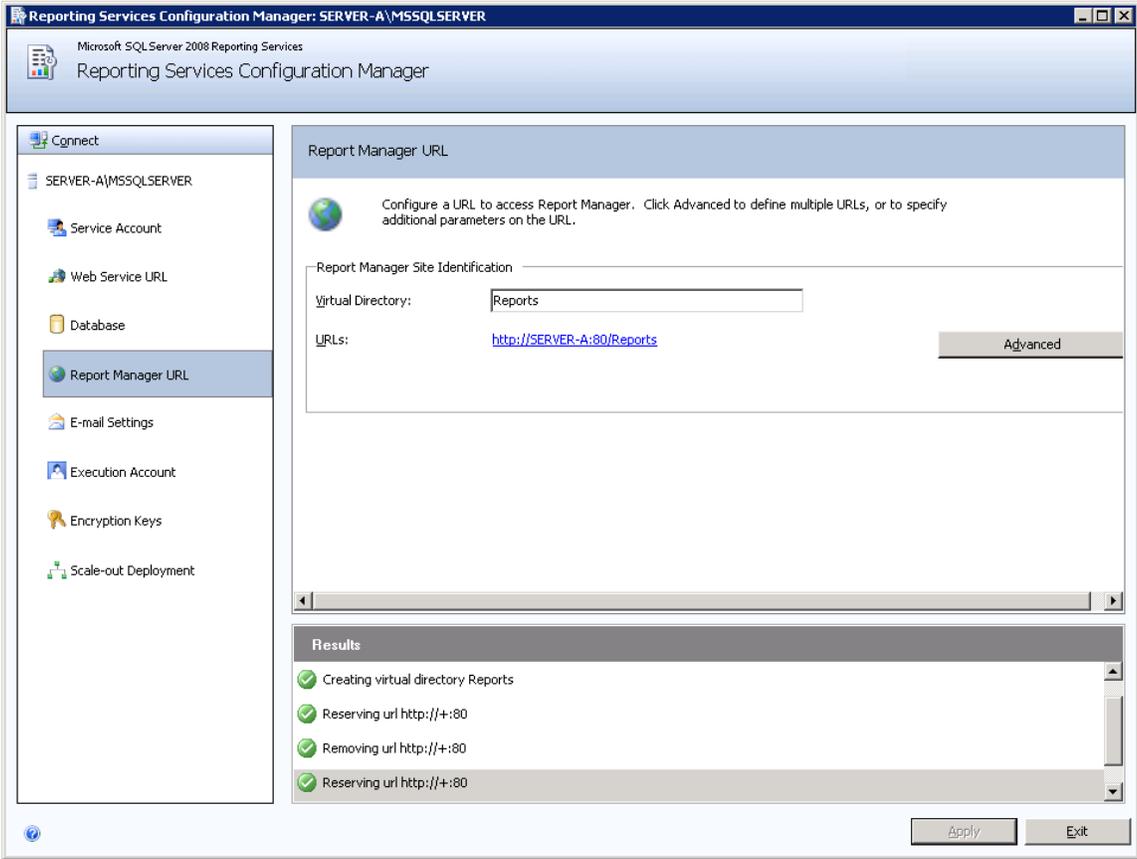
21. In the left pane of the Report Services Configuration Manager dialog box, click **Report Manager URL**.



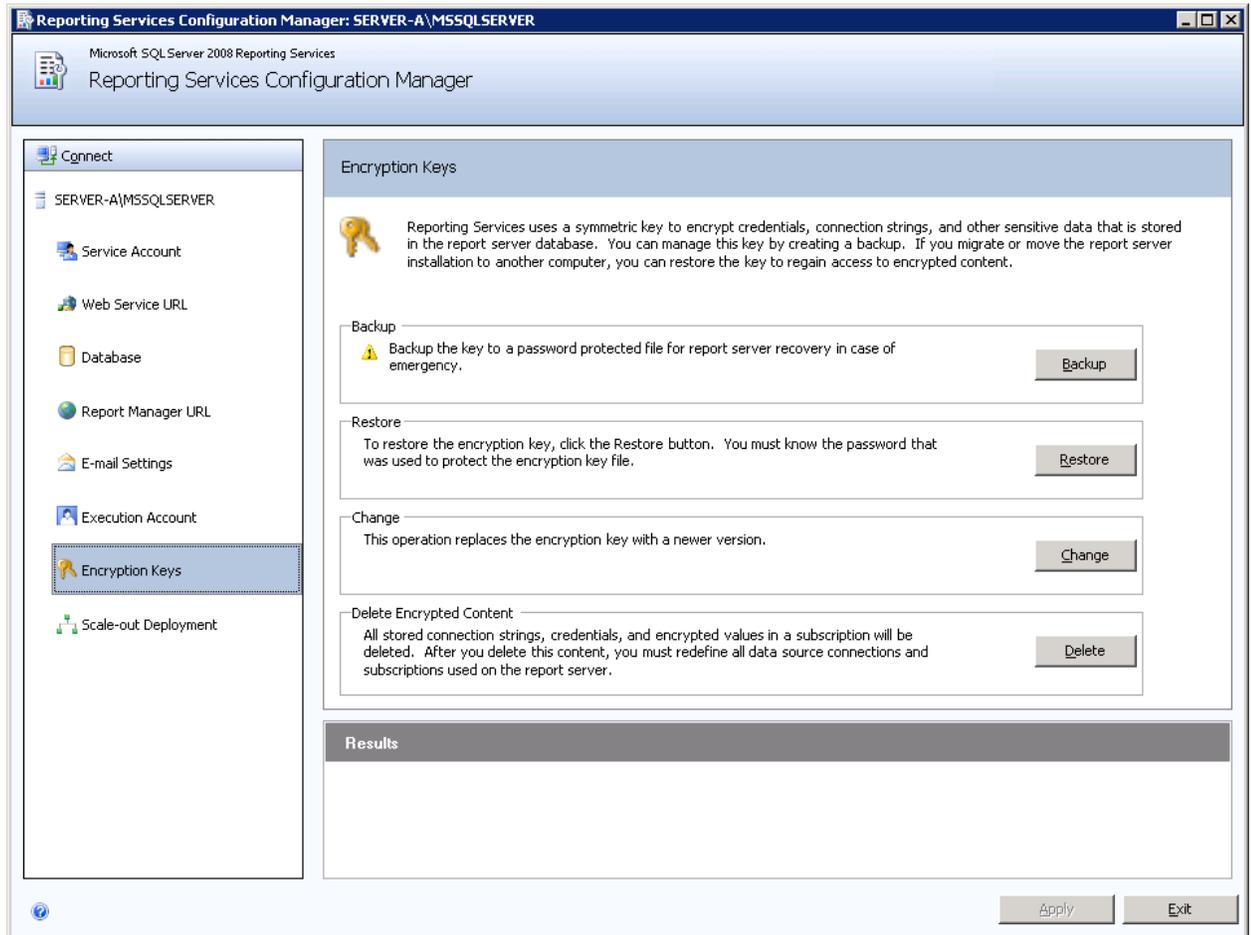
22. In the Report Manager URL pane, accept the default values. Click **Apply**.



The Results pane displays the results.



23. Click **Encryption Keys** in the left pane and back up the encryption keys to a safe location. Click **Apply**.



24. Click **Exit**. You are now ready to begin the Vision installation.

Important Information about Configuring Report Services

Do not configure an Execution Account during the Report Server Configuration. Configuring this account causes the account specified in the Execution Account to be used instead of the credentials listed in Weblink. This may result in reporting errors within Vision.

- If you are not familiar with Microsoft Reporting Services or how to configure it, see this Microsoft link: <http://msdn.microsoft.com/en-us/library/ms156305.aspx>
- If you will use the server-side printing functionality of Deltek Vision, see [Appendix E: Printing in Deltek Vision](#) for instructions on where and how to configure the account.
- If you have configured the Report Server Service Account to be a domain account, Reporting Services will use Kerberos Authentication by default. You must ensure that you have created an SPN for the account. To configure an SPN, complete the steps in this Microsoft link: <http://msdn.microsoft.com/en-us/library/cc281382.aspx>.

- Alternatively, you can configure the RSReportServer.config file with the following XML structure that specifies NTLM only. This is for deployments that do not support Kerberos or to work around Kerberos authentication errors (HTTP 401 errors) :

```
<AuthenticationTypes>  
  <RSWindowsNTLM/>  
</AuthenticationTypes>
```



Details about Kerberos authentication issues can be found in the following Microsoft Reporting Services documentation: <http://msdn.microsoft.com/en-us/library/cc281253.aspx>.

Appendix E: Printing in Vision 7.x

In Vision 5.x and earlier, you could print using only the printers installed on the Report Server. Users who wanted to print to their local printers had to first print preview a report, save the report as a PDF file, and then while viewing the PDF version of the report in their PDF viewer, they could print to their local printer.

Vision 7.x provides the ability to:

- Print directly to users' local printers.
- Send a printout or batch to printers that are installed directly on the Web Server. This is primarily used for batch job printing using the process server for transactions such as Batch Billing.

Printing to Local Printers on End-User Workstations

Vision 7.x uses the Microsoft SQL Reporting Services WinForm report viewer control to render reports and allow users to preview a report. From the preview window, a print job is sent directly to a user's local printer without the requirement of saving to a PDF file first. In the preview window, viewers still have the option to download to PDF and other file types.

Reverse Proxy

The Microsoft SQL Reporting Services WinForm report viewer control requires a direct connection to the server running the SQL Reporting Services web service (<http://<server>/reportserver>) over Port 80. This means that your report server (and possibly your database server if they are installed on the same machine) are directly exposed to the Internet. It also requires an external FQDN so that the report server can be resolved by the external users.

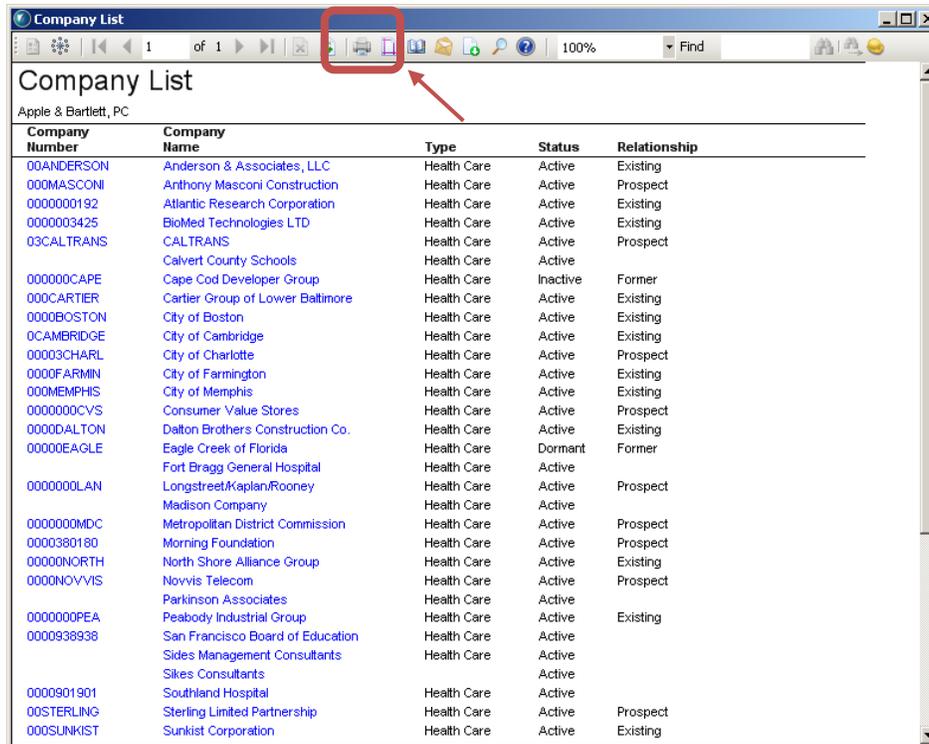
A reverse proxy that uses Microsoft's Application Request Routing (ARR) extension for IIS 7.0/7.5 in Windows Server 2008/2008R2 allows the direct forwarding of requests through the Vision web server to the reporting services web service with responses back to your Internet clients. This configuration resolves all of the issues identified in the previous paragraph but does require that the server hosting the Vision web/application server be running Windows Server 2008/2008R2 with IIS 7.0/7.5.



See the *Delttek Vision Advanced Technical Administration Guide* for information.

To print to a local printer, complete the following steps:

1. In Vision, preview a report.
2. Click the Printer icon in the preview window to display a list of printers that are installed on the local workstation.



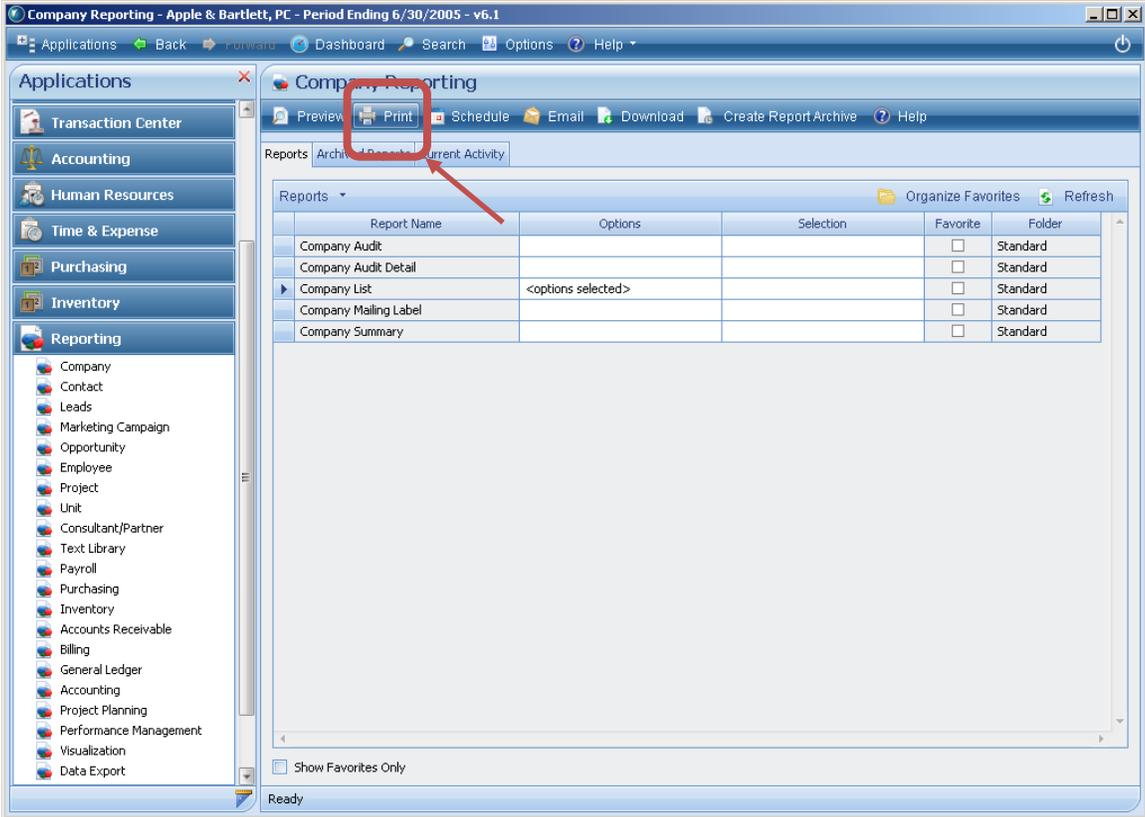
3. Select the local printer, and click the **Print** button to send the printout to the local printer.

Printing to Network Printers installed on the Web Server

In Vision 7.x, you print to network printers installed on the network server, the same as you did in previous versions of Vision. The only change is that the printers are now installed on the Web Server instead of on the Report Server. Steps for installing printers on the Web Server are in the next section titled *Installing Network Printers on the Deltek Vision Web Server*.

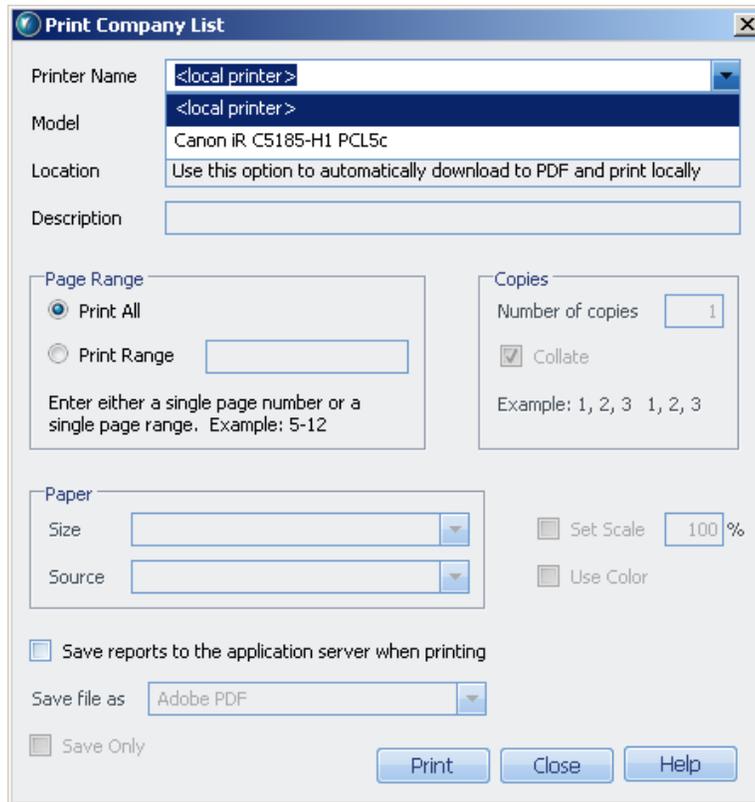
To print to a network printer installed on the Vision Web Server, complete the following steps:

1. In Vision, select a report, and click the **Print** icon on the toolbar.



2. From the drop-down list, select the network printer. If only <Local Printer> is listed, the system administrator has not yet installed printers on the server.

3. Click **Print** to send the job to the printer.



Faster Printing

Server-side printing is now faster for Vision print jobs. This applies to printing reports, invoices, posting logs, checks, and so on. You will see a difference, especially when you print long reports. Reports print ten times faster.

With the ability to print faster in Vision, there are some small formatting differences compared with prior versions of Vision. On print output in Vision 7.x:

- Lines and boxes appear a little thicker.
- Fonts appear a little smaller. One more line may print on a page.
- Margins may be slightly different (0.1–0.3 cm difference).

Faster printing applies only when you print directly to network printers that have been set up within Vision for which you have Vision role security. (The Vision print dialog box displays when you print.) It does not apply when you print from a Vision report preview window. (The standard Windows Print dialog box displays when you print.)

In Vision 7.x, you still have the option to print with the printing technology from Vision 6.1. You may prefer this for formatting purposes for some print jobs, such as for checks, forms, or invoices.

To print using Vision's previous printing technology, complete the following steps:

1. Any place in Vision where you can select an option to open a Vision print dialog box, press the CTRL key on your keyboard and click the print option at the same time.

Examples of print options that open a print dialog box in Vision are:

- A print  icon on a Vision toolbar:  **Print**,  **Print Checks**, and so on.
- A print command that displays in a drop-down list when you click a print command on a Vision toolbar. For example, on the toolbar of the Posting Logs form in **Transaction Center » Posting Logs**, click  **Posting Log**, and then press the CTRL key and click  **Print** on the drop-down list.
- The **Print Setup** button on the Options dialog box. This dialog box displays when you select a report in Reporting, and then click  **Schedule** on the toolbar. On the Schedule dialog box, click the **Options** button to open the Options dialog box.
- The **Run** button on a report Print Options dialog box.

A **Print Using Previous Version's Method (May be Slower)** check box displays at the bottom of the print dialog box. (This displays on the print dialog box only when you use the CTRL key.)

2. Click the **Print Using Previous Version's Method (May be Slower)** check box.
You must enter a network printer in the **Printer Name** field on the print dialog box to be able to select the **Print Using Previous Version's Method (May be Slower)** check box.
3. Click **Print**.

In the following scenarios, you have no control over the **Print Using Previous Version's Method (May be Slower)** check box. It will be selected automatically, regardless of whether or not you see the check box on the Print dialog box:

- On the print dialog box, you select more than one copy to print in the **Number of Copies** field, and you clear the **Collate** check box.
- On the print dialog box, you select the **Set Scale** check box, and you change the percentage to something other than 100%.

Known issues with the printing enhancement

- Some reports that are set to print automatically in landscape mode in order to fit all their columns are printing in portrait mode. As a result, some columns are cut off entirely. Even if you change it from portrait to landscape on the Layout tab, it still prints in portrait mode. The Project Planning List and Profit Planning Monitor reports are two reports that have this issue. Until this is fixed, you can print these reports in landscape mode using the previous version's printing method.
- The UK “check on bottom” check format and purchase orders are printing incorrectly. Some text near the left margin is cut off. Until this is fixed, you can print the checks using the previous version's printing method.

Installing Network Printers on the Vision Web Server

The Vision Weblink application allows you to configure the account that connects Vision to the SQL Server Reporting Services. Vision uses this account to run reports, view report activity and perform server-side printing, such as when batch printing, is required. It is possible to have two accounts that work with SQL Server Reporting Services, depending on your report server database access selection. If you select Windows Authentication, then you can only have one account. If you select SQL Authentication, then you can have two accounts (one for access to the printers and the URL, and the other account to access the database).

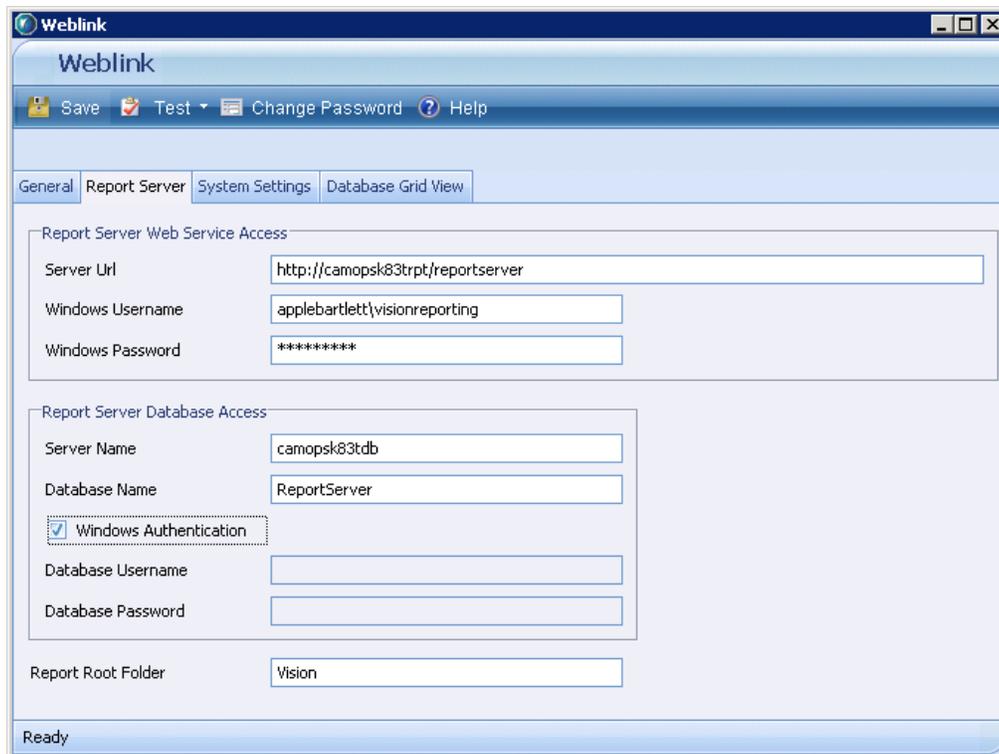
The following procedures address the requirements for establishing the necessary rights and privileges on the Web, Database, and Report Servers for batch printing. This is required if you change the Windows Username account specified in Weblink from the default local account “DeltekVision” created by the installation.

In the Weblink application, the Report Server tab is used to configure Vision for connecting to Microsoft SQL Server Reporting Services. The tab contains the following two sections:

- **Report Server Web Service Access** — The account entered in this section connects the SQL Server Reporting Services URLs for loading Vision reports into Reporting Services, checking Vision report versions, and running the Vision reports. See Report Server Web Service Access for more information.
- **Report Server Database Access** — The account entered in this section connects the database server hosting the Reporting Services Report Server Databases and the Vision database. It is also used for running reports and checking Vision reporting activity in Reporting Services. You can use the following two options:
 - Windows Authentication - Select this option for the account in the Report Server Web Service Access section to be used to connect to the database server.
 - Specify a SQL Server Username and Password – Remove the selection of the Windows Authentication option and specify the SQL Server Login you have created in SQL Server Management Studio into the Database Username field.

Steps to configure the required rights for either option must be configured in the database server procedure below. See Report Server Database Access for more information.

To configure network printers for Vision batch jobs, launch Weblink and complete the following steps to assign the appropriate rights to the account being used in each section.



Report Server Web Service Access

To change the account listed from Vision to a domain account, complete the following steps:

1. Create a domain user account (not a domain administrator). If local or domain password policies may cause the password to expire, ensure that the password is updated in Weblink in a timely manner to avoid connection errors.
2. Complete these steps on the Web Server:
 - a. Log on to the Web Server and add the account to the Local Administrator Group. (This gives the account the privilege to install the print drivers.)
 - b. On the Web Server, click **Control Panel » Administrative Tools**, and launch the Local Security Policy applet.
 - c. Expand Local Policies and click **User Rights Assignment**.
 - d. Double-click the **Logon as a Service** option and add the account to the list. (This allows Vision to enumerate the list of printers.)
 - e. Log on to the Web Server as the account and install all the printers that are required.
3. Complete these steps on the Report Server:
 - a. Log on to the Report Server and add the account to the local administrator's group. (This gives the account the required privileges for SQL Server Reporting Services.)
 - b. If you are using SQL Server 2008 on Windows Server 2008 or Windows Vista, the account referenced in Weblink may not have the necessary privileges (even as a member of the local administrator's group). You must logon to the server as a local Administrator (preferably as the account you were logged in as when you installed SQL Server Reporting Services). You can copy and paste the following command lines into a command prompt (DOS) window to give the account the appropriate privileges to the Reporting Services Web Service. When you launch the command prompt, right-click and choose the **Run As Administrator** option.

Deltek recommends that you copy each of the two commands into Notepad and turn off the word wrap feature. This allows each command that is pasted into the command prompt window to be executed as one contiguous line.

In the command line syntax below, make replacements as necessary for the path to the Deltek Vision Scripts folder, replace <SERVERNAME> with the name of your report server, and replace <DOMAIN\USERNAME> with the username you plan to use. Do not remove the double quotation marks.

```
"c:\Program Files\Microsoft SQL Server\100\Tools\Binn\rs.exe" -i
"C:\Program
Files\Deltek\Vision\Support\Scripts\DeltekAddItemSecurity.rss" -s
http://<SERVERNAME>/reportserver -v
userName="DOMAIN\USERNAME" -v roleName="System
Administrator" -v itemPath="/" -v keepCurrentPolicy="True"

"c:\Program Files\Microsoft SQL Server\100\Tools\Binn\rs.exe" -i
"C:\Program
```

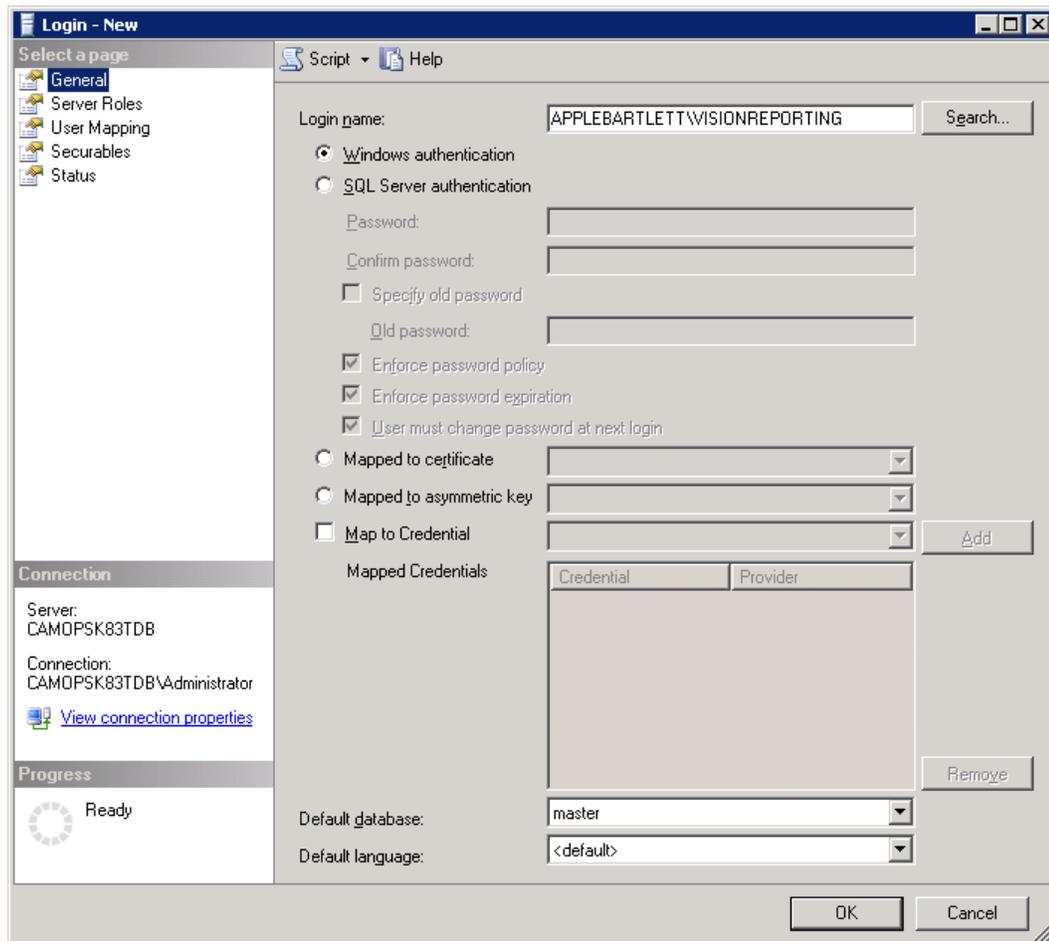
```
Files\Deltek\Vision\Support\Scripts\DeltekAddItemSecurity.rss" -s
http://<SERVERNAME>//reportserver -v
userName="DOMAINUSERNAME" -v roleName="Content Manager"
-v itemPath="/" -v keepCurrentPolicy="True"
```

Report Server Database Access

The following steps guide you through creating/adding a SQL Server login that corresponds to the account you entered on the Deltek Vision Weblink Report Server tab. In these steps, you also give the account the appropriate rights to the databases on the SQL Servers hosting your Vision and Report Server databases.

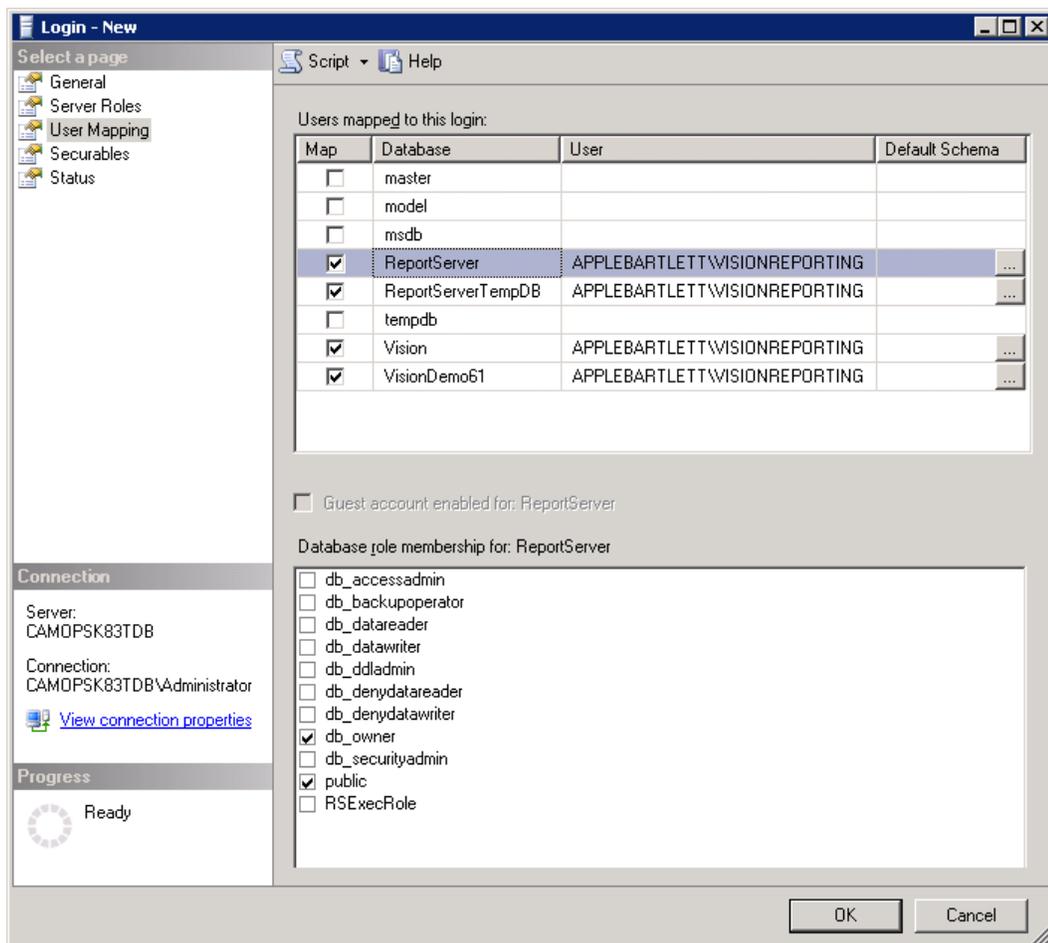
To create an account and add the appropriate rights, complete the following steps:

1. Launch the SQL Server Management Studio and connect to the database server(s) hosting the Vision and Reporting Server databases.
2. Expand the security folder.
3. Right-click **logins** and select **New Login**. The New Login screen displays.



4. Click the General tab.
5. Complete the following fields:

- **Login name** — Enter the name of the SQL Server Login. The Login name you enter here and the authentication option you select must match what you enter in Weblink on the Report Server Tab.
 - **Windows Authentication** — If you selected Windows Authentication on your Weblink entry (Database Access section), select this option and enter in the same name you entered in the Windows Username field of the Report Server Web Service Access section of Weblink. The Integrated Authentication checkbox **MUST** be enabled in the Database Server Connection section of the Report Server Tab in Weblink.
 - **SQL Server Authentication** — If you selected SQL Authentication on your Weblink Entry (Database Access section), select this option and enter the same name you entered into the **Database Username** field of the Report Server Database Server Connection section of Weblink. (Note: The name specified for this section cannot be in the Domain\Username format.)
6. Click **OK**.
 7. Click the User Mapping tab.



Use these fields to determine the databases the Login Name will be mapped to and the role membership it will be assigned to within the databases.

8. Make sure the following databases are selected in the **Users mapped to this login** grid:
 - ReportServer

- ReportServerTempDB
- Your Vision databases

This maps the login/user to the respective databases.

9. As you select each database (including your Vision database), select the db_owner role in the **Database role membership for:** section. You must select this option for each database.

You must map the Login that is created on the database server to all Vision databases that are configured in Weblink. This is in addition to the ReportServer and ReportServerTempDB databases. If the login is not a member of the db_owner role in those databases, the Weblink Reporting Services connections will fail.

In the screenshot example above, there are two Vision databases on the database server and both are being mapped to the new login account.

Launch Deltek Vision Weblink

To launch Weblink, complete the following steps:

1. Launch the Deltek Vision Weblink application and select your database entry. The database entry you select here should have also been mapped previously.
2. Select the Report Server tab.
3. Enter the Domain account you created and configured on the Web server in the Report Server Web Service Access section.
4. In the Report Server Database Access of Weblink, enter the SQL Server Login you created and configured on the database server, or select the **Windows Authentication** option. This allows you to use the domain account you used in the Report Server Web Services section to connect to the Report Server Database Servers.

Do **not** enter a Windows Domain account in this option.

Launch Deltek Vision Application and Refresh Report Printers

To launch Vision and refresh report printers, complete the following steps:

1. Launch the Deltek Vision application and log in to the database entry you configured in Weblink.
2. Click **Utilities » Report Administration**.
3. Select the Report Printers tab.
4. Click **Refresh Report Printers** to update Vision with the printers that were installed.

Appendix F: Load Standard Vision Reports

During the Web Server/Tier installation process, Vision installs a standard set of reports. Vision uses the following internal steps to complete this process:

1. Vision installs the Vision report folders and files into the Vision\Reports folder (default location: \Program Files\Deltek\Vision\Reports).
2. Vision imports the Vision Report files into Microsoft SQL Server Reporting Services (SSRS), which makes the reports available in Reporting Services.

Connection Errors

If there are problems with the connection between Vision and the report server, the reports will not install correctly onto the report server.

Upgrade existing Vision 6.x installation	The connection between the Report Server database and Reporting Services URL fails.	The account specified in Weblink may not have the appropriate rights to the report server, web server, report server databases, and Vision database.	Upgrade your installation. See Upgrade an Existing Vision 6.x Installation in the “Identify the Error” section below for steps to resolve the issue.
New Vision 7.x installation	An error displays during installation.	Internal error occurred during the installation.	Check the Vision installation log files and correct the condition that is listed in the error message. See New Installation of Vision 7.x in the “Identify the Error” section below for steps to resolve the issue.
All installations	The connection between the Report Server database and Reporting Services URL fails.	The Report Server did not respond in a timely manner and the connection timed out.	Launch Vision and reload the reports. See Reload Reports into Vision in the “Identify the Error” section below for steps to resolve the issue.

Identify the Error

If Vision displays a message stating that Vision Reports were not successfully imported during the installation process, you must complete the appropriate procedure for your installation type.

Upgrade an Existing Vision 6.x Installation

To upgrade an existing Vision 6.x installation, complete the following steps:

1. Launch the Deltek Vision Weblink application.
2. For each database in the drop-down list, click the Report Server tab.

3. Click the **Test Report Server** button to verify that no errors occur during the connection. Refer to “Appendix E: Printing in Vision 7.x” for information on assigning rights to the account listed in Weblink.
4. Save your changes and exit Weblink.
5. Reload your reports into Vision. See the “Reload Reports into Vision” procedure below for additional information.

New Installation of Vision 7.x

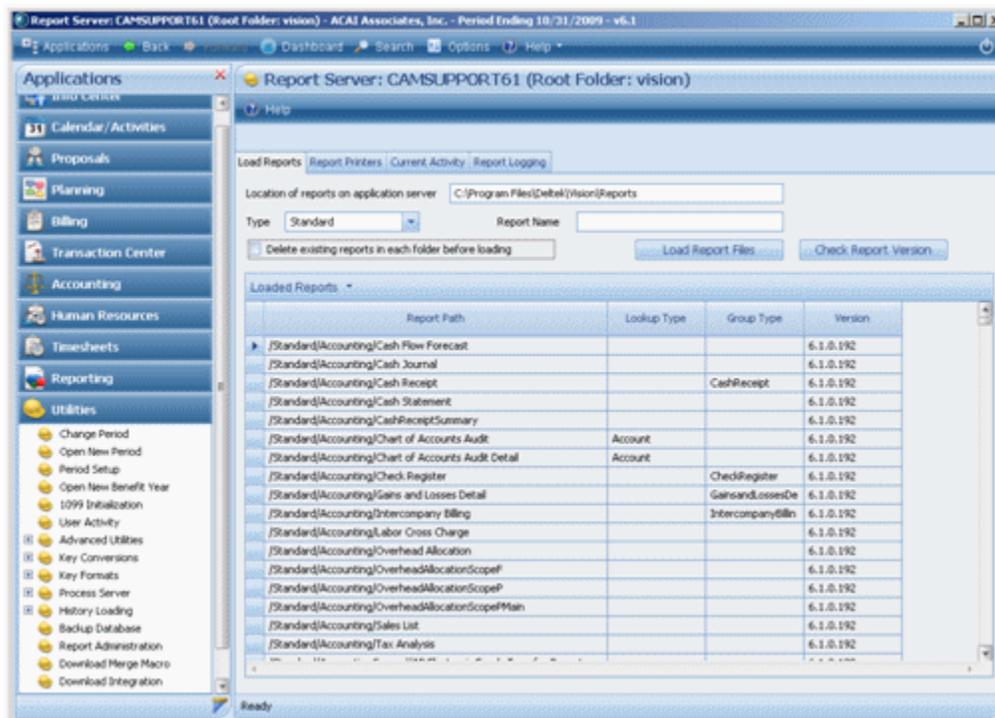
For a new installation of Vision 7.x, complete the following steps:

1. Open the Deltek Vision installation location folder (\ProgramFiles\Deltek\Vision\Logs).
2. Review the latest **DeltekVisionCMD_xx-XX.log** file (xx-XX represents the language of your loaded reports).
3. If an error is reported in the log file, you must correct the condition causing the error.
4. Reload your reports into Vision. See the “Reload Reports into Vision” procedure below for additional information.

Reload Reports into Vision

To reload reports on the Vision reports server, complete the following steps:

1. Double-click the Vision icon to launch the Vision application.
2. From the Vision Applications menu, click **Utilities » Report Administration** to display the Reporting Administration form.
3. Select the Load Reports tab to load reports on the report server.



4. In the **Location of reports on application server** field, enter the file path location of the reports (RDL files) on the report server.
5. From the **Type** option drop-down list, select **Standard**.
6. If you want to load a single report, enter the name of the report in the **Report Name** field. (You do not need to supply the .RDL extension.)

You can also use this field as a wild card search. For example, if you enter **Project**, Vision finds and loads all files that contain the word Project, such as Project List, Project Summary, and Project Audit.

Sub reports do not load for main reports; you must load them manually by name.

If you leave the **Report Name** field blank, all reports load.

7. Click **Load Report Files**. A loading reports warning message displays.
8. Click **OK** to continue the reload report process.
9. To install custom reports, return to step 5. This time, select **Custom** from the **Type** option drop-down list. Then complete the remaining steps of the procedure.



For additional information on reloading reports, click the **Help** button on the Load Reports Tab.



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