

Dell™ ChangeBASE 6.2.3

Prerequisites and Getting Started Guide



© 2015 Dell Inc.

ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Dell Inc.

The information in this document is provided in connection with Dell products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Dell products. EXCEPT AS SET FORTH IN DELL SOFTWARE'S TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, DELL ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL DELL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF DELL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Dell makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Dell does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Dell Inc.
Attn: LEGAL Dept
5 Polaris Way
Aliso Viejo, CA 92656

Refer to our web site (software.dell.com) for regional and international office information.

Patents

This product is protected by U.S. Patents #7,814,260; 7,913,043; 7,979,650; 8,086,782; 8,145,864; 8,171,247; 8,255,654; and 8,271,755. Protected by Japanese, E.U., French, and UK patents 1615131 and 05250687.0, and German patent DE602004002858. Additional Patents Pending.

Trademarks

Dell and the Dell logo are trademarks of Dell Inc. and/or its affiliates. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names, or their products. Dell disclaims any proprietary interest in the marks and names of others.

Legend



CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.



IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.

ChangeBASE Prerequisites and Getting Started Guide

Updated - March 2015

Software Version - 6.2.3

Contents

Introduction	4
Key Phases of a Migration Project	4
Assessment Capabilities	5
Features and Benefits	5
Before You Start...	7
ChangeBASE System Requirements	7
Local Database Setup	7
Minimum Requirements	8
Remote Database Setup	8
Minimum Client Requirements	9
Minimum Requirements for Server Hosting ChangeBASE Service	10
Minimum Requirements for Server Hosting SQL Database	11
Minimum Requirements to Host on a Virtual Environment	11
Virtual Machines	12
Virtual Machines used for Repackaging (EXE/BAT/VBS/CMD)	12
Virtual Machines used for Virtualization	13
Recommended Configuration for Optimal Performance	14
Best Practice Setup using Active Directory	14
Pre-Installation Steps	18
Installing ChangeBASE	21
Local Installation	21
Multi-User Installation	22
ChangeBASE Service Installation	22
Client Installation	22
Further Details on ChangeBASE	23
Web Capture	24
Web Capture Installation	24
Further Details on Web Capture	24
About Dell	25
Contacting Dell	25
Technical support resources	25

Introduction

Dell™ ChangeBASE is a leading provider of automated application compatibility analysis, remediation and conversion.

ChangeBASE can assess and fix application compatibility issues automatically prior to migration to the latest Microsoft platforms and virtualized package environments. ChangeBASE also enables you to virtualize your packages automatically.

ChangeBASE is based on a thin client-server model in which most of the processing is carried out by a central service. Compatibility assessment checks against the selected migration platforms are carried out automatically by default, whenever packages are imported into a ChangeBASE database.

ChangeBASE version 6.1 introduces the ability to create links to external data source. This allows you to expand your application assessment to include information on how the applications are being used within the environment. Once the link has been created, it will be maintained and refreshed to ensure that the most up-to-date data is used within custom checks and for reports. Tapping into external data gives you insights to help plan for migration projects.

The guide is intended for network administrators, consultants, analysts, and any other IT professionals who are responsible for setting up ChangeBASE.

This chapter covers the following topics:

[Key Phases of a Migration Project](#)

[Assessment Capabilities](#)

[Features and Benefits](#)

Key Phases of a Migration Project

- **Identify:** The first step is to identify both the managed and unmanaged packages across the enterprise. Dell™ Asset Manager can be used to perform this step.
- **Plan/Rationalize:** Once the packages have been identified, the best practice is to rationalize packages that have similar functionality and/or have multiple versions. This approach means that only the latest versions of software are being submitted to the migration project. Once the number of packages has been defined, the amount of project resources can also be planned.
- **Import and Assess:** The list of packages collated during the rationalization phase should be imported into ChangeBASE in order to test compatibility with the target platform(s). The packages are automatically assessed against the relevant checks. Once the compatibility results are visible, packages can undergo another round of rationalization to ensure that effort is only spent on packages that will work on the target platform(s). Incompatible packages should be upgraded, redeveloped or retired.

- **Fix:** ChangeBASE assesses packages according to a Red/Amber/Green (RAG) system. ChangeBASE can automatically remediate many Amber issues, and some Red issues, by means of MST (Transform) files. The underlying packages and installations are never modified directly. ChangeBASE can also fix compatibility issues through the use of additional files such as Manifests and runtimes to allow packages to run correctly on the new Platform. By using Transform files, subsequent upgrades or patches can still be applied while allowing you to maintain support for the particular packages.
- **Virtualize:** ChangeBASE can automatically create a virtualized package in a number of formats, including Microsoft's App-V, Symantec Workspace Virtualization (SWV), and VMware's ThinApp.
- **UAT:** The fixed package is now ready for User Acceptance Testing (UAT). Package owners can test in the target environment.
- **Deploy:** The package and fixes are deployed to the target environment.
- **Manage:** There is a 'Patch Assessment' report that rolls up Microsoft Patch Tuesday updates from July 2013 onwards. When you run the report, it shows the packages in your database on which the updates are likely to have an impact. The current RAG statuses of your applications remain unaffected by the report.

Assessment Capabilities

ChangeBASE provides automated application compatibility testing and fixing for the following:

- Windows XP, 32-bit and 64-bit
- Windows 7, 32-bit and 64-bit
- Windows 8, 32-bit and 64-bit
- Windows Server 2003 32-bit and 64-bit (including R2)
- Windows Server 2008 32-bit and 64-bit (including R2)
- Windows Server 2012
- Microsoft Office 2007, 2010 and 2013 dependencies
- MSI Installer Integrity - ICEs ([Internal Consistency Evaluators](#)) checking and fixing
- Microsoft App-V, Microsoft Server App-V, VMware ThinApp, Citrix XenApp and Symantec SWV

 **NOTE:** Browser Compatibility also allows the automated testing of Web applications for compatibility with Internet Explorer 8, 9 and 10, and Firefox. Refer to [Web Capture](#).

Features and Benefits

- **True Client/Server Model**
 - Multi-threaded imports across all the CPU resources in parallel, allowing the import and simultaneous assessment of high volumes of packages.

- Import from all shared resources across a network, with simultaneous viewing of the assessment results.
- **Instant Multi-Platform Compatibility Assessment**
 - Identify compatibility issues instantly on import into ChangeBASE, across a wide range of specified target platforms. So, for example, you can simultaneously see the issues that would be affected by deploying packages on both Windows Server 2012 and Windows 8.1, and arrive at accurate and informed decisions on the timeframes and costs of such deployments, in order to prioritize packages for relicensing, replacement and testing.
 - Repackage non-standard or legacy packages prior to import so that you can test your entire inventory of packages for compatibility issues.
- **Auto-Fix Compatibility Issues**
 - Resolve application compatibility issues prior to deployment with minimal manual effort, to avoid repeated assessment cycles and to substantially accelerate package delivery. Reduce post-migration support issues.
- **Virtual Compatibility Assessment**
 - Determine which packages you can virtualize within seconds, and track middleware dependencies, saving days of testing time.
- **Package Virtualization**
 - Automatically virtualize your packages. Save time, avoid errors and meet demand more quickly than with manual conversions.
- **Auto-Fix for Virtual Platforms**
 - Evaluate packages for compatibility issues with virtual target platforms, and fix them in just a few simple steps.
- **Automate Corporate Packaging Standards**
 - Test for issues related to in-house and packaging (MSI) standards and apply automated fixes to ensure compliance. Develop and customize QA checks and related remedies in order to achieve significant time and cost savings compared to manual checking.
- **Ongoing Management**
 - Introduce changes quickly, easily and reliably, with the highest degree of confidence.
 - Reduce security risks and deployment times by the periodic running of an assessment report that shows the likely impact of past and present Microsoft updates on your package estate.

Before You Start...

ChangeBASE System Requirements

Before installing ChangeBASE, ensure that your system meets the minimum hardware and software requirements described in the following sections.

Local Database Setup

[Minimum Requirements](#)

Remote Database Setup

[Minimum Client Requirements](#)

[Minimum Requirements for Server Hosting ChangeBASE Service](#)

[Minimum Requirements for Server Hosting SQL Database](#)

[Minimum Requirements to Host on a Virtual Environment](#)

Virtual Machines

[Virtual Machines used for Repackaging \(EXE/BAT/VBS/CMD\)](#)

[Virtual Machines used for Virtualization](#)

Recommended Configuration for Optimal Performance

Local Database Setup

For a training course, a POC (Proof Of Concept) installation, or where there is only to be one user of ChangeBASE, it is usual for all components (including the ChangeBASE service) to be installed on the same machine, which should be running under one of the following Operating Systems:

- Windows Vista SP2 (x86 and x64)
- Windows 7 SP1 (x86 and x64)
- Windows 8 (x86 and x64)
- Windows 8.1 (x86 and x64)
- Windows Server 2008 R2 SP1 (x64)
- Windows Server 2008 SP2 (x86 and x64)
- Windows Server 2012 (x64)
- Windows Server 2012 R2 (x64)

Minimum Requirements

Provided that the machine is going to be importing less than 1,000 packages, it should meet the following minimum specifications:

Table 1: Minimum Machine Requirements for Local Database Setup

Display Resolution	Core Processor	RAM (GB)	SQL Server	.NET Framework	Network Connection
1024 x 768 pixel array	Quad-core processor	8, preferably on a 64-bit Operating System	SQL Server Express 2008/2012	4.5	Gigabit Ethernet

 **CAUTION:** The SQL Server Collation must be Case Insensitive (CI).

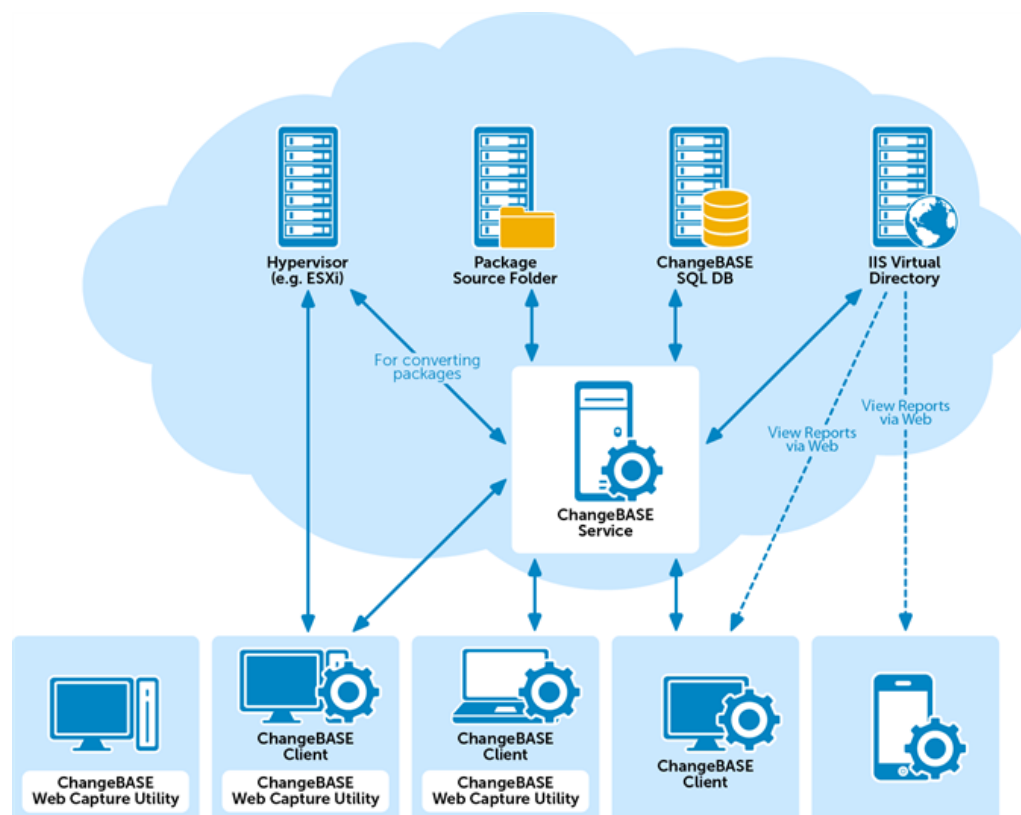
You will also need the following:

- Microsoft Visual C++ Redistributable 2012. It is available from <http://www.microsoft.com/en-us/download/details.aspx?id=30679>. Install the 64-bit version on 64-bit Windows, and the 32-bit version on 32-bit Windows.
- A Hypervisor for 'Legacy Conversion' (hereafter typically referred to as 'Repackaging') and/or Virtualization. See [Virtual Machines](#).
- If you are going to be using the ChangeBASE API, you will need PowerShell 3.0. It is automatically installed with Windows 8 and Windows Server 2012. Alternatively, you can download it from <http://www.microsoft.com/en-gb/download/details.aspx?id=34595> or <http://www.microsoft.com/en-us/download/details.aspx?id=34595>.

Remote Database Setup

In the event that more than one user connects to the same database, the ChangeBASE client software may be installed on each of the workstations ('clients'), with the ChangeBASE service and database(s) hosted remotely.

Figure 1: Multi-User Setup



Minimum Client Requirements

Each client should be running under one of the following Operating Systems:

- Windows Vista SP2 (x86 and x64)
- Windows 7 SP1 (x86 and x64)
- Windows 8 (x86 and x64)
- Windows 8.1 (x86 and x64)
- Windows Server 2008 R2 SP1 (x64)
- Windows Server 2008 SP2 (x86 and x64)
- Windows Server 2012 (x64)
- Windows Server 2012 R2 (x64)

Each client should meet the following minimum specifications:

Table 2: Minimum Client Requirements for Remote Database Setup

Display Resolution	Core Processor	RAM (GB)	.NET Framework	Network Connection
1024 x 768	Quad-core	8 (16 if a large number of	4.5	Gigabit

Display Resolution	Core Processor	RAM (GB)	.NET Framework	Network Connection
pixel array	processor	packages are imported), preferably on a 64-bit Operating System		Ethernet

You will also need the following:

- Microsoft Visual C++ Redistributable 2012. It is available from <http://www.microsoft.com/en-us/download/details.aspx?id=30679>. Install the 64-bit version on 64-bit Windows, and the 32-bit version on 32-bit Windows.
- A Hypervisor for 'Legacy Conversion' (hereafter typically referred to as 'Repackaging') and/or Virtualization. See [Virtual Machines](#).
- If you are going to be using the ChangeBASE API, you will need PowerShell 3.0. It is automatically installed with Windows 8 and Windows Server 2012. Alternatively, you can download it from <http://www.microsoft.com/en-gb/download/details.aspx?id=34595> or <http://www.microsoft.com/en-us/download/details.aspx?id=34595>.

Internet Connectivity Recommended

It is highly recommended that an internet connection is available when using ChangeBASE, as the access to software and assessment group updates, and the associated online help, are dependent on this.

If internet connectivity is not possible, please contact Dell to discuss alternative delivery methods.

Minimum Requirements for Server Hosting ChangeBASE Service

These requirements are dependent on the numbers of packages being imported for assessment, and on the numbers of clients, and are to be taken as recommendations rather than absolute minimums.

Table 3: Minimum Requirements for Server Hosting ChangeBASE Service

	Small Operation (i.e. less than 1,000 packages and less than 10 clients)	Medium Operation (i.e. between 1,000 and 5,000 packages and 10 or more clients)	Large Operation (i.e. more than 5,000 packages and 10 or more clients)
Operating System	One of: • Windows 7 SP1 • Windows 8 • Windows 8.1	Windows Server 2008 R2 SP1, Windows Server 2008 SP2, Windows Server 2012, or Windows Server 2012 R2.	Windows Server 2008 R2 SP1, Windows Server 2008 SP2, Windows Server 2012, or Windows Server 2012 R2.
	 NOTE: A 64-bit Operating System is recommended wherever		

	Small Operation (i.e. less than 1,000 packages and less than 10 clients)	Medium Operation (i.e. between 1,000 and 5,000 packages and 10 or more clients)	Large Operation (i.e. more than 5,000 packages and 10 or more clients)
	possible, especially if you are using 64-bit SQL Server.		
Core Processor	Quad-core processor	8-core processor	16-core processor
RAM (GB)	8	16	32
.NET Framework	4.5	4.5	4.5
Network Connection	Gigabit Ethernet	Gigabit Ethernet	Gigabit Ethernet

You will also need:

- Microsoft Visual C++ Redistributable 2012. It is available from <http://www.microsoft.com/en-us/download/details.aspx?id=30679>. Install the 64-bit version on 64-bit Windows, and the 32-bit version on 32-bit Windows.

Minimum Requirements for Server Hosting SQL Database

ChangeBASE supports both SQL Server 2008 R2 and SQL Server 2012. The requirements are as given in the following links:

- SQL Server 2008 - [http://msdn.microsoft.com/en-us/library/ms143506\(v=sql.105\).aspx](http://msdn.microsoft.com/en-us/library/ms143506(v=sql.105).aspx)
- SQL Server 2012 - <http://msdn.microsoft.com/en-us/library/ms143506.aspx>



NOTE: The server may run SQL Server Express, but due to its one GB of RAM usage restrictions, as well as its database size limits, it is recommended that SQL Express is used for no more than 600 packages.



CAUTION: The SQL Server Collation must be Case Insensitive (CI).

It is recommended that:

- The SQL Server Browser service is set to **Automatic**.
- TCP/IP protocol is enabled in the database(s).

Minimum Requirements to Host on a Virtual Environment

Hosting on a virtual environment is supported. The minimum requirements remain the same, but with the following additional requirements for medium and large operations

- The number of recommended cores should not be shared with other virtual computers
- The amount of available RAM should not be shared with other virtual computers
- On the SQL Server, the ChangeBASE database and SQL TempDB should be located on physically separate drives and not shared with other virtual computers

Virtual Machines

Virtual machines (VMs) are utilized by ChangeBASE for the Repackaging of legacy installer files (whether in EXE, VBS, BAT or CMD format) into MSIs, and for the conversion of MSIs/EXEs into virtual formats (Virtualization).

The system requirements are as follows:

Virtual Machines used for Repackaging (EXE/BAT/VBS/CMD)

Table 4: Requirements for Virtual Machine used for Repackaging

Running under Hypervisor	Operating System	RAM (GB)	Minimum Display Resolution	Software
One of: • Microsoft Hyper-V • VMware Workstation 9 (with shared VMs) • VMware Server 2.x/ESX Server 5.1	One of: • Windows XP SP3 32-bit (x86) • Windows 7 32-bit (x86)  NOTE: Windows Vista is not supported, even in its 32-bit version.  IMPORTANT: If 64-bit Repackaging is required, then you can use the version of MSI Studio that is bundled with ChangeBASE, provided that the repackaged applications undergo full testing prior to deployment, especially if they require COM (Component Object Model) servers.	4 or greater	1024 x 768 pixel array	As follows: • Microsoft.NET Framework 3.5 SP1 and: • .NET 4 or later (Full Version) for Windows 7 • .NET 4.0.x (Full Version) for Windows XP • VMware Tools for a VMware-based VM. • Hyper-V Integration Services for a Microsoft Hyper-V-based VM. • CBVMTTools (supplied with ChangeBASE).

Virtual Machines used for Virtualization

Table 5: Requirements for Virtual Machine used for Virtualization

Running under Hypervisor	Operating System	RAM (GB)	Minimum Display Resolution	Software
One of: • Microsoft Hyper-V • VMware Workstation 9 (with shared VMs) • VMware Server 2.x/ESX Server 5.1	One of: • Windows XP SP3 32-bit (x86) • Windows 7 32-bit (x86) • Windows 7 64-bit (x86) • Windows 8 32-bit (x86) • Windows 8 64-bit • Windows Server 2003 R2 • Windows Server 2008 R2 • Windows Server 2012	4 or greater	1024 x 768 pixel array	As follows: • Microsoft.NET Framework 3.5 SP1 and: • .NET 4 or later (Full Version) for Windows 7 and Windows 8 • .NET 4.0.x (Full Version) for Windows XP • VMware Tools for a VMware-based VM. • Hyper-V Integration Services for a Microsoft Hyper-V-based VM. • One or more of the following: • App-V Sequencer 4.6 SP1/5.0 (also requires Windows 7 SP1) • ThinApp Setup Capture 4.6.1 • Symantec Wise Composer with Symantec Workspace Virtualization Admin (Client) 6.1 • CBVMTools (supplied with ChangeBASE).



NOTE: Windows Vista is not supported, even in its 32-bit version.



IMPORTANT:

- Do not disable Internet Protocol Version 4 (TCP/IPv4) on any of the Virtual Machines.
- The VMware VIX library only allows connections to one type of provider per process. This means that you can only configure ChangeBASE to use either Workstation- or Server-based Virtual Machines, not both.

- If you are running ChangeBASE on a Machine that does not have VMware Workstation installed and you want to connect to an ESX/vCenter server, or if you encounter errors connecting to ESX servers 5.1 and above, download and install the VIX SDK (<http://www.vmware.com/support/developer/vix-api/>).
- The App-V 5.0 Sequencer requires the prior installation of Microsoft.NET Framework 4.0 Full and PowerShell 3.0. The latter is automatically installed with Windows 8 and Windows Server 2012. Alternatively, you can download it from <http://www.microsoft.com/en-gb/download/details.aspx?id=34595> or <http://www.microsoft.com/en-us/download/details.aspx?id=34595>.

Recommended Configuration for Optimal Performance

For optimal performance it is recommended that:

- If you are using VMware Workstation (with shared VMs), you use 64-bit Windows for the host machine.
- If you are using 64-bit Windows for the SQL Server machine, you use 64-bit SQL Server.

Space requirements for the database are 16 GB per 400 packages (40 GB per 1000).

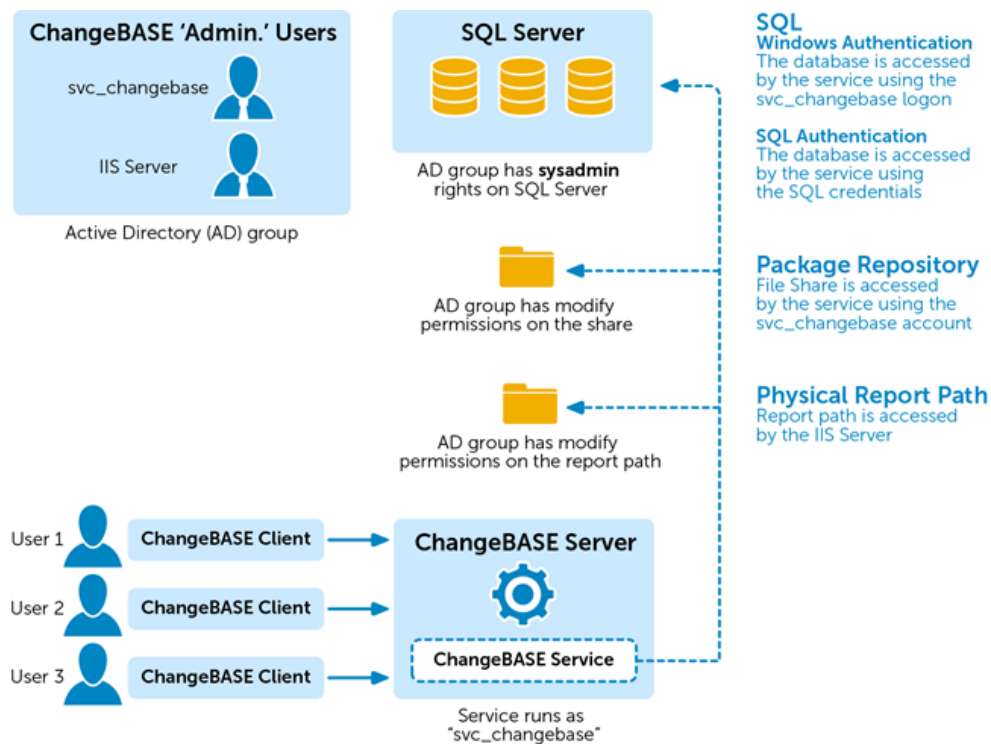


NOTE: When large numbers (more than 2000) of packages are imported into ChangeBASE, you may experience a degradation of import speeds. Over the course of time, the indexes on some tables can become fragmented which has a negative impact on performance. In this situation, please refer to the Dell Knowledge Base article [135255](#) for more details.

Best Practice Setup using Active Directory

The following procedure is recommended if your site uses a client/server environment and is able to take advantage of the Active Directory (AD) service included in most Windows Server Operating Systems.

Figure 2: Client/server set up



To set up using Active Directory

1. Assuming that SQL Server has already been installed centrally, create an AD group related to ChangeBASE.
2. Create a user account (for example `SVC_ChangeBASE`) that will be used to connect to the ChangeBASE service, and ensure that the password is set to never expire.



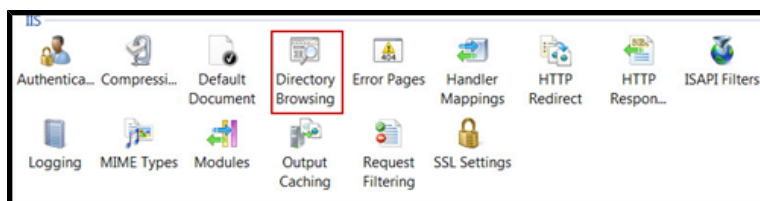
NOTE: This account will be prompted for when you select the ChangeBASE service during installation.

You will associate the account with the SQL Server `dbcreator` and `sysadmin` roles via the **Login Properties** of the AD group at the step starting [Set up SQL Security as follows:](#)

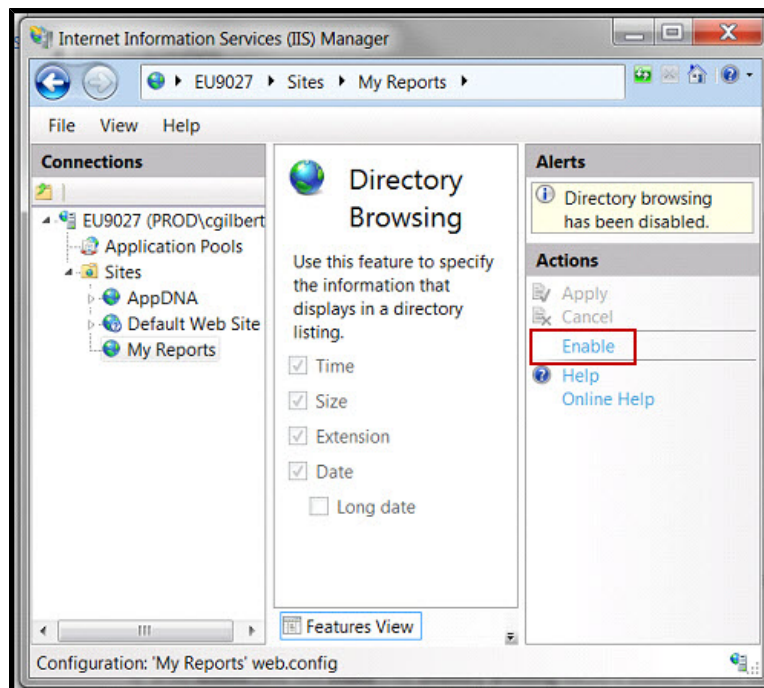
3. Ensure that this `SVC_ChangeBASE` account has the Log on as a Service Right so that it can access the ChangeBASE service.
 - a. To add the **Log On as a Service Right** to the account if it is on your local computer:
 - i. Select **Control Panel > Administrative Tools > Local Security Policy**.
 - ii. In the console tree, double-click **Local Policies**, and then click **User Rights Assignment**.
 - iii. In the details pane, double-click **Log On as a Service**.
 - iv. Click **Add User or Group**, and then add the account to the list of accounts that possess the **Log On as a Service Right**.

- b. To add the **Log On as a Service** Right to the account if it is not on your local computer:
 - i. Select **Start > Run**, type **mmc**, and then click **OK**.
 - ii. Select **File > Add/Remove Snap-in**.
 - iii. In **Add/Remove Snap-in**, click **Add**, and then, in **Add Standalone Snap-in**, double-click **Group Policy Object Editor**.
 - iv. In **Group Policy Object**, click **Browse**, move to the GPO (Group Policy Object) that you want to modify, click **OK**, and then click **Finish**.
 - v. Click **Close**, and then click **OK**.
 - vi. In the console tree, click **User Rights Assignment**.
 - vii. In the details pane, double-click **Log On as a Service**.
 - viii. If the security setting has not yet been defined, select the **Define these policy settings** check box.
 - ix. Click **Add User or Group**, and then add the account to the list of accounts that possess the **Log on as a Service** Right.
 4. Add this service account to the **ChangeBASE** AD group.
 5. Add the machine account of the server hosting IIS (Internet Information Services) to the **ChangeBASE** AD group. This server will be used for ChangeBASE Web reporting.
 6. Set up a central reports directory that can be accessed by the IIS server, for example **My Reports**.
 7. To set up the virtual reports directory on the server hosting IIS:
 - a. Open IIS.
 - b. Right-click on **Sites** and then **Add Web Site**.
 - c. Give your Site a name and set the Physical Path to the virtual directory that you created above. Leave all other settings as default.
- NOTE:** If you receive a warning about port binding you should increment the Port until the warning ceases.
- d. Right-click on your Website and select **Properties**.
 - e. Share the virtual directory to allow ChangeBASE to export your reports. To do this, go to **Sharing** and click **Share**.
- NOTE:** If you have specific report authors, then you can explicitly share with them, but, as a minimum, you will need to add the account that will be used to connect to the ChangeBASE service. If this account is already in a ChangeBASE Active Directory group, simply add this group in place of **Everyone** in the above example.

- f. Click on your Website, followed by **Directory Browsing**.



- g. Click on **Enable**.



NOTE: The final step will be to link the Physical Path (D:\My Reports) to ChangeBASE. This will be done at the end of this Best Practice Setup, as the last part of the product setup.

8. Open SQL Server Management Studio and connect to the SQL Server instance.

TIP: If you want to know the name of the SQL Server instance, open the **Services** window and select **SQL Server**. The instance name is given in brackets.

9. Set up SQL Security as follows:

- Browse to **Security > Logins**.
- Right-click **Logins** and select **New Login**.
- Use **Search** to find the **ChangeBASE** group you created.
- Once you have located the group, click **OK**.
- Select **Server Roles**.
- Check **dbcreator** and **sysadmin**.
- Click **OK**.

10. Install ChangeBASE on the central server that is to run the ChangeBASE service. Install both the service and client features.

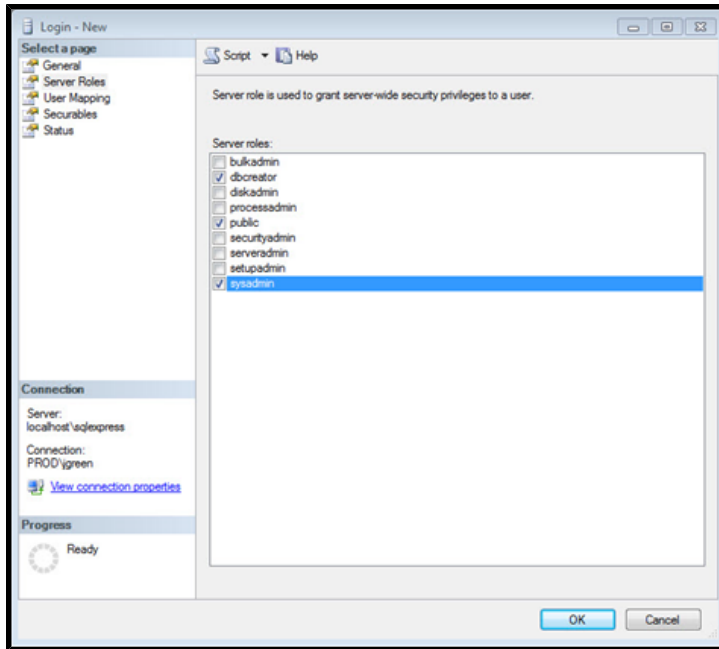
11. Apply permissions to C:\ProgramData\ChangeBASE, as follows:

- Open Windows Explorer.
- Type C:\ProgramData\ChangeBASE into the address bar and press Return.
- Select the **Security Properties** and click **Edit**.

- d. Click **Add** and add the **ChangeBASE** group.
 - e. Check **Allow** next to **Modify** to give the group **Modify** permissions on the folder.
 - f. Click **OK**.
- 12. Set up shares and permissions to each of the Package Sources that you are going to set up in ChangeBASE, as follows:
 - a. Locate the Package Source.
 - b. Right-click on it and select **Properties**.
 - c. Move to the **Sharing** tab and select **Advanced Sharing**.
 - d. Check **Share this folder**.
 - e. Click **Permissions**.
 - f. Add the **ChangeBASE** group to the share permissions.
 - g. Check **Allow** next to **Change**.
 - h. Click **OK** to return to the Sharing tab.
 - i. Note the **Network** path.
 - j. Select the **Security** tab and click **Edit**.
 - k. Click **Add** and add the ChangeBASE group.
 - l. Check **Allow** next to **Modify** to give the group modify permissions on the folder.
 - m. Click **OK**. This may take some time to apply.
 - n. Repeat the process for the next package source or select to run ChangeBASE.

Pre-Installation Steps

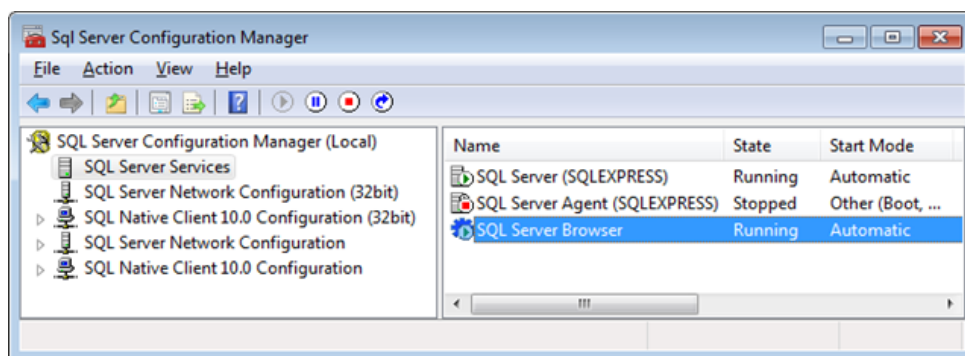
- 1. Ensure that you have met all the system requirements.
- 2. ChangeBASE will verify that the user account under which you log onto the SQL Server instance is associated with the SQL Server **dbcreator** and **sysadmin** roles, so you need to ensure that the account is associated with these roles before starting to set up ChangeBASE.

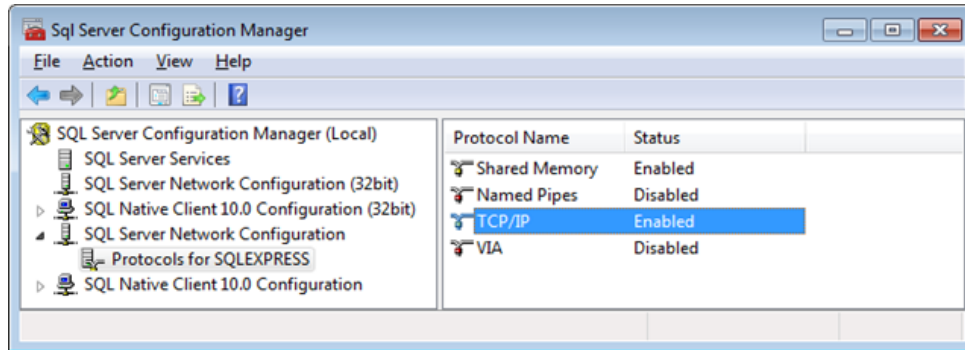


If you are going to use Windows Authentication, then you can associate the logon with the **dbcreator** and **sysadmin** roles via **Server Roles** in the SQL Server **Login Properties**. If you followed the [Best Practice Setup using Active Directory](#), then you will have associated this account with the necessary rights via the **ChangeBASE AD Group**. Refer to [Set up SQL Security](#).

3. Ensure that the necessary shares have been created to the folder(s) containing the packages to be imported (refer to [Best Practice Setup using Active Directory](#)).
4. If you are running SQL Server and ChangeBASE on separate machines, check the following:
 - The SQL Server Browser service must be running, and set to **Automatic** on the machine where SQL is installed.
 - Both the SQL Browser service and SQL Server must be allowed through your firewall.
 - The TCP/IP protocol must be enabled.

 **NOTE:** Both "SQL Server Browser" and "TCP/IP" can be configured in SQL Server Configuration Manager:





5. If you are going to be importing Web data for assessment, having specified a browser platform, and wish to first capture the data using the **Web Capture** utility, then install and use it in accordance with the section on [Web Capture](#).
6. Ensure that you have your Site's Dell License Key and Site Message.

Installing ChangeBASE

This chapter covers the following topics:

[Local Installation](#)

[Multi-User Installation](#)

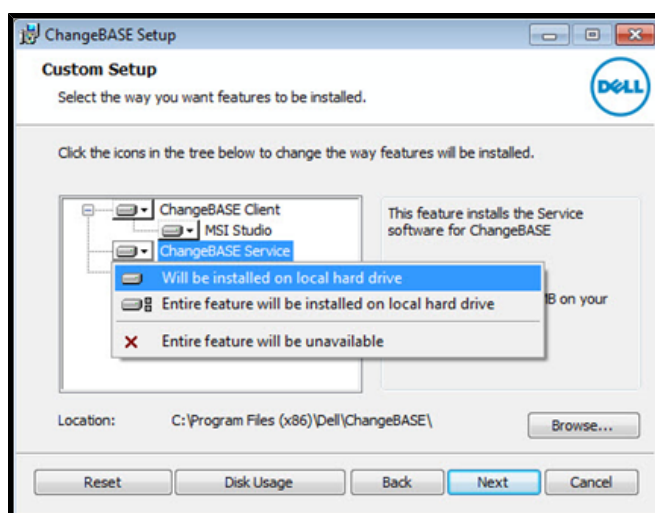
[Further Details on ChangeBASE](#)

Local Installation

If you are installing all ChangeBASE components on the same machine, proceed as follows.

To install ChangeBASE

1. Run the ChangeBASE installation MSI (Local Administrative privileges are required), and click **Next**.
2. Accept the license agreement and click **Next**.
3. Ensure that both the ChangeBASE Client and ChangeBASE Service are set to **Will be installed on local hard drive**, and, if required, install **MSI Studio** locally under the **ChangeBASE Client** option.



If required, change the location of the installation as required, using the **Browse** button. Then click **Next**.

4. Specify how you will be logging onto the ChangeBASE service and enter the service account credentials. For a local installation, leave **Run service as LocalSystem** selected.



CAUTION: There is no facility within ChangeBASE to modify access to the service once setup is complete. For example, if the service is started in LocalSystem, then all the files created in ProgramData will be owned by LocalSystem, and all the individual file permissions would need to be changed if access to the ChangeBASE service was subsequently modified to run under a network account.

5. Click **Next**, and then **Install**.
6. Once installation is complete, click **Finish**.

Multi-User Installation

ChangeBASE Service Installation

To install the service

1. On the server where ChangeBASE service is to be hosted, run the ChangeBASE installation MSI (Local Administrative privileges are required), and click **Next**.
2. Accept the license agreement and click **Next**.
3. Right-click the **ChangeBASE Service** to ensure it is set to **Will be installed on local hard drive**.
If required, change the location of the installation as required, using the **Browse** button. Then click **Next**.
4. Specify how you will be logging onto the ChangeBASE service and enter the service account credentials.
You can leave **Run service as LocalSystem** selected if you are installing all ChangeBASE components on the same machine. Otherwise, select **Run service as:** and enter the user **Account** and **Password** for the particular account that you created for accessing the service. Refer to **Create a special user account that will be used to connect to the ChangeBASE service**, and ensure that the password is set to never expire.



IMPORTANT: The account that you specify must have the Log on as a Service Right. Refer to [Ensure that this SVC_ChangeBASE account has the Log on as a Service Right so that it can access the ChangeBASE service](#). Therefore, if the account that you specify does not have this Right, an appropriate warning will be displayed when you click **Test Credentials** in the above dialog.



CAUTION: There is no facility within ChangeBASE to modify access to the service once setup is complete. For example, if the service is started under one account, then all the files created in ProgramData will be owned by that account, and all the individual file permissions would need to be changed if access to the ChangeBASE service was subsequently modified to run under a different account.

5. Click **Next**, and then **Install**.
6. Once installation is complete, click **Finish**.

Client Installation

After installing the ChangeBASE service, proceed as follows for each client.

To install the client

1. Run the ChangeBASE installation MSI (Local Administrative privileges are required), and click **Next**.
2. Accept the license agreement and click **Next**.
3. Leave the **ChangeBASE Client** at the default **Will be installed on local hard drive**, and, if required, install **MSI Studio** locally under the **ChangeBASE Client** option. Right-click the **ChangeBASE Service**, and select **Entire feature will be unavailable**.

Then change the location of the installation as required, using the **Browse** button.

4. Click **Next**, and then **Install**.
5. Once installation is complete, click **Finish**.

Further Details on ChangeBASE

For information on the configuration and use of ChangeBASE, select **Dell > ChangeBASE > ChangeBASE User Guide** from the Windows **Start** menu, to view the user guide in PDF format. Alternatively, select the **Help** tab from the product **About** box to view the online version.

Web Capture

This chapter covers the installation of the **Web Capture** utility.

Web Capture Installation

You can install the **Web Capture** utility on a ChangeBASE client, the ChangeBASE server, or on its own dedicated server.

 **NOTE:** If you are going to be installing the utility on its own dedicated server, then the requirements for this machine are the same as for [Minimum Client Requirements](#).

To install **ChangeBASEWeb Capture**

1. Run the installation MSI - **ChangeBASE_Web_Capture.msi** - and click **Next**. Local Administrative privileges are required.
2. Accept the license agreement and click **Next**.
3. Change the location of the installation as required, using the **Browse** button, before clicking **Next**.
4. Click **Next**, and then **Install**.
5. Once installation is complete, click **Finish**.

Further Details on Web Capture

For information on the configuration and use of this utility, select **Dell > ChangeBASE > ChangeBASE User Guide** from the Windows **Start** menu, to view the user guide in PDF format, and go the last chapter. Alternatively, select the **Help** tab from the product **About** box to view the online version, and click on **Web Capture** in the **Contents** pane.

About Dell

Dell listens to customers and delivers worldwide innovative technology, business solutions and services they trust and value. For more information, visit www.software.dell.com.

Contacting Dell

Technical Support:

[Online Support](#)

Product Questions and Sales:

(800) 306-9329

Email:

info@software.dell.com

Technical support resources

Technical support is available to customers who have purchased Dell software with a valid maintenance contract and to customers who have trial versions. To access the Support Portal, go to <http://software.dell.com/support/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. In addition, the portal provides direct access to product support engineers through an online Service Request system.

The site enables you to:

- Create, update, and manage Service Requests (cases)
- View Knowledge Base articles
- Obtain product notifications
- Download software. For trial software, go to [Trial Downloads](#).
- View how-to videos
- Engage in community discussions
- Chat with a support engineer