alterian

UPGRADE GUIDE

Campaign Manager 6.0

VERSION CONTROL

Version	Date	Author	Changes
1.0	28 April 2017	D Cooper	Release

RELATED DOCUMENTS

The related documents are located in the Alterian product help.

Name
Campaign Manager 6.0 Installation Guide
Campaign Manager 6.0 Architecture Guide
Campaign Manager 6.0 Backup Guide
Campaign Manager 6.0 Data Flow and Structure
Campaign Manager 6.0 Load Process Guide
Campaign Manager 6.0 Release Note

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1. INTRODUCTION

This document provides an overview of considerations that must be given to the existing environment prior to upgrade to Campaign Manager 6.0 along with step-by-step guidance for the upgrade.

For an overview of common Campaign Manager Architecture configurations and guidelines for planning a system, refer to the **Campaign Manager 6.0 Architecture Guide**.

If you require further assistance, contact your Alterian account representative.

The following sections are included in this document:

- Upgrades
- Uninstalls
- Troubleshooting

2. SUPPORTED PLATFORMS

This section details the Operating Systems and other requirements for:

- Application Server
- SQL Server
- Engine Server
- Client

APPLICATION SERVER

- Windows Server 2008 R2 SP2 (x64)
    - English language version
    - Standard Edition or above
    - Includes .net 4.5.2
- Windows Server 2012 R2 (x64) (recommended)
    - English Language version
    - Standard Edition or above
    - Includes .net 4.5.2
    - The deployer will do a version check to verify that the minimum requirement of Windows 2012 R2 April 2014 update (2919355) is installed
- IIS
    - IIS 7.5

SQL SERVER

- SQL Server 2008 R2 SP3
    - English language version
    - Standard Edition or above
- SQL Server 2012 SP3
    - English language version
    - Standard Edition or above
- SQL Server 2014 SP2
    - English language version
    - Standard Edition or above

Note: Only non-clustered environments will be tested

ENGINE SERVER

- Office (if required for Excel export)
    - Microsoft Office 2010 (x86)
    - Microsoft Office 2013 (x86)

CLIENT

- Windows
    - Windows 7
    - Windows 8.1
    - Windows 10
    - Silverlight 5.1
    - Browsers
        - Microsoft Internet Explorer 11
        - Current version of Google Chrome (HTML elements only)
        - Microsoft Edge (HTML elements only) - Supported but not tested.
- macOS
    - Sierra (Version 10.12)
    - Browsers
        - Current version of Google Chrome (HTML elements only)
        - Not Safari
- Microsoft Office 2010 (x86)
    - Microsoft Office 2013 (x86)
    - Client Support for Office 365 (x86)

TABLET SUPPORT

There is no support for tablets in this release

2.1. VIRTUAL MACHINES

Alterian makes significant use of VMWare and Hyper-V virtualization technologies for internal product testing and hosting of production instances in our data centers. Alterian supports virtualized installations of Campaign Managerfor on-premise production environments with the following caveats:

If a user reports an issue to Alterian Support that is performance or network related, the user may be required to reproduce the issue in a non-virtualized environment.

If a user requests help from Alterian Support for virtualization software installation, configuration, or optimization, the user will be advised to find another source of qualified technical staff for these activities.

3. IMPORTANT UPGRADE CONSIDERATIONS

- The minimum version requirement for upgrading to Campaign Manager 6.0 is Campaign Manager 5.1.

- Campaign Manager 6.0 is not compatible with Email Response Importer (ERI).

- If you have any bespoke plugins or scripts in kettle folder, these can be restored from a backup folder (data-integration.backup) in the existing install location on the App and Engine Servers. it is advised that scripts are not saved to the kettle installation directory.

- Engine Migration Utility - The Engine Migration Utility, which runs at the end of the deployer process, is required to re-build indexes and links in the Engine database to support the increased data scalability as outlined in the Campaign Manager 6.0 release notes. This process is done on a single column basis but this will require temporary disk space to accommodate this. Although this is difficult to define, we would suggest that 20% of the repository size would be acceptable. The drive that requires the space is the drive hosting the Temp Folder(s) as defined in the Alterian Management Console's (AMC) Process Configuration screen. If not defined, this will most likely use the system temp which is not recommended and system drives are often short on disk space. Alterian highly recommend setting these values for the General and Machine settings to a drive with significant free space. It is also important to give the migration utility time to run, although it is not possible to estimate the time as this will be dependent number of indexed columns, number of links and spec of the machine. It is strongly recommended that the length of time the migration takes to run in the test environments is noted and added to scheduled down time for the upgrade.

- Unique Constraint on Campaign Key – Campaign Manager now applies a UniqueConstraint to all Campaign Keys, which is done at start of the campaign system after the upgrade. This UniqueConstraint property will remain in place to the lifetime of the campaign key. To avoid any issues, it is very important that:

  1. All campaign keys are Unique before commencing the installation.

  2. All Campaign keys are Unique prior to re-starting the campaign system after the upgrade.

  3. If your load process has the scope to load duplicate values into a campaign key, even if these are de-duped as part of the process, that the UniqueConstraint is temporarily removed prior to the load process. The UniqueConstraint must be re-applied prior to re-starting the campaigns. For more information please refer to the Alterian on-line help.

NOTE: Alterian would highly recommend changing the load process to use Engine's UPDATE functionality and not a self-implemented load, de-dupe. Delete process.

- Removal of support for duplicate values in an Update Key – Previous versions of Engine permitted duplicate update keys in the source data but would randomly select the row to keep. This is no longer supported and will result in a load failure. It is important to ensure that all data feeds to Engine Updates contain unique update keys.

- All machines must have the Universal C runtime installed. You can get the appropriate download for your operating system from: https://support.microsoft.com/en-gb/help/3118401/update-for-universal-c-runtime-in-windows.

- Please ensure you have the latest service pack before beginning an upgrade, contact Alterian support.

4. UPGRADING TO CAMPAIGN MANAGER 6.0

The Campaign Manager Installer can be used to upgrade existing systems, provided those systems were originally installed using the Installer or Single Sign On.

NOTE: If you are not currently using single sign on, and wish to, we recommend you perform the upgrade and then contact support or refer to the System management section of the online help for information on how to add single sign on. If you already use NT Authentication you will need to change the value of the following held in the "Alterian\Alchemy\Alterian.Alchemy.HostingSite\web.configfolder":

```
<add key="authService" value-
e="https://<USERDOMAIN>/auth/AlterianAuthentication.svc/singlesignon"/>
```

to:

```
<add key="authService" value="https://<USER DOMAIN>/au-
th/AlterianAuthentication.svc/httpscert"/>
```

4.1. BACKUP

Alterian recommends that the following are backed up prior to beginning the upgrade:

- Campaign Manager installation folder on each server.
- SQL Server databases:
    - All client databases
    - AlchemyStore
    - AlMain
    - AlterianAuth
- Engine Cerlog – The upgrade process will overwrite this file due to a change in cerlog format to UTF-8 for better support logging of Unicode Engine data.

4.2. INSTALLING KETTLE

Kettle and Java Runtime Environment will be upgraded as part of the deployer on App and Engine servers. For information on how to configure Kettle for use with Campaign Manager, see the Pentaho Data Integration (Kettle) section in the online Alterian product help.

Note: If you have any bespoke plugins or scripts in kettle folder, these can be restored from a backup folder (data-integration.backup) in the existing install location on the App and Engine Servers. it is advised that scripts are not saved to the kettle installation directory.

4.3. RUN UPGRADE

1. Run the CM.Deployer.exe file using the 'Run as administrator' option to launch the Installer wizard.

2. Click **Next** on the Welcome screen.

3. Select **Upgrade Existing** as the installation type.

4. Enter the SQL Server name and click **Test Connection** to confirm it is valid.
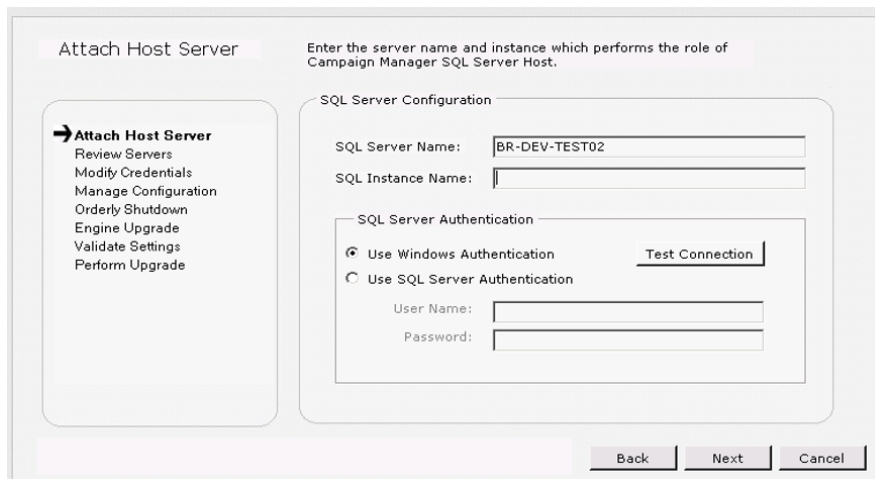
5. Click **Next**.

6. The configured Application, SQL, and Engine servers are displayed. For a standard upgrade there should be no need to edit server credentials.

7. Click **Next**.
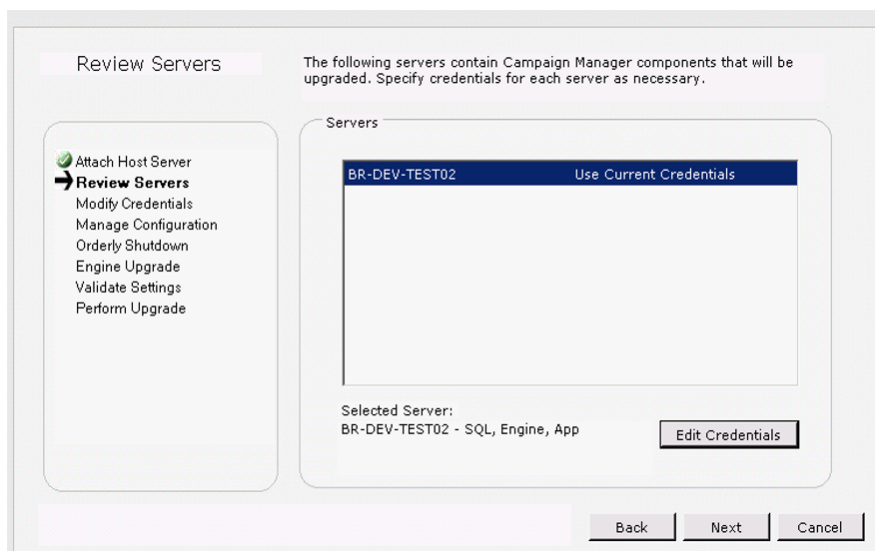
8. Perform an orderly shutdown by clicking **Shutdown**. This process shuts down the Campaign Manager sites and services.
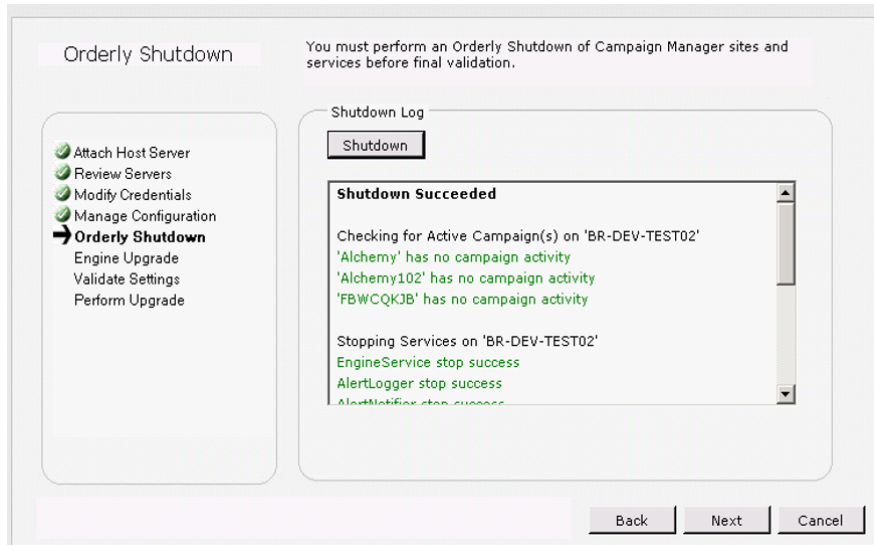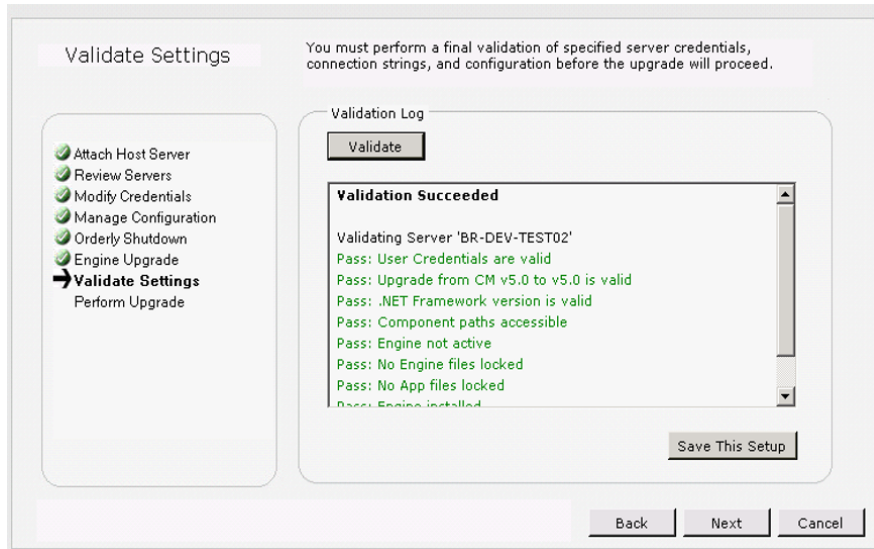
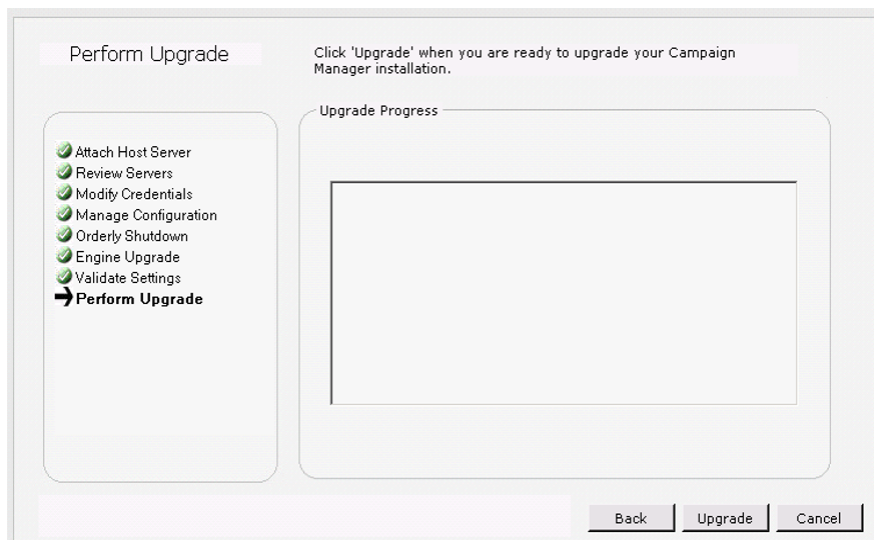9. Click **Next** when the shutdown has completed successfully.
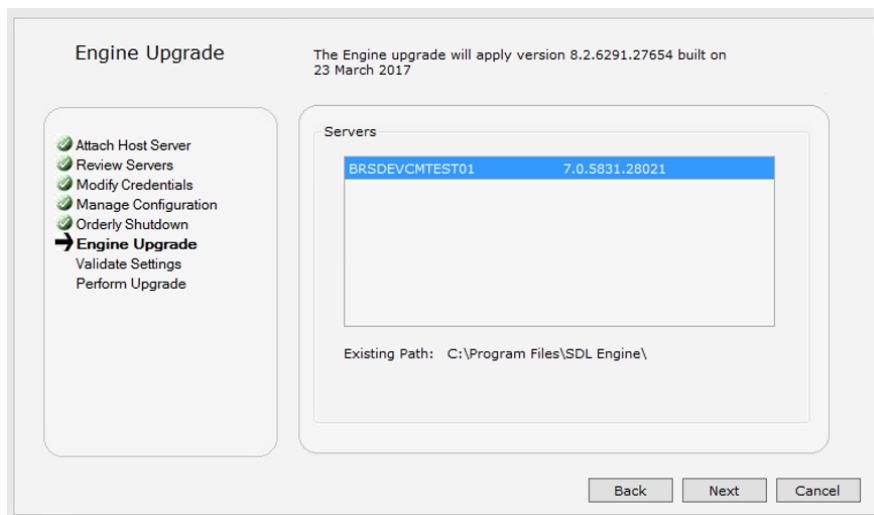
10. Click **Next**.

11. Click **Validate** to check all entered credentials and configuration settings.

12. Click **Next** when the validation has successfully completed. Note you will not be able to click **Next** until validation has successfully completed.

13. Click **Upgrade** to start the upgrade.

When the software upgrade completes there is a further stage to carry out the Engine data migration.

Migration steps are performed by a utility that will launch from the Deployer by clicking the **Migrate** button on the final screen.

IMPORTANT NOTE	This is a mandatory stage and under no circumstances should be skipped, as failure to perform this migration will leave the system in a non-functioning state.

4.4. ENGINE 8 MIGRATION UTILITY

The Engine Migration Utility, which runs at the end of the deployer process, is required to re-build indexes and links in the Engine database to support the increased data

scalability as outlined in the Campaign Manager 6.0 Release Notes. This migration utility will auto-launch at the end of the deployer process and will carry out the process on all Engine repositories that are registered as datasources within the Datasource Admin Screen. The utility will provide progress on the current columns being indexed and those remaining.

4.5. POST MIGRATION STEP

After completing the migrations step, the system is ready for review, UAT testing and final approval prior to re-enabling Datasources and re-starting all campaign activity.

4.6. POST UPGRADE CONFIGURATION

4.6.1 SQL SERVER

This section details the extra optional configuration steps, taken on the SQL Server once the upgrade has successfully completed.

1. In SQL server management studio, select Security > Logins > [AlchemyDSA]
2. On the Server Roles tab
   - Select the 'bulkadmin' and 'public' roles.
   - Select the 'dbcreator' role if you are planning to create additional client databases.
   - Clear the 'sysadmin' server role.
3. On the User Mapping tab:
   - Make sure the 'public' and 'db_owner' roles are selected for the 'Alchemy', 'AlchemyStore', 'Almain', 'AlterianAuth', and any additional client databases.
4. Provide access to the alchemy domain service account to xp_cmdshell. In SQL Management Studio.
5. Click the master database.
6. Select New Query.
7. Enter the following in the New Query window:

```
EXEC sp_xp_cmdshell_proxy_account 'DOMAIN\user','password'
GRANT exec ON xp_cmdshell TO [DOMAIN\user]
```

8. Change 'DOMAIN\user' and 'password' to the username and password for the alchemy domain service account.

4.6.2 ENGINE

1. Make sure that Engine is configured to use external surrogates when used with Campaign Manager to increase resilience as follows:

    a. Use AMC -> Engine and Server Configuration -> Process Configuration.

    b. In 'machine settings' change the machine name from 0.0.0.0 to 127.0.0.1

    c. Click Update Machine, then click Save.

2. Check the following setting is correct for Campaign Manager use:

    a. Use AMC to set the following configuration option using the Engine Configuration Applet:

        • AllowDuplicateColumnsInTemplate=TRUE

3. In AMC, select the Engine project and navigate to Engine & Server Configuration, then Process Configuration and enter an internal location for the machine setting temp folder in both the General and Machine Setting areas. Failure to do this means that the c:\windows\temp area is used which may result in running out of disk space. This step needs to be repeated for every Engine project.

Note: To avoid any pagefile issue it is recommended to set the pagefile to be system managed and not a pre-defined size.

5. UNINSTALLING CAMPAIGN MANAGER

You can fully uninstall Campaign Manager using the Deployer.

NOTE: This will remove all SQL Server databases, all shares and system files, and all related services. Ensure that the BCP folder has been removed from the SQL server, and the temp folder has been removed from the App Sever. Backups should be taken if there is a requirement to retain any of these files. Prior to uninstall, the administrator must shut down Engine.

1. Ensure Engine is shut down.
2. Save the Installer package to the App Server.
3. Run the **CM.Deployer.exe** file. This will launch the Installer wizard.

NOTE: If you have locked down the SQL Server permissions these will need adjusting so that the user is a member of the sysadmin role, otherwise the uninstall will fail due to insufficient permissions.

4. Select the **Uninstall** option and run the wizard selecting applicable options.
5. Uninstall Engine using the Control Panel Add/Remove programs option from App and Engine server/s.

6. TROUBLESHOOTING

6.1. CM UPGRADE TROUBLESHOOTING

For each deployer run, a CM.DeployerLog txt file is created in the same folder as the deployer EXE. This contains information logged during usage of the wizard and execution of the install/upgrade/uninstall. If reporting an issue with Alterian Support, please also include the log file to assist with investigation.

6.2. ENGINE UPGRADE TROUBLESHOOTING

The Engine Suite component is installed by the Campaign Manager Deployer on the App and Engine server/s. If the Engine installer returns an error:

- The MSI error code will be displayed in the deployer GUI
- The Engine installation will be rolled-back, and the deployer run will be aborted before attempting Campaign Manager.
- Detailed logging for the failure is included at the end of the CM Deployer Log file.

Summary information for MSI return codes can be found here: http://msdn.-microsoft.com/en-us/library/aa376931%28v=vs.85%29.aspx

To investigate any failure, the full Engine MSI and bundle log files are located in the:

- Deployer package Integrations folder when Engine is installed on the App server.
- Alchemy share TempInstall folder when Engine is installed on a dedicated server.

The main MSI log file will be named in the following format "Engine.InstallLog-YYYY_MM_DD_HH_MM_SS_pkgEngineMsi.txt".

Take the MSI error code displayed in the Deployer, and locate all instances of the code in the MSI log file (you can do this using Notepad, for example). The MSI log file should provide further details on the issue. After resolving the issue, re-run the deployer to attempt install again.

7. VALIDATION - ERROR MESSAGES

The validation step performs a range of checks to highlight potential issues with the install/upgrade.

This section provides additional information to help you resolve any error messages that may appear.

FAIL: UPGRADE FROM CM V4.0 TO V6.0 IS NOT VALID

Check the existing installed CM version. The deployer only supports upgrade from CM version 5.1.x or later to this release.

FAIL: OS IS INVALID

Check all servers have Microsoft Windows Server 2008 R2 SP1 (x64) English Language Standard, Enterprise, Web Server edition installed, or Windows 2012 R2 Standard edition.

Microsoft Windows 7 Professional is also allowable, but not supported.

NET FRAMEWORK 4.5.2 OR LATER REQUIRED ON APP, ENGINE AND SQL SERVER/S

Ensure that .NET Framework 4.5.2 or later is installed on each server.

CURRENT USER IS NOT A MEMBER OF THE BUILT-IN ADMINISTRATORS GROUP

Recheck the pre-requisites for each server and add the common domain account as a local admin. Ensure the account has "logon as a service" right on each machine.

IIS6 WMI MANAGEMENT COMPATIBILITY MUST BE INSTALLED ON THE APP SERVER

Recheck the IIS pre-requisites for the App Server to ensure this is included.

INVALID KETTLE ZIP FILE

Contact Support as the supplied kettle zip could be corrupt.

FAIL: SERVER IS NOT ACCESSIBLE

This indicates the server cannot be accessed via Ping. Check the items in the installation guide for example, firewall configuration between servers. Check the common domain account has local administrator access to all servers; check the servers are accessible on the domain for example by using the command line Ping utility to verify accessible.

FAIL: USER CREDENTIALS ARE INVALID

Check the common domain account has local administrator access on all servers.

FAIL: FRAMEWORK VERSION IS INVALID

Check all servers have Microsoft .NET Framework v4.5.2 or later 64 bit installed.

FAIL: SQL IS NOT VALID

The deployer expects SQL 2008 R2 Standard or Enterprise Edition product version 10.50.nnnn.n, SQL Server 2012, or SQL Server 2014 SP1.

To check the product version use SELECT @@Version on the SQL Server.

FAIL: IIS IS INVALID

The deployer expects IIS 7, IIS8 or above.

FAIL: EMAIL MANAGER ACCOUNT LINK NAME MUST BE SPECIFIED

The link name must be completed in the Configure Email Manager link step. Click the Test Connection button to populate with a default link name, based on the Email Manager account details.

FAIL: EMAIL MANAGER UNABLE TO VALIDATE URL

Check the Email Manager URL is reachable from the App server (e.g. using Internet Explorer).

FAIL: ALCHEMY SERVICE CREDENTIALS ARE INVALID (OR) FAIL: SERVICE CREDENTIALS FAILED DB CONNECTION

Check the service account has local admin rights on each server.

Check the account has a corresponding login on the SQL Server. On a clean install, this should be a member of the sysadmin role, before proceeding with locking down the permissions after the install.

FAIL: ALTENGINECAMPAIGN.DLL LOCKED; FAIL: EMTOOLS.DLL LOCKED; FAIL: APICLIENTDLL LOCKED; FAIL: ENGINEMUTEX.DLL LOCKED

The CM Deployer needs to update files that can be held open by Engine sessions.

At the validation stage, the CM Deployer should have already completed an orderly shutdown of CM sites and services.

To release locked Engine files, wait for active processing to complete, before using the AMC Orderly shutdown option on the affected Engine server/s.

The Microsoft Windows Process Monitor tool can also be used to confirm which process is holding the file open.

FAIL: INACCESSIBLE XXXX COMPONENT (ID N)

The deployer checks that each component is accessible prior to upgrade.

The component information is obtained from the Almain.AL.ProcessIndex table, which contains an ID, hostname, and networkPath for each component.

The validation message will provide an ID for a component entry that cannot be reached.

This may be due to accessibility problems (e.g. the deployer cannot reach the file share indicated by the networkPath). To verify this, use Windows Explorer to ensure the networkPath can be reached, and is writeable (e.g. create a temp file).

Contact Support if the component entry is invalid (for example, the networkPath doesn't exist). This may be due to a previously failed install, and the component should be reviewed and removed if necessary before retrying validation.

FAIL: INSTALL FOLDER CANNOT BE CREATED AND SHARED

This fail occurs if the deployer cannot create or share the installation folder due to insufficient permissions. Perform the following checks:

- That the deployer was started using the 'Run as Administrator' option
- The deployer user is a local admin
- That the File and Print sharing feature is enabled on the server
- That the firewall is disabled
- The Remote Registry Windows service can be started (i.e. startup mode Automatic).

HTTP ERROR 500.0 - INTERNAL SERVER ERROR CALLING LOADLIBRARYEX ON ISAPI FILTE "C:\WINDOWS\MICROSOFT.NET\FRAMEWORK\V4.0.30319\\ASPNET_ FILTER.DLL" FAILED

This fail occurs if an ISAPI filter entry exists for "ASP.NET_4.0.xxxxx" referencing the 32 bit .NET framework. To resolve the issue:

1. Open IIS Manager on the App Server.
2. Click the server and double-click ISAPI Filters.
3. If an ISAPI filter entry exists for "ASP.NET_4.0.xxxxx" referencing the 32 bit .NET Framework, remove this entry.
4. The .NET Framework 4.0 entries for "ASP.Net_4.0_32bit" and "ASP.Net_4.0_64bit" re valid should be retained.
5. Browse to Campaign Manager after removing the ISAPI entry.

FAIL: ENGINE COMPONENT 'NN' IS ACTIVE. WAIT OR SHUTDOWN

Engine needs to be inactive for the upgrade to complete. If this refers to an Engine process, wait for active processing to complete before attempting AMC Orderly shutdown. If the specified process refers to a user application (AMC, iLoader or MMC) then close the application before retrying validation.

FAIL: ENGINE ALREADY INSTALLED

For a clean install of CM 6.0, the Engine server must not contain any previous versions of Engine. Uninstall Engine via the Control Panel's 'Uninstall or change a program' option

from the specified server and retry.

FAIL – SQL FILESTREAM: FULL ACCESS NOT CONFIGURED

Check the SQL instance has Full filestream access enabled in SQL Server Management Studio. In the SQL Server Configuration Manager, check the server has Filestream enabled for Transact-SQL and File I/O access.

FAIL – ENGINE V6 OR HIGHER NOT INSTALLED

For upgrade to Campaign Manager 6.0 only an existing Engine 6 or later is supported.

FAIL: ENGINE NUCBROKER SERVICE CREDENTIALS ARE INVALID

Check the service account has local admin rights on each server – see section 2.1.

FAIL: ENGINE PROJECTBASE PATH EXISTS

For clean install, an existing Engine installation Projectbase folder must be renamed or removed.

FAIL: ENGINE INSTALL PATH NOT ACCESSIBLE; FAIL: ENGINE PROJECTBASE PATH NOT ACCESSIBLE

Check the specified path can be accessed on the Engine server. The drive should be writable for access by the CM Deployer user account.

FAIL: UNIVERSAL C RUNTIME NOT INSTALLED

Version 10.0.10240.0 of this component is required.

FAILURE TO RUN KETTLE FROM CAMPAIGN MANAGER

If you cannot run Kettle jobs from CM, check Java is installed on the server and the JAVA_HOME environment variable references a valid location for the Java runtime. To access the environment variable, open Control Panel > System > Advanced system settings and click the Environment Variables button. Add or update the JAVA_HOME value in the System variables section of the dialog that opens. Click OK to ensure the new value is propagated to the system.

FAILURE TO INSTALL JAVA

If the Java prerequisite installation fails with error code '1' in the deployer log, check if you have logged on to each server with the user account used for running the CM deployer. This ensures the required user profile is present on each server.

8. APPENDICES

8.1. APPENDIX A – ADDING EMAIL MANAGER URLS

This appendix describes how to add an Email Manager URL to Campaign Manager 6.0 if the Email Manager URL was not created at the time Campaign Manager was deployed.

db_owner access to Almain, AlterianAuth and CM client databases are needed to run the utility. The utility uses Windows Authentication to connect with the SQL Server.

1. Run the SysAdminApp.exe utility located in the PauseResume folder under the CM install location on the Engine Server.

2. Open a command prompt and change directory to the PauseResume folder location.

3. Run the utility using the following command:

   - Sysadminapp /sqlserver=sqlservername /addEMSite

If you have multiple Campaign Manager URLs configured the utility will ask which Campaign Manager URL to associate the new Email Manager site with.

> Please replace sqlservername based on your SQL Server name. If the Campaign Manager SQL Server isn't the default instance, supply the sqlserver as sqlservername\instancename. If SQL Server is installed as the default instance, please use the machine name rather than (local) or ".".
>
> The utility only adds an Email Manager site if one has not already been configured.