Migrating from System Center Configuration Manager 2007 to System Center 2012 R2 Configuration Manager
### Objectives

After completing this lab, you will be better able to:

- Configure a Configuration Manager 2012 site to migrate data from a Configuration Manager 2007 environment
- Create migration jobs based on collections and on individual objects
- Migrate objects from Configuration Manager 2007 to Configuration Manager 2012
- Migrate a client to Configuration Manager 2012

### Prerequisites

This lab requires a Configuration Manager 2012 site installed (Primary1 is the ConfigMgr 2012 primary site server installed in the lab). This lab can also be completed on a standalone primary site running Configuration Manager 2012, as this lab uses, or it can be completed from a Configuration Manager 2012 hierarchy (central administration site or child primary site). The lab also requires a Configuration Manager 2007 site with various objects for migration to Configuration Manager 2012 (SMSServer is the ConfigMgr 2007 site server in the lab). Finally, to migrate a client to ConfigMgr 2012, you will need a ConfigMgr 2007 client (SMSClient is the ConfigMgr 2007 client in the lab). If you want to complete migration of a distribution point, you need an additional distribution point (separate from the site server – Member is the ConfigMgr 2007 remote distribution point the lab).

### Estimated Time to Complete This Lab

75 minutes

### Computers used in this Lab

- Primary1 (ConfigMgr 2012 primary site server)
- SMSServer (ConfigMgr 2007 primary site server)
- SMSClient (ConfigMgr 2007 client)
- Member (ConfigMgr 2007 remote distribution point)

The password for the administrator account on all computers in this lab is: **password**.
1 **Verifying Objects Available for Migration in the Configuration Manager 2007 Site**

In this exercise, you will view objects in the Configuration Manager 2007 site that are available to be migrated to Configuration Manager 2012.

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<td>Complete the following task on: ![SMSServer]</td>
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<tr>
<td>1.</td>
<td>Start the Configuration Manager 2007 Console</td>
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</table>
|      | 1. On the **Start** menu, point to **All Programs**, point to **Microsoft System Center**, point to **Configuration Manager 2007**, and then click **ConfigMgr Console**.  
**NOTE:** The Configuration Manager Console window appears displaying the System Center Configuration Manager home page in the results pane. |
| 2.   | Verify the Configuration Manager 2007 version |
|      | 1. In the tree pane, expand **Site Database**, and then click **Site Management**.  
**NOTE:** The Site Management information appears in the results pane. Notice that the "Version" is "4.00.6487.2000". This indicates that the Configuration Manager 2007 site is running the service pack 2 release, which is the minimum supported version for a migration to any version of Configuration Manager 2012. The "R2" and "R3" add-ons for Configuration Manager 2007 are irrelevant for the migration process. |
| 3.   | Verify collections to be migrated |
|      | 1. In the tree pane, expand **Computer Management**, and then click **Collections**.  
**NOTE:** The list of Configuration Manager 2007 collections appear in the results pane. Notice that there are 19 collections in the site, two of which are custom collections. Configuration Manager collections are candidates for migration to Configuration Manager 2012.  
2. In the tree pane, expand **Collections**, and then click **ConfigMgr Clients**.  
**NOTE:** One of the ways to initiate a migration to Configuration Manager 2012 is via objects referenced by a specific collection. In this lab, you will use this collection as the source for object migration. This step was to validate that there are existing clients in the collection. Notice that there are three clients in the collection, "SMSServer", "SMSClient", and "XPClient".  
3. In the tree pane, expand **Main Building**, and then click **Main Building**.  
**NOTE:** The "Main Building" collection displays its two subcollections in the tree pane ("Floor 1" and "Floor 2"). Notice that there are no members of "Main Building" collection, it is only there as an organizational folder. Collections of this type can be migrated to Configuration Manager 2012 also, which you will do later in this lab. |
| 4.   | View objects available in the Configuration Manager 2007 |
|      | 1. In the tree pane, expand **Site Management**, expand **TST**, expand **Site Settings**, and then click **Boundaries**.  
**NOTE:** The list of Configuration Manager 2007 boundaries appear in the results pane. Notice that there are two boundaries in the site, one Active Directory site. |
site boundary and one IP address range boundary. Configuration Manager boundaries are candidates for migration to Configuration Manager 2012 however they are only useful in Configuration Manager 2012 if added to boundary groups for content lookup or site assignment after migration. Boundary groups will be created automatically by the migration process.

2. In the tree pane, expand Software Distribution, and then click Packages.

NOTE: The list of Configuration Manager 2007 software distribution packages appear in the results pane. Notice that there are six packages in the site with the following number of programs:

- KB977384 – Advanced Client Hotfix – TST has one program
- Configuration Manager Client Upgrade has one program
- CCM Framework Tools has six programs
- DCM Authoring Tools has six programs
- PowerPoint Viewer is a virtual package so contains no programs
- Word Viewer is a virtual package so contains no programs

Configuration Manager packages and programs are candidates for migration to Configuration Manager 2012. Configuration Manager 2012 will migrate Configuration Manager 2007 physical packages to packages, while virtual packages are migrated to Configuration Manager 2012 applications with an App-V deployment type automatically created.

3. In the tree pane, click Advertisements.

NOTE: The list of Configuration Manager 2007 advertisements appear in the results pane. Notice that there are five advertisements in the site. Configuration Manager advertisements are candidates for migration to Configuration Manager 2012 as deployments. However, advertisements for virtual packages are not migrated to Configuration Manager 2012 and new deployments will need to be created in the Configuration Manager 2012 site to deploy the applications.

4. In the tree pane, expand Software Updates, and then click Update Lists.

NOTE: The list of Configuration Manager 2007 update lists appear in the results pane. Notice that there are two update lists in the site:

- English Updates which contains three updates
- Universal Updates which contains two updates

Configuration Manager update lists are candidates for migration to Configuration Manager 2012, now referred to as software update groups.

5. In the tree pane, under Software Updates, click Deployment Templates.

NOTE: The list of Configuration Manager 2007 software update deployment templates appear in the results pane. Notice that there are two deployment templates in the site. Configuration Manager deployment templates are candidates for migration to Configuration Manager 2012, although there is no node in the console to view deployment templates. You can configure a deployment to use one during the Deploy Software Updates Wizard.

6. In the tree pane, under Software Updates, click Deployment Management.

NOTE: The list of Configuration Manager 2007 software update deployments appear in the results pane. Notice that there are two deployments in the site:
• English Updates which includes three updates
• Universal Updates which includes two updates

Configuration Manager update deployments are candidates for migration to Configuration Manager 2012 as deployments.

7. In the tree pane, under Software Updates, click Deployment Packages.

**NOTE:** The list of Configuration Manager 2007 deployment packages appear in the results pane. Notice that there are two deployment packages in the site:

• English Updates which contains three updates
• Universal which contains two updates

Configuration Manager deployment packages are candidates for migration to Configuration Manager 2012.

8. In the tree pane, expand Operating System Deployment, and then click Boot Images.

**NOTE:** The list of Configuration Manager 2007 boot images appear in the results pane. Notice that there are two boot images in the site:

• Boot image (x64)
• Boot image (x86)

Configuration Manager boot images are candidates for migration to Configuration Manager 2012, although for our lab scenario, you are only targeting a collection of Configuration Manager 2007 clients, which does not reference any operating system deployment objects. The two default boot images are not migrated to Configuration Manager 2012 however. Rather they are replaced with new default boot images in Configuration Manager 2012 R2 that are based on a newer WinPE version. This is due to the requirement for a new version of the Windows Assessment and Deployment Kit (ADK) to support Windows 8.1 deployment.


**NOTE:** The list of Configuration Manager 2007 operating system images appear in the results pane. Notice that there is one operating system image in the site, "Windows 7 x64". Configuration Manager operating system images are candidates for migration to Configuration Manager 2012, although for our lab scenario, you are only targeting a collection of Configuration Manager 2007 clients, which does not reference any operating system deployment objects.

10. In the tree pane, under Operating System Deployment, click Task Sequences.

**NOTE:** The list of Configuration Manager 2007 task sequences appear in the results pane. Notice that there is one task sequence in the site, to install the 64-bit version of Windows 7. Native Configuration Manager task sequences are candidates for migration to Configuration Manager 2012, although for our lab scenario, you are only targeting a collection of Configuration Manager 2007 clients, which does not reference any operating system deployment objects. Configuration Manager 2012 does not support migration of task sequences created from the Microsoft Deployment Toolkit (MDT).

11. In the tree pane, under Operating System Deployment, click Drivers.

**NOTE:** The list of Configuration Manager 2007 drivers appear in the results pane. Notice that there are three drivers in the site. Configuration Manager
drivers are candidates for migration to Configuration Manager 2012, although for our lab scenario, you are only targeting a collection of Configuration Manager 2007 clients, which does not reference any operating system deployment objects.

12. In the tree pane, under **Operating System Deployment**, click **Driver Packages**.

**NOTE:** The list of Configuration Manager 2007 driver packages appear in the results pane. Notice that there is one driver package in the site (this package contains the three drivers just identified). Configuration Manager driver packages are candidates for migration to Configuration Manager 2012, although for our lab scenario, you are only targeting a collection of Configuration Manager 2007 clients, which does not reference any operating system deployment objects.

13. In the tree pane, expand **Asset Intelligence**, expand **Customize Catalog**, and then click **Software Categories**.

**NOTE:** The list of Configuration Manager 2007 custom categories appear in the results pane. Notice that there are two custom categories in the site:

- Client Components
- Site System Components

Configuration Manager custom categories and families are candidates for migration to Configuration Manager 2012. Custom Asset Intelligence hardware requirements are also candidates for migration.

14. In the tree pane, click **Software Metering**.

**NOTE:** The list of Configuration Manager 2007 software metering rules appear in the results pane. Notice that there are 30 software metering rules in the site. Configuration Manager software metering rules are candidates for migration to Configuration Manager 2012.

15. In the tree pane, expand **Desired Configuration Management**, and then click **Configuration Baselines**.

**NOTE:** The list of Configuration Manager 2007 configuration baselines appear in the results pane. Notice that there are two configuration baselines in the site. Configuration Manager configuration baselines are candidates for migration to Configuration Manager 2012.

16. In the tree pane, under **Desired Configuration Management**, click **Configuration Items**.

**NOTE:** The list of Configuration Manager 2007 configuration items appear in the results pane. Notice that there are four configuration items in the site. Configuration Manager configuration items are candidates for migration to Configuration Manager 2012.

You have now identified the objects from the Configuration Manager 2007 site that are able to be migrated to the Configuration Manager 2012 environment. You will perform the migration in the following exercises however you will exclude some objects from the migration job that are automatically selected by the migration job as they are targeted by systems in the target collection, and are not needed in the Configuration Manager 2012 site.
## PREPARING THE Configuration Manager 2012 R2 Environment for Migration

In this exercise, you will configure the migration feature in Configuration Manager 2012 R2 to enable migration from the Configuration Manager 2007 environment to Configuration Manager 2012 R2. Although this lab has been adapted for a migration to Configuration Manager 2012 R2, it was originally developed for migration to Configuration Manager 2012 RTM, then updated for Configuration Manager 2012 SP1, and now Configuration Manager 2012 R2. The migration process is essentially the same in all three versions, so you can use your experience gained from this version if scenarios you are migrating to previous versions of Configuration Manager 2012. You could also use this knowledge to perform a migration from one Configuration Manager 2012 R2 environment to another Configuration Manager 2012 R2 environment.

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| **1. Start the Configuration Manager Console** | On the Start menu, click **Configuration Manager Console**.  
**NOTE:** The System Center 2012 R2 Configuration Manager console window appears displaying the Overview page for the Assets and Compliance workspace. You could also launch the Configuration Manager Console from the Start menu, All Programs, Microsoft System Center 2012 R2, and then Configuration Manager Console.  
**2. Gather information on the available objects in the Configuration Manager 2007 site** |
| 1. Click the Administration workspace.  
**NOTE:** The Administration workspace appears displaying the Overview page.  
2. In the navigation pane, click **Migration**.  
**NOTE:** The Migration dashboard appears. Notice that Summary information appears in the results pane. Notice also that there is no specific data available for migration to be displayed by default. Notice also that no alerts have been raised for migration.  
3. On the Home tab of the Ribbon, click **Specify Source Hierarchy**.  
**NOTE:** The Specify Source Hierarchy dialog box appears allowing you to configure the source Configuration Manager 2007 central or a stand-alone primary site to be migrated. This could also be a Configuration Manager 2012 R2 site (such as a lab site) that you want to migrate objects from.  
4. In the **Top-level Configuration Manager site server** box, type **SMSServer**  
**NOTE:** You can also specify the FQDN of the source server if necessary.  
5. Under **Specify the Source Site Account to use to access the SMS Provider for the source site server**. This account requires Read permissions to all source site objects, verify that **User Account** is selected, and then click **Set**.  
**NOTE:** A new menu appears with account options.  
6. Click **New Account**.  
**NOTE:** The Windows User Account dialog box appears allowing you to enter the user name and password which will be used by the migration feature to connect from the Configuration Manager 2012 central administration site to the
source site (in our lab, a Configuration Manager 2007 primary site) in order to gather data about the Configuration Manager clients, objects, and other information.

Notice that you can manually specify the account, or can browse to an Active Directory account to use.

7. In the **User name** box, type **SMSDOMAIN\administrator**

8. In the **Password** and **Confirm password** boxes, type **password** and then click **Verify**.

**NOTE:** The Windows User Account dialog box expands to allow you to specify how to verify the account.

9. In the **Data source** box, click **SQL Server**.

10. In the **SQL Server** box, verify that **smsserver** is listed.

11. In the **Database name** box, type **SMS_TST** and then click **Test connection**.

**NOTE:** A Configuration Manager message box appears indicating that the connection test was successful. You have now verified that the configured account can be used to access both the SMS Provider as well as the site database for the Configuration Manager 2007 site. If your environment was using a named instance for Configuration Manager, you could specify it as well.

12. Click **OK**.

**NOTE:** The Windows User Account dialog box appears.

13. Click **OK**.

**NOTE:** The Specify Source Hierarchy dialog box appears displaying the current configuration for migrating a Configuration Manager 2007 central or a standalone primary site to Configuration Manager 2012.

14. Under **Specify the Source Site Database Account to use to access the SQL Server for the source site server**. This account requires **Read and Execute permissions to the source site database**, verify that **Use the same account as the Source Site SMS Provider Account** is selected.

**NOTE:** You can configure unique user accounts for accessing the Configuration Manager site server and for accessing the Configuration Manager site database server.

You will also want to enable shared distribution points for the site, so you will enable that on this dialog next.

15. Click to select **Enable distribution point sharing for the source site server**, and then click **OK**.

**NOTE:** The migration feature will now connect to the Configuration Manager 2007 hierarchy to gather information about the sites and clients in the hierarchy, as well as objects specific to the central site. A **Data Gathering Status** message box appears displaying the status of identifying objects for migration. When the **Progress** status displays "Completed gathering data", the process is complete.

16. Click **Close**.

**NOTE:** The Migration dashboard appears. Notice that Summary information appears in the results pane. Notice also that there is now environment specific data displayed as a result of the data gathering process, including the one source server, 91 objects that can be migrated, as well as three clients
available for migration. Notice also that there now has been one alert generated, this being an informational alert indicating that the initial data gathering process has completed successfully.

| 3. Viewing active source hierarchy information | 1. In the navigation pane, expand Migration, and then click **Source Hierarchy**.  
**NOTE:** The source hierarchy information appears in the results pane. Notice that the summary information appears in the preview pane, which includes the source site "TST", source site server, the most recent time data gathering between the two sites occurred, and the total number of objects available to be migrated and those already migrated.  
2. In the preview pane, click the **Shared Distribution Points** tab.  
**NOTE:** The distribution points shared from the Configuration Manager 2007 site appear in the preview pane. Any packages migrated from the Configuration Manager 2007 site which have been distributed to distribution points displayed here can be accessed by the clients of either Configuration Manager site provided that you share the distribution points between the two environments. Notice that there are two distribution points in the source site - one being the default distribution point on the site server ("SMSServer") and another remote distribution point ("Member"). Distribution point sharing allows both Configuration Manager 2007 and Configuration Manager 2012 clients to access content from the Configuration Manager 2007 distribution points.  
If the two distribution points are not displayed, refresh the list of shared distribution points.  
Notice that the site server-based distribution point is not able to be upgraded and reassigned to Configuration Manager 2012. This is because it has more roles assigned to it than just the distribution point role. Also notice that there are no "Hosted Migrated Packages". This indicates the number of packages that have been migrated to Configuration Manager 2012 that are distributed to this distribution point. At this time, no packages have been migrated, so the current value is "0". The remote distribution point, "Member", is available to be upgraded and reassigned, which you can do later in this lab if you have the time to do so.  
Sharing of distribution points is not necessary for our lab, however you may want to do so in your production environment.  
You have now successfully configured a migration source hierarchy to start migrating objects from a Configuration Manager 2007 site to a Configuration Manager 2012 hierarchy. |
### Migrating Objects From Configuration Manager 2007 to Configuration Manager 2012 R2

In this exercise, you will create two migration jobs to migrate objects from a Configuration Manager 2007 primary site to Configuration Manager 2012 R2. One migration job will find objects associated with selected collections for migration, the other will migrate objects specifically selected in the migration process. Both migration jobs will run automatically to migrate objects to Configuration Manager 2012 R2.

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<td>Complete the following task on: Primary1</td>
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</table>
| 1. Create a migration Job | 1. On the **Home** tab of the Ribbon, click **Create Migration Job**.  
**NOTE:** The **Create Migration Job Wizard General** dialog box appears allowing you to name the migration job, as well as to configure how migration is going to occur - by collection or object type.  
2. In the **Name** box, type **Objects used by ConfigMgr Clients** and then in the **Description (optional)** box, type **Objects used by clients in the ConfigMgr Clients collection**  
3. In the **Job type** box, verify that **Collection migration** is displayed, and then click **Next**.  
**NOTE:** The **Create Migration Job Wizard Select Collections** dialog box appears allowing you to select the collections that you want to migrate. The collections selected here dictate which objects are migrated - those being objects referenced by the selected collections. Notice that the list displays the collection type (device or user) and whether or not the collection has already been migrated. This list of collections was identified by the data gathering process completed earlier. Also notice that the default is to "Migrate objects that are associated with the specified collections" - which will identify the objects targeted to the collection(s) to be migrated.  
4. Click to select **ConfigMgr Clients**, click to select **Main Building**, and then click **Next** to identify the objects associated with these collections.  
**NOTE:** The **Create Migration Job Wizard Select Objects** dialog box appears displaying the available object types that are referenced by the selected collections and are available to be migrated. Not all objects listed in a migration job must be migrated in a migration job. In this lab, you will not migrate all the objects available or automatically selected by the wizard.  
5. Under **Object types**, click **Software Distribution Deployments**.  
**NOTE:** The **Create Migration Job Wizard Select Objects** dialog box appears displaying the available software distribution deployments (formerly called "advertisements"). Notice that the list displays three of the five advertisements you identified earlier from the Configuration Manager 2007 site. Two of the advertisements from Configuration Manager 2007 were for virtual packages which were not targeted to any of the collections selected for migration. You can migrate and deploy virtual packages, however virtual packages are migrated as Configuration Manager 2012 applications with App-V deployment types.  
6. Under **Available objects**, click to clear **KB977384**. |
<table>
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<tr>
<th>NOTE: This advertisement is not applicable for Configuration Manager 2012, as this KB is for Configuration Manager 2007 R3, and the clients will be upgraded to Configuration Manager 2012.</th>
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<tr>
<td>7. Under <strong>Object types</strong>, click <strong>Software Distribution Packages</strong>.</td>
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<td><strong>NOTE:</strong> The <strong>Create Migration Job Wizard Select Objects</strong> dialog box appears displaying the available package objects. Notice that the list displays three of the six packages you identified earlier from the Configuration Manager 2007 site. Virtual packages for Configuration Manager 2007 can be migrated directly, although if selected for migration, they are converted to Configuration Manager 2012 applications. In our scenario, the virtual packages were not advertised to any of the selected collections, so are not selected for potential migration objects in this migration job. You will migrate (through conversion to applications) the two virtual packages in another migration job. Notice that the “Configuration Manager 2007 Client Upgrade” package does not appear as it was not targeted to the selected collection. You could add it to another migration job, however it would only be useful after migration if you change the source files for the package to be the Configuration Manager 2012 source files, and there is already a built-in package definition for upgrading Configuration Manager clients that can be imported as needed.</td>
</tr>
<tr>
<td>8. Under <strong>Available objects</strong>, click to clear <strong>KB977384 – Advanced Client Hotfix – TST</strong>.</td>
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<tr>
<td><strong>NOTE:</strong> You do not need to migrate the “KB977384 – Advanced Client Hotfix – TST” package, as it is a required update for Configuration Manager 2007 R3, which is not applicable for Configuration Manager 2012 clients.</td>
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<tr>
<td>9. Under <strong>Object types</strong>, click <strong>Configuration Items</strong>.</td>
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<td><strong>NOTE:</strong> The <strong>Create Migration Job Wizard Select Objects</strong> dialog box displays the four configuration items available for migration. In this environment, there is no need to migrate the “SCCM Client” configuration item, as this configuration item validates that the Configuration Manager client is installed in a specific folder. By default, Configuration Manager 2012 clients install into a different location than Configuration Manager 2007 clients do, and as a result, this configuration item will always report non-compliance for any targeted clients.</td>
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<tr>
<td>10. Under <strong>Available objects</strong>, click to clear <strong>SCCM Client</strong>.</td>
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<td><strong>NOTE:</strong> An <strong>Excluded Objects</strong> dialog box indicating that since you cleared the selection of one of the configuration items, the “SCCM Client” configuration baseline, which includes the “SCCM Client” configuration item, can’t be migrated.</td>
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<tr>
<td>11. Click <strong>Continue</strong>.</td>
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<tr>
<td><strong>NOTE:</strong> The <strong>Create Migration Job Wizard Select Objects</strong> dialog box displays the available object types for migration. Notice that for four of the object types, not all available objects are to be migrated. Notice also that “Configuration Baselines” indicate that only one of the two available configuration baselines will be migrated.</td>
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<tr>
<td>12. Click <strong>Next</strong>.</td>
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<tr>
<td><strong>NOTE:</strong> The <strong>Create Migration Job Wizard Content Ownership</strong> dialog box appears allowing you to designate the site that will own the content for appropriate migrated &quot;package&quot; objects. If you are migrating to a Configuration Manager 2012 hierarchy, you would want to designate the site server that is 'closest' to the source files for access over the network by the Configuration</td>
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Manager 2012 site server when needed.

13. Click Next to assign ownership to the local primary site in our lab environment.

**NOTE:** The Create Migration Job Wizard Security Scope dialog box appears allowing you to select with which security scopes the objects in this migration job to be associated with. Notice that all security scopes in the target Configuration Manager 2012 R2 site are available to be associated with the objects to be migrated. Also notice that you are required to associate at least one security scope with the migrated objects. This will provide security to the migrated objects to the security scope(s) selected in the wizard.

If the required security scope has not already been created, notice that you can create a security scope from this wizard page to be assigned to the migrated objects.

14. Under Available security scopes, click to select Default, and then click Next.

**NOTE:** The Create Migration Job Wizard Collection Limiting dialog box appears allowing you to configure limiting of any collections that might increase membership due to migration and Configuration Manager 2012 global replication of collections and require to be configured for a limiting collection. Notice that there are no collections displayed as potential for an increase in scope.

15. Click Next.

**NOTE:** The Create Migration Job Wizard Site Code Replacement dialog box appears displaying any collections that need to be modified that contain membership rules that include the Configuration Manager 2007 site code. The Configuration Manager 2007 site code will no longer be applicable in the Configuration Manager 2012 environment after performing a side-by-side migration. In our environment, there were no collection queries that used the site code, so no collections are displayed on this page.

16. Click Next.

**NOTE:** The Create Migration Job Wizard Review Information dialog box appears displaying any actions that the admin must complete to allow migration to be successful, as well as what objects are going to be modified by the migration. Notice that you can save the results to a file for reference after the wizard has completed.

17. Click Next.

**NOTE:** The Create Migration Job Wizard Settings dialog box appears allowing you to specify the time the migration job should run as well as what the migration process should do in the event of conflicting objects that may already exist in the destination site. Notice that there are options for transferring the organization folder structure for migrated objects from Configuration Manager 2007 to the Configuration Manager 2012 site, as well as an option to enable advertisements after they have been migrated to Configuration Manager 2012 deployments.

18. Click Next to accept the defaults of starting the migration job as soon as the wizard is completed, to not migrate updated objects (objects that already exist in the target site), transfer any organization folders, and not to enable the migrated programs that were advertised in Configuration Manager 2007.

**NOTE:** The Create Migration Job Wizard Summary dialog box appears to
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| verify all the selections and number of objects to be migrated. Verify the information displayed under “Details”. | **19.** Click **Next.**

**NOTE:** The **Create Migration Job Wizard Completion** dialog box appears indicating that the wizard completed successfully.

**20.** Click **Close.**

**NOTE:** The Source Hierarchy information appears in the results pane.

**21.** In the navigation pane, click **Migration Jobs.**

**NOTE:** The Migration Jobs information appears in the results pane. Notice that the information displayed indicates that the migration job is running, as well as the number of objects migrated. You will need to refresh the **Migration Jobs** node to view updated information in the console.

**22.** In the preview pane, click the **Objects in Job** tab.

**NOTE:** The list of objects that are included in the migration job appears in the preview pane. Notice that the information displayed indicates the object name, as well as its migration status. Some of the objects may have a status of “Migrated”, while others may show "Running", “Skipped” or “Available to Migrate”.

| 2. Monitoring the migration job | 1. In the navigation pane, click **Migration.**

**NOTE:** The Migration dashboard appears in the results pane, displaying summary information related to the migration under **Summary.** Notice the "Migration Job Statistics" pane, as well as the two charts for "Object Migration" and "Client Migration".

Based on the migration job for the specific Configuration Manager 2007 site, there should be various objects which have been migrated, depending on how long the migration job has been active. The migration job should display a status of “Completed”. Notice that there were 17 objects migrated as well as four objects that were excluded from the migration job, and 70 available to be migrated.

Below the "Migration Summary" section, notice that the initial data gathering process alert still appears.

| 3. Verifying the exclusion list | 1. On the Ribbon, click **Edit Exclusion List.**

**NOTE:** The **Edit Exclusion List** dialog box appears displaying the objects that were excluded by previous migration jobs (four of them). These objects will be automatically excluded from future migration jobs created. Notice that you can remove an item from the list to allow them to be migrated in the future as desired. You could also manually select an object in a migration job even though it is in the exclusion list.

**2.** Click **Cancel.**

**NOTE:** The Migration home page appears in the results pane, displaying summary information related to the migration under **Summary.**

| 4. Migrating objects by object type | 1. On the Ribbon, click **Create Migration Job.**

**NOTE:** The **Create Migration Job Wizard General** dialog box appears allowing you to name the migration job, as well as to configure how migration is going to occur - by collection or object type.
2. In the **Name** box, type **Migration by object type** and then in the **Description (optional)** box, type **Migration of specific objects**

3. In the **Job type** box, click **Object migration**, and then click **Next**.

**NOTE:** The **Create Migration Job Wizard Select Objects** dialog box appears displaying all the object types that were discovered from the source site (Configuration Manager 2007 in this lab) during data gathering. Notice that the list includes:

- Boundaries
- Virtual Application Packages
- Operating System Deployment Boot Images
- Operating System Deployment Driver Packages
- Operating System Deployment Drivers
- Operating System Deployment Images
- Task Sequences
- Asset Intelligence Catalog
- Asset Intelligence Hardware Requirements
- Asset Intelligence User-defined Categorization List
- Software Metering Rules

These are in addition to the object types already migrated in the previous migration job. You can easily identify objects that have already been migrated by highlighting an object type - for example, "Software Distribution Packages", and then viewing the status under "Available objects". The "State" will indicate "Migrated" for those already migrated, "Excluded" for those excluded (though they can still be manually selected if desired), and "Not migrated" for those not migrated yet.

4. Under **Object types**, click to select **Boundaries**.

**NOTE:** The **Create Migration Job Wizard Select Objects** dialog box appears displaying the available boundary objects. Notice that the list displays one boundary and is automatically selected. This is a single object that represents the boundaries from the source Configuration Manager 2007 site. All boundaries from the source site are automatically included, and will be added to a boundary group in the Configuration Manager 2012 site - by the name displayed here in the boundaries list. Recall that the Configuration Manager 2007 site contained two boundaries - one IP address range and one AD site boundary.

5. Under **Available objects**, click to select **Virtual Application Packages**.

**NOTE:** The list of virtual packages in Configuration Manager 2007 appears in the results pane. Notice that there are two virtual packages.

6. Under **Object types**, click to select **Asset Intelligence Catalog**.

**NOTE:** The list of custom Asset Intelligence categories and families appear in the results pane. Notice that the list includes three customized Asset Intelligence objects to be migrated. You could select any of the additional objects as necessary, though none additional are required for the lab.

7. Click **Next**.

**NOTE:** The **Create Migration Job Wizard Content Ownership** dialog box appears allowing you to designate the site that will own the migrated objects.
that contain content.

8. Click **Next** to use the local primary site as the content owning site.

**NOTE:** The **Create Migration Job Wizard Security Scope** dialog box appears allowing you to select with which security scopes the objects in this migration job to be associated with. Notice that all security scopes in the target Configuration Manager 2012 site are available to be associated with the objects to be migrated. Also notice that you are required to associate at least one security scope with the migrated objects. This will provide security to the migrated objects to the security scope(s) selected in the wizard.

9. Under **Available security scopes**, click to select **Default**, and then click **Next**.

**NOTE:** The **Create Migration Job Wizard Review Information** dialog box appears displaying the list of objects that are going to be modified by the migration. Notice that you can save the results to a file for reference after the wizard has completed.

10. Click **Next**.

**NOTE:** The **Create Migration Job Wizard Settings** dialog box appears allowing you to specify the time the migration job should run as well as what the migration process should do in the event of conflicting objects that may already exist in the destination site. Notice that there is an option for transferring the organization folder structure for migrated objects from Configuration Manager 2007 to the Configuration Manager 2012 site.

11. Click **Next** to accept the defaults of starting the migration job as soon as the wizard is completed, to not migrate an object again in the event of a conflict, and to migrate folder structure.

**NOTE:** The **Create Migration Job Wizard Summary** dialog box appears to verify all the selections and number of objects to be migrated. Verify the information displayed under “Details”.

12. Click **Next**.

**NOTE:** The **Create Migration Job Wizard Completion** dialog box appears indicating that the wizard completed successfully.

13. Click **Close**.

**NOTE:** The Migration dashboard appears in the results pane.

14. In the navigation pane, click **Migration Jobs**.

**NOTE:** The Migration Jobs information appears in the results pane. Notice that the information displayed indicates that the migration job is running, as well as the number of objects migrated. You will need to refresh the **Migration Jobs** node to view updated information in the console.

15. In the result pane, click **Migration by object type**, and then in the preview pane, click the **Objects in Job** tab.

**NOTE:** The list of objects that are included in the migration job appears in the preview pane. Notice that the information displayed indicates the object name, as well as its migration status. Some of the objects may have a status of "Migrated", while others may show "Available to Migrate" or "Running".
Verify Objects Migrated from Configuration Manager 2007 to Configuration Manager 2012 R2

In this exercise, you will verify the objects that were migrated from the Configuration Manager 2007 source site to the Configuration Manager 2012 environment.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Detailed steps</th>
</tr>
</thead>
</table>
| Complete the following task on: Primary1 | 1. Click the **Assets and Compliance** workspace.  
**NOTE:** The Assets and Compliance workspace appears displaying the Overview page.  
2. In the navigation pane, click **Device Collections**.  
**NOTE:** The list of collections appears in the results pane. Notice that there are now seven collections in the site, the four built-in collections, two administrator created collections, and the “ConfigMgr Clients” collection that was migrated. This collection does not contain any members in the Configuration Manager 2012 environment, as the collection is query-based and queries specifically for Configuration Manager 2007 clients, of which none are reporting to the Configuration Manager 2012 site. This collection would display any Configuration Manager 2007 clients that were reporting to the Configuration Manager 2012 site (if there were any).  
3. Refresh the **Device Collections** node, and then in the navigation pane, expand **Device Collections**.  
**NOTE:** The list of collection folders appears in the navigation pane. You need to refresh the **Device Collections** node in order to view folders created as part of migration. Notice that there is a folder titled “Main Building”. Recall that this was a collection from Configuration Manager 2007 that contained no members, though it did contain two subcollections.  
4. In the navigation pane, click **Main Building**.  
**NOTE:** The collections that are contained in the “Main Building” folder appear in the results pane. Notice that both “Floor 1” and “Floor 2” are collections in the “Main Building” folder. Notice also that there are five members of each of the two collections. Recall that in Configuration Manager 2007, there were one and two members of the collections respectively. This is due to the evaluation of the query rules for those two collections and that there are more members in the Configuration Manager 2012 site database than in the Configuration Manager 2007 environment.  
5. In the navigation pane, expand **Asset Intelligence**, and then click **Catalog**.  
**NOTE:** The list of categories and families appear in the results pane. Notice that there are three customizations with a “Validation State” of “User Defined”. These are the three items that were migrated from Configuration Manager 2007.  
6. In the navigation pane, expand **Compliance Settings**, and then click **Configuration Items**.  
**NOTE:** The configuration items appear in the results pane. The three
configuration items displayed were migrated from the Configuration Manager 2007 site. Recall that the Configuration Manager 2007 site had four configuration items, however one was excluded from migration, as it is was specific to Configuration Manager 2007 client installation location, which has changed in Configuration Manager 2012.

7. In the navigation pane, click **Configuration Baselines**.

**NOTE:** The one configuration baseline that was migrated from Configuration Manager 2007 appears in the results pane. Notice that the preview pane displays compliance statistics for the baseline. Recall that there were two configuration baselines in the Configuration Manager 2007 site, however one was excluded from the migration job.

8. Click the **Software Library** workspace.

**NOTE:** The **Software Library** workspace appears displaying the Overview page.

9. In the navigation pane, expand **Application Management**, and then click **Applications**.

**NOTE:** The list of applications appears in the results pane. Notice that there are two applications that were migrated from the Configuration Manager 2007 site. Recall that these two applications were Configuration Manager 2007 virtual packages that were migrated as Configuration Manager 2012 applications.

10. In the preview pane, click the **Deployment Types** tab.

**NOTE:** The list of deployment types for the "PowerPoint Viewer" application appears in the preview pane. Notice that the one deployment type for this application is based on the "Microsoft Application Virtualization 4" technology. Virtual packages from Configuration Manager 2007 are migrated as applications with App-V 4 deployment types in Configuration Manager 2012.

11. In the preview pane, click the **Deployments** tab.

**NOTE:** The deployments for the "PowerPoint Viewer" application appear in the preview pane. Notice that there are no deployments created. Virtual packages migrated to Configuration Manager 2012 are not deployed automatically, even if they were advertised in Configuration Manager 2007.

12. In the navigation pane, click **Packages**.

**NOTE:** The list of packages appears in the results pane. Notice that there are two packages that were migrated from the Configuration Manager 2007 site, as well as the two default packages in Configuration Manager 2012 R2 (named "Configuration Manager Client Package" and "User State Migration Tool for Windows 8.1"). Recall that the Configuration Manager 2007 site had six packages, however the client upgrade package was excluded, as it made no sense to migrate to Configuration Manager 2012, as well as the KB977384 package was manually excluded. There were also two virtual packages were migrated to applications (that you just verified).

13. In the preview pane, click the **Deployments** tab.

**NOTE:** The deployments for this package appear in the preview pane. Notice that there is one deployment that was migrated from the Configuration Manager 2007 site as an advertisement. Notice also that the targeted program is "Per-system unattended".

14. In the preview pane, click the **Programs** tab.

**NOTE:** The list of programs for the package appears in the preview pane. Notice that the package has the same six programs as it had in the Configuration Manager 2007 site.
15. In the preview pane, click **Per-system unattended**, and then on the Ribbon, click **Properties**.

**NOTE:** The **Per-system unattended Properties** dialog box appears displaying general properties for the program.

16. Click the **Advanced** tab.

**NOTE:** The **Per-system unattended Properties** dialog box displaying the advanced properties for the program. Notice that the program is disabled, which prevents any targeted computers from running the program. This was configured as part of the migration job for all deployments, however can be modified on an individual program if desired.

17. Click **Cancel**.

**NOTE:** The list of programs for the package appears in the preview pane.

18. In the navigation pane, expand **Software Updates**, and then click **Software Update Groups**.

**NOTE:** The update groups for the site appear in the results pane. There were no software update groups created prior to the migration, so the two software update groups there now, "English Updates" and "Universal Updates", were migrated from Configuration Manager 2007. Notice that "(Migrated from Software Update Deployment)" are added to the software update group names to indicate that they were migrated.

19. In the preview pane, click the **Deployment** tab.

**NOTE:** The deployments for this update group appear in the preview pane. Notice that the update group has a deployment, migrated from Configuration Manager 2007. Notice also that the deployments are not enabled, which means that they are not actively deployed to the target collection (even if that collection contained members, which we have already validated that it does not).

20. In the navigation pane, click **Deployment Packages**.

**NOTE:** The software update deployment packages appear in the results pane. Both of these packages were migrated from the Configuration Manager 2007 site.

21. In the results pane, click **English Updates**, and then on the Ribbon, click **Show Members**.

**NOTE:** The list of software updates included in the deployment package appears in the navigation pane as a sticky node under "All Software Updates". Notice that the package has the same three updated as it had in the Configuration Manager 2007 site.

22. Click the **Administration** workspace.

**NOTE:** The Administration page appears displaying the available migration jobs.

23. In the navigation pane, expand **Hierarchy Configuration**, and then click **Boundaries**.

**NOTE:** The list of boundaries in the hierarchy appears in the results pane. Notice that there are four boundaries displayed, two of which were migrated from Configuration Manager 2007 – "192.168.3.50-192.168.3.59" and "CM2007Site".

24. In the navigation pane, click **Boundary Groups**.

**NOTE:** The list of boundary groups in the hierarchy appears in the results.
pane. Notice that there are four boundary groups displayed, three of which were created as a result of migrating from Configuration Manager 2007 – "Boundary group for distribution point TST (\SMSServer)" and "Boundary group for distribution point TST (\Member)" - which are configured for content location only, and "TST (Configuration Manager 2007 Primary Site)" - which is not configured for either site assignment or content location. The first two boundary groups migrated for the distribution point were actually created when distribution point sharing was enabled.

### 2. Running migration reports

1. Click the Monitoring workspace.

   **NOTE:** The Monitoring workspace appears displaying the Overview page.

2. In the navigation pane, expand **Reporting**, expand **Reports**, and then click **Migration**.

   **NOTE:** The list of reports in the "Migration" folder appears in the results pane. Notice that there are five reports available.

3. In the results pane, click **Migration jobs**, and then on the Ribbon, click **Run**.

   **NOTE:** The Migration jobs report window appears displaying the two migration jobs and their status. Notice that both jobs have a status of "Completed".

4. Under **Name**, click **Objects used by ConfigMgr Clients**.

   **NOTE:** The Migration job properties report window appears displaying the migration job and the objects included. Notice that the report includes the status of each object, which should be "Completed" for all objects other than the "Main Building" collection. Notice that the "Message" column indicates that it was skipped and converted to a folder.

5. Close the Migration job properties report window.

   **NOTE:** The list of reports in the "Migration" folder appears.

You have now identified the objects that were migrated from Configuration Manager 2007 to Configuration Manager 2012 as part of this one migration job. You may recall that the Migration page indicated that there were a total of 90 objects at the source site, although our first migration job only targeted 17 objects after the four items were excluded and the second migration job targeted six objects.

In the next exercise, you will migrate a client from Configuration Manager 2007 to Configuration Manager 2012.

### 3. Verifying shared packages

1. Click the Administration workspace.

   **NOTE:** The Administration workspace appears displaying the boundary groups in the environment.

2. In the navigation pane, click **Source Hierarchy**.

   **NOTE:** The one source hierarchy we have configured appears in the results pane.

3. In the preview pane, click the **Shared Distribution Points** tab.

   **NOTE:** The list of shared distribution points appears in the preview pane. Notice that there are two shared distribution points, and that neither contains any "Hosted Migrated Packages". They does really contain some hosted packages that were migrated, but those were migrated after the most recent
4. On the **Home** tab of the Ribbon, click **Gather Data Now**.

**NOTE:** The **Data Gathering Status** message box appears.

5. When the status indicates complete, click **Close**, and then refresh the **Shared Distribution Points** tab in the preview pane.

**NOTE:** The list of shared distribution points appears in the preview pane. Notice that there are two shared distribution points, and that they contain four and six "Hosted Migrated Packages" respectively. These are packages that have been migrated that are available to be accessed, from an appropriate distribution point, by both Configuration Manager 2007 as well as Configuration Manager 2012 clients.
In this exercise, you will migrate a Configuration Manager 2007 client to Configuration Manager 2012 R2. This is accomplished by reinstalling the client using any supported Configuration Manager 2012 client installation method. You will use a client push process in this lab.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Detailed steps</th>
</tr>
</thead>
</table>
| **1. Configure a valid client push account** | 1. Click the **Administration** workspace.  
**NOTE:** The Administration workspace appears displaying the Overview page.  
2. In the navigation pane, expand **Site Configuration**, and then click **Sites**.  
**NOTE:** The list of sites appears in the results pane. Notice that there is only one site in the results pane, the local primary site.  
3. In the results pane, click **MCM**, and then on the Ribbon, click **Settings**.  
**NOTE:** A new menu of options appears.  
4. Click **Client Installation Settings**, and then click **Client Push Installation**.  
**NOTE:** The **Client Push Installation Properties** dialog box appears displaying general properties for the installation method. Notice that automatic client push installation is not enabled.  
5. Click the **Accounts** tab.  
**NOTE:** The **Client Push Installation Properties** dialog box appears displaying the configured accounts the installation method. Notice that there is one account listed, "ConfigMgrDom\ClientInstall". Since the client is in a different forest, this account is not a valid administrative account on the target client.  
6. Click **New** (the icon resembles a starburst).  
**NOTE:** A new menu appears with options for adding an account.  
7. Click **New Account**.  
**NOTE:** The **Windows User Account** dialog box appears allowing you to designate an account that can be used to install clients through the Client Push Installation method.  
8. In the **User name** box, type `smsdomain\clientinstall`  
9. In the **Password** and **Confirm password** boxes, type `password` and then click **Verify**.  
**NOTE:** The **Windows User Account** dialog box expands to display options for validating the account credentials. Notice that the default method to verify is by connecting to a network share.  
10. In the **Network share** box, type `\\SMSClient\admin$` and then click **Test connection**.  
**NOTE:** The UNC path designated here is the same path that the site server will connect to during a client push installation process. A **Configuration**
### 2. Migrate a client to Configuration Manager 2012

1. Click the **Assets and Compliance** workspace.

   **NOTE:** The Assets and Compliance Overview page appears.

2. In the navigation pane, click **Device Collections**.

   **NOTE:** The list of collections appears in the results pane.

3. In the results pane, click **All Systems**, and then on the Ribbon, click **Show Members**.

   **NOTE:** The members of the "All Systems" collection appear in the results pane. Notice that the list includes the one client that needs to be migrated, "SMSClient". Normally you would need to run a discovery method to discover computers that can be migrated through a client push process from the Configuration Manager 2012 site. However, "SMSClient" was "discovered" as it was a member of a migrated collection as a direct membership rule. As a result, it was added to the Configuration Manager 2012 site database. If "SMSClient" does not appear in the collection, update the collection membership, and then refresh the members displayed.

4. In the results pane, click **SMSClient**, and then on the **Home** tab of the Ribbon, click **Install Client**.

   **NOTE:** The Install Configuration Manager Client Wizard Before You Begin dialog box appears.

5. Click **Next**.

   **NOTE:** The Install Configuration Manager Client Wizard Installation Options dialog box appears displaying options for remotely installing clients.

6. Click to select **Always install the client software**.

   **NOTE:** For a migration scenario like you are implementing in the lab, you technically don’t need to enable this option. However, it is a good practice for a reinstall as the computer is already installed as a Configuration Manager client.

7. Click to select **Install the client software from a specified site**, and then in the **Site** box, click **MCM-Configuration Manager 2012 R2 Primary Site**.

   **NOTE:** This option is required as the migrated record is not currently assigned to the local site. Configuration Manager 2012 will only push the client software to assigned resources by default. This option configures the push process to manually assign the client to the local site, and to complete the push from the local site.

8. Click **Next**.

   **NOTE:** The Install Configuration Manager Client Wizard Summary dialog box appears indicating that it is ready to complete the installation. Verify
9. Click Next.

**NOTE:** The Install Configuration Manager Client Wizard Completion dialog box appears indicating that the wizard completed successfully.

10. Click Close.

**NOTE:** The list of members of the "All Systems" collection appears in the results pane. It will take a number of minutes (potentially more than 20 minutes depending on hardware) for the client to be upgraded to Configuration Manager 2012 due to new client requirements, such as .NET Framework 4.0. You will verify the client upgrade in the next procedure.

You do not have to complete the client migration if you do not care to, you can move onto exercise 7 to clean up migration data. If you want to perform a distribution point migration, you can move to exercise 6 if you do not want to wait for the client upgrade.

In the following procedure, you will verify that the Configuration Manager 2007 client was successfully migrated to Configuration Manager 2012 R2. If the client is still in the upgrade process, you can move to the next exercise to migrate a distribution point, or to exercise 7 to clean up migration data and then return to this procedure to verify client installation if you have the time.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Detailed steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Verify client upgrade</td>
<td>1. On the Start menu, right-click My Computer, and then click Manage.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The Computer Management window appears.</td>
</tr>
<tr>
<td></td>
<td>2. Expand Services and Applications, and then click Services.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The Services window appears displaying the list of services on the</td>
</tr>
<tr>
<td></td>
<td>system. Notice that the &quot;SMS Agent Host&quot; service is listed and started. If the</td>
</tr>
<tr>
<td></td>
<td>cmsetup service is listed, the computer is still being upgraded. The upgrade</td>
</tr>
<tr>
<td></td>
<td>from Configuration Manager 2007 to Configuration Manager 2012 is fairly</td>
</tr>
<tr>
<td></td>
<td>lengthy due to the additional components that Configuration Manager 2012</td>
</tr>
<tr>
<td></td>
<td>clients require. Both Configuration Manager 2007 and Configuration Manager</td>
</tr>
<tr>
<td></td>
<td>2012 use the SMS Agent Host service. As a result, you can't view the version</td>
</tr>
<tr>
<td></td>
<td>from Services.</td>
</tr>
<tr>
<td></td>
<td>3. Close the Computer Management window, and then in Control Panel, start</td>
</tr>
<tr>
<td></td>
<td>Configuration Manager.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The Configuration Manager Properties window appears displaying the</td>
</tr>
<tr>
<td></td>
<td>general properties for the client. Configuration Manager 2007 used &quot;</td>
</tr>
<tr>
<td></td>
<td>Configuration Manager Properties&quot; as the dialog box title, so this is one</td>
</tr>
<tr>
<td></td>
<td>quick indication that the client has been upgraded. Notice the &quot;Version&quot;</td>
</tr>
<tr>
<td></td>
<td>attribute shows &quot;5.00.7958.1000&quot;, which is the R2 release version of</td>
</tr>
<tr>
<td></td>
<td>Configuration Manager 2012 used in these lab images.</td>
</tr>
<tr>
<td></td>
<td>The client is in a separate forest from the Configuration Manager 2012 site.</td>
</tr>
<tr>
<td></td>
<td>To support clients in a remote forest, you would have to configure additional</td>
</tr>
<tr>
<td></td>
<td>settings to allow successful client management:</td>
</tr>
</tbody>
</table>
Configure the Configuration Manager 2012 site to publish its site data to the remote forest, and have proper DNS name resolution to allow the remote clients to find the Configuration Manager site systems and enable a management point and distribution point in the remote forest where the clients reside.

- Install a Configuration Manager 2012 site in the remote forest
- Or add appropriate trust relationships so that clients in the remote forest can access site resources in the Configuration Manager 2012 site

The appropriate option above would be dependent upon network configuration and Active Directory trust relationships between forests and resources available to you.

For this lab environment, the easiest solution would be to manually move the client to the site server's forest to allow it to register in the site and access site resources. If you do not move the client to the site's forest, then it will not be able to successfully register in the site and be managed.

If you want to complete this exercise and validate the client reporting to the Configuration Manager site, you will need to manually modify the domain membership of "SMSClient" to become a member of the "ConfigMgrDom" forest.

4. Click **Cancel**.

In the following procedure, you will verify that the Configuration Manager 2007 client was successfully migrated to Configuration Manager 2012.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Detailed steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the following task on: <strong>Primary1</strong></td>
<td></td>
</tr>
<tr>
<td>1. Verify the client migration at the site server</td>
<td>1. Click the <strong>Assets and Compliance</strong> workspace.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: The Assets and Compliance page appears displaying the members of the &quot;All Systems&quot; collection. Notice that the list includes the one client that was migrated, &quot;SMSClient&quot;.</td>
</tr>
<tr>
<td></td>
<td>2. On the <strong>Collection</strong> tab of the Ribbon, click <strong>Update Membership</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: A <strong>Configuration Manager</strong> message box appears validating the request to update the membership of the collection.</td>
</tr>
<tr>
<td></td>
<td>3. Click <strong>Yes</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: The collection is updated and the members of the &quot;All Systems&quot; collection appear in the results pane. You will need to refresh the &quot;All Systems&quot; node in order to see the updated membership information. Notice that the &quot;SMSClient&quot; computer now is listed as a &quot;Computer&quot; client, and is assigned to the site &quot;MCM&quot;.</td>
</tr>
<tr>
<td></td>
<td>The client will only display as a client, if it were able to register in the site. In this lab environment, that would require that the client is moved from the &quot;SMSDomain&quot; forest to the &quot;ConfigMgrDom&quot; forest, then waiting a few minutes for the client to register. After that has completed, the client will retrieve policies, and send in a Heartbeat DDR to the site. When the Heartbeat DDR has</td>
</tr>
</tbody>
</table>
been processed, the computer will appear as a Configuration Manager 2012 client in the site.

4. Click the Administration workspace.

**NOTE:** The Administration workspace appears displaying the list of sites in the results pane.

5. In the navigation pane, expand **Migration**, and then click **Source Hierarchy**.

**NOTE:** The list of source hierarchies appears in the results pane.

6. On the Ribbon, click **Gather Data Now**.

**NOTE:** A Data Gathering Status message box appears displaying the status of the data gathering process. A data gathering process is required to update the migrated client statistics.

7. Click **Close** when the data gathering process has completed.

**NOTE:** The list of active source hierarchies appears in the results pane.

8. In the navigation pane, click **Migration**.

**NOTE:** The Migration dashboard appears displaying overall status for the source hierarchy, migration jobs, objects migrated, and clients migrated. Notice that the "Client Migration" counts have changed - "Migrated" has increased by one, and "Remaining" has decreased by one.

In the exercise 7, you will configure Configuration Manager 2012 to stop the scheduled data gathering process, and then to clear the migrated data. This does not remove data migrated from Configuration Manager 2007, however does remove the data from special migration tables in the Configuration Manager 2012 site database.
**6 UPGRADING A SHARED DISTRIBUTION POINT TO CONFIGURATION MANAGER 2012 R2 (OPTIONAL)**

In this exercise, you will initiate an upgrade of the remote shared distribution point from the Configuration Manager 2007 site and have it migrated as a Configuration Manager 2012 distribution point. This process will then allow the upgraded distribution point to receive new content from the Configuration Manager 2012 R2 site.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Detailed steps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Complete the following task on: Primary1</td>
</tr>
</tbody>
</table>

1. Initiate the upgrade of a shared distribution point

   1. In the navigation pane, expand **Migration**, and then click **Source Hierarchy**.
      
      **NOTE:** The Source Hierarchy page appears displaying the source hierarchy in the results pane.
   
   2. In the preview pane, click the **Shared Distribution Points** tab.
      
      **NOTE:** The list of shared distribution points from the Configuration Manager 2007 site appears. Notice that there are two shared distribution points available:

      - Member – this is a remote distribution point. Notice that this distribution point is “Eligible for Reassignment”
      - SMSServer – this is the distribution point that resides on the primary site server. Notice that this distribution point is not "Eligible for Reassignment“. This is because it shares other site system roles in addition to the distribution point role

   3. In the preview pane, click **Member**, and then on the Ribbon, click **Reassign Distribution Point**.
      
      **NOTE:** The **Reassign Shared Distribution Point Wizard General** dialog box appears allowing you to specify general settings for the upgraded distribution point. Notice that you are required to specify the Configuration Manager 2012 site that the upgraded distribution point will be added to.

   4. In the **Site code** box, click **MCM – Configuration Manager 2012 R2 Primary Site**.
   
   5. Under **Site System Installation Account**, click **Use another account for installing this site system**.
      
      **NOTE:** You cannot use the primary site server computer account ("Primary1") as the site system installation account, as the remote distribution point is in a remote untrusted forest. As a result, the primary site server computer account is not a valid account at the computer "Member".

   6. Click **Set**.
      
      **NOTE:** A new menu appears allowing you to add a new account or use an existing account.

   7. Click **New Account**.
      
      **NOTE:** The **Windows User Account** dialog box appears.

   8. In the **User name** box, type `smsdomain\administrator`
   
   9. In both the **Password** and **Confirm password** boxes, type `password`
and then click **Verify**.

**NOTE:** The *Windows User Account* dialog box expands with options for verifying the account credentials.

10. In the **Network share** box, type `\member\smspkgc$` and then click **Test connection**.

**NOTE:** A *Configuration Manager* message box appears indicating that the account was successful in connecting to the network share.

11. Click **OK**.

**NOTE:** The *Windows User Account* dialog box appears displaying the account credentials to be used to install the remote site system.

12. Click **OK**.

**NOTE:** The *Reassign Shared Distribution Point Wizard General* dialog box appears displaying the general properties for upgrading and reassigning the distribution point, including the site the distribution point will be assigned to, as well as the account to use to install the distribution point.

13. Click **Next**.

**NOTE:** The *Reassign Shared Distribution Point Wizard Distribution Point* dialog box appears displaying available configuration options for installation of a distribution point. Notice that by default, IIS will not be installed or configured, BranchCache will not be enabled on the distribution point, HTTP will be used as the client connection protocol, clients are not allowed to connect anonymously, a self-signed certificate will be used, and the distribution point will not support pre-staged content.

14. Click to select **Install and configure IIS if required by Configuration Manager**, and then click **Next** to accept the remaining default configuration options.

**NOTE:** The *Reassign Shared Distribution Point Wizard Drive Settings* dialog box appears displaying the drive configuration options for installation of the distribution point. Notice that by default, Configuration Manager will automatically select the drive to use for the content library, as well as the package share, and not use the drive when the free space on the drive reaches 50MB of free space.

15. Click **Next** to accept the default configuration options.

**NOTE:** The *Reassign Shared Distribution Point Wizard Pull Distribution Point* dialog box appears allowing you to configure this distribution point as a pull distribution point. A pull distribution point gets its assigned content by downloading it from a ‘source’ distribution point, rather than receiving the content from a push process from the site server.

16. Click **Next** to not configure this distribution point as a pull distribution point.

**NOTE:** The *Reassign Shared Distribution Point Wizard PXE Settings* dialog box appears displaying the options to enable PXE for the distribution point. Notice that by default, PXE support is not enabled. It is not required in our lab environment, however in your production environment, you may need to enable PXE support for bare metal client installation.

17. Click **Next** to accept the default configuration options of no PXE support.

**NOTE:** The *Reassign Shared Distribution Point Wizard Content Validation* dialog box appears displaying the configuration options for enabling
content validation on the distribution point. Notice that by default, content validation will not be enabled, which is fine for our lab scenario. However you may want to enable this on a recurring schedule in your own production environments.

18. Click **Next** to accept the default configuration options of no scheduled content validation.

**NOTE:** The Reassign Shared Distribution Point Wizard Boundary Groups dialog box appears displaying the configuration options for membership in boundary groups. Notice that as part of the shared distribution point process, this distribution point was previously added to a boundary group specific to this distribution point. You will also add it to another boundary group for the site.

19. Click **Add**.

**NOTE:** The Add Boundary Group dialog box appears displaying the available boundary groups.

20. Click to select **Local Clients in MCM**, and then click **OK**.

**NOTE:** The Reassign Shared Distribution Point Wizard Boundary Groups dialog box appears displaying the configuration options for membership in boundary groups. Notice that the distribution point is now a member of two boundary groups.

21. Click **Next**.

**NOTE:** The Reassign Shared Distribution Point Wizard Content Conversion dialog box appears displaying the shared content that is hosted on this distribution point. Notice that this distribution point hosts four migrated packages, and that the information includes the estimated disk space that is required to migrate these four packages, which is roughly two times the original package sizes. Notice also that there is no disk space required for migrating the two virtual packages, as the content can't be migrated directly to the content library, as virtual packages are not supported. These two packages were migrated over as applications, and the content needs to be distributed to Configuration Manager 2012 distribution points.

22. Click **Next**.

**NOTE:** The Reassign Shared Distribution Point Wizard Summary dialog box appears indicating that the wizard is ready to upgrade the distribution point.

23. Click **Next**.

**NOTE:** The Reassign Shared Distribution Point Wizard Completion dialog box appears indicating that the wizard completed successfully.

24. Click **Close**.

**NOTE:** The list of shared distribution points appears in the preview pane.

25. In the navigation pane, click **Distribution Point Migration**.

**NOTE:** The list of distribution points targeted for upgrade and reassignment appears in the results pane. Notice that there is only one distribution point listed as the second distribution point, on the site server, is not eligible for upgrade. Notice also that its status is either "Running" or "Reassigning distribution point", and that it is assigned to site MCM. If your status is not updated, refresh the node.
In the following procedure, you will view the status of the Configuration Manager 2007 distribution point reassignment to Configuration Manager 2012.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Detailed steps</th>
</tr>
</thead>
</table>
| Complete the following task on: ![Primary1](image) | 1. In the navigation pane, expand Migration, and then click Distribution Point Migration.  
**NOTE:** The list of distribution points to be upgraded and reassigned appears in the preview pane. Notice that the status indicates that the distribution point is being upgraded. It will take a few minutes to upgrade the distribution point.  
2. On the Ribbon, click Refresh.  
**NOTE:** The list of distribution points to be upgraded appears in the preview pane. Notice that the status indicates that the distribution point was successfully reassigned.  
3. In the navigation pane, click Distribution Points.  
**NOTE:** The list of Configuration Manager distribution points is displayed in the results pane. Notice that the upgraded and reassigned distribution point is listed. Notice also that it indicates that it is a member of a different forest than the distribution points in the Configuration Manager 2012 sites, and that it is not a member of any distribution point groups.  
4. Click the Monitoring workspace.  
**NOTE:** The monitoring workspace appears.  
5. In the navigation pane, expand Distribution Status, and then click Content Status.  
**NOTE:** The status of the content distributed in the site appears in the results pane. In the lab environment, the only content that has been distributed is content that was converted as part of the distribution point upgrade process, other than the two built-in client packages in Configuration Manager 2012. Notice that two of the migrated packages indicate 100% compliance, while the two migrated virtual applications, even though targeted, are 0% compliant as no content has been added to the applications. The two built-in packages will get distributed to the upgraded distribution point after a period of time also (the compliance may indicate 50% for those two packages currently).|

You have now successfully upgraded and reassigned a distribution point from Configuration Manager 2007 to Configuration Manager 2012 R2, while maintaining the content that was previously distributed to the distribution point.

In the next exercise, you will configure Configuration Manager 2012 to stop the scheduled data gathering process, and then to clear the migrated data. This does not remove data migrated from Configuration Manager 2007, however does remove the data from special migration tables in the Configuration Manager 2012 site database.
7 **Removing Migration Data from Configuration Manager 2012 R2**

In this exercise, you will stop the scheduled data gathering process from periodically gathering information from the Configuration Manager 2007 site. You will also clean up data from Configuration Manager 2012 R2 that was used to create migration jobs. This process retains any objects previously migrated to Configuration Manager 2012 R2, however does clean up tables in the site database.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Detailed steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the following task on: Primary1</td>
<td>1. Click the Administration workspace.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: The list of distribution points in the site appears in the results pane. Notice that the local site server distribution point and the upgraded distribution point are displayed.</td>
</tr>
<tr>
<td></td>
<td>2. In the navigation pane, click Source Hierarchy.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: The Source Hierarchy page appears displaying the source hierarchy in the results pane. Notice that the &quot;Credential Configured&quot; column indicates &quot;Yes&quot; for our source hierarchy of &quot;TST&quot;.</td>
</tr>
<tr>
<td></td>
<td>3. On the Ribbon, click <strong>Stop Gathering Data</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: A Configuration Manager message box appears prompting to stop gathering data from the Configuration Manager 2007 source site.</td>
</tr>
<tr>
<td></td>
<td>4. Click Yes.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: The source hierarchy is displayed in the results pane. Notice that the &quot;Credential Configured&quot; column now displays &quot;No&quot; and that the &quot;Status&quot; column displays &quot;Have not gathered data&quot;. Configuration Manager 2012 will no longer gather data from the Configuration Manager 2007 source environment. If you want to remove all references to the Configuration Manager 2007 environment from Configuration Manager 2012, you would now need to clean up the migration data from the old site from the new site.</td>
</tr>
<tr>
<td></td>
<td>5. On the Ribbon, click <strong>Clean Up Migration Data</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: A Clean Up Migration Data message box appears prompting for the Configuration Manager 2007 hierarchy to clean up migration data. Notice that the &quot;Source hierarchy&quot; box displays the Configuration Manager 2007 site &quot;TST (smsserver)&quot;.</td>
</tr>
<tr>
<td></td>
<td>6. Click <strong>OK</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: A Configuration Manager message box appears prompting for confirmation to remove the migration data.</td>
</tr>
<tr>
<td></td>
<td>7. Click Yes.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: The source hierarchy results are displayed in the results pane. Notice that the site &quot;TST&quot; no longer appears as the source hierarchy. Recall that it did appear previously in the list.</td>
</tr>
<tr>
<td></td>
<td>8. In the navigation pane, click <strong>Migration Jobs</strong>.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE</strong>: The list of migration jobs appear in the results pane. Notice that there are no migration jobs. Recall that earlier there were two migration jobs.</td>
</tr>
</tbody>
</table>
9. In the navigation pane, click **Distribution Point Migration**.

**NOTE:** The list of migrated distribution points appears in the results pane. Recall that earlier there was one migrated distribution point.

10. In the navigation pane, click **Migration**.

**NOTE:** The Migration dashboard appears. Notice that there are no items displayed for “Source Hierarchy”, “Migration Job Statistics”, “Object Migration” and “Client Migration”. Recall that earlier there was data for each of these values in the home page. This process does not remove any migrated objects, only references to information about the Configuration Manager 2007 site. You can verify that all migrated objects still exist in the Configuration Manager 2012 R2 site. Cleaning up migration data does not remove any migrated objects, only the information from the data gathering process.

The "Stop Gathering Data" as well as the "Clean Up Migration Data" actions could also be run at the CAS in a hierarchy, as they are actions that replicate results to the primary sites in addition to the central administration site. Since you are running these actions from the child primary site, after SQL Server replication has completed, you could view the updated status in the Migration node of the central administration site as well as the primary site.

You have now successfully migrated objects and a client from Configuration Manager 2007 to Configuration Manager 2012 R2. This process involves a side-by-side migration of objects and data from Configuration Manager 2007 to Configuration Manager 2012. You completed a limited migration in the lab due to available time, whereas in your own migrations, you will have multiple migration jobs to migrate more objects over than we did here, based on collections or object types (such as all operating system deployment objects). You also will likely have multiple primary sites to migrate. If you were still running Configuration Manager 2012 RTM or Configuration Manager 2012 SP1, the migration process is essentially the same as experienced in this lab.