

Deploying Autodesk software the easy way

Class ID: IT18200

Speaker : Derek Gauer
Co-Speaker: Ted Martin

Class summary

- You don't have to be an Information Technology specialist to deploy Autodesk software the easy way.
- Autodesk software installs can take sufficient effort to deploy to multiple computers. This class will explore the creation of deployment packages and push technology. This can greatly reduce the amount effort to deploy Autodesk software.
- Streamline the deployment of Autodesk software and add-ons using Microsoft System Center Configuration Manager 2012 r2 © (SCCM) and script technology. When deploying Autodesk products to two or a thousand computers, you can use these techniques with SCCM. You can also use this same workflow for other similar IT software management tools to deploy Autodesk products.
- We will briefly explore the creation of Autodesk packages using the out of the box tools in Autodesk products. We will run through how to create an SCCM software package, and deploying the Autodesk build to a collection of computers. We will also explore how to deploy third party or Autodesk add-ons to the same collection of computers using scripts and SCCM. SCCM has powerful reporting tools to monitor the software deployment status during and/or after the deployment.



Outline of course

1. Introduction of presenters, Design Technology and our experiences deploying Autodesk Software (Design Technology Group at IBI Group)
2. Creation of Autodesk packages for 2016/2017 design suites
3. Creation of batch files to install Autodesk or third party applications
4. SCCM package creation for Autodesk products and add-ons.
5. Deploying your programs
6. Checking the status of the deployment
7. Running a report



IT18200: Deploying Autodesk software the easy way

Who are we?

Derek Gauer

IBI Group Toronto, Ontario, Canada

Design Technology Group

Global Portfolio Manager, Software, Hardware, Support and IT Liaison

Derek Gauer has more than 25 years of CAD management experience, and he has worked at IBI Group for the past 23 years. Mr. Gauer specializes in CAD management, road design (including horizontal and vertical alignment), quantity calculations, and contract document preparation. Mr. Gauer's current position is the global manager for the hardware, software, and support in the Design Technology Group. His experience of CAD, Building Information Modeling (BIM), and IT has enabled him to integrate over 20 new firms into the IBI Group of companies. He supports over 1,500 users spread across 65 offices in ten countries. His role includes investigating and implementing training methodologies and researching new advancements in software. Mr. Gauer has extensive knowledge of AutoCAD AutoCAD Map 3d, AutoCAD Civil 3D, Revit, 3ds Max, and InfraWorks 360 software. Mr. Gauer is a member of the Autodesk User Group International (AUGI), Groundbreakers AutoCAD Civil 3D User Group, and the Ontario Revit User Group.

Email dgauer@ibigroup.com



IT18200: Deploying Autodesk software the easy way

Who are we?

Ted Martin

IBI Group Waterloo, Ontario, Canada

Design Technology Group

Global Portfolio Manager, Software, Hardware, Support and IT Liaison

Mr. Martin one of the few full time support staff tasked with global CAD support. Mr. Martin has almost 22 Years of experience with Autodesk product and consulting services. He has a background in Civil and had a brief stint as a mechanical / manufacturing designer prior to joining IBI.

Mr Martin was hired by Cumming Cockburn Limited in 2002 to help rebuild a local presents in Waterloo Ontario Canada and managed CAD and IT operations. In 2004 IBI acquired CCL and he began helping with integrations shortly after that. Since Mr Martin has been a CAD team lead on integrations, this offered lots of opportunities to see customization and work flow in a multitude of applications. Currently he supports over 65 offices and 1,500 users worldwide

Email tmartin@ibigroup.com



Polling question

Question 1 : How many of you do manual installs?

Question 2 : How many of you automate the installs?

What is a Design Technology group?

Design Technology is a group of former CAD Designers, CAD managers, BIM managers working for the alignment of the overall corporate goals. The Design Technology group or (DT) need to work very closely with the IT group.

Our goals are to:



What is unique about Design Technology (DT)?

- DT works at a user level to resolve all issues related to project deliverables, workflow or software issues.
- DT makes decisions based on calculated evaluations that IT may not have the expertise or time to assess.
- DT controls licensing management and ensures the company is compliant with all design technology license agreements.
- DT tests and evaluates hardware for its functionality within the area of design, maintaining a fiscal balance between cost and performance.
- DT is a specialized subset of IT that marries management ideology, IT technology and most importantly, user sensitivities.



Why not just leave the deploying of software to your IT department?

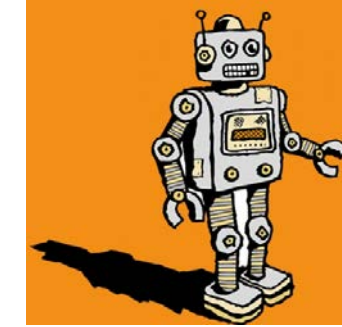
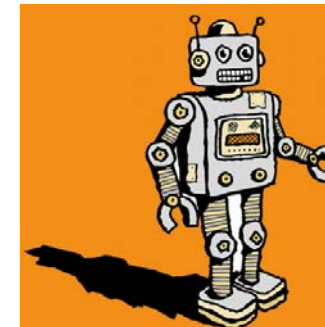
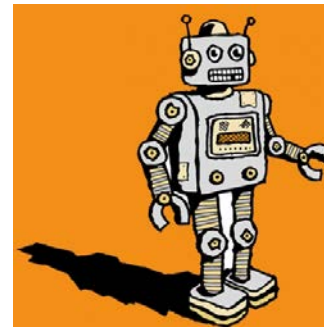
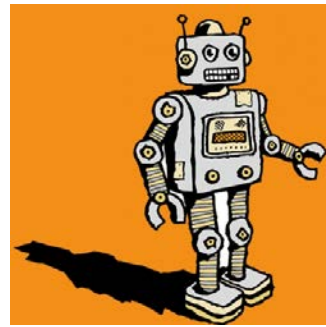
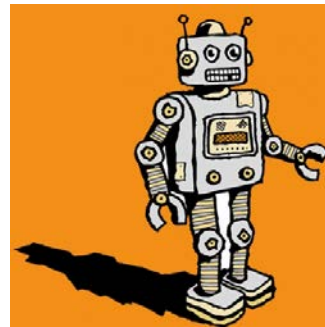
- IT maybe good at installing some software, but DT has a working knowledge of software and the design requirements for projects.
- DT can test the applications and coordinate the best products and add-ons to deploy globally and locally.
- IT may be too busy to deploy critical design software during project ramp up. New versions of Revit may be required on projects that are outside a corporate standard. DT can download, build and deploy with short notice.
- DT proactively monitors patches and hotfixes and can set up pushes resolving critical issues ahead of any impact for users.

Why not just leave the deploying of software to IT?

- Real world example
 - Recent example from our company: we needed to deploy the performance fix for Civil 3d 2014 and 2016 to over 400 computers in many offices and countries. We were able to do this efficiently and quickly using SCCM.

Why use Microsoft System Center Configuration Manager 2012 r2© (SCCM)

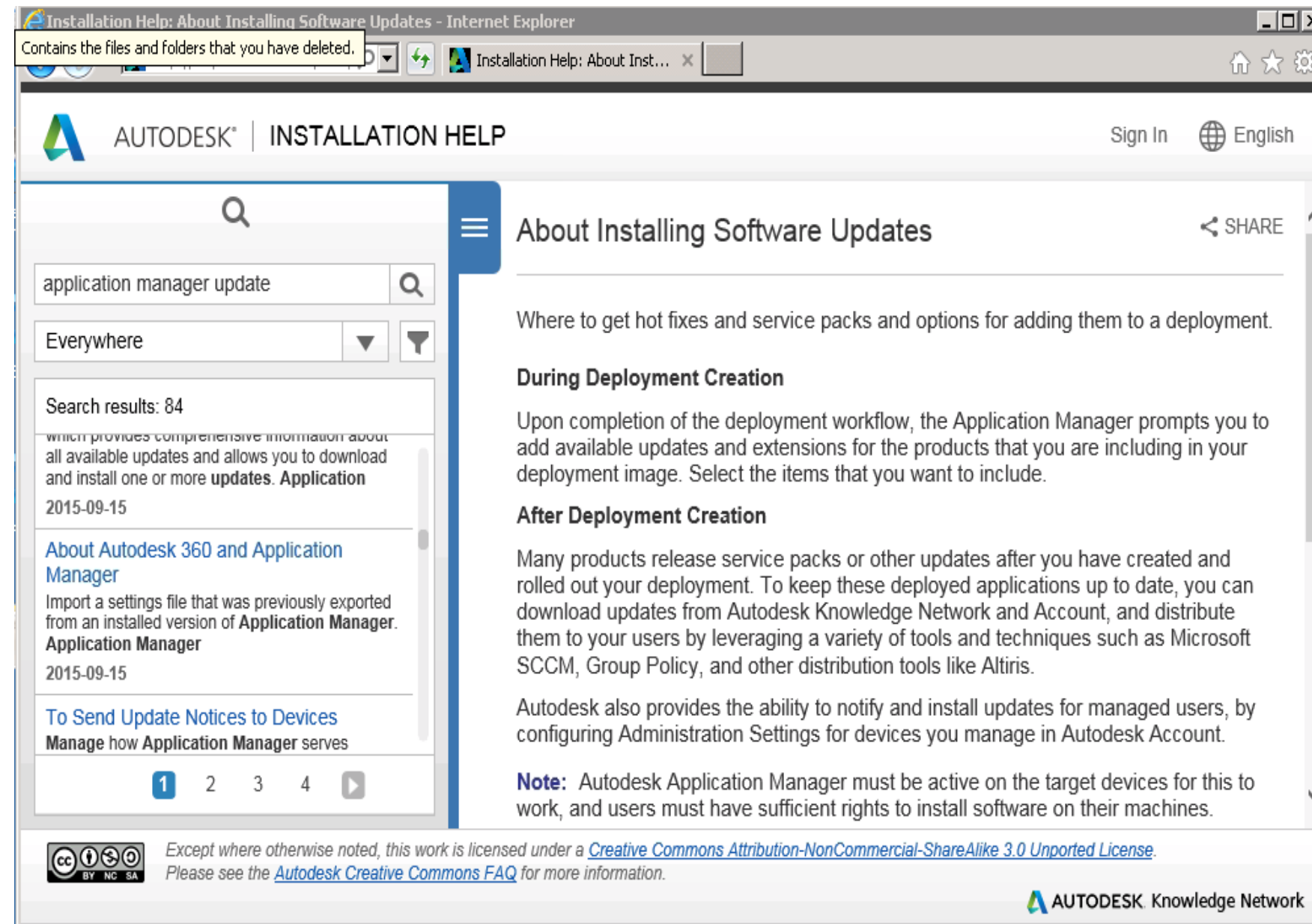
- Faster (about twice as fast to install applications)
- You can push to one or thousands of computers, it is like your own personal robot to do installs



- You can uninstall applications
- You can run reports

Why use Microsoft System Center Configuration Manager 2012 r2© (SCCM)

- Autodesk recommends it.



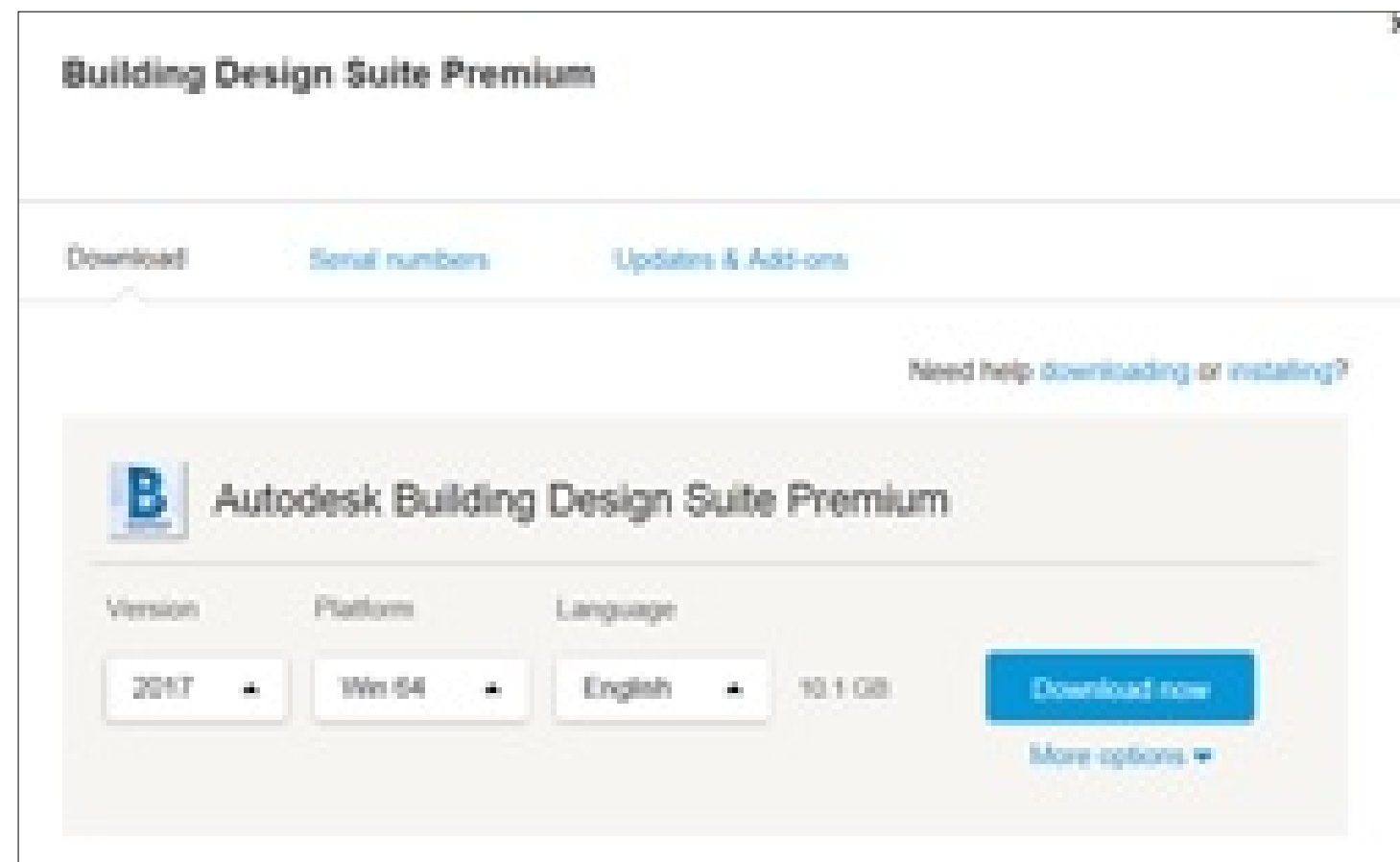
Creation of Autodesk packages in Autodesk 2016/2017 design suite packages.

Login into your subscription account.

<https://accounts.autodesk.com/Logon>

Download your products.

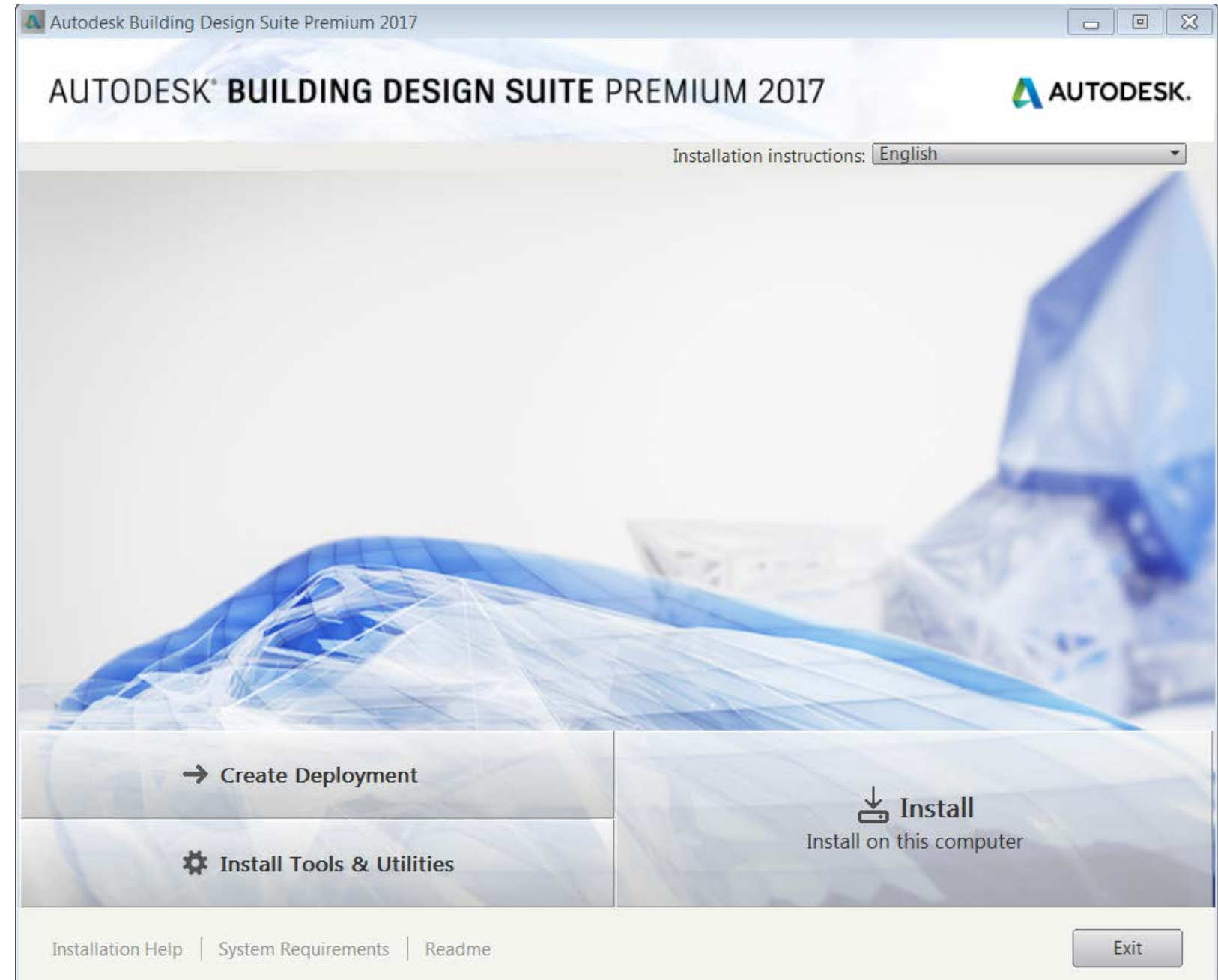
Go to all products & services and select the products to download.



Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

Start creating a deployment

Double click on the downloaded file and start creating the package



Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

Configure deployment

Type in your deployment configure name and administrative path.

Use a Universal Naming

Convention (UNC) or mapped drive for the server location. For example

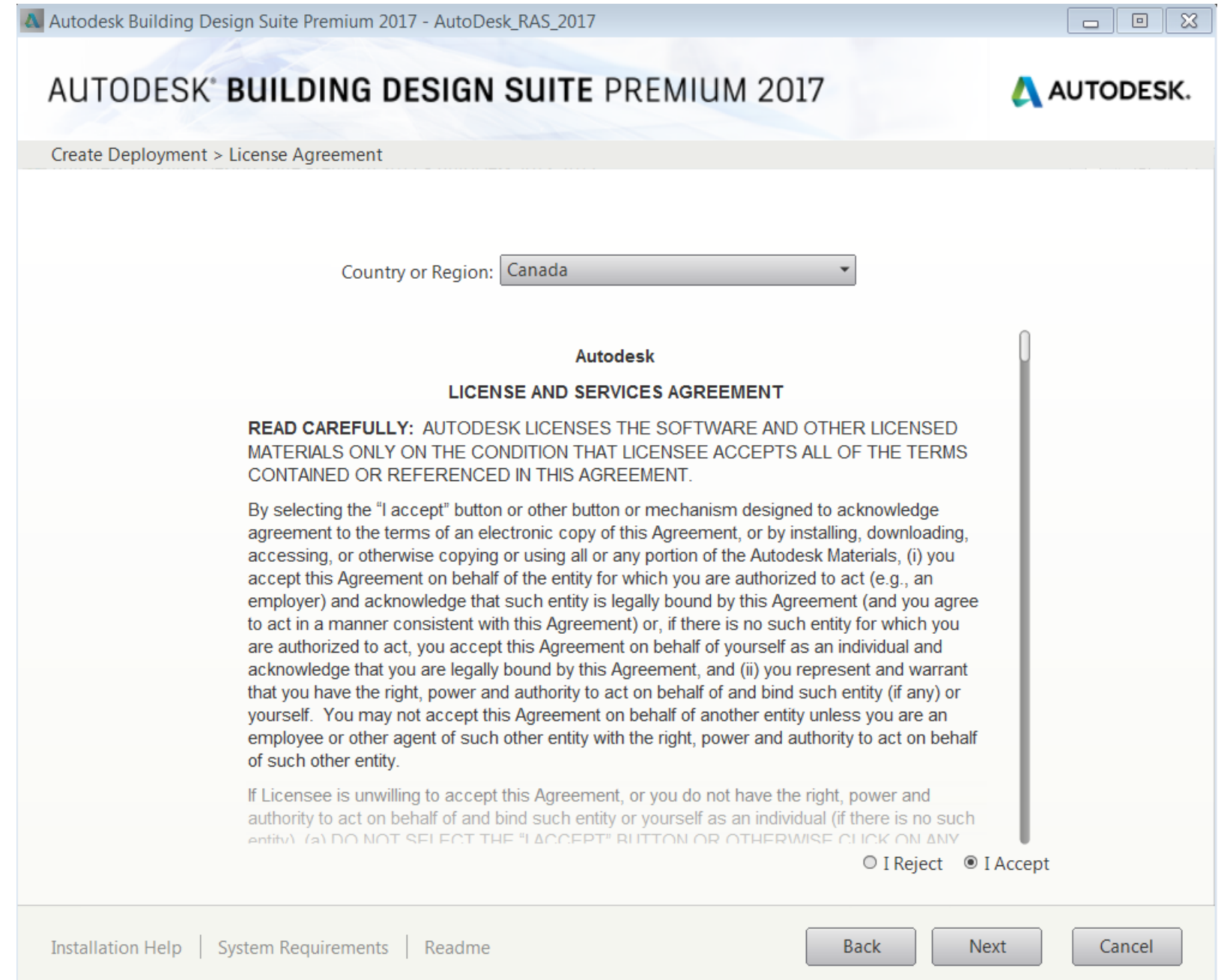
\\server1\deployments\Autodesk_BDSP_2017

The screenshot shows the 'Configure AutoDesk_RAS_2017' window within the Autodesk Building Design Suite Premium 2017 installer. The window title is 'Autodesk Building Design Suite Premium 2017 - AutoDesk_RAS_2017'. The main heading is 'AUTODESK® BUILDING DESIGN SUITE PREMIUM 2017' with the Autodesk logo. Below this is a breadcrumb 'Create Deployment > Configure AutoDesk_RAS_2017'. The 'Administrative Image' section contains a 'Deployment configuration name' field with 'AutoDesk_RAS_2017', an 'Administrative image path' field with 'G:\Deployment\AutoDesk_RAS_2017\', and a 'Browse...' button. The 'Target platform' section has radio buttons for '32-bit' and '64-bit' (selected), and a checked checkbox for 'Include only products required by this deployment configuration'. The 'Installation Settings' section has checked checkboxes for 'Run installations in silent mode' and 'Create a log file in each workstation's temp folder', and an unchecked checkbox for 'Create a network log file:' with a 'Browse...' button. At the bottom are links for 'Installation Help', 'System Requirements', and 'Readme', and buttons for 'Back', 'Next', and 'Cancel'.

Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

License agreement

Select your Country or Region. Read your license and services agreement. Click next



The screenshot shows the 'Autodesk Building Design Suite Premium 2017 - AutoDesk_RAS_2017' window. The title bar includes standard Windows window controls. The main window has a header with the Autodesk logo and the text 'AUTODESK® BUILDING DESIGN SUITE PREMIUM 2017'. Below the header is a breadcrumb trail: 'Create Deployment > License Agreement'. A dropdown menu for 'Country or Region' is set to 'Canada'. The main content area is titled 'Autodesk LICENSE AND SERVICES AGREEMENT'. It contains a 'READ CAREFULLY' section followed by the full text of the license agreement. At the bottom right of the agreement text are two radio buttons: 'I Reject' and 'I Accept', with 'I Accept' being selected. At the very bottom of the window is a footer bar with links for 'Installation Help', 'System Requirements', and 'Readme', and three buttons: 'Back', 'Next', and 'Cancel'.

Autodesk Building Design Suite Premium 2017 - AutoDesk_RAS_2017

AUTODESK® BUILDING DESIGN SUITE PREMIUM 2017

Create Deployment > License Agreement

Country or Region: Canada

Autodesk

LICENSE AND SERVICES AGREEMENT

READ CAREFULLY: AUTODESK LICENSES THE SOFTWARE AND OTHER LICENSED MATERIALS ONLY ON THE CONDITION THAT LICENSEE ACCEPTS ALL OF THE TERMS CONTAINED OR REFERENCED IN THIS AGREEMENT.

By selecting the "I accept" button or other button or mechanism designed to acknowledge agreement to the terms of an electronic copy of this Agreement, or by installing, downloading, accessing, or otherwise copying or using all or any portion of the Autodesk Materials, (i) you accept this Agreement on behalf of the entity for which you are authorized to act (e.g., an employer) and acknowledge that such entity is legally bound by this Agreement (and you agree to act in a manner consistent with this Agreement) or, if there is no such entity for which you are authorized to act, you accept this Agreement on behalf of yourself as an individual and acknowledge that you are legally bound by this Agreement, and (ii) you represent and warrant that you have the right, power and authority to act on behalf of and bind such entity (if any) or yourself. You may not accept this Agreement on behalf of another entity unless you are an employee or other agent of such other entity with the right, power and authority to act on behalf of such other entity.

If Licensee is unwilling to accept this Agreement, or you do not have the right, power and authority to act on behalf of and bind such entity or yourself as an individual (if there is no such entity), (a) DO NOT SELECT THE "I ACCEPT" BUTTON OR OTHERWISE CLICK ON ANY

☐ I Reject ☒ I Accept

Installation Help | System Requirements | Readme

Back Next Cancel

Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

Product Information

Select license access type.
Enter your license info and
product key.
Add your required servers
if it is a network license.

The screenshot shows the 'Product Information' window for Autodesk Building Design Suite Premium 2017. The window title is 'Autodesk Building Design Suite Premium 2017 - AutoDesk_RAS_2017'. The main heading is 'AUTODESK® BUILDING DESIGN SUITE PREMIUM 2017' with the Autodesk logo. Below the heading is a breadcrumb 'Create Deployment > Product Information'.

License Access

- ☐ Autodesk ID
Use a license assigned to a user
- ☐ Serial Number (Stand-Alone)
Use a license assigned to a...
- ☒ Network
Use a license from my network

Specify a License...

Serial number: 397 - [REDACTED] ✓ Product key: 765I1 ✓

Select your license server model:
Distributed License Server

Network License Manager runs on multiple servers. Enter the name of one of these servers. Click Add to add this server to the server pool. Add other server names to the pool as required.

Server name:
[Text input field]

[Browse...] [Add]

Server pool:

- 10.100.100.102
- swt017506vm1ms

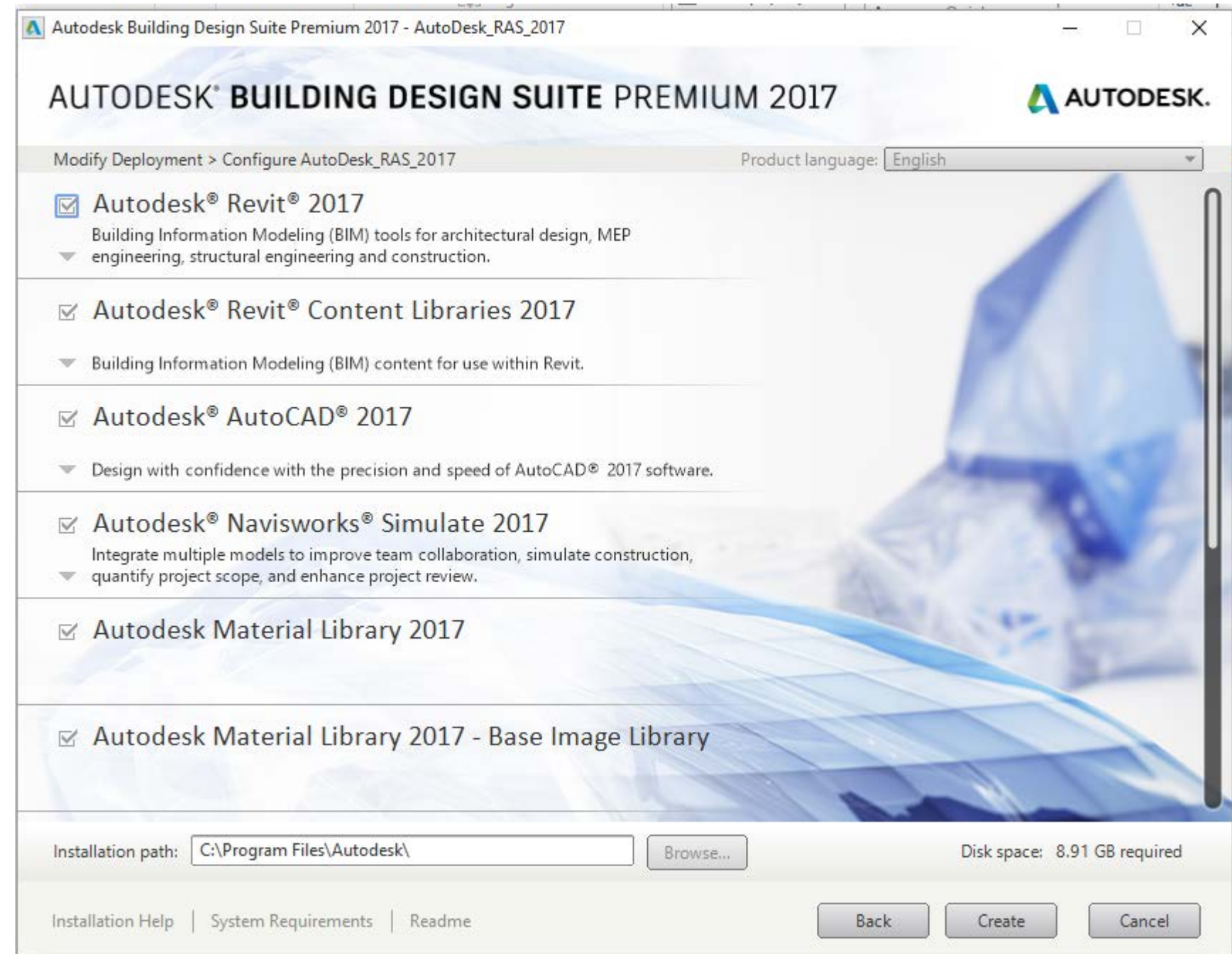
[Move Up] [Move Down] [Remove]

[Installation Help] [System Requirements] [Readme] [Back] [Next] [Cancel]

Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

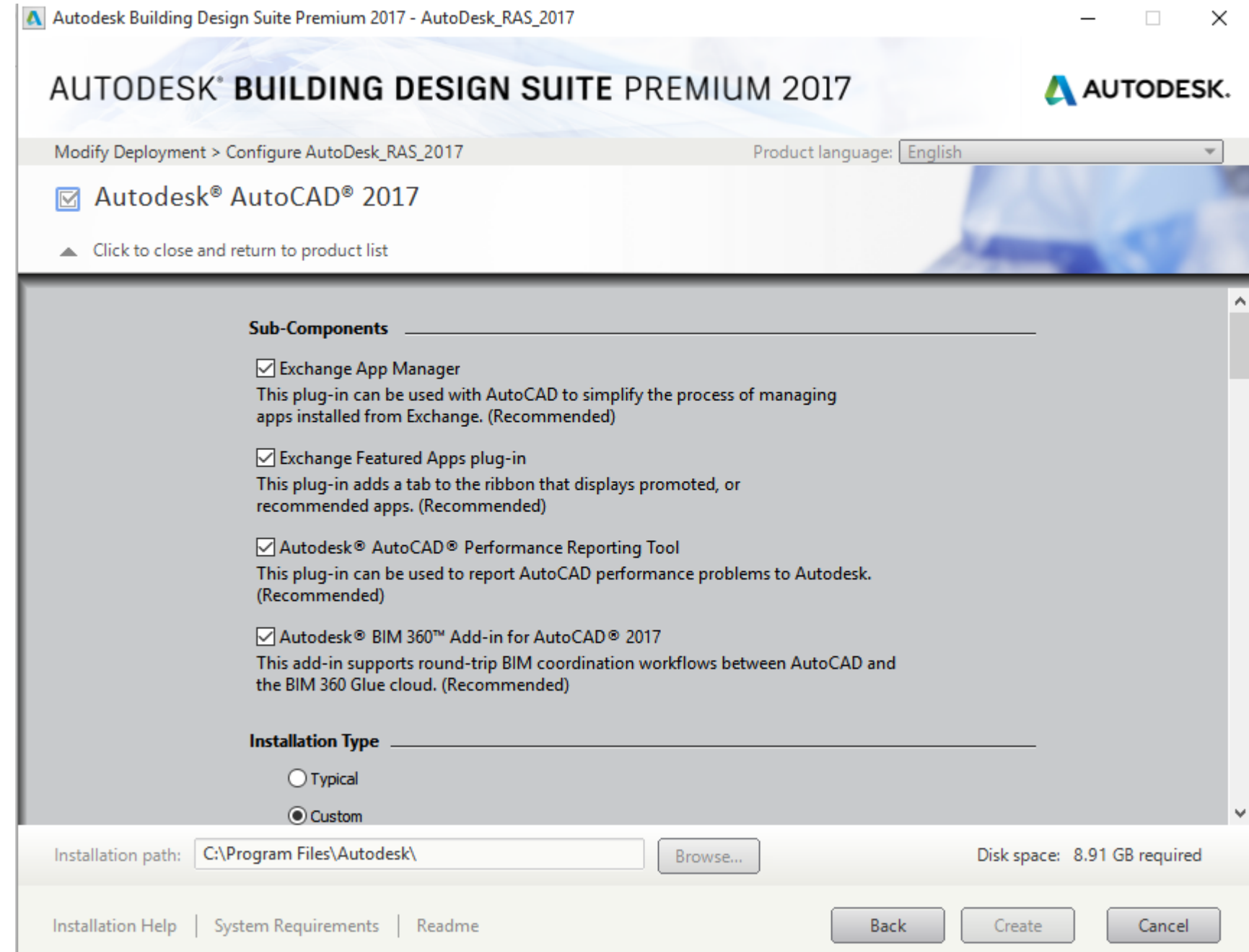
Modify deployment

Select and configure
your products to be
installed



Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

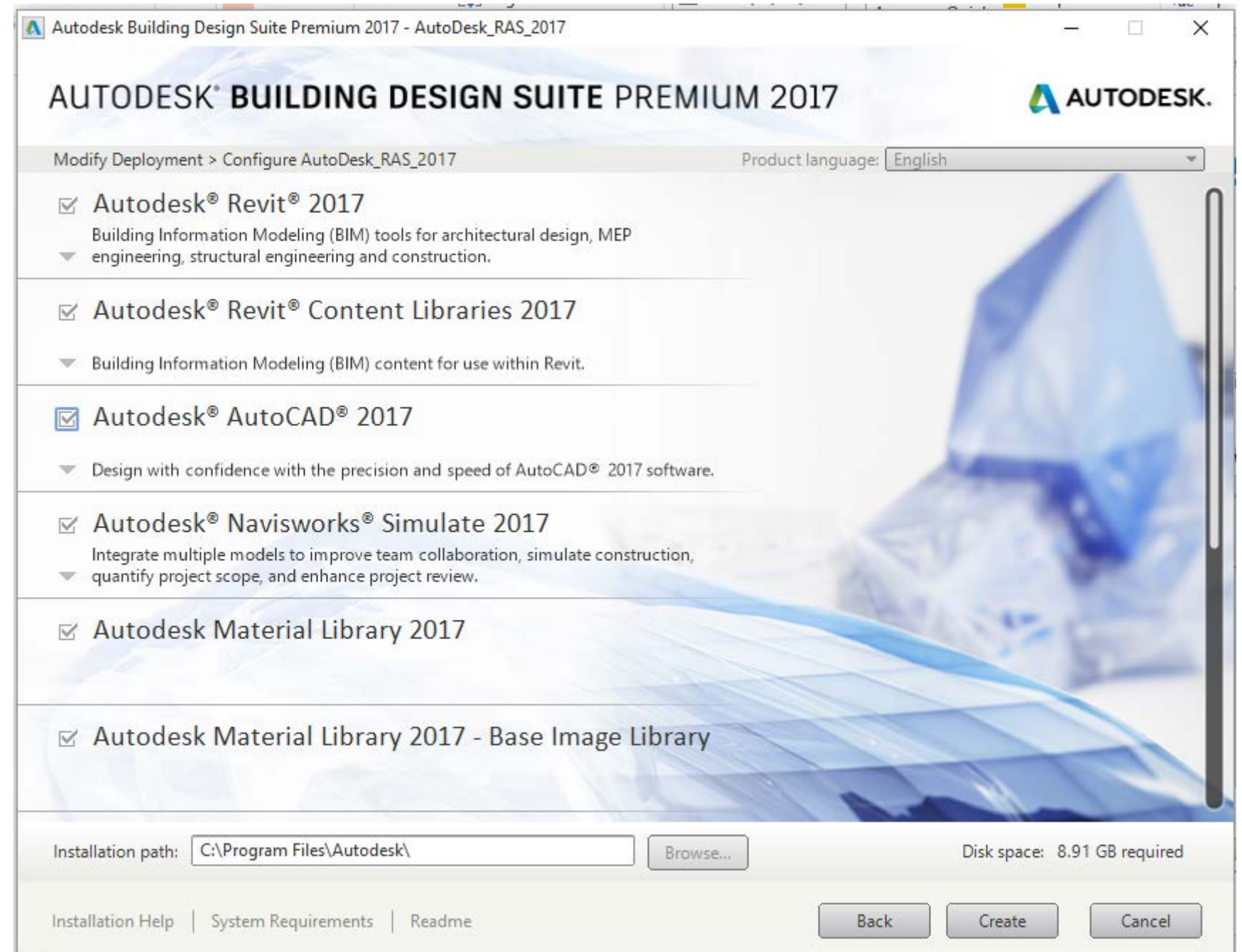
Configure AutoCAD



Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

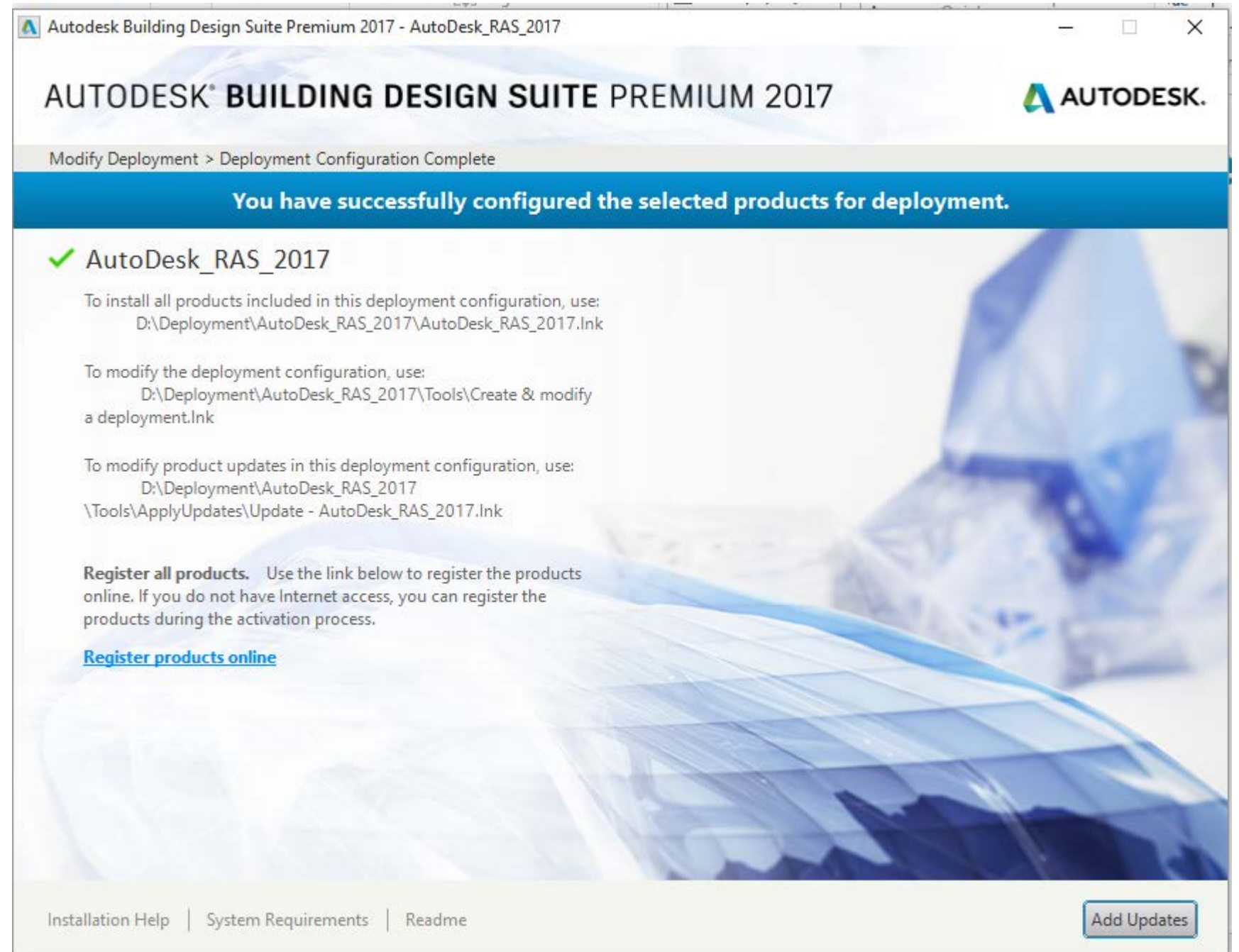
Create the deployment

Click create to build your deployment.



Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

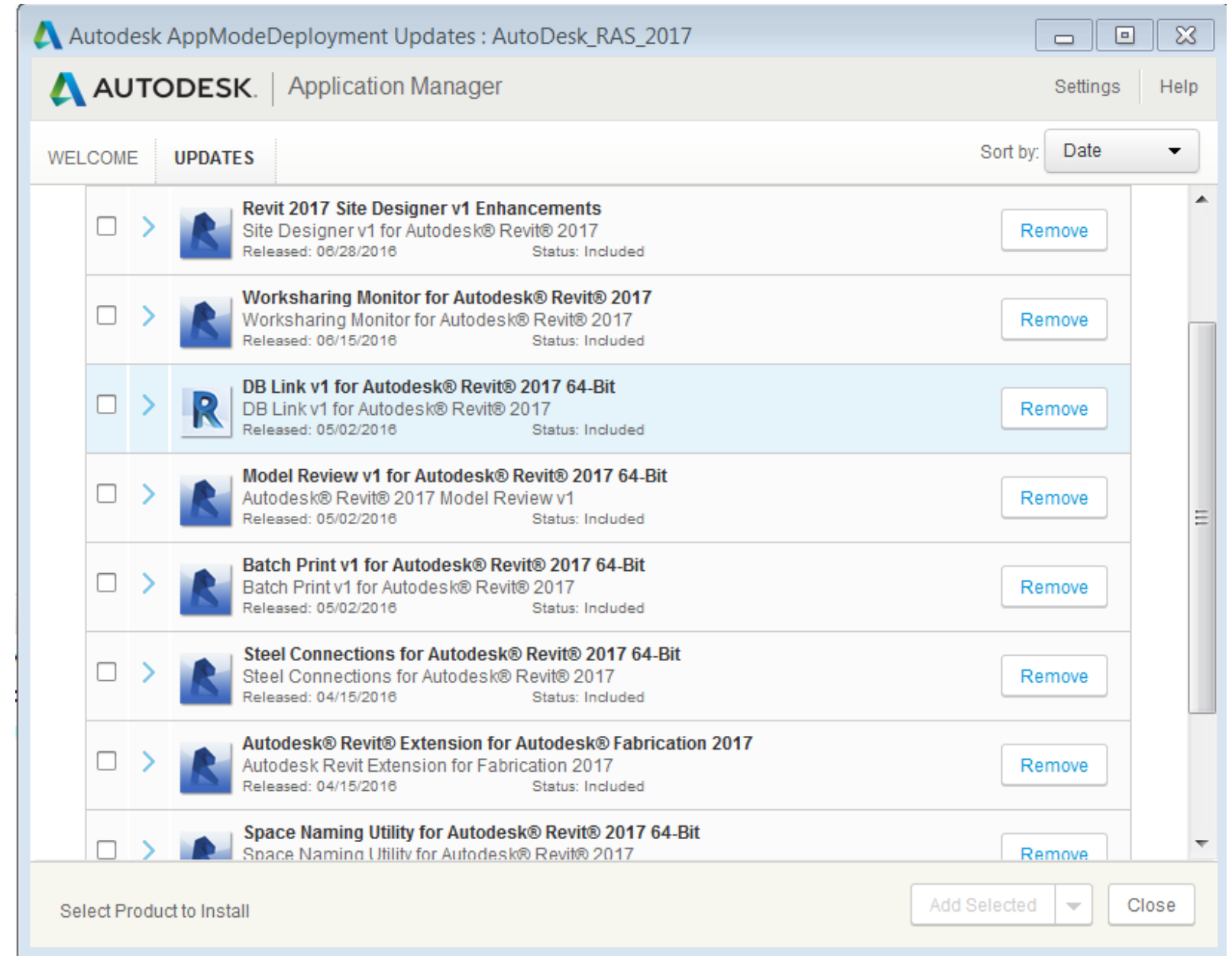
Deployment is finished.



Creation of Autodesk packages in Autodesk 2016/2017 design suite packages

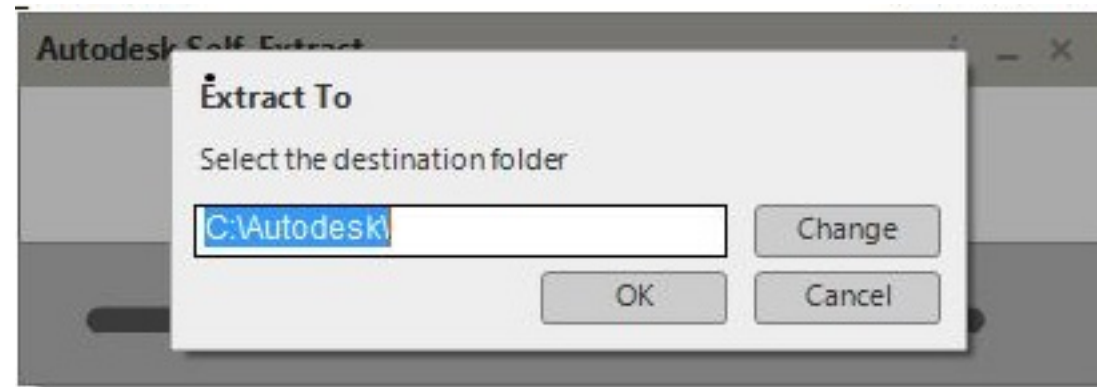
Add updates as required.

Updates can be added later using a command script.



Creation of command or batch files to install Autodesk or third party applications

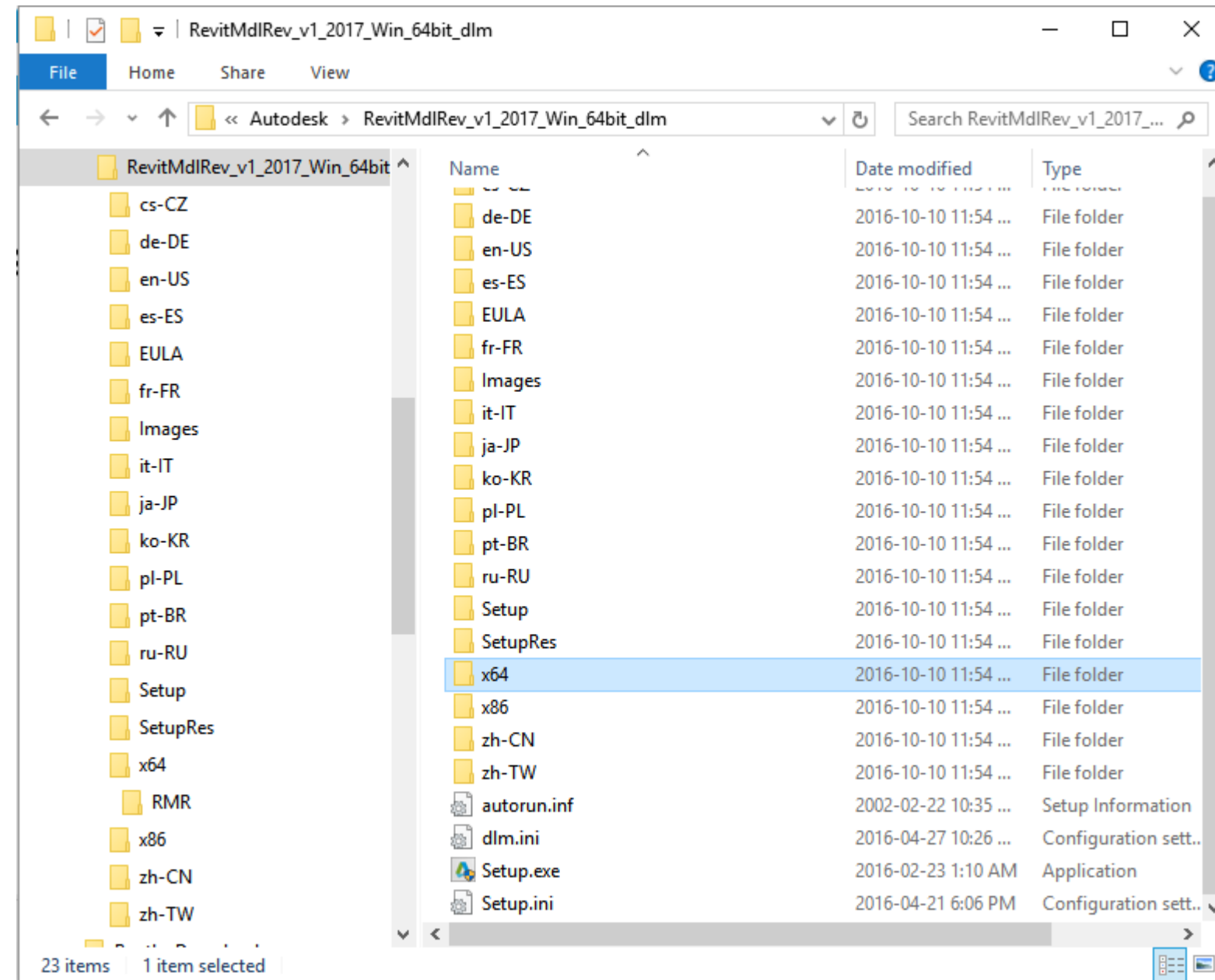
- You can create simple batch files in notepad to deploy add-ons, third party apps, service packs and customization.
- Download the add-on and extract to c drive or server location.



- This example is Autodesk Revit model Review 2017.

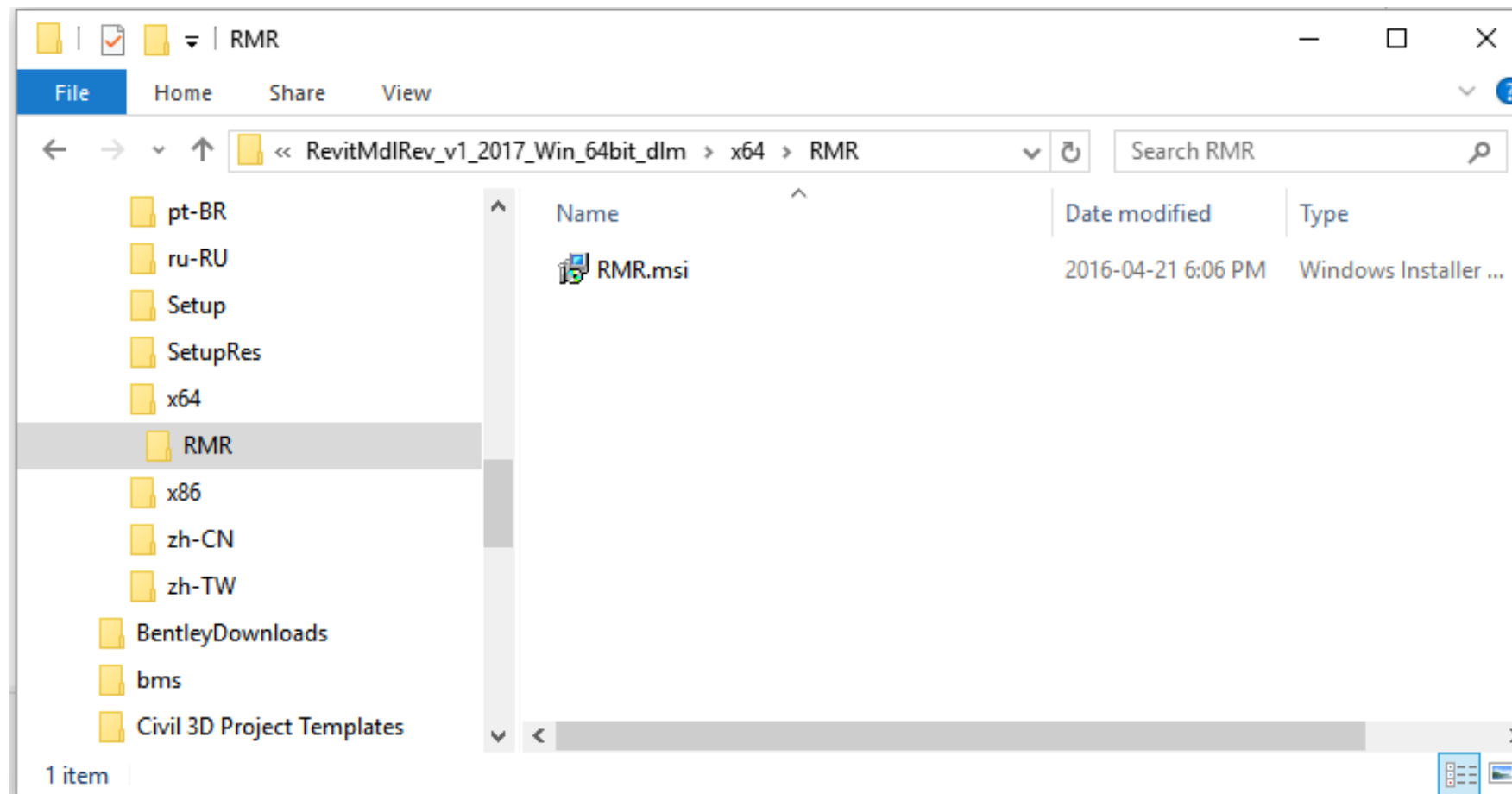
Creation of command or batch files to install Autodesk or third party applications

- Review setup files and find msi files.



Creation of command or batch files to install Autodesk or third party applications

- Typically msi files for add-ons are located in the x64 folder for Autodesk add-ons.




Creation of command or batch files to install Autodesk or third party applications

- Create your Command or batch files in Notepad or notepad plus. Make sure you extension is either .cmd or .bat.
- Example 1 Batch file created in notepad to install Revit add-on

```
msiexec /i
```

```
"\\server1\deployments\AutoDesk_BDSP_2017\Revit_Addon\RevitMdlRev_v1_2017_  
Win_64bit_dlm\x64\RMR.msi" /qn
```


Creation of command or batch files to install Autodesk or third party applications



A screenshot of a Notepad window titled "AU 2016_IT18200_Revit-addon_sample.cmd - Notepad". The window has a menu bar with "File", "Edit", "Format", "View", and "Help". The text area contains a single line of command: `msiexec /i "\\server1\deployments\AutoDesk_BDSP_2017\Revit_Addon\RevitMdlRev_v1_2017_Win_64bit_dlm\x64\RMR.msi" /qn`. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

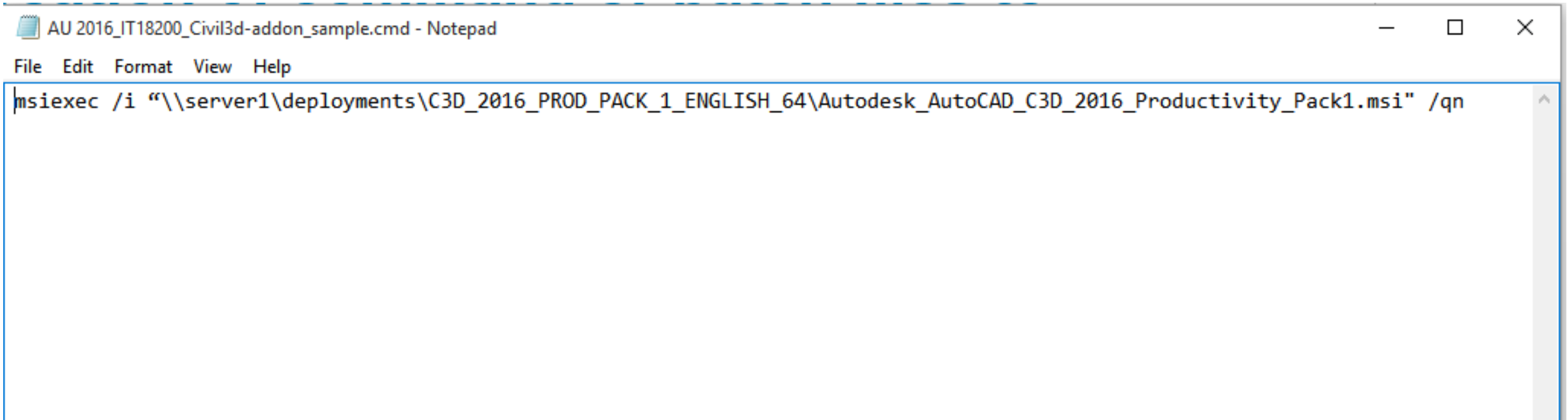
```
msiexec /i "\\server1\deployments\AutoDesk_BDSP_2017\Revit_Addon\RevitMdlRev_v1_2017_Win_64bit_dlm\x64\RMR.msi" /qn
```

AU 2016_IT18200_Revit-addon_sample.cmd

Creation of command or batch files to install Autodesk or third party applications

- Example 2 Batch file created in notepad to install Civil 3d add-on
- Extract C3D_2016_PROD_PACK_1_ENGLISH_64.exe to folder \\Img\x64\Components\ with WinRAR or 7-Zip
- `msiexec /i`
“\\server1\deployments\C3D_2016_PROD_PACK_1_ENGLISH_64\Autodesk_AutoCAD_C3D_2016_Productivity_Pack1.msi” /qn

Creation of command or batch files to install Autodesk or third party applications



A screenshot of a Notepad window titled "AU 2016_IT18200_Civil3d-addon_sample.cmd - Notepad". The window has a menu bar with "File", "Edit", "Format", "View", and "Help". The text area contains the command: `msiexec /i "\\server1\deployments\C3D_2016_PROD_PACK_1_ENGLISH_64\Autodesk_AutoCAD_C3D_2016_Productivity_Pack1.msi" /qn`. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

```
msiexec /i "\\server1\deployments\C3D_2016_PROD_PACK_1_ENGLISH_64\Autodesk_AutoCAD_C3D_2016_Productivity_Pack1.msi" /qn
```

AU 2016_IT18200_Civil3d-addon_sample.cmd

Creation of command or batch files to install Autodesk or third party applications

Commonly used MSIEXEC command line switches:

Switch	Effect
--------	--------

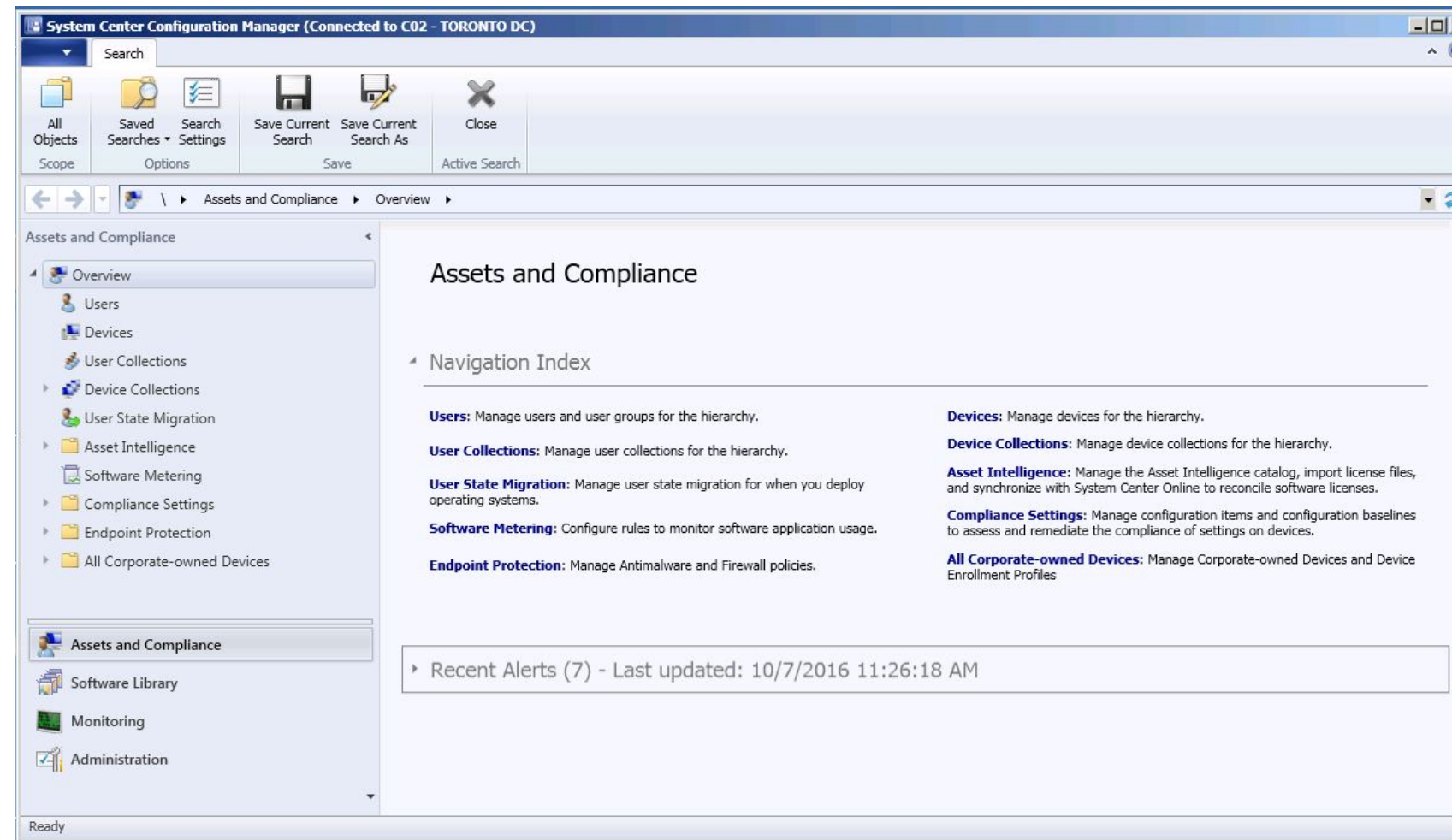
/qn	Performs the install/patch with no user interface (silent install).
-----	---

/qb	Quiet with a file installation progress bar during installation/service pack update.
-----	--

/qr	Quiet with a progress thermometer on the standard wizard dialog (no questions)
-----	--

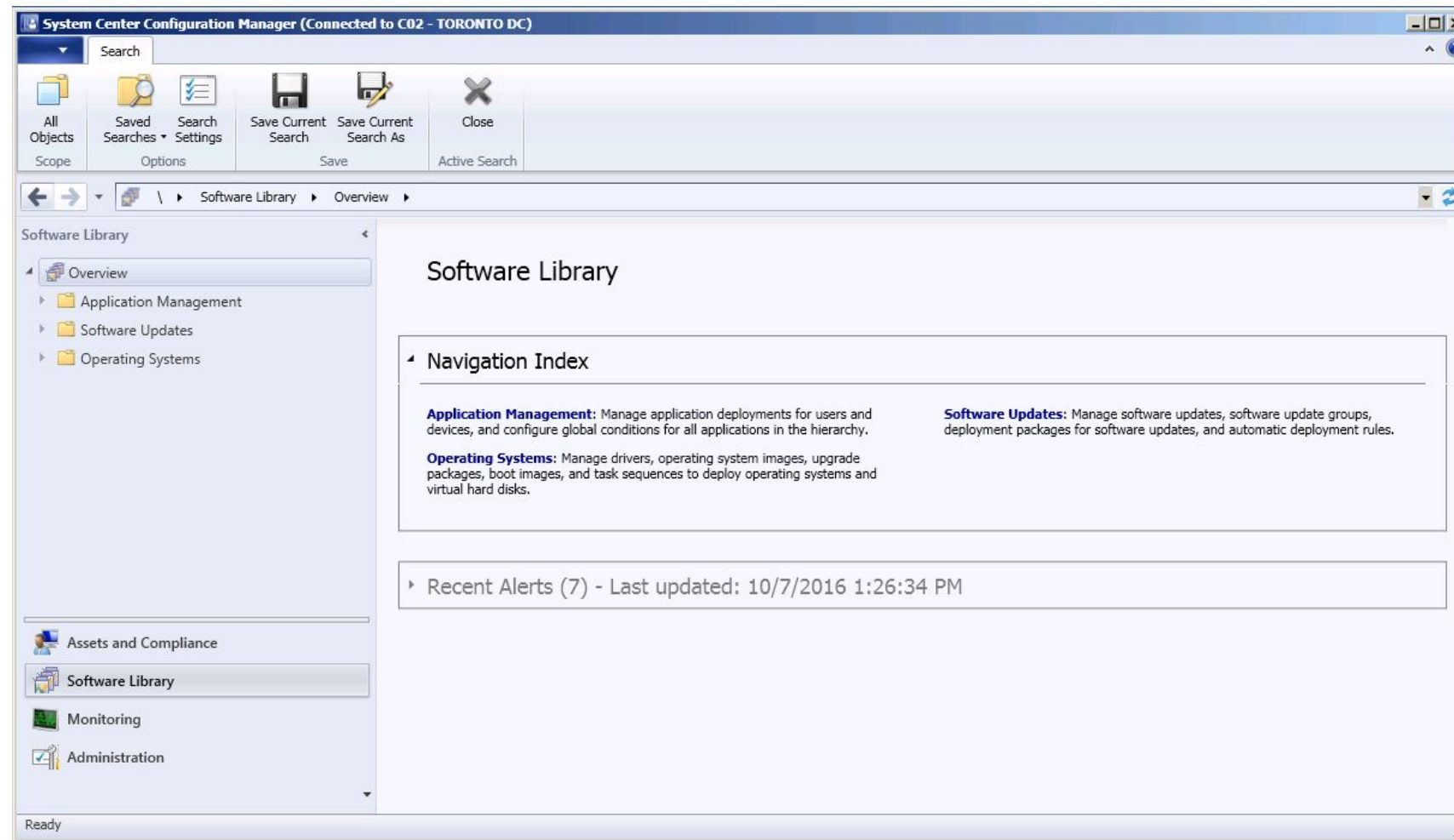
SCCM packages creation

Run SCCM console from workstation or server



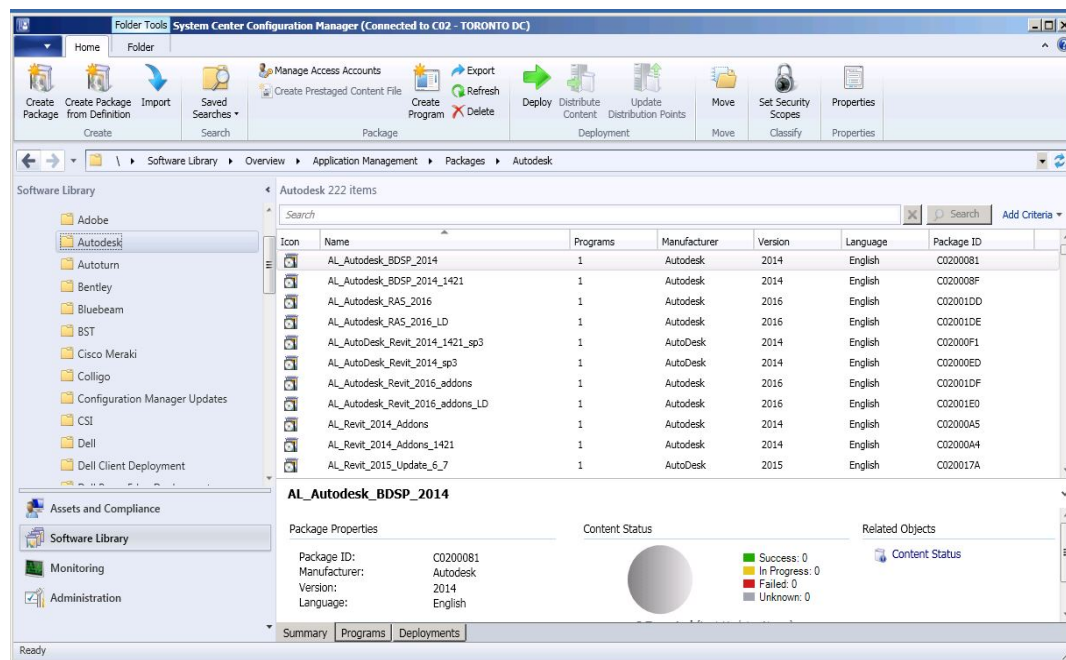
SCCM packages creation

Open Software Library

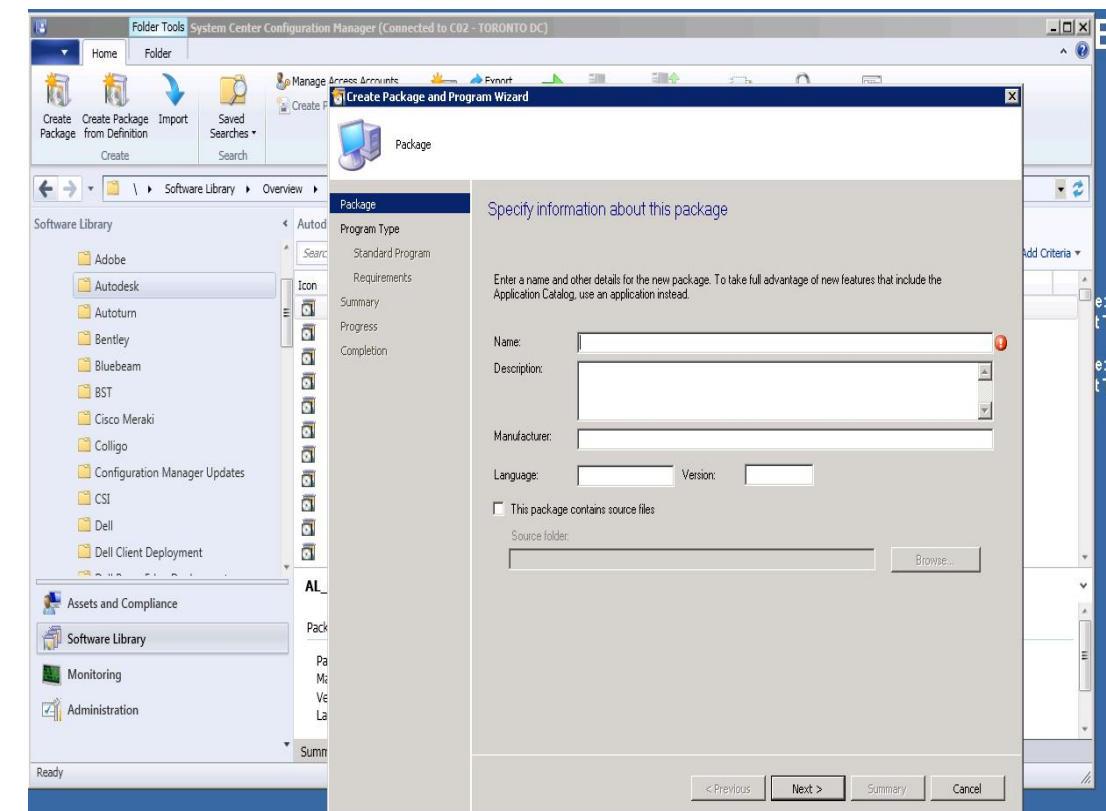


SCCM packages creation

Create Autodesk folder and select folder



Click create package



SCCM packages creation

Specify the information about the package

Create Package and Program Wizard

Package

Package

Program Type

Standard Program

Requirements

Summary

Progress

Completion

Specify information about this package

Enter a name and other details for the new package. To take full advantage of new features that include the Application Catalog, use an application instead.

Name: AU_Autodesk_BDSP_2017

Description: Autodesk Building Design Suite Premium - Revit, AutoCAD, Navisworks Simulate

Manufacturer: Autodesk

Language: English Version: 2017

☐ This package contains source files

Source folder: Browse...

< Previous Next > Summary Cancel

SCCM packages creation

Input the information about this standard program.

Since Autodesk software are generally deployed silently to multiple computers at the same time, the software needs to run silent (Hidden). Whether or not a user is logged on, and with administrator rights.

Create Package and Program Wizard

Standard Program

Package
Program Type
Standard Program
Requirements
Summary
Progress
Completion

Specify information about this standard program

Name: AU_Autodesk_BDSP_2017

Command line: lage en-us\Img\AutoDesk_RAS_2017.ini /Trial /language en-us Browse...

Startup folder: \\server1\Deployment\AutoDesk_RAS_2017\Img

Run: Normal

Program can run: Only when a user is logged on

Run mode: Run with user's rights

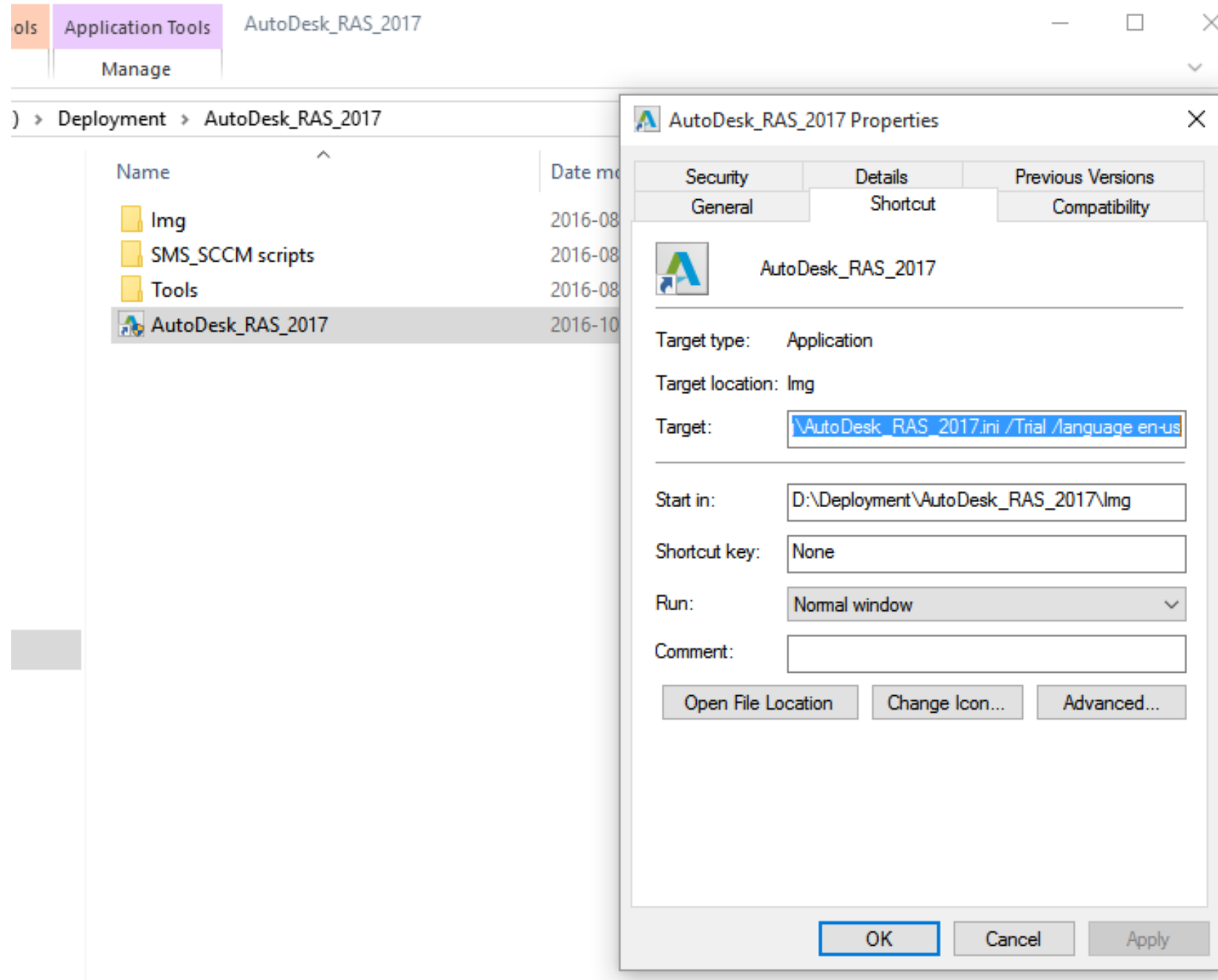
☒ Allow users to view and interact with the program installation

Drive mode: Runs with UNC name

☐ Reconnect to distribution point at log on

< Previous Next > Summary Cancel

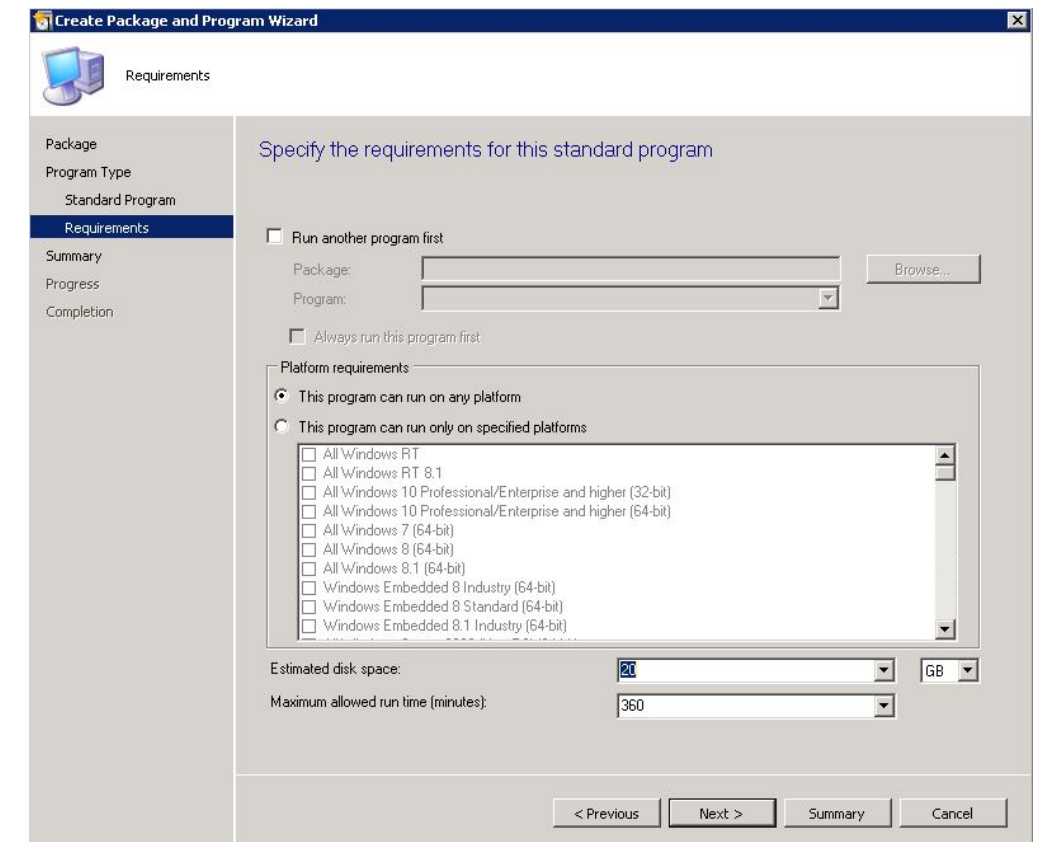
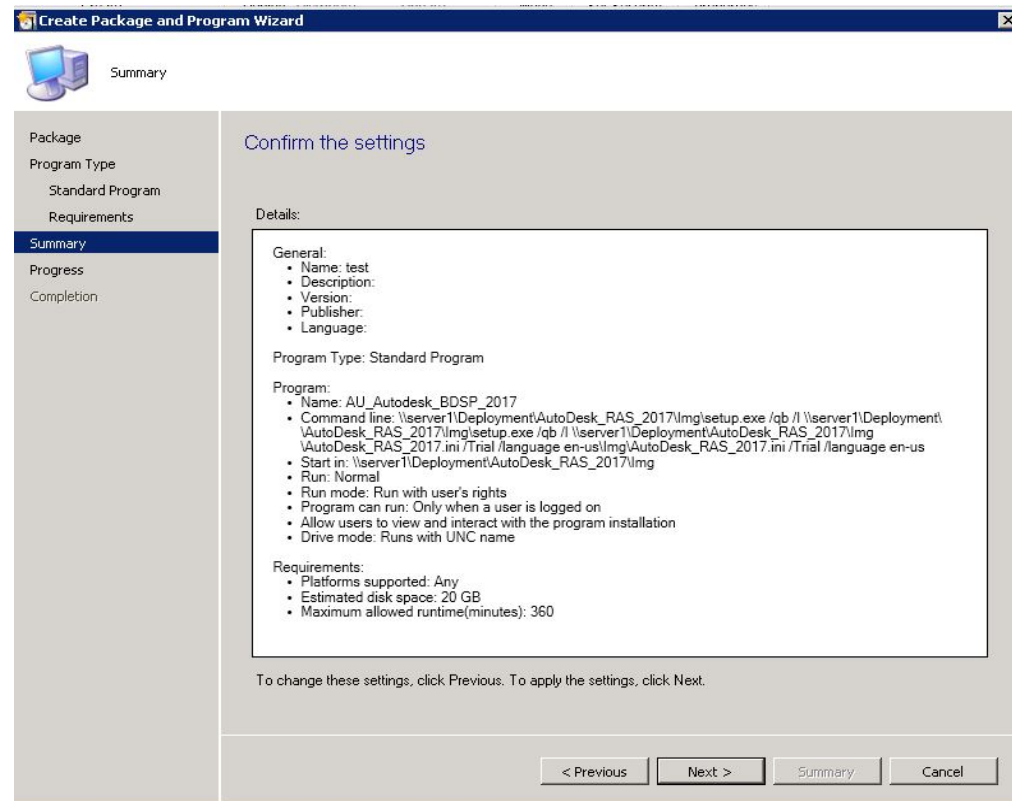
SCCM packages creation



Copy command switching
and startup folder from the
Autodesk deployment
shortcut

SCCM packages creation

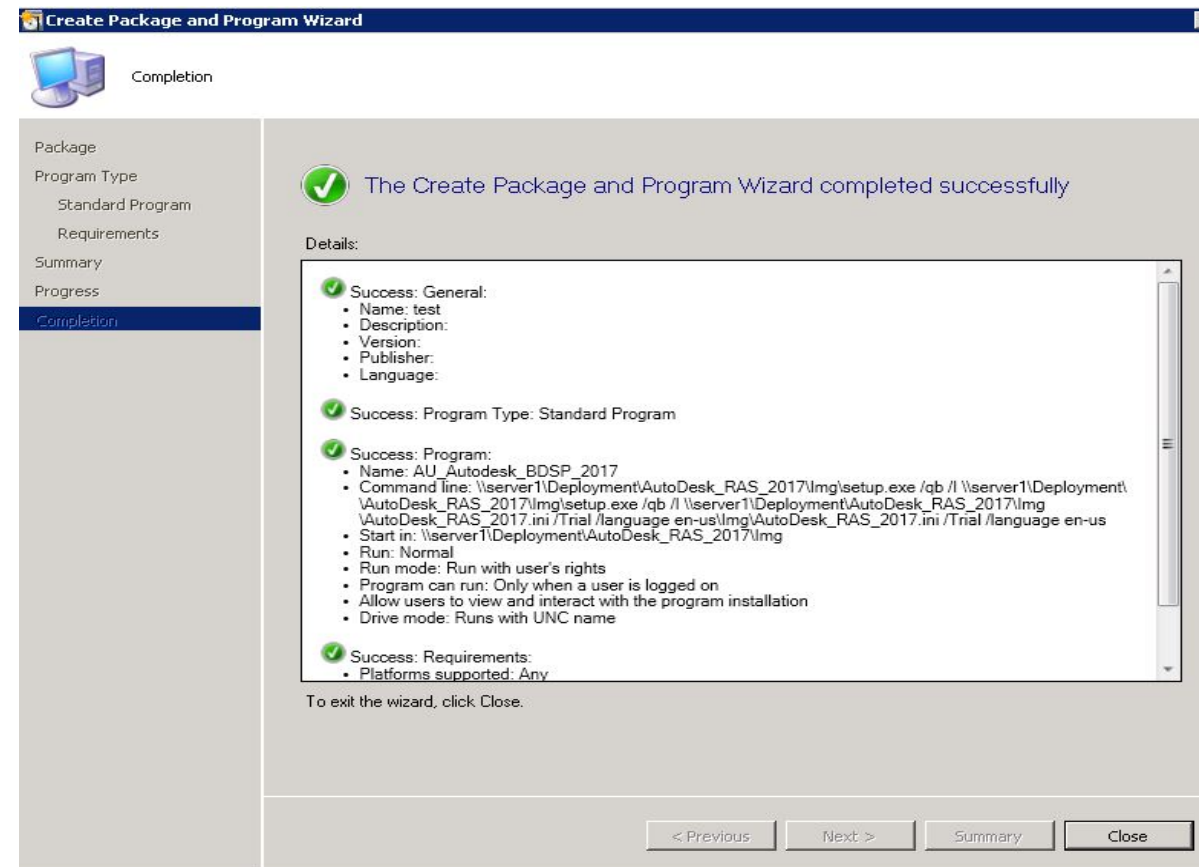
Specify the requirements for this standard program



Confirm the settings and click next.

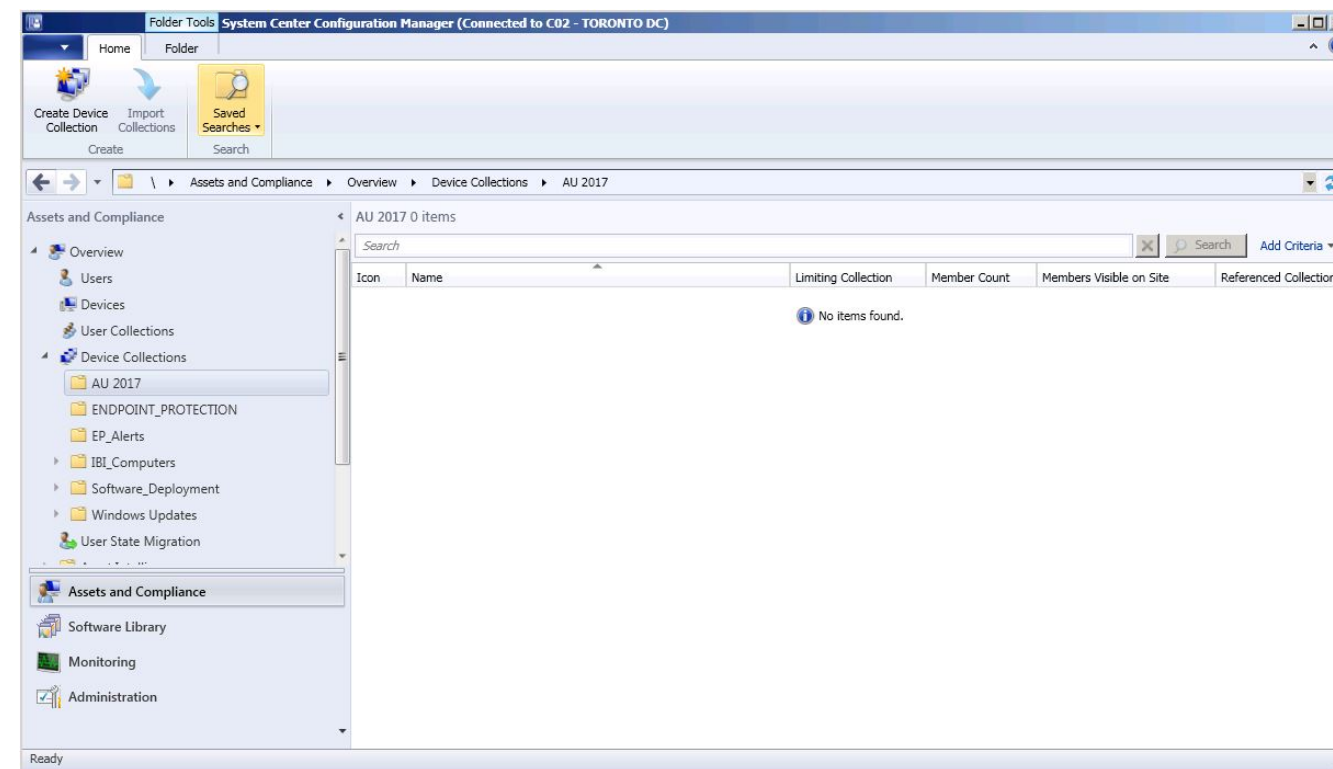
SCCM packages creation

Click close and the package and program wizard is completed.



SCCM packages creation

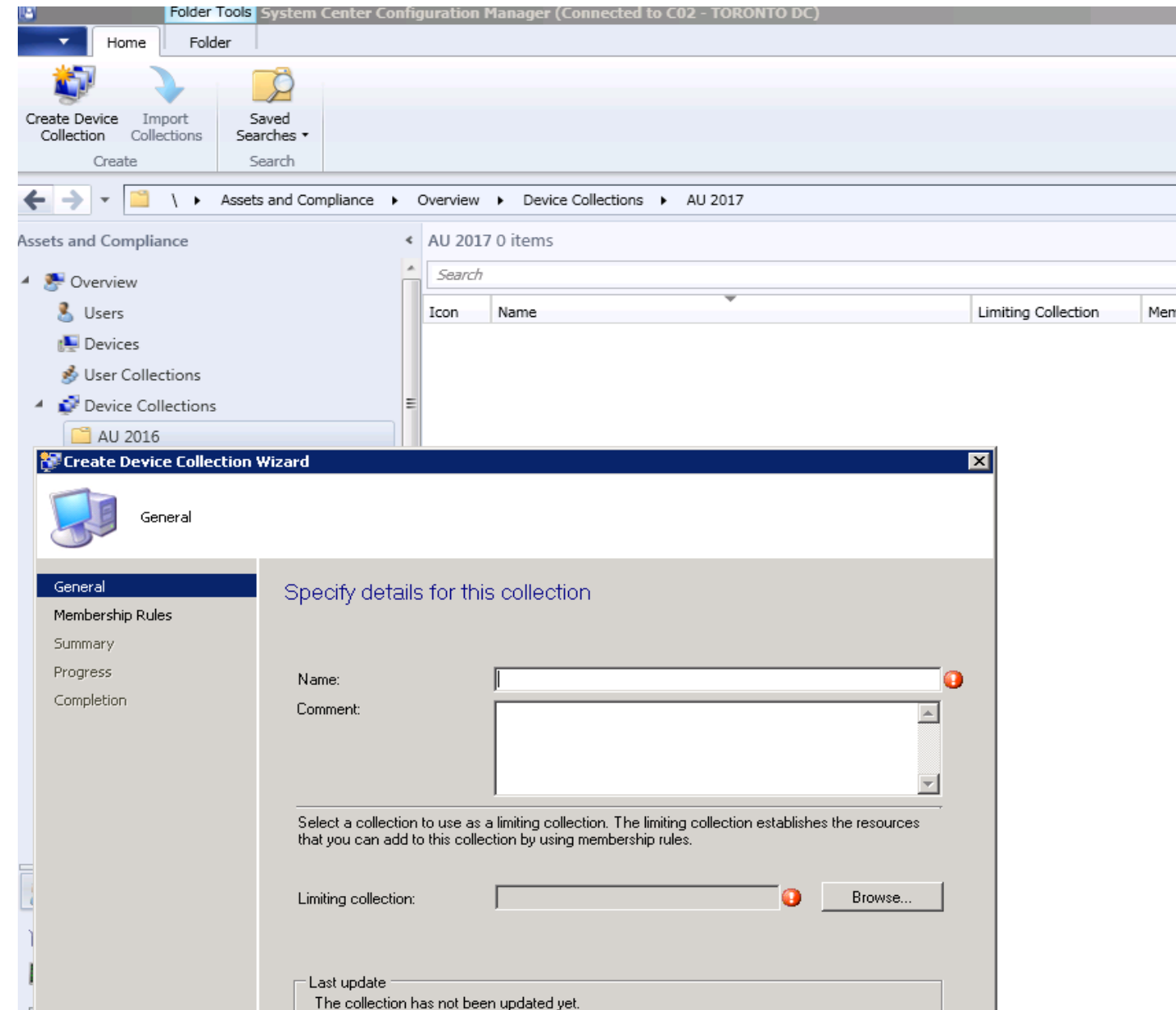
Create new device collection



Navigate to Assets and compliance-
Overview-Device collection –
Software deployment – Au 2017

SCCM packages creation

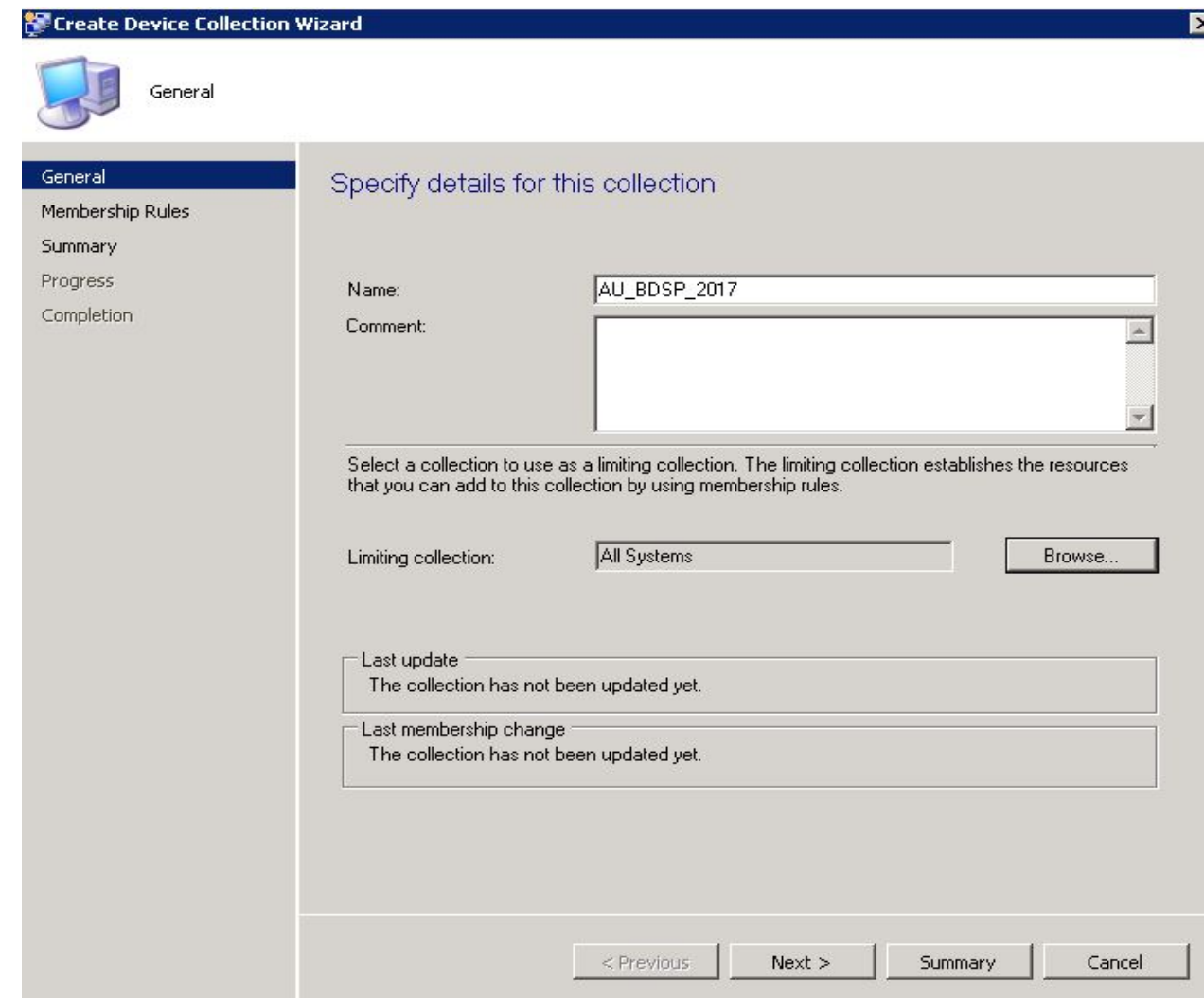
Create new device collection



SCCM packages creation

Create new device collection

Specify details for this collection – Limit collection as necessary.



The screenshot shows the 'Create Device Collection Wizard' window. The 'General' tab is selected in the left-hand navigation pane. The main area is titled 'Specify details for this collection'. It contains the following fields and controls:

- Name:** A text box containing 'AU_BDSP_2017'.
- Comment:** A multi-line text box.
- Limiting collection:** A dropdown menu currently showing 'All Systems', with a 'Browse...' button to its right.
- Last update:** A text box containing 'The collection has not been updated yet.'
- Last membership change:** A text box containing 'The collection has not been updated yet.'

At the bottom of the wizard, there are four buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'.

SCCM packages creation

Define membership rules for the collection. Add direct rule or query rules

Membership Rules

Define membership rules for this collection

Membership rules determine the resources that are included in the collection when it updates. You can use membership rules to add a specific object or a set of objects from a query. The collection membership can also include or exclude other collections. Membership rules can add only those objects that are members of the limiting collection.

Membership rules:

Rule Name	Type	Collection Id
There are no items to show in this view.		

☒ Use incremental updates for this collection

An incremental update periodically evaluates new resources and then adds resources that qualify to this collection. This option does not require you to schedule a full update for this collection.

☒ Schedule a full update on this collection

Occurs every 7 days effective 10/7/2016 3:03 PM

< Previous Next > Summary Cancel

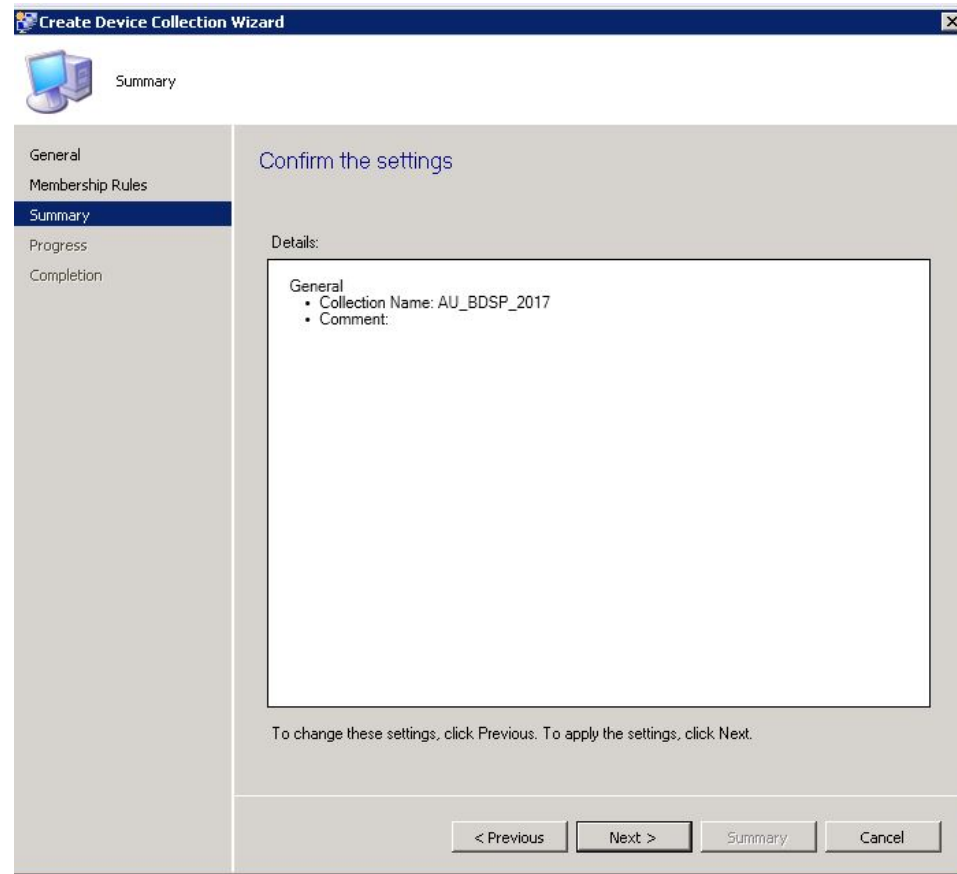
Example query rule to find computers with Revit 2014, so newer products can be installed

Query Language – Query Statement

select

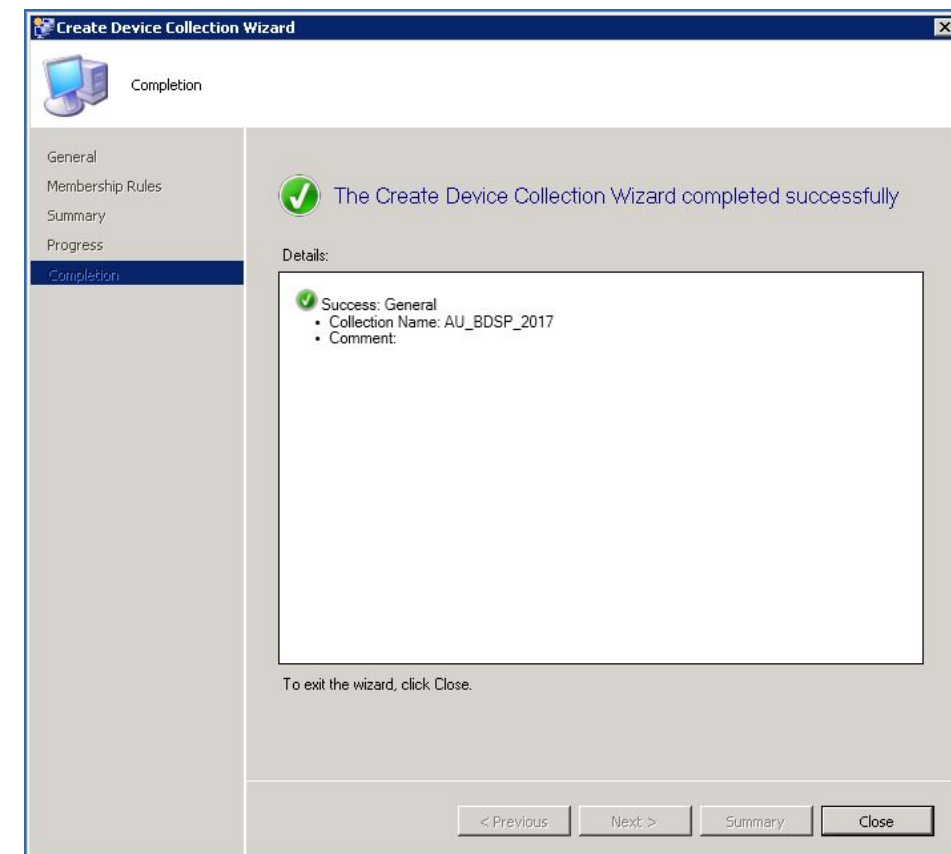
```
SMS_R_SYSTEM.ResourceID,SMS_R_SYSTEM.ResourceType,SMS_R_SYSTEM.Name,SMS_R_SY  
STEM.SMSUniqueIdentifier,SMS_R_SYSTEM.ResourceDomainORWorkgroup,SMS_R_SYSTEM.Client  
from SMS_R_System inner join SMS_G_System_INSTALLED_SOFTWARE on  
SMS_G_System_INSTALLED_SOFTWARE.ResourceId = SMS_R_System.ResourceId where  
SMS_G_System_INSTALLED_SOFTWARE.ARPDisplayName like "Revit 2014%"
```

SCCM packages creation



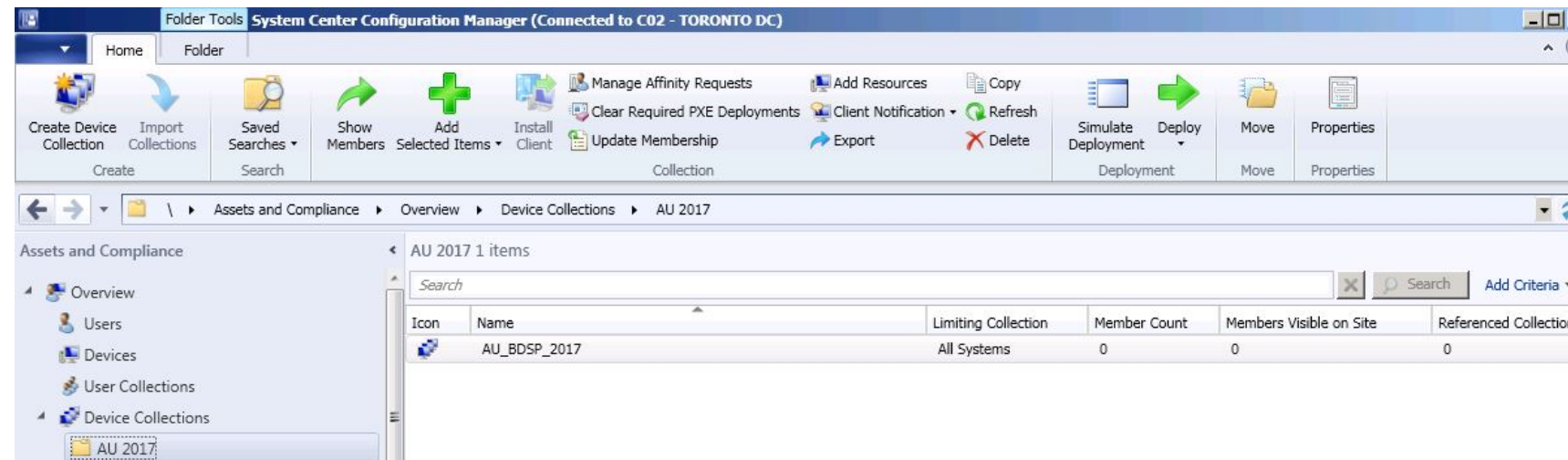
Confirm the settings – click next.

Collection is complete.



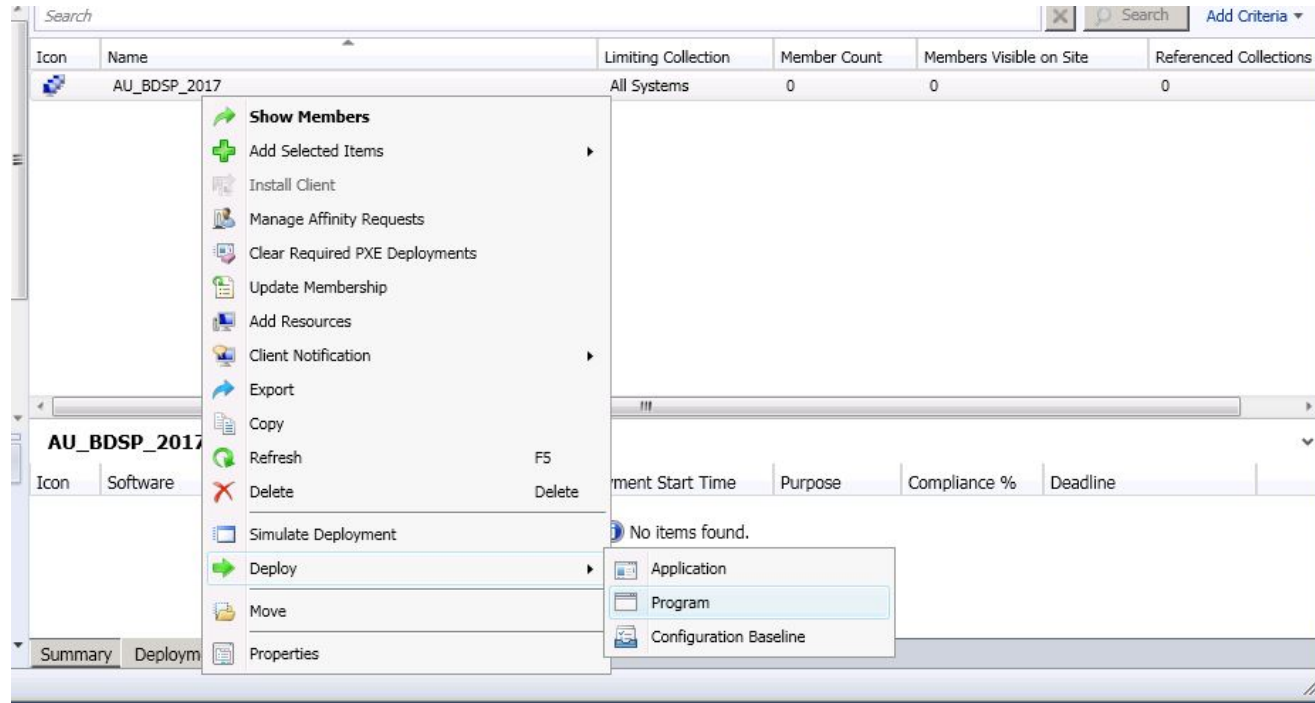
SCCM packages creation

Collection is now displayed



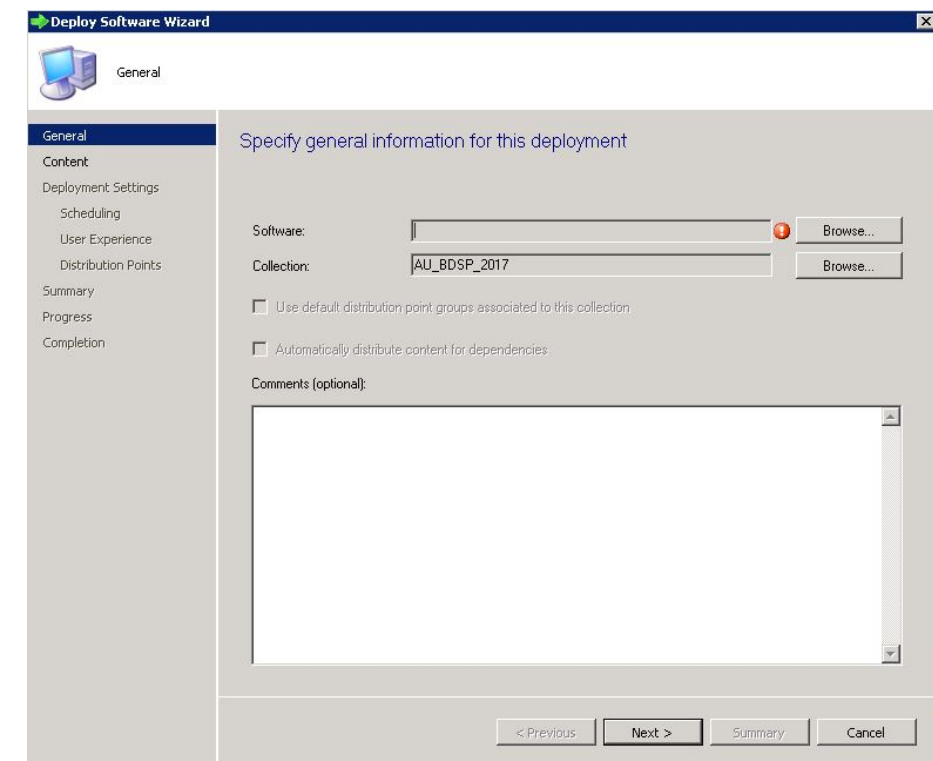
SCCM packages creation

Deploy your program



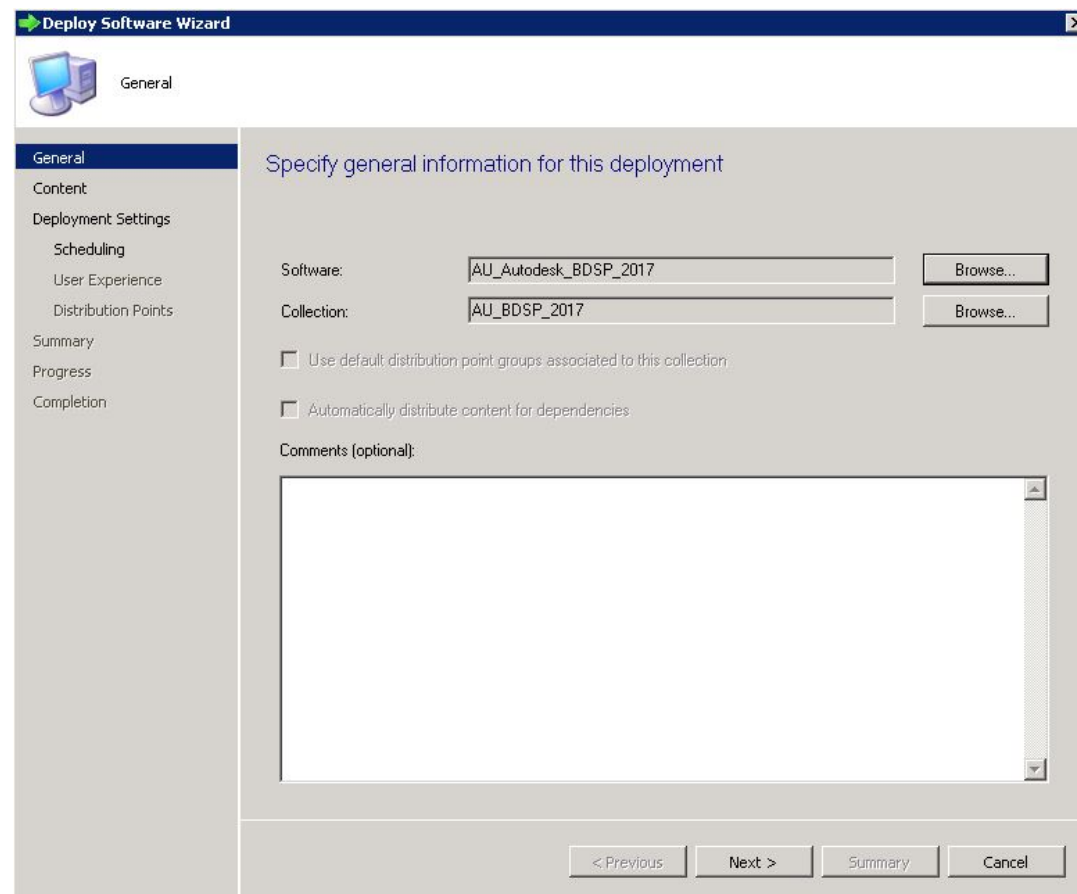
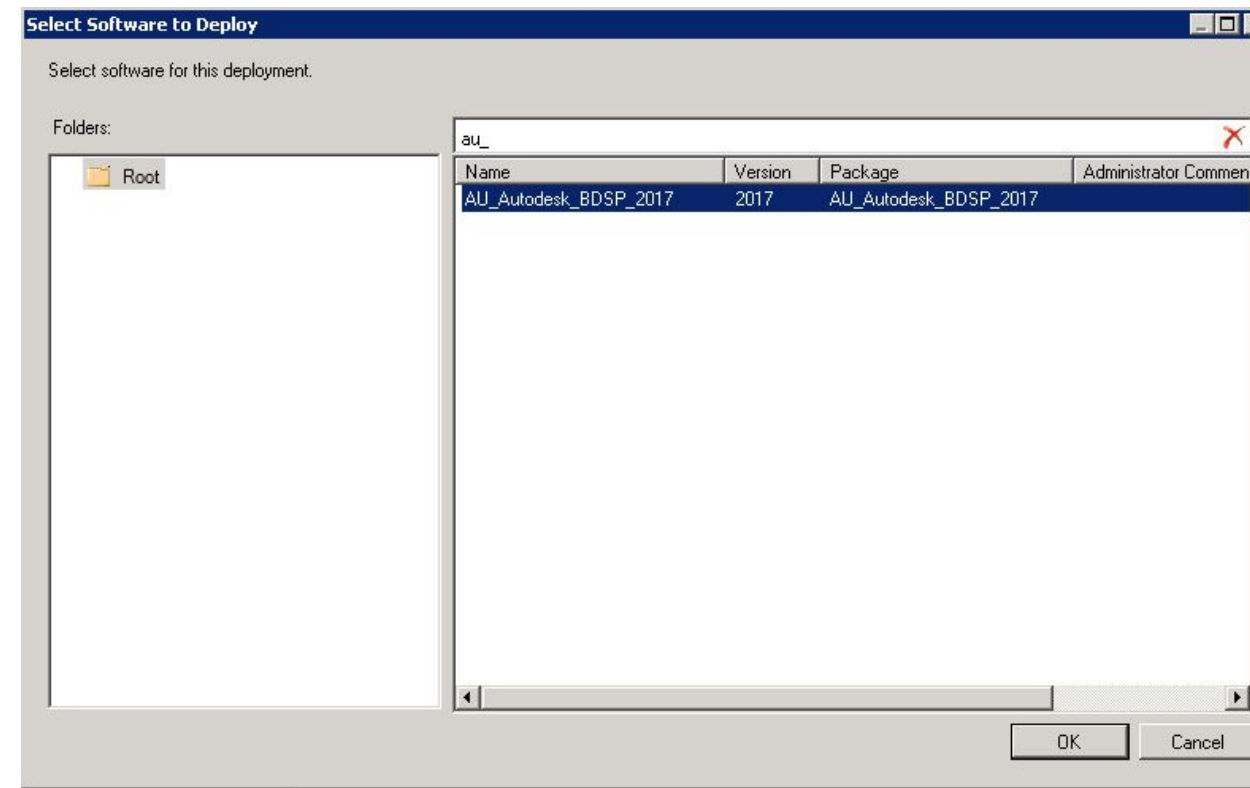
Deploy your program –
right click on the
deployment

Specify general information
for this deployment



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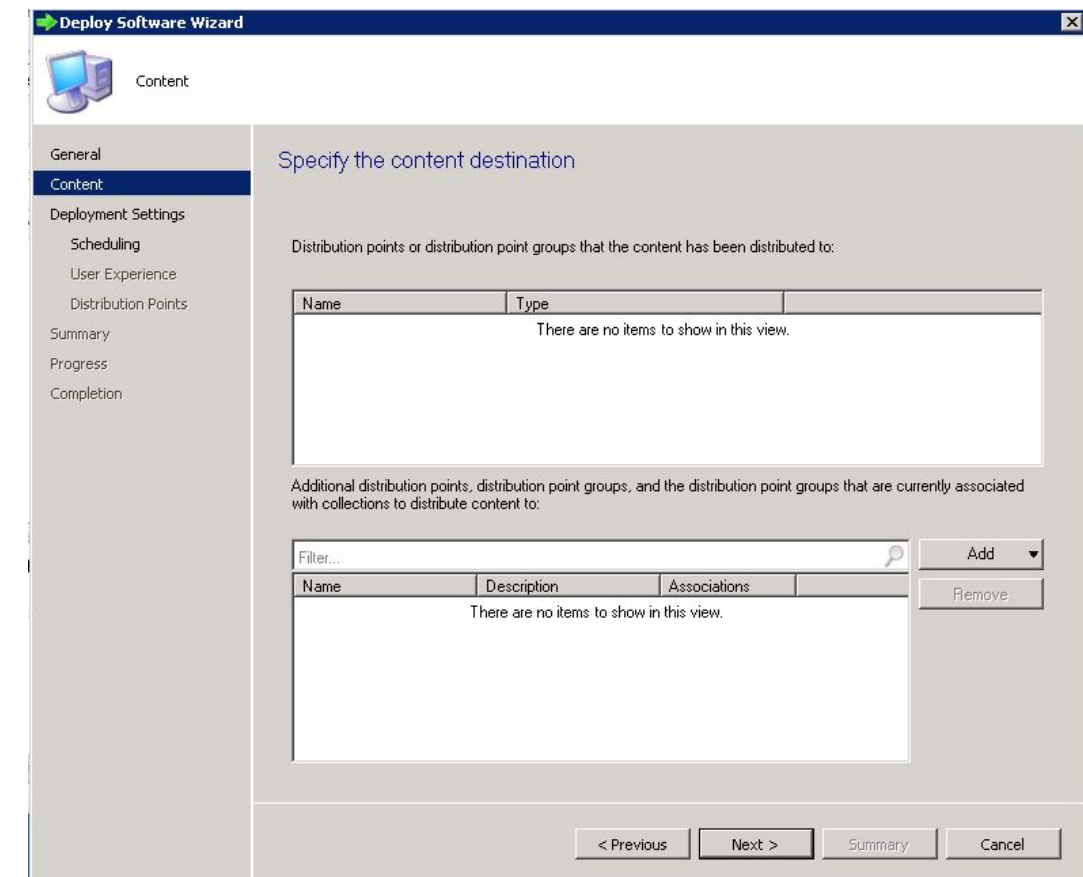
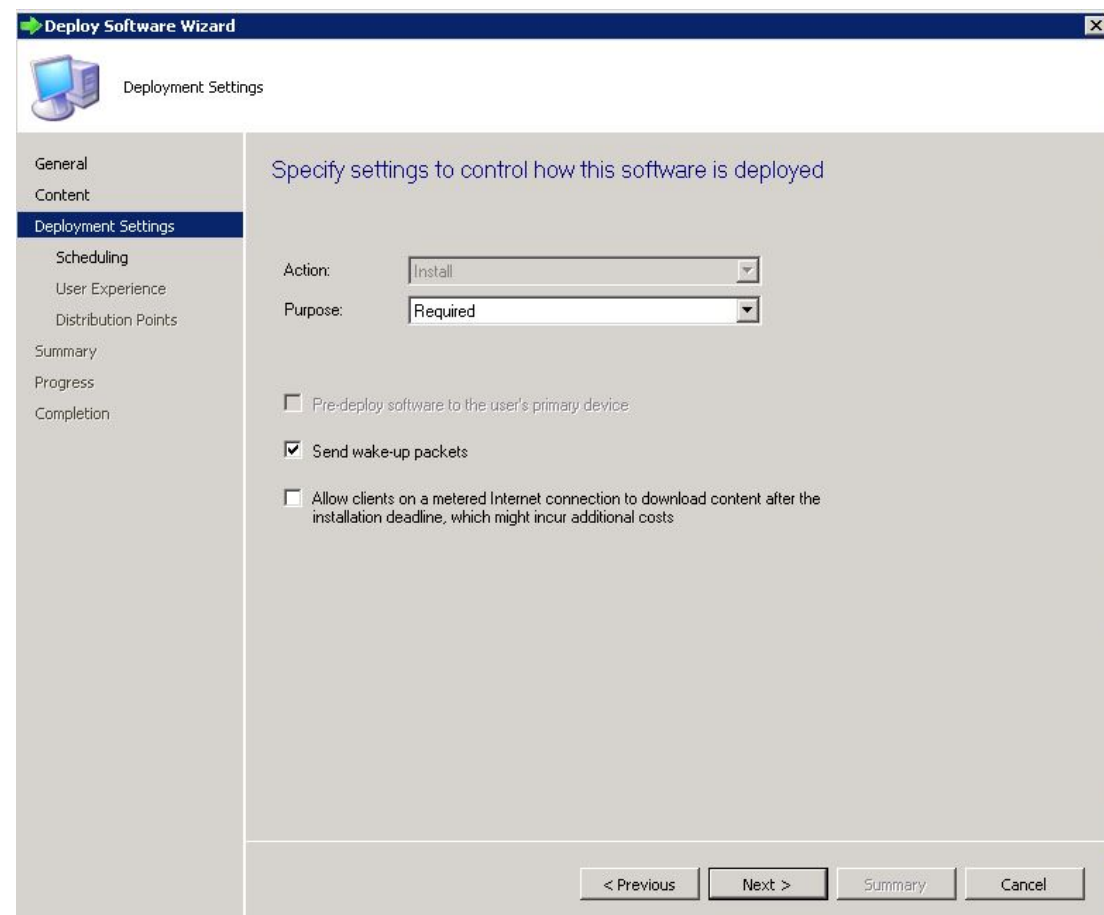
Select software to deploy



Specify general information for this deployment

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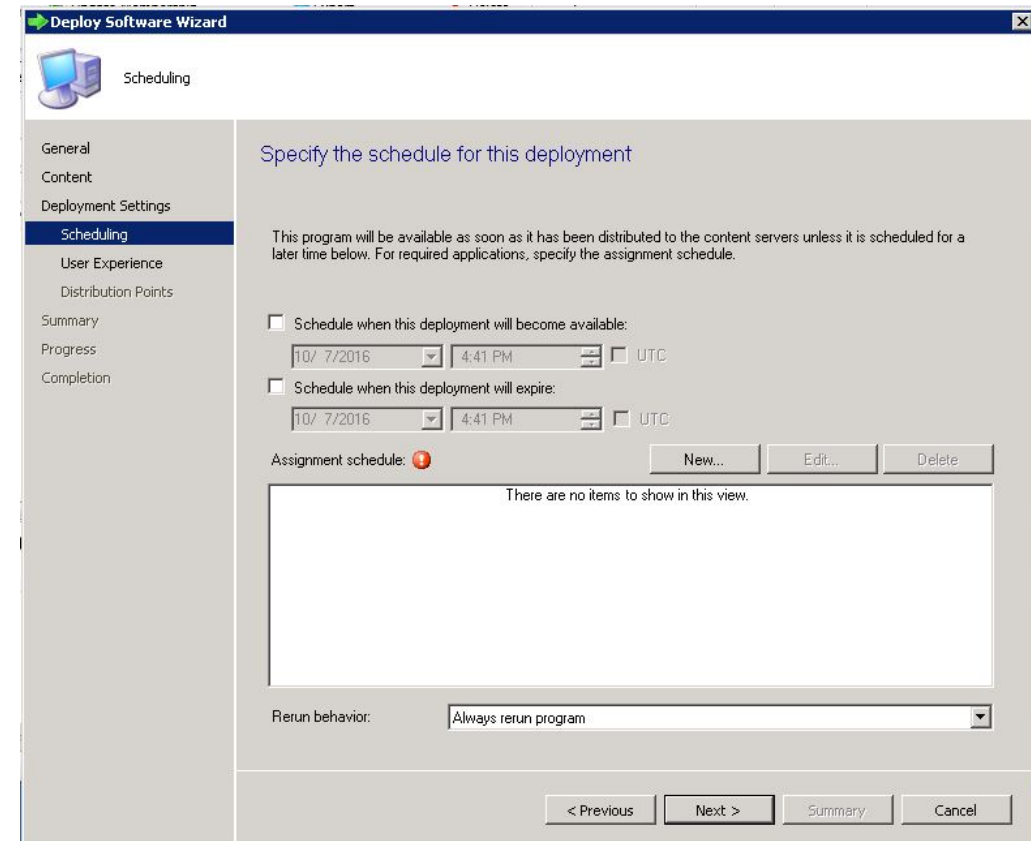
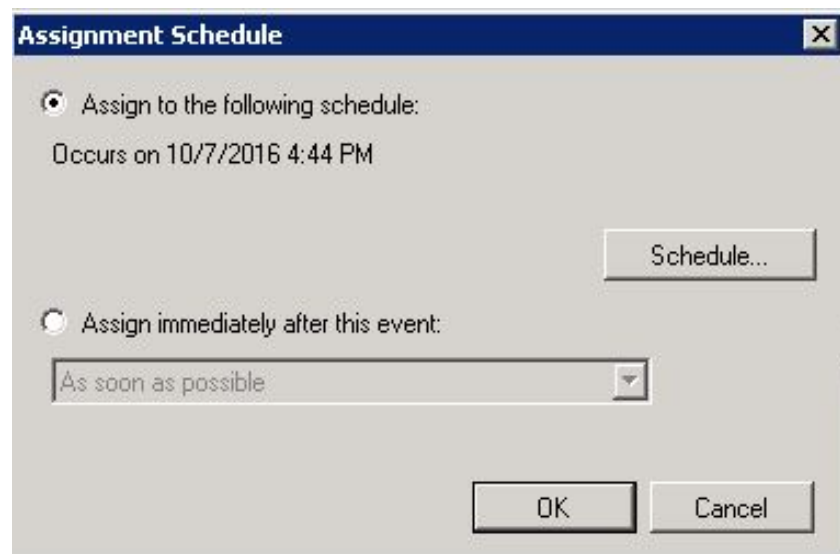
Specify the content destination or click next



Specify settings to control how this software is deployed.

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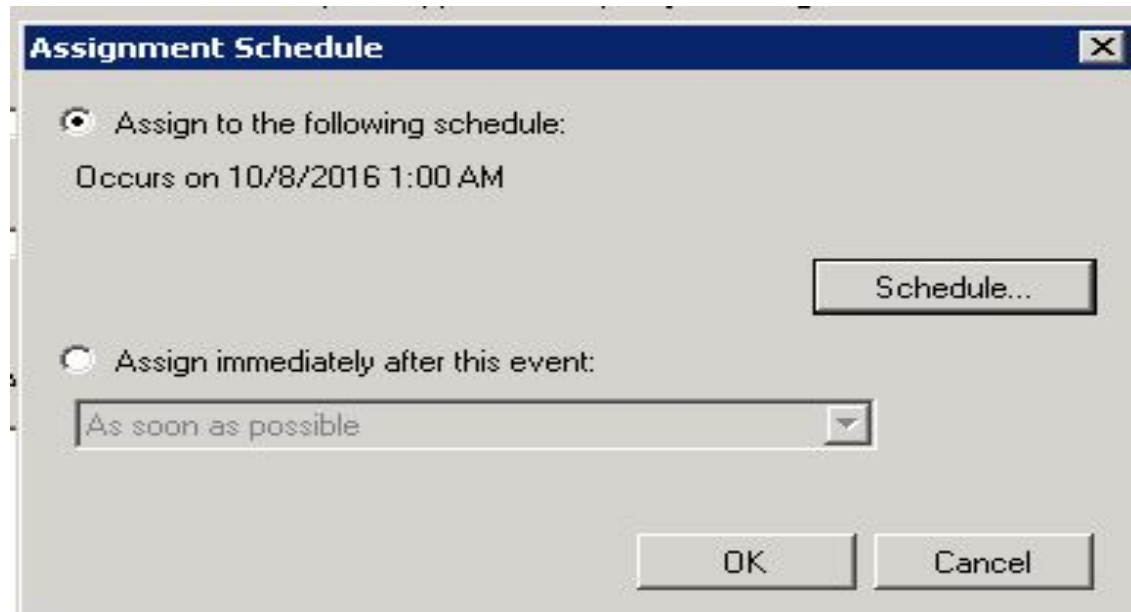
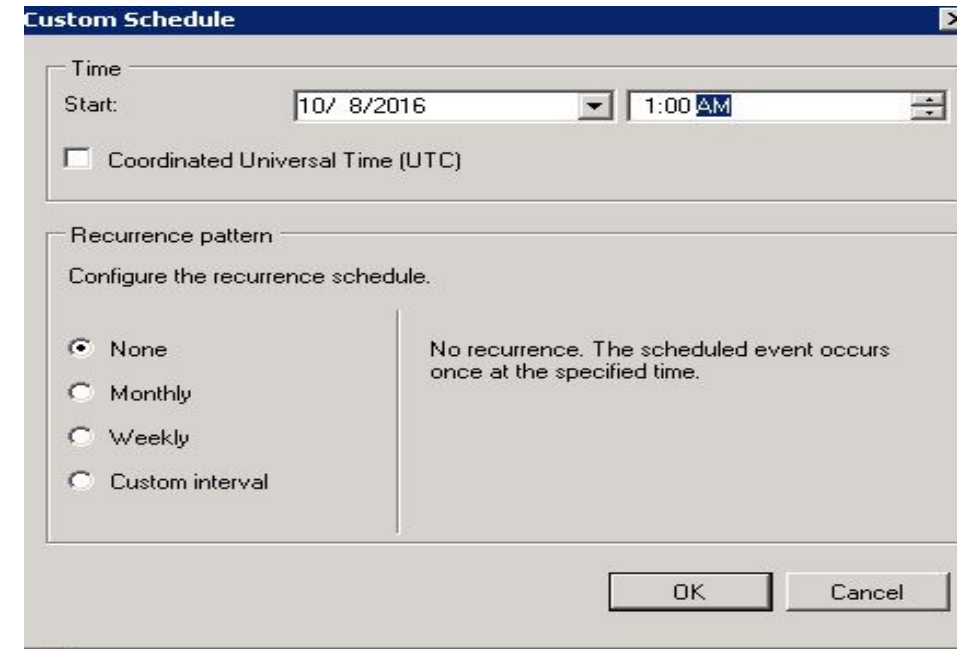
Specify the schedule for this deployment.



Assignment Schedule

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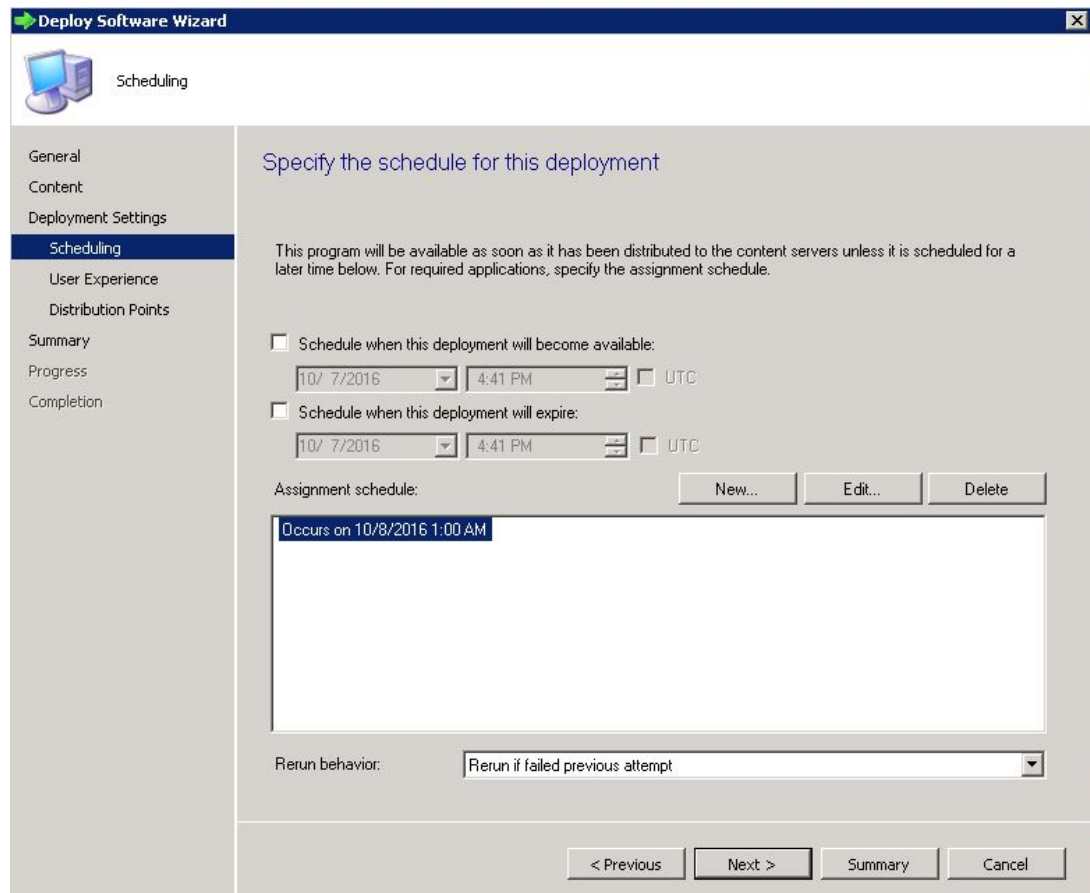
Create custom schedule



Assignment Schedule – Click ok

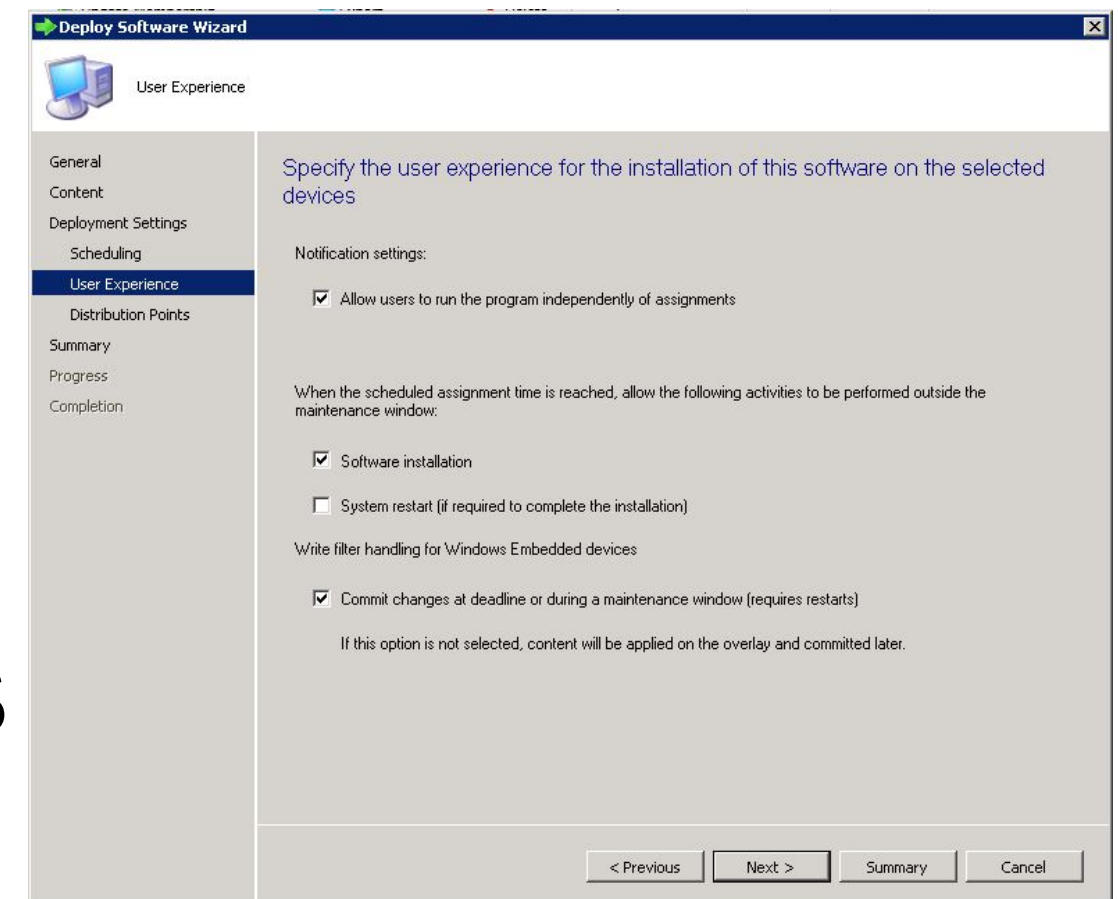
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Specify the schedule for this deployment is complete – Click next



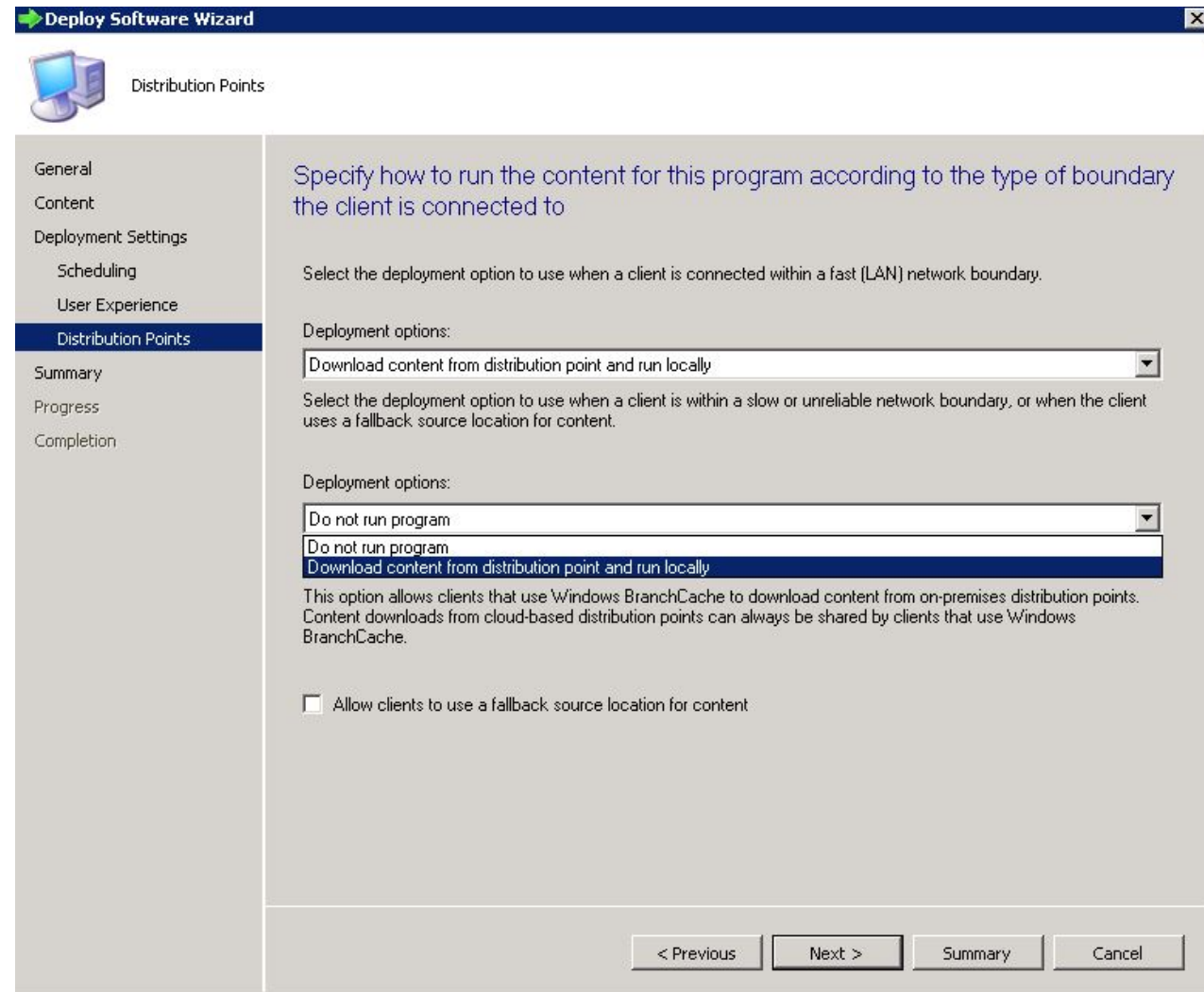
The screenshot shows the 'Scheduling' step of the 'Deploy Software Wizard'. The left sidebar lists steps: General, Content, Deployment Settings, Scheduling (selected), User Experience, Distribution Points, Summary, Progress, and Completion. The main area is titled 'Specify the schedule for this deployment'. It contains a text box explaining that the program will be available as soon as it is distributed unless a later time is specified. There are two checkboxes: 'Schedule when this deployment will become available:' and 'Schedule when this deployment will expire:'. Both are currently unchecked. Below these are date and time pickers set to 10/7/2016 at 4:41 PM, with a 'UTC' checkbox. An 'Assignment schedule:' section has 'New...', 'Edit...', and 'Delete' buttons. Below this is a list box containing 'Occurs on 10/8/2016 1:00 AM'. At the bottom, there is a 'Rerun behavior:' dropdown menu set to 'Rerun if failed previous attempt' and navigation buttons: '< Previous', 'Next >', 'Summary', and 'Cancel'.

User Experience- Select the user experience for the installation of this software on the selected devices.



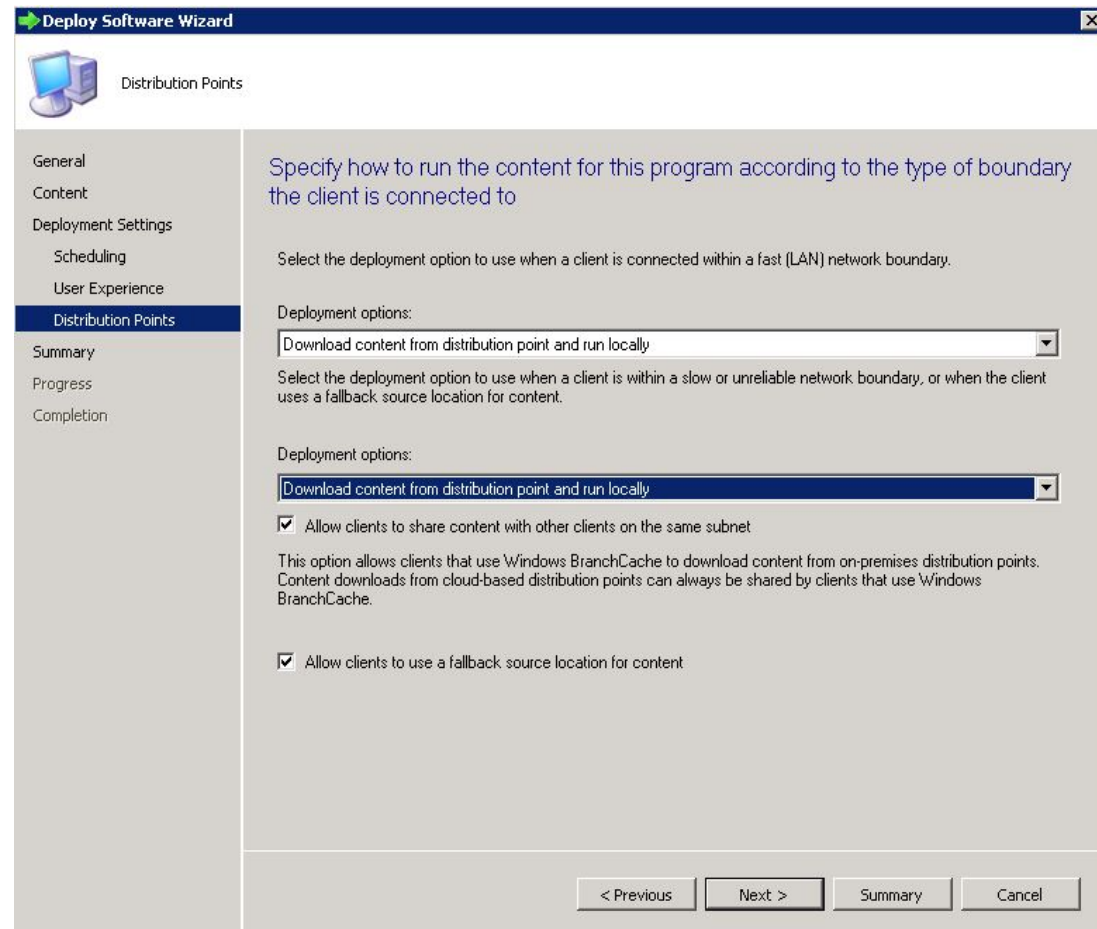
The screenshot shows the 'User Experience' step of the 'Deploy Software Wizard'. The left sidebar is the same as the previous step, with 'User Experience' now selected. The main area is titled 'Specify the user experience for the installation of this software on the selected devices'. It includes 'Notification settings:' with a checked checkbox 'Allow users to run the program independently of assignments'. Below this is a section 'When the scheduled assignment time is reached, allow the following activities to be performed outside the maintenance window:' with two checkboxes: 'Software installation' (checked) and 'System restart (if required to complete the installation)' (unchecked). There is also a section 'Write filter handling for Windows Embedded devices' with a checked checkbox 'Commit changes at deadline or during a maintenance window (requires restarts)'. A note below states: 'If this option is not selected, content will be applied on the overlay and committed later.' Navigation buttons at the bottom are '< Previous', 'Next >', 'Summary', and 'Cancel'.

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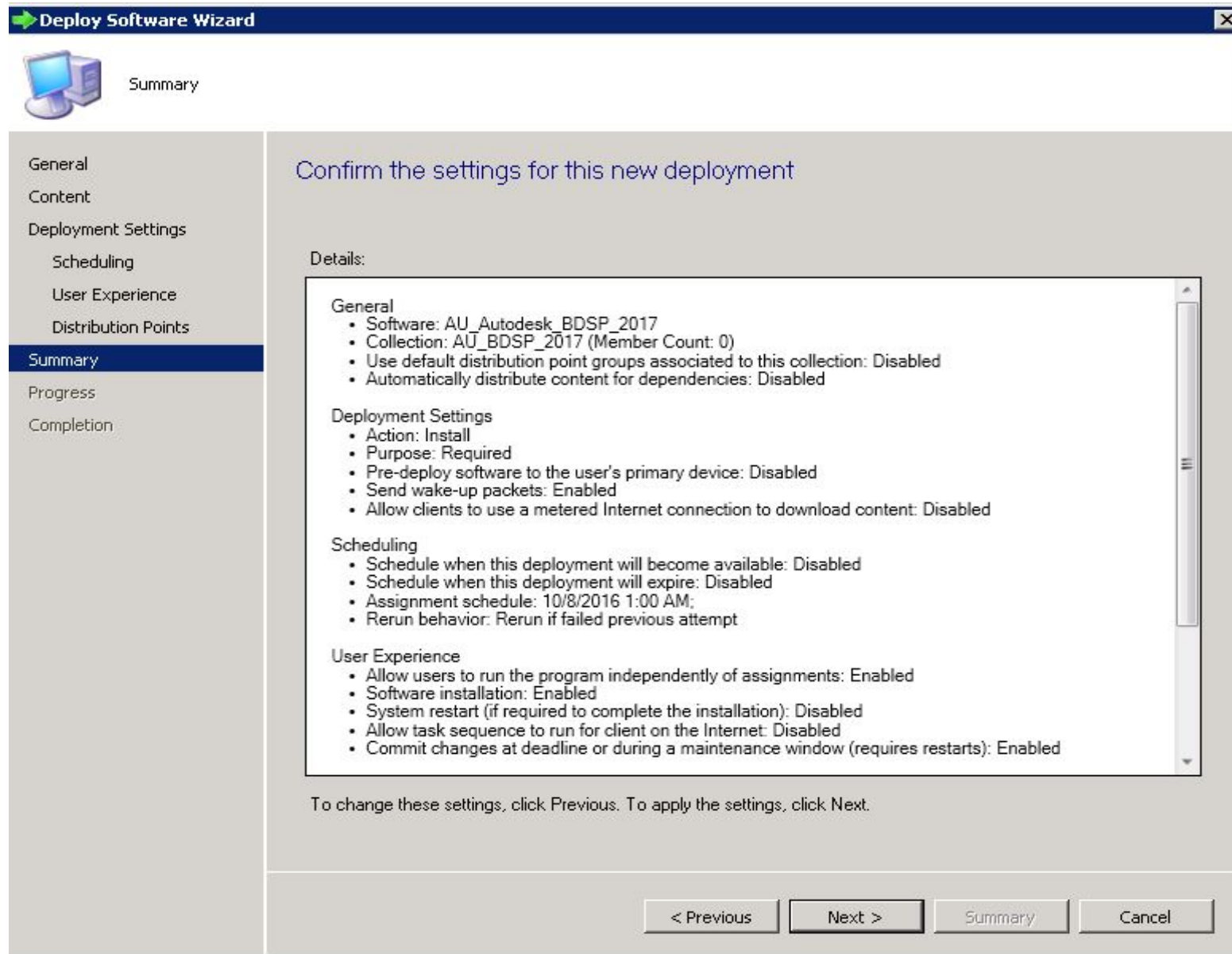
Specify how to run the content for this program according to type of boundary the client is connected to.

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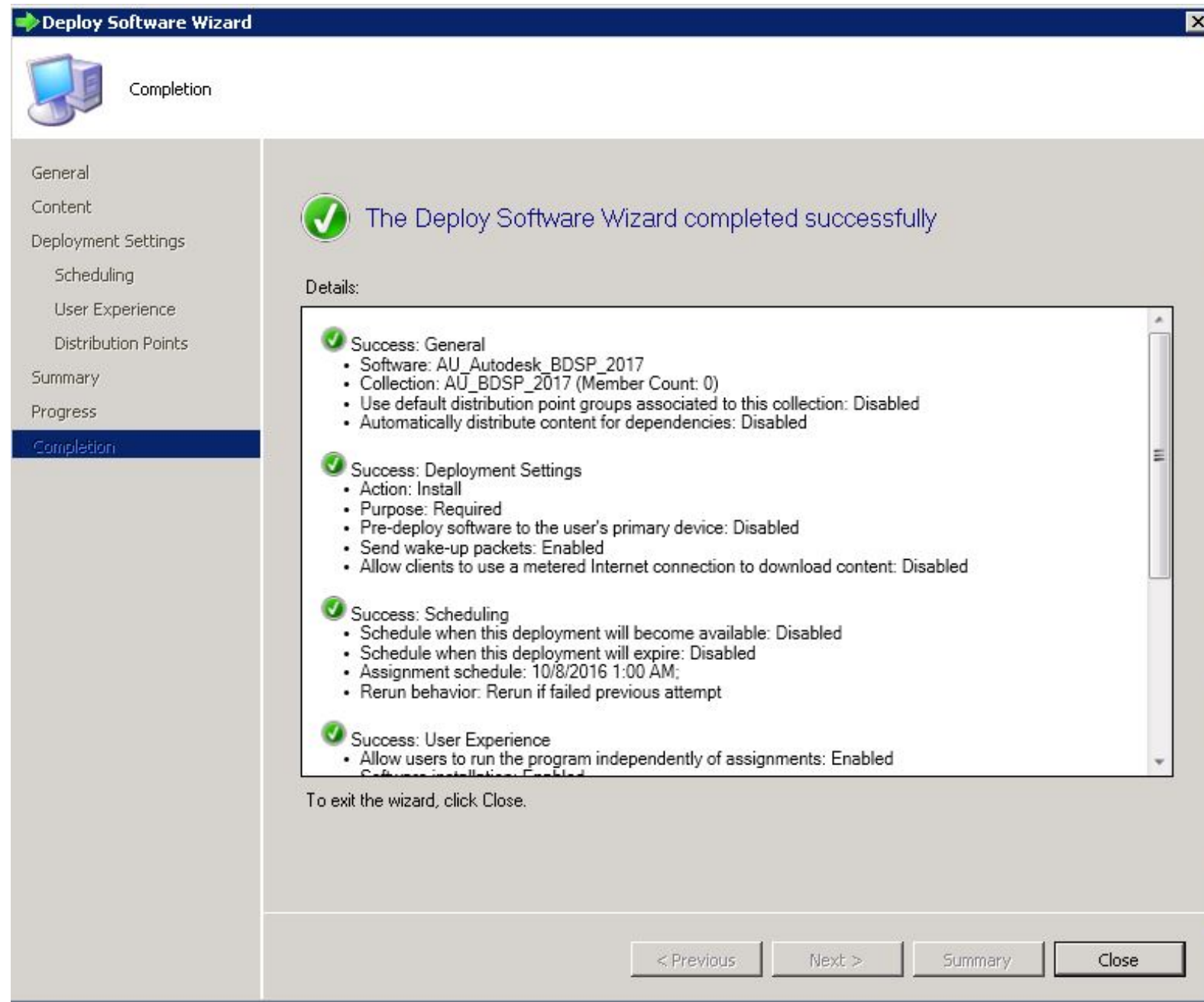
User experience – Select the user experience for the installation of this software on the selected devices. Click next

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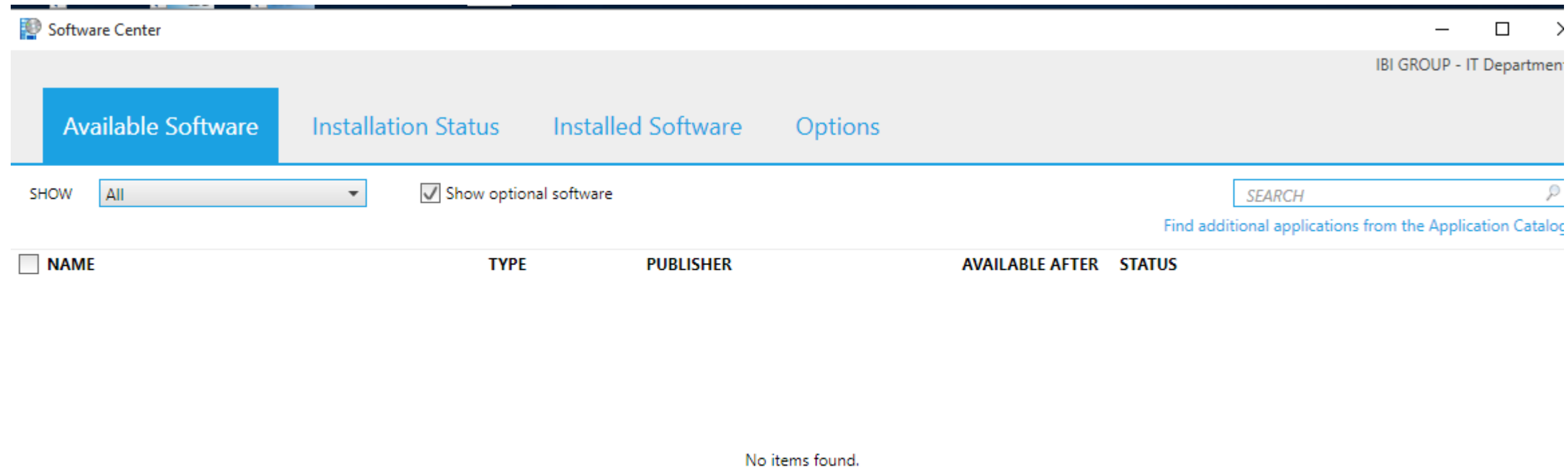
Summary – Confirm the settings for this new deployment – click next.

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Completion – The deployment software wizard completed successfully. Click close

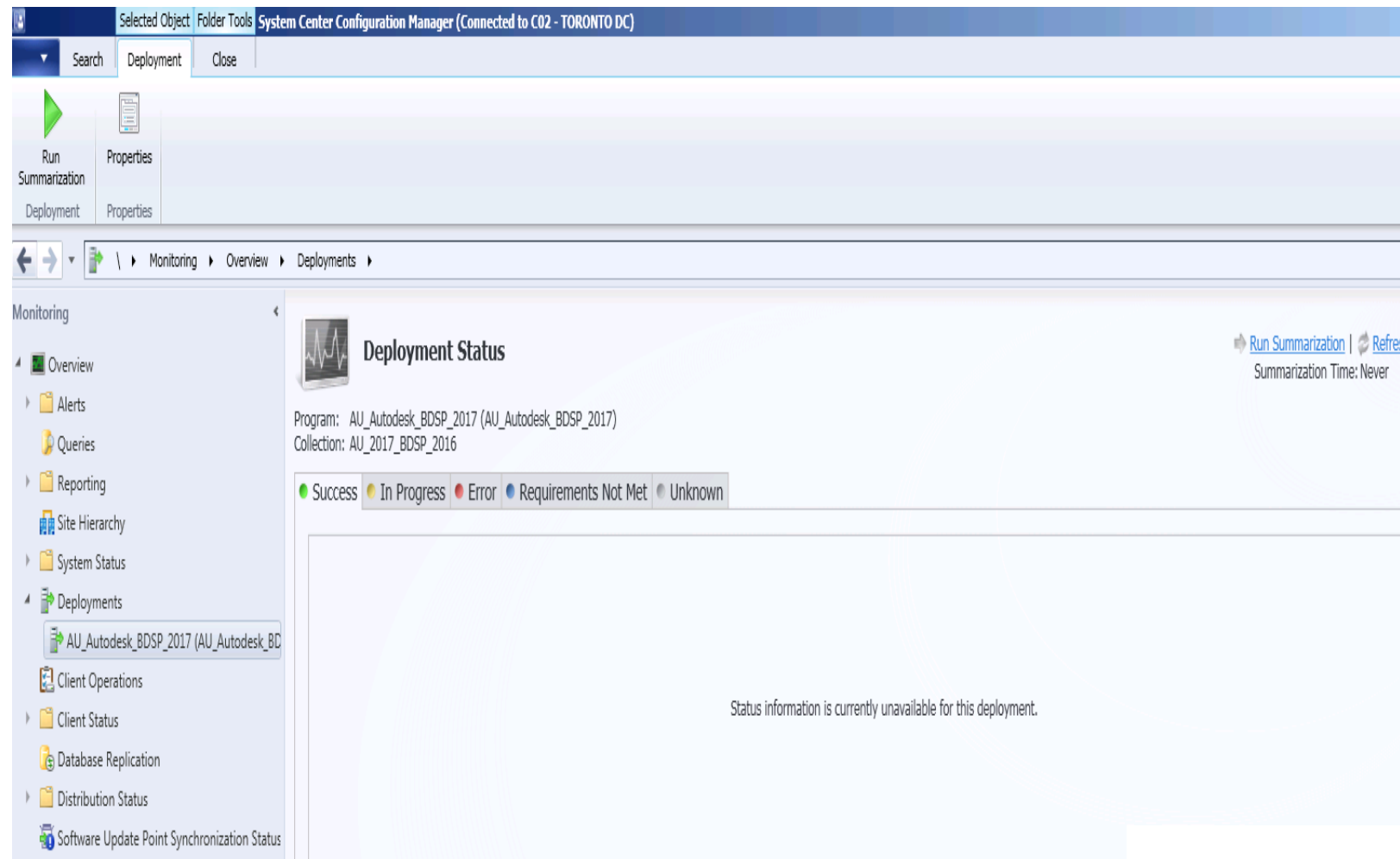
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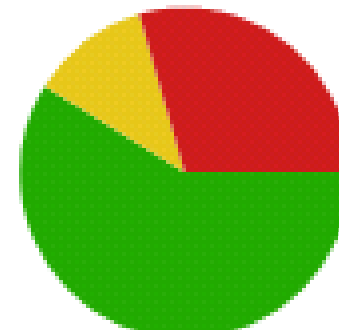
On the workstation, you will see the available software if you selected user experiences correctly.

Check the status of the deployment

Monitor overview of deployment – Deployment Status



Completion Statistics



Success	10
In Progress	2
Error	5
Requirements Not Met	0
Unknown	0

Related Objects

- Collection
- Applications
- Content Status

Run reports and queries

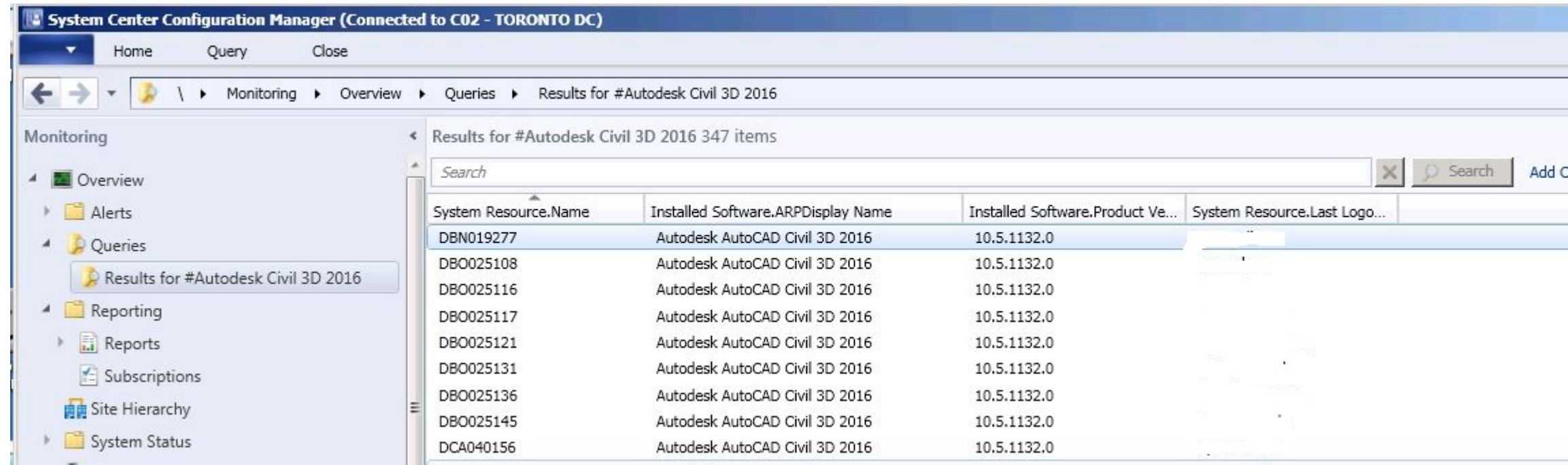
Reports can be run from:

Monitoring –
Overview –
Reporting- reports
Reports can be customized

The screenshot shows the 'Software 02D - Computers with specific software installed' report interface. At the top, there's a header bar with the title. Below it, a message states: 'To view the report, provide values for the parameters below, then click View Report.' The parameters section includes 'Report Category' (Asset Intelligence), 'Report Name' (Software 02D - Computers with specific software installed), and 'Report Description' (This report lists all computers with specific software installed. This report is linked to Software 02E - Installed software on a specific computer.). Below the parameters, there are input fields for 'Collection' (All Systems) and 'Software Product' (Autodesk AutoCAD Civil 3D 2016 - English(10.5)), each with a 'Values...' link. A 'View Report' button is also present. The main content area shows a table with the following data:

Computer Name	Computer Manufacturer	Computer Model	Product Name	Product ID	DSL ID	Installation Type
DBN019277	Dell Inc.	OptiPlex 9020	Autodesk AutoCAD Civil 3D 2016 - English	none		Physically installed
DBO025108	Dell Inc.	OptiPlex 9020	Autodesk AutoCAD Civil 3D 2016 - English	none		Physically installed
DBO025116	Dell Inc.	OptiPlex 9020	Autodesk AutoCAD Civil 3D 2016 - English	none		Physically installed
DBO025117	Dell Inc.	OptiPlex 9020	Autodesk AutoCAD Civil 3D 2016 - English	none		Physically installed

Run reports and queries



Queries can be run from:
Monitoring – Overview – Queries

Queries are very customizable.

SCCM other advantages

- Deploy from distribution points
- Run reports and queries
- Monitoring
- Alerts
- Compliance
- Deploy other windows software



The end



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