

Deploy Cisco Secure Endpoint/Secure Client using Microsoft Intune

Contents

Introduction

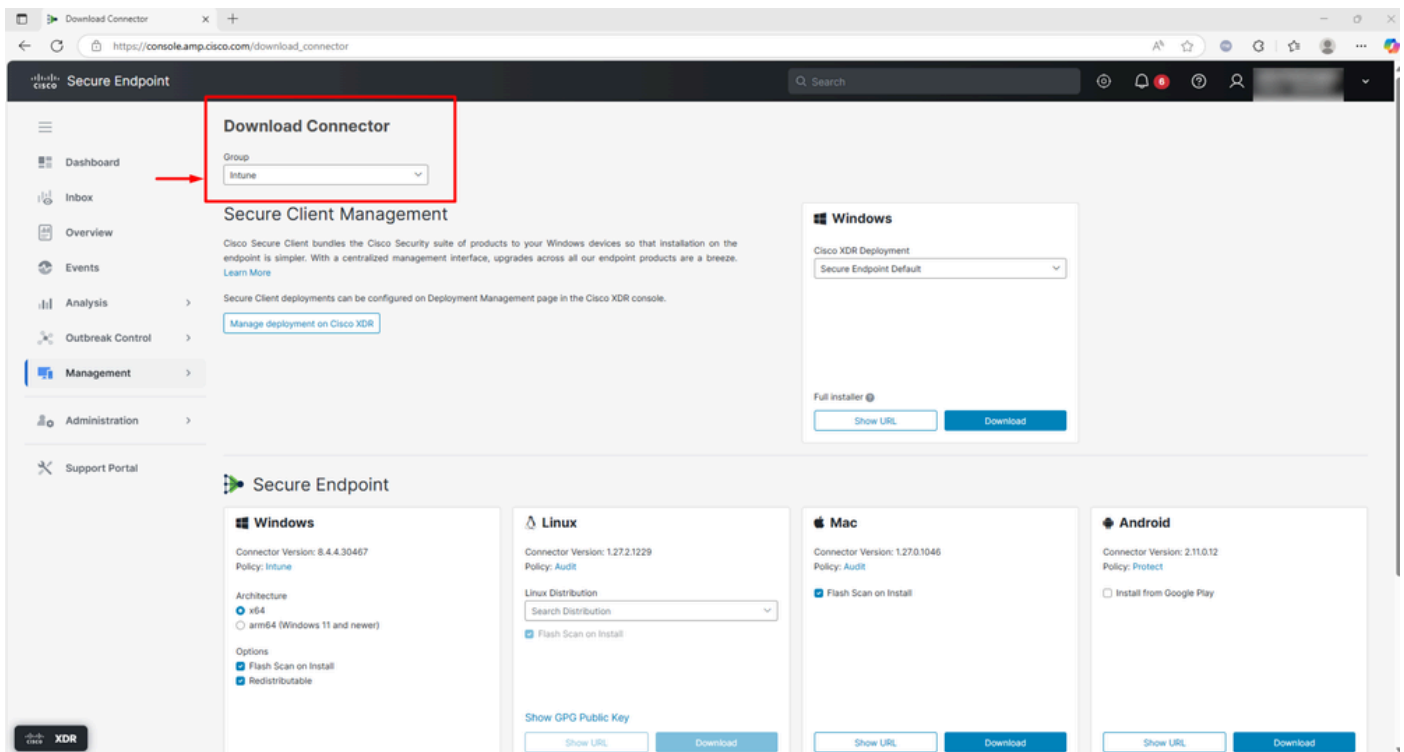
This document outlines the process for deploying Cisco Secure Endpoint or Secure Client using Microsoft Intune. The document walks through the steps on how to create a Microsoft Intune supported apps from the Secure Endpoint/Secure Client installers and then use that for deployment using the Microsoft Intune admin center. Specifically, the process includes packaging the Cisco Secure Endpoint installer as a Win32 application using the Intune Win32 Content Prep Tool, followed by configuring and deploying the app through Intune. We have utilized the official Microsoft Prep Tool for creating the app.

Configuration

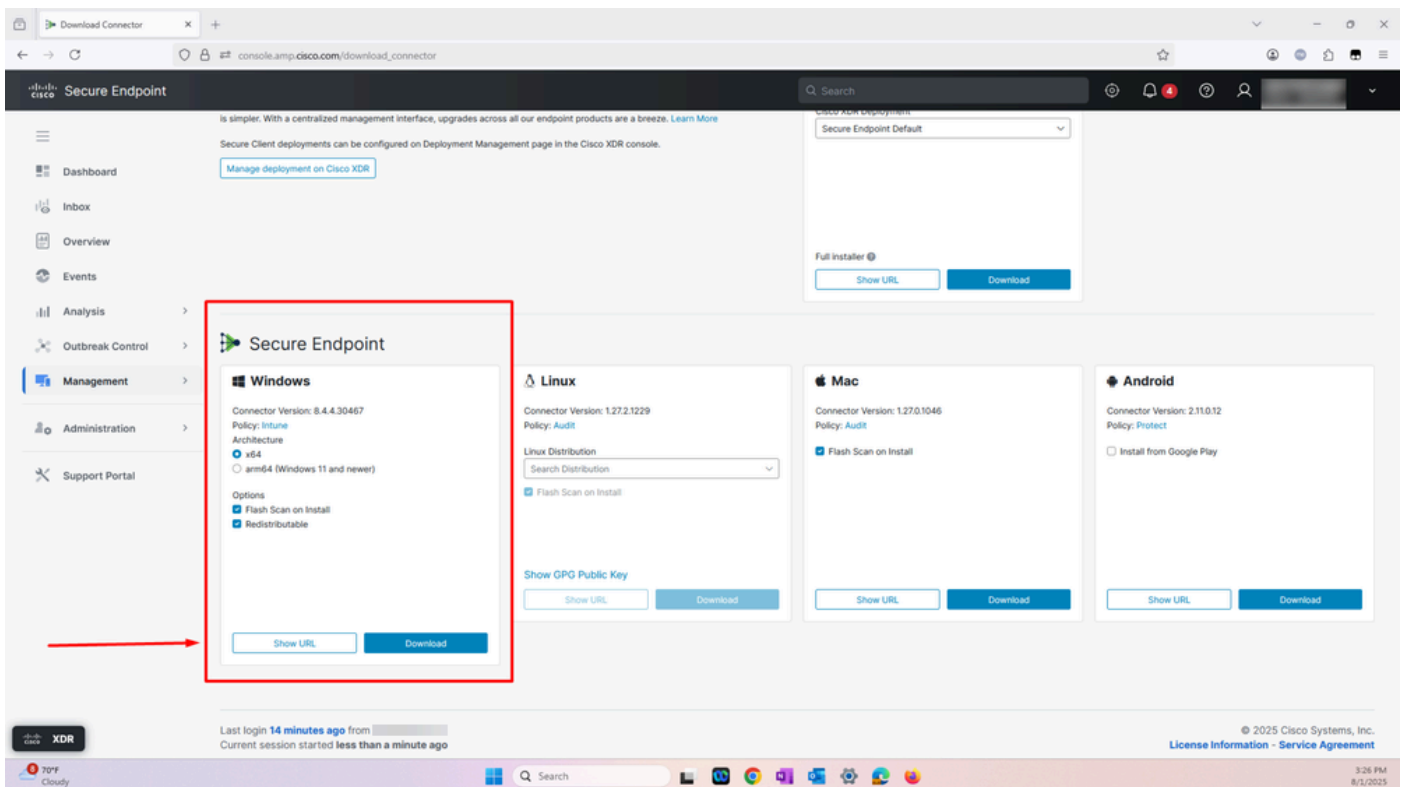
Secure Endpoint Deployment

Step 1. Download the Cisco Secure Endpoint Installer.

- Login to your respective Secure Endpoint Portal, depending on the region: <https://apps.security.cisco.com/overview>
- Navigate to the **Management** tab and select **Download Connector**
- Select the Secure Endpoint **group** you want the connector to register to



- Select **download** and the EXE installer gets downloaded locally as shown in the screenshot



Step 2. Prepare the Intune file using Win32 Content Prep Tool.

The Win32 Content Prep Tool is a utility provided by Microsoft Intune to help IT administrators prepare Win32 applications (i.e., traditional Windows desktop apps) for deployment through Microsoft Intune. The tool converts Win32 application installers (like .exe, .msi, and related files) into a .intunewin file format, which is required for deploying these apps via Intune.

To prepare the Intune file, follow these step:

- Download the Win32 Content Prep Tool from Github.
Download: <https://github.com/microsoft/Microsoft-Win32-Content-Prep-Tool>
- Execute **IntuneWinAppUtil.exe**
- In the next step, change directory to the folder that contains the Cisco Secure Endpoint executable file that was downloaded in step 1 and the install powershell script (**Install-CiscoSecureEndpoint.ps1**)
- Then specify the script filename for the setup file: **Install-CiscoSecureEndpoint.ps1**
- In the next step, specify the folder where the **Intunewin** file must be generated
- Enter N, when prompted to specify catalog
- **Intunewin** File is generated as shown in the screenshot:

```

Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\> cd C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master
PS C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master> .\IntuneWinAppUtil.exe
Please specify the source folder: C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master
Please specify the setup file: Install-CiscoSecureEndpoint.ps1
Please specify the output folder: C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master
Do you want to specify catalog folder (Y/N) N
INFO Validating parameters
INFO Validated parameters within 5 milliseconds
INFO Compressing the source folder 'C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master' to 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\IntunePackage.intunewin'
INFO Calculated size for folder 'C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master' is 64988858 within 1 milliseconds
INFO Compressed folder 'C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master' successfully within 2189 milliseconds
INFO Checking file type
INFO Checked file type within 4 milliseconds
INFO Encrypting file 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\IntunePackage.intunewin'
INFO 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\IntunePackage.intunewin' has been encrypted successfully within 279 milliseconds
INFO Computing SHA256 hash for 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\9e1c1c82-57fc-4978-991c-7a46d1d3a4be' within 135 milliseconds
INFO Computed SHA256 hash for 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\IntunePackage.intunewin'
INFO Computing SHA256 hash for 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\IntunePackage.intunewin'
INFO Computed SHA256 hash for 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\IntunePackage.intunewin' within 146 milliseconds
INFO Copying encrypted file from 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\9e1c1c82-57fc-4978-991c-7a46d1d3a4be' to 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\IntunePackage.intunewin'
INFO File 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Contents\IntunePackage.intunewin' got updated successfully within 559 milliseconds
INFO Generating detection XML file 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage\Metadata\Detection.xml'
INFO Generated detection XML file within 274 milliseconds
INFO Compressing folder 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage' to 'C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master\Install-CiscoSecureEndpoint.intunewin'
INFO Calculated size for folder 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage' is 63805832 within 0 milliseconds
INFO Compressed folder 'C:\Users\>\AppData\Local\Temp\7cb36f1-f027-44c6-81a7-1dbfdc947b57\IntuneWinPackage' successfully within 1343 milliseconds
INFO Removing temporary files
INFO Removed temporary files within 11 milliseconds
INFO File 'C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master\Install-CiscoSecureEndpoint.intunewin' has been generated successfully

[=====] 100%
INFO Done!!!

PS C:\Users\>\Downloads\Microsoft-Win32-Content-Prep-Tool-master\Microsoft-Win32-Content-Prep-Tool-master>

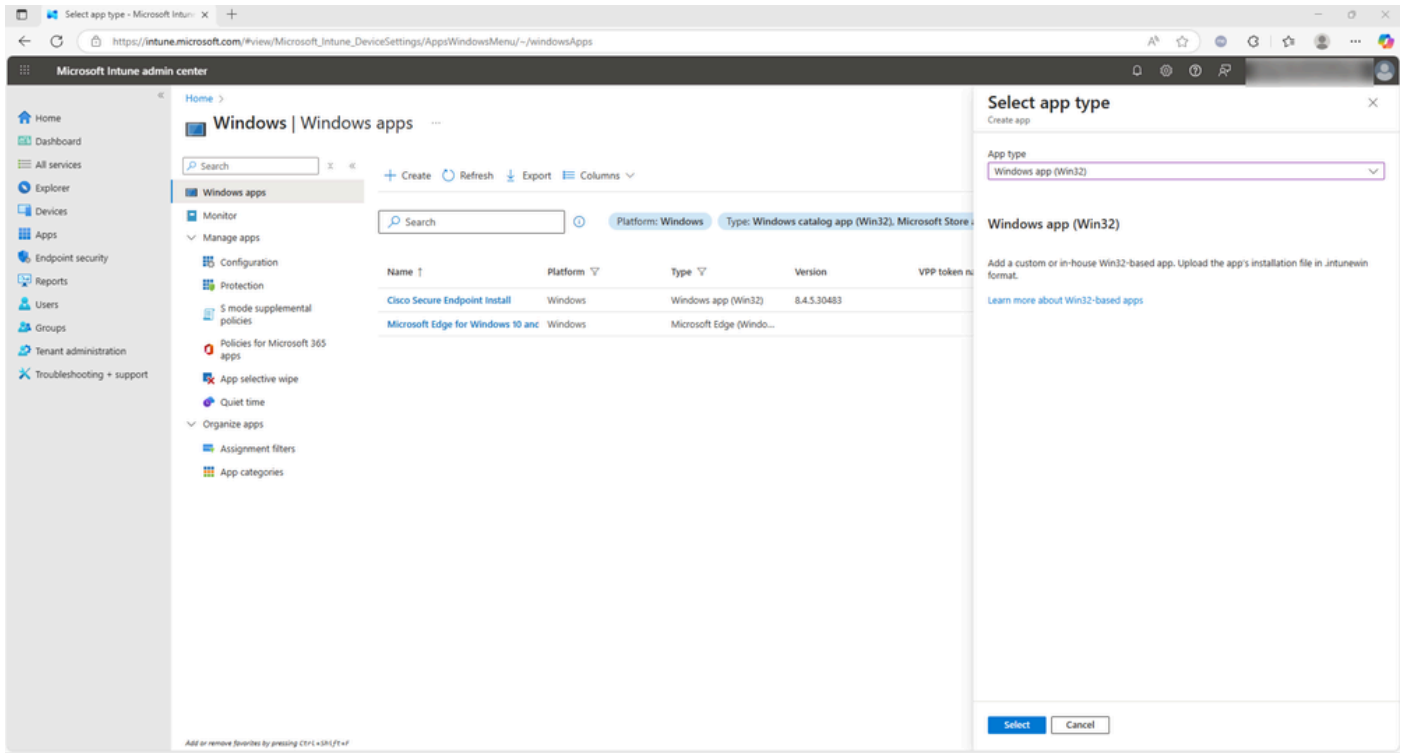
```

Step 3. Upload the Secure Endpoint IntuneWin File to Microsoft Intune Admin Center.

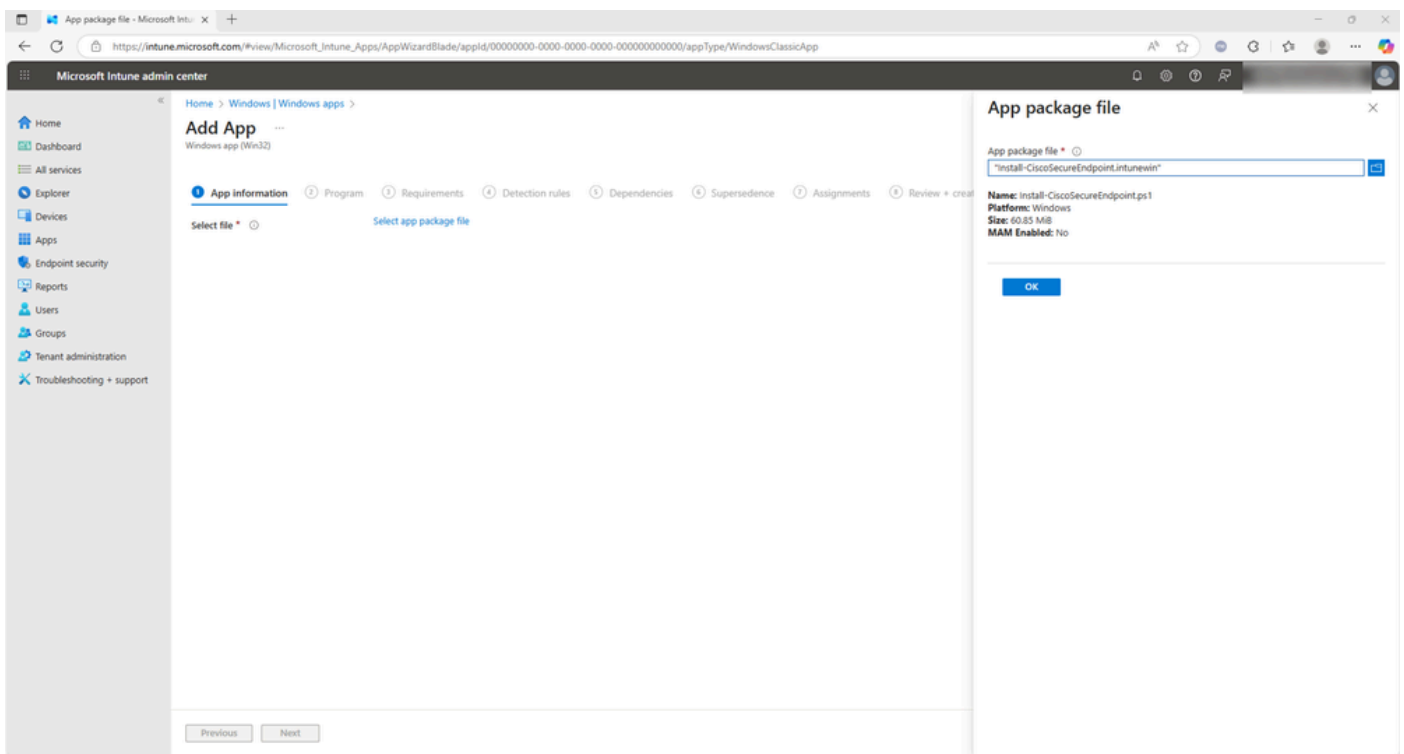
Perform the following steps:

- Log in to **Microsoft Intune Admin Center**
- Navigate to the **Windows Apps** in the Microsoft Intune Admin Center and Select **App Type – Win32** and select

These two actions are demonstrated in the screenshot:



- In the next step, upload the Secure Endpoint Intunewin file created in step 2 and select **OK**



- After selecting **OK**, enter the information as presented in the screenshot. The optional fields can be left blank on each tab. Proceed to the next step by selecting **Next**

Microsoft Intune admin center

Home > Windows | Windows apps >

Add App

Windows app (Win32)

1 App information 2 Program 3 Requirements 4 Detection rules 5 Dependencies 6 Supersedence 7 Assignments 8 Review + create

Select file * [Install-CiscoSecureEndpoint.ps1](#)

Name *

Description *

Preview:

Publisher *

App Version *

Category *

Show this as a featured app in the Company Portal * ☒ Yes ☐ No

Information URL *

Privacy URL *

Developer *

Owner *

Notes *

Logo * [Change image](#)

- Enter the **Install** Command as shown:

```
%windir%\SysNative\WindowsPowerShell\v1.0\powershell.exe -nopprofile -executionpolicy Bypass -file
```

Please note that the code presented here serves as an example and any code can be used as an install command for this installer

- Enter **Uninstall** as n/a and installation time required as 60 (optional). Set Allow available uninstall as **No**, select Install behavior as **System**, and enter any optional details before you select **Next**

Microsoft Intune admin center

Home > Windows | Windows apps >

Add App

Windows app (Win32)

1 App information 2 Program 3 Requirements 4 Detection rules 5 Dependencies 6 Supersedence 7 Assignments 8 Review + create

Specify the commands to install and uninstall this app:

Install command *

Uninstall command *

Installation time required (mins) *

Allow available uninstall * ☒ Yes ☐ No

Install behavior * ☒ System ☐ User

Device restart behavior *

Specify return codes to indicate post-installation behavior:

Return code	Code type
0	Success
1707	Success
3010	Soft reboot
1641	Hard reboot
1618	Retry

[+ Add](#)

- On the requirements tab, check **No. Allow this app to be installed on all systems** and select the minimum operating system. Fill and optional fields if desired and select **Next**

The screenshot shows the 'Add App' wizard in the Microsoft Intune admin center, specifically the 'Requirements' tab. The breadcrumb navigation is 'Home > Windows > Windows apps'. The page title is 'Add App' with a subtitle 'Windows app (Win32)'. A progress bar at the top indicates the current step is 'Requirements', with other steps being 'App information', 'Program', 'Detection rules', 'Dependencies', 'Supersedence', 'Assignments', and 'Review + create'.

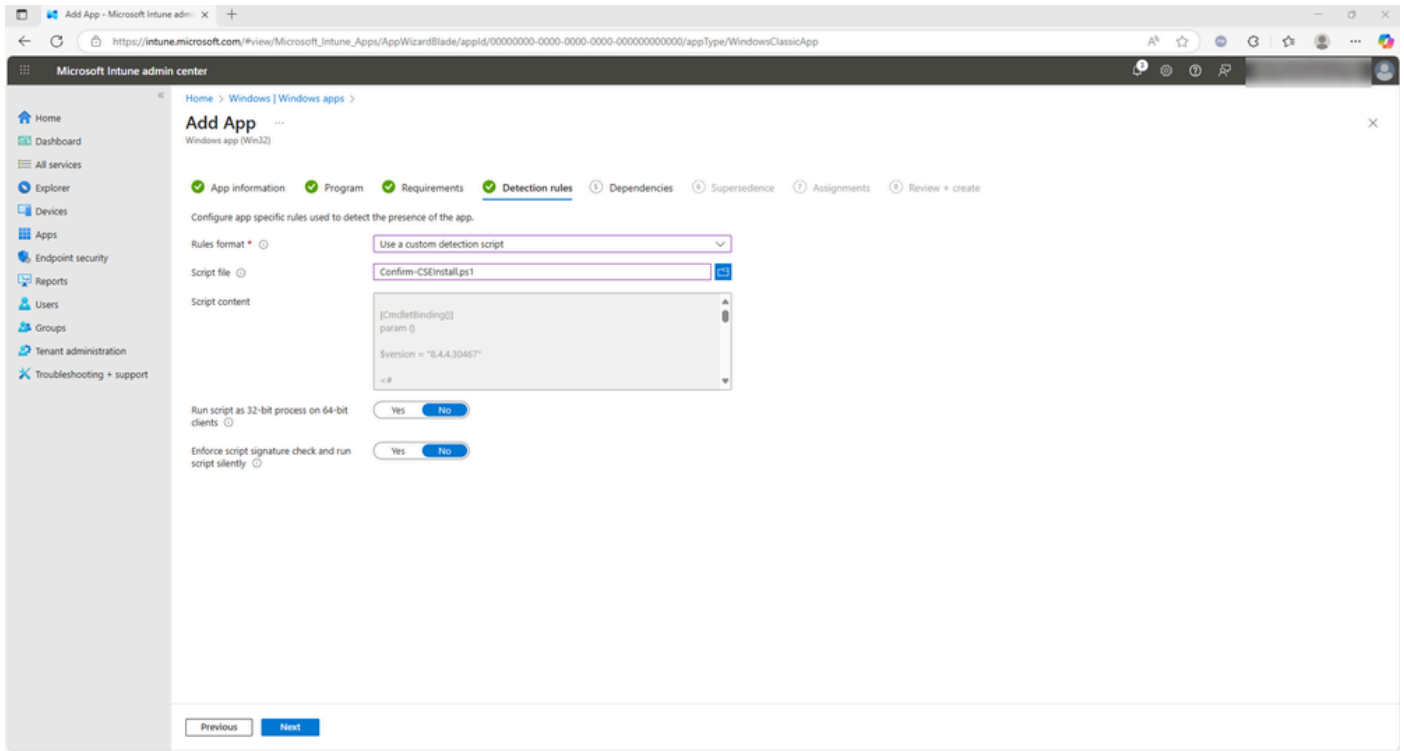
The main content area is titled 'Specify the requirements that devices must meet before the app is installed:'. It contains the following sections:

- Check operating system architecture:** Two radio buttons are present. The first is 'Yes. Specify the systems the app can be installed on.' (unselected). The second is 'No. Allow this app to be installed on all systems.' (selected).
- Minimum operating system:** A dropdown menu is set to 'Windows 10 1607'.
- Disk space required (MB):** An empty text input field.
- Physical memory required (MB):** An empty text input field.
- Minimum number of logical processors required:** An empty text input field.
- Minimum CPU speed required (MHz):** An empty text input field.

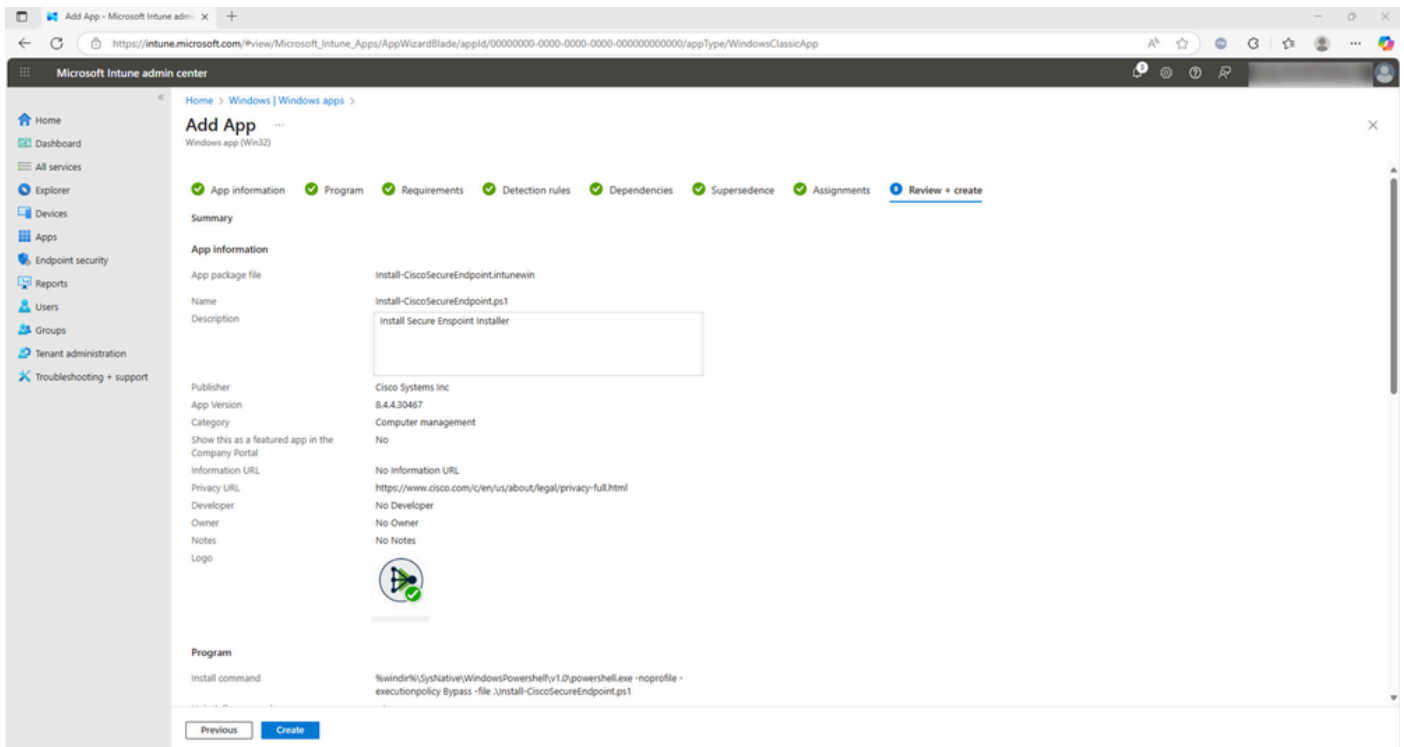
Below these fields is a section titled 'Configure additional requirement rules'. It has a table with two columns: 'Type' and 'Path/Script'. The table is currently empty, with a message 'No requirements are specified.' below it. There is a '+ Add' link to the left of the table.

At the bottom of the page, there are two buttons: 'Previous' and 'Next'.

- On the **Detection Rules** tab, the Rules format drop-down menu provides two options: **Manually configure detection rules** and **Use a custom detection script**. Either option can be selected based on the deployment requirements.
- When choosing **Manually configure detection rules**, you can define a rule type such as MSI, File, or Registry to detect the presence of the application. In this document, the alternative option, **Use a custom detection script**, has been selected.
- A PowerShell script named **Confirm-CSEInstall.ps1** is used to verify successful installation of Cisco Secure Endpoint. It is listed at the bottom of this document.



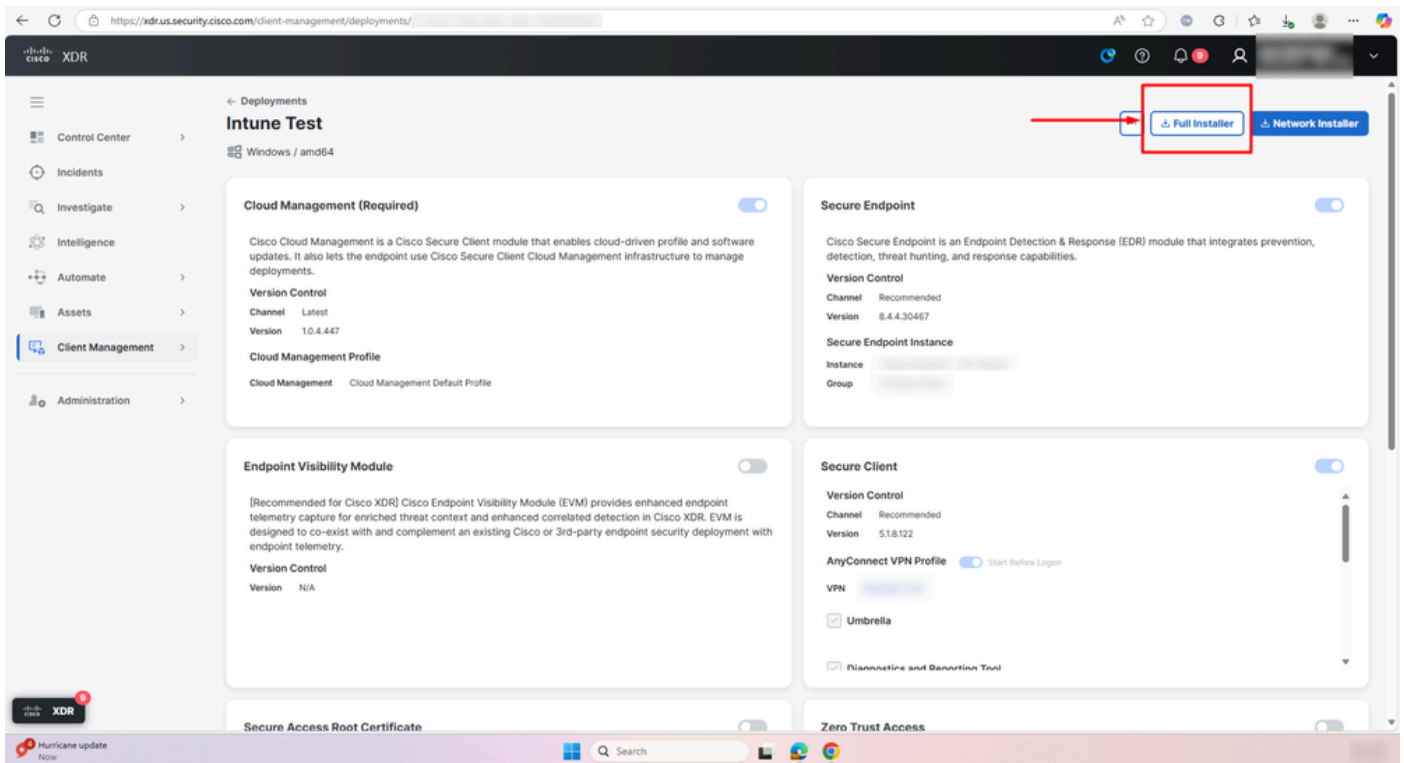
- Select **Next** to proceed. Note: A custom detection script can be created specifically for this deployment process to suit your environment and detection criteria.
- The next few tabs are optional. No dependencies need to be configured, assign the application to the required group and select **Review + create**



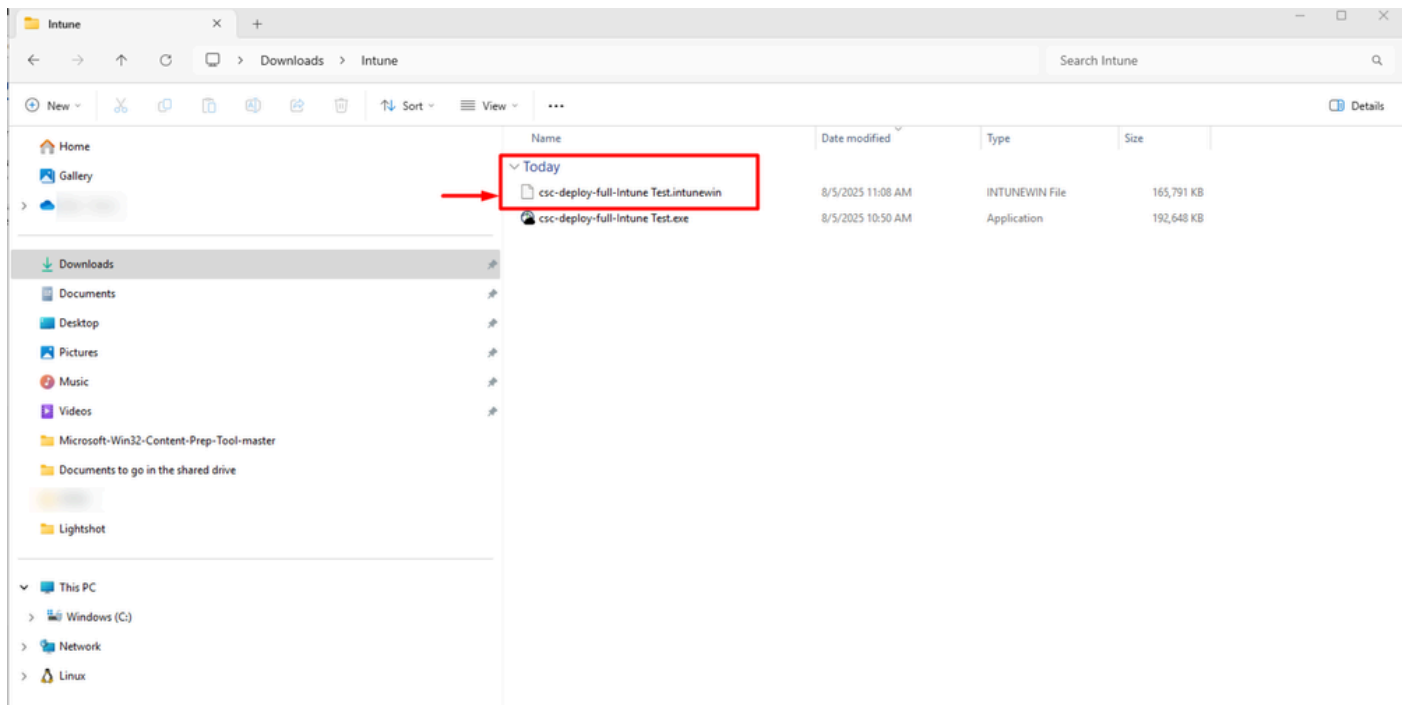
Secure Client Deployment

Step 1. Download the Cisco Secure Client Full Deployment

- Log in to the XDR or Secure Client Cloud Management console, depending on the region: <https://apps.security.cisco.com/overview>
- Create a new deployment and select **Full Installer** or **Network Installer** depending on your deployment type



- A **csc-deploy-full-Intune Test.exe** gets downloaded as shown in the screenshot.



Step 3. Upload the csc-deploy-full-intune Test.intunewin file from part 1 to Microsoft Intune Admin Center as per the steps shown above.

This completes the process to deploy Cisco Secure Endpoint using Intune.

Install-CiscoSecureEndpoint.ps1 script

```
[CmdletBinding()]
param ()

$cse_exe = <Secure Endpoint Installer>
$version = <Secure Endpoint Version>

if ($PSCommandPath -eq $null) {
    function GetPSCommandPath() {
        return $MyInvocation.PSCommandPath;
    }
    $PSCommandPath = GetPSCommandPath
}

$script = [pscustomobject]@{
    "Path" = Split-Path $PSCommandPath -Parent
    "Name" = Split-Path $PSCommandPath -Leaf
}

Set-Location -Path $script.Path

$cse_installer = [IO.Path]::Combine($script.Path, $cse_exe)
$csc_installer_args = "/R /S"

<#
    Cannot use -wait for 'Cisco Secure Endpoint' and therefore cannot get the exit code to return.
```

```

    Using -wait, returns varied results, instead use Get-Process and while loop to wait for installation
#>
$install = Start-Process -WorkingDirectory "$($script.Path)" -FilePath "${cse_installer}" -ArgumentList
while (Get-Process "$($cse_exe -replace '.exe', '')" -ErrorAction SilentlyContinue)
{
    Start-Sleep -Seconds 10
}

```

Confirm-CSEInstall.ps1 script

```

[CmdletBinding()]
param ()

$version = <Secure Endpoint Version>

<#
https://learn.microsoft.com/en-us/intune/intune-service/apps/apps-win32-add#step-4-detection-rules
The app gets detected when the script both returns a 0 value exit code and writes a string value to t

The Intune agent checks the results from the script. It reads the values written by the script to t
the standard error (STDERR) stream, and the exit code. If the script exits with a nonzero value, th
the application detection status isn't installed. If the exit code is zero and STDOUT has data, the
detection status is installed.
#>

$cse = Get-ItemProperty HKLM:\Software\Microsoft\Windows\CurrentVersion\Uninstall\*, HKLM:\SOFTWARE\Wow
if ($cse | Where-Object { [System.Version] $_.DisplayVersion -ge [System.Version] "${version}" })
{
    Write-Host "Installed"
    exit 0
}

exit 1

```