

# Installing PXE Everywhere Agents



## Summary

How to use the 1E Client Deployment Assistant (CDA) to create a Configuration Manager Applications to deploy PXE Everywhere Agents with Microsoft ADK files. Before you begin installation, please ensure you have reviewed [Design Considerations](#) and [Requirements](#) pages, and the installation steps below.

PXE Everywhere client provides a light-weight PXE server that responds to PXE boot requests from the local subnet and serves boot files to requesting PXE clients. It must therefore be installed on at least one client in each subnet where PXE booting is required, and preferably installed on all PCs in your environment thereby providing maximum availability (redundancy) and scalability (load-balancing) for PXE boot requests.

CDA is the recommended method of installing and upgrading PXE Everywhere Agent with Microsoft ADK files. The steps below are a summary of how you use CDA to deploy PXE Everywhere Agent with the Microsoft ADK files.

Please refer to [1E Client Deployment Assistant 1.5](#) for full details of how to use CDA to deploy 1E Client with PXE Everywhere and optionally other 1E clients including Nomad, Shopping, WSA, Tachyon, WakeUp and NightWatchman. CDA is provided as a zip file that can be downloaded from the [Nomad area of the 1E Support Portal](#).

If you are not using CDA, then you will need to:

- deploy the MSI separately and include [PXE Everywhere Agent settings](#) on the command-line or in an MST transform
- deploy ADK file as described in [Deploying Microsoft ADK files](#)

Please ensure you have reviewed all [Requirements](#) before installing.

After you have deployed the Agent and ADK files, you will then need to prepare and deploy boot image (s) using [Preparing and deploying 1E PXE Everywhere boot images](#).

## Microsoft ADK files

In addition to the binaries supplied by 1E, PXE Everywhere Agent requires a number of files that are distributed and licensed with the Microsoft Windows Automated Deployment Kit (ADK). The required files are listed in the table opposite, along with the location on the PXE Everywhere Agent that they need to be installed to.

As these files are licensed by Microsoft, 1E are unable to include them in the installation media. However, you can use the [1E Client Deployment Assistant \(CDA\)](#) to extract the required files from the ADK, create an installer transform and prepare an Application in Configuration Manager that will install the PXE Everywhere Agent with the appropriate settings and the additional Microsoft files.

The Windows Assessment and Deployment Kits (ADK) normally exist on the Configuration Manager CAS or Primary Site server, although they can be downloaded separately from the Microsoft website.

File	Destination Location (relative to TFTPBOOT)
boot.sdi	\boot.sdi
abortpxe.com	\boot\x86\abortpxe.com
bootmgr.exe	\boot\x86\bootmgr.exe
pxeboot.com	\boot\x86\pxeboot.com
pxeboot.n12	\boot\x86\pxeboot.n12
bootmgfw.efi	\boot\x86\bootmgfw.efi
	\boot\x64\bootmgfw.efi
wg14_boot.ttf (optional)	\boot\fonts\wg14_boot.ttf

## Installing PXE Everywhere Agents

The PXE Everywhere Agent is a client module in 1E Client, and is installed using the 1EClient installer (1EClient.msi).



The PXE Everywhere Responder and PXE Everywhere Agent cannot co-exist on the same computer and are not supported together. Whilst it is possible to install them together, they will not work and will have issues such as failure to bind to ports.

To install a Responder on the same computer as 1E Client then you must disable the client module for PXE Everywhere Agent. For an existing installation of 1E Client, reconfigure the client by setting **Module.PXEEverywhere.Enabled=false**. When installing or upgrading 1E Client on a computer that has or will have a Responder, then you must add **MODULE.PXEEVERYWHERE.ENABLED=false** to the installer command line or edit the **mst** transform.

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## Preparing a Configuration Manager Application for PXE Everywhere Agent using the 1E Client Deployment Assistant

The **1E Client Deployment Assistant** (CDA) is used to create an Application in Configuration Manager that installs the PXE Everywhere agent with the appropriate settings and also adds the required Microsoft boot files from the Windows Automated Deployment Toolkit (ADK).

First download and extract the latest version of the **1E Client Deployment Assistant** (CDA) from the 1E Support Portal (<https://1eportal.force.com/s/endpointagentinstallertopic>).

Also check the 1E Support Portal (<https://1eportal.force.com/s/nomadtopicdetail>) to see if there are any **Hotfixes** for PXE Everywhere. Download the latest Accumulated Hotfix (Patch) and extract its MSP file to include in the CDA folder structure.

The following is a summary of steps described in [1E Client Deployment Assistant - Running the wizard: PXE Everywhere settings](#) but *only* for deploying PXE Everywhere Agent.

1. Right-click the extracted **1EClientDeploymentAssistant.exe** and select **Run as administrator**
2. On the **Welcome** screen click **Next**
3. On the **License Terms** screen accept the license and click **Next**
4. On the **ConfigMgr Connection** page
  - a. If you are running this on the CM site server select **Local ConfigMgr Site Server**
  - b. Otherwise, select **Remote ConfigMgr Site Server** and
    - Enter the site server name and username and password that should be used to connect to the CM site. In a multi-site hierarchy enter the name of the CAS site server.
    - Click **Connect** to test the connection. Once connected, click **Next**
5. On the **General Settings** screen
  - a. Enter a UNC paths for Application Content Source and Package Content Source. The wizard will create a 1E\PXE Everywhere\4.0.x.x folder in these locations that will become the source for the CM Application Deployment Type.
  - b. Do not check the Distribute Content checkbox (we'll do that later). Click **Next**
6. On the **Agent Selection** screen, uncheck all products except **1E Client 5.1**. Click **Next**
7. On the **1E Client 5.1.0.xxx** screen, uncheck **Create Package** and leave the remaining settings as is. Click **Next**
8. On the **Tachyon and the other client settings** screen, uncheck **Enable Tachyon** *and* all the other options. Click **Next**
9. On the **Nomad client settings** screen, uncheck **Enable Nomad** (which will disable all the other options). Click **Next**
10. On the **PXE Everywhere Settings** screen
  - a. Enter the location of the Windows ADK (the wizard needs to extract Microsoft files from the ADK and add them to the application source). If you are running the wizard on the CM site server, the ADK should be installed in C:\Program Files (x86)\Windows Kits\10\Assessment and Deployment Kit.
  - b. Modify the **PXE Everywhere Central web service URL**, replacing **pxe.contoso.com** with the FQDN of your PXE Everywhere Central web server
  - c. Check **Enable support for DHCP Snooping** *only* if you are also deploying PXE Everywhere Responders
  - d. Click **Next**
11. On the **Summary** screen, review the settings and click **Create**. The wizard will generate a transform MST file that includes all the custom properties and a CAB file that includes the files extracted from the ADK. It will then create a Collection, Application and Deployment in Configuration Manager.
12. When the wizard completes, click **Finish**

## Verify Configuration Manager objects

Confirm that the application source files include the following, after which you can distribute to **Distribution Points**.

- the 1E Client installer
- an installer transform MST file
- files extracted from the Windows ADK

In the Configuration Manager Admin Console, you should confirm that CDA has created:

- an Application named **1E Client 5.1.0.x**
- a Collection named **1E Client 5.1.0.x - Required**
- required Deployments for the 32-bit and 64-bit Deployment Types to the **1E Client 5.1.0.x** Collection

Please refer to [1E Client Deployment Assistant 1.5 - Configuration Manager objects](#).

## Deploying the 1E Client enabled PXE Everywhere Agent

You will need to distribute application source to Distribution Points.

Once distributed, simply add devices to the **1E Client 5.0.x.x - Required** Collection in order to deploy the Agent to those devices.

## Next steps

Please refer to [Verifying](#) to verify your PXE Everywhere implementation.

Prepare and deploy the boot image using [Preparing and deploying the PXE Everywhere boot images](#).