

ArcGIS® 10.5.1, ArcGIS Pro 2.0, and ArcGIS Earth 1.5 Enterprise Deployment

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ArcGIS 10.5, ArcGIS Pro 2.0, and ArcGIS Earth 1.5 Enterprise Deployment

An Esri Technical Paper

Contents	Page
Introduction.....	1
Enterprise Deployment Using Active Directory—Group Policy or SCCM.....	1
Planning Software Deployment	2
Download and Extract Setups.....	3
System Requirements.....	3
Setup Requirements	3
Upgrading to 10.5.1	6
Licensing for 10.5.1 products	8
Licensing for ArcGIS Pro 2.0.....	10
Enterprise Deployment Using Active Directory and Group Policy	15
Introduction.....	15
Create Software Distribution Share	16
Create New GPO.....	16
Edit GPO.....	17
Enforce GPO.....	18
Start Software Installation.....	18
Upgrading to 10.5.1	19
Customize Group Policy Installation	20
Creating Transforms	21
Applying a Transform.....	22
Deploying Localized Setups Using Group Policy	23
Create Localized Setup GPO	23
Create Language Pack GPO.....	25
GPO Link Order.....	25
Deploying Patches and QFEs Using Group Policy.....	26

Contents	Page
Uninstalling Setups Deployed Using Group Policy.....	27
Enterprise Deployment Using SMS/SCCM.....	28
Introduction.....	28
Create Software Distribution Share	28
Create Package.....	29
Create Program	29
Create Advertisement.....	30
Start Software Installation.....	30
Upgrading to 10.5.1	30
Deploying Localized Setups Using SCCM.....	31
Uninstalling Setups Using SCCM	31
Deploying ArcGIS 10.5.1 Patches and QFEs Using SMS or SCCM	31
Troubleshooting the Installation	33
ArcGIS Desktop 10.5.1.....	33
Setup Dependency	34
Feature Dependency.....	34
Properties	34
Features Available	36
Localized Setups	38
Transforms	38
Uninstall.....	39
Existing ArcGIS for Desktop Users.....	39
Additional Installation Components	40
ArcGIS Desktop 10.5.1 Language Packs.....	41
Setup Dependency	42
Feature Dependency.....	42
Command Line Parameters.....	42
Features Available	42
Transforms	42
Uninstall.....	42
ArcGIS Desktop Background Geoprocessing 10.5.1 (64 bit).....	43
Setup Dependency	43
Feature Dependency.....	43
Command Line Parameters.....	43

Contents	Page
Features Available	43
Localized Setups	43
Transforms	44
Uninstall	44
 ArcGIS License Manager 10.5.1	 44
Setup Dependency	44
Feature Dependency.....	44
Command Line Parameters.....	44
Features Available	44
Localized Setups	44
Transforms	45
Uninstall	45
 ArcGIS ArcReader 10.5.1.....	 45
Setup Dependency	45
Feature Dependency.....	45
Command Line Parameters.....	45
Features Available	45
Localized Setups	46
Transforms	46
Uninstall	46
 ArcGIS ArcReader 10.5.1 Language Packs.....	 46
Setup Dependency	46
Feature Dependency.....	46
Command Line Parameters.....	47
Features Available	47
Transforms	47
Uninstall.....	47
 ArcGIS Engine 10.5.1.....	 47
Setup Dependency	47
Feature Dependency.....	48
Command Line Parameters.....	48
Features Available	48
Localized Setups	48
Transforms	49
Uninstall.....	49

Contents	Page
ArcGIS Engine 10.5.1 Language Packs.....	49
Setup Dependency	49
Feature Dependency.....	49
Command Line Parameters.....	49
Features Available	49
Transforms	49
Uninstall.....	49
ArcGIS Engine Background Geoprocessing 10.5.1 (64 bit).....	50
Setup Dependency	50
Feature Dependency.....	50
Command Line Parameters.....	50
Features Available	51
Localized Setups	51
Transforms	51
Uninstall.....	51
ArcGIS Server 10.5.1.....	51
Setup Dependency	52
Feature Dependency.....	52
Command Line Parameters.....	52
ArcGIS Server 10.5.1 Account.....	53
Server Configuration File	54
Features Available	54
Existing ArcGIS for Server Users.....	54
Localized Setups	56
Transforms	56
Uninstall.....	56
ArcGIS Server 10.5.1 Language Packs.....	56
Setup Dependency	57
Feature Dependency.....	57
Command Line Parameters.....	57
Features Available	57
Transform.....	57
Uninstall.....	57
ArcGIS Web Adaptor (IIS) 10.5.1	57
Setup Dependency	58
Feature Dependency.....	62

Contents	Page
Product Conflict	62
Command Line Parameters	62
Installing Multiple Instances	62
Features Available	63
Upgrade	63
Localized Setups	63
Transforms	64
Uninstall	64
ArcGIS Web Adaptor (Java Platform) 10.5.1	69
Setup Dependency	70
Feature Dependency	70
Product Conflict	70
Command Line Parameters	70
Features Available	70
Upgrade	71
Localized Setups	71
Transforms	71
Uninstall	71
ArcObjects SDK for the Java Platform	73
Setup Dependency	73
Feature Dependency	73
Command Line Parameters	73
Features Available	73
Localized Setups	73
Transforms	73
Uninstall	74
ArcObjects SDK for the Microsoft .NET Framework	74
Setup Dependency	74
Feature Dependency	74
Command Line Parameters	74
Features Available	74
Localized Setups	75
Transforms	75
Uninstall	75
ArcGIS Desktop 10.5.1 Tutorial Data	75
Setup Dependency	75

Contents	Page
Feature Dependency.....	75
Command Line Parameters.....	75
Features Available	76
Localized Setups	76
Transforms	77
Uninstall.....	77
ArcGIS Data Interoperability 10.5.1 for Desktop.....	77
Setup Dependency	77
Feature Dependency.....	77
Command Line Parameters.....	77
Features Available	77
Localized Setups	77
Transforms	78
Uninstall.....	78
ArcGIS Data Interoperability 10.5.1 for Server.....	78
Setup Dependency	78
Feature Dependency.....	78
Command Line Parameters.....	78
Features Available	78
Localized Setups	78
Transforms	78
Uninstall.....	78
ArcGIS Coordinate Systems Data	79
Setup Dependency	79
Feature Dependency.....	79
Command Line Parameters.....	79
Features Available	79
Localized Setups	79
Transforms	79
Uninstall.....	79
Portal for ArcGIS 10.5.1	79
Setup Dependency	79
Feature Dependency.....	79
Command Line Parameters.....	79
Features Available	80
Localized Setups	80

Contents	Page
Transforms	80
Uninstall.....	80
Portal for ArcGIS 10.5.1 Help Language Pack.....	80
Setup Dependency	80
Feature Dependency.....	80
Command Line Parameters.....	80
Features Available	81
Transforms	81
Uninstall.....	81
ArcGIS Data Store 10.5.1	81
Setup Dependency	81
Feature Dependency.....	81
Command Line Parameters.....	82
Features Available	82
Creating Data Store.....	82
Localized Setups	82
Transforms	82
Uninstall.....	82
ArcGIS Data Store 10.5.1 Help Language Pack.....	83
Setup Dependency	83
Feature Dependency.....	83
Command Line Parameters.....	83
Features Available	83
Transforms	83
Uninstall.....	83
ArcGIS Pro.....	84
Setup Dependency	84
Feature Dependency.....	84
Properties	84
Features Available	88
Localized Setups	88
Transforms	88
Uninstall.....	90
Software Updates	90

Contents	Page
ArcGIS Pro Licensing Service.....	90
Setup Dependency	90
Feature Dependency.....	90
Properties	90
Features Available	91
Localized Setups	91
Uninstall.....	91
ArcGIS Pro Language Packs	91
Setup Dependency	91
Feature Dependency.....	91
Command Line Parameters.....	91
Features Available	92
Transforms	92
Uninstall.....	92
ArcGIS Pro Help.....	93
Setup Dependency	93
Feature Dependency.....	93
Command Line Parameters.....	93
Features Available	93
Localized Setups	94
Transforms	94
Uninstall.....	94
ArcGIS Data Interoperability for Pro	94
Setup Dependency	94
Feature Dependency.....	94
Command Line Parameters.....	94
Features Available	95
Localized Setups	95
Transforms	95
Uninstall.....	95
ArcGIS Pro Coordinate Systems Data.....	95
Setup Dependency	96
Feature Dependency.....	96
Properties	96
Features Available	97
Localized Setups	97

Contents	Page
Uninstall	97
ArcGIS Earth	97
Setup Dependency	98
Feature Dependency.....	98
Properties	98
Features Available	99
Localized Setups	99
Transforms	99
Uninstall	100
Summary	100

ArcGIS 10.5.1, ArcGIS Pro 2.0, and ArcGIS Earth 1.5 Enterprise Deployment

Introduction The ability to distribute software to a number of users or computers from a centralized location has become a requirement for many administrators. In addition, many companies would like to lock down a user's environment and remove the ability for a user to locally install or update existing software.

To solve these challenges, an administrator can use an enterprise deployment tool, such as Microsoft® Group Policy, System Management Server (SMS), or System Center Configuration Manager (SCCM), to manage the setups, allocating them to users or computers based on their needs. The software, of predetermined properties, is installed without the administrator physically visiting each machine. An administrator will also use an enterprise deployment tool to control a user's environment. These tools enable the administrator to prevent users from installing unauthorized software or removing files that an installed software application still requires.

ArcGIS® 10.5.1 and ArcGIS Pro setups are developed with Microsoft® Windows® Installer technology, allowing ArcGIS software products and patches to be deployed from a central server. With enterprise deployment of ArcGIS products, geographic information system (GIS) managers or system administrators can efficiently plan for and control installations and updates. For example, these maintenance activities can be scheduled when they have the least impact on users or the network. Installations can be targeted to specific groups of users or machines. ArcGIS product version updates throughout an organization can be synchronized. Software can be installed on computers for which users don't have administrative privileges.

ArcGIS 10.5.1 and ArcGIS Pro setups can be installed on many machines by deploying the MSI or Setup.exe file directly. Any enterprise deployment tool that supports installation using an MSI file can be used to deploy ArcGIS 10.5.1 and ArcGIS Pro setups. This paper documents the enterprise deployment of ArcGIS 10.5.1 and ArcGIS Pro setups using the Active Directory® Group Policy and SCCM. The examples consider enterprise deployment in a secure lockdown environment as well as by users with administrative control on their machines.

Enterprise Deployment Using Active Directory— Group Policy or SCCM

The following ArcGIS 10.5.1 and ArcGIS Pro setups are supported for standard Windows Installer deployment in both a lockdown environment (where the user installing does not have administrative privileges) and an environment where the user installing does have administrative privileges. **Note:** If installing in a lockdown environment, Group Policy must be set to Always install with elevated privileges for the Windows Installer.

- ArcGIS Desktop 10.5.1

- ArcGIS Desktop 10.5.1 Language Packs
- ArcGIS License Manager 10.5.1
- ArcGIS Engine 10.5.1
- ArcGIS Engine 10.5.1 Language Packs
- ArcGIS ArcReader 10.5.1™
- ArcGIS ArcReader 10.5.1 Language Packs
- ArcGIS Server 10.5.1
- ArcGIS Server 10.5.1 Language Packs
- ArcGIS Web Adaptor (IIS) 10.5.1
- ArcGIS Web Adaptor (Java Platform) 10.5.1
- ArcObjects SDK for the Java Platform
- ArcObjects SDK for the Microsoft .NET Framework
- ArcGIS Desktop 10.5.1 Tutorial Data
- ArcGIS Data Interoperability 10.5.1 for Desktop
- ArcGIS Data Interoperability 10.5.1 for Server
- ArcGIS Coordinate Systems Data
- Portal for ArcGIS 10.5.1
- Portal for ArcGIS 10.5.1 Help Language Pack
- ArcGIS Data Store 10.5.1
- ArcGIS Data Store 10.5.1 Help Language Pack
- ArcGIS Pro
- ArcGIS Pro Licensing Service
- ArcGIS Pro Language Packs
- ArcGIS Pro Help
- ArcGIS Pro SDK for .NET
- ArcGIS Data Interoperability for Pro
- ArcGIS Pro Coordinate Systems Data
- ArcGIS Earth

Planning Software Deployment

Before you deploy software, go through the following checklist:

- Download and extract setups.
- System requirements: Client machines should meet system requirements of the setup.
- Setup requirements: Install any setup dependencies or feature dependencies and remove any product conflicts. If the product has an installation guide, read that before deploying the setup. Version 10.5.1 setups can upgrade the 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, and 10.5 setups.
- Licensing: Decide on the software licensing model—single use or concurrent use for ArcGIS 10.5.1 setups. ArcGIS Pro follows the named user/single use/concurrent use licensing model.
- Deployment method: Decide on the deployment method—Group Policy or SCCM—and customize the setup if needed. Check the ArcGIS Resources to see if a [patch](#) has

been released for it. If yes, you can apply it to the administrative image before deployment.

Download and Extract Setups

- Click the product's download link on Esri's Customer Care portal.
- Download and extract the setups.
- Make sure you have write access to your download directory location, as well as your ArcGIS installation directory location, and that no one is accessing it.
- Recommended: Use Esri® Download Manager to manage your downloads.
 - The first panel of the extraction wizard will allow you to indicate the location on your computer to which you would like the installation files extracted. When satisfied, click OK.
 - **Note:** If you choose to change the destination location when starting the .exe (either from the Launch option in Esri Download Manager or running the downloaded self-extracting .exe manually), be sure to choose a unique location to which you will move the files.
 - You will be notified when the file extraction is complete. To install the software at a later time, uncheck the check box.

System Requirements

Every setup has system requirements that must be met before the setup can proceed with the installation. System requirements consist of supported operating systems and minimum hardware requirements.

- Supported operating systems—Check the [system requirements](#) at the ArcGIS Resources website to confirm that machines on which the software is going to be deployed have a supported operating system. The system requirements will list the minimum and maximum version of supported service packs, also. This will help in knowing what platform is supported. Some setups, like ArcGIS Desktop 10.5.1, can be installed on both 32-bit and 64-bit OSs, and some setups, like ArcGIS Server 10.5.1, can only be installed on a 64-bit OS.
- Hardware requirements—Check the latest [hardware requirements](#) at the ArcGIS Resources website. Setups do not have any built-in checks for hardware requirements.

Setup Requirements

Setups check for launch conditions, feature dependencies, and product conflicts.

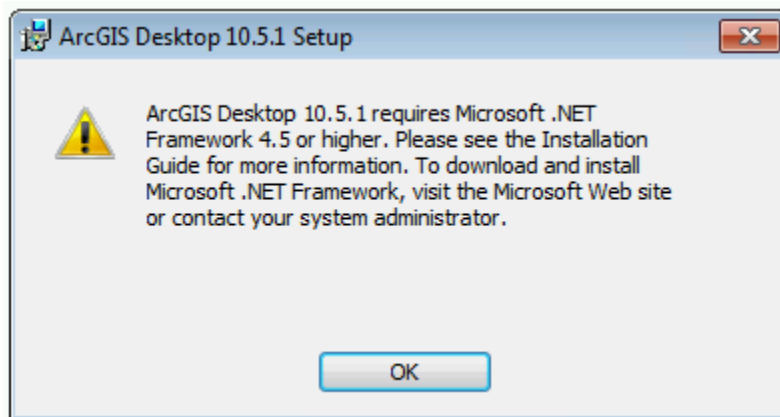
- Launch conditions—These are the dependencies that must be met for the setup to run:

- **Windows Installer 3.1 or higher:** Windows Installer version 3.1 or higher must be installed and running on your machine prior to the launch of any Esri setups. The Windows Installer service installs setups with elevated privileges. After installation, the application itself runs in user context. Some Esri programs need administrative privileges to launch.
- **System account:** The machine's system account must have full control of the system drive and the drive to which you will be installing.
- **MSXML 6.0:** Some setups require Microsoft XML Core Services (MSXML) 6.0. The msxml6.msi is located in the \Support\MSXML6\32-bit and 64-bit folders. If installing on a 32-bit operating system, use the 32-bit version, and if on the 64-bit operating system, use the 64-bit version. This Microsoft Installer (MSI) file can be run silently using standard MSI command line parameters; for example:

```
msiexec /i msxml6.msi /qb
```

If Setup.exe is used to start the installation, MSXML 6.0 is installed automatically.

- **Microsoft .NET Framework 4.5:** Some setups, like ArcGIS Desktop 10.5.1, have a setup dependency on Microsoft .NET Framework 4.5. If the setup does not find it, the following dialog box is displayed:



Note: This dialog box is not displayed if setup is being deployed completely silently.

- **Feature dependencies**—Setups are made of features that are defined based on the functionality they provide. Feature dependencies do not prevent a setup from being installed, unlike setup dependencies. If a prerequisite for the feature is not found on the machine, that feature will not be available for installation on the Select Features dialog box.

Unavailable features can be added at a later time by installing the prerequisite and going to Add/Remove Programs > [Product] > Change > Modify. The feature that had been unavailable before should now be visible and marked with a red X. Select the feature for installation and follow the on-screen instructions until the installation process has been successfully completed. Uninstalling and reinstalling the software is not required.

For example, ArcGIS ArcReader 10.5.1 has a .NET Support feature with a dependency on Microsoft .NET Framework 4.5. If it is not found, the .NET Support feature does not show up on the Select Features dialog box. If ArcGIS ArcReader 10.5.1 has already been installed and you need to install the .NET Support feature, install Microsoft .NET Framework 4.5, then go to Add/Remove programs, click ArcGIS 10.5.1 ArcReader, then click the Uninstall/Change option. This launches the Application Maintenance dialog box. Select Modify and click Next to go to the Select Features dialog box. The .NET Support feature will now be available for installation.

This document lists all setup and feature dependencies for the products that are supported for software deployment. Refer to the individual installation guides for more detail.

- **Product conflicts**—If the products listed below are installed on your machine and are a version previous to ArcGIS 10.1, they must be uninstalled before proceeding with the ArcGIS 10.5.1 setups. All ArcGIS products previous to version 10.1 must be uninstalled before installing any ArcGIS 10.5.1 product.

ArcGIS Pro can be installed on the same machine as other ArcGIS Desktop releases or on a machine without any Esri products.

Esri strongly recommends that all sample and third-party extensions or plug-ins be uninstalled before installing a newer version of ArcGIS. Remove these from your computer before uninstalling ArcGIS products. Contact the distributor or manufacturer to confirm that they are supported with ArcGIS 10.5.1 products. If they are, you can install them again after installing ArcGIS 10.5.1 products.

- ArcGIS for Desktop
- ArcInfo® Workstation
- ArcReader
- ArcIMS®
- ArcIMS Web ADF™ for the Java Platform
- ArcIMS Web ADF for the .NET Framework
- ArcGIS Server for the Microsoft .NET Framework

- ArcGIS Server Web ADF Runtime for the Microsoft .NET Framework
- ArcGIS Engine Runtime
- ArcGIS Engine Developer Kits
- ArcGIS Desktop Developer Kits
- ArcGIS Image Server (including all clients)
- ArcGIS Mobile
- Python and Numerical Python (NumPy) (not required, but it is highly recommended that you remove these)

The setup will terminate and display a dialog box if conflicting versions of these products exist on your machine. If so, you must uninstall each of them and then run the setup again to proceed with your installation.

Upgrading to 10.5.1

ArcGIS 10.5.1 setups have been authored as major upgrades to 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, and 10.5 setups. They are designed to detect and upgrade an existing installation of 10.1 (including SP1), 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 setups on the target system.

The installation location parent folder is retained, although the upgrade is installed in a <Product>\10.5 folder. After installation, any customizations, add-ons, or third-party applications installed for 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 must be reapplied to 10.5.1. The settings for the installation location, license manager (for concurrent use), or authorization information (for single use) are retained in the upgrade.

ArcGIS 10.1 (including SP1), 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, and 10.5 Users

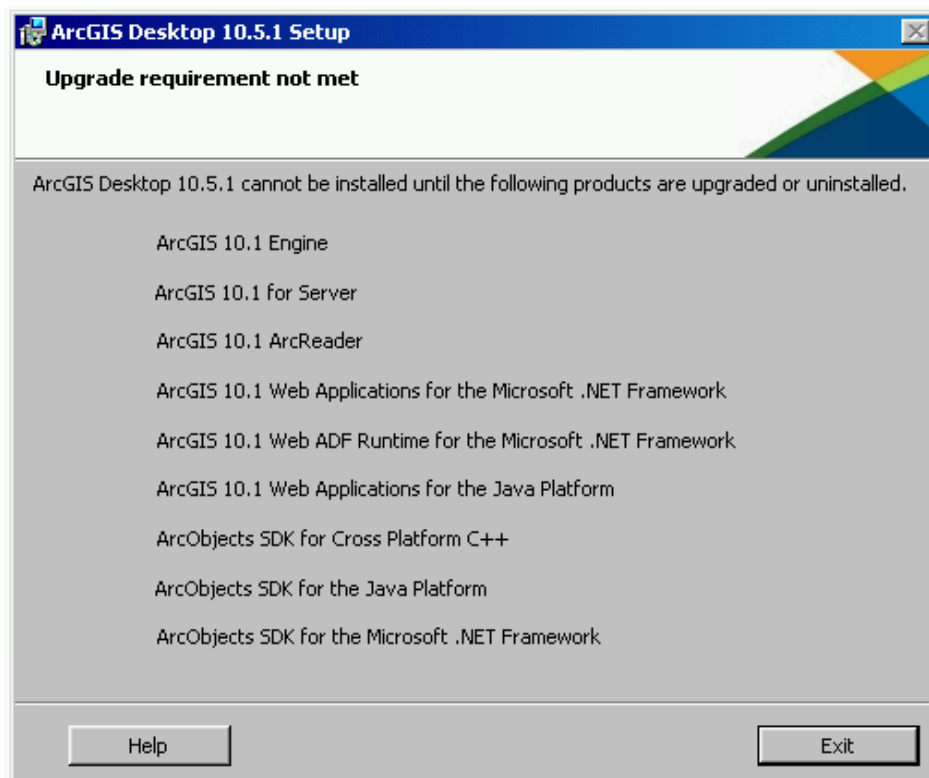
ArcGIS 10.5.1 is a major upgrade. If, for example, you already have ArcGIS 10.3 for Desktop installed, the setup will automatically upgrade to ArcGIS Desktop 10.5.1. Additionally, you can install ArcGIS Desktop 10.5.1 without having a previous version of ArcGIS for Desktop installed on your machine. The same logic applies to other ArcGIS 10.5.1 setups.

If you wish to change the installation location, you will need to manually uninstall the 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 product before installing the 10.5.1 setups in the new location.

You must also uninstall your license manager and install the 10.5.1 license manager. ArcGIS License Manager 10.5.1 can serve licenses to ArcGIS 10.x and 9.x installations.

If 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 setups are found on the machine but not the product that is being upgraded, installation will not continue until all

10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 setups have been uninstalled or upgraded.



Note: This dialog box is not displayed if setup is being deployed completely silently.

Upgrading a Localized 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 Setup

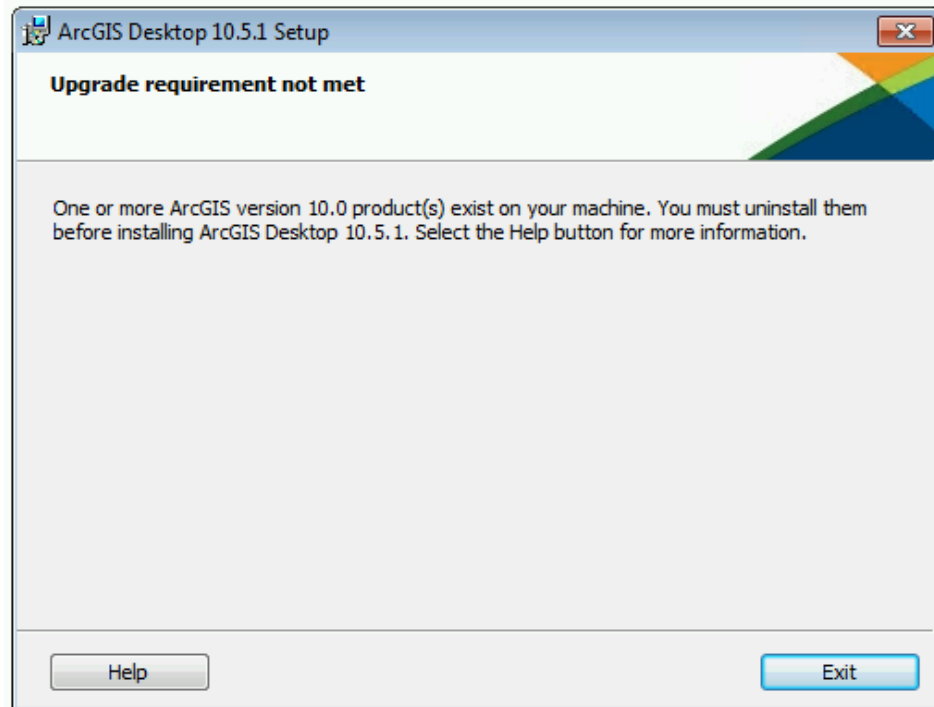
Running setup.exe for a localized 10.5.1 setup will upgrade both the main product installation and the language pack installation.

If you have a localized 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 product installed and run the upgrade for the English 10.5 setup using setup.msi, only the core product installation will be upgraded. The 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 language pack will be retained in the original installation location but will not be functional.

When the 10.5.1 language pack is available, run its setup to upgrade the 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 language pack to 10.5.1. If the core 10.5.1 product exists, running setup.exe for a localized installation will display the maintenance dialog box for the core product. Cancel out of this setup to continue with the language-pack-only installation. Installation using the language pack MSI file will not bring up the maintenance dialog box of the core product.

ArcGIS 10.0 and Prior Users

You must uninstall all ArcGIS products prior to 10.1 and any third-party extensions or tools from your machine before proceeding with 10.5.1 setup installation.



Note: This dialog box is not displayed if setup is being deployed completely silently.

Licensing for 10.5.1 products

All 10.5.1 products can be authorized using single use files. In addition to single use authorization, ArcGIS Desktop 10.5.1 and ArcGIS Engine 10.5.1 can also be authorized using a license manager. Following is a brief overview of licensing for comprehensive licensing information, refer to the License Manager Reference Guide at the ArcGIS Resources website.

- **Concurrent Use with License Server**—A concurrent use license allows you to gain access to the software from any computer on the network on which the software is installed. A license server manager administers a pool of licenses to be shared. The number of concurrent licenses determines the number of users who can run the applications concurrently. If all licenses are being used, an additional user cannot run the application until one of the other users finishes using his or her license. When one user finishes using the license, another user can begin using it. **This configuration is available only for ArcGIS Desktop 10.5.1 and ArcGIS Engine 10.5.1.** After it is installed, ArcGIS License Manager 10.5.1 keeps track of the number of copies of the software that can be run simultaneously. A concurrent use license allows copies of ArcGIS Desktop 10.5.1 and ArcGIS Engine 10.5.1 to be installed on numerous machines. The number of concurrent use seats in your license file determines the number of copies of each software product that can be run simultaneously.

You only need one ArcGIS License Manager per network to manage all your concurrent use ArcGIS 10.x and 9.x software products. The license manager can be a Windows, or Linux server and will manage Windows, and Linux ArcGIS software products. For example, a Windows installation of ArcGIS Desktop 10.5.1 can obtain a license from a Windows, or Linux license manager.

After purchasing Esri concurrent use software products, you will receive an e-mail from Esri Customer Service containing the authorization information for your purchased products. You will need this information to authorize licenses on your license manager. You first need to run the license manager installer and use ArcGIS License Server Administrator to authorize licenses.

The deployment workflow follows:

1. Log in to [My Esri](#) and generate a provisioning file (.prvs) for concurrent use. A provisioning file allows a license administrator to quickly authorize ArcGIS software on end-user machines. It has prepopulated information for what features you are authorized for.
 2. Install ArcGIS License Manager 10.5.1.
 3. At the end of the installation, ArcGIS License Server Administrator appears. Select version 10.1–10.5 from the drop-down list and click Authorize now. This launches the Software Authorization wizard. Click I have received an authorization file from Esri and am now ready to finish the authorization process. Browse to the concurrent provisioning file that was created in step 1 and click Next. Click Authorize with Esri now using the Internet and continue with the authorization process. At this stage, ArcGIS License Manager 10.5.1 has connected to the Esri Customer Care portal to download authorization information. After this is done, you will have a license manager ready to serve concurrent use ArcGIS Desktop 10.5.1 and ArcGIS Engine 10.5.1 licenses.
 4. Install the ArcGIS software on client machines and configure the machines to ArcGIS License Manager 10.5.1. To enable licensing during SCCM deployment, pass in the property `ESRI_LICENSE_HOST=[your_license_server]` to Setup.exe. For Group Policy deployments, create a transform and edit the `ESRI_LICENSE_HOST` property. You can also specify the software type using the properties `SOFTWARE_CLASS` and `SEAT_PREFERENCE`. See the Creating Transforms section of this document for more details. Client machines no longer need to connect to the Esri customer website to obtain authorization to use the software. You can look up how many licenses are being used in ArcGIS 10.5.1 License Manager.
- **Single Use**—A single use license generally restricts use of a software product to one user/machine. A single use license must be dedicated for each computer that has use rights for the software, data, or documentation. **This configuration is for all setups including ArcGIS Desktop 10.5.1 and ArcGIS Engine 10.5.1.**

The deployment workflow follows:

1. Log in to [My Esri](#) and generate a client provisioning file (.prvc) for single use. If authorizing ArcGIS Server 10.5.1, generate a client provisioning file for ArcGIS Server 10.5.1. If, for example, you have 300 single use licenses for ArcGIS Server 10.5.1, you do not have to create 300 .prvc files. Just one .prvc file will have all the licensing information and can be used to authorize on client machines.
2. On the end-user machine, after installation of the ArcGIS software is complete, open a command prompt window. Change the path to C:\Program Files\Common Files\ArcGIS\bin. Run the following command to authorize the software silently:

```
SoftwareAuthorization.exe /LIF <Location of prvc> /s /Ver 10.5
```

The client machine connects to the Esri Customer Care portal during authorization. You can look up how many licenses are being used by logging on to the Customer Care website.

Authorizing Single Use in Group Policy/SCCM—To perform authorization of a single use product as a user without administrative privileges, follow these steps:

1. Copy a valid authorization file (.prvc) to a shared area on your server. The authorization file (.prvc) cannot be in a location with spaces.
2. Create a new SCCM package with a program that runs SoftwareAuthorization.exe using Run with administrative rights. SoftwareAuthorization.exe should be run from %CommonProgramFiles%\ArcGIS\bin with the following command line:

```
%CommonProgramFiles%\ArcGIS\bin\SoftwareAuthorization.exe /LIF  
<Location of prvc> /s /Ver 10.5
```

The /s parameter is used to run the software authorization tool silently.

When creating an SCCM package, include a .prvc file in the source. This is because when SCCM runs with administrative rights, it does it as the system account and not as a standard administrator account. The system account does not have rights to network shares, so the .prvc needs to be in the package source.

For Group Policy, create a script that has the above command line.

3. In SCCM, create an advertisement for this program; it should be run after the main setup has been installed. For Group Policy, add it as a logon script to the computer.

Licensing for ArcGIS Pro 2.0

An administrator of an organization that has been provisioned for ArcGIS Pro can use three licensing options to manage licenses for members. You must authorize licenses for members before members can run ArcGIS Pro. The three options for licensing with

ArcGIS Pro are as follows:

- **Named user license**—A named user license is the default license option for ArcGIS Pro. Named user licenses are authorized and managed by an administrator through an organization's ArcGIS Online website or a local instance of Portal for ArcGIS. An administrator assigns a software level (Basic, Standard, or Advanced) and extensions in ArcGIS Online or Portal for ArcGIS to individual users. When you start ArcGIS Pro and sign in with a named user license, the app runs with the level and extensions set by the administrator. If an administrator has not assigned a license to you, ArcGIS Pro will not run when you attempt to sign in.

If the license is through ArcGIS Online (the default option), licensing software is not required because ArcGIS Online is a cloud-based service provided by Esri. If the license is through Portal for ArcGIS, installation of Portal for ArcGIS 10.5 or later is recommended and ArcGIS License Manager 10.5.1 or later is required.

The advantage of a named user license is that the assigned level and extensions are available to you at all times. With a named user license, a user can run ArcGIS Pro on up to three machines simultaneously.

- **Concurrent use license**—Concurrent use licenses are authorized and managed using the ArcGIS License Manager just like ArcGIS Desktop. The ArcGIS License Manager is installed on a single machine on the network and is provisioned with core and extension licenses. With a concurrent use license, your machine points to a License Manager Server for license authorization from a shared pool of licenses, and you can choose your license level and extensions as long as the desired license is available. This allows more users to have ArcGIS Pro installed on their machine than the total number of licenses. Simultaneous use of ArcGIS Pro is limited by the total number of available licenses in the License Manager Server.

A named user license is the default license type, so before concurrent use licenses are stored and managed in the License Manager, an administrator must convert named user licenses to concurrent use licenses in [My Esri](#). After the ArcGIS License Manager is installed and provisioned with licenses by an administrator, members can start ArcGIS Pro and check out any available license on the Licensing dialog box.

- **Single use license**—Single use licenses are managed within [My Esri](#) and authorized on each machine. Within [My Esri](#), a single use license contains an authorization number for the core license level (e.g., Advanced, Standard, or Basic) and one authorization number for every extension. Use the authorization number to authorize a core license level and optional extension licenses. Single use licenses can only be accessed on the authorized machine. Once authorized, anyone with access to that machine can use ArcGIS Pro on or off the network.

The named user license is the default license type, so before a single use license can be used to authorize ArcGIS Pro, you must convert at least one named user license to a single use license in My Esri. Create a provisioning file (prvc) to avoid entering the authorization numbers manually in the Software Authorization Wizard and download the file.

Following properties can be used to configure licensing options for ArcGIS Pro installation:

Parameter	Value	Case Sensitive	Required	Description
ESRI_LICENSE_HOST	@<License Manager>	No	Yes for concurrent use	Machine name of license manager
SOFTWARE_CLASS	Viewer	Yes	Yes (one of these values)	Installs ArcGIS Pro as Basic level
	Editor			Installs ArcGIS Pro as Standard level
	Professional			Installs ArcGIS Pro as Advanced level
AUTHORIZATION_TYPE	SINGLE_USE	Yes	Yes (one of these values)	Installs ArcGIS Pro as a single use seat
	CONCURRENT_USE	Yes		Installs ArcGIS Pro as a concurrent use seat
	NAMED_USER	Yes		Installs ArcGIS Pro with a Named User license.
LOCK_AUTH_SETTINGS	True		No	If the authorization type is defined at the command line, then the registry string LOCK_AUTH_SETTINGS is set to True under HKEY_LOCAL_MACHINE\SOFTWARE\Esrri\ArcGISPro\Licensing. When LOCK_AUTH_SETTINGS is True, the licensing settings in the registry apply to all ArcGIS Pro users on that machine--an individual user cannot make changes. To allow ArcGIS Pro users on the machine to define their own authorization settings through the ArcGIS Pro application, set LOCK_AUTH_SETTINGS to False.

ArcGIS_Connection		No	No	Specifies whether a connection to www.arcgis.com should be available from the Portals page.
	TRUE			To include the connection, set this property to "TRUE".
	FALSE			If set to "FALSE", the connection will not appear on the Portals page.
Portal_List	<portalURL1>; <portalURL2>	No	No	To add one or more portal connections to the Portal page, set Portal_List="<portalURL1>;<portalURL2>". Use semicolons to separate portal URLs. If "ArcGIS_Connection" is set to "False", this property cannot contain "arcgis.com". If your portal supports HTTPS, it is strongly recommended that the Portal_List URL(s) uses HTTPS.
License_URL	<portalURL>	No	No	To specify the URL of the Named User licensing portal, set License_URL="<portalURL>". If "ArcGIS_Connection" is set to "False", "License_URL" cannot contain "arcgis.com". To use this property, "AUTHORIZATION_TYPE" must be set to "NAMED_USER".

If all three properties (ESRI_LICENSE_HOST, SOFTWARE_CLASS, and AUTHORIZATION_TYPE) are used for per machine install, it creates licensing registry keys in HKLM\Software\ESRI\ArcGISPro\Licensing hive. For per user install, licensing registry keys are created in HKCU\Software\ESRI\ArcGISPro\Licensing hive.

■ Named user license command line

Named user licensing for per machine installs

```
msiexec.exe /i <Path to msi> /qb ALLUSERS=1
SOFTWARE_CLASS=Professional AUTHORIZATION_TYPE= NAMED_USER
License_URL="<portalURL>"
```

Named user licensing for per user installs

```
msiexec.exe /i <Path to msi> /qb ALLUSERS=2 MSIINSTALLPERUSER=1
SOFTWARE_CLASS=Professional AUTHORIZATION_TYPE= NAMED_USER
License_URL="<portalURL>"
```

■ Concurrent use license command line

Concurrent use licensing for per machine installs.

```
msiexec.exe /i <Path to msi> /qb ALLUSERS=1
ESRI_LICENSE_HOST=yourlicenseserver SOFTWARE_CLASS=Professional
AUTHORIZATION_TYPE=CONCURRENT_USE
```

Concurrent use licensing for per user installs.

```
msiexec.exe /i <Path to msi> /qb ALLUSERS=2 MSIINSTALLPERUSER=1
ESRI_LICENSE_HOST=yourlicenseserver SOFTWARE_CLASS=Professional
AUTHORIZATION_TYPE=CONCURRENT_USE
```

Note: The ArcGIS Pro Licensing Service setup is required for a per user installation of ArcGIS Pro to work offline with a concurrent use license.

■ Single use license command line

Single use licensing for per machine installs

Install setup

```
msiexec.exe /i <Path to msi> /qb ALLUSERS=1
SOFTWARE_CLASS=Professional AUTHORIZATION_TYPE=SINGLE_USE
```

Authorize product

```
%ProgramFiles%\ArcGIS\Pro\bin\SoftwareAuthorizationPro.exe"/LIF
<Location of prvc> /s /Ver 10.5
```

Single use licensing for per user installs

Install setup

```
msiexec.exe /i <Path to msi> /qb ALLUSERS=2 MSIINSTALLPERUSER=1
SOFTWARE_CLASS=Professional AUTHORIZATION_TYPE=SINGLE_USE
```

Install ArcGIS Pro Licensing Service setup

```
msiexec.exe /i <Path to msi> /qb
```

Authorize product

```
%ProgramFiles%\ArcGIS\Pro\bin\SoftwareAuthorizationPro.exe"/LIF
<Location of prvc> /s /Ver 10.5
```

Installing ArcGIS Pro Licensing Service

- The ArcGIS Pro Licensing Service setup is installed with ArcGIS Pro. It is required for a per user installation of ArcGIS Pro to work offline with a concurrent use license or to utilize single use licensing. The ArcGIS Pro Licensing Service setup installs the 64-bit Flex Net service. The Flex Net service is automatically installed by a per machine instance of ArcGIS Pro; the Pro Licensing setup is only necessary to support per user installations.
- To install the ArcGIS Pro Licensing Service, run ProLS.msi in "<ArcGIS Pro installation directory>\Resources\ArcGIS Pro Licensing Service" and follow the prompts. This requires administrative privileges.

More information regarding ArcGIS Pro licensing is available at <http://pro.arcgis.com/en/pro-app/get-started/view-software-licenses.htm>.

Enterprise Deployment Using Active Directory and Group Policy

Introduction

Using Group Policy as an enterprise deployment tool requires an Active Directory environment. The Active Directory environment consists of a domain controller with a server operating system, like Windows Server 2003, Windows Server 2008, Windows Server 2012, and Windows Server 2012 R2, to manage the domain and desktop clients, like Windows XP Professional, Windows Vista, Windows 7, Windows 8, and Windows 10. Group Policy includes a software installation extension that enables the domain controller to manage setups that can be assigned to users or computers or can be published to users. These setups must be created with Microsoft Windows Installer technology. The deployment package can be customized using a transform (.mst) file. The transform file can be used to specify the software seat, installation directory, and license manager as required. Once a package is deployed, either assigned or published, it is displayed in the Add/Remove Programs dialog box. An authorized user launches the setup from Add New Programs. Packages can be set to Always install with elevated privileges, enabling the Windows Installer to run as the local machine's system account. For more information on Group Policy software deployment, see www.microsoft.com.

The domain controller should be used to uninstall ArcGIS. When the software is deployed per user and many different users install it, using the Add/Remove Programs dialog box to uninstall will remove all the files and registry keys for this product, but the software shortcuts will remain on the machine for other users. This may confuse users when their shortcuts fail to work because the files have been uninstalled. The Add/Remove Programs dialog box for these users will also state that the product is still installed on the machine. To avoid these issues, uninstall using the Group Policy's Remove option. When the software is deployed per machine, the Control Panel's

Add/Remove Programs dialog box does not enable you to remove the software unless you have administrative privileges; using Group Policy to manage the uninstall of the software will uninstall with elevated privileges for all users.

If deploying the software in a lockdown environment, you will need to modify Group Policy so that the Windows Installer is set to Always install with elevated privileges (both user and computer configuration).

Deploying software to client machines is a multistep process involving first creating the software distribution share followed by creating a Group Policy Object (GPO), editing the GPO, enforcing the GPO, and finally initiating software installation on the client machine.

Create Software Distribution Share

Before software can be deployed, it must be copied to a network share for easy access. It is recommended that an administrative installation be done first and that the network share be used to deploy to client machines. This method supports the Group Policy method of redeploying the setup package after a patch has been applied.

You can perform an administrative installation on the server using the standard `msiexec` command line parameters:

```
msiexec /a <setup location>\setup.msi /qb TARGETDIR=<installation directory>/10.5.1 /<product name>
```

It is important to include the `TARGETDIR` property; otherwise, the installation directory will default to the drive with the emptiest disk space including mapped drives. If the `/qb` parameter is not included, the setup dialog will be launched, and that can be used to finish the administrative installation. Also, remember to include the version and product name in the `TARGETDIR`. This helps prevent overwriting the administrative image by mistake.

For patch deployment, you will patch the administrative installation on the server, then redeploy the package to your clients. Do not delete this administrative installation; it is required for modifying installation features and additional patching. See the *Deploying Patches Using Group Policy* section for more information.

Some setups have files that are located in a directory structure that can potentially exceed the Windows 256-character limit. If the Windows character limit is exceeded, you will receive installation error 1335. There are two workarounds for this issue: you can either perform an administrative installation to a directory structure that does not exceed the above limits, or you can perform an administrative installation at the command line with the additional parameter of `SHORTFILENAMES=TRUE`.

```
msiexec /a <setup location>\setup.msi /qb TARGETDIR= <installation directory>/10.5.1 /<product name> SHORTFILENAMES=TRUE
```

After the administrative or shortfile administrative installation is done, share the folder and modify security permissions so that client machines can access the network share.

Create New GPO

1. Start Group Policy Management Console (GPMC). GPMC consists of a Microsoft Management Console (MMC) snap-in and a set of programmable interfaces for managing Group Policy. GPMC is included with Remote Server Administration

Tools (RSAT). Installing RSAT does not automatically install GPMC. To install GPMC after you install RSAT, go to Server Manager and add it as a feature:

Start > Run > gpmc.msc

2. Browse to your domain and your organizational unit (OU), then right-click and click Create a GPO in this domain, and Link it here.

Organizational units are Active Directory containers into which you can place users, groups, computers, and other organizational units. An organizational unit is the smallest scope or unit to which you can assign Group Policy settings or delegate administrative authority.

3. Provide a value for the name.

Edit GPO To launch Group Policy Management Editor, right-click GPO and click Edit.

The Group Policy snap-in contains the following major branches:

- **Computer Configuration:** Administrators can use Computer Configuration to set policies that are applied to a computer regardless of who logs on. Computer Configuration typically contains sub items for software settings, Windows settings, and administrative templates.

For all products except ArcGIS Pro, setups assign the application to a computer. ArcGIS Pro can be assigned to either a computer or user.

In this example, GPO has been named ArcGIS Desktop 10.5.1.

1. Go to ArcGIS Desktop 10.5.1 > Computer Configuration > Policies > Software Settings > Software Installation. Then right-click and click New Package.
2. Browse to the folder that contains the MSI and select it. Always use a UNC path to browse to the MSI file. This share should have security rights configured so that the client machines can also access it.
3. Choose the Advanced option and click OK. The Publish option is not available because you will assign to Computer.
4. After the GPO Properties dialog box appears, go to the Deployment tab and check the Uninstall this application when it falls out of the scope of management check box. This option is needed during uninstallation.
5. After the ArcGIS Desktop 10.5.1 package shows up in the right pane (this takes a minute or two), close Group Policy Management Editor.

- **User Configuration:** Administrators can use User Configuration to set policies that apply to users regardless of which computer they log on to. User Configuration

typically contains sub items for software settings, Windows settings, and administrative templates.

It is not recommended that you assign an ArcGIS setup package except the ArcGIS Pro setups to a user. Assigning an ArcGIS setup to a user will not successfully add a shortcut to your desktop, and the setup will not auto install by file extension activation.

In this example, GPO has been named ArcGIS Pro.

1. Go to ArcGIS Pro > User Configuration > Policies > Software Settings > Software Installation. Then right-click and click New Package.
2. Browse to the folder that contains the MSI and select it. Always use a UNC path to browse to the MSI file. This share should have security rights configured so that the client machines can also access it.
3. Choose the Advanced option and click OK.
4. After the GPO Properties dialog box appears, go to the Deployment tab and unselect the Auto install option under Deployment options. Select the Assigned option under Deployment Type.
5. Check the Uninstall this application when it falls out of the scope of management check box. This option is needed during uninstallation.
 - a. Select Install this application at logon to initiate group policy software installation when a user logs on.
 - b. To prevent users from starting installation on their own, select Do not display this package in the Add/Remove Programs control panel.
 - c. To prevent the user from seeing any dialog boxes during installation, select the Basic option under the Installation interface user options.
6. Click OK and then close Group Policy Management Editor.

ArcGIS Pro setups can be assigned to a user or computer. Use the following criteria to decide what option to choose:

- If all users on the computer need to use ArcGIS Pro, then assign to computer.
- If only a particular user needs it, then assign to user.

Enforce GPO

GPO will now show up in the OU folder. Right-click GPO and click Enforced.

Start Software Installation

For computer assignment, reboot the client machine to install the software. Software installation happens before any user is logged in. This is foreground policy processing. For software installation Group Policy, foreground processing must be running synchronously.

Synchronous processes can be described as a series of processes where one process must finish running before the next one begins. It can sometimes take two reboots for a package to be deployed. Confirm that the software has been installed by opening Add/Remove Programs.

On Windows Vista and higher operating systems, a generic Please wait message is displayed while the application is being installed. To change this, enable Verbose vs. normal status messages policy Group Policy and then link and enforce the GPO to the relevant OU. After that, the name of the application that is being deployed is shown during the installation process.

If the Install this application at logon option was selected for user assignment, then log off and log on to the client machine to start the installation. Just like computer assignment, the software installation happens before user login. For user assignment, the application is also available to be installed in Add or Remove Programs > Install a program from the network.

If you created a new GPO without any upgrade information for the 10.5.1 setups, you have to use that to uninstall.

Upgrading to 10.5.1

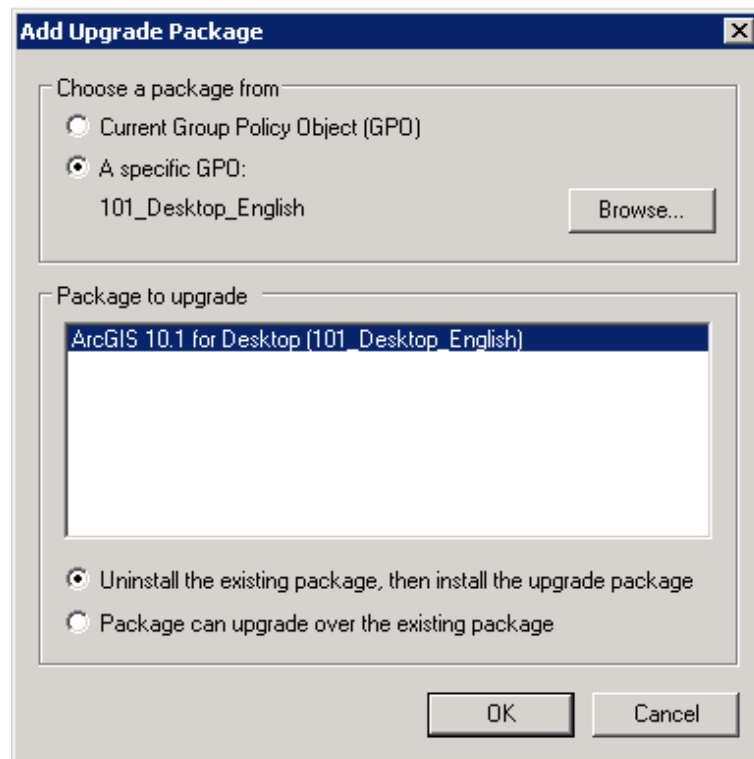
If you are upgrading from 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 to 10.5.1, there are several options depending on how GPOs are grouped together and implemented in your organizational unit and domain. First is to create a new GPO without an upgrade specification. Second is to create a new 10.5.1 GPO and specify the 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 GPO and 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 package. Third is to modify the existing 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 GPO and add the 10.5.1 package in it.

New 10.5.1 GPO with no upgrade information: The first option is what was just done in the steps mentioned above for [Create New GPO](#) and [Edit GPO](#). There is no requirement to add the upgrade information because the default behavior of the 10.5.1 MSI setup is to uninstall the 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 setup and then install the 10.5.1 setup in one seamless step.

New 10.5.1 upgrade GPO: The second option is to create a new GPO for 10.5.1 and add the 10.5.1 package to it.

- For example, create a new GPO named ArcGIS Desktop 10.5.1 using the steps mentioned above for [Create New GPO](#) and new package in it for ArcGIS Desktop 10.5.1 using [Edit GPO](#).
- In the Group Policy Management Editor, right-click the ArcGIS Desktop 10.5.1 package and click Properties. After the GPO Properties dialog box appears, go to the Upgrade tab and click the Add button.
- In the Add Upgrade Package dialog box, click the A specific GPO button and then click the Browse button.

- For example, if you have an existing GPO named ArcGIS 10.1 for Desktop, select the GPO and click OK.
- In the Add Upgrade Package dialog box, you can choose either the Uninstall the existing package, then install the upgrade package option or the Package can upgrade over the existing package option. Click OK and close the Group Policy Management Editor.



Modify existing 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 GPO: The third option is to modify the existing 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 GPO.

- For example, if you have an existing GPO named ArcGIS 10.1 for Desktop and there is a package in it for ArcGIS 10.1 for Desktop, open the GPO in the GPO editor and create a new package and select the ArcGIS Desktop 10.5.1 MSI file. This will create a package named ArcGIS Desktop 10.5.1 and automatically add the option to upgrade the ArcGIS 10.1 for Desktop package.
- If the upgrade option doesn't show up, right-click the package and select Properties. Go to the Upgrade tab and click the Add button. Click the Current Group Policy button and then browse to the ArcGIS 10.1 for Desktop package.

Customize Group Policy Installation

Group Policy software distribution can only deploy an MSI file. It cannot accept any command line parameters. The only way to customize the setup installation is to generate

a Microsoft transform (.mst) file and link it to the MSI file while creating the software installation GPO.

An MST file can be used to install a setup with predefined properties. The MSI file and the MST file are then used to deploy the setup. The MST file customizations can include the installation location, license manager, installation type, features to install, software product type, and so forth.

Transforms for setup.msi can be created using Orca, a free tool available with the Microsoft Installer software developer kit (SDK). Install the latest version of Microsoft SDK and then launch C:\Program Files\Microsoft SDKs\Windows\v7.0A\Bin\Orca.Msi. The actual path will vary based on the version of the SDK. This will install Orca. Other tools are available that use a wizard to create transform files, for example, Wise for Windows Installer and InstallShield Admin Studio.

You will need to use a transform file to set the installation directory to a location other than the default and to specify your software type.

Creating Transforms

To create transforms, open setup.msi in Orca. On the main toolbar, navigate to Transform > New Transform. Now start modifying tables to customize the setup.

■ Modify properties.

Many aspects of the installation can be modified by just changing values of properties in the property table. A complete list of what properties can be modified is included in the command line table of the products section of this document. Following are some examples of how to modify properties:

1. Specify the software seat type for ArcGIS Desktop 10.5.1.

In the Property table, change the value of SOFTWARE_CLASS to one of the following: Professional, Editor, or Viewer.

- ◆ Professional is for an Advanced seat (ArcInfo).
- ◆ Editor is for a Standard seat (ArcEditor™).
- ◆ Viewer is for a Basic seat (ArcView®).

2. Specify the seat preference for ArcGIS Desktop 10.5.1.

In the Property table, change the value of SEAT_PREFERENCE to one of the following: Float or Fixed.

- ◆ Float is for concurrent use.
- ◆ Fixed is for single use.

3. Specify the license manager to use for ArcGIS Desktop 10.5.1.

In the Property table, change the value of ESRI_LICENSE_HOST from Not_Set to @<the name of the ArcGIS License Manager 10.5.1 >, for example, @mylicenseserver.

4. Prevent the launch of Desktop Administrator after installation of ArcGIS Desktop 10.5.1.

In the Property table, change the value of DESKTOP_CONFIG from FALSE to TRUE.

■ Change the features selected for installation.

- To install a feature in a feature table, change the level to 1.
- To prevent features from being installed, change the level from 1 to any number greater than 100.

The features specified using a transform should replicate the selection of features in the Add/Remove dialog box. If you want to create a transform that adds an installation feature to an existing setup, that transform must include the features that are already installed on the machine and the feature you would like to add. If you do not include the already installed features, they will be uninstalled while the added feature and its associated features are installed.

Some setups install the Python feature, which is conditionally set to be installed in the MSI and requires an additional step. So that the Python feature is not installed, the feature table changes above must be made and the Python rows must be deleted from the condition table.

■ Change the default installation location.

- Changing INSTALLDIR instructions is specific to every product. See the Transform section of the product in this document for more details.
- For ArcGIS Desktop 10.5.1 in the CustomAction table, locate the custom action GET_INST_LOC.
- The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MyDesktop10.5.1\.

Applying a Transform

1. Choose the Advanced option when creating a new package.
2. After the GPO properties dialog box appears, select the Modifications tab and add the transform file.

Now, when the application is deployed, it will have all your customizations in it. Transforms can only be added to the GPO during the GPO creation process. It is not possible to add a transform to an existing software installation GPO.

Deploying Localized Setups Using Group Policy

Some Esri setups are available as localized setups, and some also come with language pack setups that localize the application. If the product being deployed has a localized setup available, you can deploy the localized version of the setup.

All localized setup data is stored in .mst files and embedded in the MSI file. To deploy the localized setup, first check what languages are available for localized setup, extract the .mst files, and then apply them on the MSI file while creating the GPO. You will need WISubStg.vbs and msidb.exe to do so. Both of these utilities are available as part of Windows Installer SDK, which can be downloaded from www.microsoft.com.

After the SDK is installed, these utilities will be in the following location (the actual path will vary based on the version of the SDK and operating system):

- C:\Program Files\Microsoft SDKs\Windows\v7.0\Samples\sysmgmt\msi\scripts\WiSubStg.vbs
- C:\Program Files\Microsoft SDKs\Windows\v7.0A\Bin\MsiDb.Exe

The deployment workflow is to create the localized setup GPO, create the language pack GPO, and then have the correct GPO link order.

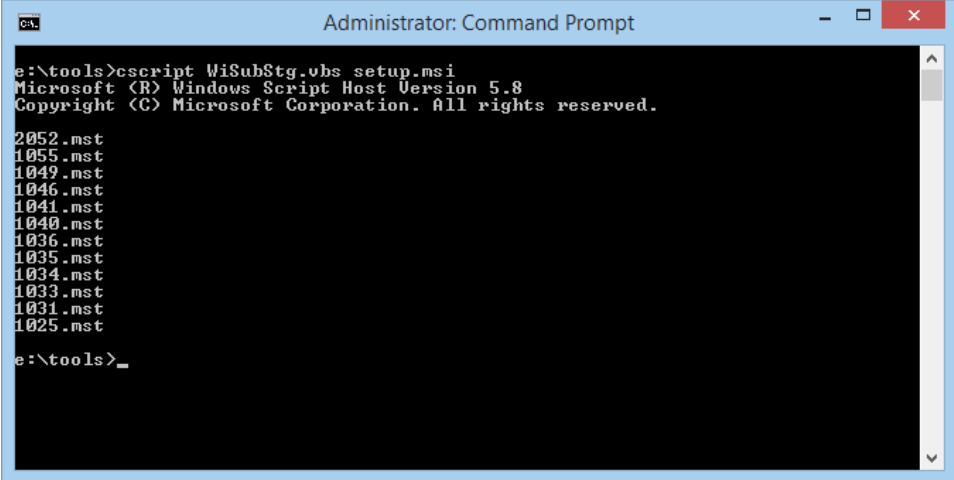
Create Localized Setup GPO

When assigning to a computer, the application is installed silently, and no setup dialog boxes are displayed on the client machine. If you open the setup via Add/Remove Programs, the setup dialog boxes will be displayed in English. If you would like to have these dialog boxes shown in a localized GUI, you have to deploy the localized setup, which involves extracting the .mst file from the MSI file and then applying it during GPO creation. If you are going to uninstall the application by Group Policy, it is uninstalled silently, and users will not see the setup dialog boxes. So create the localized setup GPO only if you will need to modify the installation manually on a client machine by going to Add/Remove Programs.

- See available transform files.

Use WISubStg.vbs to see what .mst files are embedded.

```
cscript WiSubStg.vbs [path to database][path to file][options]
```



```

Administrator: Command Prompt
e:\tools>cscript WiSubStg.vbs setup.msi
Microsoft (R) Windows Script Host Version 5.8
Copyright (C) Microsoft Corporation. All rights reserved.

2052.mst
1055.mst
1049.mst
1046.mst
1041.mst
1040.mst
1036.mst
1035.mst
1034.mst
1033.mst
1031.mst
1025.mst

e:\tools>_

```

For example, for ArcGIS Desktop 10.5.1, 11 .mst files are embedded. ArcGIS Pro has 15 .mst files. The following table shows the language code for each .mst file.

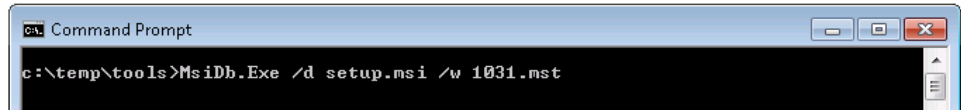
Language	Language Code
Arabic	1025
Chinese_CN	2052
French	1036
German	1031
Italian	1040
Japanese	1041
Portuguese_BR	1046
Russian	1049
Spanish	1034
Turkish	1055
Finnish	1035
Korean	1042
Hebrew	1037
Czech	1029
Swedish	1053

- Extract transform files.

Use MsiDb to extract the .mst files. This tool is used to import and export database tables and streams, merge databases, and apply transforms.

```
MsiDb.Exe /d <Path to msi> /w <Language Code>.mst
```

In the following example, the German .mst is being extracted from setup.msi, by extracting 1031.mst into the folder containing MsiDb.Exe.



■ Create GPO.

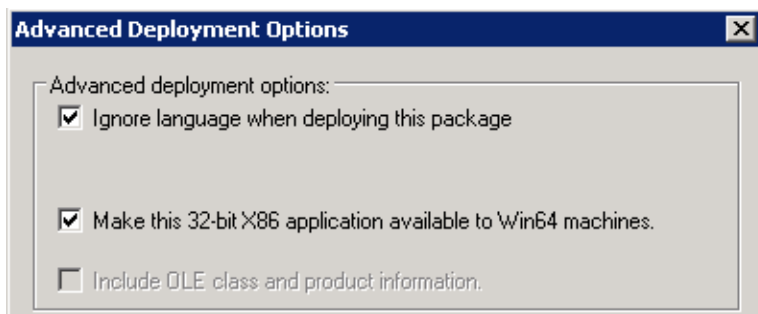
Apply transform during the GPO creation process.

- Choose the Advanced option when creating a new package.
- After the GPO properties dialog box appears, select the Modifications tab and add the transform file. Now when the application is deployed, it will deploy as a localized setup. This can be confirmed by going to Add/Remove Programs and launching the uninstallation. Setup dialog boxes will have localized text.

Create Language Pack GPO

If the application has a language pack setup, create a GPO for that too. For example, ArcGIS Desktop 10.5.1 has 11 language pack setups. If you need localized German applications, choose the German language pack MSI while creating the language pack GPO.

While creating the GPO, go to the Deployment tab and click Advanced. Check the option Ignore language when deploying this package.



GPO Link Order

Link this GPO to the same OU that has localized setup GPO. Now this OU has two GPOs, and they need to be ordered correctly. If a language pack GPO is installed before the localized setup GPO, it will fail, because language packs have a setup dependency on the ArcGIS Desktop 10.5.1 setup. The GPO with the lowest link order is processed last. The correct link order will look like the following:

Link Order	GPO	Enforced	Link Enabled	GPO Status	WMI Filter	Modified	Domain
1	ArcGIS Desktop German Supplement	No	Yes	Enabled	None	4/1/2...	install...
2	ArcGIS Desktop German	No	Yes	Enabled	None	4/1/2...	install...

After both these GPOs are processed on the client machine, you will have a localized setup and localized application.

Deploying Patches and QFEs Using Group Policy

All ArcGIS 10.5.1 patches and QFEs are available as individual Windows Installer Patch (.msp) files that upgrade an existing installation.

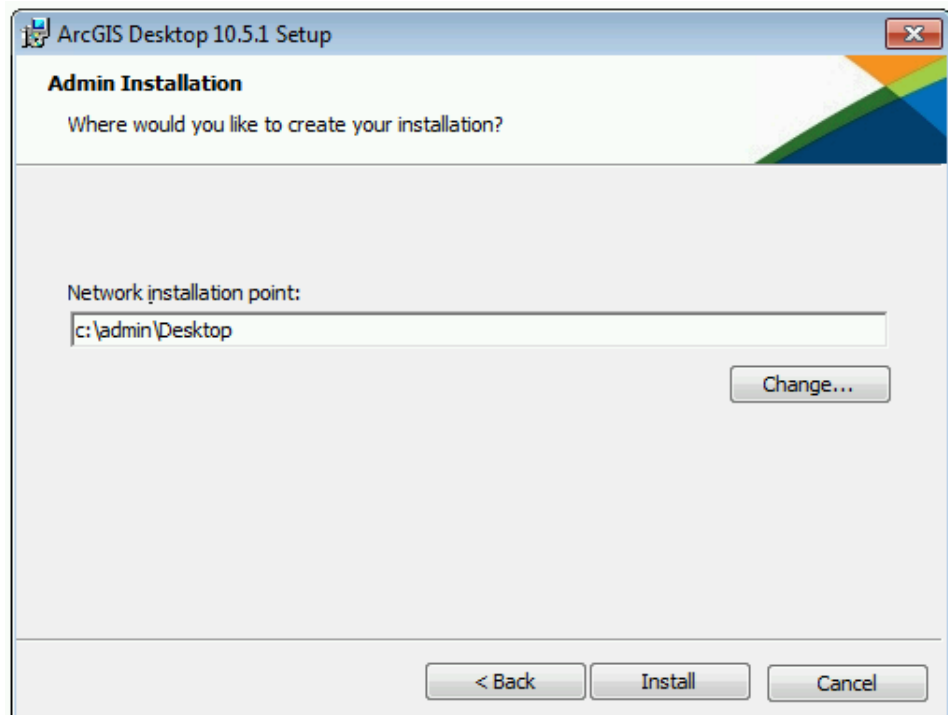
An .msp file cannot be directly deployed as a package using Group Policy software deployment. To deploy an .msp file, follow these steps:

- Apply the .msp file to the administrative installation using the following command line:

```
msiexec /a <location of ArcGIS administrative installation>\setup.msi /p <location of patch>\<patch name>.msp
```

For example: msiexec /a c:\admins\10.5.1 \desktop\setup.msi /p c:\admins\desktop\ArcGISDesktop104patch1.msp

The image below shows the setup dialog box that is displayed when you launch the command to apply a patch to an administrative installation location. To do this silently, append a /qb switch to the command line and include the TARGETDIR parameter.



Once the command is launched to apply the msp to the administrative installation, the setup dialog box will prompt you for the network installation location. This

installation location will be prepopulated with the location of your 10.5.1 administrative installation. Do not change this location; you want the files in this location to be updated with the patch changes.

Once the setup is complete, the setup.msi will have been updated with the patch changes. The date of the setup.msi will be updated to the current date. After the administrative image has been updated with the patch, the patch cannot be removed from the administrative image.

- Redeploy the ArcGIS package.
 1. Select the package in the GPMC, right-click, and click Edit.
 2. In Group Policy Management Editor, select GPO > Computer Configuration > Policies > Software Settings > Software installation.
 3. Right-click the package and click All tasks > Redeploy application.
 4. Click Yes to the message, confirming that you want to redeploy the application.
- Redeployment of the application occurs on the next logon or reboot, depending on how the application was deployed (user-based deployment or computer-based deployment). For more information on applying patches to an administrative installation, see [Microsoft Knowledge Base Article 226936](#).

Uninstalling Setups Deployed Using Group Policy

There are two ways to uninstall setups that were deployed using Group Policy:

- For uninstalling on specific computers, remove the computer account from the OU and reboot the computer. The application will be uninstalled during the boot-up process.
- If you want to uninstall an application from all computers to which GPO has been linked and enabled, follow the steps below:
 1. Right-click GPO in GPMC > Edit.
 2. In Group Policy Management Editor, go to Computer Configuration > Policies > Software Settings > Software installation.
 3. In the right pane, select the application and right-click it. Click All Tasks > Remove.
 4. Click Immediately uninstall the software from users and computers and click OK.

The next time the computer reboots, the product will be uninstalled.

Enterprise Deployment Using SMS/SCCM

Introduction

Using SMS or SCCM as an enterprise deployment tool enables software to be distributed to all Windows operating systems using the software distribution feature. Enterprise deployment with SMS or SCCM allows distribution of software to computers without having to physically visit the location of the computers. Instead, a package is created that contains the program. For ArcGIS 10.5.1 and ArcGIS Pro setups, the MSI file is bundled with the msiexec command line parameters to create a package. The package is then distributed to collections, which are computers or groups of users. Once a package has been distributed, client machines are alerted, and the user can choose to install the package immediately or schedule a time for installation. Packages can be run with administrative rights even if the user who is logged on is not an administrator. Packages can also be set to run whether or not a user is logged on to the machine. For more information on SMS and SCCM, see www.microsoft.com.

Deploying software to client machines is a multistep process involving creating the software distribution share; creating a package, program, and advertisement; and, finally, initiating software installation on the client machine.

Create Software Distribution Share

Before software can be deployed, it must be copied to a network share for easy access. If you are starting at a point where there are patches already available for the application that is being deployed, you have a choice to make: create an administrative image and apply a patch on it and then deploy, or deploy the main setup and patch separately.

- Copy setup files to a network share.
 1. Copy the entire contents of the extracted setup files folder to your server machine for deployment. You cannot copy just the MSI file to your server machine for deployment; other associated files are also required.
 2. At the Create Program step, create different programs for the main setup and the patch and deploy them in sequence.

Or:

- Create an administrative image of the setup.
 1. You can create an administrative installation on the server using the standard msiexec command line parameters:

```
msiexec /a <setup location>\setup.msi /qb TARGETDIR=  
<installation directory>/10.5.1 /<product name>
```

It is important to include the TARGETDIR property; otherwise, INSTALLDIR will default to the drive with the most empty space including mapped drives. If a /qb parameter is not included, the setup dialog box will be launched, and that can be used to finish the administrative installation.

Some setups have files that are located in a directory structure that would exceed the Windows 256-character limit. If the Windows character limit is exceeded, you will receive installation error 1335. There are two workarounds for this issue: perform either an administrative installation to a directory structure that does not exceed the above limits or an administrative installation at the command line with the additional parameter of `SHORTFILENAME=TRUE`:

```
msiexec /a <setup location>\setup.msi /qb TARGETDIR=
<installation directory>/10.5.1 /<product name>
SHORTFILENAME=TRUE
```

2. Patch the administrative installation using the following:

```
msiexec /a <location of the admin installation>\setup.msi /p
<location of the .msp file>\<patch name>.msp.
```

Do not delete this administrative installation; it is required for modifying installation features and additional patching.

3. At the Create Program step, create one program.

The first method is more efficient in terms of network usage. While applying a patch, only the bits for a patch are sent to the client machine.

Create Package

- Start Configuration Manager Console.
- Start the New Package wizard.
 1. Click System Center Configuration Manager > Site Database > Computer Management > Software Distribution > Packages, then right-click and click New Package.
 2. Go through all dialog boxes and fill in all required information. On the Data Source dialog box, check the This package contains source files check box and then browse to the folder that contains Setup.exe.
- Use the Manage Distributions Points wizard.
 1. Right-click the package and click Manage Distribution Points.
 2. Go through all dialog boxes and fill in all required information. Select a distribution point.

Create Program

SCCM can deploy both setup.msi and Setup.exe, but to get the most out of SCCM, it is recommended that you deploy using Setup.exe. Setup.exe accepts standard Windows Installer command line parameters. See <http://msdn2.microsoft.com/en-us/library/Aa367988.aspx> for Windows Installer command line options.

There is no need to create transforms. Everything that you can do with the command line can be done in SCCM. Just pass in the same command line while creating the program in SCCM.

Access the New Program wizard by doing the following:

1. Go to the package and click Programs, then right-click and click New Program.
2. Go through all dialog boxes and fill in all required information. On the General dialog box for command line, you can type in the command line just the way you would for msixec, except replace msixec /I <Path to msi> with <Path to Setup.exe>.

For example:

- Install silently with default features to the default installation directory:

```
Setup.exe /qb-!
```

The /qb-! switch has a basic UI with no modal dialog boxes and hides the Cancel button. Use /qn for a completely silent installation.

- Install silently with all features to a nondefault installation directory:

```
Setup.exe /qb-! INSTALLDIR=C:\ArcGIS ADDLOCAL=ALL
```

- Install silently with custom features to a nondefault installation directory:

```
Setup.exe /qb-! INSTALLDIR=C:\ArcGIS  
ADDLOCAL=<feature1>,<feature2>,...
```

Create Advertisement

Access the New Advertisement wizard by doing the following:

1. Navigate to System Center Configuration Manager > Site Database > Computer Management > Software Distribution > Advertisement, then right-click and click New Advertisement.
2. Go through all dialog boxes and fill in all required information. On the General dialog box, select Package and the program in the package that you want to advertise. Choose the collection that you want to deploy to.

Start Software Installation

Depending on your configuration in the advertisement and the command line in the program, the software will start installation after the next logon or reboot or be scheduled to run at a certain time.

Upgrading to 10.5.1

If you are upgrading from 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 to 10.5.1, create a new package, program, and advertisement to install and uninstall the 10.5.1 setup.

Deploying Localized Setups Using SCCM

Running Setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable that runs the main product localized setup.msi, then runs the language pack setup.msi as a secondary installation. For example, if you run Setup.exe for ArcGIS Desktop in Spanish, the mobile setup, as well as the Spanish Language Pack setup, will be installed. If additional language packs need to be installed, copy them to the Supplements folder prior to launching Setup.exe. All the language pack MSI files in the Supplements folder will be installed if the installation is launched using Setup.exe. There is no need to extract and deploy transform files.

Note: While the main product setup automatically installs the associated language pack, an Add/Remove item exists for both setups. The main product uninstallation process does not uninstall language packs. These will need to be manually uninstalled.

Uninstalling Setups Using SCCM

When the software is deployed, the Control Panel's Add/Remove Programs dialog box does not enable you to remove the software unless you have administrative privileges. Use SMS or SCCM to manage uninstallation of the software when uninstalling with elevated privileges for all users.

- Uninstall silently using product code.

```
msiexec /x <{product code}> /qb
```

For example: To uninstall ArcGIS Desktop 10.5.1 silently, use the following command line:

```
msiexec /x {4740FC57-60FE-45BB-B513-3309F6B73183} /qb
```

- Any ArcGIS product can be uninstalled silently using the product code. [Knowledge Base article 28709](#) is updated and available with the product codes for ArcGIS releases.
- Create a new program within the same package and a new advertisement using the command line mentioned above.

Deploying ArcGIS 10.5.1 Patches and QFEs Using SMS or SCCM

All ArcGIS 10.5.1 patches are available as individual Windows Installer Patch (.msp) files that upgrade an existing installation. For SCCM, they have to be deployed like a regular MSI installation. To deploy, create a new package, program, and advertisement for SCCM.

There are two methods of deploying .msp files using SMS or SCCM. Select one of these methods to deploy ArcGIS patches:

- Apply the .msp file to an administrative installation and deploy the patched MSI file.

Or:

- Deploy the .msp file separately from the base product setup.msi.

To Apply the .msp File to an Administrative Installation and Deploy the Patched Windows Installer File

Applying the Windows Installer Patch to an administrative installation will update the setup.msi with patch changes. The setup.msi can then be deployed. To apply the patch to an administrative installation, do the following:

1. Create an administrative installation. If an administrative installation does not already exist on your server, create one using the code below:

```
msiexec /a <location of setup.msi>\setup.msi
```

2. Patch the administrative installation using msiexec /a <location of the administrative installation>\setup.msi /p <location of the .msp file>\<patch name>.msp.

For example: msiexec /a c:\admins\10.5.1 \desktop\setup.msi /p c:\admins\desktop\ArcGISDesktop10.5patch1.msp

Once the command is launched to apply the patch to the administrative installation, the setup dialog box will prompt you for the network installation location. This installation location will be prepopulated with the location of your ArcGIS 10.5.1 administrative installation. Do not change this location; you want the files in this location to be updated with the patch changes.

Once the setup is complete, the setup.msi will have been updated with any patch changes. The date of the setup.msi will be updated to the current date.

3. Create an SMS or SCCM package using the patched MSI file and deploy it. The following command line parameter should be used: msiexec /a <location of the administrative installation>\setup.msi.

To Deploy the Patch .msp File Directly

The patch .msp file can be directly deployed using SMS or SCCM. The setup for the ArcGIS product must have already been deployed and installed on the client machine.

1. Copy the .msp file to the server machine.
2. Create a package to deploy the .msp file. The following command line parameter should be used:

```
msiexec /p <location of .msp file>\<patch name>.msp REINSTALL=ALL  
REINSTALLMODE=omus
```

REINSTALLMODE must always be equal to omus.

REINSTALL can be equal to ALL to reinstall all features already installed, or you can specify individual features (same feature names as ADDLOCAL).

3. Deploy the .msp package.

Troubleshooting the Installation

- If you receive an "Internal error, Install aborted" or "Corrupt Install" message when starting setup, ensure that the system TEMP variable is set to a valid folder where you have write access and space available.
- If you receive an error message upon clicking Next on the final installation dialog box, verify that all your system variables are set to a valid value. An empty system variable will cause the installation to fail. To check your system variables, go to Start > Settings > Control Panel > System and choose the Environment tab.

- Examine the Event Viewer.

Entries are logged in the Event Viewer when the Windows Installer results in an error or goes into repair. Examining the logs may offer insight into the solution.

1. Right-click My Computer.
2. Click Manage.
3. Expand the Event Viewer tree.
4. Click Application.
5. Search for MsiInstaller entries related to ArcGIS.

- Capture a log of the installation.

1. From the desktop, go to Start > Run.
2. Enter the command below, modifying the setup location as necessary:

```
msiexec.exe /i <path to setup>\setup.msi /qb /L*v
%TEMP%\Install.log
```

- Capture a log of the uninstallation.

1. From the desktop, go to Start > Run.
2. Enter the command below, modifying the product code as necessary:

```
msiexec.exe /x <{product code}> /qb /L*v %TEMP%\Uninstall.log
```

ArcGIS Desktop 10.5.1

For comprehensive information on the installation of ArcGIS Desktop 10.5.1, refer to the [installation guide](#) at the ArcGIS Resources website. For a list of supported operating systems and hardware requirements, refer to System Requirements at [ArcGIS 10.5.1 System Requirements](#). This product has a [Quick Start Guide](#) at the ArcGIS Resources website.

ArcGIS Desktop 10.5.1 is available as Basic, Standard, or Advanced. Basic, Standard, and Advanced are licensing product levels of the ArcMap™ and ArcCatalog™ applications. Once installed, you can change product levels or switch between concurrent use and single use versions without uninstalling or performing any installation action.

Installation Overview Steps

The installation of ArcGIS Desktop is a multistep process (with only the first three steps required for ArcGIS Desktop applications):

1. Install the ArcGIS License Manager (if a 10.5.1 license manager does not already exist for your use). If you intend to use ArcGIS Desktop for single use version only, you do not need to install ArcGIS License Manager. For ArcGIS Desktop 10.5.1 applications, the ArcGIS License Manager 10.5.1 is required.
2. Install ArcGIS Desktop.
3. Complete the ArcGIS Administrator wizard to specify your product type, assign a license manager (if using a concurrent-use product), or authorize your software (if using a single-use product).
4. Install any of the optional components available for ArcGIS Desktop. These components may be required depending on your use of ArcGIS Desktop.

Setup Dependency If the following products are not detected on the machine, setup will not proceed:

- Microsoft .NET Framework Version 4.5
- Microsoft Internet Explorer Version 9 or higher
- [Microsoft XML Core Services 6.0](#) (This is installed automatically if Setup.exe is used to launch the installation.)

Feature Dependency Properties

There are no feature dependencies.

The following properties can be added to the msixec command line:

Parameter	Value	Case Sensitive	Required	Description
ESRI_LICENSE_HOST	License Manager	No	Yes for concurrent use	Machine name of license manager
SOFTWARE_CLASS	Viewer	Yes	Yes	Installs ArcGIS Desktop 10.5.1 as ArcView (Basic)
	Editor			Installs ArcGIS Desktop 10.5.1 as ArcEditor (Standard)
	Professional			Installs ArcGIS Desktop 10.5.1 as ArcInfo (Advanced)
SEAT_PREFERENCE	Fixed	Yes	Yes	Installs your ArcGIS software class as a single use seat
	Float	Yes	Yes	Installs your ArcGIS software class as a concurrent use seat
INSTALLDIR	%System Drive%\Program Files\ArcGIS\Desktop10.5		No	ArcGIS Desktop 10.5.1 installation location

Parameter	Value	Case Sensitive	Required	Description
INSTALLDIR1	Default for both GUI and silent installation is %System Drive%\Python27		No	Python installation location
DESKTOP_CONFIG	TRUE	Yes	Yes (if you supply ESRI_LICENSE_HOST, SOFTWARE_CLASS, and SEAT_PREFERENCE on the command line)	Setting this parameter to TRUE will prevent the ArcGIS Administrator wizard from being launched automatically at the end of the setup.
RENEWAL_CHECK	TRUE			Setting this to TRUE will enable users to use the license renewal option in ArcGIS Administrator to automatically update expiring licenses instead of browsing to new provisioning files.
BLOCKADDINS	#0	Yes	No	Load all add-ins regardless of whether they have digital signatures.
	#1	Yes	No	Only load and use add-ins that are digitally signed by a trusted certificate authority.
	#2	Yes	No	Only load and use add-ins that have been published by Esri.
	#3	Yes	No	Only load add-ins from the administrator folders and all add-ins published by Esri.
	#4	Yes	No	Do not load or execute add-ins in this application.
ENABLEEUEI	0	Yes	No	Do not enable participation in the Esri User Experience Improvement Program.
	1	Yes	No (1 is default)	Enable participation in the Esri User Experience Improvement Program.
MODIFYFLEXDACL	FALSE	No	No	This is the default value.

Parameter	Value	Case Sensitive	Required	Description
	TRUE	No	No	<p>Setting this property to TRUE alters the following permissions, allowing management of the FlexNet anchor service by any user:</p> <p>SERVICE_QUERY_CONFIG SERVICE_QUERY_STATUS SERVICE_ENUMERATE_DEPENDENTS SERVICE_START SERVICE_INTERROGATE SERVICE_USER_DEFINED _CONTROL READ_CONTROL</p>

It is highly recommended that you include the ESRI_LICENSE_HOST, SOFTWARE_CLASS, SEAT_PREFERENCE, and DESKTOP_CONFIG command line parameters when installing silently. This will enable a user to install without user interface interaction or having to complete the ArcGIS Administrator wizard.

Features Available

The following features are available for installation. The setup can be modified to install specific features only by appending the ADDLOCAL parameter to the msixexec command line.

Feature	Feature Parent	Title	Description
Applications		Applications	This is the ArcGIS Desktop 10.5.1 software.
ArcCatalog	Applications	ArcCatalog	ArcCatalog is the application for managing your spatial data holdings, for managing your database designs, and for recording and viewing metadata.
ArcInfoStyles	Applications	Styles	Styles are an organized collection of elements that can be used to make your maps.
ArcInfoTemplates	Applications	Templates	Templates provide a quick way to create a new map. Templates can contain data, a custom interface, and a predefined layout that arranges map elements on a virtual page.

Feature	Feature Parent	Title	Description
ArcMap	Applications	ArcMap	ArcMap is used for all mapping and editing tasks, as well as for map-based analysis.
ArcMap_Publishing_Extension	Extensions	Publisher	The ArcGIS Publisher extension converts standard ArcMap documents to a published map format that can be used by ArcReader.
ArcScan	Extensions	ArcScan	The ArcGIS ArcScan™ extension provides a set of tools for interactive and batch raster-to-vector conversion as well as tools for simple raster cleanup.
CivicAndBusiness	ArcInfoStyles	Civic and Business	These are the Civic and Business styles.
Ext_3D_Analyst	Extensions	3D Analyst	The ArcGIS 3D Analyst™ extension allows 3D visualization and analysis. 3D Analyst includes the specialized 3D viewing applications ArcScene™ and ArcGlobe™.
Extensions		Extensions	These are the optional ArcGIS extensions that can be installed and used with any ArcGIS Desktop 10.5.1 product.
GeoStatisticalAnalyst	Extensions	Geostatistical Analyst	The ArcGIS Geostatistical Analyst extension provides a set of tools for creating surfaces to visualize and analyze spatial phenomena and provide error estimation tools for prediction.
Military	ArcInfoStyles	Military	These are the Military styles.
NaturalResources	ArcInfoStyles	Natural Resources	This is the Natural Resources style.
NetworkAnalyst	Extensions	Network Analyst	The ArcGIS Network Analyst extension provides functions for transportation and logistical analysis on a network dataset.
Python	Applications	Python	This feature will install Python, which is required for some geoprocessing tools.

Feature	Feature Parent	Title	Description
Schematics	Extensions	Schematics	The ArcGIS Schematics extension is an effective and innovative solution to automate schematic and geoschematic graphic presentations of Esri ArcGIS geodatabases.
SpatialAnalyst	Extensions	Spatial Analyst	The ArcGIS Spatial Analyst extension provides a broad range of powerful spatial modeling and analysis features that allow you to create, query, map, and analyze vector/raster data.
TemplateGeneral	ArcInfoTemplates	General	These are the general templates.
TemplateIndustry	ArcInfoTemplates	Industry	These are the industry templates.
TemplateUSA	ArcInfoTemplates	USA	This is the USA template and data.
TemplateWorld	ArcInfoTemplates	World	This is the world template and data.
TrackingAnalyst	Extensions	Tracking Analyst	The ArcGIS Tracking Analyst extension provides tools for real-time and historic data display and temporal analysis.

Python Requirement for Geoprocessing

ArcGIS Desktop 10.5.1 geoprocessing tools require that Python 2.7.13 and Numerical Python 1.9.3 are installed. If the ArcGIS Desktop 10.5.1 setup does not find either Python 2.7.13 or Numerical Python 1.9.3 (NumPy) installed on the target computer, Python and all required components will be installed during a complete installation. You can choose a Custom installation to unselect the Python feature and avoid installing it. Additionally, if Python is installed during the ArcGIS Desktop 10.5.1 installation, you will be provided with the opportunity to choose its installation location. The Python installation location should not include spaces. If Python and NumPy are both found by the ArcGIS Desktop 10.5.1 setup program, Python components will not be installed and, as a result, will not be uninstalled.

Localized Setups

ArcGIS Desktop 10.5.1 is available in Arabic, Simplified Chinese, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, Turkish, and Finnish. Running setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms

Changing INSTALLDIR

1. In the CustomAction table, locate the custom action GET_INST_LOC.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MyDesktop10.5.1\ . The backslash must be included.

Uninstall

To uninstall ArcGIS Desktop 10.5.1 silently, use the following command line:

```
msiexec.exe /x {4740FC57-60FE-45BB-B513-3309F6B73183} /qb
```

Existing ArcGIS for Desktop Users**ArcGIS 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, and 10.5 Users**

- The ArcGIS Desktop 10.5.1 setup package is designed to detect and upgrade an existing installation of ArcGIS 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 for Desktop on the target system. The settings for the installation location, license manager (for concurrent use), or authorization information (for single use) are retained in the upgrade. After installation, any customizations, add-ons, or third-party applications installed for 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 might need to be reapplied. The installation folder will change to %System Drive%\Program Files\ArcGIS\Desktop10.5.
- If you wish to change the installation location from the default %System Drive%\Program Files\ArcGIS\Desktop<version> folder, you will need to manually uninstall ArcGIS 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 for Desktop through Add/Remove from the Windows Control Panel before installing ArcGIS Desktop 10.5.1 in the new location.
- Concurrent and single use users

Your current 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 authorization will be preserved and reconfigured for 10.5.1 use. For concurrent use users, ensure the license manager you are connecting to is a 10.5.1 license manager. You can run the ArcGIS Administrator after installation to change the license manager or any other required settings.

ArcGIS 10.1 Users (including SP1)

- The ArcGIS Desktop 10.5.1 setup package is designed to detect and upgrade an existing installation of ArcGIS 10.1 for Desktop (including SP1) on the target system. The settings for the installation location, license manager (for concurrent use), or authorization information (for single use) are retained in the upgrade. The installation location parent folder is retained, although the upgrade is installed in an ArcGIS Desktop 10.5.1 folder. After installation, any customizations, add-ons, or third-party applications installed for 10.1 must be reapplied to 10.5.1.
- If you wish to change the installation location, you will need to manually uninstall ArcGIS 10.1 for Desktop through Add/Remove from the Windows Control Panel before installing ArcGIS Desktop 10.5.1 in the new location.

- Concurrent and single use users

Your current 10.1 authorization will be preserved and reconfigured for 10.5.1 use. For concurrent use users, ensure that the license manager you are connecting to is a 10.5.1 license manager. You can run the ArcGIS Administrator after installation to change the license manager or any other required settings. The ArcGIS License Manager 10.5.1 also supports versions 10.1 and 10.0.

ArcGIS 10.0 and Prior Users

- You must uninstall all ArcGIS products prior to 10.1 and any third-party extensions or tools from your machine before proceeding with the ArcGIS Desktop 10.5.1 installation. You must also uninstall your license manager and install the ArcGIS License Manager 10.5.1. The ArcGIS License Manager 10.5.1 can serve licenses to ArcGIS 10.x and 9.x installations.
- If you are installing ArcGIS 10.5.1 to the same machine, you are not required to deauthorize your single use licenses. If you have borrowed a concurrent use license, it is recommended that you return the license before the upgrade process.
- You are not required to uninstall ArcView GIS 3.x to install and run ArcGIS Desktop 10.5.1. ArcGIS Desktop 10.5.1 defaults to a different folder and will not conflict with ArcView GIS 3.x in any way.

Additional Installation Components

The additional ArcGIS Desktop 10.5.1 components, such as ArcGIS 10.5.1 Desktop Tutorial Data, ArcGIS 10.5.1 Data Interoperability, ArcGIS VBA Compatibility, and ArcObjects SDK, can be installed separately if they are required. To install a component, click the download link on the My Esri site, which downloads a self-extracting .exe file. After the download completes, you have the option of starting the setup immediately or running it manually. To run the setup manually, browse to the downloaded folder containing the setup and run setup.exe. The download contains a PDF version of the license agreement displayed during each installation. The license agreement is located in the \Desktop\Documentation folder.

ArcGIS Desktop contains the following components.

Product	Product Description
ArcGIS Desktop	Contains the installation for ArcGIS Desktop and its extensions
ArcGIS License Manager	Contains the license manager setup required for ArcGIS Desktop concurrent use
ArcGIS for Desktop VBA Compatibility	Installs Visual Basic for Applications (formerly installed by the ArcGIS Desktop setup) (optional) for enabling VBA Editor in ArcGIS
ArcGIS Data Interoperability for Desktop	Provides direct data access, transformation, and export capabilities
ArcGIS Data Reviewer for Desktop	Automates and improves data quality control management

ArcGIS Workflow Manager for Desktop	Supports better management of GIS tasks and resources
Database Server	Installs SQL Server Express instance to store geodatabases. (optional)
ArcObjects Esri Developer Network (EDN™) Resources for Developers	Contains the resources for extending ArcGIS Desktop ArcObjects using the application programming interface (API) for .NET or Java (optional)
ArcObjects SDK for the Microsoft .NET Framework	
ArcObjects SDK for Java	

You must install the appropriate DBMS client on your computer to connect to a database or enterprise geodatabase from ArcGIS. You can download DBMS client files from My Esri or obtain them from your DBMS provider.

Starting with ArcGIS 10.1, the Visual Basic for Applications (VBA) runtime is installed by Setup.exe of the ArcGIS VBA Compatibility setup program. Prior to ArcGIS 10.1, the VBA runtime was installed by the ArcGIS for Desktop setup. The VBA setup is not an upgrade setup. If you have the VBA setup from an earlier release installed, remove it before installing the VBA setup released with ArcGIS Desktop 10.5.1.

To enable the VBA macro in the ArcGIS Desktop 10.5.1 applications, you must complete the following steps:

1. Install ArcGIS Desktop 10.5.1.
2. Install the ArcGIS VBA Compatibility setup.
3. Obtain a license for VBA. For concurrent use products, you must obtain a license for VBA. For single use products, your authorization file contains the VBA feature.

If deploying the ArcGIS VBA Compatibility setup, the setups listed must be deployed in the following order:

1. Setup.msi—This is the ArcGIS VBA Compatibility setup program.
2. VBAOF11.msi—This is the Visual Basic for Applications Core setup program. This MSI file is located in the VBA folder.
3. VBAOF11I.msi—This is the Visual Basic for Applications Core English setup program. This MSI file is located in the VBA\1033 folder.

If Setup.exe is used to launch the ArcGIS VBA Compatibility setup, Visual Basic for Applications Core setup and Visual Basic for Applications Core English setup are installed automatically.

ArcGIS Desktop 10.5.1 Language Packs

There are 11 language packs available for ArcGIS Desktop 10.5.1 —Arabic, Brazilian Portuguese, Finnish, French, German, Italian, Japanese, Russian, Simplified Chinese, Spanish, and Turkish. Use Setup.exe to accomplish a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product

setup.msi and then run the language pack MSI as a secondary installation. For example, if you run Setup.exe for ArcGIS Desktop 10.5.1 in Spanish, both the desktop setup and Spanish Language Pack setup will be installed. Additional language packs must be installed separately.

While the ArcGIS Desktop 10.5.1 setup automatically installs the language pack, an Add/Remove item will exist for both setups. The ArcGIS Desktop 10.5.1 uninstallation process does not uninstall language packs, and they will need to be manually uninstalled using the Add/Remove Programs dialog box. Running setup.exe for a localized 10.5.1 setup will upgrade both the main product installation and the language pack installation.

Setup Dependency	ArcGIS Desktop 10.5.1 must be installed on the machine.
Feature Dependency	None
Command Line Parameters	None
Features Available	None
Transforms	Changing INSTALLDIR

ArcGIS Desktop 10.5.1 Language Packs install to the Installation directory of ArcGIS Desktop 10.5.1. It is not possible to change this with a transform.

Uninstall To uninstall ArcGIS Desktop 10.5.1 Language Packs silently, use the following command line:

```
msiexec.exe /x <Product Code> /qb
```

Language Pack	Product Code
ArcGIS Desktop 10.5.1 Arabic Language Pack	{CF58210A-A897-496D-A552-725D1003D336}
ArcGIS Desktop 10.5.1 Brazilian Portuguese Language Pack	{C552CEE1-879B-46D8-AC75-F5289C3F5B11}
ArcGIS Desktop 10.5.1 Finnish Language Pack	{FA01E780-4471-4EBE-A2C9-B56BE9B24B45}
ArcGIS Desktop 10.5.1 French Language Pack	{5A9EF428-60FC-4290-9EEC-F1F0A05B214B}
ArcGIS Desktop 10.5.1 German Language Pack	{9A6E5C1F-2BC5-4D1F-A262-01DD16474B1B}
ArcGIS Desktop 10.5.1 Italian Language Pack	{571864AE-7A3B-4F38-A8C5-36C5C0720CD0}
ArcGIS Desktop 10.5.1 Japanese Language Pack	{782A3F72-D49F-4233-A6B6-A699558A8E44}

Language Pack	Product Code
ArcGIS Desktop 10.5.1 Russian Language Pack	{C9B1201E-679A-446E-97BF-E7CFC85F440D}
ArcGIS Desktop 10.5.1 Simplified Chinese Language Pack	{2DB43EFE-E8E0-42B3-9901-BA62D3724261}
ArcGIS Desktop 10.5.1 Spanish Language Pack	{AA08AAACE-9B17-49FB-A319-00DD7E655DA9}
ArcGIS Desktop 10.5.1 Turkish Language Pack	{3C435B6A-68ED-4439-95B7-ABDA2BA338D2}

ArcGIS Desktop Background Geoprocessing 10.5.1 (64 bit)

For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#). If Python 64 bit is already installed, the Python feature in the setup will be unavailable.

Setup Dependency

- 64-bit operating system.
- ArcGIS Desktop 10.5.1 must be installed on the machine.

Feature Dependency

None

Command Line Parameters

Parameter	Default Value	Case Sensitive	Required	Description
MODIFYFLEXDACL	FALSE	No	No	This is the default value.
MODIFYFLEXDACL	TRUE	No	No	Setting this property to TRUE alters the following permissions, allowing management of the FlexNet anchor service by any user: SERVICE_QUERY_CONFIG SERVICE_QUERY_STATUS SERVICE_ENUMERATE _DEPENDENTS SERVICE_START SERVICE_INTERROGATE SERVICE_USER_DEFINED _CONTROL READ_CONTROL.

Features Available

The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msixexec command line.

Feature	Feature Parent	Title	Description
GP_Runtime		RequiredFeature	
Python	GP_Runtime	Python	

Localized Setups

ArcGIS Desktop Background Geoprocessing 10.5.1 (64 bit) setup is available in Arabic, Simplified Chinese, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, and Turkish. Running setup.exe provides a fully localized installation

experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms **Changing INSTALLDIR**

ArcGIS Desktop Background Geoprocessing 10.5.1 (64 bit) installs to the Installation directory of ArcGIS Desktop 10.5.1. It is not possible to change this with a transform.

Uninstall To uninstall ArcGIS Desktop Background Geoprocessing 10.5.1 (64 bit) silently, use the following command line:

```
msiexec.exe /x {C444EB5E-7CC1-4F05-A17E-0632F3F20071} /qb
```

ArcGIS License Manager 10.5.1

For comprehensive information on the installation of ArcGIS License Manager 10.5.1, refer to the [reference guide](#) at the ArcGIS Resources website. For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#). This product has a [Quick Start Guide](#) at the ArcGIS Resources website.

Setup Dependency None

Feature Dependency None

Command Line Parameters

The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ArcGIS\License10.5	No	No	ArcGIS License Manager 10.5.1 installation location
MODIFYFLEXDACL	FALSE	No	No	This is the default value.
MODIFYFLEXDACL	TRUE	No	No	Setting this property to TRUE alters the following permissions, allowing management of the FlexNet anchor service by any user: SERVICE_QUERY_CONFIG SERVICE_QUERY_STATUS SERVICE_ENUMERATE _DEPENDENTS SERVICE_START SERVICE_INTERROGATE SERVICE_USER_DEFINED _CONTROL READ_CONTROL

Features Available None

Localized Setups

ArcGIS License Manager 10.5.1 setup is available in Arabic, Simplified Chinese, Finnish, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, and Turkish. Running setup.exe provides a fully localized installation experience. Setup.exe

is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms **Changing INSTALLDIR**

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MyLicenseManager10.5.1\ . The backslash must be included.

Uninstall

To uninstall ArcGIS License Manager 10.5.1 silently, use the following command line:

```
msiexec.exe /x {DF06C3DC-54B5-49A1-9756-B68FD65A0AD0} /qb
```

ArcGIS ArcReader 10.5.1

For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#). This product has a [Quick Start Guide](#) at the ArcGIS Resources website.

Setup Dependency

If the following products are not detected on the machine, setup will not proceed:

- Microsoft Internet Explorer Version 9 or higher
- [Microsoft XML Core Services 6.0](#) (This is installed automatically if Setup.exe is used to launch the installation.)

Feature Dependency

The .NET Support feature requires Microsoft .NET 4.5. If Microsoft .NET 4.5 is not found, the .NET Extension Support feature will not be available for installation.

Command Line Parameters

The following properties can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ArcGIS\ArcReader10.5	No	No	ArcGIS ArcReader 10.5.1 installation location
ENABLEEUEI	1	Yes	No	Enable participation in the Esri User Experience Improvement Program. To disable participation in the Esri User Experience Improvement Program, change the value to 0.

Features Available

The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msiexec command line.

Feature	Feature Parent	Title	Description
ArcReader		ArcReader	ArcReader is the application for viewing and printing maps published with the Publisher extension.
Documentation		Documentation	This is the ArcReader documentation.
DotNetRuntime	ArcReader	.NET Support	Select this feature to install the ArcGIS .NET primary interoperability assemblies into the global assembly cache. These are required to develop and use ArcGIS .NET customizations.
Tutorial		Tutorial	This is the ArcReader tutorial data.

Localized Setups

ArcGIS ArcReader 10.5.1 setup is available in Arabic, Simplified Chinese, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, and Turkish. Running setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms

Changing INSTALLDIR

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MyArcReader10.5.1\ . The backslash must be included.

Uninstall

To uninstall ArcGIS ArcReader 10.5.1 silently, use the following command line:

```
msiexec.exe /x {C09FD9B6-D7DA-4140-9F78-0F213A3F9D6D} /qb
```

ArcGIS ArcReader 10.5.1 Language Packs

There are 10 language packs available for ArcGIS ArcReader 10.5.1 —Arabic, Brazilian Portuguese, French, German, Italian, Japanese, Russian, Simplified Chinese, Spanish, and Turkish. Use Setup.exe to accomplish a fully localized installation experience. Setup.exe is a bootstrapper executable that will run the main product setup.msi and then run the language pack MSI as a secondary installation. For example, if you run Setup.exe for ArcGIS ArcReader 10.5.1 in Spanish, both the ArcGIS ArcReader 10.5.1 Spanish setup and ArcGIS ArcReader 10.5.1 Spanish Language Pack setup will be installed. Additional language packs must be installed separately.

While the ArcGIS ArcReader 10.5.1 setup automatically installs the language pack, an Add/Remove item will exist for both setups. The ArcGIS ArcReader 10.5.1 uninstallation process does not uninstall language packs, and they will need to be manually uninstalled using the Add/Remove Programs dialog box. Running setup.exe for a localized 10.5.1 setup will upgrade both the main product installation and the language pack installation.

Setup Dependency

ArcGIS ArcReader 10.5.1 must be installed on the machine.

Feature Dependency

None

Command Line Parameters None

Features Available None

Transforms **Changing INSTALLDIR**

ArcGIS ArcReader 10.5.1 Language Packs install to the Installation directory of ArcGIS ArcReader 10.5.1. It is not possible to change this with a transform.

Uninstall To uninstall ArcGIS ArcReader 10.5.1 Language Packs silently, use the following command line:

```
msiexec.exe /x <Product Code> /qb
```

Language Pack	Product Code
ArcGIS ArcReader 10.5.1 Arabic Language Pack	{C2F8AAD2-C515-4BCC-8913-6E9CB4375064}
ArcGIS ArcReader 10.5.1 Brazilian Portuguese Language Pack	{1236DEA3-885E-4325-BD9E-E1BBD58D3635}
ArcGIS ArcReader 10.5.1 French Language Pack	{A7B483CB-2F41-4265-9BF5-BC2C8F1D7A70}
ArcGIS ArcReader 10.5.1 German Language Pack	{FCCC12FE-DD42-41B2-B9F7-087982817F59}
ArcGIS ArcReader 10.5.1 Italian Language Pack	{DC12627C-1B82-4F4C-93D0-A3FE19CD6C57}
ArcGIS ArcReader 10.5.1 Japanese Language Pack	{ED8504A7-C995-4172-9F45-91563CA372AB}
ArcGIS ArcReader 10.5.1 Russian Language Pack	{27B39A9E-7577-4F42-866A-868AE11CFB2D}
ArcGIS ArcReader 10.5.1 Simplified Chinese Language Pack	{B11385ED-2330-470B-874D-6E6F2A6D93FB}
ArcGIS ArcReader 10.5.1 Spanish Language Pack	{3E446394-3840-4D0E-8A6C-98C32C184948}
ArcGIS ArcReader 10.5.1 Turkish Language Pack	{43F7132D-5690-4FC7-9F5C-A696F5AC336B}

ArcGIS Engine 10.5.1 For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#). This product has a [Quick Start Guide](#) at the ArcGIS Resources website.

Setup Dependency If the following products are not detected on the machine, setup will not proceed:

- Microsoft .NET 4.5
- Microsoft Internet Explorer Version 9 or higher
- [Microsoft XML Core Services 6.0](#) (This is installed automatically if Setup.exe is used to launch the installation.)

Feature Dependency None

Command Line Parameters The following properties can be added to the msixec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ ArcGIS Engine10.5	No	No	Default installation location
INSTALLDIR1	Default for both GUI and silent installation is %System Drive%:\Python27		No	Python installation location
RENEWAL_CHECK	TRUE			Setting this to TRUE will enable users to use the license renewal option in ArcGIS Administrator to automatically update expiring licenses instead of browsing to new provisioning files.
MODIFYFLEXDACL	FALSE	No	No	This is the default value.
MODIFYFLEXDACL	TRUE	No	No	Setting this property to TRUE alters the following permissions, allowing management of the FlexNet anchor service by any user: SERVICE_QUERY_CONFIG SERVICE_QUERY_STATUS SERVICE_ENUMERATE _DEPENDENTS SERVICE_START SERVICE_INTERROGATE SERVICE_USER_DEFINED _CONTROL READ_CONTROL

Features Available The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msixec command line. If the ArcGIS Engine 10.5.1 setup does not find either Python 2.7.13 or Numerical Python 1.9.3 (NumPy) installed on the target computer, Python and all required components will be installed during a complete installation.

Feature	Feature Parent	Title	Description
ArcEngine		ArcGIS Engine	This installs the ArcGIS Engine components. These components support the creation of GIS and mapping applications.
Python	ArcEngine	Python	This feature will install Python, which is required for some geoprocessing tools.

Localized Setups ArcGIS Engine 10.5.1 setup is available in Arabic, Simplified Chinese, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, and Turkish. Running

setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms **Changing INSTALLDIR**

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MyEngine10.5.1\ . The backslash must be included.

Uninstall To uninstall ArcGIS Engine 10.5.1 silently, use the following command line:

```
msiexec.exe /x {C089C13D-F409-4385-B303-9A6DFCB60DE8} /qb
```

ArcGIS Engine 10.5.1 Language Packs

There are 10 language packs available for ArcGIS Engine 10.5.1 —Arabic, Brazilian Portuguese, French, German, Italian, Japanese, Russian, Simplified Chinese, Spanish, and Turkish. Use Setup.exe to accomplish a fully localized installation experience. Setup.exe is a bootstrapper executable that will run the main product setup.msi and then run the language pack MSI as a secondary installation. For example, if you run Setup.exe for ArcGIS Engine 10.5.1 in Spanish, both the ArcGIS Engine 10.5.1 Spanish setup and ArcGIS Engine 10.5.1 Spanish Language Pack setup will be installed. Additional language packs must be installed separately.

While the ArcGIS Engine 10.5.1 setup automatically installs the language pack, an Add/Remove item will exist for both setups. The ArcGIS Engine 10.5.1 uninstallation process does not uninstall language packs, and they will need to be manually uninstalled using the Add/Remove Programs dialog box. Running setup.exe for a localized 10.5.1 setup will upgrade both the main product installation and the language pack installation.

Setup Dependency ArcGIS Engine 10.5.1 must be installed on the machine.

Feature Dependency None

***Command Line
Parameters*** None

Features Available None

Transforms **Changing INSTALLDIR**

ArcGIS Engine 10.5.1 Language Packs install to the Installation directory of ArcGIS Engine 10.5.1. It is not possible to change this with a transform.

Uninstall To uninstall ArcGIS Engine 10.5.1 Language Packs silently, use the following command line:

```
msiexec.exe /x <Product Code> /qb
```

Language Pack	Product Code
ArcGIS Engine 10.5.1 Arabic Language Pack	{1977F44D-A4FD-45EC-A36E-6D09C9777A2D}
ArcGIS Engine 10.5.1 Brazilian Portuguese Language Pack	{7A4891E3-46F3-4636-8538-48204461A5AC}
ArcGIS Engine 10.5.1 French Language Pack	{3792C8B9-C28A-42C8-BB5C-E7C5FC09ECAE}
ArcGIS Engine 10.5.1 German Language Pack	{4E8D5EE6-2656-435D-95BE-B53A52B64C6A}
ArcGIS Engine 10.5.1 Italian Language Pack	{58B59E13-782B-4CAB-9155-3D1D0CCE2911}
ArcGIS Engine 10.5.1 Japanese Language Pack	{668F2851-05CC-479F-8DB2-8A1F346EA360}
ArcGIS Engine 10.5.1 Russian Language Pack	{8D9C041C-EE1F-4B9E-BA34-8620400E6D20}
ArcGIS Engine 10.5.1 Simplified Chinese Language Pack	{2875623F-213B-40D1-BA6C-E02C1DDFDE69}
ArcGIS Engine 10.5.1 Spanish Language Pack	{9BAA4AEA-6510-4319-B7C9-55393DAC6A89}
ArcGIS Engine 10.5.1 Turkish Language Pack	{012EA47D-EF79-4479-B8CC-934E6D62B621}

ArcGIS Engine Background Geoprocessing 10.5.1 (64 bit)

For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#). If Python 64 bit is already installed, the Python feature in the setup will be unavailable.

Setup Dependency

- 64-bit operating system.
- ArcGIS Engine 10.5.1 must be installed on the machine.

Feature Dependency

None

Command Line Parameters

Parameter	Default Value	Case Sensitive	Required	Description
MODIFYFLEXDACL	FALSE	No	No	This is the default value.
MODIFYFLEXDACL	TRUE	No	No	Setting this property to TRUE alters the following permissions, allowing management of the FlexNet anchor service by any user: SERVICE_QUERY _CONFIG SERVICE_QUERY _STATUS SERVICE_ENUMERATE _DEPENDENTS SERVICE_START SERVICE_INTERROGATE SERVICE_USER _DEFINED_CONTROL READ_CONTROL

Features Available

The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msixec command line.

Feature	Feature Parent	Title	Description
GP_Background		Background Geoprocessing (64 bit)	
Python	GP_Background	Python	

Localized Setups

ArcGIS Engine Background Geoprocessing 10.5.1 (64 bit) setup is available in Arabic, Simplified Chinese, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, and Turkish. Running setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms

Changing INSTALLDIR

ArcGIS Engine Background Geoprocessing 10.5.1 (64 bit) installs to the Installation directory of ArcGIS Engine 10.5.1. It is not possible to change this with a transform.

Uninstall

To uninstall ArcGIS Engine Background Geoprocessing 10.5.1 (64 bit) silently, use the following command line:

```
msiexec.exe /x {C449F6FA-DC86-410E-9F7E-B4986717B50A} /qb
```

ArcGIS Server 10.5.1

For comprehensive information on the installation, refer to the [installation guide](#) at the ArcGIS Resources website. For a list of supported operating systems and hardware

requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#). This product has a [Quick Start Guide](#) at the ArcGIS Resources website.

After installing the GIS server, you can get started right away with publishing services. In many cases, you should also install ArcGIS Web Adaptor. This component allows you to integrate your enterprise web server, such as IIS, with your ArcGIS Server site.

ArcGIS Web Adaptor gives you control over your site URL if you don't want users to see the default port 6080 or the default site name, arcgis. Using ArcGIS Web Adaptor, you can restrict outside users from accessing ArcGIS Server Manager or the ArcGIS Server Administrator Directory. With ArcGIS Web Adaptor in your site, you can perform authentication at the web tier. Finally, by associating your site to an enterprise web server, you can host web applications that use your services.

Setup Dependency If the following products are not detected on the machine, setup.msi will not proceed:

- 64-bit operating system
- [Microsoft XML Core Services 6.0](#) (This is installed automatically if Setup.exe is used to launch the installation.)
- Machines with an underscore (_) in their names are not supported. The ArcGIS Server 10.5.1 setup will not proceed if an underscore is detected in the machine name.

Note: ArcGIS Server is not supported on domain controllers. Installing ArcGIS Server on a domain controller may adversely affect functionality.

Feature Dependency .NET Extension Support

The .NET Extension Support feature requires Microsoft .NET 4.5. If Microsoft .NET 4.5 is not found, the .NET Extension Support feature will not be available for installation. The .NET Extension Support feature is required for server object extension (SOE) development and use.

Command Line Parameters The following properties can be added to the msixec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ArcGIS\Server	No	No	ArcGIS Server 10.5.1 installation location
INSTALLDIR1	Default for both GUI and silent installation is %System Drive%\Python27		No	Python installation location

Parameter	Default Value	Case Sensitive	Required	Description
USER_NAME	Local System account	Yes	No	Specify an existing domain or local account. If the specified local account does not exist, it will be created.
PASSWORD		Yes	Yes	Password for the account specified
ACCOUNT	UseConfigFile	Yes	No	There are no other valid values for this property.
EXPORTCONFIG		Yes	No	Exports the account information entered with the USER_NAME and PASSWORD command line parameters to an encrypted XML file
CONFIGPATH		Yes	No	Full path and name of server configuration file. Used in conjunction with ACCOUNT=UseConfigFile, this property specifies the server configuration file for configuring the ArcGIS Server 10.5.1 account. Used in conjunction with EXPORTCONFIG=Yes, this property specifies the name of the server configuration file and the location where it will be stored. The file name must end with .xml, and the specified folder must already exist.

ArcGIS Server 10.5.1 Account

The ArcGIS Server 10.5.1 account must be configured when ArcGIS Server 10.5.1 is installed silently. For production systems, it's recommended that a preexisting account be designated that resides in your domain or Active Directory and follows your organization's security policy. If the ArcGIS Server 10.5.1 account is not defined during a silent installation, or the credentials are not valid, the ArcGIS Server 10.5.1 setup displays a warning message during installation. The message can be closed by clicking OK. Under these circumstances, the ArcGIS Server 10.5.1 account is set to the Local System account.

When using an existing domain account, enter the following:

```
msiexec /I \\machinename\ArcGIS_Server\setup.msi /qb
USER_NAME=mydomain\mydomainaccount PASSWORD=my.password
```

When using a new or existing local account, enter the following:

```
msiexec /I \\machinename\ArcGIS_Server\setup.msi /qb
USER_NAME=myaccount PASSWORD=my.password
```

Server Configuration File

A server configuration file from previous installations or from other machines can be used to speed up the configuration process on other ArcGIS Server 10.5.1 machines and reduce the chance of inadvertently typing a wrong name or password. While the account password is encrypted, be sure to store the configuration file in a secure location. A server configuration file can be imported by specifying both ACCOUNT and CONFIGPATH parameters. It can be exported by specifying both EXPORTCONFIG and CONFIGPATH parameters.

When importing ArcGIS Server 10.5.1 account credentials using a server configuration file, enter the following:

```
msiexec /I \\machinename\ArcGIS_Server\setup.msi /qb
ACCOUNT=UseConfigFile CONFIGPATH=\\networkmachine
\serverconfigs\standardaccount.xml
```

When exporting ArcGIS Server 10.5.1 account credentials to a server configuration file, enter the following:

```
msiexec /I \\machinename\ArcGIS_Server\setup.msi /qb EXPORTCONFIG=Yes
CONFIGPATH=\\networkmachine \serverconfigs\standardaccount.xml
```

Features Available

The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msiexec command line. If Python 2.7.13 and Numerical Python 1.9.3 are not detected, the ArcGIS Server 10.5.1 setup will automatically install them.

Feature	Feature Parent	Title	Description
DotNetSupport	GIS_Server	.NET Extension Support	The .NET Extension Support feature is for developers who want to extend ArcGIS Server 10.5.1 with .NET server object extensions. This feature is also required for deploying .NET SOEs.
GIS_Server		GIS Server	The GIS server hosts GIS services that are accessible through REST and SOAP. The GIS server includes a default web server; it is administered using Manager and browsed using Services Directory.

Existing ArcGIS for Server Users

When upgrading from 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 silently, users must specify the ArcGIS for Server account used by the ArcGIS 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 for Server site. Typically, this is the account defined when installing 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, 10.5, or 10.5.1. If the account has changed since 10.1, 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 was installed, for example, by using the Configure ArcGIS Server Account utility, the user name and password designated when modifying the account must be entered. You can determine the ArcGIS for Server account by accessing the Configure ArcGIS Server Account utility from the Start menu on the machine hosting ArcGIS for Server. The ArcGIS for Server account is listed in the dialog box.

If the ArcGIS for Server account is not specified or does not match the ArcGIS for Server account used by the current site, the installation process will display a message indicating the credentials could not be validated. The installation will exit as a result. In the examples below, the ArcGIS Server account used by the 10.5.1 site is myaccount.

ArcGIS 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, and 10.5 for Server Users

The ArcGIS Server 10.5.1 setup package is designed to detect and upgrade an existing installation of ArcGIS 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 for Server on the target system.

To upgrade using setup.exe, follow the step below:

1. On the machine hosting ArcGIS 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 for Server, run the following command line. Setup.exe will call setup.msi with the provided command line parameters.

```
<path to ArcGIS Server 10.5.1 setup download folder>\setup.exe /qb  
USER_NAME=myaccount PASSWORD=mypassword
```

To upgrade using setup.msi, follow the step below:

1. On the machine hosting ArcGIS 10.2, 10.2.1, 10.2.2, 10.3, 10.3.1, 10.4, 10.4.1, or 10.5 for Server, run the following command to run ArcGIS Server 10.5.1 setup.msi.

```
msiexec /i <path to ArcGIS Server 10.5.1 setup download  
folder>\setup.msi /qb USER_NAME=myaccount PASSWORD=mypassword
```

ArcGIS 10.1 for Server Users (including SP1)

The ArcGIS Server 10.5.1 setup package is designed to detect and upgrade an existing installation of ArcGIS 10.1 (including SP1) for Server on the target system.

To upgrade using setup.exe, follow the step below:

1. On the machine hosting ArcGIS 10.1 for Server, run the following command to install. Setup.exe will apply the ArcGISServerUG.msp silently and then call setup.msi with the provided command line parameters.

```
<path to ArcGIS Server 10.5.1 setup download folder>\setup.exe /qb  
USER_NAME=myaccount PASSWORD=mypassword
```

To upgrade using setup.msi, follow the steps below:

1. On the machine hosting ArcGIS 10.1 for Server, run the following command to apply the patch. This makes the machine ready to apply the setup.msi.

```
msiexec.exe /p <path to ArcGIS Server 10.5.1 setup download  
folder>\Support\patch\ArcGISServerUG.msp /qb
```

2. On the machine hosting ArcGIS 10.1 for Server, run the following command to run ArcGIS Server 10.5.1 setup.msi.

```
msiexec /i <path to ArcGIS Server 10.5.1 setup download
folder>\setup.msi /qb USER_NAME=myaccount PASSWORD=mypassword
```

The extra step of applying the .msp before running the .msi file is not required if upgrading from a 10.1 SP1 installation of ArcGIS for Server.

ArcGIS 10.0 for Server Users

You must uninstall versions 10.0 and earlier of ArcGIS Server from your machine before proceeding with the ArcGIS Server 10.5.1 installation.

Localized Setups

ArcGIS Server 10.5.1 setup is available in Arabic, Simplified Chinese, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, and Turkish. Running setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms

Changing INSTALLDIR

1. In the InstallExecuteSequence table, add a row. The values for the fields are the following:

```
Action: ESRI_CHANGE_INST
Condition: ESRI_ARCGISDIR="1" OR UPGRADE_THIS
Sequence: 978
```

2. In the CustomAction table, add a row. The values for the fields are the following:

```
Action: ESRI_CHANGE_INST
Type: 35
Source: INSTALLDIR
Target: C:\MyServer
```

Uninstall

To uninstall ArcGIS Server 10.5.1 silently, use the following command line:

```
msiexec.exe /x {40CC6E89-93A4-4D87-A3FB-11413C218D2C} /qb
```

ArcGIS Server 10.5.1 Language Packs

There are nine language packs available for ArcGIS Server 10.5.1 —Arabic, Brazilian Portuguese, French, German, Italian, Japanese, Russian, Simplified Chinese, Spanish, and Turkish. Use Setup.exe to accomplish a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack MSI as a secondary installation. For example, if you run Setup.exe for ArcGIS Server 10.5.1 in Spanish, both the ArcGIS Server 10.5.1 Spanish setup and ArcGIS Server 10.5.1 Spanish Language Pack setup will be installed. Additional language packs must be installed separately.

While the ArcGIS Server 10.5.1 setup automatically installs the language pack, an Add/Remove item will exist for both setups. The ArcGIS Server 10.5.1 uninstallation process does not uninstall language packs, and they will need to be manually uninstalled using the Add/Remove Programs dialog box. Running setup.exe for a localized 10.5.1 setup will upgrade both the main product installation and the language pack installation.

Setup Dependency ArcGIS Server 10.5.1 must be installed on the machine.

Feature Dependency None

Command Line Parameters None

Features Available None

Transform **Changing INSTALLDIR**

ArcGIS Server 10.5.1 Language Packs install to the Installation directory of ArcGIS Server 10.5.1. It is not possible to change this with a transform.

Uninstall To uninstall ArcGIS Server 10.5.1 Language Packs silently, use the following command line:

```
msiexec.exe /x <Product Code> /qb
```

Language Pack	Product Code
ArcGIS Server 10.5.1 Arabic Language Pack	{EC049BDB-FD40-4AE3-A46D-907D18D5E859}
ArcGIS Server 10.5.1 Brazilian Portuguese Language Pack	{A8348F23-03E9-4803-829E-2EF01E4C931D}
ArcGIS Server 10.5.1 French Language Pack	{5BFF0B80-95B9-477B-87A0-9DF828E1121D}
ArcGIS Server 10.5.1 German Language Pack	{A7855ECC-B5BE-4410-A6CC-4ED38BED04AA}
ArcGIS Server 10.5.1 Italian Language Pack	{06E6378B-2061-4B94-B3DF-151A8EB089AA}
ArcGIS Server 10.5.1 Japanese Language Pack	{401E8FA1-0EF3-45AD-A05A-759170F5CBEA}
ArcGIS Server 10.5.1 Russian Language Pack	{3DA4C3CD-1BEF-44E3-9FDD-C552F1BEA879}
ArcGIS Server 10.5.1 Simplified Chinese Language Pack	{1C91A247-D6BD-441C-9515-2F40F64879EF}
ArcGIS Server 10.5.1 Spanish Language Pack	{AD082F05-D4CA-4915-BE11-BB290B5639A0}
ArcGIS Server 10.5.1 Turkish Language Pack	{54C7B1EC-3386-4A6A-B526-B65249CEBB18}

ArcGIS Web Adaptor (IIS) 10.5.1

For comprehensive information on the installation of ArcGIS Web Adaptor (IIS) 10.5.1, refer to the [installation guide](#) at the ArcGIS Resources website. For a list of supported

operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#).

ArcGIS Web Adaptor (IIS) allows you to integrate your existing IIS web server with ArcGIS Server and Portal for ArcGIS. You can use Web Adaptor solely with ArcGIS Server or Portal for ArcGIS, or you can configure Web Adaptor to work with both.

Web Adaptor can be used in various ArcGIS Server site configurations. For example, in a site with a single ArcGIS server, you can install Web Adaptor on the same machine as the ArcGIS server or offload it to a dedicated web server. In a multiple-machine deployment, you can have one entry point into your site by installing Web Adaptor on a single web server, or you can establish redundancy at the web server tier by installing Web Adaptor on multiple web servers.

If you've configured multiple Web Adaptor instances on a single web server, you can use different version numbers for all those instances. In version 10.2 and earlier, all Web Adaptor instances on a single web server were required to use the same version number; running the setup upgraded all existing Web Adaptor instances to the latest version.

Web Adaptor is a platform independent from ArcGIS Server; therefore, the Web Adaptor instance you deploy does not have to match the operating system platform of your ArcGIS Server site. For example, if you have a site composed of Linux machines, you can deploy ArcGIS Web Adaptor (IIS) to work with ArcGIS Server.

The version of ArcGIS Web Adaptor must always match the version of ArcGIS Server you're using. You can have a 10.2.1 or later version of ArcGIS Web Adaptor installed alongside earlier versions of ArcGIS Web Adaptor on the same machine. For example, you can have a 10.1 SP1 version and a 10.5.1 version of ArcGIS Web Adaptor installed on the same web server.

Each Web Adaptor instance must have its own unique name; you cannot have two Web Adaptor instances with the same name on a single web server. If a naming conflict is detected during the installation, a warning message is displayed. You need to uninstall the earlier version with the same name to resolve the conflict. Alternatively, you can change the name of one Web Adaptor instance to proceed with the installation.

You can add the Cross-domain Policy File feature at any time by running the ADDLOCAL command on the existing installation.

Setup Dependency If the following products are not detected on the machine, setup will not proceed:

- Microsoft .NET Framework 4.5 or higher.
- Internet Information Services (IIS) and specific IIS components enabled (Supported versions are 7.0, 7.5, 8.0, 8.5, and 10)

If setup.exe is used to do a GUI installation of ArcGIS Web Adaptor (IIS) 10.5.1, the missing components are installed automatically. If setup.exe is used to deploy ArcGIS Web Adaptor (IIS) 10.5.1 using SCCM/SMS and IIS components are

missing, the IIS Requirements verification dialog box, which installs the required IIS components, will pop up on the client machine. Users will have to click the I agree button to let the setup proceed. Installation using setup.msi, whether silent or GUI, will not proceed until the missing IIS components are installed.

If you're going to perform a silent installation of ArcGIS Web Adaptor, all required IIS components must be enabled manually. The ArcGIS Web Adaptor setup will not automatically enable missing IIS components when you're performing a silent installation.

- Windows Vista and Windows 7

For installations on Windows Vista and Windows 7, the following IIS components must be installed:

Internet Information Services

- ◆ Web Management Tools

- ◇ IIS 6 Management Compatibility
 - IIS Metabase and IIS 6 configuration compatibility
- ◇ IIS Management Console
- ◇ IIS Management Scripts and Tools
- ◇ IIS Management Service

- ◆ World Wide Web Services

- ◇ Application Development Features
 - .NET Extensibility
 - ASP.NET
 - ISAPI Extensions
 - ISAPI Filters
- ◇ Common HTTP Features
 - Default Document
 - Static Content
- ◇ Security
 - Basic Authentication
 - Request Filtering
 - Windows Authentication

- Windows Server 2008 and Windows Server 2008 R2

For installations on Windows Server 2008 and Windows Server 2008 R2, the following IIS components must be installed:

Web Server (IIS)

◆ Web Server

- ◇ Common HTTP Features
 - Default Document
 - Static Content
- ◇ Application Development
 - ASP.NET
 - .NET Extensibility
 - ISAPI Extensions
 - ISAPI Filters
- ◇ Security
 - Basic Authentication
 - Windows Authentication
 - Request Filtering

◆ Management Tools

- ◇ IIS Management Console
- ◇ IIS Management Scripts and Tools
- ◇ Management Service
- ◇ IIS 6 Management Compatibility
- ◇ IIS 6 Metabase Compatibility

● Windows 8.1 and Windows 10

For installations on Windows 8.1/10, the following IIS components must be installed:

Internet Information Services

◆ Web Management Tools

- ◇ IIS 6 Management Compatibility
 - IIS Metabase and IIS 6 configuration compatibility
- ◇ IIS Management Console
- ◇ IIS Management Scripts and Tools
- ◇ IIS Management Service

◆ World Wide Web Services

- ◇ Application Development Features
 - .NET Extensibility 3.5
 - ASP.NET 3.5
 - ISAPI Extensions
 - ISAPI Filters
- ◇ Common HTTP Features
 - Default Document
 - Static Content
- ◇ Security
 - Basic Authentication
 - Request Filtering
 - Windows Authentication
- Windows Server 2012 and Windows Server 2012 R2

For installations on Windows Server 2012 or 2012 R2, the following IIS components must be installed:

Web Server (IIS)

- ◆ Web Server
 - ◇ Common HTTP Features
 - Default Document
 - Static Content
 - ◇ Application Development
 - ASP.NET 3.5
 - .NET Extensibility 3.5
 - ISAPI Extensions
 - ISAPI Filters
 - ◇ Security
 - Basic Authentication
 - Windows Authentication
 - Request Filtering
- ◆ Management Tools
 - ◇ IIS Management Console
 - ◇ IIS Management Scripts and Tools
 - ◇ Management Service
 - ◇ IIS 6 Management Compatibility
 - IIS 6 Metabase Compatibility

Note: Windows 7, 8, and 8.1 are supported for basic testing and application development use only. They are not recommended for deployment in a production environment.

Feature Dependency None

Product Conflict ArcGIS Web Adaptor (IIS) can be installed even if any other Esri product from a previous version is installed on the client machine.

Command Line Parameters The following properties can be added to the msixec command line:

Parameter	Default Value	Case Sensitive	Required	Description
WEBSITE_ID	1	Yes	No	Numeric value of website. This is used to determine the website where the ArcGIS Web Adaptor instance will be created. The value for WEBSITE_ID is a number specific to each website on your server and assigned by IIS. The IDs for the websites on your server can be found in IIS Manager. The default website has an ID of 1. By default, the WEBSITE_ID parameter is set to the default website (even if multiple websites exist).
VDIRNAME	arcgis	Yes	No	Name of ArcGIS Web Adaptor web application. The instance name cannot contain spaces.
PORT		Yes	No	If the website has multiple ports, use the PORT parameter to install to the specified port of the WEBSITE_ID.

To install ArcGIS Web Adaptor (IIS) silently, use the following:

```
<path to ArcGIS Web Adaptor (IIS) setup download>\Setup.exe /qb
VDIRNAME=arcgis_1 WEBSITE_ID=4059640
```

Installing Multiple Instances

Multiple instances of ArcGIS Web Adaptor (IIS) can be installed on the same machine at the same time. Each instance must have a unique website and instance name combination. The command line for Setup.exe and setup.msi is different.

For the setup.msi command line, first extract the .mst from setup.msi using MsiDb.Exe and use the following:

```
msiexec /I setup.msi /qb WEBSITE_ID=1 VDIRNAME=arcgis_1
MSIEXECINSTANCE=1 TRANSFORMS=:InstanceID1.mst
```

INSTANCEID goes from 1 to 20 for all 20 transforms.

For the Setup.exe command line, use the following:

```
Setup.exe WEBSITE_ID=2 VDIRNAME=arcgis_1
```

Features Available

The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msixexec command line.

Feature	Feature Parent	Title	Description
CrossDomainPolicyFiles	WebAdaptor	Cross-domain Policy Files	Installs cross-domain policy files in the web server root location to enable access for Silverlight and Flex clients
WebAdaptor		Web Adaptor	Allows ArcGIS Server 10.5.1 to integrate with your existing IIS web server

The CrossDomainPolicyFiles feature is not installed by default. To install the feature, you must add an additional parameter to your installation command line. The command line parameter ADDLOCAL=ALL below installs the CrossDomainPolicyFiles feature silently.

By default, Adobe® Flash and Microsoft Silverlight web applications are not allowed to access web services that reside outside the domain where the application is hosted. Cross-domain policy files enable access to web services outside the application's domain. When the CrossDomainPolicyFiles feature is enabled, two cross-domain policy files will be installed in the IIS web server root folder: crossdomain.xml for Adobe Flash applications and clientaccesspolicy.xml for Microsoft Silverlight applications. These files will enable Adobe Flash and Microsoft Silverlight applications to access feature services hosted by ArcGIS Server 10.5.1.

For example:

```
<path to ArcGIS Web Adaptor (IIS) setup download>\Setup.exe /qb
ADDLOCAL=ALL VDIRNAME=arcgis_external WEBSITE_ID=4059640
```

Upgrade

Starting with version 10.2.1, ArcGIS Web Adaptor can be installed side by side with other versions of ArcGIS Web Adaptor so to upgrade an earlier version of ArcGIS Web Adaptor to 10.5.1, you need to uninstall the earlier version and install the 10.5.1 setup. During the 10.5.1 installation, you'll specify the same name as your earlier Web Adaptor version. This guarantees your Web Adaptor URL will remain identical to the earlier version.

If a naming conflict is detected during the 10.5.1 installation, a warning message will appear. You will need to uninstall the earlier version with the same name to perform the upgrade.

After installing 10.5.1, you need to configure ArcGIS Web Adaptor with its corresponding ArcGIS Server site.

At 10.2 and earlier versions, running the setup upgraded all existing Web Adaptor instances to the latest version.

Localized Setups

ArcGIS Web Adaptor (IIS) 10.5.1 setup is available in Arabic, Simplified Chinese, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, and Turkish.

Running setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms **Changing INSTALLDIR**

ArcGIS Web Adaptor (IIS) 10.5.1 installs to the home directory of IIS. It is not possible to change this with a transform.

Uninstall To uninstall ArcGIS Web Adaptor, follow the steps in the sections below.

1. Unregister Web Adaptor.

First you'll need to unregister Web Adaptor with your site using ArcGIS Server Manager. To do so, follow the steps below:

- a. Open Manager and log in as a user who has administrative access to ArcGIS Server. If you need help with this step, see [Logging in to Manager](#).
- b. Click Site > Web Adaptor.
- c. Click Unregister Web Adaptor.
- d. In the Unregister Web Adaptor dialog box, click Yes.

Note: The unregistering functionality is only available starting at ArcGIS 10.1 SP1 for Server and is required beginning at 10.1 SP1. If your ArcGIS Server and Web Adaptor product versions are out of sync, you'll need to make sure the components are upgraded to the same product version before proceeding.

2. Uninstall Web Adaptor.

Use your operating system's tools to uninstall Web Adaptor.

To uninstall ArcGIS Web Adaptor (IIS) 10.5.1 silently, use the following command line:

```
msiexec.exe /x {0A9DA130-E764-485F-8C1A-AD78B04AA7A4} /qb
```

To uninstall ArcGIS 10.5 Web Adaptor (IIS) silently, use the following command line:

```
msiexec.exe /x {87B4BD93-A5E5-469E-9224-8A289C6B2F10} /qb
```

To uninstall ArcGIS 10.4.1 Web Adaptor (IIS) silently, use the following command line:

```
msiexec.exe /x {F53FEE2B-54DD-4A6F-8545-6865F4FBF6DC} /qb
```

To uninstall ArcGIS 10.4 Web Adaptor (IIS) silently, use the following command line:

```
msiexec.exe /x {B83D9E06-B57C-4B26-BF7A-004BE10AB2D5} /qb
```

To uninstall ArcGIS 10.3.1 Web Adaptor (IIS) silently, use the following command line:

```
msiexec.exe /x {10A57135-2051-41AE-B2D3-0B10470CDB9B} /qb
```

To uninstall ArcGIS 10.3 Web Adaptor (IIS) silently, use the following command line:

```
msiexec.exe /x {B52143C3-3085-4976-9795-ED134AEA0099} /qb
```

To uninstall ArcGIS 10.2.2 Web Adaptor (IIS) silently, run this command from the command line:

```
msiexec /x {5D50CC1F-63E9-400E-A62C-EEAD948618EC} /qb
```

To uninstall ArcGIS 10.2.1 Web Adaptor (IIS) silently, run this command from the command line:

```
msiexec /x {18C45289-5BB0-448E-813D-34D31DF68104} /qb
```

To uninstall ArcGIS 10.2 Web Adaptor (IIS) silently, run this command from the command line:

```
msiexec /x {1803FE22-6164-4DC4-B14E-EBD4148A8429} /qb
```

To uninstall ArcGIS 10.1 SP1 Web Adaptor (IIS) silently, run this command from the command line:

```
msiexec /x {0EAADB27-2BD7-4ED5-92E2-532F775BCCED} /qb
```

To uninstall ArcGIS 10.1 Web Adaptor (IIS) silently, run this command from the command line:

```
msiexec /x {11CCA428-4679-4D79-ADC0-A13F43290ACF} /qb
```

To uninstall additional instances of ArcGIS Web Adaptor silently, replace the above product code with the product code of the Web Adaptor instance to be uninstalled. Product codes for Web Adaptor (IIS) instances are listed below. The product codes are listed in the same order as the Web Adaptor instances installed on your system; for example, the first Web Adaptor instance created is the first product code listed below:

ArcGIS Web Adaptor (IIS) 10.5.1 product codes

```
{B8A6A873-ED78-47CE-A9B4-AB3192C47604}
```

```
{7DEAE915-5FAC-4534-853D-B4FC968DBDEB}  
{AC10F3CF-A5C1-44B0-8271-27F26D323D14}  
{5F748B0C-3FB6-42FF-A82D-C1573D3C1469}  
{428DE39D-BF23-42B5-A70E-F5DD5DD21C2C}  
{98B1DE9B-0ECF-4CAA-A29A-B89B2E8F38F1}  
{4876508B-31CF-4328-BE11-FFF1B07A3923}  
{D803A89F-4762-4EFD-8219-55F4C3047EDE}  
{4A5F404B-391F-4D13-9EE4-5B9AC434FD5A}  
{99FFFA13-2A40-4AA4-AAC1-9891F2515DB1}  
{2B04DE60-3E79-4B44-9A93-40CAC72DE2FB}  
{D595C9E2-BBA0-4708-A871-1166CD0CFB61}  
{50825C57-5040-436D-B64C-A53FFB897E9D}  
{5D750A11-BC80-45CE-B0DD-33BA8A5D8224}  
{60390703-9077-4DDE-8BB1-A025AB0FE75B}  
{BF75DC6C-F1A5-4A3C-A6A6-76BCB5DB5881}  
{96B29B2F-888A-4C2B-B8C3-97E9A7849F2F}  
{7FDD9158-2E93-4E12-A249-CD9D5445C527}  
{A868CBAC-D9A2-41A7-8A5B-069AB63FEC7B}  
{83462AE4-27BB-4B63-9E3E-F435BD03BB12}
```

ArcGIS Web Adaptor (IIS) 10.5 product codes

```
{604CF558-B7E1-4271-8543-75E260080DFA}  
{9666ABD8-8485-4383-B3DD-4D1598F582A3}  
{58264BBA-5F61-41D9-839A-00B6C2C66A63}  
{5988C905-772F-4F62-8339-1796C38674B7}  
{ADD5FF4F-EB57-4460-BD33-D55562AE6FA7}  
{EF65064A-96C8-4EA1-B76D-B9BCC97EF76A}  
{183C90B7-4F78-47CE-AF69-116BF6A34085}  
{6B2FA0A8-6F2C-4359-B7A4-D2F9FD63EE97}  
{ACF59C57-A613-44CC-A927-1D8C2B280516}  
{2E5E4CDE-9964-4B40-A1F1-843C62AC789E}  
{2901A5D3-C16D-4993-A306-86261B0430B1}  
{AC910B51-6077-4055-B042-D72CA0D23D69}  
{8F36D583-35F0-43F2-8F8F-5B696F87183A}  
{37C2CAE2-4A81-4289-B318-93D63C63AA47}  
{CC345B69-1E26-4C56-B640-92BCBADBDF06}  
{F0FAE80D-0C51-4D9D-A79B-057396A2456D}  
{5BA355D1-D9B6-4CA0-B1C6-694377084464}  
{25118D44-AD2D-423F-85F0-5D730A2691B7}  
{D4855344-CEE0-47A3-BD50-D7E2A674D04E}  
{9CD66AA3-F0DA-46CC-A5DD-0BB5B23499AD}
```

ArcGIS 10.4.1 Web Adaptor (IIS) product codes

```
{475ACDE5-D140-4F10-9006-C804CA93D2EF}  
{0547D7D8-7188-4103-9387-A99FE15215AF}  
{25DFAFFF-07CE-42A2-B157-541D7980A3DA}  
{771998A8-A440-4F5F-B55A-0FE2C594208B}
```

```
{C120DC32-DBEA-4CB1-94E4-F50A7EE09F5C}  
{3294151B-CA4C-4A89-BBC7-DCE521D8A327}  
{E04FB941-248D-4806-9871-04DB306EEA91}  
{66CD667D-440D-4CF1-9ECB-C6C77A7A0520}  
{7938463B-E744-4332-8617-39E91B10FC15}  
{C22C2AF5-D58E-4A4D-85DF-E3A38C83F37A}  
{9AF62D15-755B-43DE-878A-DBA23D33B28A}  
{D4F22207-C5FA-49B0-9466-9E4D37435882}  
{C8ADE9B2-3BC8-4417-97D0-785BA0CD86D9}  
{C85A40C5-00B9-4CDE-9299-397BFD5A2EAF}  
{E0BD73FB-4028-4A5D-9A24-9FA0BD614D4B}  
{83CF76EC-F959-46B3-9067-F59B2A846D2F}  
{F7D6BD55-8D07-4A57-8284-ADACE0F567D8}  
{C56A0E47-D4E1-4762-9BAF-07A19A154EE6}  
{09AC608B-7CE4-4280-9F4E-F2988A58428D}  
{5695B2B6-A25E-4013-B5F8-30686FDDFE0D}
```

ArcGIS 10.4 Web Adaptor (IIS) product codes

```
{E2C783F3-6F85-4B49-BFCD-6D6A57A2CFCE}  
{901578F9-BC82-498D-A008-EC3F53F6C943}  
{E3849BEC-6CAF-463F-8EFA-169116A32554}  
{EE889E4F-85C7-4B8A-9DAA-5103C9E14FD6}  
{89D96D88-CC2F-4E9B-84DD-5C976A4741EE}  
{0913DB77-F27B-4FDE-9F51-01BB97BBEBB9}  
{99B6A03C-D208-4E2E-B374-BA7972334396}  
{A0F3D072-0CD1-43D7-AFDA-8F47B15C217C}  
{0FE26871-21C3-4561-B52E-A8FED5C8E821}  
{1D1F3C15-F368-44AF-9728-6CF031D478AF}  
{CE5EC52D-B54D-4381-9F6E-2C08F7721620}  
{E71AEC5B-25F0-47E5-B52C-847A1B779E48}  
{5DA1F056-A3F1-46D5-8F2E-74E72F85B51B}  
{1EB3D37A-902A-43E2-9EAA-1B43BA10C369}  
{839FFEB7-76B5-4CBB-A05E-E2276FC3421D}  
{594E1C33-1C6D-49B4-A83F-2A780193B75F}  
{34330B0C-34CD-4DCF-A68D-FDE7A1834659}  
{42A96EC7-7CA9-4F68-B946-E9BF84713605}  
{A1A8DAE4-B6F9-446F-8F6A-487F1E07A434}  
{3BF277C6-6A88-4F72-A08C-54F1E45F44E5}
```

ArcGIS 10.3.1 Web Adaptor (IIS) product codes

```
{2350F5B2-44A2-413E-804C-445DB177152B}  
{7729802B-A3BB-49E5-8BCC-8413C4F852F1}  
{6494393C-0657-4D5D-9A51-E54831E48CC4}  
{140F583D-4EB9-4A3A-8B60-2DA3A72234D1}  
{794D05F0-522C-42E7-AF0D-5A7FDECD7FB2}  
{D4CFB367-FF83-4632-AA26-F7138001C071}  
{096A7FDD-9548-44BE-B04D-1F82669850E3}  
{95DB352A-B1A4-49DD-9D16-5AD8870203D0}
```

```
{D3C84839-B233-4951-8F9B-962D4CD81DB7}  
{2C858B42-0479-4F5B-9B3B-2489EDF9639F}  
{395889EC-8AB3-4570-AC77-11C2EEDB9A61}  
{BE5D14D7-5433-4F04-8E3A-6A6DB7032C28}  
{FD8D58CC-B361-4198-B83C-41DEF9AA9C81}  
{553CDCDB-5559-43B7-A61C-8838529634CA}  
{F569182C-6726-4BD3-B4C5-57982598761A}  
{89E4E8EC-4594-428F-AEAD-0936A7EC21A4}  
{F313D6A5-1057-4A09-B512-DB20D5D801D4}  
{7A22729E-048C-493B-8766-6FDF7155E134}  
{36FEEE30-C19C-416D-A19D-38D277F45620}  
{A1C899A0-8582-4C38-8A4B-DFAE55681F0}
```

ArcGIS 10.3 Web Adaptor (IIS) product codes

```
{0E139F65-5170-4F6D-A27C-873C61DA98F6}  
{45CD1727-42C8-4986-90B0-5E16C58EBFC7}  
{D6447963-213B-4E7F-A133-02E995C6F948}  
{CB34AB51-E1EF-42C5-A0DF-C37C5C5F3160}  
{EDA2D3D2-733F-4B63-89BB-48AA5AD65A17}  
{8445558D-7ECF-4C2B-95AA-8C85E41140E8}  
{34072E47-BF27-4D33-A52B-B33BEDB667DA}  
{FD629592-E642-415F-B048-C53D8AD68866}  
{0BAD8A19-1D69-461E-817A-E4B1F7F26639}  
{556DAC0C-C01E-4D5E-B470-077A60BC5F28}
```

ArcGIS 10.2.2 Web Adaptor (IIS) product codes

```
{B4F6E64E-FC38-4743-92F0-F934EEFE683B}  
{1879DA6F-9FBE-406C-970A-E4E7D1D588F9}  
{058D6AC8-5E5D-42CE-B02D-1F93EA0CA2FD}  
{16990EFC-29DE-4973-AC57-FE4ED65CF149}  
{28832100-4AF5-4CE6-B397-EA209892A466}  
{9253CEB5-4FFD-4E2D-B6CC-8636D38C8776}  
{07C61E8A-EEB0-4E3A-BA98-BD1B6D2E996F}  
{5F3600B0-3421-4734-9240-D69A65398E36}  
{F73700E5-E5E3-4B35-AFC3-182EC445D23F}  
{1636DF85-7289-4E4D-960F-D695167B7006}
```

ArcGIS 10.2.1 Web Adaptor (IIS) product codes

```
{345B5297-EB09-42E3-9AC4-726D2D3953AE}  
{EFB3F701-9AF6-4577-AE0A-0C0B09BCA5C8}  
{F3C325DE-3F65-4D60-AC47-0DD9D9E35B16}  
{4B9BF032-BF90-4B71-87D1-CAFC65FA67A7}  
{52D5974A-753E-419A-B5FE-3B01326B0F69}  
{A59DCF22-BEAE-484B-9997-4EC8426054A3}  
{94DD2DB1-C250-4BFD-A189-74774814DF5E}  
{2F3A4E46-FFA9-4359-A0E1-AEA0A38352FA}  
{8DE09037-50A3-4E3A-8F94-86DF0A116E22}
```



```
{7A5BC91C-B3C0-465B-9670-643F88DAF793}
```

ArcGIS 10.2 Web Adaptor (IIS) product codes

```
{2A79BF0A-248E-45A1-B283-5EC0CFA07537}
{EF39D7A8-94B9-4042-A480-8BB5F4CD04D6}
{E045E259-E3FA-4C5B-9F85-8FB1A40FA1BB}
{8C5ECECE-8FA3-4E6A-8219-62276CD40617}
{DB03FAC4-6F6E-4A20-AA79-4D31A6C3E8C1}
{9ADB734F-294E-4E03-808B-8BAECE9493E8}
{2D9BF186-23BA-4DBB-8360-315AF8A345AF}
{66C75B2A-B5AC-441E-9286-09DF7E0D75F2}
{AA60D73D-F69B-42E3-9A57-150F5D3D3916}
{FB4D8549-9627-45DA-9D94-FC0FCA6263FA}
```

ArcGIS 10.1 SP1 Web Adaptor (IIS) product codes

```
{D52794EA-CFED-4A35-AD48-D7B70362872E}
{FC0598F8-DFE8-4324-9E88-8EABB2D9B855}
{53D94675-CA80-4333-9FFF-BA9DF7AAAB01}
{1B4C6478-0E9B-4781-AADE-EECE7923BE02}
{2FAC39EB-E9F1-478F-BB9A-46D77920FE90}
{9892BC97-25CC-47F8-BA52-AE616DF07393}
{B34156D4-6941-4DCD-BF16-BA9FA11673FD}
{4512A442-2FB4-48E7-927A-49874DB5C57B}
{CF5D211A-6637-4B65-8E0A-B152888A4ECB}
{8353ED1D-4DFC-4FCE-B3B8-2668009D653A}
```

ArcGIS 10.1 Web Adaptor (IIS) product codes

```
{F2D4A6C5-E11F-4FEF-A240-5F2BA22F6418}
{DF32A6BA-A260-4BCD-B59A-4CEB4173B2D8}
{0CF52969-7F17-4F85-82FF-C658F3DC5F6E}
{8E4D5C3B-B54C-4CC5-9A5F-3EC0C6BF64F0}
{0329B7AD-D457-42F2-B97E-BBAE26D54329}
{38A627D7-01C7-4E3F-945D-3CD4CDF14BE5}
{635C3AE6-F3F1-434D-B1E7-B12CE91AD83F}
{39BE94C5-8146-4560-A54E-859979624ACF}
{1506767A-988E-44EB-A733-E5B8BFFBE81E}
{BFA02DB7-9E55-4179-88AC-D2C1B9802096}
```

ArcGIS Web Adaptor (Java Platform) 10.5.1

For comprehensive information on the installation of ArcGIS Web Adaptor (Java Platform) 10.5.1, refer to the [installation guide](#) at the ArcGIS Resources website. For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#).

ArcGIS Web Adaptor (Java Platform) allows you to integrate your existing Java-based web server with ArcGIS Server and Portal for ArcGIS. You can use Web Adaptor solely with ArcGIS Server or Portal for ArcGIS, or you can configure Web Adaptor to work with both.

The Java platform setup is compatible with Java EE servers such as WebSphere and WebLogic.

Web Adaptor is an application that runs in your existing website and forwards requests to your ArcGIS servers. It polls your site at a regular interval to learn which machines have been added or removed. It then forwards traffic to only the currently participating machines. When you prepare to expose your ArcGIS Server site to an external audience, you should install Web Adaptor or implement comparable request forwarding and security technology.

Web Adaptor can be used in various ArcGIS Server site configurations. For example, in a site with a single ArcGIS server, you can install Web Adaptor on the same machine as the ArcGIS server or offload it to a dedicated web server. In a multiple-machine deployment, you can have one entry point into your site by installing Web Adaptor on a single web server, or you can establish redundancy at the web server tier by installing Web Adaptor on multiple web servers.

Web Adaptor is a platform independent from ArcGIS Server; therefore, the Web Adaptor instance you deploy does not have to match the operating system platform of your ArcGIS Server site. For example, if you have a site composed of Linux machines, you can deploy ArcGIS Web Adaptor (Java Platform) to work with ArcGIS Server.

The ArcGIS Web Adaptor version must always match the version of its registered ArcGIS Server site. You can have a 10.2.1 or later version of ArcGIS Web Adaptor installed alongside earlier versions of ArcGIS Web Adaptor on the same machine. For example, you can have a 10.1 SP1 version and a 10.5.1 version of ArcGIS Web Adaptor installed on the same web server.

Each ArcGIS Web Adaptor instance must have its own unique name; you cannot have two Web Adaptor instances with the same name on a single web server.

Setup Dependency The ArcGIS Web Adaptor (Java Platform) 10.5.1 setup will only proceed if the operating system is 64 bit.

Feature Dependency None

Product Conflict ArcGIS Web Adaptor (Java Platform) 10.5.1 can be installed even if any other Esri product from a previous version is installed on the client machine.

Command Line Parameters The following property can be added to the msixec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files \ArcGIS\WebAdaptor10.5\java	No	No	Installation location

Features Available None

Upgrade Starting with version 10.2.1, ArcGIS Web Adaptor can be installed side by side with other versions of ArcGIS Web Adaptor so to upgrade an earlier version of ArcGIS Web Adaptor to 10.5.1, you need to uninstall the earlier version and install the 10.5.1 setup. During the 10.5.1 installation, you'll specify the same name as your earlier Web Adaptor version. This guarantees your Web Adaptor URL will remain identical to the earlier version.

After installing 10.5.1, you need to configure ArcGIS Web Adaptor with its corresponding ArcGIS Server site.

At 10.2 and earlier versions, running the setup upgraded all existing Web Adaptor instances to the latest version.

Localized Setups ArcGIS Web Adaptor (Java Platform) 10.5.1 setup is available in Arabic, Simplified Chinese, French, German, Italian, Japanese, Brazilian Portuguese, Russian, Spanish, and Turkish. Running setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

Transforms Changing INSTALLDIR

1. In the CustomAction table, add a row and set the following values for each field:

Action: ESRI_CHANGE_INST
Type: 35
Source: INSTALLDIR
Target: c:\WebAdaptorJava10.5.1 (or any value)

2. In the InstallExecuteSequence table, add a row and set the following values for each field:

Action: ESRI_CHANGE_INST
Condition: Not Installed
Sequence: 1002

3. In the InstallUISequence table, add a row and set the following values for each field:

Action: ESRI_CHANGE_INST
Condition: Not Installed
Sequence: 1002

Uninstall To uninstall ArcGIS Web Adaptor, follow the steps in the sections below.

1. Unregister Web Adaptor.

First you'll need to unregister Web Adaptor with your site using ArcGIS Server Manager. To do so, follow the steps below:

a. Open Manager and log in as a user who has administrative access to ArcGIS Server. If you need help with this step, see Logging in to Manager.

- b. Click Site > Web Adaptor.
- c. Click Unregister Web Adaptor.
- d. In the Unregister Web Adaptor dialog box, click Yes.

Note: The unregistering functionality is only available starting at ArcGIS 10.1 SP1 for Server and is required beginning at 10.1 SP1. If your ArcGIS Server and Web Adaptor product versions are out of sync, you'll need to make sure the components are upgraded to the same product version before proceeding.

2. Uninstall Web Adaptor.

Use your operating system's tools to uninstall Web Adaptor.

To uninstall ArcGIS Web Adaptor (Java Platform) 10.5.1 silently, use the following command line:

```
msiexec.exe /x {02C091A9-1F0E-453D-B99C-12FE5B55BF8E} /qb
```

To uninstall ArcGIS Web Adaptor (Java Platform) 10.5 silently, use the following command line:

```
msiexec.exe /x {2A35F01C-9D46-4D2F-B29D-3B7AE6130958} /qb
```

To uninstall ArcGIS 10.4.1 Web Adaptor (Java Platform) silently, use the following command line:

```
msiexec.exe /x {C265BE76-9463-429F-B7D4-9C4D34E9DCC2} /qb
```

To uninstall ArcGIS 10.4 Web Adaptor (Java Platform) silently, use the following command line:

```
msiexec.exe /x {C1F0DF95-C1E2-4AF4-A4FC-223BAEAF3E} /qb
```

To uninstall ArcGIS 10.3.1 Web Adaptor (Java Platform) silently, use the following command line:

```
msiexec.exe /x {65C25345-EF47-44BD-AD25-2A626F5DD305} /qb
```

To uninstall ArcGIS 10.3 Web Adaptor (Java Platform) silently, use the following command line:

```
msiexec.exe /x {FE719171-3AED-4D9C-8DC2-FC0F1A715D62} /qb
```

To uninstall ArcGIS 10.2.2 Web Adaptor (Java Platform) silently, run this command from the command line:

```
msiexec /x {DC6E3BFB-E525-473C-A139-92AD3A0E11A4} /qb
```

To uninstall ArcGIS 10.2.1 Web Adaptor (Java Platform) silently, run this command from the command line:

```
msiexec /x {DE4AC1B6-B05A-4409-A26C-160354B72838} /qb
```

To uninstall ArcGIS 10.2 Web Adaptor (Java Platform) silently, run this command from the command line:

```
msiexec /x {D9F0D397-64A8-494B-83CF-0A71A2751AC2} /qb
```

To uninstall ArcGIS 10.1 SP1 Web Adaptor (Java Platform) silently, run this command from the command line:

```
msiexec /x {E511C26C-3028-48E8-AD83-A30B1A7BFAFC} /qb
```

To uninstall ArcGIS 10.1 Web Adaptor (Java Platform) silently, run this command from the command line:

```
msiexec /x {02013567-A06D-4B27-9CDB-4777ED7473F3} /qb
```

Once you uninstall Web Adaptor, client applications will not be able to communicate with ArcGIS Server. To reestablish this communication in the future, use the Web Adaptor configuration page to register Web Adaptor with ArcGIS Server.

ArcObjects SDK for the Java Platform

For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#). This product has a [Quick Start Guide](#) at the ArcGIS Resources website.

Setup Dependency

One of the following must be installed:

- ArcGIS Desktop 10.5.1
- ArcGIS Engine 10.5.1
- ArcGIS Server 10.5.1

Feature Dependency

None

Command Line Parameters

The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ \ArcGIS\DevelopKit10.5	No	No	Default installation location

Features Available

None

Localized Setups

Setup is available in the English language only.

Transforms

Changing INSTALLDIR

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MySDKJava\. The backslash must be included.

Uninstall

To uninstall ArcObjects SDK for the Java platform silently, use the following command line:

```
msiexec.exe /x {7D7894D9-FDF9-4D86-99A9-8575059A3435} /qb
```

ArcObjects SDK for the Microsoft .NET Framework

For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#). This product has a [Quick Start Guide](#) at the ArcGIS Resources website.

Setup Dependency

If the following products are not detected on the machine, setup will not proceed:

- One of the following:
 - ArcGIS Desktop 10.5.1
 - ArcGIS Engine 10.5.1
 - ArcGIS Server 10.5.1 with the .NET Extension Support feature
- One of Visual Studio 2013 Professional, Premium, Ultimate, Team Foundation Server, or Test Professional or one of Visual Studio 2015 Professional, Premium, Ultimate, Team Foundation Server, or Test Professional

Feature Dependency

- Visual Studio 2013—This feature requires VS2013 Professional, Premium, Ultimate, Team Foundation Server, or Test Professional.
- Visual Studio 2015—This feature requires VS2015 Professional, Premium, Ultimate, Team Foundation Server, or Test Professional.

Command Line Parameters

The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ArcGIS\DevelopKit10.5	No	No	Default installation location

Features Available

The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msiexec command line.

Feature	Feature Parent	Title	Description
VS2013IDE		Visual Studio 2013	This feature integrates ArcObjects commands, wizards and templates into supported Visual Studio editions.
Doc2013	VS2013IDE	Documentation	Help contains the Object Model Diagrams, API Reference help, and other help topics for working with ArcObjects, packaged in the help format used by Visual Studio 2013.
VS2015IDE		Visual Studio 2015	This feature integrates ArcObjects commands, wizards and templates into supported Visual Studio editions.
Doc2015	VS2015IDE	Documentation	Help contains the Object Model Diagrams, API Reference help, and other help topics for working with ArcObjects, packaged in the help format used by Visual Studio 2015.
Samples		Samples	Samples provide the source code described in the sample section of the Developer Help.

Localized Setups Setup is available in English only.

Transforms Changing INSTALLDIR

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MySDKNet\. The backslash must be included.

Uninstall To uninstall ArcObjects SDK for the Microsoft .NET Framework silently, use the following command line:

```
msiexec.exe /x {8AFB3303-27DB-47B3-8DEE-F7DDE478AD0F} /qb
```

ArcGIS Desktop 10.5.1 Tutorial Data For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#).

Setup Dependency None

Feature Dependency None

Command Line Parameters The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\arcgis	No	No	Installation location

Features Available

The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msixexec command line.

Feature	Feature Parent	Title	Description
Applications		Applications	These are the tutorial data features for ArcGIS Desktop applications.
ArcScan	Extensions	ArcScan	This is the ArcScan tutorial data.
BuildingAGeodatabase	Applications	Building a Geodatabase	This is the Building a Geodatabase tutorial data.
CAD	Extensions	CAD	This is the CAD tutorial data.
Data_Interoperability	Extensions	Data Interoperability	This is the Data Interoperability tutorial data.
Data_Reviewer	Extensions	Data Reviewer	This is the Data Reviewer tutorial data.
Database_Servers	Applications	Database Servers	This is the Database Servers tutorial data.
EditingWithArcGIS	Applications	Editing With ArcGIS	This is the Editing with ArcGIS tutorial data.
Extensions		Extensions	These are the tutorial data features for ArcGIS Desktop extensions.
GP_Service_Example	Applications	GP Service Example	This is the GP Service Example tutorial data.
Geocoding_StreetMap	Applications	Geocoding	This is the Geocoding tutorial data.
GeostatisticalAnalyst	Extensions	Geostatistical Analyst	This is the Geostatistical Analyst tutorial data.
LinearReferencing	Applications	Linear Referencing	This is the Linear Referencing tutorial data.
Maplex	Applications	Maplex	This is the Maplex® tutorial data.
ModelBuilder	Applications	ModelBuilder	This is the ModelBuilder™ tutorial data.
NetCDF	Applications	NetCDF	This is the netCDF tutorial data.
NetworkAnalyst	Extensions	Network Analyst	This is the Network Analyst tutorial data.
Parcel_Editing	Applications	Parcel Editing	This is the Parcel Editing tutorial data.
Raster	Applications	Raster	This is the Raster tutorial data.
Representations	Applications	Representations	This is the Representations tutorial data.
SQL_Example	Applications	SQL Example	This is the SQL Example tutorial data.
Schematics	Extensions	Schematics	This is the Schematics tutorial data.
SpatialAnalyst	Extensions	Spatial Analyst	This is the Spatial Analyst tutorial data.
TrackingAnalyst	Extensions	Tracking Analyst	This is the Tracking Analyst tutorial data.

Localized Setups

Setup is available in English only.

Transforms **Changing INSTALLDIR**

1. In the InstallExecuteSequence table, add a row. The values for the fields are the following:

Action: ChangeInstallDir
 Condition: NOT Installed AND NOT UPGRADE_101
 Sequence: 437

2. In the CustomAction table, add a row. The values for the fields are the following:

Action: ChangeInstallDir
 Type: 51
 Source: INSTALLDIR
 Target: C:\MyTutorial

Uninstall

To uninstall ArcGIS Desktop 10.5.1 Tutorial Data silently, use the following command line:

```
msiexec.exe /x {C57612C3-E89C-4069-8ABD-26CB1C78F22A} /qb
```

ArcGIS Data Interoperability 10.5.1 for Desktop

For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#).

Setup Dependency

If neither of the following products is detected on the machine, setup will not proceed:

ArcGIS Engine 10.5.1 or ArcGIS Desktop 10.5.1

Feature Dependency

None

Command Line Parameters

The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ESRI\Data Interoperability Extension\Data Interoperability (x86)	No	No	Default installation location

Features Available

None

Localized Setups

Setup is available in English only.

Transforms **Changing INSTALLDIR**

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MyDataInteroperability\. The backslash must be included.

Uninstall

To uninstall ArcGIS Data Interoperability 10.5.1 for Desktop silently, use the following command line:

```
msiexec.exe /x {C8731549-61E3-405F-BB82-6BB53DFFA78F} /qb
```

ArcGIS Data Interoperability 10.5.1 for Server

For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#).

Setup Dependency

If the following product is not detected on the machine, setup will not proceed:

ArcGIS Server 10.5.1

Feature Dependency

None

Command Line Parameters

The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ESRI\Data Interoperability Extension\Data Interoperability	No	No	Default installation location

Features Available

None

Localized Setups

Setup is available in English only.

Transforms **Changing INSTALLDIR**

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MyDataInteroperability\. The backslash must be included.

Uninstall

To uninstall ArcGIS Data Interoperability 10.5.1 for Server silently, use the following command line:

```
msiexec.exe /x {C75F9866-F151-4620-924F-37717308EED0} /qb
```

J9736

ArcGIS Coordinate Systems Data

It installs the data files required for the GEOCON transformation method and vertical transformation files for the United States (VERTCON and GEOID12B) and the world (EGM2008). For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#).

Setup Dependency None

Feature Dependency None

Command Line Parameters

The following property can be added to the msixec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ \ArcGIS\CoordinateSystemsData	No	No	Default installation location

Features Available None

Localized Setups Setup is available in English only.

Transforms Changing INSTALLDIR

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\My CoordinateSystemsData\. The backslash must be included.

Uninstall

To uninstall ArcGIS Coordinate Systems Data silently, use the following command line:

```
msiexec.exe /x {C4ABCECD-A61B-4FD5-B405-388551D6CCA3} /qb
```

Portal for ArcGIS 10.5.1

For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#).

Setup Dependency The Portal for ArcGIS 10.5.1 setup will only proceed if the operating system is 64 bit.

Feature Dependency None

Command Line Parameters

The following property can be added to the msixec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\ \Program Files\ \ArcGIS\Portal	No	No	Default installation location

Parameter	Default Value	Case Sensitive	Required	Description
CONTENTDIR	%System Drive%\arcgisportal	No	No	This property allows you to specify the portal's content directory. The location you specify must be a local directory; you cannot choose a shared network directory. This is because the Portal for ArcGIS service is configured to run under the Windows native Local System account by default. The Local System account cannot access network locations.

Features Available None

Localized Setups Setup is available in English only.

Transforms **Changing INSTALLDIR**

1. In the CustomAction table, locate the custom action GetInstallDir.
2. The target column for this custom action is [INSTALLDIR]. Change this to the desired installation location, for example, C:\MyPortal\. The backslash must be included.

Uninstall To uninstall Portal for ArcGIS 10.5.1 silently, use the following command line:

```
msiexec.exe /x {C7E44FBE-DFA6-4A95-8779-B6C40F3947B7} /qb
```

Portal for ArcGIS 10.5.1 Help Language Pack

There is only one Language Pack setup for Portal for ArcGIS 10.5.1. The Portal for ArcGIS 10.5.1 Help Language Pack setup installs localized help files for all supported languages. The language-specific help shortcut will only be created for one of the specified languages included in the drop-down menu—Arabic, Chinese (Simplified Han), Danish, Dutch, French, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Portuguese (Portugal), Romanian, Russian, and Spanish. To change the shortcut language, uninstall the Portal for ArcGIS 10.5.1 Help Language Pack, install it again, and choose another language.

If you run Setup.exe for Portal for ArcGIS 10.5.1, the Portal for ArcGIS 10.5.1 Help Language Pack setup will not be installed automatically. It must be installed separately.

Setup Dependency Portal for ArcGIS 10.5.1 must be installed on the machine.

Feature Dependency None

Command Line Parameters The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
ST_LANGUAGE	ar	Yes	No	Shortcut Language. The other languages that can be specified at the command prompt are given in the table below.

Language	Language Code
Arabic	ar
Chinese (Simplified Han)	zh-CN
Danish	da
Dutch	nl
French	fr
German	de
Italian	it
Japanese	ja
Korean	ko
Norwegian	no
Polish	pl
Portuguese (Brazil)	pt-BR
Romanian	ro
Russian	ru
Spanish	es

Features Available None

Transforms Changing INSTALLDIR

Portal for ArcGIS 10.5.1 Help Language Pack Desktop installs to the Installation directory of Portal for ArcGIS 10.5.1. It is not possible to change this with a transform.

Uninstall To uninstall Portal for ArcGIS 10.5.1 Help Language Pack silently, use the following command line:

```
msiexec.exe /x {A36FDDFC-4179-47BC-B731-7141920B0E0F} /qb
```

ArcGIS Data Store 10.5.1 ArcGIS Data Store is an application used to set up a relational database management system to store the feature data published to Portal for ArcGIS. It uses lighter-weight, more scalable feature data layers. For a list of supported operating systems and hardware requirements, refer to the system requirements at [ArcGIS 10.5.1 System Requirements](#).

Modify the firewall of the data store computer to allow communication on ports 2443 and 9876. If the firewall on the data store computer blocks communication through these ports, ArcGIS Server won't be able to connect to the data store.

Setup Dependency The ArcGIS Data Store 10.5.1 setup will only proceed if the operating system is 64 bit.

Feature Dependency None

Command Line Parameters

The following property can be added to the msixexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ \ArcGIS\DataStore	No	No	Default installation location

Features Available

None

Creating Data Store

You can use the ArcGIS Data Store Configuration wizard to create a data store and join it to your ArcGIS Server site.

Alternatively, if you do not have access to a web browser, run the `configuredatastore` utility on the machine where you installed ArcGIS Data Store.

The utility is installed in `<ArcGIS Data Store installation directory>/tools`.

Open a command prompt using the Run as Administrator option. Run the `configuredatastore.bat` file and specify the ArcGIS Server URL with which you want to register the data store, the user name and password of an ArcGIS Server administrator, and the path to use for the ArcGIS Data Store data directory.

In this example, the ArcGIS Server URL is `https://myserver.domain.com:6443/arcgis/admin`, the administrator user name and password are `siteadmin` and `T1n@sp`, and the data directory is `C:\data\`.

```
configuredatastore https://myserver.domain.com:6443/arcgis/admin
siteadmin T1n@sp c:\data\
```

The primary data store machine is created and registered with your ArcGIS Server site.

Localized Setups

Setup is available in English only.

Transforms**Changing INSTALLDIR**

1. In the CustomAction table, locate the custom action `GetInstallDir`.
2. The target column for this custom action is `[INSTALLDIR]`. Change this to the desired installation location, for example, `C:\MyDataStore\`. The backslash must be included.

Uninstall

Uninstalling ArcGIS Data Store also unregisters the data store from your ArcGIS Server site. Hosted feature layers that used the data in the data store will no longer function once you uninstall the software. However, the data still exists because the data store directory remains on the server after you uninstall ArcGIS Data Store. If you later decide you need the feature layers, you can register the data store with the same ArcGIS Server site.

To uninstall ArcGIS Data Store 10.5.1 silently, use the following command line:

```
msiexec.exe /x {75276C83-E88C-43F6-B481-100DA4D64F71} /qb
```

**ArcGIS Data Store
10.5.1 Help
Language Pack**

There is only one Language Pack setup for ArcGIS Data Store 10.5.1. The ArcGIS Data Store 10.5.1 Help Language Pack setup installs localized help files for all supported languages. The language-specific help shortcut will only be created for one of the languages specified in the drop-down menu—Chinese (Simplified Han), French, German, Japanese, Russian, and Spanish. To change the shortcut language, uninstall the ArcGIS Data Store 10.5.1 Help Language Pack, install it again, and choose another language.

If you run Setup.exe for ArcGIS Data Store 10.5.1, the ArcGIS Data Store 10.5.1 Help Language Pack setup will not be installed automatically. It must be installed separately.

Setup Dependency

ArcGIS Data Store 10.5.1 must be installed on the machine.

Feature Dependency

None

**Command Line
Parameters**

The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
ST_LANGUAGE	zh-CN	Yes	No	Shortcut Language—The other languages that can be specified at the command prompt are given in the table below.

Language	Language Code
Chinese (Simplified Han)	zh-CN
French	fr
German	de
Japanese	ja
Russian	ru
Spanish	es

Features Available

None

Transforms

Changing INSTALLDIR

ArcGIS Data Store 10.5.1 Help Language Pack installs to the Installation directory of ArcGIS Data Store 10.5.1. It is not possible to change this with a transform.

Uninstall

To uninstall ArcGIS Data Store 10.5.1 Help Language Pack silently, use the following command line:

```
msiexec.exe /x {BCCB0305-E0EE-48A2-BFFD-20D010C9341B} /qb
```

ArcGIS Pro For comprehensive information on the installation of ArcGIS Pro, refer to the [installation guide](#) at the ArcGIS Resources website. For a list of supported operating systems and hardware requirements, refer to System Requirements at [ArcGIS Pro System Requirements](#). This product has a [Quick Start Guide](#) at the ArcGIS Resources website.

ArcGIS Pro can be installed on the same machine as other ArcGIS Desktop releases or on a machine without any Esri products. ArcGIS Pro is part of ArcGIS Desktop, and customers who are entitled (current on maintenance) to ArcGIS Desktop can install ArcGIS Pro.

ArcGIS Pro setups can be deployed to a user or computer. Use the following criteria to decide what option to choose:

- If all users on the computer need to use ArcGIS Pro, then assign to computer.
- If only a particular user needs it, then assign to user.

Installing ArcGIS Pro Licensing Service

The ArcGIS Pro Licensing Service setup is installed with ArcGIS Pro. It is required for a per user installation of ArcGIS Pro to work offline with a concurrent use license or to utilize single use licensing.

To install the ArcGIS Pro Licensing Service, run ProLS.msi in "<ArcGIS Pro installation directory>\Resources\ArcGIS Pro Licensing Service" and follow the prompts. This requires administrative privileges. The ArcGIS Pro Licensing Service setup installs the 64-bit Flex Net service. The Flex Net service is automatically installed by a per machine instance of ArcGIS Pro; the Pro Licensing setup is only necessary to support per user installations.

Setup Dependency If the following products are not detected on the machine, setup will not proceed:

- Microsoft .NET Framework Version 4.6.1
- Microsoft Internet Explorer Version 11 or higher
- For ArcGIS Pro to be installed per user on supported Windows Server operating systems, the registry key
HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\Installer
must contain the REG_DWORD data type DisableMSI, with a value of 0. For more information, see MSDN's topic, [DisableMSI](#).

Feature Dependency There are no feature dependencies.

Properties The following properties can be added to the msiexec command line:

Parameter	Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ArcGIS\Pro in the case of a per machine installation and %System Drive%\%USERPROFILE%\AppData\Local\Programs\ArcGIS\Pro in the case of a current user	No	No	ArcGIS Pro installation location
ALLUSERS	1	No	No	Defines the installation context of the setup. ALLUSERS=1 specifies a per machine installation. If a user without administrative privileges attempts to set this to 1, the installation fails.
	2	No	No	ALLUSERS=2 specifies a per user installation. If this parameter is not specified, the silent installation defaults to per user.
MSINSTALLPERUSER	1	No	No	To do a per user installation, specify both ALLUSERS=2 and MSINSTALLPERUSER=1. This property is ignored if ALLUSERS=1 is specified.
ENABLEEUEI	0	Yes	No	Do not enable participation in the Esri User Experience Improvement Program.
	1	Yes	No (1 is default)	Enable participation in the Esri User Experience Improvement Program.
BLOCKADDINS	#0 (default)	Yes	No	If specified, the BlockAddins registry value allows system administrators to configure the types of Add-ins that ArcGIS Pro will load. Created under HKEY_LOCAL_MACHINE\SOFTWARE\Esi\ArcGISPro\Settings. Note that this property is only read during a per machine installation; it is ignored if specified for a per user setup. Setting the property to #0 will load all add-ins regardless of whether they have digital signatures.

Parameter	Value	Case Sensitive	Required	Description
	#1			Load and use only add-ins that are digitally signed by a trusted certificate authority.
	#2			Load and use only add-ins that have been published by Esri.
	#3			Load add-ins only from the administrator folders and all add-ins published by Esri.
	#4			Do not load or execute add-ins in this application.
ESRI_LICENSE_HOST	@<License Manager>	No	Yes for concurrent use	Machine name of license manager
SOFTWARE_CLASS	Viewer	Yes	Yes	Installs ArcGIS Pro as Basic level
	Editor			Installs ArcGIS Pro as Standard level
	Professional			Installs ArcGIS Pro as Advanced level
AUTHORIZATION_TYPE	SINGLE_USE	Yes	Yes	Installs ArcGIS Pro as a single use seat
	CONCURRENT_USE	Yes	Yes	Installs ArcGIS Pro as a concurrent use seat
	NAMED_USER	Yes	Yes	Installs ArcGIS Pro with a Named User license.
LOCK_AUTH_SETTINGS	True		No	If the authorization type is defined at the command line, then the registry string LOCK_AUTH_SETTINGS is set to True under HKEY_LOCAL_MACHINE\SOFTWARE\Esri\ArcGISPro\Licensing. When LOCK_AUTH_SETTINGS is True, the licensing settings in the registry apply to all ArcGIS Pro users on that machine—an individual user cannot make changes. To allow ArcGIS Pro users on the machine to define their own authorization settings through the ArcGIS Pro application, set LOCK_AUTH_SETTINGS to False.

Parameter	Value	Case Sensitive	Required	Description
CHECKFORUPDATESAT STARTUP (per-machine only)	0	No	No	For system administrators who wish to disable automatic update notifications for a per-machine installation of ArcGIS Pro, set this property to 0. Alternatively, browse to the registry key HKEY_LOCAL_MACHINE\SOFTWARE\Esri\ArcGISPro\Settings after installation to manually set CheckForUpdatesAtStartup to 0.
	1 (default)			
ArcGIS_Connection		No	No	Specifies whether a connection to www.arcgis.com should be available from the Portals page.
	TRUE			To include the connection, set this property to "TRUE".
	FALSE			If set to "FALSE", the connection will not appear on the Portals page.
Portal_List	<portalURL1>; <portalURL2>	No	No	To add one or more portal connections to the Portal page, set Portal_List="<portalURL1>; <portalURL2>". Use semicolons to separate portal URLs. If "ArcGIS_Connection" is set to "False", this property cannot contain "arcgis.com". If your portal supports HTTPS, it is strongly recommended that the Portal_List URL(s) uses HTTPS.
License_URL	<portalURL>	No	No	To specify the URL of the Named User licensing portal, set License_URL="<portalURL>". If "ArcGIS_Connection" is set to "False", "License_URL" cannot contain "arcgis.com". To use this property, "AUTHORIZATION_TYPE" must be set to "NAMED_USER".

To install to per machine, use the following command line:

```
msiexec.exe /i <setup location>\ArcGISPro.msi /qb ALLUSERS=1
```

To install to per user, use the following command line:

```
msiexec.exe /i <setup location>\ArcGISPro.msi /qb ALLUSERS=2  
MSIINSTALLPERUSER=1
```

If ALLUSERS and MSIINSTALLPERUSER are not specified on the command line for a silent installation, it will default to per user installation.

Features Available None

Localized Setups ArcGIS Pro is available in Simplified Chinese, French, German, Japanese, Brazilian Portuguese, Russian, Spanish, Turkish, Czech, Swedish, Korean, Hebrew, Arabic, Italian, and Finnish. Running setup.exe provides a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack setup.msi as a secondary installation.

When running a localized ArcGIS Pro installation, the option to Run ArcGIS Pro when the setup completes appears on the Ready to Install dialog box. If the option is left selected, ArcGIS Pro starts after the installation of the core product and its corresponding language pack. ArcGIS Pro does not start automatically after a silent installation.

Transforms **Changing INSTALLDIR**

For per machine installation

1. In the CustomAction table, add a new row with the following values:

```
Action=SetInstallDir  
Type=51  
Source=INSTALLDIR  
Target=c:\MyPro
```

2. In the InstallExecuteSequence table, add a new row with the following values:

```
Action=SetInstallDir  
Sequence=965
```

For per user installation

1. In the CustomAction table, add a new row with the following values:

```
Action=SetInstallDir
Type=51
Source=INSTALLDIR
Target= [TempFolder]MyPro
```

2. In the InstallExecuteSequence table, add a new row with the following values:

```
Action=SetInstallDir
Sequence=965
```

3. In the Property table, change the following properties:

```
ALLUSERS=1
MSIINSTALLPERUSER=""
```

Specify License Server for Concurrent Use

In the Property table, modify the ESRI_LICENSE_HOST value to your license server:

```
Property= ESRI_LICENSE_HOST
Value=yourlicenseserver
```

Specify Authorization Type

Concurrent Use Licensing:

In the Property table, add a new row with the following values:

```
Property=AUTHORIZATION_TYPE
Value=CONCURRENT_USE
```

Single Use Licensing:

In the Property table, add a new row with the following values:

```
Property=AUTHORIZATION_TYPE
Value= SINGLE_USE
```

Named User Licensing:

In the Property table, add a new row with the following values:

```
Property=AUTHORIZATION_TYPE
Value= NAMED_USER
```

Specify Authorization Level

In the Property table, add a new row with the following values:

```
Property=SOFTWARE_CLASS
Value=Professional
```

For installing ArcGIS Pro as Basic level use value "Viewer," for standard level use "Editor," and for Advanced level use "Professional."

Uninstall To uninstall ArcGIS Pro silently, use the following command line:

```
msiexec.exe /x {28A4967F-DE0D-4076-B62D-A1A9EA62FF0A} /qb
```

The product code changes with every update of ArcGIS Pro. The product code for ArcGIS Pro is found in the registry at either HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\ArcGISPro (for a per machine installation) or HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\ArcGISPro (for a per user installation) in the string value UninstallString.

Software Updates

When Esri releases an update for the application, by default, a notification appears when you start ArcGIS Pro. You can click the notification message to start the software update process. To check for updates in the middle of a session, click the Project tab and click About. If updates are available, you can run the update process. You can also turn off the option to check for updates when starting ArcGIS Pro.

To disable automatic update notifications for a per machine installation of ArcGIS Pro, browse to the registry key HKEY_LOCAL_MACHINE\SOFTWARE\Esri\ArcGISPro\Settings and set the value of CheckForUpdatesAtStartup to 0.

ArcGIS Pro Licensing Service

The ArcGIS Pro Licensing Service setup is installed with ArcGIS Pro. It is required for a per user installation of ArcGIS Pro to work offline with a concurrent use license or to utilize single use licensing.

To install the ArcGIS Pro Licensing Service, run ProLS.msi in "<ArcGIS Pro installation directory>\Resources\ArcGIS Pro Licensing Service" and follow the prompts. This requires administrative privileges. The ArcGIS Pro Licensing Service setup installs the 64-bit Flex Net service. The Flex Net service is automatically installed by a per machine instance of ArcGIS Pro; the Pro Licensing setup is only necessary to support per user installations.

Setup Dependency

There are no setup dependencies.

Feature Dependency

There are no feature dependencies.

Properties

The following properties can be added to the msiexec command line:

Parameter	Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ArcGIS Pro Licensing Service	No	No	ArcGIS Pro Licensing Service installation location

Features Available None

Localized Setups ArcGIS Pro Licensing Service is available in Simplified Chinese, French, German, Japanese, Brazilian Portuguese, Russian, Spanish, Turkish, Czech, Swedish, Korean, Hebrew, and Finnish. Running setup.exe provides a fully localized installation experience.

Uninstall To uninstall ArcGIS Pro Licensing Service silently, use the following command line:

```
msiexec.exe /x {7F08CAB8-56E4-491F-8916-906E29AC00E9} /qb
```

ArcGIS Pro Language Packs There are 15 language packs available for ArcGIS Pro—Simplified Chinese, French, German, Japanese, Brazilian Portuguese, Russian, Spanish, Turkish, Czech, Swedish, Korean, Hebrew, Arabic, Italian, and Finnish. Use Setup.exe to accomplish a fully localized installation experience. Setup.exe is a bootstrapper executable file that will run the main product setup.msi and then run the language pack MSI as a secondary installation. For example, if you run Setup.exe for ArcGIS Pro in Spanish, both the ArcGIS Pro setup and Spanish Language Pack setup will be installed. Additional language packs must be installed separately.

While the ArcGIS Pro setup automatically installs the language pack, an Add/Remove item will exist for both setups. The ArcGIS Pro uninstallation process does not uninstall language packs, and they will need to be manually uninstalled using the Add/Remove Programs dialog box. Running setup.exe for a localized setup will upgrade both the main product installation and the language pack installation.

When running a localized ArcGIS Pro installation, the option to Run ArcGIS Pro when the setup completes appears on the Ready to Install dialog box. If the option is left selected, ArcGIS Pro starts after the installation of the core product and its corresponding language pack. ArcGIS Pro does not start automatically after a silent installation.

Setup Dependency ArcGIS Pro must be installed on the machine. Installation will follow Installcontext of ArcGIS Pro. If ArcGIS Pro is installed to per machine, then ArcGIS Pro language packs can only be installed to per machine. If ArcGIS Pro is installed to per user, then ArcGIS Pro language packs can only be installed to per user.

Feature Dependency None

Command Line Parameters The following properties can be added to the msiexec command line:

Parameter	Value	Case Sensitive	Required	Description
ALLUSERS	1	No	No	Defines the installation context of the setup. ALLUSERS=1 specifies a per machine installation. If a user without administrative privileges attempts to set this to 1, the installation fails.
	2	No	No	ALLUSERS=2 specifies a per user installation. If this parameter is not specified, the silent installation defaults to per user.
MSIINSTALLPERUSER	1	No	No	To do a per user installation, specify both ALLUSERS=2 and MSIINSTALLPERUSER=1. This property is ignored if ALLUSERS=1 is specified.

Features Available None

Transforms **Changing INSTALLDIR**

ArcGIS Pro language packs installs to the Installation directory of ArcGIS Pro. It is not possible to change this with a transform.

Uninstall To uninstall ArcGIS Pro Language Packs silently, use the following command line:

```
msiexec.exe /x <Product Code> /qb
```

The product code changes with every update of ArcGIS Pro Language Packs. The product code for ArcGIS Pro is found in the registry at either HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\<ProductName> (for a per machine installation) or HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\<ProductName> (for a per user installation), in the string value UninstallString.

Language	Product Name
Simplified Chinese	ArcGIS Pro—简体中文语言包
French	ArcGIS Pro—Module linguistique français
German	ArcGIS Pro—Sprachpaket Deutsch
Japanese	ArcGIS Pro—日本語パック
Brazilian Portuguese	ArcGIS Pro—Pacote de Idioma Português (Brasil)
Russian	ArcGIS Pro—Русский языковой пакет
Spanish	ArcGIS Pro—Paquete de idioma español
Turkish	ArcGIS Pro—Türkçe Dil Paketi
Czech	ArcGIS Pro—jazyková sada pro češtinu
Swedish	ArcGIS Pro—svenskt språkpaket
Korean	ArcGIS Pro—한국어 팩
Hebrew	ArcGIS Pro—תירבע הפש תליבה
Finnish	ArcGIS Pro—ohjelman suomen kielipaketti
Arabic	ArcGIS Pro - قيب ر ع ل ا ة غ ل ل ا ق م ز ح
Italian	ArcGIS Pro - Language Pack italiano

ArcGIS Pro Help

For comprehensive information on the installation of ArcGIS Pro Help, refer to the [installation guide](#) at the ArcGIS Resources website. For a list of supported operating systems and hardware requirements, refer to System Requirements at [ArcGIS Pro System Requirements](#).

ArcGIS Pro Help setup installs offline help for ArcGIS Pro.

Setup Dependency

ArcGIS Pro must be installed on the machine. Installation will follow Installcontext of ArcGIS Pro. If ArcGIS Pro is installed to per machine, then ArcGIS Pro Help can only be installed to per machine. If ArcGIS Pro is installed to per user, then ArcGIS Pro Help can only be installed to per user.

Feature Dependency

There are no feature dependencies.

Command Line Parameters

The following properties can be added to the msixexec command line:

Parameter	Value	Case Sensitive	Required	Description
ALLUSERS	1	No	No	Defines the installation context of the setup. ALLUSERS=1 specifies a per machine installation. If a user without administrative privileges attempts to set this to 1, the installation fails.
	2	No	No	ALLUSERS=2 specifies a per user installation. If this parameter is not specified, the silent installation defaults to per user.
MSIINSTALLPERUSER	1	No	No	To do a per user installation, specify both ALLUSERS=2 and MSIINSTALLPERUSER=1. This property is ignored if ALLUSERS=1 is specified.

Features Available

None

Localized Setups ArcGIS Pro Help is available in English, Simplified Chinese, French, German, Japanese, Russian, and Spanish.

Transforms **Changing INSTALLDIR**

ArcGIS Pro Help installs to the Installation directory of ArcGIS Pro. It is not possible to change this with a transform.

Uninstall To uninstall ArcGIS Pro Help silently, use the following command line:

```
msiexec.exe /x <Product Code> /qb
```

The product code changes with every update of ArcGIS Pro Help. The product code for ArcGIS Pro is found in the registry at either HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\<ProductName> (for a per machine installation) or HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\<ProductName> (for a per user installation) in the string value UninstallString.

Language	ProductName
English	ArcGIS Pro Help
Simplified Chinese	ArcGIS Pro 中文(简体)帮助
French	Aide ArcGIS Pro en français
German	ArcGIS Pro—Hilfe für Deutsch
Japanese	ArcGIS Pro ヘルプ (日本語)
Russian	Справка ArcGIS Pro на русском
Spanish	Ayuda de ArcGIS Pro en español

ArcGIS Data Interoperability for Pro

For comprehensive information on the installation of ArcGIS Data Interoperability for Pro, refer to the [installation guide](#) at the ArcGIS Resources website. For a list of supported operating systems and hardware requirements, refer to System Requirements at [ArcGIS Pro System Requirements](#).

ArcGIS Data Interoperability for Pro gives the ability to integrate nonnative data into your GIS and share it with others who do not use ArcGIS.

Setup Dependency ArcGIS Pro must be installed on the machine in per machine context.

Feature Dependency None

Command Line Parameters The following property can be added to the msiexec command line:

Parameter	Default Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ \ArcGIS\Data Interoperability for ArcGIS Pro	No	No	Default installation location

Features Available None

Localized Setups None

Transforms **Changing INSTALLDIR**

For per machine installation

1. In the CustomAction table, add a new row with the following values:

```
Action=SetInstallDir
Type=51
Source=INSTALLDIR
Target=c:\MyProData
```

2. In the InstallExecuteSequence table, add a new row with the following values:

```
Action=SetInstallDir
Sequence=985
```

Uninstall To uninstall ArcGIS Data Interoperability for Pro silently, use the following command line:

```
msiexec.exe /x {90104667-B575-4F77-AD95-2A8EC7FB2304} /qb
```

The product code changes with every update of ArcGIS Data Interoperability for Pro. The product code for is found in the registry at HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\Data Interoperability for ArcGIS Pro.

**ArcGIS Pro
Coordinate Systems
Data**

ArcGIS Pro Coordinate Systems Data can be installed on the same machine as other ArcGIS Desktop releases or on a machine without any Esri products.

ArcGIS Pro Coordinate Systems Data setup can be deployed to a user or computer. Use the following criteria to decide what option to choose:

- If all users on the computer need to use ArcGIS Pro Coordinate Systems Data, then assign to computer.
- If only a particular user needs it, then assign to user.

Setup Dependency

- For ArcGIS Pro Coordinate Systems Data to be installed per user on supported Windows Server operating systems, the registry key HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\Installer must contain the REG_DWORD data type DisableMSI, with a value of 0. For more information, see MSDN's topic, [DisableMSI](#).

Feature Dependency

There are no feature dependencies.

Properties

The following properties can be added to the msixec command line:

Parameter	Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ArcGIS\ProCoordinateSystemsData in the case of a per machine installation and %System Drive%\%USERPROFILE%\AppData\Local\Programs\ArcGIS\ProCoordinateSystemsData in the case of a current user	No	No	ArcGIS Pro Coordinate Systems Data installation location
ALLUSERS	1	No	No	Defines the installation context of the setup. ALLUSERS=1 specifies a per machine installation. If a user without administrative privileges attempts to set this to 1, the installation will fail.
	2	No	No	ALLUSERS=2 specifies a per user installation. If this parameter is not specified, the silent installation defaults to per user.
MSIINSTALLPERUSER	1	No	No	To do a per user installation, specify both ALLUSERS=2 and MSIINSTALLPERUSER=1. This property is ignored if ALLUSERS=1 is specified.

To install to per machine, use the following command line:

```
msiexec.exe /i <setup location>\ProCoordinateSystemsData.msi /qb
ALLUSERS=1
```

To install to per user, use the following command line:

```
msiexec.exe /i <setup location>\ProCoordinateSystemsData.msi /qb
ALLUSERS=2 MSIINSTALLPERUSER=1
```

If ALLUSERS and MSIINSTALLPERUSER are not specified on the command line for a silent installation, it will default to per user installation.

Features Available

The following features are available for installation. The setup can be modified to install only specific features by appending the ADDLOCAL parameter to the msiexec command line.

Feature	Feature Parent	Title	Description
CoordinateSystemsData		Coordinate Systems Data	Coordinate Systems Data
NorthAmericaGEOCON	CoordinateSystemsData	North America GEOCON	This feature contains grid files that convert between NAD 1983 (NSRS2007) and NAD 1983 (2011).
Vertical	CoordinateSystemsData	Vertical	This feature contains the US GEOID12B files, VERTCON files, the world EGM2008 2.5' by 2.5' geoid model file, and the EGM84 geoid model file.
VerticalWorld	CoordinateSystemsData	Vertical World 1x1	This feature contains the EGM2008 1' x 1' world geoid model file.
NTv2	CoordinateSystemsData	NTv2	Geographic transformation files needed by the NTv2 method.

Localized Setups

None

Uninstall

To uninstall ArcGIS Pro Coordinate Systems Data silently, use the following command line:

```
msiexec.exe /x {DFFA1F9B-0D1F-4D99-B96D-3509A023F324} /qb
```

ArcGIS Earth

ArcGIS Earth provides a lightweight, easy-to-use interface for immersible 3D that complements the capabilities of ArcGIS Pro and the 3D Scene Viewer with a focused experience for working with geospatial data on the globe. ArcGIS Earth allows anyone in the enterprise to quickly view 3D maps over the Internet or behind a firewall. For comprehensive information on the installation of ArcGIS Earth, refer to the [installation guide](#) at the ArcGIS Resources website. For a list of supported operating systems and hardware requirements, refer to System Requirements at [ArcGIS Earth System Requirements](#).

ArcGIS Earth can be installed on the same machine as other ArcGIS Desktop releases or on a machine without any Esri products.

ArcGIS Earth setups can be deployed to a user or computer. Use the following criteria to decide what option to choose:

- If all users on the computer need to use ArcGIS Earth, then assign to computer.
- If only a particular user needs it, then assign to user.

Setup Dependency If the following products are not detected on the machine, setup will not proceed:

- Microsoft .NET Framework Version 4.5.2
- For ArcGIS Earth to be installed per user on supported Windows Server operating systems, the registry key HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\Installer must contain the REG_DWORD data type DisableMSI, with a value of 0. For more information, see MSDN's topic, [DisableMSI](#).

Feature Dependency There are no feature dependencies.

Properties The following properties can be added to the msixec command line:

Parameter	Value	Case Sensitive	Required	Description
INSTALLDIR	%System Drive%\Program Files\ArcGIS\Earth in the case of a per machine installation and %System Drive%\%USERPROFILE%\AppData\Local\Programs\ArcGIS\Earth in the case of a current user	No	No	ArcGIS Earth installation location
ALLUSERS	1	No	No	Defines the installation context of the setup. ALLUSERS=1 specifies a per machine installation. If a user without administrative privileges attempts to set this to 1, the installation will fail.
	2	No	No	ALLUSERS=2 specifies a per user installation. If this parameter is not specified, the silent installation defaults to per user.

Parameter	Value	Case Sensitive	Required	Description
MSIINSTALLPERUSER	1	No	No	To do a per user installation, specify both ALLUSERS=2 and MSIINSTALLPERUSER=1. This property is ignored if ALLUSERS=1 is specified.
CONFIGFILE	UseConfigFile	Yes	No	If importing a configuration file, specify "CONFIGFILE=UseConfigFile" at the command line. There are no other valid values for this property.
CONFIGPATH	<Path to Config File>	Yes	No	Used in conjunction with CONFIGFILE=UseConfigFile, this property allows you to specify an ArcGIS Earth configuration file to be installed to <InstallDir>\Earth\bin. Note that the file you select will be renamed in the bin directory as config.xml. The CONFIGPATH property must contain the full path to and name of the configuration file.

To install to per machine with a config file, use the following command line:

```
msiexec.exe /i <setup location>\ArcGISEarth.msi /qb ALLUSERS=1
CONFIGFILE=UseConfigFile
CONFIGPATH=\\networkmachine\earthconfigs\config.xml
```

To install to per user, use the following command line:

```
msiexec.exe /i <setup location>\ArcGISEarth.msi /qb ALLUSERS=2
MSIINSTALLPERUSER=1
```

If ALLUSERS and MSIINSTALLPERUSER are not specified on the command line for a silent installation, it will default to per user installation.

Features Available None

Localized Setups None

Transforms **Changing INSTALLDIR**

For per machine installation

1. In the CustomAction table, add a new row with the following values:

```
Action=SetInstallDir
Type=51
Source=INSTALLDIR
Target=c:\MyEarth
```

2. In the InstallExecuteSequence table, add a new row with the following values:

```
Action=SetInstallDir
Sequence=965
```

For per user installation

1. In the CustomAction table, add a new row with the following values:

```
Action=SetInstallDir
Type=51
Source=INSTALLDIR
Target= [TempFolder]MyEarth
```

2. In the InstallExecuteSequence table, add a new row with the following values:

```
Action=SetInstallDir
Sequence=965
```

3. In the Property table, change the following properties:

```
ALLUSERS=1
MSIINSTALLPERUSER=""
```

Uninstall

To uninstall ArcGIS Earth silently, use the following command line:

```
msiexec.exe /x {3B067651-7988-4B5B-A111-8ED9D2AE28F6} /qb
```

Summary

Successful enterprise deployment requires good planning and implementation of your system environment. To successfully deploy a Windows Installer package, you should have a solid, in-depth understanding of your chosen enterprise deployment tool. This technical paper does not attempt to introduce or educate you on the usage of SMS, SCCM, or Group Policy. For more information on Windows Installer, transform files, .msp files, SMS, SCCM, Group Policy, or Active Directory, see www.microsoft.com.



Esri inspires and enables people to positively impact their future through a deeper, geographic understanding of the changing world around them.

Governments, industry leaders, academics, and nongovernmental organizations trust us to connect them with the analytic knowledge they need to make the critical decisions that shape the planet. For more than 40 years, Esri has cultivated collaborative relationships with partners who share our commitment to solving earth's most pressing challenges with geographic expertise and rational resolve. Today, we believe that geography is at the heart of a more resilient and sustainable future. Creating responsible products and solutions drives our passion for improving quality of life everywhere.



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