



Upgrading ArcGIS Enterprise

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This Sessions Presenters

From Esri's Geo Experience Center



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Agenda

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ArcGIS Enterprise Components

Portal for ArcGIS, Web Adaptor, ArcGIS Server,
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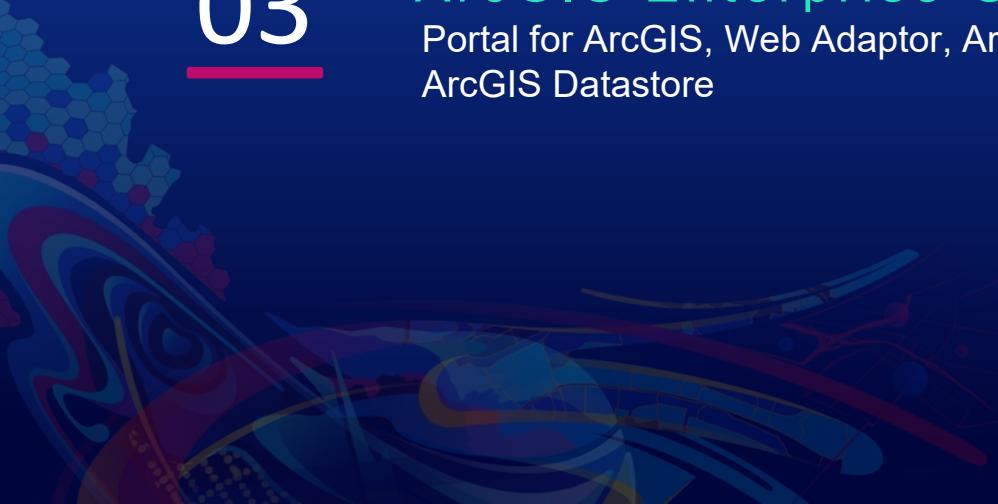
05

Demo
Upgrade ArcGIS Enterprise 10.7.1 to 10.8.1

06

Summary

Benefits, Considerations, Automation, Resources



Why Upgrade?

NEW • New features, functionality, apps and products



• Take advantage of performance enhancements



• Stay within the supported product lifecycle



• Security updates and bug fixes

Why Upgrade?



- ArcGIS Enterprise product lifecycle
 - <https://support.esri.com/en/other-resources/product-life-cycle>
 - STS releases (*short-term support release*)
 - 3 years of support (1.5 years of patches)
 - 10.8, 10.9
 - LTS releases (*long-term support release*)
 - 6 years of support (4 years of patches)
 - 10.8.1, 10.9.1

Product Life Cycles
Look up information related to the software and technical support provided by Esri throughout a product's life cycle.

Desktop	Industry Focused Extensions	Data and Workflows Extensions
ArcGIS Desktop		
ArcGIS Pro	ArcGIS Aviation Airports	ArcGIS Data Reviewer
ArcMap	ArcGIS Aviation Charting	ArcGIS Data Interoperability
	ArcGIS Bathymetry	ArcGIS Workflow Manager
	ArcGIS Maritime	
	ArcGIS Pipeline Referencing	
	ArcGIS Defense Mapping	
	ArcGIS Production Mapping	
	ArcGIS Roads and Highways	
Enterprise		
ArcGIS Server	Portal for ArcGIS	ArcGIS Data Store
ArcGIS Server	Portal for ArcGIS	ArcGIS Data Store
		ArcGIS Web Adaptor
		ArcGIS Web Adaptor
		ArcGIS Web Adaptor (Java)
GIS Server Extensions		

Product lifecycle

Supported Versions

Planning Your Upgrade

- App compatibility with ArcGIS Enterprise
 - Some applications release on different cycles (e.g. ArcGIS Insights)
 - Check Esri documentation for app compatibility
 - <https://doc.arcgis.com/en/>

Insights Version	ArcGIS Enterprise								
	10.5.1	10.6	10.6.1	10.7	10.7.1	10.8	10.8.1	10.9	
3.1	✓	✓	✓	✗	✗	✗	✗	✗	
3.2	✗	✗	✓	✗	✗	✗	✗	✗	
3.2.1	✗	✗	✗	✓	✗	✗	✗	✗	
3.3	✗	✗	✓	✗	✗	✗	✗	✗	
3.3.1	✗	✗	✗	✓	✓	✗	✗	✗	
3.4	✗	✗	✓	✗	✗	✗	✗	✗	
3.4.1	✗	✗	✗	✓	✓	✗	✗	✗	
2020.1	✗	✗	✗	✗	✓	✓	✗	✗	
2020.2	✗	✗	✗	✗	✓	✓	✓	✗	
2020.3	✗	✗	✗	✗	✓	✓	✓	✗	
2021.1	✗	✗	✗	✗	✗	✗	✓	✓	

<https://doc.arcgis.com/en/>

Planning Your Upgrade



- DO NOT UNFEDERATE

Planning Your Upgrade



- **DO NOT UNFEDERATE**



- **Portal license**
 - Starting at 10.7, license is a .JSON file



- **Hosting server**
 - Starting at 10.6.1, ArcGIS Datastore is only supported as the managed database for your hosting server



- **User types**
 - Review the member roles, user types available at the version to which you are upgrading

Planning Your Upgrade

- **Take snapshots of machines**
 - Verify all volumes are included in the snapshots
- **Verify backups**
 - In a test environment, test your backup and restore process
- **BACK UP Environment**
 - WebGISDR
 - ArcGIS Datastore (Relational, TileCache & Spatiotemporal)
 - Use the 'backupdatastore' utility
 - ArcGIS Server
 - Use the 'Backup' utility
 - Take backups of the content stores
 - Folders: arcgisportal , arcgisserver, arcgisdatastore

Planning Your Upgrade

- Automated Upgrades



ArcGIS Enterprise Builder

Upgrades Supported
At 10.6



CloudFormation Templates

ArcGIS Enterprise Cloud
Builder for Amazon Web
Services



ArcGIS Enterprise Cloud
Builder for Microsoft Azure



Advanced Automation

NEW



ArcGIS Enterprise on
Kubernetes



Recommended Upgrade Order

1. Portal for ArcGIS
2. ArcGIS Web Adaptor (*portal*)
3. Web Styles
4. ArcGIS Server
5. ArcGIS Web Adaptor (*server*)
6. ArcGIS Data Store (*primary first, then stand-by*)
7. All other Server Roles
GeoEvent, GeoAnalytics, Image, etc.

Portal for ArcGIS

Upgrading

Portal | Licensing

- You will need the portal .JSON license file before you can upgrade

Import License File and Continue Portal Upgrade

Select a license file (.json) to authorize your ArcGIS Enterprise portal's users and apps. Click Continue Portal Upgrade to continue upgrading your Portal for ArcGIS software.

License file

No file selected.

Portal Administrator Directory

[Home](#) > [Upgrade](#)

Upgrade

Backup Directories

Roll back if upgrade failed

License File * No file selected.

Format

```
C:\Program Files\ArcGIS\Portal\tools\upgradeportal>upgradeportal.bat -h
Description: The upgradeportal utility allows you to upgrade the portal.

usage: upgradeportal [-lf <arg>] [-s]

-lf,--licenseFile <arg>    This is the path to the portal license file.
-s,--silent                  Upgrade the portal silently.
-h,--help                     Display this tool help message and exit.

C:\Program Files\ArcGIS\Portal\tools\upgradeportal>
```

Create a New Portal

Enter the username and password for the initial administrator account that will be created in your portal.
Use this account to configure a Web Adaptor with your portal and then sign in to the portal for the first time.

First Name

Last Name

E-mail

Confirm E-mail

Username 4 to 128 characters

Password 8 to 28 characters

Confirm Password Repeat your password

Security Question Select a question for password recovery. ▾

Answer

BACK

CREATE

CONTINUE PORTAL UPGRADE

JOIN EXISTING PORTAL

Home Gallery Map Scene Groups

Sign In



Continue Portal Upgrade

CONTINUE PORTAL UPGRADE

Import License File and Continue Portal Upgrade

Select a license file (.json) to authorize your ArcGIS Enterprise portal's users and apps. Click Continue Portal Upgrade to continue upgrading your Portal for ArcGIS software.

License file

Browse... No file selected.

Continue Portal Upgrade

Portal | Indexer

- Starting at 10.7
 - No need to manually Reindex if content is on a file system
- Upgrading to a version not 10.7 or Higher
 - Manually run a full Reindex
 - Ensures all New and Existing content is searchable
 - Ensures Portal knows where to find content

Portal Administrator Directory

[Home](#) > [System](#) > [Indexer](#)

Indexer

Resources: [Index Status](#) ←

Supported Operations: [Reindex](#)

Supported Interfaces: [REST](#)

Portal | Indexer

Portal Administrator Directory

[Home](#) > [System](#) > [Indexer](#) > [Status](#)

Index Status

Type	Count
users	39
groups	262
search	7091

Supported Interfaces: [REST](#)

Portal Administrator Directory

[Home](#) > [System](#) > [Indexer](#) > [Reindex](#)

Reindex

Mode

Include list (in CSV)

Format

[Reindex](#)

Portal Administrator Directory

[Home](#) > [System](#) > [Indexer](#)

Indexer

Resources: [Index Status](#)

Supported Operations

Supported Interfaces: [REST](#)

Portal Administrator Directory

[Home](#) > [System](#) > [Indexer](#) > [Status](#)

Index Status

Type	Count in store	Count in index
users	39	39
groups	262	262
search	7091	7091

Supported Interfaces: [REST](#)

Portal | Living Atlas Content

- Starting at 10.7
 - Content is upgraded during a post-upgrade operation
- Upgrading to a version not 10.7 or Higher
 - Manually run the Living Atlas Upgrade

Configure Living Atlas Content 

Access Living Atlas content in your portal.

Note: Clicking Configure updates Living Atlas content in your portal and saves configuration changes. Content that is configured is shared with all users in your organization.

Check the box for the additional types of Living Atlas content you would like to enable in your portal, provide ArcGIS Online organizational account credentials for accessing them and click Configure. Using premium content in the portal consumes credits from the specified ArcGIS Online account.

To disable an existing type of content, uncheck the account checkbox and click Configure.

Subscriber Premium (requires credits )

UPGRADE CONTENT **CONFIGURE**

Data Store | Managed Database

- Starting at 10.6.1
 - ArcGIS Datastore only supported as the Managed Database
 - Enterprise Geodatabases no longer supported as the Managed Database

The image shows a screenshot of the ArcGIS portal interface. On the left, a 'Notice' modal is displayed, stating: 'Your current configuration is in an unsupported state. This deployment is using an enterprise geodatabase as the **managed database** for the hosting server site which is no longer supported. It is still possible to reference data from enterprise geodatabases by registering the database with your ArcGIS Server sites including the hosting server site. However, enterprise geodatabases cannot be the **managed database** for the hosting server site. To return to a supported state you must configure ArcGIS Data Store (relational data store) with your hosting server site by following a specific workflow to maintain your existing services and items. Please refer to the ArcGIS Enterprise Help for more information.' At the bottom right of the modal is an 'OK' button. On the right, the 'Servers' configuration page is shown. The sidebar includes options for General, Home Page, Gallery, Map, Items, Groups, Utility Services, ArcGIS Online, Servers, Roles, Collaborations, and Security. Under 'Federated Servers', there is a section to 'Add one or more servers to your portal' with 'VALIDATE SERVERS' and 'ADD SERVER' buttons. A list of servers shows 'https://dev001005.esri.com:6443/arcgis' with a warning icon. Under 'Hosting Server', it says 'Optional choose one of your servers to act as your portal's hosting server. Your portal's ArcGIS Server's Managed Database must be configured on the site before it can be used as a hosting server.' A dropdown menu lists 'dev001005.esri.com/server' and 'No hosting server dev001005.esri.com/server'. Under 'Feature Analysis - GeoAnalytics Tools', it says 'Optional choose a server to act as your portal's GeoAnalytics Server. Enabling a GeoAnalytics Server allows for distributed analysis on feature and tabular data using distributed compute. Both a relational and spatial database must be registered as managed databases before you can designate a GeoAnalytics Server.' A dropdown menu lists 'No GeoAnalytics Server'.

The image shows the 'Servers' configuration page again, but with validation errors. The 'Servers' section now has a yellow background with red text: 'ArcGIS Server administration URL 'https://dev001005.esri.com:6443/arcgis' is accessible. The federated server does not have an ArcGIS Data Store registered as a managed database and cannot be set as a hosting server. Validating hosting server. ArcGIS Server 'https://dev001005.esri.com:6443/arcgis' version matches with Portal for ArcGIS. Error: Validation failed. Hosting servers require the ArcGIS Server has an ArcGIS Data Store registered as a managed database. Please select a server that uses one.' Below this, the 'VALIDATE SERVERS' and 'ADD SERVER' buttons are visible.

Portal | Licensing



Members

10.2 – 10.4.1



Level-1 & Level-2

10.5 – 10.6.1



User Types

10.7 - ...

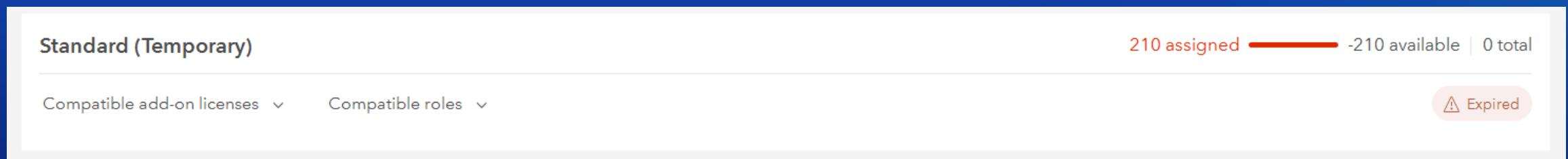
Portal | Licensing



Portal | Licensing



Portal | Licensing



Portal | Highly-Available Upgrades

Pre 10.6.1

- Had to Unregister standby
- No validation if it was done

10.6.1

- No need to Unregister standby
- Had to Continue Upgrade primary

10.7

- Continue Upgrade either machine

Portal | Upgrades

		Upgrading To																	
		10.2	10.2.1	10.2.2	10.3	10.3.1	10.4	10.4.1	10.5	10.5.1	10.6	10.6.1	10.7	10.7.1	10.8	10.8.1	10.9		
10.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗		
10.2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗		
10.2.1			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗		
10.2.2				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗		
10.3					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
10.3.1						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗		



Error

There was an error when attempting to upgrade the existing portal.

Upgrade from 10.2.1 to 10.8.0 is no longer supported. Portal for ArcGIS 10.7.x will be the last major release series to support direct upgrades from the 10.2 series. This includes versions 10.2, 10.2.1, and 10.2.2. Future releases will support upgrades from version 10.3 onwards.

For more information, please view the log messages located in the content directory specified during setup (C:\arcgisportal\logs).

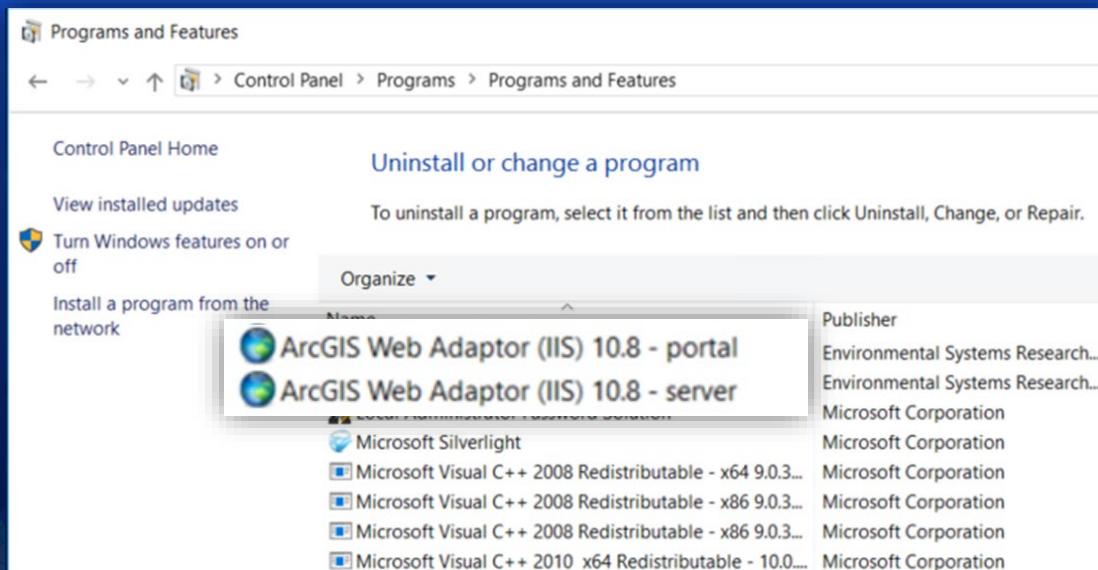


Upgrade ArcGIS Web Adaptor

Upgrades

ArcGIS Web Adaptor | Upgrades

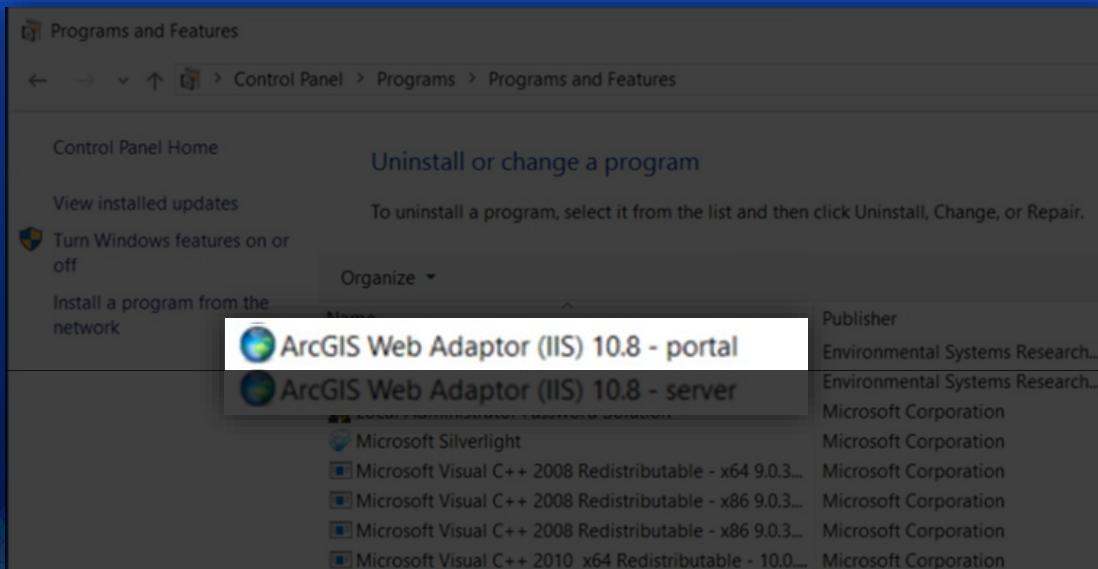
- Take note of the existing Web Adaptor Name
 - You will use the same name when configuring



```
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps# pwd
/opt/tomcat_arcgis/webapps
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps# ls
host-manager portal portal.war server server.war
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps#
```

ArcGIS Web Adaptor | Upgrades

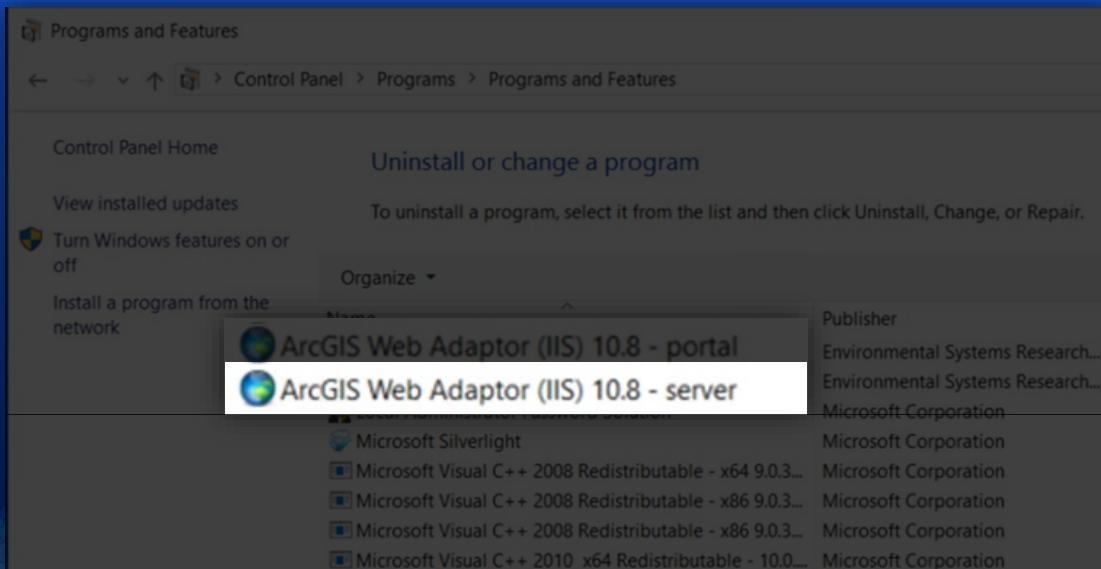
- Take note of the existing Web Adaptor Name
 - You will use the same name when configuring



```
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps# pwd
/opt/tomcat_arcgis/webapps
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps# ls
host-manager portal portal.war server server.war
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps#
```

ArcGIS Web Adaptor | Upgrades

- Take note of the existing Web Adaptor Name
 - You will use the same name when configuring



```
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps# pwd
/opt/tomcat_arcgis/webapps
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps# ls
host-manager portal portal.war server server.war
root@ip-10-0-0-59:/opt/tomcat_arcgis/webapps#
```

ArcGIS Web Adaptor | Upgrades

- **Uninstall Previous Version**
- **Install the Upgraded Version**
 - Use the same Web Adaptor Name
- Configure new Web Adaptor
- Introduced at 10.8
 - IIS requirement for 'WebSocket Protocol'

ArcGIS Server

Upgrading

ArcGIS Server | Upgrades

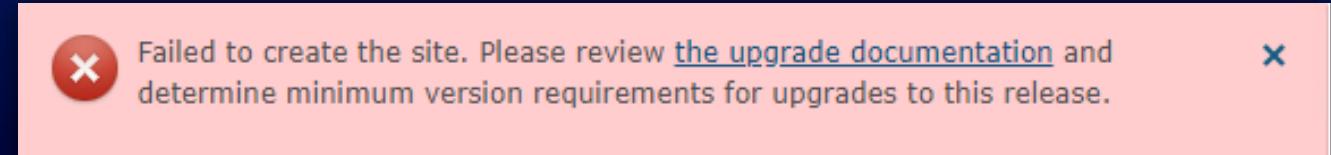
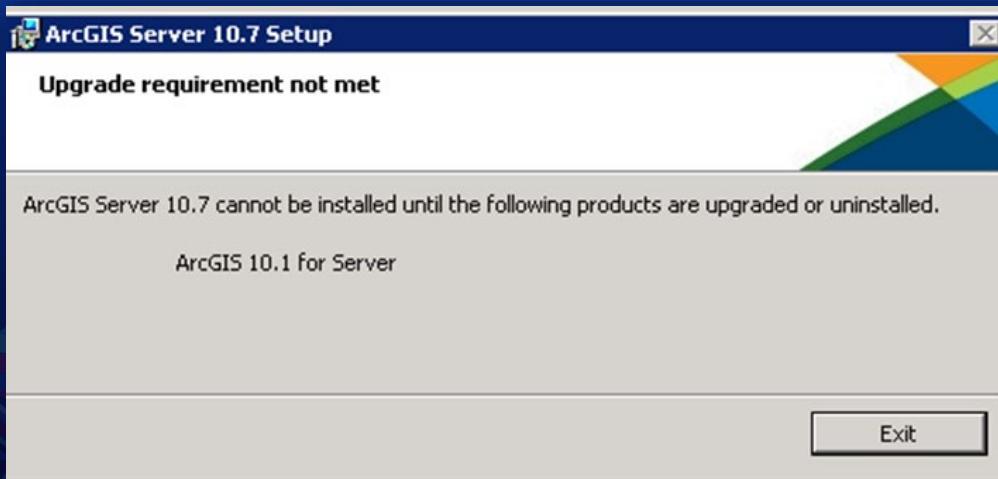
- **ArcGIS Server 10.5 and beyond**
 - Continue Server Upgrade...
- Hosting Server must be at the same version as Portal for ArcGIS
- Other federated ArcGIS Server roles that are at a minimum of 10.5 can be upgraded at a later time, unless promoted in Portal for a specific purpose.
 - i.e. GeoAnalytics, Raster Analytics, etc.

ArcGIS Server | Multi-Cluster Sites

- **ArcGIS Server 10.7 and beyond**
 - Multiple Server clusters within ArcGIS Server Site are no longer supported
- During an upgrade, if you have multiple server clusters:
 - ‘Default’ cluster will be created (if not already created)
 - The following will be moved to the ‘Default’ cluster
 - All ArcGIS Servers
 - All Services (includes System & Utility Services)
 - All Services will be in a ‘STOPPED’ state
 - Services will need to be manually started

ArcGIS Server | Upgrades

	Upgrading To															
	10.2	10.2.1	10.2.2	10.3	10.3.1	10.4	10.4.1	10.5	10.5.1	10.6	10.6.1	10.7	10.7.1	10.8	10.8.1	10.9
10.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗
10.2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗
10.2.1			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗
10.2.2				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗
10.3					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
10.3.1						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗



ArcGIS Data Store

Upgrading

ArcGIS Data Store | References

- Review the latest documentation

- <https://enterprise.arcgis.com/en/portal/latest/administer/windows/upgrade-data-store.htm>

The screenshot shows a web browser window for the ArcGIS Enterprise Administer section. The URL in the address bar is enterprise.arcgis.com/en/portal/latest/administer/windows/upgrade-data-store.htm. The page title is "Portal for ArcGIS". The navigation menu at the top includes "Home", "Use", and "Administer" tabs, with "Administer" being the active tab. Below the menu, the breadcrumb navigation shows "Administer / Using your portal with ArcGIS Server / Use ArcGIS Data Store with your portal / Manage data stores". On the left, there is a sidebar with a vertical list of links under "Manage data stores": "What is ArcGIS Data Store?", "Configure a data store", "Manage data stores" (which is expanded to show "Add a machine to your data store", "Access and manage ArcGIS Data Store logs", "Manage data store backups", "Recover a data store", "Move a relational or spatiotemporal big data store", "Alter relational data store account passwords", "Change the managed database to an ArcGIS Data Store relational data store", "Upgrade ArcGIS Data Store" (which is selected and highlighted in blue), and "Uninstall ArcGIS Data Store". The main content area has a heading "Upgrade ArcGIS Data Store" and a sub-section "ArcGIS 10.8 (Windows) | Other versions ▾". It contains text about upgrading ArcGIS Data Store and a list titled "Prepare to upgrade ArcGIS Data Store" with instructions for obtaining authorization files, creating backups, and using specific utilities like backupdatastore and restoredatastore.

Note: 10.9 Documentation available at the time of release.

ArcGIS Data Store | References

- Review the latest documentation

- <https://enterprise.arcgis.com/en/portal/latest/administer/windows/upgrade-data-store.htm>

The screenshot shows a web browser displaying the 'Upgrade ArcGIS Data Store' page from the ArcGIS Enterprise portal. The URL in the address bar is <https://enterprise.arcgis.com/en/portal/latest/administer/windows/upgrade-data-store.htm>. The page title is 'Upgrade ArcGIS Data Store'. On the left, there is a sidebar menu with options like 'What is ArcGIS Data Store?', 'Configure a data store', 'Manage data stores' (which is expanded), 'Add a machine to your data store', 'Access and manage ArcGIS Data Store logs', 'Manage data store backups', 'Recover a data store', 'Move a relational or spatiotemporal big data store', 'Alter relational data store account passwords', and 'Change the managed database to an ArcGIS Data Store relational database'. Below the sidebar, there is a large button labeled 'Upgrade ArcGIS Data Store'. The main content area has a heading 'Prepare to upgrade ArcGIS Data Store' and a sub-section 'Carefully review the following information and complete any required actions before you upgrade ArcGIS Data Store:'. It lists several steps:

- Obtain new authorization files from My Esri before upgrading to 10.8.
- Create a backup of your data store and store your backup files in a remote, secure location. How you create a backup depends on what ArcGIS Data Store version you're upgrading from and the type of data store you're upgrading.
 - If you are upgrading from 10.5.1 or a later release, create a full backup of each data store using the `backupdatastore` utility. If anything goes wrong with the upgrade and you need to revert to the previous version, you can use the `Restore` feature in the `upgrade` command.

Important: It is recommended to make backup copies of these data stores. If anything goes wrong with the upgrade and you need to revert to your previous installation, you can reinstall the previous version of ArcGIS Data Store. For more information, see the [Upgrading ArcGIS Data Store](#) topic.

Note: 10.9 Documentation available at the time of release.

ArcGIS Data Store | Upgrades

- **Starting at 10.6**
 - No longer perform an uninstall/install upgrade of ArcGIS Datastore
 - In-place upgrades only supported
- **Prior to 10.7**
 - HA configurations required to upgrade Primary before upgrade Standby data store
- **10.7 and up**
 - Upgrade from either the Primary or Standby data store
 - Upgrading multi-machine data stores
 - Install ArcGIS Data Store on all data store machines
 - Do NOT uninstall ArcGIS Data Store before installing new version
 - Only on one of the Data Store machines, execute the configuration command

ArcGIS Data Store | Upgrades

- Starting at 10.7



Relational

Primary

Install New Version

Secondary

Install New Version

Configure Data Store
Choose One Machine



Tile Cache

Primary

Install New Version

Secondary

Install New Version

Configure Data Store
Choose One Machine



Spatiotemporal

Machine 1

Install New Version

Machine 2

Install New Version

Machine 3...

Install New Version

Configure Data Store
Choose One Machine

ArcGIS Data Store | Tile Cache

- After upgrade to 10.8



Tile Cache

Primary

Secondary

ArcGIS Data Store | Tile Cache

- Beginning with ArcGIS Data Store 10.8



Tile Cache

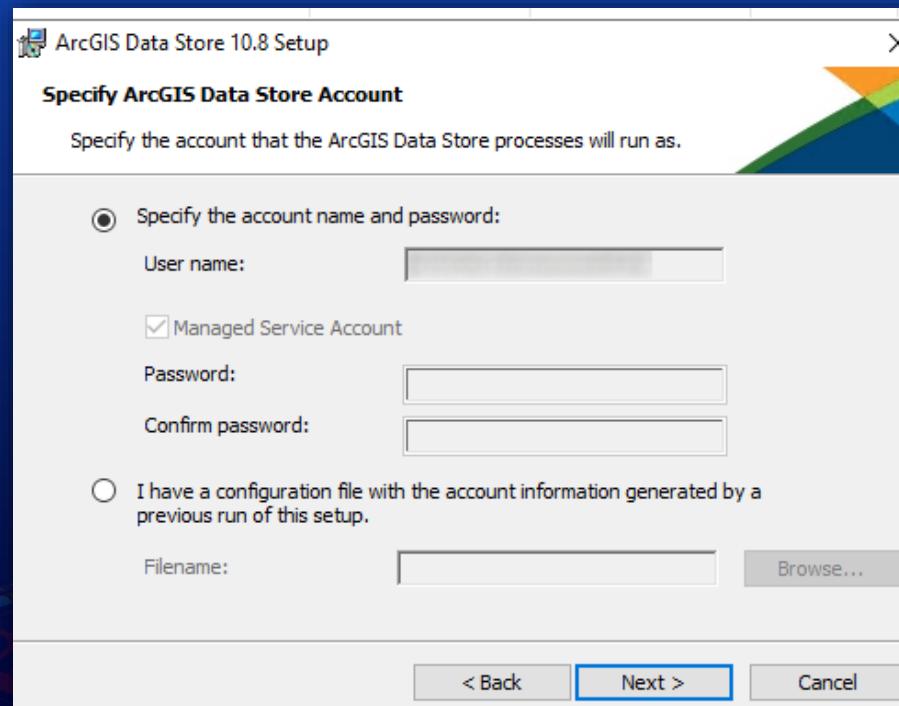
Machine 1

Machine 2

Machine 3...

ArcGIS Data Store | Group Managed Service Accounts

- Starting at 10.8
 - Support gMSA's
 - The ArcGIS Enterprise Builder does not yet support gMSAs
 - Previously configured gMSA as run-as account will be maintained
 - You cannot change to a gMSA during an upgrade



ArcGIS Data Store | Upgrades

- Create Backups Prior to upgrading !!
- Verify information is not being written to the data store during upgrade
 - Verify Hosted layers are not writing to the data store
 - Stop the ArcGIS GeoEvent Server service
 - Stop the ArcGIS GeoAnalytics Server
 - Stop the ArcGIS Mission Server
 - Verify Notebooks are not running or scheduled to run
 - Pause location tracking

Validation After Upgrade

Upgrading

Validate Upgrade

- **Login to Portal for ArcGIS**
 - Confirm all Federated Servers Validate
 - Check the Portal index status in the Portal admin directory
 - Check the TLS settings (may need to be updated)
- **Publish Items**
 - Publish to Portal for ArcGIS and to ArcGIS Server
 - Common Workflows:
 - From Portal ‘my content’ – add from my computer
 - Server Manager
 - Publish items from ArcGIS Pro and/or ArcMap
- **If upgraded to 10.7 or higher**
 - You may need to reassign members of the portal to a valid user type
 - In some cases, users may be assigned ‘Standard (Temporary)’ or ‘Lite (Temporary)’

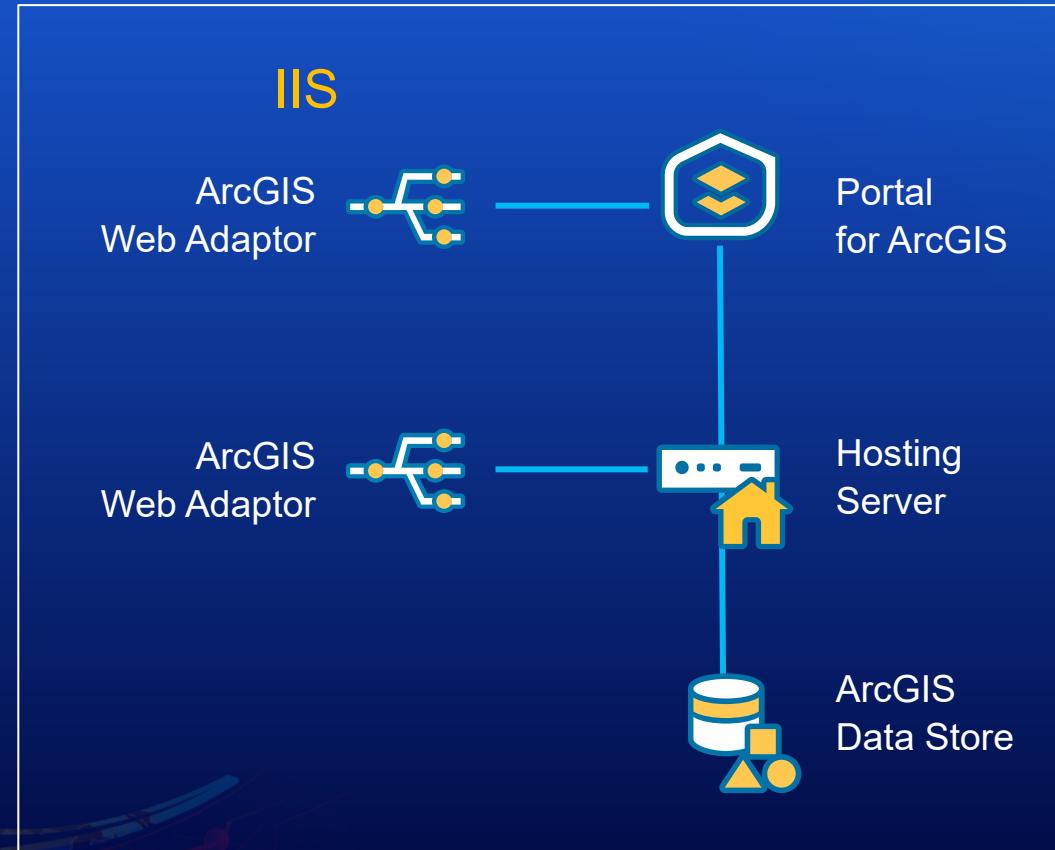


Upgrade ArcGIS Enterprise 10.7.1 to 10.8.1

Demo

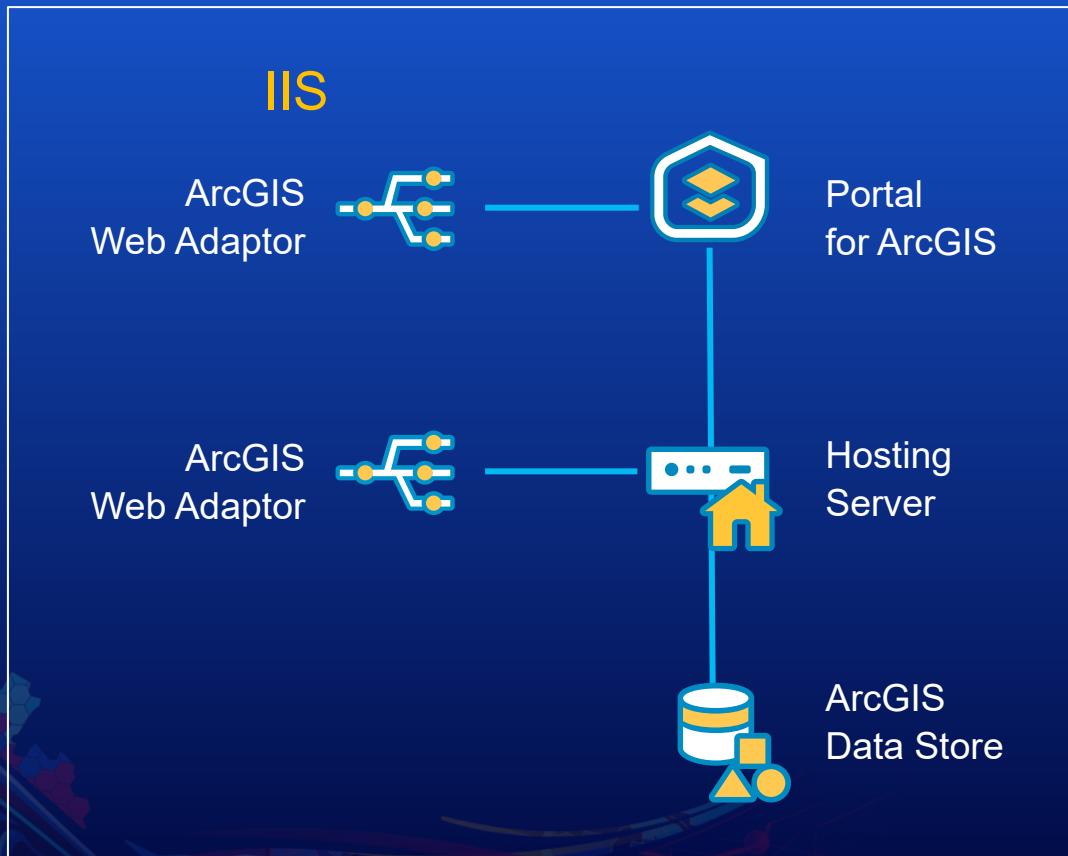
ArcGIS Enterprise | Upgrade

- Windows Server



ArcGIS Enterprise | Upgrade

• Windows Server



Upgrade Steps

1. Portal for ArcGIS
2. ArcGIS Web Adaptor (*portal*)
3. Web Styles
4. ArcGIS Server
5. ArcGIS Web Adaptor (*server*)
6. ArcGIS Data Store
(Relational / Tile Cache)

Upgrade Considerations

- Automated Upgrades

ArcGIS Enterprise Cloud Builder for AWS

Deployments

Create a new deployment or manage an existing deployment

⟳ Refresh Deployments + Add Deployment

DemoUpgrade	Status : Completed	(US East (Ohio))	Up ↑ Delete ⚡
Created Date: 2/8/2021	Type: ArcGIS Enterprise (Single Machine)		Upgrade deployment
ArcGIS Version: 10.7.1	Roles: Hosting Server		
Summary:	View Download		
Logs:	Deployment Logs		

democb	Status : Completed	(US East (Ohio))	Close ⌂ Delete ⚡
--------	--------------------	------------------	--------------------

Preferences Help Terms of Use About Sign Out Close



Upgrade Considerations

- <https://arcgisstore1081.s3.amazonaws.com/14362/docs/index.html>

The screenshot shows a web browser displaying the Esri CloudFormation Templates 10.8.1 documentation. The page title is "Esri CloudFormation Templates 10.8.1". It features a green header with the Esri logo and navigation links. Below the header, there's a section titled "CloudFormation templates to deploy ArcGIS Enterprise Web Services". A note states that the templates listed are for creating an ArcGIS Enterprise 10.8.1 deployment or upgrading existing deployments to 10.8.1. There's also a section for "Looking for a different Esri template version?" with a table showing versions 10.8, 10.7.1, 10.7, 10.6.1, 10.6, 10.5.1, 10.5, and 10.4.1. A "Table of Contents" sidebar lists various upgrade and deployment options. The main content area contains three main upgrade paths:

- Upgrade to 10.8.1 from 10.7, 10.7.1, or 10.8 with CloudFormation stack update**: This section provides steps for upgrading from 10.7, 10.7.1, or 10.8 to 10.8.1 using CloudFormation stack update. It includes links for upgrading stand-alone base ArcGIS Enterprise deployment, highly available base ArcGIS Enterprise deployment, and ArcGIS Server deployment (stand-alone and federated).
- Upgrade to 10.8.1 using Chef automation**: This section describes how Chef Automation can help upgrade in-place and upgrade from 10.6.1 or older version to 10.8.1. It includes links for upgrading stand-alone base ArcGIS Enterprise on Windows and Ubuntu, as well as highly available base ArcGIS Enterprise deployment on Windows and Ubuntu.
- Upgrade to 10.8.1 by running ArcGIS Enterprise Setups**: This section recommends moving instances out of the auto-scaling group and upgrading ArcGIS components during an on-premise deployment.

A circular callout on the right side of the page features the AWS logo and the text "CloudFormation Templates".

Upgrade Considerations



CloudFormation Templates

ArcGIS Enterprise



Esri CloudFormation Templates 10.9

CloudFormation templates to deploy ArcGIS Enterprise on Amazon Web Services

The templates listed on this page use CloudFormation to create an ArcGIS Enterprise 10.9 deployment or ArcGIS Server 10.9 roles on Amazon Web Services (AWS).

Upgrade Considerations

- Automated Upgrades

ArcGIS Enterprise Cloud Builder 10.8.1 for Microsoft Azure

Terms of Use Help About Settings Signout

Deployments

Show V2 Sites V1 Sites Desktops

demo-upgrade	Deployed On:	8 Feb 2021 13:19	Portal URL:	http://demo-upgrade-azure.bd.esri.com/portal/home/
	Version:	10.7.1	Manager URL:	https://demo-upgrade-azure.bd.esri.com/server/manager/
	Role:	ArcGIS Enterprise		

Upgrade Deployment

close



Upgrade Considerations

- Automated Upgrades



ArcGIS Enterprise on Kubernetes



Summary | Benefits of Upgrading

- New Features, Functionality, Apps & Products

NEW

- Take advantage of Performance Enhancements



- Stay within the supported product lifecycle



- Security updates & bug fixes



Summary | Upgrade Considerations

- **Take snapshots of machines**
 - Verify all volumes are included in the snapshots
- **Verify backups**
 - In a test environment, test your backup and restore process
- **BACK UP Environment**
 - WebGISDR
 - ArcGIS Datastore (Relational, TileCache & Spatiotemporal)
 - Use the 'backupdatastore' utility
 - ArcGIS Server
 - Use the 'Backup' utility
 - Take backups of the content stores
 - Folders: arcgisportal , arcgisserver, arcgisdatastore

Summary | Automated Upgrades



ArcGIS Enterprise Builder

Upgrades Supported
At 10.6



CloudFormation Templates

ArcGIS Enterprise Cloud
Builder for Amazon Web
Services



ArcGIS Enterprise Cloud
Builder for Microsoft Azure



Advanced Automation

NEW



ArcGIS Enterprise on
Kubernetes



Summary | Resources

- **Upgrading ArcGIS Enterprise Documentation**

ArcGIS Enterprise

- <https://enterprise.arcgis.com/en/get-started/latest/windows/upgrade-arcgis-enterprise.htm>

ArcGIS Enterprise on Microsoft Azure

- <https://enterprise.arcgis.com/en/server/latest/cloud/azure/overview-arcgis-server-on-microsoft-azure.htm>

ArcGIS Enterprise on Amazon Web Services

- <https://enterprise.arcgis.com/en/server/latest/cloud/amazon/what-is-arcgis-server-on-aws.htm>



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