

Quick Start Guide

Data Appliance for ArcGIS®
ArcGIS Server 10 | Windows® 5.1



Overview

The purpose of the Quick Start Guide is to step you quickly and easily through the setup of Data Appliance 5.1 for ArcGIS®. This Quick Start Guide is for use with ArcGIS Server 10 SP5 or higher. The setup consists of the following steps:

- Step 1** Unpack the Components
- Step 2** Install Appliance into an Equipment Rack
- Step 3** Cable the Data Appliance
- Step 4** Power on Data Appliance
- Step 5** System Licensing and Activation
- Step 6** Apply Windows Updates
- Step 7** Verify the Data Collection
- Step 8** Create ArcGIS Users on Data Appliance
- Step 9** Create Shares
- Step 10** Configure ArcGIS Server to Use Cache Directory
- Step 11** Add Services
- Step 12** Use Services

Before Starting

ArcGIS Server 10 SP5 or higher is required for all Data Appliance 5.1 for ArcGIS data collections. If you purchased Data Appliance for ArcGIS Server 10, refer to the instructions provided in your Data Appliance for ArcGIS Server 10 box before performing the steps in this Quick Start Guide.

Important: It is imperative that care and precautions be taken when handling the data collection hard drives. The hard drives are sensitive to shock as well as electrostatic discharge. Make sure that precautions are taken to eliminate any built-up static. The use of a grounding strap is highly recommended while you handle the hard drives.

1 Unpack the Components

Within each Data Appliance for ArcGIS box, there is a removable front bezel for the server to cover and lock the hard drives; keys are included. This is to prevent unauthorized persons from removing hard disks. Also included in the box are the adjustable sliding rails to mount your Data Appliance for ArcGIS server into a standard computer equipment rack. The mounting kit is located within the smaller box that is packed toward the front of the server. The contents of the box can be unpacked by a single person, but it is recommended that two people remove the server from the box. The server weight is approximately 90 lbs.

2 Install Appliance into an Equipment Rack

Data Appliance for ArcGIS ships with side rails attached that slide into the adjustable rails installed in the computer equipment rack. Depending on the depth of your rack cabinet, adjustments to the sliding rails may be required. Use the mounting screws provided to attach the sliding rails to your cabinet. Additional details can be found in the Data Appliance 5.1 for ArcGIS Windows® Hardware Quick Reference that is included in the box.

3 Cable the Data Appliance

Data Appliance for ArcGIS hardware requires two AC power sources. Two power cords are included in the smaller box that contains the mounting kit for the rails. Connect both power cords. Connect a monitor to the video port as well as a keyboard and mouse to their respective PS/2 ports. Network connectivity is required during the operation of Data Appliance for ArcGIS. Plug an RJ-45 Ethernet cable into the Ethernet port of the Data Appliance hardware. Additional details can be found in the Data Appliance 5.1 for ArcGIS Windows Hardware Quick Reference that is included in the box.

4 Power on Data Appliance

To turn on Data Appliance for ArcGIS, press the power button located on the front of the computer equipment rack.

Note: While booting up, the Windows 2008 Storage Server operating system performs a number of system checks to verify the integrity of the file system. During this time, the hard drive activity LEDs on Data Appliance for ArcGIS will blink. Please do not interrupt the system by powering it off or rebooting it.

5 System Licensing and Activation

After Windows setup is complete, the system will boot into the final section of Windows Setup. Follow the on-screen instructions.

- A. Select the appropriate settings and click **Next**.
- B. Type the product key found on the Microsoft® COA label located on the front left corner of the system and click **Next**. Check **Automatically activate Windows when I'm online** if the system has Internet access.
- C. Accept the Microsoft Software License Terms and click **Start**.
- D. Follow the instructions to change the administrative password for the system.

Note: Refer to the Data Appliance for ArcGIS User Guide for Windows on the Cutting Edge website for information on activating Windows without Internet access or for additional details on system setup.

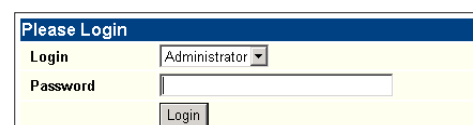
6 Apply Windows Updates

Read the following before continuing: Data Appliance for ArcGIS ships with the Windows 2008 Storage Server operating system. Microsoft routinely releases updates and patches to improve stability and security. Any updates released after Data Appliance for ArcGIS has shipped need to be applied.

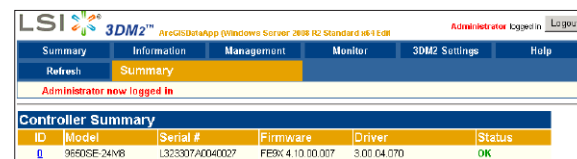
7 Verify the Data Collection

Before utilizing the data collection, the health of the RAID arrays must be verified. Data Appliance for ArcGIS ships with the LSI/3ware 3DM2 utility pre-installed. This utility will be used to verify the status of the datasets.

- A. Log in to Data Appliance for ArcGIS as **Administrator**.
- B. Click the **Start** menu, expand **All Programs**, and expand the **3ware** folder.
- C. Click **Connect to 3DM2** to start the 3DM2 utility.
- D. Disregard the security warning and click **Continue to website (not recommended)**.
- E. In the **Login** drop-down menu, select **Administrator**.



- F. Enter the password "3ware" and click **Login**.
- G. The 3DM2 summary screen will be displayed. Note the Status column.



- H. If the status for all collections is **OK** and green, the arrays are healthy and ready to use. If something other than **OK** is displayed, click **Information** and click **Unit Information**. This will display the status of each RAID array (unit).
 - 1. If the status is **Verifying**, the datasets are ready to use. (Verify procedures are run on schedules to preemptively correct any errors.)
 - 2. If the status is **Degraded** or **Offline**, **immediately stop and contact Cutting Edge Networked Storage technical support**.
- I. Click **Logout** to log out of the 3DM2 utility. Once you have logged out, exit the web browser.

8 Create ArcGIS Users on Data Appliance

The ArcGIS users on your ArcGIS Server 10 must be created on Data Appliance for ArcGIS.

Note: If your Data Appliance for ArcGIS is joined to Active Directory, skip to step 9, **Create Shares**.

- A. Log in to Data Appliance for ArcGIS as **Administrator**.
- B. Click **Start > Administrative Tools > Computer Management**.
- C. In the Computer Management application, on the left pane, click **Local Users and Groups** to expand the tree, and click the **Users** folder. On the main pane, right-click and select **New User**. The New User wizard is displayed.
- D. Use the New User wizard to create the users listed in the table below. The passwords must be configured to match the passwords for the respective accounts on ArcGIS Server 10, and the passwords must be set to never expire:

User Name	Full Name	Description
ArcGISSOC	ArcGIS Server Object Container Account	Account for running the GIS Server Object Container process
ArcGISSOM	ArcGIS Server Object Manager Account	Account for running the GIS Server Object Manager process
ArcGISWebServices	GIS Web Service Account	Account that web services use to access the GIS Server Object Manager process

- E. Click **Create** to create each new user on Data Appliance for ArcGIS.

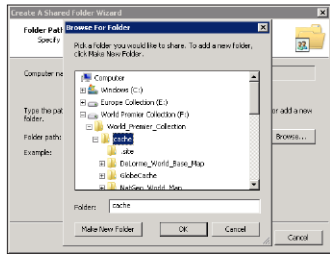
9 Create Shares

Data Appliance for ArcGIS must be configured to share the data collections.

- A. Log in to Data Appliance for ArcGIS as **Administrator**.
- B. Click **Start > Administrative Tools > Computer Management**.
- C. In the Computer Management application, click **Shared Folders** to expand the tree, and right-click the **Shares** folder. Select **New Share**.
- D. In the Create a Shared Folder wizard, click **Next** to begin.

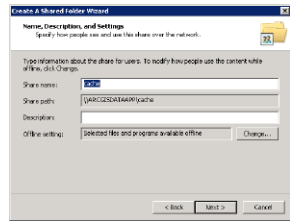
Create Shares (continued)

- E. For Folder Path, click **Browse**, and navigate to the hard drive with the data collection (usually drive E). Select the **cache** folder (or the **source_documents** folder) and click **OK**.

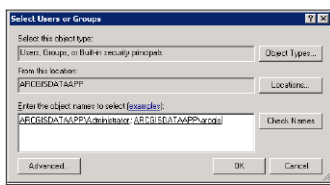


- F. Click **Next**.
G. In the **Name, Description, and Settings** dialog box, enter the **Share name** and **Description** for your data collection as indicated in the following table. For **Offline setting**, accept the default.

Folder	Share Name	Description
\\cache	cache	Data Appliance Cache
\\source_documents	source_documents	Data Appliance Source Documents



- H. Click **Next**.
I. Select the **Customize permissions** option and click **Custom**.
J. In the Customize Permissions dialog box, click **Add**.
K. In the Select Users or Groups dialog box, click **Advanced**. The Select Users or Groups dialog box expands.
L. Change the permissions on the ArcGISSOC account to allow Full Control.
M. Repeat steps 9C–9L for the source documents folder.
N. Click **Find Now** to display a list of all local users. Press the Ctrl key and click each of the three ArcGIS users and the Administrator user to select them: Administrator, ArcGISSOC, ArcGISSOM, and ArcGISWebServices. Then, with all four users selected, click **OK** above the Search results area. The dialog box reverts to a smaller size.



- O. The four users you just selected should be listed under **Enter the object names to select**. Click **OK**.

Configure ArcGIS Server to Use Cache Directory

ArcGIS Server 10 maintains a list of directories in which it can find map and globe cache tiles. You need to explicitly add Data Appliance cache directories to this list.

- Log in to ArcGIS Server using the Data Appliance for ArcGIS data account with administrator privileges.
- Start ArcGIS Server Manager and log in using your ArcGIS Server account.
- Click the **GIS Server** tab.
- From the **View** menu on the left, click **Server Directories** (or **Directories** if you are using Java Manager).
- Click **Add Directory**.
- For the path to the directory, enter the path to the **cache** directory on the Data Appliance for ArcGIS data you made when you created shares, (for example, \\ARCGISDATAAPP\cache).
- From the **Type** drop-down list, choose **Cache**.
- Leave **Virtual Directory** blank. You do not need to specify a description, cleaning mode, or maximum file age.
- Click **OK** to add the directory. By default, you will return to the list of output directories. To verify that the cache directory was created successfully, you can select **Cache Directories** from the **Show** drop-down menu.

Add Services

The following instructions apply to map services. Information about globe services can be found in the help file on the *Data Appliance 5.1 for ArcGIS Help Documentation* DVD by opening `arcgis_data_appliance.pdf`.

- Log in to the ArcGIS Server that connects to Data Appliance for ArcGIS using an account with administrative privileges.
- Start ArcGIS Server Manager and log in using your ArcGIS Server account.
- In ArcGIS Server Manager, click the **Services** tab, then click **Add New Service**.
- In the **Name** field, type the exact name of the corresponding map cache folder on the Data Appliance (for example, `Ocean_Basemap`). The name of the service must be identical to its cache folder name. See the "Services Reference Guide for 5.1" at the end of this document for a list of the Data Appliance map services.
- Verify that **Type** is Map Service and **Startup Type** is Automatic. Click **Next**.
- In the **Map Document** field, browse to the `source_documents` folder on the data appliance (for example, `\\ARCGISDATAAPP\source_documents\map_documents`), and select the **map document** that you want to publish.
- In the **Server Cache Directory** field (or **Cache Directory**, if you are using Java Manager), select the **cache** directory you added that references the cache directory on Data Appliance for ArcGIS.

Add Services (continued)

- Accept the rest of the default properties and click **create the service**.
- If necessary, start the service in Manager by checking the box next to the service name and clicking **Start**.
- Repeat this process for any other map services you want to configure.

Use Services

For specific instructions on how to connect to and use the services, see the appropriate user guide for the ArcGIS application you are using.

Additional information can be found in the help file on the *Data Appliance 5.1 for ArcGIS Help Documentation* DVD by opening `arcgis_data_appliance.pdf`.

Services Reference Guide for 5.1

Map Services	Globe Services	Geocode Services ¹
DeLorme_World_Base_Map	ESRI_Elevation_World	ESRI_Places_World ¹
NatGeo_World_Map	USGS_Elevation_US	
Ocean_Basemap		
USA_Topo_Maps		
World_Boundaries_and_Places		
World_Boundaries_and_Places_Alternate		
World_Imagery		
World_Light_Gray_Base		
World_Light_Gray_Reference		
World_Physical_Map		
World_Shaded_Relief		
World_Street_Map		
World_Topo_Map		
World_Transportation		

¹Available on a separate DVD included with the Data Appliance 5.1 for ArcGIS.

Resources

Cutting Edge Networked Storage provides several reference documents. These are available at cuttedge.com/contact/DAWindows.html.

The *Data Appliance 5.1 for ArcGIS Help Documentation* DVD is included in the box with your data collection drives. Refer to the help for additional details.

For an up-to-date online help system, system requirements, information on licensing, and more, visit links.esri.com/data-appliance/5.1/tech-docs.

Support

Esri Support

For information regarding the configuration and setup of ArcGIS Services and usage, visit support.esri.com/en/phoneSupport.

For the most current information for all ArcGIS products, visit the ArcGIS Resources website at resources.arcgis.com.

Cutting Edge Support

For information and support regarding the Data Appliance for ArcGIS hardware, contact Cutting Edge Networked Storage using the following options:

Phone: 800-257-1666
E-mail: support@cuttedge.com
Website: cuttedge.com/contact/technical_support.html
Hours: Monday–Friday, 8:00 a.m.–5:00 p.m. (Pacific time)

