Data Appliance 5.1 for Arc**GIS**®

ArcGIS 10.1 for Server | Windows®

Quick Start Guide

Powered by ArcGIS

esri®   CUTTING EDGE NETWORKED STORAGE

Overview

The purpose of the Quick Start Guide is to step you quickly and easily through the setup of a Data Appliance 5.1 collection. This Quick Start Guide is for use with ArcGIS® 10.1 for Server. The setup consists of the following steps:

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 pounds.

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 Networked Storage website for information on activating Windows without Internet access or for additional details on system setup.
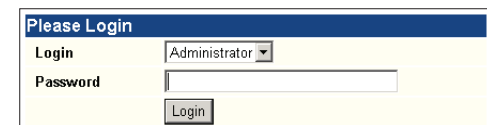
6 Apply Windows Updates

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.
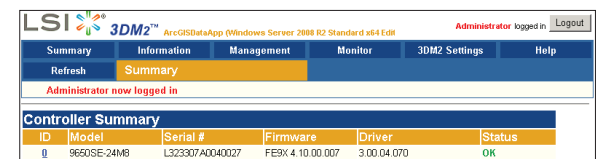
7 Verify the Data Collection

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 is 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 displays 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 user on ArcGIS 10.1 for Server must be created on Data Appliance for ArcGIS.

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 following user. The password must be configured to match the password for the respective account on ArcGIS 10.1 for Server, and the password must be set to never expire:
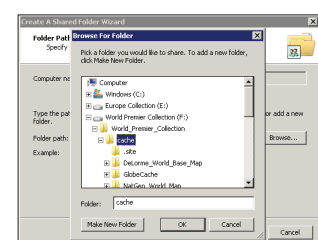
User Name	Full Name	Description
arcgis	ArcGIS Server Account	Account to perform a variety of functions in support of the GIS server

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

9 Create Shares

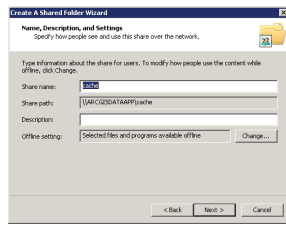Data Appliance for ArcGIS must be configured to share the data collections.

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.
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**.
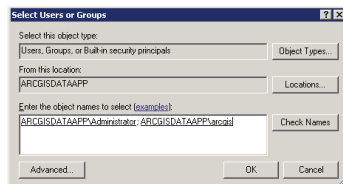
9 — Create Shares (continued)

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. Click **Find Now** to display a list of all local users. Press the Ctrl key and click the Administrator user and the arcgis user to highlight them. Then, with both users highlighted, click **OK** above the Search results area. The dialog box reverts to a smaller size.

M. The two users you just selected should be listed under Enter the object names to select. Click **OK**.
N. Make sure the permissions for the users and groups are set to Full Control.
O. Repeat steps 9C through 9N for the source documents folder.

10 — Configure ArcGIS Server to Use Cache Directory

ArcGIS 10.1 for Server maintains a list of directories in which it can find map and globe cache tiles. You need to explicitly add the Data Appliance cache directory to this list.
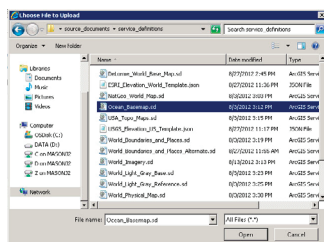
A. Log in to ArcGIS Server using the Data Appliance for ArcGIS data account with administrative privileges.
B. Start ArcGIS Server Manager and log in using your ArcGIS for Server account.
C. Click the **Site** tab.
D. In the **View** menu on the left, click **Directories**.
E. Click **Add Directory** on the right below the Directories description.
F. Enter a **Name**, for example, Cache. From the **Type** drop-down list, choose **Cache**.
G. For **Location**, enter the **path** to the cache folder on the ArcGIS Data Appliance data collection you made when you created shares, for example, \\ARCGISDATAAPP\cache.
H. You do not need to specify a Description, Cleaning Mode, or Maximum File Age.
I. Click **Add** to add the directory.

11 — Publish 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.

Using ArcGIS Server Manager, you can publish a service definition file (.sd) as a service. To publish a service definition using Manager, follow these steps for each map service that you want to create:

A. Open ArcGIS Server Manager and log in.
B. Click **Services** > **Manage Services** > **Publish Service**.
C. Click the **browse** button to navigate to the source_documents > service_definitions folder on the Data Appliance data collection, for example, \\ARCGISDATAAPP\source_documents\service_definitions.
D. Select the **service definition** you want to publish, for example, Ocean_Basemap.sd. See the Services Reference Guide for 5.1 at the end of this document for a list of the Data Appliance map services.

E. Click **Next**.
F. By default, the service definition is published to the server folder specified in the service definition configuration. You must publish the service definition to this root folder.
G. Optionally, choose the **GIS server cluster** that will host the published service definition. Click **Next**.
H. Optionally, choose to **enable** or **disable capabilities** for your service definition.
I. Click **Publish** to publish the service definition as a service. The new map service appears in the list of available services.
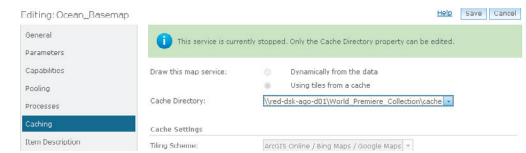

11 — Publish Services (continued)

The publish process uses the first directory in the server's list of cache directories. You need to change it to the data appliance cache directory created previously.

J. Click the **Stop** button to the right of the service name to stop the service.
K. Click the **Edit** button to edit the service properties.
L. Click **Caching** and change the **cache directory** setting to reference the data appliance collection.

M. Click **Save** to save your changes and click the **Restart** button to restart the service.
N. Repeat this process for any other map services you want to publish.

12 — 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		

[1]Available on a separate DVD included with 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 Networked Storage 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)