



What an Archive Node is

StorageGRID 11.5

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What an Archive Node is

The Archive Node provides an interface through which you can target an external archival storage system for the long term storage of object data. The Archive Node also monitors this connection and the transfer of object data between the StorageGRID system and the targeted external archival storage system.

The screenshot displays the StorageGRID WebScale Deployment interface. On the left, the 'Grid Topology' pane shows a hierarchical view of the deployment, including Data Center 1, Data Center 2, and Data Center 3. Under Data Center 1, the 'ARC' node (DC1-ARC1-98-165) is highlighted. The main pane shows the 'Overview' tab for the selected ARC node. The overview includes a status summary table and a 'Node Information' section.

Overview: ARC (DC1-ARC1-98-165) - ARC		
Updated: 2015-09-30 10:29:18 PDT		
ARC State:	Online	
ARC Status:	No Errors	
Tivoli Storage Manager State:	Online	
Tivoli Storage Manager Status:	No Errors	
Store State:	Online	
Store Status:	No Errors	
Retrieve State:	Online	
Retrieve Status:	No Errors	
Inbound Replication Status:	No Errors	
Outbound Replication Status:	No Errors	

Node Information	
Device Type:	Archive Node
Version:	10.2.0
Build:	20150928.2133.a27b3ab
Node ID:	19002524
Site ID:	10

Object data that cannot be deleted, but is not regularly accessed, can at any time be moved off of a Storage Node's spinning disks and onto external archival storage such as the cloud or tape. This archiving of object data is accomplished through the configuration of a data center site's Archive Node and then the configuration of ILM rules where this Archive Node is selected as the "target" for content placement instructions. The Archive Node does not manage archived object data itself; this is achieved by the external archive device.



Object metadata is not archived, but remains on Storage Nodes.

What the ARC service is

The Archive Node's Archive (ARC) service provides the management interface you can use to configure connections to external archival storage, such as tape through TSM middleware.

It is the ARC service that interacts with an external archival storage system, sending object data for near-line storage and performing retrievals when a client application requests an archived object. When a client application requests an archived object, a Storage Node requests the object data from the ARC service. The ARC service makes a request to the external archival storage system, which retrieves the requested object data and sends it to the ARC service. The ARC service verifies the object data and forwards it to the Storage Node, which in turn returns the object to the requesting client application.

Requests for object data archived to tape through TSM middleware are managed for efficiency of retrievals. Requests can be ordered so that objects stored in sequential order on tape are requested in that same sequential order. Requests are then queued for submission to the storage device. Depending upon the archival

device, multiple requests for objects on different volumes can be processed simultaneously.

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