



IBM Tivoli Storage Manager 6.1

Policy domains and server maintenance in the Administration Center

Tivoli. software



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This module describes policy domains and server maintenance in the Administration Center for IBM Tivoli Storage Manager 6.1.

Objectives

Upon completion of this module, you will be able to perform the following tasks in the Administration Center:

- Create policies
- Manage policies
- Create server maintenance scripts
- Edit server maintenance scripts
- Customize server maintenance scripts

Upon completion of this module, you will be able to perform the following tasks in the Administration Center:

Create policies

Manage policies

Create server maintenance scripts

Edit server maintenance scripts

Customize server maintenance scripts

Determining service level requirements

Business requirements for data management

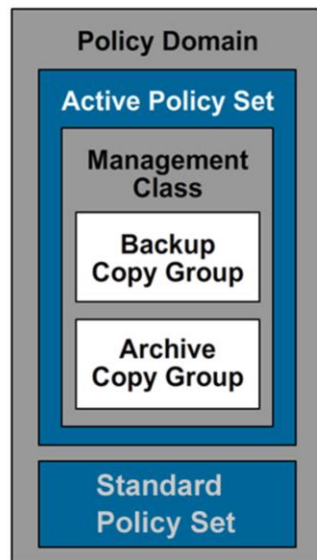
- What data to back up
- What data to archive
- Where to store the data
- How many versions to retain
- How long to retain each version

Based on service level agreements with the data owners, the Tivoli Storage Manager administrator decides:

- What data to back up
- What data to archive
- Where to store the data
- How many versions to retain
- How long to retain each version

The administrator also determines specifications that are based on business needs and your environment. These plans are then implemented through policy management.

Policy structure



Policy is stored on the Tivoli Storage Manager server in the Tivoli Storage Manager database.

The administrator creates the policies and stores them in the database on the server. You can update the policies, and the updates retroactively apply to data that is already being managed. You might have one policy or many policies depending on business needs.

Policies include several elements:

A **Policy Domain** is a set of rules applied to a group of nodes managed by the same set of policy constraints as defined by the policy sets. A node is only defined to one policy domain per server. A node can be defined to more than one Tivoli Storage Manager server.

A **Policy Set** is a collection of management class (MC) definitions. A policy domain can contain several policy sets, however, only one policy set in a domain can be active at a time. Policy sets that you require are in the Administration Center and are hidden from view. You can only see information on policy sets using the command line.

A **Management Class** is a collection of management attributes describing backup and archive characteristics. There are two sets of MC attributes, one for backup and one for archive. A set of attributes is called a copy group. There is a *backup* copy group and an *archive* copy group. For Tivoli Space Manager clients only, parameters affect space management.

Working with policy domains by server

The table shows the servers you have added to the console, and the policy domains defined for those servers. Policy domains help you to apply consistent rules for data management to groups of client nodes. Click a server name to work with its policy domains.

Select	Server Name	Policy Domains
<input type="radio"/>	TSM_SERVER1	STANDARD
Total: 1 Filter		

You can view existing policy domains in the Administration Center. Select a server to view the policy domains for that server or select the radio button beside a server. Use the **Select Actions** menu and select **View Policy Domains**.

Selecting the option to create a policy domain

Policy domains help you to apply consistent rules for data management to groups of client nodes. Click a policy domain name to work with its properties, client nodes, option sets, client node schedules, and management classes.

Select	Domain Name	Description	Archive Retention	Pending Changes
	STANDARD	Installed default	365 days	

Total: 1 Filter

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After you select the server, a page is displayed with new options in the **Select Action** menu. You can create, modify, delete, export, or import a policy domain. You can also manage pending changes. Managing pending changes is the equivalent of validating and activating a policy domain on the command line.

Next, select the option to **Create a Policy Domain**. A wizard provides prompts for each of the associated tasks.

Creating a policy domain

General

Set rules for retaining backup and archived files if an appropriate management class is unavailable or does not exist. These retention settings protect files from being immediately expired.

***Name**

Description

Backup retention
 days

Archive retention
 days

Task List:

- General
- Storage pools
- Assign client nodes
- Summary

< Back Next > Finish Cancel

A list of tasks is on the left side of the General page. Provide a name and description for the policy domain, and specify the backup retention and archive retention in days.

Specifying storage pools and retention

Storage Pools

Storage pools determine where managed data will be stored. The same storage pool can be selected for both backup and archived data, but different pools are typically used.

Select a storage pool for at least one of these data types. If you do not select storage pools for both data types, backup or archive operations can fail.

Default storage pool for backup data
BACKUPPOOL

Default storage pool for archive data
ARCHIVEPOOL

Select active-data pools for this policy domain

< Back Next > Finish Cancel

Specify one default storage pool for backup data and one default storage pool for archive data. If you have an active-data pool, you can select that storage pool for backups.

Assigning client nodes to a policy domain

Assign Client Nodes Now?
The server manages the data and operations for a client node by using the rules of the policy domain. You can select the client nodes to assign to the new policy domain now or at another time. A client node can be assigned to only one policy domain.

Do you want to assign client nodes to this policy domain now?

Yes
 No

Assign client nodes
Create the list of client nodes to select from.

View all client nodes.
 View client nodes that match your conditions:
Name

Assign client nodes
Select client nodes to assign to the policy domain. A client node belongs to only one policy domain.

Select	Name	Current Policy Domain	Type	Platform	Description
<input type="checkbox"/>	CLIENT	STANDARD	Client	WinNT	--

Page 1 of 1 Total: 1 Filtered: 1 Displayed: 1

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Decide whether you want to assign client nodes now. If you select **Yes**, a second panel is displayed. In the panel you can view all client nodes or select a list that matches your conditions. When your list is displayed, you select the client nodes you want to associate with this policy. Then, verify all of the information on the summary page and click **Finish** to create the domain.

Creating a management class

The screenshot displays the Administration Center interface for managing policy domains. The top section shows a list of policy domains with columns for Select, Domain Name, Description, Backup Retention, Archive Retention, and Pending Changes. Two domains are listed: SALES and STANDARD.

Select	Domain Name	Description	Backup Retention	Archive Retention	Pending Changes
<input type="checkbox"/>	SALES	Sales policy domain	30 days	365 days	--
<input type="checkbox"/>	STANDARD	Installed default policy domain.	30 days	365 days	--

The bottom section shows the 'SALES Properties' window, expanded to the 'Management Classes' section. A context menu is open over the 'STANDARD' management class, with the 'Create Management Class...' option selected. The menu options include: Create Management Class..., Modify Management Class..., Delete Management Class, Make Management Class Default, Manage Pending Changes..., Fake Action..., Select All, Deselect All, Export Data, and Show Filter Row.

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After you create a policy domain, select that policy domain to display the domain properties. Expand the **Management Classes** section and choose the option to create the management classes you require for the backup and archive data.

Specifying management class settings

General

Select the type of data this management class will be used to store. If you only select one type of data, and this management class is used as the default, backup or archive operations can fail.

Backup and archive data
 Backup only
 Archive only

Space management (also called HSM) allows files to be automatically migrated from client nodes and then recalled from storage when needed. This function requires a special client.

Enable space management for files stored by this management class.

< Back Next > Finish Cancel

The tasks included in this wizard are displayed on the left side of the page. Specify the type of data to be stored: backup and archive data, backup only, or archive only. You can also enable space management (HSM) for data that uses this management class for storage.

Naming the management class

General
A management class contains the rules used to manage data for client nodes in the domain.

*Name
Sales

Description
Management class for the Sales policy domain

The default management class is used for all client node data unless files or directories are bound to a different management class

Make this management class the default

< Back Next > Finish Cancel

Give the management class a name and specify whether this class is the default management class.

Specifying storage pools

Backup Settings

The server initially stores backup data in the storage pool that you select. You must select a storage pool on either the Backup settings tab or the Archive settings tab.

Where to store files (Consider using disk storage to initially store client node data. You can later migrate the data to a different form of storage.)

-- Select Storage Pool --

If a backup is an incremental type:

- Always back up the file
- Back up the file only if the file or its attributes changed since the previous backup

If a file is being modified during backup, the program should do the following:

- Back up the file
- Do not back up the file
- Retry, and back up the file only if the file is no longer being modified (Recommended)
- Retry, and back up the file on the last attempt even if the file is still being modified

Tables of Contents

Where to store the table of contents (TOC) that is created for NDMP backups or some backup set operations. As a best practice, select a storage pool that uses a DISK or FILE device class.

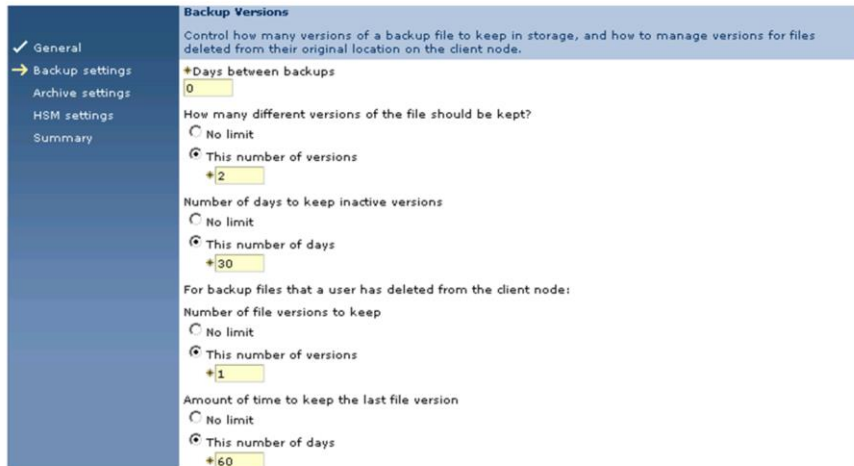
Storage pool for tables of contents

-- Select Storage Pool --

< Back Next > Finish Cancel

Define the backup settings. Select a backup storage pool and the type of backup. Also specify a storage pool to store tables of contents.

Controlling the number of versions



Backup Versions
Control how many versions of a backup file to keep in storage, and how to manage versions for files deleted from their original location on the client node.

✓ General
→ Backup settings
Archive settings
HSM settings
Summary

*Days between backups
0

How many different versions of the file should be kept?
 No limit
 This number of versions
+2

Number of days to keep inactive versions
 No limit
 This number of days
+30

For backup files that a user has deleted from the client node:
Number of file versions to keep
 No limit
 This number of versions
+1

Amount of time to keep the last file version
 No limit
 This number of days
+60

On the Backup Versions page, specify the following parameters:

- Days between backups
- How many different versions of the file should be kept
- Number of days to keep inactive versions
- For backup files that a user has deleted from the client node, specify the number of file versions to keep and the amount of time to keep the last file version.

Specifying archive settings

The screenshot shows a web-based configuration window titled "Create Management Class". On the left is a navigation pane with the following items: "General" (checked), "Backup settings" (checked), "Archive settings" (highlighted with a yellow arrow), "HSM settings", and "Summary". The main content area is titled "Archive Settings" and contains the following text and controls:

The server initially stores archive data in the storage pool that you select. You must select a storage pool on either the Backup settings tab or the Archive settings tab.

Where to store files (Consider using disk storage to initially store client node data. You can later migrate the data to a different form of storage.)

-- Select Storage Pool --

If a file is being modified during archive, the program should do the following:

- Archive the file
- Do not archive the file
- Retry, and archive the file only if the file is no longer being modified (Recommended)
- Retry, and archive the file on the last attempt, even if the file is still being modified

Archive Version Control

How many days should a file be kept?

- No limit
- This number of days

365

At the bottom of the window are navigation buttons: "< Back", "Next >", "Finish", and "Cancel".

At the bottom of the slide, there is a red banner with the text "Policy domains and server maintenance in the Administration Center" and "© 2009 IBM Corporation" on the right side.

After backup settings are complete, specify the archive settings.

Specifying HSM settings

HSM Settings

Hierarchical storage management (HSM) functions allow data to be migrated from client nodes to a storage pool, and back again when needed. HSM, also known as space management, is available for client nodes on some operating systems.

Where to store files (Consider using disk storage to initially store client node data. You can later migrate the data to a different form of storage.)

-- Select Storage Pool --

How are files selected for migration from the client node?

Files can only be selected manually

Files are selected automatically, and can also be selected manually
Files become eligible for automatic migration after a period of not being accessed on the client node.

Days since last access

< Back Next > Finish Cancel

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Select a storage pool for migrated (HSM) data. Typically, this pool is a sequential access storage pool. Decide whether users select files for migration from the client node manually or automatically. To migrate files automatically, specify the number of days since the last access. Specifying the number of days triggers the migration process.

Working with existing policy domains

TSM_SERVER2 Policy Domains

Policy domains help you to apply consistent rules for data management to groups of client nodes. Click a policy domain name to work with its properties, client nodes, option sets, client node schedules, and management classes.

Select	Domain Name	Description	Action	Archive Retention	Pending Changes
	STANDARD	Installed default	--- Select Action --- --- Select Action --- Create a Policy Domain... Modify Policy Domain... Delete Policy Domain Manage Pending Changes.. Export Policy Domain... Import Policy Domain... Create a Client Node... Refresh Table	365 days	-

Total: 1 Filter

Use the **Select Action** menu from the Policy Domains page to modify, delete, export, or import an existing policy domain. A wizard guides you through the process that you select.

Creating a server maintenance script

Server Maintenance

Maintenance Script

The table shows the servers you have added to the console, and identifies the servers for which maintenance scripts have been created. Maintenance scripts perform routine server maintenance operations according to a schedule you specify. As a best practice, create a maintenance script for every server.

Select	Server Name	Maintenance Script
<input type="checkbox"/>	TSM_SERVER1	None
Total: 1 Filter		

--- Select Action ---

- Select Action ---
- Create Maintenance Script...
- Create Custom Maintenance Script...
- Modify Maintenance Script...
- Convert to Custom Maintenance Script...
- Remove Maintenance Script...
-
- Refresh Table
-
- Expire Inventory...
- Shred Data...

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The next topic describes server maintenance scripts in the Administration Center. You can create, modify, or remove a maintenance script from the **Server Maintenance** menu. If a script is already available for this server, an indicator is visible in the column to the right of the server name. The indicator identifies the type of script. In this case you can only modify, convert, or remove the existing maintenance script.

Reviewing tasks to include in the script

Server Maintenance

A maintenance script helps ensure that your server runs efficiently, makes optimal use of storage space and enforces your policies.

Welcome

Use this wizard to schedule a basic server maintenance procedure. Basic server maintenance includes the following tasks:

- Back up primary storage pools
- Copy active data from a primary pool to an active-data pool
- Back up the server database
- Identify the copy storage pool and database backup volumes to be moved
- Create a disaster recovery plan file
- Migrate stored data from primary storage pools to secondary storage pools
- Remove expired data from server storage
- Reclaim fragmented tapes by consolidating active data

< Back Next > Finish Cancel

The server maintenance script includes a series of tasks that prepare you for disaster recovery. Use this script to restore the Tivoli Storage Manager server or storage pools. The script also performs migration, expiration, and reclamation as needed.

Determining the type of maintenance plan

Select a Predefined Script

If you plan to use Tivoli Storage Manager's disaster recovery management (DRM) feature, select the third option. Otherwise, select the option that best matches your environment.

ANRW00501
To migrate data, a primary storage pool must be associated with a Next storage pool.

ANRW00531
To copy active data, you must first create an active-data storage pool.

Basic maintenance. Select this option if you do not use copy storage pools or active-data pools.

Basic maintenance plus storage pool backup. Select this option if you have copy storage pools or active-data pools defined but do not use DRM to move tapes offsite.

Basic maintenance plus storage pool backup and DRM. Select this option if you have copy storage pools or active-data pools defined and are licensed to use DRM.

< Back Next > Finish Cancel

Option 1: Basic maintenance

Option 2: Basic maintenance plus storage pool backup

Option 3: Basic maintenance plus storage pool backup and DRM.

Select one of three options for your maintenance plan. Option one is basic maintenance, option two is basic maintenance plus storage pool backup, and option three is basic maintenance plus storage pool backup and DRM.

The setup of required elements must be complete before you can create the maintenance plan. For example, if you do not have a copy pool or active-data pool, you cannot select options two or three. In this example option three is selected.

Selecting the type of database backup

Back Up Server Database

The server's database contains information about all users' data. If you lose the database, you lose the users' data. Protecting the database by regularly backing it up is essential.

→ Back Up Server Database
Back Up Storage Pools
Identify Library Volumes to be Moved
Prepare Recovery Plan
Expire Stored Data
Reclaim Tapes
Schedule Maintenance
Summary

Select the device class to use for the backup
-- Select device class --

Select the type of backup that will be performed. Full plus incremental DB backups are recommended to protect the server and the DB Backup volumes are not moved offsite. DBSnapshot is recommended when using disaster recovery management and the db backup volumes are moved offsite.

Six incremental backups, followed by a full backup (Recommended)
 Incremental backup, then a full backup when the maximum number of incremental backups has been made
 Full backup
 DBSnapshot

< Back Next > Finish Cancel

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Choose a device class to use for the database backup. This device class is the same device class that you indicated when you did the initial setup of the server and ran the **set dbrecovery** command. Also select the type of backup to perform.

Backing up storage pools

Back Up Storage Pools

Protect users' data by backing up your primary storage pools to copy storage pools. Having the data in copy storage pools can allow your system to recover from minor and major failures in a primary storage pool. Including this task will create a more comprehensive maintenance script, but is not required.

Back Up
✓ Server Database
Back Up
→ Storage Pools
Identify Library Volumes to be Moved
Prepare Recovery Plan
Expire Stored Data
Reclaim Tapes
Schedule Maintenance
Summary

--- Select Action --- Filter

Select	Primary Storage Pool	Destination Copy Pool
	None	

Total: 0 Filtered: 0 Selected: 0

< Back Next > Finish Cancel

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Add a relationship to back up the storage pools. If you have an existing script to modify, you can modify or remove the relationship.

Verifying the relationship

Back Up Storage Pools

Protect users' data by backing up your primary storage pools to copy storage pools. Having the data in copy storage pools can allow your system to recover from minor and major failures in a primary storage pool. Including this task will create a more comprehensive maintenance script, but it is not required.

Back Up Server Database
✓ Back Up Storage Pools
→ Identify Library Volumes to be Moved
Prepare Recovery Plan
Expire Stored Data
Reclaim Tapes
Schedule Maintenance
Summary

--- Select Action --- Filter

Select	Primary Storage Pool	Destination Copy Pool
<input type="checkbox"/>	BACKUPPOOL	COPYPOOL_A

Total: 1 Filtered: 1 Selected: 0

< Back Next > Finish Cancel

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After you select a relationship, the selection that you made is displayed. You can add as many relationships as you need so that all of your primary storage pools have a copy pool.

Identifying DR media to move offsite

Identify Library Volumes to be Moved

Specify the options to be used to identify and process the volumes that are changing states. Changing the states of the storage pool and database backup volumes prepares them to be moved offsite as disaster recovery media. Select any advanced options to be used.

Process all mountable volumes
 Process mountable volumes that match your conditions:

Name

Destination state of the volumes:
COURIER

Advanced options

Create a command file
 Specify automated library options

< Back Next > Finish Cancel

Options for the destination state of the volumes include:

- ▶ COURIER
- ▶ VAULT
- ▶ NOTMOUNTABLE

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Identify and process the volumes that are changing states. Changing the states of the storage pool and database backup volumes prepares them for moving offsite with the disaster recovery media. You can change the destination state of the volumes to **courier**, **vault**, or **notmountable**. You can also use two advanced options to create a command file and specify automated library options.

Creating a command file

Create a Commands File

You can create a command file that stores commands. For example, this file might contain the server commands to check in all of the volumes to a library. System authority might be required to write to an external command file.

Command

Specify the fully qualified name of the file that will contain the commands. If you do not specify a file name, the default file name specified in the disaster recovery manager settings is used. If you have not specified a default setting, a file name is generated by the server.

Overwrite any existing contents of the command file

< Back Next > Finish Cancel



You can create a command file that stores commands. For example, you might create a command file to check in scratch volumes to a tape library. Specify a fully qualified name that contains the commands. If you do not specify a fully qualified name, you use the default file name that is specified in the disaster recovery manager settings. If you do not have a default setting, the server generates a file name.

Automated library options

Automated Library Options
Specify whether the volumes should be removed from the library when changing states.

Use the following method to remove volumes from the library:
Bulk

Specify the cartridge access port to use for removing volumes. This only applies to volumes in an ACSLS library

Methods to remove volumes from the library include:

- ▶ Bulk
- ▶ No
- ▶ Yes
- ▶ Untileeful

< Back Next > Finish Cancel

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If you have an automated library, you can specify whether volumes can be removed from the library when changing states. Methods to remove volumes from the library include **bulk**, **no**, **yes**, and **untileeful**. The way a library responds to the option depends on the library. If you have an ACSLS library, you can specify the cartridge access port. Refer to the *Tivoli Storage Manager 6.1 Administrative Reference Guide* for your platform.

Creating a recovery plan file

Recovery Plan File Creation Settings

Specify the settings to use in the creation of the disaster recovery plan file. To make any other changes to the disaster recovery plan file, open the disaster recovery management properties notebook.

- Back Up Server Database
- Back Up Storage Pools
- Identify Library Volumes to be Moved
- Prepare Recovery Plan
- Expire Stored Data
- Reclaim Tapes
- Schedule Maintenance
- Summary

On the Tivoli Storage Manager server's file system

Electronic vault using a server device class

-- Not defined --

< Back Next > Finish Cancel

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Specify the settings to use when creating the disaster recovery plan file. If you set up server-to-server communications, you can store the plan file on another server. Specify the device class that you set up, which points to the other server.

Running expiration

Expire Stored Data	
<input checked="" type="checkbox"/> Back Up Server Database	The expiration process removes backup and archive data from server storage based on your policies. Run expiration regularly to ensure that data is kept only as long as your policies dictate.
<input checked="" type="checkbox"/> Back Up Storage Pools	
<input checked="" type="checkbox"/> Identify Library Volumes to be Moved	By default, the expiration process will run until it completes. To control the time required to complete server maintenance, you can limit the amount of time allowed for the process.
<input checked="" type="checkbox"/> Prepare Recovery Plan	Cancel the process after it has run for the following amount of time. In some cases, expiration will continue for a short time after the process is cancelled.
<input checked="" type="checkbox"/> Expire Stored Data	<input type="text"/> minutes
<input type="checkbox"/> Reclaim Tapes	The number of threads utilized in the expiration process. Maximum is 10.
<input type="checkbox"/> Schedule Maintenance	<input type="text" value="4"/>
<input type="checkbox"/> Summary	

< Back Next > Finish Cancel

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For expiration, specify the number of minutes the process can run and the number of threads the process can use. The maximum number of threads is 10; the default is 4.

Reclaiming tapes

Reclaim Tapes

Tapes eventually get fragmented because users' files expire or are deleted. The reclamation process takes the valid data from fragmented tapes and consolidates the data onto a smaller number of tapes. Tapes are returned to scratch status for reuse by the server. Including this task will create a more comprehensive maintenance script, but it is not required.

- ✓ Back Up Server Database
- ✓ Back Up Storage Pools
- ✓ Identify Library Volumes to be Moved
- ✓ Prepare Recovery Plan
- ✓ Expire Stored Data
- Reclaim Tapes
- Schedule Maintenance
- Summary

Select the storage pools for which to run reclamation. Use Shift + click to select more than one.

DEDUP_POOL
 COPYPOOL_A

By default, tapes will be reclaimed when unused space reaches 50% of capacity. To improve performance, consider increasing this value if your storage pools contain a large number of empty tapes.

Reclaim a tape when unused space on it reaches this percentage of capacity.

% capacity occupied

By default, the reclamation process will run until it completes. To control the amount of time the server spends performing maintenance, you can limit the amount of time allowed for the process. Limiting the amount of time can cause the process to be cancelled before it completes.

Cancel the process after it has run for the following amount of time. In some cases, reclamation processing will continue for a short time after the process is cancelled.

minutes

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As data expires, tapes can become fragmented. Reclamation is the process of moving the remaining data from multiple volumes to a single volume. You can reuse the empty volumes as scratch. Specify the storage pools to be processed. Tapes are reclaimed when the unused space on the volume reaches the value that you set for the **% capacity occupied**. By default this process runs until it completes. To limit the time that the process runs, you can specify that value in minutes.

Scheduling maintenance

Schedule Maintenance

Run the maintenance script regularly. You might want to start by running it daily, and then adjust the frequency according to your system's needs.

When do you want to start this maintenance procedure?

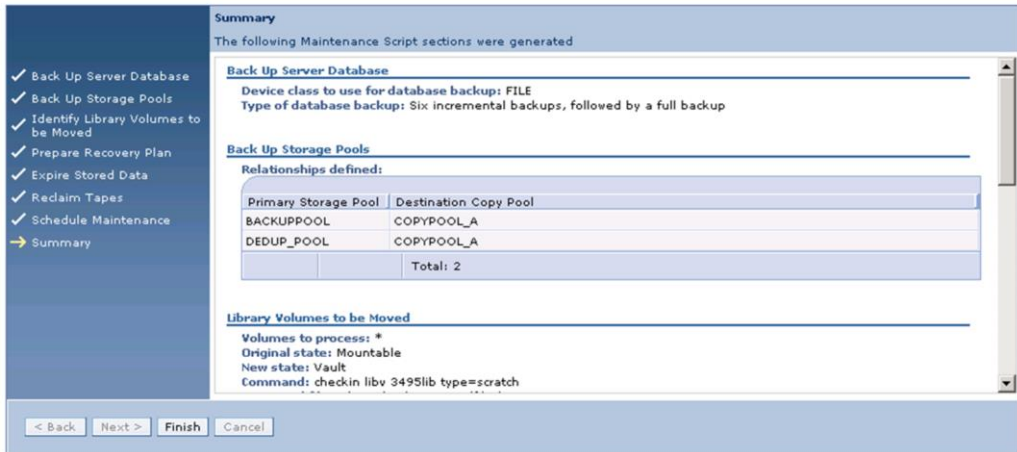
7/2/09 4:08 PM

Monday Tuesday Wednesday Thursday
 Friday Saturday Sunday

< Back Next > Finish Cancel

Scheduling the maintenance script ensures that the script runs on a regular basis. You can set the date and time to start the maintenance, and with enhanced scheduling, you can also choose what day or days of the week it will run.

Reviewing the schedule summary



Summary

The following Maintenance Script sections were generated

Back Up Server Database

Device class to use for database backup: FILE
Type of database backup: Six incremental backups, followed by a full backup

Back Up Storage Pools

Relationships defined:

Primary Storage Pool	Destination Copy Pool
BACKUPPOOL	COPYPOOL_A
DEDUP_POOL	COPYPOOL_A
Total: 2	

Library Volumes to be Moved

Volumes to process: *
Original state: Mountable
New state: Vault
Command: checkin libv 3495lib type=scratch

< Back Next > **Finish** Cancel

Review the summary page, check all of the settings, and click **Finish**.

Converting to a custom script

Maintenance Script

The table shows the servers you have added to the console, and identifies the servers for which maintenance scripts have been created. Maintenance scripts perform routine server maintenance operations according to a schedule you specify. As a best practice, create a maintenance script for every server.

ANRW0054I
Click OK to convert your predefined maintenance script or click Cancel to cancel the action. If you click OK, your predefined maintenance script converts into a custom maintenance script and opens in the maintenance script editor. You cannot convert the custom maintenance script back into a predefined maintenance script.

OK Cancel

Select	Server Name	Maintenance Script
<input checked="" type="checkbox"/>	TSM_SERVER1	Predefined

Total: 1 Filtered: 1

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If you have an existing script, you cannot create a new custom script. However, you can convert the existing script to a custom script. When you choose that option, the script editor is displayed. Make any changes you deem necessary. If you make changes, you cannot convert the script back into a predefined maintenance script.

Customizing a script

Custom Maintenance Script

Select standard maintenance actions or enter other administrative commands.

The screenshot shows a window titled "Custom Maintenance Script" with a menu of actions on the left and a text editor on the right. The menu includes options like "Back Up Server Database", "Back Up Storage Pool", "Copy Active Data to Active-data Pool", "Migrate Stored Data", "Reclaim Storage Pool", "Create Recovery Plan File", "Delete Volume History", "Delete Expired Data", "Move Disaster Recovery Media", and "Run Script Commands Serially". The text editor contains the following script:

```
-- Select an Action --
-- Select an Action --
Back Up Server Database
Back Up Storage Pool
Copy Active Data to Active-data Pool
Migrate Stored Data
Reclaim Storage Pool
Create Recovery Plan File
Delete Volume History
Delete Expired Data
Move Disaster Recovery Media
Run Script Commands Serially
6 if(rc_ok) goto ba_full
7 select * from db where num_backup_incr=6
8 if(rc_ok) goto ba_full
9 if(rc_notfound) goto ba_incr
10 ba_full: BACKUP DB DEVCLASS=FILE WAIT=YES TYPE=FULL
11 goto done
12 ba_incr: BACKUP DB DEVCLASS=FILE WAIT=YES TYPE=INCREMENTAL
13 done:
14 MOVE DRMEDIA * WHERESTATE=MOUNTABLE TOSTATE=VAULT CMD="checkin libv 3495lib type=scratch" CMDFI
Schedule
When do you want to start this maintenance procedure?
Start date: 7/2/09 Start time: 4:08 PM
 Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Sunday
OK Cancel
```

The custom script editor opens a text file. You can create new entries, edit existing entries, and save the resulting script. A menu is available for adding specific actions to the script. You can also select to **run script commands in parallel** or **insert comment**. Use the up and down arrows to move an action up or down in the sequence. Scroll to the bottom of the page to fill in the schedule information for your custom script.

Summary

You should now be able to:

- Create policies
- Manage policies
- Create server maintenance scripts
- Edit server maintenance scripts
- Customize server maintenance scripts

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