adic

Command Reference

READER COMMENT FORM

ADIC includes this Form in an effort to provide the best possible documentation to our customers. Please take a few moments to mail or FAX your response to:

> ADIC
> Software Documentation
> 10949 East Peakview Ave.
> Englewood, CO 80111
> FAX: 303-792-2465
> E-mail: techdocs@adic.com

Question	Circle One	
Information was complete.	Agree	Disagree
Information was easy to find.	Agree	Disagree
Information was easy to follow.	Agree	Disagree

Is there anything you especially *like* or *dislike* about the organization, presentation, or writing in this manual?_____

_____

_____

_____

_____

Book Title	Document Number
Customer Name	Telephone
E-mail Address	
Company Name	
Address	
City, State, Zip	

NOTES

Contents

Preface

Introduction 1

Command Reference 2

Preface

NOTES

Purpose of This Book

This book alphabetically lists and describes the VolServ commands.

Who Should Read This Book

This book is written for system administrators who uses the command line to operate VolServ.

It assumes the administrator has a strong familiarity with:

- UNIX operating systems.

- Applications running in their site environment.

How This Book is Organized

This book contains the following chapters:

Chapter 1: Introduction — Describes environment variables and the command line structure.

Chapter 2: Command Reference — Alphabetical list of VolServ commands.

Conventions

The conventions used throughout the VolServ technical books are listed below:

Convention	Example

Screen text, file names, program names, and commands are in `Courier` font.	```Request to add a new volume:```
	```Volume group will be "20"```
	```Volume position will be "A123".```

The root prompt is shown as a number symbol.	`#` **`su root`**
What you should type in is shown in `Courier` **bold** font.	**`vsarchiveqry`**
Site-specific variables are in a *Times italics* font.	**tar -xvf** *tapedevicename*
A backward slash (\ ) denotes the input is continued onto the next line; the printed page is just not wide enough to accommodate the line.	**# `remsh`** *nodename* **`-n dd if=/dev \`** */tapedevicename/***`bs=20b	tar xvfb \`** **`- 20`** (You should type the entire command without the backward slash.)
Pressing <Return> after each command is assumed.	
A menu name with an arrow refers to a sequence of menus.	Config-->MediaType-->Redefine

Books

The books described below are part of the technical documentation set, and are shipped on CD along with the VolServ software:

Overview
Provides an overview of VolServ. Contains a glossary.

Installing VolServ
Describes server requirements, installation instructions, troubleshooting procedures, and configuration parameters.

Using the VolServ GUI
Describes how to perform system administrative tasks using the graphical user interface.

API Guide
Provides a list of API functions.

Administrative Tasks
Describes how to perform system administrative tasks using VolServ commands.

Command Reference
Contains a list of VolServ commands

Error Messages
Provides corrective action for system log errors.

Quick Reference Card
Summarizes commands.

Online Books

The documentation CD contains VolServ book files and Adobe® Acrobat® Reader. The Reader allows you to view and navigate the online documentation files yet preserves the page design and graphics from the printed books.

Related Publications

The publications described in the table below are created and distributed on an as-needed basis.

Related Publications	Description
"Release Notes"	For each version of VolServ, the "Release Notes" contain: • Summary of enhancements. • Describes: 　- Fixed problems. 　- Known problems. 　- Installation and configuration issues. • Lists: 　- Operating system patches. 　- System requirements.
"Product Alerts"	Informs customers of technical problems and solutions.
"Product Bulletins"	Conveys technical information—not problems—to customers.

Contact Publications Department

To make corrections or to comment on VolServ publications, please contact Software Technical Publications at our e-mail address: techdocs@adic.com.

Secured Web Site

To receive access to the secured site on our home page containing technical product information (Release Notes, Product Alerts, Product Bulletins, FAQs), visit http://partners.adic.com/ and follow the password request procedure. In return, ADIC will send you instructions and a password.

1

Introduction

Introduction

Roadmap

Topic	Refer To Chapter
Introduction.	1
Alphabetical list of commands.	2

Options Common to all Commands

Seven options are available on every command that is supported from the command line. These parameters are:

Parameter	Description
-I	Indicates command line options are to be read from stdin. The **-I** option provides the capability for the client to enter command options on the command line, in a text file, or a combination of both. When the **-I** option is specified, command options are first read from the command line. VolServ then reads any options from stdin. Example: **cat** optionfile > **vsmount -I -u -p** drvpool2 instructs VolServ to first read the **-u** and **-p** options entered on the command line and then to read the options from stdin (the contents of optionfile). If optionfile contains "**-c** class1", the command, as processed by VolServ, will look like "**vsmount -u -p** drvpool2 **-c** class1"
-h	Requests help for the entered command. The Help option returns the usage for the entered command, a copyright notice, and the version number of the CLI software. The Help option takes precedence over any other option entered on a command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is issued.

Parameter	Description
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Optional Parameters

The following parameters are optional:

- -I (read from stdin).

- -h (help).

Both options needs to be specified only if the client is requesting the functionality provided by the option.

Default Values

The remaining parameters have default values:

- -H *(hostname)*.

- -P *(priority)*.

- -R *(retries)*.

- -T *(timeout)*.

- -V *(prognum)*.

If the client does not specify one or more of these options on a command, VolServ uses the appropriate default values specified in the description of the previous options.

A client can specify values that override the default values previously specified. To specify an override value, the client must set an environment variable for each common option that is to have an override default.

The environment variables and their associated common options are:

Parameter	Environment Variable*
-H *hostname*	VSCLI_HOST
-P *priority*	VSCLI_PRIORITY
-R *retries*	VSCLI_RETRIES
-T *timeout*	VSCLI_TIMEOUT
-V *prognum*	VSCLI_PROGNUM
The client runs the UNIX setenv command to set an environment variable.	

Example   The following example sets the default for the **-H** (*hostname*) option to eiffel and overrides the VolServ default. The default *hostname* is the host computer where the command is issued.

```
setenv VSCLI_HOST eiffel
```

Or,

Introduction

```
prompt VSCLI_HOST=eiffel
prompt export VSCLI_HOST (bourne shell)
```

When a client specifies one or more of the -H *(hostname)*, the -P *(priority)*, the **-**R *(retries)*, the **-**T *(timeout)*, and the -V *(prognum)* options on the command line, the values entered on the command line supercedes the VolServ default values and any user-specified default values for the appropriate options.

Environment Variables

The following environment variables provide the capability for the client to specify default values for common options:

- VSCLI_HOST

- VSCLI_PRIORITY

- VSCLI_RETRIES

- VSCLI_TIMEOUT

- VSCLI_PROGNUM

The environment variable belowcontrols the number of lines per page for report output:

- VSRPT_PAGE_LENGTH
  The default page length is 66 lines.

If the default page length is not appropriate, a client can execute the appropriate environment variable command to set the VSRPT_PAGE_LENGTH environment variable to the desired page length. If the VSRPT_PAGE_LENGTH environment variable is set to 0, VolServ generates reports with no page breaks.

VolServ uses the user-specified page length when generating the following reports.

- Archive Query

- Connect Query

- Drive Query

- Intransit Query

- MediaClass Query

- Drive Pool Query

- Request Query

- Media Type Query

- Media Query

Command-specific Options

A matrix that shows which commands support which command-specific options is included in below

A discussion of how each of these options direct or modify the processing of individual commands is included with the command descriptions in this discussion.

Command-specific options are described in the following outline.

Parameter	Description	Example
-a	Specifies that all items meet specified criteria that are to be processed. Used primarily on query commands.	**vsdriveqry -a** Instructs VolServ to return information on all drives known to the VolServ system.
-a *archivename*	Specifies the name of the archive to be referenced by the command. Valid archive names may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.	**vsimport** … **-a** archive1 … Instructs VolServ to import the specified medium/media into the `archive1` archive.
archivename	Specifies the name of the archive to be referenced by the command. Valid archive names may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.	**vsarchivevary** archive1 … Specifies that VolServ is to vary the state of the `archive1` archive.

Parameter	Description	Example
-b	Identifies the batch assigned to the medium/media being imported.	**vsimport** … **-b** batch1 … Identifies batch1 as the batch assigned to the medium/media being imported. The batch assigned to a medium is maintained by the VolServ system.
-c	Indicates that all MediaClass names associated with the specified archive are to be reported.	**vsarchiveqry** … **-c** … Instructs VolServ to return all MediaClass names associated with the specified archive.
-c *currentmediaclass*	Identifies the current MediaClass name of the medium/media to be reclassified.	**vsreclassify** … **-c** MediaClassA … Indicates to VolServ that the medium/media specified on the command are currently associated with MediaClassA.
-c *mediaclass*	Identifies the target MediaClass name of the medium/media specified on the command.	**vsimport** … **-c** MediaClassB … Instructs VolServ to associate the imported medium/media with MediaClassB.
-d	Indicates that all drives associated with the specified archive are to be reported.	**vsarchiveqry** … **-d** … Instructs VolServ to return all drive IDs associated with the specified archive.
-d *driveID*	Identifies the drive on which the medium to be dismounted is currently mounted.	**vsdismount** … **-d** 1 … Indicates to VolServ that the medium specified to be dismounted is currently mounted on drive 1.

Parameter	Description	Example
driveID…	Specifies a list of one or more drives from which the drives to satisfy the command are to be selected. The number of drives that can be specified is restricted by the CLI software. Currently, the maximum allowed number is 64.	**vsunlock** 1 3 … Instructs VolServ to unlock drive 1 and drive 3.
drivepool	Specifies the name of the drive pool being queried.	**vspoolqry drivepool3** Instructs VolServ to return information on `drive pool3`.
enterpriseID	Specifies the identifier of the enterprise connection being queried. An enterprise ID must be numeric.	**vsconnectqry** 4 Instructs VolServ to return information on the 4 connection.
-f	Identifies the manufacturer of the medium/media being imported.	**vsimport** … **-f** manufac1 … Identifies manufac1 as the manufacturer of the medium/media being imported. The manufacturer of a medium is maintained by the VolServ system.
-i	Indicates, if an inter-archive move is required, that the command is to be processed only if both the source and destination archives are attended.	**vsmount** … **-i** … Instructs VolServ to perform the mount if an inter-archive move is required only if both the source and destination archives are attended.

Parameter	Description	Example
-l *lockID*	Specifies the lock ID assigned to the drive specified in the command.	**vsdismount** … **-l** 9 … Indicates that the drive specified in the command is reserved for exclusive use and has been assigned the lock ID 9.
-m	Indicates that all media associated with the specified archive are to be reported.	**vsarchiveqry** … **-m** … Instructs VolServ to return all media IDs associated with the specified archive.
mediaclass	Specifies the name of the MediaClass group being queried.	**vsmedclassqry** medclass6… Instructs VolServ to return information on medclass6.
mediaID	Specifies the medium to be processed by the command. A valid medium identifier may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.	**vsqrymount** medium7 Requests a list of the drives available to satisfy a mount request for medium7.
mediaID…	Specifies a list of one or more media to be processed by the command. A valid medium identifier may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted. The number of media that can be specified is restricted by the CLI software. Currently, the maximum allowed number is 64.	**vsexport** medium8 medium 9 medium11 medium3 … Instructs VolServ to export medium8, medium9, medium11, and medium3.

Parameter	Description	Example
mediatype…	Specifies a list of one or more mediatypes to be processed by the command. Valid MediaType names can contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted. The number of media types that can be specified is restricted by the CLI software. Currently, the maximum allowed number is 32.	**vsmedtypeqry** `medtypeZ` Instructs VolServ to return information on `medtypeZ`.
-n *newmediaclass*	Identifies the target MediaClass group of the medium/media specified on the command.	`MedClassX` … Instructs VolServ to associate the specified medium/media with `MedClassX`.
-p *drivepool*	Specifies the name of a drive pool from which a drive can be selected to satisfy the command. Valid drive pool names may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.	**vsmount** … **-p** `drivepool1` … Instructs VolServ to mount the specified medium/media on drives selected from drive pool `drivepool1`.
-q *quantity*	Specifies the number of drives to be locked.	**vslock** … **-q** 3 … Instructs VolServ to lock three drives.

Introduction

Parameter	Description	Example
requestID	Specifies VolServ-assigned ID of the request being queried. A valid request ID must be specified in either the `ydddnnnnn` format or the `yy:ddd:nnnnn` format where `y` and `yy` represent the last one/two digits of the year, `ddd` represents the Julian day, and `nnnnn` is a one-up number.	**vsrequestqry** 93:131:14796… Requests status on request `93:131:14796` from VolServ.
-s *compstate*	Specifies the target state of the item being varied.	**vsdrivevary** … **-s** `on-line` … Instructs VolServ to vary the specified drive to the `on-line` state.
-t	Indicates that all media types associated with the specified archive are to be reported.	**vsarchiveqry** … **-t** … Instructs VolServ to return all media types associated with the specified archive.
-t *comment*	Provides a comment to be associated with each media specified on the command. VolServ maintains the comment, if any, associated with each medium. This comment is provided on the Eject list (a GUI display) from the archive console associated with the archive containing the media.	**vscheckout** … **-t** "`Sending tocustomer xyz`" Provides the comment "`Sending to customer xyz`" to be associated with each medium specified in the command.
-u	Indicates the command is to be processed if an inter-archive move is required whether the source and destination archives are attended or unattended.	**vsmount** … **-u** … Instructs VolServ to perform the mount if an inter-archive move is required whether the losing and gaining archives are attended or unattended.

Parameter	Description	Example
-v	Indicates that verbose output is requested. • If **-v** option is specified on a command that specifies a list of items, status is returned on every item specified in the list, regardless of the success or failure of the command processing on each item. • If **-v** option is specified on a query command, all applicable information is returned to the client. • If **-v** is not specified on a command that specifies a list of items, status is returned on only those items that were not successfully processed. • If **-v** option is not specified on a query command, only the specifically requested information is returned to the client.	**vscleareject** … **-v** … Instructs VolServ to return status on every medium specified in the command, regardless of whether the medium is successfully or unsuccessfully processed. If the **-v** option is not specified on the **vscleareject** command, status is returned on only those media that are not successfully removed from the Eject list. **vsmedclassqry** … **-v** Instructs VolServ to return detailed information for all media associated with each media class reported. If the **-v** option was not specified on the **vsmedclassqry** command, only the IDs of the media associated with the reported MediaClass group are returned to the client.
-w	Indicates VolServ waits until the command processing completes before returning status to the client. If the move requires an inter-archive move, VolServ waits until the move completes, whether the source and destination archives are attended or unattended. When the **-w** option is not specified, final status is returned as soon as move processing begins.	**vsmove** … **-w** … Instructs VolServ to return status only after move processing completes.

Introduction

Parameter	Description	Example
-x	Specifies a list of one or more drives to exclude from a specified drive pool when selecting drives to satisfy a command. The **-x** option is valid only when the **-p** drivepool option is specified.	**vsmount** …**-p** : drvpoolmed **-x** 1 2 … Instructs VolServ to exclude drives 1 and 2 from consideration when selecting drives from the drvpoolmed drive pool to satisfy the mount request.

Tables

The names of the commands, as entered from the command line, are listed alphabetically in the first column of the table. The command-specific options are listed alphabetically across the top of the table.

- When a command does not support an option, the cell that represents the intersection of the command and the command-specific option is shaded. For example, the vsdismount command does not support the **-a** *archivename* option.

- When a command does support an option, the cell that represents the intersection of the command and the option contains an X. For example, the vsdismount command does support the -d *driveID*, the -l *lockID* option, and the *mediaID* option.

	-a (all)	-a archive name	archivename	-b batchID	-c (MediaClass)	-c current mediaclass
vsamlconfig			X			
vsarchiveqry	X		X		X	
vsarchivevary			X			
vsaudit			X			
vscheckin		X				
vscheckout						
vsclearreject						
vsconnectqry						
vsdismount						
vsdriveqry	X					
vsdrivevary						
vsexport						
vsimport		X		X		
vsintransitqry						
vslock						
vsmedclassqry	X					
vsmedqry	X					
vsmedtypeqry	X					
vsmount						
vsmove		X				
vsping						
vspoolqry	X					
vsqrymount						
vsreclassify						X
vsrequestqry						
vsunlock						

Introduction

	-f manufacturer	-i (mount, attended)	-l lockID	-m (medialDs)	mediaclass
vsamlconfig					
vsarchiveqry				X	
vsarchivevary					
vsaudit					
vscheckin					
vscheckout					
vsclearreject					
vsconnectqry					
vsdismount			X		
vsdriveqry					
vsdrivevary					
vsexport					
vsimport	X				
vsintransitqry					
vslock					
vsmedclassqry				X	X
vsmedqry					
vsmedtypeqry					
vsmount		X	X		
vsmove		X			
vsping					
vspoolqry					
vsqrymount					
vsreclassify					
vsrequestqry					
vsunlock			X		

	medialD	medialD…	mediatype	-n new mediaclass	-p drivepool	-q quantity
vsamlconfig						
vsarchiveqry						
vsarchivevary						
vsaudit						
vscheckin		X				
vscheckout		X				
vsclearreject		X				
vsconnectqry						
vsdismount	X					
vsdriveqry						
vsdrivevary					X	
vsexport		X				
vsimport		X				
vsintransitqry						
vslock					X	X
vsmedclassqry						
vsmedqry		X				
vsmedtypeqry			X			
vsmount		X		X	X	
vsmove		X				
vsping						
vspoolqry						
vsqrymount	X					
vsreclassify		X		X		
vsrequestqry						
vsunlock						

Introduction

	request ID	-t (Media Types)	-t comment	-s compstate	-u (mount, unattended)	-u usage time
vsamlconfig						
vsarchiveqry		X				
vsarchivevary				X		
vsaudit						
vscheckin						
vscheckout			X			
vscleareject						
vsconnectqry						
vsdismount						X
vsdriveqry						
vsdrivevary				X		
vsexport			X			
vsimport						
vsintransitqry						
vsmedclassqry						
vslock						
vsmedqry						
vsmedtypeqry						
vsmount					X	
vsmove						
vsping						
vspoolqry						
vsqrymount						
vsreclassify						
vsrequestqry	X					
vsunlock						

Introduction

	-v (verbose)	-w (wait)	-x driveID…
vsamlconfig			
vsarchiveqry			
vsarchivevary			
vsaudit			
vscheckin			
vscheckout			
vsclearject	X		
vsconnectqry			
vsdismount			
vsdriveqry			
vsdrivevary	X		
vsexport	X		
vsimport	X		
vsintransitqry	X		
vsmedclassqry			
vslock	X		X
vsmedqry			
vsmedtypeqry			
vsmount			X
vsmove	X	X	
vsping			
vspoolqry	X		
vsqrymount			
vsreclassify	X		
vsrequestqry			
vsunlock	X		

CLI Directory Structure

All files necessary for command line interface to VolServ are contained in the volserv/vscli directory by default. However, the installer may choose a different directory during execution of the installation script. The vscli subdirectory is always appended to the directory specified by the installer. Refer to *Installing VolServ* for more information.

The system administrator or clients may use the commands to interface to VolServ. The commands are interfaced to VolServ via the API. For more information, refer to the *Command Reference and API Guide.*

The default command directory structure is shown in the following figure and described in the table below.

```
                    /volserv/vscli
                          |
         +----------------+----------------+
         |                |                |
       /bin             /man             /util
```
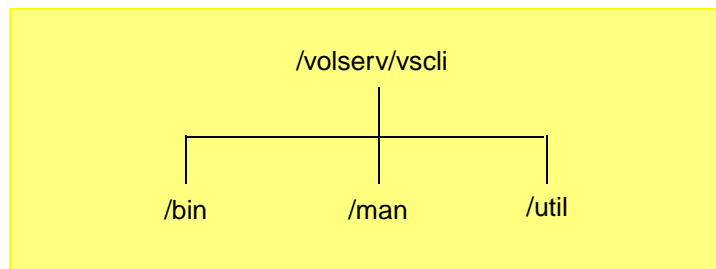
Directory	Contents
bin	Contains the CLI executables that are invoked from the command line by the system administrator and the system operator.
man	Contains man pages for each executable in the /bin directory.
util	Contains several utilities and associated .README files.

NOTES

Introduction

NOTES

2

Command Reference

Commands

Roadmap

Topic	Refer To Chapter
Introduction.	1
Alphabetical list of commands.	2

volserv

Starts or ends VolServ and activates the system log display.

Parameters

```
volserv -s
volserv -t | -q
volserv [-y]
```

Parameters

Parameters	Description
-s	Starts VolServ in the single user mode. Only commands run with `vswin` are run. Client interface commands are refused.
-t	Terminates the VolServ operations. VolServ terminates gracefully. Outstanding commands are cancelled and any commands awaiting status are allowed to complete (within a certain time period). The termination of VolServ prompts the user to continue the software termination. • If the **-y** option is specified, the prompt is automatically answered as "yes" and the software is terminated automatically. **NOTE**: If a VolServ request is submitted to the system duringVolServ system termination, VolServ issues a message which states that the system is unavailable.
-q	Quits the VolServ operations. The user will be prompted to verify if the software should really be shutdown if the **-y** option is not specified..
-y	Automatically answers the command prompt with a "yes."

Commands

Return Codes
- 0 - Command completed successfully - VolServ started or completed normally.

- 1 - Command did not complete successfully - VolServ did not start or complete as expected.

Examples

Step 1. Successful VolServ system start-up. Requests VolServ to start.

```
volserv
```

Step 2. Output returned:

```
VolServ Version x.0.0 for SunOS (x.x)
-- Copyright (c) 1992-1999 ADIC.

Initiating VolServ start up

Setup environment variables ok
Starting up process server... Done
Process server started ok
Starting up VolServ server processes
... Done
Server processes started ok
Starting up VolServ system processes
... Done
System processes started ok
VolServ start up completed
```

Notes
The environment variables VS_DIR and II_SYSTEM must be set before executing VolServ.

II_SYSTEM must be in the path.

See Also
- vswin (l)

vsamlconfig

Starts the ADIC-GRAU AML (Automated Media Library) configuration script.

The following information needs to be known before running the command:

- Archive name.

- Attended Mode or Unattended Mode.

- Console location.

- AMU host name.

- AMU port number.

Parameters

`vsamlconfig`

Example

Configure an AML.

Step 1. **vsamlconfig**

Step 2. `AML CONFIG MENU`

Step 3. `[C]onfigure a New Archive`

Step 4. `[R]econfigure a existing Archive`

Step 5. `[D]elete an existing Archive`

Step 6. `[Q]uit`

Step 7. Enter option (C/R/D/Q/) :*Option*

Step 8. `Enter Archive Name:` *ArchiveName*

Step 9. Is *ArchiveName* correct (Y/N [Y]):

Commands

Step 10.   Enter Mode: *ArchiveMode*

Step 11.   Is *ArchiveMode* correct (Y/N [Y]):

Step 12.   Enter Console Location (termname:0): *Terminal*

Step 13.   Is *Terminal* correct (Y/N [Y]):

Step 14.   Enter Mode ([A]ttended,[U]nattended: *ArchiveMode*

Step 15.   Is *ArchiveMode* correct (Y/N [Y]):

Step 16.   Enter AMU Host Name: *HostName*

Step 17.   Is *HostName* correct (Y/N [Y]):

Step 18.   Enter AMU Port Number : *PortNum*

Step 19.   Is *PortNum* correct (Y/N [Y]):

The Archive Configuration completed successfully.
Cycle VolServ to bring up the library

See Also   None

vsarchiveqry

Queries for information about a specified library.

Parameters

```
vsarchiveqry archivename
vsarchiveqry -a
[ -cdIhmtv ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameters	Description
archivename	Identifies the library to be queried. • Valid library names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-a	Specifies that all libraries are to be queried.
-c	Indicates that detailed information on all MediaClass groups associated with the specified libraries are to be reported.
-d	Indicates that all drives associated with the specified libraries are to be reported.
-m	Indicates that all media associated with the specified libraries are to be reported.
-t	Indicates that detailed information on all media types associated with the specified libraries are to be reported.

Commands

Parameters	Description
-v	Indicates that all drives, all MediaClass groups, all media, and all media types associated with the specified libraries are to be reported.
	Specifying the **-v** option is equivalent to specifying the **-d**, the **-c**, the **-m**, and the **-t** options.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed.
	An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	The number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes   •   0 - The `vsarchiveqry` command is successfully
                         processed.

                     •   -1 - An error is detected by either the CLI software or the
                         API software.

                     •   >0 - An error is detected by VolServ. The returned exit code
                         corresponds to the error code given by VolServ.

Examples   **Step 1.**   Successful library query. Requests VolServ to return
                          the MediaClass groups and the media types
                          associated with the `shelf1` library.

```
vsarchiveqry shelf1 -ct
```

                 Step 2.   Output returned:

```
--------------------------------------------------
Archive Query Report                    May 24
12:43:18 1993                           1
--------------------------------------------------

Archive:                                shelf1
--------------------------------------------------
            Archive Type:           DataShelf
            Current State:          online
            Archive Mode:           Attended
            Console Display Location:columbia:0
            Fill Mode:              None
            Configure State:        Not Being
Configured


MediaClass:                             MC-D2M
            MediaType:              D2M
            Class Capacity %:       50%
            Class Capacity:         40
            Current Fill Level:     2
```

Commands

```
            Action:                 None

MediaType:                          D2M
            Archive Capacity:       40
            Current Fill Level:     2
            Assigned Locations:     2
            Auto Checkin:           off
            Auto Import:            off
            Action:                 None
```

Step 1.   Successful library query. Requests VolServ to return
the drives, the media, the MediaClass groups, and
the media types associated with the `stage1` library.

```
vsarchiveqry stage1 -v
```

Step 2.   Output returned:

```
------------------------------------------------
Archive Query Report              May 24
12:59:38 1993                     1
------------------------------------------------

Archive:                          stage1
------------------------------------------------
            Archive Type:         Stage
            Current State:        online
            Archive Mode:         Attended
            Console Display Location:columbia:0
            Fill Mode:            None
            Configure State:      Not Being
Configured
```

```
                 Drive ID(s):               12

                 Media ID(s):               med001med002
med003
                                            med004

MediaClass:                                 MC-3480
                 MediaType:                 3480
                 Class Capacity %:          50%
                 Class Capacity:            100
                 Current Fill Level:        4
                 Action:                    None

MediaType:                                  3480
                 Archive Capacity:          100
                 Current Fill Level:        4
                 Assigned Locations:        4
                 Auto Checkin:              off
                 Auto Import:               off
                 Action:                    None
```

Step 1. Unsuccessful library query. Requests VolServ to
return the drives associated with the
BadArchiveName library.

```
vsarchiveqry BadArchiveName -d
```

Step 2. Output returned:

```
Archive query was unsuccessful
Error VOL008: item not found
```

Notes   The vsarchiveqry command does not trigger unsolicited
status messages from VolServ.

A pending or executing `vsarchiveqry` request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request is also aborted by sending the SIGINT signal (control-c).

See Also

• vsarchivevary

vsarchivevary

Varies the state of a library.

The name of the library and the target state (online, offline, or diagnostic) must be specified. The return code presented to the client indicates the success or failure of the command.

Parameters

```
vsarchivevary -s state archivename
```

```
[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameters	Description
-s *state*	Specifies the target state of the specified drives. Valid drive states are • online (on) • offline (of) • diagnostic (d)
archivename	Identifies the library to be varied. • Valid library names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.

Commands

Parameters	Description
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	The number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsarchivevary command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful archive vary. Requests VolServ to vary the shelf1 archive to the diagnostic state.

```
vsarchivevary shelf1 -s diagnostic
```

Step 2. Output returned:

```
Vary of archive [shelf1] to state [diagnostic]
was successful
```

Step 1. Unsuccessful archive vary. Requests VolServ to vary the BadArchiveName archive to the on-line state.

```
vsarchivevary BadArchiveName -s
online
```

Step 2. Output returned:

```
Vary of archive [BadArchiveName] to state
[on-line] was unsuccessful

Error VOL013: invalid archive
```

Notes

VolServ rejects all incoming requests that could physically command an offline or diagnostic library (for example: Mount, Dismount, and Move).

Commands

VolServ processes commands that interact strictly with the database (for example: Query Mount, Create Drive Pool, and Create Archive Media Class), regardless of the state of the associated archive.

All components associated with an offline or diagnostic library, such as media, drives, and physical hardware, are unavailable.

The Archive Vary command does not trigger unsolicited status messages from VolServ.

A pending `vsarchivevary` request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also
- vsarchiveqry

- vsdrivevary

vsaudit

Performs library inventory verification.

- If the specified library is robotically controlled, the robot scans each physical bin location and verifies that the database is consistent with the actual location of media. Any noted inconsistencies are returned to the client, logged in a system log file, and VolServ initiates corrective action, based on the circumstances of the discrepancy.

- However, if the specified library is a manually controlled, the library operator is directed to generate the audit report. The operator then directs the report to be printed or to verify the information online. Either way, the operator performs the inventory and corrects any reported discrepancies. Discrepancies are resolved by issuing appropriate media management commands (for example, Eject) to relocate media to the appropriate locations. Audits of manual libraries do not return a discrepancy list.

Although audit requests from the command line are for full library audits only, subset audits can be performed from the GUI.

Commands

Tip
Full archive audits are lengthy and should be requested with discretion.

Parameters

```
vsaudit archivename
[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameters	Description
archivename	Specifies the name of the archive to audit. • Valid archive names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	The number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.

Parameters	Description
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsaudit command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful audit request. Requests VolServ to audit the shelf1 archive.

```
vsaudit shelf1
```

Step 2. Output returned:

```
-------------------------------------------------
Audit Report                              May 24
12:43:18 1993                             1
-------------------------------------------------
Archive:                                  shelf1
-------------------------------------------------
no discrepancies found
```

Step 1. Unsuccessful audit request. Requests VolServ to audit the BadArchiveName archive.

```
vsaudit BadArchiveName
```

Commands

Step 2.   Output returned:

```
Audit of archive [BadArchiveName] was
unsuccessful

Error VOL013: invalid archive
```

Notes

With the exceptions of the manual libraries, a pending or executing vsaudit request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

Note

A pending or executing vsaudit request is reprioritized using the VolServ reprioritize command. The reprioritize command is not available from the command line, but is available to the client through either the API or the RPC interface.

A pending or executing Storage Technology ACS product family library audit requires a Cassette Autoloader Port (CAP). If the CAP is busy, the vsaudit command can be queued. This results in intermediate status that indicates the vsaudit command is waiting for a busy CAP to be freed.

In an ADIC/GRAU DataTower or Storage Technology ACS product family database, VolServ does not actually track media location to the bin level, but only down to the Manipulator Unit (MU) level. However, the logic and VolServ responses are similar to the bin tracking performed in the DataLibrary software with no internal database.

The vsaudit command does not trigger unsolicited status messages from VolServ.

The total length of time that VolServ waits for a command status, in synchronous mode, from VolServ is (`VSID_RETRY_LIMIT` plus 1) multiplied by `VSID_TIMEOUT_VALUE`. Because of the time required for robotic audits, the timeout value or retries may need to be increased from the default values.

See Also   None

Commands

vscheckin Logically checks media into the VolServ system that has been previously checked *out* of the VolServ system.

Checkin is a logical operation. After media is logically checked in to the VolServ system, the media is physically entered into a library before becoming available for client use (mounting,…). Media is physically entered into the VolServ system via the "Enter" functionality available from the appropriate library's console display. The Enter functionality is not available from the command line.

Parameters
```
vscheckin mediaid…

[ -a archivename ]
[ -Ihv ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
mediaid...	Specifies a list of one through 64 media to be checked in.
	• A valid media identifier may contain up to 16 alphanumeric characters, including spaces.
	• Leading and trailing spaces are not permitted.

Parameter	Descrition
-a *archivename*	Specifies the name of the destination library for the media to be entered into after they are checked in. • Valid library names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command. **NOTE**: If -v is not specified, status is returned on only those media that were not successfully checked out.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.

Commands

Parameter	Description
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vscheckin command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful Checkin request with verbose option specified. Requests VolServ to check MED012, MED014, and MED023 into the library from which they were checked out and to return status on each media.

```
vscheckin MED012 MED014 MED023 -v
```

Step 2. Output returned:

```
Check in 3 of 3 media was successful

        Media [MED012]          no error
        Media [MED014]          no error
        Media [MED023]          no error
```

Step 1. Successful Checkin request with verbose option not specified. Requests VolServ to check MED013 into the shelf2 library and to return status on media only if processing for that media failed.

```
vscheckin MED013 -a shelf2
```

Step 2. Output returned:

```
Check in 1 of 1 media was successful
```

Step 1. Errors with verbose option specified. Requests VolServ to check MED011, MED014, and MED021 into the library from which they were checked out and to return status on every specified media.

```
vscheckin MED011 MED014 MED021 -v
```

Step 2. Output returned:

```
Check in 1 of 3 media was successful
Error VOL024: error in the list
        Media [MED011]      invalid action
                             or location state
                          for operation
        Media [MED014]    no error
        Media [MED021]     item not found
```

Commands

Step 1. Errors with verbose option not specified. Requests VolServ to check `MED001, MED002,` and `MED093` into the `stage1` library and to return status on media only if processing for that media failed:

```
vscheckin MED001 MED002 MED093 -a
stage1
```

Step 2. Output returned:

```
Check in 1 of 3 media was successful
Error VOL024: error in the list
   Media [MED001]   archive not associated with
                    media class
Media [MED093]     item not found
```

Notes   Media checked out of one library can be checked in to another library, as long as the receiving library is configured to support the media's MediaClass group and the receiving library is not at capacity for the media's media type.

Media checked out from more than one library can be checked in as a single group into a single new library (assuming necessary library media class associations exist).

Media that are checked out from more than one library and are checked in as a single group without a target library specified on the vschechin command are returned to their respective check-out libraries.

Failure of the vscheckin request for one or more media in a list does not fail the request for all media in the list.

The vscheckin command triggers unsolicited status messages from VolServ to the client software.

A pending or executing `vscheckin` request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also

- vscheckout

Commands

vscheckout

Checks media out of the VolServ system.

Media that has been checked out is still known by VolServ, but is unavailable for client allocation.

Upon receipt of a vscheckout request, VolServ marks the specified media for checkout. If the specified media is contained in libraries, VolServ adds the media to the Eject list of the containing library. An operator selects the "Eject" functionality from the appropriate librarie's console display to physically remove the checked-out media from the containing library.

Parameters

vscheckout *mediaid...*

[-t *comment* **]**
[-Ihv]
[-H *hostname* **]**
[-P *priority* **]**
[-R *retries* **]**
[-T *timeout* **]**
[-V *prognum* **]**

Parameters

Parameter	Description
mediaid...	Specifies a list of one through 64 media to be checked out of the VolServ system.
	• A valid media identifier may contain up to 16 alphanumeric characters, including spaces.
	• Leading and trailing spaces are not permitted.

Parameter	Description
-t *comment*	Provide a comment to be associated with each checked-out media. This comment is provided on the Eject list (a GUI display) from the library console associated with the library containing the media.
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command. **NOTE**: If -v is not specified, status is returned on only those media that were not successfully checked out.
-l	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.

Commands

Parameter	Description
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes
- 0 - The vscheckout command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples
Step 1. Successful Checkout request with verbose option specified. Requests VolServ to check MED003,MED004,and MED005 out of the VolServ system and to return status on every specified media.

```
vscheckout MED003 MED004 MED005 -t
"Transfer to Library" -v
```

Step 2. Output returned:

```
Check out 3 of 3 media was successful
          Media [MED003]            no error
          Media [MED004]            no error
          Media [MED005]            no error
```

Step 1. Successful Checkout request with verbose option not specified. Requests VolServ to check `MED003`, `MED004`, `MED005`, `MED006`, `MED007`, and `MED008` out of the VolServ system and to return status on media only if processing for that media failed.

```
vscheckout MED003 MED004 MED005
MED006 MED007 MED008
```

Step 2. Output returned:

```
Check out 6 of 6 media was successful
```

Step 1. Errors with verbose option specified. Requests VolServ to check `MED010`, `MED011`, `MED012`, and `MED13` out of the VolServ system and to return status on every specified media.

```
vscheckout MED010 MED011 MED012
MEDa13 -v
```

Step 2. Output returned:

```
Check out 2 of 4 media was successful
Error VOL024: error in the list
   Media [MED010]    invalid action or location
                     state for operation
   Media [MED011]    no error
   Media [MED012]    no error
   Media [MED013]    item not found
```

Commands

Step 1. Errors with verbose option not specified. Requests VolServ to check MED010, MED011, MED012, and MEDa13 out of the VolServ system and to return status on media only if processing for that media failed:

```
vscheckout MED010 MED011 MED012
MEDa13
```

Step 2. Output returned:

```
Check out 2 of 4 media was successful
Error VOL024: error in the list

Media [MED010]     invalid action or location
                   state for operation
    Media [MED013]      item not found
```

Notes

Failure of the vscheckout request for one or more media in a list does not fail the request for all media in the list.

A currently allocated media is checked out of the VolServ system. Attempts to physically eject an allocated media fail until the media is no longer in use.

Media marked for checkout is unmarked (removed from the Eject list) by the Clear Eject command. An operator removes media from the Eject list by performing an Eject Fail operation from the appropriate library's console display. The Eject Fail functionality is not available from the command line.

The Clear Eject command is available to clients, whereas, Fail Eject is an operator-only command.

The vscheckout command triggers unsolicited status messages from VolServ.

A pending or executing `vscheckout` request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\\). The request is aborted by sending the SIGINT signal (control-c).

See Also

- vscheckin, vsclearreject

Commands

vsclearreject

Removes the specified media from the library's Eject list.

Ejects can be generated during processing of the VolServ `vscheckout` `vsexport`, `vsmount`, and `vsmove` commands. Ejects can also be generated during automigration.

The Clear Eject command essentially undoes the completion of these commands. Media is removed from the Eject list and returned to the available state. For example, if a client issues an export command for a specific media, the specified media is scheduled for removal by adding the media to the Eject list for the library associated with the media. If the client decides the media should not be removed from its associated library, the client issues the Clear Eject command, and VolServ removes the media from the Eject list, thus voiding the Export request.

Parameters

```
vsclearreject mediaid...

[ -Ihv ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Paramaeter	Description
mediaid ...	Specifies the media (up to 64 pieces) to remove from the Eject list. • A valid media identifier may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command. **NOTE**: If -v is not specified, status is returned on only those media that were not successfully checked out.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.

Commands

Paramaeter	Description
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsclearreject command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful with verbose option specified. Requests VolServ to remove MED017, MED021, and MED023 from the Eject list and to return status on each specified media.

```
vsclearreject MED017 MED021 MED023 -v
```

Step 2. Output returned:

```
Clear Eject 3 of 3 media was successful
         Media [MED017]          no error
         Media [MED021]          no error
         Media [MED023]          no error
```

Step 1. Successful with verbose option not specified. Requests VolServ to remove `MED016`, `MED018`, `MED020`, and `MED021` from the Eject list and to return status on media only if processing for that media failed.

```
vsclearreject MED016 MED018 MED020
MED021
```

Step 2. Output returned:

```
Clear Eject 4 of 4 media was
successful
```

Step 1. Errors with verbose option specified. Requests VolServ to remove `MED012`, `MED013`, `MED014`, and `MED051` from the Eject list and to return status on every specified media.

```
vsclearreject MED012 MED013 MEd014
MED051 -v
```

Step 2. Output returned:

```
Clear Eject 2 of 4 media was successful
Error VOL024: error in the list
        Media [MED012]          no error
        Media [MED013]          item not marked for ejection
        Media [MED014]          no error
        Media [MED051]          item not found
```

Commands

Step 1. Errors with verbose option not specified. Requests VolServ to remove MED012, MED013, MED014, and MED051 from the Eject list and to return status on media only if processing for that media failed.

```
vsclearject MED012 MED013 MED014
MED051
```

Step 2. Output returned:

```
Clear Eject 2 of 4 media was successful
Error VOL024: error in the list
          Media [MED013]           media not marked for ejection
          Media [MED051]            item not found
```

Notes
The vsclearject request fails for media if the media is already selected for eject by the operator.

Failure of the vsclearject request for one or more media in a list does not fail the request for all media in the list.

An operator also removes media from the Eject list by performing an Eject Fail from the appropriate library's console display. The Eject Fail functionality is not available from the command line.

The Clear Eject command triggers unsolicited status messages from VolServ.

A pending Clear Eject request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also
• vscheckout,

- vsexport,

- vsmount,

- vsmove

Commands

vsconnectqry Queries for enterprise connection information.

This command provides a list of all client internet addresses that are currently associated with the given enterprise identifier.

Parameters **vsconnectqry** *enterpriseid*

[-Ih]
[-H *hostname* **]**
[-P *priority* **]**
[-R *retries* **]**
[-T *timeout* **]**
[-V *prognum* **]**

Parameters

Parameter	Description
enterpriseid	Specifies the identifier of the enterprise connection being queried. An enterprise identifier must be numeric.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.

Parameter	Description
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsconnectqry command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1.   Successful enterprise query. Requests VolServ to return a list of the client internet addresses associated with enterprise identifier 3.

```
vsconnectqry 3
```

Step 2. Output returned:

```
-------------------------------------------------
Connect Query Report                  May 24 12:43:18 19931
-------------------------------------------------

Enterprise ID:                        3
-------------------------------------------------

Client #: 1
          Socket Family:        10
          Socket Port:          1
          Internet Address:     300
          Program Number:       300016
          Version Number:       2
          Procedure Number:     1


                                      2
                                      •
```

          Step 1. Unsuccessful enterprise query. Requests VolServ to return a list of the client Internet addresses associated with enterprise identifier 13:

```
vsconnectqry 13
```

          Step 2. Output returned:

```
Connect query was unsuccessful
Error VOL008: item not found
```

Notes   The vsconnectqry command is run from either:

- Command line.

- Or, GUI.

However, only from the GUI can "query all" be specified to list all enterprises.

From the command line, only one enterprise can be specified within a single command. This restriction prevents any single client from listing the clients of other enterprises being serviced by VolServ.

The `vsconnectqry` command does not trigger unsolicited status messages from VolServ.

A pending `vsconnectqry` request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also   None

Commands

vsdismount

Dismounts media from a drive.

- For automated libraries, VolServ checks to see that the media is ejected from the drive by the storage subsystem. If the media is not ejected from the drive, the vsdismount request fails and VolServ returns a failure status to the client. However, if the media is ejected from the drive, VolServ tells the library robotics to move the media from the drive pickup point to a bin within the library system. A successful return code is returned to the client after the media movement is completed.

- For manual libraries, a dismount notice is sent to the appropriate library's console display for action. An operator dismounts the specified media and then notifies VolServ that the media dismount is complete. VolServ returns a successful return code to the client only after the operator confirms the dismount is complete.

Parameters

```
vsdismount mediaid
vsdismoun-d driveid
[-l lockid]
[-u usagetime]
[-e errorcount]
[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
mediaid	Identifies the media to be dismounted. A valid media identifier may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.
-d *driveid*	Identifies the drive where the media is mounted.
-l *lockid*	Specifies the lock identifier associated with the drive if the drive is mounted with a lock identifier.
-u *usagetime*	The amount of time (in seconds) the drive is in use.
-e *errorcount*	The number of errors encountered while interacting with the drive.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.

Commands

Parameter	Description
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsdismount command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful dismount. Requests VolServ to dismount MED032 from drive 2.

```
vsdismount MED012 -d 2
```

Step 2. Output returned:

```
Dismount of Media [MED032] from Drive
[2] was successful
```

Step 1. Unsuccessful dismount request. Requests VolServ to dismount MED016 from drive 13.

```
vsdismount MED016 -d 13
```

Step 2. Output returned:

```
Dismount of Media [MED016] from Drive
[13] was unsuccessful

Error VOL081: drive not mounted
```

Step 1. Unsuccessful dismount request. Requests VolServ to dismount MED016 from drive 9.

```
vsdismount MED016 -d 9
```

Step 2. Output returned:

```
Dismount of Media [MED016] from Drive
[9] was unsuccessful

Error VOL044: media not mounted
```

Notes   The vsdismount command triggers unsolicited status messages from VolServ.

A pending vsdismount request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also   • vsmount

vsdriveqry

Queries for information on specified drives.

Parameters

vsdriveqry *driveid*...

vsdriveqry   -a

[-Ih]
[-H *hostname* **]**
[-P *priority* **]**
[-R *retries* **]**
[-T *timeout* **]**
[-V *prognum* **]**

Parameters

Parameter	Description
driveid...	Specify a list of one through 64 drives to be queried.
-a	Indicates all drives known to the VolServ system are to be queried.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.

Parameter	Description
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsdriveqry command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful drive query. Requests VolServ to return information on every drive known to the VolServ system.

```
vsdriveqry -a
```

Step 2.   Output returned:

```
-------------------------------------------------
Drive Query Report                    Mar 10 11:00:32 19941
-------------------------------------------------

Drive ID:                             1
-------------------------------------------------
          Drive Type:          Magnetic
          Associated Archive:  stage1
          Current State:       Online
          Assignment:          Free
          Usage Count:         0
          Current Usage Time:  0
          Total Usage Time:    0
          Error Count:         0
          Mount State:         Unmounted
          Mounted Media ID:
          Media Type(s) Supported:D2M
          •
          •
          2

Drive ID:                             3
-------------------------------------------------
          Drive Type:          Magnetic
          Associated Archive:  shelf1
          Current State:       Online
          Assignment:          Free
          Usage Count:         1
          Current Usage Time:  0
          Total Usage Time:    0
          Error Count:         0
          Mount State:         Unmounted
          Mounted Media ID:
          Media Type(s) Supported:D2M
```

```
-------------------------------------------------
Drive ID:                          4
-------------------------------------------------
          Drive Type:             Magnetic
          Associated Archive:     shelf1
          Current State:          Online
          Assignment:             Free
          Usage Count:            0
          Current Usage Time:     0
          Total Usage Time:       0
          Error Count:            0
          Mount State:            Unmounted
          Mounted Media ID:
          Media Type(s) Supported:D2M
```

Step 1. Unsuccessful drive query. Requests VolServ to return information on drive 35. (Drive 35 does not exist.)

```
vsdriveqry 35
```

Step 2. Output returned:

```
Drive query was unsuccessful.

Error VOL008: item not found.
```

Notes   The vsdriveqry command does not trigger unsolicited status messages from VolServ.

A pending vsdriveqry request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also   • vsdrivevary

Commands

vsdrivevary

Changes the state of a drive.

A drive in the offline, unavailable, or diagnostic state is excluded from VolServ's drive selection algorithm.

> **Tip**
>
> A `vsmount` or `vslock` request for an offline, unavailable, or diagnostic drive will fail.
>
> On the ohter hand, varying a drive to the online state makes it available for selection for vsmount or vslock requests.

Parameters

```
vsdrivevary -s state
vsdrivevary driveid
vsdrivevary -p drivepool
[ -Ihv ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
driveid…	Specifies one through 64 individual drives whose state is to be varied.
-p *drivepool*	Specifies the name of a drive pool . • Valid drive pool names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.

Parameter	Description
-s *state*	Specifies the target state of the specified drives. Valid drive states are • online (on) • offline (of) • diagnostic (d)
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command. **NOTE**: If -v is not specified, status is returned on only those media that were not successfully checked out.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.

Commands

Parameter	Description
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The `vsdrivevary` command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful drive vary with verbose option specified. Requests VolServ to vary all drives in the `drvpoolusr` drive pool to the `off-line` state and to return status on every drive in `drvpoolusr.`

```
vsdrivevary -p drvpoolusr -s off-line
-V
```

Step 2. Output returned:

```
Vary 8 of 8 drives to state [off-line] was successful.
          Drive [1]                no error
          Drive [4]                no error
          Drive [5]                no error
          Drive [7]                no error
          Drive [8]                no error
          Drive [11]               no error
          Drive [12]               no error
          Drive [14]               no error
```

Step 1. Successful drive vary with verbose option not specified. Requests VolServ to vary drive 2 to the diagnostic state and to return status on a drive only if processing for that drive failed.

```
vsdrivevary 2 -s diagnostic
```

Step 2. Output returned:

```
Vary 1 of 1 drives to state
[diagnostic] was successful.
```

Step 1. Errors with verbose option specified. Requests VolServ to vary drives 5, 15, 8, 18, and 11 to the on-line state and to return status on every specified drive.

```
vsdrivevary 5 15 8 18 11 -s online -v
```

Commands

Step 2. Output returned:

```
Vary 3 of 5 drives to state [online] was successful
          Drive [5]               no error
          Drive [15]              invalid drive specified
          Drive [8]               no error
          Drive [18]              invalid drive specified
          Drive [11]              no error
```

          Step 1. Errors with verbose option not specified. Requests VolServ to vary drives 5, 15, 8, 18, and 11 to the off-line state and to return status on a drive only if processing for that drive failed.

> **vsdrivevary 5 15 8 18 11 -s offline**

          Step 2. Output returned:

```
Vary 3 of 5 drives to state [offline] was successful
Error VOL024: error in the list
          Drive [15]              invalid drive specified
          Drive [18]              invalid drive specified
```

          Step 1. Unsuccessful Drive Vary request. Requests VolServ to vary every drive associated with the BadPoolName drive pool to the diagnostic state.

> **vsdrivevary -p BadPoolName -s**
> **diagnostic**

          Step 2. Output returned:

> Error VOL030: invalid drive pool
> specified

Notes   Mounted drives that have their state changed remain in-use. Varying a drive has no impact on client data transfer operations in progress and the client receives no automatic notification of a drive state change.

Drives can be varied, regardless of whether or not they are associated with a library.

Drives can be varied, regardless of whether or not they are allocated; however, allocated drives that are not online cannot be dismounted.

The unavailable state is assignable only by VolServ when a higher level component in the library system is no longer online. For example, varying a CLM offline causes the associated drive to be viewed as unavailable.

The `vsdrivevary` command does not trigger unsolicited status messages from VolServ.

A pending `vsdrivevary` request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also   • vsdriveqry

Commands

vsexport   Marks media and related media information for removal from the VolServ system.

If the specified media is **not** associated with a library, the media is logically removed from the VolServ system. However, if the specified media is associated with a library, the media is placed on the Eject list of the appropriate library.

A client can also use the vsexport command to remove information about media that have been checked out of the library and is physically out of the library.

Upon receipt of an vsexport request, VolServ marks the specified media for eject and returns a successful return code to the client. The <Eject> button is highlighted on the operator's consoleto indicate that media need to be ejected from the library.

To physically remove the media marked for export from the library, an operator must select the Eject functionality from the appropriate library's console display. The Eject functionality is not available from the command line.

After media, specified on a vsexport command, is physically removed from the library system, the media is no longer managed by VolServ, and all information related to exported media is deleted from VolServ.

Parameters   **vsexport** *mediaid*...

[-t comment]
[-Ihv]
[-H *hostname*]
[-P *priority*]
[-R *retries*]
[-T *timeout*]
[-V *prognum*]

Parameters

Parameter	Description
mediaid…	Specifies a list of one through 64 media to export. • A valid media identifier may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-t *comment*	Provide a text message to be displayed on the library console for each media being exported. This comment is provided on the Eject list (a GUI display) from the library console associated with the library containing the media. The length of the comment is restricted by the CLI software. Currently, the maximum allowed length is 80.
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command. **NOTE**: If -v is not specified, status is returned on only those media that were not successfully checked out.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.

Commands

Parameter	Description
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The `vsexport` command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples   **Step 1.**   Successful export request with verbose and
               comment options specified. Requests to VolServ to
               place media MED012, MED014, and MED016
               on the Eject list with the comment, *Media to be
               shipped off-site*, and to return status on every
               specified media.

```
vsexport MED012 MED014 MED016 -t
Media to be shipped off-site -v
```

               Step 2.   Output returned:

```
Export 3 of 3 media was successful
          Media [MED012]          no error
          Media [MED014]          no error
          Media [MED016]          no error
```

               Step 1.   Successful export request with comment option
               specified and verbose option not specified.

               Requests to VolServ to place media MED001,
               MED002, MED003, MED012, MED014, and
               MED016 on the Eject list with the comment, *Media
               to be shipped off-site*, and to return status on media
               only if processing for that media failed.

```
vsexport MED001 MED002 MED003 MED012
MED014 MED016 -t Media to be shipped
off-site
```

               Step 2.   Output returned:

```
Export 6 of 6 media was successful
```

               Step 1.   Errors with verbose and comment options specified

Requests to VolServ to place media `MED007`, `MED014`, `MED021`, `MED028`, `MED053`, and `MED042` on the Eject list with the comment, *Media to be shipped off-site*, and to return status on every specified media.

```
vsexport MED007 MED014 MED021 MED028
MED053 MED042 -t Media to be shipped
off-site -v
```

Step 2.   Output returned:

```
Export 4 of 6 media was successful
Error VOL024: error in the list
          Media [MED007]          no error
          Media [MED014]          invalid action or location state
                                  for operation
          Media [MED021]          no error
          Media [MED028]          no error
          Media [MED053]          item not found
          Media [MED042]          no error
```

Step 1.   Errors with verbose option not specified and comment option specified

Requests to VolServ to place media `MED007`, `MED014`, `MED021`, `MED028`, `MED053`, and `MED042` on the Eject list with the comment, *Media to be shipped off-site*, and to return status on media only if processing on that media failed.

```
vsexport MED007 MED014 MED021 MED028
MED053 MED042 -t Media to be shipped
off-site
```

Step 2. Output returned:

```
Export 4 of 6 media was successful
Error VOL024: error in the list
          Media [MED014]          invalid action or location state
                                  for operation
          Media [MED053]          item not found
```

Notes
The vsexport command cannot be cancelled. Media can be unmarked for export via the Clear Eject request or if the operator fails the eject.

Media that is marked for ejection from the library system cannot be reallocated to satisfy a client request, except to satisfy a query of the media. Any other request (except vscleareject) received for that media fails.

An allocated media can be marked for export. Attempts to physically eject an allocated media fail until the media is no longer in-use.

The vsdrivevary command triggers unsolicited status messages from VolServ to the client software.

See Also
• vscleareject, vsimport

Commands

vsimport

Logically adds media to the VolServ system.

Upon receipt of a vsimport request, the specified media is added to the VolServ system. If a non-unique media identifier is specified, the import for that media fails.

The vsimport is a logical operation. Media must be physically entered into a library before the media is available for client use (mounting,…). Entry is performed when an operator selects the Enter functionality from the appropriate library's console display. The Enter functionality is not available from the command line.

Parameters

vsimport *mediaid*…

vsimport -a *archivename*

vsimport -c *mediaclass*

[-f *manufacturer* **]**
[-b *batch* **]**
[-Ihv]
[-H *hostname* **]**
[-P *priority* **]**
[-R *retries* **]**
[-T *timeout* **]**
[-V *prognum***]**

Parameters

Parameter	Description
mediaid…	Specifies a list of one through 64 media to import. • A valid media identifier may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-a *archivename*	Identifies the library into which the media are to be entered. VolServ sends Enter commands for the media to be entered to the console for the specified library. • Valid library names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-c *mediaclass*	Identifies the MediaClass name with which the imported media are to be associated. Valid MediaClass names may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.
-f *manufacturer*	Specifies the name of the media manufacturer. • If the **-f** (manufacturer) option is specified, the **-b** (batch) option must also be specified. • If the **-f** (manufacturer) option is not specified, the **-b** (batch) option cannot be specified.

Commands

Parameter	Description
-b *batch*	Specifies the manufacturer's batch that contains the media to be entered. • If the **-b** (batch) option is specified, the **-f** (manufacturer) option must also be specified. • If the **-b** (batch) option is not specified, the **-f** (manufacturer) option cannot be specified.
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command. **NOTE**: If -v is not specified, status is returned on only those media that were not successfully checked out.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.

Parameter	Description
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsimport command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful Import request with verbose option specified

Requests VolServ to import media MED003, MED018, MED021, MED030, and MED036 into the medclasssh1med MediaClass group in the shelf1 library and to return status on every specified media.

```
vsimport MED003 MED018 MED021 MED030
MED036
-a shelf1 -c medclasssh1med -v
```

Commands

Step 2.   Output returned:

```
Import 5 of 5 media was successful
          Media [MED003]          no error
          Media [MED018]          no error
          Media [MED021]          no error
          Media [MED030]          no error
          Media [MED036]          no error
```

Step 1.   Successful Import request with verbose option not specified

Requests VolServ to import media MED003, MED018, MED021, MED030, and MED036 into the medclasssh1med MediaClass group in the shelf1 library and to return status on media only if processing for that media failed.

```
vsimport MED003 MED018 MED021 MED030
MED03
-a shelf1 -c medclasssh1med
```

Step 2.   Output returned:

```
Import 5 of 5 media was successful
```

Step 1.   Errors with verbose option specified.

Requests VolServ to import media MED003, MED018, MED021, MED030, and MED036 into the medclasssh1med MediaClass group in the shelf1 library and to return status on every

specified media. "MediaMaker ABC" is the manufacturer of these media and these media were part of batch "1001."

```
vsimport MED003 MED018 MED021 MED030
MED036 -a shelf1
-c medclasssh1med -v -f "MediaMaker
ABC" -b 1001
```

Step 2. Output returned:

```
Import 3 of 5 media was successful
Error VOL024: error in the list
          Media [MED003]          no error
          Media [MED018]          item already exists
          Media [MED021]          item already exists
          Media [MED030]          no error
          Media [MED036]          no error
```

Step 1. Errors with verbose option not specified

Requests VolServ to import media MED003, MED018, MED021, MED030, and MED036 into the medclasssh1med MediaClass group in the shelf1 library and to return status on media only if processing for that media failed. "MediaMaker ABC" is the manufacturer of these media and these media were part of batch "1001."

```
vsimport MED003 MED018 MED021 MED030
MED036 -a shelf1
-c medclasssh1med -f "MediaMaker ABC"
-b 1001
```

Commands

Step 2. Output returned:

```
Import 3 of 5 media was successful
Error VOL024: error in the list
          Media [MED018]        item already exists
Media [MED021]item already exists
```

Step 1. Unsuccessful Import request.

Requests VolServ to import media `MED003`, `MED018`, `MED021`, `MED030`, and `MED036` into the `medclassmed` MediaClass group in the `BadArchiveName` library and to return status on media only if processing for that media failed.

```
vsimport MED003 MED018 MED021 MED030
MED036 -a BadArchiveName
-c medclassmed
```

Step 2. Output returned:

```
Import of media was unsuccessful
Error VOL013: invalid archive
```

Notes   Import is a logical operation. Media must be physically entered into a library by an operator before they are available for general use. A successful Import request results in the media identifier being placed on the receiving library's Enter list.

Media identifier values must be unique throughout a VolServ system. Non-unique media identifiers are rejected.

• If the Enter fails for the media to be imported, the media is placed `Intransit`.

Media identifiers of media being imported into manual libraries may contain alphanumeric and special characters including spaces. However, spaces cannot be used as leading or trailing characters. If media in a manual library can later be moved into an automated library, the media identifiers must also conform to any naming restrictions imposed by the automated library. For example, special characters may not be allowed in media identifiers in the automated library.

The media type for the media is determined by the media type of the specified MediaClass group.

After the MediaClass capacity is reached, no more media can be imported into the MediaClass group.

The vsimport command triggers unsolicited status messages from VolServ to the client software.

A pending Import request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also
- vsexport

Commands

vsintransitqry

Queries for media that are in the intransit state. The query returns a list of media identifiers.

Note

The `vsintransitqry` command supports no command-specific options.

Media is considered to be intransit under the following conditions:

- It is waiting to be entered into a library as a result of `vsimport`, `vsmount`, `vsmove`, `vscheckout`, or migration activity processing.

- It is in the homeless state as a result of a manual eject or a failed enter activity.

Parameters

```
vsintransitqry
[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.

Parameter	Description
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Commands

Return Codes

- 0 - The vsintransitqry command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

• >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples   **Step 1.**   Successful intransit query.

Requests VolServ to return a list of all media in the `intransit` state.

```
vsintransitqry
```

Step 2.   Output returned:

```
--------------------------------------------------
Intransit Query Report              May 14 09:45:57 19931
--------------------------------------------------


Media ID(s):MED007                   MED025MED040
```

Step 1.   Unsuccessful intransit query

Requests VolServ to return a list of all media in the `intransit` state.

```
vsintransitqry
```

Step 2.   Output returned:

```
Intransit query was unsuccessful
Error VOL008: item not found
```

Notes   Only media in the Intransit state are queried and reported to the client.

The `vsintransitqry` command does not trigger unsolicited status messages from VolServ.

A pending `vsintransitqry` request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also
- vsmedqry

Commands

vslock   Obtains exclusive use of one or more drives.

The lock identifier assigned to the locked drives is returned to the client. This lock identifier must be used by clients on subsequent requests (such as `vsmount`) for those drives.

A request to lock a drive that is busy (mounted or previously locked) is queued until the drive becomes available. In addition, intermediate status is returned to indicate the reason a request is being queued.

A `vslock` command:

• That specifies a drive pool or a list of drives should also indicate the number of drives from the pool and list to be locked. VolServ selects the drives to lock from within the pool and list according to drive availability.

• cannot specify a drive pool or a list of drives that spans libraries, they must be associated with a single library.

• Reserves one drive for exclusive use if a quantity is not specified on the command.

VolServ considers only online drives as candidates to be locked. If a sufficient number of online drives in the same library are unavailable to satisfy a vslock command, the command fails.

If there is a sufficient number of online drives in the same library to satisfy a `vslock` request, but the number of available online drives is not sufficient, the request waits until sufficient drives become available.

Note

Partial locks are not set.

Parameters

```
vslock driveid…
vslock -p drivepool
[ -x driveid ]
[-q quantity]
[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
driveid...	Specifies a list of one through 64 candidate drives to reserve (lock) for exclusive use.
-p *drivepool*	Specifies the name of a drive pool. • Valid drive pool names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-x *driveid…*	Specifies a list of one through 64 drives contained in the specified drive pool that are NOT reserved for exclusive use.
-q *quantity*	Specifies the number of drives to be locked. • If the **[-q** *quantity*] option is not specified, the number of drives to be locked defaults to 1.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.

Commands

Parameter	Description
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed.
	An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vslock command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful Lock request that specifies a list of one or more drives (**vslock** 4 8 12)

Step 2. Requests VolServ to lock (reserve for exclusive use) one of the drives 4, 8, and 12.

Step 3. Output returned:

```
Lock [1] drives locked with lock id[1719790788]
    1          Drive[4]
```

Step 1. Successful Lock request that specifies a drive pool and a quantity

Requests VolServ to lock (reserve for exclusive use) 2 drives from drive pool drvpoolmed.

```
vslock -p drvpoolmed -q 2
```

Step 2. Output returned:

```
Lock [2] drives locked with lock id[1719790788]
          1      Drive[40]
          2      Drive[41]
```

Step 1. Unsuccessful Lock request, too many drives requested to be reserved.

Requests VolServ to lock (reserve for exclusive use) 5 drives from drive pool drvpooltwr (drvpooltwr contains only 2 drives.)

```
vslock -p drvpooltwr -q 5
```

Commands

Step 2.   Output returned:

```
Lock was unsuccessful
Error VOL122: not enough available
drives in pool
```

Step 1.   Unsuccessful Lock request.

Requests VolServ to lock (reserve for exclusive use)
1 drive from drive pool `BadDrivePool.`

```
vslock -p BadDrivePool -q 1
```

Step 2.   Output returned:

```
Lock was unsuccessful

Error VOL030: invalid drive pool
specified
```

Notes

Note

It is important to keep any `vsmount` or `vsdismount`
request that contains the proper lock identifier to continue to
have access to a locked drive.

If a mount request does not specify a lock identifier for a locked
drive, whether the drive is available for use or not, the `vsmount`
request waits until the drive is both unlocked and available.

If a vsmount request specifies a drive pool, but does not specify a lock identifier, only available unlocked drives in the specified drive pool are considered to satisfy the mount request. If there are no available unlocked drives in the specified drive pool, the mount request waits until a drive from the specified drive pool becomes available and unlocked.

A vslock command that is queued and awaiting resources is cancelled via the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

An vsunlock command is run when the client no longer needs drives for exclusive use.

The vslock command does not trigger unsolicited status messages from VolServ.

Intermediate status may be returned if the vslock command is queued.

See Also

- vsdismount,

- vsmount,

- vsunlock

Commands

vsmedclass qry

Queries for the attributes of a specified MediaClass group or all MediaClass groups. The members of the MediaClass group and any additionally requested information on each media is returned to the client.

Parameters

```
vsmedclassqry mediaclass
vsmedclassqry -a
[ -m | -v ]
[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
mediaclass	Specifies a single MediaClass name to request information on. Valid MediaClass names may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.
-a	Requests information on all MediaClass groups known to the VolServ system.
-m	Requests a list of media identifiers for all media associated with each reported MediaClass group.
-v	Requests detailed information for all media associated with each reported MediaClass group.

Parameter	Description
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Commands

Return Codes • 0 - The vsmedclassqry command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples   **Step 1.**   Successful MediaClass Query with neither **-m** nor **-v** specified.

Requests VolServ to return information on every MediaClass group known to the VolServ system. No media-specific information is requested.

```
vsmedclassqry -a
```

Step 2.   Output returned:

```
-------------------------------------------------
Media Class Query Report              May 14 10:09:11 19931
-------------------------------------------------


Media Class: medclassstgusr
-------------------------------------------------
          Media Type:              USRTYPE
          Capacity:                20
          Current Fill Level:      2
          High Mark %:             80%
          Mountable by Class:      Yes
          Notify Comment:          Media exceed high mark
          RPC Option:              No Callback
          •
          • 2
```

```
        •²
Media Class: medclasssh2med
-------------------------------------------------
           Media Type:             D2M
           Capacity:               20
           Current Fill Level:     3
           High Mark %:            80%
           Mountable by Class:     Yes
           Notify Comment:         Media exceed high mark
           RPC Option:             Enterprise Callback
           Enterprise ID:          3
           •
           •²
           •²

Media Class: medclasssh2sml
-------------------------------------------------
           Media Type:             D2S
           Capacity:               20
           Current Fill Level:     2
           High Mark %:            80%
           Mountable by Class:     Yes
           Notify Comment:         Media exceed high mark
           RPC Option:             Standard Callback
           HostName:               copper
           Program Number:         1
           Version Number:         1
           Procedure Number:       1
           Protocol:               TCP
```

Step 1. Successful Media Class Query request with **-m** option specified.

Requests VolServ to return detailed media information for every media in the `medclasssh1usr` MediaClass group.

```
vsmedclassqry medclasssh1usr -m
```

Commands

Step 2. Output returned:

```
-------------------------------------------------
Media Class Query Report              May 14 09:45:57 19931
-------------------------------------------------

Media Class: medclasssh1usr
-------------------------------------------------
          Media Type:            USRTYPE
          Capacity:              20
          Current Fill Level:    3
          High Mark %:           80%
          Mountable by Class:    Yes
          Notify Comment:        Media exceed high mark
          RPC Option:            No Callback

Media ID(s):     MED007     MED025     MED040
```

Step 1. Successful Media Class Query request with **-v** option specified.

Requests VolServ to return detailed media information for every media in the medclasssml MediaClass group.

```
vsmedclassqry medclasssml -v
```

Step 2. Output returned:

```
-------------------------------------------------
Media Class Query Report              May 14 09:45:57 19931
-------------------------------------------------
```

```
Media Class: medclasssml
-------------------------------------------------
          Media Type:              D2S
          Capacity:                20
          Current Fill Level:      8
          High Mark %:             80%
          Mountable by Class:      Yes
          Notify Comment:          Media exceed high mark
          RPC Option:              No Callback




MediaID: MED005
          Media Type:              D2S
          Media Class:             medclasssml
          Assignment:              Free
          Location State:          Archive
          Current Archive:         stage1
          Pending Archive:
          Action State:            None
          Import Date:             May 14 09:30:09 1993
          Last Access:             May 14 09:45:43 1993
          Mount Count:             2
          Move Count:
          Manufacturer:            MediaMaker
          Batch:                   1001


          2
          2
```

Commands

```
MediaID: MED017
         Media Type:            D2S
         Media Class:           medclasssml
         Assignment:            Allocated
         Location State:        Archive
         Current Archive:       shelf2
         Pending Archive:
         Action State:          None
         Import Date:           May 14 09:28:41 1993
         Last Access:           May 14 09:40:21 1993
         Mount Count:           1
         Move Count:            1
         Manufacturer:
         Batch:



         2
         2


MediaID: MED038
         Media Type:            D2S
         Media Class:           medclasssml
         Assignment:            Free
         Location State:        Archive
         Current Archive:       shelf2
         Pending Archive:       shelf1
         Action State:          Move
         Import Date:           May 14 09:30:09 1993
         Last Access:
         Mount Count:           1
         Move Count:            2
         Manufacturer:
         Batch:
         •
         •
         •
```

```
MediaID: MED051
           Media Type:             D2S
           Media Class:            medclasssml
           Assignment:             Free
           Location State:         Intransit
           Current Archive:
           Pending Archive:        shelf1
           Action State:           Import
           Import Date:            May 14 09:30:09 1993
           Last Access:
           Mount Count:            0
           Move Count:             0
           Manufacturer:
           Batch:
```

Step 1.   Unsuccessful Media Class Query.

Requests VolServ to return information on the
UnknownClass MediaClass group.

```
vsmedclassqry UnknownClass
```

Step 2.   Output returned:

```
Query of Media Class [UnknownClass]
was unsuccessful

Error VOL008: item not found
```

Notes   The vsmedclassqry command does not trigger unsolicited
status messages from VolServ.

Commands

A pending `vsmedclassqry` is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also

- vsmedqry

vsmedqry
Queries for the attributes of one or more specified media. The values of the attributes of the media are returned to the client.

Parameters
```
vsmedqry mediaid…

vsmedqry -a

[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
mediaid…	Specifies a list of one through 64 media to be queried.
-a	Specifies the **-a** option to indicate information is to be reported on all media known to the VolServ system.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.

Commands

Parameter	Description
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsmedqry command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful Media Query request.

Requests VolServ to return information on every media known to the VolServ system.

```
vsmedqry -a
```

Step 2. Output returned:

```
-------------------------------------------------
Media Query Report                    May 14 10:34:30 19931
-------------------------------------------------

Media ID:                             MED001
-------------------------------------------------
            Media Type:               USRTYPE
            Media Class:              medclassstgusr
            Assignment:               Free
            Location State:           Archive
            Current Archive:          stage1
            Pending Archive:
            Action State:             None
            Import Date:              May 13 12:06:15 1993
            Last Access:              May 13 13:12:09 1993
            Mount Count:              1
            Move Count:               2
            Manufacturer:
            Batch:

            2
            2
```

Commands

```
Media ID:                         MED015
-------------------------------------------------
          Media Type:             D2M
          Media Class:            medclassmed
          Assignment:             Free
          Location State:         Intransit
          Current Archive:
          Pending Archive:        shelf1
          Action State:           Move
          Import Date:            May 13 16:25:39 1993
          Last Access:            May 13 16:40:53 1993
          Mount Count:            0
          Move Count:             0
          Manufacturer:           MediaMaker ABC
          Batch:                  1001

          2
          2
Media ID:                         MED027
-------------------------------------------------
          Media Type:             D2M
          Media Class:            medclassmed
          Assignment:             Free
          Location State:         Archive
          Current Archive:        shelf2
          Pending Archive:        shelf1
          Action State:           Move
          Import Date:            May 12 14:36:10 1993
          Last Access:            May 13 16:13:53 1993
          Mount Count:            0
          Move Count:             0
          Manufacturer:
          Batch:
          •
          •
          •
```

```
Media ID:                        MED039
-------------------------------------------------
          Media Type:            D2M
          Media Class:           medclassmed
          Assignment:            Allocated
          Location State:        Archive
          Current Archive:       shelf1
          Pending Archive:       shelf2
          Action State:          Move
          Import Date:           May 12 14:36:10 1993
          Last Access:           May 13 14:36:10 1993
          Mount Count:           1
          Move Count:            1
          Manufacturer:
          Batch:
```

Step 1. Media Query request with errors.

Requests VolServ to return information on media `MED027`, `BadMedia`, and `MED039`.

`vsmedqry MED027 BadMedia MED039`

Step 2. Output returned:

```
-------------------------------------------------
Media Query Report                May 25 16:06:09 19931
-------------------------------------------------
```

Commands

```
Media ID:                        MED027
--------------------------------------------------
           Media Type:           D2M
           Media Class:          medclassmed
           Assignment:           Free
           Location State:       Archive
           Current Archive:      shelf2
           Pending Archive:      shelf1
           Action State:         Move
           Import Date:          May 13 16:36:39 1993
           Last Access:          May 24 12:23:25 1993
           Mount Count:          0
           Move Count:           0
           Manufacturer:
           Batch:

Media ID:                        BadMedia
--------------------------------------------------
           Error:                item not found

Media ID:                        MED039
--------------------------------------------------
           Media Type:           D2M
           Media Class:          medclassmed
           Assignment:           Allocated
           Location State:       Archive
           Current Archive:      shelf1
           Pending Archive:      shelf2
           Action State:         Move
           Import Date:          May 13 16:36:39 1993
           Last Access:          May 24 12:23:25 1993
           Mount Count:          1
           Move Count:           1
           Manufacturer:
           Batch:
```

Notes   A `vsmedqry` can query any media in the VolServ system. The media specified in a single Media Query request are not required to be located in the same library.

A pending `vsmedqry` is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

The `vsmedqry` command does not trigger unsolicited status messages from VolServ.

See Also
- vsmedclassqry

Commands

vsmedtype qry

Queries for the attributes of one or more media types. The values of the attributes of the media types are returned to the client.

Parameters

```
vsmedtypeqry mediatype…
vsmedtypeqry -a
[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
mediatype...	Specifies a list of one or more media types to be queried.
	Either system-specified media types and or user-defined media types can be specified.
	Valid media type names may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.
	The number of media types that can be specified is restricted by the CLI software. Currently, the maximum allowed number is 32.
-a	Indicates that information is to be returned on all media types known to the VolServ system.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.

Parameter	Description
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server.The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Commands

Return Codes

- 0 - The `vsmedtypeqry` command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- \>0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples   **Step 1.**   Successful Media Type Query request.

Requests VolServ to return information on every
media type known to the VolServ system.

```
vsmedtypeqry -a
```

Step 2.   Output returned:

```
-------------------------------------------------
Media Type Query Report            May 24 12:43:18 19931
-------------------------------------------------

MediaType:                         D2S
-------------------------------------------------
          Capacity:                25000.00 megabytes
          Number of Sides:         1
          •
          •
          •


MediaType:                         3480
-------------------------------------------------
          Capacity:                200.00 megabytes
          Number of Sides:         1
```

Step 1.   Media Type Query request with errors.

```
vsmedtypeqry D2S USRTYPE
```

```
-----------------------------------------------
Media Type Query Report            May 24 12:43:18 19931
-----------------------------------------------

MediaType:                         D2S
-----------------------------------------------
          Capacity:                25000.00 megabytes
          Number of Sides:         1

MediaType:                         USRTYPE
-----------------------------------------------
          Error: item not found
```

Notes   The `vsmedtypeqry` command does not trigger unsolicited
                   status messages from VolServ.

                   A pending `vsmedtypeqry` is cancelled with the VolServ
                   cancel command. The VolServ cancel command is run from the
                   command line by sending a SIGQUIT signal (control-\). The
                   request also is aborted by sending the SIGINT signal
                   (control-c).

See Also   • vsmedclassqry,

                   • vsmedqry

Commands

vsmount   Mounts media onto a drive.

When issuing a Mount command, the client can specify one of the following.

• Single media.

• List of media.

• MediaClass group.

• And:

    - Specific drive.

    - Drive pool.

    - Drive pool with the exclusion of drives.

The `vsmount` command's lock identifier parameter.is required if the drive to be used in satisfying the `vsmount` request has been previously locked with a `vslock` request. If a `vsmount` request is run for a locked drive and does not specify a lock identifier, VolServ waits until the requested drive is unlocked.

The client can also specify how to handle a `vsmount` request that requires an inter-library movement of the media. This option indicates whether an inter-library media movement should or should not be attempted and whether to consider if the source and destination libraries are operator-attended or not.

If more than one media and or a drive pool is specified on the `vsmount` command, VolServ applies a selection algorithm to select media and drive pair from the list of media and available drives.

For manual libraries, a `vsmount` notice is sent to the operator console for action. The operator is then responsible for confirmation to VolServ when the mount is complete. VolServ returns a return code to the client after the operator action is complete.

A `vsmount` request is queued for later processing if:

• The specified drive is busy.

• The specified media is busy.

• The selected drive is locked and a lock identifier was not specified on the Mount request.

When a `vsmount` request is queued for later processing, VolServ returns intermediate status to the client that specifies the reason the Mount request was queued.

Commands

Parameters

```
vsmount mediaid...
vsmount -c mediaclass
vsmount -d driveid
vsmount -p drivepool
[ -f flipmedia ]
[ -i | -u ]
[ -l lockid]
[ -Ih ]
[ -H hostname ]
[ -n newmediaclass ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum]
[ -x driveid...]
```

Parameters

Parameter	Description
mediaid…	Specifies a list of one through 64 media to be mounted. • A valid media identifier may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-d *driveid*	Specifies a drive that can be used to satisfy the Mount request.
-c *mediaclass*	Specifies a MediaClass name from which the media to be mounted is to be selected.
-f *flipmedia*	
-i	Indicates that a mount requiring an inter-library move fails if either the source and destination library is marked as unattended.
-u	Indicates that a mount requiring an inter-library move is to be performed, regardless of whether either the losing or gaining library is attended or unattended.
-l *lockid*	Specifies the associated lock identifier if a locked drive) is specified to satisfy the Mount request.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.

Parameter	Description
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-n *newmediaclass*	Specifies the destination MediaClass group for the reclassification of the media selected to satisfy the Mount request. **NOTE**: Use this only if the selected media is to be reclassified to a different MediaClass group.
-p *drivepool*	Specifies the name of a drive pool. • Valid drive pool names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Commands

Parameter	Description
-x *driveid*…	Specifies a list of one through 64 drives contained in the specified drive pool that are to be excluded from consideration when allocating drives to satisfy the Mount request.

Return Codes

- 0 - The vsmount command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful Mount request that specifies a list of one or more media and a specific drive.

Requests VolServ to mount media MED026 on drive 9.

```
vsmount MED026 -d 9
```

Step 2. Output returned:

```
Mount of Media [MED026] onto Drive
[9] was successful
```

Step 1. Successful Mount request that specifies a MediaClass group and a specific drive.

Requests VolServ to mount media from MediaClass `medclassmed` onto drive `10` and to reclassify the selected media to MediaClass group `medclasssh1med`.

```
vsmount -c medclassmed -d 10 -n
medclasssh1med
```

Step 2. Output returned:

```
Mount of Media [MED027] onto Drive
[10] was successful
```

Step 1. Successful Mount request that specifies a specific media and a drive pool with an exclusion drive list.

Requests VolServ to mount media MED022 onto any drive from drive pool drvpoolusr, excluding drives 4 and 14.

```
vsmount MED022 -p drvpoolusr -x 4 14
```

Step 2. Output returned:

```
Mount of Media [MED022] onto Drive
[12] was successful
```

Step 1. Successful Mount request that specifies a MediaClass name and a drive pool.

Requests VolServ to mount media from the `medclasssml` MediaClass group onto a drive from the `drvpooltwr` drive pool.

```
vsmount -c medclasssml -p drvpooltwr
```

Commands

Step 2. Output returned:

```
Mount of Media [MED041] onto Drive
[7] was successful
```

Step 1. Successful Mount request when all specified drives are in use.

Requests VolServ to mount media `MED034` onto drive `12`. (`MED022` is currently mounted on drive `12`.)

```
vsmount MED034 -d 12
```

Step 2. Output returned:

```
Mount waiting due to busy drive

Mount of Media [MED034] onto Drive
[12] was successful
```

Step 1. Successful Mount request when specified media is in use.

Requests VolServ to mount media `MED034` on any drive in drive pool `drvpoolmed` except drive `12`.

```
vsmount MED034 -p drvpoolmed -x 12
```

Step 2. Output returned:

```
Mount waiting due to busy media

Mount of Media [MED034] on Drive [14]
was successful
```

Step 1. Successful Mount request reclassifying the selected media.

Requests VolServ to mount any media from MediaClass group `medclassstgmed` onto any drive in drive pool `drvpoolmed,` and to change the MediaClass association of the selected media from `medclassstgmed` to `medclassmed.`

```
vsmount -c medclassstgmed -p
drvpoolmed -n medclassmed
```

Step 2. Output returned:

```
Mount of Media [MED048] onto Drive
[3] was successful
```

Note

Before running the `vsmount` request, `MED048` was associated with `medclassstgmed`. After running the `vsmount` request, `MED048` is associated with `medclassmed`. The `vsmedqry` command can be used to verify the MediaClass association of a specific media.

Step 1. Unsuccessful Mount request requiring an inter-library move.

Requests VolServ to mount media `MED023` located in the `stage1` library onto drive `11` associated with the `tower1` library.

```
vsmount MED023 -d 11
```

Commands

Step 2. Output returned:

```
Media could not be mounted onto drive

Error VOL110: mount crosses archives
```

Step 1. Unsuccessful Mount request with unknown media specified.

Requests VolServ to mount media `BadMedia` onto drive `5`.

```
vsmount BadMedia -d 5
```

Step 2. Output returned:

```
Media could not be mounted onto drive

Error VOL029: invalid media specified
```

Notes
The time required to satisfy a specific mount request depends on the number of available drives and pending `vsmount` requests.

A drive that is specified in a `vsmount` request may not be the ideal drive where to mount the specified media. It may take considerably longer to mount the media onto a specified drive than if a drive pool is specified.

The **-i** and **-u** options have no affect on a `vsmount` request that does not require an inter-library media movement.

If a specified drive was previously locked, the lock identifier assigned to that drive must be supplied before that drive is considered in the selection process.

If a specified or selected drive was previously locked and the `vsmount` request does not specify a lock identifier, VolServ returns a message to the client that the selected drive is locked and VolServ is waiting for the drive to become unlocked to continue execution of the command.

If the `vsmount` request specifies a MediaClass group and the **-n** *newmediaclass* option is specified, the reclassify to a different MediaClass group occurs only after VolServ selects the media to satisfy the `vsmount` request. Only the selected media is reclassified. The remaining media in the MediaClass group are not reclassified.

- If the **-n** *newmediaclass* option is specified, the receiving MediaClass group is checked for compatible media type, as well as for adequate room for another media (i.e., fill level less than capacity).

- If either of these conditions is not satisfied, the `vsmount` request fails.

A pending `vsmount` request (waiting for a drive or media) is cancelled with the VolServ Cancel request. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

The `vsmount` request fails if no specified drive is online.

If media or drive is specified and either the media or drive (or both) are presently in use, the `vsmount` request waits for resources and a message is returned to the client that indicates the reason for the delay.

When specifying a drive pool that contains drives that support different types of media, only those drives that support the media type of the media specified in the `vsmount` request are considered for selection.

Commands

If a list of media specified in a `vsmount` request contains media of more than one type, the request fails.

When media or drive pairing requires the media be moved within a single library system (such as cross-aisle) the mount may take a while to complete. The **-i** and **-u** options do NOT apply to intra-library system movement.

When a `vsmount` request with groups of media or drives is submitted, VolServ attempts to select a drive or media pair where the drive and media are associated with the same library. If multiple drive or media pair are candidates, VolServ selects a drive or media pair from the library with an available drive.

If no drive or media pair associated with the same library exists, VolServ then selects a drive or media pair where the drive and media are associated with a different library. If multiple drive or media pair are candidates, VolServ selects a drive or media pair from the library with the largest number of drives. If all libraries contain the same number of drives, VolServ then selects a drive or media pair from the library with the largest number of media.

When specifying a mount by MediaClass group, and the specified MediaClass group is associated with more than one library, no inter-library media or drive pairing is permitted. The media selected from the MediaClass group must be in the same library as the selected drive; otherwise the Mount request fails.

When media is ejected (as a result of Export, or Checkout, no check is made to determine if a queued Mount request exists for the ejected media. As a result, the Mount request remains queued until a drive is freed. At that time, the Mount request fails because the media is not available. In other words, the request queue is not checked for impact on pending requests each time a resource changes its availability and after media or drive pair is identified. VolServ does not attempt re-pairing based on changed availability of resources.

The Mount command triggers unsolicited status messages from VolServ to the client software.

Mount requests may require inter-library media movement or a Mount request can be queued waiting for an in-use media or drive. The client may want to increase the *timeout* value or the *retries* value so the CLI `vsmount` request does not timeout while waiting for the Mount request to complete.

If the Mount request allows movement, VolServ checks the destination library for available space. If no space is available, the mount fails.

See Also
- vsdismount,

- vsreclassify

Commands

vsmove

Moves media from one library to another.

A client uses the vsmove command to direct the movement of media from one library to another. Inter-library media movement requires operator intervention. The operator must eject the media from their current libraries and enter them into the target library. The Eject and Enter functionalities are available from the appropriate library's console display. The Eject and Enter functionalities are not available from the command line.

Upon receipt of a vsmove request, the VolServ software verifies the specified media exist, the target library supports the media type of the specified media, and there exists an appropriate library MediaClass association with the target library. The current library of each specified media is commanded to eject the media. An Eject request, specifying the target library, is displayed on the library console of each losing library. The operator must select and manually eject or remove the media on the list. After media is selected for ejection, the target library displays a corresponding **Enter** request for that media. The operator must then manually enter the media specified on the list into the target library.

When the media is ejected from the original library and entered into the target library, the VolServ system generates unsolicited status messages if any of the moved media are associated with MediaClass groups that are configured to generate unsolicited communication from VolServ.

The vsmove command is run for "homeless" media. A homeless media is an Intransit media that has no pending movement activity.

Parameters

```
vsmove mediaid
vsmove -a archivename
[-iIhwv]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum ]
```

Parameters

Parameter	Description
mediaid…	Specifies a list of one through 64 media to be moved. • A valid media identifier may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-a *archivename*	Specifies the name of the library to which the specified media are to be moved. • Valid library names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-i	Indicates this command is to be processed only if both the source and destination libraries are operator-attended.

Commands

Parameter	Description
-w	Indicates VolServ waits until the command processing completes before returning status to the client.
	If the move requires an inter-library move, VolServ waits until the move completes, whether the source and destination libraries are attended or unattended. When the
	• If **-w** option is not specified, final status is returned as soon as move processing begins.
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command.
	NOTE: If -v is not specified, status is returned on only those media that were not successfully checked out.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed.
	An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server.
	The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.

Parameter	Description
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The `vsmove` command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful Move request, wait until move completes before returning status to client, verbose option specified.

Requests VolServ to move media `MED016`, `MED023, MED044,` and `MED048` to library `stage1`; to wait until the move completes before returning status to the client; and to return status on every specified media.

```
vsmove MED016 MED023 MED044 MED048 -a
stage1 -wv
```

Commands

Step 2. Output returned:

```
Move 4 of 4 media was successful
          Media [MED016]          no error
          Media [MED028]          no error
          Media [MED043]          no error
          Media [MED048]          no error
```

Step 1. Successful Move request, verbose option not specified.

Step 2. Requests VolServ to move media MED013, MED016, MED028, and MED028 to library shelf1. Since the **-i** option is NOT specified, the move is to complete whether the losing and gaining libraries are attended or unattended.

```
vsmove MED013 MED016 MED028 MED031 -a
shelf1
```

Step 3. Output returned:

```
Move 4 of 4 media was successful.
```

Step 1. Errors with verbose option specified (target library is unattended).

Step 2. Requests VolServ to move media MED013, MED016, MED022, and MED034 to the shelf1 library only if both the source libraries and the destination library are attended and to return status on every specified media.

```
vsmove MED013 MED016 MED022 MED034 -a
shelf1 -iv
```

Step 3. Output returned:

```
Move 0 of 4 media was successful
Error VOL024: error in the list
            Media [MED013]   target archive mode is unattended
            Media [MED016]   target archive mode is unattended
            Media [MED022]   target archive mode is unattended
            Media [MED034]   target archive mode is unattended
```

Step 1. Errors with verbose option not specified.

Requests VolServ to move media MED003, MED004, MED013, MED028, MED033, and MED043 to the shelf2 library.

```
vsmove MED003 MED004 MED013 MED028
MED033 MED043
-a shelf2
```

Step 2. Output returned:

```
Move 3 of 6 media was successful
Error VOL024: error in the list
            Media [MED003]            item not found
            Media [MED004]            media already exists in an
archive
            Media [MED033]            archive not associated with
media
                                      class
```

Step 1. Unsuccessful Move request.

Requests VolServ to move media MEDabc and MEDxyz to the BadArchive library.

```
vsmove MEDabc MEDxyz -a BadArchive
```

Commands

Step 2. Output returned:

```
Move of media was unsuccessful

Error VOL107: invalid target archive
```

Notes　　　　　　Movement of media is between libraries, not within libraries.
Media that is allocated to a Move request is not available for
other allocation until the move completes.

- If the **-w** option is not specified, status from the Move
  request indicates only the initial validity of the move. Actual
  completion of the move can only be traced via callback
  processing, media querying, or operator monitoring.

The Move command does trigger unsolicited status messages
from VolServ.

- If the **-w** option is specified on a Move request, the client
  can increase the *timeout* value or the *retries* value so the CLI
  vsmove command does not time-out while awaiting
  completion of the Move request.

A pending Mount request is cancelled with the VolServ cancel
command. The VolServ cancel command is run from the
command line by sending a SIGQUIT signal (control-\). The
request also is aborted by sending the SIGINT signal
(control-c).

See Also　　　　　　• **v**sclearoject

vsping

Pings the VolServ system.

The vsping command allows a user to check the availability of VolServ (in other words, a means for the client systems to "ping" the VolServ system.) If VolServ responds to the vsping, it is assumed by the client that the VolServ client interface is available and functioning.

The client is not required to use the vsping command before sending other commands, but vsping is available for clients to verify that VolServ software is running.

• If no options are specified, vsping tries to ping the VolServ system on the host machine at VolServ's default program number.

Note

The vsping command supports no command-specific options.

Parameters

```
vsping
[ -Ih ]
[ -H hostname ]
[ -V prognum ]
```

Parameters

Parameter	Description
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.

Parameter	Description
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed.
	An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server.
	The default host name is the host name of the computer where the CLI command is run.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsping command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful request, VolServ is available.

Requests VolServ to acknowledge receipt of the Ping request.

```
vsping
```

Step 2. Output returned:

```
VolServ is available.
```

```
Successful request, VolServ is not
available
```

Step 1. Successful request, VolServ is not available.

Requests VolServ to acknowledge receipt of the Ping request.

```
vsping
```

Step 2. Output returned:

```
VolServ is not available

Error CMD022: could not send command
to volume server.
```

Notes   The client is not required to use vsping before issuing other commands.

The vsping command is a relatively fast operation.

No VolServ status messages are returned in response to the vsping command.

The vsping command does not trigger unsolicited status messages from VolServ.

See Also   None

Commands

vspoolcfg

Configures a specified drivepool.

Parameters

```
vspoolcfg -p drivepool
vspoolcfg -c driveid
vspoolcfg -d driveid
vspoolcfg -i driveid
vspoolcfg -r driveid
[ -Ih ]
[ -H hostname ]
[ -P priority ]
[ -R retries ]
[ -T timeout ]
[ -V prognum]
```

Parameters

Parameter	Description
-p drivepool	Specifies a single drive pool to be queried. • Valid drive pool names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-c driveid	Identifies the drive where the media is mounted.
-d driveid	
-i driveid	
-r driveid	

Parameter	Description
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P πρι ορι τψ Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Commands

vspoolqry   Queries for information on a specified drive pool or on all drive pools known to VolServ.

The command returns the list of drives contained in each drive pool. Detailed information on each individual drive is obtained by specifying the **-v** (verbose) option.

Parameters   `vspoolqry` *drivepool*

`vspoolqry  -a`

`[ -Ihv ]`
`[ -H` *hostname* `]`
`[ -P` *priority* `]`
`[ -R` *retries* `]`
`[ -T` *timeout* `]`
`[ -V` *prognum* `]`

Parameters

Parameter	Description
drivepool	Specifies a single drive pool to be queried. • Valid drive pool names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-v	IIndicates that verbose output is needed. Status is returned on every media specified in the `vscheckout` command. **NOTE**: If `-v` is not specified, status is returned on only those media that were not successfully checked out.

Parameter	Description
-a	Specifies the **-a** option to request information on all drive pools known to the VolServ system.
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vspoolqry command is successfully processed.

Commands

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples   **Step 1.**   Successful Drive Pool Query request with verbose option specified.

Requests the VolServ to return detailed drive information for the every drive in the drvpoolsml drive pool.

```
vspoolqry drvpoolsml -v
```

Step 2.   Output returned:

```
-------------------------------------------------
Drive Pool Query Report              May 25 15:03:52 19931
-------------------------------------------------

Drive Pool: drvpoolsml
-------------------------------------------------
            2
            2
            2
Drive ID: 4
          Drive Type:          Magnetic
          Associated Archive:  shelf2
          Current State:       Offline
          Assignment:          Free
          Usage Count:         1
          Mount State:         Unmounted
          Mounted Media ID:
            2
            2
            2
```

```
Drive ID: 7
        Drive Type:           Magnetic
        Associated Archive:   tower1
        Current State:        Online
        Assignment:           Allocated
        Usage Count:          1
        Mount State:          Mounted
        Mounted Media ID:     MED041
        2
        2
        2

Drive ID: 13
        Drive Type:           Magnetic
        Associated Archive:   shelf1
        Current State:        Diagnostic
        Assignment:           Free
        Usage Count:          0
        Mount State:          Unmounted
        Mounted Media ID:
        2
        2
        2
```

Step 1. Successful Drive Pool Query request with verbose option not specified.

Requests the VolServ to return a list of Drive IDs for every drive pool known to the VolServ system.

```
vspoolqry -a
```

Step 2. Output returned:

```
------------------------------------------------
Drive Pool Query Report          May 26 15:45:52 19931
------------------------------------------------
```

```
Drive Pool: drvpoolsml
------------------------------------------------
          Drive ID(s):              2467
                                     9111314
          •
          •
          2

Drive Pool: drvpooltwr
------------------------------------------------
          Drive ID(s):              711
          •
          •
          2
Drive Pool: drvpoolstg
------------------------------------------------
          Drive ID(s):              139
```

Step 1.   Unsuccessful Drive Pool Query.

Requests the VolServ to return a list of drive
identifiers for the NoPool drive pool.

```
vspoolqry NoPool -v
```

Step 2.   Output returned:

```
Query of drive pool [NoPool] was
unsuccessful

Error VOL008: item not found
```

Notes   The vspoolqry command does not trigger unsolicited status
messages from VolServ.

A pending `vspoolqry` is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The `vspoolqry` also is aborted by sending the SIGINT signal (control-c).

See Also   None

Commands

vsqrymount   Queries for drives that could be used in a subsequent mount of a specified media.

The vsqrymount output lists the drives in the order of preference, based (in order of relative importance) upon their availability, proximity to the media, and usage time.

Upon receipt of the vsqrymount request, VolServ determines which library contains the specified media:

• If the specified media is **not** in a library, a null list of drives is returned to the client.

• If the media is **in** a library, VolServ determines which drives in that library (and only that library) are suitable (based on the media's type) for mounting the media.

Parameters   vsqrymount *mediaid*

[-Ih]
[-H *hostname* **]**
[-P *priority* **]**
[-R *retries* **]**
[-T *timeout* **]**
[-V *prognum***]**

Parameters

Parameter	Description
mediaid	Specifies the media for which a list of drives supporting the media's type is being requested.
	A valid media identifier may contain up to 16 alphanumeric characters, including spaces. Leading and trailing spaces are not permitted.

Parameter	Description
-I	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsqrymount command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

Commands

• >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful Query Mount request.

Requests VolServ to return a list of drives that are candidates to be mounted with MED024.

```
vsqrymount MED024
```

Step 2. Output returned:

```
Media [MED024] can be mounted on the following drives:
                               1Drive [14]
                               2Drive [12]
```

Step 1. Unsuccessful Query Mount request, specified media already mounted.

Requests VolServ to return a list of drives that are candidates to be mounted with MED041.

```
vsqrymount MED041
```

Step 2. Output returned:

```
Query Mount for media [MED041] was unsuccessful.
Error VOL043: media mounted
                               1Drive [11]
                               2Drive [7]
```

Step 1. Unsuccessful Query Mount request.

Requests VolServ to return a list of drives that are candidates to be mounted with MED003.

```
vsqrymount MED003
```

Step 2. Output returned:

```
Query Mount for media [MED003] was
unsuccessful.

Error VOL008: item not found
```

Notes

The returned list of drives are known to be suitable for mounting the specified media, but those drives are not available if they are currently in use.

Drives that are not online are not considered suitable for mounting and are, therefore, not returned in response to the query.

If a vsqrymount is run against media:

• that is found to be currently mounted, the output to the client includes a message that the media is mounted, in addition to a list of suitable drives.

• that is currently allocated for mounting (but has not completed the mount move), the output includes a message that the media is assigned.

The ordering of the returned drive list is based on the media's current physical location. Drives that are not mounted are listed before drives that have media mounted on them. Consequently, for a mounted media, the drive where the media is currently mounted may not be the first drive on the returned list.

Commands

The `vsqrymount` command does not trigger unsolicited status messages from VolServ.

A pending `vsqrymount` request is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also   •   vsmount

vsreclassify

Changes the MediaClass name of one or more media.

Upon receipt of this request, VolServ verifies that each specified media identifier references a media of the type supported by the target MediaClass group.

- If all media are of the appropriate media type, VolServ verifies that the target MediaClass group is not filled to capacity.

- If the target MediaClass group is filled to capacity, the vsreclassify fails and a failure return code is returned to the client.

If the target MediaClass group is not filled to capacity, only as many media as it takes to reach the capacity are reclassified. Any remaining media specified in the vsreclassify command request are not reclassified and have a failure indicator returned to the client.

Parameters

vsreclassify *mediaid*

vsreclassify -c *currentmediaclass*

vsreclassify -n *newmediaclass*

[-Ihv]
[-H *hostname* **]**
[-P *priority* **]**
[-R *retries* **]**
[-T *timeout* **]**
[-V *prognum***]**

Commands

Parameters

Parameter	Description
mediaid…	Specifies a list of one through 64 media to be reclassified.
-c *currentmediaclass*	Specifies the MediaClass group with which the specified media are currently associated. • Valid MediaClass names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-n *newmediaclass*	Specifies the new MediaClass group with which the specified media are to be associated. • Valid MediaClass names may contain up to 16 alphanumeric characters, including spaces. • Leading and trailing spaces are not permitted.
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command. **NOTE**: If -v is not specified, status is returned on only those media that were not successfully checked out.
-l	Command options are first read from the command line. VolServ then reads any options contained in the stdin file.

Parameter	Description
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed.
	An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server.
	The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Return Codes

- 0 - The vsreclassify command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Commands

Examples

Step 1. Successful Reclassify request with verbose option specified.

Requests VolServ to reclassify media `MED002`, `MED023`, and `MED044` from MediaClass group `medclassstgsml` to `medclasssml` and to return status on every specified media.

```
vsreclassify MED002 MED023 MED044 -c
medclassstgsml -n medclasssml -v
```

Step 2. Output returned:

```
Reclassify of 3 of 3 media into class [medclasssml] was successful
          Media [MED003]          no error
          Media [MED023]          no error
          Media [MED044]          no error
```

Step 1. Successful Reclassify request with verbose option not specified.

Requests VolServ to reclassify media `MED002`, `MED023`, and `MED044` from MediaClass group `medclasssml` to `medclassstgsml` and to return status on media only if processing for that media was unsuccessful.

```
vsreclassify MED002 MED023 MED044 -c
medclasssml -n medclassstgsml
```

Step 2. Output returned:

```
Reclassify of 3 of 3 media into class
[medclassstgsml] was successful
```

Step 1. Errors with verbose option specified.

Requests VolServ to reclassify media `MED013`, `MED017`, `MED020`, `MED032`, `MED041`, and `BadMedia` from MediaClass group `medclasssml` to `medclasssh2sml` and to return status on every specified media.

```
vsreclassify MED013 MED017 MED020
MED032 MED041 BadMedia -c medclasssml
-n medclasssh2sml -v
```

Step 2. Output returned:

```
Reclassify of 2 of 6 media into class [medclasssh2sml] was
successful
Error VOL024:                 error in the list
          Media [MED013]      class does not support media type
          Media [MED017]      no error
          Media [MED020]      invalid current class
          Media [MED032]      no error
          Media [MED041]      archive not associated with
                               mediaclass
          Media [BadMedia]    item not found
```

Step 1. Errors with verbose option not specified.

Requests VolServ to reclassify media `MED013`, `MED017`, `MED020`, `MED032`, `MED041`, and `BadMedia` from MediaClass group `medclasssml` to `medclasssh2sml` and to return status on media only if processing on that media was unsuccessful.

```
vsreclassify MED013 MED017 MED020
MED032 MED041 BadMedia -c medclasssml
-n medclasssh2sml
```

Commands

Step 2. Output returned:

```
Reclassify of 2 of 6 media into class [medclasssh2sml] was
successful
Error VOL024:                  error in the list
            Media [MED013]   class does not support media type
            Media [MED020]   invalid current class
            Media [MED041]    archive not associated with
                             mediaclass
            Media [BadMedia]  item not found
```

Step 1. Unsuccessful Reclassify request.

Requests VolServ to reclassify the media MED042 from MediaClass group medclassmed to BadClass and to return status on media only if processing on that media was unsuccessful.

```
vsreclassify MED042 -c medclassmed -n
BadClass
```

Step 2. Output returned:

```
Reclassify of media into class
[BadClass] was unsuccessful

Error VOL147: invalid target class
```

Notes The reclassify command cannot be cancelled.

Pending vsmount requests are not affected by the reclassification of media.

If the capacity of the target MediaClass group is exceeded by the reclassification, only as many media as necessary to reach capacity are reclassified; the reclassification of any remaining media fails.

The capacity of a library media class is a soft limit. If the capacity of a library media class is exceeded, the entire vsreclassify request is processed unless the capacity of the associated MediaClass group is reached. When the capacity of the library media class is reached, applicable High Mark processing is initiated.

An attempt to reclassify media into its current MediaClass group fails.

If reclassifying media places it in a MediaClass group that does not have the media's present location as a preferred location, the media is NOT moved just to place it into a preferred area. Later, if the media is mounted then dismounted, or ejected then entered, an attempt is made to place the media in a preferred location as defined by the target library media class.

If media to be reclassified is in a library, the target MediaClass group must be associated with that library.

Media that does not reside in a library can be reclassified.

The vsreclassify command triggers unsolicited status messages from VolServ.

See Also

- vsmount

- vsmedclassqry

Commands

vsrequestqry   Queries for information about a specified request.

The client must specify VolServ assigned request identifier of the request being queried.

Upon receipt of a `vsrequestqry` request, VolServ searches its request queue for the specified request identifier. If the specified request is not found, status is returned to the client that indicates a non-existent request. If the request is found, the attribute values of the request are returned to the client.

Parameters   **vsrequestqry** *requestid*

[-Ih]
[-H *hostname* **]**
[-P *priority* **]**
[-R *retries* **]**
[-T *timeout* **]**
[-V *prognum* **]**

Parameters

Parameter	Description
requestid	Specifies the VolServ-assigned identifier of the request to be queried. A valid request identifier must be specified in the: `yyyyddmm` format.
-I	Command options are first read from the command line. VolServ then reads any options contained in the `stdin` file.

Parameter	Description
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed.
	An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server.
	The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Commands

Return Codes

- 0 - The vsrequestqry command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples   **Step 1.**   Successful Request Query.

Requests VolServ to return status on request `93:144:02136` (or `314402136`).

```
vsrequestqry 93:144:02136
```

Step 2.   Output returned:

```
-------------------------------------------------
Request Query Report              May 24 12:43:18 19931
-------------------------------------------------

Request ID:                       93:144:02136
-------------------------------------------------
          Request Type:           Move
          Priority:               15
          Time:                   May 24 12:41:54 1993
          Current State:          Executing
```

Step 1.   Unsuccessful Request Query.

Requests VolServ to return status on request `314402137` (or `93:144:02137`).

```
vsrequestqry 314402137
```

Step 2.   Output returned:

```
-------------------------------------------------
Request Query Report              May 24 12:54:43 19931
-------------------------------------------------
          Error:                  item not found
```

Notes   The client must know the request identifier to be queried.

After execution of a request completes, a relatively short period of time exists where the request shows a state of "`complete`." Afterwards, all knowledge of the request is removed from the VolServ system and any subsequent queries for the command fail.

The `vsrequestqry` command returns information for only one request per execution.

The `vsrequestqry` command does not trigger unsolicited status messages from VolServ.

A pending `vsrequestqry` is cancelled with the VolServ cancel command. The VolServ cancel command is run from the command line by sending a SIGQUIT signal (control-\). The request also is aborted by sending the SIGINT signal (control-c).

See Also   None

Commands

vsunlock Releases exclusive use of one or more drives.

The list of drives to be unlocked and the assigned lock identifier for those drives must be specified.

A client needing to release a subset of locked drives, locked via a single lock command, can runmultiple `unlock` requests. Each `unlock` request can specify a subset of the drives held by the client. VolServ releases only those drives specified in the `unlock` request.

Parameters **vsunlock** *driveid…*

vsunlock -l *lockid*

[-Ihv]
[-H *hostname* **]**
[-P *priority* **]**
[-R *retries* **]**
[-T *timeout* **]**
[-V *prognum* **]**

Parameters

Parameter	Description
driveid...	Specifies a list of one through 64 drives to be released (unlocked) from exclusive use.
-l *lockid*	Indicates the lock identifier assigned to the specified, locked drive.
-v	Indicates that verbose output is needed. Status is returned on every media specified in the vscheckout command. **NOTE**: If -v is not specified, status is returned on only those media that were not successfully checked out.

Parameter	Description
-I	Command options are first read from the command line. VolServ then reads any options contained in the `stdin` file.
-h	Requests help for the entered command. When the Help option is specified, no command line processing is performed. An exit code of 0 is returned to the client when the Help option is specified.
-H *hostname*	Host name of the VolServ server. The default host name is the host name of the computer where the CLI command is run.
-P *priority* Default value is 15.	The execution priority of the entered command. Assignable priority values are restricted to a range from 1 (highest) to 32 (lowest) inclusive.
-R *retries* Default value is 3.	Number of retries the CLI software attempts if a time-out is returned by the API software.
-T *timeout* Default value is 120 seconds.	Amount of time (in seconds) the API software waits for status from VolServ before returning a time-out to the CLI software. Total wait time for a command is (retries plus 1) multiplied by time-out value.
-V *prognum* Default value is 300016.	RPC program number for VolServ.

Commands

Return Codes

- 0 - The vsunlock command is successfully processed.

- -1 - An error is detected by either the CLI software or the API software.

- >0 - An error is detected by VolServ. The returned exit code corresponds to the error code given by VolServ.

Examples

Step 1. Successful Unlock request with verbose option specified.

Requests VolServ to unlock drives 4, 8, and 12, all of which have an assigned lock identifier of 1719790788, and to return status on every specified drive.

```
vsunlock -v 4 8 12 -l 1719790788
```

Step 2. Output returned:

```
Unlock [3] drives unlocked with lock id [1719790788]
                        Drive [4] no error
                        Drive [8] no error
                        Drive [12] no error
```

Step 1. Successful Unlock request without verbose option specified.

Requests VolServ to unlock drive 4 and 3, with an assigned lock identifier of 1719790788, and to return status on a drive only if the Unlock request for that drive was unsuccessful.

```
vsunlock 4 8 -l 1719790788


Unlock [2] drives unlocked with lock
id [1719790788]
```

Step 1.   Unsuccessful Unlock identifier with verbose option.

Requests VolServ to unlock drives `40, 41, 42,` and `43`, three of which have an assigned lock identifier of `1719790788`, and to return status on every specified drive.

```
vsunlock -v 40 41 42 43 -l 1719790788
```

Step 2.   Output returned:

```
Unlock [3] drives unlocked with lock id [1719790788]
Error VOL024: error in the list
                          Drive [40] invalid lock id
                          Drive [41]no error
                          Drive [42] no error
                          Drive [43] no error
```

Step 1.   Unsuccessful Unlock identifier without verbose option.

Requests VolServ to unlock drives `40, 41, 42,` and `43`, three of which have an assigned lock identifier of `1719790788` and to return status on a drive only if the Unlock request for that drive was unsuccessful.

```
vsunlock 40 41 42 43 -l 1719790788
```

Step 2.   Output returned:

```
Unlock [3] drives unlocked with lock id [1719790788]
Error VOL024: error in the list
                          Drive [40] invalid lock id
```

Commands

Notes   The client can release a subset of drives locked by a single
                `vsunlock` request.

                VolServ fails a `vsunlock`for a drive if the lock identifier
                specified in the unlock request does not match the lock
                identifier assigned to the drive.

                The `vsunlock` command does not trigger unsolicited status
                messages from VolServ.

                A pending `vsunlock` is cancelled with the VolServ cancel
                command. The VolServ cancel command is run from the
                command line by sending a SIGQUIT signal (control-\). The
                request also is aborted by sending the SIGINT signal
                (control-c).

See Also   •   vslock

vswin   Starts the VolServ system administrator's console and brings up
                             the system GUI display.

Parameters   **vswin -display** *host*#

Parameters

Parameter	Description
-display *host*#	Starts the VolServ GUI.

Commands

Return Codes   • 0 - Terminated normally.

                             • 1 - Error occurred during initialization.

Example   **Step 1.**   Initialize the VolServ System console.

                             ```
                             vswin
                             ```

                             Step 2.   Run the VolServ System Console in the background.

                             ```
                             vswin &
                             ```

Notes   The environmental variable VS_DIR must be set. The
                             environmental variable II_SYSTEM must be set and in the path
                             statement.

                             vswin can only be run from the VolServ host machine.

The display location of `vswin` must give `xhost` privileges to
the VolServ host machine for `vswin` to properly work.

See Also
- volserv (l)

NOTES

Commands

NOTES