LXI CORP.

MMS®/*vms* - Vault Management

*for the iSeries*

Software : MMS/*vms*

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# Vault Management

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# Chapter 1

*Introduction*

When a disaster strikes, it is important to know that company data is safe. Knowing that the data is safe in the companies' data center is of little value if fire or flood destroys it. Storing media offsite provides an extra degree of protection by keeping data moving across multiple locations. If a disaster occurs, the data is retrieved from an offsite location. Media rotation requires that time schedules are implemented and adhered to. Recently used media goes offsite for a user-specified time before returning to the data center or moving to another location. Media that goes offsite may be packed into containers before leaving the data center or the media may be vaulted once it arrives at the offsite location. MMS Vault Management (MMS/*vms*) is a subset of the LXI Media Management System (MMS). This module is designed to help you implement a vaulting strategy, provide tools, which aid in locating media, and help reduce recovery time.

A media's location needs to be tracked for recovery purposes. In case of a disaster, it is the function of MMS Vault Management (MMS/*vms*) to provide the user with the information necessary to locate required media.

## Why You Should Use MMS/*vms*

Many reasons exist for choosing LXI for your vault management solution, including its wide array or features and functions, ease of implementation, power, flexibility, and ease of use. For those of you familiar with other LXI products, the choice of MMS/*vms* is easy. MMS/*vms* can increase productivity and help eliminate errors caused by old, out dated and incomplete container management or vaulting strategies. The flexibility provided allows you to customize and change your strategy as required without having to modify existing code. The strategy that you create can be reviewed at any time to help ensure that all your requirements are met.

Ease of implementation is key to using any software. MMS Vault Management uses existing IBM facilities and requires no additional modifications to make it function. Since there is no need to make changes to existing code, MMS/*vms* is active and ready to use after the installation procedure has completed.

## Flexibility When You Need It

Changes are the forte of any data center and MMS/*vms* is designed to adapt easily and quickly. The container and vaulting strategy that worked so well yesterday can be updated to meet today's challenges within a few minutes. Move calendars, jobs and schedules provide solutions that can be implemented and maintained in one comprehensive software package.

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## How This Book Is Organized

This manual is organized to help you set up and use the software as quickly and efficiently as possible. If you are familiar with earlier versions of this product, you should scan the table of contents for new features. The MMS/*vms* manual is organized as follows:

- **System Overview**
  Chapters 2 through 5 outline the MMS/*vms* features and functions. These chapters also provide a guide to the menu system used by MMS/*vms*. Chapter 5 contains the Quick Start exercises, which illustrate the simplicity of use.

- **Description of Major Functions**
  Chapters 6 through 11 detail all MMS/*vms* functions including the creation of locations, containers and slots, automated moves/returns, manual moves/returns and temporary returns.

- **Reports**
  Chapter 12 shows the reports available in MMS/*vms*. These reports provide you with the information necessary to ensure that your container management and vaulting strategies are functioning.

- **Command References**
  Chapter 13 provides a list of all MMS/*vms* commands, command parameters and values allowed. For those familiar with commands and wishing to bypass the menus, the commands provide a fast means of setting up and using the product.

- **Installation Instructions**
  Chapter 14 contains the information required to successfully install this product. Information on license keys is also provided.

- **Troubleshooting Guide**
  Chapter 15 lists the most commonly asked questions regarding MMS/*vms* functionality. If MMS/*vms* does not function as expected, this appendix can provide you with valuable insight quickly.

- **Software Support**
  Chapter 16 provides instructions for accessing Electronic Software Support from the LXI technical support staff. In the event that you need a Program Temporary Fix PTF or online support, this chapter walks you step-by-step through the process of getting help.

## Conventions Used

The conventions that are used in this manual have been established to help you learn and use the product quickly and easily.

The first time a function is referenced, it displays in **bold** type.

Menus, panels, and command prompts are displayed as needed to help explain a function or location of a function.

Default parameters for commands are **bold** and **underlined**.

## Command Key Actions

To help minimize the time required to learn MMS Vault Management, IBM command key standards have been followed whenever and wherever possible. The following graph shows some of the commands and their use within this product. The command keys available and their associated functions are displayed at the bottom of each menu and panel.

| Command Key | Function | Description |
|---|---|---|
| F1 | Help | Displays cursor-sensitive help text. |
| F3 | Exit | Exits the function and returns to the prior function. |
| F4 | Prompt | Prompts the user for command parameters. |
| F5 | Refresh | Updates the panels with current information. |
| F12 | Cancel | Cancels the requested function. |

## Online Help

MMS/*vms* provides online help for all commands, menus, and panels. The help provides additional information on a function or field. To access help, position the cursor on the field or parameter in question and press the **F1** key.

MMS/*vms* error messages may also provide additional information on the cause of the error and the corrective action to take. To retrieve additional message help, place the cursor on the message and press the **F1** key. If second level help is available, it is displayed.

## Before You Install

Before installing this product, review the items below. Knowing this information from the beginning will simplify using MMS/*vms*.

### Command Security

MMS/*vms* is a command driven software product. All menu and panels options reference either an IBM or a MMS/*vms* command. Command authority for MMS/*vms* is achieved in the same way that authority is established for IBM commands. If a user is not authorized to use a MMS/*vms* command, the function that the restricted command performs will not be available for use and the option number will not be displayed. If the user tries to access the command directly via command line, he will receive a message from OS/400 stating that he is not authorized to use the command. Refer to the appropriate IBM manual for details on establishing or changing command authority.

### System Defaults

MMS/*vms* command defaults conform to iSeries system defaults, where applicable. Overrides can come from IBM commands as well as MMS/*vms*. In areas where IBM has no matching default, MMS/*vms* uses values that cause the software to use the fewest resources and execute the fastest. If the MMS/*vms* command defaults are changed, it is the users responsibility to maintain the changes during product upgrades.

# Chapter 2

*Features and Functions*

This chapter documents some of the most important features in MMS Vault Management. If you are an experienced user, browse through this chapter to find what is new and what features have been added.

Changes in MMS/*vms* are of two types: those that enhance existing features or make them easier to use, and new features that add flexibility and power to MMS/*vms*.

## Automatic Moves

MMS/*vms* moves and returns volumes automatically based on the move information provided. Volume move/return information is created through a Move Schedule or by manual input. If a Move Schedule is used, the volumes are scheduled for moves as they are used.

## Multiple Move Schedules

MMS/*vms* provides virtually limitless scheduling options. Up to 999 moves can be scheduled for a volume. Move Schedules determine the number of days or generations that a volume resides at a location and the vaulting method to use.

## Calendar Support

MMS/*vms* maximizes flexibility by providing calendar support. Calendar support determines when volumes move and return. If volumes move offsite on a daily basis, calendar support will move and return volumes daily. If volumes only move and return on Tuesday, calendar support will only move and return volumes on Tuesday. Calendar support is based on the Move Job and can be different for different jobs.

## Pack/Unpack Support

With pack/unpack support, containers are selected by the user or by MMS/*vms*. If MMS/*vms* packs the container, it occurs during move processing. If the user packs the container, it can occur anytime before the move, even days before the move. To ensure that a container is not used before it's empty, MMS/*vms* requires that the user unpack the container. This process frees the container and allows it to be reused.

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## Generation Support

MMS/*vms* provides tape movement based on generations or number of copies of specific saves. Generation processing is alternative to movement by days. This form of tape movement ensures that you always have a specific number of backups offsite. LXI allows generation support along with day support on Move Schedules.

## Temporary Returns

With temporary return support, a volume is temporarily returned from an offsite location for recovery purposes and then sent back to complete the offsite rotation cycle. MMS/*vms* maintains the container or slot information to ensure that the volume returns to the correct location.

## Network Support

MMS/*vms* network support provides container and vaulting capabilities to all or specific systems within the network. This support allows systems to process container and vaulting functions independent of other systems in the network or be grouped together and managed as a single system.

## Tape Library Support

MMS/*vms* provides support for IBM, Memorex/Telex and StorageTek tape libraries. This ensures that volumes scheduled for movement are ejected from the tape library.

# Chapter 3

*Concepts*

MMS/*vms* provides a variety of container management and vaulting options. From simple location moves, using no containers or slots, to complex schedule container or vaulting patterns, MMS/*vms* provides the functions necessary to create and manage them with ease. Setting up MMS/*vms* is simple once you understand the concepts. This chapter will describe the concepts and how they relate to each other.

## Container Concepts

A container is a physical box that contains tapes. The number of tapes that the box holds depends on the size of the box and the size of the tapes. The box starts out at the data center where it is packed with tapes going to an offsite location for a user-defined period of time. The box is packed and locked by the user. Once complete, the box is retrieved by an offsite storage vendor and transferred to their location for safekeeping. When the user specified time has elapsed, the box returns to the user where it is unpacked and the tapes returned to the tape rack. Once the container has been unpacked, it is available for reuse.

If an offsite tape is required for recovery, the container must be recalled from the offsite vendor.

## Vaulting Concepts

Vaulting or slot management is accomplished by storing tapes individually at an off-site company's tape rack. This type of management requires that the user allocate a specific number of slots from an offsite storage vendor. The number of slots allocated usually equals the number of tapes at the location at any point in time. When tapes move offsite, the offsite storage vendor retrieves the tapes from the user and transfers them to an available slot. If slot management is controlled by the user, the user must tell the vendor which slot to use. When the tape returns from offsite, it is placed in the users tape rack. Since vaulting deals with each tape individually, packing and unpacking do not apply.

If an offsite tape is required for recovery, it must be recalled from the offsite vendor.

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## Move/Return Concepts

The first requirement in any MMS/*vms* processing is the **move/return definition**. This definition defines the volume or range of volumes to move offsite, the location that the volumes are moving to, the move date, if other than today, an optional container class and a return date. MMS/*vms* uses this definition to move the volume to an offsite location on the specified date and return it when the return date is equal to or less than the current date. If a container class is specified, the volumes are packed into the container based on the container class rules for packing. When the volume returns, the move/return definition is deleted. If the volume returns in a container, it remains there until unpacked by the user.

## Class Concepts

The use of containers or slots (vaulting) is optional. If used, they must be associated to a **container class** definition. The container class defines the size and **rules for packing**. Rules for packing determine if multiple systems or multiple return dates can reside in the same container. Since slots can only hold one tape, the rules for packing do not apply.

# Chapter 4

*Menus*

MMS/*vms* is a command driven product. As such, most functions can be easily initiated from an OS/400 command line or from within a high level program. When the product is first installed, the menu system provides an easy method of learning the commands associated with a particular function. Over time, as the commands become familiar, the menu system can be bypassed and the commands can be accessed directly.

The menu system is comprised of a main menu and five related command menus. Each command menu provides access to another related command menu. Depending on the function and level of menu currently displayed, the related command menu may be an LXI menu or an IBM menu.

## Menu Groups

Menus are grouped by function. The following functions have their own menu.

- Container
- Move
- Move Schedule
- Reports
- Security

## Menu Security

IBM security can be implemented for any MMS/*vms* menu or menu function. If a user is not authorized to a menu, the secured menu will not be displayed as an option from other MMS/*vms* menus. If a user is not authorized to a specific function on a menu, the option and related command will not be displayed. To change the authority of a MMS/*vms* menu or command, use the appropriate IBM command to change it.

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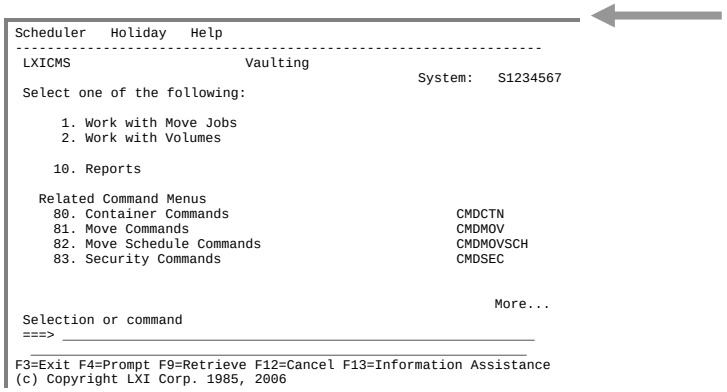
## Menu Bars

Some menus contain menu bars. Menu bars are located on the top of a menu and are assigned function names. Use the **Tab** key to position the cursor on the desired function. Once the cursor is in place, pressing the **Enter** key lists the options available. If you are using a mouse, double click on the desired function. This provides a list of the options available. Enter the desired option number in the option field provided and press **Enter**.

The following example shows the location of the menu bar on menu MMS/*vms*.




## GUI Menus

All menus and panels display in the IBM Graphical User Interface (GUI) format if supported by the display device. This support means that all menus and panels will have a PC look and feel with an easy point-and-click interface. The function keys still work and the command line is available for use.

# Chapter 5

## *Getting Started with Vault Management*

In this chapter, you will learn how to implement and use the basic functions of MMS/*vms*. If you are a new user to MMS/*vms*, this chapter is important for two reasons: you will become comfortable navigating MMS/*vms*, and you will have a head start on the next MMS program you learn.

Simplicity is the key in getting started. The following procedures will guide you through the steps necessary to successfully implement MMS/*vms*.

The purpose of this chapter is to:

- Create an offsite location
- Create a calendar schedule
- Create a Move Schedule
- Add a Move Schedule entry
- Create a Move Job
- Start the MMS Tape Management interface
- Start the move/return processor

The remaining chapters provide additional information on other functions and options available to you.

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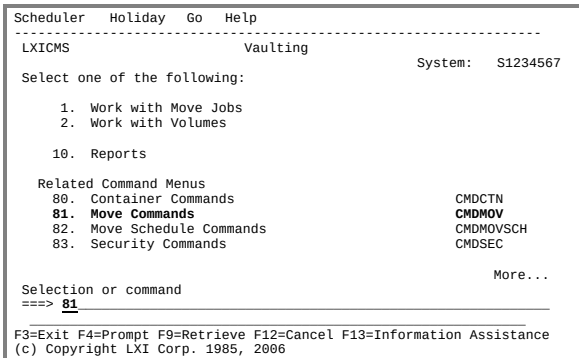
## Step 1.

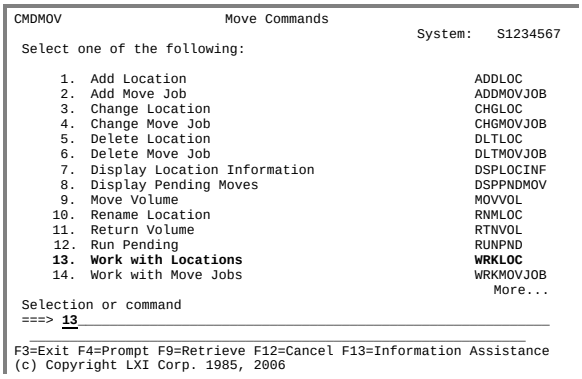
Ensure that **LXICMS** is in the library list and enter **GO LXICMS**. This displays the Vaulting menu.

The first step in the vaulting process is to define locations. Selecting **Option 81** from the Vaulting menu displays the Move Commands menu.



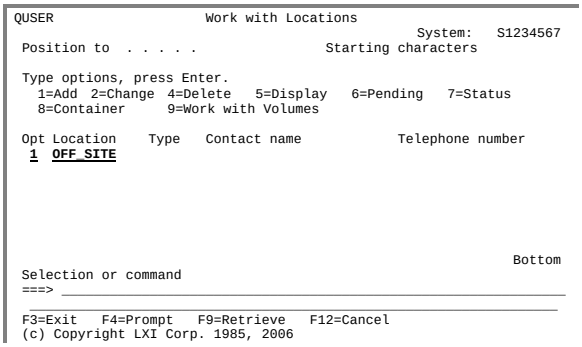

## Step 2.

Select **Option 13** from the Move Commands menu prompts the Work with Location (WRKLOC) command. Pressing **Enter** displays the Work with Locations panel.




## Step 3.

Select **Option 1** and type the name of an offsite location. Pressing **Enter** displays the Add Location panel where additional information can be entered. When complete, press **Enter**. If multiple locations are required, follow the same steps to input and when complete, press **F12** twice to return to the Vaulting menu.



## Step 4.

Selecting **Option 1** from the Vaulting menu displays the Work with Move Jobs panel. The Work with Move Jobs panel defines containers, slots, calendars, and Move Schedules.

```
Scheduler   Holiday   Go   Help
--------------------------------------------------------------------------
 LXICMS                      Vaulting
                                                        System:   S1234567
 Select one of the following:

      1.  Work with Move Jobs
      2.  Work with Volumes


     10.  Reports

   Related Command Menus
     80.  Container Commands                            CMDCTN
     81.  Move Commands                                 CMDMOV
     82.  Move Schedule Commands                        CMDMOVSCH
     83.  Security Commands                             CMDSEC

                                                             More...
 Selection or command
 ===> 1_____________________________________________________________________
  _____________________________________________________________________________
F3=Exit F4=Prompt F9=Retrieve F12=Cancel F13=Information Assistance
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```

## Step 5.

Select **Option 1** and enter the name of an MMS Tape Management Job Label. This prompts the Add Move Job (ADDMOVJOB) command. Press **Enter** to return to the Work with Move Jobs panel. In this example, **DAILY_BKUP** is the Job Label for the daily backups.

```
                          Work with Move Jobs

 Position to . .  _____________      Starting characters

 Type options, press Enter.
   1=Add  2=Change  4=Delete 5=Pending  6=Class 7=Schedule 8=Calendar
   9=Run

 Opt Move job      Class     Schedule      Calendar      Eject
  1  DAILY_BKUP




                                                              BOttom
 Selection or command
 ===> ____________________________________________________________________
 _____________________________________________________________________________
 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel
 (c) Copyright LXI Corp. 1985, 2006
```

## Step 6.

Select **Option 8** and press **Enter** to display the Work with Calendar Schedules panel.

```
                          Work with Move Jobs

 Position to . .  _____________      Starting characters

 Type options, press Enter.
   1=Add  2=Change  4=Delete 5=Pending  6=Class 7=Schedule 8=Calendar
   9=Run

  Opt  Move job      Class     Schedule      Calendar      Eject
  ___  _________
  8_   DAILY_BKUP    *NONE     *NONE         *NONE         *NO




                                                              BOttom
 Selection or command
 ===> ____________________________________________________________________
 _____________________________________________________________________________
 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel
 (c) Copyright LXI Corp. 1985, 2006
```

## Step 7.

Select **Option 1** and type the name of a calendar. This calendar determines when an offsite storage vendor picks up and delivers tapes. Pressing **Enter** prompts the Add Calendar Schedule (ADDCALSCH) command. In this example, the calendar name is **DAILY**.

```
QUSER                  Work with Calendar Schedules
                                                    System:   S1234567
Position to  . . . . .               Starting characters

Type options, press Enter.
  1=Add   2=Change   4=Delete

Opt   Calendar      -------------------Days--------------------
 1    DAILY




Selection or command
===> ____________________________________________________________
____________________________________________________________________
F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel
(c) Copyright LXI Corp. 1985, 2006
```

## Step 8.

Enter the days that the offsite storage vendor will pickup and deliver tapes. The default is ***ALL** (Sunday through Saturday). Press **Enter** twice to return to the Work with Move Jobs panel.

```
                  Add Calendar Schedule (ADDCALSCH)

Type choices, press Enter.

Calendar name  . . . . . .  DAILY          Name
Days . . . . . . . . . . .  *ALL           *ALL, *SUN, *MON, *TUE...
        + for more values   ____




                                                                Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

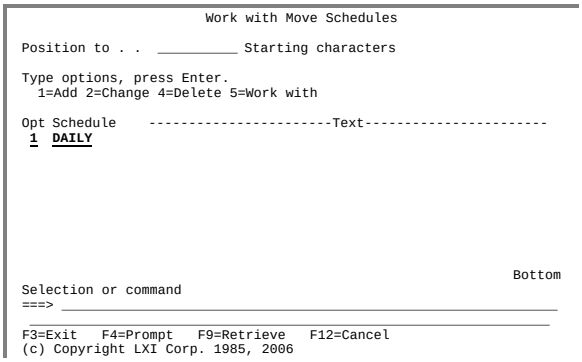
## Step 9.

Select **Option 7** and press **Enter** to display the Work with Move Schedules panel.

```
                        Work with Move Jobs

Position to . .  ____________       Starting characters

Type options, press Enter.
  1=Add  2=Change  4=Delete 5=Pending  6=Class 7=Schedule 8=Calendar
  9=Run

 Opt  Move job      Class     Schedule      Calendar      Eject
 __   _________
 7_   DAILY_BKUP    *NONE     *NONE         *NONE         *NO




                                                          BOttom
Selection or command
===> ____________________________________________________________
____________________________________________________________________
F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel
(c) Copyright LXI Corp. 1985, 2006
```

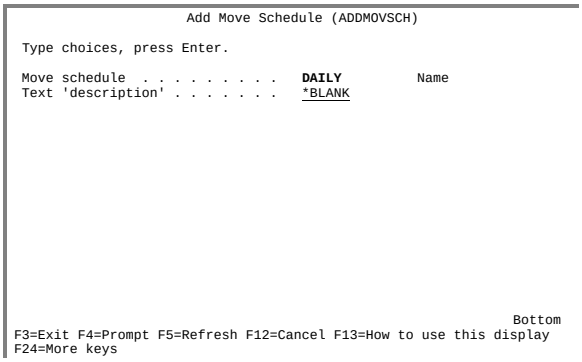
## Step 10.

Enter the name of a Move Schedule. In this example, the name of the Move Schedule is **DAILY**. Press **Enter**. This prompts the Add Move Schedule (ADDMOVSCH) command.



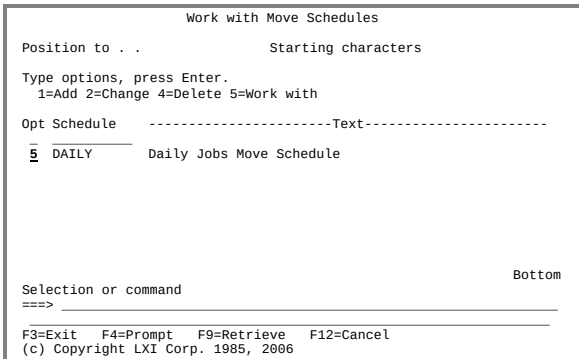

## Step 11.

Enter the description for the Move Schedule and press **Enter**.



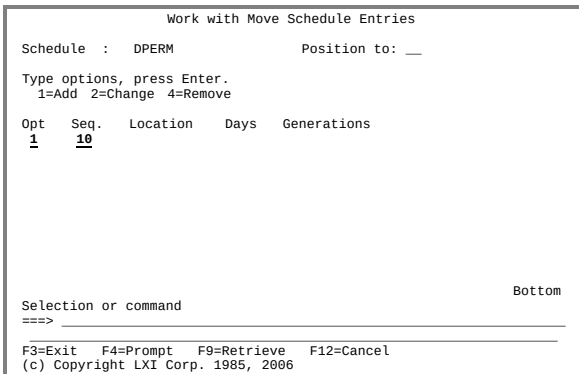

## Step 12.

Selecting **Option 5** for the Move Schedule displays the Work with Move Schedule Entry panel.



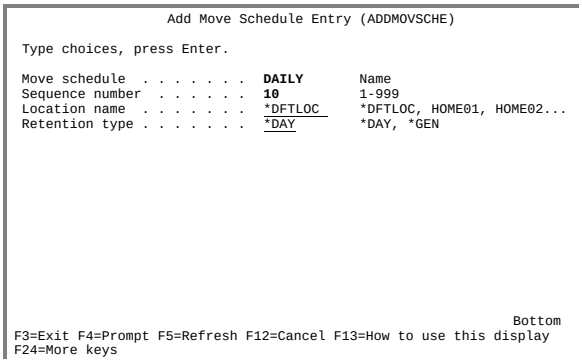
## Step 13.

Select **Option 1** and sequence number "**10"** to add the first Move Schedule entry. This prompts the Add Move Schedule Entry (ADDMOVSCHE) command.



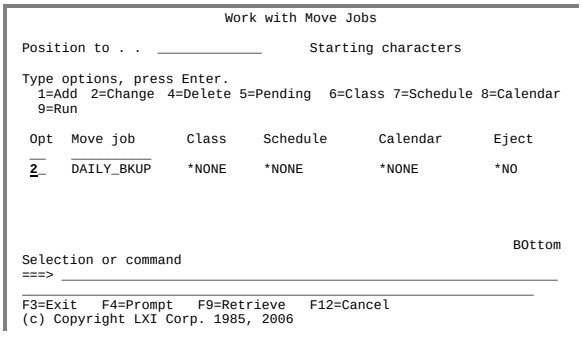

## Step 14.

Enter the offsite location and retention. Retention can be specified in days or generations. Press **Enter** until the Work with Move Jobs panel displays.



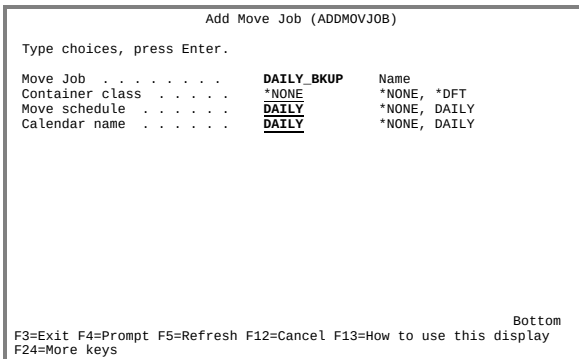

## Step 15.

Select **Option 2** and press **Enter.** This prompts the Change Move Job (CHGMOVJOB) command.



## Step 16.

Enter **DAILY** for the Move Schedule and Calendar name parameters. Press **Enter** to return to the Work with Move Jobs panel.




## Step 17.

To automate the move/return process, the Start TMS Interface (STRTMSIFC) must be added to a job scheduler. It should run after all backups have completed. Add the following command to a job scheduler.

```
LXICMS/STRTMSIFC SYSTEM(*ALL) RUNPND(*YES)
```

This completes the setup for a MMS Tape Management Job Label named **DAILY_BKUP**. When the save that uses Job Label **DAILY_BKUP** occurs, the tapes from the backup are moved as defined by the Move Job named **DAILY_BKUP**.

Each Job Label **must** have its own Move Job for automated moves to occur. Each Move Job can be associated with the same Move Schedule and calendar, if appropriate. This eliminates the need to create a Move Schedule and calendar for every tape Job Label.

---

**See the following pages for detailed information.** σσσ

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# Chapter 6

*Working with Locations*

The whole point to container management or vaulting is to minimize the risk of losing data by spreading it out over multiple locations. This way, if one location, such as the data center, is destroyed, data from another location can be retrieved and business can continue. With government regulations requiring that data be maintained for longer periods, multiple locations minimize the space required to keep all tapes on-site. If for no other reason, keeping tapes at multiple locations reduces the security issues that could exist if all tapes were in a central location.

Locations are the cornerstone of MMS/*vms*. Without locations, container management and vaulting cannot occur. MMS/*vms* supports virtually limitless locations. Any location that a volume may move to must be defined.

This chapter will discuss:

- Location overview
- How to create a location
- How to view the location status

## Location Overview

Locations are defined through a **location definition**. The definition includes the location name, address, contacts, telephone and fax numbers. When volumes move, MMS/*vms* verifies that the location exists and then moves the volume(s) to that location. Additional options include the ability to work with volumes, containers and slots at a location. When a volume returns, it returns to the location defined as the default location in the MMS Tape Management system.

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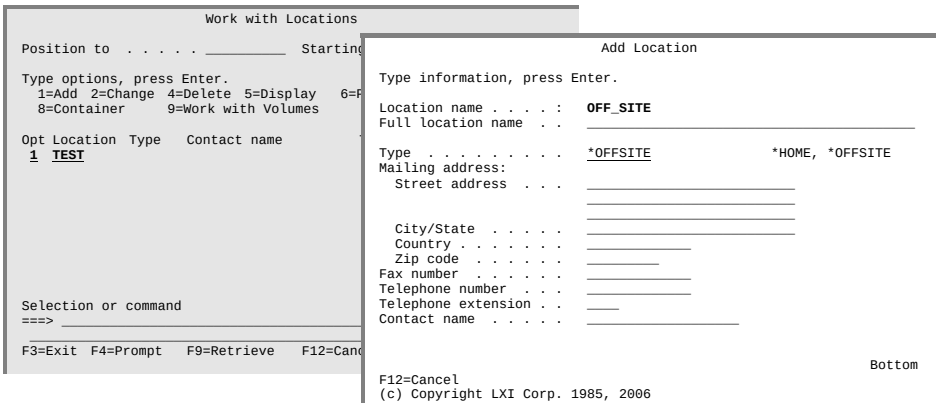
# Working with Locations

The Work with Location (WRKLOC) command lists all or specific user-defined locations. To work with locations, select **Option 81** from the Vaulting menu. This displays the Move Commands menu. Select **Option 12** to display the Work with Locations panel.

## Adding a Location

Using **Option 1** from the Work with Location panel or the Add Location (ADDLOC) command, type a location name and press **Enter**. This displays the Add Location panel where additional location information is entered. All fields on the Add Location are optional.




## Changing a Location

Use **Option 2** from the Work with Location panel or the Change Location (CHGLOC) command to display the Change Location panel where location information is changed.

## Deleting a Location

Use **Option 4** from the Work with Location panel or the Delete Location (DLTLOC) command to delete a location. A location cannot be deleted if a volume is at the location or has a pending move to the location.

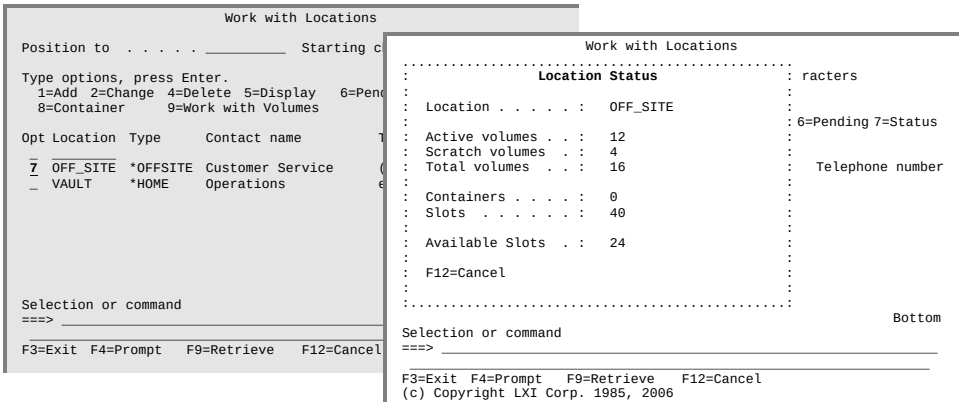
## Display Pending Moves/Returns

Use **Option 5** from the Work with Location panel or the Work with Pending (WRKPND) command to display the tapes residing at the location and their move and return date.

### Viewing Location Status

Using **Option 7** from the Work with Locations panel displays the Location Status window. This information includes:

- Number of active volumes
- Number of scratch volumes
- Total volumes
- Number of containers
- Number of slots
- Available slots



# Chapter 7

*Containers and Slots*

Containers and slots enhance the power of a container management or vaulting system by identifying where a volume resides at an offsite location. Since offsite locations can have hundreds of containers and thousands of slots for a company, identifying where the volume is located becomes crucial. If slots or vaulting is used, it is typically the responsibility of the user to manage the slots. If containers are used, it is important that the contents are managed to ensure that short term tapes are not packed with long term tapes.

This chapter will discuss:

- Container/slot processing
- How to create a container class
- How to create containers and slots

## Container/Slot Overview

Container and slot attributes are defined through a **container class**. The container class defines the number of tapes that reside in a container or slot and the packing requirements. If containers are used, the packing requirements determine if tapes with multiple return dates or from multiple systems can be packed into the same container. Once the container class is defined, containers or slots can be added to the class. If slots are used, their location is specified when they are created.

When a tape moves, the container class determines if the tape is moving in a container or if it is vaulted at the offsite location. If a container is used, MMS/*vms* searches for an available container and packs the tape into it. If other tapes already reside in the container, the tape will need to match the attributes of the container class. If the attributes do not match the container class, another container is selected. If the volume is vaulted at the offsite location, MMS/*vms* searches for an available slot and assigns it to the tape.

When a vaulted tape returns, the slot is freed and made available for other tapes. When a container returns, the user must unpack it. This process frees the container and makes it available for other tapes.

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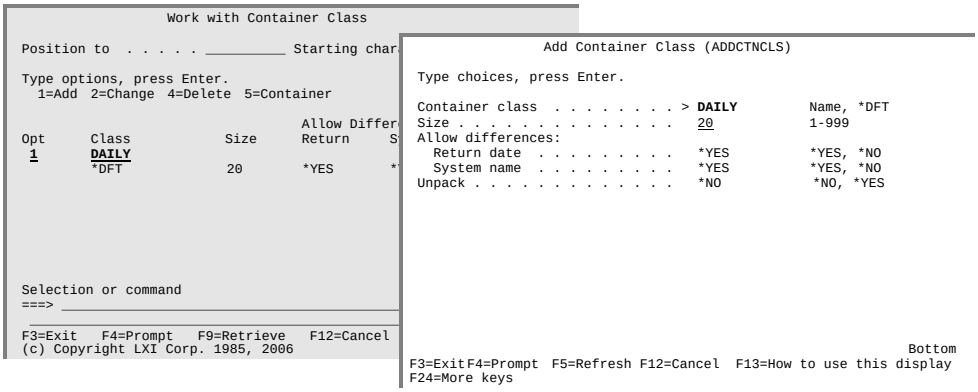
# Working with Containers Classes

Container classes are attributes, such as size and whether to allow return date or system name differences, associated to container/slots. To work with container classes, select **Option 80** form the Vaulting menu. This displays the Container commands menu. Select **Option 13** to work with the container classes.

## Adding a Container Class

Using **Option 1** from the Work with Container Class panel prompts the Add Container Class (ADDCTNCLS) command. This command defines the attributes of containers and slots.




## Changing a Container Class

Using **Option 2** from the Work with Container Class panel prompts the Change Container Class (CHGCTNCLS) command. This command changes the attributes of containers. The container class cannot be changed if it is being used.

## Deleting a Container Class

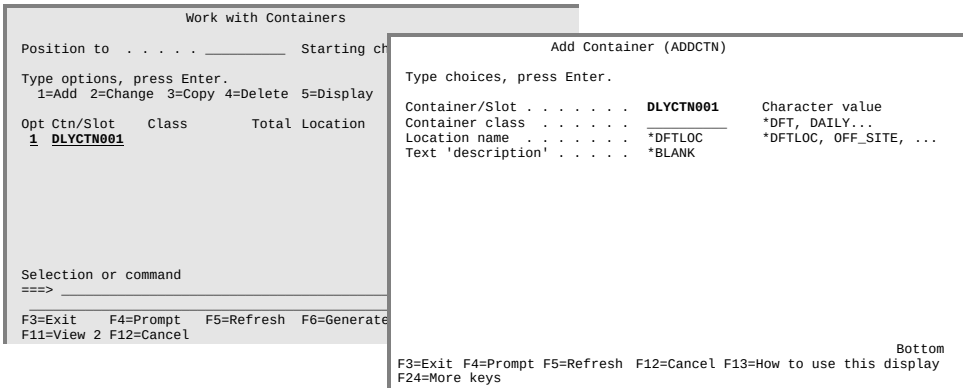
Using **Option 4** from the Work with Container Class panel prompts the Delete Container Class (DLTCTNCLS) command. This command deletes a container class. The container class cannot be deleted if it is being used.

## Working with Containers

Containers and slots are physical locations where tapes reside. The difference between a container and a slot is that a container holds more than one tape while a slot holds only one tape. To work with containers or slots, select **Option 80** from the Vaulting menu. This displays the Container commands menu. Select **Option 12** to work with the containers.

### Adding a Container/Slot

Using **Option 1** from the Work with Container panel prompts the Add Container (ADDCTN) command. This command defines the containers and slots.




### Changing a Container/Slot

Using **Option 2** from the Work with Container panel prompts the Change Container (CHGCTN) command. This command changes the description of containers/slots.

### Copying a Container/Slot

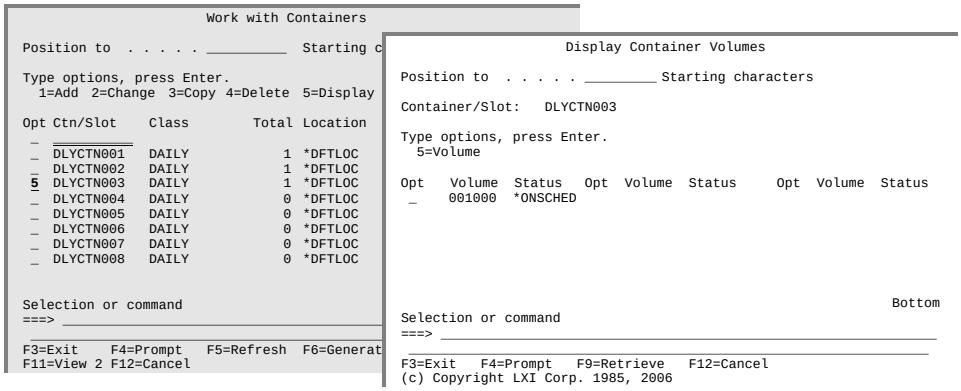
Using **Option 3** from the Work with Container panel prompts the Copy Container (CPYCTN) command. This command copies an existing container/slot to another. The container/slot being copied to must not exist.

### Deleting a Container/Slot

Using **Option 4** from the Work with Container panel prompts the Delete Container (DLTCTN) command. This command deletes a container/slot. A container/slot cannot be deleted if in use.

### Displaying Container/Slot Contents

Use **Option 5** from the Work with Container panel or the Display Container Volume (DSPCTNVOL) command to display the Display Container Volumes panel. This lists all the tapes residing in the specified container/slot.

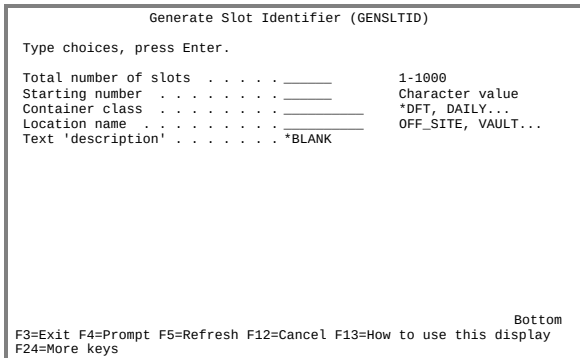



### Unpacking Container/Slot

Use **Option 8** from the Work with Container panel or the Unpack Container (UNPACK) command unpacks the all or the specified tape from the container.

## Generating Slots

The Generate Slot Identifier (GENSLTID) command creates a range of slot identifiers automatically. Using this command eliminates the need to create each slot individually. The slots are associated with a user specified container class and created at a user-specified location. Slot identifiers can contain alphabetic as well as numeric characters. If alphabetic characters are embedded in the slot identifier, they are not incremented. Only the numeric portions of the slot identifier are incremented. Slots cannot exist in the default location. To generate slot identifiers, prompt the Generate Slot Identifier (GENSLTID) command and enter the parameters as required.



# Chapter 8

*Moving Volumes Manually*

Manual moves allow volumes to move from one location to another without requiring the creation of a Move Job, schedule or calendar. This type of processing moves one or more volumes from the default location to an offsite location and then back again. The information is basic and the volumes cannot move to multiple locations, but in cases where a quick move is required, the manual move process provides a solution. The use of containers or slots is optional, but if used, the container class and container/slot definitions must exist.

This chapter will discuss:

- Manual move processing
- How to select a tape volume to move
- How to initiate a manual move

## Manual Move Overview

Manually moving a volume requires a move date, location and return date. This information is specified through MMS Tape Management or through a MMS/*vms* command. A container class is required if the volume is packed into a container or vaulted at an offsite storage vendor. Once this information is entered, the volume is ready for movement. Volume movement occurs when a MMS/*vms* command initiates the move/return process. This process moves and returns all volumes whose move or return date is less than or equal to the current date. Reports are printed and the volume status is changed to reflect the current location. If slots were used, they are freed and made available for other volumes. If containers were used, the volume will remain in it until unpacked by the user. When the container is empty, it is available for reuse.

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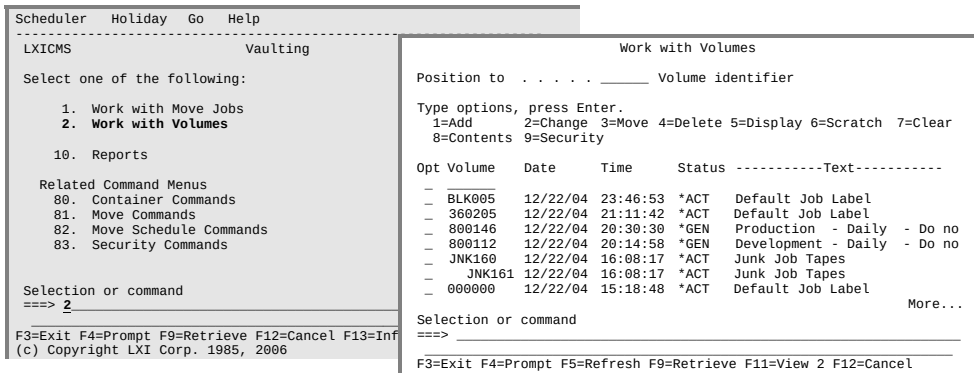
# Manual Moves

Manual moves provide a method of moving volumes when no predefined Move Schedule can be used. Volumes can be moved one at a time or as a group.

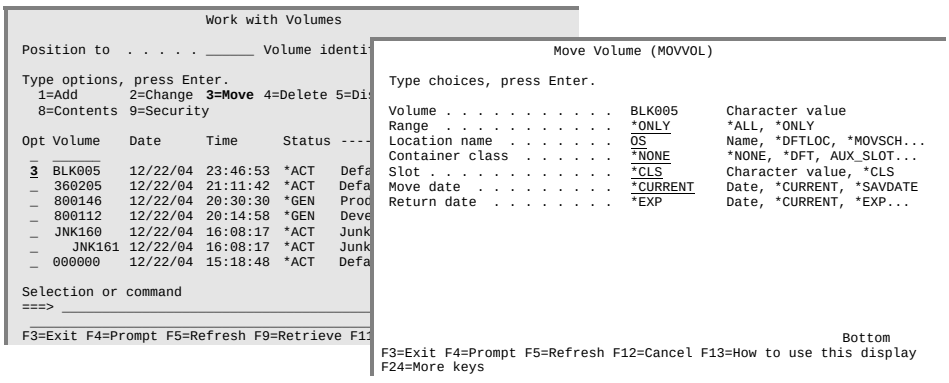
## Selecting Volumes

Using **Option 2** from the Vaulting menu displays the MMS Tape Management Work with Volumes panel. This panel lists all volumes in the tape management database. Pressing **F11** twice from this panel shows the current location of the volumes.



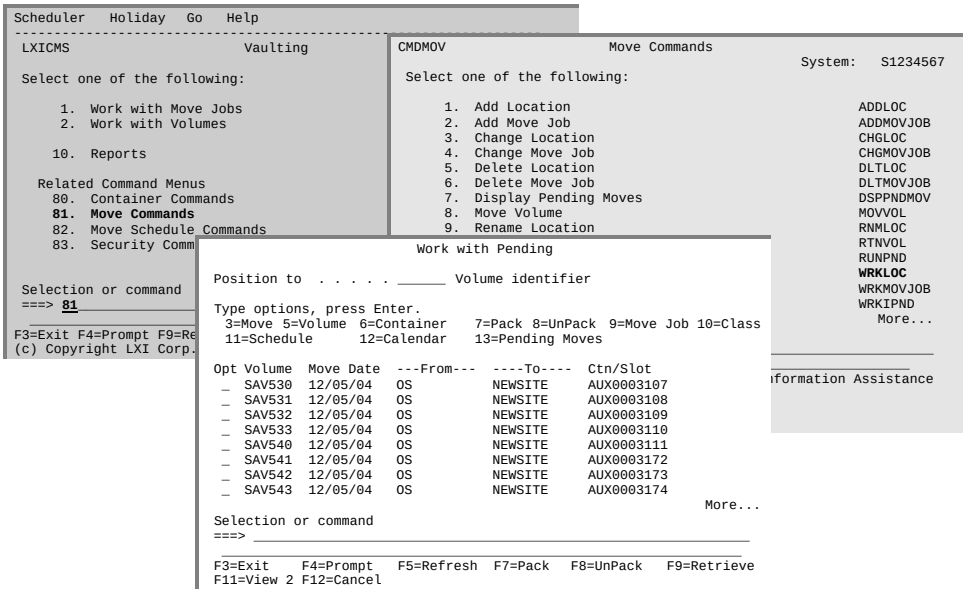

## Using the MOVVOL command

Using **Option 3** from the Work with Volumes panel prompts the Move Volume (MOVVOL) command. This command creates the move/return definition for a manual move. A basic definition includes the location and move and return dates. If containers or slots are used, a container class must be specified.



### Viewing Manual Moves

Using **Option 81** from the Vaulting menu displays the Move Commands menu. Selecting **Option 15** from this menu displays the Work with Pending (WRKPND) panel, which lists all volumes currently residing in the specified location and having a pending move to another location.




### Initiating Manual Moves

Volume movement is initiated through the Run Pending (RUNPND) command. This command returns all volumes whose return date is equal to or less than the current date and moves all volumes whose move date is equal to or less than the current date. The Run Pending command can be used interactively, in batch, or through a job scheduler.

After the Run Pending (RUNPND) command has finished processing, all volumes scheduled to move today should reside at the new location and all volumes scheduled to return today should be at the default location. The updated status of the volumes is displayed by using the Work with Pending (WRKPND) command.

### Returning Manual Moves

When the return date of the volume is equal to or less than the current date, the volume is returned the next time the Run Pending (RUNPND) command is executed.

# Chapter 9

*Automating Moves and Returns*

If volumes follow a specific move pattern, the move/return process can be automated. Automating the move process eliminates the need for user intervention. The move process can be automated by defining a Move Job, Move Schedule and calendar. Once created, all volumes using the Move Job will follow the pattern defined in the Move Jobs' schedule. As volumes move and return, reports print, listing the volumes current location. If containers or slots are used, they are managed by MMS/*vms*.

This chapter will discuss:

- Automated move processing
- How to create a calendar
- How to create a Move Schedule
- How to create a Move Job
- How to initiate automatic moves

## Automatic Move Overview

The automatic move provides greater flexibility by eliminating the need for user intervention in the daily movement of tapes. This process requires that a **Move Job**, **Move Schedule** and a **calendar** be created.

The Move Job defines **what** MMS Tape Management Job Label to move. If the Job Label creates 50 tapes, then all 50 tapes move. This definition includes a Move Schedule, calendar and container class. The Move Schedule defines **where** the tapes are going to and for how long. This definition includes the offsite location name and the amount of time that the tape will remain at the location. The calendar defines **when** the tapes move and return. If the offsite storage vendor shows up every Monday, then the calendar can be set up to move and return only on Monday.

To minimize setup time, the same Move Schedule and calendar can be used for multiple Job Labels.

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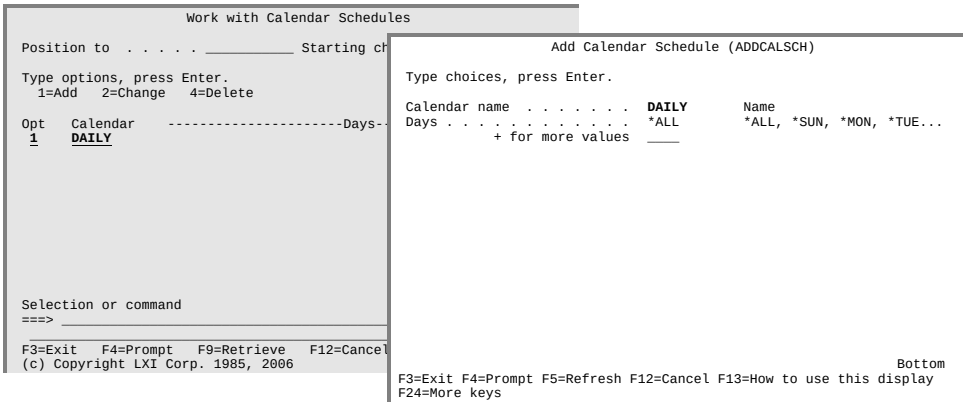
# Working with Calendars

Calendars determine when volumes move from the default location to an offsite location and when they return. The same calendar can be used for multiple Job Labels. To work with calendars, select **Option 82** from the Vaulting menu. This displays the Move Schedule Commands menu. Select **Option 10** to work with calendars. Calendars Schedules can also be accessed by using the Work with Calendar Schedule (WRKCALSCH) command.

## Adding a Calendar

Using **Option 1** from the Work with Calendar Schedule panel prompts the Add Calendar Schedule (ADDCALSCH) command. This command creates a calendar, which determines when volumes move from the default location and return to the default location.




## Changing a Calendar

Using **Option 2** from the Work with Calendar Schedule panel prompts the Change Calendar Schedule (CHGCALSCH) command. This command changes an existing calendar. A calendar cannot be changed if it is currently associated with a Move Job.

## Deleting a Calendar

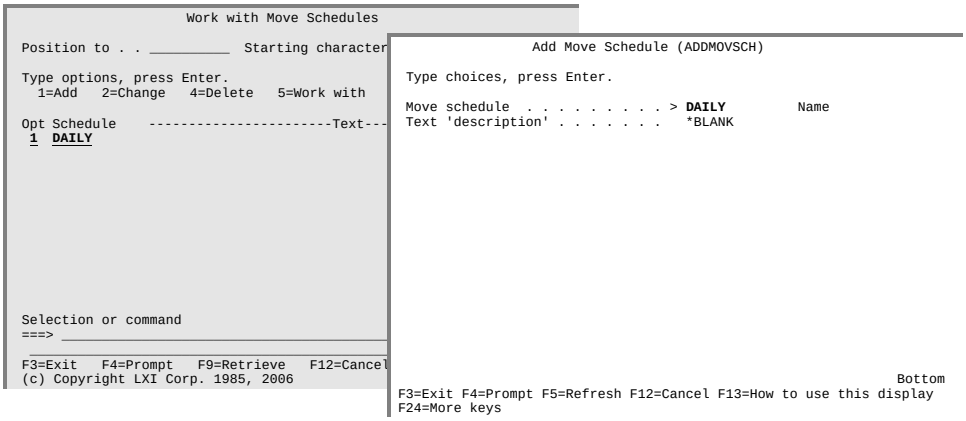
Using **Option 4** from the Work with Calendar Schedule panel or the Delete Calendar Schedule (DLTCALSCH) command deletes an existing calendar. A calendar cannot be deleted if it is currently associated with a Move Job.

## Working with Move Schedules

Move Schedules contain the Move Schedule entries that determine how long volumes remain at a specific location before moving to another location or returning to the default location. To work with Move Schedules, select **Option 82** from the Vaulting menu. This displays the Move Schedule Commands menu. Select **Option 11** to work with Move Schedules. Move Schedules can also be accessed by using the Work with Move Schedule (WRKMOVSCH) command.

### Adding a Move Schedule

Using **Option 1** from the Work with Move Schedule panel prompts the Add Move Schedule (ADDMOVSCH) command. This command creates a Move Schedule definition. Once created, Move Schedule entries, which determine the move pattern, are added.




### Changing a Move Schedule

Using **Option 2** from the Work with Move Schedule panel prompts the Change Move Schedule (CHGMOVSCH) command. This command changes an existing Move Schedule.

### Deleting a Move Schedule

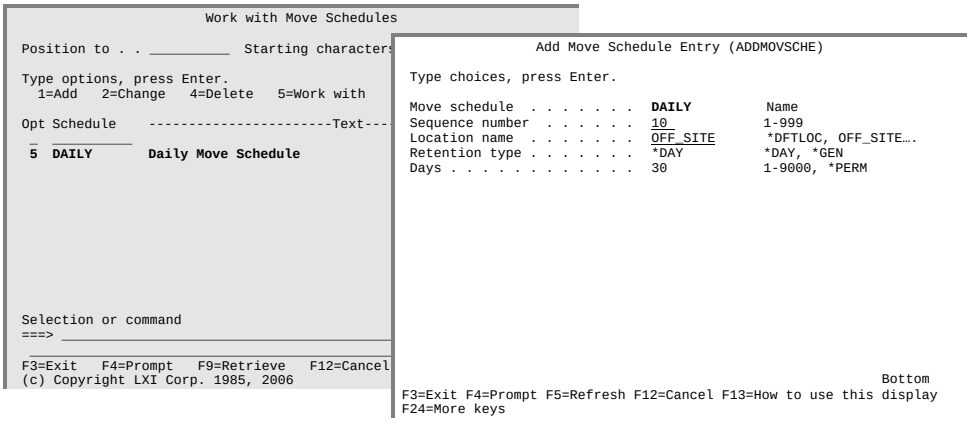
Use **Option 4** from the Work with Move Schedule panel or the Delete Move Schedule (DLTMOVSCH) command to delete an existing Move Schedule. A Move Schedule cannot be deleted if it is currently associated with a Move Job.

## Working with Move Schedule Entries

Move Schedule entries contain the location and the length of time that the volumes remain at the location. Up to 999 moves can be specified per Move Job and volumes can either be moved by days or generations. To work with Move Schedule entries, select **Option 82** from the Vaulting menu. This displays the Move Schedule Commands menu. Select **Option 12** to work with Move Schedule entries. Move Schedule Entries can also be accessed by using the Work with Move Schedule Entry (WRKMOVSCHE) command.

### Adding a Move Schedule Entry

Using **Option 1** from the Work with Move Schedule Entries panel prompts the Add Move Schedule Entry (ADDMOVSCHE) command. This command adds a Move Schedule entry, which defines the location that the volumes will move to as well as the retention.




### Changing a Move Schedule Entry

Using **Option 2** from the Work with Move Schedule Entries panel prompts the Change Move Schedule (CHGMOVSCHE) command. This command changes an existing Move Schedule entry. A Move Schedule entry cannot be changed if it is currently associated with a Move Job.

### Removing a Move Schedule Entry

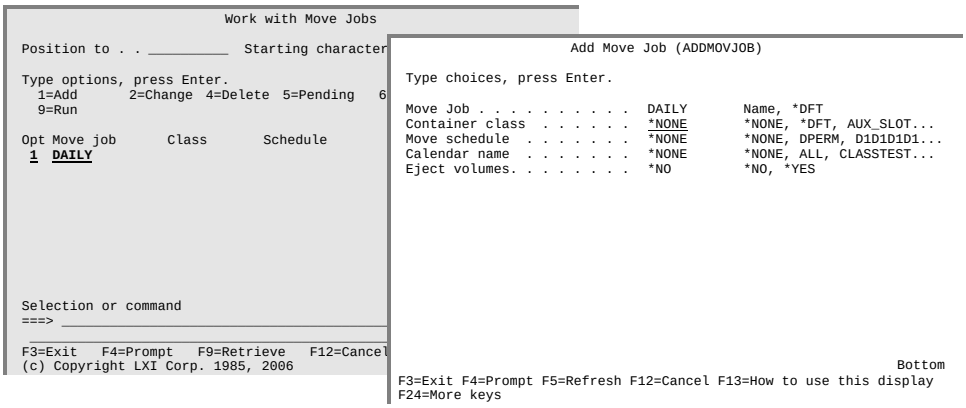
Use **Option 4** from the Work with Move Schedule Entry panel or the Remove Move Schedule Entry (RMVMOVSCHE) command to remove a Move Schedule entry from a Move Schedule. A Move Schedule entry cannot be deleted if it is currently associated with a Move Job.

## Working with Move Jobs

Move Jobs associate the container class, Move Schedule and Calendar name to a Job Label. To work with Move Jobs, select **Option 81** from the Vaulting menu. This displays the Move Commands menu. Select **Option 14** to work with Move Jobs. Move Jobs can also be accessed by using the Work with Move Job (WRKMOVJOB) command.

### Adding a Move Job

Using **Option 1** from the Work with Move Job panel prompts the Add Move Job (ADDMOVJOB) command. This command creates a Move Job definition. Once created, the calendar, Move Schedule and container class, if used, can be associated with the Move Job.




### Changing a Move Job

Using **Option 2** from the Work with Move Job panel prompts the Change Move Job (CHGMOVJOB) command. This command changes an existing Move Job definition. A Move Job cannot be changed if it has any pending moves associated with it.

### Deleting a Move Job

Use **Option 4** from the Work with Move Job panel or the Delete Move Job (DLTMOVJOB) command to delete a Move Job. A Move Job cannot be deleted if it has any pending moves associated with it.

## Using the STRTMSIFC Command

Before volumes can be moved and returned automatically, the interface to MMS Tape Management must be started. This is performed by the Start TMS Interface (STRTMSIFC) command, which enables the link between MMS Tape Management and MMS/*vms* and allows access to all tape volumes. If multiple systems exist in the MMS Tape Management network, this interface must only be started on a system performing container management and vaulting functions. Once started, it will process the volumes for all specified systems.

### Processing All Systems

To process the volumes from all systems, enter the following command from a command line or schedule the command in a job scheduler.

```
LXICMS/STRTMSIFC SYSTEM(*ALL)
```

### Selective System Processing

To process up to 300 specific systems, enter the following command from a command line or schedule the command in a job scheduler.

```
LXICMS/STRTMSIFC SYSTEM(SYSTEMA SYSTEMB SYSTEMC SYSTEMD)
```

### Running Multiple Interfaces

If multiple iSeries systems residing in the MMS Tape Management network have unique container management processing requirements, MMS/*vms* can be set up to process specific systems within the network independently of other systems. The Start TMS Interface (STRTMSIFC) command determines which systems, in a multi-system network, to process together.

## Using the RUNPND Command

The Run Pending (RUNPND) command performs the moves and returns and updates the MMS Tape Management network with the updated volume status. Once started, it will process the specified pending moves and returns. This command can be run from the command line, scheduled in a job scheduler or called from within a program. The **RUNPND** command must run after the TMS interface has completed.

### Processing All Move Jobs

To process all Move Jobs, enter the following command from a command line or schedule the command in a job scheduler.

```
LXICMS/RUNPND MOVJOB(*ALL)
```

### Selective Run Pending

To process up to 100 specific Move Jobs, enter the following command from a command line or schedule the command in a job scheduler.

```
LXICMS/RUNPND MOVJOB(ARJOB APJOB GLJOB PRJOB)
```

### Using the RUNPND from the STRTMSIFC

The **RUNPND** command can be executed as part of the TMS interface. In the following example, the **RUNPND** command is issued by the Start TMS Interface (**STRTMSIFC**) command as soon as it completes.

```
LXICMS/STRTMSIFC SYSTEM(*ALL) RUNPND(*YES)
```

# Chapter 10

*Packing and Unpacking*

Packing is the function that puts tapes into a container and unpacking is the function that removes tapes from a container. These functions, if used, provide the user with additional information as to the location of a volume. For users who use a large number of containers, the ability to locate a container that contains the required volume may be essential. MMS/*vms* provides the ability to view the contents of any container and return, either permanently or temporarily, a container and the volumes within. The unpack function requires that all volumes be manually unpacked from a container. This safety check ensures that the container has arrived at the default location and has been unpacked.

This chapter will discuss:

- Pack/unpack processing
- How to pack a container
- How to unpack a container

## Pack/Unpack Overview

Packing is controlled by the container class rules for packing. If tapes are manually packed, the first tape in the container determines the container class and rules for packing that all subsequent tapes will need to follow. Tapes, if packed automatically, are packed when the move date is equal to the current date. The ability to pre-pack a container is provided. If tapes are not scheduled for movement on the current date, they can be pre-packed into a container for future movement.

Unpacking is required when tapes return to the default location. This process removes the tapes from the container and makes the container available for reuse. If the container is not unpacked, it will not be available for other jobs.

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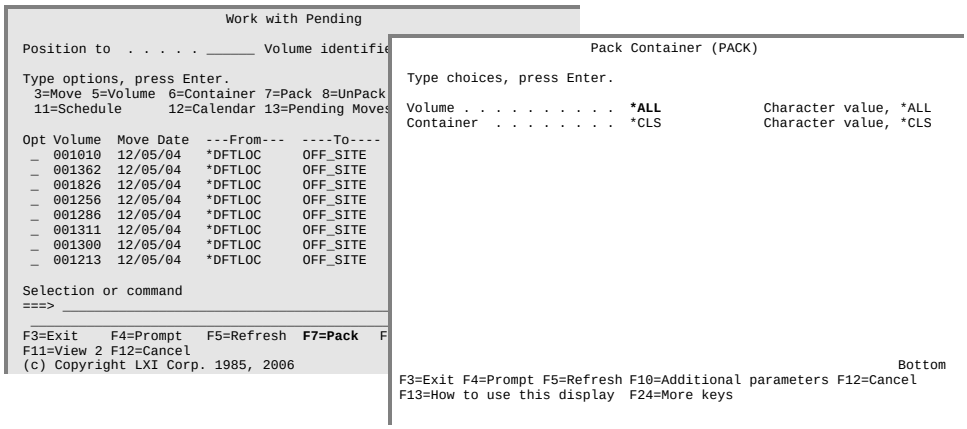
# Packing and Unpacking

The pack/unpack function provides a method of controlling what tapes go into a container as well as which tapes are removed from a container.

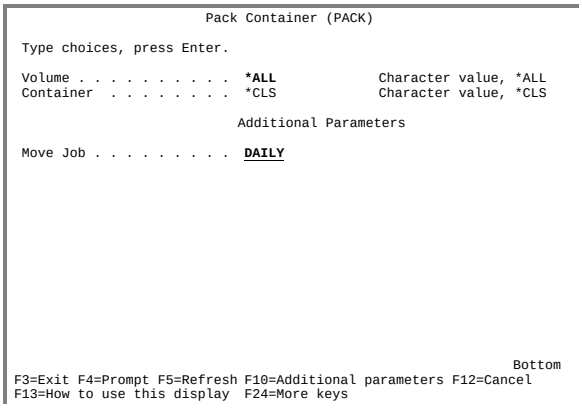
## Packing Current Moves

The Work with Pending (WRKPND) command lists all or specific Move Job volumes. Using **F7** from the Work with Pending panel prompts the Pack Container (PACK) command. Changes are not allowed to the **PACK** command. Pressing **Enter** will pack all volumes scheduled to move today.



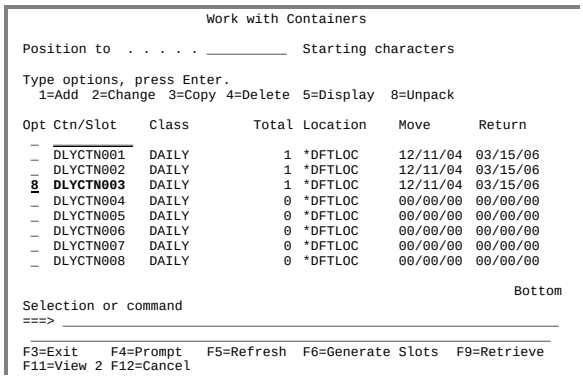

## Packing Specific Jobs

Specific Move Jobs are packed by specifying the Move Job name in the Pack Container (PACK) command. To pack specific Move Jobs, prompt the **PACK** command, press **F10**, and specify the Move Job.



## Unpacking Containers

After a container returns from offsite storage, it must be unpacked before re-use is allowed. If a container is not unpacked, it will remain packed until all the volumes in the container have been reused. The Work with Containers (WRKCTN) command lists all or specific containers. Using **Option 8** from the Work with Containers panel unpacks all volumes from the specified container. The container must be at the default location in order to unpack.



# Chapter 11

*Temporary Returns*

MMS/*vms* provides a temporary return function that allows one or more volumes to move to the default location and then return to the schedule to complete the move pattern. This function, if used, allows the MMS/*vms* database to reflect the temporary location of a volume that is recalled from an offsite storage location for recovery purposes.

This chapter will discuss:

- Temporary return processing
- How to temporarily return a volume
- Working with temporarily returned volumes
- How to return a volume into a schedule

## Temporary Return Overview

When a volume moves to the default location temporarily, it is flagged as a Temporary Return **(*TEMPRTN)**. MMS/*vms* retains and maintains the location of the volume in the Move Schedule even though the volume was flagged as moving to the default location. If the required volume resides in a slot, only that volume is flagged as being temporarily returned. If the required volume resides in a container, the container and all volumes within the container are flagged as being temporarily returned. When the recovery function is complete, the volume can be returned to the Move Schedule. If the schedule expires before the volume is returned to the schedule, MMS/*vms* automatically returns the volume. If more time remains on the schedule, the volume is returned to the container or slot from which it left. If the scheduled location has changed, the volume is returned to the new location in the same container. If vaulting is used, a new slot will be assigned.

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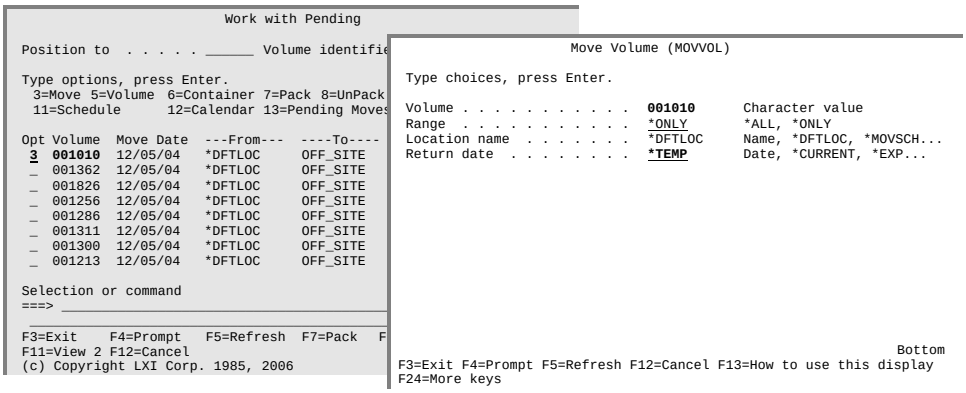
# Temporary Returns

The temporary return function provides a method of temporarily returning a volume and then returning it to the off-site location that it came from and having it continue with the Move Schedule.

## Returning from the Schedule

The Work with Pending (WRKPND) command lists all or specific Move Job volumes. Using **Option 3** from the Work with Pending panel prompts the Move Volume (MOVVOL) command. Pressing **Enter** will temporarily return the volume.




## Working with Temporary Returns

To work with volumes that have been temporarily returned, specify ***TEMP** in the status parameter of the Work with Pending (WRKPND) command. This lists all or specific volumes that are temporarily returned. Using **Option 3** will return the volumes to the schedule.

## Returning to the Schedule

The Move Volume (MOVVOL) command moves a temporarily returned volume back to the schedule. To return a volume back to the schedule, prompt the command and specify ***RTNSCH** in the location parameter. This will move the volume to the schedule to complete the move pattern.

# Chapter 12

## *Vault Management Reports*

The following is a list of all reports available from MMS/*vms*. The name of the report and the command(s) used to print them and the printer file are listed. All printer files reside in library LXICMS400.

| Report | Command | Printer File |
|---|---|---|
| Display Container Volume | DSPCTNVOL | QCMSPRT |
| Display Pending Move | DSPPNDMOV | QCMSPRT |
| Print CMS Data | PRTCMSDTA | QCMSPRT |
| Work with Calendar Schedule | WRKCALSCH | QCMSPRT |
| Work with Container | WRKCTN | QCMSPRT |
| Work with Container Class | WRKCTNCLS | QCMSPRT |
| Work with Location | WRKLOC | QCMSPRT |
| Work with Move Job | WRKMOVJOB | QCMSPRT |
| Work with Move Schedule | WRKMOVSCH | QCMSPRT |
| Work with Move Schedule Entry | WRKMOVSCHE | QCMSPRT |
| Work with Pending | WRKPND | QCMSPRT |

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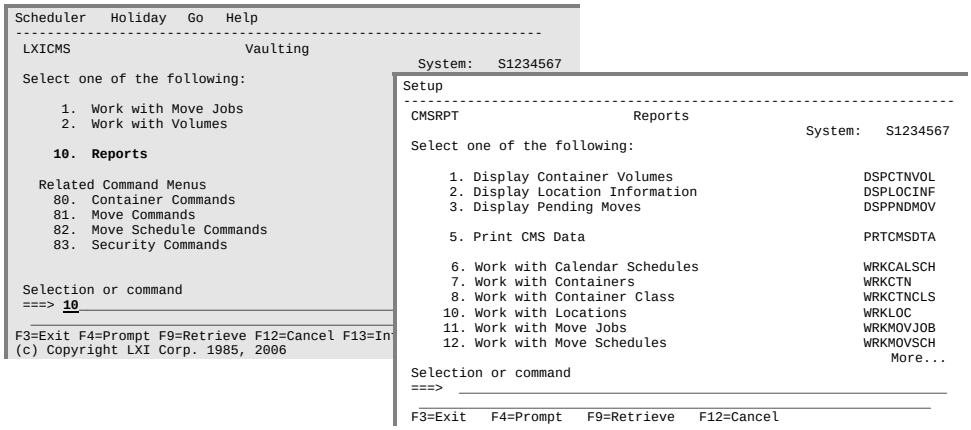
## Accessing the Report Menu

To access the MMS/*vms* report menu, enter **Option 10** from the Vaulting menu.




## Printing Reports

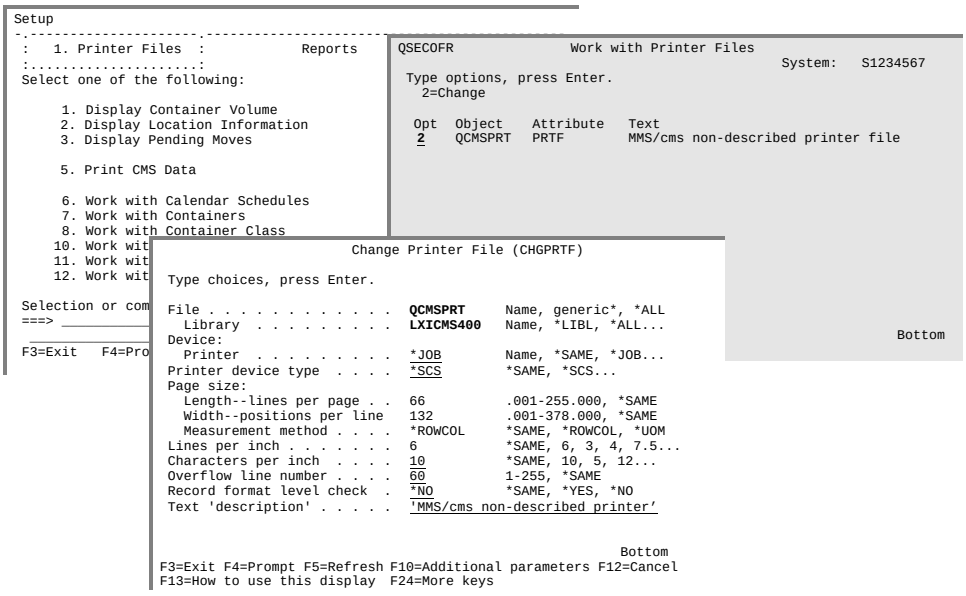
To print a report, enter the desired option number from the Reports menu. This prompts the associated command for selection criteria, if required, and spools the output to the jobs' output queue or to the output queue specified in the printer file, if overridden. The reports can also be printed by prompting the commands (listed on the right hand side) and specifying ***PRINT** for the **OUTPUT** parameter.

## Changing Printer File Attributes

MMS/*vms* allows you to change the attributes of the printer device file. The attributes that can be changed include the device, device type, lines per page, lines per inch, characters per inch and output queue. The ability to change the printer file is based on the users authority to the IBM Change Printer File (**CHGPRTF**) command.

### Changing Printer Attributes

To change the attributes of a MMS/*vms* printer file, select **Setup** from the Reports pull down menu. Enter **Option 1**, Printer Files. This lists the MMS/*vms* printer files available for change. Enter **Option 2** for the printer file requiring change and change the parameters as needed. The changes remain with the printer file until changed again.



## Container Volumes Report

The Display Container Volumes (DSPCTNVOL) command creates the Container Volumes report, which shows all volumes in the specified container/slot.

```
                              Container Volumes                              Page     1
                                                        S1234567  12/31/04  12:37:21

 Container/Slot: DAILY_001

 Volume   Status     Volume   Status     Volume Status     Volume Status
 001362   *ONSCHED   001310   *ONSCHED
 001263   *ONSCHED   001524   *ONSCHED

                * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Pending Moves Report

The Display Pending Move (DSPPNDMOV) command creates the Pending Moves report, which lists all or specific Move Job volumes. The report shows the move date and the "from" and "to" locations that remain for the specified volumes or Move Job.

```
                          Pending Moves                                  Page     1
                                                        S1234567  12/31/04  12:54:15

 Move Job :  DAILY

 Volume     Move Date     ---From---     ----To----
 001541     07/18/05      OS             *DFTLOC
 001801     07/18/05      OS             *DFTLOC

              * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Calendar Schedules Report

The Work with Calendar Schedule (WRKCALSCH) command creates the Calendar Schedules report, which lists all or specific calendars. This report lists the move/return days specified for the calendar.

```
                                Calendar Schedules                        Page     1
                                                          S1234567  12/31/04  13:14:05

 Calendar        ----------------------Days-----------------------
 ALL             *ALL
 DAILY           *MON   *TUE   *WED   *THU   *FRI
 WEEKLY          *FRI

                 * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Container/Slot Report

The Work with Container (WRKCTN) command creates the Container/Slot report, which lists all or specific containers or slots. Report information includes the total number of volumes in the container/slot, the move date, location and return date.

```
                                Container/Slot                              Page     1
                                                                 S1234567  12/31/04  13:19:44

Ctn/Slot    Class    Total  Location  Move      Return    Text
AUX0000101  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000102  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000103  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000104  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000105  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000106  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000107  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000108  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000109  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000110  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000111  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000112  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000113  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000114  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000115  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots
AUX0000116  AUX_SLOT  0     HOME01    00/00/00  00/00/00  Auxiliary Slots

              * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Container Class Report

The Work with Container Class (WRKCTNCLS) command creates the Container Class report**,** which lists all or specific container classes. Information includes the size of the container and the rules for packing.

```
                          Container Class                                Page     1
                                                              S1234567  12/31/04  13:41:50

                         Allow Differences
Class           Size     Return    System
*DFT              20     *YES      *YES
DAILY_SLT          1     *NO       *NO
WEEKLT_SLT         1     *NO       *NO
DAILY_CTN         11     *NO       *NO
WEEKLY_CTN        11     *NO       *YES

               * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Location Report

The Work with Locations (WRKLOC) command creates the Location report**,** which lists all or specific location definitions. Information includes the full location name, location type, contact and telephone number.

```
                                    Locations                              Page     1
                                                          S1234567  12/31/04  13:58:35

Location     Full location name      Type        Contact name    Telephone number
OFF_SITE     Offsite Location        *OFFSITE    Customer Srv    1-123-1234
VAULT        Vaulting Facility       *OFFSITE    B.Smith         234-5678

              * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Move Job Report

The Work with Move Job (WRKMOVJOB) command creates the Move Job report, which lists all or specific Move Jobs. Information includes the Container Class, Move Schedule and Calendar associated with the specified Move Jobs.

```
                                Move Job                                 Page     1
                                                        S1234567  12/31/04  14:08:38

Move job                 Class          Schedule       Calendar
DAILY_BKUP               DAILY_SLT      DAILY          DAILY
DAILY_PROD               DAILY_SLT      DAILY          DAILY
DAILY_SPL                DAILY_SLT      DAILY          DAILY
DAILY_INV                DAILY_SLT      DAILY          DAILY
DAILY_ORD                DAILY_SLT      DAILY          DAILY
WEEKLY_SAV               WEEKLY_SLT     WEEKLY         WEEKLY
WEEKLY_SPL               WEEKLY_SLT     WEEKLY         WEEKLY
WEEKLY_INV               WEEKLY_SLT     WEEKLY         WEEKLY
WEEKLY_ORD               WEEKLY_SLT     WEEKLY         WEEKLY

              * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Move Schedule Report

The Work with Move Schedule (WRKMOVSCH) command creates the Move Schedule report, which lists all or specific Move Jobs.

```
                              Move Schedule                                 Page     1
                                                          S1234567  12/31/04  14:22:11

  Schedule        ----------------------Text-----------------------
  DAILY           Daily Schedule
  WEEKLY          Weekly Schedule

                  * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Move Schedule Entry Report

The Work with Move Schedule Entry (WRKMOVSCHE) command creates the Move Schedule Entry report, which lists all entries associated with the specified Move Schedule.

```
                          Move Schedule Entry                          Page     1
                                                    S1234567  12/31/04  14:28:29

Schedule:    D1D1D1D1

Seq.     Location        Days     Generations
  10     OFF_SITE        30             0
  20     VAULT           30             0

              * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

## Pending Moves/Return Report

The Work with Pending (WRKPND) command creates the Pending Moves/Returns report, which lists all or specific volumes or Move Jobs. Information includes the next move date, Move Job, "from" and "to" location and container/slot.

```
                              Pending Moves/Returns                                Page     1

                                                                  S1234567  12/31/04  14:33:57

 Volume ---Save Date/Time---  ----Move Job----  Move Date  --From-- --To-- Class      Ctn/Slot
 001184 12/18/04   17:19:32   DAILY             12/09/05   OFF_SITE VAULT  DAILY      *NONE
 001742 12/18/04   17:25:20   DAILY             12/10/04   OFF_SITE VAULT  DAILY      *NONE
 001201 12/18/04   10:34:48   DAILY             12/16/05   OFF_SITE VAULT  DAILY      *NONE
 001362 12/18/04   10:34:48   DAILY             12/17/05   OFF_SITE VAULT  DAILY      *NONE
 001010 12/17/04   10:35:07   DAILY             12/18/05   OFF_SITE VAULT  DAILY      *NONE
 001327 12/30/04   14:43:17   DAILY             12/19/05   OFF_SITE VAULT  DAILY      *NONE
 001128 12/17/04   10:35:07   WEEKLY            12/23/05   OFF_SITE VAULT  WEEKLY     *NONE
 001191 12/30/04   14:43:17   WEEKLY            12/23/05   OFF_SITE VAULT  WEEKLY     *NONE
 001827 12/17/04   17:19:11   WEEKLY            12/23/05   OFF_SITE VAULT  WEEKLY     *NONE
 001526 12/17/04   17:19:11   WEEKLY            12/23/05   OFF_SITE VAULT  WEEKLY     *NONE
 001812 12/17/04   17:19:11   WEEKLY            12/23/05   OFF_SITE VAULT  WEEKLY     *NONE
 001001 12/18/04   17:19:32   WEEKLY            12/23/05   OFF_SITE VAULT  WEEKLY     *NONE
 001750 12/18/04   17:19:32   WEEKLY            12/23/05   OFF_SITE VAULT  WEEKLY     *NONE
 001659 12/18/04   17:25:20   WEEKLY            12/23/05   OFF_SITE VAULT  WEEKLY     *NONE
 001012 12/17/04   17:19:11   DAILY             12/29/05   OFF_SITE VAULT  DAILY      *NONE
 001192 12/18/04   17:19:32   DAILY             12/30/05   OFF_SITE VAULT  DAILY

                * * * * *   (c) Copyright LXI Corp. 1985, 2006   * * * * *
```

# Chapter 13

## *Vault Management Commands*

MMS/*vms* is a command driven product. Even in the MMS/*vms* menus, commands are executed to perform the requested function. If desired, these commands can be used directly instead of the menus to provide faster access to MMS/*vms* functions. Not all commands can be used in the same environment. Some commands can only be used interactively (**I**), some only in batch (**B**) and others are available for all environments (**B/I**). Commands are restricted to the environment for which they were created. Before using a MMS/*vms* command, ensure that it is allowed in the environment from which you wish to execute it.

The following pages show all of the MMS Vault Management commands with their parameters and a brief description of each parameter's purpose.

The commands are listed in alphabetical sequence.

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# ADDCALSCH - Add Calendar Schedule

```
---------------------------------------------------------------------------------------------------------
                    Add Calendar Schedule (ADDCALSCH)        Environment:  B/I

Calendar name . . . . . . . . . . .  _________          Name
Days . . . . . . . . . . . . . . . .  *ALL               *ALL, *SUN, *MON...
              + for more values       _____

---------------------------------------------------------------------------------------------------------
```

## Purpose

The Add Calendar Schedule (ADDCALSCH) command creates a move/return calendar and adds one or more days to it. The values entered by this command determine when volumes move/return processing occurs.

## Parameters

CAL: Specifies the name of the calendar to add.

| | |
|---|---|
| *Calendar-name* | Enter the name of the calendar. |

DAYS: Specifies one or more days to add to the calendar. The special value ***ALL** can be specified to add all days to a calendar.

| | |
|---|---|
| ***ALL** | Moves and returns occur daily. |
| *SUN | Moves and returns occur on Sunday. |
| *MON | Moves and returns occur on Monday. |
| *TUE | Moves and returns occur on Tuesday. |
| *WED | Moves and returns occur on Wednesday. |
| *THU | Moves and returns occur on Thursday. |
| *FRI | Moves and returns occur on Friday. |
| *SAT | Moves and returns occur on Saturday. |

## Examples

```
ADDCALSCH CAL(DAILY) DAYS(*MON *FRI)
```

This adds move/return processing days Monday and Friday to calendar DAILY.

# ADDCTN - Add Container

```
-------------------------------------------------------------------------------------------------
                    Add Container (ADDCTN)          Environment:  B/I

Container/Slot . . . . . . . . . . . . . .  _________    Name
Container class . . . . . . . . . . . . . .  _________    Name
Location name . . . . . . . . . . . . . . .  *DFTLOC     *DFTLOC
Text 'description' . . . . . . . . . . . .  *BLANK      Char, *BLANK
-------------------------------------------------------------------------------------------------
```

## Purpose

The Add Container (ADDCTN) command adds a container or slot. A container or slot must be associated with a container class in order to be added. The container class determines if the definition being added is a container or slot.

## Parameters

CTN: Specifies the name of the container or slot to add.

| | |
|---|---|
| *Container/Slot* | Enter a container or slot name. |

CLS: Specifies the name of an existing class to associate with the container or slot.

| | |
|---|---|
| *Class-name* | Enter a valid container/slot class. |

LOC: Specifies the name of an existing location where the container/slot resides. Containers must reside at the default location and slots must reside at an offsite location.

| | |
|---|---|
| ***DFTLOC** | The container resides at the default location. This value is not allowed for a slot definition. |
| *Location-name* | Enter a valid location name. |

TEXT: Specifies the text that briefly describes the object.

| | |
|---|---|
| ***BLANK** | No text is specified. |
| *'description'* | Enter no more than 50 characters of text, enclosed in apostrophes. |

## Examples

```
ADDCTN CTN(DAILYCTN01) CLS(DAILY) LOC(*DFTLOC) +
   TEXT('Daily Container')
```

This adds a container named DAILYCTN01 that is associated with container class DAILY. The container resides at the default location.

# ADDCTNCLS – Add Container Class

```
---------------------------------------------------------------------------------------------------
                    Add Container Class (ADDCTNCLS)        Environment:  B/I

Container class . . . . . . . . . . . . . . .  _________    Name
Size . . . . . . . . . . . . . . . . . . . . .  20          1-9999
Allow differences:
    Return date . . . . . . . . . . . . . . .  *YES        *YES, *NO
    System  . . . . . . . . . . . . . . . . .  *YES        *YES, *NO
Unpack . . . . . . . . . . . . . . . . . . . .  *NO        *NO, *YES

---------------------------------------------------------------------------------------------------
```

## Purpose

The Add Container Class (ADDCTNCLS) command determines the attributes of containers or slots. The attributes include the size of the container, and the type of differences allowed within a container. If a slot is defined, the size would equal 1 and the differences would not apply since multiple volumes cannot be placed in the same slot.

## Parameters

CLS: Specifies name of the class to add.

| | |
|---|---|
| *Class* | Enter a valid class name. |

SIZE: Specifies the size of the container/slots assigned to this class.

| | |
|---|---|
| **20** | The container holds a maximum of 20 tape volumes. |
| *Size* | Enter a value from 1 to 9999. |

ALWDIF: Specifies the differences allowed within a container. This parameter does not apply to slots since multiple volumes are not allowed in a slot.

Return date:

| | |
|---|---|
| ***YES** | Multiple return dates can be packed into the same container. |
| *NO | Multiple return dates are not allowed in the same container. |

System name:

| | |
|---|---|
| ***YES** | The volumes from multiple systems are allowed in the container. |
| *NO | Only volumes from the same system are allowed in the container. |

UNPACK: Specifies whether the containers are unpacked when they return to the default location.

| | |
|---|---|
| ***NO** | The container is not unpacked. |
| *YES | The container is unpacked. |

Examples

```
ADDCTNCLS CLS(DAILY) SIZE(15) ALWDIF(*NO *NO)
```

This adds a container class named DAILY. The container holds up to 15 volumes. Only the volumes with the same return date and from a single system are allowed in containers that use this class.

# ADDHOLSCH – Add Holiday Schedule

```
---------------------------------------------------------------------------------------------------
                    Add Holiday Schedule (ADDHOLSCH)        Environment:  B/I

Date of Holiday . . . . . . . . . . . . . . .  ____                 Name
Text 'description' . . . . . . . . . . . . .  *BLANK                Char, *BLANK

---------------------------------------------------------------------------------------------------
```

## Purpose

The Add Holiday Schedule (ADDHOLSCH) command creates a holiday definition. The holiday definition determines if a specific date is a holiday. All move/return processing is bypassed on a holiday.

## Parameters

DATE: Specifies the date of the holiday to add.

| | |
|---|---|
| *Date* | Enter a valid date. |

TEXT: Specifies the text that briefly describes the object.

| | |
|---|---|
| ***BLANK** | No text is specified. |
| *'description'* | Enter no more than 50 characters of text, enclosed in apostrophes. |

## Examples

```
ADDHOLSCH DATE(010106) TEXT('New Years Day')
```

This adds a holiday schedule for 01/01/06. All MMS/*vms* processing is bypassed on this day.

# ADDLOC – Add Location

```
---------------------------------------------------------------------------------------------------
                    Add Location (ADDLOC)          Environment:   B/I

Location name . . . . . . . . . . . . . . . _____________          Name

---------------------------------------------------------------------------------------------------
```

## Purpose

The Add Location (ADDLOC) command creates a location definition. This definition specifies the destination of a move. When a location name is added, a data entry panel is displayed allowing additional location information, such as name, address, contact, phone and fax number, to be added.

## Parameters

LOC: Specifies the name of the location to add.

*Location-name* Enter a location name.

## Examples

```
ADDLOC LOC(OFF_SITE)
```

This displays a data entry panel for entering additional location information for location definition OFF_SITE.

# ADDMOVJOB – Add Move Job

```
------------------------------------------------------------------------------------------------------
                    Add Move job (ADDMOVJOB)          Environment:  B/I

Move job . . . . . . . . . . . . . . . . . . . . _________      Name
Container class . . . . . . . . . . . . . . . .  *NONE          Name, *NONE
Move schedule . . . . . . . . . . . . . . . . .  *NONE          Name, *NONE
Calendar name . . . . . . . . . . . . . . . . .  *NONE          Name, *NONE
Eject volumes . . . . . . . . . . . . . . . . .  *NO           *NO, *YES

------------------------------------------------------------------------------------------------------
```

## Purpose

The Add Move Job (ADDMOVJOB) command creates a Move Job definition. A Move Job defines the class, schedule and calendar to use for volumes using this Move Job.

## Parameters

MOVJOB: Specifies the name of a Move Job to add.

| | |
|---|---|
| *Move-job* | Enter a valid Move Job name. |

CLS: Specifies the name of an existing container class. If ***NONE** is specified, the volumes associated with this Move Job will not be packed or vaulted.

| | |
|---|---|
| ***NONE** | No container class is associated with this Move Job. |
| *Class* | Enter a valid container class. |

MOVSCH: Specifies the name of an existing Move Schedule. If ***NONE** is specified, the volumes associated with this Move Job cannot move automatically.

| | |
|---|---|
| ***NONE** | No Move Schedule is associated with this Move Job. |
| *Move-schedule* | Enter a valid Move Schedule. |

CAL: Specifies the name of an existing calendar. If ***NONE** is specified, the volumes associated with this Move Job cannot move automatically.

| | |
|---|---|
| ***NONE** | No calendar is associated with the Move Job. |
| *Calendar* | Enter a valid calendar. |

EJTVOL: Specifies whether the volumes moving offsite are ejected from tape libraries.

| | |
|---|---|
| ***NO** | The volumes are not ejected. |
| *YES | The volume is ejected if it exists in a tape library. |

## Examples

```
ADDMOVJOB MOVJOB(DAILY) CLS(DAILY) MOVSCH(DAILY) CAL(DAILY)
```

This creates a Move Job named DAILY. The job uses a container class, Move Schedule and calendar named DAILY.

# ADDMOVSCH – Add Move Schedule

```
---------------------------------------------------------------------------------------------------
                    Add Move Schedule (ADDMOVSCH)        Environment:  B/I

Move schedule . . . . . . . . . . . . . . .  _____          Name
Text 'description' . . . . . . . . . . . .   *BLANK         Char, *BLANK

---------------------------------------------------------------------------------------------------
```

## Purpose

The Add Move Schedule (ADDMOVSCH) command creates a Move Schedule definition.

## Parameters

MOVSCH: Specifies the name of the Move Schedule to add.

| | |
|---|---|
| *Move-schedule* | Enter a Move Schedule name. |

TEXT: Specifies the text that briefly describes the object.

| | |
|---|---|
| ***BLANK** | No text is specified. |
| *'description'* | Enter no more than 50 characters of text, enclosed in apostrophes. |

## Examples

```
ADDMOVSCH MOVSCH(DAILY) TEXT('Move Schedule for Daily Backups')
```

This creates a Move Schedule definition named DAILY.

# ADDMOVSCHE – Add Move Schedule Entry

```
---------------------------------------------------------------------------------------------------------
                    Add Move Schedule Entry (ADDMOVSCHE)        Environment:    B/I

Move schedule . . . . . .  _______          Name
Sequence number . . . . . .  ____           1-999
Location name . . . . . .  *DFTLOC          Name, *DFTLOC
Retention type . . . . . .  *DAY            *DAY, *GEN
Days . . . . . .  30                        1-9000, *PERM
Generations . . . . . .  10                 1-9999

---------------------------------------------------------------------------------------------------------
```

## Purpose

The Add Move Schedule Entry (ADDMOVSCHE) command adds a move entry to an existing Move Schedule. The entry defines the location that the volume(s) will move to and the amount of time, either in days or generations, that the volume(s) must remain at the specified location. A Move Schedule can have up to 999 Move Schedule entries. If the Move Schedule is associated with a Move Job, an entry cannot be added.

## Parameters

MOVSCH: Specifies the name of an existing Move Schedule that the Move Schedule entries apply to.

| | |
|---|---|
| *Move-schedule* | Enter a Move Schedule name. |

SEQNBR: Specifies the sequence number within the Move Schedule that this entry will occupy. A Move Schedule can have up to 999 sequence numbers.

| | |
|---|---|
| *Sequence-number* | Enter a value from 1 to 999. |

LOC: Specifies the name of an existing location where the volume will reside.

| | |
|---|---|
| **<u>*DFTLOC</u>** | The volume resides at the default location. This value is only allowed for sequence number 1. |
| *Location-name* | Enter a location name. |

RETTYP: Specifies the type of retention used for volumes residing at the specified location.

| | |
|---|---|
| **<u>*DAY</u>** | Retention is based on the value specified in the **DAYS** parameter. |
| *GEN | Retention is based on the value specified in the **GEN** parameter. |

DAYS: Specifies the number of days that the volume will remain at the specified location.

| | |
|---|---|
| **<u>30</u>** | The volume will remain at the location for 30 days. |
| *PERM | The volume will remain at the location permanently. |
| *Days* | Enter a value from 1 to 9000. |

GEN: Specifies the number of volume generations that must exist at the specified location.

| | |
|---|---|
| **10** | Ten generations are required. |
| *Generations* | Enter a value from 1 to 9999. |

Examples

```
ADDMOVSCHE MOVSCH(DAILY) SEQNBR(10) LOC(OFF_SITE) RETTYP(*DAYS) +
   DAYS(10)
```

This adds a Move Schedule entry to Move Schedule DAILY. This entry moves volumes to location OFF_SITE where they will remain for 10 days.

```
ADDMOVSCHE MOVSCH(DAILY) SEQNBR(20) LOC(VAULT) RETTYP(*GEN) +
   GEN(2)
```

This adds a Move Schedule entry to Move Schedule DAILY. This entry moves volumes to location VAULT where they will remain for 2 generations.

# CHGCALSCH - Change Calendar Schedule

```
---------------------------------------------------------------------------------------------------
                    Change Calendar Schedule (CHGCALSCH)        Environment:  B/I

Calendar name . . . . . . . . . . .  _________          Name
Days . . . . . . . . . . . . . . . .  *SAME              *SAME, *ALL, *SUN, ...
              + for more values       _____

---------------------------------------------------------------------------------------------------
```

## Purpose

The Change Calendar Schedule (CHGCALSCH) command changes one or more days of an existing move/return calendar. The values entered by this command determine when volumes move/return processing occurs. If the calendar is in use by any move/return process, it cannot be changed.

## Parameters

CAL: Specifies the name of an existing calendar to change.

| | |
|---|---|
| *Calendar-name* | Enter the name of the calendar. |

DAYS: Specifies one or more days to add or change in the calendar. The special value ***ALL** can be specified to add all days to a calendar.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *ALL | Moves and returns occur daily. |
| *SUN | Moves and returns occur on Sunday. |
| *MON | Moves and returns occur on Monday. |
| *TUE | Moves and returns occur on Tuesday. |
| *WED | Moves and returns occur on Wednesday. |
| *THU | Moves and returns occur on Thursday. |
| *FRI | Moves and returns occur on Friday. |
| *SAT | Moves and returns occur on Saturday. |

## Examples

```
CHGCALSCH CAL(DAILY) DAYS(*ALL)
```

This changes calendar DAILY to process moves/returns 7 days a week.

# CHGCTN - Change Container

```
---------------------------------------------------------------------------------------------------
                    Change Container (CHGCTN)          Environment:  B/I

Container/Slot . . . . . . . . . . . . . .  _________      Name
Text 'description' . . . . . . . . . . . .  *SAME          Char, *SAME, *BLANK
---------------------------------------------------------------------------------------------------
```

## Purpose

The Change Container (CHGCTN) command changes the description of a container or slot.

## Parameters

CTN: Specifies the name of the container or slot to change.

| | |
|---|---|
| *Container/Slot* | Enter a container or slot name. |

TEXT: Specifies the text that briefly describes the object.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *BLANK | No text is specified. |
| *'description'* | Enter no more than 50 characters of text, enclosed in apostrophes. |

## Examples

```
CHGCTN CTN(DAILYCTN01) TEXT('Daily Backups')
```

This changes the description of a container named DAILYCTN01.

# CHGCTNCLS – Change Container Class

```
---------------------------------------------------------------------------------------------------
                Change Container Class (CHGCTNCLS)        Environment:  B/I

Container class . . . . . .  _________      Name
Size . . . . . .  ____      1-999
Allow differences:
    Return date . . . . . .  *SAME          *SAME, *YES, *NO
    System . . . . . .  *YES                *YES, *NO
Unpack . . . . . .  *NO                     *NO, *YES

---------------------------------------------------------------------------------------------------
```

## Purpose

The Change Container Class (CHGCTNCLS) command changes the attributes of containers or slots. The attributes include the size of the container, and the type of differences allowed within a container. If a slot is defined, the size would equal 1 and the differences would not apply since multiple volumes cannot be placed in the same slot. If the container class is in use by any move/return process, it cannot be changed.

## Parameters

CLS: Specifies name of the class to change.

| | |
|---|---|
| *Class* | Enter a valid class name. |

SIZE: Specifies the size of the container/slots being changed.

| | |
|---|---|
| *Size* | Enter a value from 1 to 999. |

ALWDIF: Specifies the differences allowed within a container. This parameter does not apply to slots since multiple volumes are not allowed in a slot.

Return date:

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *YES | Multiple return dates can be packed into the same container. |
| *NO | Multiple return dates are not allowed in the same container. |

System name:

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *YES | Volumes from multiple systems are allowed in the container. |
| *NO | Only volumes from the same system are allowed in the container. |

UNPACK: Specifies whether the containers are unpacked when they return to the default location.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *NO | The container is not unpacked. |
| *YES | The container is unpacked. |

## Examples

```
CHGCTNCLS CLS(DAILY) SIZE(15) ALWDIF(*YES *YES)
```

This changes a container class named DAILY to allow volumes with different return dates and system names to be packed in the same container.

# CHGLOC – Change Location

```
---------------------------------------------------------------------------------------------------
                    Change Location (CHGLOC)          Environment:  B/I

Location name . . . . . . . . . . . . . . . _____________          Name
---------------------------------------------------------------------------------------------------
```

## Purpose

The Change Location (CHGLOC) command changes a location definition. This definition specifies the destination of a move/return. When a location name is changed, a data entry panel is displayed allowing additional location information, such as name, address, contact, phone and fax number, to be changed.

## Parameters

LOC: Specifies the name of the location to change.

*Location-name* Enter a location name.

## Examples

```
CHGLOC LOC(OFF_SITE)
```

This displays a data entry panel for changing additional location information for location definition OFF_SITE.

# CHGMOVJOB – Change Move Job

```
-------------------------------------------------------------------------------------------------
                Change Move job (CHGMOVJOB)          Environment:  B/I

Move job . . . . . . . . . . . . . . . . . . . . _________    Name
Container class . . . . . . . . . . . . . . . .  *SAME        Name, *SAME, *NONE
Move schedule . . . . . . . . . . . . . . . . .  *SAME        Name, *SAME, *NONE
Calendar name . . . . . . . . . . . . . . . . .  *SAME        Name, *SAME, *NONE
Eject volumes. . . . . . . . . . . . . . . . .   *SAME        *SAME, *NO, *YES

-------------------------------------------------------------------------------------------------
```

## Purpose

The Change Move Job (CHGMOVJOB) command changes the attributes of a Move Job. A Move Job defines the class, schedule and calendar to use for volumes using this Move Job. If the Move Job is in use by any move/return process, it cannot be changed.

## Parameters

MOVJOB: Specifies the name of an existing Move Job to change.

| | |
|---|---|
| *Move-job* | Enter a valid Move Job. |

CLS: Specifies the name of an existing container class. If ***NONE** is specified, the volumes associated with this Move Job will not be packed or vaulted.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *NONE | No container class is associated with this Move Job. |
| *Class* | Enter a valid container class. |

MOVSCH: Specifies the name of an existing Move Schedule. If ***NONE** is specified, the volumes associated with this Move Job cannot move automatically.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *NONE | No Move Schedule is associated with this Move Job. |
| *Move-schedule* | Enter a valid Move Schedule. |

CAL: Specifies the name of an existing calendar. If ***NONE** is specified, the volumes associated with this Move Job cannot move automatically.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *NONE | No calendar is associated with the Move Job. |
| *Calendar* | Enter a valid calendar. |

EJTVOL: Specifies whether the volumes moving offsite are ejected from tape libraries.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *NO | The volumes are not ejected. |
| *YES | The volume is ejected if it exists in a tape library. |

Examples

```
CHGMOVJOB MOVJOB(DAILY) MOVSCH(DAILY) CLS(DAILY) CAL(BIWKLY)
```

This changes Move Job DAILY to use calendar BIWKLY.

# CHGMOVSCH – Change Move Schedule

```
------------------------------------------------------------------------------------------------------------
                    Change Move Schedule (CHGMOVSCH)        Environment:   B/I

Move schedule . . . . . . . . . . . . . .   _______          Name
Text 'description' . . . . . . . . . . . .  *SAME            Char, *SAME, *BLANK

------------------------------------------------------------------------------------------------------------
```

## Purpose

The Change Move Schedule (CHGMOVSCH) command changes the description for a Move Schedule definition. A Move Schedule cannot be changed if referenced by a Move Job.

## Parameters

MOVSCH: Specifies the name of the Move Schedule to change.

| | |
|---|---|
| *Move-schedule* | Enter a Move Schedule name. |

TEXT: Specifies the text that briefly describes the object.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *BLANK | No text is specified. |
| *'description'* | Enter no more than 50 characters of text, enclosed in apostrophes. |

## Examples

```
CHGMOVSCH MOVSCH(DAILY) TEXT('Daily Backups')
```

This changes the description for a Move Schedule definition named DAILY.

# CHGMOVSCHE – Change Move Schedule Entry

```
------------------------------------------------------------------------------------------------------------
                    Change Move Schedule Entry (CHGMOVSCHE)          Environment:    B/I

Move schedule . . . . . .  _______          Name
Sequence number . . . . . .  ___            1-999
Location name . . . . . .  *SAME            Name, *SAME, *DFTLOC
Retention type . . . . . .  *SAME           *SAME, *DAY, *GEN
Days . . . . . .  *SAME                     *SAME, 1-9000, *PERM
Generations . . . . . .  *SAME              *SAME, 1-9999

------------------------------------------------------------------------------------------------------------
```

## Purpose

The Change Move Schedule Entry (CHGMOVSCHE) command changes an existing Move Schedule entry. The entry defines the location that the volume(s) will move to and the amount of time, either in days or generations, that the volume(s) must remain at the specified location. A Move Schedule can have up to 999 Move Schedule entries. If the Move Schedule entry is in use by any move/return process, it cannot be changed.

## Parameters

MOVSCH: Specifies the name of an existing Move Schedule entry to change.

| | |
|---|---|
| *Move-schedule* | Enter a Move Schedule name. |

SEQNBR: Specifies the sequence number within the Move Schedule.

| | |
|---|---|
| *Sequence-number* | Enter a value from 1 to 999. |

LOC: Specifies the name of an existing location where the volume will reside.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *DFTLOC | The volume resides at the default location. This value is only allowed for sequence number 1. |
| *Location-name* | Enter a location name. |

RETTYP: Specifies the type of retention used for volumes residing at the specified location.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *DAY | Retention is based on the value in the **DAYS** parameter. |
| *GEN | Retention is based on the value in the **GEN** parameter. |

DAYS: Specifies the number of days that the volume will remain at the specified location.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *PERM | The volume will remain at the location permanently. |
| *Days* | Enter a value from 1 to 9000. |

GEN: Specifies the number of volume generations that must exist at the specified location.

| | |
|---|---|
| ***SAME** | Retain the current value. |
| *Generations* | Enter a value from 1 to 9999. |

## Examples

```
CHGMOVSCHE MOVSCH(DAILY) SEQNBR(10) RETTYP(*DAYS) DAYS(30)
```

This changes the retention for Move Schedule entry sequence 10 in Move Schedule DAILY.

```
CHGMOVSCHE MOVSCH(DAILY) SEQNBR(20) LOC(BANK)
```

This changes the location for Move Schedule entry sequence 20 in Move Schedule DAILY.

# CPYCTN - Copy Container

```
---------------------------------------------------------------------------------------------------
                    Copy Container (CPYCTN)          Environment:  B/I

From Container/Slot . . . . . _________          Name
To Container/Slot. . . . . _________

---------------------------------------------------------------------------------------------------
```

## Purpose

The Copy Container (CPYCTN) command copies an existing container/slot definition to a new container/slot. The attributes of the new container/slot will match the copied container/slot.

## Parameters

FROMCTN: Specifies the name of the container or slot to copy.

*Container/Slot* Enter a container or slot name.

TOCTN: Specifies the name of the container or slot being created.

*Container/Slot* Enter a container or slot name.

## Examples

```
CPYCTN FROMCTN(DAILYCTN01) TOCTN(DAILYCTN02)
```

This copies the container definition and attributes of DAILYCTN01 to DAILYCTN02.

# DLTCALSCH - Delete Calendar Schedule

```
---------------------------------------------------------------------------------------------------------
                    Delete Calendar Schedule (DLTCALSCH)          Environment:   B/I

Calendar name . . . . . . . . . . . _____________          Name
---------------------------------------------------------------------------------------------------------
```

## Purpose

The Delete Calendar Schedule (DLTCALSCH) command deletes an existing move/return calendar. If the calendar is in use by any move/return process, it cannot be deleted.

## Parameters

CAL: Specifies the name of an existing calendar to delete.

*Calendar-name* Enter the name of the calendar.

## Examples

```
DLTCALSCH CAL(DAILY)
```

This deletes calendar DAILY.

# DLTCTN - Delete Container

```
---------------------------------------------------------------------------------------------------
                    Delete Container (DLTCTN)          Environment:  B/I

Container/Slot . . . . . . . . . . . . . . _________    Name
---------------------------------------------------------------------------------------------------
```

## Purpose

The Delete Container (DLTCTN) command deletes a container or slot. If the container/slot is in use by any move/return process, it cannot be deleted.

## Parameters

CTN: Specifies the name of the container or slot to delete.

*Container/Slot* Enter a container or slot name.

## Examples

```
DLTCTN CTN(DAILYCTN01)
```

This deletes a container named DAILYCTN01.

# DLTCTNCLS – Delete Container Class

```
Delete Container Class (DLTCTNCLS)          Environment:  B/I

Container class . . . . . .  _________      Name
```

## Purpose

The Delete Container Class (DLTCTNCLS) command deletes the containers/slot class definition. If the container/slot class is in use by any move/return process, it cannot be deleted.

## Parameters

CLS: Specifies name of the class to delete.

*Class* Enter a valid class name.

## Examples

```
DLTCTNCLS CLS(DAILY)
```

This deletes a container class named DAILY.

# DLTHOLSCH – Delete Holiday Schedule

```
---------------------------------------------------------------------------------------------------------
                    Delete Holiday Schedule (DLTHOLSCH)        Environment:   B/I

Date of Holiday . . . . . . . . . . . . . . . _________          Name
---------------------------------------------------------------------------------------------------------
```

## Purpose

The Delete Holiday Schedule (DLTHOLSCH) command deletes a holiday definition.

## Parameters

DATE: Specifies the date of the holiday to delete.

*Date* Enter a valid date.

## Examples

```
DLTHOLSCH DATE(010106)
```

This deletes a holiday definition for 01/01/06.

# DLTLOC – Delete Location

```
---------------------------------------------------------------------------------------------------
                    Delete Location (DLTLOC)        Environment:   B/I

Location name . . . . . . . . . . . . . . . _____________        Name
---------------------------------------------------------------------------------------------------
```

## Purpose

The Delete Location (DLTLOC) command deletes a location definition. If the location is in use by any move/return process, it cannot be deleted.

## Parameters

LOC: Specifies the name of the location to delete.

*Location-name* Enter a location name.

## Examples

```
DLTLOC LOC(OFF_SITE)
```

This deletes a location definition named OFF_SITE.

# DLTMOVJOB – Delete Move Job

```
---------------------------------------------------------------------------------------------------
                    Delete Move job (DLTMOVJOB)          Environment:   B/I

Move job . . . . . . . . . . . . . . . . . . . . _________          Name
---------------------------------------------------------------------------------------------------
```

## Purpose

The Delete Move Job (DLTMOVJOB) command deletes a Move Job definition. If the Move Job is in use by any move/return process, it cannot be deleted.

## Parameters

MOVJOB: Specifies the name of the Move Job to delete.

*Move-job* Enter a valid Move Job.

## Examples

```
DLTMOVJOB MOVJOB(DAILY)
```

This deletes Move Job DAILY.

# DLTMOVSCH – Delete Move Schedule

```
---------------------------------------------------------------------------------------------------
                    Delete Move Schedule (DLTMOVSCH)        Environment:  B/I

Move schedule . . . . . . . . . . . . . . .  _______        Name
---------------------------------------------------------------------------------------------------
```

## Purpose

The Delete Move Schedule (DLTMOVSCH) command deletes a Move Schedule definition. If the Move Schedule is in use by any move/return process, it cannot be deleted.

## Parameters

MOVSCH: Specifies the name of the Move Schedule to delete.

*Move-schedule* Enter a Move Schedule name.

## Examples

```
DLTMOVSCH MOVSCH(DAILY)
```

This deletes a Move Schedule definition named DAILY.

# DSPCTNVOL – Display Container Volume

```
---------------------------------------------------------------------------------------------------
                    Display Container Volume (DSPCTNVOL)        Environment:  B/I

Container/Slot . . . . . . . . . . . . . . .  _______          Name
Output . . . . . . . . . . . . . . . . . . .  *                *, *PRINT

---------------------------------------------------------------------------------------------------
```

## Purpose

The Display Container Volume (DSPCTNVOL) command lists all volumes residing in the specified container/slot.

## Parameters

CTN: Specifies the name of the container whose volumes are displayed.

| | |
|---|---|
| *Container/Slot* | Enter a container/slot name. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
DSPCTNVOL CTN(DAILYCTN01)
```

This displays the volumes residing in container/slot DAILYCTN01.

# DSPPNDMOV – Display Pending Moves

```
---------------------------------------------------------------------------------------------------
                    Display Pending Move (DSPPNDMOV)          Environment:   B/I

Volume . . . . . . . . . . . . . . . . . . . .  _____          Char, *ALL
Move Job . . . . . . . . . . . . . . . . . . .  *VOL           Name, *VOL, *DFT, *NONE
Output . . . . . . . . . . . . . . . . . . . .  *              *, *PRINT

---------------------------------------------------------------------------------------------------
```

## Purpose

The Display Pending Move (DSPPNDMOV) command lists all or specific volumes pending moves. Volumes can be listed by volume identifier or by Move Job.

## Parameters

VOL:

Specifies the volume whose pending moves are displayed. Special value ***ALL** is not valid when ***VOL** is specified in the Move Job parameter.

| | |
|---|---|
| *ALL | All volumes, whose Move Job matches the Move Job specified in the **MOVJOB** parameter, will have their pending moves displayed. |
| *Volume-id* | Enter a valid volume identifier. |

MOVJOB:

Specifies the Move Job for the volumes whose pending moves are displayed. Special value ***NONE** is not valid when ***ALL** is specified for the volume parameter.

| | |
|---|---|
| ***VOL** | The Move Job is the volume Job Label. |
| *DFT | The default Move Job is used. |
| *NONE | Volumes with no Move Job are selected. |
| *Move-job* | Enter a valid Move Job. |

OUTPUT:

Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
DSPPNDMOV VOL(001000)
```

This displays any pending moves for volume identifier 001000.

```
DSPPNDMOV VOL(*ALL) MOVJOB(DAILY)
```

This displays any pending moves for all volumes whose Move Job is DAILY.

# GENSLTID – Generate Slot Identifier

```
---------------------------------------------------------------------------------------------------
                    Generate Slot Identifier (GENSLOTID)        Environment:  B/I

Total number of slots . . . . . .  _______      1-1000
Starting number . . . . . .  ______      Char
Container class . . . . . .  ______      Name
Location name . . . . . .  ______      Name
Text 'description' . . . . . .  *BLANK      Char, *BLANK

---------------------------------------------------------------------------------------------------
```

## Purpose

The Generate Slot Identifier (GENSLTID) command provides a quick method of generating slots. Up to 1000 slots can be generated at a time. Slot numbers can contain alpha and numeric characters. If a slot number contains alpha characters, they are not incremented.

## Parameters

TOTAL: Specifies the number of slots to create.

| | |
|---|---|
| *Number* | Enter a value from 1 to 1000. |

NBR: Specifies the starting number for the slot. The slot number can contain alpha and numeric characters. If the slot number contains alpha characters, they are not incremented.

| | |
|---|---|
| *Number* | Enter the starting slot number. |

CLS: Specifies the name of an existing container class.

| | |
|---|---|
| *Class* | Enter a valid container class. |

LOC: Specifies the name of an existing location where the slot will reside.

| | |
|---|---|
| *Location-name* | Enter a location name. |

TEXT: Specifies the text that briefly describes the object.

| | |
|---|---|
| ***BLANK** | No text is specified. |
| *'description'* | Enter no more than 50 characters of text, enclosed in apostrophes. |

## Examples

```
GENSLTID TOTAL(100) NBR(S00101) CLS(WEEKLY) LOC(OFF_SITE)
```

This creates 100 slots in location OFF_SITE starting with number S00101. The slot numbers generated range from S00101 to S00200 and will be associated with container class WEEKLY.

# MOVVOL – Move Volume

```
Move Volume (MOVVOL)          Environment:  B/I

Volume . . . . . .  _____      Char
Range . . . . . .  *ONLY       *ALL, *ONLY
Location name . . . . . .  *DFTLOC    Name, *DFTLOC, *MOVSCH, *RTNSCH
Move job . . . . . .  *JOBLBL  Name, *JOBLBL
Container class . . . . . .  *NONE     *NONE
Slot . . . . . .  *CLS         Char, *CLS
Move date . . . . . .  *CURRENT  Date, *CURRENT, *SAVDATE
Return date . . . . . .  *TEMP  Date, *EXP, *CURRENT, …
```

## Purpose

The Move Volume (MOVVOL) command moves or returns volumes manually. Volumes can be moved based on a move and return date or they can be associated with a Move Job. An optional container class provides container/slot support. Volumes being returned can be scheduled to return, based on a date or temporarily. If a volume is returned temporarily, the volumes' location, container/slot and return date are maintained by MMS/*vms* allowing the volume to be restored to the location that it was returned from. Once restored, the volume will complete any pending moves.

## Parameters

VOL: Specifies the volume to move/return.

| | |
|---|---|
| *Volume-id* | Enter a valid volume identifier. |

RANGE: Specifies if all volumes in a multi-volume set are moved/returned or only the specified volume.

| | |
|---|---|
| ***ONLY** | Only the specified volume is moved/returned. |
| *ALL | All volumes associated with the specified volume are moved/returned. |

LOC: Specifies the location where the volume is moving/returning. If ***DFTLOC** is specified, the volumes are returned based on the return date. If a location name or ***MOVSCH** is specified, the volume are moved based on the move date or schedule.

| | |
|---|---|
| ***DFTLOC** | The volumes will return to the default location. |
| *MOVSCH | The volumes will move based on the specified Move Schedule. |
| *RTNSCH | The volumes that are temporarily returned are placed back on schedule. |
| *Location-name* | Enter the location where the volume will reside. |

MOVJOB: Specifies the name of an existing Move Job. The Move Job determines the name of the Move Schedule.

| | |
|---|---|
| ***JOBLBL** | The Job Label of the volume is used. |
| *Move-job* | Enter a valid Move Job. |

CLS: Specifies the name of an existing container class. A container class is required if containers or slots are used.

| | |
|---|---|
| ***NONE** | No container class is used. |
| *Class* | Enter a valid container class. |

SLT: Specifies the slot number that the volume will occupy.

| | |
|---|---|
| ***CLS** | The slot used is dependent on the container class. |
| *Slot-number* | Enter a valid slot number. |

MOVDATE: Specifies the date that the volume will move to the specified location. The move date cannot be specified for a scheduled move. The date, if specified, must be in the job date format.

| | |
|---|---|
| ***CURRENT** | The current date is used. |
| *SAVDATE | The save date of the volume is used. If the volume is part of a multi-volume save, the move date is based on the save date of the base (first) volume of the set. |
| *Move-date* | Enter a valid move date. |

RTNDATE: Specifies the date that the volume will return to the default location. The return date cannot be specified for scheduled moves. The date, if specified, must be in the job date format.

| | |
|---|---|
| ***TEMP** | The volume is returned temporarily. This return type is used when a tape is required at the default location for a short period of time before being returned back to the offsite location. This return type maintains the volumes current location attributes and allows the volume to be returned to the schedule to complete the move pattern. |
| *EXP | The volume return date is based on the volumes expiration date. |
| *CURRENT | The volume is returned on the current date. |
| *PERM | The volume will not return. |
| *Return-date* | Enter a valid return date. |

Examples

```
MOVVOL VOL(001000) RANGE(*ONLY) LOC(OFF_SITE) MOVDATE(10/15/04) +
   RTNDATE(12/31/04)
```

This moves volume 001000 from the default location to OFF_SITE. The volume will move on 10/15/04 and return on 12/31/04.

```
MOVVOL VOL(001000) RANGE(*ONLY) LOC(*MOVSCH) MOVJOB(*JOBLBL)
```

This moves volume 001000 from the default location to the location defined on the Move Schedule with a Move Job name that is the same as the volumes' Job Label.

# PACK – Pack Container

```
---------------------------------------------------------------------------------------------------
                    Pack Container (PACK)        Environment:  B/I

Volume . . . . . . . . . . . . . . . . . . . .  _______        Char, *ALL
Container . . . . . . . . . . . . . . . . . .   *CLS           Char, *CLS
Move Job . . . . . . . . . . . . . . . . . . .  *ALL           Char, *ALL, *NONE
---------------------------------------------------------------------------------------------------
```

## Purpose

The Pack Volume (PACK) command packs one or more volumes into available containers. Volumes are packed according to the container class associated with the Move Job or by entering a container. If a container is specified, the first volume in the container establishes the return date and system name. These values, along with the container class rules for packing, determine if multiple return dates or system names are allowed in the same container. The pack container process is not allowed for slots.

## Parameters

VOL: Specifies the volume to be packed. The special value ***ALL** packs all volumes whose move date is equal to the current date into containers selected by MMS/*vms*. If a volume identifier is specified with ***CLS** for the container parameter, it is packed into a container selected by MMS/*vms*, regardless of the move date. If a volume and container are specified, the volume is packed if it meets the rules for packing.

| | |
|---|---|
| *ALL | All volumes, whose move date equals the current date, are packed. |
| *Volume-id* | Enter a valid volume identifier. |

CTN: Specifies the container that the volume will reside in. The special value ***CLS** uses the container class specified in the Move Job for the volume.

| | |
|---|---|
| ***CLS** | The container is determined by the container class. |
| *Container* | Enter a valid container. |

MOVJOB: Specifies the Move Job to pack. The special value ***ALL** packs all Move Jobs.

| | |
|---|---|
| ***ALL** | All Move Jobs are packed. |
| *NONE | Volumes not associated with Move Jobs are packed. |
| *Move-job* | Enter a valid Move Job. |

## Examples

```
PACK VOL(001000) CTN(*CLS)
```

This packs volume 001000 into an available container. The available containers are associated with the container class defined in the Move Job.

```
PACK VOL(001000) CTN(CTN001)
```

This packs volume 001000 into container CTN001 if the volume matches the requirements of the container. Container requirements are defined in the container class.

```
PACK VOL(*ALL) CTN(*CLS)
```

This packs all volumes whose move date is equal to the current date in containers associated with the container class defined in the volumes Move Schedule.

# PRTCMSDTA – Print CMS Data

```
-------------------------------------------------------------------------------------------------------
                    Print CMS Data (PRTCMSDTA)        Environment:  B/I

Data type . . . . . .  _____          *CTN, *LOC, *VOL
Volume . . . . . .  *ALL              Char, *ALL
Container class . . . . . .  *ALL     *ALL, *DFT, …
Container/Slot . . . . . .  *ALL      Char, *ALL
Location name . . . . . .  *ALL       *ALL, *DFTLOC, …
-------------------------------------------------------------------------------------------------------
```

## Purpose

The Print CMS Data (PRTCMSDTA) command prints CMS reports in container, location or volume sequence. The reports can be used for auditing purposes.

## Parameters

DTATYP: Specifies the data type for the report.

| | |
|---|---|
| *CTN | The report contains container/slot information. |
| *LOC | The report contains location information. |
| *VOL | The report contains volume information. |

VOL: Specifies the volumes to use as search criteria.

| | |
|---|---|
| ***ALL** | All volumes are used as search criteria. |
| *Volume-id* | Enter a valid volume identifier. |

CLS: Specifies the container class to use as search criteria.

| | |
|---|---|
| ***ALL** | All container classes are used as search criteria. |
| *Container-class* | Enter the container class to use as search criteria. |

CTN: Specifies the containers/slots to use as search criteria.

| | |
|---|---|
| ***ALL** | All containers/slots are used as search criteria. |
| *Container-class* | Enter the container/slot to use as search criteria. |

LOC: Specifies the location to use as search criteria.

| | |
|---|---|
| ***ALL** | All locations are used as search criteria. |
| *Location* | Enter the location to use as search criteria. |

## Examples

```
PRTCMSDTA DTATYP(*LOC) LOC(OS)
```

This prints all volumes in location OS.

# RMVMOVSCHE – Remove Move Schedule Entry

```
---------------------------------------------------------------------------------------------------------
                    Remove Move Schedule Entry (RMVMOVSCHE)        Environment:  B/I

Move schedule . . . . . . . . . . . . . .   _______              Char
Sequence . . . . . . . . . . . . . . . . .  ____                 1-999

---------------------------------------------------------------------------------------------------------
```

## Purpose

The Remove Move Schedule Entry (RMVMOVSCHE) command removes an existing Move Schedule entry from a Move Schedule. If the Move Job is in use by any move/return process, the Move Schedule entry cannot be removed.

## Parameters

MOVSCH: Specifies the Move Schedule of the entry to remove.

*Move-schedule* Enter a valid Move Schedule.

SEQNBR: Specifies the sequence number of the entry to remove.

*Sequence-number* Enter a valid sequence number.

## Examples

```
RMVMOVSCHE MOVSCH(DAILY) SEQNBR(3)
```

This removes schedule entry number 3 from Move Schedule DAILY.

# RNMLOC – Rename Location

```
---------------------------------------------------------------------------------------------------
                    Rename Location (RNMLOC)        Environment:   B/I

From location name . . . . . .    _______              Char
To location name . . . . . . .    _______              Char

---------------------------------------------------------------------------------------------------
```

## Purpose

The Rename Location (RNMLOC) command changes the name of an existing location.

## Parameters

FROMLOC: Specifies the name of the location being renamed.

*Location-name* Enter a valid location name.

TOLOC: Specifies the name of the new location.

*Location-name* Enter a valid location name.

## Examples

```
RNMLOC FROMLOC(OS) TOLOC(Off-Site)
```

This renames location OS to Off-Site.

# RTNVOL – Return Volume

---

Return Volume (RTNVOL) Environment: B/I

Volume . . . . . _____ Char

---

## Purpose

The Return Volume (RTNVOL) command allows you to return the volume to the default location. If will also unpack the volume from the container/slot, if necessary.

**Note**: When this command is used to return a volume, the volume does not appear on any return report. If you want to return a volume and have it show up on the return report, use the Move Volume (**MOVVOL**) command to return the volume.

## Parameters

VOL: Specifies the volume identifier to return.

*Volume-id* Enter a valid volume identifier.

## Examples

```
RTNVOL VOL(193827)
```

This returns volume 193827.

# RUNPND – Run Pending

```
-------------------------------------------------------------------------------------------------------
                    Run Pending (RUNPND)          Environment:  B/I

Move Job . . . . . .  *ALL                  Name
      + for more values
Eject volumes . . . . . .  MOVJOB           *MOVJOB, *NO
Output . . . . . .  *                       *, *PRINT, *OUTFILE
File to receive output . . . . . .
  Library . . . . . .  *LIBL                Name, *LIBL
Output member options:
  Member to receive output . . .  *FIRST    Name, *FIRST
Replace or add records . . . . . .  *REPLACE  *REPLACE, *ADD

-------------------------------------------------------------------------------------------------------
```

## Purpose

The Run Pending (RUNPND) command processes all or specific Move Jobs. Processing includes returning all scheduled volumes, moving all volumes whose move date is less than or equal to the current date and printing the move/return reports.

## Parameters

MOVJOB: Specifies up to 100 Move Jobs to move. The special value *ALL moves all volumes whose move date is equal to or less than the current date.

| | |
|---|---|
| ***ALL** | All volumes with or without Move Jobs are processed. |
| *NONE | Volumes with no Move Jobs are processed. |
| *Move-job* | Enter a valid Move Job. |

EJTVOL: Specifies whether the volumes moving offsite are ejected from tape libraries.

| | |
|---|---|
| ***MOVJOB** | The volumes are ejected based on the **EJTVOL** parameter values specified in the Move Job. |
| *NO | The volume is not ejected. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| * | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed with the job's spooled output. |
| *OUTFILE | The output is directed to the database output file specified on the "File to receive output" prompt (**OUTFILE** parameter). |

OUTFILE: Specifies the name and library of the database output file to which the output of the command is directed. If the file does not exist, this command creates a database output file in the specified library.

File to receive output:

*File-name* — Enter the name of the database file where the output is directed.

Library:

***LIBL** — Searches all libraries in the job's library list until the first match is found for the value in the **OUTFILE** field. If the file does not exist, it is created in the **QGPL** library.

*Library-name* — Enter a valid library name.

OUTMBR: Specifies the name of the database file member that receives the output of the command.

Members to receive output:

***FIRST** — The first member in the file receives the output. If no members exist in the file, the system creates a member with the name of the file specified in the "File to receive output": prompt (**OUTFILE** parameter).

*Member-name* — Enter the name of the file member that receives the output. If the name does not exist, the system creates it.

Replace or add records:

***REPLACE** — The output data replaces any existing records in the specified file member.

*ADD — The output data is added to the end of existing records in the specified file member.

## Examples

```
RUNPND MOVJOB(*ALL) EJTVOL(*NO)
```

This processes all Move Jobs that have volumes whose move date is less than or equal to the current date. If the volumes being moved reside in a tape library, they are not ejected.

```
RUNPND MOVJOB(DAILY)
```

This processes all moves and returns for Move Job DAILY. If the volumes being moved reside in a tape library, they are ejected.

# STRTMSIFC – Start TMS Interface

```
-------------------------------------------------------------------------------------------------------
                    Start TMS Interface (STRTMSIFC)          Environment:   B/I

System name . . . . . . . . . . . . . . . .  *ALL             Name, *ALL, *LCL
          + for more values                  ____
Starting date and time:
  Date . . . . . . . . . . . . . . . . . . .  *LASTRUN        Date, *LASTRUN
  Time . . . . . . . . . . . . . . . . . . .  _____           Time
Move date . . . . . . . . . . . . . . . . . .  *SAVDATE      *CURRENT, *SAVDATE
Omit error set . . . . . . . . . . . . . . .  *NO           *YES, *NO
Run pending moves . . . . . . . . . . . . .  *NO            *YES, *NO
Move job . . . . . . . . . . . . . . . . . .  *ALL          *ALL, *NONE…
Output . . . . . . . . . . . . . . . . . . .  *             *, *PRINT, *OUTFILE
File to receive output . . . . . . . . .  _____
  Library . . . . . . . . . . . . . . . . .    *LIBL         Name, *LIBL
Output member options:
  Member to receive output . . .  *FIRST                     Name, *FIRST
Replace or add records . . . .  *REPLACE                    *REPLACE, *ADD

-------------------------------------------------------------------------------------------------------
```

Purpose

The Start TMS Interface (STRTMSIFC) command determines which systems to manage in an MMS Tape Management network. Management includes the creation of move records. This command groups systems together under a single MMS/*vms* interface.

Parameters

SYSTEM: Specifies the system names to manage in a MMS Tape Management network. The special value ***ALL** manages and creates move records for all systems within the network.

| | |
|---|---|
| ***ALL** | All systems are managed. |
| *LCL | The local system is the only system managed. The local system is the one issuing this command. |
| *System-name* | Enter a valid system name. |

STRDATE: Specifies the period of time for which the volumes are selected.

Date: One of the following is used to specify the starting date on which or after which the data must have been logged. Any volumes saved before the specified date are not ejected.

***LASTRUN** The last time that this command ran is used as the starting time.

*Begin-date* Enter the beginning date. The date must be specified in the job date format.

Beginning time: One of the following is used to specify the starting time at which or after which the data must have been logged. Any volumes saved before the specified time and date are not selected.

*Begin-time* Enter the beginning time for the specified beginning date that determines the logged data to be used. The time is specified in 24-hour format and can be specified with or without a time separator.

MOVDATE: Specifies the date on which the move/return dates are created.

***SAVDATE** All move/return dates are based on the save date of the volumes being moved. If the volume is part of a multi-volume set, the move date is based on the save date of the base (first) volume of the set.

*CURRENT All move/return dates are based on the current date.

OMITERR: Specifies if volume sets with ***ERR** volumes are omitted.

***NO** All volume sets are processed.

*YES Any volume set which contains a volume in ***ERR** status is omitted.

RUNPND: Specifies if this command should execute a **RUNPND** after it completes processing. If ***YES** is specified, the **RUNPND** command does not need to be issued after this command completes.

***NO** The **RUNPND** command is not issued as part of this command.

*YES The **RUNPND** command is issued as part of this command. There is no prompting of changing the default parameters on the **RUNPND** command if issued as part of the **STRTMSIFC** command.

MOVJOB: Specifies up to 100 Move Jobs to be processed by the **RUNPND** parameter.

| | |
|---|---|
| ***ALL** | All Move Jobs are processed. |
| *NONE | Records with no specified Move Job are processed. |
| *Move-job* | Enter up to 100 Move Jobs. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed with the job's spooled output. |
| *OUTFILE | The output is directed to the database output file specified on the "File to receive output" prompt (**OUTFILE** parameter). |

OUTFILE: Specifies the name and library of the database output file to which the output of the command is directed. If the file does not exist, this command creates a database output file in the specified library.

File to receive output:

| | |
|---|---|
| *File-name* | Enter the name of the database file where the output is directed. |

Library:

| | |
|---|---|
| ***LIBL** | Searches all libraries in the job's library list until the first match is found for the value in the **OUTFILE** field. If the file does not exist, it is created in the **QGPL** library. |
| *Library-name* | Enter a valid library name. |

OUTMBR: Specifies the name of the database file member that receives the output of the command.

Members to receive output:

***FIRST** The first member in the file receives the output. If no members exist in the file, the system creates a member with the name of the file specified in the "File to receive output": prompt (**OUTFILE** parameter).

*Member-name* Enter the name of the file member that receives the output. If the name does not exist, the system creates it.

Replace or add records:

***REPLACE** The output data replaces any existing records in the specified file member.

*ADD The output data is added to the end of existing records in the specified file member.

## Examples

```
STRTMSIFC SYSTEM(*ALL)
```

This manages and creates move information for all systems within the MMS Tape Management network.

```
STRTMSIFC SYSTEM(SYSTEMA SYSTEMB SYSTEMC)
```

This manages and creates move information for SYSTEMA, SYSTEMB and SYSTEMC. If other systems participate in the MMS Tape Management network, they are not managed by this command. This command can be run on another MMS/*vms* system which manages systems that are not part of this group.

```
STRTMSIFC SYSTEM(*ALL) RUNPND(*YES)
```

This manages and creates move information for all systems within the MMS Tape Management network and then issues the Run Pending (RUNPND) command to perform the moves and returns.

# UNPACK – Unpack Container

```
---------------------------------------------------------------------------------------------------
                    Unpack Container (UNPACK)        Environment:  B/I

Container . . . . . .  _________          Char, *ALL
Volume . . . . . .  *ALL                  Char, *ALL

---------------------------------------------------------------------------------------------------
```

## Purpose

The Unpack Container (UNPACK) command unpacks one or more volumes or all volumes from a container. Volumes must be unpacked from containers in order to make them available for other jobs. The unpack container process is not allowed for slots.

## Parameters

CTN: Specifies the container to unpack. If **CTN(*ALL)** is specified, **VOL(*ALL)** must be used. The container must reside at the default location to be unpacked.

| | |
|---|---|
| *ALL | All containers are unpacked. |
| *Container* | Enter a valid container. |

VOL: Specifies the volume to be unpacked. The volumes must reside in a container at the default location to be unpacked. If the container has returned to the default location, ***ALL** must be specified for this parameter.

| | |
|---|---|
| ***ALL** | All volumes, whose return date is less than or equal to the current date, are unpacked. This value is required if the container is at the default location. |
| *Volume-id* | Enter a valid volume identifier. |

## Examples

```
UNPACK CTN(DAILY) VOL(*ALL)
```

This unpacks all volumes from container DAILY and makes the container available for use.

```
UNPACK CTN(*ALL) VOL(*ALL)
```

This unpacks all volumes from all containers at the default location.

# WRKCALSCH – Work with Calendar Schedule

```
---------------------------------------------------------------------------------------------------
                    Work with Calendar Schedule (WRKCALSCH)        Environment:   B/I

Calendar name . . . . . . . . . . .   *ALL                 Name, *ALL
Output . . . . . . . . . . . . . . .  *                   *, *PRINT

---------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Calendar Schedule (WRKCALSCH) command lists all or specific calendar schedules.

## Parameters

CAL: Specifies the name of the calendar whose schedule to show. If the special value ***ALL** is specified, all calendar schedules are shown.

| | |
|---|---|
| ***ALL** | All calendar schedules are shown. |
| *Calendar-name* | Enter the name of the calendar whose schedule to show. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
WRKCALSCH CAL(DAILY)
```

This lists the schedule for calendar DAILY.

# WRKCTN – Work with Container

```
---------------------------------------------------------------------------------------------------
                    Work with Container (WRKCTN)          Environment:   B/I

Container/Slot . . . . . . . . . . . . . . .   *ALL          Name, *ALL
Container class . . . . . . . . . . . . . . .  *ALL          Name, *ALL
Location name . . . . . . . . . . . . . . . .  *ALL          Name, *ALL, *DFTLOC
Output . . . . . . . . . . . . . . . . . . . .  *            *, *PRINT

---------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Container (WRKCTN) command lists all or specific containers/slots. Additional options allow selection by container class and location.

## Parameters

CTN: Specifies the name of the container or slot to show.

| | |
|---|---|
| ***ALL** | All containers/slots are shown. |
| *Container/Slot* | Enter a container or slot name. |

CLS: Specifies the name of an existing class to associate with the container or slot.

| | |
|---|---|
| ***ALL** | All container classes are used for container/slot selection. |
| *Class-name* | Enter a valid container/slot class. |

LOC: Specifies the name of an existing location where the container/slot resides. Containers must reside at the default location and slots must reside at an offsite location.

| | |
|---|---|
| ***ALL** | All locations are used for container/slot selection. |
| *DFTLOC | The container resides at the default location. |
| *Location-name* | Enter a valid location name. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
WRKCTN CTN(*ALL) CLS(DAILY) LOC(*DFTLOC)
```

This lists all containers/slots in container class DAILY, which are in the default location.

# WRKCTNCLS – Work with Container Class

```
---------------------------------------------------------------------------------------------------
                    Work with Container Class (WRKCTNCLS)        Environment:   B/I

Container class . . . . . . . . . . . . . . .   *ALL                Name, *ALL
Output . . . . . . . . . . . . . . . . . . . .  *                   *, *PRINT

---------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Container Class (WRKCTNCLS) command lists all or specific container classes.

## Parameters

CLS: Specifies name of the class to show.

| | |
|---|---|
| ***ALL** | All container classes are shown. |
| *Class* | Enter a valid class name. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
WRKCTNCLS CLS(DAILY)
```

This lists a container class named DAILY.

# WRKHOLSCH – Work with Holiday Schedule

```
---------------------------------------------------------------------------------------------------
                    Work with Holiday Schedule (WRKHOLSCH)          Environment:  I

No parameters
---------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Holiday Schedule (WRKHOLSCH) command lists holidays entered through the Add Holiday Schedule (ADDHOLSCH) command.

## Examples

```
WRKHOLSCH
```

This lists all holidays.

# WRKLOC – Work with Location

```
---------------------------------------------------------------------------------------------------
                    Work with Location (WRKLOC)          Environment:   B/I

Location name . . . . . . . . . . . . . . . .  *ALL                  Name, *ALL
Output . . . . . . . . . . . . . . . . . . . .  *                     *, *PRINT

---------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Location (WRKLOC) command lists all or specific locations.

## Parameters

LOC: Specifies the name of the location to show.

| | |
|---|---|
| ***ALL** | All locations are shown. |
| *Location-name* | Enter a location name. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
WRKLOC LOC(OFF_SITE)
```

This lists a location definition named OFF_SITE.

# WRKMOVJOB – Work with Move Job

```
------------------------------------------------------------------------------------------------------
                    Work with Move job (WRKMOVJOB)          Environment:  B/I

Move job . . . . . . . . . . . . . . . . . . . . *ALL                  Name, *ALL
Container class . . . . . . . . . . . . . . . . *ALL                   Name, *ALL, *NONE
Move schedule . . . . . . . . . . . . . . . . . *ALL                   Name, *ALL, *NONE
Calendar name . . . . . . . . . . . . . . . . . *ALL                   Name, *ALL, *NONE
Output . . . . . . . . . . . . . . . . . . . . . *                     *, *PRINT

------------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Move Job (WRKMOVJOB) command lists all or specific Move Jobs.

## Parameters

MOVJOB: Specifies the name of a Move Job to show.

| | |
|---|---|
| ***ALL** | All Move Jobs are shown. |
| *Move-job* | Enter a valid Move Job. |

CLS: Specifies all or the name of an existing container class to show.

| | |
|---|---|
| ***ALL** | All container classes are shown. |
| *NONE | All Move Jobs that have no container class are shown. |
| *Class* | Enter a valid container class. |

MOVSCH: Specifies all or the name of an existing Move Schedule.

| | |
|---|---|
| ***ALL** | All Move Schedules are shown. |
| *NONE | All Move Jobs that have no Move Schedule are shown. |
| *Move-schedule* | Enter a valid Move Schedule. |

CAL: Specifies all or the name of an existing calendar.

| | |
|---|---|
| ***ALL** | All calendars are shown. |
| *NONE | All Move Jobs that have no calendar are shown. |
| *Calendar* | Enter a valid calendar. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| * | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
WRKMOVJOB MOVJOB(*ALL) MOVSCH(DAILY)
```

This lists all Move Jobs associated with Move Schedule DAILY.

```
WRKMOVJOB MOVJOB(*ALL) MOVSCH(*NONE)
```

This lists all Move Jobs that are not associated with a Move Schedule.

# WRKMOVSCH – Work with Move Schedule

```
---------------------------------------------------------------------------------------------------
                    Work with Move Schedule (WRKMOVSCH)        Environment:  B/I

Move schedule . . . . . .  *ALL                 Name, *ALL
Output . . . . . .         *                    *, *PRINT

---------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Move Schedule (WRKMOVSCH) command lists all or specific Move Schedules.

## Parameters

MOVSCH: Specifies the name of the Move Schedule to show.

| | |
|---|---|
| ***ALL** | All Move Schedules are shown. |
| *Move-schedule* | Enter a Move Schedule name. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
WRKMOVSCH MOVSCH(DAILY)
```

This lists a Move Schedule definition named DAILY.

# WRKMOVSCHE – Work with Move Schedule Entry

```
------------------------------------------------------------------------------------------------------------
                    Work with Move Schedule Entry (WRKMOVSCHE)        Environment:    B/I

Move schedule . . . . . . . . . . . . . . .   _______              Name
Output . . . . . . . . . . . . . . . . . . .   *                   *, *PRINT
------------------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Move Schedule Entry (WRKMOVSCHE) command lists all the schedule entries within the specified Move Schedule.

## Parameters

MOVSCH: Specifies the name of an existing Move Schedule that the Move Schedule entries apply to.

| | |
|---|---|
| *Move-schedule* | Enter a Move Schedule name. |

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

| | |
|---|---|
| ***** | The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job). |
| *PRINT | The output is printed to the job's spooled output. |

## Examples

```
WRKMOVSCHE MOVSCH(DAILY)
```

This lists all Move Schedule entries in Move Schedule DAILY.

# WRKPND – Work with Pending

```
-------------------------------------------------------------------------------------------------------
                    Work with Pending (WRKPND)          Environment:  B/I

Volume . . . . . .  *ALL                                Name, *ALL
Move Job . . . . .  *ALL                                Name, *ALL
Location name . . .  *ALL                               Name, *ALL
Container/slot . . .  *ALL                              Name, *ALL
Time period for volume output:
  Starting date and time:
  Beginning date . . . . . *BEGIN                       Date, *CURRENT, *BEGIN
  Beginning time . . . . . *AVAIL                       Time, *AVAIL
  Ending date and time:
  Ending date . . . . . *END                            Date, *CURRENT, *END
  Ending time . . . . . *AVAIL                          Time, *AVAIL

Status . . . . . .  *ALL                                *ALL, *TEMP
Output . . . . . .  *                                   *, *PRINT

-------------------------------------------------------------------------------------------------------
```

## Purpose

The Work with Pending (WRKPND) command lists all or specific volumes which have pending moves/returns. Additional selection criteria allows selection by Move Job, location, container/slot and move date/time.

## Parameters

VOL: Specifies the name of the volume to show.

| | |
|---|---|
| ***ALL** | All volumes are shown. |
| *Volume-id* | Enter a valid volume identifier. |

MOVJOB: Specifies the name of the Move Job to show.

| | |
|---|---|
| ***ALL** | All Move Jobs are shown. |
| *Move-job* | Enter a valid Move Job. |

LOC: Specifies the name of the location to show.

| | |
|---|---|
| ***ALL** | All locations are shown. |
| *Location* | Enter a valid location. |

CTN: Specifies the name of the container or slot to show.

| | |
|---|---|
| ***ALL** | All containers/slots are shown. |
| *Container/slot* | Enter a valid container/slot. |

PERIOD: Specifies the period of time for which the volume data is shown. This parameter contains two lists of two elements each.

Beginning date: One of the following is used to specify the starting date on which or after which the data must have been logged. Any volumes pending moves before the specified date are not shown.

***BEGIN** The logged data from the beginning of the MMS/*vms* database is shown.

*CURRENT The logged data for the current day and between the specified starting and ending times (if specified) is shown.

*Begin-date* Enter the beginning date. The date must be specified in the job date format.

Beginning time: One of the following is used to specify the starting time at which or after which the data must have been logged. Any volumes pending moves before the specified time and date are not shown.

***AVAIL** The logged data that is available for the specified beginning date is shown.

*Begin-time* Enter the beginning time for the specified beginning date that determines the logged data to be shown. The time is specified in 24-hour format and can be specified with or without a time separator.

Ending date: One of the following is used to specify the ending date before which or on which the data must have been logged. Any volumes pending moves after the specified date are not shown.

***END** The last day on which data was logged is the last day for which the logged data is shown.

*CURRENT The logged data for the current day and between the specified starting and ending times (if specified) is shown.

*End-date* Enter the ending date for which logged data is shown. The date must be specified in the job date format.

Ending time: One of the following is used to specify the ending time before which the data must have been logged. Any volumes pending moves after the specified time and date are not shown.

***AVAIL** The logged data that is available for the specified ending date is shown.

*End-time* Enter the ending time for the specified ending date that determines the logged data to be shown. The time is specified in 24-hour format and can be specified with or without a time separator.

STATUS: Specifies the status of the volumes to show.

***ALL** All volumes are shown.

*TEMP Volumes that are temporarily returned are shown.

OUTPUT: Specifies whether the output from the command is displayed at the requesting workstation or printed with the job's spooled output.

***** The output is displayed (if requested by an interactive job) or printed with the job's spooled output (if requested by a batch job).

*PRINT The output is printed to the job's spooled output.

## Examples

```
WRKPND VOLUME(001000)
```

This lists the pending move/return for volume 001000.

```
WRKPND VOLUME(*ALL) MOVJOB(DAILY)
```

This lists the pending move/return for all volumes with a Move Job of DAILY.

```
WRKPND VOLUME(*ALL) MOVJOB(*ALL) LOC(OFF_SITE)
```

This lists the pending move/return for location OFF_SITE.

# Chapter 14

*Install/Uninstall Instructions*

This chapter describes the install/uninstall processes. The installation of MMS Vault Management is easy and only takes a few minutes to load and setup. Please read and follow these instructions carefully to avoid problems and ensure trouble free product performance.

## Install Process

The installation process loads/updates the product from CD to disk. To install, follow the instructions in the ***Readme*** text file provided on the CD. These instructions guide you through the installation process. If this is a first time install, the installation process creates the following libraries on the system.

- LXI Base and Support Programs
- LXICMS MMS Vault Management Programs
- LXICMS400 MMS Vault Management Files

### Changing the iSeries

Moving this product from one iSeries to another or upgrading to a different iSeries model requires a new license key. Once the product moves to the new iSeries or the iSeries is upgraded to a different model, call LXI Corp. for a new license key. No install is required.

## Uninstall Process

To remove MMS/*vms* from the system, perform the following:

```
DLTLICPGM LICPGM(0LX0000) OPTION(93)
```

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## Entering the License Key

MMS Vault Management (MMS/*vms*) requires a valid license key in order to function. The license key is based on the serial number and model of the iSeries. To enter a license key, perform the following:

___ Step 1. **GO LXI/LXI**

___ Step 2. Tab to the **SETUP** option on the menu bar.

___ Step 3. Press **Enter** to view the options available.

___ Step 4. Select "**Work with License Info.**".

___ Step 5. Select **Option 1** for feature **9130**.

___ Step 6. Enter the supplied license key.

### Trial Period

The trial period is valid for a period of 30 days from the time the product is *first* used. In order for MMS/*vms* to continue performing moves and returns after the 30-day trial period, a license key must be entered.

### Permanent License Key

Once the software has been purchased and payment received by LXI Corp., a ***permanent license key*** will be issued. This permanent license key must be entered into the software to ensure that the product continues without interruption.

The license key remains valid unless the iSeries serial or model number changes. When a change occurs, you should notify LXI Corp. to get another license key.

# Chapter 15

## *Troubleshooting Guide*

The purpose of this guide is to list commonly asked questions regarding the use of MMS Vault Management. Each question and answer is designed to resolve specific situations as quickly as possible. This guide should be the first place a user looks when encountering any type of function that does not appear to operate as expected. If, after reviewing this guide, a question still exists, contact LXI Product Support for assistance.

**1. I entered the license key and MMS/*vms* says it's invalid.**

The license key is date sensitive. If the evaluation time has elapsed, another license key will be required. If you are entering a permanent license key, ensure that you entered the license key correctly. Additional information can be found in Chapter 14, *Install/Uninstall Instructions*. If the code still does not work, call LXI Corp. Product Support.

**2. When I used the Start TMS Interface command, no move/return records were created. Why?**

The Start TMS Interface (STRTMSIFC) command only creates move/return records for volumes created since the last time the command was run. If this is the first time that the command has been run since the product was loaded, the product created a base date/time stamp that will be used the next time the command is run. At that time, all volumes created between the two run times will have move/return records created, if applicable.

**3. How do I get volumes on a Move Schedule if the Start TMS Interface command did not create the move/return records?**

Use the Move Volume (MOVVOL) command and specify ***MOVSCH** on the Location name (**LOC**) parameter and the name of the Move Job on the Move Job (**MOVJOB**) parameter.

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4. **How do I get a volume back to the *DFTLOC for recovery purposes and then return it to its proper place within the Move Job's Move Schedule when I am through with the volume?**

   Use the Move Volume (MOVVOL) command and specify ***DFTLOC** on the Location name (**LOC**) parameter and ***TEMPRTN** on the Return Date (**RTNDATE**) parameter. This will temporarily return the volume to the default location.

   The Move Volume command can be used to return a temporarily returned volume back into a Move Jobs' Move Schedule by specifying ***RTNSCH** on the Location name (**LOC**) parameter.

5. **How can I see all temporarily returned volumes?**

   Use the Work with Pending (WRKPND) command and specify ***TEMP** on the Status (**LOC**) parameter. This will list all temporarily returned volumes that meet the commands' selection criteria.

6. **How can I move a volume based on a Move Job that does not match the volumes Job Label?**

   Use the Move Volume (MOVVOL) command and specify the name of the Move Job on the Move Job (**MOVJOB**) parameter. This will create move/return records based on the specified Move Job. Additional information about the parameters is available in Chapter 13, *Vault Management Commands*.

7. **The Unpack Container (UNPACK) command does not allow me to unpack all returned containers. How can this be accomplished?**

   Use the Work with Container (WRKCTN) command to display all or specific containers. Once displayed, **Option 8** can be specified for all returned containers. Pressing **Enter** will unpack all containers in one step. If only a few containers need to be unpacked, use the Unpack (UNPACK) command and specify the name of the container in the Container (**CTN**) parameter.

8. **The Work with Pending (WRKPND) command only displays a volumes next move. How can I see what future moves are still pending?**

   Use the Display Pending Moves (DSPPNDMOV) command to display a volumes or Move Jobs future moves. This command can also be accessed by using **Option 13** from the Work with Pending panel.

# Chapter 16

## *Electronic Software Support*

Electronic Software Support (**ESS**) is a module within all LXI Corp. products that provides LXI Technical Support staff access to your system, upon your approval, to help isolate and resolve issues. This process helps ensure that your product is working correctly and performing to design standards.

Online support allows an LXI product technician to sign on to your system for diagnostic purposes. This method is beneficial when issues cannot be resolved easily. Online support requires that you provide LXI with a user profile, password and virtual device for system access.

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## Setting up ESS

Before using **ESS**, some initial setup must be performed. This setup includes defining any special characters or numbers that must be dialed prior to dialing the LXI Corp. Product Support number, determining the modem type and optionally defining the resource name and line speed. This setup only needs to be performed once or if the information changes.

To access the **ESS** main menu, type **GO LXI/ESS** on an OS/400 command line and press **Enter**.

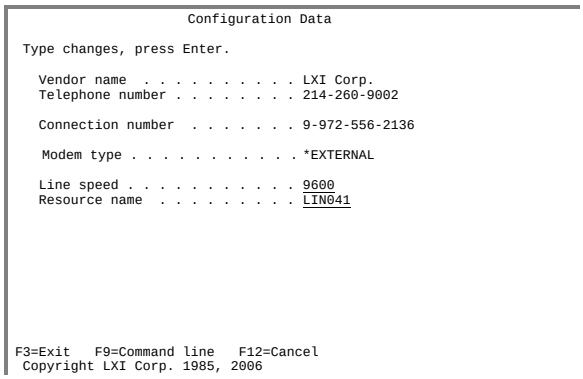
### Updating the Configuration Data

Select **Option 1** from the Setup pull-down menu. This displays the Configuration Data panel. This panel specifies the LXI Product Support phone number and the modem type parameter.

Do not alter the LXI Corp. phone number unless you need to add special characters in front of it for time delay or outside line purposes.

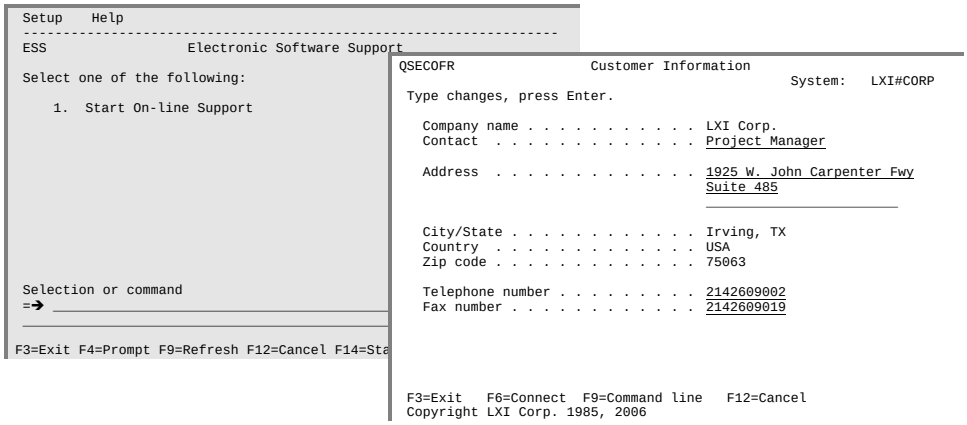
If an **external** modem is specified in the modem type parameter, press **Enter**. This displays two additional parameters which are the resource number of the line being used and the speed of the modem. Review and optionally change the information and press **Enter**.

If an **internal** modem is specified, press **Enter**.



## Requesting Online Support

To start online support, enter **Option 1** from the Electronic Software Support menu. This displays the Customer Information panel. Enter the required information and press **Enter**. To start the **ESS** online support process, press **F6**.




## ESS Considerations

When using an external modem, **ESS** leaves the line varied on. Due to processing restrictions, **ESS** cannot vary the line off.

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