

Essential Unicorn Administration (UNIX) Training Guide

SIRSI
101 Washington Street SE
Huntsville, Alabama 35801
(256) 704-7000

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SIRSI Corporation
101 Washington Street SE
Huntsville, Alabama 35801

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INTRODUCTION

The Company

SIRSI

- SIRSI Corporation, the leader in library technology, uses the most advanced technology available to provide easy-to-use information systems for libraries, businesses, and archives.
- SIRSI's headquarters is in Huntsville, Alabama.



The Software

Unicorn

The collection management software on the host machine

WorkFlows

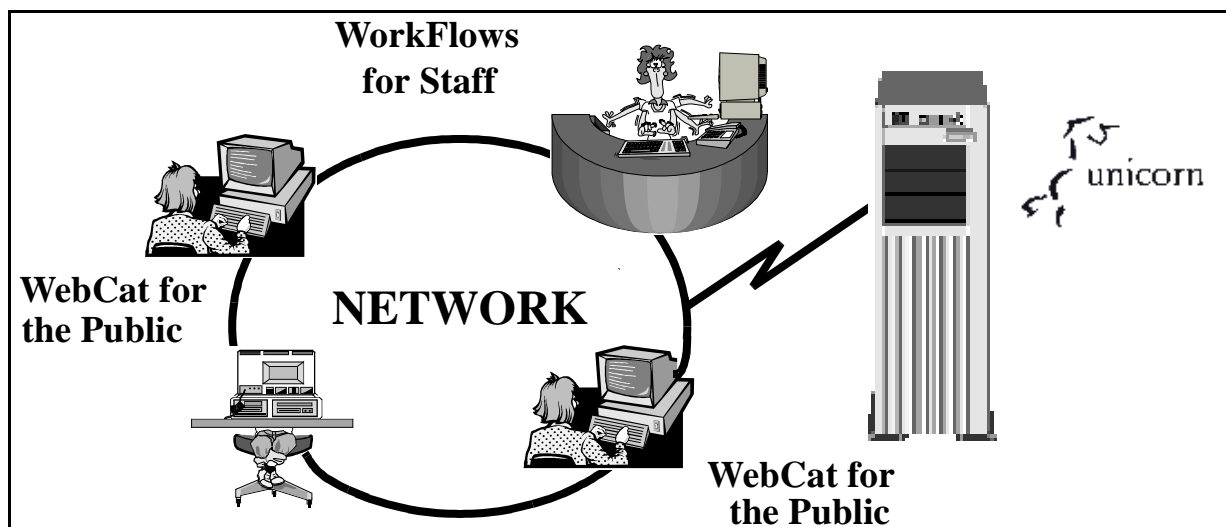
The staff client that connects to Unicorn for searching, cataloging, circulation, etc.

- WorkFlows uses Windows, graphical user interface, and client/server technology.
- WorkFlows is installed on staff PCs or on the network.

WebCat

The web client that the public uses to connect to Unicorn for searching

- WebCat is the library's World Wide Web Public Access Catalog.
- A web browser is needed to use WebCat.



Goals

The goals of Essential Unicorn Administration are to provide information about the following topics.

- Installing and configuring WorkFlows workstations
- Getting started using WorkFlows
- Essential Unicorn administration tasks that must happen regularly
- Interacting with SIRSI Customer Support

WorkFlows

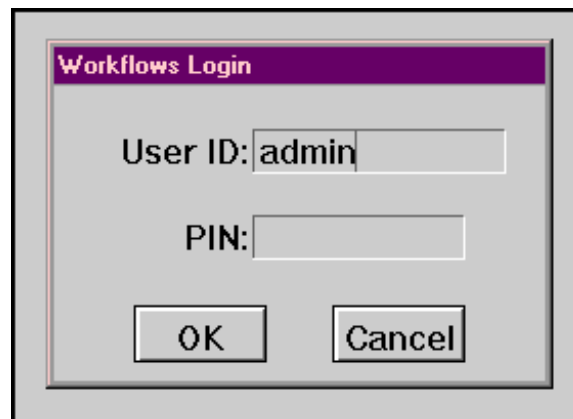
Logging In

Launch WorkFlows.

The WorkFlows login dialog box will display.

Log in as admin.

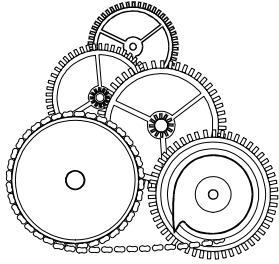
Supply a User ID and PIN.



The image shows a dialog box titled "Workflows Login". It has a purple header bar with the text "Workflows Login" in white. Below the header, there are two input fields. The first is labeled "User ID:" and contains the text "admin". The second is labeled "PIN:" and is empty. At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

Select OK.

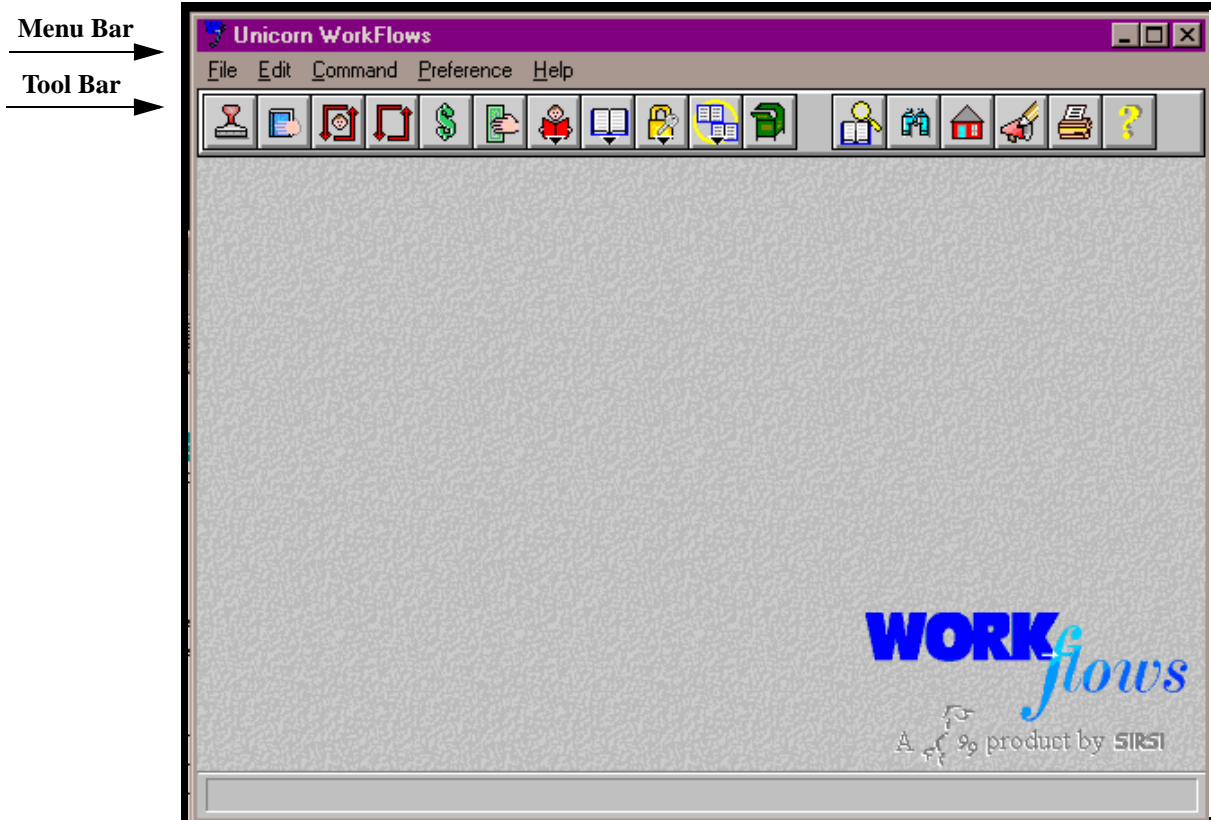
FYI



- Configuration files download from the host machine to the workstation during login.
- The system “pushes” files from the host machine to each workstation to ensure that configuration changes made on the host machine get delivered to each workstation.

WorkFlows

The WorkFlows Desktop



Menu Bar



File Edit Command Preference Help

The menu bar can be used to access basic Windows commands, access Unicorn commands, set preferences, and access online help.

Toolbar



- A group of icons representing a set of related wizards
- A toolbar for each module
- Switch between toolbars easily
- Create custom toolbars made up of wizards most useful for getting particular jobs done at a particular workstation

Wizard



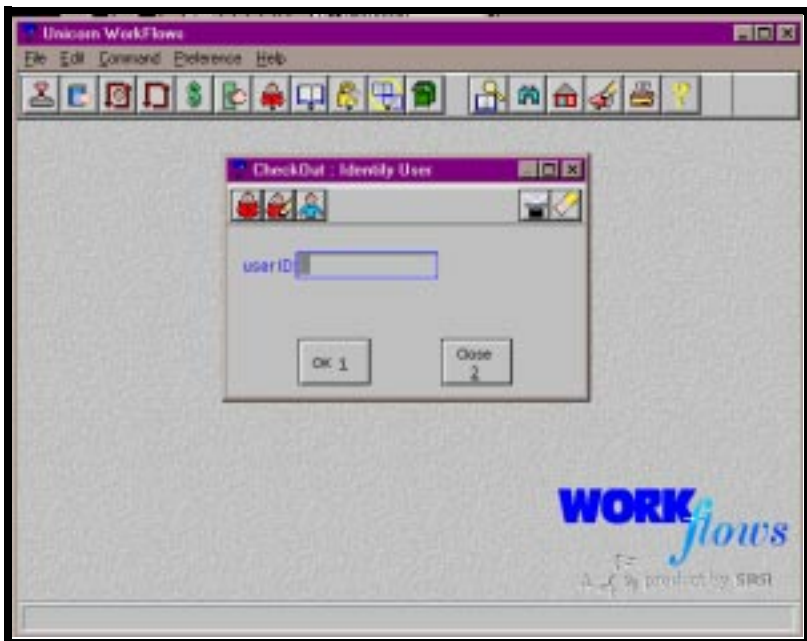
- Represented by icons on toolbar
- Guides you through a process and gives you opportunities to do related work

Touch a wizard icon with your mouse pointer

- Displays balloon help beside the mouse cursor
- Displays flyby help on the status bar at the bottom of the screen

Selecting a wizard

Opens a window dedicated to the task at hand

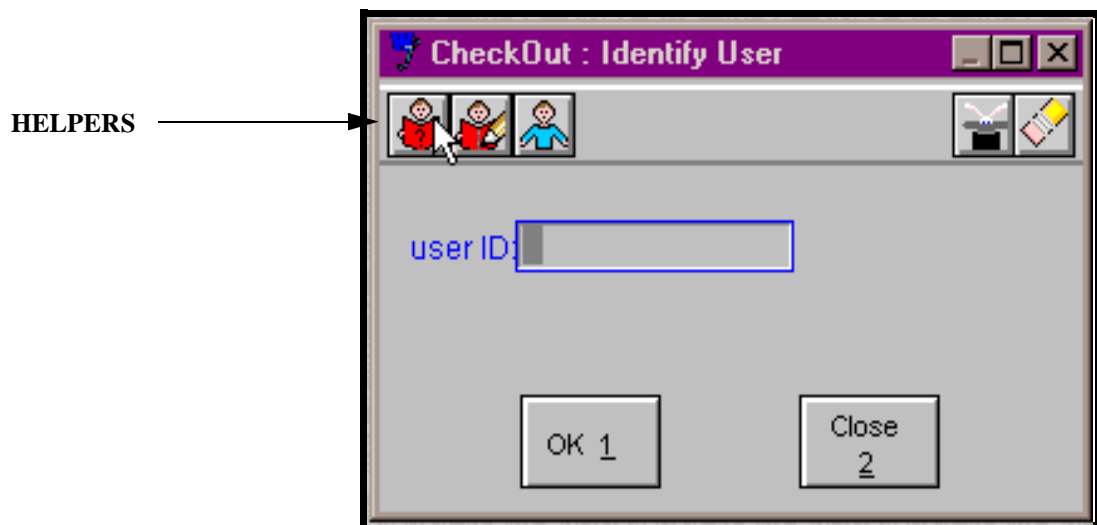


***Example:** The checkout wizard will guide you through checking out multiple items to one borrower, switching to the next borrower and checking out more items, etc. If along the way you need to lookup a borrower who does not have his library card or to replace a worn barcode on a book, helpers are provided that allow you to do those things and then return to your original task.*

WorkFlows

Helpers

- Provide options for doing work related to a wizard task
- Represented by icons at the top of wizard widows
- Touching a helper icon with your mouse opens balloon help (beside the mouse cursor) and flyby help (on the status bar at the bottom of the screen)

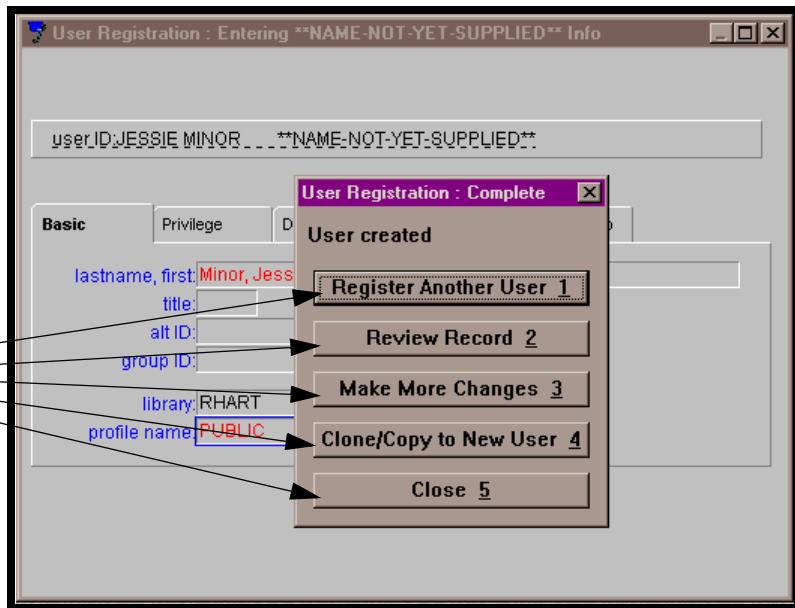


Example: A helper allows you to lookup a borrower or replace an item barcode while checking out books.

Next Steps

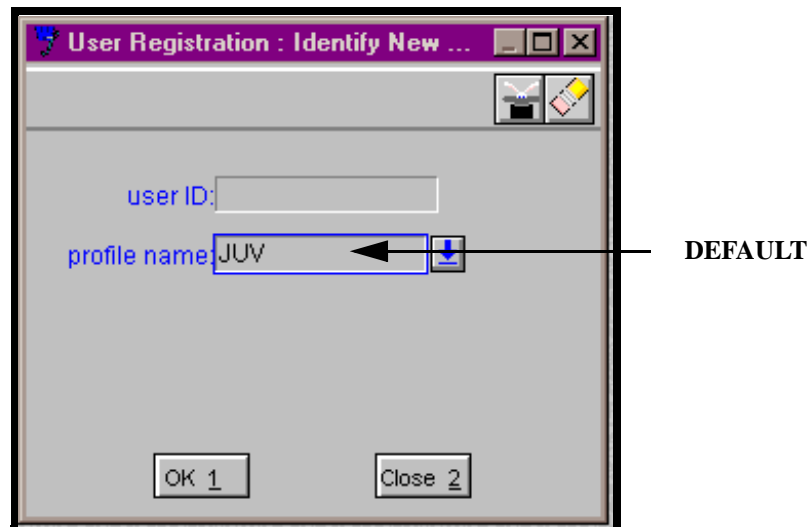
- Represented by buttons
- Options presented at decision points allow you to select the next step

NEXT STEPS



WorkFlows

Default values can be set to fill fields with commonly used values so that work proceeds more quickly.



Wizard Properties

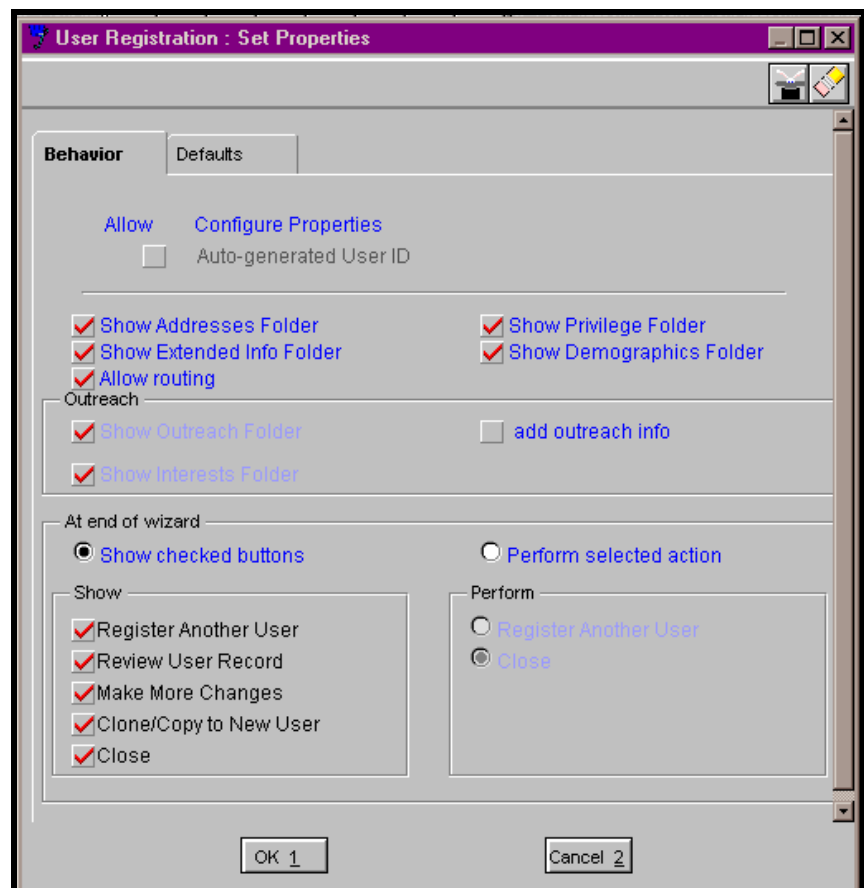
Configuration options for wizards

- Behavior
- Defaults
- Helpers

Behavior Properties

Administrators can

- Enable/disable certain next steps and folders
- Preset selected field values



Defaults Properties

Each user can preset most field values for his workstation.

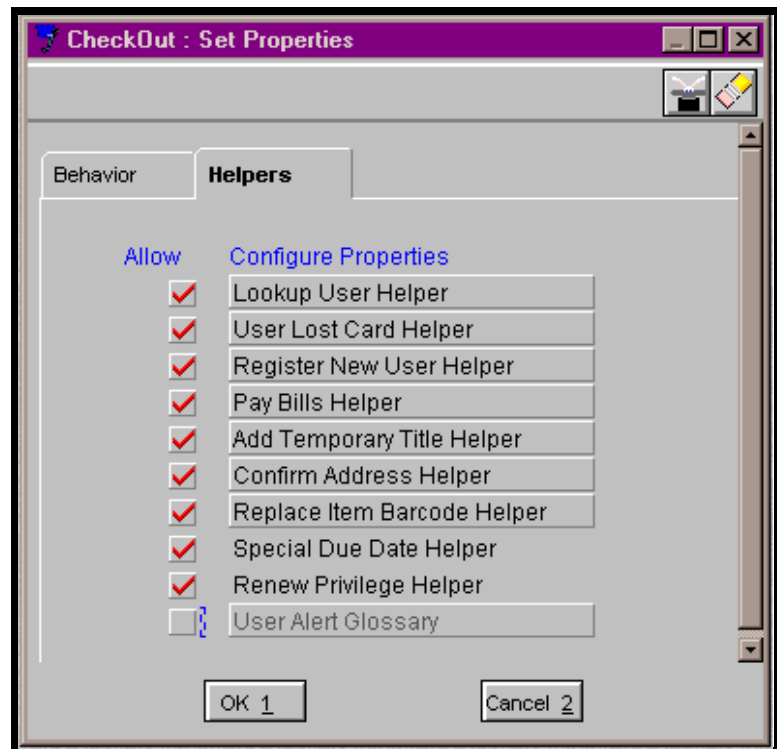
The screenshot shows a dialog box titled "User Registration : Set Properties" with a purple title bar. It has two tabs: "Behavior" and "Defaults", with "Defaults" selected. The dialog is divided into several sections:

- Behavior**: Not visible as it is not the active tab.
- Defaults**:
 - library**: A dropdown menu with "MAIN" selected.
 - profile name**: A dropdown menu with "PUBLIC" selected.
 - Addresses**: A section with a label "Addresses" and three radio buttons: "primary address flag" (selected), "address 1", "address 2", and "address 3".
 - Demographics**: A section with four fields: "user cat1:" (dropdown), "user cat2:" (dropdown), "department:" (text input), and "birthyear:" (text input).
 - Outreach**: A section with two fields: "route" (dropdown) and "total items limit" (text input with "10" entered).

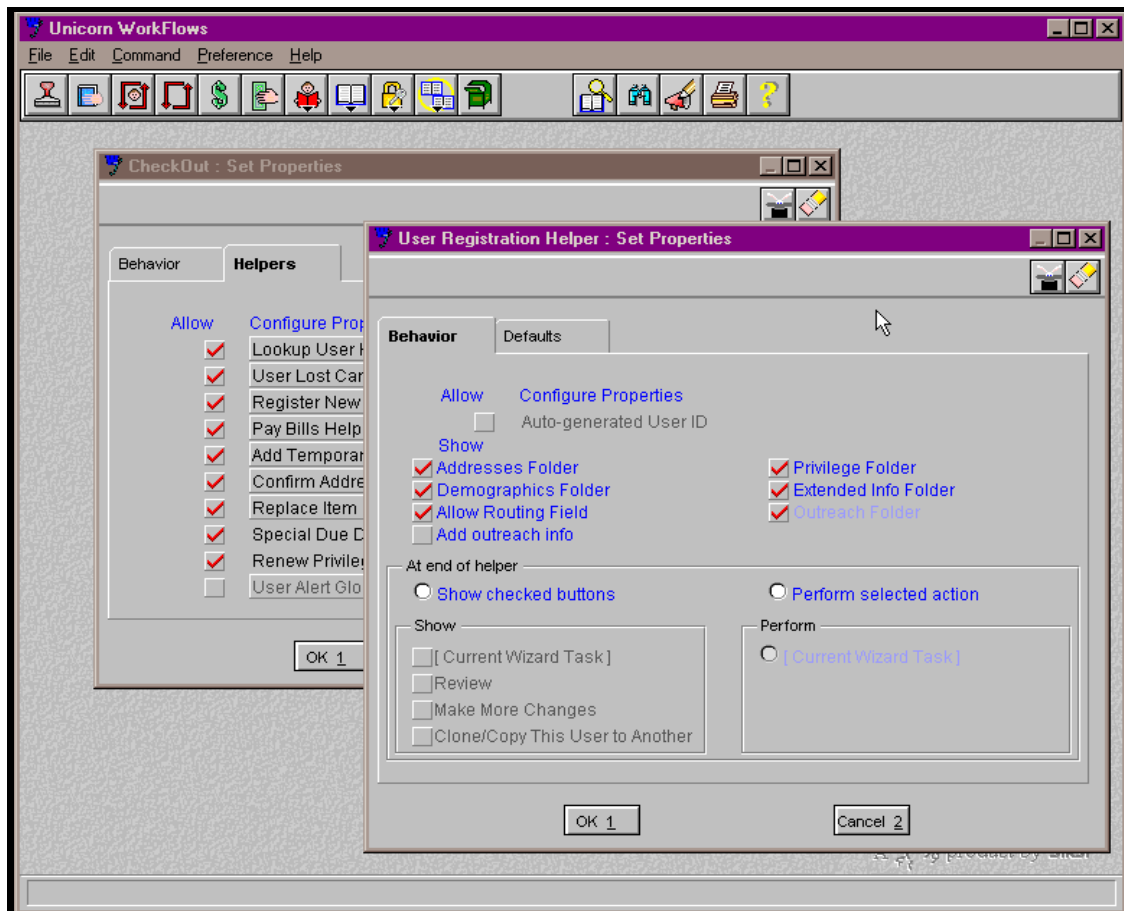
At the bottom of the dialog are two buttons: "OK 1" and "Cancel 2".

Helpers Properties

Using checkboxes, administrators can enable/disable certain helpers.



Note that in the Behavior Properties column, some helpers are displayed on platforms. When a helper displays on a platform, that indicates that the helper has Behavior, Defaults and/or Helper properties. By selecting the platform beside the checkbox with the name of the helper, you will open the selected helper's properties window.



As part of the installation of your Unicorn system, SIRSI creates User ID logins for you.

Logins control which wizards a user can use.

- ADMIN

System administrator login with access to all wizards

- TECH

Technical services login with access to wizards needed for technical services work (such as cataloging, serials control, acquisitions, etc.)

- CIRC

Public services login with access to wizards needed for public services work (such as circulation, reference, etc.)

For multilibrary customers, SIRSI creates a CIRC and TECH login for each library.

Table 1: Staff Logins

User ID	PIN	User ID	PIN
ADMIN			

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To Do List



During training, everyone in a given class will use the same login.

After training, staff members need to be notified of the logins to be used for ongoing work through WorkFlows.

INSTALLING AND CONFIGURING WorkFlows

Overview

Follow these steps to install WorkFlows on a workstation.

Installation

- 1) Install WorkFlows from the Unicorn Clients CD.
- 2) Launch WorkFlows; supply Host info and log in.
- 3) Update Workflows from the host machine using the UPDATE wizard.

Configuration

Workstation

- 1) Create a Temp folder.
- 2) Install fonts.

Workflows

- 1) Set configuration preferences.
- 2) Select an application for screen printing.
- 3) Set cataloging preferences.

Install WorkFlows

NOTE: Review requirements for SIRSI's WorkFlows client on a Windows95/98 or Windows NT PC in Appendix A.

- 1) Put the Unicorn Clients CD in the workstation CD-ROM drive.
- 2) Use Windows Explorer or My Computer to locate and launch the WorkFlows Install Shield.

The icon looks like this.



A graphical interface leads you through the installation. For standard installation, give affirmative answer to all questions (i.e., Finish, Next, Yes).

For step-by-step instructions on running the install, refer to Appendix B.

- 3) When installation is finished, the install shield will close.

Launch WorkFlows

Supply Host info and Login.

- 1) Select the WorkFlows application from your desktop.

A configuration window will display.

- 2) Supply Host info.
- 3) Select OK and login.

The screenshot shows a 'Configuration' dialog box with the following fields and options:

- Host info:** IP address: library.um.edu, Port: 1
- Printer:** Receipt printer available, Port: COM1, Speed: 9600, Parity: NONE
- Scanner:** Barcode, NONE, Attached to keyboard, Port: COM1, Speed: 9600, Parity: NONE, Pre-amble: 27 66, Post-amble: 27 68
- Station:** Font: Display, Edit, Name: PCGUH-DISP, Login timeout: 30
- Show this window on next startup
- Buttons: OK, Cancel

← Supply Host info here

IP address can be filled with either an IP address or a domain name.

Port number should be "1"

Make a note of your host machine IP address or domain name below.

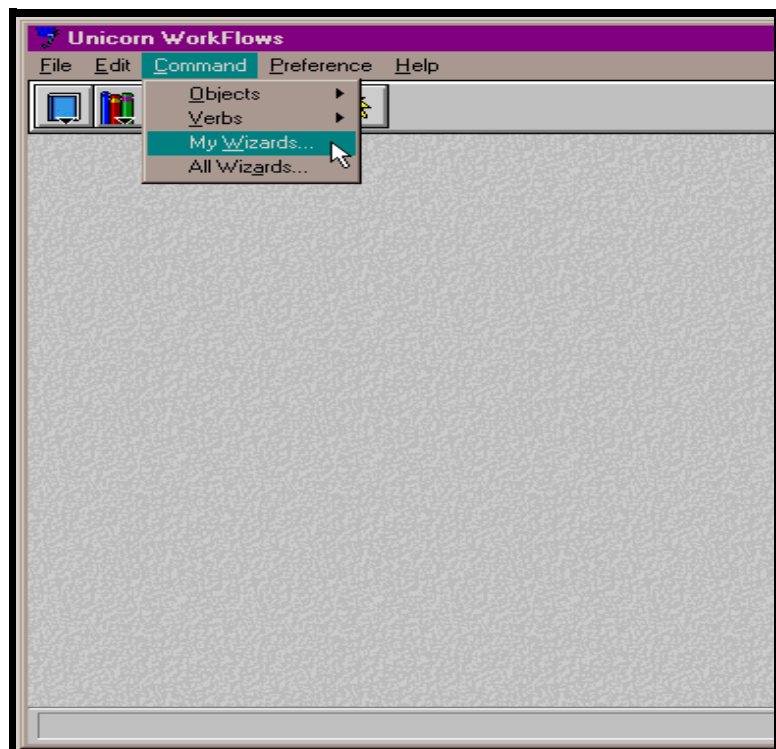
Installation

Update WorkFlows with UPDATE Wizard

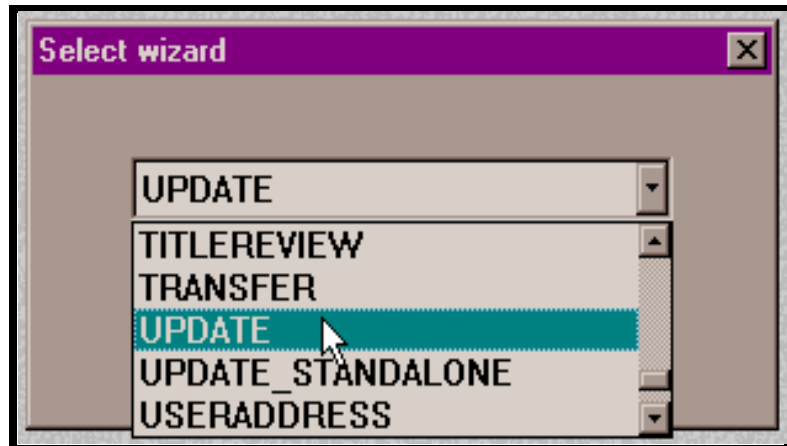
Running the update wizard ensures that the WorkFlows software on your PC is synchronized with the Unicorn software on your host machine.

- 1) From the menu bar, select

Command → **My Wizard**



- 2) Select **UPDATE** from the pull-down menu.
Then select **OK**.



- The install shield that initially installed WorkFlows from CD will update the programs using information from the host machine.
- To update the software, select affirmative answers to the questions.
- “Install Now” will close WorkFlows.

When to Run the UPDATE Wizard

Run the Update wizard

- After initial installation from CD of WorkFlows
- After software upgrades to Unicorn on the host machine

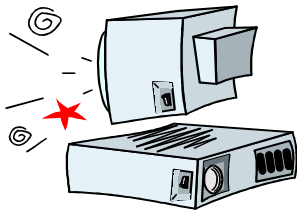
Workstation Configuration

Workstation Configuration

Create a Temp Folder

Machines where WorkFlows is installed need a “temp” folder, usually C:\temp, so that finished reports can be viewed and/or printed.

Create a temp folder on each machine where WorkFlows is installed.



Troubleshooting Tip

When attempting to view or print finished reports, the error message

`Unable to open DOS files for write
C:/temp/output.txt`

means that a temp directory needs to be created on the drive indicated in the error message.

Workstation Configuration

Install Fonts

Install fonts so that diacritics and special characters can be entered or displayed through WorkFlows.

From the Windows Start menu, select

Settings → **Control Panel** → **Fonts**

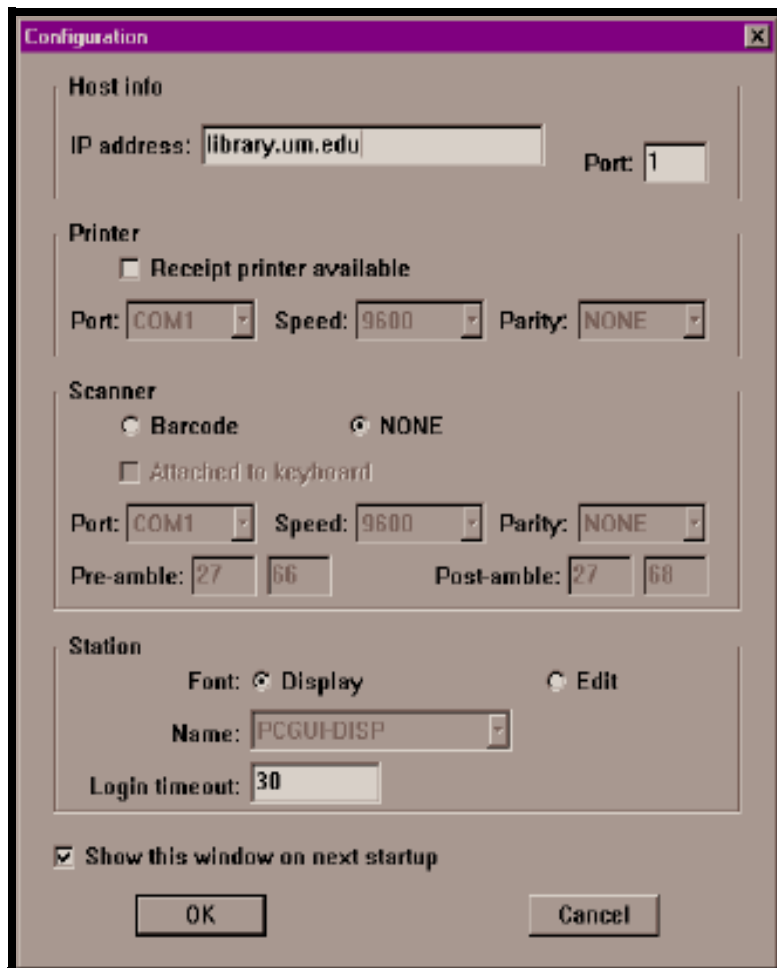
WSGUI Edit and WSGUI Display fonts will auto-install.

Workstation Configuration

From Menu bar, select

Preference → Configuration

Printer Info



The screenshot shows a 'Configuration' dialog box with several sections. The 'Printer' section is highlighted with a black arrow. The sections are:

- Host info:** IP address: library.um.edu, Port: 1
- Printer:** Receipt printer available, Port: COM1, Speed: 9600, Parity: NONE
- Scanner:** Barcode, NONE, Attached to keyboard, Port: COM1, Speed: 9600, Parity: NONE, Pre-amble: 27 66, Post-amble: 27 68
- Station:** Font: Display, Edit, Name: PCGUI-DISP, Login timeout: 30

At the bottom, there is a checkbox for 'Show this window on next startup' (checked) and 'OK' and 'Cancel' buttons.

The Printer rectangle must be modified at workstations where receipt printing (date due slips, hold availability slips, shelving slips, serial routing slips) will be used.

Determine whether receipt printing will be used at this station.

At workstation where receipt printing will be used, put a check beside Receipt printer available.

Supply the information about the way in which the printer is connected.

Note: When a receipt printer is to be used with a Windows NT workstation, the receipt printer must also be designated as the default printer for Windows.

Workstation Configuration

Scanner Info

The screenshot shows a 'Configuration' dialog box with the following sections and settings:

- Host info:** IP address: library.um.edu, Port: 1
- Printer:** Receipt printer available, Port: COM1, Speed: 9600, Parity: NONE
- Scanner:** Barcode, NONE, Attached to keyboard, Port: COM1, Speed: 9600, Parity: NONE, Pre-amble: 27 66, Post-amble: 27 68
- Station:** Font: Display, Edit, Name: PCGUH-DISP, Login timeout: 30
- Show this window on next startup
- Buttons: OK, Cancel



The Scanner rectangle must be modified at workstations where a barcode scanner will be used

Select the radio button beside Barcode at workstation where scanner will be used and supply information about how scanner is connected to the workstation.

Default Preamble and Postamble settings are supplied.

Note: Appendix C outlines related information about programming barcode scanners.

Workstation Configuration

Set Preference, Configuration

Station Info

The screenshot shows a 'Configuration' dialog box with the following sections:

- Host info:** IP address: library.um.edu, Port: 1
- Printer:** Receipt printer available, Port: COM1, Speed: 9600, Parity: NONE
- Scanner:** Barcode, NONE, Attached to keyboard, Port: COM1, Speed: 9600, Parity: NONE, Pre-amble: 27 66, Post-amble: 27 68
- Station:** Font: Display, Edit, Name: PCGUI-DISP, Login timeout: 30

At the bottom, there is a checkbox for 'Show this window on next startup' (checked), and 'OK' and 'Cancel' buttons.

←
The Station rectangle should be set appropriately for the kind of work done at a particular workstation.

Station Info Settings

- At the workstation where bibliographic records will be modified (typically cataloger workstations), select

Font: EDIT

Name: PCGUI-EDIT

These selections allow diacritics and special characters to be edited as separate characters.

- At workstations where bibliographic records will **not** be modified, select

Font: DISPLAY

Name: PCGUI-DISP

These selections ensure the best display of diacritics and special characters.

Saving Changes

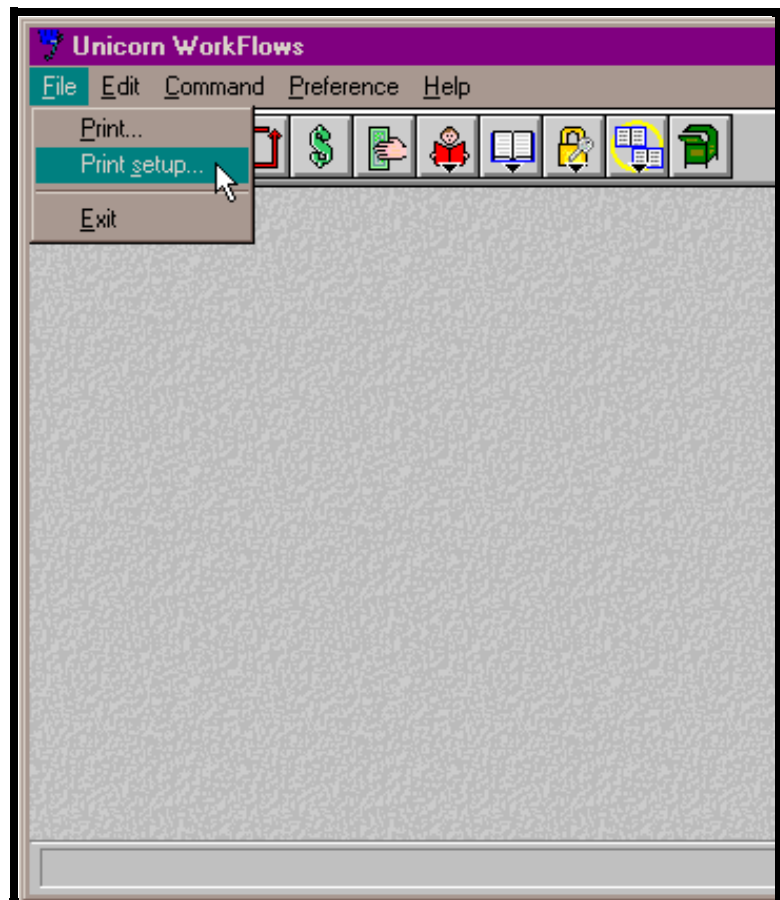
- Select OK to save your changes.
- Changes take effect when you log out and back in.

Workstation Configuration

Select an application for screen printing

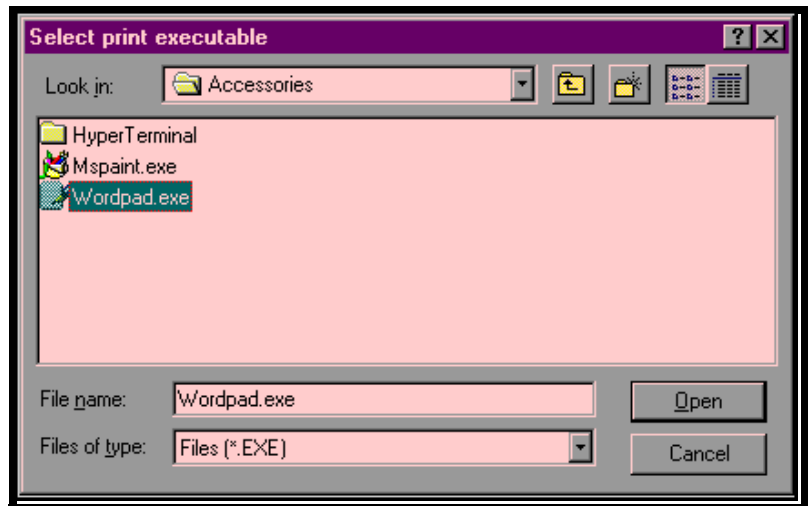
From the menu bar, select

File → Print setup



Workstation Configuration

Select wordpad.exe as the print executable.



Typical Path to Wordpad.exe

Windows95/98 workstations

C:\Program Files\Accessories

Windows NT workstations

C:\Program Files\Windows NT\Accessories

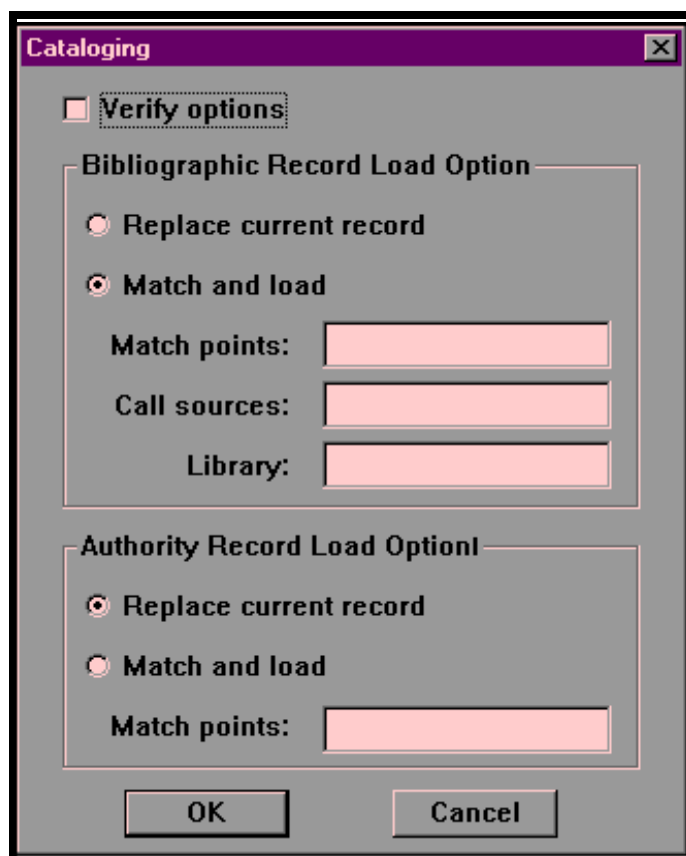
Workstation Configuration

Set Preference, Cataloging

From the menu bar, select

Preference → **Cataloging**

Following your trainer's recommendation, set Cataloging Preference at workstations where SmartPORT will be used.



Install WorkFlows from *Unicorn Clients CD*

- Launch WorkFlows; supply host info and log in.
- Update WorkFlows using the UPDATE wizard.

Command → My Wizard → UPDATE

- Verify that a temp folder exists on the workstation; create it if necessary
- Install WSGUI Display and WSGUI Edit fonts.

Start → SETTINGS → Control Panel → Fonts

- Launch WorkFlows and log in again.
- Set configuration preferences.

Preference → Configuration

- Select an application for screen printing.

File → Print Setup

- Set cataloging preferences.

Preference → Cataloging

Install and configure WorkFlows on staff workstations.

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GETTING STARTED USING WorkFlows

Overview

To get started using WorkFlows, it is helpful to know about following topics.

- Displaying and modifying toolbars
- Modifying properties and saving changes to host machine
- Using help effectively
- Keyboard alternatives to using a mouse

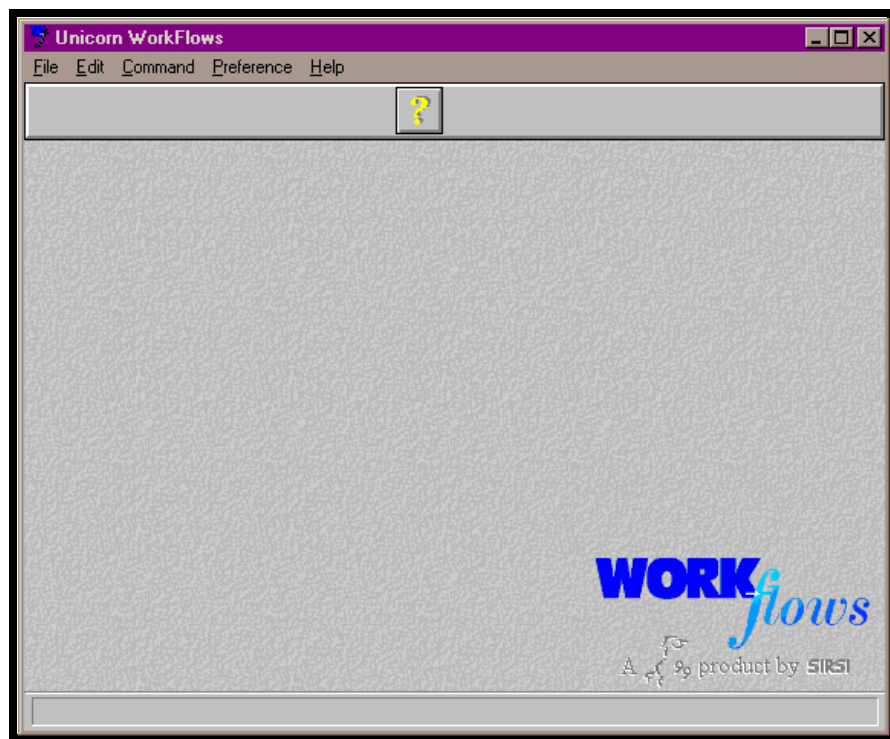
Toolbars

Getgoin Toolbar

By default, the initial installation of WorkFlows shows the Getgoin toolbar.

The only icon available on the Getgoin toolbar takes you to help, and the Getting Started Using WorkFlows help topic.

There will be more on that later in this section.



Displaying Toolbars

From the Menu bar, select:

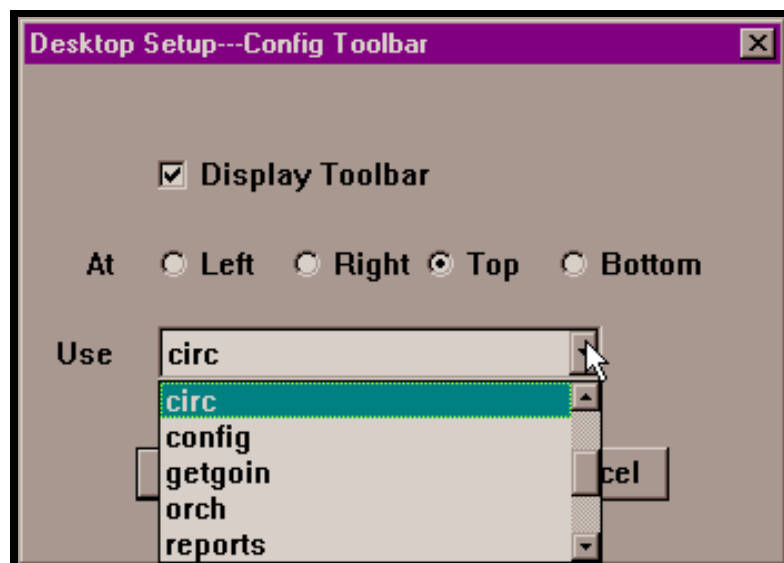
Preference → **Desktop** → **Toolbar** →
Display

or

Rest your mouse cursor on the toolbar and right click.

Select Toolbars from the resulting window.

The Desktop Setup—Config Toolbar window will display.



Select the toolbar you will use.

Select OK.

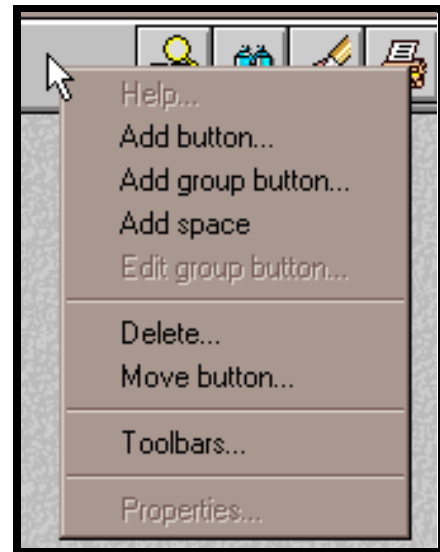
Toolbars

Modifying Toolbars

Making a custom toolbar

With your mouse cursor pointing to the area of the toolbar you will modify, use your mouse to right click.

A pop-up menu with options for modifying the toolbar will display.



Exercise

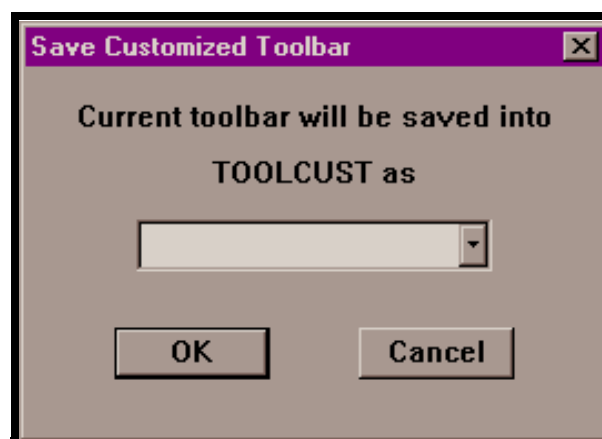
Practice adding and deleting wizards to modify a toolbar.

Saving Custom Toolbars

Toolbar modifications are lost if they are not saved. To Save toolbar modifications, from the menu bar, select

**Preference → Desktop → Toolbar →
Save as**

The Save Customized Toolbar window will display.



Type your custom toolbar name into the data entry well.

Select OK.

Notes About Custom Toolbars

- Toolbar modifications and changes to which toolbar is in use are specific to a workstation, not login.
- Any WorkFlows user can make changes to toolbars on his own workstation.

Properties

Overview

All wizards have properties.

Properties fall into three categories

- **Behavior** — often deals with the availability of next steps
- **Defaults** — supplies default values
- **Helpers** — controls the availability of helpers and properties for helpers

Who Can Make Changes to Properties?

The admin login can change Behavior and Helpers properties.

CIRC and TECH logins cannot change Behavior and Helpers properties.

Any user can change Default properties on the workstation where he is working.

Making Changes to Properties

To change properties, rest your mouse cursor on a Wizard icon. Click the right mouse button.

A pop up window will display.

Select properties from the list of options.

Make changes as needed.

Understanding the Choices

Properties pages have context-sensitive help. Select context sensitive help for an explanation of the Properties options in the active window.

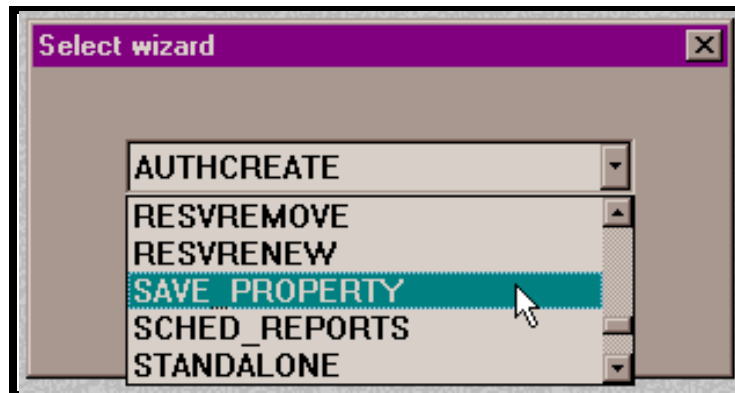
Saving Property Changes to the Host Machine

The admin user can save property changes to the server so that they are distributed to all clients at WorkFlows login.

From the menu bar, select

Command → **My Wizard**

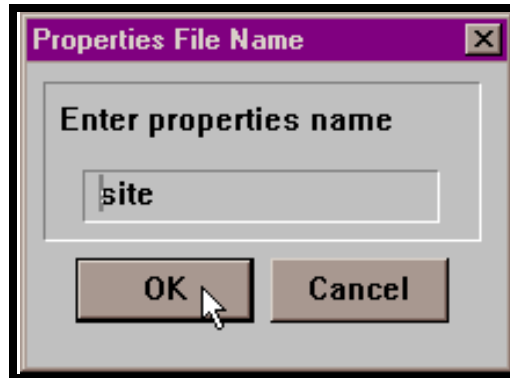
The Select wizard window will display.



Select SAVE_PROPERTY.

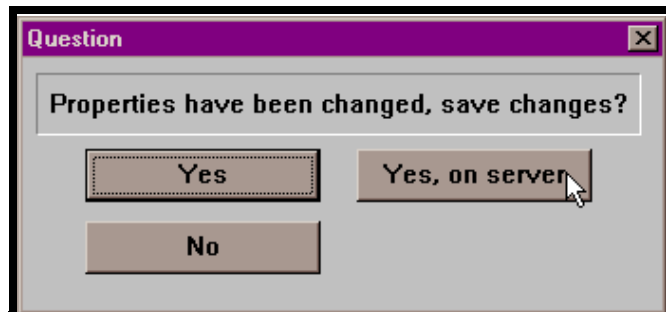
Properties

The Properties File Name window will display.



Select OK to accept the defaults.

The Question window will display.



Select Yes, on server.

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SIRSI recommends that Unicorn administrators and supervisory staff systematically review properties for each Unicorn module. Change properties as needed to tailor WorkFlows to meet the needs of your library operations.

Properties

Exercise

Review the “Application to view reports” and “Application to print reports” properties of the Schedule New Reports, Scheduled Reports and Finished Reports wizard.

Table 2:

Client Operating System	Default Path to wordpad
Windows95 or 98	Program Files\Accessories\wordpad.exe
Windows NT	Program Files\Windows NT\Accessories\wordpad.exe

Make changes if necessary.

Save changes to server if appropriate.

Additional Information

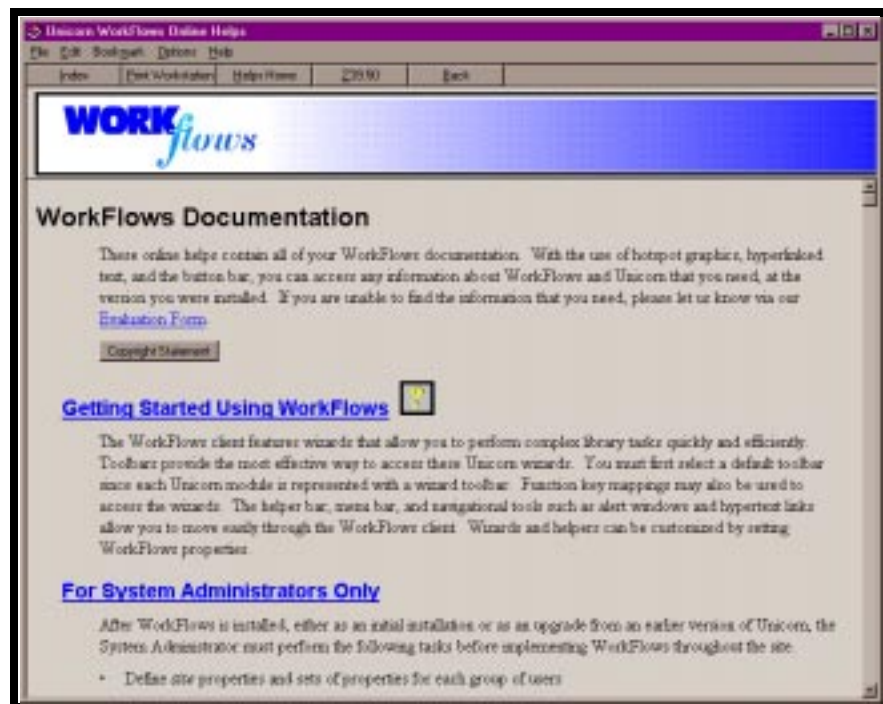
Additional information about creating property files for groups of users is available under the Properties help topic. Additional details related to this topic will be covered in the Unicorn Administration course.

Online helps are the documentation for using Unicorn through WorkFlows.

Select **Help**.



Unicorn WorkFlows Online Help will open.





SIRSI recommends that you and all library staff who will use WorkFlows explore the help topic Getting Started Using WorkFlows.

This help topic reiterates and expands on the information in this section of Essential Unicorn Administration.

When you ask staff to read Getting Started Using WorkFlows, you introduce them to help as the primary source of WorkFlows documentation.

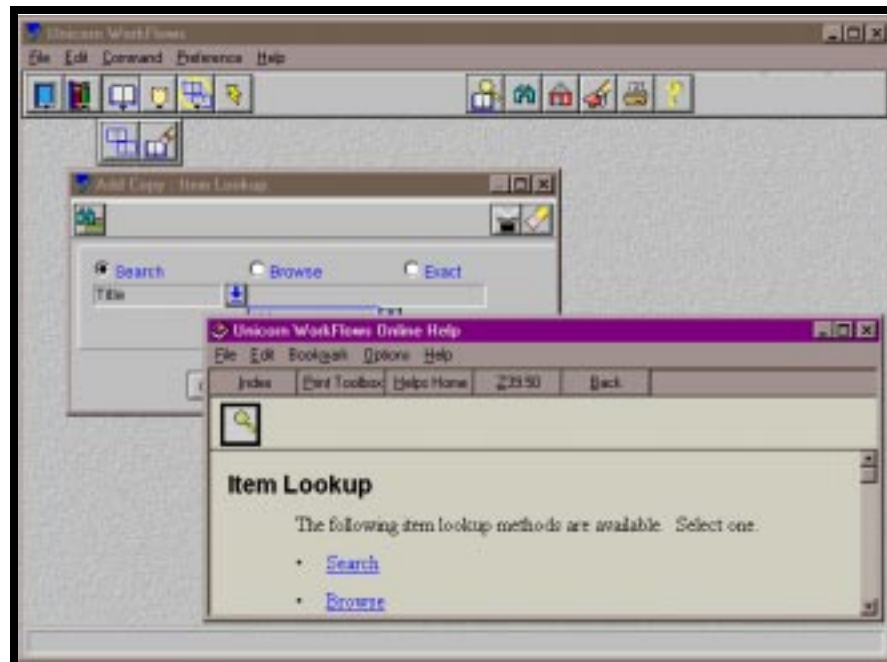
- Context-sensitive help
- Help contents
- Help index
- Find

Overview

Context-sensitive Help

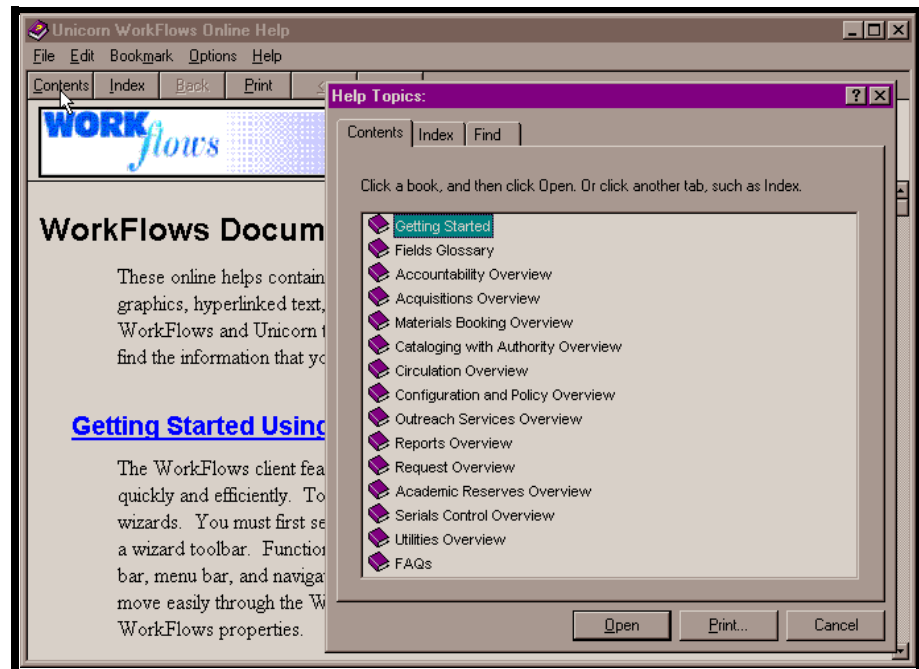
Context sensitive help gives you information about a task when you need it most. Context-sensitive help provides documentation of the wizard in the active window.

- With a wizard in the active window, select help.
- Context-sensitive help will display.



Help Contents

Open the contents to see help arranged as a set of books.



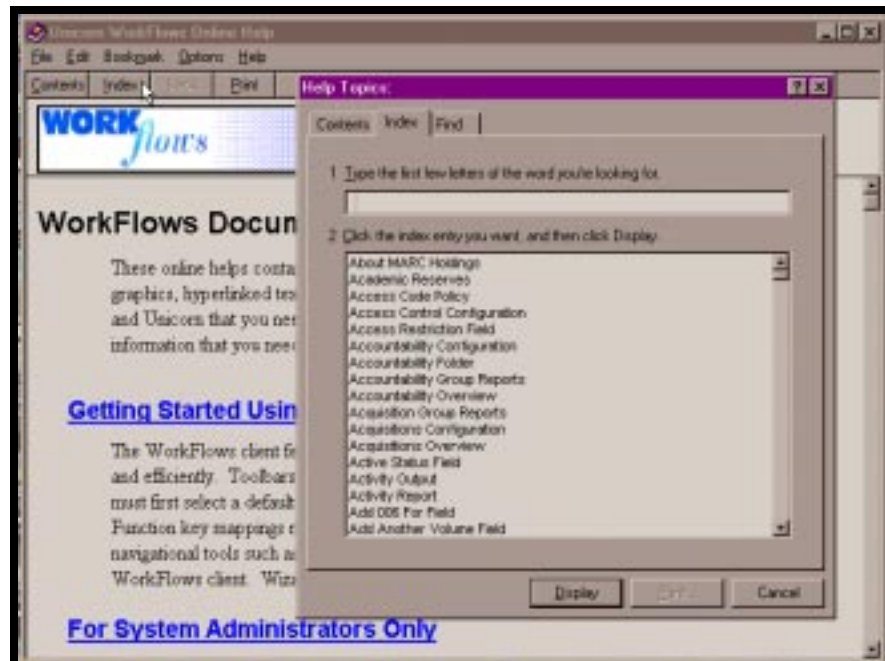
Open a book to see the topics covered in that book.

Approaching help from the contents is a good way to get an overview of a module.

Overview

Help Index

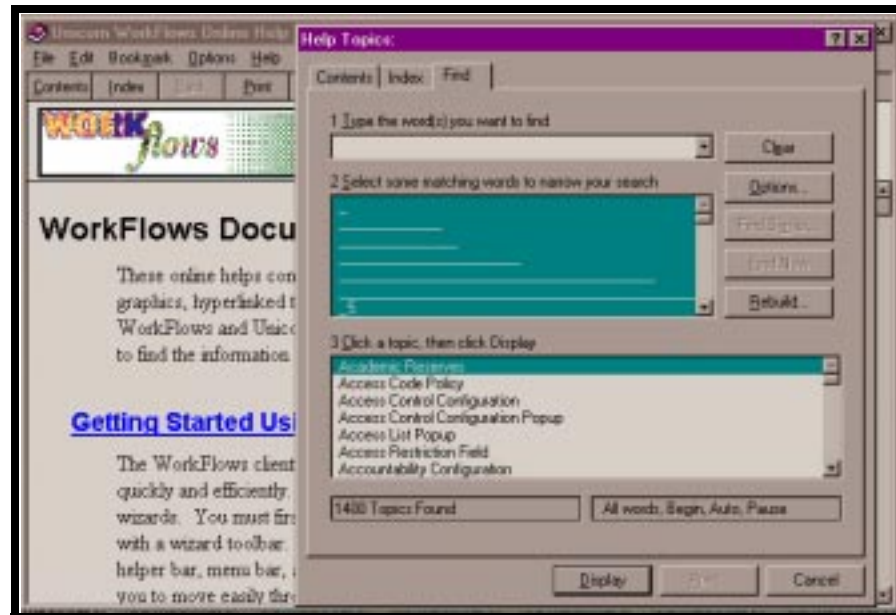
Open the index to browse help topics arranged alphabetically across all subjects.



When you know the title of your help topic, you can get to it quickly from the index.

Find

Find is similar to keyword searching. Find searches the help text for your search term.



Find is useful when you don't know where to look for the information you need.

Note: Find is case sensitive. You will get better results using Find with caps lock turned off.

Keyboard Shortcuts

In WorkFlows, key combinations can be used to replace using the mouse.

Navigating the Menu Bar

Alt-letter

Select the Alt key with the appropriate underlined character to access the Menu bar.

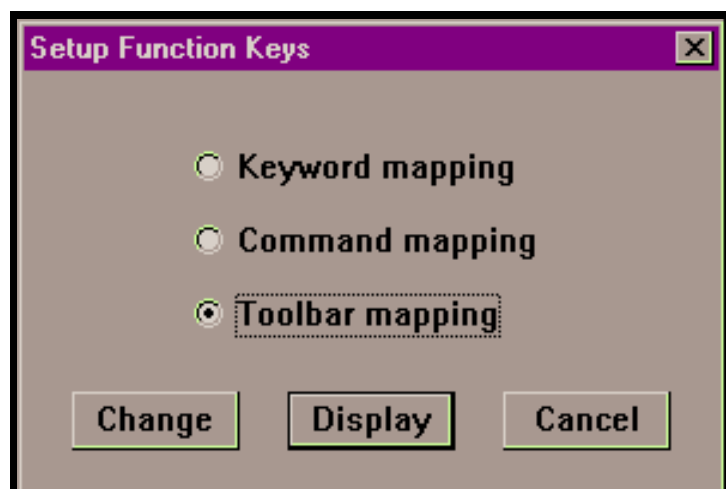
Example: Type Alt-P. The Preference pop-up menu will display. Type C to display the Configuration menu.

Selecting Wizards using function keys

Function key mappings that relate to the Toolbar in use are available.

For options relating to function key mapping from the Menu bar, select

Preference → **Function keys**



Moving between fields

Tab and Shift-Tab

Use the Tab key to move between writable fields and next step buttons.

Use Shift-Tab to move backwards between active, input fields and next step buttons.

Moving between folders

F2 and F3

The function key F2 has been mapped to move forward between folder tabs.

The function key F3 has been mapped to move backward between folder tabs.

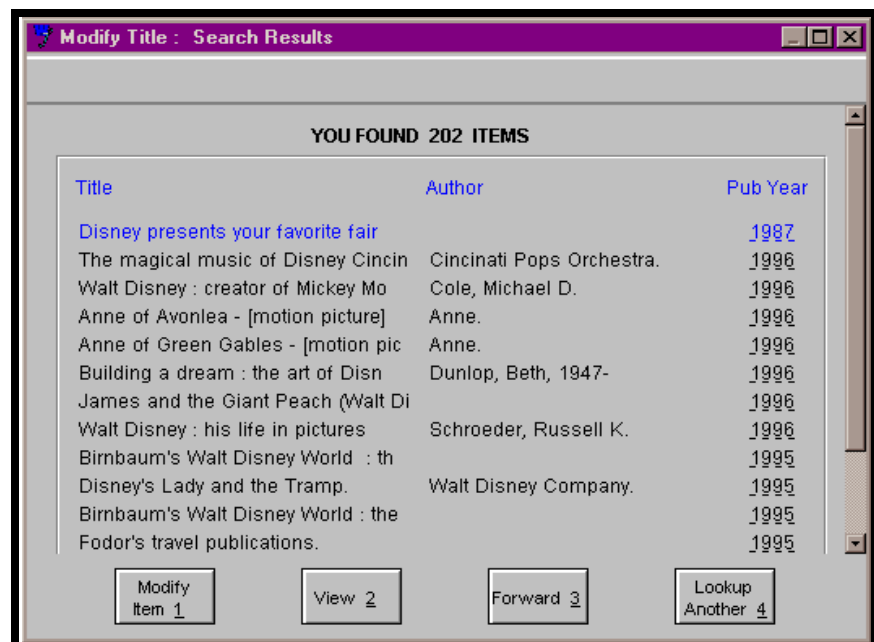
Keyboard Shortcuts

Selecting Next Steps

Alt-Number

Each next step button is assigned a number, which displays underlined next to the button label. To select a button, type Alt and the appropriate number.

Note: *The number pad cannot be used with this convention.*



Example: *To select Modify Item, hold down Alt key and press the number 1.*

Enter

Pressing the Enter key in a WorkFlows window, selects the default (left-most) next step button.

Note: *Pressing Enter in a verify list selects the highlighted value.*

For more information on keyboard alternatives to using the mouse, please see the help topic, “Keyboard shortcuts.”

ESSENTIAL UNICORN ADMINISTRATION

Overview

This section of the class deals with the day-to-day tasks that are necessary for system reliability.

Required maintenance activities include the following tasks.

- Halting the Unicorn servers
- Backups
- Host-machine shutdown
- Required maintenance reports
- Removing unneeded finished reports

Connecting to Unicorn for Essential Activities

The essential activities

- Halting the Unicorn servers
- Backups
- Host-machines shutdown

can only be performed at the console or using a telnet connection.

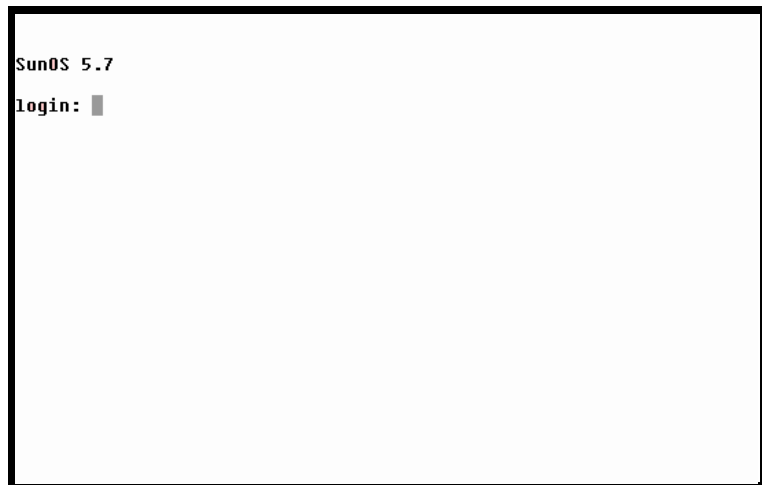
Required maintenance reports can be scheduled, monitored and removed using WorkFlows.

Overview

Connecting to Unicorn With a Character Client

At a login prompt, enter the login

admin

A screenshot of a terminal window showing the SunOS 5.7 login prompt. The text "SunOS 5.7" is displayed on the first line, and "login: █" is on the second line, with a small black square representing the cursor.

```
SunOS 5.7
login: █
```

Press Enter. At the password prompt enter the appropriate password and press Enter.

Connecting to Unicorn From a Sun Console

Sun consoles run a graphical user interface which behaves differently from the interface described in this document.

Before you log in at a Sun console, you can select an option that brings up a Command Line Interface that functions in the way described here.

At the Welcome screen that prompts you to “Please enter your user name” select the Options button.

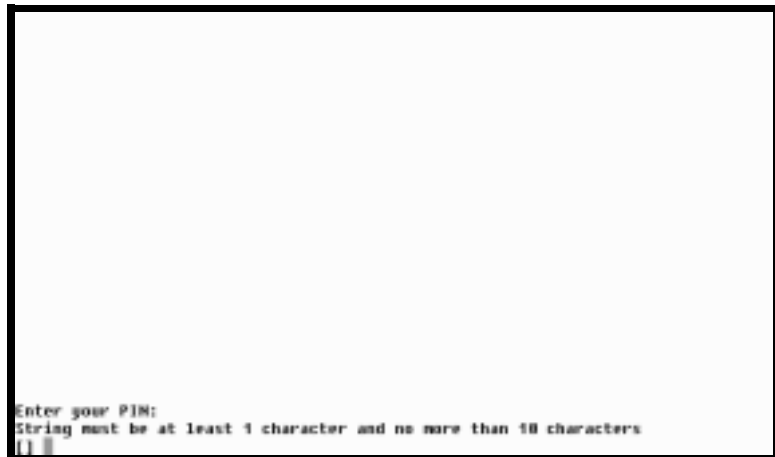
From the resulting menu, select Command Line Login. The graphical display will be replaced by text.

Overview

Press Enter and a login prompt will display. From that point you will be able to proceed using these instructions.

Once you have supplied the admin login and password, you will be prompted for the admin PIN.

Enter the admin PIN and press Enter.



Once you are logged in, you will be prompted for station identification. Press Enter for a list of choices.

Type vt100 or the line number beside vt100 and press Enter.

Overview

```
Enter your station ID or FLOATING for a floating terminal:
String must be at least 1 character and no more than 10 characters
[FLOATING]

Select your terminal type:
1) ANSI          8) MACGUI DISP  15) TUI          22) UT100
2) DT110        9) MACGUI EDIT  16) TV          23) UT220
3) HP700-41     10) PCGUI-DISP  17) TV-COLOR   24) WEBSERVER
4) HP700-92     11) PCGUI-EDIT  18) TVXT       25) WVSE30
5) IBHS151     12) SCDCOLOR   19) TVXT-COLOR 26) WVSE325
6) IBHS153     13) SCCHORD    20) UNKNOWN    27) WVSE60
7) IBHS164     14) STANDALONE 21) UUT1224
[ ] vt100
```

A restricted Rights Legend will display; press Enter.

The Unicorn Utility Selection menu will display.

```
UNICORN                      Utility Selection                      03/06/2000
-----
Select the utility you want to use:

1) Backup          5) Report          9) Unicornadmin
2) Computeradmin  6) Standalone     10) Updatesdisk
3) Import_export  7) Systemconfig  11) Msclient
4) Logs           8) Terminaltype

Type      HELP for help,
or a NUMBER,
EXIT to quit UNICORN utilities,
[ ]
```

From the Utility Selection menu, you will be able to perform required maintenance tasks.

Halt, Initialize and Run the Unicorn Servers Each Day

SIRSI recommends that each morning you stop and start the Unicorn servers.

- Halting Unicorn servers stops all processes that make up Unicorn.
- While Unicorn is halted no one can connect to it with either WorkFlows or WebCat.
- When halting Unicorn, users who are using WorkFlows or WebCat will have their connections terminated.
- Running Unicorn servers makes Unicorn available again for connections from WorkFlows and WebCat.
- The Halt, Initialize and Run procedure can be completed in minutes.

What are the Unicorn Servers?

Unicorn is made up of multiple servers that run on your host machine. In this context, servers refer to a group of processes that do related work.

- The Workstation server handles interaction between clients (like WorkFlows) and the Unicorn databases. The Workstation must be running to connect to Unicorn with either WorkFlows or InfoVIEW.

Halt and Run

- The WebCat server enables OPAC connections through the Web. The WebCat Server is dependent on the Workstation Server; WebCat cannot run unless Workstation is already running.
- The Z39.50 server runs to enable Z35.50 clients to connect to your catalog.
- The Reports server runs scheduled reports.
- The Netserver is needed when Unicorn is installed on one host machine and the WebCat is installed on another host machine.

Why is it Necessary to Halt, Initialize and Run?

Halting Unicorn servers stops all the processes that make up Unicorn. Initializing the servers removes lock files and running the servers gives Unicorn a clean start.

A Halt, Initialize and Run is a **preventative** maintenance measure.

The Procedure

- From the Utilities Selection menu, type either Unicornadmin or the number beside that selection and press Enter.
- From the Operation Selection menu type HALT and press Enter.

```
UNICORNADMIN          Operation Selection          03/06/2000
* There are 1 user(s) logged in.
* UNICORN workstation server 99.2.0.0 is HALTED.
* Netserver 99.2.0.0 is HALTED.
* WebCat server 99.2.0.0 is HALTED.
* UNICORN report server 99.2.0.0 is HALTED.
* z39.50 server is HALTED.

      (To return to previous level, press the ESCAPE key (ESC).)
-----
Select operation:
Type      HELP for help,
          EXIT to quit the UNICORN Administration Utility,
          HALT to halt selected server(s),
          INITIALIZE to initialize servers/stations/users/utilities,
          LOCK to lock or unlock gateway element(s),
          RUN to run selected server(s),
or        STATUS to view the status of servers/stations/users/utilities.
[EXIT] halt
```

When prompted to select what you would like to halt, Type **all** and press Enter.

```
UNICORNADMIN/HALT    Type Selection          03/06/2000
      (To return to previous level, press the ESCAPE key (ESC).)
-----
Select what you would like to halt:
1) netserver          3) webcat_server      5) z39.50 server
2) report server      4) workstation server

Type      EXIT to discontinue halt,
          ALL to halt all of them,
or        a NUMBER.
[EXIT] all
```

The Procedure

As each server is halted a confirmation message will display. Press Enter when prompted.

When all servers are halted, you will return to the Unicornadmin Operation Selection menu where you can select Initialize.

```
UNICORNADMIN                               Operation Selection                               03/06/2000

* There are 1 user(s) logged in.
* UNICORN workstation server 99.2.0.0 is HALTED.
* Netserver 99.2.0.0 is HALTED.
* WebCat server 99.2.0.0 is HALTED.
* UNICORN report server 99.2.0.0 is HALTED.
* Z39.50 server is HALTED.

      (To return to previous level, press the ESCAPE key <ESC>.)
-----
Select operation:
Type          HELP for help,
              EXIT to quit the UNICORN Administration Utility,
              HALT to halt selected server(s),
              INITIALIZE to initialize servers/stations/users/utilities,
              LOCK to lock or unlock gateway element(s),
              RUN to run selected server(s),
or           STATUS to view the status of servers/stations/users/utilities.

[EXIT] initialize
```

When prompted to select what you would like to initialize, type **all** at the prompt and press Enter.

When prompted to select gateway to initialize, type **all** to initialize all gateways.

As each server is initialized a confirmation message will display.

Press Return, as prompted by the screen, as each server is initialized.

When prompted to select the type of station to initialize, type **all** and press Enter.

The Procedure

When prompted to select the user to initialize, type **all**.

When the same “user to initialize” screen reappears type **exit**.

When prompted select the utility to initialize, type **all**.

When this same screen reappears type **exit**.

Continue to press Enter, as prompted by the screen, as additional servers are initialized.

When you return to the Unicornadmin Operation Selection screen, type **run** and press Enter.

```
UNICORNADMIN                               Operation Selection                               03/06/2000

* There are 1 user(s) logged in.
* UNICORN workstation server 99.2.0.0 is HALTED.
* Netserver 99.2.0.0 is HALTED.
* WebCat server 99.2.0.0 is HALTED.
* UNICORN report server 99.2.0.0 is HALTED.
* 229.50 server is HALTED.

      (To return to previous level, press the ESCAPE key <ESC>.)
-----
Select operation:
Type          HELP for help,
              EXIT to quit the UNICORN Administration Utility,
              HALT to halt selected server(s),
              INITIALIZE to initialize servers/stations/users/utilities,
              LOCK to lock or unlock gateway element(s),
              RUN to run selected server(s),
or           STATUS to view the status of servers/stations/users/utilities.

[EXIT] run|
```

When prompted, select what you would like to run, type **all** and press Enter.

You will cycle through running each server. Press Enter when prompted.

The Procedure

When all servers are running, you will return to the Unicornadmin Operation Selection menu where you can select **exit** to return to the Utility Selection menu.

Monthly System Shutdown

Shut down and restart the host machine each month.

- Halt the Unicorn servers from Unicornadmin
- Shut down the host machine
- Briefly turn off the host machine to reset the hardware
- Boot the host machine
- Start the http server
- From Unicornadmin, initialize all
- Run all Unicorn servers

Why Shutdown Periodically?

A full system shutdown kills defunct processes, removes files from temp space and resets hardware.

It is a **preventative** maintenance measure.

Shutdown Procedures

You must be logged in at the console when you shut down.

Halt the Unicorn servers for Unicornadmin

Following the procedures outlined earlier, go to Unicornadmin and halt all servers.

Shutdown the host machine

Shutdown procedures vary between operating systems.

- **Shutdown IBM AIX machines from within Unicorn**

From the Unicorn Utility Selection menu, select **computeradmin**.

```
UNICORN                               Utility Selection
-----
Select the utility you want to use:

  1) Archgen           7) Mailbox           13) Terminaltype
  2) Archiveadmin     8) Remote           14) Unicornadmin
  3) Backup           9) Report           15) Updatogui
  4) Computeradmin   10) Scanner         16) Updatewdisk
  5) Import_export  11) Standalone     17) Wsclient
  6) Logs             12) Systemconfig

Type      HELP for help,
          EXIT to quit UNICORN Utilities,
or a NUMBER.

[ ] computeradmin
```

Shutdown Procedures

From the Computer Resource Administration menu, select **system shutdown**.

```
COMPUTERADMIN          Computer Resource Administration
                        (To return to previous level, press the ESCAPE key <ESC>.)
-----
Select what you want to work with.

1) disk space          3) set date          5) update software
2) process status     4) system shutdown

Type      HELP for help,
          EXIT to quit the Computer Admin Utility,
          or  a NUMBER.

[EXIT] system shutdown
```

When asked whether to proceed with shutdown, select **yes**.

```
COMPUTERADMIN/SYSTEM SHUTDOWN  Halt System

* There are 2 user(s) logged in.
* UNICORN workstation server 99.2.4.0 is HALTED.
* Netserver 99.2.4.0 is HALTED.
* WebCat server 99.2.4.0 is HALTED.
* UNICORN report server 99.2.4.0 is HALTED.
* 239.50 server is HALTED.

                        (To return to previous level, press the ESCAPE key <ESC>.)
-----
Proceed with shutdown?

1) NO
2) YES

[ ] yes
```

You will be prompted for the root password. Type the root password and press Enter.

Shutdown Procedures

```
COMPUTERMGR/SYSTEM SHUTDOWN      Root Password
-----
You need to know the root password to shutdown the system.
Please type in the root password now.
If you don't know it, just press ENTER or RETURN.
root's Password: █
```

After you type the root password and press Enter, the system will respond with a screen that looks like this.

```
COMPUTERMGR/SYSTEM SHUTDOWN      Root Password
-----
You need to know the root password to shutdown the system.
Please type in the root password now.
If you don't know it, just press ENTER or RETURN.
root's Password:
SHUTDOWN PROGRAM
Wed Apr 12 12:37:48 EDT 2000

Broadcast message from root@nwww (tty) at 12:37:48 ...
shutdown: PLEASE LOG OFF NOW !!!
All processes will be killed in 1 minute.
```

The screen display will look like this when the shutdown begins.

Shutdown Procedures

```
Broadcast message from root@nwww (pts/0) at 12:38:48 ...
shutdown: THE SYSTEM IS BEING SHUT DOWN NOW

Wait for '....Halt completed....' before stopping.
Error reporting has stopped.
Process accounting has stopped.
nfs_clean: Stopping NFS/NIS Daemons
0513-004 The Subsystem or Group, nfsd, is currently inoperative.
0513-004 The Subsystem or Group, biod, is currently inoperative.
0513-004 The Subsystem or Group, rpc.lockd, is currently inoperative.
0513-004 The Subsystem or Group, rpc.statd, is currently inoperative.
0513-004 The Subsystem or Group, rpc.mountd, is currently inoperative.
0513-004 The Subsystem or Group, ypsserv, is currently inoperative.
0513-004 The Subsystem or Group, ypbind, is currently inoperative.
0513-004 The Subsystem or Group, yppasswdd, is currently inoperative.
0513-004 The Subsystem or Group, yppupdated, is currently inoperative.
i4cfg Version 4.5.5 AIX -- LUM Configuration Tool
(c) Copyright 1995-1998, IBM Corporation, All Rights Reserved
US Government Users Restricted Rights - Use, duplication or disclosure
restricted by GSA ADP Schedule Contract with IBM Corp.
█
```

The shutdown is complete when the last line on the screen displays.

....Halt completed....

***Note:** IBM AIX machines may be shutdown from a shell prompt. SIRSI recommends doing a shutdown from within Unicorn because the Unicorn shutdown script checks to ensure that servers are halted before proceeding with the shutdown command.*

Shutdown Sun Solaris or Intel Solaris machine from a shell prompt using these instructions.

At the console, login as root.

Type this command and press Enter:

```
/usr/sbin/shutdown -y -g0 -i5
```

Shutdown Procedures

```
# /usr/sbin/shutdown -y -g0 -i5
```

The system will respond with a screen that looks like this.

```
# /usr/sbin/shutdown -y -g0 -i5
Shutdown started.   Wed Apr 12 11:48:39 CDT 2000
Broadcast Message from root (pts/4) on galileo Wed Apr 12 11:48:39...
THE SYSTEM IS BEING SHUT DOWN NOW ! ! !
Log off now or risk your files being damaged
Changing to init state 5 - please wait
```

This command will complete the shutdown and power off the host machine.

Shutdown Procedures

Shutdown machines running other operating systems from a shell prompt.

Explicit instructions for shutdown of IBM AIX and Sun machines are provided for SIRSI's turnkey customers. If you are running Unicorn on another platform, consult your UNIX system administrator or system documentation for guidance on the appropriate shutdown command for your platform.

Briefly turn off host machine to reset the hardware

If the shutdown did not power off the host machine, turn it off now. This step will reset the hardware.

Boot the host machine

Power on the host machine. It will boot automatically.

Start the http server

- Turnkey installations

Use a telnet application to connect to your host machine. Login as admin.

From the Utility Selection menu select **wwwmanager**.

Type **run** and press Enter to run the wwwmanager.

Exit the wwwmanager.

Shutdown Procedures

- Software only installations

Explicit instructions for starting the http server are provided for SIRSI's turnkey customers. If your SIRSI contract is for software only, consult your UNIX system administrator or http server documentation for guidance on starting the http server.

Initialize all

From the Utility Selection menu, select Unicornadmin. Following the procedures outlined earlier, initialize all.

Run all Unicorn servers

Still within Unicornadmin and following procedures outlined earlier, run all servers.

Unicorn Backup Strategy

Backups provide a mechanism for restoring software and data after a system failure.

The Unicorn backup strategy is made up of two parts.

- A full system backup takes a snapshot of Unicorn. The full system backup should be performed weekly.

Unicorn servers must be halted during full system backups.

- A daily backup backs up logs of transactions that change the database. The daily backup makes a copy of a cumulative log file. It contains transactions logged during the current month.

There is no need to halt the Unicorn servers during daily backups.

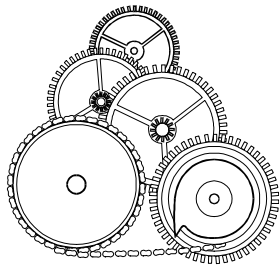
Examples:

When you make your daily backup tape on May 5th, the cumulative log will contain May 1st through May 4th.

When you make you daily backup tape on May 27th the cumulative log will contain the May 1st through May 26th.

Unicorn Backup Strategy

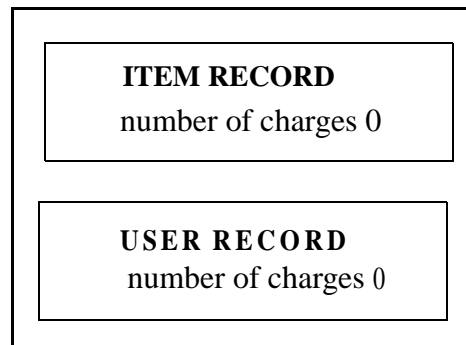
Why Do You Need to Halt Unicorn During a Full System Backup?



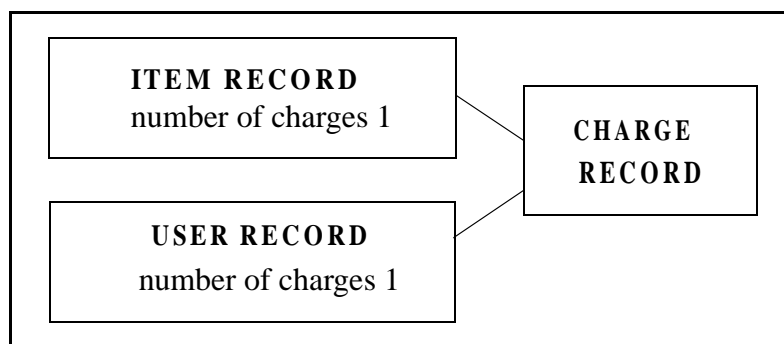
Unicorn stores your records using a relational database structure. One transaction, such as checking out an item to a user, can affect several databases. Here is an example.

Checking out a book creates a charge record in the charge database and changes fields in the database records of both the item and the user involved in the transaction. A checkout affects three databases.

Before Checkout



After Checkout

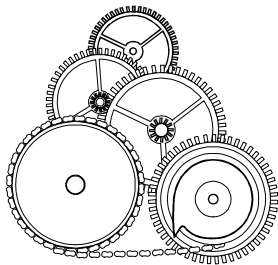


Unicorn Backup Strategy

Making a backup while the servers are running could result in situations where related databases are backed up in different states. For example, if the charge database is backed up before a particular item is checked out but the user database is backed up after the checkout, the user database will have a record of the charge but the charge database will not. If a restore is done using this backup, there will be no record of who has the item and the incorrect charge count in the user record can make the user record inaccessible.

Creating full backups while the Unicorn servers are halted ensures that when your database is restored, all databases contain information that is consistent and all records are accessible.

How Are Unicorn Backups Used During a Restore?



When a restore of Unicorn is necessary, SIRSI systems support personnel will ask you to provide access to the tapes needed to restore your system.

First you will be asked to place your latest full-system backup in your drive. SIRSI system support staff will use this backup to restore your system to the point in time when the backup was made.

Second, SIRSI support personnel will restore *transactions* contained in log files. Restoring transactions causes logged commands to be executed again.

To restore transactions, you may need to supply your latest daily backup tape. Because daily backups make copies of a cumulative monthly log file, your latest daily backup can be used to retrieve any transactions from the current month.

Unicorn Backup Strategy

If your latest full system backup was made in the previous month, you may need to supply a second tape of transactions. This tape contains transactions from the previous month. The first daily backup tape made in a new month contains all the transactions from the previous month.

Example 1:

On May 17, a hardware failure makes it necessary to restore from backup. The latest full system backup made on May 11 is restored. To bring the system up to date, transactions that occurred after the May 11 backup are selected from the cumulated May log files. Those transactions are processed through a transaction server so that the commands are executed again.

Example 2:

On May 3, a hardware failure makes it necessary to restore from backup. The latest full system backup made on April 27 is restored. To restore transactions that occurred in April after the full backup, the cumulated log file for April is needed. If necessary, that file can be retrieved from the first daily backup made in May. To restore transactions that occurred in May, the cumulated log file of transactions for May is needed. If necessary, that file can be retrieved from the latest daily backup tape. The selected transactions are processed through a transaction server so that the commands are executed again.

Notes About System Backups

If there is a hardware failure that requires a restore of the operation system, a Unicorn backup alone is not adequate.

SIRSI recommends a quarterly system backup be made using mechanisms usually provided with the operating systems.

System backups are also recommended after operating system updates or changes to server hardware configuration.

Please refer to Appendix E for procedures for performing system backups on the platforms SIRSI delivers as turnkey systems, IBM AIX and Sun SOLARIS.

When it is necessary to restore from a system backup and a Unicorn backup, the system backup is restored first.

Unicorn Backup Recommendations

Do a Unicorn full backup once a week (minimum).

- Unicorn servers must be halted during full backups.
- It is important to maintain multiple generations of Unicorn full system backups. This means you should have on hand several of your latest Unicorn full system backups. Occasionally a backup tape cannot be read. Having an earlier backup gives you added security. If you are unable to restore from you latest full backup, a

Unicorn Backup Strategy

backup that was made earlier can be used instead.

A simple strategy for maintaining multiple generations of Unicorn full system backups, when full backups are done weekly, involves five tapes or five sets of tapes. The tapes (or sets of tapes) can be numbered 1 - 5. Tapes can be used in a rotation that corresponds to weeks on the calendar. If backups are made on Fridays, on the first Friday of the month use tape 1. On the second Friday of the month use tape 2, etc. Tape 5 will only be used in the months that contain 5 Fridays. Always use tape 1 for the first backup of the month.

NEVER make a new backup using the tape that contains your most recent Unicorn full backup.

- Consider storing a recent Unicorn full system backup off site for disaster recovery.

Do a Unicorn Daily Transactions Backup every day.

- It is important to maintain multiple generations of Unicorn daily backups. That means you should have on hand several of your latest Unicorn daily backups. Occasionally a backup tape cannot be read for use in a restore. Having an earlier backup gives you added security. If you are unable to restore from your latest daily backup, a backup that was made the day before can be used instead.

Unicorn Backup Strategy

A simple strategy for maintaining multiple generations of Unicorn daily backups involves seven tapes. The tapes can be labelled with the seven days of the week. Tapes can be used in a rotation that corresponds to the days on the calendar.

- **NEVER** make a new backup using the tape that contains your most recent Unicorn daily backup.

Unicorn Backup Strategy

Set aside the first daily backup made in a new month. At SIRSI, we sometimes refer to the tape as your monthly tape, even though the backup is made with the mechanism used for daily backup. It contains all the logged transactions from the previous month.

This tape is necessary if you restore from a full backup made in the previous month.

- It is recommended that you use two tapes in rotation for recording monthly log files. You might label the tapes “even” and “odd” for use in even and odd months.
- **NEVER** use a tape containing a full month of logs in the weekly tape rotation.

The Procedure for Unicorn Full Backup

Unicorn full backup is an attended backup initiated from the keyboard. The root password must be supplied to initiate a full system backup.

Using Unicornadmin, halt all servers.

From the Utility Selection menu, select Backup.

Unicorn Backup Strategy

```
UNICORN                      Utility Selection                      02/06/2008
-----
Select the utility you want to use:

 1) Backup           5) Report           9) Unicornadmin
 2) Computeradmin   6) Standalone      10) Updatesdisk
 3) Import_export   7) Systemconfig    11) Msclient
 4) Logs            8) Terminaltype

Type      HELP for help,
          EXIT to quit UNICORN utilities,
          or  a NUMBER.
[ ] Backup
```

From the File Type Selection menu, select **full system**.

```
BACKUP                      File Type Selection                      02/06/2008
-----
      (To return to previous level, press the ESCAPE key <ESC>.)
Select what you want to work with:

 1) daily transactions  3) full system
 2) database files     4) logs

Type      HELP for help,
          EXIT to quit the Backup utility,
          or  a NUMBER.
[EXIT] Full system
```

From the Operation Selection menu, type **save** and press Enter.

Unicorn Backup Strategy

```
BACKUP/SYSTEM                Operation Selection                02/06/2008
-----
      (To return to previous level, press the ESCAPE key <ESC>.)
-----
Select operation:
Type      HELP for help,
          EXIT to discontinue working with full system backup,
          LIST to list all file systems,
          SAVE to copy full system to backup media,
          STATUS to view the status of recent full system backups,
          or  VERIFY to check accuracy of files saved to backup media.
[EXIT] save
```

You will be prompted for the root password. Type the root password and press Enter.

```
BACKUP/SYSTEM                Root Password                02/06/2008
-----
You need to know the root password to do a full system backup.
Please type in the root password now.
If you don't know it, just press ENTER or RETURN.
Password: █
```

When the backup finishes, verify that the backup was successful.

Unicorn Backup Strategy

From the Unicorn Utilities menu, select **Backup**.
From the resulting Operation Selection menu, type **verify** and press Enter.

```
BACKUP/SYSTEM          Operation Selection          03/06/2000
-----
      {To return to previous level, press the ESCAPE key (ESC).}
-----
Select operation:
Type   HELP for help,
       EXIT to discontinue working with full system backup,
       LIST to list all file systems,
       SAVE to copy full system to backup media,
       STATUS to view the status of recent full system backups,
       or VERIFY to check accuracy of files saved to backup media.
[EXIT] verify
```

Unicorn Backup Strategy

You will be prompted to enter how many volumes (tapes) will be input. Type the number of tapes used for the Unicorn full backup and press Enter.

```
BACKUP/SYSTEM/VERIFY          Volume Count          00/06/2000
-----
      (To return to previous level, press the ESCAPE key <ESC>.)
-----
How many volumes will be input?
Number must be between 1 and 99
[1] █
```

Once a successful verify is complete, go to Unicornadmin to initialize and run all servers so that Unicorn is available again.

General Recommendations Related to Backups

- Technologies such as disk mirroring and RAID5 are not a substitute for backups to external media.
- Clearly label the tapes you use for backups.
- Store your backup tapes in a safe place. Tapes should not be stored in close proximity to heat sources or electronic equipment that might generate magnetic fields. Examples can include telephones, laminating machines, etc.
- Follow your tape drive manufacturer's recommendations for cleaning your tape drive regularly. Clean it no less often than once a

Unicorn Backup Strategy

month.

Note that tape drive cleaning cartridges have a limited life. Most cleaning cartridges are labelled with the recommended number of times they should be used. Record number of uses on the label and replace the cartridge when indicated.

- Tapes wear out. Replace the tapes you use for backup on a regular schedule.

SIRSI recommends that you note on the label the date when a tape goes into service. Discard tapes that have been in service longer than one year.

If a tape fails to verify after a backup has been made on it, indicate that on the label. Discard a tape that fails to verify more than once.

Required Maintenance Reports

- SIRSI defines reports rather broadly to include any process that can be scheduled in Unicorn.
- Unicorn's report utility can be used to produce Lists of Users, Statistics or Bibliographies.
- It is also used to schedule required maintenance activities.

The Reports Toolbar

Display the reports toolbar.



- Convert Reports



Converts Reports scheduled under earlier character interface

- Schedule New Reports



Guides you through the process of creating a new report

- Scheduled Reports



Allows you to see and change the schedule of reports

- Finished Reports



Allows you to view the results of reports that have finished running
Printing and removing report results are among the other options

The Reports Toolbar





Schedule Required Maintenance Reports

Schedule the reports listed in Table 3.

Note the scheduling considerations.

For a step-by-step example of scheduling a required maintenance report, refer to Appendix F.

Table 3: Required Maintenance Reports

GROUP	NAME	DESCRIPTION	SCHEDULING CONSIDERATIONS
Administration	Backup Daily Files	Makes a backup of a log of all transactions that have changed databases in the current months. Appropriate tape must be in tape drive when reports runs.	Run daily at 00:10. Must run after midnight.
Administration	Statistics Log	Extracts transactions from history log and builds statistics transactions.	Runs daily at 00:15. Works with consolidated history logs. Must run after Backup Daily files
User	Update User Delinquency Status	Flags overdue items. Evaluates users and edits their status in accordance with library policies. Updates estimated fines in charge records.	Run daily at 00:20. Must run after materials become due, usually 23:59.
Text	Add, Delete, Update Databases	Updates the keyword and browse indexes for bibliographic data. Plays a role in authority control.	Run daily at 02:00.
Authority	Correct Authority Thesauri*	Balances authority thesauri	Run daily at 02:15
Text	Reorganize Text Dictionary	Reorganizes keyword indexes to make them smaller and more efficient.	Run weekly (minimum). Schedule to run weekly on Saturday at 02:30.
Authority	Reorganize Thesauri Dictionary*	Reorganizes authority thesauri to make them smaller and more efficient.	Run weekly (minimum). Schedule to run weekly on Sunday at 02:30.
Administration	Consolidate Daily Logs	Changes multiple daily log files into single monthly log files and compresses them.	Run monthly on the 2nd at 1:00

* When authority control is in use

The Reports Toolbar

Monitoring the Status of Required Maintenance Reports

Each day a staff member should verify that the required maintenance reports ran without error.

From the reports
toolbar, select
Finished Reports.



The Finished Reports: Properties window will display.

Select OK to accept defaults.

The Finished Reports: List Finished Reports window will display.

Note the Status column.

The Reports Toolbar

Status column

Report Name	Owner	Completed	Status
Update User Delinquency Status	SIRSI	2/7/2000,6:08	OK (info)
Recall Notice on Charged Items	SIRSI	2/7/2000,5:37	OK (info)
Overdue Notice	SIRSI	2/7/2000,5:36	OK (info)
Reorganize Thesauri Dictionary	SIRSI	2/7/2000,5:03	OK (info)
Reorganize Text Dictionary	SIRSI	2/7/2000,4:13	OK (info)
Correct Authority Thesauri	SIRSI	2/7/2000,3:35	OK (info)
Gateway Statistics Logs	MARYB	2/7/2000,2:15	ERROR (info)
Consolidate Daily Logs	SIRSI	2/7/2000,1:10	OK (info)

- A status of OK means that the report was able to finish.
- If a required maintenance report has the status of ERROR, do not remove the report from the finished list. Contact the helpdesk and describe the error.

View Selected Reports

Even when the status is OK, the logs of the following selected reports should be viewed

- Add, Delete, Update Databases
- Reorganize Text Dictionary
- Reorganize Thesauri Dictionary (scheduled when authority control is enabled)

The Reports Toolbar

Viewing A Finished Report

Each day a staff member should verify that the required maintenance reports ran without error.

From the reports toolbar, select Finished Reports.



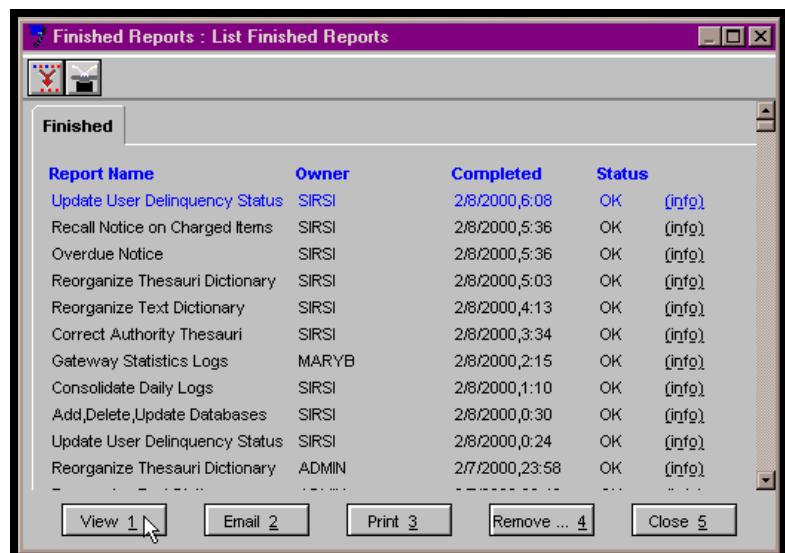
The Finished Reports: Properties window will display.

Select OK to accept defaults.

The Finished Reports: List Finished Reports window will display.

Select a report from the finished list.

Select the View next step button.



The Reports Toolbar

The selected finished report will open for viewing in Wordpad.

View Selected Reports

Scan the logs of Add, Delete, Update Databases, Reorganize Text Dictionary and Reorganize Thesauri Dictionary (scheduled when authority control is enabled) looking for the words “error” or “abnormally.”

- If a required maintenance report has messages that indicate a possible problem, do not remove the report from the finished list.
- Contact the helpdesk and describe the situation.

Guidelines for Removing Finished Reports

- Every week, remove unneeded finished reports to recover disk space and reduce the clutter.
- Remove finished maintenance reports, as well as unneeded finished reports run by staff.
- When removing finished required maintenance reports, leave reports dated from the latest two days in the list. If subsequent reports run in ERROR, the helpdesk may want information from the reports finished in the few days prior to the error.

The Reports Toolbar

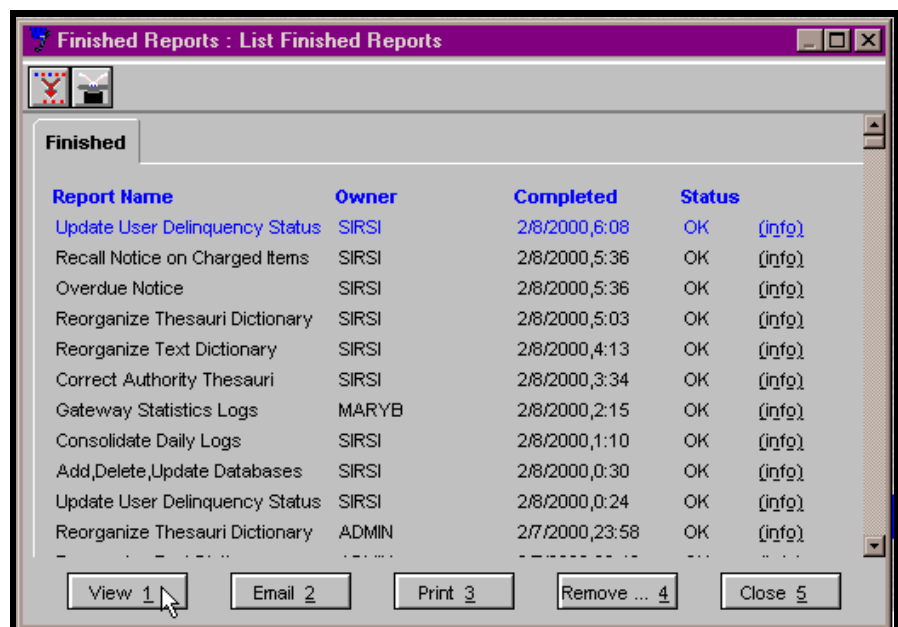
- Do not remove a maintenance report that is the subject of a help desk call until the call is resolved.
- Remove all finished reports run that are more than two weeks old.

Removing a Finished Report

From the reports toolbar, select **Finished Reports**.



- Select the report you will remove.
- Select the Remove next step button.



The Reports Toolbar

- In the resulting list, additional check boxes can be selected that allow you to remove multiple reports.
- Select Remove and then Remove All.

The Reports Toolbar

Daily

- Halt, initialize and run all servers from Unicornadmin
- Check the status of the workstation server from Unicornadmin; report errors to SIRSI helpdesk
- The following reports should run every day; verify that they ran without error:

GROUP	NAME	SOURCE
USER	Update User Delinquency Status	setdelinq
ADMINISTRATION	Backup Daily Files	dailybackup
ADMINISTRATION	Statistics Log	statlog
TEXT	Add, Delete, Update Databases	adutext
AUTHORITY	Correct Authority Thesauri*	correctthesauri

*when authority control is enabled

Weekly

- Full system backup - halt all servers
complete full system backup
initialize and run all servers
verify backup
- Remove unneeded files from bibliographic data backup, bibliographic load error
- The following reports should run once a week (minimum); verify that they ran without error

GROUP	NAME	SOURCE
TEXT	Reorganize Text Dictionary	reorgtext
AUTHORITY	Reorganize Thesauri Dictionary*	reorgthesauri

*when authority control is enabled

- Remove unneeded finished reports
- Check mail for users who run servers
- Check available disk space; notify SIRSI if you need help recovering space or moving files

Monthly

- Save to tape any logs older than three months that may be needed for reporting; remove logs older than three months
- Set aside dailybackup tape created on first working day of the month
- The Consolidate Daily Logs report (Group: ADMINISTRATION, Source: consolidate) should run once a month (minimum); verify that it ran without error
- Shutdown and restart host computer – halt Unicorn servers from Unicornadmin
shutdown and restart host machine
run httpd daemon
initialize “all” from Unicornadmin
run all servers from Unicornadmin

Quarterly

- Make a system backup

CUSTOMER SUPPORT

Overview

Contact the helpdesk when you have questions.

Call us, fax us or email us.

The Unicorn administrator should serve as the primary contact with the helpdesk.

The Unicorn administrator should distribute help desk answers to those who submit questions.

Know your site code when you contact the helpdesk so that SIRSI has access to pertinent details about your installation.

Your help desk calls are logged and tracked. Formal escalation procedures ensure that your call gets an answer in a timely manner.

Who Do I Contact When I Need Help From SIRSI?

The SIRSI Customer Support Helpdesk is available from 7:00 a.m. - 7:00 p.m. CST to assist you.

How do I Contact the Helpdesk?

Call us, fax us or email us.

Call us

- 877 - 401 - 9534 (toll free)
- 256 - 704 - 7001

Fax us

- 800 - 239 - 3239 (toll free)

Email Us

- Register for email support through www.sirsi.com under the Customer Support section so that you can contact the helpdesk using email.
- Many sites register an email alias for email support. The alias allows multiple people to see email responses from the helpdesk.

Who Can Contact the SIRSI Helpdesk?

- You can designate who is the primary contact at your institution.
- Additional alternate contacts can be listed.
- SIRSI recommends that when possible, questions to the helpdesk should be funneled through your primary contact.
- We reserve the right to direct all replies to helpdesk inquiries to the individual listed as your primary contact.
- The primary contact is responsible for communicating answers to others who may have submitted questions.

Contacting the Helpdesk

Know Your Site Code When You Contact SIRSI

Your site code: _____

- Whenever you contact SIRSI, identify your institution with your site code.
- Using your site code, SIRSI personnel can locate information about your platform, Unicorn version, contact phone numbers, etc. With that information, we can help you more quickly.

Call Tracking Mechanisms

- If you contact our helpdesk, your query will receive a tracking number we refer to as a call number.
- Call numbers are made up of a sequentially assigned number and your site code.

Phone Calls

- When you call our helpdesk a member of our Interview Team takes your call.
- The interviewer will ask a set of questions and record your answers.
- The interview team member will provide you with a call number and pass your query on to the Calls Wrangler. The Calls Wrangler routes your call.
- If all lines are busy when you call our helpdesk, you have the option to remain in a queue or leave a message. If you leave a message, you can expect to be called back by helpdesk personnel with a call number within an hour.

Call Tracking Mechanisms

Fax

If you fax in a question or problem, an Interview Team member will use the information in your fax to open a helpdesk call.

The interview team member will pass your query to the Calls Wrangler.

You can usually expect to be notified by fax of a call number by the end of the day.

Email

Your email messages open calls automatically.

Call numbers for emailed calls are automatically assigned and should be returned to the registered email contact within an hour.

The Calls Wrangler reviews email calls and routes them.

What if You Don't Get a Call Number?

If you submit a call and do not receive your call number within the allotted time frame, we may not have received your voice mail/fax/email message. Please submit the call again.

SIRSI's Customer Support Goals

Our Calls Wrangler prioritizes the calls that come in from all sources.

Priority1 Team

- The most serious situations are referred to the Priority1 team for resolution.
- The Priority1 team specializes in handling time-sensitive calls or calls for systems that are unavailable for use.

Same Day Team

- Calls that do not receive Priority1 handling are referred to the Same Day team.
- The Same Day team's goal is to answer 80% of the calls received on any given day.

SIRSI's Customer Support Goals

Day 2 Team

- Issues not resolved the day they are received are routed to the Day 2 team.
- The Day 2 team has the goal of answering the remaining 20% of calls within the next two days.
- Calls not resolved within three days of their receipt are passed to the Review team.

Review Team

- The review team is made up of a group of management personnel and software designers at SIRSI.
- The review team ensures that your call gets a response.

The length of time required to get a resolution to a call varies from a few hours to a few days.

We do have peaks and valleys in the number of calls we receive. There are times that we will exceed our goals and other times when volume makes it difficult for us to meet them.

APPENDIX A

Requirements for SIRSI's WorkFlows Client on a Windows95/98 or Windows NT PC

- IBM-compatible Pentium PC
- 133 MHz or faster processor
- Microsoft Windows95/98 or Windows NT
- For Windows95/98, at least 16 Mbytes memory (32 Mbytes recommended)
- For Windows NT, at least 48 Mbytes memory
- 20 Mbytes disk space
- Network card
- WINSOCK software if running Windows95/98
- If a receipt printer is to be used with Windows95/98, parallel port (LPT1 - LPT3) or serial port (COM1 - COM4)

APPENDIX B

Details of WorkFlows Initial Installation

- 1) On the initial window labeled “WorkFlows Client-Welcome” select **Finish**.
- 2) The install shield will perform unpacking and setup steps.
- 3) The “Welcome” window advises you to close other Windows applications running on the PC. Select **Next** to continue installation.
- 4) The “Software License Agreement” window advises you of SIRSI’s WorkFlow End User License Agreement. Select **Yes** to accept the terms.
- 5) The “WorkFlows Destination” window asks you to choose a destination folder for WorkFlows files. Make your choice and select **Next**.
- 6) The “Select Components” window asks whether to Create a Folder in Start Menu and/or Create a Shortcut on Desktop. Make your choice and select **Next**.
- 7) The “Select Folder Name” window asks you to choose a folder name for Shortcut icons. Make your choice and select **Next**.

-
-
- 8) Files will be copied to the WorkFlows folder.
 - 9) After the files are copied, the “Setup Complete” window will inform you that the WorkFlows client was successfully installed. Select **Finish** to complete setup.

APPENDIX C

Why Program Barcode Readers?

Unicorn can do more sophisticated processing of scanned barcodes when your barcode readers are programmed to send an appropriate preamble and postamble.

A preamble signals the beginning of a barcode, and a postamble signals the end. The postamble typically sends an automatic return (as if you pressed Enter).

With the preamble and postamble signaling the beginning and end of barcode data, Unicorn is able to clear data entry wells of stray characters.

Programming the Default Preamble and Postamble Used by WorkFlows

To program a Welch Allyn barcode reader to use the default preamble and postamble expected by WorkFlows, go to www.sirsi.com, Customer Support section for a link to the scan sheet. Print the pdf document and scan the barcodes in sequence.

To program other brands of readers, refer to the documentation for your scanner and follow these steps.

- Scan the “Add prefix” or “Add preamble” barcode. Scan the barcode labeled “All symbologies,” then scan the hexadecimal values for <1><4><2>.
- This sequence will program the scanner to use a preamble of <esc>.

Testing the Programming of Your Barcode Reader

- Scan the “Add suffix” or “Add postamble” barcode. Scan the barcode labeled “All symbologies,” then scan the hexadecimal values for <1><4><4>.
- This sequence will program the scanner to use a postamble of <esc><D>.

Not sure whether your scanner needs programming?

A simple test to determine whether your barcode scanner sends a preamble and postamble can be conducted from a DOS prompt.

At the machine where the reader to be tested is installed, open a DOS window.

Scan a barcode.

A scan of a barcode from a reader programmed to send a preamble of ESC B and a postamble of ESC D will produce a display that looks like this

```
C:\WINDOWS\DESKTOP>\
```

```
B50613010022308\
```

```
D
```

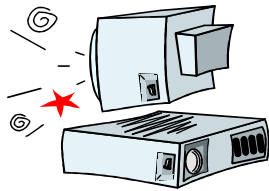
A scan of a barcode from a reader programmed to send no preamble or postamble will produce a display that looks like this

```
C:\WINDOWS\DESKTOP>50613010022308
```

Using a Different Preamble and Postamble

As noted above, many customers who are using barcode readers have the Escape character configured as part of the preamble and postamble. In WorkFlows, there is a Preference option that allows the use of ESC for Closing Windows. If that feature is enabled, scanning a barcode will cause the active window to close before the barcode can be read.

If a workstation has a barcode reader that sends an ESC as part of the preamble and /or postamble and you enable the feature to use ESC for Closing Window, go to www.sirsi.com, Customer Support Section. Follow the link for Setting New Preambles and Postambles for Barcode Readers for more information.



Troubleshooting Tip

If your barcode scan includes extraneous characters (usually a B at the beginning and a D at the end), verify that caps lock is off.

Keyboard wedge barcode reader must be used with your keyboard caps lock off.

APPENDIX D

Automatic Server Halt/Run Script

The `auto_haltrun` script allows you to halt, initialize, and run Unicorn systems from the Unix command line, or automatically via the Unix cron facility. The `auto_haltrun` script may also be used to provide basic system status information.

Warning: *Use of the `auto_haltrun` script should be restricted to very experienced system administrators who are familiar with the Unix operating system.*

Command Line Usage

The `auto_haltrun` script is run from the Unix command line. The structure of the command is as follows, where only one of these options is used at a time.

```
auto_haltrun {cycle|halt|init|run|status} [force]
```

- **Auto_haltrun Cycle**

When “cycle” is specified, `auto_haltrun` attempts to halt, initialize, run, and provide status, in that sequence. It does this using standard administration tools which have been altered to operate without requiring user intervention.

- **Auto_haltrun Halt**

When “halt” is specified, or during the “halt” phase of a “cycle,” auto_haltrun checks the state of the system for the following conditions.

Users logged in

Running reports

If either of these conditions is found to be true, the system is not halted.

- **Auto_haltrun Init**

When “init” is specified, or during the “init” phase of a “cycle,” auto_haltrun checks the state of the system for the following conditions.

Servers running

Users logged in

Running reports

If any of these conditions is found to be true, initialization is not performed.

- **Auto_haltrun Run**

When “run” is specified, or during the “run” phase of a “cycle,” auto_haltrun checks the state of the system to see if there are any servers running, auto_haltrun also prints an informational message and continues, running any halted servers.

- **Status**

A “status” phase is always performed by auto_haltrun to report the final state of the system after all other phases have been attempted. The status argument only reports, and never changes the state of the running system.

Note: *The auto_haltrun script cannot be run as the root user, and should always be run from the sirsir user account.*

- **Force Option**

If the force option is specified, the halt, initialize, run, and cycle operations will be performed regardless of whether users are logged in or reports are running. If the force option is used, a message displays to warn that no checking will be done before action is taken.

Execution Restrictions

Like many system utilities, only one instance of `auto_haltrun` may be running at a time. If a second copy of `auto_haltrun` is invoked from another station or by another system user, `auto_haltrun` displays the following message and terminates.

```
**ERROR--auto_haltrun is
currently running
```

The `auto_haltrun` script will also check whether there is a backup in progress or if log files are being copied to tape. If so, `auto_haltrun` terminates with an error message. For customers who do not use SIRSI's backup utilities, a custom halt/run script may be used to detect the existence of any running non-SIRSI backup facilities. A customer should have SIRSI API training before attempting to use a custom halt/run script.

Automatic Operation through the Cron Facility

The `auto_haltrun` script may be automated to run through the Unix cron facility.

***Note:** Before setting up any jobs with the cron facility, it may be necessary to ask your Unix system administrator to give you access to it. This mechanism differs from system to system.*

Since administration of the crontab file entries differs depending on the particular Unix implementation you are running, implementation-independent examples will be presented here.

Please consult the system administration documentation pertinent to the implementation of Unix at your site for more specific details.

When setting up `auto_haltrun` to be executed automatically via cron, it is necessary to use a wrapper script to set up the proper environment, and then run the `auto_haltrun` facility itself. This wrapper script **must** be placed in the `/Unicorn/Bincustom` directory.

Example:

Simple Auto_haltrun Wrapper Script

A very simple `auto_haltrun` wrapper script that would be placed in `/Bincustom` follows

```
#Copyright (c) 1999,** Sirsi Corporation
#
# sample auto_haltrun wrapper script
hr_command="$1"
#
# Change the location of this output file as
#needed.
# Leave the ".$$" so that a unique file is created
#with the extension of its process id.
#
outputfile=/tmp/haltrun.$$
#
# Note that the line below dots in the environ file
#from a specific path. This is necessary because at
#this point in processing, the PATH env
# variable has not been set up yet, therefore it is
#not possible to run `getpathname` in order to get
#the location of the Config directory.
# Dotting in the environ file and exporting the
#variables sets up enough of a Unicorn environment
#to use the tools and to have access to UPATH
# entries and Unicorn tools.
#
# Be sure to alter this fixed path to point to the
#environ file on your system.
#
. /s/sirsi/Unicorn/Config/environ
# <==change this
#as needed for your site
export PATH BRSCconfig UPATH WINDIR TERMINFO TERMCP
```

```
TZ
customdir=`getpathname custom`
distlist="${customdir}/haltrun_dist"
auto_haltrun "${hr_command}" 2>&1 > ${outputfile}
if [ -s ${distlist} ]
then
mail `cat ${distlist}` < ${outputfile}
else
mail sirsi < ${outputfile}
fi
rm -f ${outputfile}
```

This script sets up the necessary environment by dotting in the `/Unicorn/Config/environ` file and exporting critical environment variables, runs the specified `auto_haltrun` command and redirects the output to a file. The output file is then mailed to all users found in the list file `/Unicorn/Custom/haltrun_dist`.

Example:

A sample `/Unicorn/Custom/haltrun_dist` file contains e-mail addresses, one per line, and might resemble the following.

```
sirsi  
john@unc.edu  
webmaster@bigsite.com
```

Example:**Crontab Entry to Cycle the System**

A sample crontab entry may be created to cycle the system at 1:00 every morning. Check your Unix documentation for the exact format of crontab entries as they differ from system to system. Note that a fixed path must be used to invoke the `haltrun_wrap` script, as the command ``getpathname bincustom`` cannot be used here since the Unicorn environment has not been properly set up at this point.

```
# mins hrs day month weekday commands ...  
0 1 * * * /s/sirsi/Unicorn/Bincustom/  
haltrun_wrap cycle  
2>&1
```

Cron works in such a way that the user account that set up the entry will receive an email containing the stdout output of the job, and another email of the stderr output of the job. In the scheme outlined above, the `haltrun_wrap` script does a direct mailing to the user accounts contained in the `/Unicorn/Custom/haltrun_dist` file. There will also be another e-mail produced by cron which will

contain any errors encountered while trying to run the /Unicorn/Bincustom/haltrun_wrap script itself. This may be suppressed if desired, by directing all output to /dev/null. It is recommended that this change be delayed until after a lengthy period of successful automatic halt/init/runs by the auto_haltrun facility to insure that all potential problems have been resolved with timing of jobs at your site.

A sample crontab entry that ignores its output completely follows.

```
# mins hrs day month weekday commands ...  
0 1 * * * /s/sirsi/Unicorn/Bincustom/  
haltrun_wrap cycle  
2>&1 >/dev/null
```

Note: *Special care should be used when setting up an automatic halt, initialize, and run, since this must happen in harmony with scheduled reports, system backups, and other periodic system events.*

Sample Output

Sample output from the `auto_haltrun` script follows.

Example:

Output When Using the Status Option

The `auto_haltrun` script has been run with the following option.

```
auto_haltrun status
```

The script returns the following output.

```
UNICORN Auto Halt/Run Utility started on
Wed Feb 3
15:39:25 CST 1999**
running as user "sirsi" on machine "lib-
server"
Parameters given: status
===== STATUS MESSAGE=====
UNICORN Netserver XX.X.X.X is RUNNING.
*** UNICORN Report Server XX.X.X.X is RUN-
NING.
There are 0 report(s) running.
No NAMED/PORT stations are in use.
No apiserver stations are in use.
No bserver stations are in use.
User ID      How Many Logged In
-----
CIRC          1
TECHSERV     1
SIRSI         1
PUBLIC        1
There are 4 user(s) logged in.
No utilities are in use.
*** UNICORN Workstation server XX.X.X.X is
RUNNING.
*** UNICORN Workstation socket server
XX.X.X.X is
RUNNING.
UNICORN Webcat server XX.X.X.X is HALTED.
*** UNICORN Z39.50 server is RUNNING.
UNICORN Auto Halt/Run Utility finished on
Wed Feb 3
15:39:42 CST 1999**
```

Example:

Output When Using the Cycle Option

The auto_haltrun script has been run with the following option.

```
auto_haltrun cycle
```

The script returns the following output.

```
UNICORN Auto Halt/Run Utility started on
Wed Feb 3
16:38:02 CST 1999
running as user "sirsi" on machine "hp"
Parameters given: cycle
=====CUSTOM MESSAGE=====
this is the custom haltrun script
===== HALT MESSAGE=====
Netserver is now HALTED.
UNICORN report server is now HALTED.
UNICORN Workstation server is now HALTED.

UNICORN Workstation socket server is now
HALTED.
Z39.50 server is already HALTED.
=====INITIALIZATION MESSAGE=====
Netserver initialized.
UNICORN report server initialized.
Invalid STAT.
No users are logged in.
No utilities are in use.
UNICORN Workstation server initialized.
===== RUN MESSAGES=====
Netserver is now RUNNING.
UNICORN report server is now RUNNING.
UNICORN Workstation server is now RUNNING.
UNICORN Workstation socket server is now
RUNNING.
Z39.50 server is now RUNNING.
=====STATUS MESSAGES=====
Netserver XX.X.X.X is RUNNING.
*** UNICORN report server XX.X.X.X is RUN-
NING.
There are 0 report(s) running.
No NAMED/PORT stations are in use.
No apiserver stations are in use.
No bserver stations are in use.
```

```
No users are logged in.
No utilities are in use.
*** UNICORN Workstation server XX.X.X.X is
RUNNING.
*** UNICORN Workstation socket server
XX.X.X.X is
RUNNING.
*** Z39.50 server is RUNNING.
UNICORN Auto Halt/Run Utility finished on
Wed Feb 3
16:39:12 CST 1999
```

New Serveradmin Log File

A new log file, serveradmin, tracks automated halt, initialize, and run activities. This log may be viewed via the Logutility.

Example:

Sample Serveradmin Log

Sample log content is included below.

```
19990204125723 UNICORN Workstation server --
STATUS
requested (interactive)
19990204125730 UNICORN Z39.50 server -- STATUS
requested (interactive)
19990204130411 UNICORN gatewayrpt -- STATUS
requested
(automated)
19990204130411 UNICORN Netserver -- STATUS
requested
(automated)
19990204130412 UNICORN Report Server -- STATUS
requested (automated)

19990204130412 UNICORN stationlock -- STATUS
requested
(automated)
19990204130413 UNICORN userlock -- STATUS
requested
(automated)
19990204130414 UNICORN utilitylock -- STATUS
requested
(automated)
19990204130415 UNICORN Workstation server --
STATUS
requested (automated)
```

19990204130416 UNICORN Webcat server -- STATUS
requested (automated)
19990204130416 UNICORN Z39.50 server -- STATUS
requested (automated)

APPENDIX E

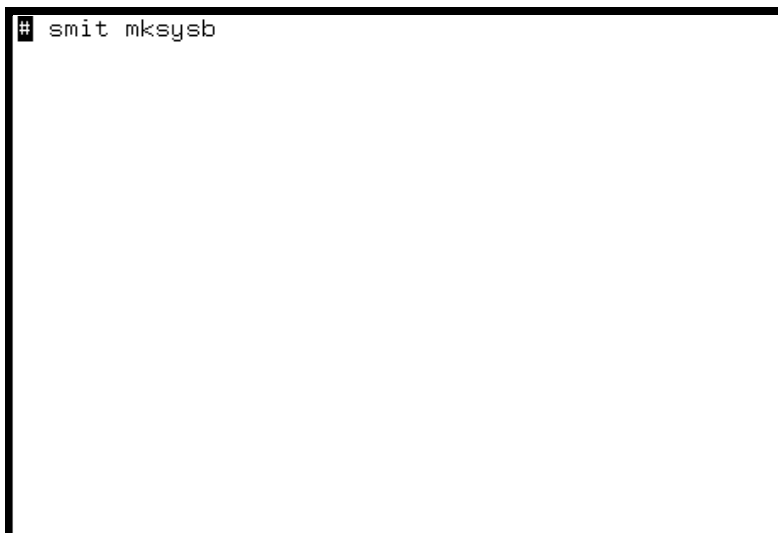
System Backups

Making Bootable Backup (mksysb) Under AIX Version 4

The mksysb backup makes a bootable tape that can be used to completely rebuild your system or to recover one or more files. It backs up everything in the ROOTVG volume group, including the ODM (Object Data Manager) database. The ODM contains device configuration data.

Login as root and type the following:

```
smit mksysb
```



```
# smit mksysb
```

You will see a screen that looks like this:

```
Back Up the System
Type or select values in entry fields.
Press Enter AFTER making all desired changes.

[TOP]                                     [Entry Fields]
WARNING: Execution of the mksysb command will
        result in the loss of all material
        previously stored on the selected
        output medium. This command backs
        up only rootvg volume group.

* Backup DEVICE or FILE                  [ ]
Create MAP files?                        yes
EXCLUDE files?                           no
List files as they are backed up?        no
Generate new /image.data file?          yes
EXPAND /tmp if needed?                   no
Disable software packing of backup?     no
[MORE...2]

F1=Help      F2=Refresh      F3=Cancel      F4=List
Esc+5=Reset  Esc+6=Command  Esc+7=Edit    Esc+8=Image
Esc+9=Shell  Esc+0=Exit    Enter=Do
```

Note that by default, the “Backup DEVICE or FILE“ field will be highlighted. (It is displayed inside a black box in the screen shot, above.)

Type the device name of your tape drive, usually:

`/dev/rmt0`

If you are not sure what the correct device name is, press F4 to bring up a list of devices. Select it from the list.

Verify that create map files is set to yes. If it is not, use the arrow keys to move to that position on the screen and change it.

Press Enter.

When the backup begins to run, you will see a STATUS screen that looks like this.

```
COMMAND STATUS
Command: running      stdout: yes      stderr: no
Before command completion, additional instructions may appear below.
```

As the backup progresses, other messages will display.

```
COMMAND STATUS
Command: running      stdout: yes      stderr: no
Before command completion, additional instructions may appear below.

Creating information file (/image.data) for rootvg.
```

When the system backup is finished, the screen will look like this. You should see a command status of “OK” at the top of the screen.

```
COMMAND STATUS
Command: OK          stdout: yes      stderr: no
Before command completion, additional instructions may appear below.
█
Creating information file (/image.data) for rootvg...
Creating tape boot image.....
Creating list of files to back up.
Backing up 10186 files.....
0512-038 wksysb: Backup Completed Successfully.

F1=Help          F2=Refresh      F3=Cancel       Esc+6=Command
Esc+8=Image     Esc+9=Shell    Esc+0=Exit     /=Find
n=find Next
```

Remove the tape that contains the system backup, mark it as a bootable backup with the date, write-protect the tape, and store it in a safe place.

Making A System Backup Under Sun Solaris

Sun Solaris machines can be booted from a boot CD. It is necessary in a situation that requires a system restore to have a boot CD available.

The system backup can be used to rebuild the system, but not to reboot it.

The system backup should include backups of both

- /
- /var

Use `df` commands to learn the actual path to these file systems on your Unix machine.

Note the screen display below. The command

```
df /
```

is used to find the actual path name for /. The server returns the pathname

```
/dev/dsk/c0t1d0s0
```

That information is used in the next command that actually starts the backup

```
ufsdump 0uf /dev/rmt/0 /dev/dsk/c0t1d0s0
```

Where

- /dev/rmt/0 is the name of the tape device that will be used for backup
- /dev/dsk/c0t1d0s0 is the actual path to /

```
Telnet - galien
Connect [0: Internal Help]
# df /
#
# (/dev/dsk/c0t1d0s0 ): 904150 blocks 239051 files
#
# ufsdump 0uf /dev/rmt/0 /dev/dsk/c0t1d0s0
```

This screen shows what it looks like when the backup is finished.

```
Telnet - galien
Connect [0: Internal Help]
#df /
#
# (/dev/dsk/c0t1d0s0 ): 904070 blocks 239052 files
#
#ufsdump 0uf /dev/rmt/0 /dev/dsk/c0t1d0s0
DUMP: Writing 32 kilobyte records
DUMP: Date of this level 0 dump: Thu Apr 06 09:36:04 2000
DUMP: Date of last level 0 dump: the epoch
DUMP: Dumping /dev/rdisk/c0t1d0s0 (hostname:/) to /dev/rmt/0.
DUMP: Mapping (Pass 1) [regular files]
DUMP: Mapping (Pass 2) [directories]
DUMP: Estimated 92700 blocks (45.20MB).
DUMP: Dumping (Pass 3) [directories]
DUMP: Dumping (Pass 4) [regular files]
DUMP: 92734 blocks (45.20MB) on 1 volume at 1097 KB/sec
DUMP: DUMP IS DONE
DUMP: Level 0 dump on Thu Apr 06 09:36:04 2000
#
#
#
#
#
#
```

Remove the tape that contains the system backup, mark it as a system backup of / and note the date, write-protect the tape, and store it in a safe place.

You must repeat these steps for /var using a separate tape.

APPENDIX F

Example: Scheduling Update User Delinquency Status to Run Daily

This example gives step-by-step instructions for scheduling Update User Delinquency Status.

Other required maintenance reports can be scheduled in a similar fashion.

When scheduling other reports, refer to *Table 3: Required Maintenance Reports* for pertinent details on Report Group, Report Name, and scheduling considerations.

- 1) From the Reports toolbar, select Schedule New Reports.

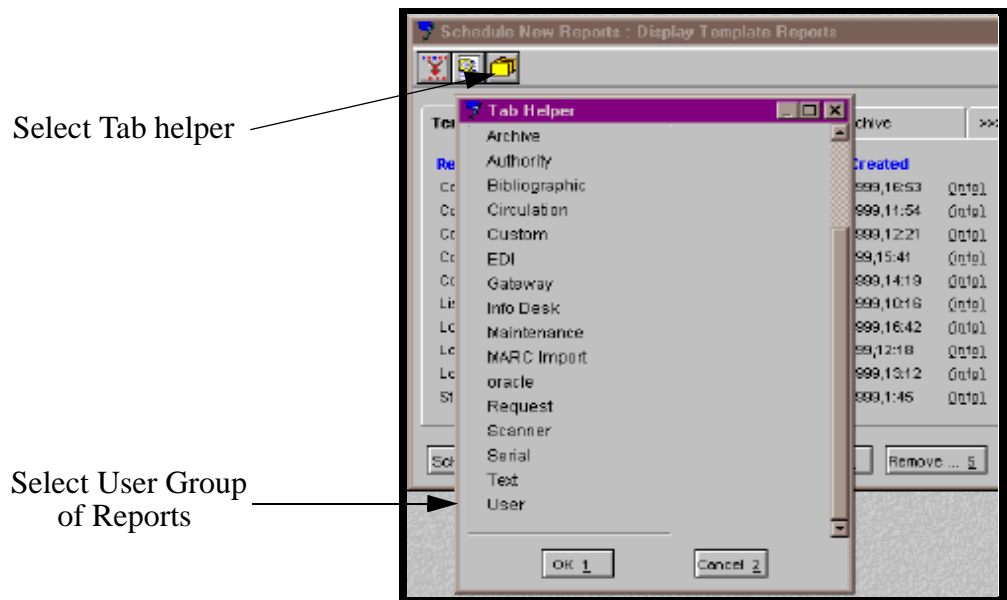
The Schedule New Reports properties page will display.

- 2) Select OK to accept defaults.

Folders representing report groups will display.

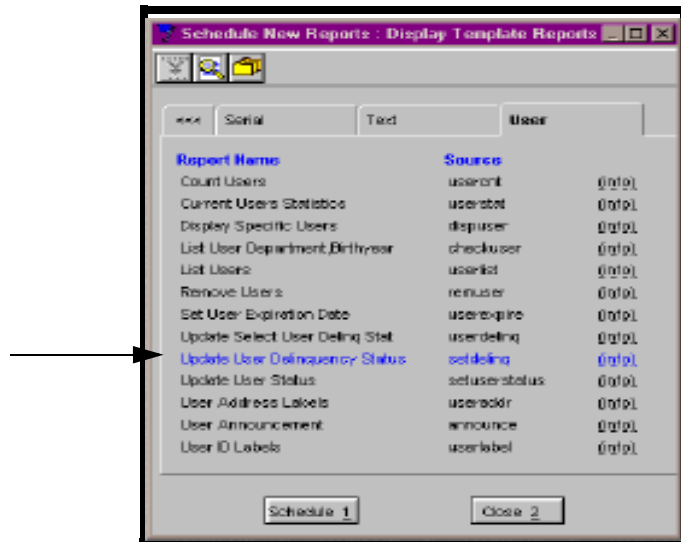
- 3) Select the “Select Tab” helper.

A list of available folders will display.



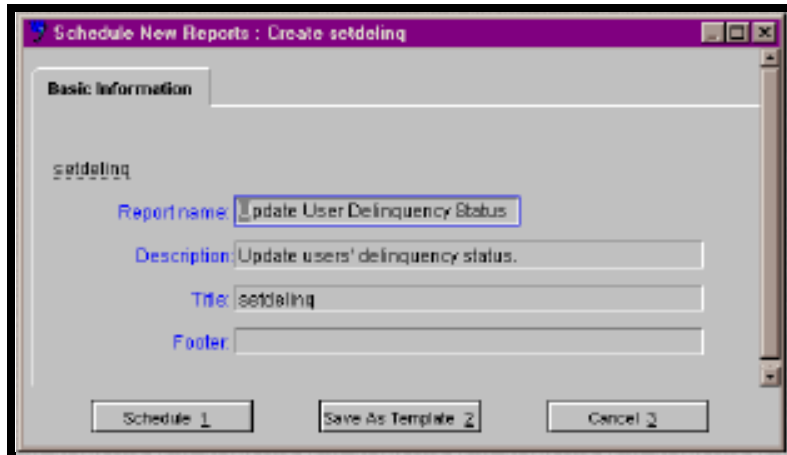
- 4) Select "USER," the group that contains Update User Delinquency Status. Select OK.

The folder containing the USER group of reports will display.



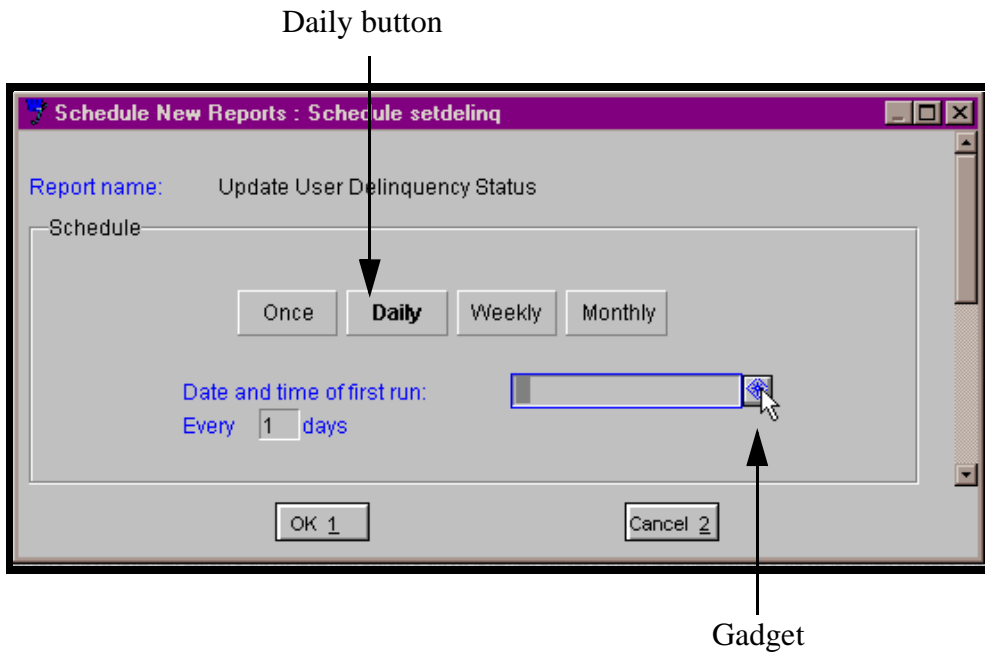
-
- 5) Select Update User Delinquency Status.
Select Schedule.

The Schedule New Reports: Create Setdelinq window will display.



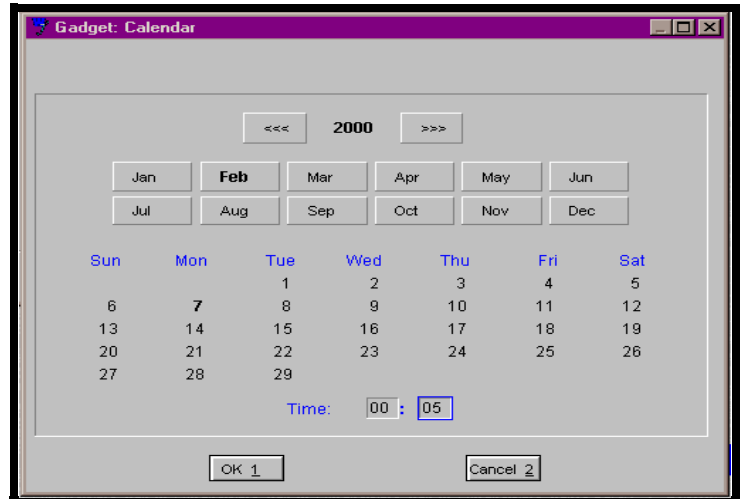
- 6) Select Schedule.

The Schedule New Reports: Schedule Setdelinq window will display.



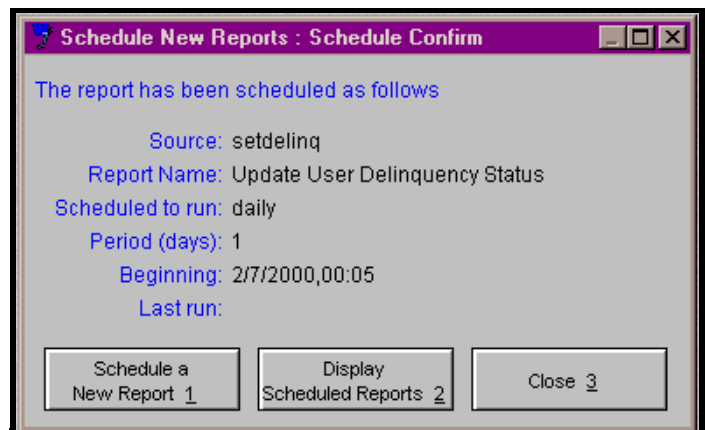
- 7) Select the button labeled Daily to schedule the report to run daily.
- 8) Select the gadget beside “Date and time of first run.”

The calendar gadget will display.



- 9) Modify the time, and if desired, the date of the first run. Select OK.

The Schedule New Reports: Schedule Confirm window will display.



APPENDIX G

To Do List





- Distribute login User IDs and PINs to staff.
- Install and configure WorkFlows on staff work stations.
- Meet with supervisory staff to review systematically the properties for each module.
- Request that all staff who will use WorkFlows read the help topic, Getting Started Using WorkFlows.
- Schedule required maintenance reports.
- Assign tasks on daily and weekly Essential Administration Checklist.
- Register for email support.
