User's

Guide

virtua

Integrated Library System

InfoStation®

VIRTUA ILS – INTEGRATED LIBRARY SYSTEM

InfoStation® User's Guide

Version 16.1

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Table of Contents

INDEX 190

Table of Figures

1. Using This Guide

This user's guide describes the features and functions of InfoStation®, the Web-reporting subsystem of the Virtua™ ILS – Integrated Library System. InfoStation lets you run configurable, Web-based reports for each subsystem of the Virtua ILS – Integrated Library System.

Note: From this point on, we will refer to the Virtua ILS – Integrated Library System as simply Virtua or the Virtua system in this user's guide.

The *InfoStation User's Guide* is one of seven guides that make up the documentation for InfoStation. This guide contains an overview of InfoStation and step-by-step instructions for logging in to InfoStation, creating report configurations, running reports, scheduling reports, and customizing reports. The other InfoStation guides are the . . .

- *InfoStation/Acquisitions Reports Reference Guide* - Provides details on the reports that belong by default to the Acquisitions Report Group.
- *InfoStation/Cataloging Reports Reference Guide* - Provides details on the reports that belong by default to the Cataloging Report Group.
- *InfoStation/Circulation Reports Reference Guide* - Provides details on the reports that belong by default to the Circulation Report Group.
- *InfoStation/OPAC Reports Reference Guide* - Provides details on the reports that belong by default to the OPAC Report Group.
- *InfoStation/Serials Reports Reference Guide* - Provides details on the reports that belong by default to the Serials Report Group.
- *InfoStation Reference Guide* - Provides general reference material about InfoStation, including descriptions of report parameters and information about the InfoStation directory structure.

In addition, InfoStation also offers several reports that fall under the Administrative Report Group. Those reports and where you can find information about them is listed below.

- Bibliographic Record Load and Extract - *InfoStation/Cataloging Reports Reference Guide*
- Patron Record Load and Extract - *InfoStation/Cataloging Reports Reference Guide*
- Update Probationary Patrons - *InfoStation/Circulation Reports Reference Guide*

InfoStation returns information related to each Virtua subsystem. As such, in this user's guide, we assume that you are familiar with the subsystems of Virtua. Where

appropriate, throughout this guide, we refer you to other Virtua user's guides for additional information.
In addition, throughout this guide, we assume that you have read the *Virtua Getting Started Primer*, which offers an overview of the Virtua system and an explanation of terminology.

You can use the list below and the Table of Contents to locate specific information in this user's guide. For your easy reference, this guide also contains a Table of Figures and an Index. In addition, each chapter in this user's guide begins with a list of hyperlinks to topics discussed in the chapter. This guide also contains a Quick Reference, which provides brief step-by-step instructions for performing basic InfoStation tasks.

For . . .	**See . . .**
An overview of InfoStation and introduction to concepts and terminology related to InfoStation	Chapter 2
Details on logging in to InfoStation and choosing options for your session	Chapter 3
A discussion of the Reports List screen	Chapter 4
Details on configuring notice-generating and non-notice-generating reports	Chapter 5
Details on running your report configurations	Chapter 6
Details on the types of output that InfoStation can produce	Chapter 7
Details on scheduling your report configurations to run automatically	Chapter 8
Information on creating one-click, patron reports	Chapter 9
Details on customizing your report output	Chapter 10
Details on customizing InfoStation	Chapter 11
A quick reference section for various InfoStation tasks	Appendix A
Information on troubleshooting your reports	Appendix B
Details on the changes that were made in this update of this guide	Appendix C

2. Getting Started

In this chapter we provide an introduction to InfoStation, a description of the types of reports, an overview of the InfoStation workflow, and details on getting help with InfoStation.

This chapter covers the following topics:

2.1 Overview of InfoStation

InfoStation, Virtua's Web-reporting subsystem, lets you . . .

- Configure and customize Web-based reports to meet your library's specific needs.
- Save report configurations so that you can use them repeatedly.
- Return report output in three formats:
  - **HTML** - Output is returned to the screen.
  - **E-mail** - Output is sent to one or more specified e-mail addresses.
  - **Delimited** - Output is sent as a delimited file attachment to one or more specified e-mail addresses.
- Generate circulation notices and send them to the appropriate patrons.
- Schedule report configurations to run automatically and confirm that scheduled reports have been run successfully.
- Create multilingual reports.
- Create links from which patrons can run predefined reports, such as the New Books List or Titles on Order report.
- Access reports from any PC on your network.
- Control report security.

InfoStation needs the following Virtua executables to create reports:

- **MARCBibUpdate.exe**
- **vload.exe**
- **write2709.exe**
- **MARCView.exe**
- **CircReport.exe**
- **callNumberKey.exe**
- **DiagnosticFromValidation.exe**

2.2 A Note about Database Requirements

For your InfoStation reports to work properly, your database must contain the required data. Throughout the InfoStation documentation, where appropriate, we describe the specific database requirements of each report.

Most reports generate results based on the information stored in the records in your database. Throughout the InfoStation guides, where appropriate, we list the fields that reports use to generate results. If your records do not contain the necessary information, your report configurations will NOT return results.

Important: The MARC tags noted in the InfoStation documentation apply to the MARC 21 standard.

InfoStation reports also rely upon parameters that you configure via the Virtua Profiler. For your reports to work correctly, your parameters must be properly configured. For details on the Virtua Profiler, see the *Virtua Profiler Getting Started Primer*.

2.3 Introduction to Terminology

In this user's guide, we use terminology that is unique to InfoStation. The following terms are used throughout this user's guide and throughout the InfoStation reference guides.

- **Configure vs. Customize** - Throughout most Virtua user's guides, we use the terms *configure* and *customize* interchangeably. In the *InfoStation User's Guide* and in the InfoStation reference guides, however, we make the following distinctions:

- ♦ **Configure** - Refers to tasks related to creating a report configuration. For example,
    - You *configure* the Overdues report.
    - You *configure* Report-specific Parameters.
- ♦ **Customize** - Refers to tasks related to customizing report output or the InfoStation interface. For example,
    - You *customize* the Overdues output templates.
    - You *customize* graphics.

- **Data Elements** - The pieces of data that a report can return. For details on data elements, see the section "Understanding Terms for Data Elements" in this user's guide.

- **Output Format** - The type of output generated by a particular report configuration. You can configure each report to generate HTML, e-mail, or delimited output. For details on output formats, see the section "Setting the Output Format Parameter" in this user's guide.

- **Output Template** - A template that you can edit to customize the output from a given report configuration.
    - ♦ Be careful not to confuse *output* templates with *report* templates.
    - ♦ For details on customizing output templates, see the chapter "Customizing Report Output" in this user's guide.

- **Report** - A job or query that gathers a particular type of information from the database. For example,
    - ♦ The Overdues report gathers information related to overdue items.
    - ♦ The Account Summaries report generates summaries of Acquisitions accounts.

- **Report Configuration** - A set of instructions or parameters that causes a particular report to return a specific set of results. For example, an Overdues report configuration might generate a list of overdue items checked out to patrons of a particular type.
    - ♦ Throughout this user's guide, we also refer to report configurations simply as configurations.
    - ♦ For details on creating report configurations, see the chapter "Working with Report Configurations" in this user's guide.

- **Report Template** - A template from which you can create a report configuration. Report templates contain parameters that you can configure to generate specific results.
    - ♦ Report templates are labeled *Template* in the Configuration column on the Reports List screen.
    - ♦ Be careful not to confuse *report* templates with *output* templates.

- For details on working with report templates, see the section "Creating Report Configurations" in this user's guide.

- **Retrieve vs. Return** - Terms used to describe how reports handle data elements.
  - When a report *retrieves* a data element, it collects the data element from the database.
  - When a report *returns* a data element, that data element appears in the output.

  Any data element that is *retrieved* by a report is available to be *returned* by the report. By default, a report does NOT necessarily *return* all of the data elements that it *retrieves*.

2.4 About Report Types

Beyond each report's default Report Group classification, all reports can be classified as either notice-generating or non-notice-generating. The primary difference between these two types of reports is that notice-generating reports can generate patron notices and non-notice-generating reports cannot generate patron notices.

It is important to distinguish between notice-generating and non-notice-generating reports because you may need to configure each type of report differently depending on . . .

- The type of output that you want to produce (HTML, e-mail, or delimited).
  -AND-
- Where you want InfoStation to send the output.

In the following sections, we describe the general differences between notice-generating and non-notice-generating reports. For details on the characteristics of individual reports, see the appropriate InfoStation reference guide.

2.4.1 About Notice-generating Reports

You can use notice-generating reports to generate both electronic and paper notices for patrons. The following reports are notice-generating and belong by default to the Circulation Report Group:

- **Availability Report** - Generates notices for patrons whose requested items have become available.
- **Availability Reminder Report** - Generates reminder notices for patrons who have already received an Availability notice regarding their requested items.

- **Bills Report** - Generates notices for patrons whose overdue items are eligible for billing.
- **Change Request Pickup Location** - Generates notices for patrons to inform them that the pickup location of their request has changed.
- **Expired Bookings Report** - Generates notices for patrons whose item bookings have expired.
- **Expired Requests Report** - Generates notices for patrons whose requests have expired.
- **Overdues Report** - Generates notices for patrons whose checked out items have become overdue.
- **Patron Account Statement Report** - Generates a list of the fines and fees assessed to a patron.
- **Patron Expiration Reminders Report** - Generates expiration reminder notices for patrons (or a list of patrons) whose patron records are due to expire based on the value specified in the Expiration Alert (Days) setting in the Patron Types parameter in the Virtua Profiler.
- **Recalled Bills Report** - Generates notices for patrons whose overdue, billable items have been recalled by other patrons.
- **Recalled Overdues Report** - Generates notices for patrons whose overdue items have been recalled by other patrons.
- **Recalls Report** - Generates notices for patrons whose checked out items have been recalled by other patrons.
- **Request Expiration Notification and Extension Report** - Generates notices for patrons whose requests are about to expire.
- **Review Notices Report** - Generates notices for patrons whose checked out items are about to come due.
- **Unsatisfied Request Cancellation Report** - Generates notices for patrons whose requests have been canceled.

Most *non*-notice-generating reports retrieve data by accessing the database directly. Most notice-generating reports, however, collect data by using **CircReport.exe**.

Note: The only notice-generating reports that do NOT use **CircReport.exe** are the Patron Account Statement report, Patron Expiration Reminders report, and Change Request Pickup Location report. For details on those reports, see the *InfoStation/Circulation Reports Reference Guide*.

Before you can run configurations of notice-generating reports, **CircReport.exe** must be installed on your machine. If this executable is NOT installed, or if you are unable to run your Circulation report configurations, contact Innovative Customer Service. For additional information on **CircReport.exe**, see the *Virtua System Management: Reporting User's Guide*.

2.4.2 About Non-notice-generating Reports

Non-notice-generating reports do not generate patron notices. In general, library staff will use the output from non-notice-generating reports in-house for account, database, and collection management. Below, we list InfoStation's non-notice-generating reports, classified according to their default Report Groups:

Acquisitions Reports

- Account Summaries
- Acquisitions Audit Trail
- Acquisitions Transaction Counts by User
- Canceled Orders Summary
- Cost Export
- Credits
- Gifts Received By Month
- Items Received By Month
- New Books List
- Order Status
- Purchase Requests
- Received Gifts List
- Received Items List
- Titles on Order
- Vendor List
- Vendor Performance
- Vouchers

Administrative Reports

- Bibliographic Record Load and Extract
- Patron Record Load and Extract
- Update Probationary Patrons

Cataloging Reports

- Authorities List
- Bibliographic Record List
- Broad Cataloging Statistics
- Cataloger Productivity

- Cataloging Errors
- Change Item Location by Call Number Range
- Indexed Words
- Item Barcode List
- Item Data Integrity
- Items Created List
- Items Received List
- Legal Deposit Statistics
- New Title List
- Number of Records in Database
- Production of Records by User
- Records By State
- Record Extraction Utility
- Record Modification Utility
- Subject Bibliography
- URL Checker

Circulation Reports

- Basic Circulation Statistics
- Blocked Patrons
- Calculating Overdue Fines before Check-In
- Check-outs by Swiss Book Classes
- Circulation by Call Number Range
- Circulation Snapshot
- Collected Fines
- Delinquent Patron Accounts
- E-mail Validation
- Excessive Requests
- Expired Agency Requests
- Expiring Patrons
- Failed Notices
- Highest Circulating Titles
- Inventory Control Utility
- Items by Status
- Journal Circulation
- Last Copy Items
- Media Booking Pull List
- Number of Patrons
- Patron Barcode List

- Patron List
- Patron Statistics
- Renewal Statistics
- Reserves Activate List
- Reserves Current Active List
- Reserves Pull List
- Reserves Remove List
- Shelving Pull List
- Transition Disputed Items
- Undelivered Notices
- Unique Management

  Note: The Unique Management report is not included with the standard InfoStation distribution. For information on getting this report, contact Innovative Customer Support.

- Unsatisfied Requests

OPAC Reports

- Electronic Resource Access Statistics
- OPAC Search Statistics
- Server Response Times

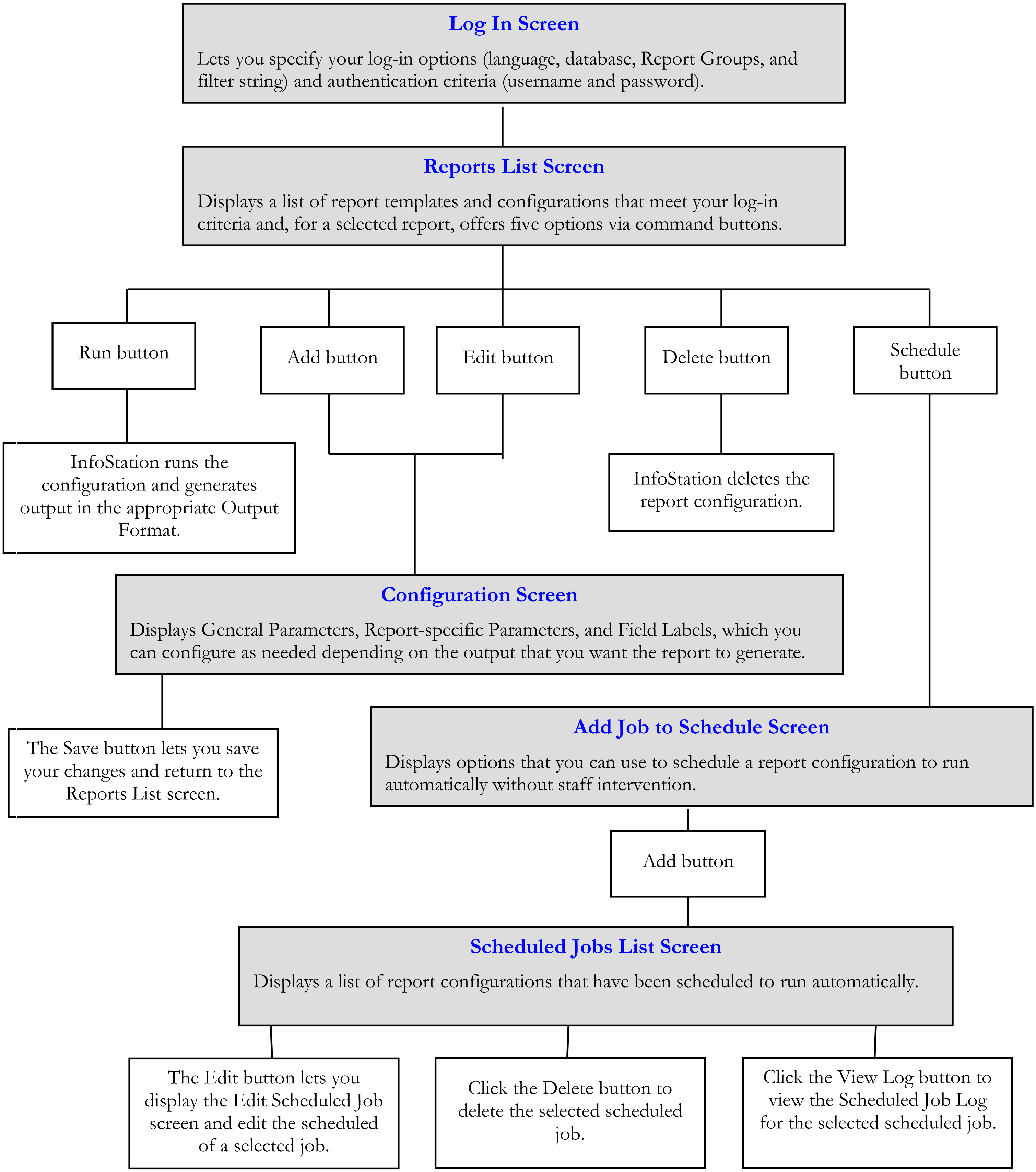
Serials Reports

- Bindery Pull List
- Canceled Serials
- Serials Acquisitions
- Serials List
- Serials Snapshot
- Serials Without Holdings

2.5 Overview of the InfoStation Workflow

While InfoStation offers navigational aids that give you flexibility in determining your own specific workflow, you will always follow the same *general* workflow, which is prescribed by the options that are available on each InfoStation screen. Below we provide an illustration of this general workflow, showing how each screen lets you perform various tasks.

Note: The following workflow does not take into account the Log In, Reports List, Scheduled Jobs, or Log Out icons that appear at the bottom of each screen in InfoStation. Rather, this workflow shows what happens when you use the command buttons that appear on each screen.


Log In Screen
Lets you specify your log-in options (language, database, Report Groups, and filter string) and authentication criteria (username and password).
Reports List Screen
Displays a list of report templates and configurations that meet your log-in criteria and, for a selected report, offers five options via command buttons.
Run button
Add button
Edit button
Delete button
Schedule button
InfoStation runs the configuration and generates output in the appropriate Output Format.
InfoStation deletes the report configuration.
Configuration Screen
Displays General Parameters, Report-specific Parameters, and Field Labels, which you can configure as needed depending on the output that you want the report to generate.
The Save button lets you save your changes and return to the Reports List screen.
Add Job to Schedule Screen
Displays options that you can use to schedule a report configuration to run automatically without staff intervention.
Add button
Scheduled Jobs List Screen
Displays a list of report configurations that have been scheduled to run automatically.
The Edit button lets you display the Edit Scheduled Job screen and edit the scheduled of a selected job.
Click the Delete button to delete the selected scheduled job.
Click the View Log button to view the Scheduled Job Log for the selected scheduled job.

2.6 Getting Help with InfoStation

To supplement the information that is available in this user's guide and in the InfoStation reference guides, we offer the InfoStation online help system.

> **Important:** You can use the InfoStation online help system *only* if your browser supports JavaScript.

Throughout the InfoStation interface, help buttons appear and give you access to context-sensitive and task-oriented help for various InfoStation features. For example, in Figure 2-1 we show the help buttons that appear on the Log In screen.

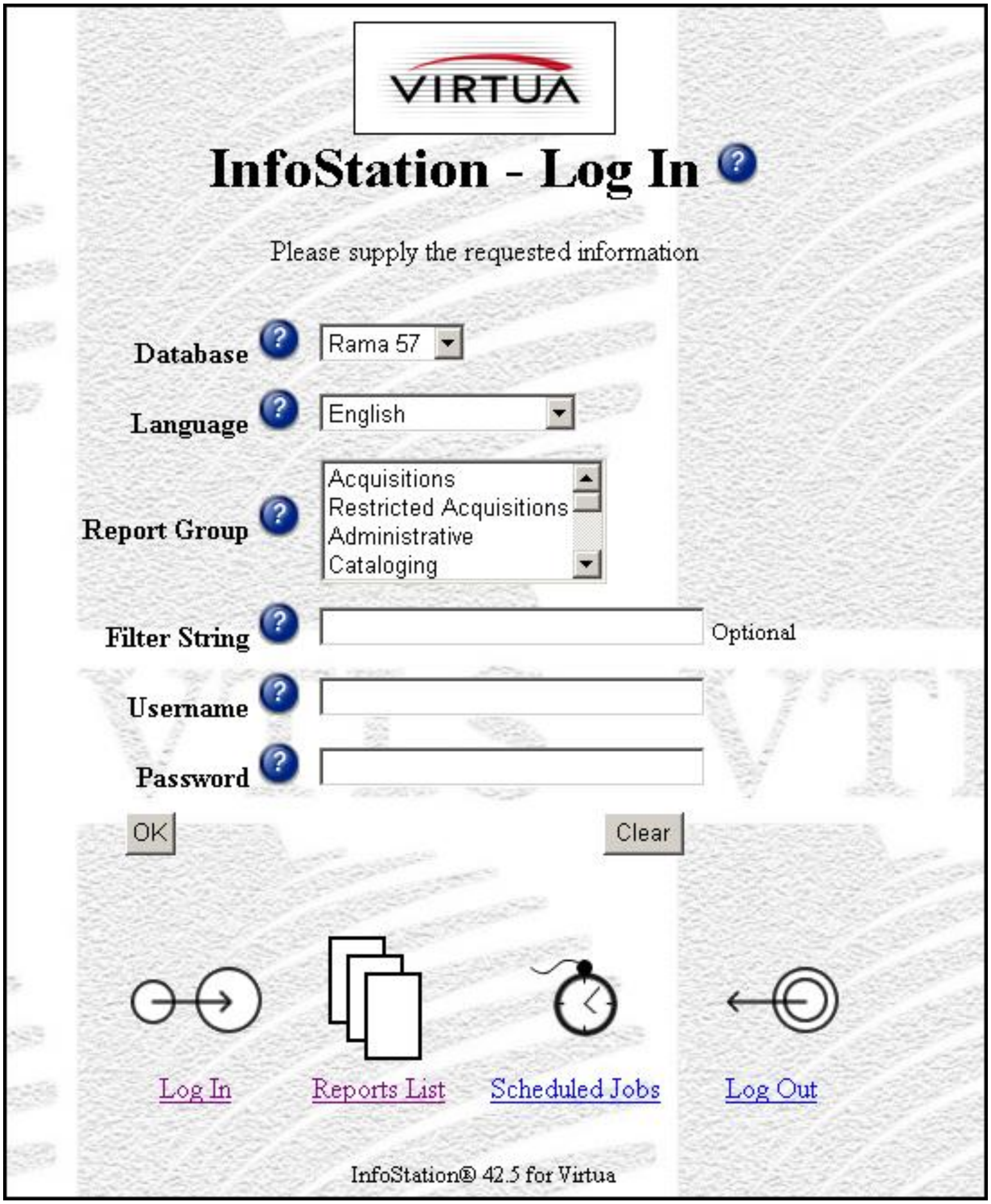


Figure 2-1. Log In Screen

Note: The InfoStation online help system is written with the assumption that you have read this user's guide and the InfoStation reference guides. The online help system is intended to supplement these guides and does NOT offer comprehensive instructions on how to use InfoStation.

To view the help topic for a particular feature,

- Click the  button that appears next to the appropriate label.

  The appropriate help topic appears in a new window. For example, in Figure 2-2 we show the overview help topic for the Log In screen, which appears when you click the help button to the right of the screen title.

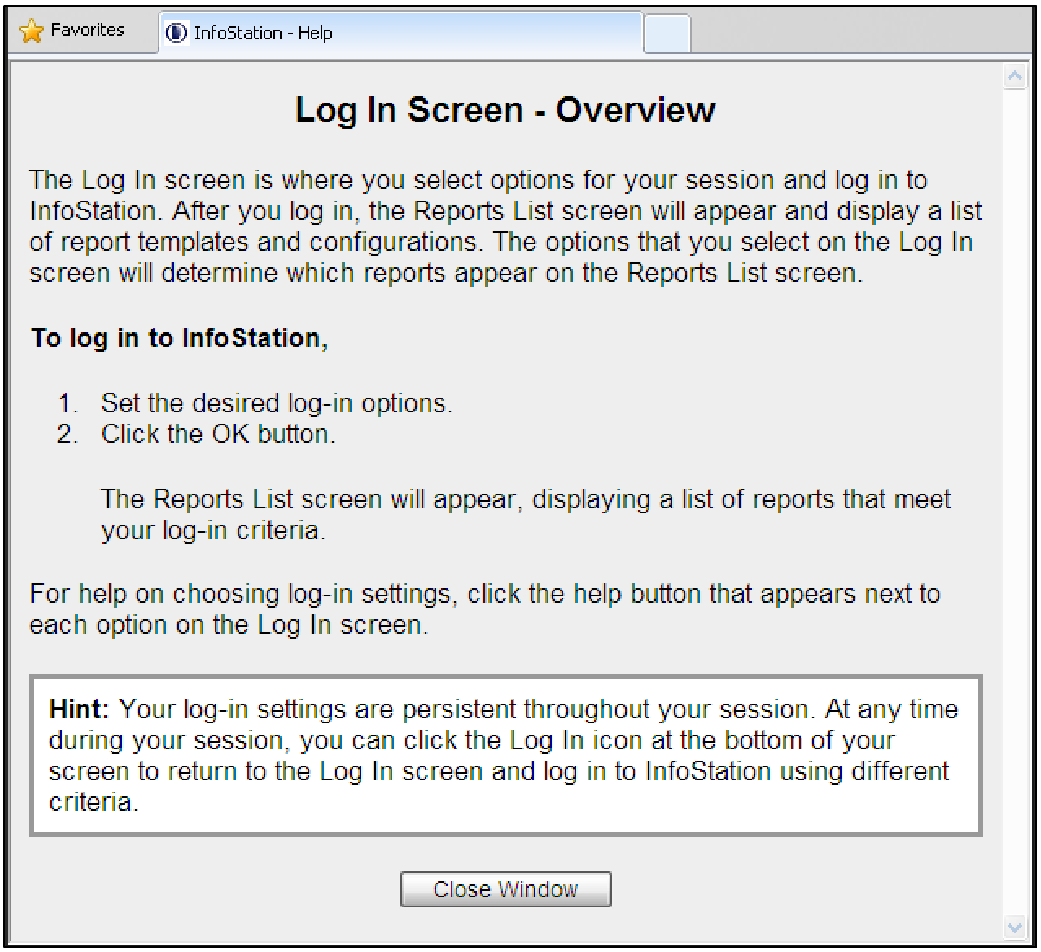


Figure 2-2. Help Window for Log In Screen

3. Working with the Log In Screen

In this chapter, we describe the steps that you must take to log in to InfoStation and begin your session. Additionally, this chapter contains information about the various log-in options that are available in InfoStation, and it provides details on the features that are available to help you navigate InfoStation.

This chapter covers the following topics:

⇒ Viewing the InfoStation Log In screen
⇒ Global Navigational Aids
⇒ Working with Log-in Options
⇒ Logging In to InfoStation

3.1 Viewing the Log In Screen

To access the InfoStation Log In screen,

- Using your preferred Internet browser, access the URL for the Log In screen.

  The Log In screen appears (*Figure 3-1*).

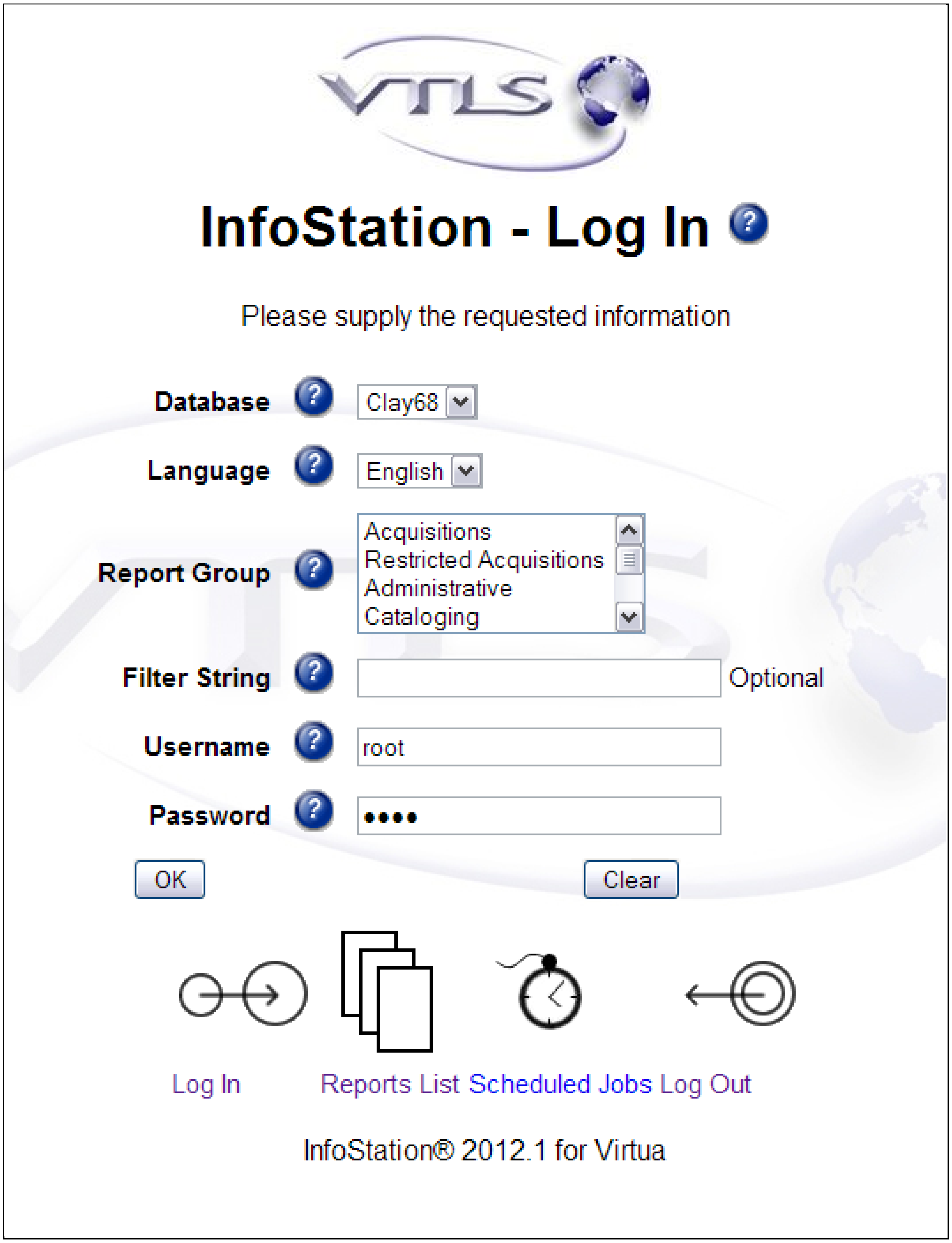


Figure 3-1. Log In screen

The Log In screen is where you choose your log-in options and begin your InfoStation session. The Log In screen contains the following components:

- **Database**, **Language**, and **Report Group** list boxes, which let you choose options for your session. For details, see the section "Working with Log-in Options" in this chapter.

- **Filter String** text box, where you can type a string of characters on which to filter the Reports List, which appears after you click the OK button on the Log In screen. For details, see the section "Filtering the Reports List" in this user's guide.

- **Username** and **Password** text boxes, where you can type the Virtua username and password that you want to use to log in to InfoStation. For details, see the section "Working with Log-in Options" in this chapter.

- **OK** button, which submits your log-in information.

- **Clear** button, which resets the Log In screen.

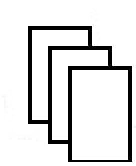
- **Log In**, **Reports List**, **Scheduled Jobs**, and **Log Out** icons, which appear at the bottom of each screen in InfoStation. For details, see the following section "Global Navigational Aids."

In the following sections, we provide details on the log-in options that you can apply to your InfoStation session. For details on logging in to InfoStation, see the section "Logging In to InfoStation" in this chapter.

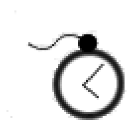
3.2 Global Navigational Aids

Four icons appear at the bottom of the Log In screen (*Figure 3-1*). These navigational aids appear by default at the bottom of every screen in InfoStation, giving you access to the following functions at any time during your session:

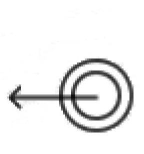
Log In Takes you back to the Log In screen, where you can specify a database, language, Report Group, filter string, username, and password for log-in.



Reports List Takes you to the Reports List screen, which displays the list of report templates and configurations that meet the database, language, and Report Group criteria that you specified at log-in. You can access the Reports List only *after* you log in.



Scheduled Jobs Takes you to the Scheduled Jobs List screen, which displays the list of reports that you have configured, scheduled, and saved. You can access the Scheduled Jobs List only *after* you have logged in.



Log Out Logs you out of InfoStation and takes you back to the Log In screen, where all log-in options are reset to the default values.

Important: We recommend that you *always* log out of InfoStation after you have completed your session. If you do NOT log out, anyone who uses your PC after you can access reports with your user permissions and may then have access to confidential information.

3.3 Working with Log-in Options

The Log In screen contains various fields, where you can choose options for your session. After you log in to InfoStation, the Reports List screen appears, displaying a list of report templates and configurations. The options that you choose on the Log In screen determine which reports appear on the Reports List screen.

Hint: At any time during your InfoStation session you can click the Log In icon to return to return to the Log In screen and log in using different criteria.

For details on the Reports List screen, see the chapter "Introduction to the Reports List screen" in this user's guide.

3.3.1 Choosing a Database for Log-in

The Database drop-down list box displays the databases that you configured when you installed InfoStation. These databases are stored in the **databases.cfg** file in your **/usr/vtls/virtua/webrpt_XX_x** directory.

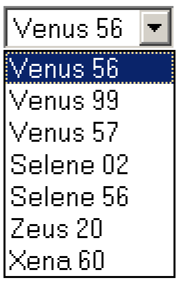


Figure 3-2. Database Drop-down List

Use the Database drop-down list box to select a database for your session. This is the database from which your reports will gather data. You can log in to one database only.

When you log in to InfoStation, the Reports List screen displays *only* the report configurations associated with the database you select from the Database pull-down list box. For details, see the chapter "Introduction to the Reports List screen" in this user's guide.

Note: The database you specify at log-in is persistent throughout your session. To run reports from a different database, you must return to the Log In screen and log in to a different database.

3.3.1.1 Editing the databases.cfg File

You can add databases to the Database drop-down list by running the installation script, or by editing the **databases.cfg** file directly.

To edit **databases.cfg** directly, open the file using your favorite text editor.

The **databases.cfg** file contains the following set of elements, which must be associated with each database that you configure. To add a database, copy the set of elements, paste them in the file, and configure the new values.

```
# Database configurations for InfoStation
# Start of database definition
db_label=2014.1
db_host=primary.library.com
db_sid=primary2014.1
db_user=dbadmin@primary.world
db_pass=dbadmin
db_charset=AMERICAN_AMERICA.AL32UTF8
exe_dir=
webgw_url=
db_time_zone=
# End of database definition
```

Notice that you can set a time zone value for each configured database. If the database uses the InfoStation hosting server's system time zone, leave the "db_time_zone" setting blank. Otherwise, set the "db_time_zone" setting to the proper time zone value.

To determine what time zone value to assign, use the "tzselect" system command.

The "tzselect" command outputs a result value in the context of exporting this value to a TZ environment variable, e.g., **TZ='America/New_York'; export TZ**.... For this example, you would set the "db_time_zone" value to *America/New_York*.

If the "db_time_zone" setting is a non-blank value for the database that is logged in to, InfoStation will use the value in the TZ environment variable when invoking Virtua binaries, which tells the those binaries what time zone applies to Oracle database operations.

If you modify an existing database by making changes in the **databases.cfg** file or by running the installation script, you must then update each report configuration that was created for that database. You can do this by . . .

- Deleting the report configuration from the reports list and creating a new one.
  -OR-
- Selecting the report configuration from the reports list, clicking the Edit button, and then clicking the Save button on the report Configuration screen.

3.3.2 Choosing a Language for Your Session

You can choose a language for InfoStation in two ways. You can . . .

- Choose a language on the Log In screen
  -OR-
- Change the language via the URL.

The language you select affects the language of both the interface and the reports themselves. When you configure reports, they are language-specific. The Reports List screen displays *only* the report configurations and templates that match the language of the interface. For details, see the chapter "Introduction to the Reports List screen" in this user's guide.

The language you specify is persistent until you change it manually via the Log In screen or the URL.

You can make additional translations available by translating the language strings in various text files in the InfoStation directory. For details, see the *Virtua Translation and String Customization Guide*.

Note: Your Internet browser determine how right-to-left text is displayed. If you are running InfoStation in a language that uses right-to-left directionality and you notice problems with the display, you may wish to try using a different browser.

3.3.2.1 Selecting a Language Via the Log In Screen

On the Log In screen, the Language drop-down list box displays all the languages in which you can configure and run InfoStation reports.

<u>Language Drop-down List Box</u>

Figure 3-3. Language Pull-down List Box

You can use the Language drop-down list box to choose a language for your session. The language applies to your session only after you log in. For details on logging in, see the section "Logging In to InfoStation" in this chapter.

Note: A complete set of translations may not exist for each language in the list. For details on translating InfoStation, see the *Virtua Translation and String Customization Guide*.

3.3.2.2 Changing the Language Via the URL

By editing the language code in the InfoStation URL, you can change the language of InfoStation without returning to the Log In screen.

The portion of the InfoStation URL that determines the language of the interface is **lang_code=en**, where the language code appears directly after the equal sign. For example, in the following URL, the language code is **en**:

http://computer.domain.org:8000/web_reports/cgi-bin/InfoStation.cgi?mod=login&func=login&lang_code=**en**

Note: Depending on the screen you are viewing, the language code may appear in a different place within the URL.

To change the language of InfoStation,

1. In the URL, edit the language code.

   Note: You can use any language code for which an InfoStation translation exists.

2. Press the ENTER key.
   -OR-
   On your Internet browser, click the Go button (or equivalent).

   The language of InfoStation changes.

Note: If you specify an invalid language code (i.e., a language code for which translations do not exist), InfoStation will use the default language specified in the **constants.cfg** file. If a default language is NOT defined in the **constants.cfg** file, you will get an error message. For details on translating InfoStation, see the *Virtua Translation and String Customization Guide*.

3.3.3 Working with Report Groups

Report Groups help you organize reports, assign report permissions to Virtua users, and control report security. Each InfoStation report can belong to one or more Report Groups.

When you install InfoStation, each report is automatically assigned to a Report Group, according to its expected usage. For details on the default location of each report within the **/usr/vtls/virtua/webrpt_XX_x** directory, see the *InfoStation Reference Guide*.

To better serve your library's workflow or security requirements, you may want to assign reports to different Report Groups. You can move and copy reports from one Report Group to another using the **move_report.pl** utility. For details, see the *InfoStation Reference Guide* (see also the section "Copying Reports to the Patron Report Group" in this guide).

Note:

- Throughout this user's guide and in the InfoStation reference guides, we classify each report according to its *default* Report Group. If you assign your reports to different Report Groups, certain aspects of this guide may not apply to you.
- Changing the Report Group of an individual report does NOT change the functionality of that report.

3.3.3.1 About User Permissions and Report Groups

Via the User Profiles parameter in the Virtua Profiler, you can assign user permissions for each InfoStation Report Group. For example, you can give a user permission to run reports that belong to the Circulation Report Group but not the Acquisitions Report Group.

Report Groups let you determine which Virtua users have access to which InfoStation reports. For details on setting InfoStation user permissions, see the *Virtua Profiler/Global Settings User's Guide*.

3.3.3.2 Choosing Report Groups for Your Session

On the Log In screen, the Report Group list box displays all the Virtua subsystems and special categories for which you can configure and run reports.

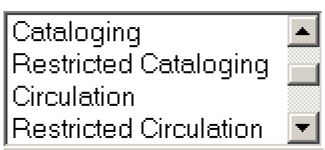


Figure 3-4. Report Group List Box

The following categories appear in the Report Group list box:

- Acquisitions (see the *InfoStation/Acquisitions Reports Reference Guide*)
- Restricted Acquisitions (see the *InfoStation/Acquisitions Reports Reference Guide*)
- Administrative (see the *InfoStation/Cataloging Reports Reference Guide* and *InfoStation/OPAC Reports Reference Guide*)
- Cataloging (see the *InfoStation/Cataloging Reports Reference Guide*)
- Restricted Cataloging (see the *InfoStation/Cataloging Reports Reference Guide*)
- Circulation (see the *InfoStation/Circulation Reports Reference Guide*)
- Restricted Circulation (see the *InfoStation/Circulation Reports Reference Guide*)

- OPAC (see the *InfoStation/OPAC Reports Reference Guide*)
- Restricted OPAC (see the *InfoStation/OPAC Reports Reference Guide*)
- Patron (empty report group)
- Serials (see the *InfoStation/Serials Reports Reference Guide*)
- Restricted Serials (see the *InfoStation/Serials Reports Reference Guide*)

When you log in to InfoStation, you must select one or more Report Groups. Based upon the Report Group(s) you choose at log-in, the appropriate reports appear on the Reports List screen.

When you log in to InfoStation, you will have access *only* to the reports that belong to the Report Group(s) you select on the Log In screen.

- You can log in to as many Report Groups as you like.
- You must select at least one Report Group before you can log in.

You can log in only to the Report Groups for which you have permission to run reports.

- If you do NOT have permission to access any of the Report Groups that you select on the Log In screen, you receive an error message when you log in.
- If you have permission to access at least one Report Group that you select on the Log In screen, you are allowed to log in, but the reports belonging to the Report Groups for which you do NOT have permission are omitted from the Reports List screen.

For details on setting InfoStation report permissions, see the *Virtua Profiler/Global Settings User's Guide*.

3.3.4 Using Filter Strings

Filter strings let you limit the reports that appear on the Reports List screen. When you apply a filter string to the Reports List screen, the list includes only the report templates and configurations that contain that string. For example, if you filter on the string *Overdues*, the Reports List screen will display only the report templates and configurations that contain the string *Overdues*.

Note: Filter strings are case sensitive and optional for log-in.

Because filter strings apply specifically to the Reports List screen, we describe them in detail in the section "Filtering the Reports List" in the chapter "Introduction to the Reports List screen" in this user's guide.

3.3.5 Specifying a Username and Password for Log-in

On the Log In screen, the Username and Password fields let you specify the Virtua username and password that you want to use for logging in to InfoStation. The report permissions for your session are determined by the user profile associated with the Virtua username and password you specify at log-in.

After you log in to InfoStation, the Reports List screen appears, displaying the report templates and configurations that meet your database, language, Report Group, and filter string criteria AND that you have permission to run, as specified in your user profile.

Note: When you log in to InfoStation . . .

- If you do NOT have permission to access *any* of the reports you selected, InfoStation generates an error message.
- If you select a Report Group that you do NOT have permission to access, reports belonging to that Report Group are omitted from the Reports List screen.

For details on setting InfoStation report permissions, see the *Virtua Profiler/Global Settings User's Guide*.

3.4 Logging In to InfoStation

To log in to InfoStation,

1. Using your InfoStation URL, access the Log In screen (*Figure 3-1*).

2. In the Database pull-down list box, select a database for your session.

3. In the Language pull-down list box, select a language for your session.

4. In the Report Group list box, select one or more Report Groups for your session. You must select at least ONE Report Group before you can log in.

Hints:

- To select multiple, adjacent Report Groups in the list, hold down the SHIFT key, and highlight the desired groups.
- To select multiple, non-adjacent Report Groups in the list, hold down the CTRL key, and highlight the desired groups.

5. If you want, in the Filter String text box, type a filter string.

   Note: Filter strings are optional.

6. In the Username text box, type your Virtua username.

7. In the Password text box, type your Virtua password.

   Note: At this point, if you decide that you do NOT want to log in to InfoStation, or if you wish to change your log-in criteria, click the Clear button to clear your log-in settings.

8. Click the OK button.

   The Reports List screen appears (*Figure 3-5*), displaying a list of report templates and configurations that meet your log-in criteria.

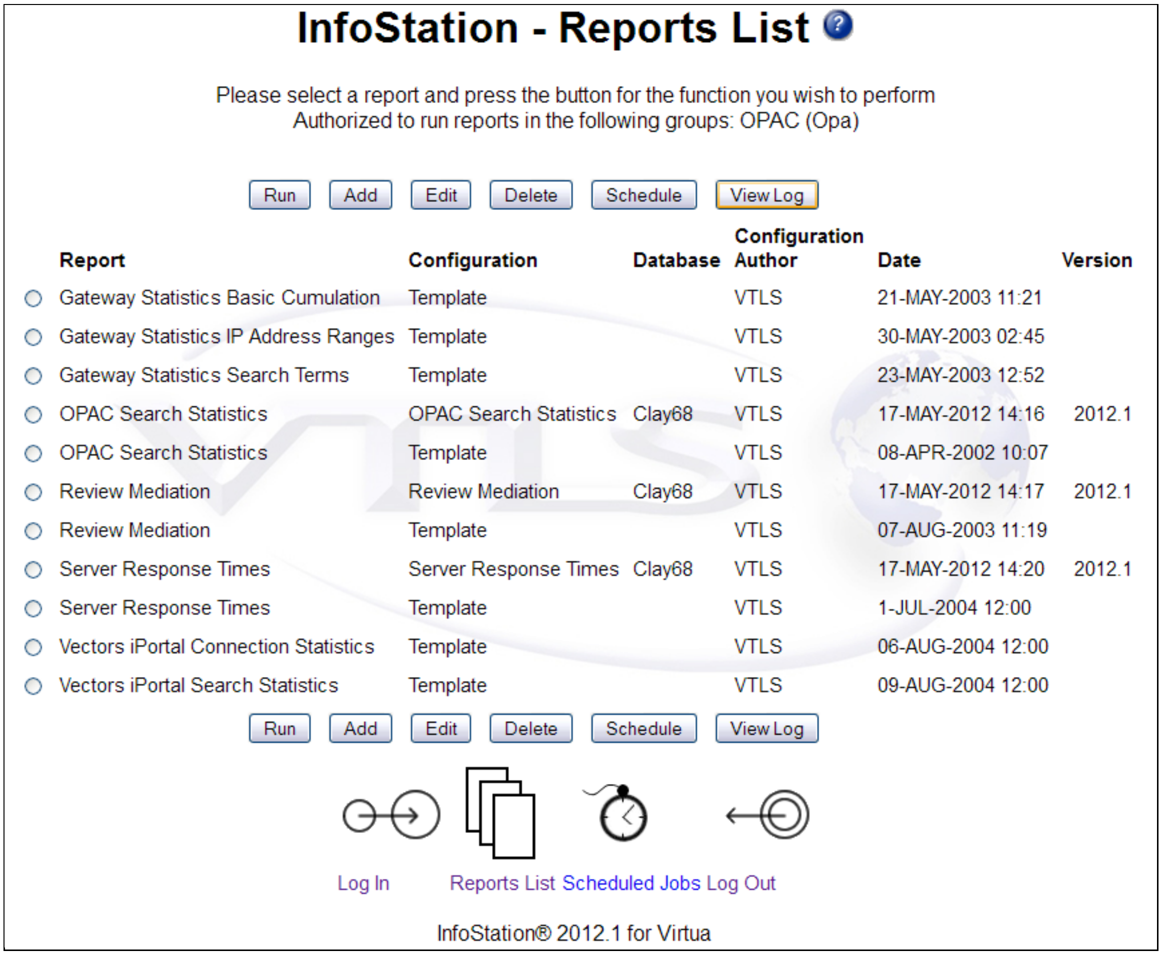


Figure 3-5. Reports List screen

4. Introduction to the Reports List Screen

The Reports List screen displays the reports available in the report group(s) you selected at log-in and serves as the starting point for most of the tasks you can perform via Virtua's Web-reporting subsystem. From the Reports List screen, you can . . .

- View a list of all available report templates and configurations.
- Access the Configuration screen to create a new report configuration or edit an existing configuration.
- Run report configurations.
- Delete report configurations.
- Access scheduling features.

This chapter covers the following topics:

4.1 Accessing the Reports List Screen

The Reports List screen is displayed after you select the report group(s) you want to access and then log in to InfoStation. Figure 4-1 shows what the Reports List screen looks like for the Serials Report Group

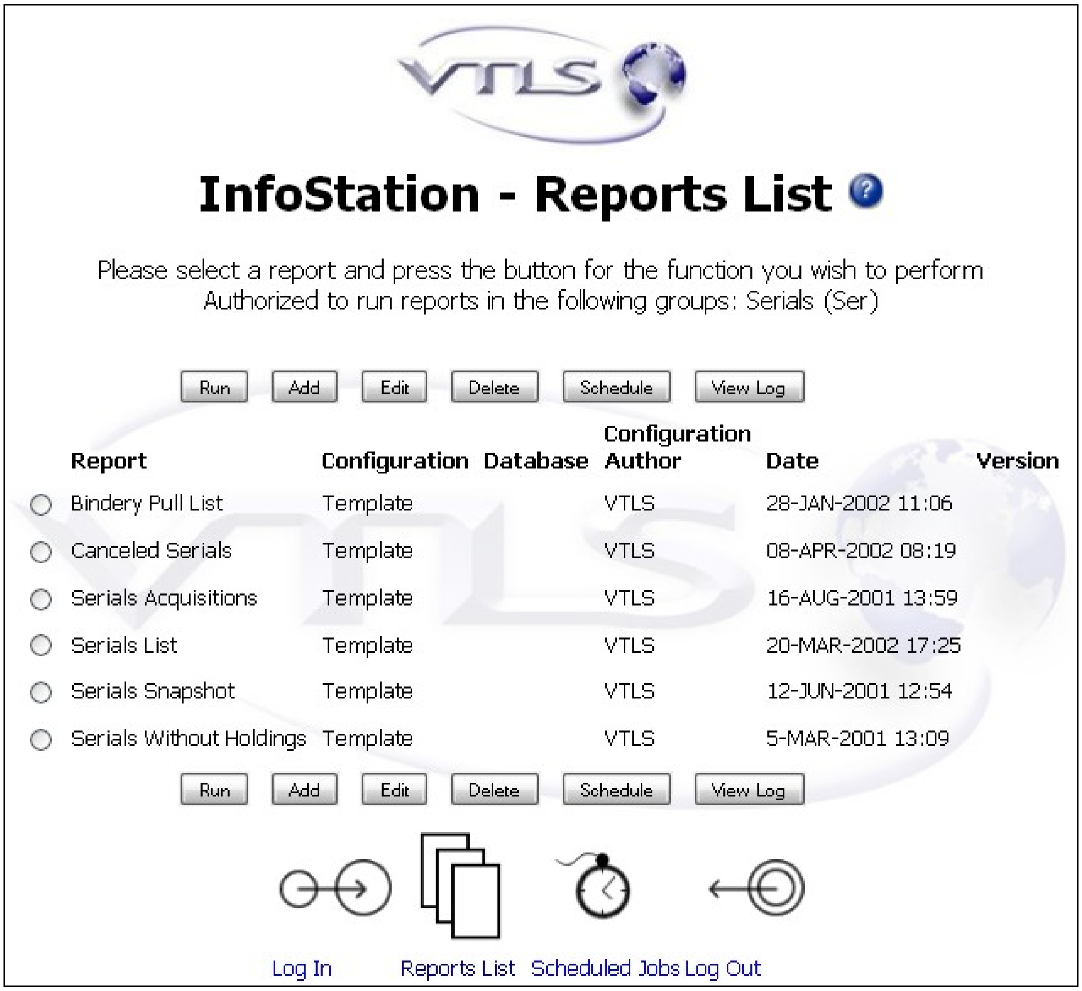


Figure 4-1. Reports List Screen

The format is the same for the Reports List screen regardless of the report groups that it displays except for one element. The one difference appears on the screen listing Circulation and/or Restricted Circulation reports. On that Reports List screen, the bottom of the screen contains information about the version of **CircReport.exe** that InfoStation is currently configured to run (*Figure 4-2*).This same information appears on the Configuration screen of every report that uses **CircReport.exe** during the reporting process.

Figure 4-2. Version Information for CircReport.exe

At any time during your session, you can return to the Reports List screen by clicking the Reports List icon, which appears at the bottom of every screen in InfoStation.

4.2 Aspects of the Reports List Screen

The Reports List screen consists of the following elements:

- Authorization message
- Command buttons
- Column headings
- List of report templates and configurations
- Information about the version of **CircReport.exe** that InfoStation is currently configured to run (*Figure 4-2*)

In the following sections, we describe these components.

4.2.1 Authorization Message on the Reports List Screen

At the top of the Reports List screen, an authorization message appears, stating that you are “Authorized to run reports in the following Report Groups: [Report Groups].”

For the Report Groups that you selected at log-in, the message lists the groups you have permission to access. Depending on your log-in criteria and your user permissions, the authorization message may include any of the following groups:

- Acquisitions (Acq)
- Restricted Acquisitions (Racq)
- Administrative (Adm)
- Cataloging (Cat)
- Restricted Cataloging (Rcat)
- Circulation (Cir)
- Restricted Circulation (Rcir)
- OPAC (Opa)
- Restricted OPAC (Ropa)
- Patron (Pat)
- Serials (Ser)
- Restricted Serials (Rser)

Note: For each Report Group, the Report Group code, which appears in parentheses, is always in English, regardless of the language you select for InfoStation.

A Report Group is included in the authorization message only if both of the following conditions exist:

- You selected the Report Group at log-in.
  -AND-
- You have permission to run reports in that Report Group.

For example, if you select both the Acquisitions and Serials Report Groups at log-in but you do not have permission to run Acquisitions reports, the authorization message will display, "Authorized to run reports in the following Report Groups: Serials (Ser)." In addition, the Acquisitions reports are omitted from the reports list.

Note: If you are authorized to run reports in a particular Report Group but you do not select that Report Group at log-in, the group will not be listed in the authorization message.

For additional information on how log-in options and user permissions affect the Reports List screen, see the section "List of Reports on the Reports List screen" in this chapter.

4.2.2 Command Buttons on the Reports List Screen

On the Reports List screen, below the authorization message, six command buttons appear. By default, these buttons appear at both the top and the bottom of the screen. Both sets of buttons perform the same functions, which we describe below.

Note: The buttons on the Reports List screen perform functions related primarily to report *configurations*. Only the Add button performs a function related to both report configurations AND report templates.

The Reports List screen displays the following command buttons:

- **Run** - Runs the selected report configuration. For details, see the chapter "Running Report Configurations" in this guide.

- **Add** - Displays the Configuration screen in add mode, where you can customize and save a report configuration using a template or an existing configuration. For details, see the sections "Creating Report Configurations" and "Creating New Configurations from Existing Configurations" in this guide.

- **Edit** - Displays the Configuration screen in edit mode, where you can edit and save the configuration you select on the Reports List screen. For details, see the section "Editing Report Configurations" in this guide.

- **Delete** - Deletes the selected report configuration.

- **Schedule** - Displays the Add Job to Schedule screen, where you can schedule the selected report configuration to run automatically. For details, see the chapter "Scheduling Configurations to Run Automatically" in this user's guide.

- **View Log** – Displays log messages associated with the selected report.

4.2.3 Column Headings on the Reports List Screen

Below the authorization message and the command buttons, five column headings appear, providing the following information for each report in the list:

- **Report** - The name of the report.

- **Configuration** -
  - For report configurations, the Configuration Name, which you assign via the Configuration screen.
  - For report templates, the label *Template*.

- **Database** - The name of the database from which the configuration retrieves data. This is the database that you selected at log-in.

> **Note:**
> - The Reports List screen displays *only* the report configurations that have been configured for the database that you choose at log-in.
> - Report templates are not database-specific and appear on the Reports List screen regardless of the database you choose at log-in. For report templates, this column is blank, as in Figure 4-1.

- **Configuration Author** - The name of the person or entity responsible for creating the report template or configuration.

- **Date** - The date that the report template or configuration was last modified.

- **Version** - For report configurations, the InfoStation version for which the configuration was last updated. When the version of a configuration does NOT match your current InfoStation version, the version number appears in red. This indicates that the configuration may not work with your current version. To update the configuration for your current version you will want to edit and resave it, setting any new parameters that were added in your last update.

> **Note:** Version numbers do not appear for report templates, which are always up-to-date for your current version.

4.2.4 List of Reports on the Reports List Screen

The Reports List screen displays a list of report templates and configurations that meet your log-in criteria and that you have permission to run. When you first access the Report List and before any report configurations have been created, the Reports List screen displays only report templates, as in Figure 4-1.

In the following sections, we describe how your log-in options and user permissions affect the reports list. For details on filtering the reports list, see the section "Filtering the Reports List" in this chapter.

4.2.4.1 How Log-in Options Affect the Reports List

The Reports List screen displays report templates and configurations that meet your log-in criteria. Each report appears on the Reports List screen *only* if it . . .

- Has been configured for the database you selected on the Log In screen.
- Has been translated into the selected language.
- Belongs to a Report Group that you selected on the Log In screen.
- Contains the filter string specified at log-in, if any.

The database, language, and Report Group that you specify at log-in are persistent throughout your session. This means that during your session, whenever you return to the Reports List screen, the list will include *only* the report templates and configurations that meet your original log-in criteria.

Note: The log-in filter string is not persistent throughout your session. For details on reapplying the filter string or applying a new filter string, see the section "Filtering the Reports List" in this chapter.

To view the Reports List for a different database or Report Group,

1. Click the Log In icon.
   The Log In screen appears.
2. On the Log In screen, specify new log-in criteria, and then click the OK button.

   The Reports List screen appears, displaying a list of report templates and configurations that meet your new log-in criteria. For details on logging in, see the chapter "Working with the Log In Screen" in this user's guide.

4.2.4.2 How User Permissions Affect the Reports List

The Reports List screen displays a list of reports that you have permission to configure and run. At the top of the Reports List, the authorization message indicates which Report Groups you have permission to access.

If, at log-in, you select a Report Group that you are not authorized to access, that group does NOT appear in the authorization message and reports belonging to that Report Group do not appear in the reports list.

Reports appear on the Reports List screen *only* if they belong to one of the Report Groups listed in the authorization message. For example, Figure 4-3 displays the reports that belong by default to the Serials Report Group.

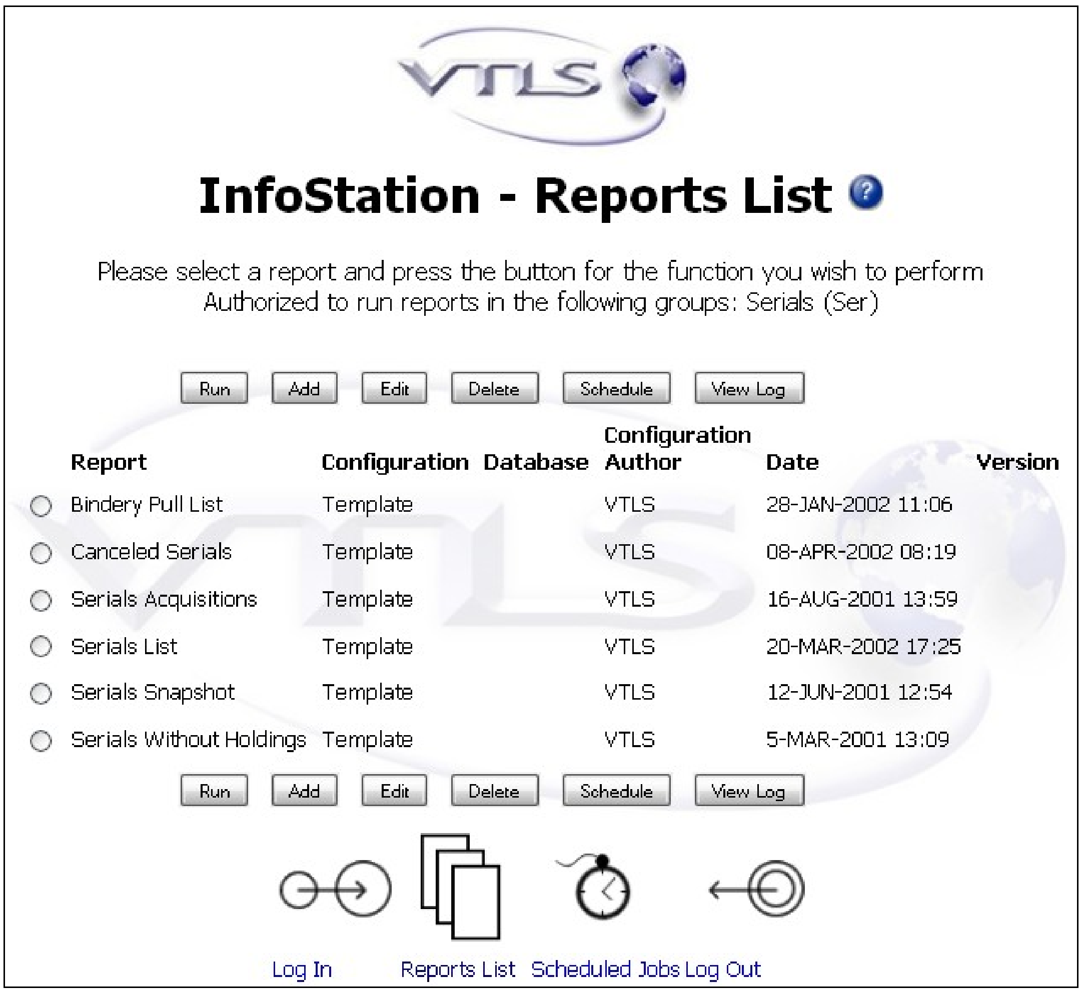


Figure 4-3. Reports List screen Displaying Serials Reports

The reports list in Figure 4-3 appears when . . .

- On the Log In screen, you chose Cataloging, Serials, and Circulation from the Report Group list box, but you have permission to access only the Serials Report Group.
- You have permission to run reports in the Cataloging, Serials, and Circulation Report Groups, but you chose only Serials in the Report Group list box on the Log In screen.

For details on setting user permissions to run reports, see the *Virtua Profiler/Global Settings User's Guide*.

4.2.4.3 When a Report Belongs to More Than One Report Group . . .

Using the utility **move_report.pl**, you can copy reports to one or more Report Groups. For example, you may want to create two configurations of the New Books List report:

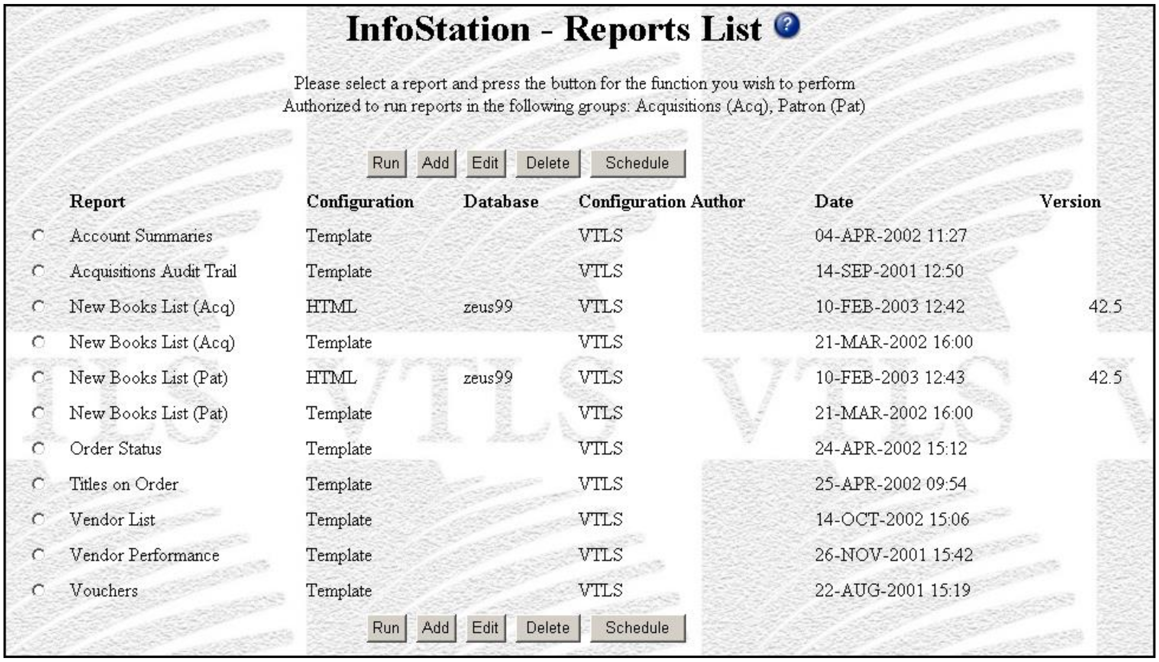
1. A staff configuration, which staff members can run to remove items from the new books list.
   -AND-
2. A patron configuration, which patrons can run to view items on the new books list with no effect on the database.

To give patrons access to the patron configuration, while restricting their access to the staff configuration, the two configurations must reside in two different Report Groups. For example, the staff configuration might reside in the Acquisitions Report Group (the default Report Group of the New Books List report), while the patron configuration resides in the Patron Report Group.

By configuring user permissions for the Guest User Profile in the Virtua Profiler, you can grant patrons permission to run configurations in the Patron Report Group *only*, while restricting them from running the staff configuration in the Acquisitions Report Group.

Staff members, on the other hand, will likely have permission to run reports in *both* the Patron and Acquisitions Report Groups. On the Reports List screen, staff need a way to determine which copy belongs to which group.

When a user logs in to more than one Report Group and the groups contain copies of the same report, the Reports List screen labels each occurrence of the report with the appropriate Report Group (*Figure 4-4*).



InfoStation - Reports List

Please select a report and press the button for the function you wish to perform
Authorized to run reports in the following groups: Acquisitions (Acq), Patron (Pat)

Run | Add | Edit | Delete | Schedule

Report	Configuration	Database	Configuration Author	Date	Version
Account Summaries	Template		VTLS	04-APR-2002 11:27	
Acquisitions Audit Trail	Template		VTLS	14-SEP-2001 12:50	
New Books List (Acq)	HTML	zeus99	VTLS	10-FEB-2003 12:42	42.5
New Books List (Acq)	Template		VTLS	21-MAR-2002 16:00	
New Books List (Pat)	HTML	zeus99	VTLS	10-FEB-2003 12:43	42.5
New Books List (Pat)	Template		VTLS	21-MAR-2002 16:00	
Order Status	Template		VTLS	24-APR-2002 15:12	
Titles on Order	Template		VTLS	25-APR-2002 09:54	
Vendor List	Template		VTLS	14-OCT-2002 15:06	
Vendor Performance	Template		VTLS	26-NOV-2001 15:42	
Vouchers	Template		VTLS	22-AUG-2001 15:19	

Run | Add | Edit | Delete | Schedule

Figure 4-4. Reports List Display Copies of Reports

In Figure 4-4, each New Books List report template and configuration is labeled as belonging to either the Acquisitions Report Group (Acq) or the Patron Report Group (Pat).

Note: The Report Group code, which appears in parentheses to the right of the report name, is always in English, regardless of the language you select for InfoStation.

The reports list shown in Figure 4-4 appears when . . .

- The New Books List report belongs to both the Acquisitions and Patron Report Groups.
  -AND-
- An authorized user selects both the Acquisitions and Patron Report Groups at log-in.

For the Report Group labels to appear, the Reports List screen must display more than one copy of the report. This means that even if a report belongs to more than one Report Group, the Report Group labels will appear *only* if . . .

- You log in to two or more of those groups.
  -AND-
- You have permission to run reports in two or more of those groups.

For details about copying and moving reports, see the *InfoStation Reference Guide*.

4.3 Filtering the Reports List

Filter strings let you limit the reports that appear on the Reports List screen. When you apply a filter string to the Reports List screen, the list includes only the report templates and configurations that contain the string. For example, if you filter on the string *Overdues*, the Reports List screen displays only the report templates and configurations that contain the string *Overdues*.

You can filter templates and configurations on the following fields:

- Report Name
- Configuration Name
- Database
- Configuration Author
- Last Modified Date
- Version

Important: Filter strings are case sensitive.

If you specify a filter string that does not exist in any report configurations or templates, InfoStation displays an empty Reports List (*Figure 4-5*).

Figure 4-5. Reports List screen Displaying Empty Reports List

You can specify a filter string via . . .

- The Log In screen.
  -OR-
- The Reports List URL.

Note: Filter strings are NOT persistent throughout your session. They apply only to a single occurrence of the Reports List screen.

4.3.1 Setting a Filter String at Log-in

On the Log In screen (*Figure 3-1*), in the Filter String text box, you can type a filter string to be applied at log in. When you specify a filter string at log in, the Reports List screen will display only the report templates and configurations that contain the filter string you specify.

The Filter String field is optional for log-in. If you do NOT specify a filter string, the Reports List screen displays all the report templates and configurations that meet your database, language, and Report Group criteria, provided that you have permission to run those reports.

When you apply a filter string at log-in, the string will apply throughout your session, until you log out or change the filter string in the URL. For details, see the following section.

For details on logging in to InfoStation, see the chapter "Working with the Log In Screen" in this user's guide.

4.3.2 Specifying a Filter String in the Reports List URL

At any time during your InfoStation session, you can use a filter string to modify the list of report templates and configurations displayed in the Reports List. You can do this by accessing the Reports List screen and specifying a filter string in the Reports List screen URL.

The portion of the Reports List screen URL that specifies the filter string is "filter=[string]," where [string] indicates the string on which you want to filter the Reports List. For example, in the following URL, the filter string is *Overdues*:

http:// computer.domain.org:8000/web_reports/cgi-bin/InfoStation.cgi?mod=reports_list&func=list&lang_code=en&filter=**Overdues**

If a filter string is NOT set, a string does not appear in the URL. For example, in the following URL, a filter string is not set.

http:// computer.domain.org:8000/web_reports/cgi-bin/InfoStation.cgi?mod=reports_list&func=list&lang_code=en&filter=

To apply a new filter string to the Reports List screen,

1. From any screen in InfoStation, click the Reports List icon to return to the Reports List screen.

> **Note:** By default, the Reports List icon is available on ALL screens in InfoStation, allowing you to return to the Reports List screen at any time during your session.

The Reports List screen appears, displaying the list of report templates and configurations that meet your original log-in criteria.

2. In the Reports List URL, type a new filter string.

3. Press Enter.
   -OR-
   On your Internet browser, click the Go button (or equivalent).

   The Reports List screen refreshes, displaying the list of report templates and configurations that meet your filter string criteria.

5. Working with Report Configurations

Infostation runs customized report configurations that you create from report templates. Before you can run reports, you must define parameters within specific report configurations. In this chapter, we describe how you can create report configurations that meet your library's specific needs.

This chapter covers the following topics:

5.1 Accessing the Configuration Screen

Each report offers a report-specific Configuration screen, where you can create, modify, and save configurations of that report. You can access each report's Configuration screen from the Reports List screen.

Note: In this section, we provide instructions for accessing the Configuration screen via a report template. For details on accessing the Configuration screen for an existing configuration, see the sections "Editing Report Configurations" and "Creating New Configurations from Existing Configurations" in this chapter.

To create a new report configuration from a report template,

1. Log in to InfoStation.

   The Reports List screen appears (*Figure 5-1*).

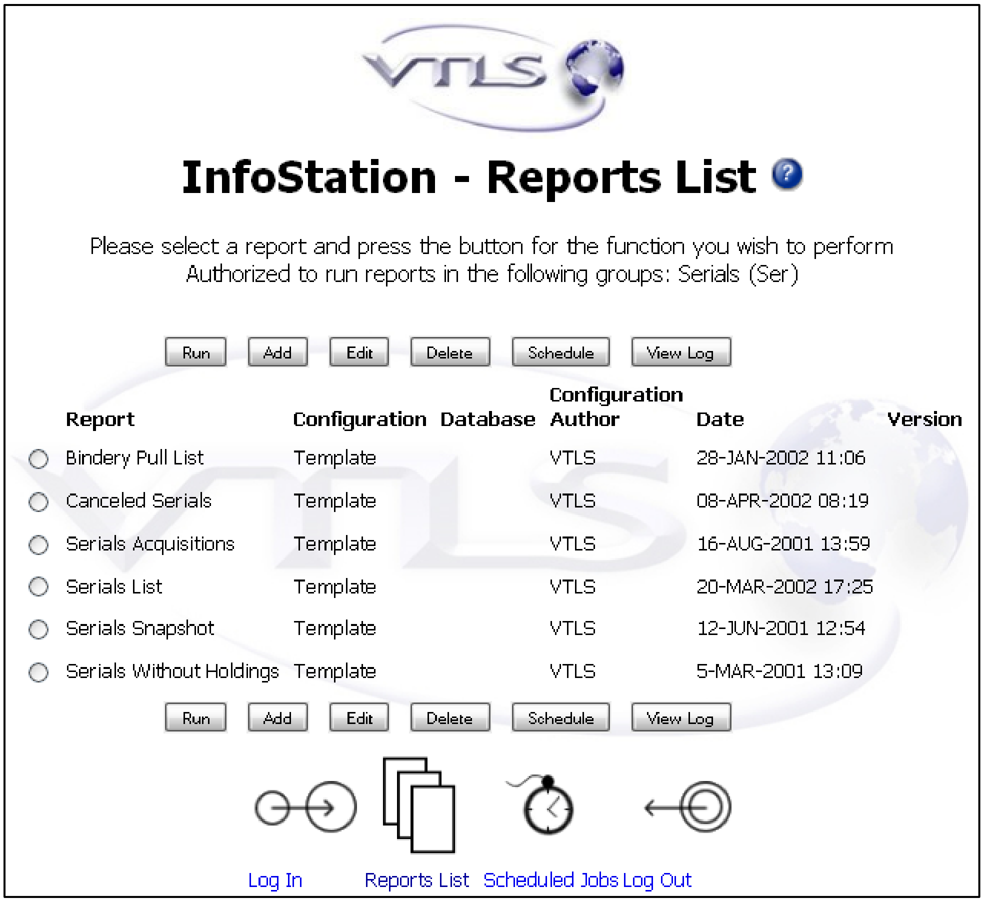


Figure 5-1. Reports List screen

2. On the Reports List screen, select the radio button for the report template that you want to use to create a report configuration. For example, if you want to create a configuration of the Canceled Serials report, select the radio button for the Canceled Serials report template.

Hint: Report templates are labeled *Template* in the Configuration column on the Reports List screen.

3. Click the Add button.

The appropriate report-specific Configuration screen appears. In Figure 5-2 we show a portion of the Configuration screen for the Canceled Serials report.

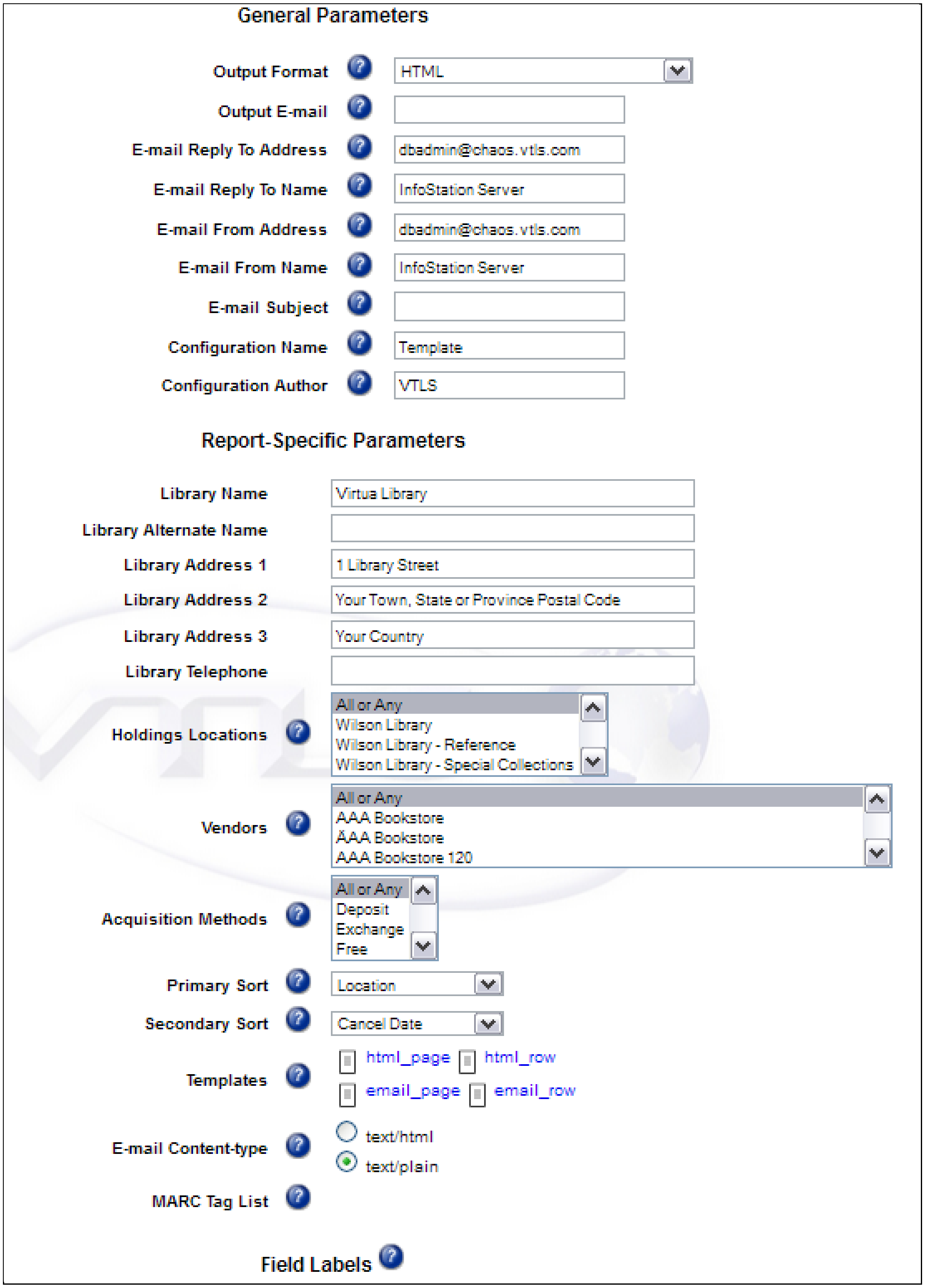


Figure 5-2. Configuration Screen for the Canceled Serials Report

5.2 Overview of the Configuration Screen

The Configuration screen is divided into three main areas:

- **General Parameters** - Let you specify the . . .
  - Format of the output (HTML, e-mail, or delimited).
  - Delimited file options (applicable to notice-generating reports only, and then only where the delimited_file_output_directory setting in **constants.cfg** is assigned a value during the installation of InfoStation.
  - E-mail address(es) to which e-mail output will be sent.
  - E-mail address to which patrons receiving notices may reply.
  - Name of the person to whom e-mail replies should be addressed.
  - Report-specific e-mail address from which notices will be sent.
  - Report-specific name from which e-mail notices will be sent.
  - Subject line of the e-mail.
  - Type of content for e-mail output (applicable to configurations that generate e-mail output only).
  - Name of the report configuration.
  - Author of the report configuration.

  For details, see the section "Configuring General Parameters" in this chapter.

- **Report-specific Parameters** - Let you customize your report configurations, including output Templates. Report-specific Parameters are different for each report and let you specify which results you want to include in the output and how the results will be formatted. For details, see the section "Configuring Report-specific Parameters" in this chapter.

- **Field Labels** - Let you specify how data elements will be labeled in the report output. Field labels vary, depending on the data elements retrieved by the report. For details, see the section "Configuring Field Labels" in this chapter.

At the bottom of the Configuration screen, two buttons appear:

- **Save** - If the configuration is free of errors, saves your changes and returns you to the Reports List screen.
- **Clear** - Clears any changes made to the configuration and displays the settings for the most recently saved configuration.

5.3 Creating Report Configurations

Creating report configurations involves the following steps:

- Configuring General Parameters.
- Configuring Report-specific Parameters, including customizing output Templates.
- Configuring Field Labels.
- Saving the report configuration.

In the following sections, we provide details on performing each of these steps.

5.3.1 Configuring General Parameters

General Parameters appear at the top of the Configuration screen (*Figure 5-3*).

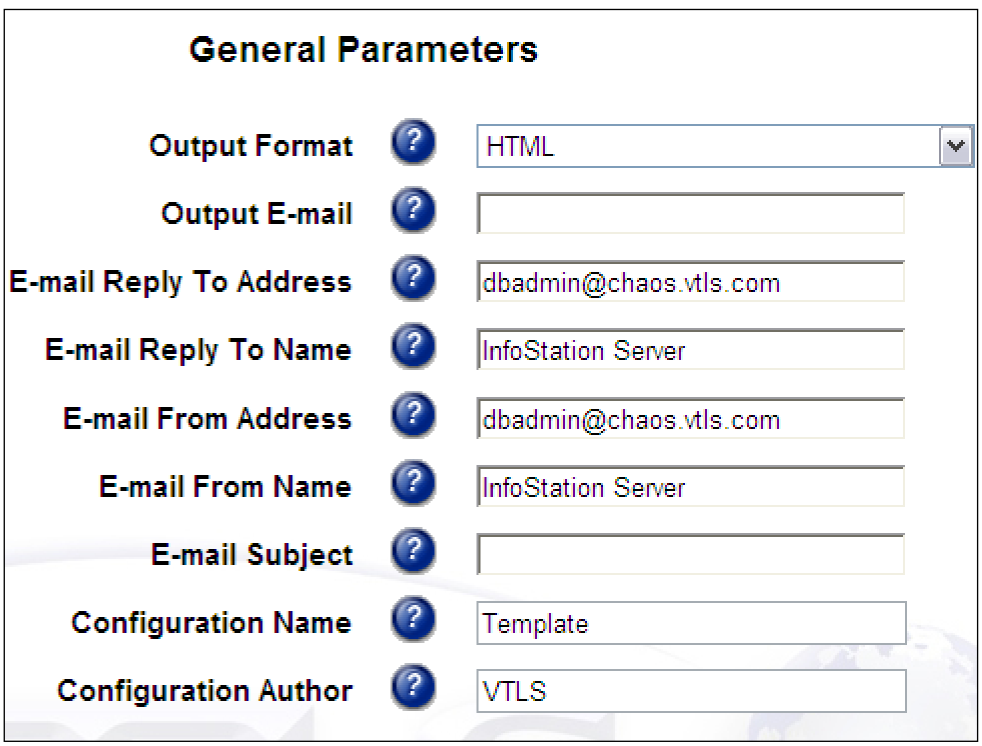


Figure 5-3. General Parameters

The first step in creating a report configuration is to configure the General Parameters. For report configurations, you are required to set the General Parameters, which consist of the following settings:

- Output Format (required)
- Output E-mail
- E-mail Reply To Address
- E-mail Reply To Name
- E-mail From Address
- E-mail From Name
- E-mail Subject
- Configuration Name (required)
- Configuration Author (required)

Note:

- All report templates have default settings for Output Format, E-mail Reply To Address, E-mail Reply To Name, E-mail From Address, E-mail From Name, Configuration Name, and Configuration Author. You can save report configurations without changing the default settings, but you cannot save a configuration in which the Configuration Name or Configuration Author is blank.
- InfoStation has the option of sending a copy of each e-mail message sent by every InfoStation report to a library-configured address via an optional Bcc e-mail entry. This Bcc e-mail address is defined as mail_bcc_address in the **constants.cfg** file, and can also be configured at installation via the **infostation_install.pl** script.
- All notice-generating report templates also have default settings for Delimited File Destination and Delimited File Output Directory, but those parameters will appear on the Configuration screen only when the delimited_file_output_directory setting in **constants.cfg** is assigned a value during the installation of InfoStation. The InfoStation installer **infostation_install.pl** script prompts you for this value.

5.3.1.1 Setting the Output Format Parameter

The Output Format parameter determines the type of output that the report configuration will produce. The Output Format pull-down list box contains three options:

- **HTML** - InfoStation will generate HTML output and return it to your screen.

- **E-mail, Primary** - (*non-notice-generating reports*) InfoStation will format the output into the text of an e-mail and send it to the e-mail address(es) that you specify for the configuration.

-OR-

- **Electronic Delivery** - (*notice-generating reports*) InfoStation will format the output according to the setting of the Honor Patron Communication Preference parameter.

- **E-mail with Delimited File Attachment** - (*non-notice-generating reports*) InfoStation will produce delimited output and send it as an attachment to the e-mail address(es) that you specify for the configuration.
  -OR-
- **Delimited File** - (*notice-generating reports*) InfoStation will produce delimited output and send it according to the setting in the Delimited File Destination parameter.

You will want to set the Output Format differently depending on the type of output that you want to produce AND the type of report that you are configuring. In the following sections, we describe how to set the Output Format for notice-generating and non-notice-generating reports.

5.3.1.1.1 Choosing the Output Format for Notice-generating Reports

> **Important:** For notice-generating reports, the Output Format parameter determines whether a report configuration will generate patron notices. Before you configure a report to generate patron notices, we recommend that you TEST your report configuration to verify that it produces the desired results.

To choose an Output Format for notice-generating reports,

- If you want to return output to the screen, choose HTML as the Output Format. HTML output is useful for . . .
  - Testing report configurations before generating patron notices.
    -AND-
  - Generating pre-notice search lists for in-house use.

  > **Important:** Notice-generating reports offer an Update Database parameter in the Report-specific Parameters area. Do NOT select the Update Database check box when you are testing report configurations.

  -OR-

- If you want to generate e-mail notices and send them to one or more particular e-mail addresses, choose Electronic Delivery as the Output Format.

-OR-

- If you want to generate text message notices and send them to individual patrons, choose Electronic Delivery as the Output Format.

  -OR-

- If you want to generate output that you can send to a directory on the server or use to prepare paper notices, choose Delimited File as the Output Format.

Note: You will want to set the Output Format parameter in conjunction with the Output E-mail Address parameter. For details, see the section "Setting the Output E-mail Address for Notice-generating Reports" in this chapter.

5.3.1.1.2 Choosing the Output Format for Non-notice-generating Reports

To choose an Output Format for non-notice-generating reports,

- If you want to return output to the screen, choose HTML as the Output Format.

  -OR-

- If you want to generate e-mail output and send it to one or more particular addresses, choose E-mail Primary as the Output Format.

  -OR-

- If you want to create delimited e-mail output, choose E-mail with Delimited File Attachment as the Output Format.

Note: If you choose either E-mail Primary or E-mail with Delimited File Attachment, you will also want to specify addresses in the Output E-mail parameter. For details, see the section "Setting the Output E-mail Address for Non-notice-generating Reports" in this chapter.

5.3.1.2 Setting the Delimited File Destination and Delimited File Output Directory Parameters (Notice-generating Reports Only)

Most notice-generating report templates have default settings for the Delimited File Destination parameter and Delimited File Output Directory parameter, but those parameters will appear on the Configuration screen only when the delimited_file_output_directory setting in **constants.cfg** is assigned a value during the installation of InfoStation. The InfoStation installer **infostation_install.pl** script prompts you for this value.

The **Delimited File Destination** parameter specifies the destination for report output that is in the format of a delimited file. The parameter has no effect unless "Delimited File" is selected for the Output Format parameter.

To set the Delimited File Destination parameter and choose a destination for the delimited file,

- If you want InfoStation to output the delimited file to a directory defined in the Delimited File Output Directory parameter, choose Delimited File Output Directory.

  -OR-

- If you want InfoStation to send the delimited file as an e-mail attachment, choose Email Attachment.

The **Delimited File Output Directory** parameter defines the path to a directory where InfoStation will save the report's delimited output file. If you want the delimited output file to be e-mailed instead, clear any value that exists in the parameter.

To specify the output directory for the delimited file,

- In the Delimited File Output Directory text box, type the directory path for the delimited output file.

Note: Validation of the Delimited File Output Directory parameter requires that its value be a directory that is either present or a descendant of a directory that is present in the download_file_path setting in **constants.cfg**.

5.3.1.3 Setting the Output E-mail Parameter

The Output E-mail parameter lets you specify where you want to send e-mail output. You can send output to one or more e-mail addresses, separating each with a comma. The Output E-mail text box accepts up to 240 characters.

Note: InfoStation uses the Output E-mail parameter in conjunction with the Output Format parameter. For details on the Output Format parameter, see the previous section "Setting the Output Format Parameter" in this chapter.

5.3.1.3.1 Setting the Output E-mail Parameter for Notice-generating Reports

To set the Output E-mail parameter for notice-generating reports,

- For HTML output, you do NOT need to specify an Output E-mail address. If you specify an Output E-mail address for HTML output, the address is ignored.

  -OR-

- For Electronic Delivery output . . .
  - If you want to send electronic notices to patrons, leave the Output E-mail text box blank. The report sends notices to each patron according to each patron's preferred communication method.
  - If you want to send e-mail output to one or more particular e-mail addresses, type those addresses in the Output E-mail text box, separating each with a comma. All e-mail output will be sent to each address.

  -OR-

- For E-mail with Delimited File Attachment, type one or more e-mail addresses in the Output E-mail text box, separating each with a comma. The delimited file will be sent to each address you specify.

5.3.1.3.2 Setting the Output E-mail Parameter for Non-notice-generating Reports

To set the Output E-mail parameter for non-notice-generating reports,

- For HTML output, you do NOT need to specify an Output E-mail address.

  -OR-

- For E-mail output, type one or more addresses in the Output E-mail text box, separating each with a comma. The e-mail output will be sent to each address you specify.

  -OR-

- For E-mail with Delimited File Attachment, type one or more addresses in the Output E-mail text box, separating each with a comma. The delimited file will be sent to each address you specify.

5.3.1.4 Setting the E-mail Reply To Address Parameter

The E-mail Reply To Address parameter lets you specify an e-mail reply-to address. If the report generates e-mail output, this will be the address that appears in the Reply To field of the e-mail and to which a reply to the e-mail will be sent.

Hint: If you have set up a different report configuration for each library location, you can assign a unique reply-to address for each configuration. In this way, you can have staff at each location responsible for answering questions about notices generated for that location.

Note: This field is automatically populated with the default address that is defined in the **constants.cfg** file. You may change it in the file to any valid e-mail address.

To specify an E-mail Reply To Address,

- In the E-mail Reply To Address text box, type a valid e-mail address.

5.3.1.5 Setting the E-mail Reply To Name Parameter

The E-mail Reply To Name parameter lets you specify an e-mail reply-to name. If the report generates e-mail output, this will be the name that appears in the Reply To field of the e-mail along with the reply-to address and to which a reply will be sent.

Note: This field is automatically populated with the default name that is defined in the **constants.cfg** file. You may change it in the file to a name associated with the corresponding E-mail Reply to Address.

To specify an E-mail Reply To Name,

- In the E-mail Reply To Name text box, type the desired name.

5.3.1.6 Setting the E-mail From Address Parameter

The E-mail From Address parameter lets you specify the e-mail address from which the e-mail is sent. If the report generates e-mail output, this will be the e-mail address that is associated with the E-mail From Name that appears in the From field of the e-mail.

Hint: If you have set up a different report configuration for each library location, you can assign a unique "from address" for each configuration.

Note: This field is automatically populated with the default address that is defined in the **constants.cfg** file. You may change it in the file to any valid e-mail address.

To specify an E-mail From Address,

- In the E-mail From Address text box, type a valid e-mail address.

5.3.1.7 Setting the E-mail From Name Parameter

The E-mail From Name parameter lets you specify a name from which the e-mail is sent. If the report generates e-mail output, this will be the name that appears in the From field on the e-mail.

Hint: If you have set up a different report configuration for each library location, you can assign a unique “from name” for each configuration.

Note: This field is automatically populated with the default name that is defined in the **constants.cfg** file. You may change it in the file to a name associated with the corresponding E-mail From Address.

To specify an E-mail From Name,

- In the E-mail From Name text box, type the desired name.

5.3.1.8 Setting the E-mail Subject Parameter

The E-mail Subject parameter lets you specify a subject for the e-mail. If the report generates e-mail output, this will appear in the Subject field of the e-mail. If the E-mail Subject field is left blank, InfoStation will provide a default subject line in the same way it did before the E-mail Subject parameter was implemented.

Hint: If you have set up a different report configuration for each library location, you can assign a unique subject for each configuration. For circulation notices, you can have a different subject line per notice type.

To specify an E-mail Subject,

- In the E-mail Subject text box, type the desired text for the subject of the e-mail.

5.3.1.9 Setting the Configuration Name Parameter

The Configuration Name parameter lets you specify a title for a given report configuration. When you name a report configuration, the name should be specific enough to help you distinguish it from other configurations on the Reports List screen.

Remember that for each configuration, the Reports List screen automatically displays the following information:

- Report title (i.e., Overdues, Patron List, Titles on Order, etc.)
- Database
- Configuration author
- Creation date

You may want to use the configuration name to include information such as the Output Format, the e-mail recipient, parameter settings, or any other information that does not appear by default on the Reports List screen.

Note: InfoStation lets you save more than one configuration with the same Configuration Name. To avoid confusion, make sure that each configuration has a *unique* name.

To specify a Configuration Name for a report configuration,

- In the Configuration Name text box, type a unique, descriptive title for your report configuration.

5.3.1.10 Setting the Configuration Author Parameter

The Configuration Author parameter lets you identify each report configuration as belonging to a particular person or entity. The configuration author appears on the Reports List screen to help you identify each report configuration.

To specify the Configuration Author for a report configuration,

- In the Configuration Author text box, type the name of the person or entity responsible for creating or maintaining the report configuration.

5.3.2 Configuring Report-specific Parameters

Report-specific Parameters appear below the General Parameters on the Configuration screen. In Figure 5-4, we show the Report-specific Parameters for the Canceled Serials report.

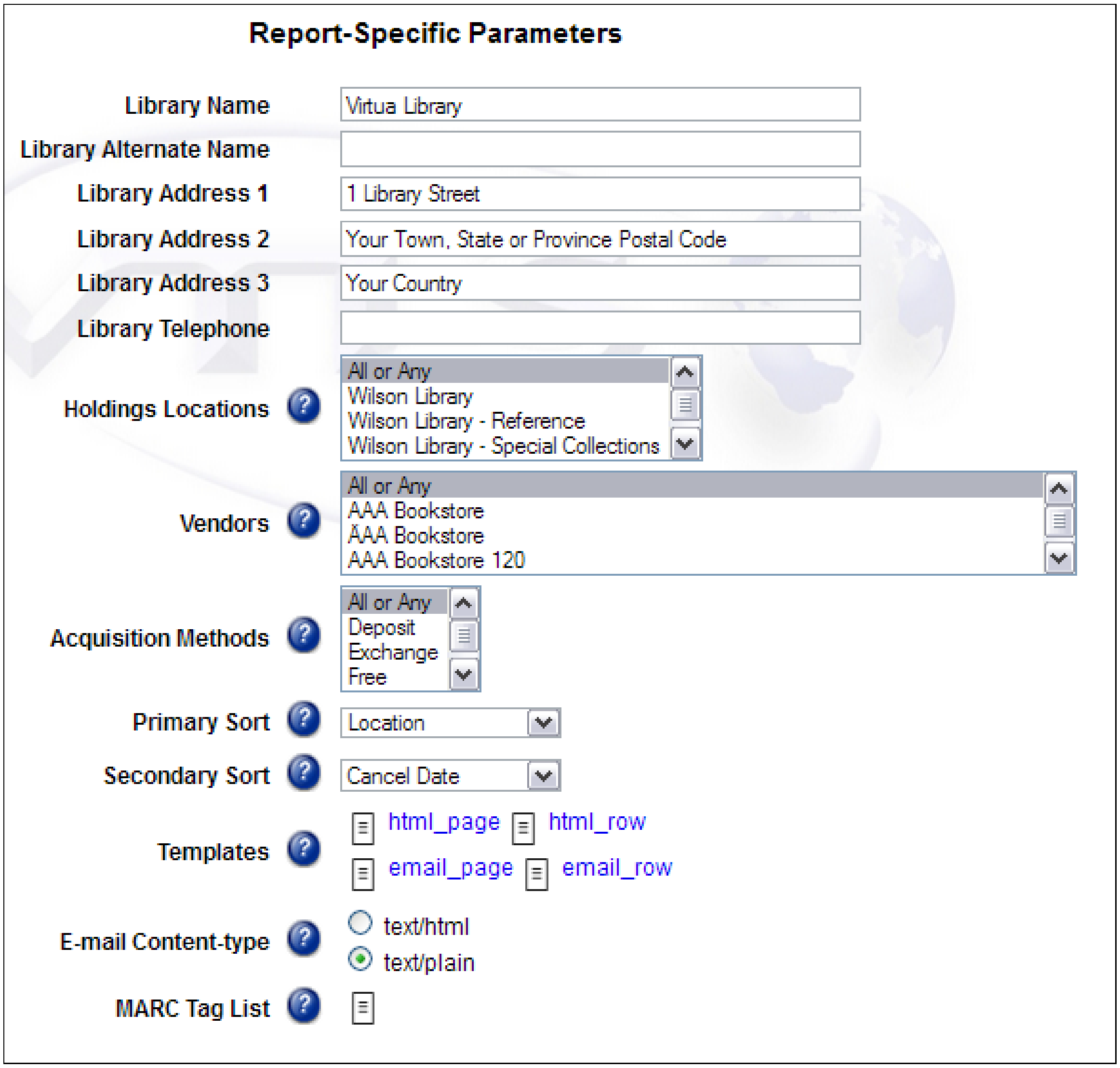


Figure 5-4. Report-specific Parameters for the Canceled Serials Report

Report-specific parameters are different for each report. For descriptions of the available Report-specific Parameters . . .

- See the *InfoStation Reference Guide*.
  -OR-
- Click the help button that appears next to the parameter name on the Configuration window.

5.3.2.1 Customizing Template Files

The Templates links, which appear on most report Configuration screens, are an aspect of the Report-specific Parameters that warrants special mention here. The Templates parameter consists of links to various templates used to format the output of the report. You can customize the templates to suit your library's needs directly from the Configuration screen and save the edited files for use with the current report configuration. For details about customizing the output templates, see the section "Customizing Report Output" in this guide.

5.3.2.2 Customizing a MARC Tag List Template

The MARC Tag List link, which appears on a number of report Configuration screens, is another aspect of the Report-specific Parameters that warrants special mention here. The MARC Tag List parameter consists of a link to a template containing MARC bibliographic tags for "extra" (i.e., non-required) data elements to be retrieved by the report. You can customize the MARC Tag List to suit your library's needs directly from the Configuration screen and save the edited template for use with the current report configuration. For details about customizing the MARC Tag List, see the section "Customizing MARC Tag Lists" in this guide.

5.3.3 Configuring Field Labels

Field labels appear at the bottom of the Configuration screen and let you specify how you want each data element to be labeled in your output. In Figure 5-5, we show the field labels for the Canceled Serials report.

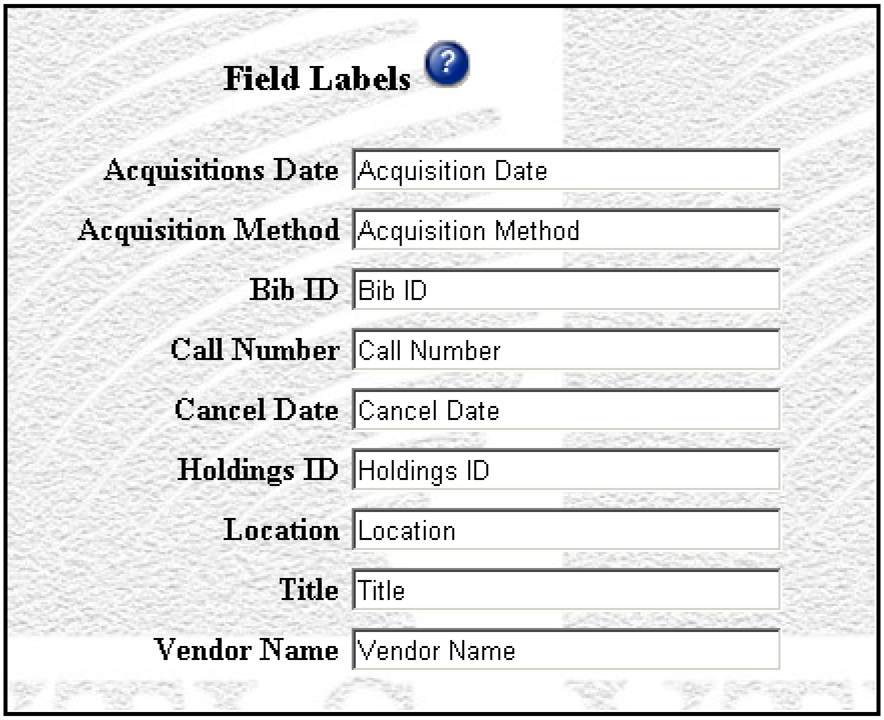


Figure 5-5. Field Labels

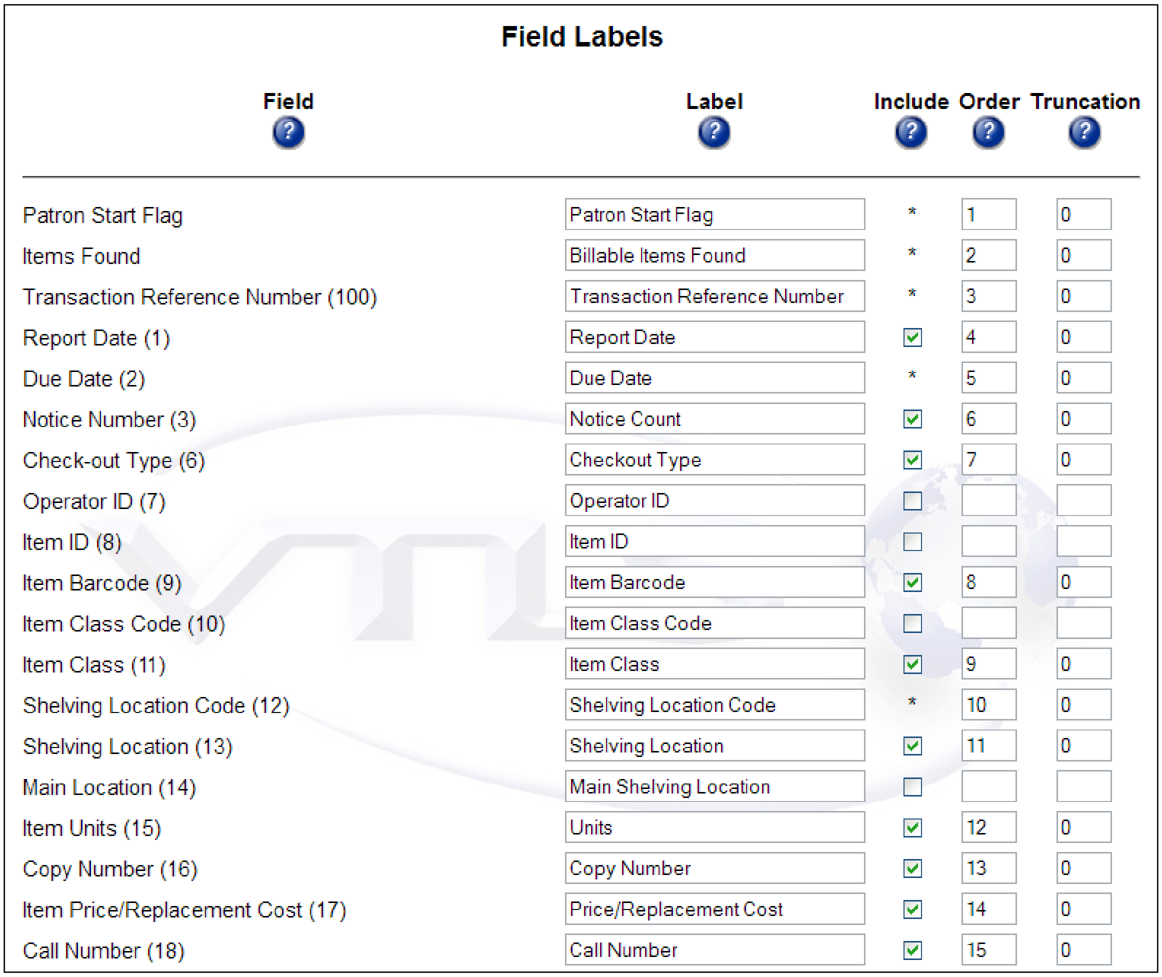
Each report returns a particular set of data elements by default. Because each report returns a different set of information, field labels are different for each report. You can edit field labels to label the output in a way that is appropriate for your library.

For information on how field labels affect the output, see the sections "Working with Report Output" and "Understanding Terms for Data Elements" in this user's guide.

Field labels are somewhat different for notice-generating and non-notice-generating reports. Below we provide guidelines for configuring field labels for each type of report.

5.3.3.1 Configuring Field Labels for Notice-generating Reports

Each notice-generating report that uses **CircReport.exe** to generate results lets you configure about 60 different field labels. In Figure 5-6, we show a portion of the field labels for the Overdues report.



Field Labels

Field	Label	Include	Order	Truncation
Patron Start Flag	Patron Start Flag	*	1	0
Items Found	Billable Items Found	*	2	0
Transaction Reference Number (100)	Transaction Reference Number	*	3	0
Report Date (1)	Report Date	☑	4	0
Due Date (2)	Due Date	*	5	0
Notice Number (3)	Notice Count	☑	6	0
Check-out Type (6)	Checkout Type	☑	7	0
Operator ID (7)	Operator ID	☐		
Item ID (8)	Item ID	☐		
Item Barcode (9)	Item Barcode	☑	8	0
Item Class Code (10)	Item Class Code	☐		
Item Class (11)	Item Class	☑	9	0
Shelving Location Code (12)	Shelving Location Code	*	10	0
Shelving Location (13)	Shelving Location	☑	11	0
Main Location (14)	Main Shelving Location	☐		
Item Units (15)	Units	☑	12	0
Copy Number (16)	Copy Number	☑	13	0
Item Price/Replacement Cost (17)	Price/Replacement Cost	☑	14	0
Call Number (18)	Call Number	☑	15	0

Figure 5-6. Notice-generating Field Labels (Overdues Report)

Note: The following guidelines apply to ALL notice-generating reports *except* Patron Account Statement. For details on configuring field labels for the Patron Account Statement report, see the section "Configuring Field Labels for Non-notice-generating Reports" in this chapter.

For notice-generating reports, the Field Labels area is divided into five columns, which we describe below.

5.3.3.1.1 Field Column

The Field column lists the data elements that can be returned by the report. On the Configuration screen, you can determine various formatting aspects of each data element. For a complete list of the data elements that notice-generating reports can be configured to retrieve, see the *InfoStation/Circulation Reports Reference Guide*.

5.3.3.1.2 Label Column

For each data element, the Label column contains a text box in which you can specify how you want the data elements to be labeled in the output. Each data element has a default label.

To change the default field label,

- Type a new label in the appropriate text box. For example, if you want the Barcode data element to be labeled *Item Barcode* in the output, type **`Item Barcode`** in the Barcode text box.

  When you run the report configuration, the new field label will appear in the output where appropriate.

5.3.3.1.3 Include Column

The Include column lets you specify which data elements you want the report to retrieve from the database.

Some data elements are *required*, meaning that they are *always* retrieved by the report. Required data elements are denoted by an * (asterisk) in the Include column.

Note: While some data elements are required, ALL field *labels* are optional (i.e., you can save a configuration where one or more fields in the Label column are blank). If you do not specify labels for your report configurations, however, your report output may not be labeled.

To configure the report to retrieve a non-required data element,

- Select the Include check box for that data element.

  When you run the report configuration, the report will retrieve that data element from the database.

Important:

- For a data element to be *returned* in the report output, two conditions must exist:
    - The report must be configured to *retrieve* the data element.
    - The data element's variable must exist in appropriate output template.
- For ALL included data elements, you must specify an Order, regardless of Output Format. For details, see the section "Order Column" in this chapter.

To configure a report NOT to retrieve a non-required data element,

- De-select the Include check box for that data element.

  When you run the report configuration, the report will NOT retrieve that data element.

Important: If you configure a report NOT to include a non-required data element, you may also need to remove the corresponding field label variable from the appropriate output template. For details, see the chapter "Customizing InfoStation" in this user's guide.

5.3.3.1.4 Order Column

In the Order column, you can specify the order of data on a line of delimited output. All data elements that the report is configured to retrieve by default also have a default Order.

Note: The values you set in the Order column affects the order of data only when the Output Format is set to E-mail with Delimited File Attachment. However, regardless of Output Format, for ALL data elements for which the Include check box is selected, you must specify an Order. Otherwise, the configuration will generate an error when you run it. Order values must be consecutive; for instance, if you have a field that has an Order value of 25, you must also have fields with the Order values 1 through 24.

To specify the Order for a data element,

- In the Order column, specify the desired order in the appropriate text box. For example, if you want the Author data element to appear as the 25th data element in delimited output, type `25` in the Author text box.

  When you run a configuration that produces delimited output, the Author data element will appear as the 25th data element on a line of output.

5.3.3.1.5 Truncation Column

In the Truncation column, you can specify whether you want values in the output to be limited to a certain number of characters. All data elements that are included by default have a default truncation of zero.

To specify the Truncation for a data element,

- If you want a data element to be truncated in the output, type the desired character limit in the appropriate text box. For example, if you want the output for Copy Number to be limited to three characters, in the Truncation text box for Copy Number, type **3**.
  -OR-
- If you do NOT want a data element to be truncated, in the Truncation text box for that data element, type **0** (zero).

5.3.3.2 Configuring Field Labels for Non-notice-generating Reports

Non-notice-generating reports generally offer fewer data element options than notice-generating reports. For example, in Figure 5-7, we show the field labels for the Canceled Serials report.

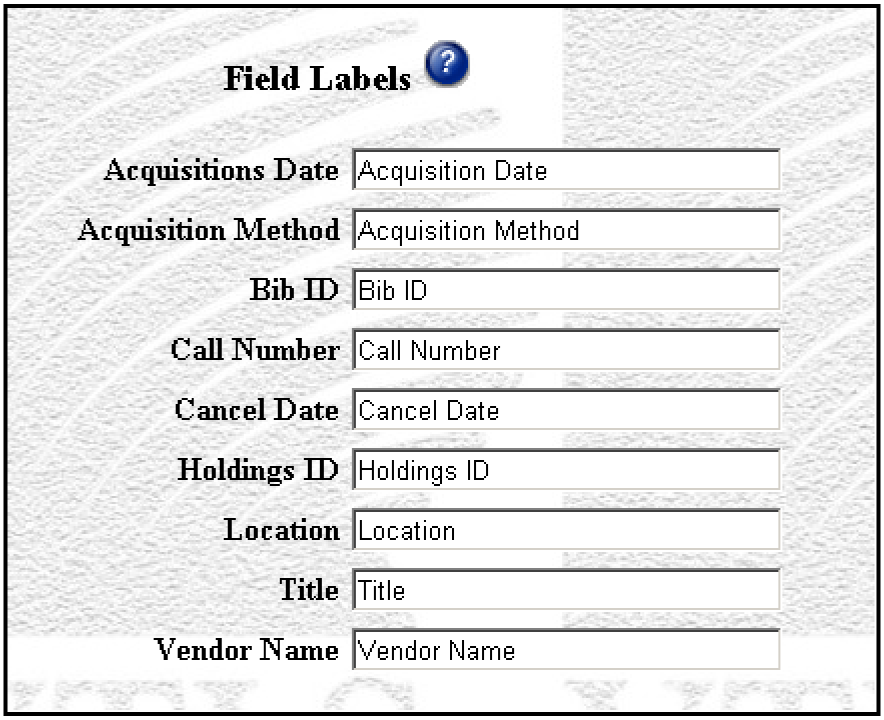


Figure 5-7. Non-notice-generating Field Labels (Canceled Serials Report)

Note: You can use the following guidelines to configure field labels for ALL non-notice-generating reports AND for the Patron Account Statement report.

For non-notice-generating reports, the Field Labels area is divided into two columns. The column on the left lists the data elements that can be returned by the report.

The column on the right contains text boxes that you can use to specify a label for the corresponding data element. These labels will appear in the output to identify the appropriate data elements. All data elements have default labels.

To change the default field label,

- Type a new label in the appropriate text box. For example, if you want the Author data element to be labeled *Author Name* in the output, type `Author Name` in the Author text box.

  When you run the report configuration, the new field label will appear in the output where appropriate.

Non-notice-generating reports always retrieve ALL data elements that appear in the Field Labels area on the Configuration screen. You can control which data elements are *returned* in the output only by editing the output templates. For details, see the chapter "Customizing InfoStation" in this user's guide.

Note: While all data elements list in the Field Labels area are required, meaning that they are always retrieved by a given report, all field *labels* are optional (i.e., you can save a configuration where one or more label fields are blank). If you do not specify labels for your report configurations, however, your report output may not be labeled.

For some non-notice-generating reports, you can add data elements to the output by editing the MARC tag list. For details, see the section "Customizing MARC Tag Lists" in this user's guide.

For a list and description of data elements available for a given non-notice-generating report, see the appropriate InfoStation reference guide.

5.3.4 Saving Report Configurations

After you have configured all parameters, you are ready to save your report configuration.

To save your configuration,

- On the Configuration screen, click the Save button.

  InfoStation performs any necessary validation checks.

  - If the configuration does NOT pass validation, InfoStation will generate an error message, and the configuration will not be saved. For details, see the following section "About Validation Checks" in this chapter.

  - If the configuration passes validation, the Reports List screen appears, displaying the new configuration in the list of reports. For example, Figure 5-8 shows a Canceled Serials report configuration added to the list of Serials reports.

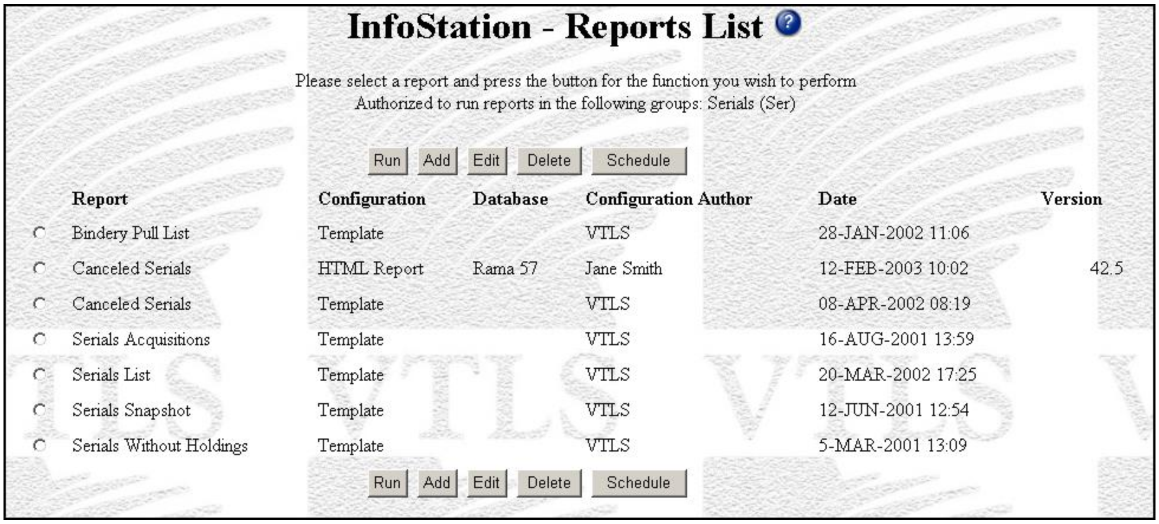


Figure 5-8. Reports List screen Displaying New Report Configuration

After you save your report configuration, it appears each time you access the Reports List for the appropriate Report Group until you delete the configuration. On the Reports List screen, reports are sorted . . .

- **First** - Alphabetically by Report name.
- **Second** - Alphabetically by Configuration name.
- **Third** - Alphabetically by Configuration Author.
- **Fourth** - Chronologically by creation date.

5.3.5 About Validation Checks

When you save a report configuration, InfoStation checks your configuration to verify that it meets all the necessary requirements. If the configuration does NOT pass the validation checks, InfoStation generates an error message, and the configuration is not saved.

For your configuration to pass validation, you must set ALL required parameters. For a list of parameters that are required for each report, see InfoStation reference guides.

For example, in the Circulation by Call Number Range report, you must set the Call Number Ranges parameter. If you do not specify at least one call number range, when you save the configuration, an error message appears (*Figure 5-9*).

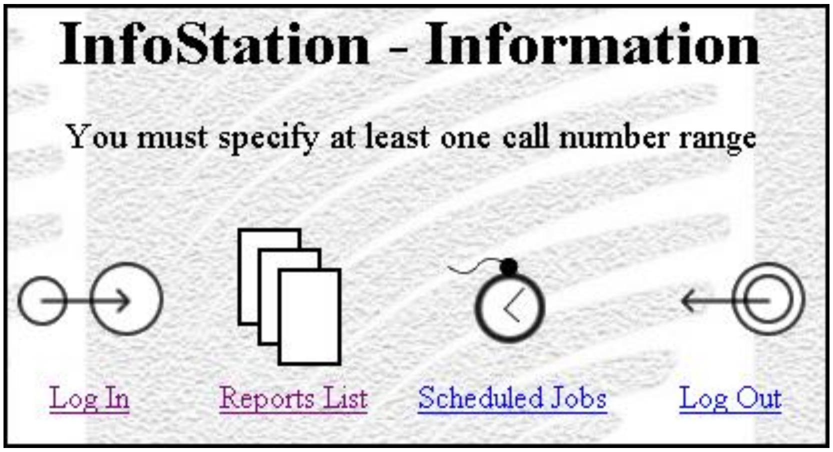


Figure 5-9. Error Message Generated When Saving a Report Configuration

The message indicates the nature of the error, allowing you to go back and fix the configuration.

To correct the error,

1. Click your Internet browser's Back button (or equivalent).

   The Configuration screen appears, displaying the information for the configuration.

2. Edit the parameters as needed.

3. Click the Save button.

   If the report passes the validation checks, your changes are saved, and the report appears in the list of reports on the Reports List screen.

Note: For most reports, validation checks occur when you save a report configuration. In some cases, however, validation checks do not occur until you run a configuration. For details on running reports, see the chapter "Running Report Configurations" in this user's guide.

5.4 Managing Report Configurations

On the Reports List screen, you can perform a variety of tasks to manage your existing report configurations. In the following sections, we discuss the tasks you can perform from the Reports List screen. In the sections below, we provide instructions for performing the following tasks:

- Editing report configurations.
- Creating new configurations from existing configurations.
- Deleting report configurations.

5.4.1 Editing Report Configurations

To edit an existing report configuration,

1. On the Reports List screen, select the radio button for the report configuration you want to edit.
2. Click the Edit button.

   The Configuration screen appears, displaying the information for the selected report.

3. Make the necessary changes.
4. Click the Save button.

   The changes are saved, and the Reports List screen reappears.

Note: The time stamp is updated to indicate when you edited the configuration.

5.4.2 Creating New Configurations from Existing Configurations

Note: Although it is possible to create a new report configuration from an existing configuration, as described below, Innovative recommends that new report configurations be created from the single, base, original report template provided with InfoStation.

Instead of creating a report configuration from a report template, you may want to create a new configuration from an existing configuration. For example, you may want to create two report configurations in which all parameters are the same, except for the Output Format. In such a case, you can use an existing configuration as the template for a second configuration.

Note: Creating a new report configuration in this manner does NOT overwrite the existing configuration. Rather, it results in two report configurations, one with the existing parameter settings and one with the new parameter settings.

To create a new report configuration from an existing report configuration,

1. On the Reports List screen, select the radio button for an existing report configuration.
2. Click the Add button.

   The Configuration screen appears, displaying the information for the report configuration you selected on the Reports List screen.

3. Make the necessary changes.

   Hint: Make sure you change the title to reflect the specific parameters of the *new* report configuration.

4. Click the Save button.

   The Reports List screen appears, displaying the new report configuration in the list of reports.

5.4.3 Deleting Report Configurations

Important: Before you delete a report configuration, be sure to delete ALL the configuration's scheduled jobs. If you do not delete the scheduled jobs *first*, you can delete them only by editing the CRONTAB file directly. For details, see the chapter "Scheduling Configurations to Run Automatically" in this user's guide.

To delete a report configuration,

1. On the Reports List screen, select the radio button for the report configuration you want to delete.
2. Click the Delete button.

   The Reports List screen refreshes. The report you deleted no longer appears in the list of reports.

Note: During installation, the InfoStation installation script will prompt you to determine whether InfoStation will display a confirmation message before a report configuration is deleted. The default setting is to NOT display a confirmation message before deleting a report configuration. To change this setting after installation, you can either run the installation script again, or modify your **constants.cfg** file so that the confirm_report_cfg_deletion setting has a value of 1.

6. Running Report Configurations

In this chapter, we provide details on running your report configurations. This chapter includes guidelines for running both notice-generating and non-notice-generating reports.

Note: You cannot run reports until you have created report configurations. For details on creating configurations, see the chapter "Working with Report Configurations" in this user's guide.

In addition to running reports manually, as described in this chapter, you can schedule report configuration to be run automatically. For details, see the chapter "Scheduling Configurations to Run Automatically" in this user's guide.

This chapter covers the following topics:

⇒ Running Notice-generating Reports
⇒ Running Non-notice-generating Reports
⇒ A Note About Errors
⇒ Troubleshooting Timeouts

6.1 Running Notice-generating Reports

Note: The steps below apply to all notice-generating reports *except* Patron Account Statement. When you run the Patron Account Statement report, it behaves differently than other notice-generating reports because it does not use **CircReport.exe**. For details on running the Patron Account Statement report, see the section "Running Non-notice-generating Reports" in this chapter.

To run a notice-generating report configuration,

1. On the Reports List screen, select the radio button for the configuration you want to run.
2. Click the Run button.

   The report runs and generates results in the appropriate Output Format. For details, see the section "When the Report is Finished Running" in this chapter.

6.2 Running Non-notice-generating Reports

Note: The steps below apply to ALL non-notice-generating reports AND the Patron Account Statement report, which behaves differently than other notice-generating reports because it does not use **CircReport.exe**.

To run a non-notice-generating report configuration,

1. On the Reports List screen, select the radio button for the configuration you want to run.
2. Click the Run button.

   The Report Loading screen appears (*Figure 6-1*).

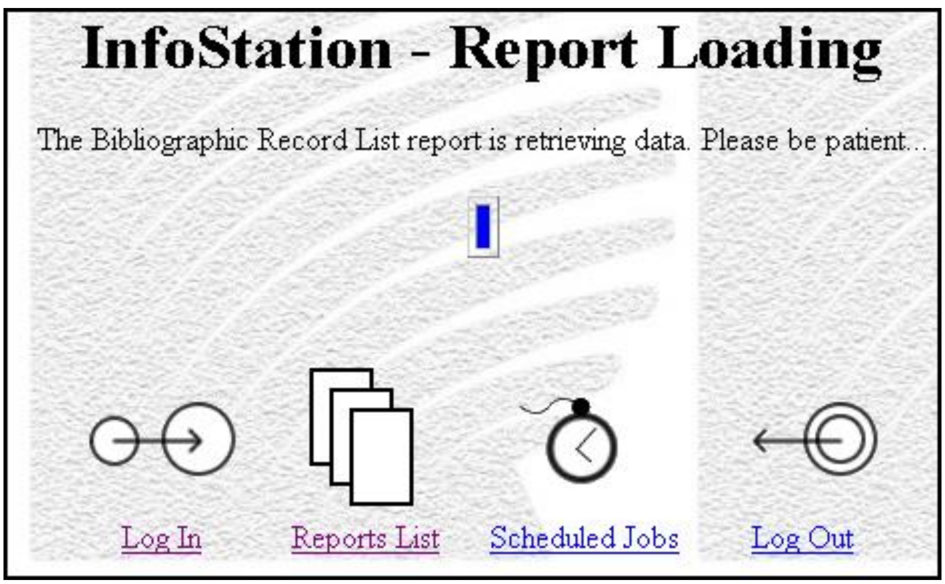


Figure 6-1. Loading Screen

The Report Loading screen is an intermediate screen that prevents the report from timing out. Some reports gather large amounts of information from the database, and they can take a long time to run. For most browsers, if an operation does not return new data to the screen within a certain amount of time, the operation will time out.

The Report Loading screen refreshes every eight seconds. By returning new information to the screen every eight seconds, the Report Loading screen prevents your browser from timing out before the report is finished running.

Note: If you stop your browser while the report is running, a data file is saved to your InfoStation temp directory. This file will be deleted automatically the next time you log in to InfoStation.

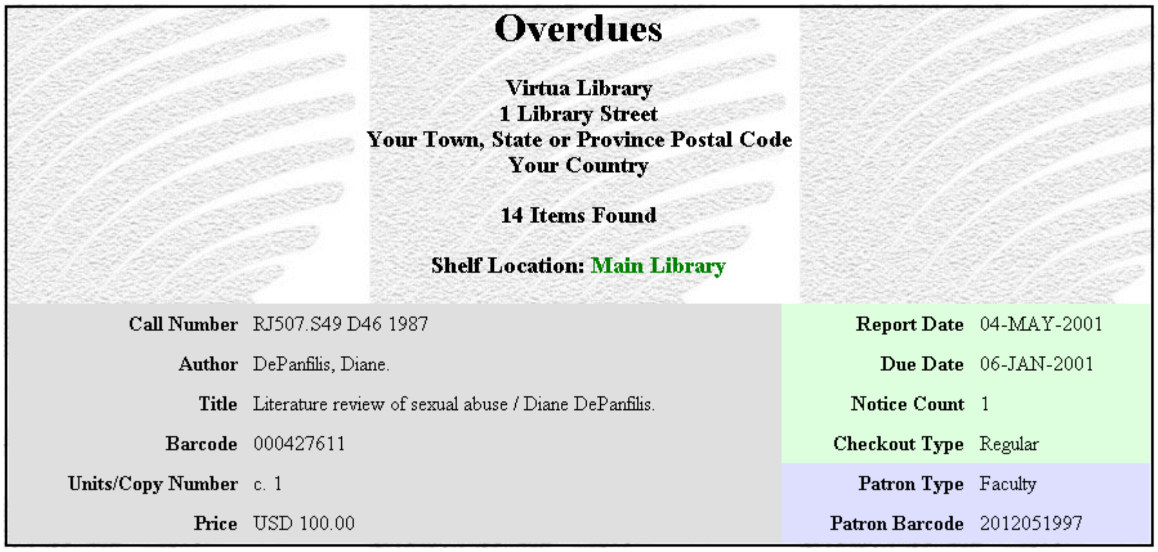
The Report Loading screen lets you monitor the progress of the report. In Figure 6-1, a box appears below the loading message. Each time the screen refreshes, InfoStation adds another box to the screen. When the report is finished running, InfoStation generates results in the appropriate Output Format. For details, see the section "When the Report is Finished Running" in this chapter.

Note: The Report Loading screen may not eliminate all timeouts. For details, see the section "Troubleshooting Timeouts" in this user's guide.

6.3 When the Report is Finished Running . . .

After a report finishes running . . .

- If the Output Format is HTML, your Internet browser displays the output on your screen. Figure 6-2 shows an example of the HTML output from an Overdues report configuration.



Overdues

Virtua Library
1 Library Street
Your Town, State or Province Postal Code
Your Country

14 Items Found

Shelf Location: Main Library

Call Number	RJ507.S49 D46 1987	**Report Date**	04-MAY-2001
Author	DePanfilis, Diane.	**Due Date**	06-JAN-2001
Title	Literature review of sexual abuse / Diane DePanfilis.	**Notice Count**	1
Barcode	000427611	**Checkout Type**	Regular
Units/Copy Number	c. 1	**Patron Type**	Faculty
Price	USD 100.00	**Patron Barcode**	2012051997

Figure 6-2. HTML Output for Overdues Report

Note: The appearance and content of the output will vary, depending on the type of report you run, the parameters set in the report configuration, and the structure of the output templates. For details, see the chapter "Working with Report Output" in this user's guide.

- If the Output Format is E-mail or E-mail with Delimited File Attachment, a confirmation message appears on the Information screen (*Figure 6-3*), indicating that the report ran successfully.

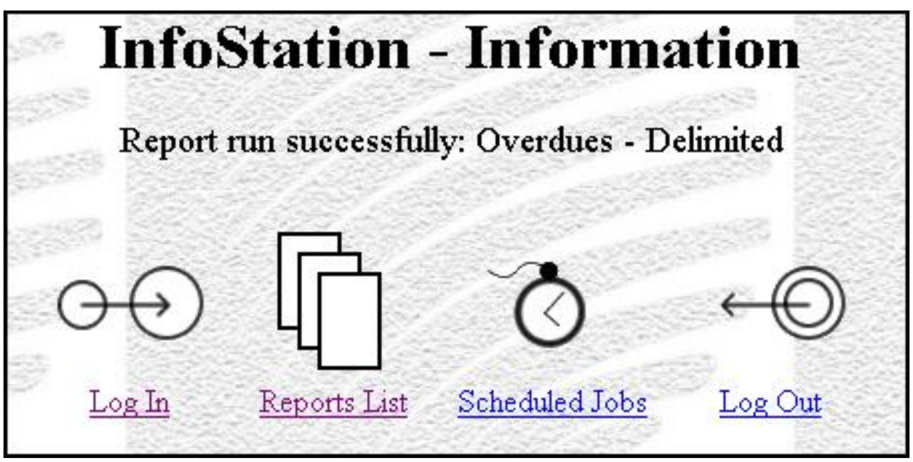


Figure 6-3. E-mail Output Confirmation for Notice-generating Report

Note: The confirmation message for E-mail and E-mail with Delimited File Attachment Output Formats is the same. If you want to distinguish between the two in the confirmation message, you can indicate the Output Format in the configuration title. For example, in Figure 6-3, the configuration title is "E-mail Report."

- If the configuration does not find any results, Figure 6-4 appears.

Figure 6-4. No Records Found Message

6.4 A Note about Errors

InfoStation performs most validation checks when you save a report configuration. Some checks, however, are performed when you run report configurations. When you run a configuration, if the report generates an error, your browser displays an error message (*Figure 6-5*).

Figure 6-5. Error Message Generated Upon Running

Note: For non-notice-generating reports, error messages interrupt the Report Loading screen.

The error message indicates the nature of the error. You can fix the configuration and then try running the report again.

6.5 Troubleshooting Timeouts

For non-notice-generating reports, the Report Loading screen will refresh every eight seconds for up to 450 times before a report times out. In this way, by default, a non-notice-generating report can run for up to one hour (8 x 450 = 3600 seconds or 60 minutes) before it times out.

Note: In general, notice-generating reports will not time out as they use **CircReport.exe**, which gathers data quickly and efficiently. Therefore, in this section, we limit our discussion to non-notice-generating reports.

In some cases, your configuration may time out before a report returns results. The length of time a configuration takes to run depends upon on a variety of factors, some of which include the following:

- Size of your database.
- Number of people using the database at the time you run the report.
- Efficiency of the report itself.
- Amount of work being handled by your server at the time you run the report.
- Parameters set in the report configuration.

When a non-notice-generating report times out, InfoStation generates the following message: “The data file associated with this page is no longer available. Please go back to the Reports List to run this report again.”

If a report configuration times out, you can . . .

- Schedule the configuration to run automatically. For details on scheduling reports to run automatically, see the chapter “Scheduling Configurations to Run Automatically” in this user’s guide.

  -OR-

- Edit the report configuration to be more specific. Usually, very specific report configurations take less time to run than broad configurations. You can narrow your configuration by using Report-specific Parameters. For details on Report-specific Parameters, see the InfoStation reference guides.

  -OR-

- Edit InfoStation’s timeout setting, which determines how many times the Report Loading screen refreshes before your browser times out. Note that the timeout setting is a global setting, which applies to ALL report configurations.

  The timeout setting consists of two settings:
  - **repeat_interval**, which is the number of seconds between page updates. The default value is 10.
  - **repeat_count**, which is the number of times that InfoStation updates the “Waiting for Results” page before giving up and indicating that no results were found. The default value is 1000.

  The **repeat_interval + repeat_count** is the total time that InfoStation allots for an HTML or E-mail report to run.

To edit InfoStation's timeout setting,

1. Log in to your server as **dbadmin**.
2. In the **/usr/vtls/virtua/webrpt_XX_x/** directory, open the file **constants.cfg** in a UNIX editor.
3. Find the following lines:

   ```
   repeat_count=1000
   repeat_interval=10
   ```

   These default values specify that an HTML or E-mail report will run approximately 10000 seconds, or 2.8 hours, before it times out.

4. Change the repeat_count value as required.
5. Save the file.

   The Report Loading screen will now refresh every ten seconds for the number of times you specified.

7. Working with Report Output

Each InfoStation report can produce HTML, e-mail, and delimited output. (In addition, each notice-generating report can produce text message out.) In this chapter, we describe each of the three universal output formats and provide examples of various types of report output.

Note: In this chapter, we discuss the output that is produced by *default* output templates. If you wish, you can edit output templates to format your output. For details, see the chapter "Customizing InfoStation" in this user's guide.

This chapter covers the following topics:

7.1 Working with HTML Output

When you configure a report to produce HTML output, InfoStation returns report output to your screen. HTML output will contain different information depending on the report you are running.

There are three primary types of default HTML output:

- **Simple List** - Contains a running list that displays one row of information for each record found by the report. For example, the New Books List HTML output (*Figure 7-1*) contains a list of records that are on the new books list.

New Books List

Virtua Library
1 Library Street
Your Town, State or Province Postal Code
Your Country

Author	Title	Publication	Call Number
Art Institute of Chicago	Italian Drawings In The Art Institute Of Chicago	Chicago : University of Chicago Press, 1979.	NC255 .C46 1979
Asad, Muhammad,	The Road To Mecca	[New York] Simon and Schuster, 1954.	BP80.A8 A3
Bhutto, Benazir	Daughter Of Destiny : An Autobiography	New York : Simon and Schuster, c1989.	DS385.B44 A3 1989
Burroughs, Edgar Rice,		Chicago : A.C. McClurg & Co., 1917.	PZ3.B944
D'Cruz, Edward	India: The Quest For Nationhood.	Bombay, Lalvani Pub. House [1967]	DS436 .D29

Figure 7-1. HTML Output for New Books List Report

- **List of Repeating Tables** - Contains a list of tables, where each table contains the information associated with a single record. The number of tables in the list equals the number of records found by the report. For example, in Figure 7-2 we show two tables in the list generated by the Overdues default HTML output. Each table contains the information for a single overdue item.

Overdues

Virtua Library
1 Library Street
Your Town, State or Province Postal Code
Your Country

18 Items Found

Shelf Location: Luxembourg Library

Call Number		**Report Date**	20-FEB-2002
Author	Gallant, Abraham Naphtali.	**Due Date**	11-FEB-2002
Title	Sefer Ḥezyonot Avraham... [microform] / me-iti Avraham Naftali... le-mishpaḥat Galan□i.	**Notice Count**	1
Barcode	overdue2	**Checkout Type**	Regular
Units/Copy Number	c. 2	**Patron Type**	Academic
Price	CHF 0,00	**Patron Barcode**	00014662

Call Number	TX900 S51	**Report Date**	20-FEB-2002
Author		**Due Date**	24-JAN-2002
Title	Fables and Legends of Science from Europe.	**Notice Count**	1
Barcode	1332224444	**Checkout Type**	Regular
Units/Copy Number	c. 0	**Patron Type**	Faculty
Price	CHF 0,00	**Patron Barcode**	ludwig

Figure 7-2. Overdue HTML Output Displaying Two Items in the List

- **Tables and Statistics** - Displays one or more unique tables and statistics. For example, in Figure 7-3 we show the default HTML output from the Vendor Performance report, where all the output is formatted into a single table.

Vendor Performance

Virtua Library
1 Library Street
Your Town, State or Province Postal Code
Your Country

	Potters Books	The Book House	Books Express	Baker & Taylor	Average
Total Orders (PO)	7	6	12	58	20.8
Open Orders (Items)	18	6	26	124	43.5
Received Items	15	21	34	129	49.8
Fill Rate (%)	83.3	350.0	130.8	104.0	114.4
Total Canceled Orders	0	0	0	0	
Canceled Items	0	0	0	0	
Canceled Rate (%)	0.0	0.0	0.0	0.0	
Claimed Items	3	5	2	71	20.2
Claimed Rate (%)	16.7	83.3	7.7	57.3	46.6
Minimum Price	0,33	93,46	1,00	0,20	
Maximum Price	274,85	93,46	8,65	137,43	
Avg. Price	75,62	93,46	3,70	17,76	47,64
Avg. Delivery	0.0	0.0	0.0	0.0	0.0
Total Encumbered	78,25	0,00	1,320,00	764,26	540,75
Total Payments	0,00	0,00	1,523,08	600,08	530,75
Total Expenditure	78,25	0,00	2,843,08	1,364,34	1,071,50

Figure 7-3. Vendor Performance HTML Output

While all reports offer a default format for HTML output, the output is entirely configurable via HTML output templates.

All HTML output has the following characteristics:

- The library name and address appear by default at the top of the output.

- Provided that the output templates contain the appropriate field label variables, data elements are labeled with the field labels you specified for the report configuration. For example, in Figure 7-3, the field labels serve as labels for the rows in the table of output.

- If the report offers Sort parameters, the output is sorted according to the Sort values selected for the report configuration.

> **Note:** Generally, sort parameters are available only for reports that produce a *list* of output (either a simple list or a list of tables). For reports that produce unique statistics and/or tables, you can rearrange the order of the output by editing the output templates.

- All available information is displayed for each record. If a piece of information is missing from the record, that information will appear as a blank.

HTML output is useful for . . .

- Testing report configurations.

> **Note:** For notice-generating reports, you can use HTML output to test report configurations before generating patron notices.

- Generating pre-notice search lists.

> **Note:** For notice-generating reports, HTML output is the *only* output format that will produce a formatted list of ALL results.

- Letting patrons run pre-defined reports, which they can access via links that you set up on any Web interface.

For details on customizing HTML output, see the section "Working with HTML Templates" in this user's guide.

7.2 Working with E-mail Output

The primary difference between notice-generating and non-notice-generating reports is how they handle e-mail output. In the following sections, we provide descriptions of how each type of report produces e-mail output.

7.2.1 E-mail Output for Non-notice-generating Reports

When you select E-mail as the Output Format for a non-notice-generating report, the report compiles from the database a list or table of relevant results, which it sends to the e-mail address(es) that are specified in the report configuration.

Below we show a sample of the default e-mail output from the New Books List report.

```
Report: New Books List
Configuration: Name: E-mail Report
Configuration: Author: Jane Smith

Bibliographic  ID: 16418
Author Name: Art Institute of Chicago
Book Title: Italian Drawings In The Art Institute Of Chicago
Publishing Company: University of Chicago Press
Date: 1979.

Bibliographic  ID: 16418
Author Name: Art Institute of Chicago
Book Title: Italian Drawings In The Art Institute Of Chicago
Publishing Company: University of Chicago Press
Date: 1979.
```

In general, e-mail output contains the same information as the HTML output for a given report. Most e-mail output shares the following characteristics:

- The report sends the output as an e-mail message (not an e-mail attachment) to the address(es) specified in the report configuration.
- The type of report, the name of the configuration, and the author of the configuration appear at the top of the list.
- Provided that the appropriate variable exists in the output template, data elements are labeled with the field labels specified in the report configuration.
- If applicable, the output is sorted according to the Sort parameters set in the report configuration.
- E-mail output returns all *available* information for each record. If a piece of information is missing from a record, that information will be displayed as a blank.
- All output is entirely configurable via e-mail template files.

For details on customizing e-mail output, see the section "Working with E-mail Templates" in this user's guide.

7.2.2 E-mail Output for Notice-generating Reports

The e-mail output that is generated by notice-generating reports is somewhat different than the e-mail output returned by non-notice-generating reports. The results generated by notice-generating reports are inserted into e-mail templates that produce patron notices.

Each notice-generating report contains default e-mail template files that control the structure and content of e-mail output. You can generate output by using the default e-mail templates, or you can customize the output by editing the templates.

Note: Before you send e-mail notices to patrons, we recommend that you review the contents of each default e-mail template file. For details on working with e-mail template files, see the chapter "Customizing InfoStation" in this user's guide.

Below we show the default e-mail output from an Overdues report configuration.

Virtua Library
1 Bookworm Lane
Reading, Virginia 12345
USA

Smith
smith@email.com
09-NOV-2012

Dear Mr. Smith,

According to our records, the following 2 item(s) are overdue. Please return them as soon as possible. Fines and suspension of privileges may result if the materials are not returned in a timely manner.

Thank you very much.

Author: Fox, Annette Baker, 1912-
Title: Canada in world affairs / Annette Baker Fox.
Call Number: F1034.2 .F69 1996 c. 1
Item Class: Government Documents 000441950
Price: USD 3.59
Due Date: 01-OCT-2012
Shelf Location: Main Library

Author: Fox, John, 1947-
Title: Applied regression analysis, linear models, and related methods / John Fox.
Call Number: HA31.3 .F69 1997 c. 1
Item Class: Government Documents 000448078
Price: USD 3.59
Due Date: 01-OCT-2012
Shelf Location: Main Library

If there is a mistake, please direct any inquiries to the Main Library Circulation Desk. Thank you very much. We appreciate your patronage.

- The list of results inserted into a letter, which is addressed to a particular patron.
- You can format the notice by editing the e-mail template files. For details on customizing e-mail output, see the section "Working with E-mail Templates" in this user's guide.
- For each report, the e-mail template is slightly different. Therefore, the information included in the Circulation notice is appropriate for each individual report configuration.

- You can edit the e-mail template to include or exclude specific data returned by the report. For example, if your library prefers not to include the price of the item in the output, you can remove Price from the output template. For details on customizing e-mail output, see the section "Working with E-mail Templates" in this user's guide.
- You can use notice-generating reports to send output to a single e-mail address or to all applicable patrons. For details, see the section "Choosing the Output Format for Notice-generating Reports" in this user's guide.
- The Sort parameters you select for the report configuration can have a significant effect on the output that the patron receives. For details, see InfoStation reference guides.
- In the output, the data elements are labeled with the field labels you specified in the report configuration.
- E-mail output returns all *available* information for each record. If a piece of information is missing from a record, that piece of information will be displayed as a blank.
- Sometimes it may be helpful to run HTML configurations to test report output before e-mailing output to patrons.

Note: Via the Output E-mail parameter in the report configuration, you can determine who receives the e-mail output.

- If you specify one or more e-mail addresses, ALL e-mail notices are sent to *each* address.
- If you do NOT specify a particular e-mail address, the e-mail notices are sent to the appropriate patrons using their primary e-mail addresses.

7.3 Working with Delimited Output

When you select E-mail with Delimited File Attachment as the Output Format, each e-mail recipient that you specify receives the report output as an e-mail attachment, which is . . .

- Formatted in the UTF-8 character set in the Virtua database.
  -AND-
- Encoded in the MIME Base64 encoding scheme.

You may need to configure your mail program to handle this type of output.

Note: You can check the configuration of your mail program by viewing your message options to verify that Base64 or MIME encoding is listed. If it is not, consult the documentation for your mail program for configuration instructions.

Except in notice-generating reports, where you can specify the order of the data elements in a line of delimited output, delimited e-mail output is not configurable. It returns ALL data elements retrieved by the report. By default, the name of the delimited file is [**Report Name]_[Configuration Name].utx**, where an underscore (_) replaces any white space characters.

Important: While delimited output contains all the raw data elements retrieved by a report, it never contains totals or calculations. Delimited output is meant to be loaded into another application, where counts and calculations can be performed, if desired.

In the output, data on a line are separated by a character, or delimiter. For non-notice-generating reports, delimited output is automatically tab-delimited (i.e., data on a line are separated by a tab character). For notice-generating reports, however, you can specify a delimiter of your choice. For details on choosing a delimiter, see the *InfoStation/Circulation Reports Reference Guide*.

Note: Generally, in a list of delimited output, field labels (rather than data elements) are returned as the first record. This may affect the format of your data when you load the output into a spreadsheet or perform a mail merge.

You can use delimited output to prepare notices to be sent to patrons at their paper addresses. Using the delimited e-mail attachment, you can perform a mail merge with your word-processing or spreadsheet program. For details about performing mail merges, consult your word-processing or spreadsheet documentation.

8. Scheduling Configurations to Run Automatically

InfoStation lets you schedule report configurations to run automatically. After you create scheduled jobs, InfoStation runs the jobs according to the schedule that you define. For each scheduled job, InfoStation maintains a log, which you can view to verify that scheduled jobs have run successfully. In this chapter, we discuss the procedure for scheduling reports and viewing the job log.

Important: If your institution needs to schedule multiple **CircReport.exe**-based reports to run in Update mode, we recommend that you stagger the schedules at wide intervals. Scheduling multiple **CircReport.exe**-based reports to run simultaneously or too close together may cause some reports to generate errors and not complete their processing.

This chapter covers the following topics:

8.1 Creating Scheduled Jobs

InfoStation schedules reports via cron jobs, which are programs automatically scheduled for execution using the UNIX cron utility. For the scheduled job to run, all the scheduling conditions must be met.

You can control each user's permission to schedule reports via the Virtua Profiler. For details see the *Virtua Profiler/Global Settings User's Guide*.

Important: Scheduled jobs work properly *only* if they produce e-mail or delimited e-mail output. Do NOT schedule report configurations that produce HTML output, as InfoStation will generate errors when it tries to run the scheduled job.

To schedule a report configuration to run automatically,

- Log in to InfoStation.
- On the Reports List screen, select the radio button for the configuration you want to schedule.

- Click the Schedule button.

  The Add Job to Schedule screen appears (*Figure 8-1*).

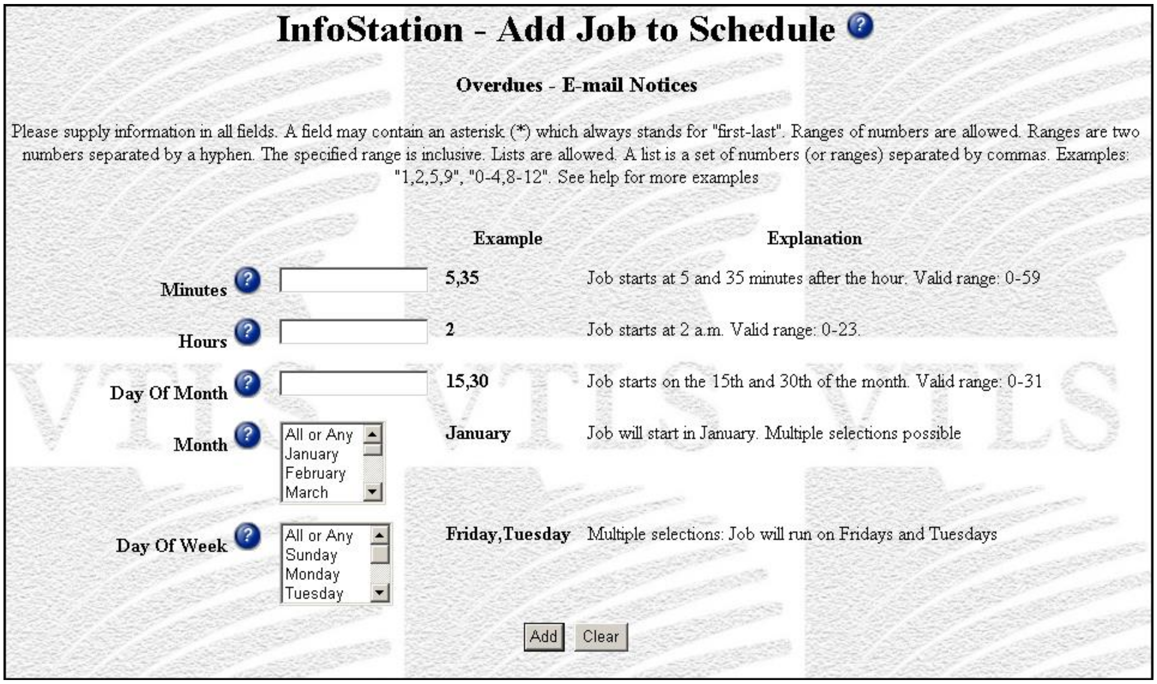


Figure 8-1. Add Job to Schedule screen

- In the Minutes text box, specify the minute(s) on which the report will run.

Note: The report will run *on* the minute(s) you specify in the Minutes field, *during* the hour(s) you specify in the Hours field. In the following examples, *hour* refers to the hour(s) you enter in the Hours field.

  - If you want the report to run once during a particular hour, type one number in the Minutes text box. For example, if you want the report to run at 30 minutes past the hour, type: **`30`**.
  - If you want the report to run more than once during a particular hour, in the Minutes text box, type more than one number, separating each with a comma. For example, if you want the report to run twice, once at 10 minutes past the hour and again at 40 minutes past the hour, type: **`10,40`**.

- If you want the report to run once every minute for a range of minutes, type that range of values in the Minutes text box. For example, if you want the report to run once every minute between 10 and 20 minutes past the hour, type: **`10-20`**.
- If you want the report to run during more than one range of minutes, specify the ranges, separating each with a comma. For example if you want the report to run between 10 and 20 minutes past the hour and again between 40 and 50 minutes past the hour, type: **`10-20,40-50`**.
- If you want the report to run on every minute of the hour, type: **`*`** (asterisk).

- In the Hours text box, specify the hour(s) during which the report will run. The system works on a 24-hour clock.

Note: The report will run sometime during the hour(s) you specify in the Hours text box. The report will run *on* the minute(s) you specify in the Minutes field, *during* the hour(s) you specify in the Hours field.

- If you want the report to run during only one hour, type one number in the Hours text box. For example, if you want the report to run during the 2:00 a.m. hour, type: **`2`**.
- If you want the report to run during more than one hour, in the Hours text box, type more than one number, separating each with a comma. For example, if you want the report to run once during the 2:00 a.m. hour, again during the 4:00 p.m. hour (or 16:00), and again during the 8:00 p.m. hour (or 20:00) type: **`2,16,20`**.
- If you want the report to run during each hour in a range of hours, type that range in the Hours text box. For example, if you want the report to run during the 2:00 a.m., 3:00 a.m., and 4:00 a.m. hours, type: **`2-4`**.
- If you want the report to run during more than one range of hours, in the Hours text box, type more than one range, separating each with a comma. For example if you want the report to run between the hours of 2:00 a.m. and 5:00 a.m. and again between the hours of 3:00 p.m. (15:00) and 5:00 p.m. (17:00), type: **`2-5,15-17`**.
- If you want the report to run every hour, type: **`*`** (asterisk).

- In the Day Of Month text box, specify the day(s) of the month on which the report will run.

Note: The values in the Minutes and Hours field determine the exact time that the report runs on the day(s) you specify in the Day of Month field.

  - If you want the report to run on one day of the month only, type one number in the Day of Month text box. For example, if you want the report to run on the 10th of the month, type: **`10`**.
  - If you want the report to run on more than one day of the month, in the Day of Month text box, type more than one number, separating each with a comma. For example, if you want the report to run on the 10th of the month and again on the 25th of the month, type: **`10,25`**.
  - If you want the report to run on a range of days, type that range in the Day of Month text box. For example, if you want the report to run each day between the 10th and the 20th of the month, type: **`10-20`**.
  - If you want the report to run during more than one range of days, in the Day of Month text box, specify more than one range, separating each with a comma. For example if you want the report to run each day between the 5th and the 10th of the month and again between the 20th and the 25th of the month, type: **`5-10,20-25`**.
  - If you want the report to run every day of the month, type: **`*`** (asterisk).

- In the Month list box, select the month(s) in which the report will run.

  - If you want the report to run every month, select *All or Any*.
  - If you want the report to run only during ONE month, select that month.
  - If you want the report to run during more than one month, select the desired months.

- In the Day Of Week list box, select the day(s) of the week on which the report will run.

> **Note:** If you specify a Day of Week and a Day of Month, InfoStation will run the report configuration on both the day(s) AND the date(s) that you specify. For example, if you choose **Thursday** from the Day Of Week list box and enter **`15`** in the Day Of Month text box, InfoStation will run your report configuration *every* Thursday AND on the 15th of the month.

  - If you want the report to run on every day of the week, select *All or Any*.
  - If you want the report to run only on ONE day of the week, select that day.
  - If you want the report to run on more than one day select the desired days.

- When you are finished scheduling the report, click the Add button.

  The Scheduled Jobs List screen appears (*Figure 8-2*).

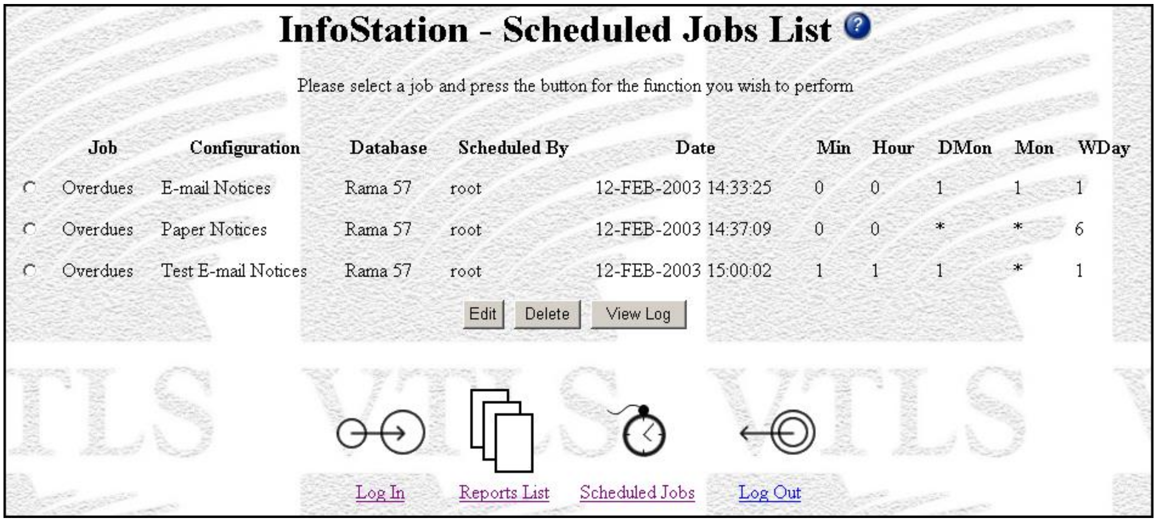


Figure 8-2. Scheduled Jobs List screen Displaying New Job

The new scheduled job appears in the list with any existing scheduled jobs. From this screen you can edit, delete, or view the log for any scheduled job. For details, see the following section in this chapter.

8.2 Managing Scheduled Jobs

After you schedule reports to run automatically, you can manage the scheduled jobs from the Scheduled Jobs List screen. In the following sections, we describe the functions you can perform from the Scheduled Jobs List screen.

8.2.1 Accessing the Scheduled Jobs List

After scheduling report configurations to run automatically, you can access your scheduled jobs from any screen in InfoStation.

To view the list of scheduled jobs,

- Click the Scheduled Jobs icon.

  The Scheduled Jobs List screen appears (*Figure 8-3*).

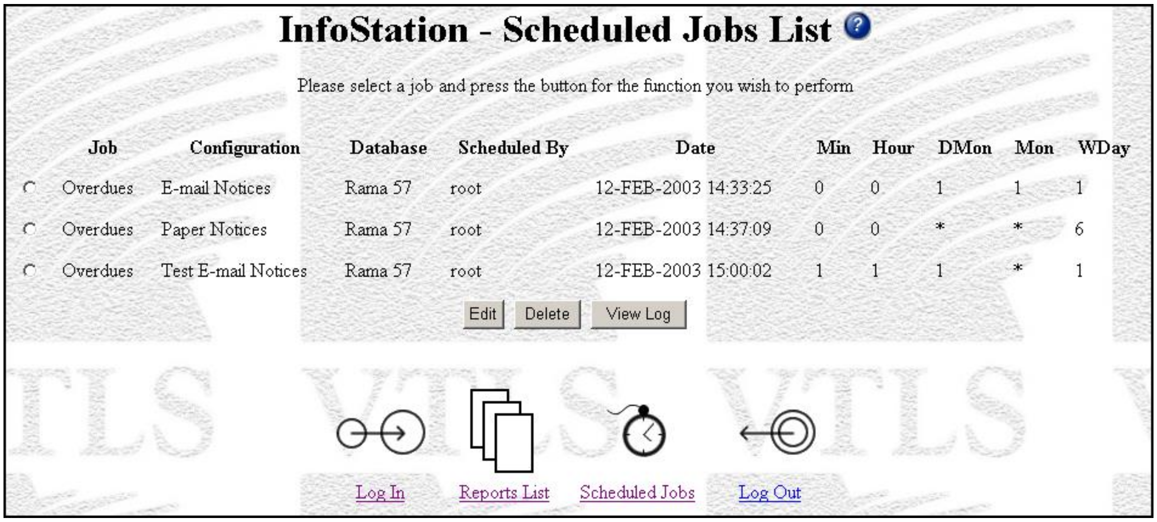


Figure 8-3. Scheduled Jobs List screen Displaying Scheduled Jobs

8.2.2 Aspects of the Scheduled Jobs List Screen

The Scheduled Jobs List screen (*Figure 8-3*) displays a list of ALL scheduled jobs for a given installation of InfoStation. The list includes scheduled jobs for ALL databases and Report Groups.

The Scheduled Jobs List screen contains 10 columns of information:

Note: An asterisk (*) indicates *All or Any*.

- **Job** - The name of the report.
- **Configuration** - The configuration name of the scheduled job.
- **Database** - The database used to run the report configuration.
- **Scheduled By** - The username of the Virtua user who scheduled the report.
- **Date** - The date the scheduled job was created.
- **Min** - The minute(s) past the hour at which the report is scheduled to run.
- **Hour** - The hour(s) of the day during which the report is scheduled to run.
- **DMon** - The day(s) of the month on which the report is scheduled to run.
- **Mon** - The month(s) during which the report is scheduled to run.
- **WDay** - The day(s) of the week on which the report is scheduled to run.

8.2.3 Editing Scheduled Jobs

To edit a scheduled job,

1. On the Scheduled Jobs List screen, select the radio button for the scheduled job you wish to edit.
2. Click the Edit button.

   The Edit Scheduled Job screen appears, displaying the scheduling information for the report configuration you selected (*Figure 8-4*).

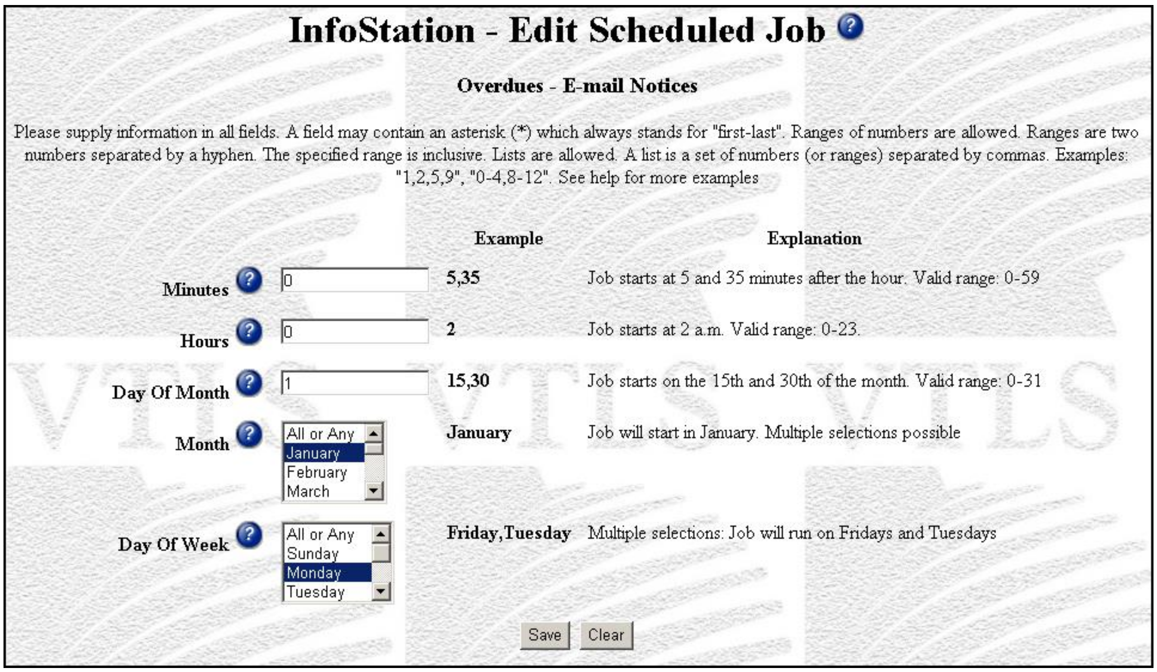


Figure 8-4. Edit Scheduled Job screen

3. Edit the job as needed. For details on scheduling jobs, see the section "Creating Scheduled Jobs" in this chapter.
4. Click the Save button.

   The Scheduled Jobs List screen appears (*Figure 8-3*), displaying the new information.

8.2.4 Deleting Scheduled Jobs

To delete a scheduled job,

1. On the Scheduled Jobs List screen, select the radio button for the scheduled job you wish to delete.
2. Click the Delete button.

   The Scheduled Jobs List screen refreshes, and the job you deleted no longer appears in the list.

Note:

- You will NOT receive a confirmation message before the scheduled job is deleted.
- After you delete a scheduled job from the Scheduled Jobs List screen, you will no longer be able to access the associated scheduled jobs log.

8.2.5 Viewing the Scheduled Jobs Log

When a scheduled job runs, a record of the task is automatically added to a log. You can view the log to verify that scheduled jobs have been run successfully.

To view the scheduled jobs log,

1. On the Scheduled Jobs List screen, select the scheduled job for which you wish to view the log.
2. Click the View Log button.

   The View Log screen appears, displaying the information associated with the scheduled job you selected (*Figure 8-5*).

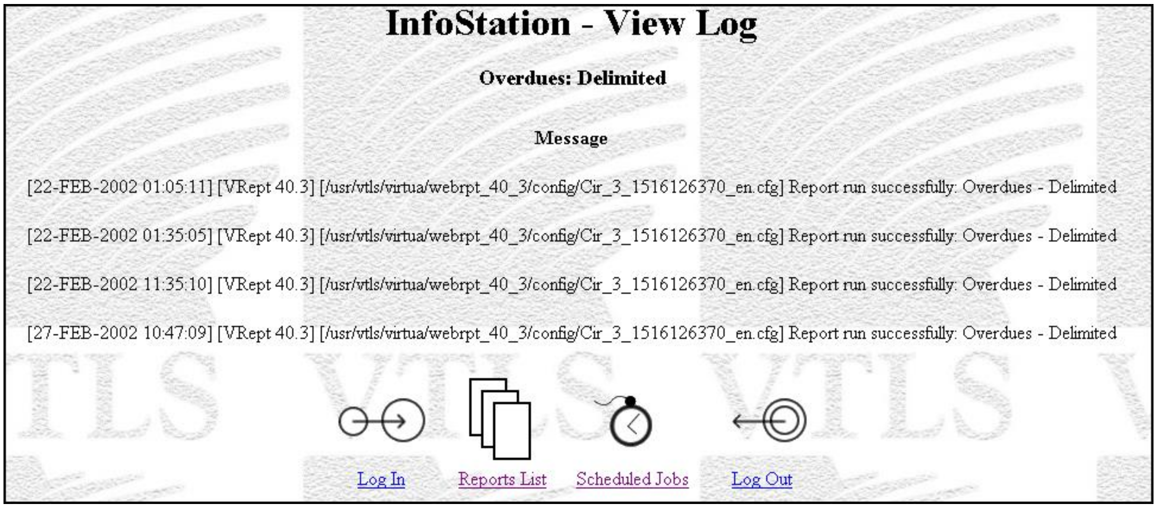


Figure 8-5. View Log screen

Each time InfoStation runs a scheduled job, the following information is recorded in the task log:

- The on which InfoStation ran the scheduled job.
- The location of the report configuration in the **/usr/vtls/virtua/webrpt_XX_x** directory.
- A statement indicating whether that the report was run successfully.
- The report type.
- The configuration name of the scheduled job.

Note:
- If the report was not run successfully, the job log will display an error message.
- The most recently completed task always appears at the bottom of the list.

9. Working with One-click Patron Reports

One-click patron reports let you make InfoStation report configurations available for patrons to run via links that you place on a Web interface, such as Chamo. One-click patron reports use a different authentication process than the routine used for an InfoStation log-in. In this way, you can make InfoStation reports available to your patrons without compromising the security of your reports.

Creating one-click patron reports consists of three steps:

1. Verifying your patron authentication information.
2. Moving the desired report to the Patron Report Group.
3. Creating a report configuration and linking to it via the desired Web interface (e.g., Chamo).

We describe these steps in detail in this chapter. This chapter covers the following topics:

9.1 Authentication for Patron Reports

When you log in to InfoStation, InfoStation creates a cookie, which stores your log-in information. Throughout your session, InfoStation uses this cookie to authenticate you for specific tasks. For example, when you run a report configuration, instead of asking you to supply your Virtua username and password, InfoStation authenticates you using the username and password that you entered at log-in.

One-click patron reports are authenticated differently. When you installed InfoStation, you defined the **patron_username** and **patron_password** settings, which are stored in the **constants.cfg** file. These settings tell InfoStation which Virtua username and password to use for authenticating reports that belong to the Patron Report Group.

When users run reports in the Patron Report Group, InfoStation authenticates them using the **patron_username** and **patron_password** constants. In this way, patrons can run one-click reports without first logging in to InfoStation.

Because of this authentication process . . .

- One-click patron reports must belong to the Patron Report Group.
- After running one-click reports, patrons must log in to InfoStation before they can perform any other InfoStation function.

Before you create one-click reports, verify that the **patron_username** and **patron_password** settings are set as desired in the **constants.cfg** file. Additionally, for the Virtua user that you want to use for running patron reports, make sure that the user permissions are set to "Run" for the Patron Report Group. For details on setting user permissions, see the *Virtua Profiler/Global Settings User's Guide*.

9.2 Copying Reports to the Patron Report Group

InfoStation supplies the utility **move_report.pl**, which lets you copy reports to the Patron Report Group. The **move_report.pl** utility is in the **/usr/vtls/virtua/webrpt_XX_x/cgi-bin** directory.

Note:

- The **move_report.pl** utility moves all the files associated with a given report, including report templates AND report configurations.
- Unlike files that follow the default InfoStation directory structure, "moved" reports will not be updated automatically when you upgrade your InfoStation installation. You will need to update these files manually each time you perform an upgrade.

The **move_report.pl** utility uses the following syntax:

./move_report.pl -r [report] -g [group] -n [number] -c [y or **n]**

Where . . .

- **-r [report]** is the name of the **.cgi** file for the report that you want to move. For example, the New Books List cgi file is **Acq_report_2.cgi**.

- **-g [group]** is the code for the Report Group to which you want to copy or move the report. For example, the Patron Report Group code is **Pat**.

- **-n [number]** is the new report number of the report.

Note: If you are copying reports, use numbers greater than 100 and less than 1200 so that your new report numbers do not duplicate Innovative-assigned report numbers that are already in use or scheduled for future use. If you do not use report numbers in the recommended range, the reports will not appear in the Reports List.

- **-c [y** or **n]** specifies whether to copy (**y**) or move (**n**) the report to the new Report Group. If you specify . . .
  - **y** (for Yes) - The report is *copied* to the new Report Group. This means that there are two copies of the report files—one in the original Report Group and one in the new Report Group.
  - **n** (for No) - The report is *moved* to the new Report Group. This means that the report files are deleted from the original Report Group and moved to the new Report Group.

For example, to copy the New Books List report from the Acquisitions Report Group to the Patron Report Group,

1. Log in your server as **dbadmin**.
2. Navigate to the **/usr/vtls/virtua/webrpt_XX_x/cgi-bin** directory.
3. Type:

   ```
   ./move_report.pl -r Acq_report_2.cgi -g Pat -n 100 -c y
   ```

   The New Books List report and all associated template, configuration, and strings files are copied to the Patron Report Group.

Hint: You can navigate to the **/usr/vtls/virtua/webrpt_XX_x/Pat/Pat_100** directory to view the copied files.

9.3 Creating One-click Reports

To create a one-click patron report,

1. In InfoStation, log in to the Patron Report Group.

2. If necessary, add or modify a configuration of the desired report. You will want to set the Output Format to HTML.

> **Note:** The **move_report.pl** utility can copy all report files from a report's original Report Group to the Patron Report Group. This means that you can create the one-click patron report using a configuration that was created in the original Report Group or by creating a new configuration in the Patron Report Group.

3. Run the desired report configuration.

4. When the report is finished running, use the URL of the output to determine the URL for your one-click link. From the URL you need to copy everything *except* the text after **mode=1**. For example,

   http://chaos.vtls.com:8001/web_reports/cgi-bin/Acq_report_2.cgi?lang_code=en&config=%2Fusr%2Fvtls%2Fvirtua%2Fwebrpt_44_0%2Fconfig%2FAcq_2_288609398_en.cfg&mode=1

5. Using this URL, create a link on the desired Web page.

When a patron clicks the link, InfoStation authenticates the report using the **patron_username** and **patron_password** constants, runs the report, and returns the HTML output to the screen (*Figure 9-1*).

New Books List

Virtua Library
1 Library Street
Your Town, State or Province Postal Code
Your Country

Author	Title	Publication	Call Number	Subject	Item Class
Turner, Ralph V.	The king and his courts; the role of John and Henry III in the administration of justice, 1199-1240 [by] Ralph V. Turner.	Ithaca, N.Y., Cornell University Press [1968]	LAW	Agriculture	Another Class
Leckie, Robert.	Warfare.	New York, Harper & Row [1970]	355.02	Agriculture	Fiction
Gaddis, Vincent H.	The strange world of animals and pets, by Vincent and Margaret Gaddis.	New York, Cowles Book Co. [1970]	591.5/1	Agriculture	Fiction
Wright, Quincy, 1890-	On predicting international relations, the year 2000.	Denver, University of Denver [c1969]	327	Agriculture	Fiction
American Industrial Arts Association.	Where the action is; selected addresses and proceedings of the American Industrial Arts Association's 31st annual convention at Las Vegas. [Editor: Linda A. Taxis.	Washington, 1969]	607	Agriculture	Fiction
	Ethics and social justice. Edited by Howard E. Kiefer and Milton K. Munitz.	Albany, State University of New York Press [1970]	B831.3 .E8	Agriculture	Fiction

Figure 9-1. New Books List HTML Output

10. Customizing Report Output

The flexibility of InfoStation extends beyond the configurability offered by report parameters. InfoStation's customization options let you tailor the output of your reports to meet your library's specific needs. In this chapter, we discuss how you can customize your report output.

Note: Customizing report output is optional. ALL reports contain default settings that you can use to run report configurations without making any customizations.

This chapter covers the following topics:

10.1 Before You Begin . . .

Before you begin customizing InfoStation, you must understand the various terms and concepts that we use throughout the following sections.

10.1.1 Understanding Terms for Data Elements

Throughout this chapter, we use various terms to describe data elements and their labels, depending on their type and function. These terms are . . .

- **Data Element** - A specific piece of data that a report retrieves or returns. Data elements are…
  - Identified by variables in output template files.
  - Labeled with a field label in report output.

- **Variable** - The name that InfoStation uses to identify a data element within report files. Variables appear in report files and represent where the corresponding data element will appear in the report output. Variables are replaced by actual values in report output.

- **Field Label** - The label that you assign to a data element via the corresponding Field Label text box on the Configuration screen. InfoStation comes with a set of default labels, which you can modify if necessary. Field labels . . .
  - Label data elements in report output.
  - Are identified by field label variables in output template files.

- **Field Label Variable** - The variable that InfoStation uses to represent a field label within report files. Field label variables appear in output template files and indicate where the corresponding field label will appear in the report output.

For example, Figure 10-1 shows the Field Labels area on the Configuration screen for the Bibliographic Record List report.

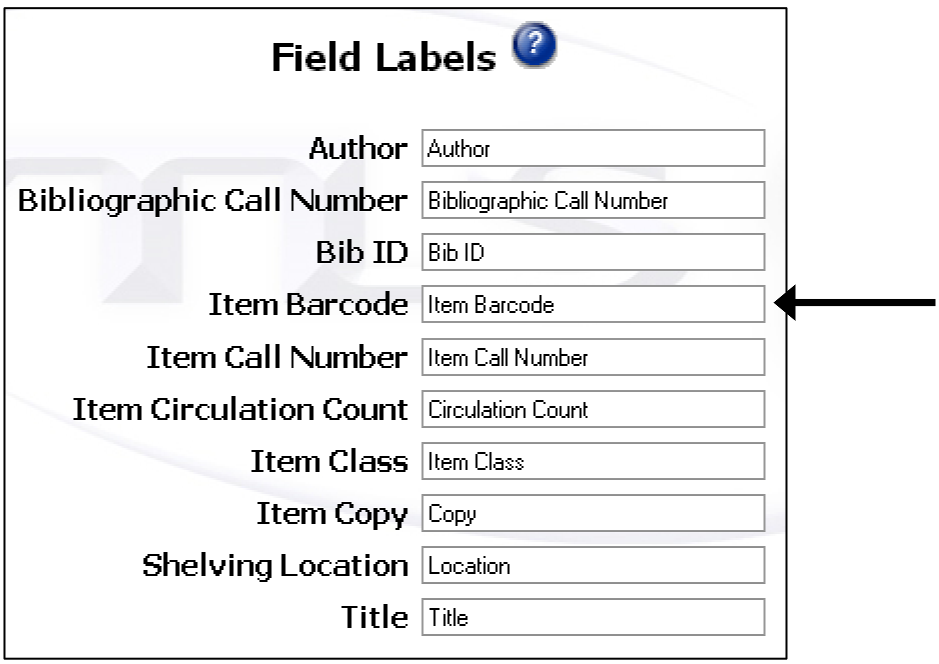


Figure 10-1. Field Labels for the Bibliographic Record List Report

Below, we describe how the terms described above apply specifically to the Item Barcode data element (indicated with an arrow in Figure 10-1) in the Bibliographic Record List report.

- **Data Element** - Item Barcode is a data element returned by the Bibliographic Record List report. In report output, the Item Barcode data element is the barcode associated with a particular item record.

- **Field Label** - *Item Barcode* is the default field label for the Item Barcode data element. You can edit field labels to label your output however you wish. For example, you might change the field label to *Barcode:*. Then, in the output, the field label and data element together might look like this:

  Barcode: 100096581

> **Note:** Unless you change the default field label, it will be used to label the data element in the output, provided that the corresponding field label variable is included by default in the output template.

- **Variable** - In output template files, the variable for the Item Barcode data element is **item_barcode**.
  - In output templates, a variable indicates where a data element will appear in the output. By editing variables in output templates, you can determine where data elements will appear in the output.
  - In this case, where **item_barcode** appears in the Bibliographic Record List output template, the report will return the barcode associated with a particular item record.

> **Important:** Different reports may use different variables to return similar data elements. Although the Bibliographic Record List report uses the variable **item_barcode**, another report might return the item barcode using a different variable, such as **barcode**. For a list of the variables used by each report, see the InfoStation reference guides.

- **Field Label Variable** - In output template files, the field label variable for the Item Barcode field label is **u_item_barcode_label**.
  - In output templates, a field label variable indicates where the field label will appear in the output.
  - By default, where **u_item_barcode_label** appears in the Bibliographic Record List output templates, the report will return the label *Item Barcode* (i.e., the default field label that appears on the Bibliographic Record List Configuration screen).

> **Important:** Field label variables are always formed by adding **u_** to the beginning of the variable and **_label** to the end of the variable.

For details on identifying variables and field label variables in output templates, see the section "Overview of Output Templates" in this chapter.

10.1.2 Identifying Variables and Field Label Variables Used by Reports

You can edit a report's output template files to control the appearance and content of the report output. You can use variables and field label variables to specify which data elements and labels will appear in the report output.

By editing output templates, you can configure a report to return or not to return any data element that a report is configured to retrieve. In addition, you can configure reports to return or not to return any available field label.

In output template files, you add and remove data elements and field labels using variables and field label variables. So before you can begin editing output template files, you need to know how to identify the variables and field label variables that correspond to the data elements and field labels for a given report.

> **Important:** Variables and field label variables are report-specific. You cannot assume that the variable used to identify a data element in one report will be used by another report to identify the same data element.

In the following sections, we provide two different methods that you can use to identify the variables that you must use to edit the output templates of each report.

10.1.2.1 Identifying Variables Via the Configuration Screen

To identify variables via the InfoStation Configuration screen,

1. Access the Configuration screen for the report configuration whose output templates you want to edit.
2. On the menu of your Internet browser, choose View/Source (or equivalent).

   The configuration's source file appears in a text editor.

3. Scroll down to locate the Field Labels portion of the file. Figure 10-2 shows the Bibliographic Record List source file, where the Field Labels section is indicated with an arrow.

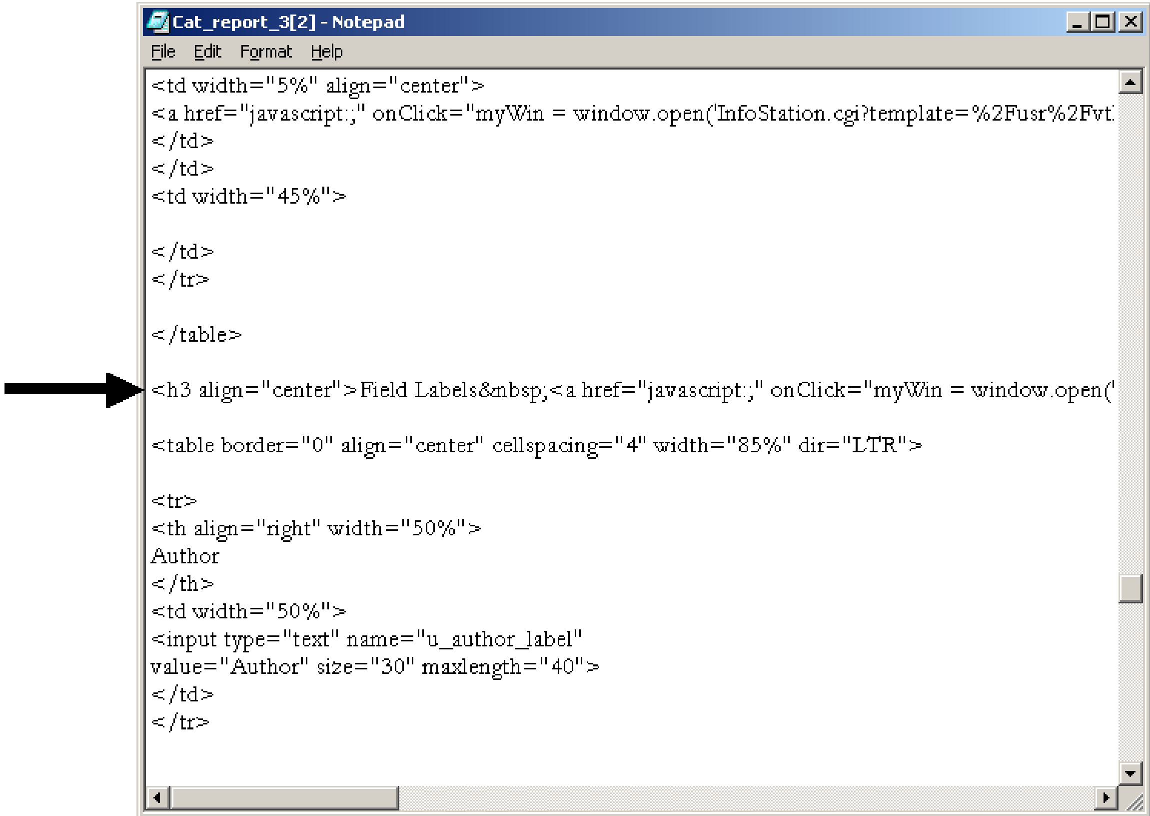


Figure 10-2. Source File for the Bibliographic Record List Report

4. Using the data element's name, which appears on the Configuration screen in the Field Labels area to the *left* of the Field Labels text boxes, locate the desired data element.

   For example, Figure 10-3 shows how you can find the Author data element for the Bibliographic Record List report.

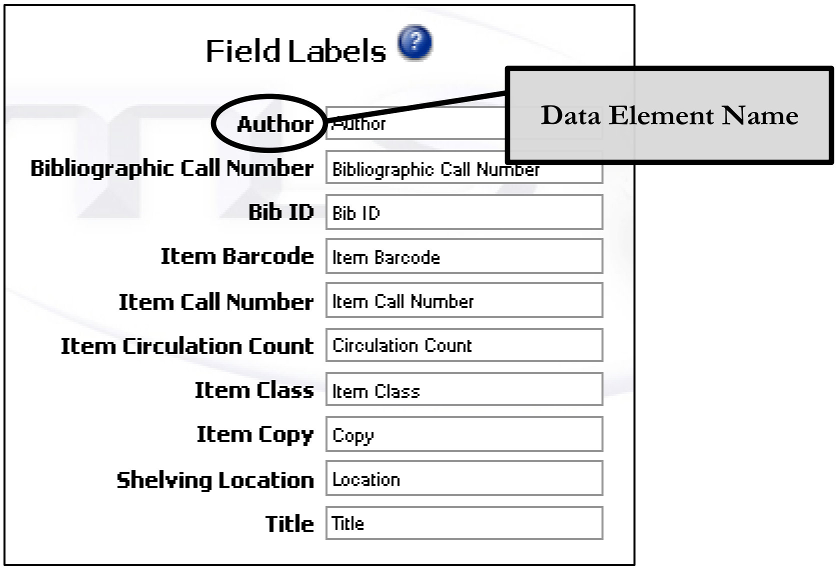


Figure 10-3. Data Element Name on Configuration Screen

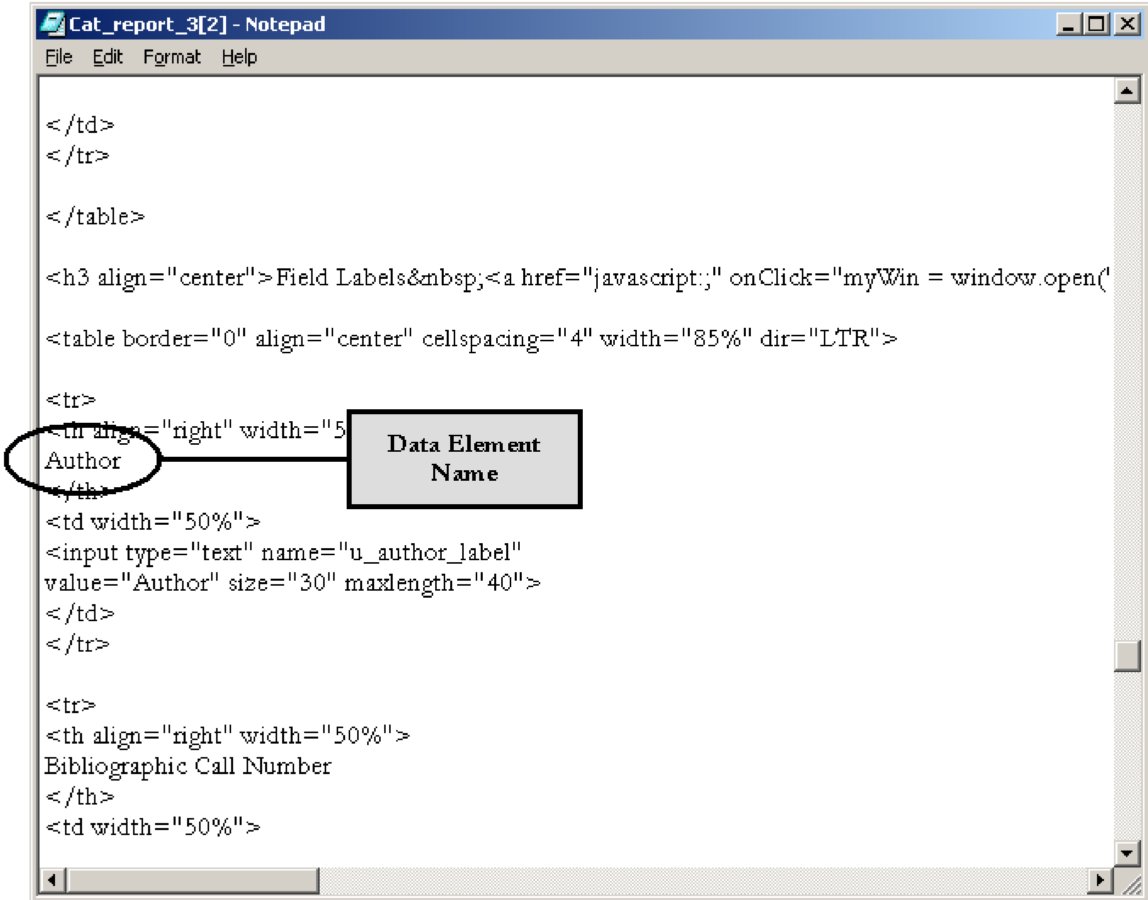


Figure 10-4. Data Element Name in Source File

5. In the source file, scan several lines down from the data element name, and find the portion of the file that reads **name=**. The text inside the quotation marks is the field label variable. For example, the field label variable for the Author data element is **u_author_label**.

6. Identify the data element variable. To do so, remove "**u_**" and "**_label**" from the field label variable. For example, the variable for the Author data element is **author**.

   You can use this method to determine the variable and field label variable for *any* data element in any report.

10.1.2.2 Identifying Variables Via the InfoStation Reference Guides

For your easy reference, we have identified all the report-specific *variables* for you and recorded them in the InfoStation reference guides. For each report, the appropriate reference guide contains a section titled "Data Element and Variables for the Report," in which we provide a list of the each data element retrieved by the report and its corresponding variable.

Note: In the InfoStation reference guides, we do not explicitly define the field label variables for the reports. You can add **u_** to the beginning and **_label** to the end of any variable to find its field label variable.

To find variables in the InfoStation reference guides,

1. On the Configuration screen, identify a data element by how it is labeled on the Configuration screen (NOT by the default field label but by how it is labeled in the column to the *left* of the default field label).
2. Using the data element's name, locate that data element in the first column of the appropriate table in the appropriate InfoStation reference guide.
3. In the second column of the table, find the variable that corresponds to the data element name.
4. Add **u_** to the beginning and **_label** to the end of the variable to identify the corresponding field label variable.

10.2 Overview of Output Templates

Each report offers a set of default output template files, which you can modify directly from the Configuration page to change the appearance and content of the report output. The template files appear as links in the area labeled Templates in the Report-specific Parameters (*Figure 10-5*). In the following sections, we provide a general description of output templates.

Important: Each output template is specific to a report *configuration*. When you edit output templates, your customizations apply only to the configuration you are currently adding or editing. They do not affect any other reports or configurations.

10.2.1 Components of Output Templates

Output templates can contain some or all of the following components:

- **Text** - Indicates where text will appear in the output. In templates, text takes the form of normal text.
- **Variable** - Holds the place of a specific data element, indicating where data will appear in the output. In output templates variables take the form of **%($variable)%**.
- **Field Label Variable** - Holds the place of a specific field label, indicating where a label will appear in the output. In output templates, field label variables take the form of **%($field_label_variable)%**.
- **Function** - Performs a particular task, the results of which are returned in the output. In output templates, functions take the form of **%(&::function)%**.
- **Perl Code Block** - Establishes a conditional statement and returns the value of the last statement processed. In output templates, Perl code usually takes the form of "if…else" statements. For example, below is the Perl code that returns a patron's name in the Overdues **patron_email_page_header** template:

```
if($notice_library_alternate_name);
  $OUT .= "\n$notice_library_address1" if($notice_library_address1);
  […]
} else{
  $OUT = $u_library_name;
  $OUT .= "\n$u_library_alternate_name"
```

10.2.2 Naming Conventions and Availability of Output Templates

Each report offers output templates that are specific to the type of output it produces.

Some reports offer 10 templates or more; other reports offer fewer. Although output templates are configuration-specific, each configuration of a given report offers the same set or subset of default templates. You can view a list of the templates that are available for a given report in the Report-specific Parameters area on the report's Configuration screen.

Most templates follow the same general naming convention, which you can use to determine how a template will affect the output. Reports offer the following types of output templates:

- **Page** - Provides the overall framework for either HTML or e-mail output.

- **Row** - Generates either a single row of information or a group of information related to a single record. Often, the row template specifies the information that should be returned by a function embedded within the Page template.

- **Header** - Provides a heading for a table, a single row, or a group of rows. Often, the header will appear in the output more than once, labeling each group of information, as appropriate.

- **Summary** - Appears at the bottom of a table, a row, or a group of rows and generates summary information for the preceding results. The summary is usually repeated for each group of rows.

10.2.3 General Guidelines for Editing Templates

Editing template files primarily consists of adding, modifying, and deleting the following elements:

- Variables
- Field label variables
- Text

In the following sections, we provide some important information that you will want to keep in mind when editing these elements of your output templates.

10.2.3.1 Guidelines for Notice-generating Report Output

For notice-generating reports, for a non-required data element to appear in the output, two conditions must exist:

- On the Configuration screen, the Include check box must be selected for that data element.
  -AND-
- The corresponding data element variable must exist in the output template.

Unless both of these conditions are met, the data element will NOT appear in the output.

Note: If you add a variable to an output template, you will also want to add the corresponding field label variable. Otherwise, the data element will not be labeled in the output.

For example, in the Overdues report, Main Location is NOT a required data element. For the Main Location to appear in the Overdues report output,

- On the Configuration screen, the Include check box must be selected for the Main Location data element.
  -AND-
- The variable **main_location_name** must exist in the output template.

Note: For the Patron Account Statement report, all data elements are required for each configuration (i.e., you cannot include or exclude data elements via the Configuration screen). You can add data elements to the default output *only* if they are listed on the Configuration screen.

When you edit e-mail output templates for notice-generating reports, we recommend that you test your customizations before sending notices to patrons. For details on testing templates for errors, see the section "Testing Your Customized Output" in this chapter.

10.2.3.2 Guidelines for Non-notice-generating Report Output

To add a data element to the output of a non-notice-generating report, one of two conditions must exist.

- The data element must appear on the Configuration screen.
  -OR-
- You must add the data element to the MARC Tag List (not available for all reports).

If the data element does NOT appear on the Configuration screen and you do NOT add it to the MARC Tag List, it cannot appear in the output.

Note:
- Default output templates do not necessarily contain all the data elements that appear on the Configuration screen.
- This guideline also applies to the Patron Account Statement report.

If you add a data element to the MARC Tag List, you must also add the corresponding variable to the output template file. Otherwise, the data element will NOT appear in the output.

Note: If you add a variable to an output template, you will also want to add the corresponding field label variable. Otherwise, the data element will not be labeled in the output.

Unlike notice-generating reports, which let you exclude data elements via the Configuration screen, data elements for non-notice-generating reports do NOT have an Include check box on the Configuration screen. Therefore, for non-notice-generating reports, you cannot choose to exclude data from the output via the Configuration screen. You can, however, exclude data from the output by deleting the appropriate variable from the output template.

10.3 Accessing and Editing Output Templates

When you are adding or editing a report configuration, InfoStation offers you an easy way to access output templates directly from the Configuration screen so that you can edit them via a Web interface.

In the following sections, we provide instructions for how you can access and edit output template files via a report's Configuration screen. For detailed descriptions and examples of output templates see the sections "Working with E-mail Templates" and "Working with HTML Templates" in this chapter.

Note: For InfoStation's template editor to work properly, your browser must be configured to open new URLs in new windows.

10.3.1 Accessing Output Templates

To access an output template file for a report configuration,

1. On the Reports List screen, select the radio button for the report template OR report configuration whose output templates you want to edit. For this example, an Overdues report configuration is used.

2. Click the Add or Edit button as appropriate.

   The Configuration screen appears.

3. Scroll to the bottom of the Report-specific Parameters, where the Templates links appear (*Figure 10-5*).

Figure 10-5. Links to Templates

   These links give you access to the editable output templates associated with a particular report configuration, in this case, an Overdues report configuration.

4. Click the link for the template that you want to edit.

   The Template window appears (*Figure 10-6*), displaying the contents of the template that you selected from the Configuration screen. Figure 10-6 displays the default contents of the **patron_acct_patron_email_page** template for the Overdues report.

Figure 10-6. email_page Template for Overdues Report

10.3.2 Aspects of the Template Window

The Template window (*Figure 10-6*) contains:

- A header that provides brief instructions and references to this user's guide.
- A scrolling text box that displays the contents of the output template you selected from the Configuration screen.
- Two buttons:
  - ♦ **Save Template** - Lets you save the changes you make to the template.
  - ♦ **Clear** - Undoes any changes you made to the template and restores the template to the most recently saved version.

On the Template window you can . . .

- Maximize the entire window.
- Use the scroll bar on the text box to view the entire output template.

10.3.3 Editing the Contents of the Output Template

The text box on the Template window displays the contents of the output template that you select from the Configuration screen. You can edit the template by editing the text in the text box. The text box supports . . .

- Text selection (i.e., highlighting) . . .
  - With your mouse.
  - With your keyboard: SHIFT + ARROWS

- Standard editing functions via your keyboard:
  - Cut (CTRL + X)
  - Copy (CTRL+ C)
  - Paste (CTRL + V)

For additional information on editing the content of output template files, see the sections "Editing E-mail Templates" or "Editing HTML Templates" in this chapter.

10.3.4 Saving Your Changes

After you edit a template, you will want to save your changes.

To save your changes,

1. Click the Save Template button.

   The Template window closes, revealing the Configuration screen. All changes you made to the template are saved.

2. Edit any other output templates and report parameters you wish.

3. When you are finished editing templates and configuring the report, on the Configuration screen, click the Save button.

   The Reports List screen appears. All changes you made to the report configuration (including those to the output templates) are saved and are applicable only to this single report configuration.

10.3.5 Discarding Your Changes

After you edit the template, if you are not satisfied with your changes, you can restore the most recently saved version of the template.

To discard your changes and restore the most recently saved version,

- On the Template window, click the Clear button.

  The template is restored.

10.3.6 Closing the Template Window

To close the Template window without saving your changes,

- In the upper-right corner of the Template window, click the X button.

  The Template window closes. Any changes you made to the template are lost.

10.4 Working with E-mail Templates

E-mail templates let you control the appearance and content of e-mail output. For notice-generating reports e-mail templates are particularly important because they let you format patron notices. In the following sections, we describe the different types of e-mail templates and provide instructions for editing them. Keep in mind that when you edit output templates, your customizations apply *only* to the configuration you are currently adding or editing.

Note: Default output templates are different for each report. In the following sections, we do not discuss the output templates for each report in detail. Rather, we provide general information and examples that you can apply to all reports. You can use these guidelines to access and edit the e-mail output templates for *any* report, either notice-generating or non-notice-generating.

10.4.1 About Types of E-mail Templates

InfoStation offers four primary types of e-mail templates:

- E-mail page templates
- E-mail row templates
- E-mail header templates
- E-mail summary templates

Note: In this user's guide, we limit our discussion to the most common types of e-mail templates. Some reports may offer templates in addition to the types listed here. You will, however, be able to use the guidelines provided here to understand and edit other types of e-mail templates.

10.4.1.1 About E-mail Page Templates

In general, all e-mail page templates provide the overall framework for the e-mail output generated by a report. You can edit e-mail page templates to control the overall structure of e-mail output. For notice-generating reports, you can edit **patron_email_page** templates to customize patron notices.

For example, below, we show the default **patron_email_page_header** template for the Overdues report alongside the e-mail output it produces. You can match the output (on the left) with the template (on the right) to see how they correspond to one another. In this example, the font is formatted to help you identify certain elements of the template and the output.

- Variables and their results appear in **bold**.
- Perl code blocks and their results appear in ***bold italics***.
- Functions and their results appear in *italics*.
- Text is normal.

Report Output from an Overdues Report Configuration	**The Overdues patron_email_page_header Template**
Virtua Library **1 Bookworm Lane** **Reading, Virginia 12345** **USA**	**($u_library_name)** **($u_library_address1)** **($u_library_address2)** **($u_library_address3)**
John Smith **smith@email.com** **02-FEB-2012**	**($u_patron_name)** **($u_email_primary)** **($u_report_date)**
Dear ***Mr. Smith***,	Dear ***%(*** ***&VRept::format_ranked_data_pair(*** ***&Patron::format_patron_name('email salutation to other name'),*** ***&Patron::format_patron)name('email salutation'),*** ***1*** ***);*** ***)%***
According to our records, the following **2** item(s) are overdue. Please return them as soon as possible. Fines and suspension of privileges may result if the materials are not returned in a timely manner. Thank you very much.	According to our records, the following %**($patron_overdue_count)%** item(s) are overdue. Please return them as soon as possible. Fines and suspension of privileges may result if the materials are not returned in a timely manner. Thank you very much.

10.4.1.2 About E-mail Row Templates

InfoStation uses two types of e-mail row templates:

- **patron_email_row** - Used by notice-generating reports to generate the information related to a single item.
- **email_row** - Used by non-notice-generating reports to generate the information related to a single record.

Often, e-mail row templates return the information for a function that is embedded within the e-mail page template, and they are repeated in the output for each record returned by a report.

For example, below we show the contents of the Overdues **patron_email_row** template:

```
%($u_author_label)%: %($author)%
%($u_title_label)%: %($title)%
%($u_call_number_label)%: %($call_number)% %($item_units)% c.
%($copy_number)%
%($u_item_class_name_label)%: %($item_class_name)% %($item_barcode)%
%($u_item_price_label)%: %($item_price)%
%($u_due_date_label)%: %($due_date)%
%($u_item_location_name_label)%: %($item_location_name)%
```

The Overdues **patron_email_row** template returns all the information related to a single overdue item. It specifies the information that will be returned by the **%(&::email_rows)%** function, which is embedded in the **patron_email_page** template. By editing the **patron_email_row** template, you can determine the specific information that is returned for each overdue item.

10.4.1.3 About E-mail Header Templates

In some cases, information returned by a report is grouped automatically, in which case **email_header** templates provide appropriate labels for the groups of information.

In the output, the information generated by an **email_header** template appears at the beginning of a group of information. In this way, report output is grouped according to the parameter within the **email_header** template.

For example, the **email_header** template for the Account Summaries report contains the following information:

```
%($u_fiscal_year_label)% %($fiscal_year)%
```

The Account Summaries **email_header** template indicates that in the output, account information generated by the e-mail row template will be grouped according to fiscal year. The heading appears in the output whenever the value of the variable in the header template changes (e.g., at the beginning of a new group of results).

> **Important:** In general, you will NOT want to edit the content of **email_header** templates. If you edit the variables returned by the **email_header** templates, your groups of output will be labeled inappropriately.

10.4.1.4 About E-mail Summary Templates

Some reports that group information automatically also use **email_summary** templates, which are similar to e-mail header templates because they return information related to a group of information.

In the output, the information generated by an **email_summary** template appears at the end of a group of information. In this way, each group of output is summarized by the information generated by the **email_summary** template.

For example, the default **email_summary** template for the Account Summaries report contains the following information:

```
%($u_fiscal_year_label)% %($summary_fiscal_year)%
%($u_encumbrance_sum_label)%: %($encumbrance_sum)%
%($u_expenditure_sum_label)%: %($expenditure_sum)%
%($u_free_balance_sum_label)%: %($free_balance_sum)%
```

In this way, for each group of account information, the E-mail Summary template returns the following summary calculations by default:

- Encumbrance total
- Expenditure total
- Free balance total

10.4.2 Editing E-mail Templates

E-mail templates may contain any of the following components, which you can edit to control the appearance and content of your output:

- Text
- Variables
- Field label variables
- Perl code
- Functions

In the following sections, we provide guidelines for editing these elements.

10.4.2.1 Editing Text in E-mail Templates

You can edit the text of e-mail templates to read however you like. Editing text in templates is straightforward because text requires no special formatting. On the Template window, edit text as you would in any text editor. In the e-mail templates, you can . . .

- Add text
- Delete text
- Change existing text

Below, we provide specific examples for editing text in **patron_email_page** and **patron_email_row** templates.

10.4.2.1.1 Editing Text in Patron E-mail Page Templates

Because you can edit the e-mail templates for each report configuration, you can edit the text to be configuration-specific. You will most likely edit the text of **patron_email_page** templates to customize patron notices. For example, you may want to . . .

- Create different notices for faculty and students.
- Send different notices to patrons, depending on the notice number specified in a configuration.

You can customize the text of notices by editing the **patron_email_page_header** and **patron_email_page_footer** templates for the appropriate notice-generating report configuration. The following examples use the Overdues **patron_email_page_header** template.

Below, the text in the Overdues **patron_email_page_header** template that is included in the e-mail messages is emphasized by showing it in **bold**.

```
%(
if($use_patron_reg_lib_for_notices_flag eq 'on') {
  $OUT = $notice_library_name;
  $OUT .= "\n$notice_library_alternate_name" if($notice_library_alternate_name);
  $OUT .= "\n$notice_library_address1" if($notice_library_address1);
  $OUT .= "\n$notice_library_address2" if($notice_library_address2);
  $OUT .= "\n$notice_library_address3" if($notice_library_address3);
  $OUT .= "\n$notice_library_telephone" if($notice_library_telephone);
} else{
  $OUT = $u_library_name;
  $OUT .= "\n$u_library_alternate_name" if($u_library_alternate_name);
  $OUT .= "\n$u_library_address1" if($u_library_address1);
  $OUT .= "\n$u_library_address2" if($u_library_address2);
  $OUT .= "\n$u_library_address3" if($u_library_address3);
  $OUT .= "\n$u_library_telephone" if($u_library_telephone);
}
)%
%(
&VRept::format_ranked_data_pair(
  &Patron::format_patron_name('other name as data'),
  &Patron::format_patron_name('full name as data')
  );
)%
%($email_primary)%
%($report_date)%

%($address_line_1)% %(
$OUT = '';
if ( $address_line_2 ) {
   $OUT = $address_line_2;
}
)%
%($city)%, %($state)% %($postal_code)% %($country)%
%($telephone_primary)%
%($e_mail_address_primary)%
Dear %(
&VRept::format_ranked_data_pair(
  &Patron::format_patron_name('email salutation to other name'),
  &Patron::format_patron_name('email salutation'),
  1
  );
)%,
```

According to our records, the following %($patron_overdue_count)% **item(s) are overdue.**
Please return them as soon as possible. Fines and suspension
of privileges may result if the materials are not returned
in a timely manner.

Thank you very much.

You can add, edit, or delete text anywhere in the **email_page** template. Below is an example of how you might edit the text of the Overdues **patron_email_page** template. The text displayed in the e-mail message is emphasized by showing it in **bold**.

```
%(
if($use_patron_reg_lib_for_notices_flag eq 'on') {
  $OUT = $notice_library_name;
  $OUT .= "\n$notice_library_alternate_name" if($notice_library_alternate_name);
  $OUT .= "\n$notice_library_address1" if($notice_library_address1);
  $OUT .= "\n$notice_library_address2" if($notice_library_address2);
  $OUT .= "\n$notice_library_address3" if($notice_library_address3);
  $OUT .= "\n$notice_library_telephone" if($notice_library_telephone);
} else{
  $OUT = $u_library_name;
  $OUT .= "\n$u_library_alternate_name" if($u_library_alternate_name);
  $OUT .= "\n$u_library_address1" if($u_library_address1);
  $OUT .= "\n$u_library_address2" if($u_library_address2);
  $OUT .= "\n$u_library_address3" if($u_library_address3);
  $OUT .= "\n$u_library_telephone" if($u_library_telephone);
}
)%
%(
&VRept::format_ranked_data_pair(
  &Patron::format_patron_name('other name as data'),
  &Patron::format_patron_name('full name as data')
  );
)%
%($email_primary)%
%($report_date)%

%($address_line_1)% %(
$OUT = '';
if ( $address_line_2 ) {
   $OUT = $address_line_2;
}
)%
%($city)%, %($state)% %($postal_code)% %($country)%
%($telephone_primary)%
%($e_mail_address_primary)%
%(
&VRept::format_ranked_data_pair(
  &Patron::format_patron_name('email salutation to other name'),
  &Patron::format_patron_name('email salutation'),
  1
  );
According to our records, the following %($patron_overdue_count)% item(s) are
overdue. Please return or renew them as soon as possible.
```

"Dear" deleted

Message edited

The changes shown above would produce output shown below, where the text is emphasized in **bold**.

Virtua Library 1 Bookworm Lane Reading, Virginia 12345 USA (555) 555-5555 ext. 5555 Smith smith@email.com 09-NOV-2012 Mr. Smith, **According to our records, the following 2 item(s) are overdue. Please return or renew them as soon as possible.** Author: Fox, Annette Baker, 1912- Title: Canada in world affairs / Annette Baker Fox. Call Number: F1034.2 .F69 1996 c. 1 Item Class: Government Documents 000441950 Price: USD 3.59 Due Date: 01-OCT-2012 Shelf Location: Main Library Author: Fox, John, 1947- Title: Applied regression analysis, linear models, and related methods / John Fox. Call Number: HA31.3 .F69 1997 c. 1 Item Class: Government Documents 000448078 Price: USD 3.59 Due Date: 01-OCT-2012 Shelf Location: Main Library

10.4.2.1.2 Editing Text in E-mail Row Templates

Most e-mail row templates contain only a small amount of text. For example, in the following excerpt from the Overdues **patron_email_row** template, we show the text in **bold**.

```
%($u_author_label)%: %($author)%
%($u_title_label)%: %($title)%
%($u_call_number_label)%: %($call_number)% %($item_units)% c.
%($copy_number)%
%($u_item_class_name_label)%: %($item_class_name)% %($item_barcode)%
%($u_item_price_label)%: %($item_price)%
%($u_due_date_label)%: %($due_date)%
%($u_item_location_name_label)%: %($item_location_name)%
```

By default, the Overdues **patron_email_row** template contains two types of text:

- The colons (**:**) separating the field label variables from the variables.
- The **c.** on the line before the copy_number variable.

This text helps format the output, which is displayed for the Overdues **patron_email_row** template below. The text displayed in the e-mail message is emphasized in **bold**.

```
Author: Fox, Annette Baker, 1912-
Title: Canada in world affairs Annette Baker Fox.
Call Number: F1034.2 .F69 1996  c. 1
Item Class: Government Documents 000441950
Price: USD 3.59
Due Date: 01-OCT-2012
Shelf Location: Main Library
```

You can edit the text of e-mail row templates however you like. Keep in mind, however, that any text you add to the e-mail row templates will appear for *each* item in the report output.

10.4.2.2 Editing Variables in E-mail Templates

In e-mail templates, variables take the form **%($variable)%**. In e-mail templates you can . . .

- Edit variables to display in the output any data element that the report is configured to retrieve.
- Delete any variable that you do not wish to display in the output.
- Rearrange any variables that appear in the template by default.

Below, we provide specific examples for editing variables in **patron_email_page** and **patron_email_row** templates.

10.4.2.2.1 Editing Variables in E-mail Page Templates

The Overdues **patron_email_page_footer** template is shown below. Variables are shown in **bold**.

> If there is a mistake, please direct any inquiries to the
> %($**item_location_name**)% Circulation Desk. Thank you very much,
> we appreciate your patronage.

In the **email_page** templates, you can . . .

- Add variables
- Delete variables
- Change existing variables

For example, if your library allows patrons to return overdue items either to the shelf location or to the main location, you might edit the last paragraph of the **patron_email_page_footer** template in the following manner:

> Please return these items to either the **%($item_location_name)%** or the **%($main_location_name)%** Circulation Desk. If you have any questions, please contact us at (555) 555-5555 ext. 5555. Thank you very much. We appreciate your patronage.

Notice that in the example above we have also edited the text of the template. For details on editing text in e-mail templates, see the section "Editing Text in E-mail Templates" in this chapter.

The example shown above would produce the output below. The data elements we added are emphasized in **bold**.

> Please return these items either to the **Virtua Branch Library** or to the **VTLS Main Library**. If you have any questions, please contact us at (555) 555-5555 ext. 5555. Thank you very much. We appreciate your patronage.

10.4.2.2.2 Editing Variables in E-mail Row Templates

The default Overdues **patron_email_row** template is shown below. The variables are shown in **bold**.

%($u_author_label)%: **%($author)%**
%($u_title_label)%: **%($title)%**
%($u_call_number_label)%: **%($call_number)% %($item_units)%** c. **%($copy_number)%**
%($u_item_class_name_label)%: **%($item_class_name)% %($item_barcode)%**
%($u_item_price_label)%: **%($item_price)%**
%($u_due_date_label)%: **%($due_date)%**
%($u_item_location_name_label)%: **%($item_location_name)%**

By default, the Overdues **patron_email_row** template produces the output that appears below, where the values returned by the variables are shown in **bold**.

Author: **Fox, Annette Baker, 1912-**
Title: **Canada in world affairs Annette Baker Fox.**
Call Number: **F1034.2 .F69 1996** c. **1**
Item Class: **Government Documents 000441950**
Price: **USD 3.59**
Due Date: **01-OCT-2012**
Shelf Location: **Main Library**

If you want to delete a particular data element from the output, simply delete the variable from the template. For example . . .

- If you do not want the item price to appear in the output, delete **%($item_price)%** from the template.
- If you do not want the copy number to appear in the output, delete **%($copy_number)%** from the template.

Note: For both notice-generating and non-notice-generating reports, you can exclude required data elements from the output by deleting them from the appropriate output template.

If you delete a variable from the template, you should also delete the corresponding field label variable. Otherwise, extraneous field labels will appear in your output. For details, see the following section "Editing Field Label Variables in E-mail Templates" in this chapter.

If you want the output to display a data element that does NOT appear by default, you can add the corresponding variable to the template.

> **Note:** You can add to a template *only* those data elements that a report is configured to retrieve.

For example, for the Overdues report, if you want Check-out Type to appear in the output, you might edit the Overdues **patron_email_row** template in the following manner, where the added variable is shown in **bold**.

```
%($u_author_label)%: %($author)%
%($u_title_label)%: %($title)%
%($u_call_number_label)%: %($call_number)%
%($u_item_class_name_label)%: %($item_class_name)% %($item_barcode)%
%($u_item_price_label)%: %($item_price)%
%($u_checkout_type_label)%: %($checkout_type)%
%($u_due_date_label)%: %($due_date)%
%($u_item_location_name_label)%: %($item_location_name)%
```

Notice that we also added the Check-out Type field label variable directly before the Check-out Type variable. This will label the new variable with the appropriate field label in the output. The added variable and field label variable are shown in **bold** in the output below.

```
Author: Fox, Annette Baker, 1912-
Title: Canada in world affairs Annette Baker Fox.
Call Number: F1034.2 .F69 1996  c. 1
Item Class: Government Documents 000441950
Price: USD 3.59
Check-out Type: Regular
Due Date: 01-OCT-2012
SHELF LOCATION: MAIN LIBRARY
```

If you want a new variable to be labeled in the output, in the output template you *must* either . . .

- Pair the variable with its corresponding field label variable.
  -OR-
- Label the variable with text.

For details on working with field label variables, see the following section "Editing Field Label Variables in E-mail Templates" in this chapter. For details on working with text, see the section "Editing Text in E-mail Templates" in this chapter.

10.4.2.3 Editing Field Label Variables in E-mail Templates

In e-mail templates, field label variables take the form **%($field_label_variable)%**. You can edit field label variables to display in the output any field label that the report is configured to retrieve.

In the following examples, we use the **patron_email_row** template for the Overdues report. However, you can use the following guidelines to edit field label variables for any type of e-mail template.

Below, the field label variables in the Overdues **patron_email_row** template are emphasized by showing them in **bold**.

%($u_author_label)%: %($author)%
%($u_title_label)%: %($title)%
%($u_call_number_label)%: %($call_number)% %($item_units)% c. %($copy_number)%
%($u_item_class_name_label)%: %($item_class_name)% %($item_barcode)%
%($u_item_price_label)%: %($item_price)%
%($u_due_date_label)%: %($due_date)%
%($u_item_location_name_label)%: %($item_location_name)%

Field label variables call up field labels to identify data elements in report output. The Overdue **patron_email_row** template will produce the following output, where the field label variables are emphasized in **bold**.

Author: Fox, Annette Baker, 1912-
Title: Canada in world affairs Annette Baker Fox.
Call Number: F1034.2 .F69 1996 c. 1
Item Class: Government Documents 000441950
Price: USD 3.59
Due Date: 01-OCT-2012
Shelf Location: Main Library

You will edit field label variables in conjunction with variables. For example,

- When you delete a variable from a template, you should also delete the corresponding field label variable. Otherwise, extraneous labels will appear in your output.
- When you add a variable to a template, you should also add the corresponding field label variable so that the data element will be labeled in the output.

Note: You can also label variables with text. For details, see the section "Editing Text in E-mail Templates" in this chapter.

You are not required to use field label variables. You can use field label variables and variables independently of one another. When you are editing templates, however, you should keep in mind that any variable NOT preceded either by a field label variable or by text will not be labeled in the report output.

In some cases, it may be appropriate not to use field label variables. For example, you might delete the field label variables from the Overdues **email_row** template in the following manner:

```
%($author)%
%($title)%
%($call_number)% %($item_units)% c. %($copy_number)%
%($item_class_name)% %($item_barcode)%
%($item_price)%
%($u_due_date_label)%: %($due_date)%
%($u_item_location_name_label)%: %($item_location_name)%
```

These modifications would produce the following output:

Fox, Annette Baker, 1912-
Canada in world affairs Annette Baker Fox.
F1034.2 .F69 1996 c. 1
Government Documents 000441950
USD 3.59
Due Date: 01-OCT-2012
Shelf Location: Main Library

10.4.2.4 Editing Functions in E-mail Templates

In output templates, functions take the form **%(&::function)%**. The following excerpt from the Overdues **patron_email_page** template shows the function in **bold**.

> According to our records, the following %($patron_overdue_count)% item(s) are overdue. Please return them as soon as possible. Fines and suspension of privileges may result if the materials are not returned in a timely manner.
>
> Thank you very much.
>
> **%(&::email_rows)%**If there is a mistake, please direct any inquiries to the %($item_location_name)% Circulation Desk. Thank you very much. We appreciate your patronage.

The Overdues **patron_email_page** template contains only one functions: **%(&::email_rows)%**. This is the case with most **email_page** templates. Another function that is common to **email_page** templates is **%(&::table_rows('email'))%**.

In most cases, e-mail functions return the information specified in the e-mail row template. Functions can also return a combination of row, header, and summary information. In all cases, you cannot edit functions directly. Instead, you must edit functions by editing other templates.

For the Overdues report, you can edit the **%(&::email_rows)%** function by editing the Overdues **patron_email_row** template. Below, we show the default **patron_email_row** template for the Overdues report.

```
%($u_author_label)%: %($author)%
%($u_title_label)%: %($title)%
%($u_call_number_label)%: %($call_number)% %($item_units)% c.
%($copy_number)%
%($u_item_class_name_label)%: %($item_class_name)% %($item_barcode)%
%($u_item_price_label)%: %($item_price)%
%($u_due_date_label)%: %($due_date)%
%($u_item_location_name_label)%: %($item_location_name)%
```

In the output, the information returned by the **patron_email_row** template appears where you see **%(&::email_rows)%** in the **patron_email_page** template. In the output, **%(&::email_rows)%** returns information as long as unique information exists, thereby generating a list. In this case, **%(&::email_rows)%** returns the contents of the **patron_email_row** template for every unique overdue item record found by the report.

10.4.2.5 Adding Links to E-mail Notices

When you use notice-generating reports to generate electronic notices, you may want to include in the notices links to your Web site, where your patrons can get additional information, such as details on library policies or instructions for renewing items online.

You can add links to e-mail notices using the anchor reference **(<a href>)**. For example, below we show how you can add a link to renewal instructions to the Overdues **email_page** template.

> According to our records, the following %($patron_overdue_count)% item(s) are overdue. Please return them as soon as possible. Fines and suspension of privileges may result if the materials are not returned in a timely manner.
>
> %(&::**email_row**s)%If there is a mistake, please direct any inquiries to the %($item_location_name)% Circulation Desk. Or click ** here ** to find out how you can renew your overdue items online.
>
> Thank you very much. We appreciate your patronage.

In our example, the word *here* appears in the electronic notice as a hyperlink, which will take the patron to the URL **http://www.library.renewals.edu**, which provides instructions on renewing items online.

10.5 Working with HTML Templates

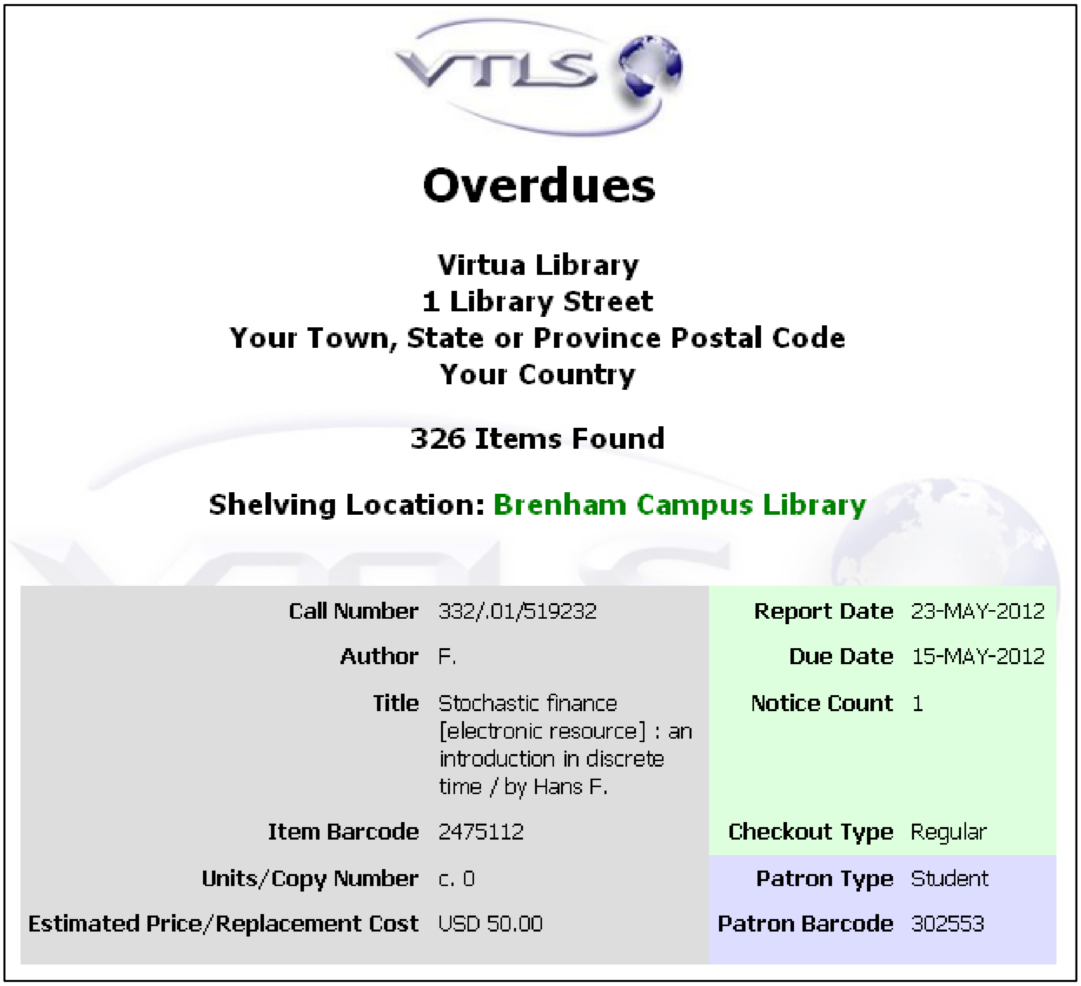
In the following sections, we provide guidelines and examples to help you edit HTML templates. Keep in mind that when you edit output templates, your customizations apply *only* to the configuration you are currently adding or editing.

Important: HTML templates are more complex than e-mail templates because they are written in HTML. We recommend that you edit HTML templates only if you are familiar with HTML.

Output templates are different for each report. In the following sections, we do not discuss the output templates for each report in detail. Rather, we provide general information and examples that you can apply to all reports. You can use these guidelines to access and edit the HTML output templates for *any* report.

10.5.1 Understanding HTML Output

Each report uses a set of HTML output templates that work together to control the appearance and content of HTML output. For example, below we show the default HTML output for the Overdues report (*Figure 10-7*).



Overdues

Virtua Library
1 Library Street
Your Town, State or Province Postal Code
Your Country

326 Items Found

Shelving Location: Brenham Campus Library

Call Number	332/.01/519232	**Report Date**	23-MAY-2012
Author	F.	**Due Date**	15-MAY-2012
Title	Stochastic finance [electronic resource] : an introduction in discrete time / by Hans F.	**Notice Count**	1
Item Barcode	2475112	**Checkout Type**	Regular
Units/Copy Number	c. 0	**Patron Type**	Student
Estimated Price/Replacement Cost	USD 50.00	**Patron Barcode**	302553

Figure 10-7. HTML Output for Overdues Report

The Overdues report output is generated by a combination of the following HTML templates:

- **html_page_header**
- **html_header**
- **html_row**
- **html_page_footer**
- **patron_acct_html_header**
- **patron_acct_html_footer**
- **patron_acct_html_row**

Although each report has different HTML templates, and the contents of each HTML template vary, all HTML templates share some common features, which are described in the following sections.

10.5.1.1 About HTML Page Templates

Generally, **html_page** templates provide the overall framework of the HTML output generated by a report. Therefore, you can edit **html_page** templates to customize the overall structure of HTML output.

For example, below we show the default **html_page_header** template for the Overdues report. HTML code is shown in **bold**. Each part of the **html_page** template is labeled to indicate which part of the output it produces.

```
<!DOCTYPE html PUBLIC "-//IETF//DTD HTML 4.01 Transitional//EN">
<HTML lang="%($::LANG_CODE)%" dir="%($dir)%">

<HEAD>
<META http-equiv="Content-Type" content="text/html; charset=UTF-8">
<TITLE>
%($report_name)%
</TITLE>
<LINK rev="MADE" href="mailto: hotline@vtls.com">
</HEAD>

<BODY bgcolor="#FFFFFF" background="
%($image_dir)%/%($bg_image)%">

<H1 dir="%($dir)%" align="center">
<IMG border="1" src="%($image_dir)%/%($logo)%"
alt="%($logo_desc)%"><BR>
%($report_name)%
</H1>

<H3 dir="%($dir)%" align="center">
%($u_library_name)%<BR>
%($u_library_address1)%<BR>
%($u_library_address2)%<BR>
%($u_library_address3)%<BR>
</H3>

<H3 dir="%($dir)%" align="center">
%($items_found)% %($u_items_found_label)%
</H3>

%(&:: html_table_rows)%

%(&VTLS::VRept::html_footer)%
</BODY>
</HTML>
```

VTLS logo used as background image

(1) Virtua Logo that appears at the top of the screen

(2) Variable that returns the report name (e.g., Overdues)

(3) Variables that return the Library name and address

(4) Displays the numbers of Overdues in the list

(5) Function that returns the information for each overdue item

Function that returns footer information

In Figure 10-8, we show the output produced by the default Overdues **html_page** template shown above. You can use the numbers in the descriptions above and match them with the numbers in Figure 10-8 to see how the **html_page** template corresponds to the actual HTML output.

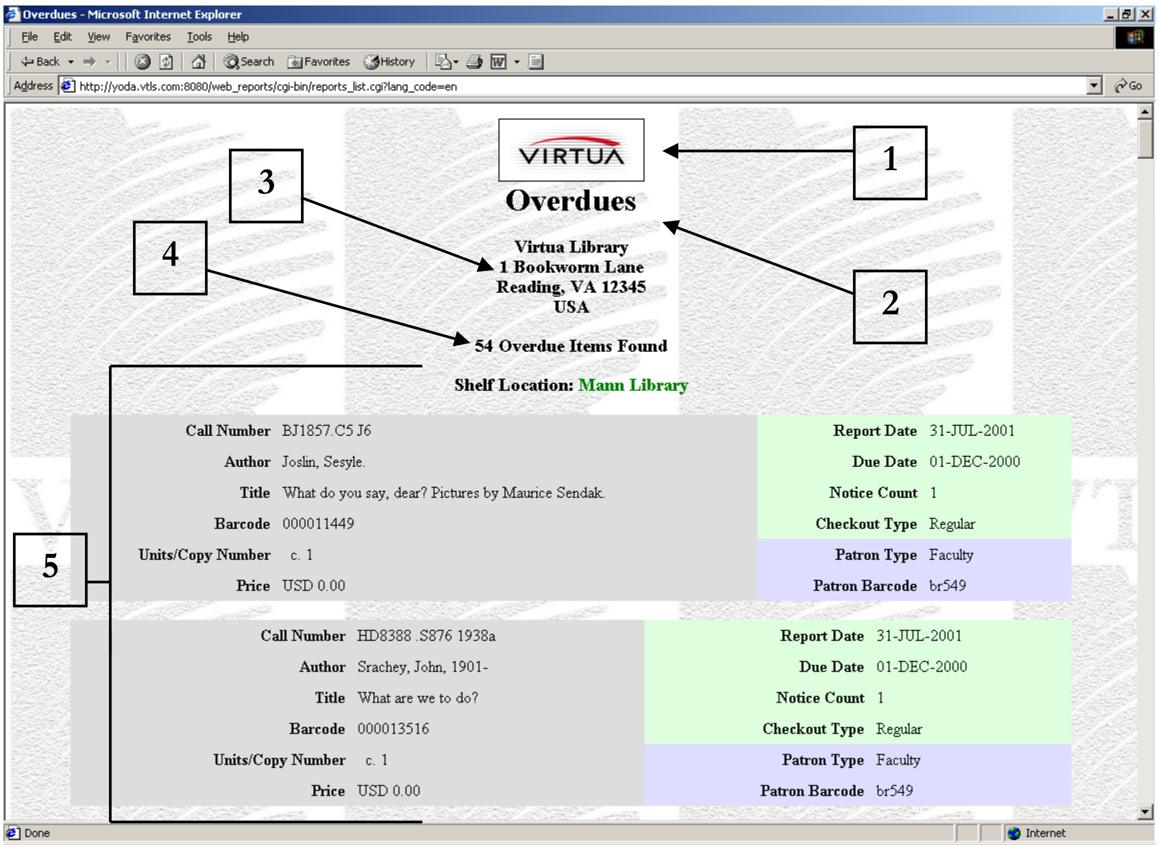


Figure 10-8. html_page Elements Defined

Notice that the information contained in the HTML output is created by a combination of . . .

- Variables
- Field label variables
- Functions
- Image Files

You can control the appearance and content of the HTML output by editing the components of the **html_page** template. For details, see the section "Editing HTML Templates" in this chapter.

10.5.1.2 About HTML Row Templates

In general, **html_row** templates generate a group of information related to a single record or result. Usually, the **html_row** template returns the information for a function embedded within the **html_page** template.

For many reports, **html_row** templates generate data in the form of a table. Before you begin editing **html_row** templates, you should understand the underlying structure of HTML output tables. In the table below, we show the output for a single overdue item from Figure 10-8. The table shows how the output consists of columns and rows.

	Column 1	Column 2	Column 3	Column 4
Row 1	**Call Number**	BJ1857.C5 J6	**Report Date**	31-JUL-2012
Row 2	**Author**	Joslin, Sesyle.	**Due Date**	01-DEC-2011
Row3	**Title**	What do you say, dear? Pictures by Maurice Sendak.	**Notice Count**	1
Row 4	**Barcode**	000011449	**Checkout Type**	Regular
Row 5	**Units/Copy Number**	c. 1	**Patron Type**	Faculty
Row 6	**Price**	USD 0.00	**Patron Barcode**	br549

The table is divided into four columns of data. These columns have the following features:

- The first two columns have gray backgrounds.
- The last two columns have green and blue backgrounds.
- Column 1 and Column 3 provide labels for the data elements that appear in Column 2 and Column 4.
- The text in Column 1 and Column 3 is bold and right-aligned.
- The text in Column 2 and Column 4 is normal and left-aligned.
- Each data element in a column represents an individual cell.

The table is divided into six rows of data. The rows have the following features:

- Each row extends across all four columns of data.
- Each row contains as many as four elements, including data returned from variables and from field label variables.

- The font and alignment of text varies across the row.
- Each element in a column represents an individual cell.

Below, we show the information from the Overdues **html_row** template that produces the *first row* of data in the table. In our example, HTML appears in **bold**.

```
<TABLE border="0" align="center" cellpadding="6" cellspacing="0"
width="90%"summary="%($table_summary)%" dir="%($dir)%">

<TR>
<TH align="right" valign="top" bgcolor="#DDDDDD">
%($u_call_number_label)%
</TH>

<TD valign="top" bgcolor="#DDDDDD">
%($call_number)%
</TD>

<TH align="right" valign="top" bgcolor="#DDFFDD">
%($u_report_date_label)%
</TH>

<TD valign="top" bgcolor="#DDFFDD">
%($report_date)%
</TD>
</TR>
```

Row 1 Cell 1: Call Number Label

Row 1 Cell 2: Call Number Data

Row 1 Cell 3: Report Date Label

Row 1 Cell 4: Report Date Data

This portion of the Overdues **html_row** template produces the first row of data that appears in Figure 10-7 and Figure 10-8. By editing **html_row** templates, you can determine the specific information that is returned for each record in the output.

Below we provide a table to help you interpret the Overdue **html_row** template.

Note: The following table applies only to the example above and does not contain comprehensive information regarding HTML.

HTML	Function	How it affects the example above
<TR></TR>	Table Row - Produces one row of an HTML table.	<TR></TR> encloses all of the information that produces the first row of output.
<TH></TH>	Table Header - Produces one cell of header text. In most browsers, headers are bold.	<TH></TH> encloses all of the information that produces the header cells in the first row.
<TD></TD>	Table Data - Produces one cell of actual data. Data cells have normal text.	<TD></TD> encloses all of the information that produces the two data cells in the first row.
align="right"	Right-aligns the text within a cell.	Right-aligns the header text in the first row.
valign="top"	Top-aligns the text within a cell.	Top-aligns the data text in the first row.
bgcolor="#DDDDDD"	Sets the background color to gray.	Makes gray the background color for the first two columns in the first row.
bgcolor="#DDFFDD"	Sets the background color to green.	Makes green the background color for the last two columns in the first row.
bgcolor="#DDDDFF"	Sets the background color to blue.	This color is not used in the first row; however, it does appear in the fifth and sixth rows of the Overdues **html_row** template.

Use the following guidelines when editing **html_row** templates:

- Add *only* those variables that a report is configured to retrieve.
- Pair variables with their corresponding field label variables.
- Maintain the row and column structure of the table throughout your editing session.
- Make sure that every row has the same number of cells.
- Unless you are very comfortable editing HTML . . .
  - Put field label variables inside <TH></TH> tags.
  - Put variables inside <TD></TD> tags.

For details on editing the components of the **html_row** templates, see the section "Editing HTML Templates" in this chapter.

10.5.1.3 About HTML Header Templates

In some cases, information returned by a report is grouped automatically. In the output, the information generated by an **html_header** template appears at the beginning of a group of information. In this way, report output is grouped according to the parameter within the **html_header** template.

For example, below we show the default **html_header** template for the Overdues report.

```
<H3 align="center">
%($item_location_name_label)%:
<FONT color="GREEN">
%($item_location_name)%<BR><BR>
</FONT>
</H3>
```

The Overdues Report Groups results by item location. The Overdues **html_header** template contains a variable and field label variable that labels groups of results with the appropriate to shelving location.

In Figure 10-9 below, we show an example of HTML output from the Overdues report. Notice that we have given the label *Shelf Location* to the heading produced by the **html_header** template.

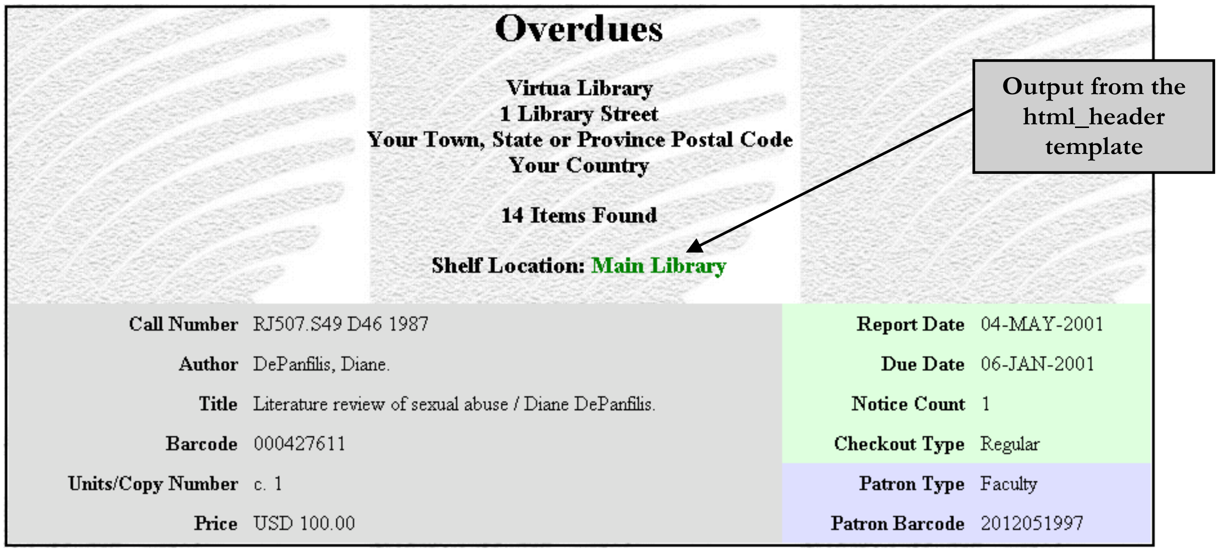


Figure 10-9. HTML Output (html_header Identified)

The heading appears on the screen whenever the value of the variable in the **html_header** template changes (i.e., at the beginning of each new group of results).

> **Important:** In general, you will NOT want to edit the content of **html_header** templates. If you edit the variables returned by the **html_header** templates, your groups of output will be labeled inappropriately.

10.5.1.4 About HTML Summary Templates

Reports that group information automatically use **html_summary** templates to provide a summary of each group of information. These **html_summary** templates are similar to **html_header** templates because they return information related to a group of information.

In the output, the information generated by an **html_summary** template appears at the end of a group of information. In this way, each group of output is summarized by the information generated by the **html_summary** template.

For example, the **html_summary** template for the Account Summaries report contains the following information:

```
<TR>
<TH valign="top" align="right" colspan="3">
<FONT color="GREEN">%($u_fiscal_year_label)%
%($u_summary_fiscal_year)%</FONT>
</TH>
<TH valign="top" align="right">
%($u_encumbrance_sum_label)%
</TH>
<TD valign="top" align="right">
%($encumbrance_sum)%
</TD>
</TR>

<TR>
<TH valign="top" align="right" colspan="4">
%($u_expenditure_sum_label)%
</TH>
<TD valign="top" align="right">
%($expenditure_sum)%
</TD>
</TR>

<TR>
<TH valign="top" align="right" colspan="4">
%($u_free_balance_sum_label)%
</TH>
<TD valign="top" align="right">
%($free_balance_sum)%
</TD>
</TR>

<TR>
<TD valign="middle" colspan="5"><HR></TD>
</TR>
```

Each group of account information, the **html_summary** template returns the following summary calculations:

- Encumbrance total
- Expenditure total
- Free balance total

Note: Most reports do not use **html_summary** templates.

10.5.2 Editing HTML Templates

Customizing HTML output involves editing . . .

- Text
- Variables
- Field label variables
- Functions
- Image Files

These elements appear within the HTML output templates and control the appearance of the output. In the following sections, we provide details for editing the components of HTML output templates.

10.5.2.1 Editing Text in HTML Page Templates

By default, the Overdues **html_page** template does not contain text. This is the case with most **html_page** templates. However, you can add text to **html_page** templates if you wish. For example, you may want your library's telephone number to appear in HTML output.

Below we show an excerpt from the Overdues **html_page** template. In this example, we have added the library telephone number, which is shown in **bold**.

```
<H3 dir="%($dir)%" align="center">
%($user_library_name)%<BR>
%($user_library_address1)%<BR>
%($user_library_address2)%<BR>
%($user_library_address3)%<BR>
(555) 555-5555 ext. 5555
</H3>
```

Note: In the **html_page** template,
 indicates a line break. If you want your added text to appear on a new line, you must type **`<BR>`** at the end of the preceding line, as in the example above.

The example above produces the output shown below in Figure 10-10. Notice that the library telephone number appears directly after the address information.

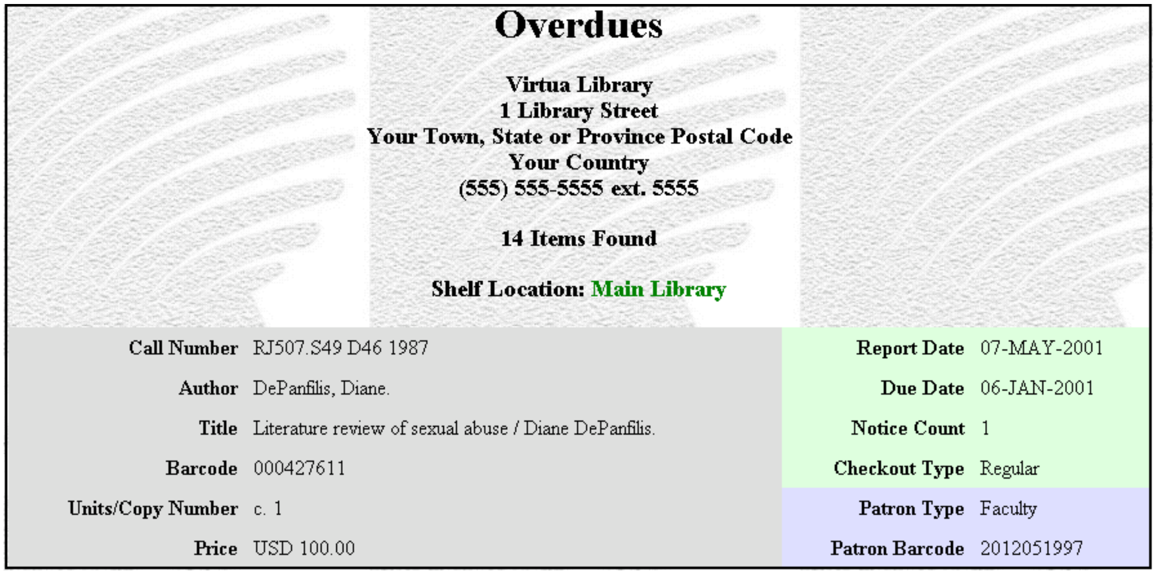


Figure 10-10. HTML Output Displaying Additional Text

10.5.2.2 Editing Variables in HTML Templates

In HTML templates, variables take the form **%($variable)%**. In HTML templates you can . . .

- Edit variables to display in the output any data element that the report is configured to retrieve.
- Delete any variable that you do not wish to display in the output.
- Rearrange any variables that appear in the template by default.

10.5.2.2.1 Editing Variables in HTML Page Templates

Generally, **html_page** templates provide the overall framework for HTML output. For example, below we show the default Overdues **html_page** template. Variables are shown in **bold**.

```
<!DOCTYPE html PUBLIC "-//IETF//DTD HTML 4.01 Transitional//EN">
<HTML lang="%($::LANG_CODE)%" dir="%($dir)%">

<HEAD>
<META http-equiv="Content-Type" content="text/html; charset=UTF-8">
<TITLE>
%($report_name)%
</TITLE>
<LINK rev="MADE" href="mailto: hotline@vtls.com">
</HEAD>

<BODY bgcolor="#FFFFFF" background="%($image_dir)%/%($bg_image)%">

<H1 dir="%($dir)%" align="center">
<IMG border="1" src="%($image_dir)%/%($logo)%"
alt="%($logo_desc)%"><BR>
%($report_name)%
</H1>

<H3 dir="%($dir)%" align="center">
%($u_library_name)%<BR>
%($u_library_address1)%<BR>
%($u_library_address2)%<BR>
%($u_library_address3)%<BR>
</H3>

<H3 dir="%($dir)%" align="center">
%($items_found)% %($u_items_found_label)%
</H3>

%(&::html_table_rows)%

%(&VTLS::VRept::html_footer)%
</BODY>
</HTML>
```

The example above contains very few variables. Most of the data elements retrieved by the Overdues report are specific to a single overdue item. Item-specific values are returned by a function embedded within the **html_page** template, in this case %(&::html_table_rows)%.

Therefore, you probably will not want to add variables to **html_page** templates modeled after the example above. For **html_page** templates that create the overall framework of the output, most of the variables that apply to the *entire* report are already included template.

10.5.2.2.2 Editing Variables in HTML Row Templates

By editing **html_row** templates, you can control the output for a single result (e.g., a single patron or a single item). For example, the Overdues **html_row** template returns all the information related to a single overdue item.

By default, the Overdues **html_row** template returns the Item Price and Patron Barcode in the Row 6 of the output (see the section "About HTML Row Templates" for details). In the following example, we have edited the Overdues **html_row** template to display the Operator ID in Row 7 of the output.

In the example below . . .

- All changes are shown in **bold**.
- The new variable is shown in ***bold italics***.
- The changes are labeled to indicate the effect they have on the output.

```
<TR>
<TH align="right" valign="top" bgcolor="#DDDDDD">
%($u_item_price_label)%
</TH>

<TD valign="top" bgcolor="#DDDDDD">
%($item_price)%
</TD>

<TH align="right" valign="top" bgcolor="#DDDDFF">
%($u_patron_barcode_label)%
</TH>

<TD valign="top" bgcolor="#DDDDFF">
%($patron_barcode)%
</TD>
</TR>

<TR>
<TH align="right" valign="top" bgcolor="#DDDDDD">
%($u_operator_id_label)%
</TH>

<TD valign="top" bgcolor="#DDDDDD">
%($operator_id)%
</TD>

<TH align="right" valign="top" bgcolor="#DDDDFF">
</TH>

<TD valign="top" bgcolor="#DDDDFF">
</TD>
</TR>

</TABLE>
<BR>
```

Begins a new row (in this case, Row 7)

Sets the color of Column 1 to gray

Displays the Operator ID Label

Sets the color of Column 2 to gray

Displays the Operator ID (new variable)

Maintains structure of Columns 3 and 4

Ends Row 7

In the example above . . .

- We added *both* the Operator ID variable AND the Operator ID field label variable.
- We maintained the structure of the table by using the same format as that of the other rows.
- Although we did not add data elements to Column 3 or Column 4, for formatting purposes, we specified the background color for each cell.

The example above produces the output shown in Figure 10-8 below.

Call Number	F266 .S58	**Report Date**	02-JAN-2001
Author	South Carolina Historical Association.	**Due Date**	01-DEC-2000
Title	The proceedings of the South Carolina Historical Association.	**Notice Count**	1
Barcode	000036571	**Checkout Type**	Reserve
Units/Copy Number	1931 c. 1	**Patron Type**	Faculty
Price	USD 3.59	**Patron Barcode**	2012051997
Operator ID	9		

Figure 10-11. HTML Output Displaying Variable Added to Table

Notice that although data does NOT appear in Column 3 or Column 4 of Row 7, the cells themselves appear (i.e., the background color is blue).

You are not required to add data to each column of a row. However, if you create a *new* row, you should specify an appropriate background color for each cell. If you do NOT use a background color to hold the place of each cell, your table will be incomplete.

For example, if you do NOT specify the background color for Column 3 and Column 4 of Row 7, your output would look like Figure 10-12.

Call Number	F266 .S58	**Report Date**	02-JAN-2001
Author	South Carolina Historical Association.	**Due Date**	01-DEC-2000
Title	The proceedings of the South Carolina Historical Association.	**Notice Count**	1
Barcode	000036571	**Checkout Type**	Reserve
Units/Copy Number	1931 c. 1	**Patron Type**	Faculty
Price	USD 3.59	**Patron Barcode**	2012051997
Operator ID	9		

Figure 10-12. HTML Output Displaying Missing Cells in Table

10.5.2.3 Editing Field Label Variables in HTML Page Templates

In HTML templates, field label variables take the form **%($field_label_variable)%**. You can edit field label variables to display in the output any field label that the report is configured to retrieve.

Below, we emphasize the field label variables in a portion of the Overdues HTML-Row template. The excerpt below produces the first two rows of HTML output for the Overdues report. The field label variables are shown in **bold**.

```
<TABLE border="0" align="center" cellpadding="6" cellspacing="0"
width="90%"dir="%($dir)%">

<TR>
<TH align="right" valign="top" bgcolor="#DDDDDD">
%($u_call_number_label)%
</TH>

<TD valign="top" bgcolor="#DDDDDD">
%($call_number)%
</TD>

<TH align="right" valign="top" bgcolor="#DDFFDD">
%($u_report_date_label)%
</TH>

<TD valign="top" bgcolor="#DDFFDD">
%($report_date)%
</TD>
</TR>

<TR>
<TH align="right" valign="top" bgcolor="#DDDDDD">
%($u_author_label)%
</TH>

<TD valign="top" bgcolor="#DDDDDD">
%($author)%
</TD>

<TH align="right" valign="top" bgcolor="#DDFFDD">
%($u_due_date_label)%
</TH>

<TD valign="top" bgcolor="#DDFFDD">
 %($due_date)%
</TD>
</TR>
```

Field label variables call up field labels to identify data elements in report output. The portion of the Overdue **html_row** template shown above will produce first two rows of information for each overdue item (*Figure 10-13*).

Call Number	JC491 .A68	**Report Date**	02-MAY-2001
Author	Arendt, Hannah.	**Due Date**	01-SEP-2000

Figure 10-13. HTML Output - First Two Rows for Overdue Item

Notice in Figure 10-13 that the field labels appear in the first and third columns of the output. They label data elements that appear in the second and fourth columns of the table.

Note: When you edit field label variables in **html_row** templates, be sure to maintain the overall format of the output

In general, your workflow will be to edit field label variables in conjunction with variables. For example,

- When you delete a variable from a template, you should also delete the corresponding field label variable. Otherwise, extraneous labels will appear in your output.
- When you add a variable to a template, you should also add the corresponding field label variable, so the data element will be labeled in the output.

Note: You can also label variables with text. For details, see the section "Editing Text in HTML Page Templates" in this chapter.

You are not required to use field label variables. You can use field label variables and variables independently of one another. However, when you are editing templates, you should keep in mind that any variable NOT preceded either by a field label variable or by text will NOT be labeled in the report output.

10.5.2.4 Editing Functions in HTML Page Templates

You can recognize functions in output templates because they always take the form **%(&::function)%**. The Overdues **html_page** template contains one function. We show this function in **bold** in the excerpt below.

```
<H3 dir="%($dir)%" align="center">
%($items_found)% %($u_items_found_label)%
</H3>

%(&::html_table_rows)%

%(&VTLS::VRept::html_footer)%
</BODY>
</HTML>
```

Each function uses one or more templates to return the appropriate information. You can format the output by editing the templates associated with the function. Two templates are embedded within the html_table_rows functions:

- **html_header** template.
- **html_row** template.

In the Overdues **html_page** templates, %(&::html_table_rows)% indicates where the information retrieved by the Overdues **html_header** and the Overdues **html_row** templates will appear in the output. The function repeats as long as it finds unique information, thereby generating a list of overdue items.

For most reports, you can edit functions indirectly by editing the other available templates, as appropriate. For the Overdues report, you can edit the html_table_rows function indirectly by editing the **html_header** and **html_row** templates.

For details on the components of the html_table_rows function, see the sections "About HTML Header Templates" and "About HTML Row Templates" in this user's guide.

10.5.2.5 Working with Fonts in HTML Page Templates

Throughout **html_page** templates, the default font color is black. In addition, variables, field label variables, and text are a particular font size by default. However, if you wish, you can edit the font size and color to control the appearance of your HTML output.

For example, below we show the portion of the Overdues **html_page** template that produces the report name.

```
<H1 dir="%($dir)%" align="center">
<IMG border="1" src="%($image_dir)%/%($logo)%"
alt="%($logo_desc)%"><BR>
%($report_name)%
</H1>
```

<u>Font Color</u>

You may want to change the color of the report name font. In the following example, we show how you would make the font color blue. Our changes are shown in **bold**.

```
<H1 dir="%($dir)%" align="center">
<IMG border="1" src="%($image_dir)%/%($logo)%"
alt="%($logo_desc)%"><BR>
<FONT color="BLUE">
%($report_name)%
</FONT>
</H1>
```

Changes the font color of the report name to blue

Changes the font color of subsequent text back to black

The example above produces the output shown in Figure 10-14.

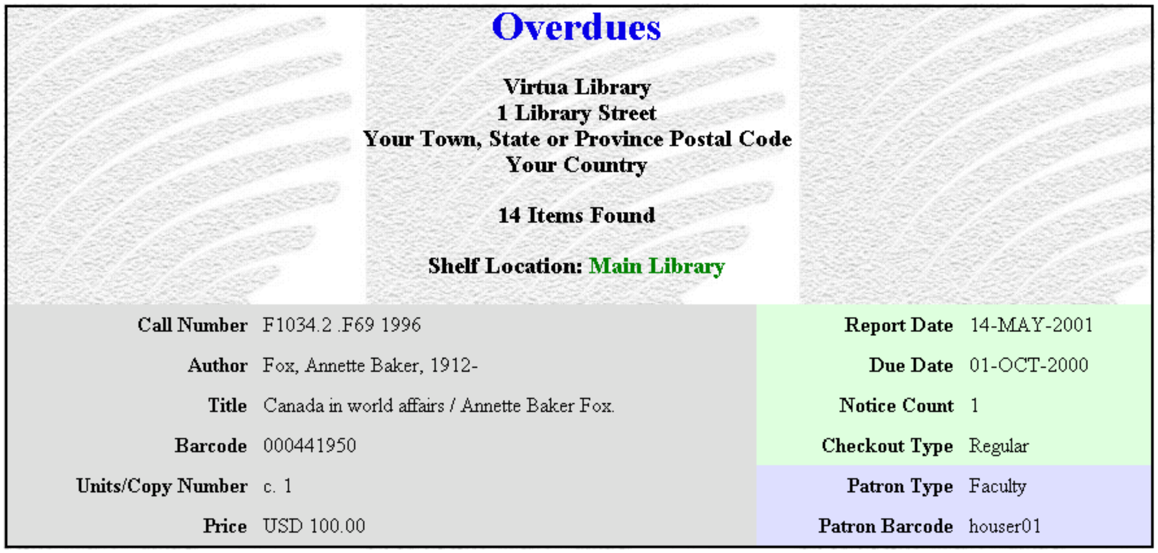


Figure 10-14. HTML Output Displaying New Font Color

Notice that only the report name (i.e., Overdues) is blue. In HTML templates, the new color applies to the font until you change it back to the default font, which is black.

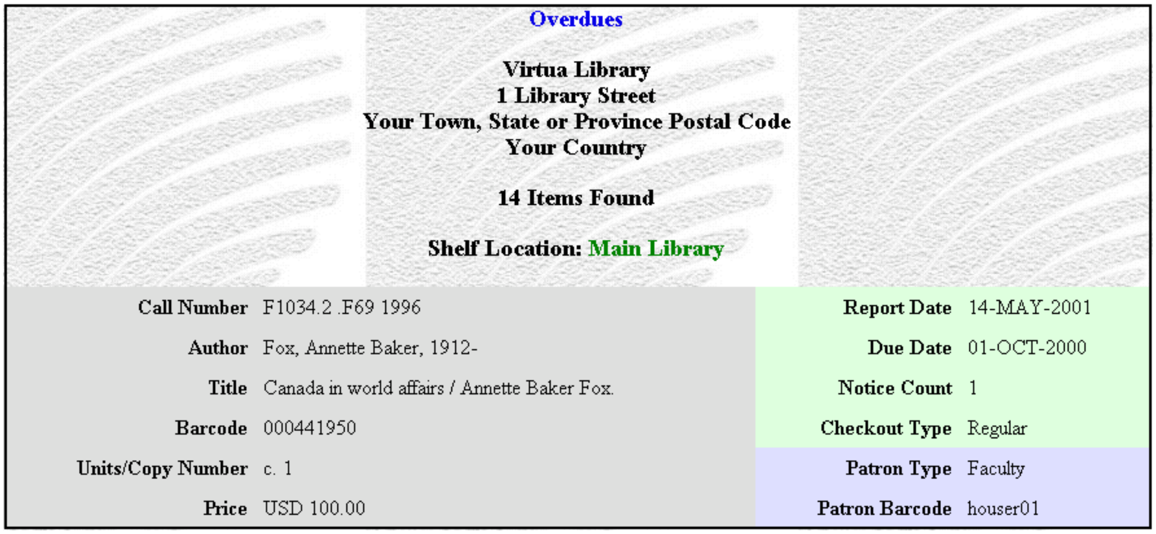
Note: You can edit font colors using any color recognized by HTML.

Font Size

You may also want to change the size of the font in HTML output. Below is an example of how you would make the report name smaller. Our changes are shown in **bold**.

```
<H3 dir="%($dir)%" align="center">
<IMG border="1" src="%($image_dir)%/%($logo)%"
alt="%($logo_desc)%"><BR>
<FONT color=”BLUE”>
%($report_name)%
</FONT>
</H3>
```

In the example above, notice that we reduced the font size of the heading, Overdues, from **H1** to **H3**. This modification makes the report name the same font size as all other elements in the **html_page** template that also use the same heading size (*Figure 10-15*).



Overdues

Virtua Library
1 Library Street
Your Town, State or Province Postal Code
Your Country

14 Items Found

Shelf Location: Main Library

Call Number	F1034.2 .F69 1996	**Report Date**	14-MAY-2001
Author	Fox, Annette Baker, 1912-	**Due Date**	01-OCT-2000
Title	Canada in world affairs / Annette Baker Fox.	**Notice Count**	1
Barcode	000441950	**Checkout Type**	Regular
Units/Copy Number	c. 1	**Patron Type**	Faculty
Price	USD 100.00	**Patron Barcode**	houser01

Figure 10-15. HTML Output Displaying New Font Size

10.5.2.6 Editing Images in HTML Page Templates

You may wish to customize InfoStation by editing the graphics that appear in HTML output. For details on working with images in InfoStation, see the section "Customizing Graphics" in this user's guide.

10.6 Customizing MARC Tag Lists

On each report's Configuration screen, the Field Labels area lists the data elements that the report retrieves from the database by default. Some reports offer a configurable MARC Tag List, which lets configuring the reports to retrieve bibliographic or authority information in addition to the data elements that are retrieve by default.

Configuring a report to return additional bibliographic or authority data requires two steps:

1. Adding the desired tag to the MARC Tag List.
2. Adding the appropriate variable to the output templates.

You can access and edit the MARC Tag List from the Configuration screen of the appropriate report.

10.6.1 Accessing the MARC Tag List

To access the MARC Tag List for a report configuration,

1. On the Reports List screen, select the radio button for the report configuration whose MARC Tag List you want to edit. For our example, we will use a New Books List configuration.

2. Click the Edit button.

   The Configuration screen appears.

3. Scroll to the bottom of the Report-specific Parameters.

   Notice that a link to the MARC Tag List appears. In Figure 10-16, an arrow indicates the link to the MARC Tag List.

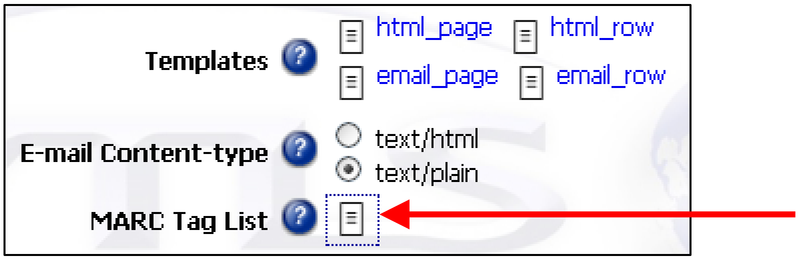


Figure 10-16. MARC Tag List Link

This link gives you access to the MARC Tag List associated with a particular configuration, in this case, a New Books List configuration.

4. Click the MARC Tag List icon.

   The Current MARC Tag List screen appears (*Figure 10-17*).

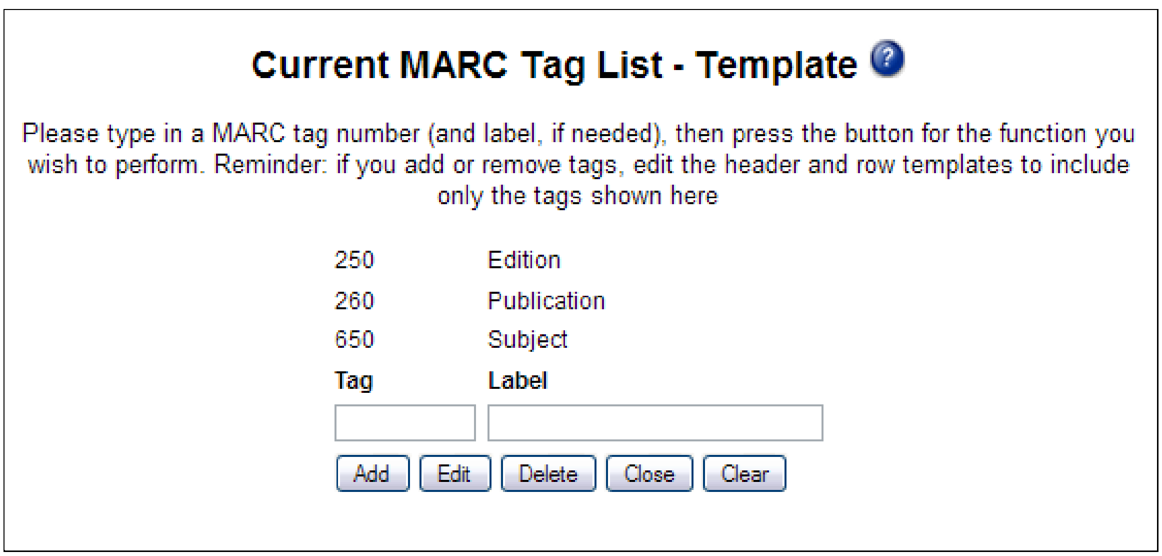


Figure 10-17. Current MARC Tag List Screen

10.6.2 Aspects of the MARC Tag List Screen

The Current MARC Tag List screen displays a list of all the MARC tags that the configuration is currently configured to retrieve.

Typically, the MARC Tag List screen does NOT display MARC tags for required data elements (i.e., data elements that appear in the Field Labels area on the Configuration screen). For example, the MARC Tag List for the New Books List report does not display Author, Title, or Call Number tags. You do not need to add these tags to the MARC Tag List. Required data elements are retrieved automatically by the report.

By default, the MARC Tag List may contain tags for non-required data elements (i.e., data elements that do NOT appear in the Field Labels area on the Configuration screen). For example, the MARC Tag List for the New Books List report contains Edition, Publication, and Subject tags.

The Current MARC Tag List screen contains . . .

- Two text boxes:
  - **Tag** - Lets you specify a tag to add to the MARC Tag List.
  - **Label** - Lets you specify a label for the data in a given tag. Tag labels are optional.
- Five buttons:
  - **Add** - Lets you add a tag to the MARC Tag List.
  - **Edit** - Lets you edit an existing tag.
  - **Delete** - Lets you delete an existing tag.
  - **Close** - Closes the Current MARC Tag List screen.
  - **Clear** - Clears any text from the text boxes.

10.6.3 Working with the MARC Tag List

On the Current MARC Tag List screen, you can . . .

- Add a tag to the MARC Tag List.
- Edit a tag in the MARC Tag List.
- Delete a tag from the MARC Tag List.

In the following sections, we describe these tasks in detail.

10.6.3.1 Adding Tags to the MARC Tag List

By adding a tag to the MARC Tag List, you can configure a report to retrieve the information in any valid bibliographic record tag. After you add a tag to the list, the configuration will retrieve the information from the appropriate field in the bibliographic record, making it available to appear in the output.

Important: When you add a tag to the MARC Tag List, the tag is NOT automatically added to the output. For details on adding tags to the output, see the section "Working with MARC Tags in Output Templates" in this chapter.

To add a tag to the MARC Tag List,

1. In the Tag text box, type the three-digit tag number and any subfields (*optional*) of the tag that you want to add to the list.

Note: If you specify only a tag *number*, InfoStation will retrieve ALL subfields in that tag. If you specify a tag number AND one or more subfields, InfoStation will retrieve only those subfields and will return them in the order that you specify. For example, if you type...

- **100** - InfoStation will retrieve ALL data in the 100 tag.
- **100a** - InfoStation will retrieve *only* subfield $a of the 100 tag.
- **100cba** - InfoStation will retrieve subfields $a, $b, and $c of the 100 tag and return them in the order **cba**.

2. In the Label text box, type a label for the tag. For example, if you add the 100 tag to the MARC Tag List, in the Label text box, you might type **`Author`**. Your Label can be up to 35 characters in length.

Note: Tag labels are optional. The Label you specify appears on the Current MARC Tag List screen to label the information in the tag. In addition, you can configure output templates to display the Label in report output. If you want the output to display a label for the tag, you must type a label in the text box.

3. Click the Add button.

   The new tag appears in the list (*Figure 10-18*).

Figure 10-18. Current MARC Tag List Screen - New Tag Added

Tags appear in the MARC Tag List in numerical order. In our example, although the 250 tag existed in the list before we added the 100 tag, the 100 tag is added to the tag above the 250 tag.

Note: Each tag can appear in the list only once.

10.6.3.2 Deleting Tags from the MARC Tag List

On the Current MARC Tag List screen, you can delete any tag that appears in the MARC Tag List. After you delete a tag, the report no longer retrieves that information from the bibliographic record, and the information cannot appear in the output.

Important: If you delete a tag from the MARC Tag List, you may also need to delete the corresponding variables from your output templates.

To delete a tag from the MARC Tag List,

1. On the Current MARC Tag List screen, in the Tag text box, type the number for the tag you want to delete. For example, if you want to delete the 650 tag, in the Tag text box, type, **`650`**.

2. Click the Delete button.

The tag and its label are removed from the list.

10.6.3.3 Editing Tags in the List

On the Current MARC Tag List screen, you can edit the label for any tag that appears in the MARC Tag List. The Edit function lets you specify a different label for an existing tag, thereby changing how the information is labeled in the output.

To edit the label for an existing tag,

1. On the Current MARC Tag List screen, in the Tag text box, type the number of the tag you want to edit. For example, if you want to edit the label for the 260 tag, in the Tag text box, type, **`260`**.

2. In the Label text box, type a new label for the tag. For example, for the 260 tag, you might type, **`Publisher`**. Your tag value can be up to 35 characters in length.

3. Click the Edit button.
   In the MARC Tag List, the tag label changes to reflect your modifications. Any output templates that contain the variable for that tag label will return the new label.

10.6.3.4 Clearing the MARC Tag List Text Boxes

To clear the Tag and/or Label text boxes without editing the tag list,

- Click the Clear button.

  All text is deleted from the text boxes.

10.6.4 Working with MARC Tags in Output Templates

If you want tags in the MARC Tag List to appear in your report output, you must add the corresponding variables to your output templates.

Note: Some MARC Tag List variables are included in output templates by default. These correspond to the tags that appear by default in the MARC Tag List.

As with all other data elements, in output templates you edit MARC tags using variables and field label variables. You can determine the variables and field label variables for MARC tags using the guidelines described in the following sections.

10.6.4.1 Determining MARC Tag Variables

In output templates, variables always take the form **%($variable)%**. For example, the variable **%($author)%** returns author information.

For MARC Tag List data elements, variables always take the form **%($tag_xxx)%**, where **xxx** is the three-digit tag value. For example, the variable for the 260 tag would be **%($tag_260)%**.

> **Note:** In the output, the MARC tag variable returns all the information stored in all subfields of a given MARC tag.

The default New Books List **email_row** template is shown below. Variables appear in **bold**.

%($u_author_label)%: **%($author)%**
%($u_title_label)%: **%($title)%**
%($tag_250_label)%: **%($tag_250)%**
%($tag_260_label)%: **%($tag_260)%**
%($tag_650_label)%: **%($tag_650)%**
%($u_call_number_label)%: **%($call_number)%**

By default, the template contains the variables for the 250, 260, and 650 tags. If, for example, you want to add the Bib-ID to the output, you might edit the template in the following manner, where the new variable is shown in **bold**:

%($u_author_label)%: %($author)%
%($u_title_label)%: %($title)%
%($tag_250_label)%: %($tag_250)%
%($tag_260_label)%: %($tag_260)%
%($tag_650_label)%: %($tag_650)%
%($tag_001_label)%: **%($tag_001)%**
%($u_call_number_label)%: %($call_number)%

For more information on editing output templates, see the section "Working with E-mail Templates" or "Working with HTML Templates" in this chapter.

10.6.4.2 Determining MARC Tag Field Label Variables

In output templates, field label variables always take the form **%($field_label_variable)%**. For example, the variable **%($u_author_label)%** returns an author field label.

For MARC tags, field label variables always take the form **%($tag_xxx_label)%**, where **xxx** is the three-digit tag value. For example, the variable for the 260 tag would be **%($tag_260_label)%**.

In the output, the field label variable returns the label you specified for the tag on the Current MARC Tag List screen. For details, see the section "Adding Tags to the MARC Tag List" in this chapter.

The default New Books List **email_row** template appears below. Field label variables are shown in **bold**.

```
%($u_author_label)%: %($author)%
%($u_title_label)%: %($title)%
%($tag_250_label)%: %($tag_250)%
%($tag_260_label)%: %($tag_260)%
%($tag_650_label)%: %($tag_650)%
%($u_call_number_label)%: %($call_number)%
```

Notice that the template already contains the 250, 260, and 650 labels by default. If, for example, you want to add the Bib-ID label to the output, you might edit the template in the following manner, where the new field label variable is shown in **bold**:

```
%($u_author_label)%: %($author)%
%($u_title_label)%: %($title)%
%($tag_250_label)%: %($tag_250)%
%($tag_260_label)%: %($tag_260)%
%($tag_650_label)%: %($tag_650)%
%($tag_001_label)%: %($tag_001)%
%($u_call_number_label)%: %($call_number)%
```

Generally, you will edit field label variable in conjunction with variables. For details on MARC tag variables, see the section "Determining MARC Tag Variables" in this chapter.

For additional details on editing output templates, see the section "Working with E-mail Templates" or "Working with HTML Templates" in this chapter.

10.7 Testing Your Customized Output

After you customize your output templates, you will want to test you customizations and correct any errors that exist.

Important: It is especially important to test template customizations for notice-generating reports *before* using them to generate patron notices.

10.7.1 Testing E-mail Templates

To test e-mail template customizations,

1. On the Configuration screen, select E-mail as the Output Format.
2. In the Output E-mail Address text box, type e-mail address to which you want to send the results of the test.

   Note: For notice-generating reports, this causes the configuration to e-mail notices to you rather than to patrons.

3. For notice-generating reports, make sure the Update Database check box is NOT selected.
4. Click the Save button.

   The Reports List screen appears.

5. On the Reports List screen, select the radio button for the configuration that you want to test.
6. Click the Run button.

   The Configuration sends output to you via e-mail.

7. Examine the output.
8. If you are not satisfied with your customization, make the necessary changes to the appropriate template(s).
9. For notice-generating reports, if you are satisfied with your customization . . .

- On the Configuration screen, delete your e-mail address from the Output E-mail Address text box.
- Use the configuration to send notices to patrons.

Note: If you encounter an error message when you test your customization, see the section "Diagnosing Template Errors" in this chapter.

10.7.2 Testing HTML Customizations

To test your HTML customization,

1. On the Configuration screen, set the Output Format to HTML.
2. Click the Save button.
   The Reports List screen appears.
3. On the Reports List screen, select the radio button for the report configuration you want to test.
4. Click the Run button.

   The report output appears in your Web browser.

5. Examine the output. If you are not satisfied with your customization, make the necessary changes to the appropriate template(s).

Note: If InfoStation generates an error message when you test your customization, see the following section in this chapter.

10.7.3 About Template Errors

If there is a problem with your output template customization, InfoStation will generate an error message when you run the report configuration (*Figure 10-19*).

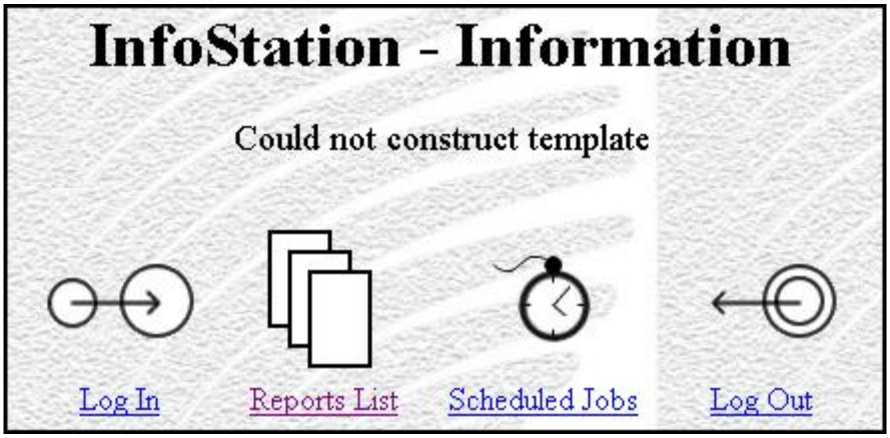


Figure 10-19. Template Error Message

The error message indicates that the template could not be constructed. You will need to examine your output templates, find the error, and correct it.

11. Customizing the InfoStation Interface

In addition to customizing report output, as described in the previous chapter, you can customize other aspects of InfoStation to meet your library's specific needs. In this chapter, we describe how you can customize various aspects of InfoStation.

Note: For details on translating and customizing strings in InfoStation, see the *Virtua Translation and String Customization Guide*.

This chapter covers the following topics:

11.1 Customizing Default Report Templates

Default report templates are what you use to create report configurations. Report templates are labeled *Template* in the Configuration column on the Reports List screen (*Figure 3-5*). They contain parameters that you can configure to generate specific results.

11.1.1 About Default Report Template Files

Each default report template has a set of default parameter values, which you can modify as needed. For example, Figure 11-1 shows a portion of the Report-specific Parameters for the Delinquent Patron Accounts report.

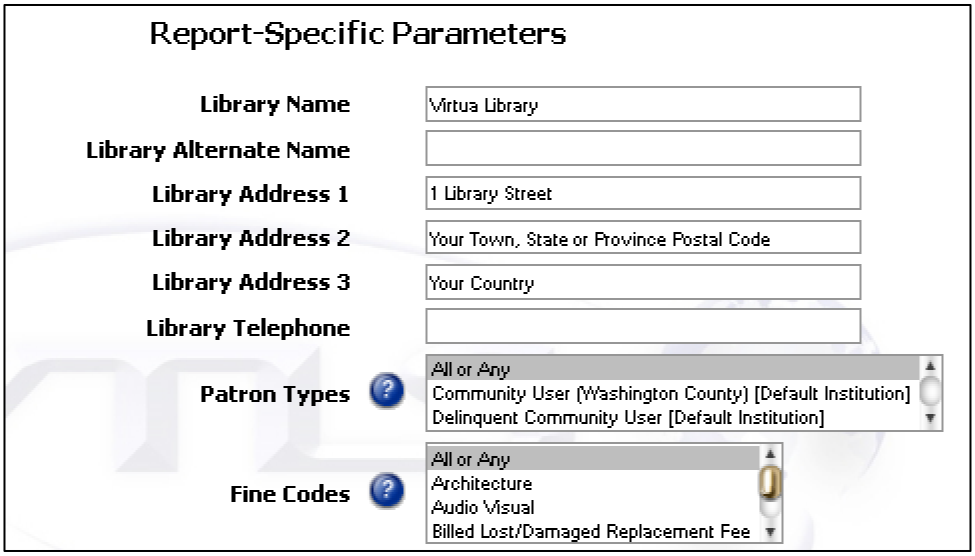


Figure 11-1. Report-specific Parameters for the Delinquent Patron Accounts Report

The default report template file contains the default settings for each parameter. In this case, the values are as follows:

Parameter	Default Value
Library Name	Virtua Library
Library Alternate Name	[blank]
Library Address 1	1 Library Street
Library Address 2	Your Town, State or Province Postal Code
Library Address 3	Your Country
Library Telephone	[blank]
Patron Types	All or Any
Fine Codes	All or Any

You can modify the default report template files to specify different default values. For example, you may wish to replace the default library name and address with your own library name and address so that you do not have to modify these fields each time you create a report new configuration.

11.1.2 Location of Default Report Template Files

Default report template files are stored in the **/usr/vtls/virtua/webrpt_XX_x/config** directory of your InfoStation installation. This directory contains a different default template file for each report and each language. Each file uses the following filename format:

[Report Group]_[Report Number]_default_xx.cfg

Where . . .

- **[Report Group]** is the Report Group of the report.
- **[Report Number]** is the report number of the report.
- **xx** is the language code of the file.

Hint: Because default report template files are language-specific, you can have different default settings for each language.

For example, the default report template file for the English translation of the Delinquent Patron Accounts report is **Cir_28_default_en.cfg**,

Where . . .

- **Cir** is the Circulation Report Group.
- **28** is the report number of the Delinquent Patron Accounts report.
- **en** is the language code for English.

For additional information on Report Groups and report numbers, see the appendix "About InfoStation Files" in this user's guide.

11.1.3 Format of the Default Report Template File

Each default report template file is a delimited file where parameters and values are separated by an equal sign (=). Figure 11-2 shows a portion of the default report template file for the Delinquent Patron Accounts report.

```
date_entered=25-FEB-2013 8:51
db_label=
lang_code=en
password=
```

```
report_name=Delinquent Patron Accounts
rept_cfg_file=/home/belhea/public_html/webrpt/config/Cir_28_default_en.cfg
rept_cgi_file= /home/belhea/public_html/webrpt/cgi-bin/Cir_report_28.cgi
save=Save
u_assessment_amount_label=Assessment Amount
u_assessment_date_label=Assessment Date
u_assessment_id_label=Assessment ID
u_assessment_subtotal_label=Assessment Subtotal
```

Figure 11-2. Default Report Template File

For each line in the file . . .

- The value to the *left* of the equal sign (=) is the name of the parameter. DO NOT MODIFY THIS NAME.
- The value to the *right* of the equal sign is the default value of the parameter. You can modify this value as needed to specify a different default setting for the report template.

For example, in Figure 11-2, the value for the **report_name** parameter is Delinquent Patron Accounts. By modifying this value, you can modify the name of this report.

11.1.4 Guidelines for Modifying Default Report Template Files

When modifying default template files, follow these guidelines:

- Do NOT add or delete parameters.
- Do NOT modify parameter names.
- If a parameter does not have a default value defined, do NOT define one. These values are configuration-specific and will be supplied automatically when you use the template to create a report configuration.
- Modify only *default* files. Do NOT modify files that use the filename format **[Report Group]_[Report Number]_[Number]_xx.cfg** (e.g., **Cat_1_9423643360_en.cfg**). These files contain settings for report configurations, which you should modify via the InfoStation interface only.
- Most parameters have names that are similar to those that appear on the Configuration screen, making them easy to identify in the default template files.

- The value **all** represents the *All or Any* option in multi-selectable list boxes.
- Numeric parameter values represent either . . .
  - ♦ For text box parameters, the value that appears in the text box.
    -OR-
  - ♦ For list box parameters, the number of the option in the list. For example, the default value for the **u_output_format** parameter is **1**, which means that the Output Format parameter will default to the first option in the list, HTML.
- Word and phrase parameter values can represent either . . .
  - ♦ Default text in a text box.
    -OR-
  - ♦ A radio button setting.

11.1.5 Modifying Default Report Template Files

> **Important:** Before you begin modifying your template files, read the section "Guidelines for Modifying Default Report Template Files" in this chapter.

To modify a default report template file,

1. Log in to the server as **dbadmin**.
2. Navigate to the **/usr/vtls/virtua/webrpt_XX_x/config** directory of your InfoStation installation.
3. Open the desired file.
4. Modify the default parameter values as needed.
5. Save the file.

   InfoStation will now use the modified file as the report template. You can test your changes by following the instructions in the section "Accessing the Configuration Screen" in this user's guide.

11.2 Customizing Graphics

InfoStation uses HTML screen templates to hold the HTML code that controls the appearance of the screens that appear throughout InfoStation (such as, the Reports List screen, the Log In screen, and the Configuration screen). You will notice that various features are consistent throughout all screens in InfoStation, including . . .

- The Virtua Logo at the top of the screen.
- The VTLS watermark image in the background.
- The Log In, Reports List, Scheduled Jobs, and Log Out icons at the bottom of the screen.

All these elements are generated by graphics stored in the **/usr/vtls/virtua/webrpt_XX_x/images** directory. You can customize these images by redefining them in the **/usr/vtls/virtua/webrpt_XX_x/images** directory. By default, the **images** directory contains the following graphics:

- **clock.png**- The image for the Scheduled Jobs icon.
- **edit_template.png** - The image for the output Templates and MARC Tag List icons.
- **login.png** - The image for the Log In icon.
- **logout.png** - The image for the Log Out icon.
- **reportslist.png** - The image for the Reports List icon.
- **virtua.png** - The image for the Virtua logo, which appears at the top of all InfoStation screens.
- **vtls_logo_relief.jpg** - The image for the VTLS watermark, which serves as the background for all InfoStation screens.

These Virtua logo and VTLS watermark images are defined by parameters in the global strings file **web_reports_strings.xx**:

bg_image=vtls_logo_relief.jpg
logo=virtua.png

Because each translation of InfoStation has its own global strings file, you can define different graphics for every language.

In template files, the logo and background graphics are referenced by their parameter name. On the interface, the appropriate image appears when the graphic is referenced in any HTML template. For example, **vtls_logo_relief.jpg** displays on the screen where **bg_image** appears in any HTML template.

Note: Graphics that are NOT defined by parameter names in the global strings files are called up by functions. For example, the Log In, Log Out, Reports List, and Scheduled Jobs icons are called up by the **footer.tem** file, which serves as a function within other template files. You can replace the default images with different images, but because the **footer.tem** file is NOT language-specific, you must use the same icon images for every language.

To change the logo or background graphic in InfoStation,

1. Copy the new graphic into the **/usr/vtls/virtua/webrpt_XX_x/images** directory. For example,

   - The default background image used by InfoStation is stored as **vtls_logo_relief.jpg** in the **/usr/vtls/virtua/webrpt_XX_x/images** directory.
   - You can add your new background graphic to the InfoStation directory structure as . . .

     /usr/vtls/virtua/webrpt_XX_x/images/new_background.jpg

2. Redefine the new image in the appropriate language strings file. For example,

   - By default, the background image is defined as

     bg_image=vtls_logo_relief.jpg

   - To display the new graphic as the background image, you would redefine it as

     bg_image=new_image.jpg

After you redefine the graphic parameter in the strings file, all HTML files that use the parameter will display the newly-defined graphic.

12. Appendix A - InfoStation Quick Reference

In this appendix, we provide brief step-by-step instructions for performing basic InfoStation tasks. Where appropriate, we provide links that you can use to get additional information about each task.

This appendix covers the following topics:

⇒ Logging in to InfoStation
⇒ Creating Report Configurations from Report Templates
⇒ Creating New Configurations from Existing Configurations
⇒ Editing Report Configurations
⇒ Deleting Report Configurations
⇒ Running Report Configurations
⇒ Scheduling Configurations to Run Automatically
⇒ Editing Scheduled Jobs
⇒ Deleting Scheduled Jobs
⇒ Viewing the Scheduled Jobs Log

12.1 Logging in to InfoStation

To log in to InfoStation,

1. Using your InfoStation URL, access the Log In screen.
2. In the Database pull-down list box, select a database for your session.
3. In the Language pull-down list box, select a language for your session.
4. In the Report Group list box, select one or more Report Groups for your session. You must select at least ONE Report Group before you can log in.
5. If you want, in the Filter String text box, type a filter string. Filter strings are optional for log-in.
6. In the Username text box, type your Virtua username.
7. In the Password text box, type your Virtua password, and then click OK.

   The Reports List screen appears, displaying a list of report templates and configurations that meet your log-in criteria.

For additional information on logging in to InfoStation, see the chapter "Working with the Log In Screen" in this user's guide.

12.2 Creating Report Configurations from Report Templates

To create a new report configuration from a report template,

1. On the Reports List screen, select the radio button for the report template from which you want to create a configuration.
2. Click the Add button.
   The Configuration screen appears.
3. On the Configuration screen, configure the General Parameters.
4. Configure the Report-specific Parameters.
5. Edit the output Templates.
6. Configure the Field Labels.
7. Click the Save button

   The Reports List screen appears. The new configuration has been added to the list.

For additional information, see the section "Creating Report Configurations" in this user's guide.

12.3 Creating New Configurations from Existing Configurations

To create a new report configuration from an existing report configuration,

1. On the Reports List screen, select the radio button for the configuration that you want to use to create a new configuration.
2. Click the Add button.
   The Configuration screen appears, displaying the information for the report configuration you selected on the Reports List screen.
3. Edit the configuration as needed.
4. Click the Save button.

   The Reports List screen appears. The new configuration has been added to the list.

For additional information, see the section "Creating New Configurations from Existing Configurations" in this user's guide.

12.4 Editing Report Configurations

To edit an existing report configuration,

1. On the Reports List screen, select the radio button for the report configuration you want to edit.
2. Click the Edit button.
   The Configuration screen appears, displaying the settings for the selected report.
3. Edit the configuration as needed.
4. Click the Save button.

   Your changes are saved, and the Reports List screen reappears.

For additional information, see the section "Editing Report Configurations" in this user's guide.

12.5 Deleting Report Configurations

To delete a report configuration,

1. On the Reports List screen, select the radio button for the report configuration you want to delete.
2. Click the Delete button.

   The Reports List screen refreshes. The report you deleted no longer appears in the list of reports.

For additional information, see the section "Deleting Report Configurations" in this user's guide.

12.6 Running Report Configurations

To run a report configuration,

1. On the Reports List screen, select the radio button for the configuration you want to run.
2. Click the Run button.

   The report runs and generates output in the appropriate format.

For additional information, see the chapter "Running Report Configurations" in this user's guide.

12.7 Scheduling Configurations to Run Automatically

To schedule a report configuration to run automatically,

1. On the Reports List screen, select the radio button for the configuration you wish to schedule.
2. Click the Schedule button.
   The Add Job to Schedule screen appears.
3. In the Minutes text box, type the desired minutes.
4. In the Hours text box, type the desired hours.
5. In the Day of Month text box, type the desired day of the month.
6. In the Month list box, select one or more values.
7. In the Day of Week list box, select one or more values.
8. When you are finished scheduling the report, click the Add button.

   The Scheduled Jobs List screen appears. The new scheduled job appears in the list.

For additional information, see the chapter "Scheduling Configurations to Run Automatically" in this user's guide.

12.8 Editing Scheduled Jobs

To edit a scheduled report configuration,

1. From any screen in InfoStation, click the Scheduled Jobs icon.

The Scheduled Jobs List screen appears.
2. Select the radio button for the scheduled job you wish to edit.
3. Click the Edit button.
   The Edit Scheduled Job screen appears, displaying the scheduling information for the report configuration you selected.
4. Edit the information as needed.
5. Click the Save button.

   Your changes are saved, and the Scheduled Jobs List screen reappears.

For additional information, see the chapter "Scheduling Configurations to Run Automatically" in this user's guide.

12.9 Deleting Scheduled Jobs

To edit a scheduled report configuration,

1. From any screen in InfoStation, click the Scheduled Jobs icon.
   The Scheduled Jobs List screen appears.
2. Select the radio button for the scheduled job you wish to delete.
3. Click the Delete button.

   The selected job is deleted. The Edit Scheduled Job screen refreshes, and no longer displays the deleted job in the list.

12.10 Viewing the Scheduled Jobs Log

To view the scheduled jobs log,

1. From any screen in InfoStation, click the Scheduled Jobs icon.
   The Scheduled Jobs List screen appears.
2. Select the scheduled job whose job log you want to view.
3. Click the View Log button.

   The View Log screen appears, displaying the information associated with the scheduled job you selected.

For additional information, see the chapter "Scheduling Configurations to Run Automatically" in this user's guide.

13. Appendix B - Troubleshooting InfoStation Reports

Sometimes, your report configurations may not produce the results that you expect. In this appendix, we provide solutions to some of the most commonly encountered InfoStation problems.

This appendix covers the following topics:

13.1 When Data Elements Do Not Appear in the Output

For a data element to appear in the output, *both* of the following conditions must be met:

- The report must be configured to *retrieve* the data element from the database.
  -AND-
- The output template must be configured to *return* the data element in the output.

Important: Most reports can return data elements that are not included in the output by default. In addition, each output format does NOT necessarily include the same default data elements.

If your report does not return the expected data elements, check the output templates to verify that they contain the appropriate variables.

For notice-generating reports, to include a *non-required* data element in the output, you must . . .

- Add the variable to the appropriate output template.
  -AND-
- On the Configuration screen, select the corresponding Include check. box.

13.2 When You Get Different Results for Different Output Formats

For notice-generating reports, you will usually get different results depending on the Output Format you use. **This is normal.**

Note: *Non*-notice-generating reports should produce the same results in ALL Output Formats.

To be included in HTML output, an item must be eligible for inclusion in the report AND it must meet the configuration criteria. For example, to be included in the HTML output of the Availability report, a requested item must be . . .

- On Hold (status 4705)
- Shelved at one of the locations selected in the Locations parameter.
- Requested by a patron whose patron type matches one of those selected in the Patron Types parameter.

For an item to be included in e-mail output, it must meet the criteria described above AND the associated patron record must contain a *valid* primary e-mail address (271 1 $a). If a valid e-mail address does not exist for the patron, that record is omitted from the output.

In this way, some results that appear in HTML output may NOT appear in e-mail output. You can use the E-mail Validation report to check patron records for valid e-mail addresses. For details, see the *InfoStation/Circulation Reports Reference Guide*.

Note: The Honor Address Preference parameter can also determine which items appear in e-mail output. For details, see the *InfoStation/Circulation Reports Reference Guide*.

13.3 When Invalid Values Appear in Parameter List Boxes

In InfoStation, Report-specific Parameter list boxes can be populated with three primary types of data:

- **InfoStation-defined Options** - Values defined by and for InfoStation that let you limit, calculate, or organize your report output. For example, in the Bibliographic Record List report the Item Conditions list box (*Figure 13-1*) is populated with options defined by InfoStation.

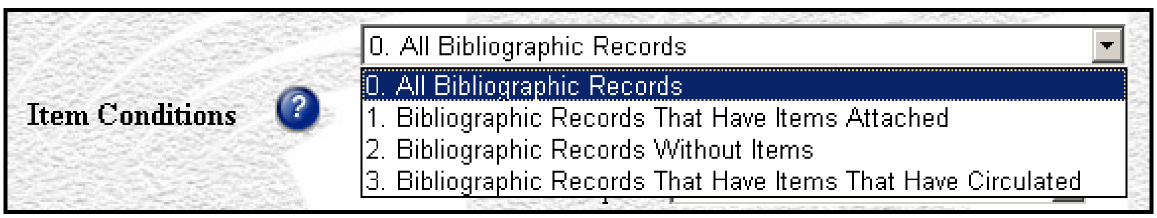


Figure 13-1. Item Conditions List Box

- **Data Elements as They Exist in Records in the Database** - Values that are taken directly from one or more records in the database. For example, in the Patron List report, the Counties list box (*Figure 13-2*) is populated with any county that exists in the database in the primary 270 tag, subfield $c of any patron record.

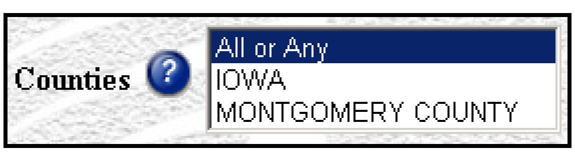


Figure 13-2. Counties List Box

- **Definitions of Codes As They Exist in the Profiler** - Descriptions that you create via the Virtua Profiler to give meaning to codes used throughout the system. For example, in the Patron Account Statement report, the Patron Types list box (*Figure 13-3*) is populated with patron type descriptions, which you define via the Virtua Profiler.

Figure 13-3. Patron Types List Box

Note: Before a code description will appear in a list box in InfoStation, the code must be associated with a record. In this way, Report-specific Parameters generally offer only the options that will produce results.

For additional information on the options offered by specific parameters, see the InfoStation reference guides.

Sometimes, list boxes that contain data elements as they exist in the records in your database may *appear* to display invalid values. Keep in mind, however, that the values displayed in these list boxes are *always* valid for your database in some way.

For example, in the Records by State report, the Record Types list box is populated with any value that exists in Leader position 06 of any record of any type in your database. If all of your records are cataloged correctly, the Record Types list box will display only valid values. All values, however, may NOT be valid for all types of records.

Additionally, if any record in your database contains *invalid* data, invalid values may appear in the Report-specific Parameter list boxes in InfoStation.

In this way, list boxes that display record data may appear to display invalid values. Each value that appears in the list box is, however, valid for at least one record in your database. This feature can help you locate and correct invalid record data.

Additionally, list boxes that contain descriptions defined via the Virtua Profiler may also seem to offer invalid options. For example, many InfoStation reports offer the Locations parameter, which lets you limit your results according to location. The Locations list box displays the location names that you have defined via the Location Names parameter in the Virtua Profiler. Each location that you define via the Profiler is identified by a location code.

Sometimes Report-specific Parameter list boxes may display a code instead of a description. For example, in place of the location Main Library, the Locations list box may display the code 1000000. This can occur when a location has been deleted from the Profiler but the location code is still associated with a record in the database. As long as the code is associated with a record in the system, it will continue to appear in InfoStation.

Note: In recent releases, the Profiler has been enhanced to restrict you from deleting parameter definitions that are associated with records. For the most part, it is no longer possible to delete item classes, patron types, locations, and similar definitions if they are associated with a record, which reduces the likelihood that undefined codes will appear in InfoStation. Codes may appear, however, if you deleted definitions before these safeguards were implemented.

13.4 When E-mail Notices Contain Incorrect Data

Running InfoStation with the **preserve_email_files** setting enabled (set to 1) in the **constants.cfg** file can cause problems with notices e-mailed to patrons via notice-generating InfoStation reports.

The **preserve_email_files** setting is meant to be used for debugging purposes in a non-production environment. Any temporary e-mail files that are preserved while the setting is turned on should be deleted or moved to another location, and the setting should be disabled (set to 0), before returning to a production environment.

Leaving the **preserve_email_files** setting enabled in a production environment, can cause Virtua to infrequently send an e-mail notice to Patron B that contains content that was originally generated for a different notice sent to Patron A.

14. Appendix C - Changes in this User's Guide

14.1 Changes for Version 16.1

No changes were made.

14.2 Changes for Version 16.0 SP2

"Setting the Output E-mail Parameter" - Updated to reflect that this field has been improved so that it now accepts up to 240 characters.

Index

D

E

F

G

M

N

O

P

R

S

T

U

V

W