



CXBanking

OptiVault 10.1

User Reference Guide

Build Number: 3132
April 2023

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Revision Record

Date	Page No.	Description of Change
April 2023	All	Initial Draft
April 2023	All	Replaced all 9.x screenshots with the latest 10.1 Navigation
April 2023	10	Added EPSS login & logout info to access OV into sections 1.1.2, 1.1.3 and 1.1.4
April 2023	121 to 149	Added Sections 7 Settings and 8 Maintenance per 10.1 navigations
April 2023	146 to 150	Updated 7.1.3 The functionalities of 'View and edit of Members' and 'View and edit of Rights' in Business Units have been relocated from the 'System > Privileges > Administer Business Users' section in OptiVault to the EPSS Screen. Within the EPSS Screen, users can navigate to the user management section to assign groups

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Preface

The conventions used in this help documentation are shown in the table below.

Document Conventions

TABLE 1: CONVENTIONS

Convention	Use
Green Text	Indicates a link to the top of the current section. These links can be clicked to quickly navigate through this document. (In some cases, you may need to hold the CTRL key to click the link)
Blue Text	Indicates a link to a different topic or section. These links can be clicked to quickly navigate through this document. (In some cases, you may need to hold the CTRL key to click the link)
→	The “arrow” sign indicates a menu choice. For example, " Choose File → Open " means "click the File menu, and then click Open."
	Used to warn users of potential problems or to take caution when making changes to settings and parameters.
	Tips or information that may help use the functionality.

Return To: [Introduction to OptiVault](#)

1 Introduction to OptiVault

OptiVault is the solution to lower costs through more effective currency management. This software application is a comprehensive system designed to optimize currency ordering and clearing for financial institutions with Vaults, Custodial Inventory, Commercial customers, and External Funding Sources known as Cashpoints. Based on historical cash-demand data, OptiVault will forecast future currency needs, considering important factors such as seasonality, holidays, special events, and trends.

Forecasted currency and denomination requirements are evaluated against various cost components associated with ordering, holding, and delivering currency to a Cashpoint.

The overriding objective: calculate the optimal amount of cash required for Cashpoints and reduce operating costs.

- Getting Started
- Screen Resolution
- Navigation Tips
- Accessing OptiVault
- Opening OptiVault
- Logging Out Of OptiVault



Caution: OptiVault is a live application. Changes that are made in the application are permanent and can affect the operation of the system. There are limited undo capabilities for the users; therefore be sure to consult this manual before deleting or changing system parameters.

1.1 Getting Started

OptiVault is a web-based application, operating in a multi-user environment to produce daily recommendations for the amount and frequency of currency orders. Daily order recommendations are distributed from a central location. The recommendations are updated by the OptiVault analyst to confirm the recommendations into orders. Resulting orders are then that can then be printed or passed electronically to the cash provider. NCR will assist in getting the application properly configured.

[Return To: Introduction to OptiVault](#)

1.1.1 Screen Resolution

Because OptiVault runs in a browser, the user may choose any valid desktop resolution, and OptiVault will resize automatically. However, we recommend using at least 1024x768 resolution and larger is preferred to minimize scrolling on some of the screens containing large amounts of information.

[Return To: Introduction to OptiVault](#)

1.1.2 Navigation Tips



When using OptiVault, avoid using the Back and Forward buttons in the browser. All navigation should occur within the application via the menu or icons, thereby ensuring the successful processing of the OptiVault system.

[Return To: Introduction to OptiVault](#)

1.1.3 Accessing OptiVault

To start using the application, first type in the required EPSS Application OptiVLM URL into your browser and then proceed to access OptiVault with provided user ID and password. Make sure to correctly enter the credentials as more than five (5) incorrect attempts will block your account. If you don't have user ID and password please contact your administrator.

Users can be added from *Shared Services > User Management* by admin.



Suggestion: save the Application URL in the Favorites folder for easier future access.

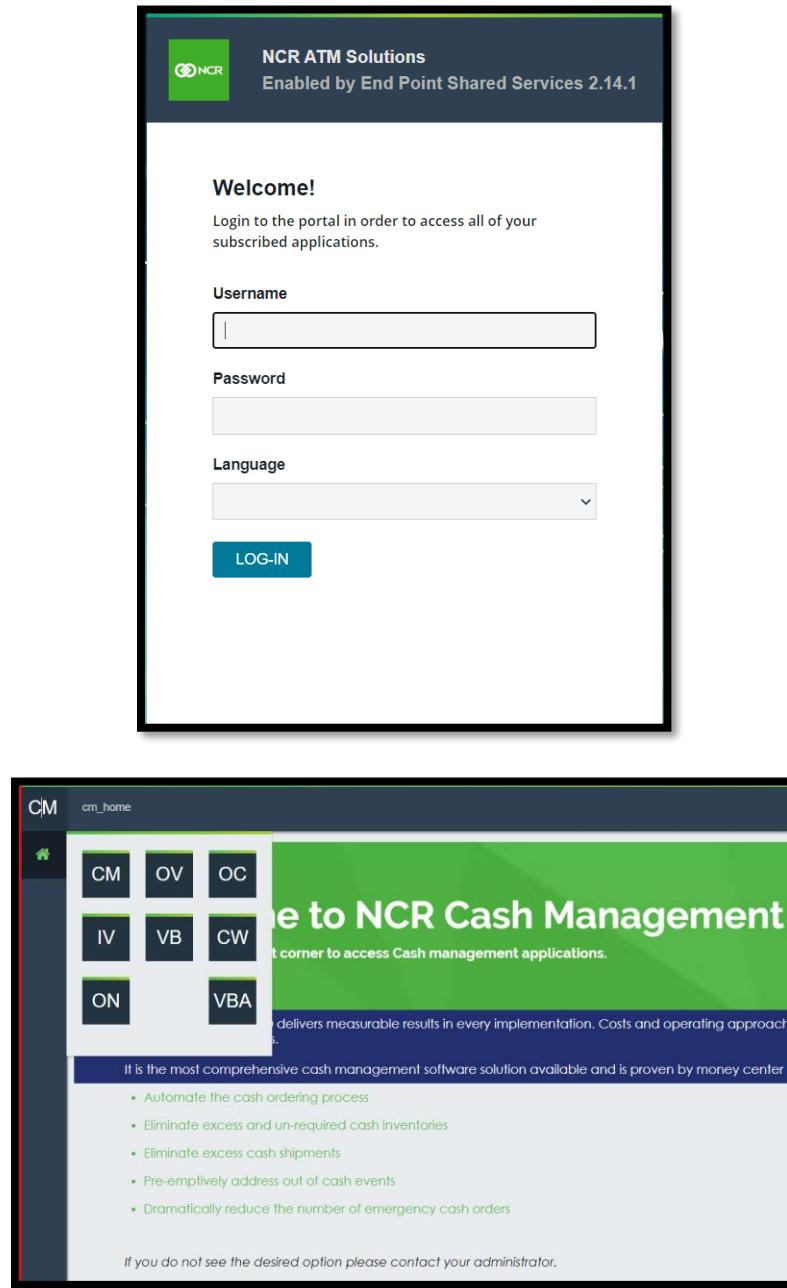
[Return To: Introduction to OptiVault](#)

1.1.4 Opening OptiVault

After a successful login, user will be directed to the Cash Management Dashboard screen, as shown below. To enter OptiVault, click on the '**'OV'**' button located in the App Launcher. App launcher is the icon at top left of the screen which allows users to switch between the application to which user has access to.

Note: If you don't see the desired application which you are trying to access reach out to your administrator so the access can be provisioned.

FIGURE 1: EPSS APPLICATION LOGIN PAGE



[Return To: Introduction to OptiVault](#)

1.1.5 Logging Out Of OptiVault

To logout, click the Logout button from User Menu Item Icon which is located in the bottom left-side menu options of the screen.

The screenshot shows the CXBanking OptiVault 10.1 dashboard. On the left is a dark sidebar with menu items: Today, Processing, Network, Events, Settings, Maintenance, Reports, Shared Services, and Log out. Below the sidebar are buttons for User user, Change password, and a status bar showing mail, Soiled, and Unknown counts. The main area has a title 'VAULT RECOMMENDATIONS TODAY' with a pie chart and a table showing the total number of recommendations (99), broken down by status: Remaining to be processed (91) and Processed (8). Below this is a section titled 'VAULT ORDERS PLACED TODAY' with a table showing delivery and return details for various currencies (USD, VEB, BZD, ARS, COP) across different schedules (Planned, Unplanned).

Currency	Schedule	Central Bank		In-Network Vaults		External Funding Source	
		Delivery	Return	Delivery	Return	Delivery	Return
USD	Planned	23,440,100	100,000	12,740,100	117,000,000	0	0
USD	Unplanned	100	1,000,000	0	0	0	0
VEB	Planned	0	0	0	0	0	0
VEB	Unplanned	0	0	0	0	0	0
BZD	Planned	0	0	1,000,000	0	0	0
BZD	Unplanned	0	0	0	0	0	0
ARS	Planned	0	0	0	200	0	0
ARS	Unplanned	0	0	0	0	0	0
COP	Planned	6,551,000,000	220,750,000	2,140,640,000	1,085,492,000	475,515,000	50,050,000
COP	Unplanned	7,009,000,000	102,000,000	10,000	0	102,050,000	50,050,000



Note: To ensure the successful processing of the OptiVault system, do not use the **Close** button in the browser; always use the Application Logout icon instead.

[Return To: Introduction to OptiVault](#)

2 Introduction to the Interface

The following section will illustrate examples of most of the OptiVault interface pages and explain the functionality, purpose, or use of each page. This section is to be used as a reference guide when working with the application regularly.

In order to keep this manual as succinct as possible, the user interface is described in detail in this section. Other chapters throughout the manual will then refer to the appropriate section of the user interface to avoid having duplicate screen images and text.

This chapter has been broken out into different sections to make it easier for the readers to find the information they are seeking. The General topics are broken out by the main Tabs or functions with all associated information contained beneath those sections. The following is a summary of the information that will be covered along with hyperlinks to each topic.

- General OptiVault Pages
- Processing Tab
- Network Tab
- Events Tab
- Settings Tab
- Maintenance Tab
- Reports Tab

2.1 General OptiVault Pages

Users of OptiVault will encounter several pages that are commonly used throughout the application. The user should become familiar with these pages as they are used frequently when working in OptiVault.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- Main Menu Tabs
- Common OptiVault Icons
- Common OptiVault Buttons
- Date Selector
- Cashpoint Search
- Cashpoint Selector
- Language Selector

2.1.1 Main Menu Tabs

The users can control the OptiVault operations through the main menu tabs displayed in the picture below. After selecting the menu items, additional options are displayed, until a final menu option is reached, allowing full access to all functions of OptiVault.

FIGURE 2: NAVIGATION TABS

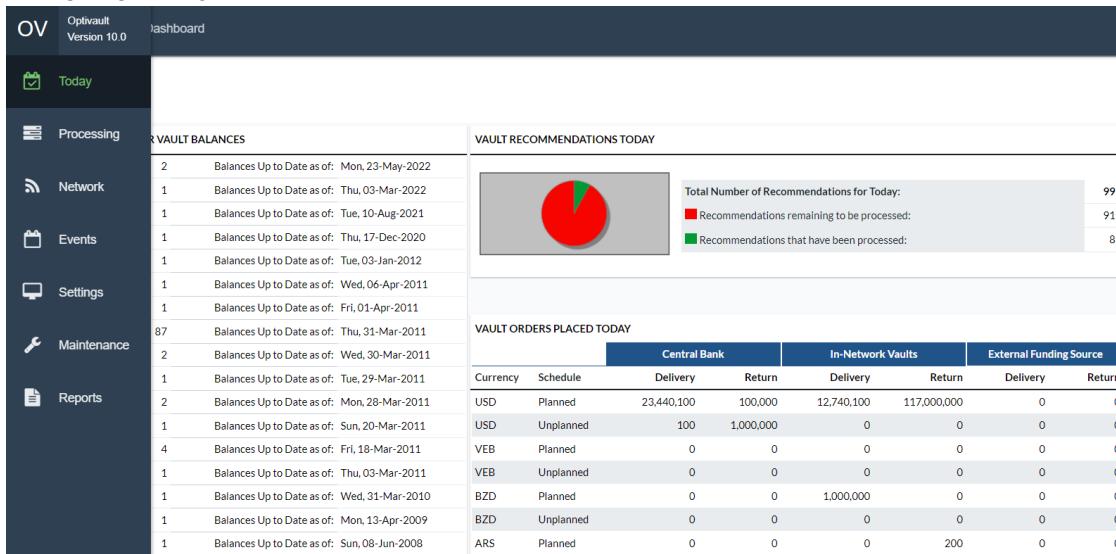


TABLE 2: MAIN MENU TABS

Tabs	Description
Today	Shows daily Cashpoint, order status and lists the processes or tasks to be executed on a daily basis by users.
Processing	Contains main OptiVault processes: balance load, recommendations, forecast, etc.
Network	Organizing Cashpoints.
Events	Calendars and event definition.
Reports	OptiVault reports.
Settings	System Privileges and institutional setup.
Maintenance	Maintenance and View Logs

Return To: [General OptiVault Pages](#)

2.1.2 Common OptiVault Icons

Some common icons are used throughout the application with which the user should become familiar. [Table 3: OptiVault Icons](#) gives an overview of these icons and their functions.

TABLE 3: OPTIVULT ICONS

Icon	Description
	Search Icon: provides access to search for Cashpoints by ID, Name, and type.
	Help Icon: Displays OptiVault On-line help.
	Print Icon: Print from any of the screens. This function will only print what is currently displayed in the browser. Any text that is not visible will not be printed.
	Home Icon: Return to the main OptiVault screen.
	Download icon: Allows the user to download the file to the local system.
	View icon: Allows the user to view a file that is hosted on the server.
	Exit icon: Closes the Cashpoint window.
	Purple Ball: Holiday Indicator to denote days that have holiday events
	Orange Ball: Event indicator to denote days that have normal events
	Red Ball: Indicator that the process or action is incomplete
	Green Ball: Indicator that the process or action is complete
	Yellow Ball: Indicates that the process has been completed but there still may be actions that need to be completed
	Alert Indicator: Informs the user that there is a problem with the action or process
	Question Mark Icon: Help tips and information for each field in the application (to close it, click on the top right corner of the note).
	Radio button: Used for selecting items.
	Check box: Used for selecting items.
	Single Arrow Icon: Move to the next page of the list.
	Double Arrow Icon: Move to the first or last page of the list.
	Date Selector Icon: Used to select a date from a calendar box. This option will allow you to enter the date in "YYYY-MM-DD" format.
	Calculator Icon: Automatically calculates certain values using the history data.

[Return To: General OptiVault Pages](#)

2.1.3 Common OptiVault Buttons

The buttons in the following table will appear in most of the windows when executing daily or weekly tasks:

TABLE 4: OPTIVault BUTTONS

Button	Description
	Exit the window.
	Save the changes made in the fields.
	Exit without saving changes.
	Update the changes made in the fields.
	Select all the items listed on the screen.
	Display the default values in the fields.
	Submits the request for the function on the current screen to be processed
	Finalizes the selection of Cashpoints or functions to allow the user to move to the next step in the process

[Return To: General OptiVault Pages](#)

2.1.4 Date Selector

In several areas of the application, it may be necessary to select or change a date for reports, orders, etc. Date fields can only be changed by accessing a Date Selector by clicking the Date Selector icon

FIGURE 3: DATE SELECTOR



TABLE 5: DATE SELECTOR DESCRIPTION

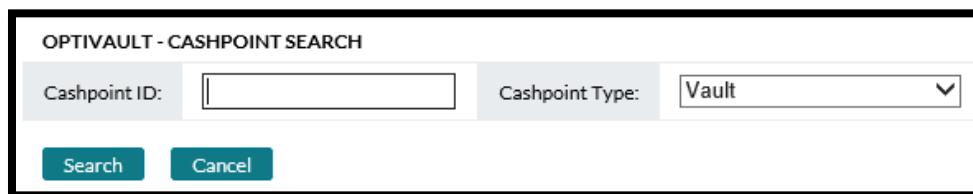
Field	Description
<<	Moves the Calendar 1 Year in the past
>>	Moves the Calendar 1 Year forward
<	Moves the Calendar 1 Month in the past
>	Moves the Calendar 1 Month forward
Dates	Hyperlinks will denote which dates can be selected. In some cases, dates will not be available (i.e. The date being selected is for a delivery day and Sunday is a non-delivery day; Sunday would not be available for selection)
yyyy-MM-dd	Specifies the currently selected date. If the user would like to type in the date, then it is possible to do so in this field, but it must conform to the format of Year(yyyy)-Month(MM)-Day(dd).
Clear	Clears the date completely from the field that was originally selected
Cancel	Cancels the date selection without changing any values.

[Return To: General OptiVault Pages](#)

2.1.5 Cashpoint Search

Many times a user will want to find a particular Cashpoint for different reasons. An easy way to search for Cashpoints is by using the Cashpoint Search Function. The Search window can be accessed by clicking on the Search Icon  on most OptiVault screens.

FIGURE 4: CASHPOINT SEARCH PAGE



The screenshot shows a search interface titled "OPTIVULT - CASHPOINT SEARCH". It contains two input fields: "Cashpoint ID" and "Cashpoint Type". The "Cashpoint Type" field has a dropdown menu showing "Vault". Below the fields are two buttons: "Search" and "Cancel".

TABLE 6: CASHPOINT SEARCH DESCRIPTION

Field Name	Description
Cashpoint ID	Unique alphanumeric code that identifies the Cashpoint.
Cashpoint Type	Allows the user to select the type of Cashpoints that OptiVault will search. The following Cashpoint types are available: <ul style="list-style-type: none"> • Vault (Default) – Cash Distribution Cashpoints

Field Name	Description
	<ul style="list-style-type: none"> • Commercial – Commercial Customer Cashpoints • Custodial Inventory – Custodial Inventory Cashpoints • External Funding Source – External Funding Source Cashpoints
Search	Submits the request to search for the Cashpoint. If nothing was entered in the search criteria field, then all Cashpoints will be returned for the Cashpoint type selected.
Cancel	Closes this window without processing any information.

[Return To: General OptiVault Pages](#)

2.1.6 Cashpoint Selector

The users are frequently asked to select one or several Cashpoints for reports. For these processes, the Cashpoint Selector is used. This window gives the user several different ways to search for Cashpoints by allowing the user to filter the selection results using different criteria.

FIGURE 5: CASHPOINT SELECTOR WINDOW

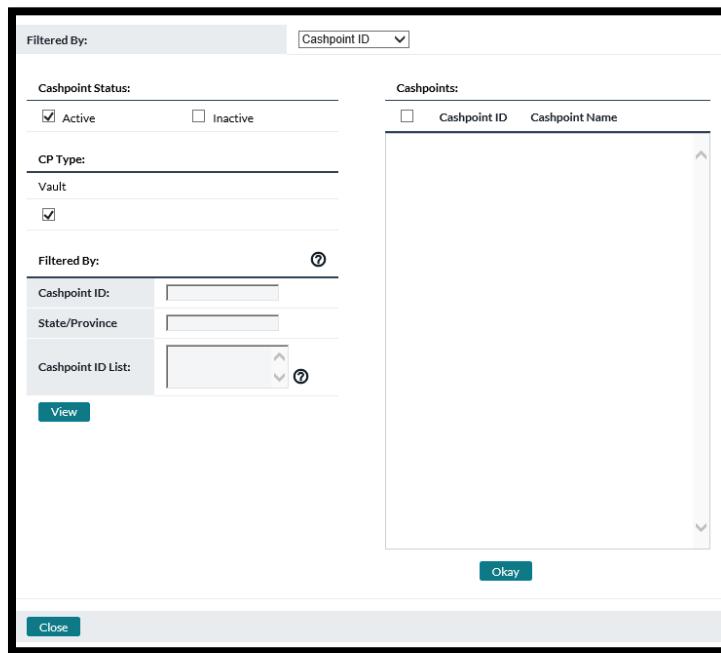


TABLE 7: CASHPOINT SELECTOR DESCRIPTION

Field Name	Description
Filtered By:	Allows the user to select how OptiVault will search for the Cashpoint. When a new selection is made, OptiVault will change the area in the bottom-left corner to allow the user to select or input criteria specific to that input type. The options available are: <ul style="list-style-type: none"> • Cashpoint ID (Default) – With this option, the user can search for the Cashpoint using its unique identifier. Type the Cashpoint ID in the field marked 'Cashpoint ID'. • Cashpoint Name – With this option, the user can search for the Cashpoint using the name that is defined at the Cashpoint level. Type the Cashpoint name in the field marked 'Cashpoint Name'. • Type – Allows the user to select only a specific type of Cashpoint (Vault, Commercial, Custodial Inventory, or External Funding Source). • Trading Market – Association of cashpoints that can share currency between them at reduced costs relative to that of the Default Funding Sources
Cashpoint Status	Allows the user to choose Active/Inactive/All Cashpoint statuses when searching for Cashpoints.
Cashpoint Type	Allows the user to select one or several types of Cashpoints
Cashpoints	List the Cashpoints that the user is able to select from. The user needs to check the box on the Cashpoint(s) they would like to choose for their select. Pressing the Okay button will finalize the selection and return it to the page requesting the information.
View	Submits the request to search for the Cashpoint. If nothing was entered in the search criteria field, then all Cashpoints will be returned. The results of the search are shown in the Cashpoints box which the user can then select Cashpoints by clicking on the checkboxes and 'Okay' to finalize the selection and return the information to the page requesting the Cashpoints.
Close	Closes this window without processing any information.
Page	Shows how many pages of Cashpoints have been returned. Each page contains 25 Cashpoints and the user can navigate between pages to select particular Cashpoints
<< < > >> Buttons	These buttons allow the user to navigate between pages. The double arrows take the user to the beginning or end of the list, whereas the single arrows take the user to the next or previous pages respectively.

Select All Button	This button will select all Cashpoints that are in the Cashpoint list. If the list was filtered, then only those Cashpoints will be selected.
Okay Button	This button finalizes the transaction and returns the selected Cashpoints to the page requesting the Cashpoint selection.

[Return To: General OptiVault Pages](#)

2.1.7 Language Selector

The Language Selector is located at the footer line. This allows each user to select their own language choice.

FIGURE 6: LANGUAGE SELECTOR

[Return To: General OptiVault Pages](#)

2.1.8 Cashpoints

The Cashpoint is the core of OptiVault. Each one holds a piece of a large puzzle, which is the Cash Network. The Cashpoint holds all the History and Parameters that allows the system to create Forecasts and Recommendations at a granular level. The Cashpoint window contains all the information, parameters, reports, and functions that allow the user to define, manage, and execute processes for Cashpoint.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

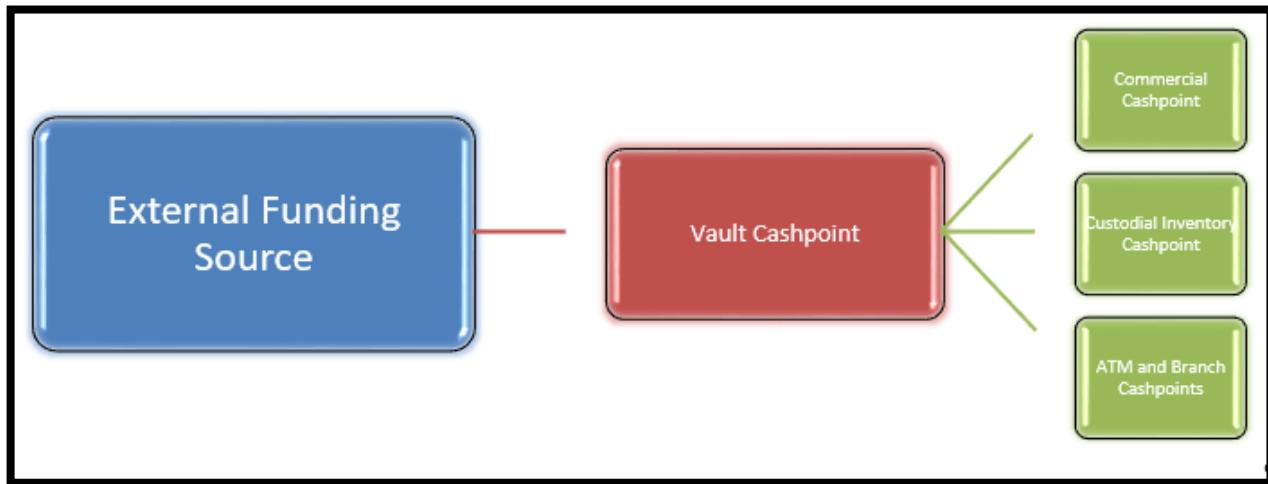
- Cashpoint Types
- Cashpoint→Basic→Definition
- Cashpoint→Basic→Denominations
- Cashpoint→Basic→Service Days
- Cashpoint->Basic->Cashpoints
- Cashpoint→Basic→Balance Entry
- Cashpoint→Basic→Provisional Credit
- Cashpoint→Advanced→Denomination Yield
- Cashpoint→Advanced→Sorting
- Cashpoint→Advanced→Sorter Utilization
- Cashpoint→Advanced→Quality Yield
- Cashpoint→Advanced→Cross-SHIP Fit Split
- Cashpoint→Orders→Recommendations
- Cashpoint→Orders→Orders
- Cashpoint→Orders→Orders Workflow
- Cashpoint→Forecast→View Forecast
- Cashpoint→Forecast→Generate Forecasts
- Cashpoint→Forecast→Exclude History
- Cashpoint→Forecast→Analysis
- Cashpoint->Forecast->ATM/Branch Forecast
- Cashpoint->Report

[Return To: Introduction to the Interface](#)

2.1.9 Cashpoint Types

There are different types of Cashpoints in OptiVault that perform different functions based on their type. [Figure 7](#) shows the basic relationship of the different Cashpoints and how they relate to each other.

FIGURE 7: CASHPOINT ELEMENTS



Below is a description of each Cashpoint and the parameters that are associated with them.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- Vault
- ATMs and Branches
- Commercial
- Custodial Inventory
- External Funding Source

[Return To: General OptiVault Pages](#)

2.1.10 Vault

The Vault Cashpoint is the main type of Cashpoint that is used to manage cash from its funding sources and to its child Cashpoints. Vaults are the central Cashpoint from which all transactions are performed.

Vaults can be independent of all other vaults or they can be dependent on one another; meaning that one vault can be the funding source for another. A vault has other Cashpoint types assigned to it such as ATMs, Branches, Commercial Cashpoints, or Custodial Inventory Cashpoints.

There are many different combinations that can be used to accommodate the needs of the institution.

The following Topics are related to Vault Cashpoints:

- Cashpoint→Basic→Definition
- Cashpoint→Basic→Denominations
- Cashpoint→Basic→Service Days
- Cashpoint->Basic->Cashpoints
- Cashpoint→Basic→Balance Entry
- Cashpoint→Basic→Provisional Credit
- Cashpoint→Advanced→Costs
- Cashpoint→Advanced→Teller Verification
- Cashpoint→Advanced→Denomination Yield
- Cashpoint→Advanced→Sorting
- Cashpoint→Advanced→Sorter Utilization
- Cashpoint→Advanced→Quality Yield
- Cashpoint→Advanced→Cross-SHIP Fit Split
- Cashpoint→Orders→Recommendations
- Cashpoint→Orders→Orders
- Cashpoint→Forecast→View Forecast
- Cashpoint→Forecast→Generate Forecasts
- Cashpoint→Forecast→Exclude History
- Cashpoint→Forecast→Analysis
- Cashpoint->Forecast->ATM/Branch Forecast
- Cashpoint->Report

[Return To: Cashpoint Types](#)

2.1.11 ATMs and Branches

ATMs and Branches are managed by OptiCash and are used in OptiVault to forecast the demand from these Cashpoints as demand on Vault Cashpoints in OptiVault. ATM and Branch Cashpoints are created in OptiCash and synchronized with OptiVault. It is not possible to create an ATM or Branch Cashpoint in OptiVault.

ATM and Branch Cashpoints can be assigned manually to a Vault at the Vault Cashpoint level or assigned through the Cashpoint synchronization process.

See the following topics for information on assigning ATM and Branch Cashpoints to Vaults:

- [Cashpoint->Basic->Cashpoints](#)

[Return To: Cashpoint Types](#)

2.1.12 Commercial

The Commercial Cashpoint is used to account for special customers that deposit large amounts of cash to the Vault. These can be grocery store chains, casinos, or any other institution that uses a lot of currency. These Cashpoints are important because they can contribute or demand large volumes of cash that are important to consider when ordering cash for a vault.

Commercial Cashpoints are created in OptiVault and manually assigned as a Cashpoint to a Vault. This is similar to the ATM and Branch Cashpoint assignment with the exception that Commercial Cashpoints cannot be automatically assigned during Cashpoint Synchronization.

The following topics are related to Commercial Cashpoints:

- [Cashpoint→Basic→Definition](#)
- [Cashpoint→Basic→Service Days](#)
- [Cashpoint→Basic→Balance Entry](#)
- [Cashpoint→Basic→Denominations](#)
- [Cashpoint→Forecast→View Forecast](#)
- [Cashpoint→Forecast→Exclude History](#)
- [Cashpoint→Forecast→Generate Forecasts](#)
- [Cashpoint→Forecast→Analysis](#)
- [Cashpoint->Report](#)

See the following topic for information on assigning Commercial Cashpoints to Vaults:

- [Cashpoint->Basic->Cashpoints](#)

[Return To: Cashpoint Types](#)

2.1.13 Custodial Inventory

In certain countries, it is possible for a Vault to hold cash for the Central Bank in a designated area of the vault. Because the cash belongs to the Central Bank, it is off the books of the vault and therefore is not incurring balance costs.

A Custodial Inventory Cashpoint is a special type of Cashpoint that is used as a holding Vault for normal Vault Cashpoints. The purpose of the Custodial Inventory Cashpoint is to hold cash off the books of its parent vault. The Custodial Inventory Cashpoint cannot stand alone, it must be assigned to a vault in order to be used. For a Vault that is capable of using Custodial Inventory, it is an extremely efficient way to lower costs while keeping cash available to service the needs of customers.

The following topics are related to Custodial Inventory Cashpoints:

- [Cashpoint→Basic→Definition](#)
- [Cashpoint→Basic→Denominations](#)
- [Cashpoint→Basic→Service Days](#)
- [Cashpoint→Basic→Balance Entry](#)

See the following topic for information on assigning Custodial Inventory to Vaults

[Return To: Cashpoint Types](#)

2.1.14 External Funding Source

The External Funding Source Cashpoint is used to identify sources of cash in the Funding Chain. The External Funding Source is mainly for informational purposes and does not have much control over its child vaults. The only exception to this would be in the Denominations assigned to the External Funding Source. These denominations are funnelled down to the child vaults as the denominations they are able to order. If denominations are not defined for an External Funding Source Cashpoint, they will not be available to order for any of the child vaults, even if they are already assigned.

The following topics are related to Custodial Inventory Cashpoints:

- [Cashpoint→Basic→Definition](#)
- [Cashpoint→Basic→Denominations](#)

See the following topic for information on assigning Vaults to External Funding Sources

[Return To: Cashpoint Types](#)

2.2 Cashpoint Pages

2.2.1 Cashpoint→Basic→Definition

This topic relates to the following Cashpoint types:

- [Vault](#)
- [Commercial](#)

- Custodial Inventory
- External Funding Source

The Definition page gives general information that describes Cashpoint's name, location and contact information.

FIGURE 8: VAULT BASIC DEFINITION PAGE

Vault ID 1038 EDIT GENERAL DETAILS

Vault ID	1038	CP Type	VAULT
Name	Bench Street	Open Holidays	<input type="checkbox"/>
Active	<input type="checkbox"/>	Date Activated	Not Active
Default Funding Source	Please choose...	Zone	<input type="button" value="▼"/>
Top of Fdg Chain?	<input type="checkbox"/>	CI	<input type="button" value="▼"/>
Trading Market	<input type="button" value="▼"/>	Central Bank	<input type="checkbox"/>
Address Line 1		Address Line 2	
City		State/Province	
Zip/Postal Code		Contact	
Contact Phone		Contact Fax	
Contact Email		Aggregate Emergencies Indicator	<input type="checkbox"/>
Max. Number of Pallets	1	Bulk Order Reduction	No Bulk Reduction <input type="button" value="▼"/>
Packaging Time (days)	0	Clearance Time (days)	0 <input type="button" value="▼"/>
Custom 1		Custom 4	
Custom 2		Custom 5	
Custom 3		Custom 6	

Save | Remove Vault

TABLE 8: DEFINITION DESCRIPTION

Field Name	Description
Vault ID	A unique 12-character alpha-numeric identifier that is used to identify the Cashpoint in OptiVault. The identifier is referred to differently in each Cashpoint type but is essentially the same thing: <ul style="list-style-type: none"> • Vault: Vault ID • Commercial: Commercial Cashpoint ID • Custodial Inventory: CI ID • External Funding Source: External Funding Source Cashpoint ID
CP Type	This field is for informational purposes and shows the type of Cashpoint (Vault, CI, Commercial, External). This field cannot be edited.
Name	The name of the Cashpoint is used as a description of the Cashpoint. This description can be seen in many reports and processes to refer to the Cashpoint as opposed to the Cashpoint ID.

Field Name	Description
Open Holidays	Flag indicating whether or not the Cashpoint is open on Holidays. This is used to identify a Cashpoint as being able to send and receive cash on holidays.
Active	Flag indicating whether or not the Cashpoint is Active or not.
Date Activated	The date that the Cashpoint was put into service or activated.
Default Funding Source	The Funding Source by default, will deliver cash to the Vault or accept returns from the vault.
Zone	This refers only to Vault Cashpoints and is used to identify the area of the country or zone to which the Vault belongs. This is used to identify the Cashpoint's location with respect to other Cashpoints and used for checking for Cross-Shipping charges when this functionality is used within OptiVault. See: Network→Cross Shipping
Top of Fdg Chain	Specifies that the Cashpoint is at the top of the funding chain. When this indicator is selected for a vault, the vault is designated as the ending point for aggregation. When the aggregation process runs for Second Level Aggregation, the aggregation process will stop at the Top of the Funding Chain based on this indicator.
Trading Market	Allows Users to associate cashpoints with a Trading Market. For more information on Trading Markets see Network→Trading Market
CI	The Custodial Inventory Cashpoint is associated with the vault. The user will specify the correct CI vault if this is a vault that will use Custodial Inventory.
Address	The address of the Cashpoint
City	The city location of the Cashpoint
State/Province	The state and province of the Cashpoint
Zip code/Postal code	The postal code of the Cashpoint
Contact	Contact information for the person who is responsible for the Cashpoint
Contact Phone	Contact phone number
Contact Fax	Contact Fax Number
Contact Email	Contact Email Address

Field Name	Description
Aggregate Emergencies Indicator	When this option is enabled, OptiVault will aggregate unplanned or emergency deliveries as well as normal or planned deliveries when performing aggregation during the recommendation process.
Max Number of Pallets	This represents the physical space available in the vault. See: Settings→Currencies/Denominations for pallet size definition
Bulk Order Reduction	<p>This option is used to determine how incoming Vault Orders and incoming ATM residuals are handled in OptiVault. The available options are</p> <p>No Bulk Reduction – This means that there is no reduction of Orders or ATM residuals</p> <p>Discount Bulk Cash Order – The incoming orders are not available on the day they are due.</p> <p>Discount ATM Residuals – The incoming ATM residuals are not available on the day they are due.</p> <p>Discount ATM Residuals and Bulk Cash Order – Both Bulk orders and ATM residuals are not available on the day they are due.</p> <p>Bulk Orders - Vaults have the responsibility to hold enough cash to service the needs of its Child Cashpoints (Vaults, ATMs, Branches, and Commercial Customers). The Vault is supplied with cash primarily from its Parent Vault (i.e., Central Bank or Parent Vault). A Vault receives Cash from its Parent by means of scheduled Deliveries or sends Cash back to the Parent by means of a scheduled Return. These Orders are used to keep the balance of the Vault at a level it can service its Child</p> <p>In some situations, Bulk Orders are normally not received until the end of the business day. This means that even though the Vault is scheduled to receive a delivery, the funds that are delivered will not be able to be used during the business day. In these situations, the option to discount or deduct the Bulk Orders from the Available Balance is used. This 'Discount Bulk Orders' option is set on the Vault's Parameters screen and is used to deduct the Order(s) on the next business day following the Last Load Date.</p> <p>ATM Residuals - When an ATM uses a Replace Cash replenishment scenario, the ATM is replenished with cassettes filled with Cash that are swapped out for the old cassettes that were used to dispense cash. Normally these replaced cassettes contain residual cash that needs to be</p>

Field Name	Description
	<p>returned to the Vault to be processed and used as available cash for future deliveries. ATM Residuals are represented on the Forecast Report for a Vault as Cash In.</p> <p>In some cases, ATM Residuals are received at the end of the business day. This means that even though the Vault is expecting to have residual cash from ATMs returned to the Vault, that cash is not available due to its late arrival. In these cases, the ATM Residual amounts should be deducted from the Available Cash. When ATM Residuals are received late in the day and are unavailable to be used for orders, the option to 'Discount ATM Residuals' is used.</p> <p>The Discount ATM Residuals option is set on the Vault's Parameters screen and is used to deduct the ATM Residuals amount for the first day following the Last Load Date. Whether or not there is a Gap between the Last Load Date and the current date, the ATM Residuals from the first day's forecasted ATM Residuals are used. The ATM Residual amount is shown in the Forecast Report as Cash In. On days where there is no Gap between the Last Load Date and the current date, the ATM Residual amount is the current day's Cash In.</p>
Packaging Time	<p>The number of days cash during which cash is intended for specific customer orders is in the vault preparing for delivery. This parameter is used to determine the available balance each day. Cash appears in the vault horizon in the "Not Available" column during this time. When using this parameter, there is an assumption that customer orders in history are recorded X days prior to actual arrival at ATM, Branch, or Commercial location (where X = Packaging Time).</p>
Clearance Time	<p>The number of days that cash takes to be processed when returned to the vault from child Cashpoints. This is used to indicate to the Recommendation process that cash that comes in will not be available right away. For example, the cash may need to be counted and verified prior to being available again for circulation. This appears as a shift in dates: ATM, Branch, and Commercial cash in appear in vault horizon X days later than it left the source, where X is the Clearance time entered here.</p>
Custom 1-6	<p>Text fields available for custom client-driven details to be stored relative to the cashpoint(s)</p>
Save Button	<p>Used to save any changes made on the page</p>

Field Name	Description
Remove Vault Button	Used to delete the Cashpoint from the system. This deletes all references of the Cashpoint to other Cashpoints as well as any parameters, history, or reports. The Cashpoint must be inactive before it can be deleted. Be sure that the Cashpoint is no longer needed as the deletion is permanent and cannot be undone.

[Return: OptiVault General Pages](#)

2.2.2 Cashpoint→Basic→Denominations

This topic relates to the following Cashpoint types:

- Vault
- Commercial
- Custodial Inventory
- External Funding Source

The denominations page is used to assign denominations to a Cashpoint. The denominations and qualities that are assigned to Cashpoint allow Cashpoint to forecast, aggregate, recommend, order, and deliver these denominations. Without the assignment of denominations, the Vault will not be able to order the currencies and they will not be available for order by child or symbiont Cashpoints (Commercial, ATM, Branch, or Custodial Inventory).

TABLE 9: DENOMINATIONS DESCRIPTION

Field Name	Description
Currency	3-character code of the currency and denomination being defined
Denomination	The denomination of the currency
Quality	The quality of the note. There are several that become available for each denomination defined. <ul style="list-style-type: none"> • Unknown – Cash that has not been sorted or verified. • Fit – Cash that can be used by branches but is required for ATMs. • Normal – Cash that can be used by branches or commercials • Soiled – Unfit for circulation
Max Balance	The maximum balance of the denomination that can be held in the Cashpoint.

Field Name	Description
Order Unit Amount	The bundle size of the order for the denomination. This means that orders must be in multiples of the Order Unit Amount.
Minimum Delivery Amount	The minimum amount that must be ordered for each delivery
Minimum Return Amount	The minimum amount that must be ordered for each return
Minimum Unplanned Delivery Amount	The minimum amount that must be ordered for each unplanned delivery
Recommend Flag	Determines which denomination/quality combinations will be considered during the Forecast and Recommendations processes. Checked are processed while unchecked are not processed.
Include in Sorting	Determines if the denomination is included in the sorted process. By default, all unknown qualities assigned to a Vault are automatically included in the sorting process.
Add New	Allows the user to add new denominations to the Cashpoint. Once clicked, a pop-up screen will appear with the available currencies and qualities that can be added to the Cashpoint.
Remove button	Used to Remove a denomination from the vault. Proceed with Caution before removing denominations as the history will also be deleted and if Cashpoint has child vaults attached to it, they may no longer have the ability to order the denominations.

[Return: OptiVault General Pages](#)

2.2.3 Cashpoint→Basic→Requirements

This topic relates to the following Cashpoint types:

- Vault

TABLE 10: REQUIREMENTS DESCRIPTION

Field Name	Description
Current Existing Vault Requirements	A list of the denominations and qualities that have requirements defined. The list contains definitions for individual days of the week or ' All Days ' which applies to every day. Clicking on the hyperlink will load the currently defined requirements in the Edit pane. This is the same as

Field Name	Description
	selecting the denomination/quality, the day, and selecting the Retrieve button.
Vault ID	The identifier of the vault.
Denom. List	A dropdown allows the user to specify the Denomination and quality for which the requirements will be defined.
Day	<p>Lists the possible choices for requirements definition. The options available are:</p> <ul style="list-style-type: none"> • All Days – Means the requirements apply to every day of the week. • Weekdays – Sunday Thru Saturday meaning the requirements refer to that day of the week, every week. • Specific Day – The requirements apply to only 1 specific day. Selecting this option will show a list of all currently defined Specific day requirements and allow the user to either edit existing or create new requirements.
Retrieve Button	Retrieves the requirements for the Denomination/Quality and Day selected. If the requirements have not yet been defined, a new record will be displayed that will allow the user to define and save the requirements.
Edit Existing Requirements	A list of all the denomination requirements for the Vault ID, Currency, Denomination, Day, and Quality selected. These will all be fields that will be defined at the top of this pane.
Cycle	<p>Indicates the cycle for which cash is delivered to the Vault. The available options are:</p> <ul style="list-style-type: none"> • Weekly • Bi-Weekly • Tri-Weekly • 4th Week • Monthly Week 1 • Monthly Week 2 • Monthly Week 3 • Monthly Week 4
Specific Date	<p>When used with a specific date option, this is the date for which the parameters will apply.</p> <p>When a cycle is chosen for Bi-Weekly, Tri-Weekly, or 4th Week, the Specific date indicates that starting date of the cycle.</p>

Field Name	Description
Max Holding	The maximum holding amount for a given denomination.
Minimum Operating Balance	Sets the minimum balance for the Vault. This is also known as safety stock and is used to ensure that enough cash is available at the Vault to avoid a shortfall situation. This amount is included as part of the required balance
E-Cash Holding Amount	Emergency Cash Holding amount is used as an amount that is held in the Vault for emergency purposes. This amount is included as part of the required balance
Percent of Withdrawals to Cover	The percentage of forecasted withdrawals that should be covered by cash balances in the branch at the start of the day. If 100% is input, the branch should have enough cash at the start of the day to satisfy 100% of the expected day's withdrawals.
Percent of Deposits Available for Withdrawal	The percentage of daily cash deposits used or recycled to cover cash withdrawals.
Percent of Deposits Held Until End Of Day	The percentage of all deposits that are held in the balance until the end of the day. This amount is used to determine the recyclability of incoming deposits.
Percent Adjustment to Forecasted Demand	An adjustment that can be applied to the Forecasted demand to increase the forecasted amount. This field only accepts positive numbers from 0 to 100
Percent Adjustment to Forecasted Deposits	An adjustment that can be applied to the Forecasted deposits to increase the forecasted amount. This field only accepts positive numbers from 0 to 100
Percent Adjustment to Generated Returns	An adjustment that can be applied to the Recommendation for returns is to increase the amount of cash returned. This field only accepts positive numbers from 0 to 100
Percent Adjustment to Total Requirements	An adjustment that can be applied to the Total Requirements to increase the requirements for the Vault. This parameter results in the Cashpoint holding more cash and should only be used when Cashpoint has a poor forecast.
Exception Threshold Amount	The Exception Amount is used to allow some flexibility to the Required Balance. When the Exception Amount is set, the recommendation will not trigger an emergency delivery until the Exception amount is exceeded. For Example, Tuesday's Required balance is \$100,000, and the opening balance for Tuesday is \$98,000 meaning the

Field Name	Description
	<p>Cashpoint will fall short \$2,000. If the exception amount were set to \$5,000, the opening balance for Tuesday could fall to \$95,000 without generating an Emergency Delivery.</p> <p>Note: The Exception Amount is an exception based on the Required Balance. Therefore, the Exception Amount cannot exceed the Required Balance value.</p>
Exception Threshold Percent	<p>An alternative to the Exception Amount is the Exception % of Holdings. Similar in function to the Exception Amount, the Exception Percentage will allow the minimum balance to fall below the Required Balance by the Percentage set.</p> <p>For Example, if the Required Balance were set to \$10,000 and the Exception Percent to 20%, then the opening balance could fall \$2,000 below the requirements before generating an Emergency Delivery.</p>
Save Button	Saves the currently selected Requirements.
Delete Button	Deletes the currently selected Requirements

[Return: OptiVault General Pages](#)

2.2.4 Cashpoint→Basic→Service Days

This topic relates to the following Cashpoint types:

- Vault
- Commercial
- Custodial Inventory

TABLE 11: SERVICE DAYS DESCRIPTION

Field Name	Description
Calendar	Shows the available calendars and highlights the one(s) that the cashpoint is currently associated with
Business Days	Business days are defined for every Cashpoint to tell the Forecast and Recommendation process which days the Cashpoint will service customers. This should be the normal work schedule of the Cashpoint.
Required Service Days	When selected for a given day, this option tells the Recommendation process that it is required to make a delivery on this day. As a result, OptiVault will attempt to maximize the required day to make the most of the delivery costs.

Field Name	Description
	<p>Note: Optional Days must also be checked when Required Service Days are specified.</p>
Optional Service Days	<p>When selected for a given day (without a Required Service Day), this option tells the Recommendation process that it is possible to delivery cash on this day, but not required. In this case, OptiVault has the choice if cash will be delivered. This allows the system to be flexible and order cash only when needed. This is also referred to as an On Demand Scenario.</p> <p>Note: This option is overridden if Required Days is selected for the same day.</p>
Cycle	<p>The frequency that the Cashpoint is normally serviced. It is not always the case that a Cashpoint is serviced every week; this is the purpose of this parameter. It allows the user to specify one of the following methods:</p> <ul style="list-style-type: none"> • Weekly – Service is done every week • Bi-Weekly – Service is done every 2 weeks • Tri-Weekly – Service is done every 3 weeks • Fourth Week – Service is done every 4 weeks • Monthly Week 1 – Service is done only the first week of the month • Monthly Week 2 – Service is done only the second week of the month • Monthly Week 3 – Service is done only the third week of the month • Split Week – Service alternates on different schedules from one week to the next.
Lead Time	<p>The Lead Time is the time required by the carrier, in advance of delivery, that an order must be placed.</p> <p>For Example. If an order placed today can be delivered tomorrow, then the Lead Time is defined as 1.</p>
Lead Time	<p>The Lead Time is the time required by the carrier, in advance of a return of cash, that a return order must be placed.</p> <p>For Example. if a Return Order is placed today and will be picked up tomorrow, then the Lead Time is 1.</p>
EOD Return Time	<p>Indicates that the branch generally has its cash picked up by the servicer at the end of the business day. Therefore, the demand on the day of return must be included in the calculation of the return recommendation. If not indicated,</p>

Field Name	Description
	a beginning-of-the-day (BOD) return time is assumed. This includes one less day of demand in the calculation of the return recommendation.
Lead Time (Unplanned Orders)	The Lead Time is the time required by the carrier, in advance of an emergency order of cash, that an emergency order must be placed. For Example , if an Emergency Order is placed today and will be delivered today, then the Lead Time is 0.
Unplanned Service Days	An Unplanned or Emergency delivery falls outside the Lead Time for normal deliveries. An Unplanned Delivery is a movement of cash to a Cashpoint that can be initiated on short notice. As a result, these types of services are generally more expensive and are avoided at all costs. It is, however, the goal of OptiVault to keep Cashpoints running at all costs and therefore emergencies will be generated to protect a Cashpoint from falling short. In some instances, institutions choose not to use emergencies or limit them to specific days. The following scenarios for unplanned deliveries are supported: YYYYYYN, where Mon-Fri are the available days for emergency deliveries. YYYYYYY, where Mon-Sat are the available days for emergency deliveries. YYYYYYY, where Sun-Sat are the available days for emergency deliveries. NNNNNNN, when there are no days selected for emergency deliveries. In this scenario, all services days for unplanned services are unchecked, and OptiVault will never generate an emergency. If customers choose to use this scenario, it is essential that users use pre-emptive alerts report to warn of any Cashpoints running low on cash. Taking the decision to avoid emergencies in OptiVault may be a dangerous practice since the user disables the only way OptiVault can alert the user when Cashpoints are running low on cash.
Save Button	Saves the Service Days parameters.

2.2.5 Cashpoint→Basic→Cashpoints

This topic relates to the following Cashpoint types:

- Vault
- Commercial

TABLE 12: CASHPOINTS DESCRIPTION

Field Name	Description
Add Cashpoint Vault	This field allows the user to type in the Cashpoint ID that will be added to the Vault. This can be done by entering a valid Cashpoint ID and clicking the ' Add ' button. The analyst can also click the Browse button to search for a Cashpoint.
Add Button	Adds a new Cashpoint to the Vault by entering a valid Cashpoint ID into the field adjacent to this button.
Browse Button	Allows analysts to browse all the available Cashpoints on the system to add to the Vault. After clicking this button, the analyst will be prompted with a search page where they can search by: <ul style="list-style-type: none"> • Cashpoint ID • Name • Depot • Center • Region The user can also enter the default Delivery and Return Transit times that will apply once the Cashpoints are selected and added. Once the user has searched for a Cashpoint, they can check the desired Cashpoints and click the 'Add' button at the bottom of the page to add the selected Cashpoints to the Vault. <p>Note: A Cashpoint ID can only belong to one Vault, therefore it is possible that if a particular Cashpoint is not found while browsing that the Cashpoint has already been assigned to another Cashpoint.</p>
ID	Unique alpha-numeric Cashpoint ID that is currently assigned to the selected Vault
Name	Name of the Cashpoint
Type	Type of Cashpoint corresponding to the Cashpoint ID.

Field Name	Description
Return Transit Time	The time (in days) that it takes to return cash from the Cashpoint. This is read from OptiCash and is read-only in OptiVault.
Delivery Transit Time	The time (in days) that it takes to deliver cash to the Cashpoint. This is read from OptiCash and is read-only in OptiVault.
Remove Button	Removes the corresponding Cashpoint from the Vault
Save Button	Saves changes made to the Return and Delivery transit times.

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Cashpoints

2.2.6 Cashpoint→Basic→Balance Entry

This page allows the user to manually enter or edit balances for the selected Cashpoint.

This topic relates to the following Cashpoint types:

- Vault
- Commercial
- Custodial Inventory

TABLE 13: BALANCE ENTRY DESCRIPTION

Field Name	Description
Cashpoint ID	The Cashpoint ID for the vault that has been selected
Date	The date of the entry will be changed. This can be changed by clicking on the calendar icon and selecting a new date.
Submit button	Submits the request to change the balances for the Cashpoint ID and date selected.
Vault Cashpoints	The following fields are available for the Vault Balance entry: <ul style="list-style-type: none"> • Load – This checkmark is used to indicate that the denomination will be loaded or saved upon clicking the save button. • Denomination – Lists the denomination and quality to be loaded

Field Name	Description
	<ul style="list-style-type: none"> ● Closing Balance – The actual closing balance of the vault. ● Not Available – The balance that is not available for withdrawal for the selected day. ● Branch/ATM Orders – The number of orders for the day to be delivered to the vault's Branch and ATM Cashpoints. ● Branch/ATM Returns – The number of returns for the day from the vault's Branch/ATM Cashpoints. ● Central Bank/Vault/Other Source Cash In – Cash coming in from the Funding Sources ● Central Bank/Vault/Other Source Cash Out – Cash going out to the Funding Sources
Commercial Cashpoints	<p>The following fields are available for the Commercial Balance entry:</p> <ul style="list-style-type: none"> ● Load – This checkmark is used to indicate that the denomination will be loaded or saved upon clicking the save button. ● Denomination – Lists the denomination and quality to be loaded. ● Deposits – Deposits into the Vault from the Commercial Customer ● Withdrawals – Cash deliveries to the Commercial Customer from the Vault.
Custodial Inventory Cashpoints	<p>The following fields are available for the Commercial Balance entry:</p> <ul style="list-style-type: none"> ● Load – This checkmark is used to indicate that the denomination will be loaded or saved upon clicking the save button. ● Denomination – Lists the denomination and quality to be loaded. ● Opening Balance – The balance at the start of the day for the Custodial Inventory Cashpoint ● Cash In – Cash transferred into the Custodial Inventory from the Vault ● Cash Out – Cash taken out of the Custodial Inventory to the Vault ● Closing Balance – The balance at the end of the day for the Custodial Inventory Cashpoint

Field Name	Description
Check All Link	Checks all denominations and qualities listed on the Balance Entry page.
Clear All Link	Clears all checkmarks for all denominations and qualities listed on the Balance Entry page.
Save Button	Saves the changes to the selected denominations and qualities on the page.
Cancel Button	Cancels any changes made and reverts to the previous menu.

2.2.7 Cashpoint→Basic→Provisional Credit

The Provisional Credit is used in cases where cash is in the Vault but for some reason is not included in the balance information of the Vault. A provisional credit can then be entered for a particular day so that the On Book Minimum Holding Custodial Inventory Capacity amount (OBMH/CI Cap) is calculated correctly.

This topic relates to the following Cashpoint types:

- Vault

TABLE 14: PROVISIONAL CREDIT DESCRIPTION

Field Name	Description
Vault ID	The Cashpoint ID for the vault that will have the Provisional Credit added
Date	The date of the provisional credit. This date can be selected by clicking on the Date icon.
Amount	The amount, in local currency, that will be added to the vault on the selected date to be added as a provisional credit
Save	Saves the entry to the Vault as a provisional credit for the date and Cashpoint ID selected.

2.2.8 Cashpoint→Advanced→Costs

The cost elements that are assigned to the Cashpoint are used for both the optimization and reporting of the Cashpoint. It is important to have the correct cost settings to ensure the best optimization possible for the Cashpoint.

This topic relates to the following Cashpoint types:

- Vault

TABLE 15: COSTS DESCRIPTION

Field Name	Description
Effective Date	The date that the currently defined rates are applicable. The date can be selected by clicking on the Date icon and will be saved with the new values upon clicking the ' Save ' button.
Carrier	The carrier that is assigned to the vault for the delivery and return of cash from the vault's funding source.
Range Button	<p>Clicking this button allows the analyst to define ranges for either Fixed or Per \$ Cost elements. The range is used when the costs are different based on the amount of cash that is being delivered/returned.</p> <p>The analyst can specify one or several cost elements by selecting the checkbox and entering the Cost per trip and the upper and lower bounds of the cost range.</p> <p>Note: There should be no gaps in the cost ranges otherwise there could be inaccurate cost calculations.</p>
Remove Button	Removes the corresponding cost element from the Cashpoint.
Add New Button	Allows the analyst to add new cost elements to the Cashpoint. Clicking on this button will pop-up a page with the currently available cost elements that are not currently assigned to the Cashpoint. The analyst can select the items to add by checking the boxes next to the cost element and clicking the submit button.
Costs	<p>A vault can be assigned a variety of cost elements that are applicable to the type of service the Cashpoint receives. All cost elements that are performed at the Cashpoints should be added to the vault to ensure the correct calculations for both Recommendations as well as the Cost Calculation process.</p> <p>The different Service types are:</p> <ul style="list-style-type: none"> • Normal Delivery/Return – Delivery or return of cash to the Cashpoint within the predefined lead times for normal deliveries • Combined Service – Delivery costs for normal services when a Delivery and return occur on the same day. • Emergency Delivery/Return – Deliveries or returns that occur outside the normal lead time. <p>The Available Cost elements are:</p> <ul style="list-style-type: none"> • Fixed Costs (Normal/Emergency/Combined Delivery and Returns) – The fixed prices for service to the Cashpoint. Fixed implies that the cost will occur every

Field Name	Description
	<p>time a service is placed for that category regardless of the value of the service.</p> <ul style="list-style-type: none"> ● Per Unit Costs (Normal/Emergency/Combined Delivery and Returns) –In addition to the fixed cost defined above, some carriers may charge a fixed cost per-defined unit of delivery (For Example, a bag or box of money transported). In this case, set the unit size, and the cost per unit size. <ul style="list-style-type: none"> ○ Formula for total delivery cost: ○ Total Delivery Cost = Fixed Cost per Delivery + (Delivery Amount / Unit Size) x Fixed Cost per Defined Unit. ○ For Example: Fixed delivery cost = 50, defined unit size = 5000, cost per defined unit = 20. When the delivery = 45000, the total cost of delivery will be: 50 + (45000 / 5000) * 20 = 230. ● Unit Size – The size that is charged based on the Per Unit Costs ● Per \$ Cost – The cost for each unit of currency.
Save Button	Saves the changes made to the cost page.

TABLE 16: COSTS (BY CURRENCY) DESCRIPTION

Field Name	Description
Max Holding Amount	This is the maximum total amount that will be recommended to hold in a vault for the total of all denominations and qualities. This generally applies to insurance or capacity limitations of a vault. Additionally, the denomination maximum capacities ensure that a single denomination does not exceed the maximum capacity during the recommendation process.
Currency Insurance Rate %	The annual insurance rate that is used to calculate the insurance cost for the vault
Delivery Handling Cost	The additional cost associated with the delivery of cash.
Return Handling Cost	The additional cost associated with the return of cash.

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2.2.9 Cashpoint→Advanced→Teller Verification

Cash that is returned to a vault from a Branch/ATM/Commercial Customer is normally not able to be used immediately. The vault must first process the incoming cash to ensure that the amounts are correct before sorting and making it available for withdrawal. Teller verification is an optional process that is used by some banks to capture the true availability of cash in the Vault. This functionality is used in conjunction with sorting to account for delays in the processing of incoming cash. Cash that comes into the Vault as unavailable is processed based on the settings on the Teller Verification page and made available to the sorter process, which then clears the cash to be used by the vault for upcoming demand.

This topic relates to the following Cashpoint types:

- Vault

TABLE 17: TELLER VERIFICATION DESCRIPTION

Field Name	Description
% of Unavailable to be Processed	This value indicates the percentage of the balances of quality ' Unavailable ' that are processed each day. Cash that is reported in the balances as ' Unavailable ' is normally reported on a daily basis in the nightly balance file. This amount usually includes the previous day's deposits that were not able to be processed on the day they came in.
% of Daily Deposits to be Processed	This value indicates the percentage of incoming deposits from Branches/ATMs/Commercial customers that are processed on a given day. Any amount less than 100 indicates to OptiVault that the remainder will be ' Unavailable '. The Unavailable balances will be processed on the next day that ' Unavailable ' cash is processed based on the '% of Unavailable to be Processed' setting.
Expected Yield of Unverified Balance	These fields allow the analysts to set up the expected yield of the Teller Verification process. These are used when the sort functionality is not used and allow the software to estimate the expected quality outcome of the Teller Verification process. If the Sorting functionality is used by the Cashpoint, then the Expected Yield of Unverified Balance should be set to 100 for Unknown and the other elements should be zero. Note: The sum of the Expected Yield of the Unverified Balance should equal 100%
Save Button	Saves the changes made to the Teller Verification settings

Field Name	Description
Cancel Button	Cancels any changes made to the Teller Verification settings and reloads the page with the currently saved settings.

2.2.10 Cashpoint→Advanced→Denomination Yield

The Denomination Yield applies to the Teller Verification process and is used to indicate the Yield of the Teller Verification process by denomination. This is used in conjunction with the Expected Yield of Unverified Balance setting on the Teller Verification page to determine the expected denominations and qualities of the Teller Verification process. The page is automatically populated with each of the denominations that are assigned to the Cashpoint and the analyst must enter the percentage of each denomination (equal to a total of 100%) for each day that processing is performed.

This topic relates to the following Cashpoint types:

- Vault

FIGURE 9: DENOMINATION YIELD PAGE

Currency	Denomination	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
COP	50000,N	0%	0%	0%	0%	0%	0%	0%
COP	20000	0%	0%	0%	40%	0%	0%	0%
COP	10000	0%	0%	0%	10%	0%	0%	0%
USD	USD100	0%	0%	0%	30%	0%	0%	0%
ARS	100	0%	0%	0%	0%	0%	0%	0%
ARS	ARS50	0%	0%	0%	20%	0%	0%	0%
	Total	0%	0%	0%	100%	0%	0%	0%

TABLE 18: DENOMINATION YIELD DESCRIPTION

Field Name	Description
Currency	Gives the currency ISO code for the currency/denomination being defined.
Denomination	The denomination ID that is assigned to the Cashpoint.
Edit Day Button	Displays a pop-up corresponding to the day of the week where the denomination yield percentages can be entered or changed.
Save Button	Saves the denomination yield percentages for the vault
Cancel Button	Cancels all changes made to the yield percentages and exits the screen without making any changes.

2.2.11 Cashpoint→Advanced→Denomination Yield→Edit

By selecting the Edit button on the Denomination Yield page, the user will receive a pop-up where they can define the denomination yield expected from the Teller Verification process.

FIGURE 10: EDIT DENOMINATION YIELD PAGE

VAULT ID ANEXAS_BOG DENOMINATION SPLIT % EDIT DAY		
Monday		
Currency	Denomination	% Split
COP	50000,N	0
COP	20000	0
COP	10000	0
USD	USD100	0
ARS	100	0
ARS	ARS50	0
Total		0

Save **Cancel**

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2.2.12 Cashpoint→Advanced→Sorting

The Sorting page allows the analyst to assign sorters that are used in the Cashpoint to process incoming cash of the quality '**Unknown**'. Unknown cash is then processed and made available for use by the vault based on the Sorter's Quality Yield percentages. Sorters are defined on the Network tab; for more information, See: [Network→Sorters](#)

By default, the sorter includes balances of '**Unknown**' quality. It is possible to include additional qualities in the sorting process by selecting the '**Include in Sorting**' option for the denomination and quality on the Denominations page; see:

[Cashpoint→Basic→Denominations](#)

This topic relates to the following Cashpoint types:

- Vault

TABLE 19: SORTING DESCRIPTION

Field Name	Description
Sorter Name	The Name of the sorter that is assigned to the Cashpoint. This value is defined on the Sorter definition page: See: Network→Sorters
Notes Per Hour	The Number of notes per hour that can be processed by the sorter. This value is defined on the Sorter definition page. See: Network→Sorters
Remove Button	Removes the corresponding sorter from the Cashpoint. The Remove function only removes the vault from the Cashpoint; the sorter will still be defined in the system.
Edit Day Button	Allows the analyst to specify the hours of operation for the sorter.
Hours	Number of hours that the sorter runs on a particular day.
Notes	This field is for informational purposes only and is used to indicate to the analyst the number of notes that are processed based on the number of hours the sorter runs and the Notes per hour that it can process.
Add New Button	Allows the analyst to add a new Sorter to the Cashpoint. Upon clicking the button, the analyst must select the sorter to be added by clicking the ' Select ' button corresponding to the sorter that is in use in the Cashpoint.

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2.2.13 Cashpoint→Advanced→Sorter Utilization

The Sorter Utilization page is used to define how the sorter will be utilized each day. In some cases, banks will process certain notes on specific days and therefore can set the percentages of each denomination that will be processed for each denomination on a given day. The combined split percentage must equal 100% or zero.

This topic relates to the following Cashpoint types:

- Vault

TABLE 20: SORTER UTILIZATION DESCRIPTION

Field Name	Description
Currency	Shows the various currencies that are assigned to the cashpoint.
Denomination	The denomination ID of the denomination that is assigned to the Cashpoint.

Field Name	Description
Edit Day Button	Allows the user to edit the Capacity splits for the selected sorter for the corresponding day.
Sorter	The drop-down List box at the top of the page allows the analyst to select the sorter for which the capacity splits will be set. Choosing a sorter from the list will load the values associated with that sorter.

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2.2.14 Cashpoint→Advanced→Quality Yield

The Quality Yield is used to indicate the percentage of each quality that will result from the notes processed. Based on the output of the sorting process, the sorter will process the notes and determine the yield of the sorting process based on the Sorter Utilization settings (See: [Cashpoint→Advanced→Sorter Utilization](#)). The results of the sorting will further be split into the note quality based on the Quality Yield settings.

This topic relates to the following Cashpoint types:

- Vault

TABLE 21: QUALITY YIELD DESCRIPTION

Field Name	Description
Currency	Shows the various currencies that are assigned to the cashpoint.
Denomination	The denomination ID of the denomination assigned to the Cashpoint
Quality	<p>The quality of the denomination that will be output by the sorter.</p> <p>The only options available are:</p> <ul style="list-style-type: none"> • Fit – Used for ATM and is the highest quality • Normal – Used for branches and commercial customers • Soiled – Unusable cash that must be returned to the central bank.
Edit Day Button	Displays a pop-up window to allow the analyst to define the quality percentage for each denomination. The total split should equal 100% or zero for each denomination in the list. Click on the ' Submit ' button at the bottom of the page to save the changes.

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2.2.15 Cashpoint→Advanced→Cross-Ship Fit Split

Cross-shipping happens when Fit denominations are ordered and returned at the same time. In certain countries, this is not allowed by the central bank and if it occurs, the bank must pay a penalty for the error. This can become extremely costly and therefore OptiVault attempts to eliminate the possibilities of such costs.

Though the Cross-Shipping penalties apply to Fit cash, it is possible that Normal cash will also contain some Fit cash. Because of this, it is necessary to define an average percentage for each denomination that will be considered fit. In this way, OptiVault can manage the deliveries and return of cash to the Central Bank without having penalties while still maintaining enough cash to service customers.

To define the Cross-Ship Fit Split for denominations, a Zone must be assigned to the Vault and the Normal denomination must have the Cross-Ship option enabled to access the Cross-Ship Fit Split page. See the following topics for more information:

- Cashpoint→Basic→Denominations

This topic relates to the following Cashpoint types:

- Vault

TABLE 22: CROSS-SHIP FIT SPLIT DESCRIPTION

Field Name	Description
Denomination	The denomination ID for the denomination assigned to the Cashpoint that has the ' Cross Ship ' option enabled. Note: Cross Shipping can only apply to ' Normal ' quality cash.
Edit Day button	Indicates the percentage of fit cash to Normal cash that can be Cross shipped in on a particular day. Clicking on this button will produce a pop-up window where the analyst can set the Fit percentage for each denomination. Clicking on the ' Submit ' button will save the changes for the selected entry.

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2.2.16 Cashpoint→Orders→Recommendations

This topic relates to the following Cashpoint types:

- Vault

TABLE 23: RECOMMENDATIONS DESCRIPTION

Field	Description
View Button	Allows the user to view the recommendation and invoke the appropriate action to Accept, Deny, or Override the order. If the order has already been placed, the analyst will see an overview of the order and will have the ability to edit the order.
Action	The type of service that will take place for the corresponding recommendation. The possible Actions would be: <ul style="list-style-type: none"> • Planned Delivery • Planned Return • Emergency Delivery • Emergency Return
Due Date	The date the order is due to be performed.
Funding Source	The source Cashpoint that will send/receive the order
Funding Source Type	The type of funding source corresponding to the Funding Source column
Status	The status of the recommendation. This indicates if the recommendation has been completed or if it is still open
Total Amount	The total amount of the recommendation or order.
View Order Button	The View Order button is visible when viewing a recommendation that has already been committed into an order. Clicking on this View Order button will allow the analyst to see the order and delete or edit it.
Denomination	Lists the denomination and quality of the denominations that are assigned to the Cashpoint that can be ordered.
Amount	The recommendation amount of the order for the denomination.
Unit Size	The Unit Size refers to the size of the order units. Orders must be placed in multiples of the unit size. For instance, if the unit size is 100,000, the order must be 100,000, 200,000, 300,000 etc.
Reason	When an order is set up as a manual order or an overridden recommendation, the analyst must select an override reason to allow the analysts to later understand why the recommendations were not followed and take corrective action so future recommendations are correct.

Field	Description
Submit Button	Submits the changes made to the recommendation and converts the recommendation into an order.
Cancel Button	Cancels the changes made on the page and returns to the previous menu.
View Horizon link	Changes the view to the Horizon Report for the selected Cashpoint to allow the analyst to see the future horizon for the Cashpoint. This is helpful to allow the analyst to understand the recommendations
Accept Button	Accepts the recommendation into an order without making changes to the recommended amounts
Override Button	Allows the analyst to change the recommended amounts and commit the recommendation into an order. Note: When overriding a recommendation, the analyst must select an override reason. This allows the analyst to understand why the recommendation is being overridden and make corrective action to avoid overrides in the future.

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2.2.17 Cashpoint→Orders→Orders

The Orders page allows the analyst to see all the orders that have been created for the current day and view and take corrective action if necessary. This page also allows the analyst to create new Orders once all recommendations have been processed.

Most of the descriptions for the orders are covered in the
Cashpoint→Orders→Recommendations

This topic relates to the following Cashpoint types:

- Vault

TABLE 24: ORDERS DESCRIPTION

Field Name	Description
Process New Order Button	Creates a new order for the Cashpoint. To place a new order, the recommendations for the Cashpoint should first be completed. Upon entering the order page, the user must first select the Due Date, Funding Source, Action, and Override Reason.

Field Name	Description
	Once the options are selected, the order may then be placed for the desired denominations.
Submit Button	Submits the changes made to the order and saves the completed order.
Cancel Button	Cancels the changes made to on the page and returns to the previous menu.
Currency	Filters in which currencies are displayed. Checked currencies are visible while unchecked are hidden. NOTE: Hidden currencies are still part of the order. If you uncheck a currency and then select Save, the order will be saved including any hidden amounts.

FIGURE 11: VAULT ORDER

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2.2.18 Cashpoint→Orders→Orders workflow

Order Workflow is a separately licensed functionality that is used to help analysts manage the State of an order from the time it is created until the time it is delivered. Workflow rules can be set up by an administrator to manage the different States of an order. Additionally, analysts can keep a Blog history of notes about the order to be able to share information about the orders and improve communication between analysts and users.

FIGURE 12: ORDER WORKFLOW PAGE

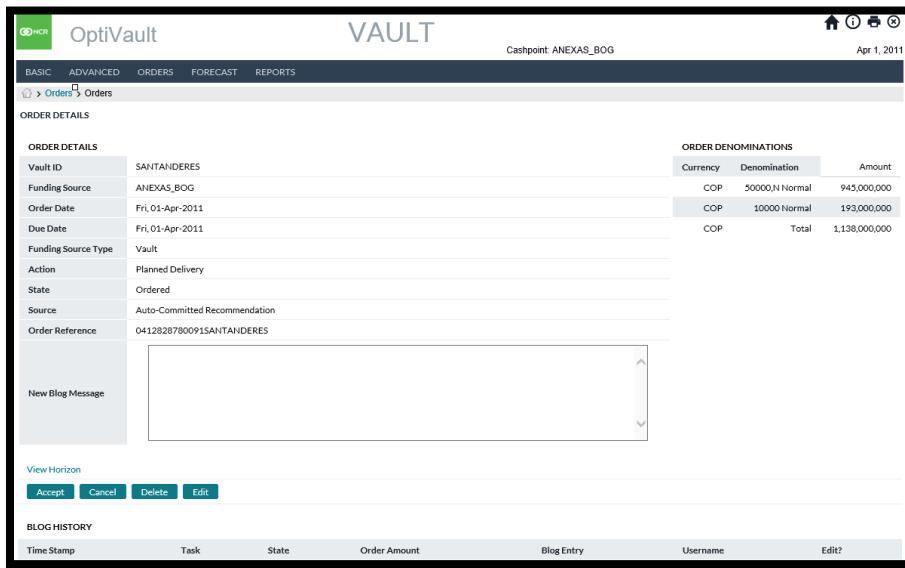


TABLE 25: ORDER WORKFLOW DESCRIPTION

Fields	Description
Vault ID	Unique alphanumeric code that identifies the Vault.
Order Date	Typically represents today's date or the date the cash is being ordered.
Due Date	Due date indicates the date when the order will be completed. Normally, the due date considers the lead-time of the Cashpoint, the service days available, the holiday and other constraints defined in the application.
Funding Source	Indicates the source of the currency to fill this Order such as the parent vault
Funding Source Type	Indicates the type of source such as External Vault, Central Bank, Vault
Action	Describes the type of service that will be performed (Planned Delivery/Planned Return/Emergency Delivery/Emergency Return)
State	Indicates the current state of the order. The State of the order is determined by the workflow setup at the System → Order Settings level.
Source	Indicates an action that led to the order such as Manual Order or System Recommendation
Reason (if applicable)	This field is required when the order is a manual order or an overridden recommendation. The override reason is a status indicator that is used to describe the reason

Fields	Description
	for changing a recommendation or creating a manual order. See Settings→Override Reasons
Total Amount (Ordered Denominations Panel)	<p>This entry must be performed on the right side of the window, in the Ordered Denominations window.</p> <p>Enter the amount of Cash by denomination and currency that need to be ordered. When amounts are entered the following validations are taken into consideration:</p>
	<p>Delivery Validation:</p>
	<ol style="list-style-type: none"> 1. Denomination Ordered Amount should not be less than Small or Large Order Unit Size for that denomination (Unit sizes are defined at System → Currencies/Denominations → Denominations; large or small order unit is assigned at the Cashpoint level Basic → Denominations). 2. The total ordered amount should not exceed the maximum capacity of the Cashpoint.
	<p>Return Validation:</p>
	<ol style="list-style-type: none"> 1. Denomination Ordered Amount should not be less than Small or Large Order Unit Size for that denomination (Unit sizes are defined at System → Currencies/Denominations → Denominations; large or small unit size is assigned at the Cashpoint level Basic → Denominations).
	<p>Note: In OptiNet, the Return Increment feature (defined in OptiNet by an Administrator) can be used to validate the Ordered Amount for each denomination instead of Unit Sizes. However, Return Increments will only apply to the OptiNet Branch Order screens for validation, while OptiCash will validate against unit sizes only.</p>
Blog History	Details the History of Blog Notes placed for the order
New Blog Message	Users can enter a new message for the order that will be placed in the Blog History. Analysts can review these notes so all analysts can view them when reviewing the order.

2.2.19 Cashpoint→Orders→Order Overview

The Order Overview page gives detailed information about the status of the orders as well as the ability to view all information relating to orders. This section also reviews the following pages that are accessible from the Order Overview page:

- Vault Orders
- Vault Recommendations
- Override Vault Recommendations
- Manual Order Page
- Order Confirmation

2.2.20 Vault Orders

The Vault Orders page gives detailed information about the status of the orders as well as the ability to view all information relating to the orders. Additionally, the Orders page shows OptiVault Recommendations as well as Child Vault Orders. The detail fields in each of the three sections report the same information for each order/recommendation type.

FIGURE 13: ORDERS OVERVIEW PAGE

Action	Order Date	Due Date	Funding Source	Funding Source Type	State	Currency	Recommended Amount	Ordered Amount	Order Status
Planned Delivery	Fri, 01-Apr-2011	Fri, 01-Apr-2011	ANEXAS_BOG	Vault	Ordered	COP	1,138,000,000	1,138,000,000	Auto-Committed Recommendation
Planned Return	Fri, 01-Apr-2011	Fri, 01-Apr-2011	ANEXAS_BOG	Vault	Ordered	COP	542,000,000	542,000,000	Auto-Committed Recommendation
Planned Delivery	Tue, 05-Apr-2011	Tue, 05-Apr-2011	ANEXAS_BOG	Vault	Ordered	COP	105,000,000	105,000,000	Auto-Committed Recommendation
Planned Delivery	Thu, 07-Apr-2011	Thu, 07-Apr-2011	ANEXAS_BOG	Vault	Ordered	COP	215,000,000	215,000,000	Auto-Committed Recommendation
Planned Return	Thu, 07-Apr-2011	Thu, 07-Apr-2011	ANEXAS_BOG	Vault	Ordered	COP	99,000,000	99,000,000	Auto-Committed Recommendation
Planned Delivery	Fri, 08-Apr-2011	Fri, 08-Apr-2011	ANEXAS_BOG	Vault	Ordered	COP	670,000,000	670,000,000	Auto-Committed Recommendation

Cashpoint ID	Action	Order Date	Due Date	State	Currency	Ordered Amount	Order Status
BMEJA_BRIN	Planned Return	Fri, 01-Apr-2011	Fri, 01-Apr-2011	Ordered	COP	283,400,000	Auto-Committed Recommendation
CUCUTA_PROSE	Planned Return	Fri, 01-Apr-2011	Fri, 01-Apr-2011	Ordered	COP	313,600,000	Auto-Committed Recommendation

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TABLE 26: ORDER DETAILS DESCRIPTION

Field	Description
Vault ID (only used for Child Vault section)	A unique Vault ID
Action (not used for Child Vault section)	Indicates if this is a cash delivery or return from the branch.
Due Date	Due date indicates the date when the ordered cash will be delivered considering the lead time.
Funding Source	Displays the Funding Source that has been selected to send cash to or receive cash from the cashpoint in question
Funding Source Type (not used for Child Vault section)	Displays the type of funding source options being Vault, External Funding Source, or Custodial Inventory.
Order State	Gives the current state of the order which is referring to Orders Workflow. Examples include Ordered, Approved, In Transit, et al.
Currency	Displays the currency for which the Order is for
Recommended Amount (not used for Child Vault section)	The amount recommended by OptiVault
Ordered Amount	The current total amount of the Order
Order Status	Refers to the current status of the Order. (Open Recommendation, Overridden, Manual Order, Declined, et al).

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2.2.21 Vault Recommendations

Vault Recommendations provides the user with detail about cash order/shipment recommendations made by OptiVault.

FIGURE 14: VAULT RECOMMENDATIONS PAGE

Recommendation Details		Recommended Denominations		
Vault ID	SANTANDERES	Currency	Denomination	Amount
Funding Source	ANEXAS_BOG	COP	50000,N Normal	945,000,000
Recommendation Date	Fri, 01-Apr-2011	COP	10000 Normal	193,000,000
Due Date	Fri, 01-Apr-2011	COP	Total	1,138,000,000
Funding Source Type	Vault		Grand Total in COP	1,138,000,000
Action	Planned Delivery			
custom01	5			
Work	8 Hours			

This recommendation has already been accepted.

[View Order](#)

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TABLE 27: VAULT RECOMMENDATION DESCRIPTION

Field	Description
Vault ID	A unique alpha-numeric code that identifies the Vault
Funding Source	The default will be to Default Funding Source
Recommendation Date	Date the recommendation generated by OptiVault
Due Date	Due date indicates the date when the ordered cash will be available. Normally, the due date considers the lead time of the Cashpoint, the service days available, the holiday and other constraints defined in the application. OptiVault uses the smart calendar to control the dates. Only those dates viable for delivery/return under the Vault definition will be allowed. As an example, if a Cashpoint has a service lead time of 1 day, and the only available days for delivery are Tuesday or Thursday, the order for this Cashpoint could only be made on Mondays or Wednesdays due to the lead time defined at the Cashpoint level. The picture below shows the calendar with the hyperlinked dates that are available for making an order.
Funding Source Type	Refers to the type of cash source. The funding source options are Vault, Commercial, Custodial Inventory, and External Funding Source
Action	Shows the action recommended by OptiVault.

Field	Description
Custom 1-10	1 – 10 Custom fields are available as Optional or Required to provide more information (at the customer's definition) regarding the order. Only when activated as Optional or Required will the fields appear in the Orders screen
Amount (Recommended Denominations Panel)	OptiVault shows the Currency, Denomination, and Amount being recommended for inclusion in the action.
Accept Button	Users can select this to convert the Recommendation to an Order as OptiVault has recommended it
Override	The user selects to advance to the Override Recommendations screen to alter the system-generated recommendation (see below)
Cancel Button	Cancels the transaction and no information is saved.

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2.2.22 Override Vault Recommendations

Users can accept OptiVault-recommended deliveries and shipments via the Vault Recommendations. They can also edit the recommendations via the Override Vault Recommendations page.

FIGURE 15: OVERRIDE VAULT RECOMMENDATIONS PAGE

Recommended Denominations			
Currency	Denomination	Amount	Total
COP	50000.N Normal	228,450,000	
COP	20000 Normal	190,000,000	
COP	10000 Normal	10,000,000	
COP	5000 Normal	119,000,000	
COP	2000 Normal	68,400,000	
COP	1000n Normal	34,200,000	
	Total	650,050,000	
	Grand Total in USD	650,050,000	

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TABLE 28: OVERRIDE VAULT RECOMMENDATION DESCRIPTION

Field	Description
Vault ID	A unique alpha-numeric code that identifies the Vault
Funding Source	The default will be to Default Funding Source
Recommendation Date	Date the recommendation generated by OptiVault
Due Date	Due date indicates the date when the ordered cash will be available. Normally, the due date considers the lead time of the Cashpoint, the service days available, the holiday and other constraints defined in the application. OptiVault uses the smart calendar to control the dates. Only those dates viable for delivery/return under the Vault definition will be allowed. As an example, if a Cashpoint has a service lead time of 1 day, and the only available dates for delivery are Tuesday or Thursday, the order for this Cashpoint could only be made on Mondays or Wednesdays due to the lead time defined at the Cashpoint level. The picture below shows the calendar with the hyperlinked dates that are available for making an order.
Funding Source Type	Refers to the type of cash source. The funding source options are Vault, Commercial, Custodial Inventory, and External Funding Source
Action	Shows the action recommended by OptiVault.
Reason	Users select the reason for the recommendation override from a pre-defined list of reasons.
Custom 1-10	1 – 10 Custom fields are available as Optional or Required to provide more information (at the customer's definition) regarding the order. Only when activated as Optional or Required will the fields appear in the Orders screen
Amount (Recommended Denominations Panel)	Users can enter new amounts by the denomination to alter the recommended total, denomination split, or both.
Unit Size	Shows the increments by which each denomination is required to ordered
Submit	Once the user has made the necessary updates to the recommendation, they can click Submit to convert it to an order.
Cancel Button	Cancels the transaction and no information is saved.

2.2.23 Manual Orders

The Manual Orders page provides the ability to enter a Vault order for either cash delivery or cash return when an Open system-generated Recommendation does not exist.

FIGURE 16: CASHPOINT MANUAL ORDERS PAGE

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TABLE 29: MANUAL ORDER DESCRIPTION

Field	Description
Vault ID	A unique alpha-numeric code that identifies the Vault
Funding Source	Users can select the source for the order being placed. Will default to the Default Funding Source
Order Date	Typically represents today's date or the date when the cash is being ordered.
Action	Shows the action that has been selected in the previous window.
Due Date	Due date indicates the date when the ordered cash will be available. Normally, the due date considers the lead time of the Cashpoint, the service days available, the holiday and other constraints defined in the application. OptiVault uses the smart calendar to control the dates. Only those dates viable for delivery/return under the Vault definition will be allowed. As an example, if a Cashpoint has a service lead time of 1 day, and the only available dates for delivery are Tuesday or Thursday, the order for this Cashpoint could only be made on Mondays or Wednesdays due to the lead time defined

Field	Description
	at the Cashpoint level. The picture below shows the calendar with the hyperlinked dates that are available for making an order.
Reason	This option is required when the order is new or overridden. The Reasons are created at the Institution level under the System tab.
Custom 1-10	1 – 10 Custom fields are available as Optional or Required to provide more information (at the customer's definition) regarding the order. Only when activated as Optional or Required will the fields appear in the Orders screen
Total Amount	This field is an auto-generated field showing the total of the amounts-by-denomination which are input via the Order Denominations panel
Blog Message	Users can enter a new message for the order that will be placed in the Blog History. Analysts can review these notes so all analysts can view them when reviewing the order.
Amount (Order Denominations Panel)	<p>This entry must be performed on the right side of the window, in the Order Denominations window.</p> <p>Enter the amount of Cash by denomination, condition (Fit, Normal, Soiled) and currency that needs to be ordered. When amounts are entered the following validations are taken into consideration:</p> <p>Delivery Validation:</p> <ol style="list-style-type: none"> Denomination Ordered Amount should not be less than Small or Large Order Unit Size for that denomination (Unit sizes are defined at <i>System → Currencies/Denominations → Denominations</i>; large or small order unit is assigned at the <i>Cashpoint level Basic → Denominations</i>). The total ordered amount should not exceed the maximum capacity of the Cashpoint. <p>Return Validation:</p> <ol style="list-style-type: none"> Denomination Ordered Amount should not be less than Small or Large Order Unit Size for that denomination (Unit sizes are defined at <i>System → Currencies/Denominations → Denominations</i>; large or small unit size is assigned at the <i>Cashpoint level Basic → Denominations</i>).

Field	Description
Submit Button	Commits the order provided all information was entered correctly. If there are errors or missing information, the user will be prompted for the correct information prior to committing the order.
Cancel Button	Cancels the transaction and no information is saved.

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2.2.24 Order Details Page

The Order Details page provides an opportunity to review, edit, override, and delete an order prior to final placement. If utilized, it also provides the ability to add additional BLOG messages and review existing BLOGs.

The Order Details page applies to both vault and child-vault orders.

FIGURE 17: CASHPOINT ORDER CONFIRMATION PAGE

The screenshot shows the OptiVault interface for an order with ID ANEXAS_BOGgw. The top navigation bar includes links for BASIC, ADVANCED, ORDERS, FORECAST, and REPORTS. The main title is 'VAULT' with the sub-title 'Cashpoint: ANEXAS_BOGgw'. The date 'Apr 1, 2011' is also displayed. The left sidebar has a 'View Horizon' section with buttons for Accept, Cancel, Delete, and Edit. Below this is a 'BLOG HISTORY' table showing a single entry: 'Tue 2011-03-29 09:29:50' with Task 'Order' and State 'Ordered', and a Blog Entry 'COP:30,000' by user 'admin'. The central area displays 'ORDER DETAILS' and 'ORDER DENOMINATIONS' tables. The 'ORDER DETAILS' table contains fields like Vault ID (ANEXAS_BOGgw), Funding Source (HSBC), Order Date (Tue, 29-Mar-2011), Due Date (Wed, 22-Apr-2020), and Action (Planned Delivery). The 'ORDER DENOMINATIONS' table shows currency (COP) denominations: 20000 Normal (Amount 20,000), 10000 Normal (Amount 10,000), and a Total (Amount 30,000). A large text area labeled 'New Blog Message' is present at the bottom left.

Vault ID	ANEXAS_BOGgw
Funding Source	HSBC
Order Date	Tue, 29-Mar-2011
Due Date	Wed, 22-Apr-2020
Funding Source Type	External Funding Source
Action	Planned Delivery
State	Ordered
Source	Manual Order
Reason	Low Denomination Levels
custom01	5
Work	8 Hours
Order Reference	3136921967113ANEXAS_BOGgw

Currency	Denomination	Amount
COP	20000 Normal	20,000
COP	10000 Normal	10,000
	Total	30,000

TABLE 30: ORDER CONFIRMATION PAGE

Field	Description
Vault ID	A unique alpha-numeric code that identifies the Vault
Funding Source	Displays the Funding Source that has been selected to send cash to or receive cash from the cashpoint in question
Order Date	Typically represents today's date or the date when the cash is being ordered.
Due Date	Due date indicates the date when the ordered cash will be delivered considering the lead time.
Funding Source Type	Displays the type of funding source options being Vault, External Funding Source, or Custodial Inventory.
Action	Shows the action that has been selected in the previous window.
Status	Status or source of order options being Manual Order, Overridden Order, Accepted Recommendation
State	Indicates the current state of the order. The State of the order is determined by the workflow setup at the System → Order Settings level.
Source	Indicates the status of the order: auto-committed, accepted recommendation, overridden recommendation, manual order or centrally overridden.
Reason	The Reason indicates why a particular recommendation from OptiVault was not used. The override reasons are created at the Institution level under the System tab.
Custom 01-10	1 – 10 Custom fields are available as Optional or Required to provide more information (at the customer's definition) regarding the order. Only when activated as Optional or Required will the fields appear in the Orders screen
Total Amount	The current total amount of the Order
Blog History	Display of all Blog records entered in connection with the order
New Blog Message	User can enter a new blog message in connection with the order being reviewed
Accept	Accept button books order as recommended or manually ordered
Cancel	Approve and book order for changes made

Field	Description
Edit	Allows the user to Edit an existing order that has not yet reached its Due Date

[Return to: Cashpoint Orders](#)

2.2.25 Cashpoint→Forecast→View Forecast

The View Forecast page shows an overview of the forecast in a graphical representation so the analyst can see the variances between the forecasted and actual amounts.

This topic relates to the following Cashpoint types:

- Vault
- Commercial

TABLE 31: VIEW FORECAST DESCRIPTION

Field Name	Description
Start Date	The date the Forecast graph will start. Note: The graph will only show the date for which Forecast records were created.
End Date	The date the Forecast graph will end. Note: The graph will only show the date for which Forecast records were created.
Forecast Listbox	Allows the user to change to the different forecast types. The user must select a forecast type and click on the Submit Button. Possible selections are: <ul style="list-style-type: none"> • Withdrawals • Deposits • Net Demand
Denomination Listbox	Allows the analyst to change to a different denomination(s). To change the view, the analyst must select the desired options and click the ' Submit ' button Note: Selecting ' All ' gives a summary of all forecasts for all denominations for the selected qualities.
Quality Listbox	Allows the analyst to change to a different quality/qualities to change the view, the analyst must select the desired options and click the ' Submit ' button. Note: Selecting ' All ' gives a summary of all the forecasts for the qualities of the selected denomination.

Field Name	Description
Graph Type	<p>Allows the user to select between a line or bar graph.</p> <p>To change the view, the user must select the desired options and click the Submit button</p>
Time Period	<p>Allows the analyst to select specific time periods. Choices are:</p> <ul style="list-style-type: none"> • Daily • Weekly • Monthly • Mondays • Tuesday • Wednesdays • Thursdays • Fridays • Saturdays <p>To change the view, the analyst must select the desired options and click the Submit button</p>
Forecast and History Graphs	<p>Each data point is a specific date. Two values are plotted:</p> <p>The Blue line (actual data) represents the historical data loaded in daily files.</p> <p>The Red line (prediction) represents the forecast data and is based on historical demand, cost, and future events.</p> <p>Clicking on any data point loads the information in the Forecast Details Pane.</p>
Date	<p>The date currently selected (by clicking a data point on the graph).</p>
Data Type	<p>The type of data that is plotted: Withdrawal, Deposit or Net Demand.</p>
Base Forecast	<p>The value originally forecasted for the day without any adjustments. This figure is for informational purposes only.</p> <p>The Forecasted figure that will be enforced for the Cashpoint is the 'Forecast' number.</p>
Forecast	<p>The value of the Forecast is currently set for the selected day. Forecasts can be adjusted higher or lower due to rounding or Forecast Adjustments applied by an Analyst.</p>
Actual	<p>The value of Actual Historical data for the selected data point.</p>
Event	<p>If an Event is in force for the selected day, the name of that event will be listed in this field.</p>

Field Name	Description
Variance	The Variance will show the difference between the Forecast and the Actual numbers.
Holiday	Indicates a non-working day for the Cashpoint and forecast demand will be zero, provided the Cashpoint is flagged as “ closed ” on Holidays.
Exclude	Indicates if the selected day is excluded in the next forecast generation process. Exclusions are usually necessary when an error in the data load has occurred or extraordinary activity occurs that is unlikely to be repeated.
Forecast Health	The value indicates the degree of correlation between the forecast and actual data. Generally, any value above 70 indicates a good correlation. The closer the value gets to 100, the higher the correlation.
Events Tab	Shows a list of the Events and dates assigned to the Cashpoint.
Adjustments Tab	This tab shows a list of Forecast Adjustments assigned to this Cashpoint. Forecast Adjustments are used to change the Forecast due to additional trends that may not be captured by the initial forecast. For example, if there is a certain demand trend that is affecting Mondays, the user may adjust the forecast specifically for that day of the week using a percentage. The Forecast Adjustment can be a positive or negative number.
Create New Adjustment Link	Above the ' Adjust ' button is a link that allows the user to specify new Forecast adjustments. Forecast adjustments can be applied to the following days: <ul style="list-style-type: none"> ● All Days (Default for every Cashpoint) ● Sundays ● Mondays ● Tuesdays ● Wednesdays ● Thursdays ● Fridays ● Saturdays ● Specific Date <p>Note: The 'All Days' Adjustment is overwritten by any day of the week or specific date. The Forecast adjustments are not cumulative.</p>

Field Name	Description
Adjust Button	Updates any values changed for the corresponding Forecast Adjustment.
Delete Button	Deletes the corresponding Forecast Adjustment from the Cashpoint. Note: The All Days adjustment is required for every Cashpoint. Setting it to zero means it will not affect the Cashpoint forecast.

[Return: OptiVault General Pages](#)

2.2.26 Cashpoint→Forecast→Exclude History

The View Forecast page shows an overview of the forecast in a graphical representation so the analyst can see the variances between the forecasted and actual amounts.

This topic relates to the following Cashpoint types:

- Vault
- Commercial

The Vault History report shows the analyst the historical data that has been loaded into the system for the selected vault. The analyst can exclude data from the forecast from this page.

TABLE 32: VAULT HISTORY DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Submit Button	Displays the report based on the dates selected
Denomination	Denomination and quality of for the date selected
Closing Balance	The closing balance on the date reported
Date	Date of the reporting day
Not Available	The cash not available for distribution by the vault
Total Cash In	The total amount of cash coming into the vault is based on the different Funding source elements
Total Cash Out	The total amount of the cash going out to the funding sources.
Branch Orders/Returns	Total orders and returns to branches
ATM Orders/Returns	Total orders and returns to ATMs

Field	Description
Central Bank Deliveries	Total deliveries into the Vault from the central bank
Central Bank Returns	Total returns to the central bank from the vault
Vault Deliveries	Total deliveries from other vaults
Vault Returns	Total returns to other vaults
Other Source Deliveries	Total deliveries from External Sources
Other Source Returns	Total returns to External Sources
Exclude Button	<p>Excludes the history record for the date and quality thereby excluding it from being used in the forecast</p> <p>Upon clicking the Exclude Button, the analyst can choose to exclude Deposits, Withdrawals, or both from the pop-up window.</p> <p>Note: The exclusion entries must be saved for them to take effect in the database. This is done by clicking the 'Save' button at the bottom of the page.</p>
Save Exclusion Entries Button	Saves the exclusion settings for the history records displayed.
View Button	Displays the report based on the dates selected.

[Return: OptiVault General Pages](#)

2.2.27 Cashpoint→Forecast→Generate Forecasts

The Generate Forecast page allows the user to generate a new Forecast for the current Cashpoint. The user can create new Forecast Definition IDs or use existing IDs to run the Forecast process. Denominations can be included during the recommendations and forecast process by simply selecting the '**Recommend**' checkbox on the *Vault > Basic > Denominations* page. For more information on running Forecasts see: [Forecast→Run Forecast](#)

This topic relates to the following Cashpoint types:

- Vault
- Commercial

The screenshot shows the CXBanking OptiVault 10.1 software interface. At the top, there's a navigation bar with links for BASIC, ADVANCED, ORDERS, FORECAST, and REPORTS. Below this is a breadcrumb trail: Home > Forecast > Generate Forecast. The main area is titled 'OPTIVAUT - GENERATE FORECAST'. It contains several input fields and dropdown menus. One dropdown menu for 'Forecast Definition ID' is set to 'gwtest'. Other fields include 'History From' (set to '01-Mar-2010'), 'Forecast From' (set to '01-Mar-2011'), 'Description' (set to 'forecast'), 'History To' (set to '28-Feb-2011'), 'Forecast To' (set to '30-Sep-2011'), and 'Forecast Exists Through' (set to '30-Sep-2011'). At the bottom left, there are 'New' and 'Save' buttons. At the bottom right, it says 'Copyright NCR Corporation. ALL RIGHTS RESERVED.' and 'OptiVault 10.0 Build 3131 SNAPSHOT'.

2.2.28 Cashpoint→Forecast→Analysis

The Forecast Analysis page gives a summary of the Forecast quality values with a visual indicator (Red, Yellow, Green) representing the quality level. This page is for Informational purposes only.

This topic relates to the following Cashpoint types:

- Vault
- Commercial

TABLE 33: FORECAST ANALYSIS DESCRIPTION

Field Name	Description
Denomination ID	The denomination ID of the forecast
Quality	The quality of the denomination of the forecast
Withdrawals	The forecast health of the withdrawals portion of the forecast
Deposits	The forecast health of the deposits portion of the forecast
Net Demand	The forecast health of the net demand portion of the forecast

[Return: OptiVault General Pages](#)

2.2.29 Cashpoint→Forecast→ATM/BRANCH Forecast

This page allows the analyst to determine how the Vault will handle forecasting ATM/Branch demand. Selecting the options on this page means that instead of aggregating the demand of the Cashpoints, it will forecast them as part of the vault's forecast process.

This topic relates to the following Cashpoint types:

- Vault

TABLE 34: ATM/BRANCH FORECAST DESCRIPTION

Field Name	Description
ATM Delivery	When selected, OptiVault will forecast the ATM Deliveries instead of aggregating the future demand
ATM Return	When selected, OptiVault will forecast the ATM Returns instead of aggregating the future demand
Branch Delivery	When selected, OptiVault will forecast the Branch Deliveries instead of aggregating the future demand
Branch Return	When selected, OptiVault will forecast the Branch Returns instead of aggregating the future demand

2.2.30 Cashpoint→Reports

The reports section of the Cashpoint screen gives the user Cashpoint specific reports to allow for faster access to critical reports used for analysis purposes. The reports are covered in the [Reports Tab](#) section of this document. Please refer to the following reports for additional information:

Vault Cashpoints:

- Vault Horizon Report
- Vault History Report
- Vault Forecast Report

Commercial Cashpoints:

- Commercial History Report
- Commercial Forecast Report

3 Today Tab

Today tab represents the high-level summary information and daily highlights for users. The following is a summary of the information that will be covered, along with hyperlinks to each topic:

- Today→Snapshot
- Today→Vault Status
- Today→Orders Workflow

3.1.1 Today→Snapshot Page

This page is the main screen users will log into when using the application. This is the starting point for OptiVault users to perform most of their daily and weekly tasks.

FIGURE 18: TODAY -> SNAPSHOT PAGE

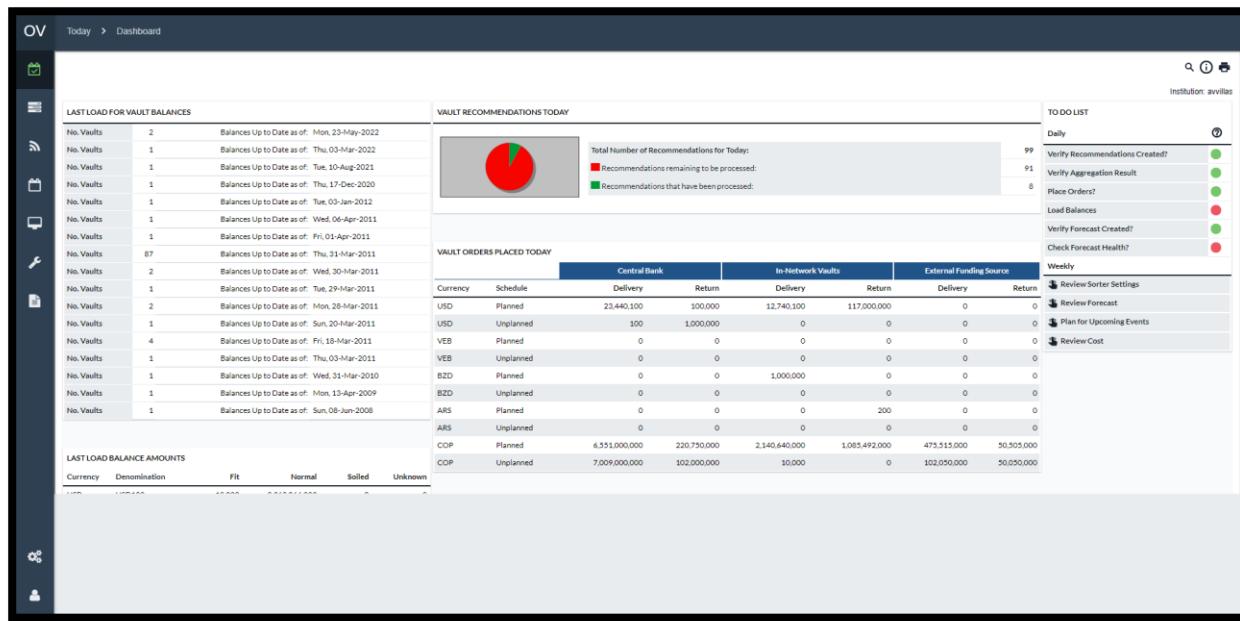


TABLE 35: SNAPSHOT PAGE DESCRIPTIONS

Today Snapshot	Description
Last Load for Vault Balances	This section displays when balances were last loaded for the Cashpoints assigned to the current user. The list is organized by date and groups the Cashpoints by the last day they had balances loaded. Clicking on a link for a particular date will launch the last load snapshot report.

Today Snapshot	Description
Vault Recommendations Today	<p>The Ordering Status screen displays a graphical indicator of the status of the current day's orders. (See: Vault Orders Error! Reference source not found.). The right side of this section shows:</p> <ul style="list-style-type: none"> ● Total Number of Recommendations for Today - The Total Number of Cashpoints, assigned to this user, which has recommendations that were produced for the day. Example, if there was only one Cashpoint in the system and that one Cashpoint had 10 recommendations, then this field would display 1. ● Recommendations remaining to be processed - This number is the number of Cashpoints, assigned to this user, which has recommendations that still need to be processed. If a Cashpoint has more than one recommendation and some or all of those recommendations are still open, then the indicator will still count that Cashpoint as "remaining to be processed". ● Recommendations that have been ordered - This number is the number of Cashpoints, assigned to this user, which has all their recommendations committed. <p>The graphic represents the total number of Cashpoints with recommendations. The Red area indicates Open Recommendations and the Green, committed recommendations.</p>
Last Load Balance Amounts	Displays last loaded balance information by Currency, Denomination and Note Quality

Today Snapshot	Description
Vault Orders Placed Today	<p>This part informs about the orders already committed, overridden or manually created for Cashpoints.</p> <p>The information shown in this section has details about the orders by Currency, Service Type, and Funding Source. The Service Types are as follows:</p> <ul style="list-style-type: none"> • Planned – Normal Deliveries and Returns • Unplanned – Deliveries that fall outside of the regular lead times for Normal Deliveries <p>Funding Source options include:</p> <ul style="list-style-type: none"> • Central Bank • In-Network Vaults • External Funding Source
Cash In & Cash Out Processing Planned for Today	<p>Currency-total Detail of Cash-In and Cash-Out by Cashpoint Types ATM, Branch, Commercials, and In-Network Child Vaults. These are cashpoint types funded by and returning residual cash to Vaults managed by OptiVault</p>
To Do List	<p>The To-Do List is a daily checklist of the processes or tasks to be executed on a daily basis by the users. See Snapshot→To Do List in more detail.</p>

3.1.2 Snapshot→To Do List

The To-Do List is used on a daily basis to help perform the processes necessary to complete the orders for all Cashpoints. The list helps users by providing indicators that show the state of the item to be completed as well as hyperlinks to pages and reports that are used to complete these tasks.

FIGURE 19: TO DO LIST

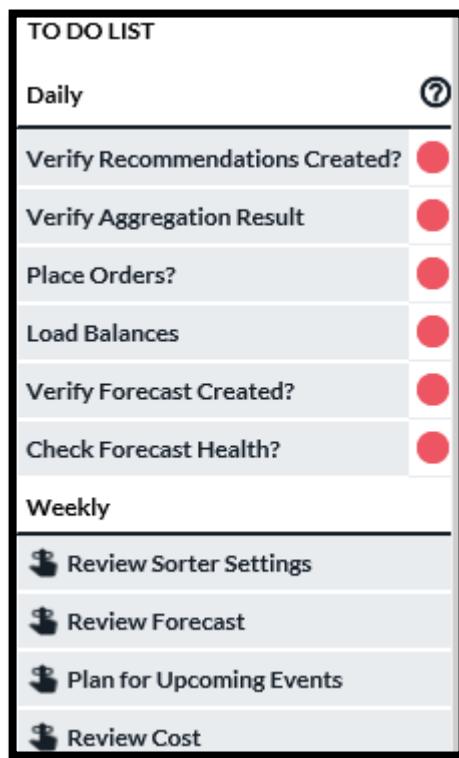


TABLE 36: TO DO LIST DESCRIPTION

To Do Item	Description
Red Indicator	Indicates there is an issue to be dealt with. For example, balances are too old, there are alerts, ordering for the Cashpoints has not been finished, etc.
Yellow Indicator	Indicates that the item has been checked but some items are still warnings that exist.
Green Indicator	Indicates that there are no warnings or no actions to be taken. For example - there are no alerts, no orders to be completed, etc.
Verify Recommendations Created?	Red - Indicates there was an error when running recommendations. This could apply to all Cashpoints or just one. Green - There are no errors in the recommendation process.
Verify Aggregation Results?	Aggregation is the OptiVault process of taking ATM/Branch cash demand from OptiCash and rolling it to the respective Vaults to drive the recommendation process.

To Do Item	Description
	<p>Red - There are Cashpoints that failed the aggregation process.</p> <p>Green - There are no errors in the aggregation process.</p> <p>Clicking on this indicator will direct the user to the Aggregation Results page.</p>
Place Orders?	<p>This indicator shows the status of recommendations that need to be processed for the day.</p> <p>Red - There are open recommendations remaining to be dealt with today.</p> <p>Green - There are no open recommendations remaining to be dealt with today.</p> <p>Clicking on this indicator will direct the user to the Orders Page.</p>
Load Balances?	<p>This indicator signals if balances have been recently loaded. Normally this is 7 days, but this parameter can be changed by the administrator to include more or less days depending on the preference.</p> <p>Red - There are active Cashpoints, assigned to this user, with out-of-date balances.</p> <p>Green - The balances are up to date for all Cashpoints assigned to this user.</p> <p>Clicking on the link will redirect to the Today→Vault Status. If a red legend is displayed, balances must be loaded for those Cashpoints with out-of-date balances.</p>
Verify Forecast Created?	<p>This indicator is a reminder to run forecasts for the Cashpoints assigned to the user.</p> <p>Red - Indicates that forecasts have not yet been run or there was an error when running forecasts.</p> <p>Green - All forecasts have been run and there are no errors from the forecasting process.</p>
Check Forecast Health?	<p>This indicator is used both as a reminder to verify and improve forecast quality as well as giving an overview of the overall forecast quality for the Cashpoints assigned to the current user.</p> <p>Red - You have poor forecast health for some of your Cashpoints.</p> <p>Yellow - You have marginal forecast health for some of your Cashpoints.</p> <p>Green - You have good forecast health for your network.</p> <p>Clicking on the indicator will bring up the Forecast Health Summary Report.</p>

To Do Item	Description
Weekly Processes	
Review Sorter Settings	Sorters can be configured by type, capacity, operating hours, and also denomination yield percentages can be set accordingly. User should ensure that settings and sorter usage planning have not changed thus impacting projected cash available from sorting
Review Forecast	It is recommended that the users review forecast quality on a weekly basis as the forecast quality has a direct impact on the quality of recommendations.
Plan for Upcoming Events	Event setup has a direct impact on the forecast process; therefore, it is important that analysts review events on a weekly basis. Refer to the section Events→Events Page Error! Reference source not found. for more details on how to review, analyze and maintain calendar and event setup.
Review Cost	To monitor the costs of the network, analysts have to make sure the cost settings are up to date and the actual cost calculation is being run on a weekly basis. For more information, see Processing→Cost Calculation Cashpoint→Advanced→Costs

3.1.3 Today→Vault Status

The Today Vault Status Tab shows the analyst a summary of the vaults that are assigned to the analyst based on the Group settings on the Privileges page. Each vault is listed on this page along with a summary of the recommendations, orders, errors, and last load dates.

FIGURE 20: TODAY VAULT STATUS PAGE

Vault ID	Currency	VAULT STATUS						Date: 29-Mar-2011					
		Open Recom.	Accepted Recom.	Declined Recom.	Accepted Amt.	Overridden Recom.	Overridden Amt.	Additional Orders	Additional Amt.	Total Orders Amt.	Alerts / Val. Err?	Agg. Errors?	Last Load Date
1038	USD	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
1038	EUR	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
1038	COP	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
1038	ARS	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
151	COP	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
628	USD	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
628	EUR	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
628	COP	0	0	0	0	0	0	0	332,100,000	332,100,000	-	-	Tue, 03-Jan-2012
628	AED	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
628	ARS	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
ANEXAS_BOG	USD	0	0	0	0	0	0	3,220,200	3,220,200	-	-	Tue, 03-Jan-2012	
ANEXAS_BOG	COP	0	0	0	7,014,250,000	0	0	312,140,000	7,326,390,000	-	-	Tue, 03-Jan-2012	
ANEXAS_BOG	AED	0	0	0	0	0	0	0	0	-	-	Tue, 03-Jan-2012	
ANEXAS_BOG	ARS	0	0	0	0	0	0	200	200	-	-	Tue, 03-Jan-2012	
ANEXAS_BOGAK	USD	0	0	0	0	0	0	0	0	-	-	Thu, 31-Mar-2011	
ANEXAS_BOGAK	COP	0	0	0	0	0	0	0	0	-	-	Thu, 31-Mar-2011	
ANEXAS_BOGAK	ARS	0	0	0	0	0	0	0	0	-	-	Thu, 31-Mar-2011	
ANEXAS_BOGAK	COP	0	0	0	0	0	0	60,000,000	60,000,000	-	-	Thu, 31-Mar-2011	
ARMEHIA_BRN	USD	0	0	0	0	0	0	0	0	-	-	Thu, 17-Dec-2020	
ARMEHIA_BRN	EUR	0	0	0	0	0	0	0	0	-	-	Thu, 17-Dec-2020	
ARMEHIA_BRN	COP	0	0	0	1,273,000,000	0	0	26,625,000	1,299,625,000	-	-	Thu, 17-Dec-2020	

TABLE 37: TODAY VAULT STATUS PAGE DESCRIPTION

Field Name	Description
Vault ID	A unique 12-character alpha-numeric identifier is used to identify the Cashpoint in OptiVault. Clicking on the hyperlink for a Vault will take the user to the Vault Cashpoint page where parameters can be reviewed and edited.
Currency	Each currency has an individual line. Each currency is designated by the currency code.
Open Recommendation	Shows the number of open recommendations for the vault. Clicking on the hyperlink for a Recommendation will take the user to the open recommendation page at the Cashpoint level for the vault. From this page, recommendations can be viewed, edited, and committed into orders. If zero recommendations exist, the user can then click on the Orders tab to place a manual order.
Accepted Recommendations	Shows the number of recommendations that were accepted for the current day.
Accepted Amount	Shows the order amount of the recommendations that have been accepted.
Overridden Recommendations	Shows the number of recommendations that were overridden for the current day.
Overridden Amount	Shows the order amount of the recommendations that have been overridden.
Additional Orders	Shows the number of manual orders that were created for the current day.
Additional Amount	Shows the amount of manual orders that were created for the current day.
Total Orders Amount	Shows the total amount of orders placed for the current day for the Accepted, Overridden, and Additional orders. Clicking on the hyperlink takes the user to the Vault Cashpoint Orders page to allow the user to view and edit all existing orders for the current day.
Alerts/Validation Error?	This field shows a warning icon for a vault that had any problems during the loading of data or the recommendation process. Clicking on the hyperlink takes the user to the Recommendation Results Report.
Last Load Date	Shows the latest date for which data was loaded for the corresponding vault.

3.1.4 Today→Vault Orders

The Today Vault Orders page shows the analyst a listing of the orders and recommendations in the system. Numerous filters are available to assist in locating desired info. The user may also click into a record once located and use that path to reach more details.

FIGURE 21: TODAY VAULT ORDERS PAGE

TABLE 38: TODAY VAULT ORDERS PAGE DESCRIPTION

Field Name	Description
Trading Market	The trading market, if any, to which this vault belongs.
Vault ID	A unique id that is used to identify the Cashpoint in OptiVault. Clicking on the hyperlink will take the user to the Vault Cashpoint page where parameters can be reviewed and edited.
Action	Type of order. Delivery or Return. Planned or Emergency.
Conf. #	Reference number of the order or recommendation. Clicking on the hyperlink will take the user to the Vault's order or recommendation details page.
Funding Source	The other entity involved in this cash transfer: For delivery, this is the sender. For a return, this is the destination.
State	The current state of an order. Will be blank for open recommendations.

Field Name	Description
Order Date	The date on which the Order was placed into the system. For an open recommendation, this is the date when it is recommended to the user to place the order.
Due Date	The date on which the transfer is expected to execute.
Order Src.	Order source. Tracks where the order came from. Manual Order, recommendation, etc.
Denomination ID	Denomination identifier.
Quality	Quality identifier. Fit, Normal, Soiled, Unknown
Amount	The amount of cash to be transferred.

3.1.5 Today→Orders Workflow

The Orders Workflow page is used to review orders and quickly move orders from one state to another.

FIGURE 22: TODAY ORDERS WORKFLOW PAGE

Cashpoint	Funding Source	Order Reference Number	Order Date	Due Date	Currency	Amount	Expiration Time
YUMM!!	TACO_RACINGS	19444600110088YUMM!!	29-Mar-2011	29-Mar-2011	USD	4,120,000.00	N/A
YUMM!!	ANEXAS_BOQ	75948799673089YUMM!!	29-Mar-2011	30-Mar-2011	COP	1,000	N/A
VaultGK	BOGOTA	65836907380POVVaultGK	29-Mar-2011	31-Mar-2011	COP	30,000	N/A
VaultGK	BOGOTA	670047651090VaultGK	29-Mar-2011	31-Mar-2011	COP	1,000,000	N/A
Vault915	A_FABIOLOA1	1846819529088Vault915	29-Mar-2011	29-Mar-2011	COP	1,000,000	N/A
Vault_T526	ANEXAS_BOQ	5304329695089Vault_T526	29-Mar-2011	30-Mar-2011	USD	10,000,000	N/A

TABLE 39: ORDERS WORKFLOW PAGE DESCRIPTIONS

Function	Description
Order Workflow	Allows the user to select an order type
Order State	Allows the user to select an order state
Order Date	Allows the user to specify an order date

Function	Description
Due Date	Allows the user to specify an order due date
Expired States Only	Allows the user to view only those orders past the expiration time for their current state.
Submit Button	Executes the query to find the orders that pertain to the order parameters specified by the Order Workflow, Order State, Order Date, Due Date, and Expired States Flag.
Checkbox	Allows the user to select the cashpoints that will be processed for the ' Apply Task '
Cashpoint ID	Indicates the Cashpoint ID of the Cashpoint to be updated
Order Reference Number	Indicates the Reference number for the order
Order Date	The date that the order was placed
Due Date	The date that the order is to be delivered
Currency	Currency of the Order
Amount	The amount of the order
Expiration Time	Time and date that the state of the order is to expire <ul style="list-style-type: none"> • Green indicator indicates the State has not expired • Red indicator indicates the State has already expired
Blog Entry	Allows users to enter information about the transaction in the Blog history
Apply Task button	Moves the selected orders to the next specified state.

4 Processing Tab

This Tab provides the user with tools to load, process, and export data. The user can Load historical data and orders; define forecast and recommendation parameters; run Forecast and Recommendation processes; output Order and Recommendation Reports; and Calculate the costs for transporting and holding cash.

All of the pages that are contained under the Processing Tab are explained below. The following is a summary of the information that will be covered in this section along with hyperlinks to each topic:

- [Processing→Process Status](#)
- [Processing→Load](#)
- [Processing→Recommendations](#)
- [Processing→Forecast](#)
- [Processing→Order Output](#)
- [Processing→CI Constraints](#)
- [Processing→Cost Calculation](#)

[Return To: Introduction to the Interface](#)

4.1.1 Processing→Process Status

The Process Status page shows any system processes that are currently running on the server.

FIGURE 23: PROCESS STATUS PAGE

Username	Process Name	State	Start Time
Import Balances - Commercials	No processes running at this time.		
Import Balances - Vaults	No processes running at this time.		
Forecast	No processes running at this time.		
Constraints Calculation	No processes running at this time.		
Recommendation	No processes running at this time.		
Order Output	No processes running at this time.		
Recommendation Output	No processes running at this time.		

TABLE 40:PROCESS STATUS DESCRIPTION

Field	Description
Username	Name of the user that initiated the process
Process Name	Name of the process that is running
State	State of the process that is running (Active or Inactive)
Start Time	Time the process was started
Import Balances – Commercials	The daily import commercial balance load process is started through <i>Processing</i> → <i>Load</i> → <i>Load Commercial Balances</i> or as an automated batch process on the server.
Import Balances – Vaults	The daily import vault balance load process is started through <i>Processing</i> → <i>Load</i> → <i>Load Vault Balances</i> or as an automated batch process on the server.
Forecast	The forecasting process for Cashpoints is started at the Cashpoint level, through <i>Processing</i> → <i>Forecasting</i> , or as an automated batch process on the server.
Constraints Calculation	The Constraint Calculations for Custodial Inventory Cashpoints are started through the <i>Processing</i> → <i>CI Constraints</i> page.
Recommendation	The recommendation process for Cashpoints is started at the Cashpoint level, through <i>Processing</i> → <i>Recommendations</i> , or as an automated batch process on the server.
Orders Output	The Orders Output process for Cashpoints is started through <i>Processing</i> → <i>Order Output</i> , or as an automated batch process on the server.
Recommendation Output	The Recommendation Output process for Cashpoints is started through <i>Processing</i> → <i>Recommendation Output</i> , or as an automated batch process on the server.
Commercial Consolidation	The Commercial Consolidation process for Commercial Cashpoints is started through <i>Processing</i> → <i>Forecast</i> → <i>Commercial Consolidation</i> , or as an automated batch process on the server.
Delete Job	The ' Delete Job ' button in the OptiVault interface can be used to delete any of the processes in the queue but will not delete the process already submitted to the server . Example: when a forecast process is submitted, it is put into the queue on the processing screen. Then the web browser sends a message to the server to initiate the



Field	Description
	process for the first one in the queue. Once started on the application server, the process itself cannot be stopped without a system administrator's intervention. If a job becomes hung up on the application server, it is necessary to delete the process from the OptiVault interface or else the job will be kicked off again as soon as the application server is restarted.

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4.1.2 Processing→Load Balances

The Load process is used to load balances for Vaults and Commercial Cashpoints into OptiVault. This function is only necessary when the batch processes failed to work as expected.

FIGURE 24: LOAD BALANCES PAGE

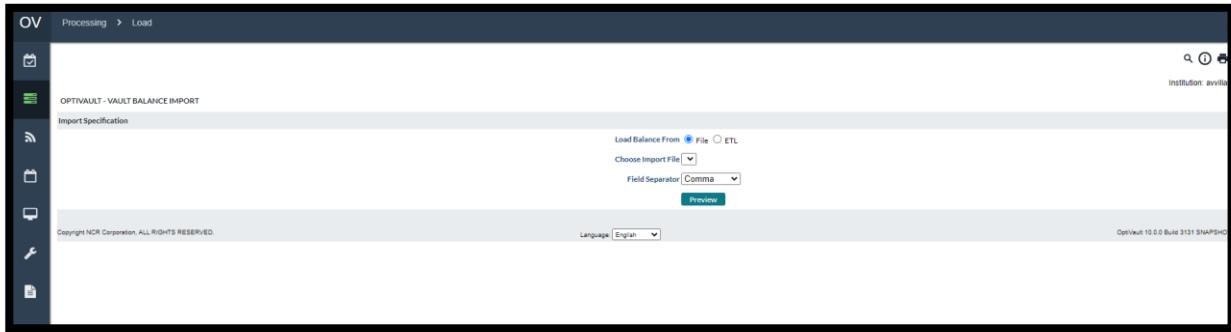


TABLE 41: LOAD BALANCES DESCRIPTION

Field	Description
Type	Allows the analyst to select the type of balance files that will be loaded into OptiVault. The available options are: <ul style="list-style-type: none">• Load Commercial Balances• Load Vault Balances
Select button	Selects the load type selected in the Type field to load balances into OptiVault
Load Balance From (only available for Vaults. Not for Commercial Clients)	OptiVault allows files to be imported from two sources: File: Users can save a file in the appropriate OptiVault format in the input directory. Users select the appropriate file name from the "Choose Import File" dropdown.

Field	Description
	ETL: ETL load comes from a table instead of a file supplied by the user. The customer institution has an outside system that drops the data into one specific table in OptiVault. The ETL load process copies from the table into the Vault history.
Choose Import File	A list of available files that can be loaded into OptiVault. The list is populated based on the files that are already saved on the server in the import directory. The import directory is defined on the maint/setup.jsp page.
Field Separator	Defines the separator that is used to separate fields in the import file. The available options are: <ul style="list-style-type: none"> • Comma • Space

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4.1.3 Processing→Load Orders

The Load Orders process is used to load Vault Cashpoints into OptiVault. This function is only necessary when the batch processes failed to work as expected.

FIGURE 25: LOAD ORDERS PAGE

TABLE 42: LOAD ORDERS DESCRIPTION

Field	Description
Select File	Click on the Browse button to select the file containing orders to upload. The file should follow the OptiVault order load format.
Separator	Select the type of field separator used in the file. Options available: comma or tab.

Field	Description
Task	<p>Select whether you would like to just upload the file to the server or upload the file to the server and process the file to load orders into OptiVault.</p> <p>If Option 1 is selected, the load process is scheduled for execution immediately. But the process could take some time to complete. The status of the load process is emailed to the email addresses entered below.</p> <p>Option 2 should be used if the process of loading orders is to be scheduled for a later time. Contact the system administrator for detailed information about scheduling the process of loading orders.</p>
Overwrite Existing Records	<p>In situations where the order files were loaded, found to be in error and then reloaded, you have to use this option. With this option, the order load process will overwrite any previously existing records for the same date and Cashpoint.</p>
Write Invalid Records to a File	<p>When order file records cannot be loaded, they will be rejected by the system. If the checkbox is checked, invalid records will be written to a file so that they can be reviewed, corrected, and successfully loaded later.</p>
Validate Due Date	<p>If checked, the order load process will validate the order date and due date based on the Cashpoint lead time defined in the system. Incorrect records will be rejected and written to the log file.</p>
E-mail Log File to	<p>Enter the email addresses of the people who should receive notification of the status of the load process when the load is completed successfully or unsuccessfully. Multiple addresses should be separated by semicolons.</p>

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4.1.4 Processing→Recommendations

The Recommendations page is used to define recommendation profiles, run, and validate the recommendation process for Cashpoints, and output the recommendation report.

The following options are available to be run on this page:

- Recommendations→Run Recommendation
- Recommendations→Run Validation for Recommendation
- Recommendations→Run Recommendation Output

TABLE 43: RECOMMENDATIONS DESCRIPTION

Field	Description
Type	Allows the analyst to select the type of balance files that will be loaded into OptiVault. The available options are: <ul style="list-style-type: none">● Load Commercial Balances● Load Vault Balances
Select button	Selects the Recommendation option selected in the Type field to load balances into OptiVault

[Return To: Processing Tab](#)

4.1.4.1 Recommendations→Run Recommendation

The Run Recommendations process is used to define Recommendation profiles and/or run the process to produce recommendations.

FIGURE 26: RUN RECOMMENDATIONS PAGE

Job ID	Job Type	User	Schedule Type	Action
1	Recommendation	user000	Once	View
2	Recommendation	admin	Once	View
3	Recommendation	admin	Once	View
6	Recommendation	admin	Once	View
7	Recommendation	admin	Once	View
8	Recommendation	admin	Once	View
9	Recommendation	admin	Once	View
10	Recommendation	admin	Once	View
11	Recommendation	admin	Once	View
12	Recommendation	admin	Once	View
16	Recommendation	admin	Once	View
17	Recommendation	admin	Once	View
19	Recommendation	admin	Once	View
20	Recommendation	admin	Once	View
21	Recommendation	79106550	Once	View
22	Recommendation	1030544518	Once	View

TABLE 44: RUN RECOMMENDATIONS DESCRIPTION

Field	Description
Job Id	A number indicating the Identifier for the Recommendation profile. This number is automatically assigned at the time of creation.
Job Type	Describes the type of profile that is created
User	Indicates the user name of the person who created the Job profile

Field	Description
Schedule Type	Indicates the type of profile that is being created. This is used for informational purposes to identify to users how the profile is to be used. This helps to prevent the deletion of system profiles that are used for batch processes.
View Button	Allows the user to view or edit the Recommendation profile as well as run the recommendation process.
Type Selector	Located next to the 'New' button, is used to select the type for a new Job Profile. The available options are: <ul style="list-style-type: none"> ● Recommendation – Used for the recommendation process ● Recommendation Output – Used for batch process recommendations output. This only applies to batch processes. Manual processing uses the Recommendation Output Process from the main Recommendations menu.
New Button	Used to create a new recommendation profile.
Cancel Button	Cancels the process and returns to the previous menu.

TABLE 45: NEW OR EDIT RECOMMENDATION DESCRIPTION

Field	Description
Start Date	The Starting Date of the recommendation process
End Date	The ending date of the recommendation process
Auto Accept Recs	When Yes is selected, all normal delivery and return recommendations will automatically be turned into orders. All Emergency recommendations will remain open.
Schedule Type	Indicates the type of profile that is being created. This is used for informational purposes to identify to users how the profile is to be used. This helps to prevent the deletion of system profiles that are used for batch processes.
Cash Point	The Cashpoint will be run during the recommendation process. Child Cashpoints will only be run if the Aggregation options are selected.
Aggregate Entire Chain	Runs the recommendation processes and aggregates the results to the selected Cashpoint.

Horizon Length	This field allows the analyst to define the number of days that will be produced for the horizon. 45 days should be the minimum setting for this option.
Run First Level Aggregation	Runs the first level aggregation process which takes the demand for Branch and ATMs in OptiCash and loads them as future demand for the select Cashpoint.
Default Recommendation Dates	Uses the default recommendation dates meaning the current date plus 7 days into the future.
Separate Note vs Coin Recommendations	Selecting Yes will cause OptiVault to generate separate recommendations for notes and coins. Selecting No will cause OptiVault to generate a single recommendation for notes and coins together.
Run Recommendation Process Button	Starts the recommendation process based on the profile settings and parameters.
Save Button	Saves the changes to the profile.
Cancel Button	Cancels the process and returns to the previous menu.
Delete Button	Only viewable when the entry is being edited; this button will delete the profile from the system. The user should be prompted to confirm the deletion before it is made permanent.

TABLE 46: RECOMMENDATION OUTPUT DESCRIPTION

Field	Description
Start Date	Starting date of the Recommendation Process
End Date	Ending date of the Recommendation Process
Rec Output File	The name that the file will be called once it is produced.
Schedule Type	Indicates the type of profile that is being created. This is used for informational purposes to identify to users how the profile is to be used. This helps to prevent the deletion of system profiles that are used for batch processes.
Save Button	Saves the changes made to the selected profile.
Cancel Button	Cancels the process and returns to the previous menu.
Delete Button	Only viewable when the entry is being edited; this button will delete the profile from the system. The user should be prompted to confirm the deletion before it is made permanent.

Return to: Processing → Recommendations

4.1.4.2 Recommendations→Run Validation for Recommendation

The Run Validation for Recommendations process runs a validation process to determine if any errors will prevent the recommendation process from completing successfully.

FIGURE 27: RUN RECOMMENDATION VALIDATION PAGE

Vault ID	Denom.	Quality	Date	Error	Affected Date	Breach Amount
1038	50000N	Normal	2011-03-29 00:00:00.0	Missing business days	2011-03-29 00:00:00.0	0
1038	50000N	Normal	2011-03-29 00:00:00.0	Missing valid action days	2011-03-29 00:00:00.0	0
1038	50000N	Normal	2011-03-29 00:00:00.0	Missing required service costs	2011-03-29 00:00:00.0	0
1038	50000N	Normal	2011-03-29 00:00:00.0	Missing return days	2011-03-29 00:00:00.0	0
1038	50000N	Normal	2011-03-29 00:00:00.0	Last load date too old	2011-03-29 00:00:00.0	0
1038	100	Unknown	2011-03-29 00:00:00.0	Missing business days	2011-03-29 00:00:00.0	0
1038	100	Unknown	2011-03-29 00:00:00.0	Missing valid action days	2011-03-29 00:00:00.0	0
1038	100	Unknown	2011-03-29 00:00:00.0	Missing required service costs	2011-03-29 00:00:00.0	0
1038	100	Unknown	2011-03-29 00:00:00.0	Missing return days	2011-03-29 00:00:00.0	0
1038	100	Unknown	2011-03-29 00:00:00.0	Last load date too old	2011-03-29 00:00:00.0	0

TABLE 47: RUN VALIDATION FOR RECOMMENDATION DESCRIPTION

Field	Description
Vault ID	A unique alpha-numeric value identifies the vault.
Denomination	The denomination ID for the Cashpoint
Quality	Quality of the denomination
Date	The date that the validation was run
Error	The error message for the Vault, Denomination, Quality and Affected date
Affected Date	The date of history to which the error applies
Breach Amount	This applies only to Custodial Inventory and shows the amount that was exceeded in the CI.
Clear All Button	Deletes all the error history entries.
Run Validation	Runs the validation for all selected vaults
Check All Link	Checks all entries in the list
Clear All Link	Clears all checked entries in the list.
Cancel Button	Cancels the process and returns to the previous menu.

Return to: Processing→Recommendations

4.1.4.3 Recommendations→Run Recommendation Output

The Run Recommendation Output process is used to output the completed recommendations to a file that can be used by analysts or to load into external reporting systems.

FIGURE 28: RUN RECOMMENDATION OUTPUT PAGE

TABLE 48: RUN RECOMMENDATION OUTPUT DESCRIPTION

Field	Description
Separator	Indicates how the report fields will be separated. The available options are: <ul style="list-style-type: none">• Tab• Comma
File Name	The name that the file will be called once it is produced.
Start Date	Starting date of the Recommendation Process
End Date	Ending date of the Recommendation Process
E-mail Log File to	Enter the email addresses of the people who should receive notification of the status of the load process when the load is completed successfully or unsuccessfully. Multiple addresses should be separated by semicolons.
Cancel Button	Cancels the process and returns to the previous menu.
Delete Button	Only viewable when the entry is being edited; this button will delete the profile from the system. The user should be prompted to confirm the deletion before it is made permanent.

Return to: Processing→Recommendations

4.1.5 Processing→Forecast

The Forecast page is used to define Forecast profiles, run forecasts for vaults and commercial Cashpoints, and run commercial consolidation for one or many Cashpoints.

The following options are available to be run on this page:

- Forecast→Run Forecast
- Forecast→Commercial Consolidation
- Forecast→Commercial Consolidation for Individual Vault
- Forecast→Forecast Settings

TABLE 49: FORECAST DESCRIPTION

Field	Description
Type	Allows the analyst to select the type of process to run. The available options are: <ul style="list-style-type: none"> • Run Forecasts • Commercial Consolidation • Commercial Consolidation for an Individual Vault
Select button	Selects the process selected in the Type field to access that function.

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4.1.5.1 Forecast→Run Forecast

The Run Forecast process is used to define or run forecast profiles for one or many Vault or Commercial Cashpoints.

FIGURE 29: RUN FORECAST PAGE

The screenshot displays the 'RUN FORECASTING PROCESS' interface. At the top, there's a header bar with the institution name 'avillas'. Below it, the main form has a title 'OptiVault - Create Forecasts'. It includes fields for 'Horizon ID' (set to '03MESES'), 'History From' (date '2010-06-01'), 'Forecast From' (date '2010-08-01'), 'History To' (date '2010-07-31'), and 'Forecast To' (date '2010-10-31'). There are buttons for 'New', 'Save', and 'Delete'. A large section titled 'Cashpoints to Forecast' contains a list labeled 'Select Cashpoints' with a 'Select' button at the bottom. At the bottom of the page are buttons for 'Start Forecast Generation' and 'Cancel', along with copyright and language information.

TABLE 50: RUN FORECAST DESCRIPTION

Field	Description
Horizon ID	When defining a ' New ' profile, the Horizon ID is defined to uniquely identify the Forecast profile. This should be a unique alphanumeric identifier. Otherwise, this is a selection box which is used to select the desired profile to run forecasts.
Description	The description of the forecast process.
History From Date	The starting date of the history used for the forecast.
History To Date	The ending date of the history used for the forecast.
Forecast From Date	Forecast starting date
Forecast To Date	Forecast ending date
New Button	Creates a new forecast profile.
Save Button	Saves the changes to the current forecast profile.
Delete Button	Deletes the selected forecast profile. Note: The forecasts are not deleted when the forecast profile is deleted.
Select Button	Prompts the user to select Cashpoints that will be forecasted using the currently selected forecast profile. Note: If the user changes the forecast profile after selecting Cashpoints that the Cashpoints will need to be selected again.
Start Forecast Generation Button	Starts the forecast generation process for the Cashpoints and forecast Horizon ID selected.
Cancel Button	Cancels the process and returns to the previous menu.
Note 	The forecast process runs for the Denomination/Quality combinations as configured in your cashpoint's Denominations setup screen. If after running the process some are missing, please check your Denominations screen and make sure that the "Recommend?" option is enabled for them.

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4.1.5.2 Forecast→Commercial Consolidation

The Commercial Consolidation process is used to define or run commercial consolidation profiles.

FIGURE 30: RUN COMMERCIAL CONSOLIDATION PAGE

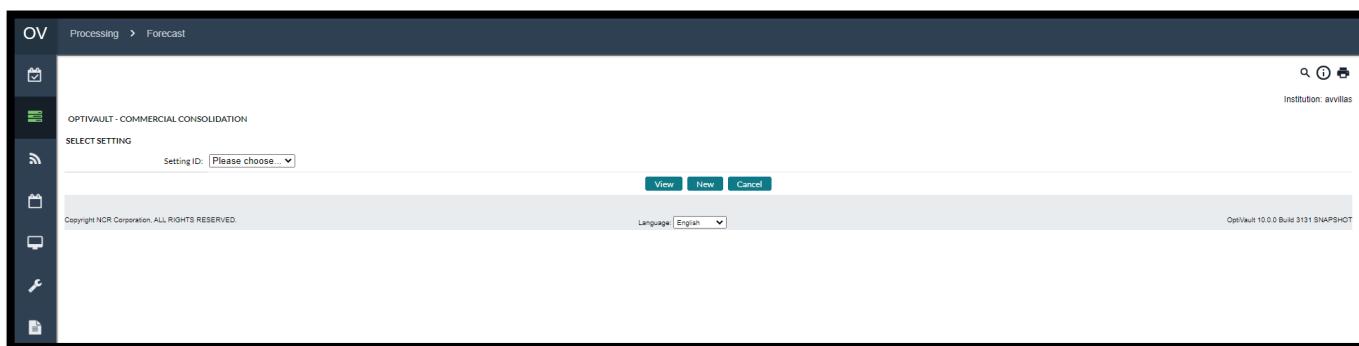


TABLE 51: COMMERCIAL CONSOLIDATION DESCRIPTION

Field	Description
Setting ID	A unique identifier that is used to save and identify the Consolidation profile
View Button	Allows the analyst to view, edit, and run the Commercial Consolidation process
New Button	Creates a new Commercial Consolidation profile.
Cancel Button	Cancels the process and returns to the previous menu.
Start Date	Sets the starting date of the Commercial Consolidation profile.
End Date	Sets the ending date of the Commercial Consolidation profile
All Date	Indicates that all dates will be consolidated. Note that this option will delete the selected Start/End dates.
Selected Vaults	Allows the analyst to select the vaults for which commercial consolidation will be run.
All Vaults	Specifies that all vaults will be run for the Commercial Consolidation process. Note: This option will remove any existing vaults that have been selected from the Select Vaults list.
Save and Start Consolidation	Saves the changes made to the currently selected profile and runs the Commercial Consolidation process using the currently selected parameters.
Save Button	Saves the parameters for the currently selected Commercial Consolidation profile.

Field	Description
Delete Button	Deletes the currently selected profile from the system. The user should be prompted to confirm the deletion before it is permanently deleted from the system. The deletion does not delete the commercial consolidations that have already been performed, only the profile is deleted.

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4.1.5.3 Forecast→Commercial Consolidation for Individual Vault

The Commercial Consolidation is used to generate the Commercial Consolidation process for a single vault so a profile does not have to be created.

TABLE 52: COMMERCIAL CONSOLIDATION FOR AN INDIVIDUAL VAULT DESCRIPTION

Field	Description
Vault	Allows the user to select the vault that will be run for Commercial Consolidation.
Use As Default	This checkmark is used to indicate that the selected vault is to be the default Cashpoint used in the system. This will then be used for all processes which allow for a default Cashpoint to be used.
Select Button	Used to select the currently displayed vault as the vault to be run for Commercial Consolidation. Clicking this button will move to the next page where the user can select the denomination and submit the process to be run.
Denomination	Allows the user to select the denomination that will be run for the selected vault during the Commercial Consolidation process.
Submit Button	Submits the job to be run for Commercial Consolidation based on the Vault and denomination selected.
Cancel Button	Cancels the process and returns to the previous menu.

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4.1.5.4 Forecast→Forecast Settings

The forecast settings can be modified on a system wide basis to allow the analyst to decide how the forecasts will be calculated for seasonality and event adjustments.

FIGURE 31: FORECAST SETTINGS PAGE

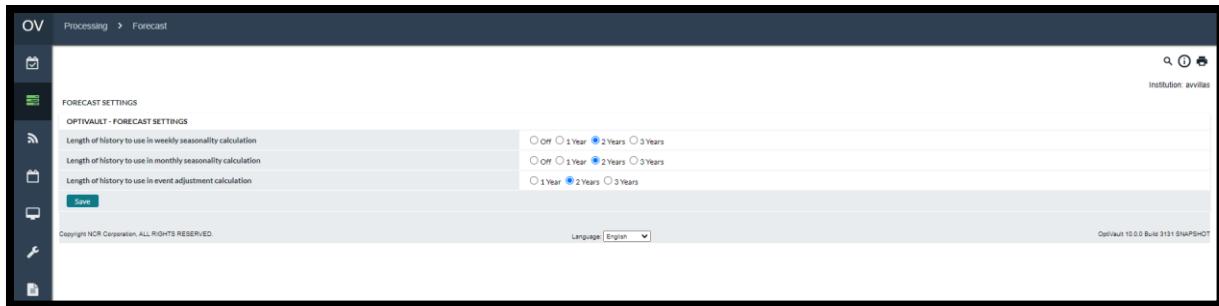


TABLE 53: FORECAST SETTINGS DESCRIPTION

Field	Description
Length of History to Use in Weekly Seasonality Calculation	Used for calculation of the Weekly Seasonality Available options are <ul style="list-style-type: none"> • N/A - Weekly Seasonality calculations are turned off and not applied to the forecast • 1 Year - The previous year will be considered for Seasonality calculations • 2 Years - The previous 2 years will be considered for Seasonality Calculations • 3 Years - The previous 3 years will be considered for Seasonality Calculations
Length of History to Use in Monthly Seasonality Calculation	Used for calculation of the Monthly Seasonality Available options are <ul style="list-style-type: none"> • N/A - Monthly Seasonality calculations are turned off and not applied to the forecast • 1 Year - The previous year will be considered for Seasonality calculations • 2 Years - The previous 2 years will be considered for Seasonality Calculations • 3 Years - The previous 3 years will be considered for Seasonality Calculations

Field	Description
Length of History to Use in Event Adjustment Calculation	Used for calculations of the Event adjustments Available options are <ul style="list-style-type: none"> ● 1 Year – The previous year will be considered for Seasonality calculations ● 2 Years – The previous 2 years will be considered for Seasonality Calculations ● 3 Years – The previous 3 years will be considered for Seasonality Calculations
Save Button	Saves the settings to apply to all future forecasts.

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4.1.6 Processing→Order Output

The Order Output page allows analysts to define order output profiles and run them to create the order output file. The profiles can be run from the interface or used for the batch process to be run automatically from the server.

FIGURE 32: ORDERS OUTPUT PAGE

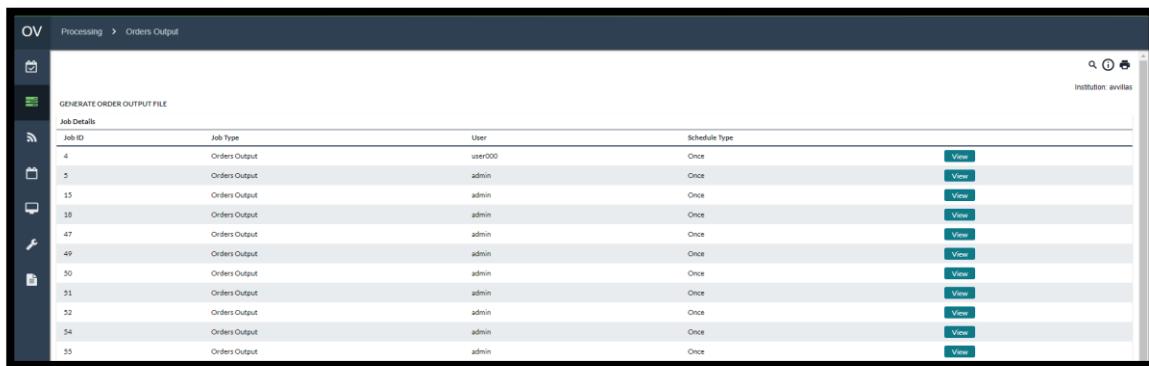


TABLE 54: ORDERS OUTPUT DESCRIPTION

Field	Description
Job Id	A number indicating the Identifier for the Recommendation profile. This number is automatically assigned at the time of creation.
Job Type	Describes the type of profile that is created
User	Indicates the user name of the person who created the Job profile

Field	Description
Schedule Type	Indicates the type of profile that is being created. This is used for informational purposes to identify to users how the profile is to be used. This helps to prevent the deletion of system profiles that are used for batch processes.
View Button	Allows the user to view or edit the Order Output profile as well as run the process.
New Button	Used to create a new recommendation profile.
Cancel Button	Cancels the process and returns to the previous menu.
Start Date	The starting date of the order output file
End Date	The ending date of the order output file
Order Output File	The name of the file that will be generated after the completion of the Order Output Process.
Save Button	Saves the currently selected Order Output profile
Save&Run Button	Saves the currently selected Order Output profile and starts the job.
Delete Button	Deletes the currently selected Order Output profile. Note: This does not delete any order output; only the profile is deleted. Also, if the profile is deleted, it cannot be used by any batch processes, so it is important to be sure that the batch processes are not dependent on an Orders Output profile before deleting.

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4.1.7 Processing→CI Constraints

The Custodial Inventory Constraints is a process that is normally run weekly to indicate the limits of each Custodial Inventory Cashpoint based on the balances of its parent Vault Cashpoint.

FIGURE 33: CI CONSTRAINTS PAGE

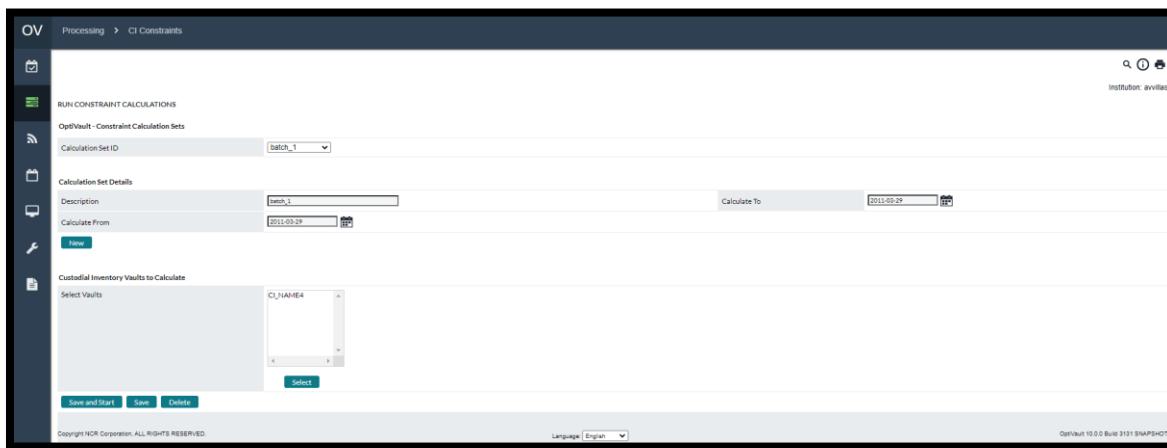


TABLE 55: CI CONSTRAINTS DESCRIPTION

Field	Description
Calculation Set ID	A unique identifier that is used to save and identify the Custodial Inventory Constraint Calculation profile
New Button	Creates a new Custodial Inventory Constraint Calculation profile.
Description	Description used to identify the Custodial Inventory Constraint Calculation profile.
Calculate From	Sets the starting date of the Custodial Inventory Calculation.
Calculate To	Sets the ending date of the Custodial Inventory Calculation.
Select Vaults	Allows the analyst to select the vaults for which vaults will be run.
Save and Start	Saves the changes made to the currently selected profile and runs the Custodial Inventory Constraint Calculation process using the currently selected parameters.
Save Button	Saves the parameters for the currently selected Custodial Inventory Constraint Calculation profile.
Delete Button	Deletes the currently selected profile from the system. The user should be prompted to confirm the deletion before it is permanently deleted from the system. The deletion does not delete the Custodial Inventory constraints that have already been performed, only the profile is deleted.

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4.1.8 Processing→Cost Calculation

OptiVault takes the cost of cash (both holding and transportation) into consideration when deciding the amount and frequency of deliveries. To measure the performance of the Cashpoints, OptiVault needs to have the costs calculated for each day of historical data.

There are two different types of costs that can be calculated in OptiVault. Each of them is calculated in the same way, but they are used in different ways.

- **Actual Costs** - Used in reports to show the daily, weekly, or monthly costs for holding and delivering cash or used to compare against Projected Costs.
- **Projected Costs** - Calculated and used as a benchmark for comparison against Actual Costs. Normally, users calculate projected costs at the beginning of the month. The projected costs are based on the current information that is on the horizon. The software stores the calculations so a comparison can be made on a daily basis to see the actual costs versus the projected costs.

The following sections will explain the Cost options and methods in more detail:

- Cost Calculation→Actual Costs/Projected Costs
- Cost Calculation→Cost Options Page

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4.1.8.1 Cost Calculation→Actual Costs/Projected Costs

FIGURE 34: ACTUAL COSTS PAGE

The screenshot shows the 'Actual Costs' page of the OptiVault software. At the top, there are three tabs: 'Actual Costs' (selected), 'Projected Costs', and 'Cost Options'. Below the tabs, there are two tables labeled 'Actual Cost Calculation Status'.

The first table has columns: 'No. Cashpoints' and 'Start Date'. It contains two rows:

31	N/A
94	01-Jan-2011

The second table has columns: 'No. Cashpoints' and 'End Date'. It contains several rows:

4	18-Mar-2011
1	20-Mar-2011
1	29-Mar-2011
2	30-Mar-2011
83	31-Mar-2011
3	01-Apr-2011

To the right of the tables is a 'Actual Costs' dialog box. It includes fields for 'Start Date' (2011-03-22) and 'End Date' (2011-03-29). There is also a 'Cashpoints' section with a list box and a 'Select' button. At the bottom of the dialog is a 'Actual Costs' button.

FIGURE 35: PROJECTED COSTS PAGE

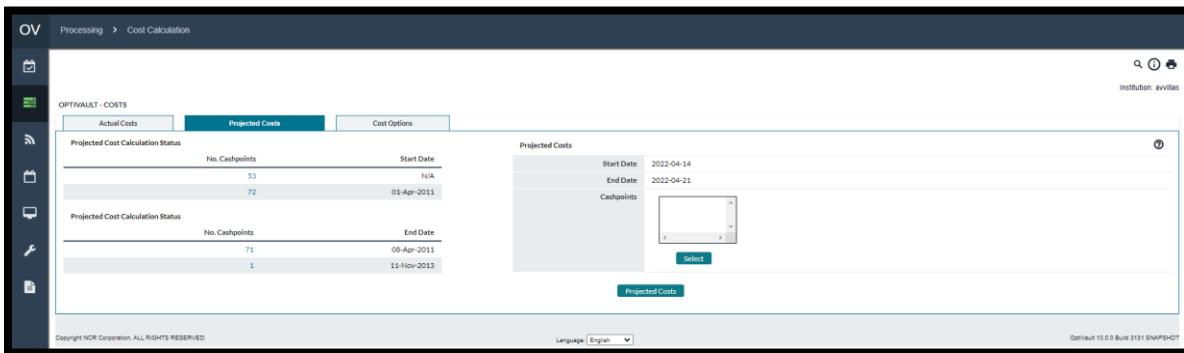


TABLE 56:ACTUAL/PROJECTED COST CALCULATION DESCRIPTION

Fields	Description
Actual/Projected Cost Calculation Statuses	On the left side of all the Cost Calculation pages is a status summary that shows the starting and ending dates for the cost calculations. There may be different entries on this page depending on the Cashpoints that were processed and when it was completed. Clicking on any of the hyperlinks will lead the user to a report detailing each Cashpoint and the starting and ending dates for the cost calculations.
Start Date	The day that Cost Calculation will begin
End Date	The last day Costs will be calculated.
Select	Allows the analyst to select Cashpoints to be used for the Cost Calculation. For more information on selecting Cashpoints, See: Cashpoint Selector
Actual/Projected Cost Calculation Button	Calculates the cost specific to the Cost Calculation model for the Cost Options that have been defined. For more information on the Cost Options see: Cost Calculation→Cost Options Page

Return To: Processing→Cost Calculation

4.1.8.2 Cost Calculation→Cost Options Page

Several different cost elements make up the overall costs for a Cashpoint. The user can choose which costs to calculate on the Costs Options page. The different cost elements are explained in detail below.

FIGURE 36: COST OPTIONS PAGE

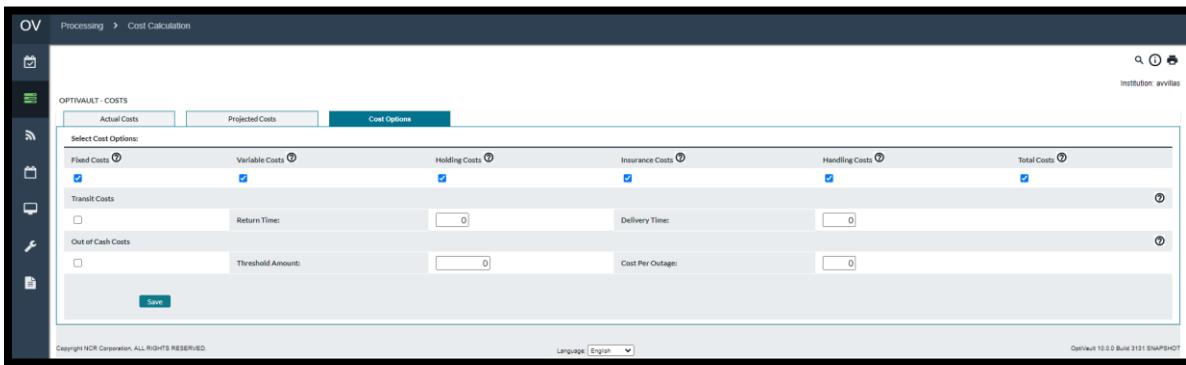


TABLE 57: COST OPTIONS DESCRIPTION

Cost	Description
Fixed Costs	Fixed cost per delivery regardless of the amount of cash being transported. Fixed costs are assigned at the Cashpoint level. See: Cashpoint→Advanced→Costs .
Variable Costs	Variable costs are based on the amount of cash being transported. In some cases, variable costs may be on a sliding scale or range. For example, the carrier is charging 0.003 EUR for 1 EUR transported when the delivery is between 0 -20,000 EUR and 0.0025 EUR for 1 EUR transported when the delivery is between 20,001-40,000 EUR. Variable costs (or cost per unit/per \$ costs) are set and assigned at the Cashpoint level. See: The service Cost panel described in the section Cashpoint→Advanced→Costs .
Holding Costs	Costs associated with holding cash (for instance, lost potential savings from interest rates). Holdings costs are based on Overnight Earning Rates defined at the Currency level refer to System→Currencies/Denominations
Insurance Costs	The currency insurance rate is the rate charged to insure funds kept in Cashpoints (0, 7, 15, etc.). This is an annual rate and is typically covered by the FDIC in the U.S. market. Insurance Costs are defined at the Cashpoint level refer to Cashpoint→Advanced→Costs Cashpoint→Advanced→Costs .

Cost	Description
Handling Costs	Total internal costs associated with the processing/handling of cash delivery. This may include the value of employees' time required during the delivery, and any other overhead or administrative costs. Handling Costs are defined at the Cashpoint level and refer to Cashpoint→Advanced→Costs .
Total Costs	If this option is selected, the report will calculate and display the sum of all checked cost components.
Transit Costs	Costs associated with cash not being used while in transit. Return Time – indicate number of days the residual cash is in transit. Delivery Time – indicate number of days the delivery is in transit.
Out of Cash Costs	Costs associated with out-of-cash situations. Threshold amount – indicate an amount below which the Cashpoint is considered out-of-cash. Cost per outage – indicate the cost set by the institution for cash outage (i.e. penalty, admin fee, etc.).
Save Button	Saves the settings for use in all Cost Calculations.

Return To: [Processing→Cost Calculation](#)

4.1.9 Processing→Custom Jobs

The Custom Job page is used to manually launch processes that have been developed as a custom integration for a particular client installation. For more information on this functionality, please see the installation guide or contact NCR Cash Management Support.

To invoke a Custom Job, click on the link for the custom job to be run.

5 Network Tab

The Network Tab is where the Network structure is defined. On this tab, users can search for Cashpoints; navigate to different pages or reports; define the network structure and defaults or assign parameters to Cashpoints.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

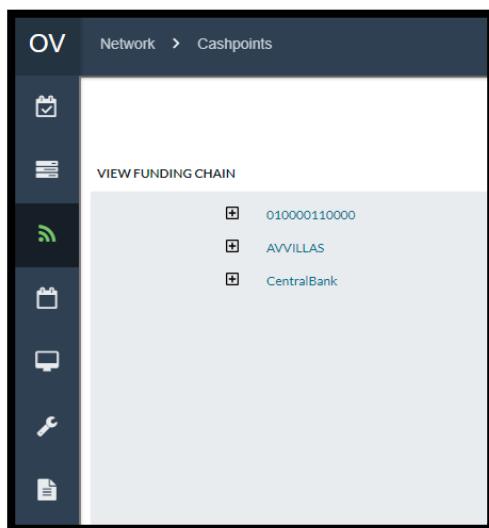
- [Network→Cashpoints](#)
- [Network→Create New](#)
- [Network→Mass Assign](#)
- [Network→Carrier](#)
- [Network→Groups](#)
- [Network→Sorters](#)
- [Network→Cross Shipping](#)
- [Network→Trading Market](#)

[Return To: Introduction to the Interface](#)

5.1.1 Network→Cashpoints

The Cashpoints page shows the user a tree view of the funding chain for the active Cashpoints assigned to the user. The list can be expanded to show the child Cashpoints assigned to the parents.

FIGURE 37: CASHPOINTS PAGE



5.1.2 Network→Create New

Allows the analyst to create new Vault, Commercial, Custodial Inventory, and External Funding source Cashpoints.

FIGURE 38: CREATE NEW PAGE

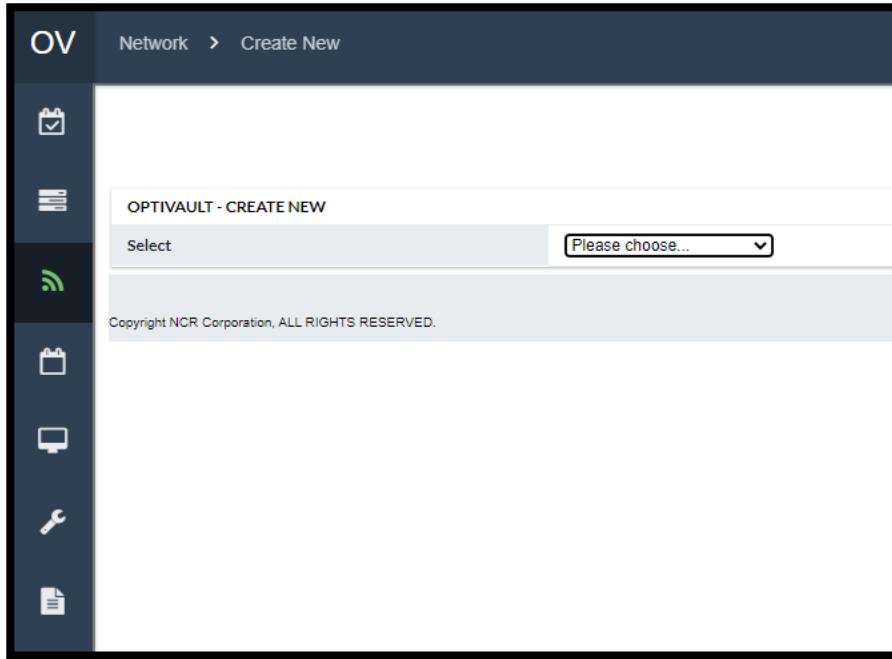


TABLE 58: CREATE NEW DESCRIPTION

Fields	Description
Select	Selects from a list the type of Cashpoint to create. Once the selection is made, the user will be directed to the appropriate Cashpoint creation page. From the individual creation page, the user must enter a Cashpoint ID and click the Create button to create the Cashpoint. All parameters for the Cashpoint must then be set at the Cashpoint level. The available selections are: <ul style="list-style-type: none"> • Vault • Commercial • Custodial Inventory • External Funding Source
Cashpoint ID	A unique alpha-numeric identifier that uniquely defines the Cashpoint in the system.
Create Button	Creates the new Cashpoint for the Cashpoint type selected and the Cashpoint ID defined

Fields	Description
Cancel Button	Cancels the creation process and returns to the previous menu.

[Return To: Network Tab](#)

5.1.3 Network→Mass Assign

The Mass Assign function allows users to quickly set parameters for Vault Cashpoints for one or many Cashpoints.

FIGURE 39: MASS ASSIGN PAGE

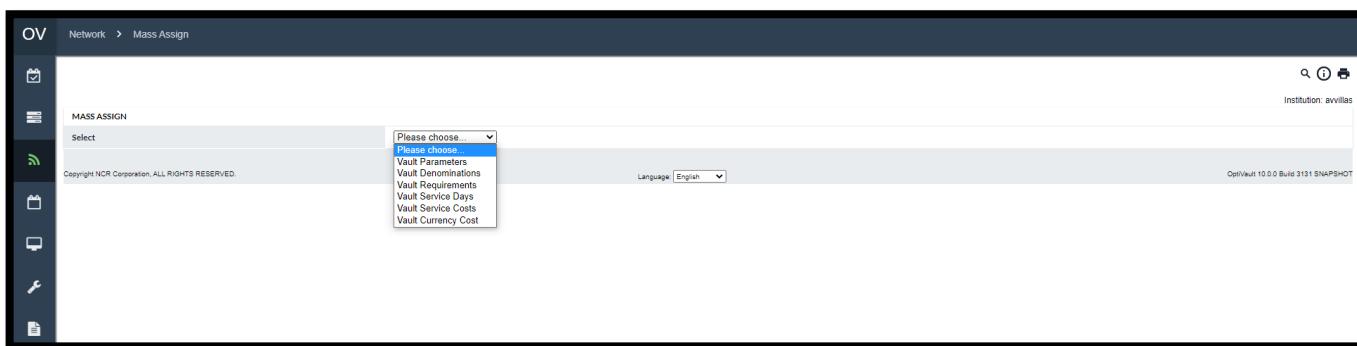


TABLE 59: MASS ASSIGN DESCRIPTION

Fields	Description
Vault Parameters	<p>The following parameters can be Mass Assigned on this page:</p> <ul style="list-style-type: none"> • Default Funding Source • Maximum Number of Pallets • Bulk Order Reduction • Aggregate Emergencies Indicator • Clearance Time • Packaging Time <p>For more detail on these parameters see: Vault ParametersError! Reference source not found.</p>
Vault Denominations	<p>The following can be Mass assigned on this page:</p> <ul style="list-style-type: none"> • Denominations that have been defined in the system for Unknown, Fit, Normal, or Soiled notes. • Minimum Delivery Amount • Minimum Return Amount • Minimum Unplanned Delivery Amount

Fields	Description
	<p>For more detail on these parameters see: Cashpoint→Basic→Denominations</p>
Vault Requirements	<p>Vault Requirements can be set by denomination only, therefore each denomination will need to be selected individually to set the requirements. Additionally, Vault Requirements can be removed from Vault Cashpoints by selecting the link at the bottom of the page.</p> <p>The following Requirements can be set on the page:</p> <ul style="list-style-type: none"> • Minimum Operating Balance • E-Cash Holding Amount • % of Withdrawals to Cover • % of Deposits Available for Withdrawal • % of Deposits Held Until the End of the Day • Day of the Week • Specific Date • % Adjustment to Forecasted Demand • % Adjustment to Forecasted Deposits • % Adjustment to Requirements • Exception Threshold/Balance Buffer <p>For more detail on these parameters see: Cashpoint→Basic→Requirements</p>
Vault Service Days	<p>The following Service Day parameters can be set on this page:</p> <ul style="list-style-type: none"> • Normal Delivery Days • Normal Return Days • Unplanned Delivery Days • Normal Delivery Lead Time • Normal Return Lead Time • Emergency Lead Time • Delivery Cycle and Start Date • Return Cycle and Start Date <p>For more detail on these parameters see: Cashpoint→Basic→Service Days</p>
Vault Service Costs	<p>The following Costs can be set on this page for Deliveries, Returns, Combine, or Unplanned orders:</p> <ul style="list-style-type: none"> • Fixed Costs • Per Unit Costs • Per \$ Cost

Fields	Description
	For more detail on these parameters see: Cashpoint→Advanced→Costs
Vault Currency Costs	The following costs can be set on this page for the different currencies that are being used in OptiVault <ul style="list-style-type: none"> • Maximum Holding Amount • Currency Insurance Rate • Delivery Handling Cost • Return Handling Cost
Next Button	Once the parameters have been selected, clicking on the next button allows the user to enter any additional information and select the Cashpoint that will be updated with the selected parameters. NOTE: There is no way to undo the changes that have been made through the Mass Assign function. Be certain that the correct Cashpoints and parameters are selected before completing the assignment.

5.1.4 Network→Carrier

The Carrier page allows users to set up and maintain carriers that will be used to transport cash to the Cashpoints.

FIGURE 40: CARRIER PAGE

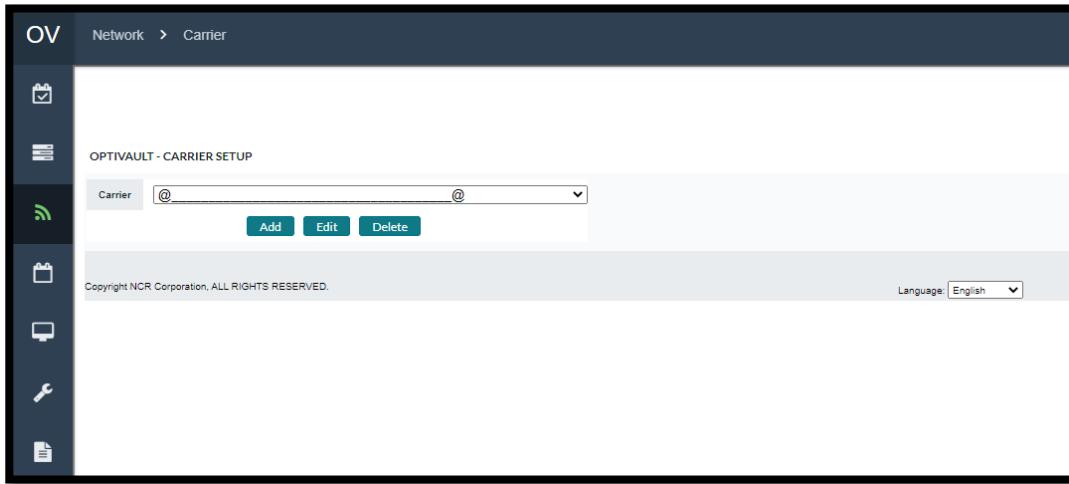


TABLE 60: CARRIER DESCRIPTION

Fields	Description
Servicer	A list of the currently defined Carriers defined in the system.

Fields	Description
Add Button	Adds a new carrier to the system
Edit Button	Edits the currently selected Servicer.
Delete Button	Deletes the currently selected servicer. Note: The depot can be deleted.
Depot ID	A unique alpha-numeric identifier used to identify the depot in the system
Holiday Shift	Defines how holidays are shifted when there is a scheduled holiday for a Cashpoint. The available options are: <ul style="list-style-type: none"> ● Later – Shifts the scheduled delivery days after the holiday ● Before – Shifts the scheduled delivery days before the holiday ● No Shift – No shifts are made on to the service days ● Ignore – The deliveries that fall on the holiday are ignored.
Depot Name	Name of the depot. This field normally shows up in reports instead of the Depot ID.
Address Line 1	Address of the carrier
Address Line 2	Address of the carrier
City	City of the carrier
State/Province	State/Province of the carrier
Zip/Postal Code	Zip/Postal code of the carrier
Contact Name	Contact name of the carrier
Email	Email address of the carrier
Phone	Phone number of the carrier
Fax	Fax Number of the carrier
Business Days	Business days of the carrier. When selected, the corresponding days are available for delivery, return, and unplanned deliveries.
Delivery Days	Days that the carrier is able to deliver cash.
Return Days	Days that the carrier is able to accept returns of cash.
Unplanned Delivery Days	Days that the carrier is able to deliver emergency cash.

Fields	Description
Save Button.	Saves the currently selected carrier profile
Cancel Button	Cancels the changes made to the carrier and exits to the previous menu.

[Return To: Network Tab](#)

5.1.5 Network→Groups

Allows analysts to create groups that can be used to quickly populate Cashpoint selections.

FIGURE 41: GROUP PAGE

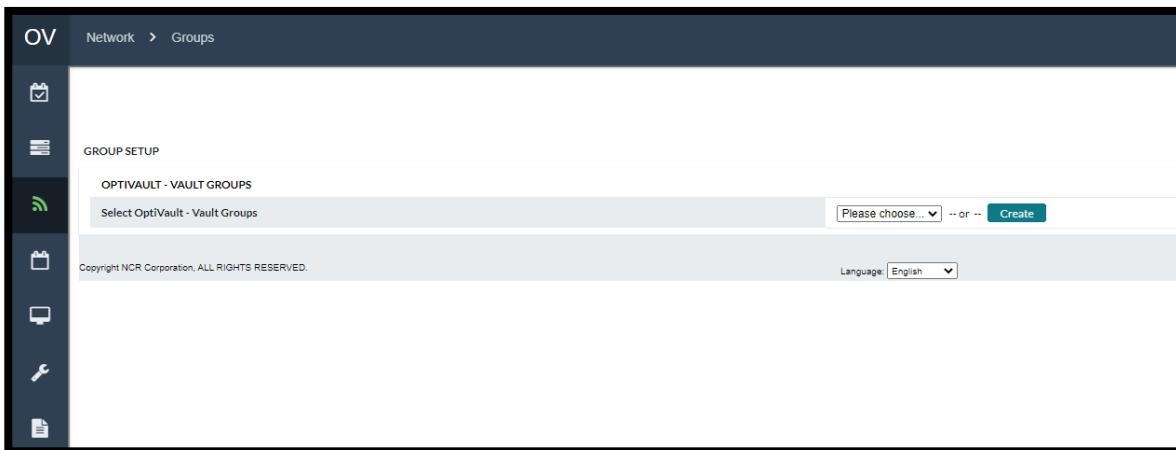


TABLE 61: GROUPS DESCRIPTION

Fields	Description
Group Selector	A dropdown list with the groups currently defined in the system.
Group ID	The unique alpha-numeric identifier for the Group
Group Name	Used to describe the group in more detail than the Group ID.
Select Cashpoints to Add	Displays a list of Cashpoints to add to the group. This is populated by clicking the ' Select ' button and selecting Cashpoints from the Cashpoint selector.
Cashpoint	Cashpoint ID of the Cashpoint in the group.
CP Type	The Cashpoint Type of the corresponding Cashpoint ID.
Save Button	Saves the currently selected Group profile.

Fields	Description
Delete Button	Deletes the Group ID from the system. The user will be prompted to confirm the deletion before it is permanently deleted from the system. Note: Only the Group ID is deleted not the Cashpoints associated with it.
Remove Button	Removes the Cashpoints that are selected by the checkmark to the left of the Cashpoint ID in the Cashpoints list.

[Return To: Network Tab](#)

5.1.6 Network→Sorters

The Sorters page is used to define the Sorters that will be used by Vault Cashpoints. The definition is used to define the name and the number of notes per hour for the corresponding Sorter.

FIGURE 42: SORTERS PAGE

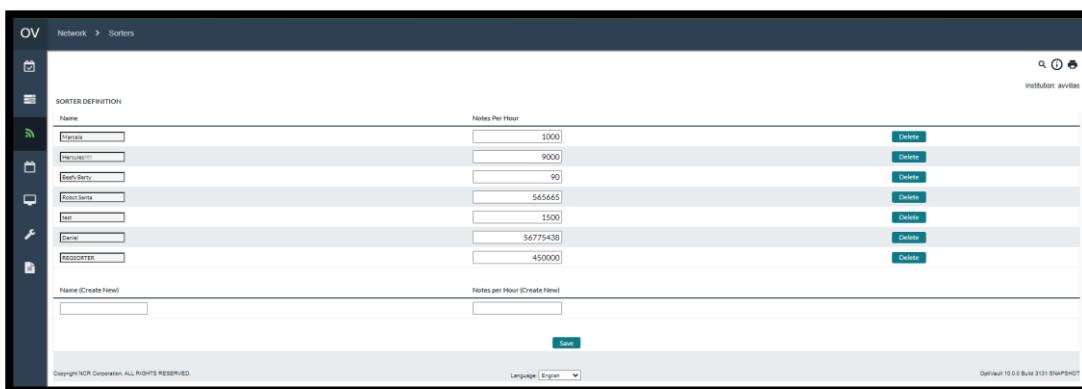


TABLE 62: SORTERS DESCRIPTION

Fields	Description
Name	A unique alpha-numeric identifier is used to identify the Sorter in the system.
Notes Per Hour	Defines the number of notes that can be processed by the sorter in an hour.
Save Button	Saves any changes made to the list of currently defined sorters
Delete Button	Deletes the corresponding Sorter from the system. Note It is not possible to delete a sorter unless it is not assigned to a Vault.

[Return To: Network Tab](#)

5.1.7 Network→Cross Shipping

The Cross Shipping page is used to define the Cross Shipping parameters for determining when Cross Shipping penalties apply.

TABLE 63: CROSS SHIPPING DESCRIPTION

Fields	Description
Type	Defines the type of Cross Action to be taken. This is used in conjunction with the ' Select ' Button to enter the appropriate sub-menu. The available options are: <ul style="list-style-type: none"> • Zones - Allows the user to define the zones that will be used to assign to the Cashpoints. • Cross Shipping Penalty - Determines the number of notes and the costs associated with constitute a Cross Shipping Penalty.
Select Button	Used to navigate to the sub-menu that is selected in the Type list.
Unit Size (in notes)	The number of notes and the cost for cross-shipping penalties. For example, if 1000 per was entered as the Unit Size and 5 was the Penalty Amount, this means that for every 1000 notes that is cross shipped, 5 dollars is charged.
Penalty Amount	The amount (in whole local currency) that is charged for each violation of the Unit Size. For example, if 1000 per was entered as the Unit Size and 5 was the Penalty Amount, this means that for every 1000 notes that is cross shipped, 5 dollars is charged.
Save Button	Saves the current Cross Shipping Penalty Cost Definition.
Name	Name of the Zone
Description	Description of the Zone
Delete Button	Deletes the corresponding Zone
Save Button	Saves the current list of Zones.

[Return To: Network Tab](#)

5.1.8 Network→Trading Market

Trading Markets are an additional licensed OptiVault feature. Vaults in the same Trading Market can share cash between themselves with reduced costs.

The OptiVault Optimization process will use the Trading Market relationships to match excess cash in one vault with a corresponding need in another vault. Recommendations will be made to move cash between vaults and have reduced cost rather than recommend to deliver from the Default Funding Source.

The Trading Market page under Network facilitates the creation of the various markets to which Vaults may be assigned.

FIGURE 43: NETWORK TRADING MARKETS PAGE



TABLE 64: TRADING MARKET FIELD DESCRIPTIONS

Fields	Description
Trading Partner Recommendations	Pre-defined Dropdown selector allowing users to select what type of Trading Market is being created. This selection will determine what exchanges may be considered when OptiVault is running the Optimization process <ul style="list-style-type: none"> • Delivery and Return Recommendations • Delivery Recommendations • Return Recommendations
Market Name	Users can define what each Trading Market will be called in the system. This is a fixed-length field.
Market Description	Open-length field where users can provide more information defining the Trading Market

[Return To: Network Tab](#)

6 Events Tab

Events can be national or local holidays as well as non-holiday occurrences. Events are important because they typically impact the demand for cash in Cashpoint, although the actual impact could have a similar effect or be quite different from one Cashpoint type to another.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- [Events→Calendar Page](#)
- [Events→Event Collisions](#)
- [Calendars→Cashpoints](#)
- [Events→Events Page](#)
- [Events→Add/Edit Event](#)

[Return To: Introduction to the Interface](#)

6.1.1 Events→Calendar Page

Calendars are used in OptiVault to group similar Holidays and Events that relate to a group of Cashpoints. These Calendars can then be assigned to Cashpoints which will use the Events to make appropriate adjustments during the Forecast process.

FIGURE 44: CALENDAR PAGE

Event ID	Month	Day or Week	Weekday	Pre Effect	Post Effect	Holiday	Weekend Shift
AGRO CORDOBA	June	All	1	Sunday	0	0	Yes

Below the table are three small calendar grids for January, February, and March, each with a yellow dot indicating a selected date.

TABLE 65: CALENDAR DESCRIPTION

Fields	Description
Create Button	Allows the user to create a new Calendar by setting a Calendar ID and Description. Once created, the Calendar can have Events and Cashpoints assigned to it.
Associate	Allows the user to associate Events to the current calendar.
Disassociate	Allows users to select Events from the Calendar list and remove them from the current Calendar.
Cashpoints Tab	Allows users to review, add, or remove Cashpoints from the calendar. See: Calendars→Cashpoints
View Year	This section of the Calendar Page shows a graphical view of the current Events assigned to this Calendar. This is for informational purposes only
Check Event Collisions Link	Allows the user to check if any Cashpoints assigned to the currently selected Calendar have collisions with another Calendar or Event. See: Events→Event Collisions

Return To: [Events Tab](#)

6.1.2 Events→Event Collisions

Event collisions might occur when the pre and post-days of two events fall within the same days. Pre and post-days are the days that impact the demand before and after the event. The overlapping events can impact the output of recommendations and forecast processes. When event collisions occur, the system has to decide which event to associate with the demand.

To ensure the correct and effective process of recommendations and forecasts, the event collisions must be corrected by making sure that the pre and post-effect days do not overlap. First, check event collisions as described below and second, update the pre and post-effect of the events under the Events tab.

When event collisions occur, OptiVault will first take into consideration those events that have a priority against other events. The priorities are determined by the following general rules:

- Holiday events are always considered first, then non-holiday events.
- Events are considered before pre/post effects of events, except for when holiday pre/post effects collide with a non-holiday event.

FIGURE 45: EVENT COLLISIONS PAGE

OPTIVULT - EVENT COLLISIONS							
Date	Cashpoint ID	Calendar	Event ID	From	To	Pre Effect	Post Effect
2010-04-04	ANEXAS_BOG	FERIADOS_NC	DOMINGO SANTO	2010-04-04	2010-04-04	0	0
			FERIADOS_NC	gwtest	2010-04-04	2010-04-04	0
2011-04-03	ANEXAS_BOG	FERIADOS_NC	SABADO SANTO	2011-04-03	2011-04-03	0	0
			FERIADOS_NC	gwtest	2011-04-03	2011-04-03	0
2011-05-01	ANEXAS_BOG	FERIADOS_NC	Dia del Trabajo	2011-05-01	2011-05-01	0	0
			FERIADOS_NC	gwtest	2011-05-01	2011-05-01	0
2011-08-07	ANEXAS_BOG	FERIADOS_NC	Batalla de Boyaca	2011-08-07	2011-08-07	1	1
2012-01-01	ANEXAS_BOG	FERIADOS_NC	Año Nuevo	2012-01-01	2012-01-01	0	0
			FERIADOS_NC	gwtest	2012-01-01	2012-01-01	0
2010-04-04	ANEXAS_BOGbk	FERIADOS_NC	DOMINGO SANTO	2010-04-04	2010-04-04	0	0
			FERIADOS_NC	gwtest	2010-04-04	2010-04-04	0
2011-04-03	ANEXAS_BOGbk	FERIADOS_NC	SABADO SANTO	2011-04-03	2011-04-03	0	0
			FERIADOS_NC	gwtest	2011-04-03	2011-04-03	0
2011-05-01	ANEXAS_BOGbk	FERIADOS_NC	Dia del Trabajo	2011-05-01	2011-05-01	0	0

TABLE 66: EVENT COLLISIONS DESCRIPTION

Field	Description
Date	Date of the event.
Cashpoint ID	Unique alpha-numeric identification of the Cashpoint.
Calendar	Displays the name of the calendar this event belongs to.
Event ID	Unique alphanumeric code identifying this event.
From/To	The time period of the event: start and end dates.
Pre-Effect	The number of days that are impacted prior to this event. For example, demand may be impacted by Christmas for several days before December 25.
Post Effect	The number of days impacted after the event.

[Return To: Events Tab](#)

6.1.2.1 Calendars→Cashpoints

FIGURE 46: CALENDAR CASHPOINTS PAGE

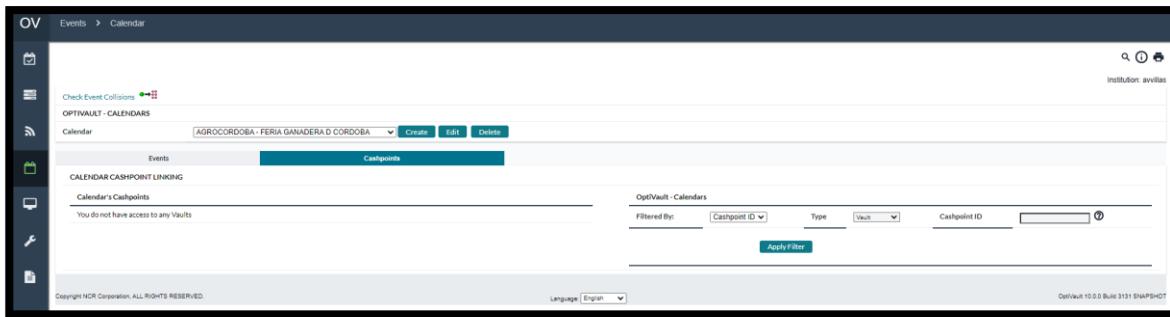


TABLE 67: CALENDAR CASHPOINTS PAGE

Fields	Description
Filtered By	Allows the user to select how the search for Cashpoints will be filtered The options for this are: <ul style="list-style-type: none">• Cashpoint ID• Type
Type	Allows the user to select how the search for Cashpoints will be filtered The options for this are: <ul style="list-style-type: none">• Vault• Commercial• Custodial Inventory• External Funding Source
Cashpoint ID	Allows the user to type the Cashpoint ID to search for when the results are filtered. This is only available when Cashpoint ID is selected in the Filtered By section.
Apply Filter	Runs the search and returns the results based on the Search Criteria defined
Select All button	Selects all Cashpoints in the list related to the button's position.
Remove button	Removes Cashpoints from the calendar
Add Button	Adds Cashpoints to the calendar
<< < > >> buttons	Allows the users to scroll back forth through the pages of Cashpoints.

[Return To: Events Tab](#)

6.1.3 Events→Events Page

Events are defined in OptiVault to bring special attention to certain days such as paydays or holidays. The Events are assigned to Calendars that are then assigned to Cashpoints for use in the Forecasting and Recommendation processes.

FIGURE 47: EVENTS PAGE

OPTIVault - EVENT ADMINISTRATION		EVENT LIST ADMINISTRATION							
Event ID	Month	Day or Week	Weekday	Pre Effect	Post Effect	Holiday	Weekend Shift	Event List ID	Event List Description
_B_O_O_M	January	22	Any	0	0	Yes	None	01MES_ATM	01MES_ATM
01MES_ATM	January	22	Any	0	0	Yes	None	Event1	Event
13 Days	March	20	Any	0	0	Yes	None	REGevent	REGevent
29march	March	29	Any	0	0	Yes	None	test	test
31march	March	31	Any	0	0	Yes	None	Test1	Test
7 days	March	28	Any	1	0	Yes	None		
AGRO BUGA	July	19	Any	0	3	Yes	Backward		
AGRO CORDOBA	June	20	Any	0	0	Yes	Forward		
AGRO TULLUA_1	June	12	Any	1	1	Yes	None		

TABLE 68: EVENTS PAGE DESCRIPTION

Fields	Description
Add Button	Allows the user to create a new Event.
Update Button	The user can select one of the events from the event list and click the Update button to change dates or Event definitions.
Delete Button	The user can select one of the events from the event list and click the Delete button to delete it from the system. Note: Events cannot be deleted if they are assigned to a Calendar.

[Return To: Events Tab](#)

6.1.3.1 Events→Add/Edit Event

The Add/Edit Event Page allows the user to define new or modify existing Events.

FIGURE 48: ADD/EDIT EVENT PAGE

TABLE 69: ADD/EDIT EVENT DESCRIPTION

Fields	Description
Event ID	Unique alpha-numeric code that identifies the Event.
Month	Specify the month in which this event occurs. If the event occurs every month, select "All".
Day of Month	<p>Enter the number of the day of the month on which this event occurs.</p> <p>Note: The event must always fall on the same day of the month each year. If the day varies from one month/year to the next, then do not use this field. Instead, use the next field called "Week of Month" (see below).</p>
Week of Month	The week of the month on which the event occurs (i.e., enter "1" if the event always falls in the first week of the month, "2" if the event always falls in the second week of the month, "5" for last week of month). If a value in this field is entered, you must also specify a day of the week on which the event occurs (see below). This feature will help to define those events that do not occur on the same day each year; for instance, Mother's Day will occur second Sunday of May each year.
Day of Week	If the Week of the month is selected, a new field Day of Week will occur. Click on the Down arrow and select the day of the week on which this event falls.

Fields	Description
Pre-effect / Post-effect	The anticipated “ripple effect” from a major event or holiday on cash demand. This is the anticipated days both before (pre-effect) and after (post-effect) that an event will have on cash demand. For example, a major holiday like December 25 (Christmas) will likely have significant effects both before and after the actual holiday. Enter the actual number of days when the “ripple effect” is expected to extend out from the event.
Holiday	<p>Optional selection. Click in the check box next to holiday to indicate that an event is also a holiday.</p> <p>Note: An event is not necessarily a holiday. For example, an event could be payday every other Wednesday. A holiday is a national or regional event that could affect the delivery of cash to a Cashpoint if the carrier does not deliver on that holiday. In this case, if the check box is selected, OptiVault will plan for this contingency and forecast for cash to be delivered before the holiday, if necessary.</p>
Weekend Shift	<p>Click the Down arrow to select the expected shift in cash demand when an event falls on the weekend (Saturday or Sunday). The possible choices are:</p> <p>Backward: shifts demand to the Friday before the weekend.</p> <p>Forward: shifts demand to the following Monday.</p> <p>None: indicates no anticipated shift in demand and keeps the original event date.</p> <p>Note: this field is only active when the Day of Month field is populated with a value greater than zero (0).</p>
Generate Dates Button	Generates Event Dates based on the definition of the Event (present year plus 2 years in the past and 2 years into the future). The dates can then be selected and individually updated if needed.
Add Button	Allows Users to manually enter dates. This is an alternative to Generating dates.
Generate From	Works similarly to “ Generate Dates ” except that this function will ONLY generate out into the future from a selected starting point. This helps keep existing dates from being overwritten during an Event refresh or update.
Update Button	Updates the select date.

Fields	Description
Delete Button	Deletes the selected date.

[Return To: Events Tab](#)

7 Settings Tab

The Settings Tab contains tools normally used by administrators to set up the system or perform maintenance functions.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- [Settings→Institution](#)
- [Settings→Override Reasons](#)
- [Settings→Privileges](#)
- [Settings→Currencies/Denominations](#)
- [Settings→Currencies/Denominations](#)
- [Settings→Order Settings](#)
- [Settings→Calendar Refresh](#)

[Return To: Introduction to the Interface](#)

7.1.1 Settings→Institution

The Institution page allows the OptiVault analyst set up parameters that affect all Cashpoints.

FIGURE 49: INSTITUTION PAGE

The screenshot displays the 'Institutions' page under the 'Settings' menu. The main area is titled 'INSTITUTIONAL PARAMETERS' and contains the following fields:

- Institutional ID: Avillas
- Bal Cost Calculation: Closing
- Aggregate OptiCash Orders as Normal Quality: checked
- Recommendation Date Duration: 7
- Reference Number Algorithm: ID Inclusive
- Historical Horizon Days To Retain: 0
- Unverified Unknown Denomination ID: COP0
- Max Days to Hold Cash for Trading Market: 5

To the right, there is a 'User Language Choices' section with checkboxes for various languages. Below that is a weekly calendar labeled 'Processing Days' with checkboxes for each day of the week. The days Monday through Friday have checkboxes checked. At the bottom of the page are 'Save' and 'Cancel' buttons, along with copyright and language information.

TABLE 70: INSTITUTION PAGE DESCRIPTION

Fields	Description
Balance Cost Calculation	<p>This option determines how the balance cost calculation is performed. The options available are:</p> <p>Closing – Balance cost is calculated each day based on the closing balance of the Cashpoint.</p> <p>Average – Balance cost is calculated based on the average holding balance of the Cashpoint.</p>
Aggregate OptiCash Orders as Normal Quality	Change First Level Aggregation so that all orders coming in from OptiCash are considered Normal quality.
Recommendation Date Duration	The value of this field sets the default recommendation length. Each time the recommendation process is run, the recommendations will automatically produce a number of days forward into the future based on this setting.
Reference Number Algorithm	<p>Choose the format for reference numbers created by OptiVault to uniquely identify orders and recommendations. The options are:</p> <p>ID Inclusive – Reference includes the cashpoint ID as well as the randomized numeric value</p> <p>Incremental – Reference is numeric values that increase by 1 each time a new reference ID is created.</p>
Historical Horizon Days To Retain	The value of this field controls the number of days of history that are retained for Horizon Days.
Unverified Unknown Denomination ID	System wide setting to determine what Denomination ID will be used to define currency that is of both unknown quality and unknown denomination.
User Language Choices	Administrators can narrow the choices for language selection. For example, if only language files for English and Russian are available, but selecting those on this screen, the user Language dropdowns will be limited to those options.
Processing Days	The Processing days are the days that the institution will be processing recommendations. These are days that the analysts will work to process recommendations and place orders.

Fields	Description
Max. Days to Hold Cash for Trading Market	In funding source optimization, excess cash at one vault location can be held over 1 or more days to serve needs at another location in the same trading market. This setting limits the longest amount of time cash can be held in this way.

[Return To: Settings Tab](#)

7.1.2 Settings→Override Reasons

The Override Reasons are used to specify the reasons that a recommendation was not followed. When a recommendation is overridden, these reasons can be used by the analysts to understand why the recommendations were not followed and to make changes to parameters to improve the Cashpoint's performance to better accommodate the Cashpoint's needs. Furthermore, if no changes are needed, the analyst can use the information to justify that the recommendations were correct.

FIGURE 50: OVERRIDE REASONS PAGE

TABLE 71: OVERRIDE REASONS DESCRIPTION

Fields	Description
Title	The title is a 12-character alpha-numeric field that is used as a general reference to the reason description
Description	An alpha-numeric field of 80 characters is used as the description of the Override Reason used to explain the Title field.
Delete Button	Deletes the entry adjacent to the button. The user will be prompted to confirm the deletion before it is made permanent.
Save Button	Saves any changes made to the entries on the page or adds a new entry if the last empty cells are filled in with information.

[Return To: Settings Tab](#)

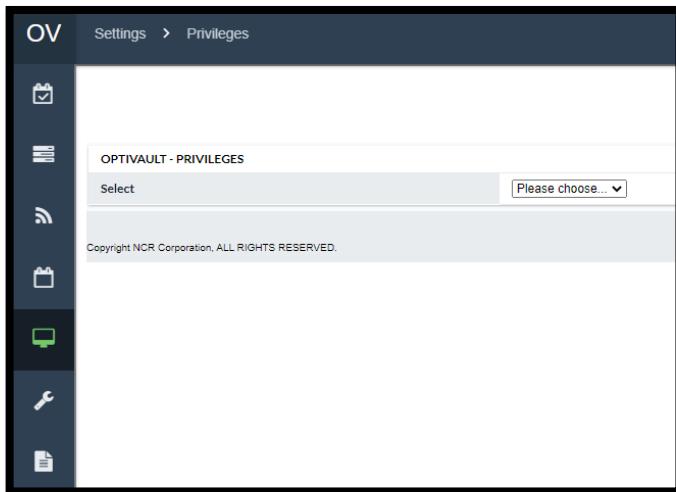
7.1.3 Settings→Privileges

The Privileges pages allow the administrator to set up users and user groups. Users can access the system only if they are a member of a Business Unit. The Business Units have Users assigned to them as well as Cashpoints and Rights.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- [Privileges→Users](#)
- [Privileges→Business Units](#)

FIGURE 51: PRIVILEGES PAGE



[Return To: Settings Tab](#)

7.1.3.1 [Privileges→Users](#)

To access OptiVault, users must have a User ID and password pre-defined by a system administrator.

FIGURE 52: NEW USER PAGE

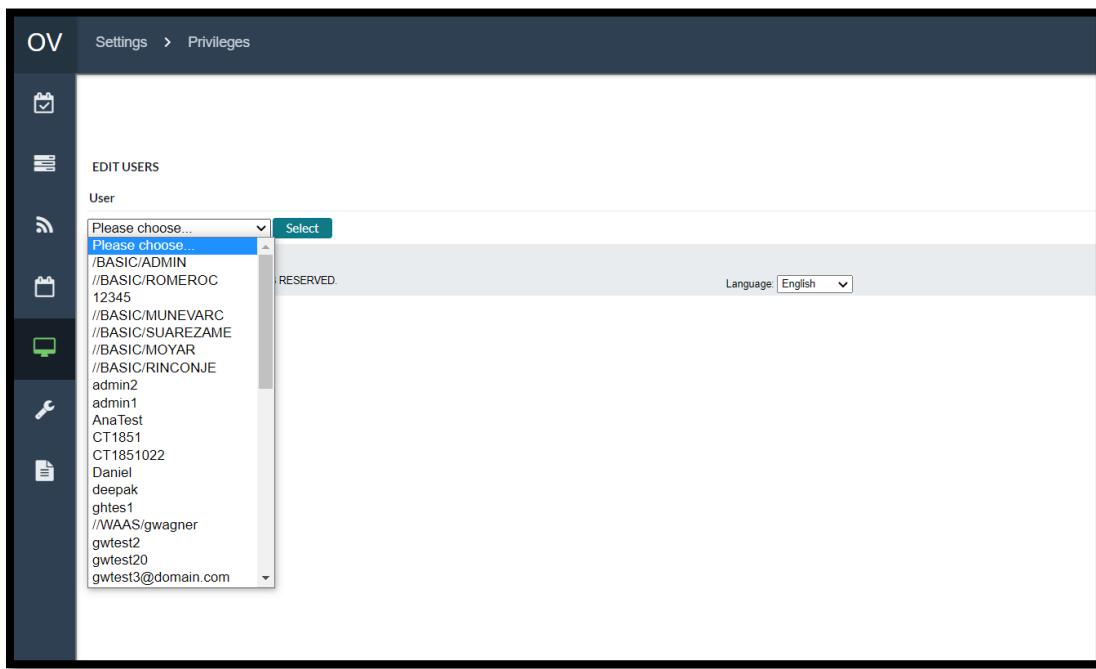


TABLE 72: USER DESCRIPTION

Field	Description
External Authentication User	EPSS Username
Max Order Amount	The maximum amount that this user will be able to put in an order. Note: This amount is in the system's primary currency.
Email Address	Email address for this user.

Return To: [Settings](#) → [Privileges](#)

7.1.3.2 Privileges □ Business Units

The functionalities of 'View and edit of Members' and 'View and edit of Rights' in Business Units have been relocated from the '*System > Privileges > Administer Business Users*' section in OptiVault to the EPSS Screen. Within the EPSS Screen, users can navigate to the user management section to assign groups.

FIGURE 53: BUSINESS UNITS PAGE

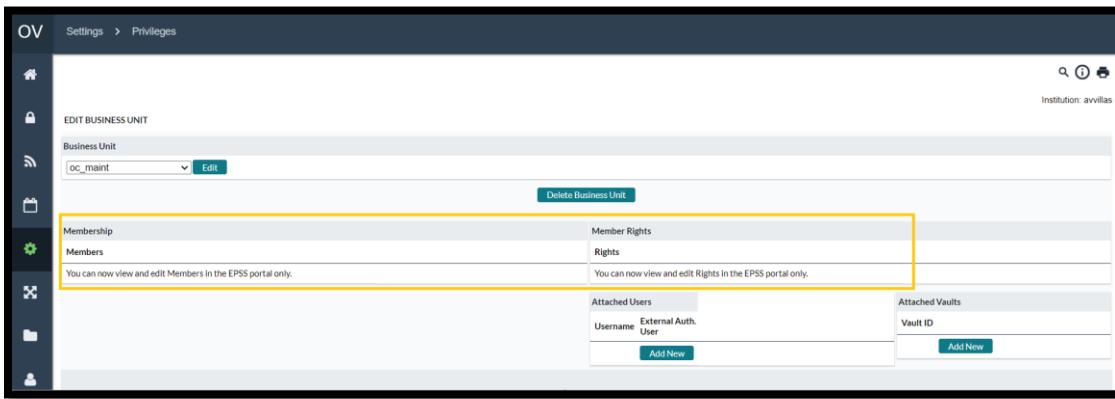


TABLE 73: BUSINESS UNIT DETAILS WINDOW

Tabs	Description
Membership	<p>Members are users in the Business Unit that have all the privileges that are assigned to that unit in the Rights section.</p> <p>To remove/add members to a group, follow the button functions described in the next table.</p> <p>Note: Members can now be assigned to (Security groups) Business units through EPSS</p>
Attached Users	<p>Attached Users are people who can administer the group without necessarily being a Member of the group. For instance, a user will not have the rights to see vault information but will have permission to assign other users to groups, create new users, etc. Being an attached user means that the user has administrative rights over the group and any users or rights within it.</p> <p>Note: When user access and maintenance is managed by an administrator, who has the right of "Administer System", it is not necessary to assign users since administrators will be able to access all users and business units.</p>
Attached Vaults	Members of the group, who have rights to view, edit and administer certain Cashpoints, will have those Cashpoints assigned to them under the Attached Vaults section.
Rights	Note: In EPSS, Rights (now referred to as Roles) can be assigned to security groups.

TABLE 74: BUTTON FUNCTIONS

Function	Description
Add New Button	Adds a New Member, User, Vault, or Right to the Group. For adding Members, Users, or Vaults, click the button labelled 'Add New'. The analyst will then be prompted with a window that will allow them to search and select the desired items to add to the group. For Rights, the user should select the appropriate right and then click the ' Add New ' Button to add the right to the Group.
Remove Bottom	Removes the Member, User, Vault, or Right from the Group. Click the button next to the Group object that is to be deleted. The analyst will be prompted to confirm the deletion before it is made permanent.
Delete Business Unit Button	Deletes the Group from the system. Clicking this button will not delete the users or the Cashpoints, but the group that is associated with the Group ID.

Return To: [Settings](#)→[Privileges](#)

7.1.4 Settings→Currencies/Denominations

The Currencies/Denomination Tab allows the user to define the currencies and denominations that users will assign to vaults so they are ordered and managed. The user has the option to configure Currencies, Denominations, and Foreign Exchange Rates by selecting the appropriate function from the dropdown box.

7.1.4.1 Settings→Currencies/Denominations→Currencies

OptiVault is a multi-currency system. It allows the users to create different currencies and denominations for each one of the currencies so it can be managed for OptiVault at the Vault level. The currencies page allows the setup of each unique currency to be utilized.

FIGURE 54: CURRENCY PAGE

Currency	Display Name	Description	Priority	Overnight Earnings Rate(%)	Delete?
US Dollar	USD	US Dollar	1	5	<button>Delete</button>
Venezuela Bolívar	BOL	Venezuelan Bolívar	2	1	<button>Delete</button>
Euro	EUR	Euro	3	1	<button>Delete</button>
Belize Dollar	BZD	Belize Dollar	4	1	<button>Delete</button>
South African Rand	ZAR	ZAR	5	1	<button>Delete</button>
UAE Dirham	AED	AED	6	1	<button>Delete</button>
Afghanistan Afghani	AFN	AFN	7	1	<button>Delete</button>
Argentine Peso	ARS	Argentine Peso	8	10	<button>Delete</button>
Russian Federation Rouble	RUB	RUB	9	1	<button>Delete</button>
Algerian Dinar	DZD	DZD	10	1	<button>Delete</button>
Angola New Kwanza	AOH	Angola	11	1	<button>Delete</button>
Icelandic Króna	ISK	ISK	12	1	<button>Delete</button>
Albania Lek	LTL	LTL	22	1	<button>Delete</button>
Australian Dollar	AUD	AUD	32	1	<button>Delete</button>
El Salvadorian Colón	TEST2	test-deno	44	1	<button>Delete</button>
Armenia Dram	AMD	AMD	45	1	<button>Delete</button>

TABLE 75: CURRENCIES DESCRIPTION

Field	Description
Currency	Full name of each Currency
Display Name	The display name will be used on all screens.
Description	Description of the currency.
Priority	A unique priority for the currency. The priority of the currencies defines the master/slave relationship for the currencies dispensed at the Cashpoint. The priority of the currency decreases as the numeric value of the priority increases. So, priority value of 1 is the highest and will be defined for the master currency. For any given Cashpoint's recommendation process, its master currency drives the optimization/delivery parameters (refer to the example below for more on multi-currency synchronization).
Overnight Earnings Rate (%)	The rate of return available funds will earn or the opportunity cost of maintaining excess cash in the branch or ATM. This should be an annualized rate.
Delete	Allows the user to delete individual currencies from usage in OptiVault

7.1.4.2 Settings→Currencies/Denominations→Denominations

Denominations are the breakdown of a currency in notes and coins that are individually forecasted, recommended, and ordered through the OptiVault system. Denominations are set up to be an identifier for each type of currency note and coin.

FIGURE 55: DENOMINATIONS PAGE

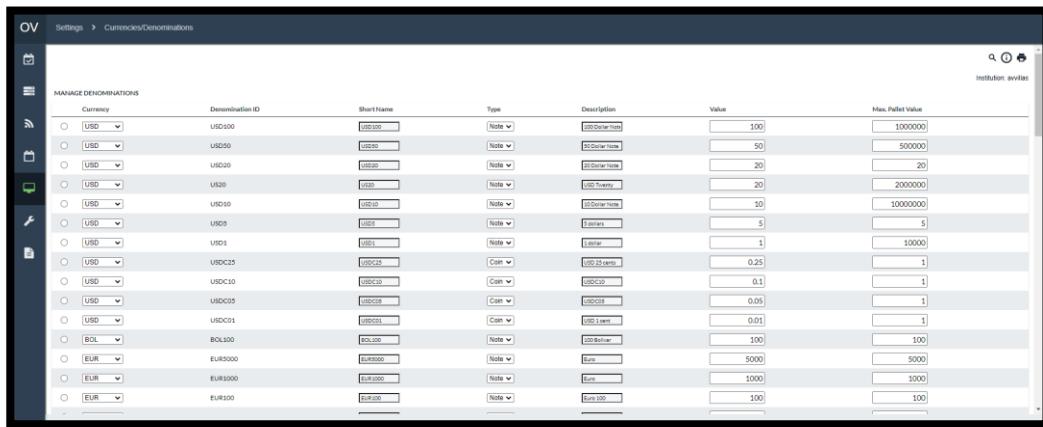


TABLE 76: DENOMINATION DESCRIPTION

Fields	Description
Denomination ID	The denomination ID is a 12-character alphanumeric field that is used to identify the denomination throughout the application.
Short Name	The short name is used as an abbreviated reference for the denomination that is used in reports to refer to the denomination ID
Type	Describes the type of denomination. The available types are: <ul style="list-style-type: none"> Note – Paper currency Coin – Metal currency
Description	Describes the denomination in more detail. Used only for informational purposes
Value	The single note or coin value of the denomination. For instance, if the denomination was USD \$100 then the value would be 100
Large Order Unit Size	The size of a large order bundle.
Small Order Unit Size	The size of a small order bundle.
Max Pallet Value	This field represents the amount (in value, not the number of notes/coins) of a denomination that can fit on a pallet. This is used in conjunction with the Max Number of Pallets parameter defined on the Cashpoint's parameter page.
Add Button	Adds a new denomination to the system. All the fields need to be specified correctly before the user can successfully add a new denomination to the system

Fields	Description
Update Button	Updates the selected entry with any changes that were made. The user has to select the radio button to the left of the Denomination entry to update that single entry.
Delete Button	Deletes the selected entry from the system. The user has to select the radio button to the left of the Denomination entry to delete that single entry. The user will be prompted to confirm the deletion before it is permanently deleted from the system.

[Return To: Settings Tab](#)

7.1.4.3 **Settings→Currencies/Denominations→Exchange Rate**

When working in a Multi-Currency environment, it is necessary for the recommendation process to consider the exchange rate between different currencies to make accurate decisions on which currencies to prioritize and optimize as well as calculate costs. The Currency Exchange Rate can be set daily if necessary.

Note: If exchange rates are changed for days in the past, it is best to re-calculate Actual Costs to ensure the figures are correct.

FIGURE 56: EXCHANGE RATE PAGE

EXCHANGE RATES	
EXCHANGE RATES	
Effective Date	Tue, 31-Aug-2021
Primary	Currency
1USD	AED
1USD	AFA
1USD	ALL
1USD	AON
1USD	ARS
1USD	AUD
1USD	BZD
1USD	DZD
1USD	EUR
1USD	PHP
1USD	RUR
1USD	SVC
1USD	VEB

Save Cancel Delete

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7.1.5 Settings→Order Settings

The following is a summary of the information that will be covered along with hyperlinks to each topic:

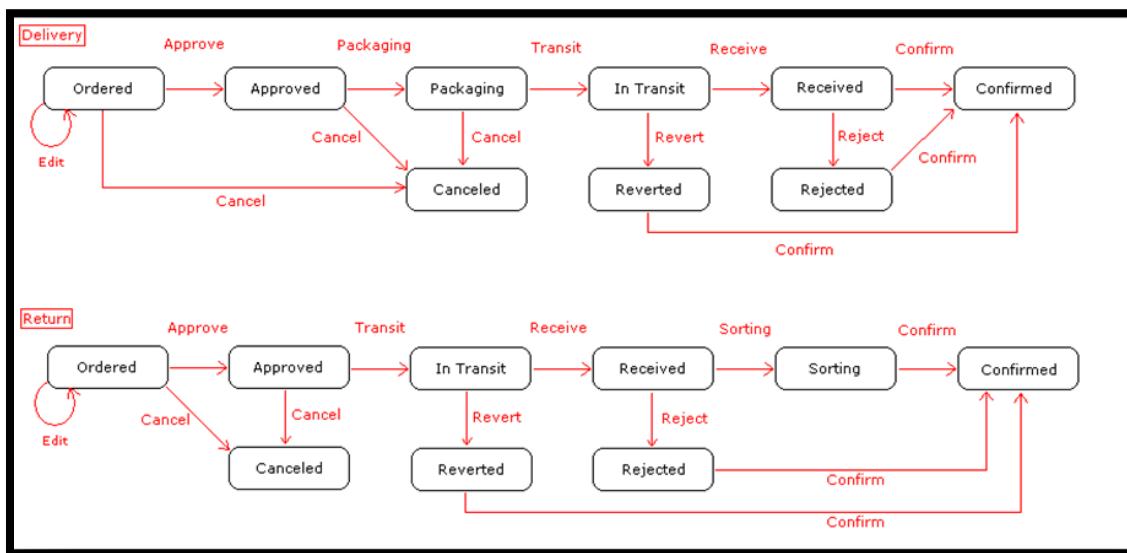
- Events→Calendar Page Settings→Order Workflow Definition
- Events→Calendar Page Settings→Custom Field Definition
- Events→Calendar Page Settings→Custom Field to Order Linkage

7.1.5.1 Settings→Order Settings→Order Workflow Definition

Order Workflow functionality tracks the status of orders from creation to fulfilment and confirmation. If Order Workflow is not licensed, standard OptiVault Order Workflow will apply and access to the Workflow Editor will be disabled.

An Order Workflow consists of States that an order can be in at a given time, and Tasks or actions that can be performed from a given State. In the example diagram below, black text in bubbles are States, while red text next to arrows represents Tasks. For instance, Orders can be 'Ordered' by Branch users but a regional supervisor has to '**Approve**' the order before it goes on to be transmitted to the carrier.

FIGURE 57: EXAMPLE OF AN ORDER WORKFLOW



[Return to: Settings→Order Settings](#)

FIGURE 58: ORDER WORKFLOW PAGE



TABLE 77: ORDER WORKFLOW DESCRIPTION

Fields	Description
Browse Order Workflow	<ul style="list-style-type: none"> Order Types – Each order type is listed in the Order Workflow list. Clicking on the '+' icon will expand the States, Tasks, and New States for each order type. States – Describes the current State of the order. This means that when the order is in a particular state, the Tasks and New States are available below the specified state. Clicking on the '+' icon for a State will expand the available Tasks and New States assigned to the workflow. Tasks – Tasks are the actions that can be taken for the order at a particular state. The Task selected will move the order into the associated 'New State' New States – This is the State that the order will be in once the Task has been selected during the order workflow.
Edit Workflow Button	Clicking on this button will enter a new page where the user can select the order type from a list to be edited. This process can be simplified by expanding desired order type from the list and clicking on one of the states listed.

Return to: [Settings](#)→[Order Settings](#)

7.1.5.1.1 Order Workflow Editing

Orders workflow can be edited by selecting one of the '**Order States**' from the Browse Order Workflow page or by clicking on the '**Edit Workflow**' button and selecting the appropriate order type.

FIGURE 59: ORDER WORKFLOW EDITING PAGE

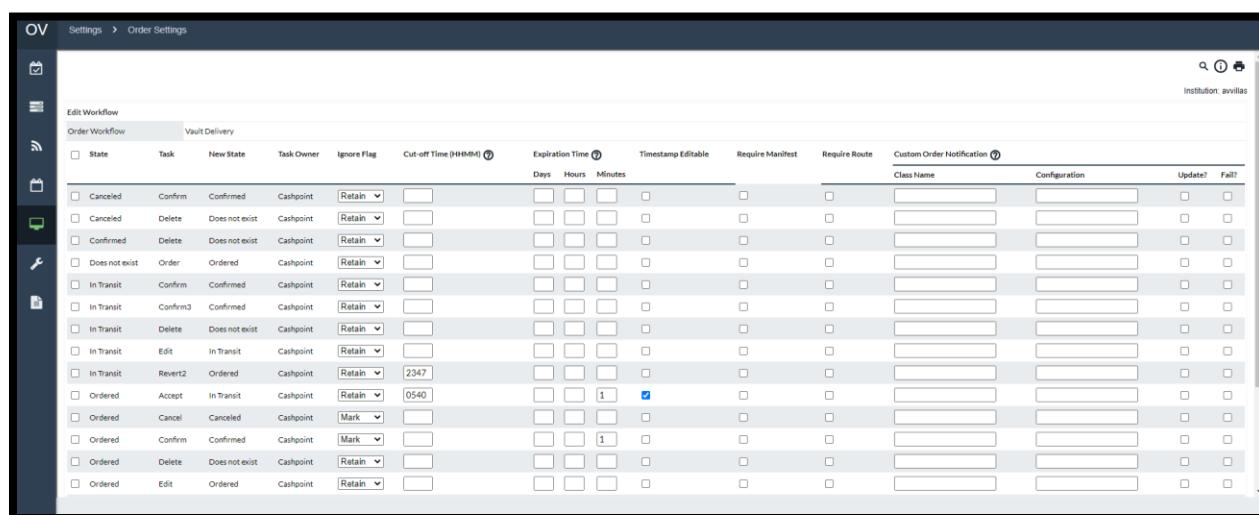


TABLE 78: ORDER WORKFLOW EDITING DESCRIPTION

Fields	Description
Checkbox	Allows the user to select the item for which the Update or Delete buttons will apply
Update button	Saves any changes made to the selected item(s) in the list.
Delete button	Deletes any item(s) selected in the list. NOTE: The State ' Does not exist ' cannot be deleted as this is a default system State.
Add Task to Workflow button	Allows the Analyst to Add an Order Task to the Order Workflow.
State	Indicates the current State of the order; this means that when an order for the associated order type is this state, then the adjoining ' Task ' and resulting ' New State ' will be available (depending on permissions).
Task	The Task is what will be displayed to the user in the form of a button on the Order Page. The Tasks available for the assignment are: <ul style="list-style-type: none"> • Accept, Accept2, Accept3 – Accepts the Order • Approve, Approve2, Approve3 – Approves the Order • Cancel, Cancel2, Cancel3 – Cancels the Order • Confirm, Confirm2, Confirm3 – Confirms the Order • Delete, Delete2, Delete3 – Allows the Order to be deleted • Edit, Edit2, Edit3 – Allows for the editing of an order

Fields	Description
	<ul style="list-style-type: none"> ● Order - Analysts place the order ● Reject, Reject2, Reject3 - Rejects the Order ● Revert, Revert2, Revert3 - Reverts the Order <p>Those tasks that have more than one entry i.e., Approve, Approve2, Approve3 are provided to give flexibility around permissions as well as cut-off times for certain functions. This is also because it may be the case that multiple people will have to Approve an order before it goes to the next State.</p> <p>Some of the tasks have several new States that can be assigned to them; for example, Approving an order can lead to Approved, In Transit, Ordered, etc. Other states such as Delete have only one option which is "Does Not Exist"</p> <p>NOTE: Certain Tasks have an effect other than changing the State of the order these include:</p> <ul style="list-style-type: none"> ● Delete - Deletes the order ● Cancel, Reject, and Revert - Orders that pass through any one of these tasks are considered undeliverable. This means that Recommendations will assume the cash has not arrived, and the same for Pre-Emptive Alerts and Recommendation Compliance Reports. ● Edit tasks - allow users to change certain fields regarding an Order (denominations, amounts, etc.) ● Order - A special task referring to the creation of Orders. ● Transmit - Transmit tasks represent the Orders Output function. The Orders Output will include only those orders currently in a State for which a Transmit task is defined starting in that State.
New State	<p>This is the State the Order will be in after the user accomplishes the 'Task' (in other words clicks on the 'Task' button in the Order)</p> <p>Depending on the Task that is selected, only applicable States will be available The following is a list of the states that are available for each Task</p> <ul style="list-style-type: none"> ● Accept, Accept2, Accept3 = Ordered, Approved, Confirmed, Packaging, In Transit, Delivered, Accepted, Reverted, or Cancelled

Fields	Description
	<ul style="list-style-type: none"> • Approve, Approve2, Approve3 = Ordered, Approved, Confirmed, Packaging, In Transit, Delivered, Accepted, Reverted, or Cancelled • Cancel, Cancel2, Cancel3 = Ordered, Approved, Confirmed, Packaging, In Transit, Delivered, Accepted, Reverted, or Cancelled • Confirm, Confirm2, Confirm3 = Ordered, Approved, Confirmed, Packaging, In Transit, Delivered, Accepted, Reverted, or Cancelled • Delete, Delete2, Delete3 = Does Not Exist • Edit, Edit2, Edit3 = Ordered, Approved, Confirmed, Packaging, In Transit, Delivered, Accepted, Reverted, or Cancelled • Order = Ordered, Approved, Confirmed, Packaging, In Transit, Delivered, Accepted, Reverted, or Cancelled • Reject, Reject2, Reject3 = Cancelled • Revert, Revert2, Revert3 = Cancelled
Task Owner	Workflow Administration Users select either "Cashpoint" or " Funding Source " Selecting " Cashpoint " means that the branch receiving the cash must complete that Workflow Task. Selecting " Funding Source " means that the sending branch must complete it.
Ignore Flag	<p>Users select between "Mark", "Unmark", and "Retain"</p> <p>Mark: Tells OptiCash that the Order will not arrive if the associated Task occurs</p> <p>Unmark: Tells OptiCash to again consider the Order to be received or going to be received if it was Marked not to arrive in the prior State</p> <p>Retain: Tells OptiCash to keep whatever "Ignore Flag" status was in place with the prior order State</p>
Cut Off Time	The time in 'HHMM' format that the user has to accomplish the Task. After this time has elapsed, the branch user will no longer have the ability to perform the task.
Expiration Time	<p>The amount of time that the task is valid. This means the user has a soft cut-off time. They are still able to process the orders, but any expired tasks performed will be flagged to the OptiCash Analyst.</p> <p>Tasks can be processed in days, hours, and minutes with any combination in between (i.e., 2 days and 1 minute)</p>

Fields	Description
Timestamp Editable	Indicates whether the timestamp recorded when this particular Task is executed can be changed afterwards. For example, if a cash delivery arrives at 10:00, but the staff takes the action of “ Receive ” at 13:00, then editing “13:00” to “10:00” would be appropriate.
Require Manifest	Indicates if the system should require that an order manifest exist before this Task can be executed.
Require Route	Indicates if the system should require that a Route Plan exist for this order before this Task can be executed.

[Return to: Settings→Order Settings](#)

7.1.5.2 Settings→Order Settings→Custom Field Definition

Order Custom Fields can be used in many different ways to allow analysts to collect data for the orders that are not available on the standard order pages.

Ten custom fields are available and can be activated or deactivated as necessary for one type of cashpoint or all cashpoint types.

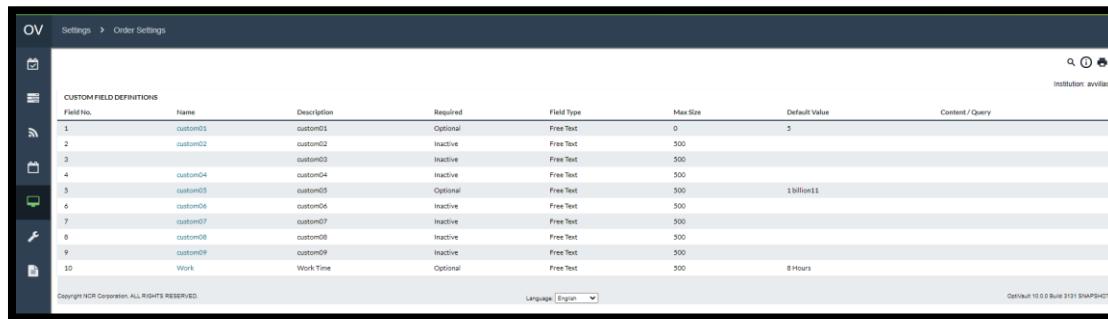


TABLE 79: ORDER CUSTOM FIELD DEFINITIONS DESCRIPTION

Fields	Description
Field Number	Indicates the Order Custom Field ID
Name	Indicates the Name of the Order Custom Field. This will be displayed to the user on the order pages.
Description	Describes the Order Custom Field is for. This field will not be displayed on the order pages.
Required	Indicates the status of the Order Custom Field: <ul style="list-style-type: none"> • Inactive – Not in service for any cashpoints • Optional – This is an optional field that does not have to be specified

Fields	Description
	<ul style="list-style-type: none"> Required – Requires that the value be specified to complete the order
Field Type	<p>Indicates the type of Custom Field being specified:</p> <ul style="list-style-type: none"> Free Text – Provides a field for users to type any information necessary to communicate to the analyst. This text field allows any information to be displayed up to the maximum size specified. Pre-set List – Displays a list that users can choose from. This list is defined in the Content/Query field as a comma-separated list. SQL Query – Displays a list of information (similar to Pre-set List but automatically populated from an SQL query.) Queries can only be set up by an administrator.
Max Size	Indicates the maximum size of the field for Free Text fields
Default Value	Indicates the information that should be in the field by default.
Content / Query	Indicates the content (comma-separated list) or SQL query that is to be used to populate the options.
Editing Values	Clicking on any of the Custom Field Name hyperlinks will take the user to the editing page to allow for the editing of the custom field.
Save button	Saves changes made during editing.
Cancel button	Cancels any changes made to the Order Custom Fields

Return to: [Settings](#)→[Order Settings](#)

7.1.5.3 [Settings](#)→[Order Settings](#)→Custom Field to Order Linkage

In order to allow Order Custom Fields to apply to a particular type of order and/or cashpoint type, the Order Custom Fields can be associated with the applicable cashpoint and order types.



TABLE 80: CUSTOM FIELD TO ORDER DESCRIPTION

Fields	Description
Name	Indicates the Name of the Order Custom Field as defined on the Order Custom Field Definition Page
Save button	Saves changes made during the editing process
Cancel button	Cancels any changes made during the editing process
Editing Linkage	To edit the linkage for an Order Custom Field, click on the Name hyperlink to access the parameters.

7.1.6 Settings→Calendar Refresh

When OptiVault is used in conjunction with OptiCash, it is possible to use the calendar information set up in OptiCash within OptiVault. The Calendar Refresh function allows this synchronization to take place. This will update the calendar information in OptiVault with the information saved in OptiCash.

The Cashpoint synchronization is a one-way sync from OptiCash to OptiVault. This means that any changes in OptiCash will be updated in OptiVault but not the reverse.

FIGURE 60: CALENDAR REFRESH PAGE

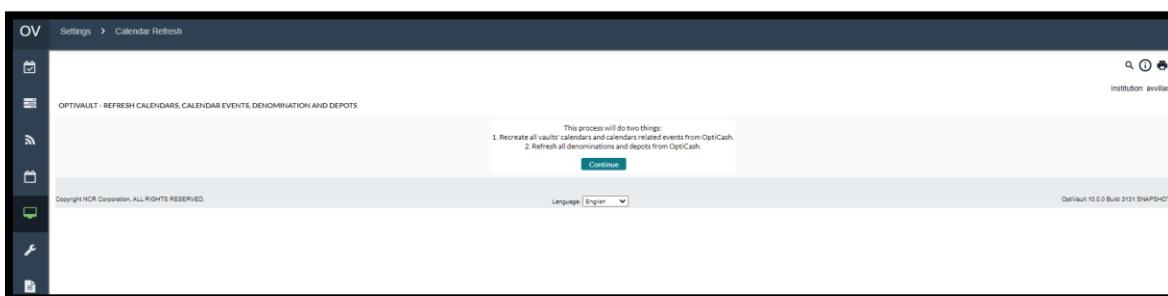


TABLE 81: CALENDAR REFRESH DESCRIPTION

Field	Description
Continue Button	Begins the Calendar Refresh. There is no prompting of the user to confirm this action please ensure that this function should be performed before clicking this button. This process may take several minutes to complete. Once the page has been refreshed, the process has been completed and a report will be displayed highlighting the information that was changed.
Vault ID	The Vault is associated with a calendar that has changed
Calendar ID	The ID of the calendar that is assigned to the vault.
Events Created	A number signifying how many event days were created for the associated Cashpoint and calendar.

[Return To: Settings Tab](#)

8 Maintenance Tab

The Maintenance Page allows users to perform system maintenance functions for OptiVault and Cashpoints. The user must select the desired option from the dropdown list to access the maintenance option. Most tasks should only be performed by system administrators or a user who is experienced in the system operations.

⚠ Caution: Changes made to data in OptiVault are permanent and cannot be undone once they are committed.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- Maintenance→Copy Vault/Copy Commercial
- Maintenance→Purge Data
- Cashpoint Maintenance→Rename Cashpoint

Return To: [Introduction to the Interface](#)

8.1.1.1 Maintenance→Copy Vault/Copy Commercial

The Copy Cashpoint function allows the user to copy a vault's history, parameters, and all other information into a new Vault. This allows users to quickly create Cashpoints that have similar settings. After the copy process has been completed, the Cashpoint will have all the same parameters and history as the original therefore it is best to edit the parameters and other definition information at the Cashpoint level.

TABLE 82: COPY CASHPOINT DESCRIPTION

Field	Description
Select Button	After selecting a Cashpoint from the dropdown List-box, the Select button prompts the user with a new page that will allow the renaming of the Cashpoint ID.
Copy Button	Executes the Copy Vault process.
To	The Vault ID of the new vault. The Vault ID is a 12-character alpha-numeric field that is used to identify the Cashpoint in the system.

Return To: [Maintenance Tab](#)

8.1.1.2 Maintenance→Purge Data

The Purge Data function is used to permanently delete data from the OptiVault database. Data can be selectively deleted from the following categories: History, Forecast, Recommendations, and Orders.

Some examples of when data may need to be purged from the OptiVault database would include:

- The wrong days were loaded in the daily files, in which case, indicate the time period that needs to be purged and re-load the fixed daily files.
- Purging the forecast table of all data before regenerating the forecast. Therefore, it will reduce the time required to regenerate the forecast.
- Purging data accumulated during several years of operations.

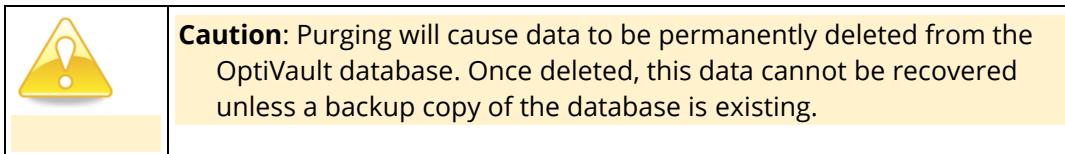


FIGURE 61: PURGE DATA PAGE

TABLE 83: PURGE DATA DESCRIPTION

Field	Description
OBMH & Cap	Deletes the OBMH & Cap data from the system for the Cashpoints selected.
History	To delete historical data, check the box; indicate “ From ” and “ To ” Dates for the purge and select Cashpoints for which the history data will be purged by clicking on the Select button. Date Selection (recommendation only): Generally, users should purge history greater than two full years plus the current year. For example , if today is July 16, 2004, the user can drop all history data prior to 01-Jan-2002. Then in January 2005, the users can drop all data prior to 01-Jan-2003. Repeat each January advancing by one year.

Field	Description
	The forecast engine uses twenty-four months of historical data.
Forecast Queue	Check the box to purge any Cashpoints currently existing in the forecast queue. This option will ignore the Cashpoints selected and the 'Start Date' and 'End Date' options. The forecast queue can be accessed at <i>Processing > Processing Status > Forecast</i> . If there is a message " No processes running at this time " this indicates there are no forecasts that have been generated. The forecast queue holds all forecast processes and releases it once the process has been completed. Occasionally, several users will generate a forecast simultaneously causing the process to hang up; therefore, no forecast process will generate until the forecast queue is purged.
Recommendations	To purge recommendations, check the box; indicate " From " and " To " Dates for the recommendations to be purged and select Cashpoints by clicking on the Select button. Note: Purging old recommendations will automatically purge old horizon for the same time frame selected for recommendations. CAUTION: Some users may run variance reports for periods greater than the past sixty days. The users should only purge data that the business will not use. Date Selection (recommendation only): generally, users should purge recommendations greater than three full months plus the current month. For example, if today is July 16, 2005, drop all data prior to 01-April-2005. Repeat each month advancing by one month. If users are running semi-annual/annual variance, they should select the dates accordingly. NOTE: Recommendations are purged by the Due Date, not the Recommendation Date.
Orders	To purge orders, check the box, indicate " From " and " To " dates for the orders to be purged and select the Cashpoints by clicking on the Select button.
Start Date	The starting date of the purge period. Used only for History and Recommendations
End Date	The ending date of the purge period. Used only for History and Recommendations.

Field	Description
Purge Data Button	Deletes the data based on the items that are checked in the ' Categories to Purge ' section of the page and the Cashpoints selected.
Cancel Button	Makes no changes in the system and exits the purge page.



Note: The above recommendations for data selections are only provided as suggestions; however, each institution needs to determine how much data it would like to have available. Prior to purging data, the database should be backed up.

[Return To: Maintenance Tab](#)

8.1.1.3 Cashpoint Maintenance→Rename Cashpoint

The Cashpoint maintenance also allows renaming Cashpoints if the user needs to do so. Remember that at this level, only the Cashpoint ID can be renamed. Renaming other definition settings such as Cashpoint name, address, etc. is possible at the Cashpoint level in the Cashpoint definition window, under the Basic tab.

FIGURE 62: RENAME CASHPOINT PAGE

TABLE 84: RENAME CASHPOINT DESCRIPTION

Field	Description
Select Button	After selecting a Cashpoint from the dropdown Listbox, the Select button prompts the user with a new page that will allow the renaming of the Cashpoint ID.
Cancel Button	Exits the Rename function without making any changes.
Save Button	Executes the renaming process.
Set as Default Cashpoint	Sets the currently selected Cashpoint as the default Cashpoint for all functions so the analyst does not have to select it from a list.

[Return To: Maintenance Tab](#)

8.1.2 Maintenance→Cashpoint Synchronization

When OptiVault is used in conjunction with OptiCash, the Cashpoints can be synchronized between OptiCash and OptiVault to keep the data up-to-date.

The Cashpoint synchronization is a one-way sync from OptiCash to OptiVault. This means that any changes in OptiCash will be updated in OptiCash but not the reverse. There are 3 categories of synchronization:

- Inserted Cashpoints
- Deleted Cashpoints
- Updated Cashpoints

TABLE 85: CASHPOINT SYNCHRONIZATION DESCRIPTION

Field	Description
Continue Button	<p>Compares the OptiCash and OptiVault databases and displays the three categories of changes that will be:</p> <ul style="list-style-type: none"> • Insert • Delete • Update <p>The user will need to click on the link under each category (displayed as the number of records to change) to proceed with committing the changes.</p>
Total Insert	<p>Signifies the new Cashpoints that will be inserted into OptiVault. Click on the link to see the Cashpoints that will be inserted.</p> <p>Click on the 'Save' button at the bottom of the page to save the Cashpoints</p>
Total Delete	<p>Signifies the old Cashpoints that will be deleted from OptiVault. Click on the link to see the Cashpoints that will be deleted.</p> <p>Click on the 'Save' button at the bottom of the page to permanently delete the Cashpoints from OptiVault. The user will be prompted to confirm the deletion before it is executed.</p>
Total Update	<p>Signifies the Cashpoint information that will be updated in OptiVault based on changes made in OptiCash. Click on the link to see the Cashpoints that will be updated.</p> <p>Click on the 'Save' button at the bottom of the page to update the Cashpoints in OptiVault.</p>

Field	Description
Save Button	Saves the information in the system
Cancel Button	Cancels the function without making any changes.

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8.1.3 Maintenance→Audit Log Browser

OptiVault has the ability to track user activity in the system. The Audit Browser allows the OptiVault user to view the transactions that took place in the system as well as filter down the results to find a specific transaction.

The Audit Log Browser begins with a filter page that allows the user to filter the results of the Audit Log to quickly find the desired information.

FIGURE 63: AUDIT LOG BROWSER SEARCH PAGE

TABLE 86: AUDIT LOG BROWSER SEARCH DESCRIPTION

Field	Description
Function	A list that is populated by the current Functions that have already been performed in the Audit Log. If the Function is not listed, it has not yet been performed.
User Name	The User Name of the person who performed the action. The search is case-sensitive, but partial word and wildcard searches are possible.
Resource	A list that is populated by the current system resources that have been accessed in the Audit Log. If the Resource is not listed, it has not yet been accessed.
From/To Timestamp	Date and time that the action was performed. The user is able to enter the date, the date/time, or leave the field blank. Leaving the field blank will return all rows. For instance, if the user wanted all records after June 1, 2009, the user would enter 2009-06-01 in the From field and leave the To field blank.

Field	Description
	<p>The entry must conform to the correct format of YYYY-MM-DD HH:MM:SS:NNN</p> <p>YYYY = Year (4 digits)</p> <p>MM = Month (2 digits)</p> <p>DD = Day (2 digits)</p> <p>HH = Hour (2 digits)</p> <p>MM = Minute (2 digits)</p> <p>SS = Second (2 digits)</p> <p>NNN = Nanoseconds (3 digits)</p> <p>Example: June 1, 2009, at 3:15 pm would be 2009-06-01 15:15:00:0000</p>

FIGURE 64: AUDIT LOG BROWSER SEARCH RESULTS PAGE

OPTIVULT - AUDIT LOG BROWSER - SEARCH RESULTS				
Timestamp	User Name	Function	Resource Type	Resource ID
2018/09/25 14:55:41	admin	(1001)Updated Cashpoint Details	cashp_id	ANEXAS_BOG
2018/09/25 14:55:32	admin	(1001)Updated Cashpoint Details	cashp_id	ANEXAS_BOG

PDF Report CSV Report

Submit

TABLE 87: AUDIT LOG BROWSER SEARCH RESULTS DESCRIPTION

Field	Description
Go To Button	Navigates to the page number specified in the Page field
Page	Indicates the current page currently being viewed out of the total number of pages. Changing the page number and selecting the ' Go To ' button navigate directly to that page.
Navigation (<< < > >>)	Navigates forward or backwards to a particular page. << First Page < Back one page > Forward one page >> Last Page
Timestamp	Date and time stamp for the Audit Log entry. Clicking on the column header will resort to the list (ascending or descending depending on the current view). Clicking on a Timestamp hyperlink will bring the user to the Transaction detail report. See:

Field	Description
User Name	User name of the person who performed the action. Clicking on the column header will resort to the list (ascending or descending depending on the current view).
Function	The function that was performed for the specific Audit Log entry. Clicking on the column header will resort to the list (ascending or descending depending on the current view).
Resource Type	The Resource type that was accessed. Clicking on the column header will resort to the list (ascending or descending depending on the current view).
Resource ID	The Resource ID that is associated with the Resource type. Clicking on the column header will resort to the list (ascending or descending depending on the current view).

The Transaction Detail report shows more in-depth information about some transactions that are performed on the system. The Transaction detail is accessed by clicking on the Timestamp hyperlink from the Audit Log Browser Results. Not all transactions will have transaction details associated with them.

FIGURE 65: AUDIT LOG BROWSER TRANSACTION DETAIL PAGE

OPTIVULT - AUDIT LOG BROWSER - TRANSACTION DETAIL		
Back		
User Name	admin	
Function	(1001)Updated Cashpoint Details	
Resource	cashp_id = ANEXAS_BOG	
Timestamp	Statement ID	Statement Parameters
2018/09/25 14:55:41	OptiVaultsAgent.updateCashpointDetails	{p_email}={p_city=city}{p_fax}={p_addr2=addr2} {p_contct}={p_addr1=addr1}[central_bank=1] {cashp_id=ANEXAS_BOOG}{p_name=ANEXAS BOGOTA}[holiday=1]{cust6=}{actvdate=DBDATE ('2007-07-12')]{cust5=}{cust4=}{cust3=}{cust2=} {cust1=}{p_state=state}{p_phone=}{status=1} {p_postcd=12345}

TABLE 88: AUDIT LOG BROWSER TRANSACTION DETAIL DESCRIPTION

Field	Description
User Name	User name of the person who performed the action.
Function	The function that was performed for the specific Audit Log entry.
Resource	The Resource type that was accessed.
Timestamp	Date and time stamp for the Audit Log entry.

Field	Description
Statement ID	The action code that is associated with the database change.
Statement Parameters	Parameters executed at the database level. This will often include the most specific details on a particular action. Example: if a Cashpoint's parameters are saved, this will list the new parameters submitted to the database. Note: If the system administrator configures partial auditing, then Statement Parameters will be blank.

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8.1.4 Maintenance→View Logs

The View Logs function allows users to access system logs to help NCR troubleshoot problems. The users should only access this page when directed to do so by a system administrator or an NCR Support Representative.

FIGURE 66: LOGS PAGE

Action	Log File Name	Size (in bytes)	Timestamp
🔗	Agg1Level.log	0	25-May-2022 06:16 PM
🔗	PvFct.COMM_FORECAS.2022-02-20 125217UTC.log	0	20-Feb-2022 12:32 PM
🔗	PvFct.COMM_FORECAS.2022-02-23 132521UTC.log	466	13-May-2022 12:32 PM
🔗	PvFct.COMM_FORECAS.2022-02-23 1332245UTC.log	692	13-May-2022 01:22 PM
🔗	PvFct.COMM_FORECAS.2022-02-23 1341126UTC.log	673	13-May-2022 02:11 PM
🔗	PvFct.COMM_FORECAS.2022-02-23 075455UTC.log	1,761,543	23-May-2022 09:55 AM
🔗	PvFct.COMM_FORECAS.2022-02-23 1357005UTC.log	554,769	23-May-2022 01:17 PM
🔗	PvFct.COMM_FORECAS.2022-02-23 134906UTC.log	63,150	23-May-2022 02:06 PM
🔗	PvFct.COMM_FORECAS.2022-02-25 1309585UTC.log	2,531	25-May-2022 12:09 PM

TABLE 89: LOG VIEWER DESCRIPTION

Field	Description
Actions	<p>Shows the available actions that are allowed for the given each Log File entry</p> <p>🔗 - Allows the user to view the Log file in the web browser.</p> <p>⬇️ - Allows the user to download the Log file to the local computer which can then be opened by a text file editor.</p> <p>NOTE: The size of the logs. Large files may take a long time to load in a web-browser or may not be visible in all text file editors. Check with your system</p>

Field	Description
	administrator if you have questions about viewing large files.
Log File Name	Name of the log file that was generated. Clicking on the log file name will prompt the user to download it to the local computer to be viewed with a text file editor.
Size	Size of the file in bytes for each log file.
Timestamp	Timestamp of the Log file (generally this is the time the log was created, but it could also be the last time it was modified).

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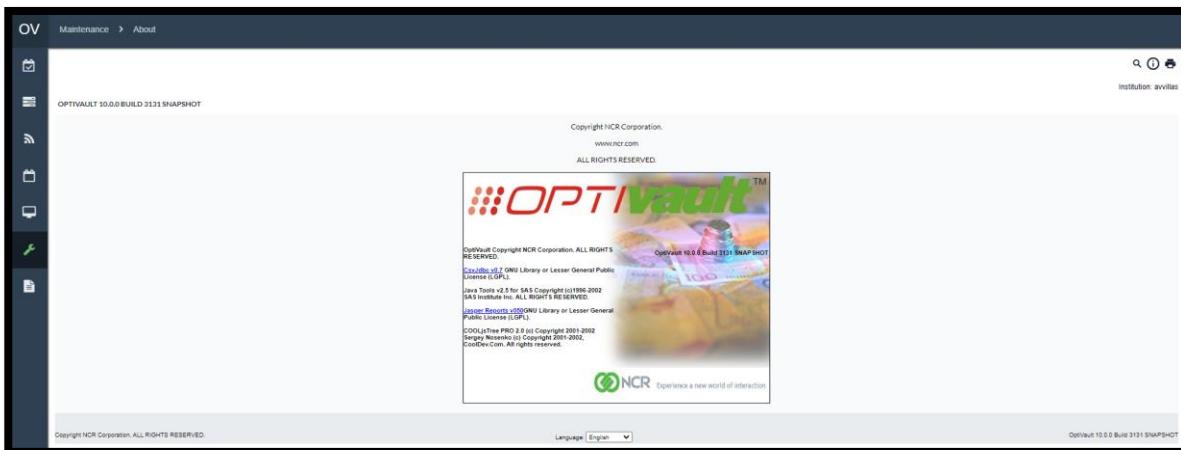
8.1.5 Maintenance→About

This page gives a system summary to tell users the current version of both the software as well as the subcomponents used by the OptiVault system.

The user can see the current version and build of the application as well as access the NCR Support website. This page also displays the user's last successful and failed login time.

This page is for informational purposes only.

FIGURE 67: ABOUT PAGE



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9 Reports Tab

OptiVault reporting functionality captures and presents information generated during normal processes.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- Reports Overview
- Report Basics
- Processing Reports
- History Reports
- Planning Reports
- Management Information Reports
- Cashpoint Reports

[Return To: Introduction to the Interface](#)

9.1.1 Reports Overview

The reports are broken into 4 sections and are summarized in the table below.

TABLE 90: REPORT SUMMARY

Report Name	Report Output
Processing Reports	
Aggregation Results	Displays the results of the aggregation processing during the recommendation process
Aggregation Summary Results	Shows a summary of the results of the Aggregation process
Recommendation Results	Displays the results from the previous recommendation process run.
Recommendation Validation Results	Shows a summary of the results of the Recommendation Validation Process
Commercial Consolidation Results	Displays the results from the previous commercial consolidation process run.
History Reports	
Commercial History	Displays the commercial history of the selected Cashpoint

Custodial Inventory History Report	Reports the historical balances and transactions for the Custodial Inventory for the selected dates.
Vault Orders	Displays a report of the vault orders for the Cashpoints and dates selected.
Vault Recommendations	Displays a report of the vault recommendations for the Cashpoints and the dates selected.
Vault Variance	Displays the differences between the recommended and ordered amounts as well as the forecast and actual values for each selected Cashpoint, and denomination for the selected time period.
CI Position (History)	Reports the details of the Custodial Inventory History breaking down the orders by denomination and quality.
Provisional Credit Report	Provides a report for the Provisional Credits entered for the selected vaults and dates selected.
Planning Reports	
Forecast Results	Shows an overview of the Forecast process for all Cashpoints.
Forecast Health Report	Displays an overview of the forecast quality for all denominations and qualities for the selected Cashpoints.
Vault Forecast Details	Displays the daily details of the forecast for the denominations and qualities selected.
Commercial Forecast Details	Displays the daily details of the forecast for the denominations and qualities selected.
Horizons	Displays the horizon information for the selected vault
Horizons with CI	Displays the horizon information for the selected vault along with Custodial Inventory information.
OptiCash Aggregation Details	Shows the results of the aggregation process for the selected Cashpoints and dates.
CI CAP/OBMH Report	Reports the Custodial Inventory Capacity amounts for the On Book Minimum Holding for each of the selected Cashpoints and dates selected.
CI Position (Forecasted)	Displays the denomination details of the Custodial Inventory forecast calculations for the selected Cashpoints and dates.
Management Information Reports	
Costs (Actuals vs. Projected)	Reports the cost comparisons between the actual and projected costs.

Costs (Actual)	Reports the actual costs that were calculated on historical data
Cross-Shipping Alerts	Displays the Cross-Shipping alerts for the selected vaults.
Cashpoint Reports	
Vault Horizon Report	Displays the horizon information for the selected vault
Vault History Report	Displays the history report for the selected vault
Vault Forecast Report	Displays the Forecast Report for the selected vault
Commercial History Report	Displays the commercial history of the selected Cashpoint
Commercial Forecast Report	Displays the commercial forecast for the selected Cashpoint.

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9.1.2 Report Basics

All reports work in the same manner in OptiVault but provide different information for the user. In each case, the user has to select Cashpoints, Options, and Report Types and Submit the request to view the report. The basic report elements will be described in this section.

FIGURE 68: REPORT GENERATION PAGE

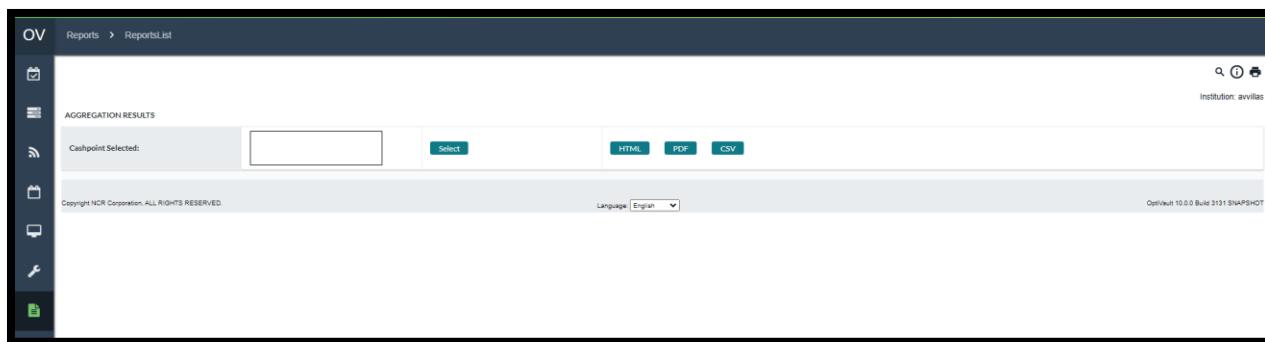


TABLE 91: REPORT DESCRIPTION

Field	Description
Select Button	Allows the user to choose Cashpoints to be included in the report. For more information on Cashpoint Selection, see: Return To: General OptiVault Pages Cashpoint Selector

Field	Description
Cashpoints Selected	A list of the Cashpoints that were selected for the specific report is listed in the box labelled “ Cashpoints Selected ”
Submit Button	Processes the report request using the options and Cashpoints selected.
HTML Button	Processes the report into an HTML report to be used in an external reporting tool
View Button	Processes the report request using the options and Cashpoints
Export Button	Exports the report into a CSV report to be used in an external reporting tool
	<p>Note: If the CSV format is selected in the output options, by default the report will be saved in your ‘dynreports’ folder (where the web application server is located). However, you can also click on the hyperlink ‘Save CSV (for import)’ to save the file to the desired location.</p>

	<p>Note: When running a network level report that will return a large amount of data, an error message may be received caused by memory shortage. In order to avoid this, reduce the selection of Cashpoints (for instance, if all active Cashpoints have been selected, try to select only half of the Cashpoints) or the time period (select 30 days instead of 90 days). If the error message is still displayed, the users who have administrative rights can change the Java settings in your web application server management console. Java settings must be changed by setting max heap size following specific web application instructions. After this, the server must be rebooted.</p>
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9.1.3 Processing Reports

The processing reports are a summary of the Aggregation, Recommendation, and Commercial Consolidation processes.

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- Aggregation Results
- Aggregation Summary Results

- Recommendation Results
- Recommendation Validation Results
- Commercial Consolidation Results
- Vault Parameters
- Vault Service Days
- Vault Service Schedule
- Vault Denominations
- Vault Service Cost
- Vault Requirements

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9.1.3.1 Aggregation Results

The Aggregation Results report is a summary of the results from each Cashpoint that aggregated data from OptiCash during the recommendation process.

TABLE 92: AGGREGATION RESULTS REPORT DESCRIPTION

Field	Description
Generate Start Date	Beginning date of the report.
Generate End Date	Ending Date of the report
Vault ID	The unique identifier of the vault was processed for commercial consolidation.
Commercial ID	The unique identifier of the Commercial Cashpoint was processed for commercial consolidation.
Denomination	The Denomination Description of the vault that was processed for recommendation
Quality	The quality of the denomination that was processed for recommendation
Start Date	Beginning date of the report
End Date	Ending date of the report
Process Status	Reports the success or failure of the consolidation process.

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9.1.3.2 Aggregation Summary Results

The Aggregation Results report is a summary of the results from each Cashpoint that aggregated data from OptiCash during the recommendation process. This report is displayed as PDF or optionally in CSV format.

TABLE 93: AGGREGATION RESULTS REPORT DESCRIPTION

Field	Description
Vault	The unique identifier of the vault was processed for commercial consolidation.
Result	The summary result of the Vault Aggregation Process
Count	The number of Cashpoints that relate to the results and Vault ID
Open In New Window Link	Clicking on the link displays the report in a new window as opposed to in the OptiVault Report Window.

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9.1.3.3 Recommendation Results

The Recommendation Results report is a summary of the results of each Cashpoint's recommendation process run. There are no options that need to be selected prior to running this report. After the report has been displayed, the user will have the option to create a PDF or CSV report by clicking the option checkmarks at the bottom of the page. This report is displayed as PDF or optionally in CSV format.

TABLE 94: RECOMMENDATION RESULTS REPORT DESCRIPTION

Recommendation Last Run Results	
Field	Description
Vault ID	The unique identifier of the vault that was processed for recommendation
Denomination	The Denomination Description of the vault that was processed for recommendation
Quality	The quality of the denomination that was processed for recommendation
Date Last Run	The date that the recommendation process was the last run for the vault
Result	The result of the last recommendation run.

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9.1.3.4 Recommendation Validation Results

This report shows the results of the validation process that is run before the recommendation process is run.

TABLE 95: RECOMMENDATION VALIDATION RESULTS REPORT DESCRIPTION

Recommendation Last Run Results	
Field	Description
Vault ID	The unique identifier of the vault that was processed for recommendation
Denomination	The Denomination Description of the vault that was processed for recommendation
Quality	The quality of the denomination that was processed for recommendation
Date	The date that the recommendation process was the last run for the vault
Error	The error that occurred during the validation process
Affected Date	History day that relates to the error
Breach Amount	When an amount is exceeded, such as maximum capacity, the Breach Amount shows the amount of the violation.

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9.1.3.5 Commercial Consolidation Results

This report summarizes the consolidation of Commercial Customer Cashpoints to see if any problems occurred in the consolidation process. After the report has been displayed, the user will have the option to create a PDF or CSV report by clicking the option checkmarks at the bottom of the page.

TABLE 96: COMMERCIAL CONSOLIDATION RESULTS DESCRIPTION

Field	Description
Generate Date	Date the report was generated.
Vault ID	The unique identifier of the vault that was processed for recommendation
Commercial ID	The Cashpoint ID of the commercial Cashpoint that relates to the report
Denomination Short Name	The denomination name being reported

Field	Description
Quality	The quality of the denomination being reported
Start Date	The starting date of the consolidation process
End Date	The ending date of the consolidation process
Process Status	The results of the consolidation process.

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9.1.3.6 Vault Parameters

This Report details all parameters assigned to a vault.

TABLE 97: VAULT PARAMETERS DESCRIPTION

Field	Description
Vault	The Cashpoint ID for the Cashpoint for which parameters are being displayed.
Maximum Number of Pallets	The Maximum number of Pallets that can be held in the Cashpoint at any given time
Packaging Time	The time (in days) that it takes for the orders to be packaged before they are sent to the Cashpoint.
Clearance Time	The time (in days) that it takes for returns from child Cashpoints to be received at processed upcoming demand.
Bulk Order Reduction	The setting that determines when orders will be available to be used for child Cashpoint demand
Aggregate Emergencies Indicator	Indicates if Emergencies from child Cashpoints will be aggregated during the recommendation process.

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9.1.3.7 Vault Service Days

This report displays the service days that are assigned to Cashpoints and the parameters that affect deliveries and returns.

TABLE 98: VAULT SERVICE DAYS DESCRIPTION

Field	Description
Vault	The Cashpoint ID for Cashpoint for which Service days are being displayed

Field	Description
Business Days	The days of the week that the Cashpoint is open for business
End of Day Return Time	Indicates if returns are processed at the end of the day.
Required Service Days	Indicates days that service (Delivery or Return) is required
Optional Service Days	Indicates days that service (Delivery or Return) is optional
Lead Time	The days prior to delivery that the orders must be placed
Cycle	Indicates the frequency of visits to the Cashpoint.
Start Date	Indicates the starting date for cycles that are not based on a weekly basis.

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9.1.3.8 Vault Service Schedule

This report displays the current service schedule based on the last recommendation process. The recommendation process runs on a daily basis and as a result, the service days are determined based on the Service Days parameters and any holiday or service shifts.

TABLE 99: VAULT SERVICE SCHEDULE DESCRIPTION

Field	Description
Start Date	The starting date of the report
End Date	The ending date of the report
Vault	The Cashpoint ID for which Service Schedules will be displayed
Vault Type	The Cashpoint type that relates to the Vault
Service Day	Indicates the date for which details are being provided
Delivery Order Day	Indicates if the date is a delivery order day
Return Order Day	Indicates if the date is a return order day
Delivery Order Date	Indicates the date that orders must be placed to be delivered on the Delivery Day
Return Order Date	Indicates the date that orders must be placed to be returned on the Return Day
Unplanned Order Day	Indicates if the date is an unplanned delivery day

Field	Description
Unplanned Order Date	Indicates the date that unplanned orders must be placed to be delivered on the Unplanned Delivery Day
Delivery	Indicates if Delivery is Optional or Mandatory on this date.
Return	Indicates if Returns are Optional or Mandatory on this date
Business Day	Indicates if the date is a Business Day
Holiday	Indicates if the date is a holiday
Exception	Indicates if there is a service exception on this date.

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9.1.3.9 Vault Denominations

This report displays all the details on the denominations assigned to Cashpoints.

TABLE 100: VAULT DENOMINATIONS DESCRIPTION

Field	Description
Cashpoint	The Cashpoint ID for which denomination details are being provided
Denomination	The Denomination ID
Quality	The Quality ID that relates to the Denomination ID
Denomination Description	The description of the denomination
Maximum Balance	The maximum balance that can be held for the denomination
Min Delivery	The minimum amount that can be delivered to the Cashpoint
Min Returns	The minimum amount that can be returned from the cashpoint
Min Unplanned Delivery	The Minimum amount of unplanned deliveries that can be delivered to the Cashpoint
Order Unit	The bundle size of the order for the denomination
Recommend?	Indications if the denomination should be Recommended for ordering during the Recommendation Process

Field	Description
Cross Shipping?	Indicates if Cross-Shipping penalties apply to the denomination and quality
Include in Sorting?	Indicates if the denomination is included in the sorting process.

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9.1.3.10 Vault Service Cost

This report displays the service costs assigned to Cashpoints.

TABLE 101: VAULT SERVICE COST DESCRIPTION

Field	Description
Vault	The Cashpoint ID for which Service Cost details are being displayed
Cashpoint Type	The type of Cashpoint being reported
Cashpoint Name	The name of the Cashpoint
Carrier	The Name of the Default Carrier that provides service to the cashpoint
Services	The Types of services that are being reported
Currency	Currency that the delivery/service costs are associated with
Max Holding Amt	The Maximum Holding Amount for the entire Cashpoint. This is not to be confused with the holding amount for each denomination. The Maximum Holding Amount is the amount that can be held at any given time regardless of the maximum capacity of the individual denominations
Currency Insurance Rate	The Currency Insurance Rate Assigned to the Cashpoint
Handling Cost	Displays the Handling Cost
Fixed Cost	Displays the Fixed Cost that is charged for the specified service
Per Defined Unit	Displays the amount charged per unit of currency
Unit Size	Displays the unit size that relates to the Per Defined Unit
Per Unit of Currency	Displays the amount that is charged for each 1 unit of currency

Field	Description
Amount Range	Displays the range for which the amount that is charged Per Unit of Currency applies

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9.1.3.11 Vault Requirements

This report displays the Vault Requirements assigned to Cashpoints for each denomination, quality, and day of the week.

TABLE 102: VAULT REQUIREMENTS DESCRIPTION

Field	Description
Day	Displays the day of the week for which requirements apply. This will display All Day for standard parameters or the particular day of the week for specific requirements.
Denomination	The denomination ID being reported
Quality	The quality of the note relating to the denomination ID
Cycle	The delivery cycle that applies to the denomination ID
Specific Date	Indicates a specific date (if applicable) for which the requirements apply.
Minimum Operating Balance	Indicates the Minimum Holding Amount that should always be held for the denomination and quality
E-Cash Holding Amount	Indicates the amount of Emergency cash that should always be held for the denomination and quality.
% of Withdrawals to Cover	Indicates the percentage of withdrawals to cover the denomination and quality
% of Deposits Available for Withdrawal	Indicates the percentage of deposits available for withdrawal for the denomination and quality
% of Deposits Held Until the End of the Day	Indicates the percentage of deposits held until the end of the day for the denomination and quality
% Adjustment to Forecasted Demand	Indicates the adjustment to the forecasted demand for the denomination and quality
% Adjustment to Forecasted Deposits	Indicates the adjustment to the forecasted deposits for the denomination and quality
% Adjustment to Total Requirements	Indicates the adjustment to total requirements for the denomination and quality

Field	Description
Exception Threshold /Balance Buffer Amount	Indicates the amount of the Exception Threshold. If no amount is indicated, then a percentage is used.
Exception Threshold / Balance Buffer Percentage	Indicates the percentage of holdings that is applicable as the Exception Threshold. If no percentage is indicated, then an Exception Amount is applicable.

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9.1.4 History Reports

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- Vault History
- Commercial History
- Custodial Inventory History
- Vault Orders
- Vault Recommendations
- Vault Variance
- Custodial Inventory (CI) Position (History)
- Provisional Credit Report
- Vault Transaction History
- Vault Transaction Summary - Averages
- Vault Recommendations, Orders, and Shipments

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9.1.4.1 Vault History

The Commercial History Report shows the analyst the historical data that has been loaded into the system for the selected Commercial Cashpoint. The analyst has the ability to exclude data from the forecast from this page.

TABLE 103: COMMERCIAL HISTORY DESCRIPTION

Field	Description
Denom.	Allows the analyst to select the denomination(s) that will be shown in the report

Field	Description
Qual.	Quality of the denomination(s) that will be shown in the report.
Start Date	Starting date of the report
End Date	Ending date of the report
Date	Date of the reporting day
Currency	OptiVault short name of the currency to which the reported denominations are a part of
Denomination	Denomination and quality relating to the date of the report
Deposits	Deposits into the Vault for the quality and denomination of the report
Withdrawals	Withdrawals from the Vault for the quality and denomination of the report
Exclude Flag	Indicates that the record is excluded from the history.

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9.1.4.2 Commercial History

The Commercial History Report shows the analyst the historical data that has been loaded into the system for the selected Commercial Cashpoint. The analyst has the ability to exclude data from the forecast from this page.

TABLE 104 : COMMERCIAL HISTORY DESCRIPTION

Field	Description
Denom.	Allows the analyst to select the denomination(s) that will be shown in the report
Qual.	Quality of the denomination(s) that will be shown in the report.
Start Date	Starting date of the report
End Date	Ending date of the report
Date	Date of the reporting day
Currency	OptiVault short name of the currency to which the reported denominations are a part of
Denomination	Denomination and quality relating to the date of the report

Field	Description
Deposits	Deposits into the Vault for the quality and denomination of the report
Withdrawals	Withdrawals from the Vault for the quality and denomination of the report
Exclude Flag	Indicates that the record is excluded from the history.

9.1.4.3 Custodial Inventory History

This report shows the Custodial Inventory History for a single Custodial Inventory Cashpoint. The user must first select the Cashpoint for which the report will be run, then the user can select the options and run the report.

TABLE 105: CUSTODIAL INVENTORY REPORT DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Denom.	Denomination to be included in the report. The user can select all denominations or a single denomination with this option.
Qual	Quality of the denomination(s) that will be shown in the report.
Denomination	The description of the denomination in the Custodial Inventory Cashpoint
Opening Balance	The Opening Balance of the Custodial Inventory Cashpoint
Cash In	Cash Transferred into the Custodial Inventory Cashpoint.
Cash out	Cash Transferred out of the Custodial Inventory Cashpoint
Closing Balance	The Closing Balance of the Custodial Inventory Cashpoint

[Return To: History Reports](#)

9.1.4.4 Vault Orders

The Vault Order report allows the OptiVault analyst to list all orders that have been generated for a specific vault or all the vaults assigned to a user. Fields in this report are automatically populated from committed recommendations or manual orders placed by the analyst.

TABLE 106: VAULT ORDERS REPORT DESCRIPTION

Field	Description
Vault ID	The unique identifier for the Cashpoint
Funding Source	The Cashpoint ID of the vault that will supply the cash to the vault
Report Sorted by	Determines the way the report is displayed. The available options are: <ul style="list-style-type: none">• Due Date• Order Date
Start Date	Starting date of the report
End Date	Ending date of the report
Action	The type of service that will be performed for the corresponding Cashpoint
Conf #	The confirmation number of the order
Order Date	The date the order was placed
Order Src.	The status of the order source.
Denom.	Denomination ID of the order
Amount	The amount of the order

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9.1.4.5 Vault Recommendations

The vault Recommendations report allows the analyst to list all recommendations that have been generated for a specific vault or all vaults assigned to the user. The recommendation process automatically populates the tables related to the recommendations. There is no other way in OptiVault to create a recommendation. In situations where no recommendations are created, the user will be able to create a manual order, if necessary, but this new record will be treated as an order, not a recommendation.

TABLE 107: VAULT RECOMMENDATIONS REPORT DESCRIPTION

Field	Description
Vault ID	The unique identifier for the Cashpoint
Start Date	Starting date of the report
End Date	Ending date of the report
Action	The type of service that will be performed for the corresponding Cashpoint

Field	Description
Due Date	The date the recommendation is scheduled to be completed if the order is completed
Funding Source	The funding Cashpoint ID for the recommendation.
Denomination	Denomination ID of the order
Amount	The amount of the order
Total Amount	A summary record is shown at the end of each Cashpoint's recommendations to show the total amount of the orders.

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9.1.4.6 Vault Variance

This report helps control the difference between what has been recommended and the orders that have been placed. This report will also monitor the difference between the forecast(aggregation) versus the actual data.

Note: The report will allow the user to filter the difference based on the percentage(%) between recommendations and orders to make the report easier to handle when dealing with large amounts of data.

TABLE 108: VAULT VARIANCE REPORT DESCRIPTION

Field	Description
Vault ID	The unique identifier for the Cashpoint
Start Date	Starting date of the report
End Date	Ending date of the report
Schedule	The type of schedule related to the order. The available types are: <ul style="list-style-type: none">• Planned• Unplanned
Action	The type of service that will be performed for the corresponding Cashpoint The available actions are: <ul style="list-style-type: none">• Delivery• Return
Funding Source	The Cashpoint ID of the vault that will supply the cash to the Cashpoint

Field	Description
Min Variance Percent	Allows the report to be filtered by selecting the minimum variance percentage. Valid entries should be 0 to 100
Max Variance Percent	Allows the report to be filtered by selecting the maximum variance percent. Valid entries should be 0 to 100.
Denom.	Represents the vault-denomination value.
Date	Date when the recommendations were placed.
Recommended Order	Recommendation generated by OptiVault.
Ordered	Actual order committed by the user.
History	The historical order committed by the user. This number is directly taken from the Vault History Report.
Difference	Variation between the recommended order vs. the actual order. The calculation is: $[(\text{Recommended Order} - \text{Actual Order})]/[\text{Recommended Order}]$.
Diff. Percentage	% Representation of the difference between recommendations and Actual Orders.
Forecast Demand	Predicted demand. Demand = Deposits (aggregated Returns) – Withdrawals (aggregated Deliveries)
Actual Demand	Actual demand. Demand = Deposits (Actual aggregated Returns) – Withdrawals (Actual aggregated Deliveries)
Difference	Variation between the Forecasted Demand Vs the Actual Net Demand. The calculation is: $[(\text{Recommended Order} - \text{Actual Order})]/[\text{Recommended Order}]$.
Diff. Percentage	Variation, in percentages, between the Forecasted Demand Vs the Actual Net Demand.

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9.1.4.7 Custodial Inventory (CI) Position (History)

Custodial Inventory can be thought of as a holding area of cash that a center may use to keep cash off-book (meaning it does not show up in the official cash center balances). There are rules that limit how much cash can be put into the Custodial Inventory and how much the center must have in its balance before it can be put cash into the Custodial Inventory. Because of this, it is important that the Custodial Inventory be controlled by OptiCash to ensure the best possible optimization.

TABLE 109: CI POSITION HISTORY REPORT DESCRIPTION

Field	Description
Vault ID	The unique identifier for the Cashpoint
Report Date	The date for which the report will be ran
Denominations	The denominations for which balances will be reported

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9.1.4.8 Provisional Credit Report

Provisional Credits are entered at the Cashpoint level and used when there are funds within the Vault that were not reported in the balances. These credits are used to add to the vault's overall balances to ensure the correct calculations are made for the Custodial Inventory calculations.

TABLE 110: PROVISIONAL CREDIT REPORT DESCRIPTION

Field	Description
Vault ID	The unique identifier for the Cashpoint
Start Date	The starting date of the report
End Date	The ending date of the report
Date	Date of the Provisional Credit entry
Amount	The amount of the provisional credit

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9.1.4.9 Vault Transaction History

This report is used to give a daily summary of transaction history between Cashpoints.

TABLE 111: VAULT TRANSACTION HISTORY DESCRIPTION

Field	Description
Date	The date of the reported cash transactions
Cash In	The total amount of cash that came into the Cashpoint
Cash Out	The total amount of cash that left the Cashpoint to service child Cashpoint demand
Fed In	The total amount of cash that was brought into the Cashpoint from the Fed
Fed Out	The total amount of cash that was sent back to the Fed from the Cashpoint

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9.1.4.10 Vault Transaction Summary - Averages

This report gives an average, minimum and maximum of the cash transactions that occurred during a selected period.

TABLE 112: VAULT TRANSACTION SUMMARY DESCRIPTION

Field	Description
Denomination	The denomination ID being reported
Cash In	Cash that is coming into the Cashpoints from child Cashpoints
Cash Out	Cash going out to service the demand for child Cashpoints
Fed In	Cash coming into the Cashpoint from the Fed
Fed Out	Cash going out to the Fed from the Cashpoint
Minimum	The minimum amount of cash transactions for the period selected
Maximum	The maximum amount of cash transactions for the period selected
Average	The average amount of cash transactions for the period selected

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9.1.4.11 Vault Recommendations, Orders, and Shipments

This report gives a summary of the orders and shipments that were recommended as well as ordered for a specific period.

TABLE 113: VAULT RECOMMENDATIONS, ORDERS, AND SHIPMENTS DESCRIPTION

Field	Description
Orders Count	The total number of orders placed during the period selected categorized by the different funding sources
Orders Amount	The total amount ordered during the period selected categorized by the different funding sources.
Shipments Count	The total number of shipments during the period selected categorized by the different funding sources

Field	Description
Shipments Amount	The total amount shipped during the period selected categorized by the different funding sources
Active Vaults	Total number of Vaults active during the period selected.

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9.1.5 Planning Reports

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- Forecast Results
- Forecast Health
- Vault Forecast Details
- Vault Forecast Summary
- Commercial Forecast Details
- Commercial Forecast Summary
- Horizons
- Horizons With CI
- OptiCash Aggregation Details
- Custodial Inventory Cap/On Book Minimum (CI CAP/OBMH) Report
- Custodial Inventory (CI) Position (Forecasted)

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9.1.5.1 Forecast Results

This report shows the forecast for all Cashpoints assigned to the user. There are no parameters to enter for this report. Clicking on the link from the reports table will automatically produce and display the report. Additionally, this report does not have the option to output as a PDF or CSV file.

TABLE 114: FORECAST RESULTS REPORT DESCRIPTION

Field	Description
Cashpoint ID	The unique identifier for the Cashpoint
Cashpoint Type	Type of Cashpoint relating to the Cashpoint ID
Status	The status of the Forecast

Field	Description
Process Executed On	The date corresponding to the last time the forecast process was run for the Cashpoint.
Forecast Exists Through	The last day for which forecast records exist
Forecast From	Starting day of the forecast
Forecast To	Ending day of the forecast
History From	Starting day of the history used to forecast the Cashpoint
History To	Ending day of the history used to forecast the Cashpoint
Horizon ID	The Forecast Horizon ID used to forecast the Cashpoint.

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9.1.5.2 Forecast Health

This report is a summary of the Forecast Health for a specific Cashpoint or all Cashpoints assigned to the user.

TABLE 115: FORECAST HEALTH REPORT DESCRIPTION

Field	Description
Cash Point	The unique identifier for the Cashpoint. The analyst has the option to report on a single Cashpoint or 'All' Cashpoints
Min %	Allows the report to be filtered by selecting the minimum variance percentage. Valid entries should be 0 to 100
Max %	Allows the report to be filtered by selecting the maximum variance percent. Valid entries should be 0 to 100.
Denomination	The denomination and quality of the forecast relating to the Cashpoint
Cashpoint Type	Type of Cashpoint relating to the Cashpoint ID
Action	The type of forecast performed. The available options will be: <ul style="list-style-type: none">• Withdrawals• Deposits• Net Demand
Forecast Health	A percentage ranging from 0 to 100 that represents the quality of the forecast with 0 being poor and 100 being perfect.

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9.1.5.3 Vault Forecast Details

The Vault Forecast Details report gives the analyst the forecasted amounts for the selected Cashpoints and options.

TABLE 116: VAULT FORECAST DETAILS REPORT DESCRIPTION

Field	Description
Vault ID	The Cashpoint ID of the vault being displayed in the report
Date	Date of the forecast record
Denomination	Denomination ID for the associated date
Quality	Quality of the denomination for the associated date
Cash In	Forecast and Actual amounts for cash into the Cashpoint
Cash Out	Forecast and Actual amounts for cash out of the Cashpoint
Net Demand	Forecast and Actual amounts for the Net Demand of the Cashpoint
Total	The total amount of the day reported
Average	The average amount for each category on the day reported.

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9.1.5.4 Vault Forecast Summary

This report gives a summary comparison of the forecast versus the actual cash transactions for the selected Cashpoints.

TABLE 117: VAULT FORECAST SUMMARY DESCRIPTION

Field	Description
Forecast Type	Allows the user to specify the type of Forecast to display. This can be one of the following options: <ul style="list-style-type: none"> • Total Vault Summary – Summarizes all Forecast Type categories • Branch Summary – Summarizes all Branch Forecasts • ATM Summary – Summarizes all ATM Forecasts • Vault Summary – Summarizes all Vault Forecasts

Field	Description
Cash In - Forecast	Displays the amount of cash that was Forecasted to come into the Cashpoint from child Cashpoints.
Cash In - Actual	Displays the actual amount of cash that was brought into the Cashpoint from child Cashpoints
Cash Out - Forecast	Displays the amount of cash that was Forecasted to go out to child Cashpoints to service demand.
Cash Out - Actual	Displays the actual amount of cash that was sent to child Cashpoints to service demand
Net Demand - Forecast	Displays the forecasted amount of cash Net Demand
Net Demand - Actual	Displays the actual amount of cash Net Demand.

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9.1.5.5 Commercial Forecast Details

The Commercial Forecast Details report gives the analyst the forecasted amounts for the selected Cashpoints and options.

TABLE 118: COMMERCIAL FORECAST DETAILS REPORT DESCRIPTION

Field	Description
Vault ID	The Cashpoint ID of the vault being displayed in the report
Date	Date of the forecast record
Denomination	Denomination ID for the associated date
Quality	Quality of the denomination for the associated date
Cash In	Forecast and Actual amounts for cash into the Cashpoint
Cash Out	Forecast and Actual amounts for cash out of the Cashpoint
Net Demand	Forecast and Actual amounts for the Net Demand of the Cashpoint
Total	The total amount of the day reported
Average	The average amount for each category on the day reported.

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9.1.5.6 Commercial Forecast Summary

TABLE 119: COMMERCIAL FORECAST SUMMARY DESCRIPTION

Field	Description
Deposit - Forecast	Displays the total and average of the denomination that was forecasted to be deposited during the selected period
Deposit - Actual	Displays the total and average actual amount of the denomination that was deposited during the selected period
Withdrawals - Forecast	Displays the total and average of the denomination that was forecasted to be withdrawn during the selected period
Withdrawals - Actual	Displays the total and average actual amount that was withdrawn during the selected period
Net Demand - Forecast	Displays the total and average Net Demand of the denomination that was forecasted during the selected period
Net Demand - Actual	Displays the total and average actual Net Demand that was reported during the selected period.

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9.1.5.7 Horizons

The Vault Horizon Report shows the analyst the currently planned horizon for the vault based on the last recommendation process run. This information is used to view the potential balances and deliveries for the upcoming 45 days to help the analyst view the future needs of the vault and the expected deliveries.

TABLE 120: VAULT HORIZON DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Display CI	When selected displays the Custodial Inventory entries along with the Cashpoint's Horizon
Submit Button	Submits the report to be displayed based on the selected options.
Currency	OptiVault short name of the currency to which the reported denominations are a part of

Field	Description
Denom.	Vault Denomination
Opening Bal.	Vault Opening Balance on the given date
Normal Del.	Normal Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Del.	Normal Deliveries to the Vault from Custodial Inventory.
Normal Ret.	Normal Returns from the Vault to all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Ret.	Normal Returns from the Vault to Custodial Inventory.
Unpl. Del.	Emergency Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Unpl.Del.	Emergency Deliveries to the Vault from Custodial Inventory.
Unpl. Ret.	Emergency Returns from the Vault to all funding sources EXCEPT OptiCash Cashpoints.
CI Unpl.Ret.	Emergency Returns from the Vault to Custodial Inventory.
Agg. Ret.	Aggregate Returns to the Vault from the attached OptiCash Cashpoints
Agg. Ord.	Aggregate Orders from the Vault to attached OptiCash Cashpoints
Tot. Net Dem.	Net Demand on the Vault for the given date
Closing Bal.	Vault Closing Balance on the given date
Reqd. Bal.	Vault Required Balance on the given date
Denom.	Vault Denomination
Opening Bal.	Vault Opening Balance on the given date
Normal Del.	Normal Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Del.	Normal Deliveries to the Vault from Custodial Inventory.

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9.1.5.8 Horizons With CI

The Vault Horizon Report shows the analyst the currently planned horizon for the vault based on the last recommendation process run. This information is used to view the

potential balances and deliveries for the upcoming 45 days to help the analyst view the future needs of the vault and the expected deliveries.

TABLE 121: VAULT HORIZON DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Display CI	When selected displays the Custodial Inventory entries along with the Cashpoint's Horizon
Submit Button	Submits the report to be displayed based on the selected options.
Currency	OptiVault short name of the currency to which the reported denominations are a part of
Denom.	Vault Denomination
Opening Bal.	Vault Opening Balance on the given date
Normal Del.	Normal Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Del.	Normal Deliveries to the Vault from Custodial Inventory.
Normal Ret.	Normal Returns from the Vault to all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Ret.	Normal Returns from the Vault to Custodial Inventory.
Unpl. Del.	Emergency Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Unpl.Del.	Emergency Deliveries to the Vault from Custodial Inventory.
Unpl. Ret.	Emergency Returns from the Vault to all funding sources EXCEPT OptiCash Cashpoints.
CI Unpl.Ret.	Emergency Returns from the Vault to Custodial Inventory.
Agg. Ret.	Aggregate Returns to the Vault from the attached OptiCash Cashpoints
Agg. Ord.	Aggregate Orders from the Vault to attached OptiCash Cashpoints
Tot. Net Dem.	Net Demand on the Vault for the given date
Closing Bal.	Vault Closing Balance on the given date
Reqd. Bal.	Vault Required Balance on the given date

Field	Description
Denom.	Vault Denomination
Opening Bal.	Vault Opening Balance on the given date
Normal Del.	Normal Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Del.	Normal Deliveries to the Vault from Custodial Inventory.

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9.1.5.9 OptiCash Aggregation Details

This report gives users a detailed breakdown of the aggregation that was performed from OptiCash into OptiVault for a single vault.

TABLE 122: OPTICASH AGGREGATION DETAILS REPORT DESCRIPTION

Field	Description
Vault ID	The unique identifier for the Cashpoint
Start Date	The starting date of the report
End Date	The ending date of the report
Qual	Quality of the denominations that will be reported
Date	Date of the entry
Cashpoint	The Cashpoint ID of the Cashpoint being aggregated
Denom	Denomination being reported
Forecasted ATM/Branch Return	Aggregated return values from the ATM and Branch Cashpoints
Actual ATM/Branch Return	Actual return values from the ATM and Branch Cashpoints
Forecast ATM/Branch Delivery	Aggregated delivery values from the ATM and Branch Cashpoints
Actual ATM/Branch Delivery	Actual delivery values from the ATM and Branch Cashpoints
Submit Button	Generates the report based on the selected options.

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9.1.5.10 Custodial Inventory Cap/On Book Minimum (CI CAP/OBMH) Report

The CI CAP/OBMH Report allows the analyst to view a combination of history and predicted horizon for Custodial Inventory Cashpoints and they are On Book Minimum Holding and Cap figures.

TABLE 123: CI CAP/OBMH REPORT DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
View Button	Submits the report to be displayed based on the Cashpoint IDs and dates selected.
CI ID(s)	Custodial Inventory Vault ID.
Date	Date to which the remaining balance columns apply.
OBMH	On Book Minimum Holdings
Total Verified	Balance of all verified vault cash
Off-site Verified	Total required off-site emergency cash
On-site Verified	All verified vault cash less off-site cash
CI Denominations (Verified)	Balance of verified CI denominations
Off-site CI Verified	Total required off-site emergency cash in CI denominations
On-site CI Verified	Verified CI less off-site CI cash
CI Ratio	The ratio of verified CI denominations to all verified on-site vault cash
Unverified	Unverified cash
Fed Credit	Fed Credit is calculated by applying the CI Ratio to unverified cash
CI Credit	Sum of verified CI denominations and the Fed Credit for unverified cash
Actual CI	Historically recorded Custodial Inventory closing balance
CI Cap	Custodial inventory calculated constraint
Predicted	Indicates if the balance information for this date is actual or forecasted.
Total Credit	Total credit towards CI Minimum Holdings less OBMH
Remaining CI	The CI Cap less the actual CI Balance

Field	Description
Recommended	Recommended transfer to or removal from Custodial inventory based on the Total Credit vs. the Remaining CI

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9.1.5.11 Custodial Inventory (CI) Position (Forecasted)

This report is similar to the Custodial Inventory (CI) Position History Report but along with the actual historic data, the projected data is displayed with it. This allows the analyst to see what the projections were versus the actual data.

TABLE 124: CI POSITION FORECASTED REPORT DESCRIPTION

Field	Description
Vault ID	The unique identifier for the Cashpoint
Start Date	The starting date of the report
End Date	The ending date of the report
Date	Date of the Provisional Credit entry
Amount	The amount of the provisional credit
Submit Button	Generates the report based on the selected options.

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9.1.5.12 Trading Market Order Matching

The report displays recommendations (delivery & return) arranged to facilitate the recognition of opportunities to serve a vault's need with another vault's excess.

The report can be filtered by Cashpoint ID, Date Range, Currency, and Orders or Recommendations.

TABLE 125: TRADING MARKET ORDER MATCHING FIELD DESCRIPTIONS

Field	Description
Vault ID	Identifies the Vault with the Need for Cash
Denomination	Denomination Ordered or Recommended
Quality	Cash quality of the order being matched
Source	Cashpoint ID of the potential Trading Market Funding Source for the need
Order Date / Due Date	Dates the Order is placed in the system and the corresponding Due Date

Field	Description
Emergency Delivery Amount (funding source)	Amount of Cash if an Emergency Delivery
Delivery Amount (funding source)	Amount of Cash if a Normal Delivery
Return Amount (funding source)	Amount of Cash if a Normal Return

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9.1.6 Management Information Reports

The following is a summary of the information that will be covered along with hyperlinks to each topic:

- Costs (Actual Vs. Projected)
- Costs (Actual)
- Total Carrier
- History Vault Stock Holding
- Forecast Vault Stock Holding
- Commercial and Branch Historical
- ATM & Branch Demand
- Cross-Shipping Alerts

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9.1.6.1 Costs (Actual Vs. Projected)

This report allows the analyst to compare the Actual costs incurred versus the Projected costs that were calculated in the past. In this way, the analyst can use this data to help fine-tune the Cashpoints and help improve the performance and optimization of the network.

TABLE 126: COSTS ACTUAL VS. PROJECTED REPORT DESCRIPTION

Field	Description
Select Button	Allows the user to choose Cashpoints to be included in the report. For more information on Cashpoint Selection, Cashpoint Selector
Start Date	Starting date of the report
End Date	Ending date of the report

Field	Description
Time Period	<p>Determines how the report is displayed and summarized.</p> <p>The available options are:</p> <ul style="list-style-type: none"> • Daily • Monthly <p>Additionally, the type of summary can be displayed</p> <p>The available summary options are:</p> <ul style="list-style-type: none"> • Network Summary - Summarizes the entire network based on the Cashpoints selected • Detail - Provides daily details for each Cashpoint and each day • Depot Summary - Summarizes the report by depot based on the Cashpoints and dates selected • Cashpoint Summary - Summarizes the report by Cashpoint based on the Cashpoints and dates selected
Denomination	Allows the analyst to select 'All' denominations or one particular denomination
Quality	Displays the quality of the denominations selected or 'All' Qualities.
Currency	OptiVault reflects the currency that the denomination(s) being reported is associated with
Cashpoint ID	Unique alphanumeric identification of the Cashpoint.
Balance Cost	<p>Balance cost details will give an overview of costs associated with cash being held in a Cashpoint. Balance Costs are the sum of the following costs:</p> <p>Balance Cost = Holding Cost + Insurance Cost + Out-of-Cash Cost</p> <p>Holding Costs - costs associated with holding too much cash (for instance, lost potential savings from interest rates).</p> <p>Holding Costs = $(\text{Closing Balance} \times \text{Interest Rate \%}) / \text{Number of Days in a Year} \times \text{Days Cash is Held in Cashpoint}$</p> <p>Insurance Costs are based on currency insurance rate that is charged to insure funds kept in Cashpoints.</p> <p>Insurance Costs = $(\text{Closing Balance} \times \text{Insurance Rate \%}) / \text{Number of Days in a Year}$</p> <p>Out-of-Cash Costs: any costs associated with out-of-cash indicated by the cost set by the institution such as penalty, admin fee, etc.</p> <p>Out-of-Cash Costs = Cost per Outage Amount x Number of Outages*, *where Outage is when Closing Balance is less than the threshold amount defined in <i>Processing tab → Cost Calculation → Cost Options</i>.</p>
Carrier Cost	Carrier costs will display the costs associated with a delivery or return service, including handling, fixed and variable costs. These costs are defined at a Cashpoint level under the <i>Advanced tab → Costs</i> .

Field	Description
	<p>Handling Costs: Total internal costs associated with the processing/handling of cash delivery. This may include the value of employees' time required during the delivery, and any other overhead or administrative costs (defined as Delivery and Return Handling Costs for branches, Replenishment Costs for ATMs).</p> <p>Fixed Costs: cost per delivery regardless of the amount of cash being transported.</p> <p>Variable Costs: costs based on the amount of cash being transported. In some cases, variable costs may be on a sliding scale or range (defined by the Range button).</p> <p>Carrier Costs = (Handling Costs + Fixed Costs + Variable Costs) x Number of Deliveries</p>
Dead Money Cost	<p>Dead money costs are associated with transit costs, i.e., costs of 'dead cash' while being in transit.</p> <p>Dead Money Costs = (Delivery Amount x Interest Rate %) / Number of Days in a Year x Delivery Time* + (Return Amount x Interest Rate %) / Number of Days in a Year x Return Time*</p> <p>*number of days for Return and Delivery Time defined in <i>Processing tab → Cost Calculation → Cost Options</i>.</p>
Total Cost	Total costs will be the sum of all the costs in the above categories.

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9.1.6.2 Costs (Actual)

This report will show a breakdown of the actual costs incurred as calculated by OptiVault for one or a number of Cashpoints, denominations, and qualities.

TABLE 127: COSTS ACTUAL REPORT DESCRIPTION

Field	Description
Select Button	Allows the user to choose Cashpoints to be included in the report. For more information on Cashpoint Selection, Cashpoint Selector
Start Date	Starting date of the report
End Date	Ending date of the report
Time Period	<p>Determines how the report is displayed and summarized.</p> <p>The available options are:</p> <ul style="list-style-type: none"> • Daily • Monthly <p>Additionally, the type of summary can be displayed</p> <p>The available summary options are:</p>

Field	Description
	<ul style="list-style-type: none"> Network Summary - Summarizes the entire network based on the Cashpoints selected Detail - Provides daily details for each Cashpoint and each day Depot Summary - Summarizes the report by depot based on the Cashpoints and dates selected Cashpoint Summary - Summarizes the report by Cashpoint based on the Cashpoints and dates selected
Denomination	Allows the analyst to select 'All' denominations or one particular denomination
Quality	Displays the quality of the denominations selected or 'All' Qualities.
Cashpoint ID	Unique alpha-numeric identification of the Cashpoint.
Currency	OptiVault reflects the currency that the denomination(s) being reported is associated with
Balance Cost	<p>Balance cost details will give an overview of costs associated with cash being held in a Cashpoint. Balance Costs are the sum of the following costs:</p> $\text{Balance Cost} = \text{Holding Cost} + \text{Insurance Cost} + \text{Out-of-Cash Cost}$ <p>Holding Costs - costs associated with holding too much cash (for instance, lost potential savings from interest rates).</p> $\text{Holding Costs} = (\text{Closing Balance} \times \text{Interest Rate \%}) / (\text{Number of Days in a Year} \times \text{Days Cash is Held in Cashpoint})$ <p>Insurance Costs are based on currency insurance rate that is charged to insure funds kept in Cashpoints.</p> $\text{Insurance Costs} = (\text{Closing Balance} \times \text{Insurance Rate \%}) / \text{Number of Days in a Year}$ <p>Out-of-Cash Costs: any costs associated with out-of-cash indicated by the cost set by the institution such as penalty, admin fee, etc.</p> $\text{Out-of-Cash Costs} = \text{Cost per Outage Amount} \times \text{Number of Outages*},$ <p>*where Outage is when Closing Balance is less than the threshold amount defined in <i>Processing tab → Cost Calculation → Cost Options</i>.</p>

Field	Description
Carrier Cost	<p>Carrier costs will display the costs associated with a delivery or return service, including handling, fixed and variable costs. These costs are defined at a Cashpoint level under the <i>Advanced tab</i> → <i>Costs</i>.</p> <p>Handling Costs: Total internal costs associated with the processing/handling of cash delivery. This may include the value of employees' time required during the delivery, and any other overhead or administrative costs (defined as Delivery and Return Handling Costs for branches, Replenishment Costs for ATMs).</p> <p>Fixed Costs: cost per delivery regardless of the amount of cash being transported.</p> <p>Variable Costs: costs based on the amount of cash being transported. In some cases, variable costs may be on a sliding scale or range (defined by the Range button). $\text{Carrier Costs} = (\text{Handling Costs} + \text{Fixed Costs} + \text{Variable Costs}) \times \text{Number of Deliveries}$</p>
Dead Money Cost	<p>Dead money costs are associated with transit costs, i.e., costs of 'dead cash' while being in transit.</p> $\text{Dead Money Costs} = (\text{Delivery Amount} \times \text{Interest Rate \%}) / \text{Number of Days in a Year} \times \text{Delivery Time*} + (\text{Return Amount} \times \text{Interest Rate \%}) / \text{Number of Days in a Year} \times \text{Return Time*}$ <p>*number of days for Return and Delivery Time defined in Processing tab → Cost Calculation → Cost Options.</p>
Total Cost	Total costs will be the sum of all the costs in the above categories.

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9.1.6.3 Total Carrier

This report allows the analyst to view and compare a summary of balances and transactions by date for one or a number of Cashpoints as well as denominations and quality.

TABLE 128: TOTAL CARRIER REPORT DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report

Field	Description
Cash Point	Cashpoints that will be selected for the report. One or several Cashpoints may be selected. To select more than one Cashpoint, hold down the CTRL button while clicking the Cashpoints
Denom	Denominations that will be selected for the report. One or several Denominations may be selected. To select more than one denomination, hold down the CTRL button while clicking the Denominations
Qual	Qualities that will be selected for the report. One or several Denomination qualities may be selected. To select more than one quality, hold down the CTRL button while clicking the Quality.
History Date	Date in history for the Cashpoints selected
Denomination	Denomination and quality that is being reported
Opening Balance	Combined opening balance for the Cashpoints selected
Normal Delivery	Normal Deliveries for the Cashpoints selected
Normal Return	Normal Returns for the Cashpoints selected
Emergency Del	Emergency Deliveries for the Cashpoints selected
Emergency Ret	Normal Returns for the Cashpoints selected
Agg. Ret	Aggregated Returns for the Cashpoints selected
Agg Ord	Aggregated Orders for the Cashpoints selected
Net Demand	Total Net Demand for the Cashpoints selected
Closing Balance	Total closing balance for the Cashpoints selected

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9.1.6.4 History Vault Stock Holding

This report allows the analyst to view Historic holding amounts for one or a number of Cashpoints. The report displays a summary total of holdings by date and quality for all Cashpoints selected. This report is only available in PDF or CSV.

TABLE 129: HISTORY VAULT STOCK HOLDING REPORT DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report

Field	Description
Cash Point	The Cashpoint ID that will be reported
Balance Date	Date of the reported entry
Denomination	Denomination and Quality on the reporting date
Stock Holding	The total holding amount is based on the Cashpoints selected.

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9.1.6.5 Forecast Vault Stock Holding

This report allows the analyst to view future forecasted Holding amounts for one or a number of Cashpoints. This report is only available in PDF or CSV.

TABLE 130: FORECAST VAULT STOCK HOLDING REPORT DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Cash Point	The Cashpoint ID that will be reported
Balance Date	Date of the reported entry
Denomination	Denomination and Quality on the reporting date
Stock Holding	The total holding amount is based on the Cashpoints selected.

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9.1.6.6 Commercial and Branch Historical

This report allows the analyst to view a summary of Historic Branch and Commercial Net Demand by month for one or a number of Cashpoints. This report is only available in PDF or CSV.

TABLE 131: COMMERCIAL AND BRANCH HISTORICAL REPORT DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Cash Point	The Cashpoint ID that will be reported
Month and Year	Month and year of the reported summary

Field	Description
Denomination	Denomination on the reporting month
Deposits	Total Deposits for the selected Cashpoints during the month and year reported
Withdrawals	Total Withdrawals for the selected Cashpoints during the month and year reported.

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9.1.6.7 ATM & Branch Demand

This report allows the analyst to view Historic ATM and Branch Orders for one or a number of Cashpoints summarized by month. This report is only available in PDF or CSV.

TABLE 132: ATM AND BRANCH DEMAND REPORT DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Cash Point	The Cashpoint ID that will be reported
Month and Year	Month and year of the reported summary
Denomination	Denomination on the reporting month
ATM Orders	Total ATM Orders for the selected Cashpoints during the month and year reported
Branch Orders	Total Branch Orders for the selected Cashpoints during the month and year reported.

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9.1.6.8 Cross-Shipping Alerts

When Cross-Shipping is used in OptiVault, the Cross-Shipping Alerts report will identify potential infractions that could result in higher costs.

TABLE 133: CROSS-SHIPPING ALERTS REPORT DESCRIPTION

Field	Description
Vault Id	Represents the vault ID where ATMs and Branches are linked.
Denom.	Represents the vault denomination where a Cross-Shipping Infraction may occur.

Field	Description
Qual.	Represents the vault Quality where a Cross-Shipping Infraction may occur.
Date	Represents the actual date where a Cross-Shipping Infraction may occur.
Alert	This column will show a dynamic warning message depending on the action that the system took in lewd of Cross-Shipping Constraints. The current return could result in a cross-ship because of a delivery in another quality A Delivery has been merged with a previous return to avoid Cross-Shipping A Return has been merged with a later delivery to avoid Cross-Shipping The current return could incur a cross-shipping penalty
Amount	The amount adjusted to avoid Cross-Shipping Infraction or the amount that may cause a Cross-Shipping Infraction.

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9.1.7 Cashpoint Reports

Some reports are only available at the Cashpoint level. These reports are specific to the Cashpoint and display information that is useful to the analyst to report or analysis.

The following Reports are available at the Cashpoint level:

- Vault Horizon Report
- Vault History Report
- Vault Forecast Report
- Commercial History Report
- Commercial Forecast Report

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9.1.7.1 **Vault Horizon Report**

The Vault Horizon Report shows the analyst the currently planned horizon for the vault based on the last recommendation process run. This information is used to view the

potential balances and deliveries for the upcoming 45 days to help the analyst view the future needs of the vault and the expected deliveries.

TABLE 134: VAULT HORIZON DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Display CI	When selected displays the Custodial Inventory entries along with the Cashpoint's Horizon
Submit Button	Submits the report to be displayed based on the selected options.
Currency	Vault Currency
Denom.	Vault Denomination relating to the respective currencies
Opening Bal.	Vault Opening Balance on the given date
Normal Del.	Normal Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Del.	Normal Deliveries to the Vault from Custodial Inventory.
Normal Ret.	Normal Returns from the Vault to all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Ret.	Normal Returns from the Vault to Custodial Inventory.
Unpl. Del.	Emergency Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Unpl.Del.	Emergency Deliveries to the Vault from Custodial Inventory.
Unpl. Ret.	Emergency Returns from the Vault to all funding sources EXCEPT OptiCash Cashpoints.
CI Unpl.Ret.	Emergency Returns from the Vault to Custodial Inventory.
Agg. Ret.	Aggregate Returns to the Vault from the attached OptiCash Cashpoints
Agg. Ord.	Aggregate Orders from the Vault to attached OptiCash Cashpoints
Tot. Net Dem.	Net Demand on the Vault for the given date
Closing Bal.	Vault Closing Balance on the given date
Reqd. Bal.	Vault Required Balance on the given date
Denom.	Vault Denomination

Field	Description
Opening Bal.	Vault Opening Balance on the given date
Normal Del.	Normal Deliveries to the Vault from all funding sources EXCEPT OptiCash Cashpoints.
CI Norm.Del.	Normal Deliveries to the Vault from Custodial Inventory.

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9.1.7.2 Vault History Report

The Vault History report shows the analyst the historical data that has been loaded into the system for the selected vault. The analyst has the ability to exclude data from the forecast from this page.

TABLE 135: VAULT HISTORY DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Submit Button	Displays the report based on the dates selected
Currency	Shows the currency name being reported
Denomination	Denomination and quality of for the date selected
Closing Balance	The closing balance on the date reported
Date	Date of the reporting day
Not Available	The cash not available for distribution by the vault
Total Cash In	The total amount of cash coming into the vault is based on the different Funding source elements
Total Cash Out	The total amount of the cash going out to the funding sources.
Branch Orders>Returns	Total orders and returns to branches
ATM Orders>Returns	Total orders and returns to ATMs
Central Bank Deliveries	Total deliveries into the Vault from the central bank
Central Bank Returns	Total returns to the central bank from the vault
Vault Deliveries	Total deliveries from other vaults
Vault Returns	Total returns to other vaults
Other Source Deliveries	Total deliveries from External Sources

Field	Description
Other Source Returns	Total returns to External Sources
Exclude Button	<p>Excludes the history record for the date and quality thereby excluding it from being used in the forecast</p> <p>Upon clicking the Exclude Button, the analyst can choose to exclude Deposits, Withdrawals, or both from the popup window.</p> <p>Note: The exclusion entries must be saved for them to take effect in the database. This is done by clicking the 'Save' button at the bottom of the page.</p>
Save Exclusion Entries Button	Saves the exclusion settings for the history records displayed.
View Button	Displays the report based on the dates selected.

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9.1.7.3 Vault Forecast Report

The Vault Forecast Report allows the analyst to view the forecast results for a particular vault and time period. The analyst has many options as to the data that is viewed for dates, forecast type, denominations, and qualities.

TABLE 136: VAULT FORECAST DESCRIPTION

Field	Description
Forecast	<p>Allows the analyst to select the type of forecast values to display.</p> <p>The available options are:</p> <ul style="list-style-type: none"> • Total Vault Forecast – Displays the total of all the forecast elements • Branch Details – Displays the details of the branch element of the forecast • ATM Details – Displays the details of the ATM element of the forecast • Vault Details – Displays the details of the Vault element of the forecast • Commercial Details – Displays the details of the Commercial element of the forecast
Start Date	Starting date of the report
End Date	Ending date of the report
Denom	Denomination ID that will be reported

Field	Description
Qual	Quality of the denomination that will be reported
Date	Date of the reporting forecast
Denomination	Denomination relating to the date of the report
Cash In	Shows the forecast and actual values of the forecast based on the type of forecast selected
Cash Out	Shows the forecast and actual values of the forecast based on the type of forecast selected
Net Demand	Shows the total net demand values of the forecast based on the type of forecast selected
Submit Button	Submits the report to be viewed based on the options selected.

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9.1.7.4 Commercial History Report

The Commercial History Report shows the analyst the historical data that has been loaded into the system for the selected Commercial Cashpoint. The analyst has the ability to exclude data from the forecast from this page.

TABLE 137: COMMERCIAL HISTORY DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Date	Date of the reporting day
Denomination	Denomination and quality relating to the date of the report
Deposits	Deposits into the Vault for the quality and denomination of the report
Withdrawals	Withdrawals from the Vault for the quality and denomination of the report
Exclude Button	Excludes the history record for the date and quality thereby excluding it from being used in the forecast Upon clicking the Exclude Button, the analyst can choose to exclude Deposits, Withdrawals, or both from the popup window.

Field	Description
	Note: The exclusion entries must be saved for them to take effect in the database. This is done by clicking the ' Save ' button at the bottom of the page.
Save Button	Saves the exclusion settings for the history records displayed.
Submit Button	Submits the report to be viewed based on the options selected.

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9.1.7.5 Commercial Forecast Report

The Commercial Forecast Report allows the analyst to view the forecast results for a particular vault and time period. The analyst has many options as to the data that is viewed for dates, forecast type, denominations, and qualities.

TABLE 138: COMMERCIAL FORECAST DESCRIPTION

Field	Description
Start Date	Starting date of the report
End Date	Ending date of the report
Denom	Denomination ID that will be reported
Qual	Quality of the denomination that will be reported
Date	Date of the reporting forecast
Denomination	Denomination relating to the date of the report
Cash In	Shows the forecast and actual values of the forecast based on the type of forecast selected
Cash Out	Shows the forecast and actual values of the forecast based on the type of forecast selected
Net Demand	Shows the total net demand values of the forecast based on the type of forecast selected
Submit Button	Submits the report to be viewed based on the options selected.
Commercial Forecast Graph Link	A hyperlink that navigates the user to the Forecast Graph page.

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