General Admin Guide Part 1

Basware P2P 18.2

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1 Introduction to Basware P2P Administration

This chapter outlines the purpose of administrative data in the system. Many of the tasks mentioned below are set up during the course of a scheduled implementation.

Occasionally, maintenance tasks in system administration need to be completed. For example, the organization may re-engineer the existing workflow process or application behavior. Based on the business process and data elements, access to system behavior, which includes the bullet points below, may be necessary in order to make configuration changes. Further details on the potential change areas are mentioned throughout this chapter.

1.1 Configuring the Basware P2P System

Before using Basware P2P, the system needs to be configured to support the organization's business processes. The data entered during this configuration process affects the following:

- Catalog Data
- User Data
- Accounting Practices
- System Security

Administration Page

The Administration page is the starting place for all administrative tasks. During implementation, please become familiar with the available links. From the home page, click the Administration icon on the menu bar to access the menus and sub-menus for this page.

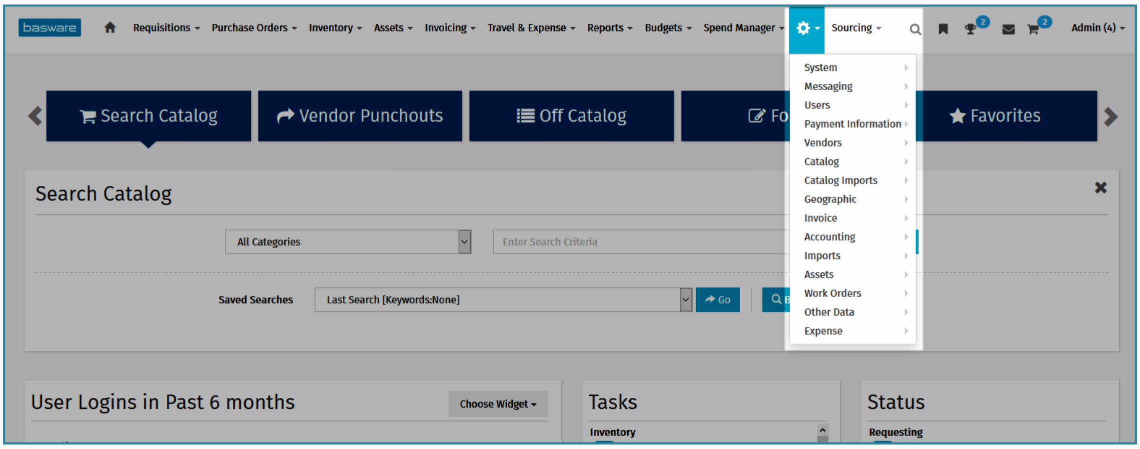


Figure 1: Administration Menu

1.2 Administrative Data Configuration Process

This section describes the main tasks completed during administrative data configuration. Several of these topics are explained in detail in the chapters that follow.

Process Flow

The specific order for defining administrative data is defined below.

Step Number	Step	Description	Responsibility
1	Define Inventory-Specific Data	Define inventory system settings, warehouse groups, and warehouses. Only required if you plan to use the inventory functionality.	Basware Technical Analyst, Basware Consultant, your project manager
2	Define Security Data	Create companies, locations, groups, users, user attribute types, and permissions	Basware Consultant, your project manager
3	Define Catalog Data	Create vendors, payment times, items, manufacturers, and other catalog data	Basware Consultant, your project manager
4	Complete System Tasks	Create system settings and scheduled tasks	Basware Consultant, your project manager
5	Create Rules	Create rules to define the way order requests are processed.	Basware Consultant, your project manager

1.3 System Behaviors

The system follows a logical pattern as far as system behavior is concerned. The behavior of the system is a direct result of how the application is configured. System configuration consists of the client data (users, vendors, locations, account codes, etc.) as well as the system security components that are mentioned below.

As an example, the Purchase Manager module usually follows the following behavior from a workflow perspective:

- Requesting - The process that users follow in order to place items in a shopping cart from either internal or external catalogs. Once items have been placed into a shopping cart, an order request can be created.
- Approvals - While an optional step, many organizations require that requests follow a predetermined approval process. This approval process/structure is built using the rules that are mentioned in the System Security section below.
- Purchasing - If/once approvals are given, purchase orders can be created and communicated to the vendor. Communication can be performed either manually or automatically, depending on the business process requirements of the client.

- Receiving - Purchase orders should be received in the application in a best practices environment before invoice entry takes place. Receiving is the method by which the user/ receiver matches the purchase order line items with the material that was delivered to their respective location.
- Invoice Entry - Normally, as the last step in the traditional procurement cycle, an accounting clerk enters an invoice to be paid against a designated purchase order.

Each module in the system follows its own designated system behavior depending on the configuration of the application. As such, system behavior is a highly configurable part of the overall suite of products and is undertaken by both the Basware Implementation Team and Client Care Team.

1.4 System Layout

The layout of the system is also highly configurable as a direct result of the system security. Based on the system settings set for the application the view/layout can be modified. The layout can be defined as what the user sees as default behavior on certain application pages as well as how application links are used to take a user from one page to another.

Data + content + configuration are combined to help determine the overall layout of the entire application.

1.5 Managing Security

The security of the system is based on three primary concentration points. Each point has a specific impact on the overall application in terms of behavior and needs to be understood before any system configuration activities take place. These are

- System Settings
- Permissions
- Rules

By System Settings

System settings are the switches/toggles that are used to govern application behavior. These settings allow the system to be very flexible in terms of helping an organization meet their respective business objectives. Administrators should understand that these switches are global in nature. Any change that is made to system settings does affect the entire application. It is generally recommended that clients consult with Basware Client Care before making any changes to system settings.

By Permissions

Permissions are used to help govern application access rights. For example, in order to be able to approve requests within the system, a user or a group of users must have a specific permission. Where possible, permissions should be enabled at the group level. Enabling permissions at the group level results in easier overall system administration. However, please note that permissions can be given to a specific user as the organization’s business process dictates.

By Rules

Rules help to govern workflow. The most common types of rules that are set up within the application help determine workflow approval routing in the Purchase Manager and Invoice Manager modules. Rules can be created and maintained separately or they can be grouped together in various chain scenarios.

2 System Setup

This chapter outlines the detailed administration components of the system. Many of the capabilities mentioned in this chapter affect the global behavior of the system.

System setup is an integral part of the system. These components are normally set up and maintained by the organization's administrator. As changes and/or updates to the areas mentioned in this chapter affect the behavior of the system, Basware recommends that changes are made in the training environment first before making any production related changes.

2.1 System Settings

System settings govern how the system presents itself to users. It allows easy customization of the system and business practices without programming. System settings are highly customizable to fit different types of processes. There are over 500 system settings, found under the System section of the Administration menu.

The following permission is required to manage system settings:

- 18 - Manage System Settings

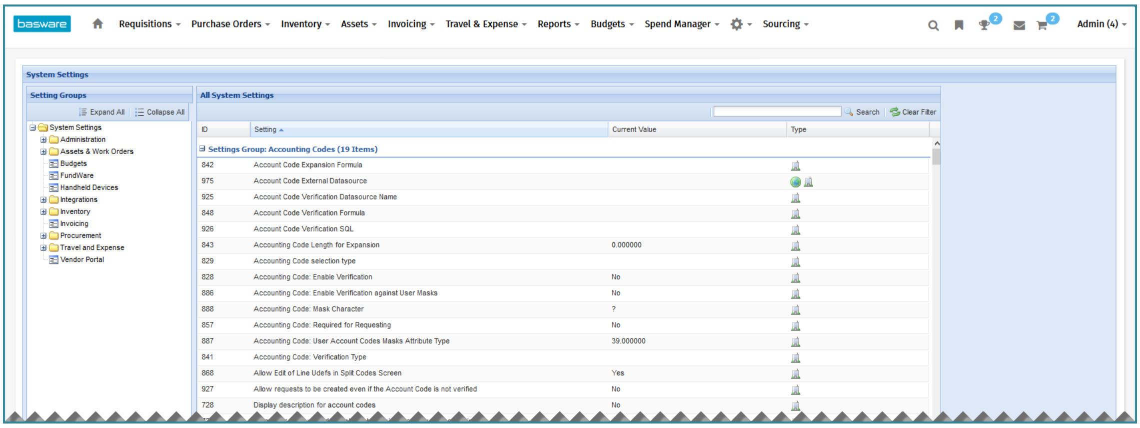


Figure 2: System Settings page

Table 1: System Settings page action definitions - main

Action	Definition
Search	Executes a system settings search based on the criteria entered in one or more of the system settings search fields.
Clear Filter	Deletes all unsaved information from this page.
Save Setting	Saves the user system setting changes and prompts the user to reset the system to update the setting changes.

Table 2: System Settings page Action Definitions - left panel

Action	Definition
Expand All	Opens all the folders in the left navigation pane.
Collapse All	Closes all the folders in the left navigation pane.
Search	Executes a system settings search based on the criteria entered in one or more of the system settings search fields.
Clear Filter	Deletes all unsaved information from this page.

Table 3: System Settings page field definitions

Field	Definition
Search	Enter a key word the search field for system settings matching that key word to be displayed. Enter the number of the system setting for that system. Note: The complete system setting number has to be entered. The system does not search for partial numbers.

Table 4: System Settings page column definitions

Column	Definition
ID	The system setting number for the corresponding system setting. Users are able to search for system settings by this number.
Setting	The name of the system setting. The name generally gives an idea of the role for the system setting. Users are able to search for to search for system settings by using key words from the system setting name.
Current Value	The current value is the value stored in the system's memory for the selected tenant. Only the first 20 characters are displayed. If there are more than 20, the twentieth character is followed by an ellipsis… To view the entire content of the current value, mouse over the current value that has an ellipsis.

Table 5: Setting Information definitions

Name	Definition
Setting ID	The system ID for the system setting.
Name	The name of the system setting. The name generally gives an idea of the role for the system setting. Users are able to search for to search for system settings by using key words from the system setting name.
Description	A description of the function of the system setting.

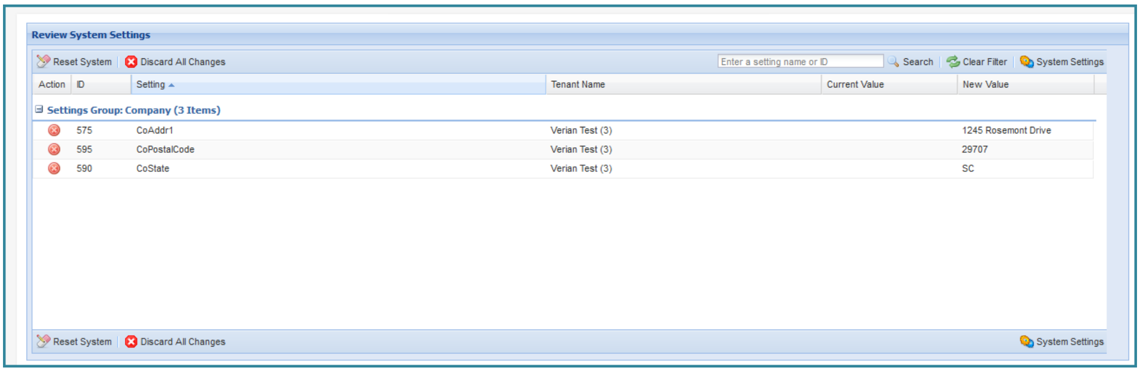


Figure 3: Review System Settings page

Table 6: Review System Settings page action definitions

Action	Definition
Reset System	Click this action to save the changes that have been made to the system settings displayed on this page. This action changes the new values to the current values in the system's memory.
Discard All Changes	Click this action to discard all current changes from the new value to the current value. A confirmation page is displayed. Note: If one system setting change needs to be discarded, click the red x icon to the left. A confirmation page is displayed.
Search	Click this action after entering a setting name or an ID number in the search field. This feature is only to search for system settings that are listed on this page.
Clear Filter	Click this action to display all the changed settings in the Review System Setting page.
System Settings	Click this action to return to the System Settings page.

Table 7: Review System Settings page column definitions

Column	Definition
ID	Displays the system ID for the system setting.
Setting	Displays the system setting.
Current Value	Displays the current value store in the memory for the tenant.
New Value	Displays the new value stored in the memory for the tenant once the system is reset.

2.1.1 System Setting Types

The Systems Settings page allows the global administrator to manage all the system settings from a central location. The settings consist of three different types categorized as follows:

Global Settings – The information here impacts the overall system and is controlled by the global administrator. The values impact all users of the system. The system administrators do not see these system settings.

Global Setting/Optionally Tenant Specific Setting – These settings are normally controlled by the global administrator. The cloud client inherits the global administrator's values for these settings when created. If the global administrator changes any of his default values, the cloud client's values remain the same. If the cloud client changes any of these values and then the global administrator changes the default values, the cloud client values remain intact. The global administrator can make changes to these system settings for each tenant.

Tenant Specific Setting – Every cloud client has a value explicitly set for this type of setting. The cloud clients always control specific values for these settings and all changes have to be made at the cloud client level. No values are inherited from the global administrator in this case – the default values take precedence. The global administrator can make changes to these system settings for each cloud client.

There are two types of administrators – global and system. Access to the settings is given based on the type of administrator logged into the system. A global administrator is given access to all three setting types, including the tenant specific settings which are the individual settings for each cloud client. On the other hand, system administrators only have access to settings pertaining to their own instance, which are settings type 2 and 3. They are only given the ability to manage settings that pertain to their particular instance.

2.1.2 Summary of Functionality

1. Users are able to select system settings groups from the collapsible menu for easy access.
2. Each settings group is divided into subsets of the settings with headings.
3. Users have the ability to search using the following options:
   - By selecting a setting group from the collapsible menu of available lists in order to view only the system settings within that group.
   - By typing in a keyword
   - By typing in the ID number of a specific system setting.

2.1.3 Requirements

The following permission is required to be able to implement this functionality:

- 18 – Manage System Settings

2.1.4 Initial Setup and Available Values for each System Setting field type

To change system settings, the user must have the permission that assigns the rights to manage the system settings. Typically, only administrators are given the right to manage and control system settings. When looking for a specific system setting, use the options described in the functionality section of this chapter.

There are several types of values of system settings that are encountered during initial setup or when continuing the application roll-out. Static values are represented using radio actions or drop-down lists.

Pop-up boxes are used when a list of options is available. User-Defined Fields require text entry and the user may be prompted to browse and select a file or path from a dialog box if required. In addition, instead of entering number values that represent definitions (for example, 1= restrict), the definitions are included in a drop-down list. The following is a summation table of system settings values.

Table 8: Available Values for each System Setting field type

Value Type	New control used
On or off	Yes or No radio buttons
Finite list of options	Pop-up window selection box
File or path	Free form text entry and a browse action that opens the browser dialog box for look-ups
Limited selection	Drop-down list

2.1.5 Assigning a System Setting

To assign system settings:

1. From the Dashboard, navigate to ⚙ > **System** > **System Settings**.
2. Search for the system setting either by ID or name and clicking **Search**.
3. Select the system setting group in the first panel.
4. Select a system setting by clicking on it.
5. Assign the value of the system setting, and then click **Save Settings**.
6. Click the **Click Here to Review** link.
7. Click **Reset System**.
8. Click **Yes** on the confirmation page.

2.1.6 Reverting Selected Changes for System Settings

To revert selected changes for system settings with changes:

1. From the Dashboard, navigate to ⚙ > **System** > **System Settings**.
2. When there are system settings that have changes and the system has not been reset the following message is displayed in the right corner "System Settings have changed. **Click here to review.**." Click **Click here to review**.
3. Click the red x icon to the left of the system setting that is not to be changed.

   A confirmation page is displayed.
4. Click **Yes**.
5. Click **OK**.

2.1.7 Reverting All Changes for System Settings with Changes

To revert all changes for system settings with changes:

1. From the Dashboard, navigate to > **System** > **System Settings**.
2. When there are system settings that have changes and the system has not been reset the following message is displayed in the right corner "System Settings have changed. **Click here to review.**." Click **Click here to review**.
3. Click **Discard all Changes**.
4. Click **Yes** on the confirmation page.
5. Click **OK**.

2.1.8 Reset System

Reset System forces the system to go back and read any system settings that have been changed. This feature avoids having to reboot the server. A new page is not displayed when this linked is clicked.

After any system setting or group of settings is updated, the system needs to be reset for the changes to take effect.

Requirements

The following permission is required to be able to implement this functionality:

- 18 – Manage System Settings

Resetting the System

Click the Reset System link on the System menu. The system immediately updates to accommodate the changes made.

Important Notes

Multi-Tenant Environment

- If the global administrator has made changes to a tenant's system settings and has not reset the system a couple of things can happen.
- If the tenant administrator attempts to reset his system by clicking the Reset System link, the Review System Settings page is displayed.
- If the tenant administrator is making changes to his system's system settings and clicks the Click Here to Review link, his changes are listed as well as the changes the global administrator made for the tenant.
- If the tenant resets his system without reverting the changes to the system settings made by the global administrator, the changes are made to the tenant's system. The changed system settings are removed from the tenant's Review System Settings page and the global administrator's Review System Settings page.
- This scenario works in reverse as well. If the tenant administrator makes changes to his system settings and has not reset the system, the above scenarios can happen with the global administrator.

Limitations

- If ColdFusion service is restarted, the current values are lost and the new values are loaded. This means that all system settings under review are applied without review. This is a fundamental limitation of this function. There is no guarantee that all system setting changes are always reviewed.
- It is possible that the application scope can timeout, which triggers an automatic global reset. This applies the system setting changes without confirmation as well. The setting for the application variable timeout can be found in the ColdFusion Administrator/Server Settings/ Memory Variables.
- In addition, any administrator capable of resetting the system is taken to the Review System Settings page to review all current changes when a system reset is performed.

Example:

Admin A changes settings 1, 2, and 3

Admin B changes settings 4 and 5

If Admin B performs a system reset, he sees the changes for all 5 settings. In other words, there is no intent to create a system of approval routing for system setting changes. If the reset is performed at the tenant level, the tenant is only able to see changes made to his system settings and no other tenants. The tenant administrator is only able to reset his system settings and no other tenants. If the reset is performed at the global administrator level, the global administrator is able to see all the tenant changes. The global administrator is able to reset all the system settings.

Note: Due to potential conflicts described above, it is always prudent to review changes and reset the system as soon as the system settings are changed.

2.2 Color Theme

The color palette gives users of the system better control of appearance of application. It also provides a consistent look and feel of the application. The pre-configured style sheets do not require any knowledge of HTML or Cascading Style Sheets. Users simply select the color scheme and the scheme is applied throughout the system.

Currently available color themes are:

- Basware
- Basware - Traditional
- Basware - Flat

Other custom themes may be available for some clients.

The following permission is required to access this functionality:

- 18 – Manage System Settings

Figure 4: Color Selection page

2.2.1 Changing the Color Theme

To change the color theme:

1. From the Dashboard, navigate to > **System** > **Colors**.
2. Select an option and click **Apply Color Scheme**.
3. Click the **Reset System Now** link to apply the color change.

2.2.2 Preview Color Scheme

This provides a pop-up preview window, dynamically generated from the style sheet attributes for a given color palette. Click the **Color Theme Name** link on the page to display the pop-up preview window.

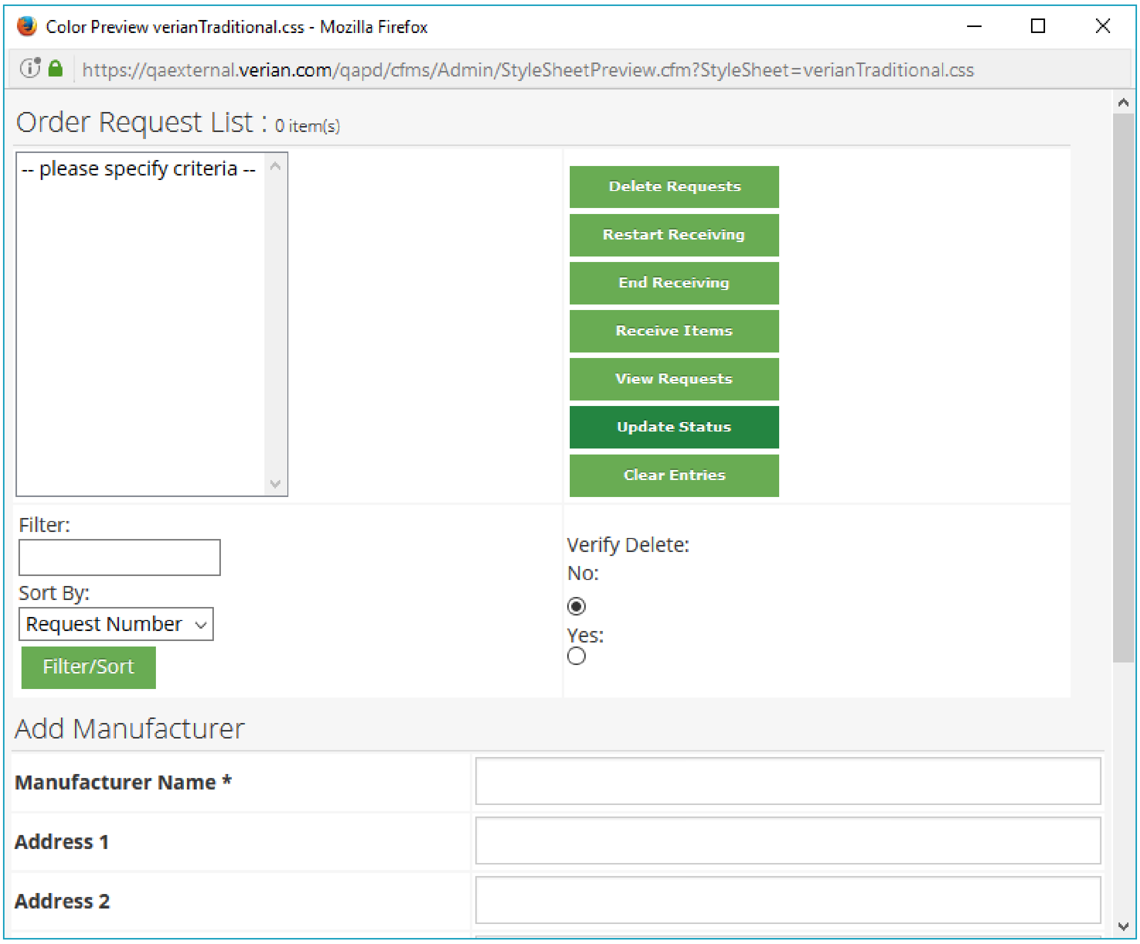


Figure 5: Pop-up Color Preview page

2.3 Scheduled Tasks

This functionality is not available for organizations on Basware's cloud instances.

Scheduled tasks can be used to schedule automated data imports and any user defined custom tasks. Tasks can be set up to run at a particular time, at a particular frequency, or can be run manually.

Scheduled tasks run on Coordinated Universal Time (UTC).

There are ten daily scheduled tasks that run behind the scenes to maintain the system:

1. PITMain
2. PITMainDayBegin
3. PITHourly
4. PITEInvoiceRead
5. PITEInvoiceCheck
6. PITDepreciation
7. PITEDI
8. PITMail

9. PITJobProcessor
10. PITProcessLevel3CCData

Tasks are run for each tenant in random order (excepting the Global tenant [tenant 1], which always runs first). On occasion, a large amount of data from one tenant's scheduled task can prevent other tenant's tasks from completing. If that is the case, the missed tasks are completed at the next scheduled time.

- Basware Technologies recommends that reports be scheduled under the Report Management module.
- Clients on the Cloud are not able to schedule tasks. Only the global administrator is able to schedule tasks.
- For more information about scheduled tasks, contact your Basware Implementation Team or Client Care Team.

The following system setting and permission must be enabled to manage scheduled tasks:

- System setting 511 - Scheduled Tasks Monitoring Contact (hidden)
- Permission 24 - Manage Scheduled Tasks

2.3.1 Task Monitoring

The system monitors the daily scheduled tasks listed above. The following information is logged in the database:

- The main name of the scheduled task that ran.
- Each action has its own row in the log with its start and end times.
- The status of the scheduled task.
- In Processing
- Completed
- Exception
- If the scheduled task has an exception, the error message is stored.

If there are any errors when one of the daily scheduled tasks is running, the system notifies the users whose email addresses are listed in system setting *511 - Scheduled Tasks Monitoring Contacts* . The system also alerts the specified users if a task runs for an extended period.

The system only monitors the daily scheduled tasks listed above.

2.3.2 Task Management

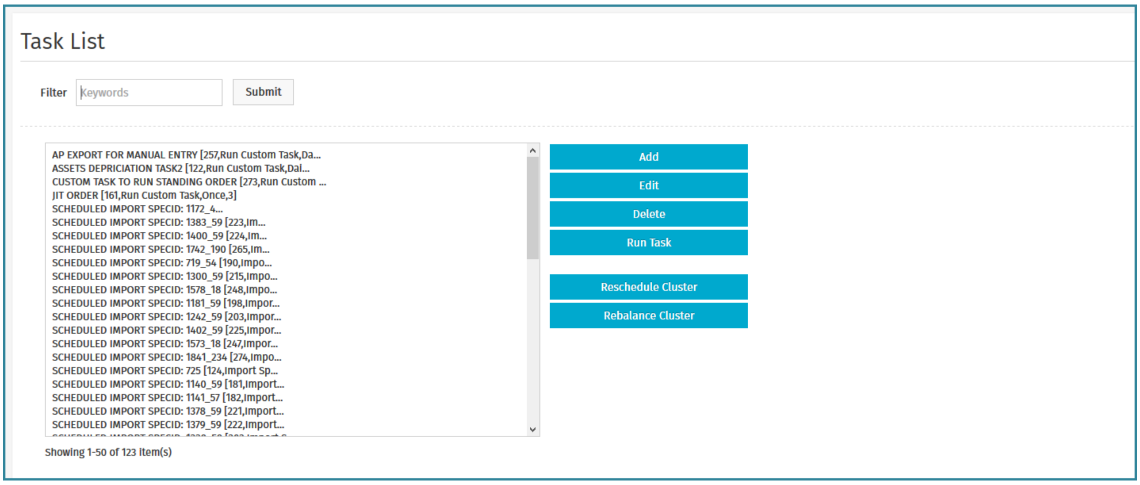


Figure 6:

Table 9: Task List page action definitions

Action	Definition
Add	Allows the global administrator to schedule a task.
Edit	Allows the global administrator to edit a scheduled task.
Delete	Allows the global administrator to delete a scheduled task.
Run Task	Allows the global administrator to run a task
Reschedule Cluster	Allows the global administrator to manually reschedule tasks on a cluster environment after a system reset. This must be done when servers are added or removed from the cluster. If a task is assigned to a server that no longer exists in the cluster, that task is assigned to a new server when this action is performed.
Rebalance Cluster	Allows a global administrator to rebalance the scheduling servers when servers are added or removed from the cluster. This action balances out the number of tasks that are run on each server in a cluster. If **Rebalance Cluster** is executed first, then **Reschedule Cluster** does not need to be executed since **Reschedule Cluster** is a subset of the **Rebalance Cluster** functionality.

When servers are added or removed from the cluster, the global administrator must manually reschedule and/or rebalance the cluster from the Task List page.

2.3.2.1 Scheduled Task Addition and Editing

The Add Task page and the Edit Task page have the same attributes.

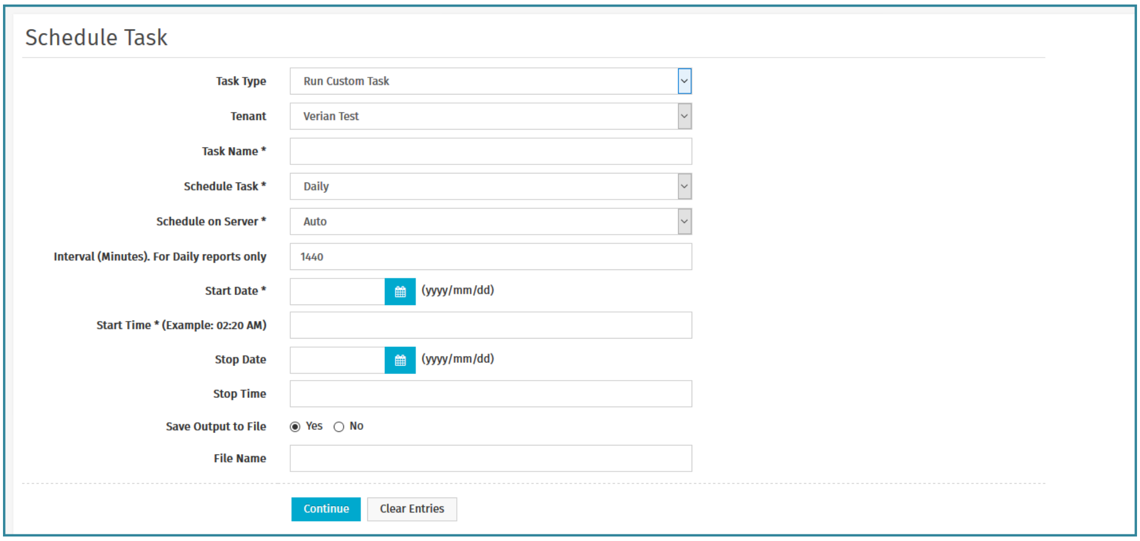


Figure 7: Add Schedule Task page

Field	Definition
Task Type	Select a task type from the drop-down list.
Tenant	Select the tenant to schedule the task for.
Task Name	Enter a name for the task.
Schedule Task	Select a task schedule. The available options are daily, monthly, once, and weekly.
Interval (Minutes) For Daily reports only	Enter an interval for the schedule in minutes. Enter 1440 if daily is selected.
Start Date	Select a date using Calendar when the scheduled task should run.
Start Time	Select a time for the start of the scheduled task.
Stop Date	Select a date when the scheduled task needs to stop.
Stop Time	Select a time when the scheduled task needs to stop on the selected stop date.
Save Output to File	Select whether the output of the task should be saved to a file.
File Name	If yes is selected in the above field, enter the name for the file.

2.3.2.2 Adding a Scheduled Task

To add a scheduled task:

1. From the Dashboard, navigate to > **System** > **Schedule Tasks**.

2. Click **Add**.
3. Select a *task type* from the drop-down list. The following task type is displayed:
    - Run Custom Task: User *run custom task* to run any custom task created by Basware.
4. Fill in the following information on the Schedule Task page:
    - Task Name
    - Schedule Timing: Daily (must set interval time to 1440), Monthly, Once, or Weekly
    - Interval Time: only required if Schedule timing is set to Daily. Must be set to 1440.
    - Start Date
    - Start Time (can be in 12-hr or 24-hr formats)
    - Stop Date
    - Stop Time (can be in 12-hr or 24-hr formats)
5. Click **Save Output to File** to save the output of the scheduled task to a file.
6. Enter a valid file name - must be associated with the current server.
7. Click **Continue.**
8. If *run custom task* was selected as the task type, enter the URL and click **Set URL.**

2.3.2.3 Editing a Scheduled Task

To edit a scheduled task:

1. From the Dashboard, navigate to > **System** > **Schedule Tasks**.
2. Select the task to be edited and click **Edit**.
3. Edit the necessary fields and click **Continue**.
4. Select the custom task from the drop-down list and click **Set URL**.

2.3.2.4 Deleting a Scheduled Task

To delete an existing scheduled task:

1. From the Dashboard, navigate to > **System** > **Schedule Tasks**.
2. Select the task to be deleted and click **Delete**.
3. Click **OK** in the verification pop-up.

2.3.2.5 Running a Task

There are times when a task needs to be run outside the scheduled time. Select the task and click Run Task to run the task immediately.

2.4 Import Specifications

For information on Import Specifications, refer to Import Specifications.

2.5 Session Manager

The session manager page allows the global administrator to view all current sessions. All sessions initially have “unknown” status. The global administrator can use Refresh to get the updated status for each user. End Session ends that user’s session (forcing the user to log in again to regain access).

All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Session List : 42 session(s)

Name	Created	Last Check	Terminal	Status	Tenant ID	Action
Vinith [API]	2017/02/17 08:56 AM	2017/02/17 08:56 AM	208.104.72.210	unknown	6	
API User [API]	2017/02/17 04:13 PM	2017/02/17 04:13 PM	54.235.35.98	unknown	226	
T244Satish	2017/02/17 07:19 AM	2017/02/17 07:19 AM	208.104.72.210	unknown	244	
API User [API]	2017/02/17 03:12 PM	2017/02/17 03:12 PM	54.164.128.49	unknown	226	
API User [API]	2017/02/17 04:09 PM	2017/02/17 04:09 PM	54.197.40.159	unknown	226	
Vinith	2017/02/17 08:57 AM	2017/02/17 08:57 AM	208.104.72.210	unknown	6	
API User [API]	2017/02/17 03:00 PM	2017/02/17 03:00 PM	52.207.229.48	unknown	226	
API User [API]	2017/02/17 03:49 PM	2017/02/17 03:49 PM	54.157.59.74	unknown	226	
Vinith	2017/02/17 10:51 AM	2017/02/17 10:51 AM	208.104.72.210	unknown	6	
Admin (17)	2017/02/17 07:26 PM	2017/02/17 07:26 PM	208.104.72.210	unknown	17	
API User [API]	2017/02/17 03:25 PM	2017/02/17 03:25 PM	52.91.65.180	unknown	226	
API User [API]	2017/02/17 04:01 PM	2017/02/17 04:01 PM	54.85.150.245	unknown	226	
API User [API]	2017/02/17 03:25 PM	2017/02/17 03:25 PM	52.91.36.48	unknown	226	
Vinith	2017/02/17 10:56 AM	2017/02/17 10:56 AM	208.104.72.210	unknown	6	
API User [API]	2017/02/17 01:45 PM	2017/02/17 01:45 PM	54.172.176.220	unknown	226	
API User [API]	2017/02/17 03:41 PM	2017/02/17 03:41 PM	54.198.167.54	unknown	226	
API User [API]	2017/02/17 03:41 PM	2017/02/17 03:41 PM	52.205.235.66	unknown	226	

Figure 8: Active Sessions page

The following permission is required to access this functionality:

- Global Administrator (15)

2.5.1 Viewing the Session Manager

To view the session manager page:

1. From the Dashboard, navigate to > **System** > **Session Manager**.
2. To update a users's status, click the icon.

   The status is updated to active or inactive.
3. To end a user's session, click the icon.

2.6 License Information

This area requires no entry or management. It is used to review the number of users in the organization’s setup and how many are being used currently. It also provides system information that is useful for technical support.

The following permission is required to access this functionality:

- 15 – Global Administrator

The global administrator is able to see full license information on the Tenant Administration page. Tenant users with permission to view the license page – permission 18 – Manage System Settings, however, see a restricted view of the License page.

- The following fields are not displayed to tenants:
- Main Company
- Tenants versus Max Tenants
- Operating System
- OS Info
- OS Version
- OS Build
- Webserver Software
- Expiration Date
- License by Module
- User Count

The following fields only display information relative to the current tenant when view by tenants:

In addition, only the global administrator is able to update the license file or apply patches.

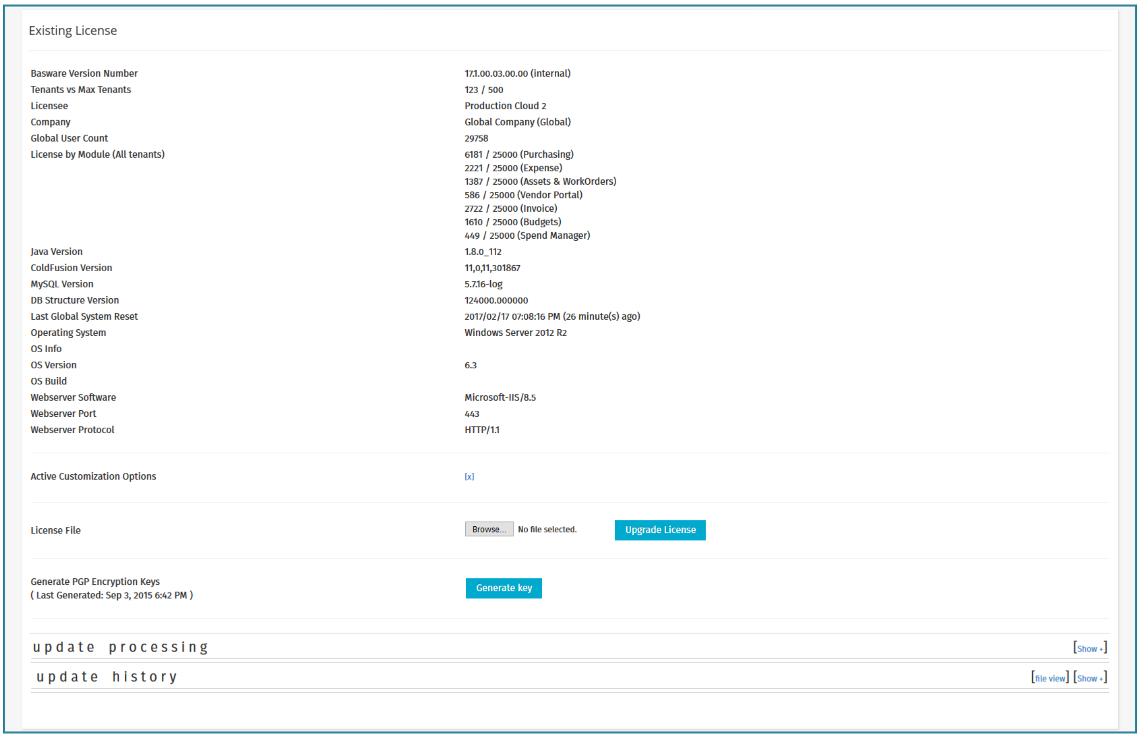


Figure 9: License Information page

2.7 Fax Administration

The Fax Administration page is used to setup the fax system attributes in Basware P2P.

The following permission is required to set up the Fax Administration Attributes

- 15 – Global Administrator

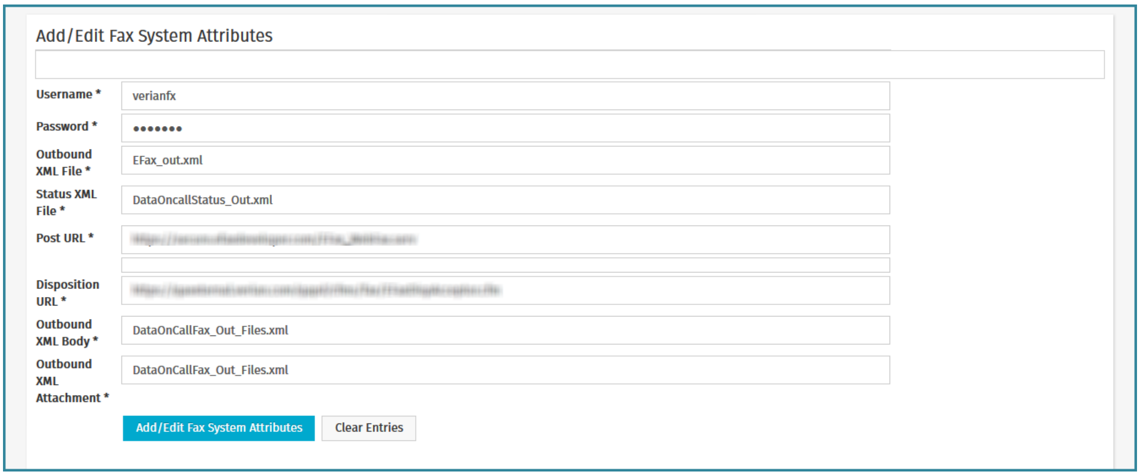


Figure 10: Add/Edit Fax System Attributes page

Table 10: Add/Edit Fax System Attributes Page Field Definitions

Field	Definition
Account ID	This is provided by the service provider and entered by the global administrator. This is a required field.
Password	This is provided by the service provider and entered by the global administrator. This is a required field.
Username	This is provided by the service provider and entered by the global administrator. This is a required field.
Disposition URL	This is the URL where the fax service provider sends the fax acceptance responses. This custom URL requires configuration.
Post URL	The fax post URL is provided by the fax service provider.
Outbound XML File	This file defines the outbound request format. The file should be EFax_out.xml if not otherwise specified. This is the default value and it should not be changed.
Outbound XML Body	This file defines the fax body. The file should be DataOnCallFax_Out_Files.xml if not otherwise specified. This is the default value and it should not be changed.
Outbound XML Attachment	This file defines the fax attachment. The file should be DataOnCallFax_Out_Files.xml if not otherwise specified. This is the default value and it should not be changed.
Status Check URL	This is the URL where the fax service provider sends fax status responses. This custom URL requires configuration.
Status XML File	This file defines the outbound status request format. The file should be DataOncallStatus_Out.xml if not otherwise specified. This is the default value and it should not be changed.

When using eFax, the Fax System Attributes page must be configured correctly. Refer to the 11.4 Implementation Guide for more information. After the Fax System Attributes have been configured correctly, the following items need to be tended to as well:

WebFax Registration – Contact Client Care to register the client with WebFax. They need an account ID, username, and password. All this information is supplied by eFax.

Vendor setup – For vendors to successfully receive faxes, the following information from the vendor's profile:

- Process Orders Via – must be set to "Fax" if the delivery method for the purchase orders is fax.
- Process Work Orders Via - must be set to "Fax" if the delivery method for the work orders is fax.
- Process RFQs Via - must be set to "Fax" if the delivery method for the RFQs is fax.
- Fax – enter the fax number for the vendor
- For domestic calls, a 10-digit number must be entered.
- For international calls, the country code must be included.

EFax sends and transmits via the Internet so the area must be included for all fax numbers. The following information is not needed:

- "1" to dial long distance
- "9" if you are required to this number or any other number to access an outside line.
- Basware does not support extensions for fax transmission.

2.7.1 Adding or Editing Fax System Attributes

To add/edit fax system attributes:

1. From the Dashboard, navigate to ⚙ > **System** > **Fax Administration**.
2. Enter the user name provided by the fax service provider.
3. Enter the password provided by the fax service provider.
4. Enter the account ID provided by the fax service provider.

   The remaining fields contain default information and should not be edited.

5. Click **Add/Edit Fax System Attributes**.

2.7.2 EFax

When using eFax, the Fax System Attributes page must be configured correctly. After the Fax System Attributes have been configured correctly, the following items need to be tended to as well:

- EFax Registration – Your Basware Implementation Team or Client Care Team registers you with eFax. Once you are registered, you are provided with an account ID, username, and password. All this information is supplied by eFax [1].
- Vendor setup – For vendors to successfully receive faxes, the following information from the vendor's profile:
    - Process Orders Via – must be set to Fax if the delivery method for the purchase orders is fax.
    - Process Work Orders Via - must be set to Fax if the delivery method for the work orders is fax.
    - Process RFQs Via - must be set to Fax if the delivery method for the RFQs is fax.
    - Fax – enter the fax number for the vendor
    - For domestic calls, a 10-digit number must be entered.
    - For international calls, the country code must be included.
- Enter "1" to dial long distance
- Enter "9" if you are required to this number or any other number to access an outside line.
- Basware does not support extensions for fax transmission.
- Contact your Basware Implementation Team or Client Care Team to configure this for you if you are on the cloud or for more information if you are privately hosted.
- EFax sends and transmits via the Internet so the area must be included for all fax numbers.

2.7.3 Fax Delivery

Fax delivery for purchase orders, RFQs, work orders, and messages is handled by the system and eFax. The system generates the document along with the sender and receiver information as an XML document, and then sends it to eFax which transmits it for delivery.

2.7.4 Fax Status

You are able to check the status of a fax by going to > **Other Data** > **Fax Queue**.

Fax statuses for documents in the fax queue are updated during the PITHourly scheduled task (FaxProcessWeb.cfm).

2.8 Work Queues

Work queues group related work tasks together for a group of users to work on more effectively. They can draw attention to items that need review or require you to take additional action on them. Work

[1] eFax is a registered trademark of j2 Global

queues are defined by your Basware Implementation Team or Client Care team and activated for pre-approval or post-approval items.

You can find work queues in the task center. If you have permission to access any items in the work queue, the queue and the number of items in it are listed, as shown in the screenshot below. If a user has access to 5 or more work queues with items, only a single link to the Work Queue Administration page is displayed.

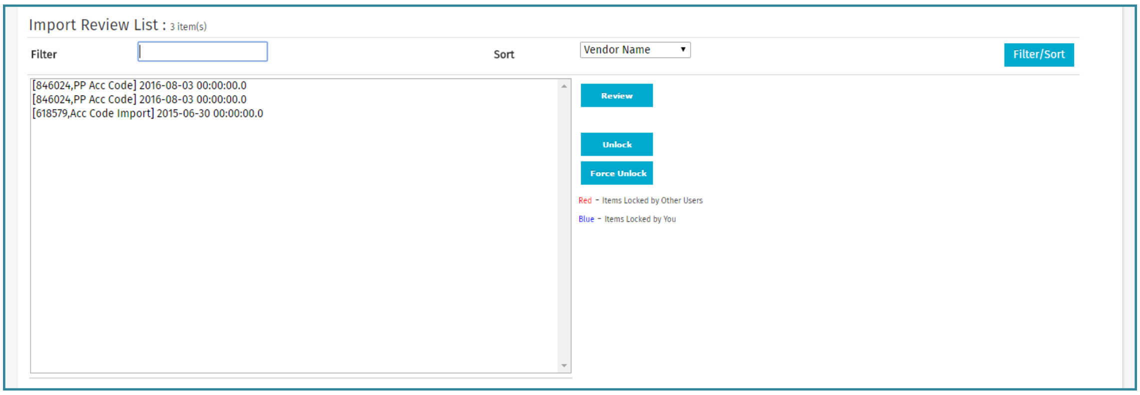


Figure 11: Dashboard Displaying List of Work Queues

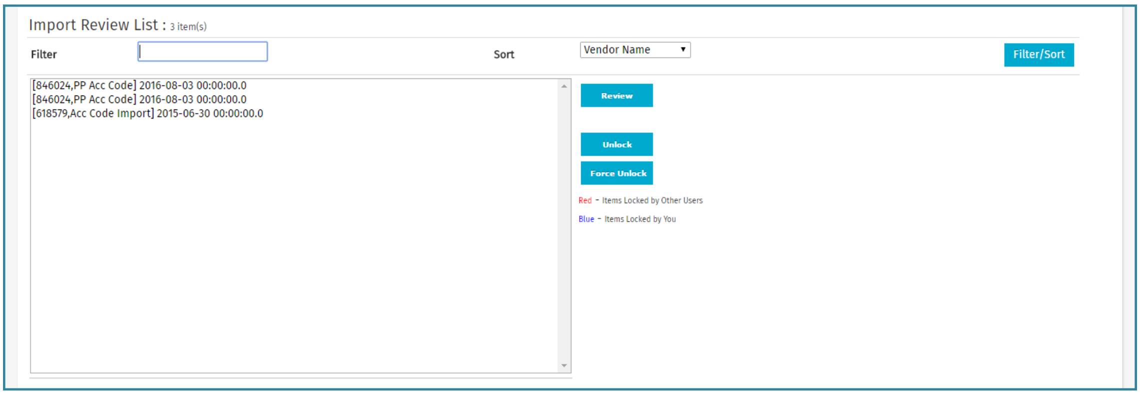


Figure 12: Sample Work Queues Page (Receipt Inspection)

Work queues are dynamic. They can be set up for just about any criteria. They organize work by task for purchase orders, invoices, etc. Different actions can be completed for each work queue. These actions are definable by the client. They could simply be a review of the invoice or could be a revision of any other data points.

Items are evaluated for work queue placement or removal as different actions are performed in the system. This can be approving an invoice, deleting a purchase order, etc. Since the determination for work queue placement is defined by the work queue itself, this is different for every system.

There are two types of work queues available. The first work queue type occurs before approvals and the second occurs after approval. The work queue types in the system are designated as a pre-approval or a post-approval work queues.

Some common elements that are seen when an item enters the work queue are as follows:

- A message is displayed in the task center stating how many items are in certain queues. The queues that are displayed are based on which queues the user has access. If there are items in six or more queues that the user has access to, he sees “x Work Queue Item(s),” where x is the number of items in the queue. If there are items in five or less queues in which the user has access to, he sees each queue listed with the number of items in the work queue.
- When on the Work Queue List page the user may see work queue items in red or blue. If the item is red then another user has the item locked. The only way to unlock these items is if the user is a member of the group that manages this work queue. The user selects the item and clicks the Force Unlock option. If the item is blue then those items were locked by the user. The way to unlock these items is select the item and click the Unlock option.

Work queues are set up for each customer by your Basware Implementation Team or Client Care Team.

3 General Maintenance

The business environment for application systems requires detailed information regarding compliance. As such, the purpose of this chapter is to help provide instructions in two key application areas; log files and system audits. Understanding where this information resides and how it may be accessed helps meet internal compliance needs as the organization continues to use the system.

3.1 Log Files

Log files contain valuable information that helps the system administrator in a variety of ways. First, log file information may be used internally to support the various functions, which are executed on the respective systems. Next, log files give Basware the ability to help support the organization in the event of error or during the support diagnostic phase. Finally, log files may help substantiate and comply with internal audit requirements. This section is designed to provide the access and understanding of the information that is contained within each log file.

The system contains a number of log files that help the organization from both a compliance as well as support perspective. Access to these log files are an invaluable resource for the application administrator.

The sample list of log files:

- Basware Log File: Logs transactions and errors related to Basware P2P general.
- Application Log File: Logs ColdFusion errors not caught by the system.
- Exception Log File: Logs detailed ColdFusion errors.
- EDI Log File: Logs EDI transactions and errors caught by the system.
- Vendor Punchout Log File: Logs Vendor Punchout transactions and errors caught by the system.
- VAPI Log File: Logs VAPI transactions and errors caught by the system.
- VAPI Event Log File: Logs VAPI Event transaction and errors caught by the system.
- Mail Log File: Logs mail errors.

All log files are saved in the folder specified using system setting *3001- Application Log Directory Path* (this is a global system setting).

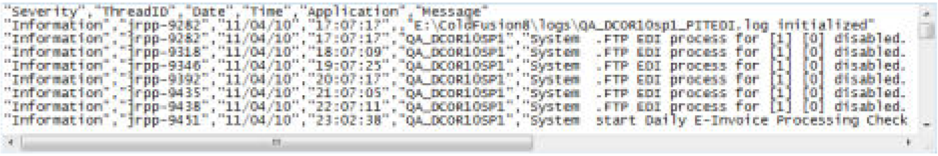
All log files follow the below naming convention:

[DataSourceName] _PIT [LogfileName].log

The data source name normally corresponds to instance name (part of the URL following server address)

Example:

EDI log file for a QASQL data source is named QASQL_PITEDI.log



```
"Severity","ThreadID","Date","Time","Application","Message"
"Information","jrpp-9282","11/04/10","17:07:17",,"E:\ColdFusion8\logs\QA_DCOR10sp1_PITEDI.log initialized"
"Information","jrpp-9282","11/04/10","17:07:17","QA_DCOR10SP1","System  .FTP EDI process for [1] [0] disabled.
"Information","jrpp-9318","11/04/10","18:07:09","QA_DCOR10SP1","System  .FTP EDI process for [1] [0] disabled.
"Information","jrpp-9346","11/04/10","19:07:25","QA_DCOR10SP1","System  .FTP EDI process for [1] [0] disabled.
"Information","jrpp-9392","11/04/10","20:07:17","QA_DCOR10SP1","System  .FTP EDI process for [1] [0] disabled.
"Information","jrpp-9435","11/04/10","21:07:05","QA_DCOR10SP1","System  .FTP EDI process for [1] [0] disabled.
"Information","jrpp-9438","11/04/10","22:07:11","QA_DCOR10SP1","System  .FTP EDI process for [1] [0] disabled.
"Information","jrpp-9451","11/04/10","23:02:38","QA_DCOR10SP1","System  start Daily E-Invoice Processing Check
```

Figure 13: Sample EDI Log File

3.2 Auditing

The purpose of this section is to help provide system administrators with the necessary information in order to access the Audit table. In addition, a detailed description of the information contained in the Audit table is found below. Access and understanding these details may help the organization create and maintain any Audit Reports that help comply with internal as well as external requirements.

New government regulations require that many organizations prove that audits are available in system applications. As such, an increased awareness and importance has been placed on the ability to access audit files in order to prove that workflow functions have been executed correctly by specific people. In order to assist with these new regulations, this section has been created for the express use of system administrators.

Audit Table

User actions are recorded in the Audit table, a database object available through the system data source. A new audit record is created in the table for each action taken by a user such as editing vendor information, approving requests, creating a purchase order, etc.

Figure 14: Sample Audit Table

Table 11: Audit Table Fields

Field Name	Description	Data Type
TENANT_ID	The unique numeric identifier attached to each tenant.	Number
AUDITLINE_ID	The unique numeric identifier attached to each audit record.	Number
DATEC	The date and time the audit record was created in the tenant's assigned time zone. Example: 11/02/15 13:13 PST	Date
DATECUTC	The date and time the audit record was created in Coordinated Universal Time (UTC). Example: 11/02/15 20:13 UTC	Date

Table 11: Audit Table Fields (continued)

Field Name	Description	Data Type
CATEGORY	This category refers to general areas within the software. For example, an action taken on the login page falls under the category of “security,” and an action taken on the request header page would fall under the category of “requisition.” The available list of Categories is accounting codes, asset, bill, catalog, eon (expense order), expense, expense request, expense requisition, inventory, invoice, or (order request), other, pop (purchase order), reports, requisition, security, shipment, system, and user.	Text
SUBCATEGORY	Simple description of action being taken.	Text
ACTION	Type of action being taken against the database.	Text
TEMPLATEFILE	The URL of the web page being used to perform the action.	Text
DETAIL	Description of the action being taken.	Text
USERNAME	Name of user responsible for action.	Text
USER_ID	The ID of the user engaging the action.	Number
REFERENCE_ID	Audit records are created when users take actions on entities in the database. The entity may be a user, a request, a purchase order, an item, etc. The reference ID in each record refers to the ID of the entity that is being acted upon. For example, if an action is taken upon Request 211, the Audit record for that action records 211 as the reference ID.	Number
WORKSTATION	Gives the Internet Protocol (IP) address of the computer taking the action.	Text
USERAGENT	Type of browser used by the user performing the action.	Text
SQL	Query statement, if any, used during action or otherwise applied to the database.	Text

This table can be accessed from your database and is named dbo.Audit_PIT in the MySQL environment.

4 Security

System security can be maintained by creating location groups and locations, which help in segregating the management activities and the user access to data based on the location (or department) level. Locations (departments) can also be used for reporting.

Various links are used in order to customize permissions and rules in order to establish the organization's purchasing process. In addition, users are linked with locations and groups.

4.1 Security Definition Process

Dependencies

The following list shows the security base data hierarchy.

- Company
  - Add Location Groups
    - Add Locations

Process

The following table describes the process for defining security data.

Stage	Task	Definition
1	Location Groups	Defines location groups to manage locations.
2	Locations	Defines locations to manage users.

4.2 HTTPS Configuration

To increase security, the system servers are configured to use HTTPS for all connections. The server encrypts all communication by the TLS 1.0 protocol.

Any HTTP URLs that users have bookmarked for the site automatically redirect to HTTPS URLs.

4.3 Security Tokens

Security tokens are used to validate user authenticity for session fingerprints and API tokens. These tokens are independent from the user's IP address, allowing easy, secure use within the cloud-hosted environment.

4.4 User Passwords

To protect users' and clients' information, passwords are stored using a secure one-way hash. If the system database were compromised, attackers would be unable to decrypt users' passwords. Passwords are protected with a SHA-512 hash, utilizing a 64-bit salt.

Features

- Two users who specify the same password will not have the same encrypted password in the database because a cryptographic salt is used. Salt is random data used as additional input to a one-way function that hashes a password. Salt helps defend systems against rainbow table and dictionary attacks in obtaining hashed passwords.
- Encrypted passwords are portable: when using Tenant Migration, no special password migration step is required for passwords stored using a secure hash.
- User passwords encrypted using one of the older methods is re-encrypted using a secure hash when users log in after the upgrade.
- Password hash is always the same length, regardless of the length of user passwords. If an attacker were to compromise the database, the hacker would not be able to determine the length of passwords based on the password hash.
- User passwords have no maximum length.

Security Concerns

Even though a secure hash is used, the system has additional password system settings that when used prevent hackers from obtaining passwords:

- 11620 - Minimum Password Length
- 11625 - Require password to contain numbers
- 11630 - Require password to contain upper case and lower case letters
- 11635 - Require password to contain a special character
- 11650 - Days before user password expires

4.4.1 Temporary Password Request

Single sign-on users are allowed to request temporary passwords from the mobile app when system setting *11645 – Activate SSO Mobile Password* is enabled.

The system allows organizations to determine if users who have issues logging into the system can request a temporary password using either their *Username* or *Email*. The temporary password is valid for 30 minutes from the time the email is sent. If a user remembers the password or the user receives the temporary password email in error, the current password is still valid.

When the system generates a temporary password for the user, the email the system sends to the user contains a link that the user can use to reset the password directly. The system does not require the user to type the password manually when using this link. If the user has trouble clicking the link (for example, if the link is garbled by email client), the temporary password can still be used in the login page. This applies to Forgot Password, Reset Password and New User Login detail emails.

Once the user logs in with the temporary password, the user is required to create a new password before proceeding. The temporary and new password must meet the password complexity as determined by the system settings. All temporary passwords sent contain the following:

- At least one lower-case letter
- At least one upper-case letter
- At least one digit
- At least one special character
- At least eight characters
- The email provided is tied to multiple users
- An invalid email address is provided

Error messages are displayed when the following instances occur:

- The email provided is tied to multiple users
- An invalid email address is provided

Required System Setting

- 11610 – Enable Forget Password Form for Password Retrieval via email

Additional System Settings

- 505 – Admin Contact email
- Email Servers Setup
- Email ID Provided in the User’s Profile

If system setting *505 – Admin Contact email* has an email address specified, a copy of the email is sent to that email address. If system setting *439 – Reply Address for System Generated Messages* is set, emails are sent from this address. If system setting 439 is not set and system setting *440 – System Email Address* is set, the emails are sent from that address. If system setting *460 – Use System Email Address instead of User Specific Email Address for the From Address* is enabled, and settings 439 and 440 have different values, the email is sent from the address in system setting 440 and the reply-to address is the email address in system setting 439. If neither system setting 439 or 440 are set, the emails are sent from noreply@verian.com.

4.5 Location Group Management

Location groups are a way by which similar locations can be combined for reporting purposes. For instance, all of the locations in a region can be assigned to one location group or all expense locations can be assigned to a location group. Location groups are required on the Location page, so if location groups are not used within the organization, then an unassigned location group needs to be created.

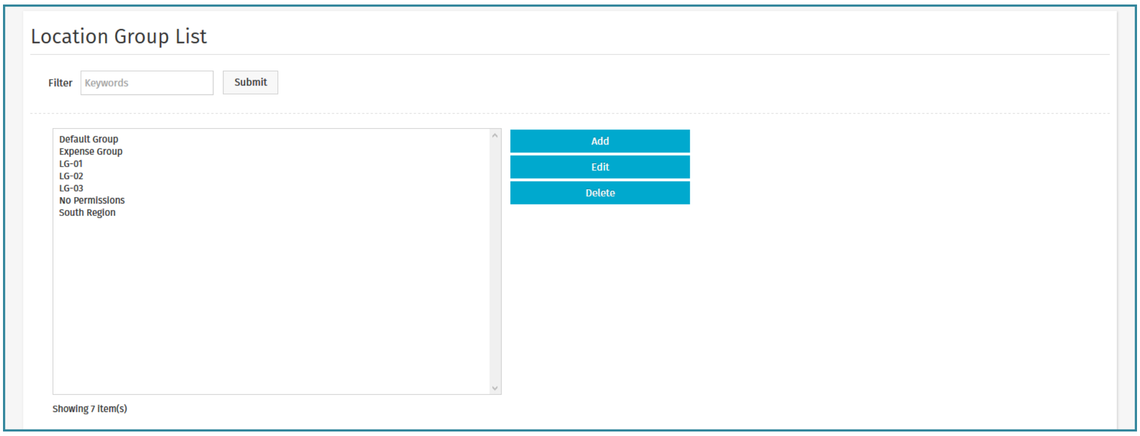


Figure 15: Location Group Management page

Action	Definition
Edit	Allows the user to edit an existing location group.
Add	Allows the user to add a new location group.
Delete	Allows the user to delete an existing location group.

4.5.1 Location Groups Addition and Editing

The Add Location Group page and the Edit Location Group page have same attributes.

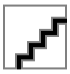


Figure 16: Add Location Group page

Field	Definition
Location Group Name	Enter the name of the location group.
Account Code	Enter an account code if an account code is used to identify the location group.

4.5.2 Adding a Location Group

To add a location group:

1. From the Dashboard, navigate to > **Geographic** > **Location Groups**.
2. Click **Add**.
3. Complete the required fields.
4. Click **Add Location Group**.

4.5.3 Editing a Location Group

To edit a location group:

1. From the Dashboard, navigate to > **Geographic** > **Location Groups**.
2. Select a location group to edit and click **Edit**.
3. Complete the required fields.
4. Click **Edit Location Group**.

4.5.4 Deleting a Location Group

To delete a location group:

1. From the Dashboard, navigate to > **Geographic** > **Location Groups**.
2. Select the location group to delete and click **Delete**.
3. Click **OK** on the pop-up window.

4.6 Location Management

Locations can be physical locations, departments, cost centers, expense locations, or asset locations depending on the module(s) being used by the tenant. If goods or services are allocated, charged, or shipped to an entity, they must be set up in the system as a location.

The following permissions are required to manage locations:

- 16 - Manage Locations and Location Groups
- 68 - View Locations

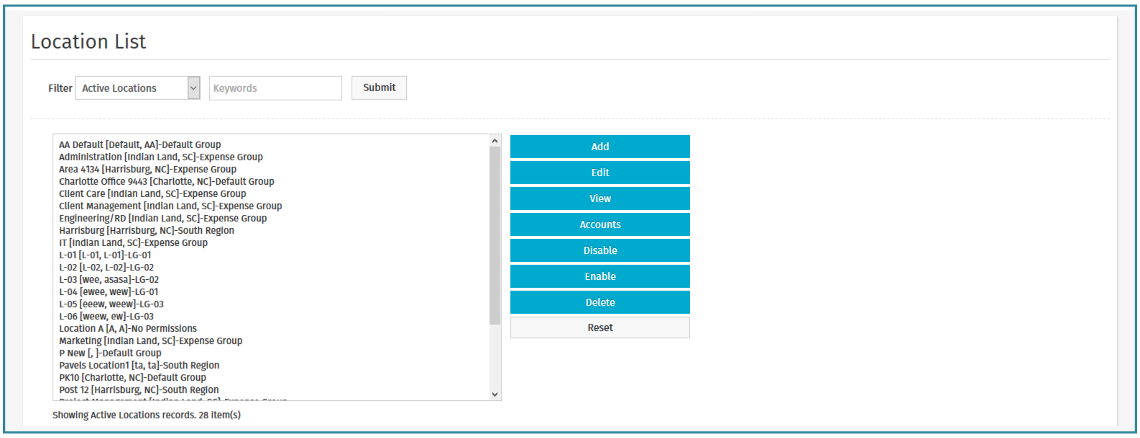


Figure 17: Location Management page

Table 12: Location Management page action definitions

Action	Definition
Edit	Allows the user to edit existing location profile.
Add	Allows the user to add a new location.
Accounts	Allows the user to assign specific vendor accounts to location. This can be used for accounting purposes or for restricting users in particular locations from purchasing from vendors outside of their region. This is a tenant administrator function.
Disable	Allows user to disable a location. Disabling a Location will add an * before the location name.
Enable	Allows the user to enable a location that has been disabled.
Delete	Allows the user to delete locations. If there are users assigned to the location, this location cannot be deleted.
Clear	Allows the user to clear any unsaved information.

4.6.1 Location Addition or Editing

The Add Location page and the Edit Location page have same attributes.

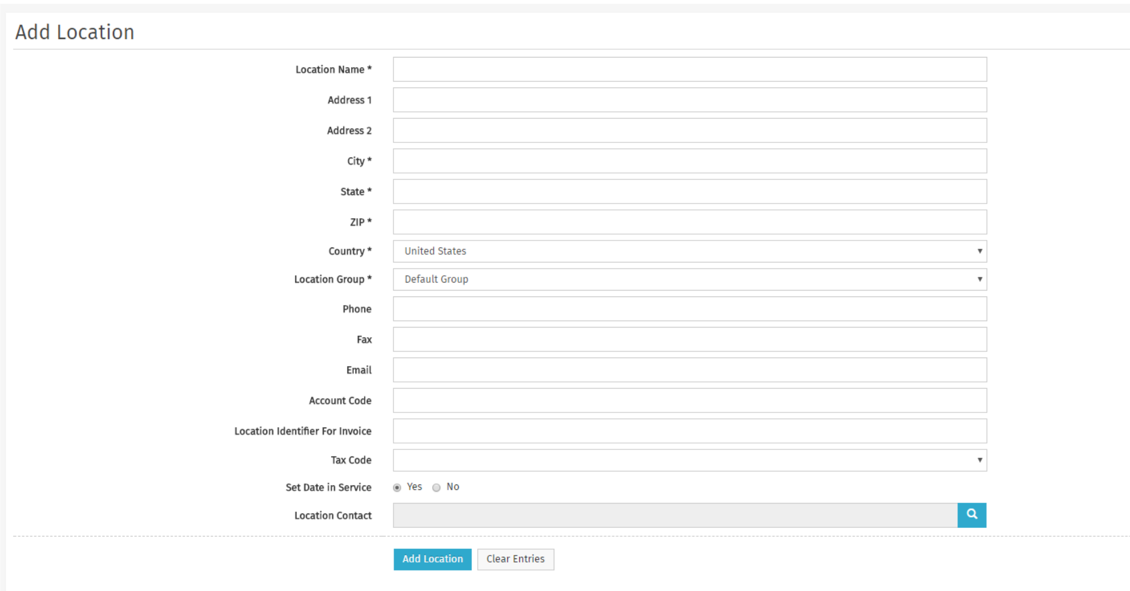


Figure 18: Add Location page

Field	Definition
Location Name	Enter the name of the location.

Field	Definition
Address 1	Enter the first line of the location address.
Address 2	Enter the second line of the location address.
City	Enter the location city.
State	Enter the location state.
ZIP	Enter the location zip code.
Country	Select the location's country. The list is from a standardized country list.
Location Group	Select the location group assignment from the location groups that have been entered from the Add Location Groups page.
Phone	Enter the location phone number. This is displayed in the directory. The value added in this field is displayed on the purchase orders for which this location is the ship to location.
Fax	Enter the fax number. This number is displayed in the directory (optional).
Email	Enter the location email address (optional).
Accounting Code	Enter the location account code. This code is typically used in accounting output files.
Tax	Enter the tax for the location.
Tax 2	Enter a second tax if a second tax value is required for the location.
Location Contact	Enter the location contact. This field can be used to identify a contact for the location. It can be used in approval routing or in sending purchasing notifications/failures to the location contact (optional).
UDEF 1-5	Names of these user-defined fields that can be identified in system settings and used for a variety of functions in order to match the business process requirements.
Tax Code	Select one tax code from the list to be linked to the location

4.6.2 Adding a Location

To add a location:

1. From the Dashboard, navigate to > **Geographic** > **Locations**
2. Click **Add**.
3. Complete the required fields.
4. Click **Add Location**.

4.6.3 Editing a Location

To edit a location:

1. From the Dashboard, navigate to > **Geographic** > **Locations**
2. Select the location to edit and click **Edit**.
3. Edit the necessary fields.
4. Click **Edit Location**.

4.6.4 Deleting a Location

Locations that are associated with invoices cannot be deleted.

To delete a location:

1. From the Dashboard, navigate to > **Geographic** > **Locations**
2. Select the location to delete and click **Delete**.
3. Click **OK** on the pop-up window.

4.7 Location Accounts

There are instances when a location needs to be associated with a specific vendor and/or a subsidiary vendor that is assigned to a main vendor (parent/child relationship) number. This is useful when a vendor classifies locations with specific account numbers. Vendors link account numbers with locations for tracking purposes and sales force assignments. This function is commonly used for accounting purposes or to ensure that a location purchases from a specified vendor or subsidiary.

The ability to use the Location Accounts action is available only when the Enterprise version of the system has been purchased. This feature and its subsequent pages are displayed if the Standard version was purchased, but the system does not recognize and execute the information that is entered.

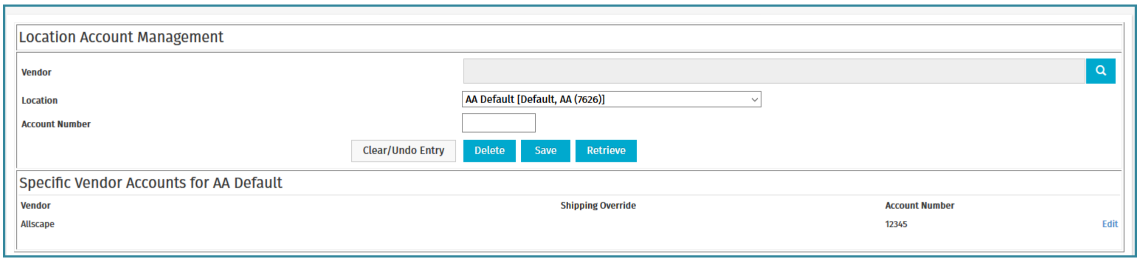


Figure 19: Location Account page

Table 13: Location Accounts Page Field Definition

Field	Definition
Vendor	Enter the vendor for which an account code needs to be assigned.
Location	Select a location from the drop-down list of the entered locations.
Account Number	Enter the account number assigned to the location for the vendor.

National Vendors with Subsidiaries

There are purchasing situations where a national vendor uses a subsidiary to supply specific locations with goods and services. The system has the ability to associate locations with a subsidiary and a designated account number.

Table 14: Location Account Management Page Field Definition

Field	Definition
Vendor	Select the national vendor for which a subsidiary needs to be associated.
Use Subsidiary	Allows the user to select additional suppliers linked to the national vendor.
Location	Select the location from the drop-down list of the entered locations.
Account Number	Enter the account number that is assigned to the location for the vendor.

4.7.1 Associating an Account with a Vendor

To associate an account with a vendor:

1. From the Dashboard, navigate to > **Geographic** > **Locations**.
2. Select a location and click **Accounts**.
3. Complete the required fields and click Save.

4.7.2 Associating a Location with a Subsidiary and Account Number

1. From the Dashboard, navigate to > **Geographic** > **Location**.
2. Click **Accounts**.
3. Click **Retrieve**.
4. Click Vendor to locate and select the national vendor.
5. Click the subsidiary drop-down to see the additional suppliers linked to the national vendor. (A description of the parent/child relationship is found in “Chapter 1: Catalog Management” under the Vendor section in the General Admin Guide – Part 2).
6. Use the drop-down to select the desired location. Only one location may be selected.
7. Enter the appropriate account number and click **Save**.

4.8 Manage Clients/Sites

This is used with project setups. Before creating a project, client sites have to be created in order to associate the projects.

The following permission is required to access this functionality:

- 125 – Manage Client/Sites

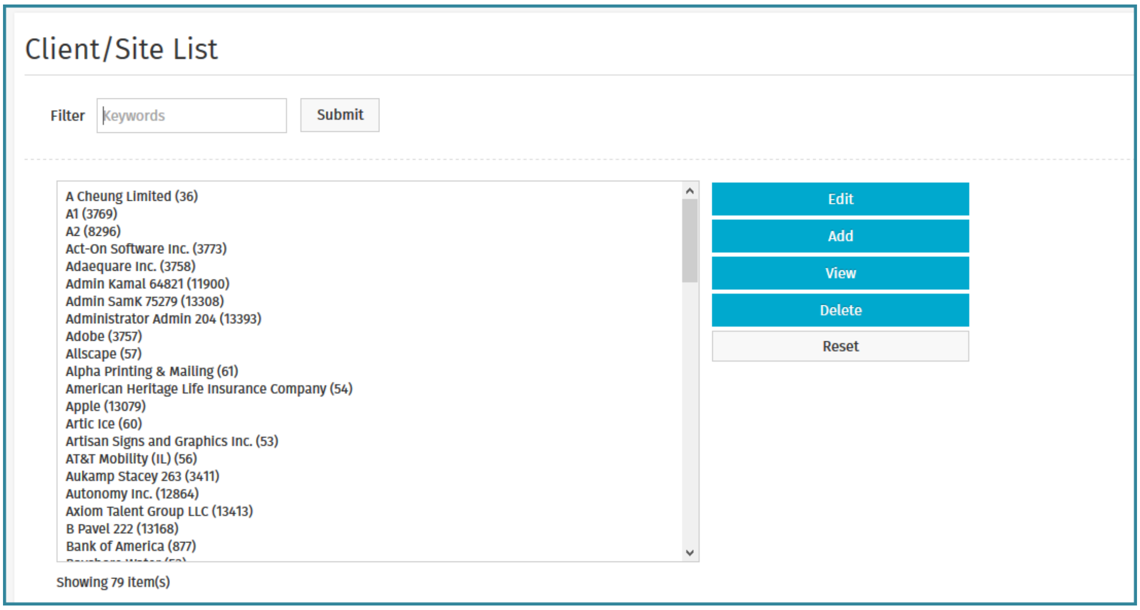


Figure 20: Client/Site Management page

Table 15: Client/Site Management Action Definitions

Action	Definition
Edit	Allows the user to edit an existing client/site.
Add	Allows the user to add a new client/site.
View	Allows the user to view the details of the selected client/site.
Delete	Allows the user to delete a client/site.
Clear Entries	Allows the user to clear entries that have not been saved.

4.8.1 Add/Edit Clients/Sites

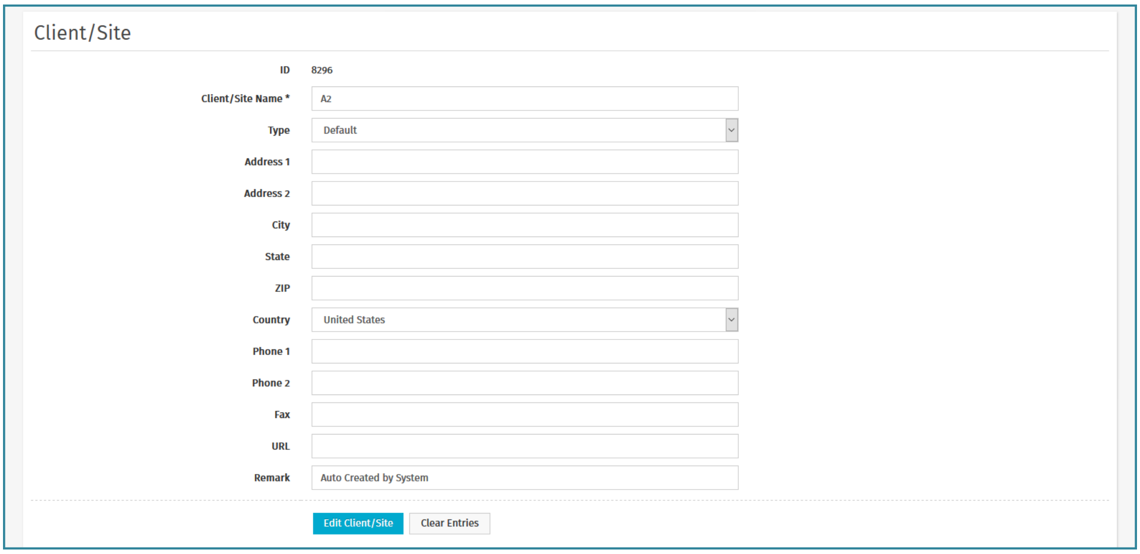


Figure 21: Add Client/Site page

Table 16: Add/Edit Client/Site page field definitions

Field	Definition
Client/Site Name	Allows the user to enter a name for the client/site.
Type	Allows the user to select the type of client/site.
Address 1	Allows the user to enter the first line of the client/site address.
Address 2	Allows the user to enter the second line of the client/site address.
City	Allows the user to enter the city of the client/site.
State	Allows the user to enter the state of the client/site.
ZIP	Allows the user to enter the postal code of the client/site.
Country	Allows the user to enter the country of the client/site.
Phone 1	Allows the user to enter the primary phone number of the client/site.
Phone 2	Allows the user to enter the alternate phone number of the client/site.
Fax	Allows the user to enter the Fax number for the client/site.
URL	Allows the user to enter the URL for the client/site.
Remark	Allows the user to enter any notes that needs to be entered.

4.8.2 Adding a Client/Site

To add a client/site:

1. From the Dashboard, navigate to > **Geographic** > **Clients/Sites**.

2. Click **Add**.
3. Enter the required fields.
4. Click **Add Client/Site**.

4.8.3 Editing a Client/Site

To edit a client/site:

1. From the Dashboard, navigate to > **Geographic** > **Clients/Sites**.
2. Select the client/site to edit and click **Edit**.
3. Enter the required fields.
4. Click **Edit Client/Site**.

4.8.4 Deleting Clients/Sites

To delete a client/site:

1. From the Dashboard, navigate to > **Geographic** > **Clients/Sites**.
2. Select the client/site to delete and click **Delete**.
3. Click **OK** in the confirmation pop-up.

4.9 Project Management

This is used to track project related activity and spending. This is a different means of measuring spend. Project related spend can cross module boundaries and include expense, invoicing, as well as standard PO related purchases.

The following permission is required when accessing this functionality:

- 126 – Manage Projects

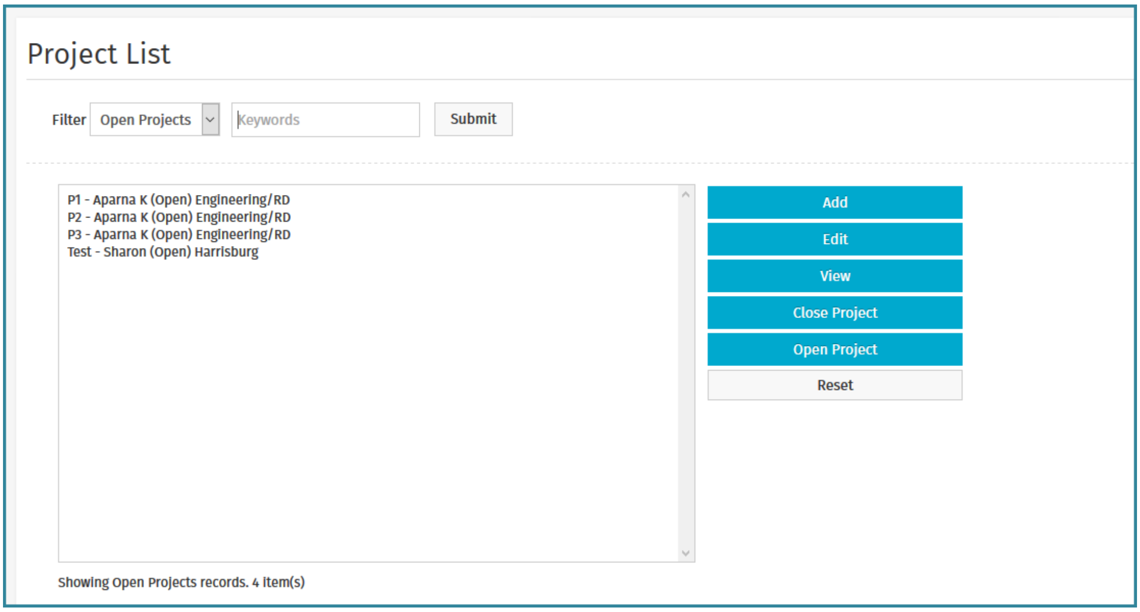


Figure 22: Project Management page

Table 17: Project Management page action definitions

Action	Definition
Edit	Allows the user to edit an existing project.
Add	Allows the user to add a new project.
View	Allow the user to view the details of the project. The user must have permission 137 to be able to view project details.
Close Project	Allows the user to close an open project.
Open Project	Allows the user to open a closed project.
Clear Entries	Allows the user to clear the entries of fields that have not been saved.

The list of projects displayed can be filtered based on the status of the project. The available options are:

- All Projects: Displays all projects.
- Open Projects: Displays only open projects.
- Closed Projects: Displays only closed projects.

To filter based on one of these options select the option in the Filter drop-down field and click Retrieve.

4.9.1 Project Addition and Editing

The Add Project and Edit Project pages have same attributes.

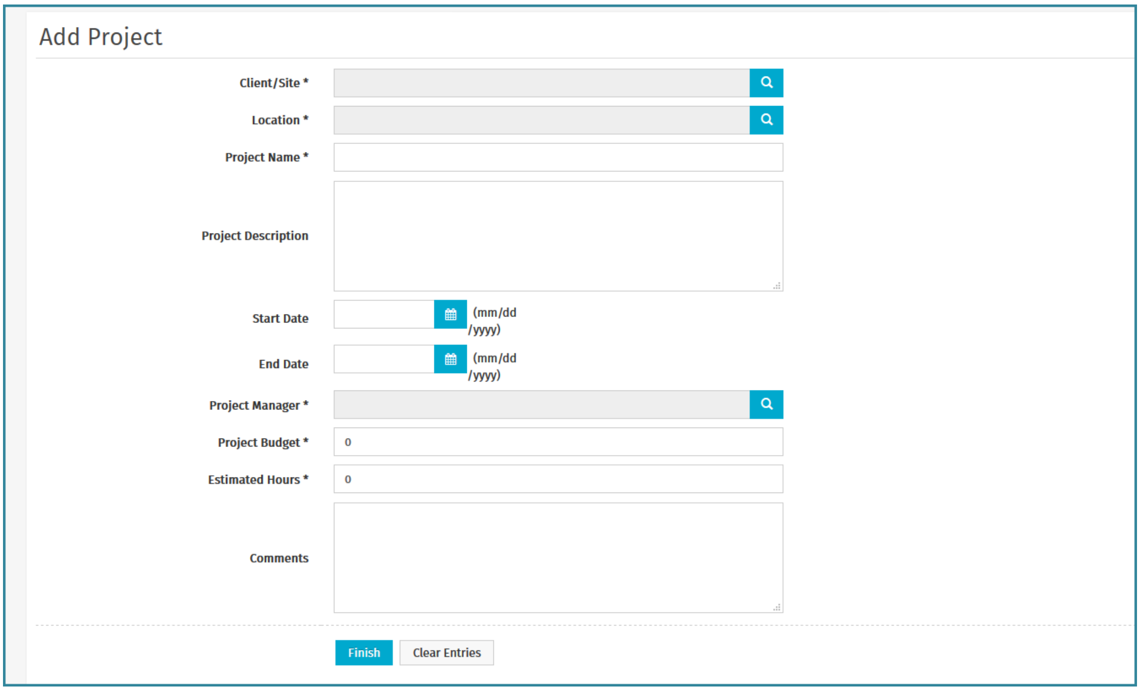


Figure 23: Add/Edit Project page

Table 18: Add/Edit Project page field definitions

Field	Definition
Client/Site Name	Select a client/site name.
Location	Select a project location.
Project Name	Enter a name for the project.
Project Description	Enter detailed description for the project.
Start Date	Select a start date for the project.
End Date	Select an end date for the project.
Project Manager	Select a manager for the project.
Project Budget	Enter a budget for the project. This is a required field so if there is no limit, enter 0.
Estimated Hours	Enter the hours estimated for the project. This is a required field so enter 0 if there is no estimation.
Comments	Enter any comments regarding the project.

4.9.2 Adding a Project

To add a project:

1. From the Dashboard, navigate to > **Geographic** > **Projects**.
2. Click **Add**.
3. Enter the required fields.

4. Click **Finish**.

4.9.3 Editing a Project

To edit a project:

1. From the Dashboard, navigate to > **Geographic** > **Projects**.
2. Select the project to edit and click **Edit**.
3. Enter the required fields.
4. Click **Finish**.

4.9.4 Opening a Project

The table filter defaults to only showing open projects. Use the filter at the top to filter for either *All Projects* or *Closed Projects*.

To open a project:

1. From the Dashboard, navigate to > **Geographic** > **Projects**.
2. Select the project to open that has a *closed* status.
3. Click **Open Project**.

4.9.5 Closing a Project

To close a project:

1. From the Dashboard, navigate to > **Geographic** > **Projects**.
2. Select the project to close that has an *open* status.
3. Click **Close Project**.

4.10 Tax Codes Management

Tax codes are used for calculating taxes on order requests based on the ship-to location.

You may choose to apply tax codes based on location instead of specifying the tax percentages in text boxes. Once a tax code is set up for a location, it can be linked to an enabled location in the system. Only one tax code can be associated per location. To see how tax code can be associated with a location, see Location Addition or Editing

The following permission is required:

- 199 - Manage Tax Codes

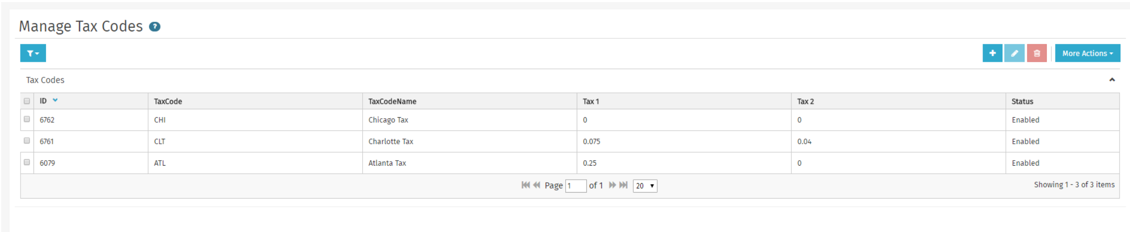


Figure 24: Tax Codes Management Page

Table 19: Tax Code Management Action Definitions

Action	Definition
Add	Allows user to add a new tax code
Edit	Allows user to edit an existing tax code
Delete	Allows user to delete an existing tax code
More Actions	There are two actions available under more actions - **Enable Tax Code & Disable Tax Code**
Filter Options	Allows user to filter from the list of tax codes from the following filter options: • ID • Tax Code • Tax Name • Tax 1 • Tax 2 • Status

4.10.1 Add Tax Codes

Create tax codes to associate to locations, and calculate taxes for purchase orders.

Location: > **Geographic** > **Tax Codes**

The following permission is required:

- 199 - Manage Tax Codes

Click on to add a new Tax Code

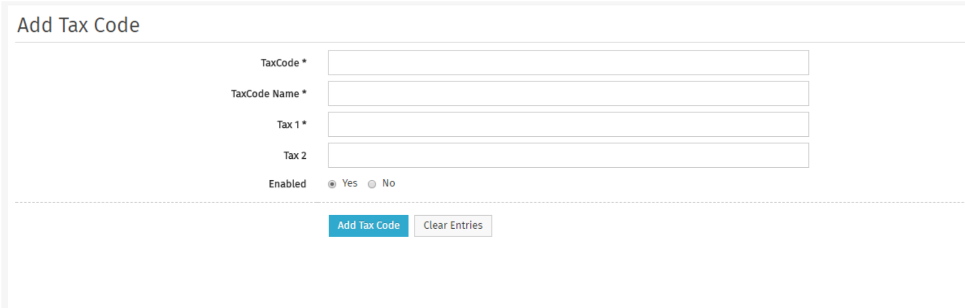


Figure 25: Add Tax Code Page

Table 20: Add Tax Code Field Definitions

Fields	Definitions
Tax Code	Enter the code
Tax Code Name	Enter the Tax Code Name
Tax 1	Tax 1 is the amount of tax to be applied to the line item for that ship to location. This field is mandatory for any tax code. Enter the tax percentage amount for the first tax to be applied. The value should be between 0 and 1.
Tax 2	Enter the tax percentage amount for the second tax to be applied if the second tax value is required for the location. The value should be between 0 and 1.
Enabled	Select whether the tax code should be enabled or not

Tax Code and Tax Code Name must have unique values.

If system setting 990 - Use Tax Codes is enabled, the tax fields on the location management page will no longer be used to calculate taxes on the purchase orders. Tax codes set up for each location will be used. After adding a tax code, it should be assigned to a location. See Location Addition or Editing to link the tax code to a location.

4.10.2 Enable or Disable Tax Codes

This action allows a user to enable or disable a tax code.

Location: > **Locations** > **Tax Codes**

The following permission is required:

- 199 - Manage Tax Codes

1. To enable a tax code, select a tax code.

2. Click on More Actions > **Enable Tax Code**.
3. Or to disable a tax code, select **Disable Tax Code**

If a tax code is disabled, it will not show up on the drop-down for tax codes on the Add/Edit Locations page. After disabling the tax code, taxes will not be recalculated on existing purchase orders when modified. If the tax code is re-enabled, taxes will be calculated on requests based on the PO ship to location and on existing purchase orders if modified.

4.10.3 Edit Tax Codes

This page allows the user to edit an existing tax code.

Location: > **Locations** > **Tax Codes**

The following permission is required:

- 199 - Manage Tax Codes

1. Select an existing tax code.
2. Click **Edit** to edit the tax code.

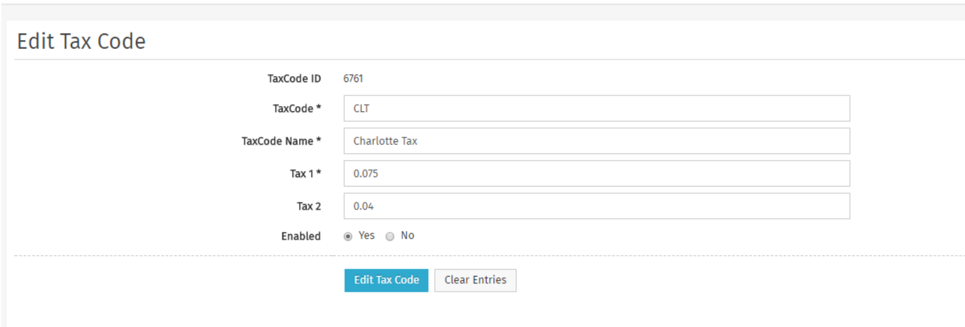


Figure 26: Edit Tax Code

Table 21: Edit Tax Code Field Definitions

Fields	Definitions
Tax Code	Enter the code
Tax Code Name	Enter the Tax Code Name
Tax 1	Enter the tax percentage amount for the first tax to be applied. The value should be between 0 and 1.
Tax 2	Enter the tax percentage amount for the second tax to be applied if the second tax is required for the location. The value should be between 0 and 1.
Enabled	Select whether the tax code should be enabled or not

Table 21: Edit Tax Code Field Definitions (continued)

Fields	Definitions
Tax Code ID	System generated ID for the tax code. This is not editable.

The edited tax information will affect only the new order requests and purchase order lines created for the ship-to location associated with the tax code changed. If you edit an existing purchase order and check the **Recalculate Tax Information** check box, the tax will be recalculated based on the new tax information.

4.10.4 Delete Tax Codes

This action allows a user to delete one or more existing tax codes.

Location: > **Locations** > **Tax Codes**

The following permission is required:

- 199 - Manage Tax Codes

User cannot delete a tax code if the tax code is associated with an enabled location.

1. Select a tax code from the grid.
2. Click **Delete** .
3. Click **OK** in the confirmation message to finish deletion.

5 User Management

User management is a task that must be completed during the initial set-up of the system and maintained throughout the lifetime of the system; as the users, the function and classification of the users, and the groups that the users belong to; may and do often change. Proper setup of groups and users reduces the user management process.

5.1 User Set-up Process

The following table describes the process for defining user data.

Stage	Task	Definition
1	Create Groups	Allows the administrator to perform critical management functions by assigning users to specific groups with specified permissions. Create groups for users that need to use similar areas of the application to reduce the number of permissions and rules and the amount of user maintenance.
2	Create Users	Persons with access to the system that has permissions.
3	Create User attribute types	Attributes can define additional information for users.
4	Assign Permissions	Used to restrict/grant access to pages and reports.

5.2 Group Management

The group functionality is designed to make administration of the system less complex by grouping together users that are similar in their system rights, their job functions, or their location assignments. Two types of groups that are typically set up; the functional permission based groups and the mapping groups.

Functional groups are those that are assigned permissions giving them the right to complete a task in the system. An example of a functional group is approvers. Everyone in the approval group is given the right to approve requests that are delivered to him or her.

Mapping groups are designed to group people together for the purpose of location assignment. An example of a mapping group is a group of people who can only order from a specific warehouse or a group that is restricted from viewing or ordering goods from a particular vendor.

The following permission is required to implement this functionality:

- 5 – Manage Users and Groups

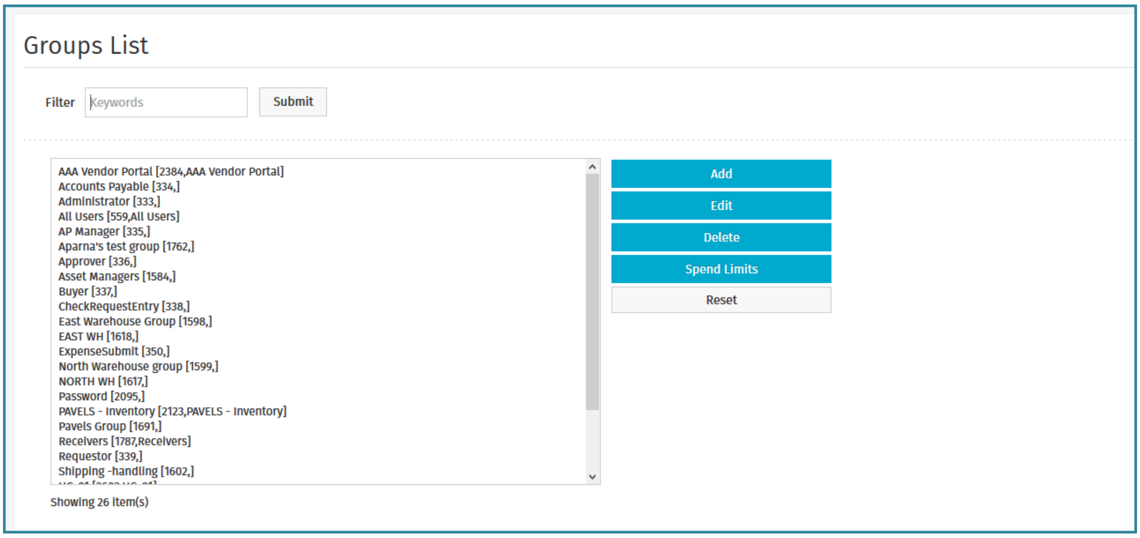


Figure 27: Group Management page

Table 22: Groups List page action definitions

Action	Definition
Add	Allows the user to add a new group
Edit	Allows the user to edit an existing group.
Delete	Allows the user to delete an existing group.
Spend Limits	Allows the user to set spending limits for user groups.
Reset	Allow the user to clear entries that have not been saved.

5.2.1 Suggested Functional Groups

Group	Scope of Permissions to be Assigned
Administrators	Users who have access to the entire set of permissions and settings. Includes catalog and Report Manager functions.
Requesters	Users who are able to create requests.
Approvers	Users who are able to approve requests for subordinates.
Purchasers	Users who need control over the overall process and have access to all purchase orders.
Accounts Payable	Users who are permitted to enter invoice information.

5.2.2 Add/Edit Groups

The Add Group page and the Edit Group page have same attributes.

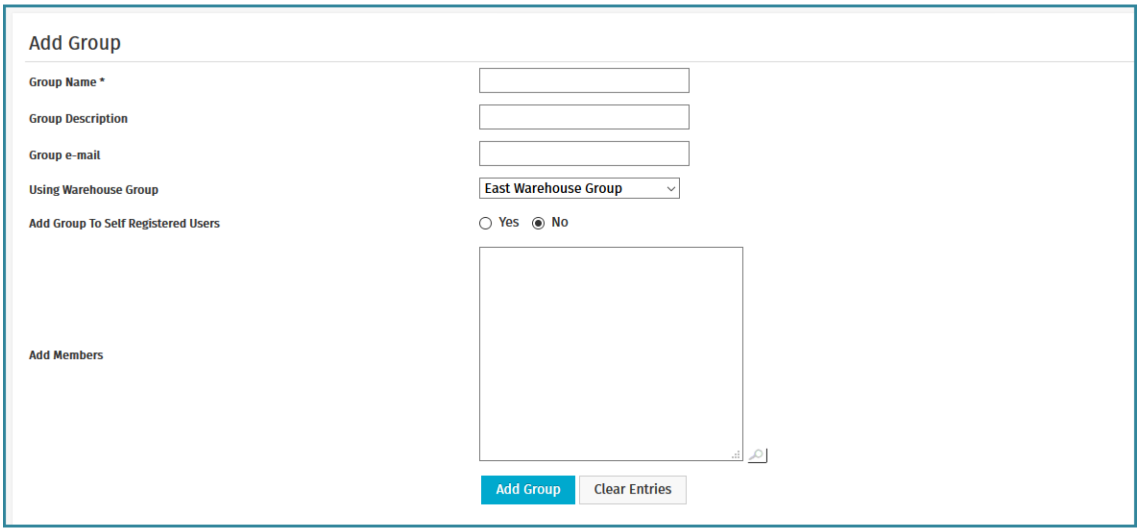


Figure 28: Add Group page

Table 23: Add Group page field definitions

Field	Definition
Group Name	Enter the name of the new group. Be sure to name the group in a manner where the function of the group is recognizable. Categorization is very important for groups, especially if the organization uses functional groups and mapping groups.
Group Description	Enter descriptive information about the group.
Group Email	Enter an email address for the group. The entire email address needs to be entered.
Using Warehouse Group	Use to grant access to warehouses for requisitioning if the Inventory module is enabled. Example: If the Southwest Warehouse group contains two warehouses, LA and Phoenix, then if the Requester group needs to only order from these two warehouses, select the Southwest Warehouse Group in the using warehouse group field.
Add Group To Self Registered Users	If Yes, all users who self-register through the login page using a generated Registration Key are automatically added to the group. If No (default), self-registered users must be manually added to the group. Self-registered users can be automatically added to any number of groups and are added to all groups for which this option is set to Yes.
Add Members	Click the Search icon on the right side of the Add Members field to bring up the box displaying the available users in the system. One or several users can be selected by using the shift or ctrl keys.

5.2.3 Adding a Group

To add a group:

1. From the Dashboard, navigate to ⚙ > **Users** > **Groups**.
2. Click **Add**.
3. Enter the group name, group description, and the group email address.
4. Select a warehouse from the drop-down field in order to associate the group with a specific warehouse group. If inventory is being used and a group is not to be associated with a sourcing warehouse, create a warehouse group that is not assigned to a warehouse first and then create a group and assign it to the unassigned warehouse.
5. Set **Add Group To Self Registered Users** to desired option.
6. The **Search** icon in the Add Members field can be used to add additional members to the group. Initial users may already be loaded into the system through Link Loader. Click the Search icon.
7. Click the appropriate link in order to see the users by the first letter of their last name or click All in order to see all users. Use the Ctrl key to select more than one user. Click **Select**.
8. Click **Done** when finished.
9. Click **Add Group**.

5.2.4 Editing a Group

To edit a group:

1. From the Dashboard, navigate to ⚙ > **Users** > **Groups**.
2. Select the group to edit and click **Edit**.
3. Edit the necessary fields.
4. Click **Edit Group**.

5.2.5 Deleting Groups

Groups cannot be deleted if they are associated with any rule that is active or inactive. This includes rule restrictors.

To delete a group:

1. From the Dashboard, navigate to ⚙ > **Users** > **Groups**.
2. Select the group to delete and click **Delete**.
3. Click **OK** on the pop up window.

5.2.6 Spend Limits for Groups

Spend Limits can be set up for a group of users for a set of account codes. Users first need to create account code groups, which specify the account code range, and then for each account code group a limit can be set.

The spending limits are based on the combination of the user role (e.g. Inventory 1) and the set of account codes (e.g. internal). Each authorization group has only one spending limit for each range or set of account codes.

If a user is assigned to two or more spend groups, the lowest spend limits are from amongst the groups for comparison during approval.

For more information on how to set up account code groups, see Accounts Coding.

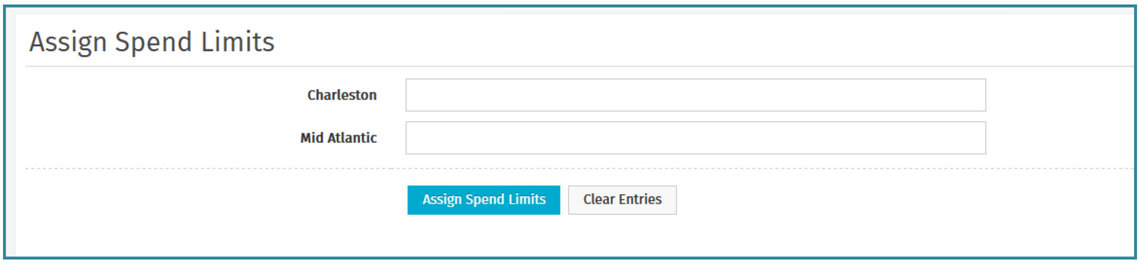


Figure 29: Assign Spend Limits page

The fields displayed here are based on the account code groups that have been added.

5.2.7 Adding Spend Limits for a Group

To add spend limits for a group:

1. From the Dashboard, navigate to > **Users** > **Groups**.
2. Select a group to add spend limits and click **Spend Limits**.
3. Enter the spend limits for the accounting code group.
4. Click **Assign Spend Limits**.

5.2.8 Group Permissions

Once a group has been created, assign the necessary permissions to the group to enable the group members' access and use of the system. See Permissions for more information.

5.3 User Management

User setup and maintenance is one of the most important functions performed in the system. The purpose is to define the user information including login, name, password, and allocation location.

All users' passwords in the application are encrypted, eliminating any possibility of misuse by any user or database administrator. Password encryption is entirely transparent to the user.

The following permissions and system settings are required to implement this functionality:

Permissions:

- 70 – View Users
- 5 – Manage Users and Groups

System settings:

- 820 – Grant New Users Access to System
- 825 – New User Message
- 875 – Display User on Purchase Order Footer
- 1115 - Allow Edit of Master Data with external reference ID - Must be set to "No" in order to edit user information if users are assigned an External Reference ID

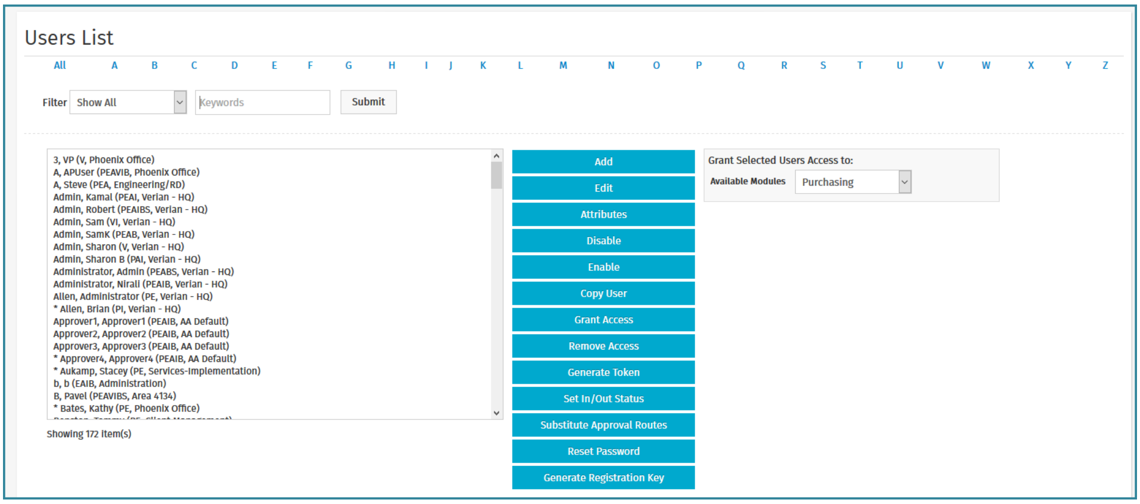


Figure 30: Users List page

Table 24: Users List page action definitions

Action	Definition
Add	Allows the system administrator to add new users into the system.
Edit	Allows the system administrator to edit existing users in the system.
Attributes	Allows the addition of selected information about the user in addition to the defaults. User attribute types are defined in a different section.

Table 24: Users List page action definitions (continued)

Action	Definition
Disable	Allows the system administrator to disable a user temporarily or permanently from the system.
Enable	Allows the system administrator to enable a user that has been disabled in the system.
Copy User	Allows the system administrator to add a user by copying a user profile.
Grant Access	Allows the system administrator access to particular modules in the system. The current modules available are Purchasing, Assets and Work Orders, Expense, Invoice, Vendor Portal, Spend, and Budgets.
Remove Access	Allows the system administrator selectively to remove access from the listed modules.
Generate Token	Allows system administrator to generate tokens to be used in API Interfaces. Note: This functionality needs to be used only if recommended by Basware.
Set In/out Status	Allows the system administrator to change another user's status.
Substitute Approval Routes	Allows the system administrator to replace or substitute a user with open approval routes when that user is about to be discontinued or on leave for an extended period of time.
Reset Password	Allows the system administrator to reset the passwords for the selected users who have valid email addresses in the system and are not excluded from password expiration.

The options below can be used to filter the User List:

- Alphabetical links may be clicked in order to narrow a search parameter.
- The And field can be used in order to search for a specific user quickly.
- The Filter drop-down field can search for the following user types:
  - Active
  - Disabled
  - Show All
  - Expense
  - Invoice
  - Purchasing
  - Service
  - Vendor Portal

5.3.1 Add/Edit Users

The Add User page and the Edit User page have same attributes.

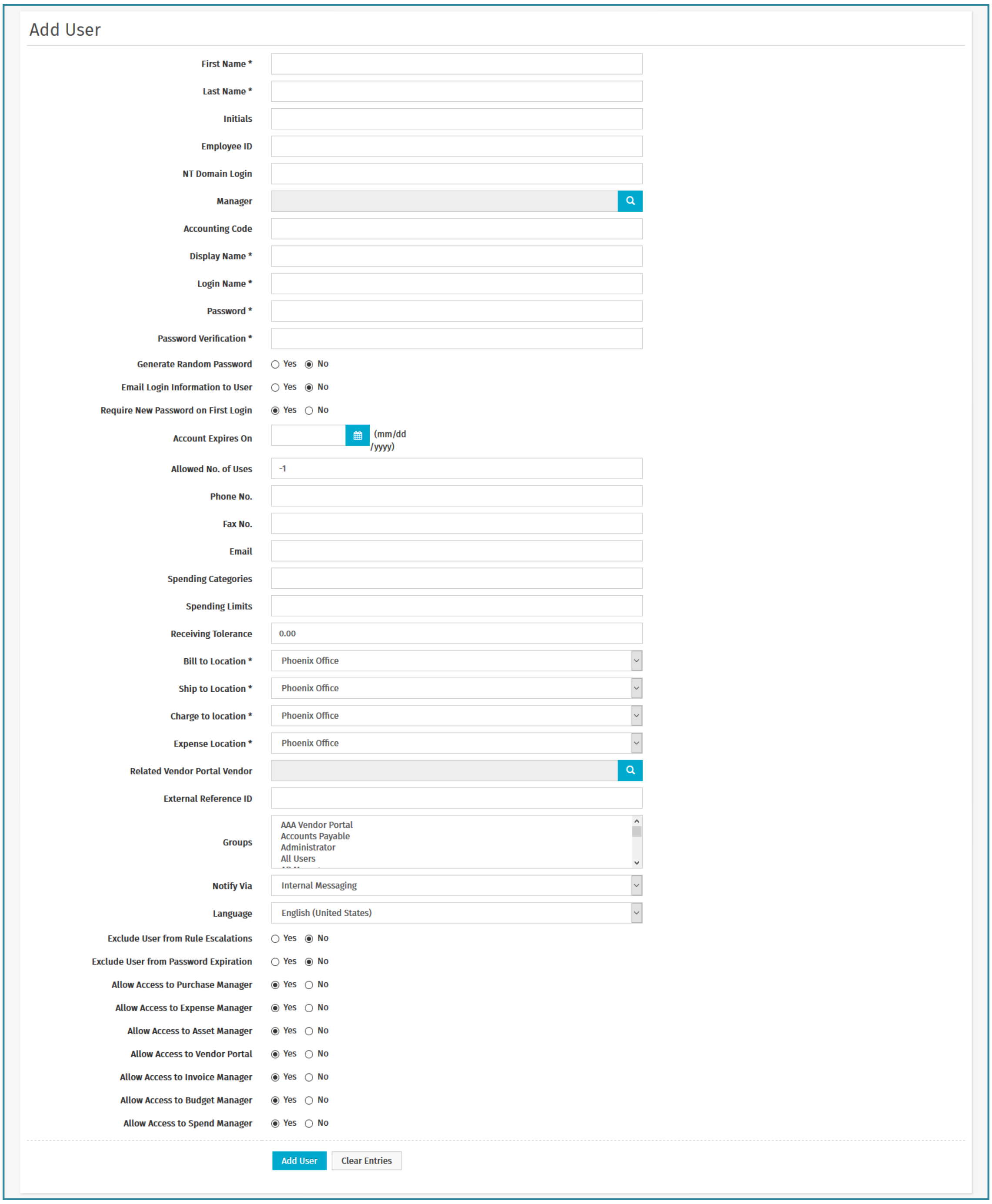


Figure 31: Add User page

Table 25: Add/Edit User field definitions

Field	Definition
First Name*	Enter the user's first name. This is a required field.
Last Name*	Enter the user's last name. This is a required field.
Initials	Enter the initials of the user.

Table 25: Add/Edit User field definitions (continued)

Field	Definition
Employee ID	Enter the Employee ID. Required if system setting *11515 - Require EmployeeID for users* is enabled.
NT Domain Login	Enter NT Domain login for the user if Single Sign On module is installed.
Manager	Select the immediate manager or next approval level for the user.
Accounting Code	Enter the accounting code of the user if an accounting code is used for the user.
Display Name*	Enter the display name in the system. This displays on all the main pages and any time that the user is addressed in the system. This is a required field.
Login Name*	Enter the name used to log in to the system. If single sign-on is used, this needs to be entered. This login name can be used as an alternative to the NT login if the user cannot authenticate on the network. This is a required field.
Password*	Enter the password used to log into the system. This password can be used as an alternative to the NT login if the user cannot authenticate on the network. This is a required field.
Password Verification*	Enter the verification of the entered password to ensure that the entered password was correct. This is a required field.
Generate Random Password	Select Yes if a random password needs to be generated. Select No if a random password does not need to be generated. All passwords generated by the system contain at least one capital letter, one lower-case letter, one number, one special character, and a minimum of 8 characters. This is set to No by default. When Generate Random Password is set to Yes, Email Login Information to User must be set to Yes. This information is not stored in the user's profile. It is used when the user is created and discarded.
Email Login Information to User	Select Yes if the password needs to be emailed to the user. Select No if the password does not need to be emailed to the user. This is set to No by default. When Generate Random Password is set to Yes, Email Login Information to User must be set to Yes. This information is not stored in the user's profile. It is used when the user is created and discarded.

Table 25: Add/Edit User field definitions (continued)

Field	Definition
Require New Password on First Login	Select Yes if the user needs to enter a new password the first time he logs in. Select No if the user does not need to change his password the first time he logs in. This is set to Yes by default. When Generate Random Password is set to Yes, Email Login Information to User must be set to Yes.
Account Expires On	Select an expiration date if an expiration date for this user is required. This is an optional field.
Allowed No. of Uses	Enter the allowed number of uses. This field defaults to –1, which is designed to allow the user infinite access to the system. If a user is temporary or should only be allowed a specified amount of uses in the system, a number can be set in this field. This is a required field, so if the user is permanent, use –1.
Mobile Password	Enter the user's mobile password. This field is enabled when single sign-on is enabled and system setting 11645 – Activate SSO Mobile Password is enabled.
Mobile Password Verification	Re-enter the user's mobile password. This field is enabled when single sign-on is enabled and system setting 11645 – Activate SSO Mobile Password is enabled.
Phone No.	Enter the user's phone number. This is an optional field, but is displayed in the directories if available.
Fax No.	Enter the user's fax number. This is an optional field, but is displayed in the directories if available.
Email	Enter the user's email. This is used to notify the user of approvals or any other system email that may be sent. This is an optional field, but is highly recommended, for receiving system communication.
Spending Categories	Spending categories are the categories that correspond to the limits assigned in the spending limits field. Semicolons divide the different values. The value entered is the Item Category ID. If the values are 0;5;7, which means that in general, for all categories (0), this user has to get everything approved as per the corresponding spend limit, but for exclusion categories 5 and 7. The exclusion categories require additional rules to be in place for the exception categories to be routed for approval. If the values are only 5;7, the rules are triggered based on the actual total of line items on the requisition and the corresponding spend limit for the category. If the 0 category is used, the order proceeds for approval to each user's manager until a manager has the ability to approve the amount of the purchase. Use (-1) for order requests Use (-2) for expenses Use (-3) for invoices Use (-4) for assets Use (-6) for non-PO invoices All changes to this field are logged in the internal system audit. Rules for exclusion categories can be any rule type that uses item category as evaluation criteria. Two rule types that would work in this instance are condition rules and approval rules by item category. However, rules for exclusion categories are not necessary if the organization does not want any approvals required for the exclusion categories.

Table 25: Add/Edit User field definitions (continued)

Field	Definition
Spending Limits	Spending limits is used for approval purposes. The spend limit is the actual dollar amount that corresponds to an Item Category ID listed in the spending categories field. There can be limits associated with each entered category. Semicolons divide different limits. If zero is entered as a spending limit, this requires each purchase in this category to be approved by a manager. If spending limits are specified with a 0 or a negative number (corresponding to the module ID) along with some item categories, the item categories are treated as exclusion categories. The spend limit assigned to 0 is used and only applies to items that are not in the exception categories. Additional rules need to exist in the system to route the items for approval in the exclusion categories. If spend limits are specified without using a 0 or a negative number, the rules are triggered based on the actual totals of line items on the requisition and the corresponding spend limit for the assigned exception category. Example 1: 0;500;300 This means that in general, this user has to have everything approved outside of the second and third exclusion categories for which they have 500.00 and 300.00 limits for which the spend limit values are essentially ignored. Example 2: 500;300 This means that in general, the rules are triggered for categories 5 and 7. This is based on the actual totals of the line items on the requisition and the corresponding spend limit for the category. If a 0.00 spending limit is used, the order proceeds for approval to each user's manager until a manager has the ability to approve the amount of the purchase. All changes to this field are logged in the internal system audit.
Receiving Tolerance	Enter the user's receiving tolerance if it is different than the percentage entered for system setting *6500 – Over Receiving Tolerance Percent (in decimal)*. Valid Values are numbers greater than 0 and less than 1. Examples Enter .02 for 2% .2 for 20% .25 for 25% If the user's receiving tolerance percentage is 0 and system setting 6500 is set to 0, receiving tolerances are disabled. If the user's receiving tolerance percentage is greater than 0 and less than 1 and system setting 6500 is 0, receiving tolerances are disabled. If the user's receiving tolerance percentage is 0 and system setting 6500 is greater than 0 and less than 1, the user and the system have the same receiving tolerances. If the user's receiving tolerance percentage is greater than the value set for system setting 6500 when the value is greater than 0 and less than 1, the user's receiving tolerance takes precedence over the system setting. The user is able to receive up to his tolerance percentage which is greater than the system's tolerance percentage. If the user's receiving tolerance percentage is less than the value set for system setting 6500 when the value is greater than 0 and less than 1, the user's receiving tolerance takes precedence over the system setting. The user is able to receive up to his tolerance percentage which is less than the system's percentage. The default value is 0.00.
Bill to Location*	The bill to location is the assigned location invoices for purchase orders and other documents are sent. This is set to the system's default location. The location may need to be changed to a different location for the user being added. Once the user is added, this is the user's default bill to location. This is a required field. Users need permission 96 – Can Change Bill-to-Location during Requesting to change the bill location for an order request. The bill-to location, ship-to location, charge-to location, and/or expense-to location are not required to be the same location. System setting *13000 – VP: Default User Location* determines the default location for the system.

Table 25: Add/Edit User field definitions (continued)

Field	Definition
Ship to Location*	The ship-to location is the assigned location goods are shipped. This is set to the system's default location. The location may need to be changed to a different location for the user being added. Once the user is added, this is the user's default ship to location. This is the user's default location. This is a required field. Users need permission 13 – Can change Ship-To Location during Requesting to change the ship to location for an order request. The bill-to location, ship-to location, charge-to location, and/or expense-to location are not required to be the same location. System setting *13000 – VP: Default User Location* determines the default location for the system.
Charge to Location*	The charge to location is the assigned location goods are charged to. This is set to the system's default location. The location may need to be changed to a different location for the user being added. Once the user is added, this is the user's default charge to location. This is a required field. Users need permission *9 – Can Change Charge-To Location during requesting* to change the charge to location for an order request. The bill-to location, ship-to location, charge-to location, and/or expense-to location are not required to be the same location. System setting *13000 – VP: Default User Location* determines the default location for the system.
Expense Location*	The expense location is the assigned location the user submits his expenses to when using the Expense Manager. This is set to the system's default location. The location may need to be changed to a different location for the user being added. Once the user is added, this is the user's default expense to location. This field is only required when Expense Manager is enabled. The expense location can be different from the shipping and billing locations. The bill-to location, ship-to location, charge-to location, and/or expense-to location are not required to be the same location. System setting *13000 – VP: Default User Location* determines the default location for the system.
Related Vendor Portal Vendor	This field is used when creating a Vendor Portal user. If creating a Vendor Portal access for a vendor, select the vendor for whom the access is being created in this field.
External Reference ID	Allows tenants to retain the IDs from other user management systems. The value must be unique for every user within the tenant.

Table 25: Add/Edit User field definitions (continued)

Field	Definition
Groups	Groups are assigned in this area. Multiple groups can be assigned by using the shift or ctrl keys.
Notify Via	This allows the selection by which the user receives messages from the system. They can receive email messages, internal messages, or both. Email messages go to the user's email account. Internal messages are to the user's Notification Area. The user needs to log into the system to receive his messages. Both email and internal deliver the message to the user using both venues.
Language	This allows the administrator to change the locale for the user from the default locale. This only affects the system's non-transactional data (actions, labels, tooltips, hover help, and messages). All transactional data (user names, vendors, items, etc.) are displayed in the language it was uploaded in.
Exclude User from Rule Escalations	When set to No, the user receives notification to approve when approvals are escalated to him. When set to Yes, the user does not receive any notification to approve and the request/invoice is declined by the system. This is set to No by default.
Exclude User from Password Expiration	When set to No, the user must change his password when the value for system setting *11650 – Days Before User Password Expires* is greater than 0. When set to Yes, the user is not required to change his password when the value for system setting *11650* is greater than 0. This is set to No by default. When set to Yes, this user is not affected by any of the reset password functionalities.
Allow Access to Purchase Manager	This allows access to the Purchasing module. This is the same function as grant access on the Main page. If grant access has been used, this defaults to Yes in the user profile.
Allow Access to Expense Manager	This allows access to the Expense module. This is the same function as grant access on the Main page. If grant access has been used, this defaults to Yes in the user profile.
Allow Access to Asset Manager	This allows access to the Assets and Work Order module. This is the same function as grant access on the Main page. If grant access has been used, this defaults to Yes in the user profile.
Allow Access to Vendor Portal	This allows access to the Vendor Portal. This is the same function as grant access on the Main page. If grant access has been used, this defaults to Yes in the user profile.
Allow Access to Invoice Manager	This allows access to the Invoice module. This is the same function as grant access on the Main page. If grant access has been used, this defaults to Yes in the user profile.
Allow Access to Budget Manager	This allows access to the Advanced Budgets module. This is the same function as grant access on the Main page. If grant access has been used, this defaults to Yes in the user profile.
Allow Access to Spend Manager	This allows access to the Spend Manager module. This is the same function as grant access on the Main page. If grant access has been used, this defaults to Yes in the user profile.

When spending limits account code based rules are used with assigning approvers to account code groups, the user's spending limits work differently. Refer to "Chapter 8" in the General Admin Guide for more information.

5.3.1.1 Adding a User

To add a user:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. Click **Add**.
3. Complete the required fields.
4. Click **Add User**.

5.3.1.2 Editing a User

To edit a user:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. Select the user to edit and click **Edit**.
3. Edit the necessary fields.
4. Click **Edit User**.

5.3.2 Disabling a User

Users with open approval routes cannot be disabled. A stop message is displayed when a user with open approval routes is selected and Disable is clicked.

To disable a user:

1. From the Dashboard, navigate to > **Users** > **User**.
2. Select the user to disable, and click **Disable**.
3. Click **OK** on the pop-up window.

The selected user is disabled and an asterisk is displayed in front of the user's name on the User list.

5.3.3 Enabling a User

To enable a user:

1. From the Dashboard, navigate to > **Users** > **User**.
2. From the Filter drop-down field select *Disabled* and click **Retrieve**.
3. Select a user from the list who needs to be enabled, and click **Enable**.

5.3.4 Copying a User Profile

Copy user allows the ability to copy a user profile when creating a new user.

To copy a user profile:

1. From the Dashboard, navigate to ⚙ > **Users** > **Users**.
2. From the Filter drop-down field, select *Enabled*, and click **Retrieve**.
3. Select a user from the list to copy and click **Copy User**.
4. Edit the necessary fields such as First Name, Last Name, Login Name, and Password.
5. Click **Edit User**.

5.3.5 Granting a User Access to Available Modules

The specific permissions for the module still need to be configured for the user to be able to perform the tasks in the module.

To grant a user access to available modules:

1. From the Dashboard, navigate to ⚙ > **Users** > **Users**.
2. Select a user.
3. From the Available Modules drop-down field, select a module.
4. Click **Grant Access**.

5.3.6 Removing a User’s Access from Available Modules

To remove a user’s access from available modules:

1. From the Dashboard, navigate to ⚙ > **Users** > **Users**.
2. Select a user.
3. From the Available Modules drop-down field, select a module.
4. Click **Remove Access**.

5.3.7 Setting the In/Out Status for Another User

Set In/Out Status provides the system administrator the ability to change another user’s status. This is helpful if a user is on vacation and forgets to set his status to out.

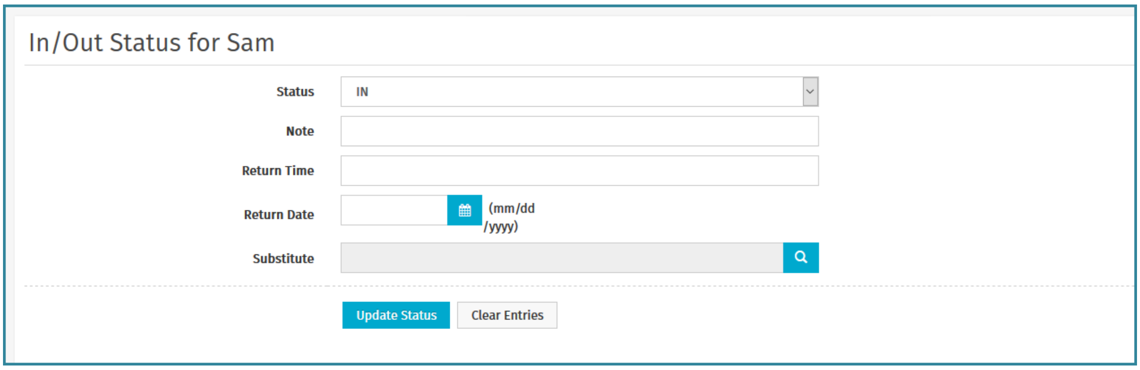


Figure 32: In/Out Status page

A user whose status is set to Out cannot be selected as a substitute. A substitute's status must be set to In.

To set the in/out status for another user:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. From the Filter drop-down field, select *Enabled*, and click **Retrieve**.
3. Select a user from the list to change and click **Set In/Out Status**.
4. Edit the necessary fields.
5. Click **Update Status**.

5.3.8 Substitute Approval Routes

There are times when users who are approvers on open approval routes need to be replaced due to changing positions, taking long-term leave, or leaving the organization. The Substitute Approval Routes Action provides the system administrator with that ability.

System administrators are able to assign all the approval documents to the user's manager, one user, or multiple users. To select another user as the substitute user, the selected user must be assigned permission *1 – Approve Requests.*

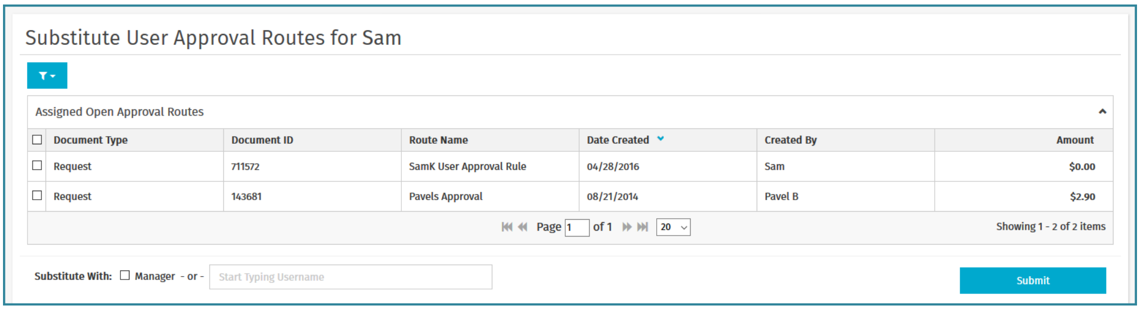


Figure 33: Substitute User Approval Route page

Filter

The following column filters support criteria selection:

- Document Type
- Document Type Criteria
- Request
- Expense
- Invoice
- Work Order

The Document Type field is limited to the criteria provided and searches for the selected criteria.

The following column filters support text entry:

- Document ID
- Route Name
- Created By

Text entry fields search for the information entered. The asterisk * can be used as a wildcard when entering information for a search. The wildcard is helpful when you are unable to remember the remaining letters or numbers of a contract, ID, or name.

The filter, sort, and pagination are maintained (sticky) for a single browser and machine. Once filter, sort, and pagination are applied, they are stored in the browser's cookies. When the user leaves the page and returns to the same page, the same filter, sort, and pagination are applied until changed by the user, the browser's cookies are cleared, or 10 days have passed. The filter is preserved for 10 days if the user leaves the page or closes the browser.

Sort

The sort option allows you to view the column information in ascending or descending order. If a sort has not been applied, the sort is defaulted to the Date Created column in descending order. Once a sort is changed or applied to another column, the applied sort is maintained for a single browser and machine until changed by the user, the browser's cookies are cleared, or 10 days have passed. The sort is preserved if the user leaves the page or closes the browser.

Pagination

Pagination allows you to control the number of items you can view in a grid at a time. Your choices are 20, 40, 80, or 100. The number of pages available to you is determined by the number of items you selected to view per page and the number of items there are.

5.3.8.1 Assigning All Approval Documents to a User's Manager

To assign all approval documents to a user's manager:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. From the Filter drop-down field, select *Enabled*, and click **Retrieve**.
3. Select the user from the list to who is being replaced on the approval routes and click **Substitute Approval Routes**.
4. Check the checkbox to the left of the Document Type column.
5. Check the checkbox between Substitute With and Manager.
6. Click **Submit**.

7. Provide a reason for the substitution in the modal. This is required.
8. Click **Submit**.

5.3.8.2 Assigning All Approval Documents to Another User

To assign all approval documents to another user:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. From the Filter drop-down field, select Enabled, and click **Retrieve**.
3. Select the user from the list to who is being replaced on the approval routes and click **Substitute Approval Routes**.
4. Check the checkbox to the left of the Document Type column.
5. Start typing the substitute's name in the autocomplete field that is to the right of Substitute With. Names of users with permission 1 that match the letter combinations you are typing are suggested.
6. Select the name of the user you are searching for when it is displayed or you have completed typing it.
7. Click **Submit**.
8. Provide a reason for the substitution in the modal. This is required.
9. Click **Submit**.

5.3.8.3 Assigning Approval Documents to Manager and/or Multiple Users

To assign approval documents to manager and/or multiple users:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. From the Filter drop-down field, select Enabled, and click **Retrieve**.
3. Select the user from the list to who is being replaced on the approval routes and click **Substitute Approval Routes**.
4. Filter for the documents you want to assign to a specific user.
5. Check the checkbox to the left of the Document Type column.
6. Select the manager or start typing the substitute's name in the auto-complete field that is to the right of Substitute With. Names of users with permission 1 that match the letter combinations you are typing are suggested.
7. Select the name of the user you are searching for when it is displayed or you have completed typing it.
8. Click **Submit**.
9. Provide a reason for the substitution in the modal. This is required.
10. Repeat Steps 6-11 until all approval documents have been assigned to substitute users.
11. Click **Submit**.

5.3.9 Reset Password

System administrators have the ability to easily reset users' passwords from the User List page. One or more users can be selected at a time. However, users who are excluded from password expiration cannot have their passwords reset.

When **Reset Password** is clicked, one of the following occurs:

- An error message is displayed if all the users selected are excluded from password expiration.
- A warning message is displayed if some of the users selected are excluded from password expiration along with the option to proceed or cancel.
- If all the users are eligible for a password reset, only the reset password options are displayed.

The Email Login Credentials option is very important. This needs to be selected with care.

Select Yes if your users log in with a username and password. As long as they have a valid email address in the system, their new password is sent to them.

Select No if your users use single sign-on. An email is not sent to users when the password is reset.

Email notifications contain the new passwords for the users. Users who log in with usernames and passwords MUST be notified via email of password resets. If email notifications are not sent, no one has access to the new passwords (not even system administers or global administrators). The reset password process has to be repeated again for the effected users.

Users without valid email addresses cannot receive their updated passwords. Once the passwords are reset, a list of users who do not have email addresses specified in the Email field on the Add/Edit User page is displayed. One of the following actions needs to be taken to allow these users back in the system:

- Enter valid email addresses for the users who do have them and reset their passwords.
- Manually enter new passwords for the users listed and informed them of their new passwords. When passwords are reset and an email is not sent, no one knows the new password or has access to it.

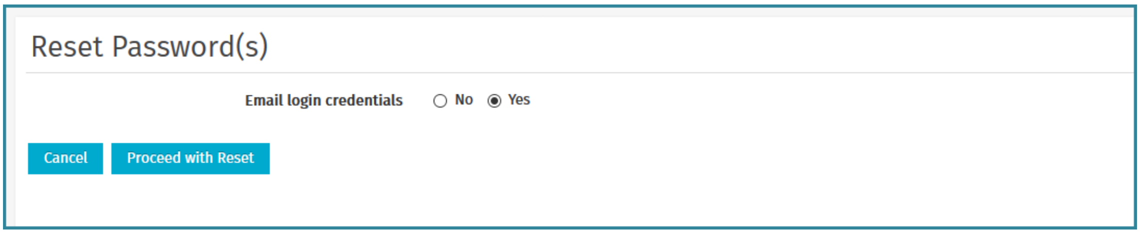


Figure 34: Reset Password

Items to Note

- The password sent in the reset password email does not expire.
- When users are added to or edited in the system, there are three flags that affect reset password.

    - Generate Random Password
    - Email Login to User
    - Require New Password on Next Login
- The maximum number of users displayed in the Admin List per page determines the maximum number of user passwords that can be changed at one time

5.3.9.1 Resetting a User Password

To reset the password for one or more users:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. Select the user or users whose passwords are to be reset.
3. Click **Reset Password**.
4. Click **OK** in the confirmation pop-up.
5. Select Yes if emails are to be sent to the users. Select No if emails are not to be sent to the users.

   Select No only when SSO is enabled.

6. Click **Proceed with Reset**.

5.3.10 SSO Password Access for Basware - Verian Mobile

Administrators are able create and edit users' mobile passwords from the Add/Edit User page.

System Setting

- 11645 – Activate SSO Mobile Password

Permission

- 5 – Manage Users and Groups

The mobile password requirements are determined by the following password system settings:

- 11620 – Password Length
- 11625 – Require Password to Contain Numbers
- 11630 – Require Password to Contain Upper and Lower Case Letters
- 11635 – Require Password to Contain a Special Character

5.3.10.1 Adding a User with a Mobile Password

To add a user with a mobile password:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. Click **Add**.

3. Enter the required information.
4. Verify that information is entered in the *NT Domain* field.
5. Enter the mobile password in the *Mobile Password* field.
6. Re-enter the same password in the *Mobile Password Verification* field.
7. Complete entering the required information.
8. Click **Add User**.

5.3.10.2 Editing a User with a Mobile Password

When system setting 11650 – Days Before User Passwords Expire has a value greater than 0, users with mobile passwords are required to change their mobile passwords at the appropriate time.

To add a user with a mobile password:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. Select the user whose mobile password needs to be edited.
3. Click **Edit**.
4. Verify that information is entered in the *NT Domain* field.
5. Enter the new mobile password in the *Mobile Password* field.
6. Re-enter the same password in the *Mobile Password Verification* field.
7. Click **Edit User**.

5.4 Management of Self-Registered Users

Users may be instructed to self-register to the system, offloading some of the responsibility for registering users from the system administrators. The self-registration feature may be especially helpful for large companies who add a lot of users in a small time frame.

Self-registered users, once approved are automatically added to all groups with the Add Group to Self Registered Users option set to Yes. See Group Management for more information.

Users must be given a registration key to self-register - See the *General User Guide, Chapter 1* for more information on the user side of self registration. The instructions below describe how to provide the self-registration key to users.

Related System Settings

- 11510 - Match Self-Registered users by card transactions
- 11515 - Require Employee ID for users
- 11520 - Modules to Grant to Self-Registered Users

5.4.1 Generating a Registration Key for New Users

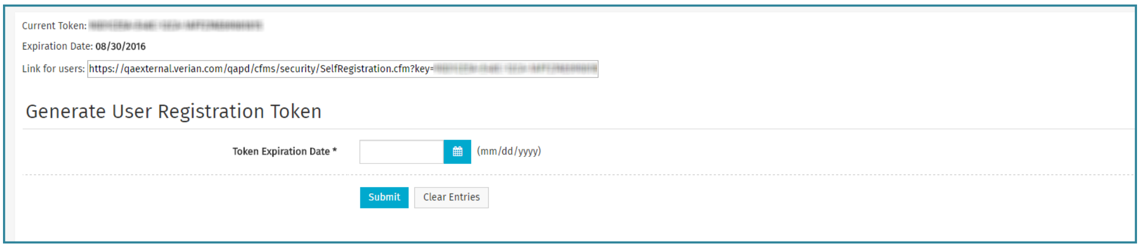


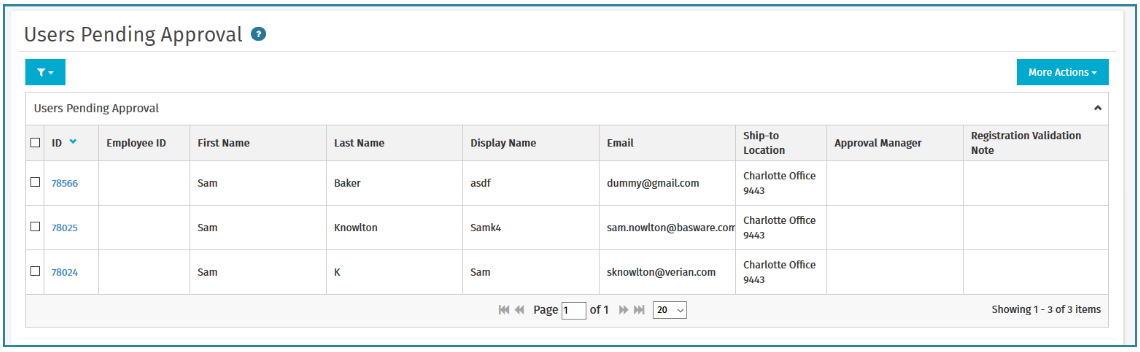
Figure 35: Generate User Registration Token page

To generate a registration key that allows users to self-register:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. Click **Generate Registration Key**.
3. Select a Token Expiration Date.
4. Click **Submit**. The Current Token field and Link for Users field populate with the key.
5. Distribute the generated token or URL to employees that need to self-register.

5.4.2 Approval of Self-Registered Users

After a user self-registers, an administrative user with permission *5 - Manage Users* must approve the registration for it to become active. Pending registrations appear on the Users Pending Approval page, accessed by navigating to > **Users** > **Users Pending Approval**.



ID	Employee ID	First Name	Last Name	Display Name	Email	Ship-to Location	Approval Manager	Registration Validation Note
78566		Sam	Baker	asdf	dummy@gmail.com	Charlotte Office 9443		
78025		Sam	Knowlton	Samk4	sam.nowlton@basware.com	Charlotte Office 9443		
78024		Sam	K	Sam	sknowlton@verian.com	Charlotte Office 9443		

Figure 36: Users Pending Approval grid

From here the administrator can approve/reject users at the header level, or edit and approve/reject users at the detail level by clicking the ID link.

The Registration Validation Note field describes errors found during user registration validation. The possible errors include:

- The employee ID already exists for another user.
- Transactions were found for the user, but none matched the provided card number.

The errors are only for the approver's information and do not prevent the user from being approved and added to the system.

5.4.2.1 Approving or Rejecting Users Pending Approval (Header Level)

To approve or reject users that used the self-registration function:

1. Navigate to > **Users** > **Users Pending Approval**.
2. Select the box(es) next to each user to be approved/rejected.
3. Click **More Actions**.
4. Click **Approve Users** or **Reject Users**.
5. If **Reject Users** is clicked, a reason must be provided in the modal that appears. The reason is sent to the users in the notification email. Provide a reject reason and click **OK**.
6. If users are approved, they are granted access to the modules specified in system setting *11520 - Module to Grant to Self-Registered Users*

5.4.2.2 Editing and Approving/Rejecting a User Pending Approval (Detail Level)

To edit and approve or reject a self-registered user at the detail level:

1. Navigate to > **Users** > **Users Pending Approval**.
2. Click the hyperlinked ID beside the user to edit.
3. On the Edit User page, edit all necessary fields.
4. Click **Save** to save the unapproved user for later approval. Click **Approve** to approve the user registration, or **Reject** to reject it.

5.5 User Attribute Types Management

User attributes are additional user data points required by the organization that are not collected by the default user fields. These may be used in several different modules such as user bank account number or credit card number for the Travel & Expense module or additional managers for approval routing in the Purchasing module.

There are two requirements in setting up attributes. First, an attribute type must be defined, followed by the attribute or list of attributes. Second, the attribute type is set up, the manage input fields are used to set up the attributes.

The following permission is required when implementing this functionality:

- 89 – Manage User Attribute Types

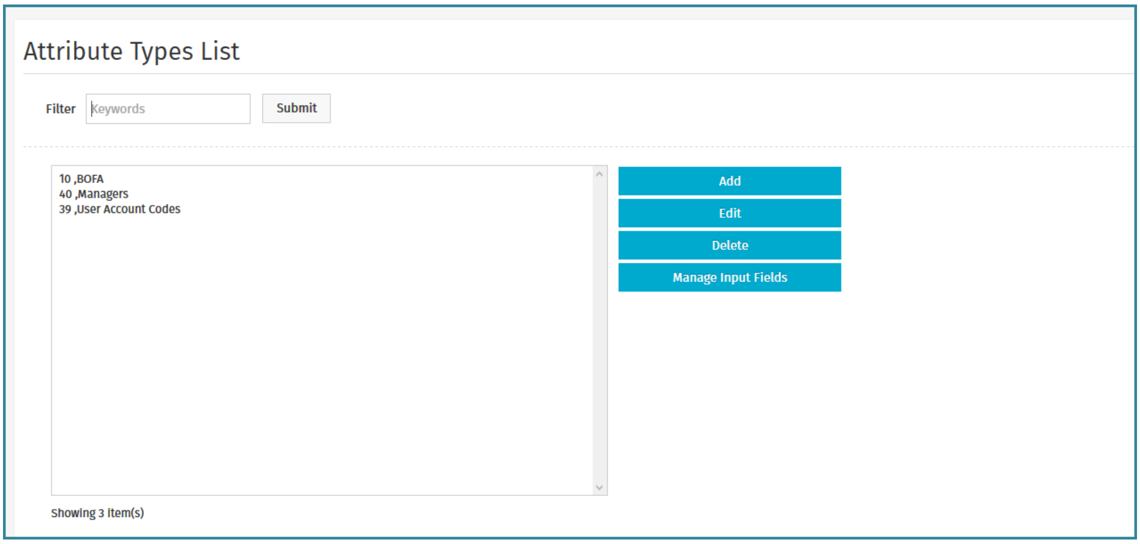


Figure 37: Attribute Types Management page

Action	Definition
Edit	Allows the user to edit an existing attribute type.
Add	Allows the user to add an attribute type.
Delete	Allows the user to delete an existing attribute type.
Manage Input Fields	Allows the user to manage or change the input fields of the attribute type. This allows the actual set-up of the type and required fields for the attribute.

5.5.1 Addition or Editing of Attribute Types

The Add Attribute Type page and the Edit Attribute Type page have same attributes.

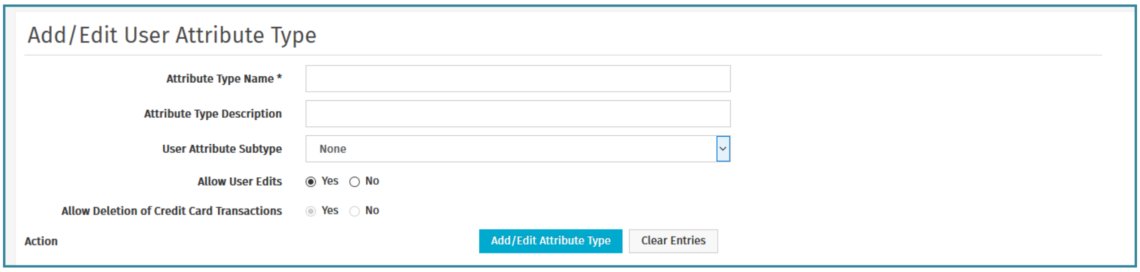


Figure 38: Add/Edit Attribute Type page

Table 26: Add/Edit User Attribute Type page field definitions

Field	Definition
Attribute Type	Enter the name of the attribute. Example: manager or bank routing number
Attribute Reference	Enter a description of the attribute type.

Table 26: Add/Edit User Attribute Type page field definitions (continued)

Field	Definition
Attribute Subtype	Select none when setting up standard user attributes. Select credit card – company paid or credit card – employee paid when setting up an attribute for a credit card reference. When one of these two options is selected, the Allow User Change field must be set to No. This is only used in conjunction with the Travel and Expense Module. If Credit Card - Employee Paid or Credit Card - Company Paid is selected, an additional field displays: Master Account Number. This information helps match imported credit card expense data to the user.
Allow User Change	Set to Yes if the user can change the attribute under his profile. If this is a static value or one that should be changed only by administration, then it should be set to No.
Allow Deletion of Credit Card Transactions	Select No if the users are not able to delete company paid credit card transactions. When set to No, if a user Select Yes if the users are able to delete company paid – credit card transactions. When this option is set to Yes, all the delete functions are available. When users delete credit card – company paid transactions, they are required to enter a reason for deleting. This option is only enabled when credit card – company paid is selected in the Attribute Subtype field.
Master Account Number	This information helps match imported credit card expense data to the user. Only displayed if the User Attribute Subtype is set to Credit Card - Employee Paid or Credit Card - Company Paid.

5.5.1.1 Adding an Attribute Type

To add an attribute type:

1. From the Dashboard, navigate to > **Users** > **User Attribute Types**.
2. Click **Add**.
3. Enter the name of the attribute in the attribute type field.
4. Enter a description of the attribute in the attribute reference field.
5. Select the attribute subtype.
6. Select *Yes* if users are allowed to change this attribute in their profiles. Select *No* if users are not allowed to change this attribute in their profiles.

If credit card – company paid or credit card – employee paid is selected as the attribute subtype, the allow user change must be set to *No*. If the user forgets to set this field to no before clicking Add/Edit Attribute Type, the system automatically changes it to *No* and displays a message.

7. Click **Add/Edit Attribute Type**.

5.5.1.2 Editing an Attribute Type

To edit an attribute type:

1. From the Dashboard, navigate to > **Users** > **User Attribute Types**.

2. Select the attribute type to be edited, and click **Edit**.
3. Edit the necessary fields.
4. Click **Add/Edit Attribute Type**.

5.5.1.3 Deleting Attribute Types

To delete an attribute type:

1. From the Dashboard, navigate to > **Users** > **User Attribute Types**.
2. Select the attribute type to be deleted, and click **Delete**.
3. Click **OK** on the pop up window.

5.5.2 Input Fields (User Attributes)

Manage input fields is used to add the user attributes for each attribute type that has been added. Thus, an attribute type is like a section and input fields is the content of that section.

When the attribute subtype credit card – company paid or credit card – employee paid is selected, an account number attribute definition is automatically created. This cannot be edited or deleted. This definition is used to store the employee credit card numbers which are stored securely. The credit card numbers are hashed and stored in the database. Only the last four digits are displayed.

The attribute subtypes credit card – company paid and credit card – employee paid are available when the Travel and Expense module has been purchased.

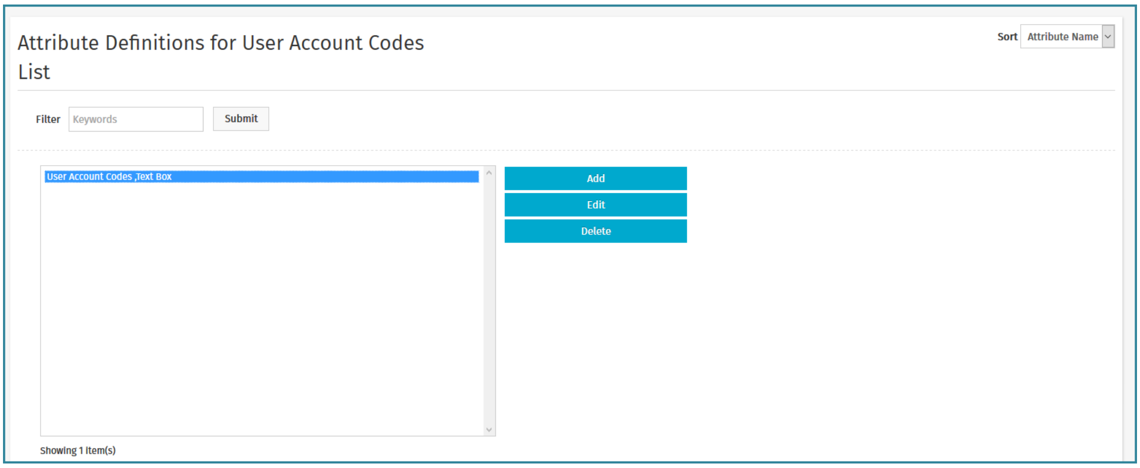


Figure 39: Attribute Definitions List page

Table 27: Add User Attribute page field definition

Action	Definition
Edit	Allows the user to edit an existing attribute.

Table 27: Add User Attribute page field definition (continued)

Action	Definition
Add	Allows the user to add a new attribute under the attribute type.
Delete	Allows the user to delete an existing attribute.

Account number attribute definitions cannot be edited or deleted.

Table 28: Field Types and Examples

Field Type	Use for	Example
List	A field that allows the user to search for the appropriate value froma provided list.	Select the Operating System? Windows XP Pro, Windows 2000, UNIX
Numeric	A field that allows numeric values only.	7000
Radio Button	A field that allows either/or options. When assigning Radio as the field type in asset attributes, be sure to separate the information in Label List with slashes.	If the attribute values are Yes/No.
Select box	A field that displays a list of supplied attribute values that can be selected. Must enter SQL to configure this field	A list of state names where the value passed is the two character state abbreviation.
Text box	A field that allows large area of free form entry.	Anything

5.5.3 User Attributes Addition and Editing

The Add User Attribute Definition page and the Edit User Attribute Definition page have same attributes.

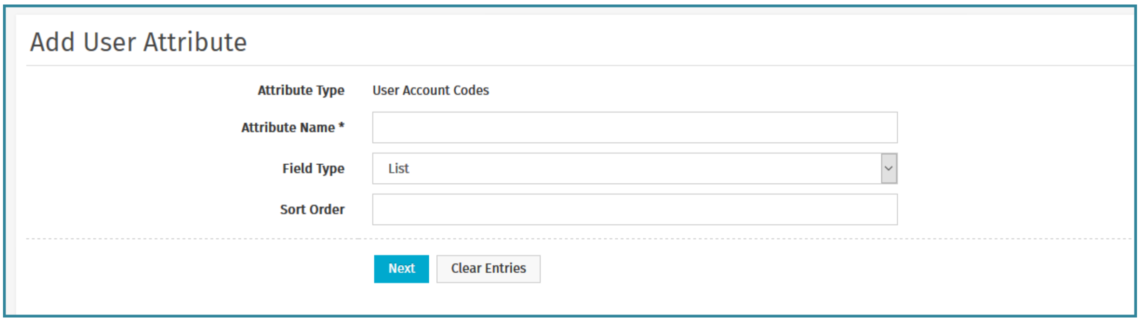


Figure 40: Add User Attribute page

Table 29: Add User Attribute page field definitions

Field	Definition
Attribute Type	Attribute type previously named, this field cannot be edited.
Attribute Name	Name of the attribute that is displayed in user profile.
Field Type	Type of user attribute entered. The choices are list, numeric, radio action, select box, and text box. Upon selecting one of these field types, the next page displays various options for collecting the data. An example of a list box is shown in the next page shot.
Sort Order	A numeric value used to set the order in which the attributes are displayed on the user profile when there are more than one user attributes added.

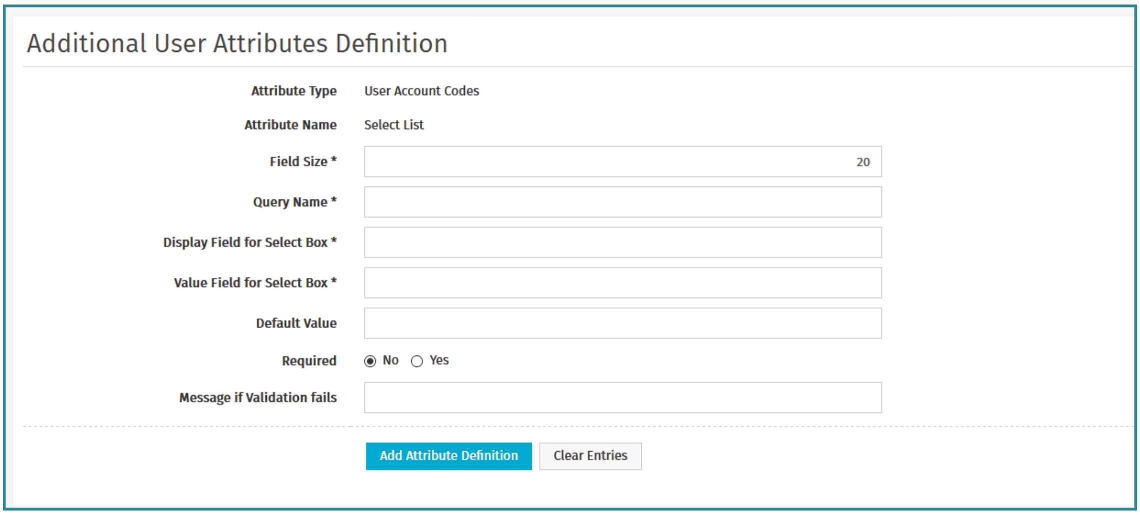


Figure 41: Add User Attribute Step 2

Step 2 varies depending on the field type selected in Step 1.

Table 30: Additional User Attributes page field definitions

Field	Definition
Attribute Type	Attribute type previously named; this field cannot be edited.
Attribute Name	Name of the attribute displayed in user profile.
Field Size	Amount of characters shown in the field.
Query Name	Name of the query written to pull required list.
Display Field for Select Box	Name of the select box.
Value Field for Select Box	The field from which the values are pulled.
Default Value	If none is selected, the value can be set to a certain ID or 0 for null.
Required	If the attribute is required for each user.

Table 30: Additional User Attributes page field definitions (continued)

Field	Definition
Message if Validation Fails	If any issue occurs while entering the data or if nothing is entered for a required field, this message is shown.

5.5.3.1 Adding a User Attribute

To add a user attribute:

1. From the Dashboard, navigate to > **Users** > **User Attribute Types**.
2. Select an attribute type and click **Manage Input Fields**.
3. Click **Add**.
4. Complete the required fields and click **Next**. Step 2 varies depending on the field type selected in the previous page.
5. Complete the required fields and click **Add Attribute Definition**.

5.5.3.2 Editing a User Attribute

To edit a User Attribute:

1. From the Dashboard, navigate to > **Users** > **User Attribute Types**.
2. Select an attribute type whose attributes need to be edited, and click **Manage Input Fields**.
3. Select a user attribute to edit and click **Edit**.
4. Edit the required fields and click **Next**. Step 2 varies depending on the field selected in the previous page.
5. Edit the necessary fields and click **Update**.

5.5.3.3 Deleting a User Attribute

To delete a user attribute:

1. From the Dashboard, navigate to > **Users** > **User Attribute Types**.
2. Select an attribute type and click **Manage Input Fields**.
3. Select a user attribute to delete and click **Delete**.
4. Click **OK** on the pop-up window.

5.5.4 User Attributes Usage

Once the attribute types and its associated attributes are setup, the administrator needs to set up the values for each of the attributes added.

When the attributes have credit card fields associated with them, the User Attribute List page can only be accessed through HTTPS. This is for user security and PCLI compliance. When the credit card numbers are entered, they are hashed and then stored in the database. Only the last four digits are displayed after Save Profile is clicked.

The credit card feature is only for companies that have the Travel and Expense module.

The following permission is required to set up attribute values:

- 5 – Manage Users and Groups

The following system setting must be determined if the Credit Card attribute subtype is enabled.

- 2180 - Require Valid Credit Card Number (applicable only if a Credit Card user attribute subtype is enabled)

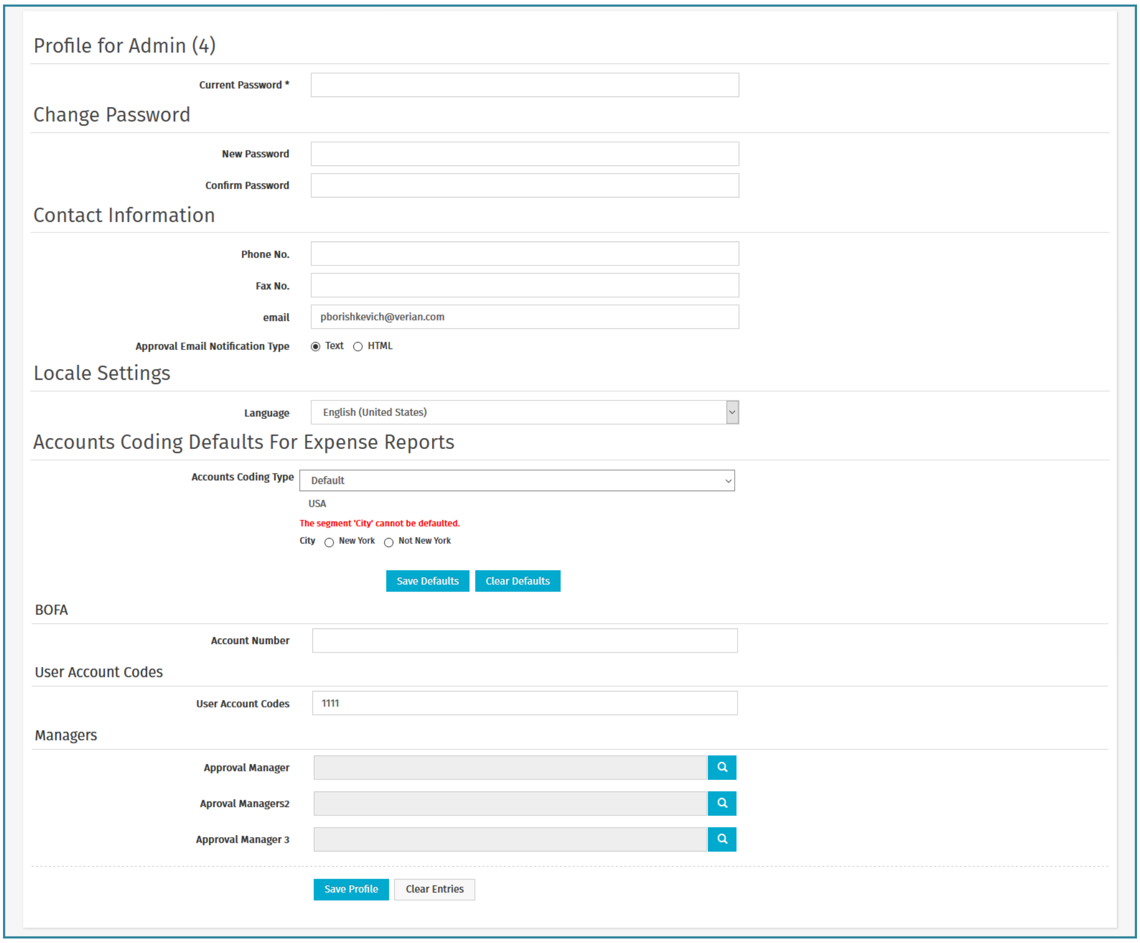


Figure 42: User Attributes page

Example: Adding an Approval Start Manager Selection

The system can prompt the user to select the manager that they would like to route the order for approval. To set this up consider the following system settings:

- 952 – User Attribute Type for Managers
- 951 – Enable Manager Selection for Approval

5.5.4.1 Adding Attribute Values for the Users

To add values for attributes:

1. From the Dashboard, navigate to > **Users** > **Users**.
2. Select the user whose attributes need to be set and click **Attributes**.

   If a credit card field has been added, an HTTPS warning message is displayed.
3. If the HTTPS warning message is displayed, click the **Here** link.
4. Enter the values for the added attributes.
5. Click **Save Profile**.

5.5.4.2 Adding a Manager Attribute

The system can prompt the user to select the manager that they would like to route the order for approval. To set this up consider the following system settings:

- 952 – User Attribute Type for Managers
- 951 – Enable Manager Selection for Approval

To add a manager attribute:

1. Create a user attribute named "manager".
2. Select user attribute manager from the Attribute Types list and click **Manage Input Fields**.
3. Determine the maximum number of managers a user can have.
4. Click **Add**.
5. For the attribute name, specify manager X replace the “X” with manager number (1, 2, and 3).
6. For the field type, select list and click **Next**.
7. Enter the information for the other fields and click **Add Attribute Definition**.

5.6 Broadcast a Message to All Users

You can send a message to all users if needed by using the broadcast message functionality.

- Broadcast messages automatically update while the user is logged in. The number by the Broadcast Messages icon increases as messages are added after the page is refreshed.
- The Broadcast Message pop-up displays when the user logs in and a new broadcast messages have been added since the user’s previous login.
- Click anywhere on the page to close the pop-up.

- The pop-up appears upon login even if the user viewed the new message before the previous logout.
- If no expiration date is selected when the broadcast message is created, the system deletes it after seven days.

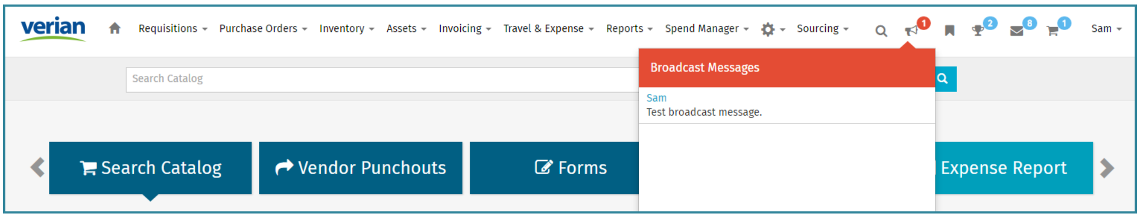


Figure 43: Broadcast Message on Dashboard

Required Permission

- 17 – Send Broadcast Messages

To broadcast a message to all users:

1. From the Dashboard, navigate to > **Messaging** > **Broadcast Message**.click the **Administration Tool**
2. Select the expiration date and the group to receive the message.
3. Enter the message.
4. Click **Send Message**.

All users in the selected user groups see the broadcast message either immediately (if logged in) or upon next login. Users can access the message from the Broadcast Message icon until it expires.

6 Accounts Coding

For any module of Basware P2P, how you structure and manage account codes is a primary consideration. The account code setup is often used for system reporting, budgets, integration with external financial systems, and more. Depending on your business requirements, one or more of the sections in this chapter will be helpful to you in order to configure the system.

This section covers the basic and advanced elements used to help build valid and meaningful accounts coding structures, integrations, and reporting points.

Terminology

The following definitions may be useful to you when reading information in this chapter:

- Accounts Coding - the overall concept of assigning transactions to different accounts. Also known as GL coding.
- Accounts String - the complete coding information for a transaction, such as "4001-201-85-3333." However, not all strings will have segments like the example above.
- Coding Segment - one piece of an accounts string, such as "4001" in the example above.

Accounts Coding Levels

Basware has the ability to manage and maintain account codes on the following levels:

- Global
- User
- Location
- Group
- Item
- AP codes

If needed, the system has the ability to verify accounting codes against certain users and/or groups. The system also provides the ability to restrict users to only specific account codes based on their location, ship-to permissions, groups, or user ID.

6.1 Account Codes Management

Account codes may be associated with many different parts of the organization. The main purpose of the account code management function is to validate account codes entered in other parts of the system. This function is especially critical if account codes can be split or if an account file is exported into an AP package.

If your accounts coding data is stored in an external datasource, see .

The following permissions are required to access this functionality:

- 61 – Manage Account Codes

- 63 – Can Split Account Codes

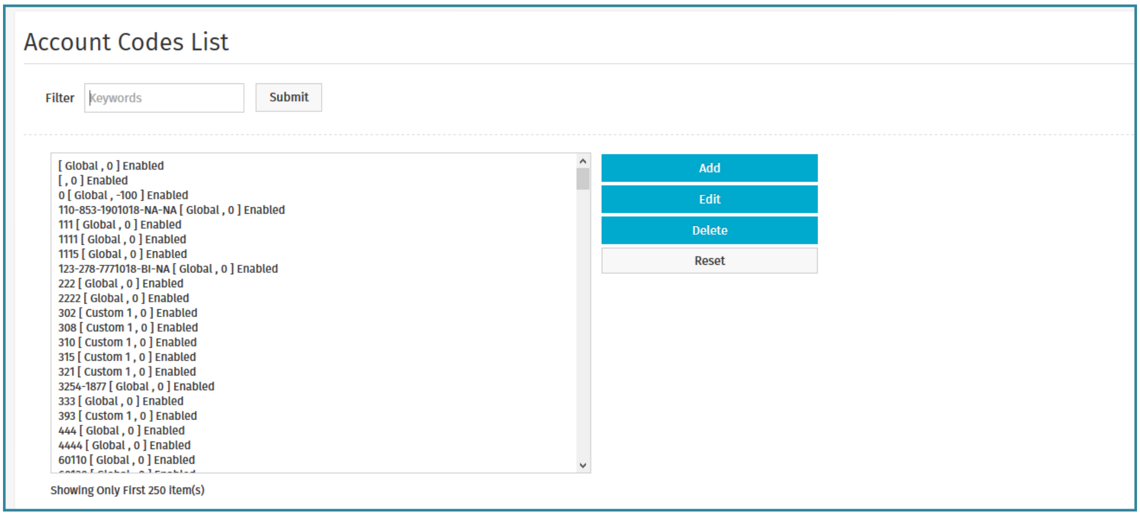


Figure 44: Account Codes Management page

The following example illustrates the attributes that make up a typical account code:

1122 [Global, 0] Enabled

Value	Definition
1122	The account code number.
Global	The account type (options include global, location, group, user, AP code, default, use tax, freight, custom 1 - 3)
0	The associated reference identification number.
Enabled	The account code is active. If not then disabled is displayed.

6.1.1 Add or Edit Account Codes

Location: > **Accounting** > **Accounting Codes**

The Add/Edit Accounting Code page includes the following fields:

Table 31: Add/Edit Account Code page field definitions

Field	Definition
Account Code	The number for the account code being entered.
Account Type	The list box of account types including global, location, group, user, AP code, use tax, freight, and custom 1 – 3.
Reference ID	The reference ID of the group or user if group or user values is used. The reference ID can be obtained from Directories on the main menu.

Table 31: Add/Edit Account Code page field definitions (continued)

Field	Definition
Account Code Group	The account code that is being added to a specific account code group
Description	A description of the account code.
Default For	If default is selected as the account type, this field can be used to enter what the default is used for. The list of allowed defaults are: *Encum, Freight, Tax, *Commitment, *FW Offset, AP, Discount, Tax2. * Represents FundWare related values.
Enabled	The radio action used to determine if the account code is active or not.

To add an account code:

1. Click **Add** from the Account Codes list.
2. Enter the new code to be added. If you are editing a code, you cannot edit this field.
3. Select the drop-down field and select the appropriate account type.
4. If location, group, or user is selected then a reference identification number needs to be entered.

   The reference ID can be obtained from Directories on the main menu.

5. To assign the account code to a specific account code group select the group from the account code group drop-down list.
6. If necessary, enter a description for the account code.
7. Use default for when AP codes are used with account interfaces. Consult your Basware Client Care team in order to use this option correctly.
8. Select the Yes radio button to enable the account code.
9. Click **Add/Edit Account Code**.

6.1.2 Deleting Account Codes

To delete an account code:

1. From the Dashboard, navigate to > **Accounting** > **Accounting Codes**.
2. Select the account code to delete and click **Delete**.
3. Click **OK** on the confirmation pop-up window.

6.1.3 Manage External Account Codes

Location: > **Accounting** > **Manage External Accounts Coding**. You must also have permission *61 - Manage Account Codes*.

You may have your system's account code information stored in an external datasource. When this is the case, system setting *975 - Accounts Coding External Datasource* is set to a valid value, and each table has a key configured to it. See your system administrator for more information.

When account codes are stored externally, you can add, edit, or delete accounts codes in each table from the Manage External Accounts Coding page. To add, edit, or delete account codes in these tables:

1. From the Manage External Accounts Coding page, select the **Table** you wish to edit and click **Refresh**. The account codes in that table display.
2. You can choose three actions:
   - **Add** - add a new account code to the segment table.
   - **Edit** - select an existing account code in the segment table to edit.
   - **Delete** - select one or more account codes and delete them from the table.

The account codes are added, updated, or deleted in the external accounts coding datasource to reflect the changes you made.

6.2 Account Type Management

Account types allow you to name accounts to show its general purpose. This information is used when account codes are added.

The system contains 10 standard account types that cannot be deleted. You are able to add, edit, and delete your own account types.

Standard Account Types	
System ID	Account Type
0	Global
1	Location
2	Group
4	User
20	Default Code
25	Use Tax
30	Freight
100	Custom 1
110	Custom 2
120	Custom 3

Users must have the following permission to access the Manage Account Type page:

- 61 – Manage Account Codes

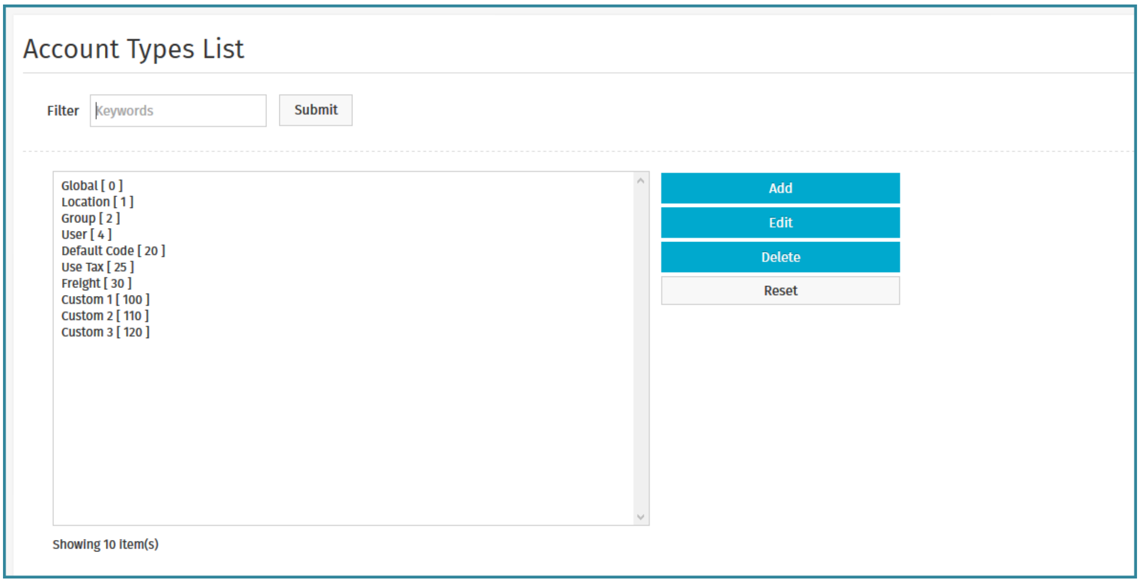


Figure 45: Account Types Management page

Action	Definition
Add	Allows the user to add a new account type.
Edit	Allows the user to edit an existing account type.
Delete	Allows the user to delete an account type.
Clear Entries	Allows the user to erase entries not saved in the system.

Standard account types and account types associated to an account code cannot be deleted.

6.2.1 Add or Edit Account Types

Location: > **Accounting** > **Account Types**

You must have the following permission:

- 61 – Manage Account Codes

To add an account type:

1. Click **Add**, or select an account type and click **Edit**.
2. Enter the name for the account type in the Name field.
3. Click **Add Account Type**.

6.2.2 Delete Account Types

Location: > **Accounting** > **Account Types**

You must have the following permission:

- 61 – Manage Account Codes

Standard account types and account types associated to an account code cannot be deleted.

To delete an account type:

1. Select the account type to delete and click **Delete**.
2. Click **OK** on the pop-up verification window.

6.3 Account Code Groups Management

Account code groups provide users the capability to associate a range of account codes to a group. Users can easily add, edit, or delete a set of account codes by specifying the range.

For users to be able to assign an account code range, the account codes must first exist in the system.

A typical business process flow for this would be:

1. Add account codes to the system.
2. Create account code groups.
3. Assign account codes to account code groups.
4. Assign the spend limits to the user group or account code group.

The following permission is required to access this functionality:

- 151 – Manage Account Code Groups

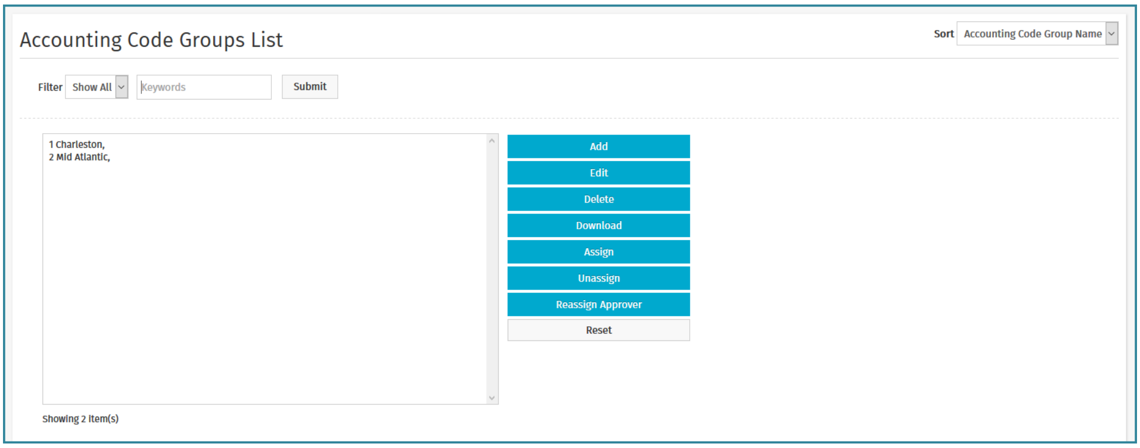


Figure 46: Account Code Group Management page

6.3.1 Add/Edit Account Code Groups

Location: > **Accounting** > **Account Code Group**

The following permission is required:

- 151 – Manage Account Code Groups

Use account code groups to associate related account codes together. The group can be used to organize account codes and define spend limit rules.

If system setting *975 - Account Code External Database* is enabled, the **Accounts Coding Segment Label** dropdown also displays. You must choose a segment label to associate the group name to. Each accounting code group must be associated to one segment label. However, each label can be associated to many groups.

When you associate a group to a segment label and go to assign account codes to the group, only the codes that are associated to that account code label can be assigned to the group.

To add an account code group:

1. Click **Add** or **Edit**.
2. Enter the name for the account code group in the Account Code Group Name field.
3. *(If enabled)* Select an **Accounts Coding Segment Label** to associate to the account code group.
4. Click **Add Account Code Group**.

The account code group is added to the list. You can now assign account codes, code types, or code ranges to the group.

6.3.2 Delete Account Code Groups

Location: > **Accounting** > **Account Code Group**

The following permission is required:

- 151 – Manage Account Code Groups

If there are account codes or user groups assigned to account code group, then the system does not allow these account code groups to be deleted unless all of these account codes are removed from this group.

To delete an account code group:

1. Select the account code group to delete and click **Delete**.
2. Click **OK** on the pop-up verification window.

6.3.3 View Account Codes in an Account Code Group

Location: > **Accounting** > **Account Code Group**

The following permission is required:

- 151 – Manage Account Code Groups

You can download a CSV file with all account codes belonging to an account code group.

1. Select the account code group you wish to download.
2. Click **Download**.

To view the account codes associated with an account code group, select the group and click **View**, and a CSV file opens displaying the list of account codes and their description.

6.3.4 Account Code Assignment

This feature allows the user to search for account codes and assign them to the group. The user is able select only one group at a time to assign account codes to.

If an external accounts coding database is enabled (system setting 975), the Assigned Account Codes list pulls and updates only codes from the external table associated with that group (determined by the segment label). For information on associating an accounts coding group to a segment label, see [Define and Enable Accounts Coding Segment Labels].

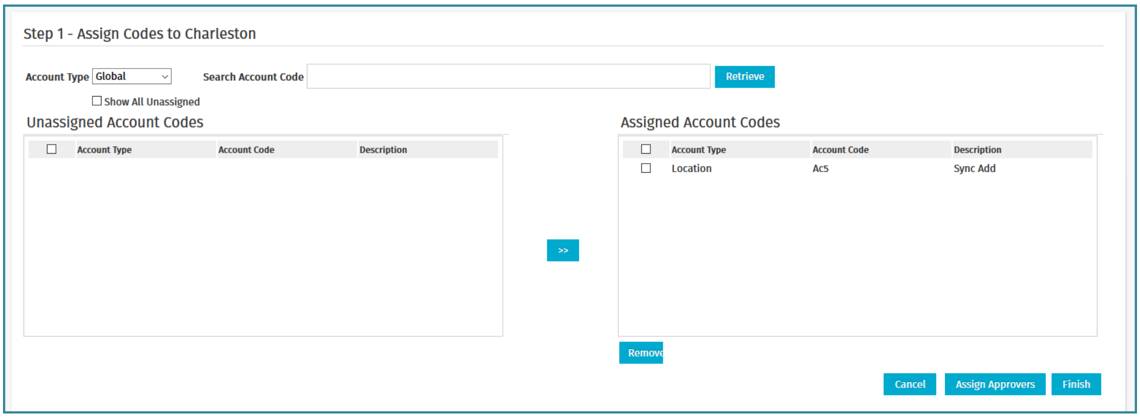


Figure 47: Assign Account Codes

Table 32: Assign Account Codes field definitions

Field	Definition
Account Type	Allows the user select the account type from the drop-down.
Search Account Code	Allows the user to search for account codes. The user is able search by the following criteria: exact match, range, and/or wildcard. Exact: ABC-123-C100 Range: Enter the account code range. The range can only contain numbers. Wildcard: The wildcards are asterisk (*) or percentage (%). They can be used at the in the following scenarios: • AB* or AB% • *AB or %AB • *C1* or %C1% Users are able to combine all three types of filters by using a comma delimited list. Example: AB*,ABC-123,100-400
Show All Unassigned	Allows the user to view all the account codes that are unassigned when the checkbox is selected. When this is checked, the system ignores the information entered for account type and search. All account types and all unassigned account codes are displayed.

6.3.4.1 Assign Account Codes to Account Code Groups

Location: > **Accounting** > **Account Code Group**

If you remove all assigned account codes from the assigned account code field and click **Finish**, the system does not stop you. Proceed with caution when removing assigned account codes.

To assign account codes to an account code group:

1. Select the account code group for which the account code or codes need to be set up for and click **Assign**.

2. Choose the Account Type and/or use the Search Account Code field to find the desired account codes. You can search by the following criteria:
   - Exact: The full, exact coding string. Ex. ABC-123-C100
   - Range: Enter an account code range. The range can only contain numbers.
   - Wildcard: The wildcards are asterisk (*) or percentage (%). They can be used at the in the following scenarios:
     - AB* or AB%
     - *AB or %AB
     - *C1* or %C1%

     Users are able to combine all three types of filters by using a comma delimited list. Example: AB*,ABC-123,100-400
3. Click **Retrieve**. The unassigned account codes that fit your criteria are displayed.
4. Click the checkbox to the left of the account type to select the account codes to assign to the account code group.
5. Click the >> to move the account codes from the Unassigned Account Codes table to the Assigned Account Codes table.
6. Click **Finish**.

6.3.4.2 Unassign Account Codes from Groups

Location: > **Accounting** > **Accounting Code Groups**

This allows the user to remove all account codes from the selected account code group.

To unassign account codes that have been assigned to an account code group:

1. Select the account code group for which account code ranges need to be unassigned and click **Unassign**.
2. Click **Yes** on the confirmation page.

6.3.5 Approver Assignment to Account Code Groups

Approvers can be assigned to account code groups based on the account code group's owner. The owner is determined when the account codes are assigned to the account code group. Two options for approval paths are available: owner's hierarchy and custom hierarchy.

The owner of the hierarchy is the first approver unless the requester is in the approval hierarchy. If this is the case, then the approval starts with the first user after the requester. If there are no users after the requester, no approval is required. This applies to both the owner and the custom hierarchies.

The owner's hierarchy technically picks up with the requester's manager regardless of the spending limit. This is only true if the requester is in the owner's hierarchy. Otherwise, approval starts with the owner.

When evaluating hierarchies, if a manager is found with no spending limits, then that manager is considered to have unlimited spending limits.

- A spending limit account code based rule must be created that matches the account type and at least the base account code.
- If field splits are used, system setting *829 – Account Code Selection Type* must be set to Split Field Entry Format. They also must be configured correctly - contact Basware Implementation Team or Client Care for more information.
- If approvers have the same spending limit, the approver entered first is the first approver.

6.3.5.1 Assign Approvers to Owner's Hierarchies for Account Code Groups

Owner's Hierarchy – approval is routed through and up the owner's user spend limits as determined by the user profile.

If one of the approver's managers in the hierarchy has a spend amount and a spend category and the Manager field is blank, the system auto declines the request.

If the item's split cost (unit x quantity x split percent) is greater than the user's spending limit, then the line is auto-declined because there is not a user with a high enough spending limit. Otherwise, that user is the last user to approve the line.

If the requester is the last manager in the hierarchy and does not have assigned spending categories, spending limits, or a manager, the order request is auto-approved.

If one approver in the hierarchy has a spending limits setup for individual categories or does not have spending limits set up, the system regards this as unlimited spending limits. For example, if the approver has spending categories 1; 2 and spending limits 100; 200, the system determines that this approver has unlimited spending limits.

To set this up correctly in the user profile, the user needs to have 0 or -1 in the Spending Limits field.

Figure 48: Assign Account Code – Owner's Hierarchy

Table 33: Select Owner page action definitions

Action	Definition
Owner	Allows the user to assign an owner to the account code group.
Approval Type	Determines if the approval route is through the owner's hierarchy (user spend limits from the user profile) or through a custom hierarchy.
Cancel	Allows the user to cancel any changes made in this step. Any changes made to the account code group are not saved. The user is returned to the Account Code Group Management List page.
Finish	Allows the user to complete the account code group assignment if owner's hierarchy is selected. The user is redirected to the Account Code Group Management List page.

To assign approvers to an owner's hierarchy:

1. From the Dashboard, navigate to > **Accounting** > **Account Code Group**.
2. Select the account code group for which the account code or codes need to be set up for and click **Assign**.
3. Assign the account codes to account code group.
4. Click **Assign Approvers**.
5. Select the owner for the account code group by clicking the Search icon.
6. Select the Owner's Hierarchy radio action.
7. Click **Finish**.

6.3.5.2 Assign Approvers to Custom Hierarchies for Account Code Groups

Location: > **Accounting** > **Account Code Group**

Custom Hierarchy – approval is routed through and up a selected group of custom approvers who are assigned a spending limit for the assigned account code group. The approval path is based on the spending limits; it is ordered from the lowest to the highest.

If the Custom Hierarchy approval type is selected, the following page displays:

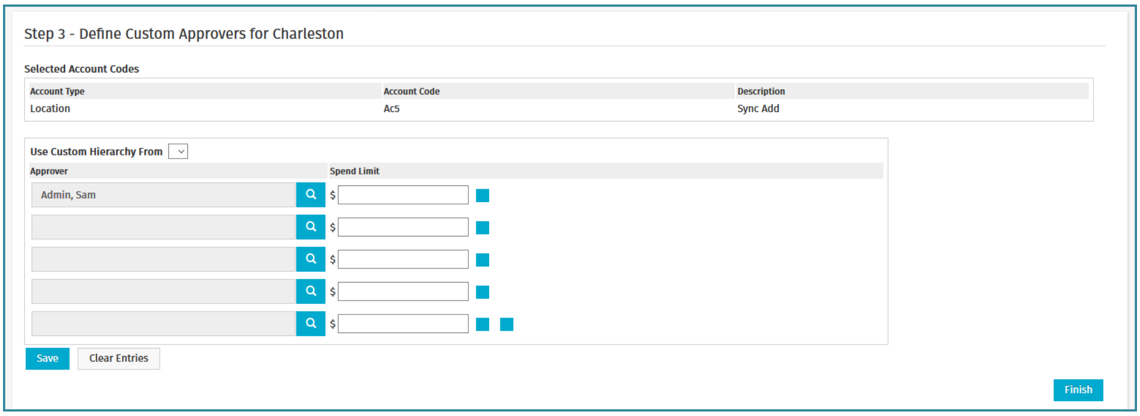


Figure 49: Define Custom Approvers

Table 34: Define Custom Approvers action definitions

Action	Definition
(Search icon)	Finds and selects approvers
Blank blue square	Should be a Delete icon. Deletes the Approver and Spend Limit fields.
Bottom right blank blue square	Should be an Add icon. Adds additional Approver and Spend Limit fields.
Save	Saves approvers and spend limits that have been entered without having to leave the page.
Clear Entries	Clears the entered information from the last save point. The user remains on this page.

Table 34: Define Custom Approvers action definitions (continued)

Action	Definition
Finish	Completes account code group assignment. The user is redirected to the Account Code Group Management List page.

Table 35: Define Custom Approvers field definitions

Field	Definition
Selected Account Codes	Displays the list of selected account codes for the group along with their account types and descriptions (if provided).
Use Custom Hierarchy from	Provides a drop-down list of existing account code groups with a custom hierarchy. When a group is selected, the Approver and Spend Limit fields are populated with the approvers and spend limits from the selected account code group.
Approvers	User selected to approve the order request.
Spend Limit	Maximum amount the associated approver can approve.

- The system does not automatically save approver and spend limit. To save this information, click **Save** to continue working or **Finish** to leave this page.
- To add additional rows for approvers, click the blank icon to the far right of the Spend Limit field of the last row.
- To delete assigned approvers and their associated spending limits, click the blank icon to the right of the Spend Limit fields.

To assign approvers to a custom hierarchy:

1. Select the account code group for which the account code or codes need to be set up for and click **Assign**.
2. Assign the account codes to account code group.
3. Click **Assign Approvers**.
4. Select the owner for the account code group by clicking the Search icon .
5. Select the Custom Hierarchy radio action.
6. Click **Next** >> .
7. If the custom hierarchy that you want to use already exists, select it from the Use Custom Hierarchy From drop-down.

   The system auto fills the information from the selected account code group.
8. To create a new custom hierarchy, select the approver by clicking the Search icon beside each Approver field. Repeat this until all the approvers are selected.
9. Enter the corresponding spend limit for each approver in the Spend Limit field .
10. Click **Finish**.

6.3.5.3 Editing Approvers to a Custom Hierarchy

To edit approvers to a custom hierarchy:

1. From the Dashboard, navigate to > **Accounting** > **Accounting Code Groups**.
2. Click **Assign Approvers**.
3. If the owner needs to be changed, select the owner for the account code group by clicking .
4. Verify that the Custom Hierarchy radio action is selected. If it is not selected, select it.
5. Click **Next** >>.
6. If the custom hierarchy that you want to use already exists, select it from the Select Account Code Group drop-down.

   The system auto fills the information from the selected account code group.
7. To replace an approver click under the Approver heading next to that approver. Repeat this until all the approvers are replaced.
8. Enter the corresponding spend limit for each approver in the Spend Limit field under the Spend Limit heading.
9. If any approvers need to be added, add them by clicking and entering their spend limit in the Spend Limit field.
10. If additional Approver and Spend Limit fields need to be added, click to the right of the set of Approver and Spend Limit field. Repeat step 11.
11. If any approvers need to be deleted, click to the right of the Spend Limit field.
12. Click **Finish**.

    A message is displayed that the account code group was successfully assigned.

6.3.6 Account Code Group Approver Reassignment

This feature allows the user to reassign an approver for the account code group.

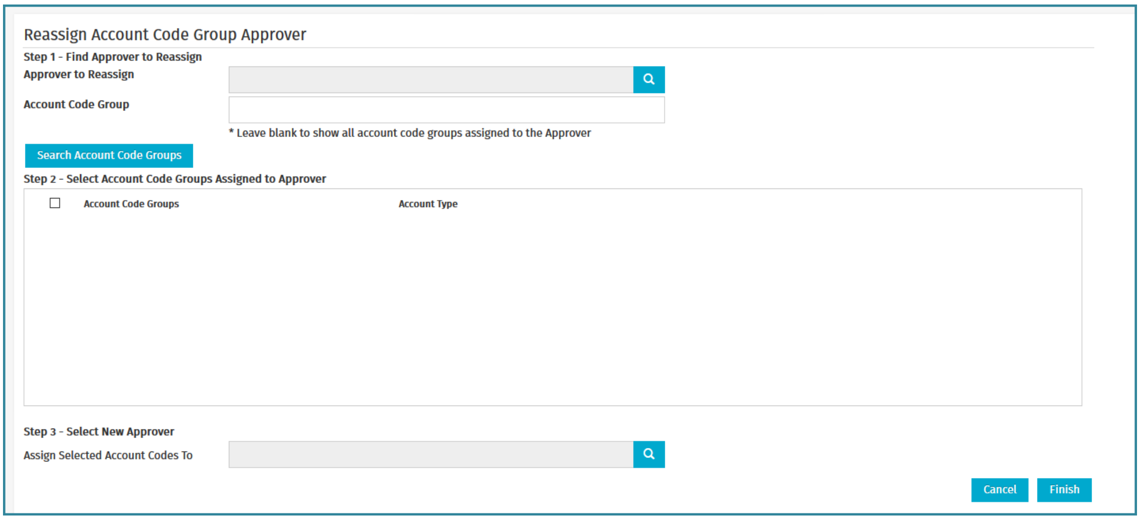


Figure 50: Reassign Approver to Account Code Groups

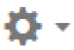
Table 36: Reassign Account Code Group Approver action definitions

Action	Definition
	Allows the user to find and select an approver.
Search Account Code Groups	Returns a list of account code groups that the selected approver is assigned to.
Checkbox	Replaces the approver selected in step 1 with the approver selected in step 3 when checked. Check the checkbox in the header to select all the account codes at the same time.
Cancel	Allows the user to cancel any changes made in this step. Any changes made to the approver and his associated account code groups are not saved. The user is returned to the Account Code Group Management List page.
Finish	Allows the user to complete the account code group reassignment. The user is redirected to the Account Code Group Management List page.

Table 37: Reassign Account Code Group Approver field definitions

Field	Definition
Approver to Reassign	Allows the user to select the approver to unassign as an approver from account code groups. This is a required field.
Account Code Group	Allows a user to enter the name of the account code group to use a filter when searching for associated account code groups.
Assign Selected Account Codes To	Allows the user to select an approver to replace the approver selected in step 1 as the approver for the account code groups selected in step 2.

6.3.6.1 Reassign Approvers Assigned to Account Code Groups

Location:  **> Accounting > Accounting Code Groups**

- The current approver and replacement approver cannot be the same user.
- If an approver needs to be removed from an account code group, this is performed through the Assign functionality.

To reassign an approver assigned to account code groups:

1. Click **Reassign Approvers**.
2. To select the approver to replace, click next to the Approver to Replace field. This is a required field.
3. Enter an account code group name in the Account Code Group field if you need to filter for s specific account code group. This is an optional field.
4. Click **Search Account Code Groups**.
5. Select the account code groups to reassign by checking the associated checkboxes. To select all the account code groups, check the checkbox in the header.
6. To select the new approver, click next to the Assign Selected Account Codes To field. This is a required field.
7. Click **Finish**.

6.3.6.2 Replacement Approver is Already on Approval Route

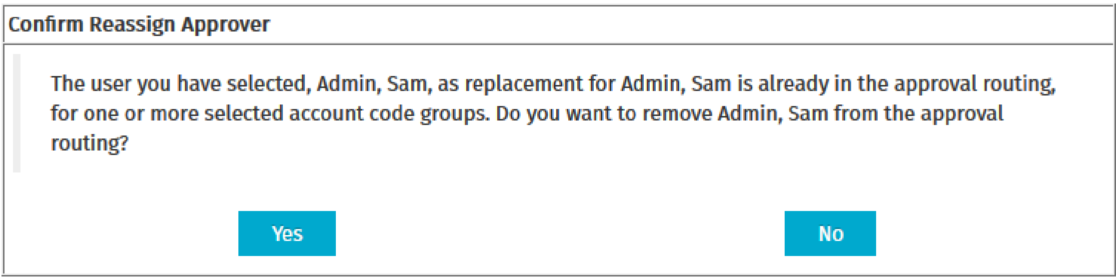


Figure 51: Confirm Reassign Approver

If the replacement approver is already on the approval path for one or more of the selected account code groups, a confirmation message is displayed asking you if you want to keep this approver on the approval path or not.

If **Yes** is clicked, the following events occur:

- The current approver is removed from the account code groups where both the current approver and the replacement approver are approvers.
- The account code groups that the replacement approver does not belong in are updated.

The current approver is removed.

The replacement approver is added.

If **No** is clicked, the following events occur:

- The current approver is not removed from the account code group where both the current approver and the replacement approver are approvers.

A different replacement approver needs to be assigned to the account code group(s) affected by this decision.

- The account code groups that the replacement approver does not belong to are updated.

The current approver is removed.

The replacement approver is added.

6.4 Account Code Field Display Settings

The account code field can be labeled to reflect the terms used by the organization, such as "GL code". This is done using the system settings listed below.

See the Accounts Coding Types and Splits sections for more information.

Table 38: Account Code Label System Settings

Name	Description	
762	Label for Account Code Across the System	Determines the display name for the accounts coding entry field in all modules. If system setting 829 - Accounting Code selection type is set to Split Field Entry Format, the accounts coding field name is determined by the accounts coding type selected.
718	Label for Account Code in OR Header	Label to be used for Account Code field on Finish Order Request page.
726	System Item Category Account Code Label	Enter the name to be used for Item Category Account Code label.
2013	Label for Account Code Field of Expense Requests	Label to be used for the Account Code Entry field in Expense Request Header page.

Table 39: Account Code Description

Number	Name	Description
728	Display Description for Account Codes	Should description for account codes be displayed on relevant pages?

Table 40: Account Code Field Type Setup

Number	Name	Description
827	Shopping Cart Display Type	Determines what information is displayed in the shopping cart. • Extended Price • Account Code Entry
829	Accounting Code Selection Type	Should the accounting codes be manually entered or selected from a list? Select one of the below-mentioned options to restrict or allow more flexibility for the end user to enter account codes. Account code field types can be set as one of the following: • Text Entry: This displays a normal text entry field where the user can enter the account code. • Selectable: This displays a drop-down list of account codes. This option can be used when the list of available account codes is limited. • Selectable [Text Entry Disabled]: This is similar to the previous option, where a drop-down list is displayed but the user is not able to enter free form text; the user can only select from the available list of account codes. • Look up: This option displays a magnifying glass icon next to the account code text box, which can be used to select from a list of account codes. This option needs be used when the available list of account codes is large. The look up option works as a drop-down list when the list of account codes is less than 50. • Look up [Text Entry Disabled]: This is similar to the look up option except that the user is not able to enter free form account codes. • Split Field Entry Format: This format enables display of split fields for account codes. The details of the field split are setup at the database level. This format also enables use of Accounts Coding Types and Segments.

Table 41: Account Code Field Display

Number	Name	Description
846	Hide Account Code Entry Field on the Free Form Request Page	This setting determines whether the account code can be entered when creating a free form request.
727	Display Item Category Account Code on All Relevant Pages	This setting determines if the item category account code is displayed on the following pages: • Shopping Cart • View OR • View PO • Approve OR • Receive • Reconcile PO/PO Invoice • Withdraw Bin

Table 41: Account Code Field Display (continued)

Number	Name	Description
824	Manually Enter the Account Code in the Split Account Codes Page	This system setting determines if text entry is enforced when entering account code splits.
874	Display Item Category Account Codes on PO Preview	This setting determines whether the account code of the item category is displayed along with item description when previewing a purchase order.
879	Display Line Account Codes on PO Preview	This setting determines if line account codes are displayed on Purchase Order Preview page.
897	Display Split Account Code on All Relevant Pages	This setting determines if the account code splits are displayed in place of the account code for an item with split codes on the following pages: • Shopping Cart • View OR • View PO • Approve OR • Receive • Reconcile PO/PO Invoice • Withdraw Bin
2107	Display Account Code Field for Expense Items	This setting determines whether Account Code fields are displayed for expense items.

Table 42: Account Code Display Width

Number	Name	Description
859	Free Form and Request Bin Account Code Display Width	This setting determines the maximum number of characters displayed for the width of account code entry on free form requests and the shopping cart.

Table 43: Account Code Display Format

Number	Name	Description
729	Format for Account Code Display When Using Drop-down List	Determines which values are displayed when account code selection is set up as a drop-down field. • Account Code • Description of Account Code • Description and Account Code
763	Format to Display for Account Code Input in Request Bin	The text is shown as account code format whenever account code entry is available (XX-XXX-XXXX).

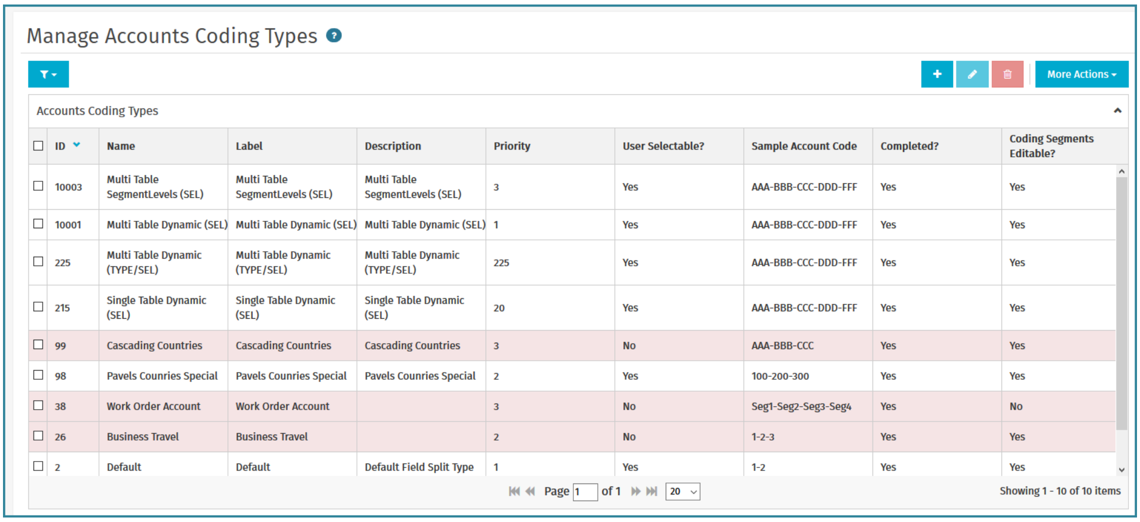
6.5 Accounts Coding Types

Administrators can set configurations for certain accounts coding scenarios within Purchase Manager and Expense Manager. Depending on the permissions granted, users can select the accounts coding type appropriate for their expense/order requests or users can be assigned to only limited accounts coding types.

Accounts Coding Types can be viewed and edited by navigating to > Accounting > Accounts Coding Types.

The following permission is required to manage Accounts Coding types:

- 61 - Manage Account Codes
- System setting 829 - Accounting Code Selection type: set to Split Field Entry Format
- 176 - Restrict to Accounts Coding Types



ID	Name	Label	Description	Priority	User Selectable?	Sample Account Code	Completed?	Coding Segments Editable?
10003	Multi Table SegmentLevels (SEL)	Multi Table SegmentLevels (SEL)	Multi Table SegmentLevels (SEL)	3	Yes	AAA-BBB-CCC-DDD-FFF	Yes	Yes
10001	Multi Table Dynamic (SEL)	Multi Table Dynamic (SEL)	Multi Table Dynamic (SEL)	1	Yes	AAA-BBB-CCC-DDD-FFF	Yes	Yes
225	Multi Table Dynamic (TYPE/SEL)	Multi Table Dynamic (TYPE/SEL)	Multi Table Dynamic (TYPE/SEL)	225	Yes	AAA-BBB-CCC-DDD-FFF	Yes	Yes
215	Single Table Dynamic (SEL)	Single Table Dynamic (SEL)	Single Table Dynamic (SEL)	20	Yes	AAA-BBB-CCC-DDD-FFF	Yes	Yes
99	Cascading Countries	Cascading Countries	Cascading Countries	3	No	AAA-BBB-CCC	Yes	Yes
98	Pavels Counries Special	Pavels Counries Special	Pavels Counries Special	2	Yes	100-200-300	Yes	Yes
38	Work Order Account	Work Order Account		3	No	Seg1-Seg2-Seg3-Seg4	Yes	No
26	Business Travel	Business Travel		2	No	1-2-3	Yes	Yes
2	Default	Default	Default Field Split Type	1	Yes	1-2	Yes	Yes

Figure 52: Accounts Coding Types Management Grid

The management grid displays the basic information for each accounts coding type:

- ID
- Name
- Label - displays in the dropdown menu for user selection
- Description - only displayed in the management grid. For administrative use only.
- Priority - decides the order in which the types load.
- User Selectable - if disabled, a user cannot select this accounts coding type
- Sample Account Code - the sample account code entered during segment configuration
- Completed - indicates if segment configuration has been completed for the type
- Coding Segments Editable - indicates if the segments can be edited or reconfigured for the accounts coding type.

All disabled accounts coding types are shaded in red.

From this grid, the administrator can Add , Edit , or Delete accounts coding types. The **More Actions** link contains the action to Configure Coding Segments.

6.5.1 Add or Edit Accounts Coding Types

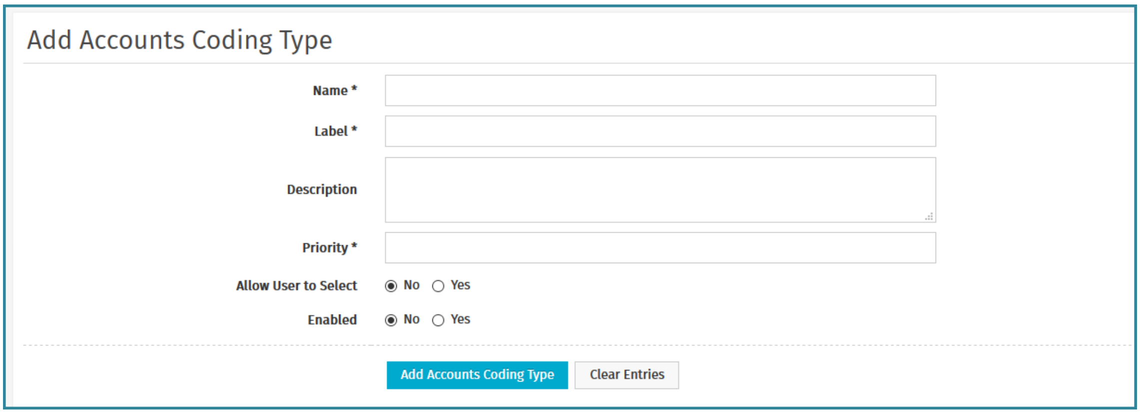


Figure 53: Add Accounts Coding Types

To add a new accounts coding type or edit header information for an existing type:

1. Navigate to > **Accounting** > **Accounts Coding Types**.
2. Click Add to add a new type. Alternatively, select an existing type and click Edit .
3. Give the accounts coding type a name, label, and description (optional).
4. Give the accounts coding type a priority, with 1 being the highest priority. The setting determines the order in which the accounts coding types display in the user's drop down field.
5. Select whether or not the user can select the accounts coding type when entering accounts coding information.

   User must have permission 176 - Restrict to Accounts Coding Types with the respective accounts coding type selected.

6. Enable or disable the accounts coding type.

If the accounts coding type is disabled, it is shaded in red on the Management Grid.

7. Click **Add Accounts Coding Type** or **Edit Accounts Coding Type** to save all changes. To start over, click **Clear Entries**.

After creating the accounts coding type, the type displays “0” in the Completed column of the Management Grid, indicating the type has not been configured. Accounts coding types must be configured before use. After initial configuration, the user can configure Security and Cascading for the accounts coding types.

6.5.2 Configure Accounts Coding Type Segments

Generally, accounts coding types are configured as general account codes or simple parent-child relationships, with single parent segment cascading. For multiple parent cascading functionality, see Accounts Coding Types - Multiple Parents Cascading.

To configure an accounts coding type:

1. Navigate to > **Accounting** > **Accounts Coding Types**.
2. Select the accounts coding type to configure or edit.
3. Click **More Actions** > **Configure Coding Segments**
4. Fill out the information using the guidelines below:
    - Sample Account String: Enter an example of the accounting code string format you want to use, such as ABC-DEF-GHI. The characters you use are unimportant, but be sure you have the number of segments needed for the string and the correct separator between each segment.
    - Segment Separator: From the drop-down, select the character used to separate the accounts coding segments. If this field is left blank, the full account string is considered one segment.
    - Number of Segments: Enter the number of segments your Sample Account String has. This must match the number of segments entered in the Sample Account String field.
    - Separator Field Type: If Display Hidden, the Segment Separator displays between each segment, such as AAAA-BBBB-CCCC. If Text Hidden, the Separator does not display, such as AAAA BBBB CCCC.
    - Cascading Type: Selecting No Cascading disables the Cascading configuration option in the top right corner of the page (this is the default). Selecting Dynamic Lookups or QuerySQL enables Cascading and disables Security. See Configure Cascading for Accounts Coding Types.
5. Click **Next**.
6. On step 2, fill out the information using the guidelines below:
    - Sort Order: Not an editable field. Indicates the order in which the segments appear, as 1, 3, 5, 7, etc.

- Segment Label (Optional): Enter a label to display beside each segment to help with user coding.
- Field Type: Select the type of field desired.

Display Hidden	A non-editable field displaying the set Default Value.
List	Creates a drop-down list of options for the user to select.
Radio Button	Creates radio button options for the user to select.
Select Box	Creates a box from which the user selects a value.
Text Box	Allows the user to enter text.
Text Hidden	Hides the field from the user interface.

- Required: Select Yes or No to indicate if the coding segment is required.
- Edit Formulae: (Optional) Enter a ColdFusion conditional statement based on which a field split segment display can be restricted. For example, a segment with Field Type Select Box can change to Display Field based on a specified user profile restriction.
- Field Notes: Enter any desired reference notes for the segment, such as a brief description. The field is for internal use only and is not visible to the user.
- Default Value: (Optional) Enter the field's default value, if any. The default value can be a static value or a predefined default code, as indicated in the dropdown.
- Allow user to set default?: Select Yes or No to indicate if users can set their own default values on the User Profile page for each segment.
- Show in new line?: Select Yes or No to indicate if the segment should show on a new line below the previous segment.
- External System Field Name: If AP Automation Integration is enabled, this field displays. Enter the name of the field corresponding to that segment in the AP Automation system. Note: if system setting *15009 - Enforce standard coding field names* is set to Yes, this field is a dropdown, not a text box.

7. When finished, click **Next**.
8. In step 3, configure the fields for each segment. The available fields differ depending on the field type selected.

- Display Hidden: no configurable information
- List: includes Query Datasource, Field Size, Maximum Length, Query SQL, Query Name, Display Field, Value Field
- Radio Button: includes Maximum Length, Label List, Value List
- Select Box: includes Query Datasource, Field Size, Maximum Length, Query SQL, Query Name, Display Field, Value Field
- Text Box: includes Field Size, Maximum Length.
- Text Hidden: no configurable information

Field	Definition
Query Datasource	Selects the correct datasource from which to pull the information. Only displays when system setting *975 - Account Code External Datasource* is set to a valid value.
Field Size	Sets the size of the display field

Field	Definition
Maximum Length	Sets the number of characters allowed in the field
Query SQL	Defines a query that pulls data to populate the selection field. Required if Base Query SQL or Query Name are not used.
Base Query SQL	Defines a query that pulls data from the "base_" data tables to populate the selection field. Required if Query SQL or Query Name are not used. This field only displays if system setting 100010 - Enable Invoicing Service is set to Yes.
Query Name	If a query is already defined and saved, enter the name here to use that query to populate the selection field. Required if Base Query SQL or Query Name are not used.
Display Field	Sets the display value from the respective table for the dropdown, such as LocationName.
Value Field	Sets the value field from the respective table for the dropdown, such as Location_ID.
Label List	Sets the label displayed for each radio button. Use "/" as a delimiter to separate labels for each radio button.
Value List	Sets the value for each radio button. Use "/" as a delimiter to separate labels for each radio button.

9. When finished, click **Next**.
10. Review the summary information on Step 4 for accuracy. Use **Previous** or the tabs at the top of the page to make any changes.

    If you add or remove any segments, data for all segments is deleted and must be reconfigured.

11. When done, click **Finish**.

The Accounts Coding Types Management Grid displays. The configured type reads Yes in the Completed field and the sample account code is displayed.

6.5.3 Configure Cascading for Accounts Coding Types

Cascading accounts coding creates configurations in which the first segment selected defines the options displayed in the second segment, and the second segment defines the options displayed in the third segment, and so on. Cascading account code segments increase ease of use for the user and decrease the risk of entering invalid or incorrect account codes.

To configure cascading for an accounts coding type:

1. Navigate to > **Accounting** > **Accounts Coding Types**. Select the accounts coding type to be configured, then click **More Actions** > **Configure Coding Segments**.

    The accounts coding type must display Yes in the Completed column before cascading is configured.

2. Make sure Cascading Type is set to *QuerySQL* or *Dynamic Lookup*. The setting here determines what fields are displayed on the Configure Cascading page.
3. Click **Cascading** in the top right corner.

   The Configure Cascading page displays.
4. Configure the following fields for each segment.
   - Cascading: Set the radio button to Yes or No to enable or disable cascading.
   - Cascading Lookup: From the dropdown, select the lookup query to use. Lookups are configured in > **Other Data** > **Lookups**.
   - Cascade Update Segment: Enter the value from the Sort Order field for the segment to be updated by the current segment. In the example above, if the data selected in Segment 1 is intended to update the data shown in Segment 2, enter 3 (Segment 2's Sort Order) in Segment 1's CascadeUpdateSegment field.
   - CascadeRegular Expression: Enter a regular expression value to use during cascading data, if desired.
   - ParentSortOrders (QuerySQL only): Enter a comma-separated list of the sort order for the parent segments on which the currently edited segment depends. For example, if the current segment is Phase (sort order 7), and it depends on Company (sort order 1) and Job (sort order 3), this field contains 1,3.
   - OptionalParent (QuerySQL only):Enter any parents on which the current segment is optionally dependent. Must be in format {parent sort order}-{accounts coding label}
   - RecordLimit (QuerySQL only): Enter the number of records to which the query is limited.
5. When all configuration is complete, click **Finish**.

6.5.4 Accounts Coding Types - Multiple Parents Cascading

When configuring cascading for account codes, a child segment may have multiple parents and/or an optional parent. Also, the data for cascading account codes can be stored in a different database.

Below is an example of a full configuration with the illustrated parent-child relationships.

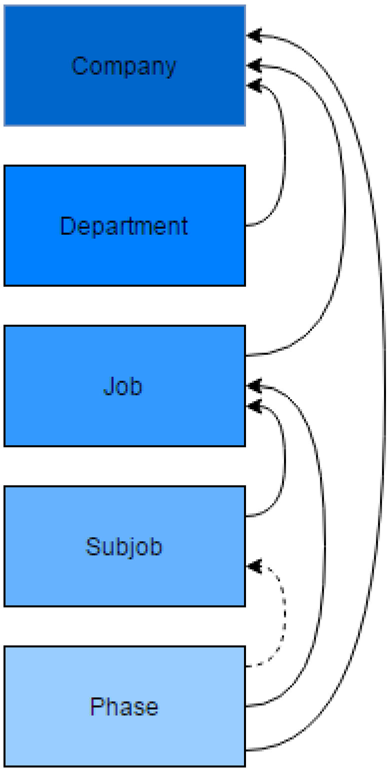


Figure 54: Illustration of example cascading setup

In this example:

- Company is a parent segment to Department, Job, and Phase.
- Department is a child segment to Company.
- Job is a child segment to Company and a parent segment to Subjob and Phase.
- Subjob is a child segment to Job and an optional parent segment to Phase.
- Phase is an optional child segment to Subjob and a child segment to Job and Company.

The data for each segment in the setup is stored in its own database table, so this example has five tables: Companies, Departments, Jobs, Subjobs, and Phases. The example setup for each table is pictured below. Notice that each table includes a column associating each record to a parent segment, such as the Company column in the Departments table.

Companies

	Field	Type
	Tenant_ID	int(11) NOT NULL
	Record_ID	int(11) NOT NULL
	Code	varchar(50) NOT NULL
	Description	varchar(100) NOT NULL

Indexes (2)

Find Redundant Indexes

Find the redundant indexes of this table. Read more

	Indexes	Columns	Index Type
	PRIMARY	Tenant_ID, Record_ID	Unique
	Record_ID	Record_ID	Unique

Figure 55: Companies table setup

	Tenant_ID	Record_ID	Code	Description
☐	22	1563	Company 1	Company Bulk 1
☐	22	1564	Company 2	Company Bulk 2
☐	22	1565	Company 3	Company Bulk 3
☐	22	1566	Company 4	Company Bulk 4
☐	22	1567	Company 5	Company Bulk 5

Figure 56: Companies table data sample

Departments

	Field	Type
🔑	Tenant_ID	int(11) NOT NULL
🔑	Record_ID	int(11) NOT NULL
	Code	varchar(50) NOT NULL
	Description	varchar(100) NOT NULL
	Company	varchar(50) NULL

Indexes (3)

Find Redundant Indexes

Find the redundant indexes of this table. Read more

	Indexes	Columns	Index Type
🔑	PRIMARY	Tenant_ID, Record_ID	Unique
	Record_ID	Record_ID	Unique
	CompanyIDX	Company	

Figure 57: Departments table setup

☐	Tenant_ID	Record_ID	Code	Description	Company
☐	3	32574	Department 1	Department Bulk 1	Company 31
☐	3	32575	Department 2	Department Bulk 2	Company 31
☐	3	32576	Department 3	Department Bulk 3	Company 31
☐	3	32577	Department 4	Department Bulk 4	Company 31
☐	3	32578	Department 5	Department Bulk 5	Company 31

Figure 58: Departments table data sample

Jobs

	Field	Type
🔑	Tenant_ID	int(11) NOT NULL
🔑	Record_ID	int(11) NOT NULL
	Code	varchar(50) NOT NULL
	Description	varchar(100) NOT NULL
	Company	varchar(50) NULL

Indexes (3)

Find Redundant Indexes

Find the redundant indexes of this table. Read more

	Indexes	Columns	Index Type
🔑	PRIMARY	Tenant_ID, Record_ID	Unique
	Record_ID	Record_ID	Unique
	CompanyIDX	Company	

Figure 59: Jobs table setup

☐	Tenant_ID	Record_ID	Code	Description	Company
☐	2	21383	Job 1	Job Bulk 1	Company 1
☐	2	21384	Job 2	Job Bulk 2	Company 1
☐	2	21385	Job 3	Job Bulk 3	Company 1
☐	2	21386	Job 4	Job Bulk 4	Company 1
☐	2	21387	Job 5	Job Bulk 5	Company 1

Figure 60: Jobs table data sample

Subjobs

	Field	Type
	Tenant_ID	int(11) NOT NULL
	Record_ID	int(11) NOT NULL
	Code	varchar(50) NOT NULL
	Description	varchar(100) NOT NULL
	Job	varchar(50) NULL

Indexes (3)

Find Redundant Indexes

Find the redundant indexes of this table. Read more

	Indexes	Columns	Index Type
	PRIMARY	Tenant_ID, Record_ID	Unique
	Record_ID	Record_ID	Unique
	JobIDX	Job	

Figure 61: Subjobs table setup

Tenant_ID	Record_ID	Code	Description	Job
2	29384	Subjob 1	Subjob Bulk 1	Job 31
2	29385	Subjob 2	Subjob Bulk 2	Job 31
2	29386	Subjob 3	Subjob Bulk 3	Job 31
2	29387	Subjob 4	Subjob Bulk 4	Job 31
2	29388	Subjob 5	Subjob Bulk 5	Job 31

Figure 62: Subjobs table data sample

Phases

	Field	Type
🔑	Tenant_ID	int(11) NOT NULL
🔑	Record_ID	int(11) NOT NULL
	Code	varchar(50) NOT NULL
	Description	varchar(100) NOT NULL
	Company	varchar(50) NULL
	Job	varchar(50) NULL
	SubJob	varchar(50) NULL

Indexes (2)

Find Redundant Indexes

Find the redundant indexes of this table. Read more

	Indexes	Columns	Index Type
🔑	PRIMARY	Tenant_ID, Record_ID	Unique
	Record_ID	Record_ID	Unique

Figure 63: Phases table setup

Tenant_ID	Record_ID	Code	Description	Company	Job	SubJob
2	500001	Phase 1	Phase Bulk 1	Company 1	Job 1	Subjob 1
2	500002	Phase 2	Phase Bulk 2	Company 1	Job 1	Subjob 1
2	500003	Phase 3	Phase Bulk 3	Company 1	Job 1	Subjob 1
2	500004	Phase 4	Phase Bulk 4	Company 1	Job 1	Subjob 1
2	500005	Phase 5	Phase Bulk 5	Company 1	Job 1	Subjob 1

Figure 64: Phases table data sample

6.5.4.1 Configure Accounts Coding Type Segments with Multiple Parents Cascading

Data must be populated into each table as shown in Accounts Coding Types - Multiple Parents Cascading before completing the cascading steps.

To configure multiple parents cascading:

1. Navigate to > **Accounting** > **Accounts Coding Types**
2. Select the accounts coding type to edit.
3. Click **More Actions** > **Configure Coding Segments**
4. Configure the segments as usual, ensuring the Cascading Type is set to QuerySQL.
5. Click **Next**.
6. Configure each segment as usual.

- Select Box populates a list with all valid values for the segment, from which the user can pick the appropriate one. The option offers the best ease of use.
- Typeahead requires the user to begin typing a value, then lists all valid matches. The search starts when the user enters one character and further narrows with each character entered.

To use Multiple Parents Cascading, the Field Type can only be configured as Select Box or Typeahead, depending on the tenant's preference. Other Field Type selections are invalid.

7. When each segment's initial configuration is complete, click **Next**.
8. Configure each segment, paying particular attention to the QuerySQL for all segments. In the example cascading setup used here, the QuerySQL for each segment is as follows:
   - Company: SELECT code, description FROM companies WHERE Tenant_ID = 9
   - Department: SELECT code, description FROM departments WHERE Tenant_ID = 9 AND company = ?
   - Job: SELECT code, description FROM jobs WHERE Tenant_ID = 9 AND company = ?
   - Subjob: SELECT code, description FROM subjobs WHERE Tenant_ID = 9 AND job = ?
   - Phase: SELECT code, description FROM phases WHERE Tenant_ID = 9 AND company = ? AND job = ?

In each child segment, the parent is indicated by [parent column name] = ?. The Parent field must be a part of the table for each segment.

9. When each segment's configuration is complete, click **Next**.
10. Review the information for each segment. Click **Previous** make changes if necessary. When all information is correct, click **Finish**.

The multiple parents cascading is NOT yet configured. Continue following the steps to finish configuring cascading.

11. Select the same accounts coding type and click **More Actions** > **Configure Coding Segments**.
12. Click **Cascading** in the top right corner.
13. Follow Configure Cascading for Accounts Coding Types, paying particular attention to the parents selected for each segment and any optional parent listed.
14. Click **Finish** when done.

The accounts coding type with cascading and multiple parents is configured. The cascading functionality occurs anywhere that the accounts coding type is specified.

Ensure the accounts coding type is enabled via the Accounts Coding Types Management grid before use.

6.5.5 Configure Security for Accounts Coding Types

The accounts coding type must display Yes in the Completed column before security is configured.

The Security settings allow the user to configure optional security for accounts coding types based on user/group settings. Four security types are available: Restrict to User's Ship to Permissions, Restrict to User's Assigned Ship To Location, Restrict to Group, and Restrict to User. Configuring security prevents users from using account codes for which they are not authorized.

Each security type requires the Select Box field type and the below Query SQL as defined during segment configuration step 3.

- Restrict to User's Ship to Permissions: SELECT CodeDesc, AccCode FROM AccountingCodes WHERE AccountCodeType_ID = 1
- Restrict to User's Assigned Ship to Location: SELECT * FROM Location WHERE 1 = 1
- Restrict to Group: SELECT CodeDesc, AccCode FROM AccountingCodes WHERE AccountCodeType_ID = 2
- Restrict to User: SELECT CodeDesc, AccCode FROM AccountingCodes WHERE AccountCodeType_ID = 4

1. Navigate to > **Accounting** > **Accounts Coding Types**. Select the accounts coding type to be configured, then click **More Actions** > **Configure Coding Segments**.
2. Click **Security** in the top right corner.
3. On the Configure Security page, choose Yes or No beside each security option to enable or disable it. All changes to this page are audited.
4. Click **Finish** to save changes.

6.5.6 Delete Accounts Coding Types

If an accounts coding type is in use, it cannot be deleted.

To delete an unused accounts coding type:

1. Navigate to > **Accounting** > **Accounts Coding Types**
2. Select the accounts coding types to delete and click **Delete** .

6.6 Account Code Splits

Use the Split Account Code page to either enter a standard single account code or split the line item's cost among different codes. In addition, you can add account codes to the some or all items on the request instead of adding account codes on a line-by-line basis. There is a Yes/No radio action, which may be selected to apply account codes to additional line items.

Finally, these account codes may be displayed on the actual purchase order. Displaying the account codes on a purchase order may be turned on or off with a system setting.

The following permission is required when implementing this functionality:

- 63 – Can Split Accounting Codes

Additionally, the following system setting can be implemented. This allows users to enter notes with each coding split they apply to an item. The note can be up to 255 characters. Notes can also be imported if accounting splits import is enabled.

- 898 - Enable notes field for split coding entry

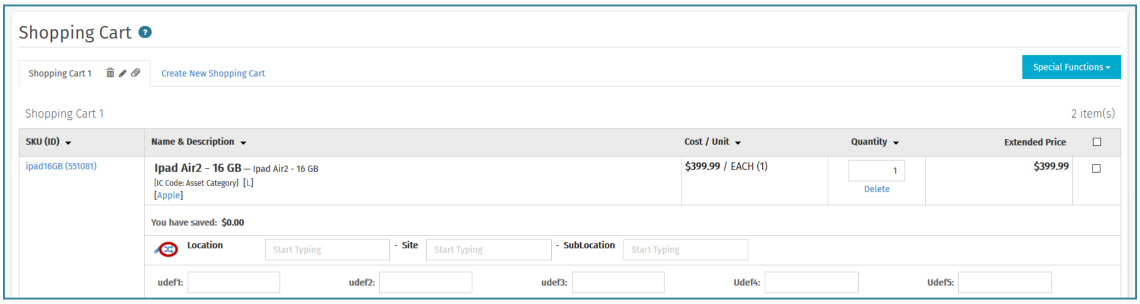


Figure 65: Shopping Cart – Displaying link to split account codes

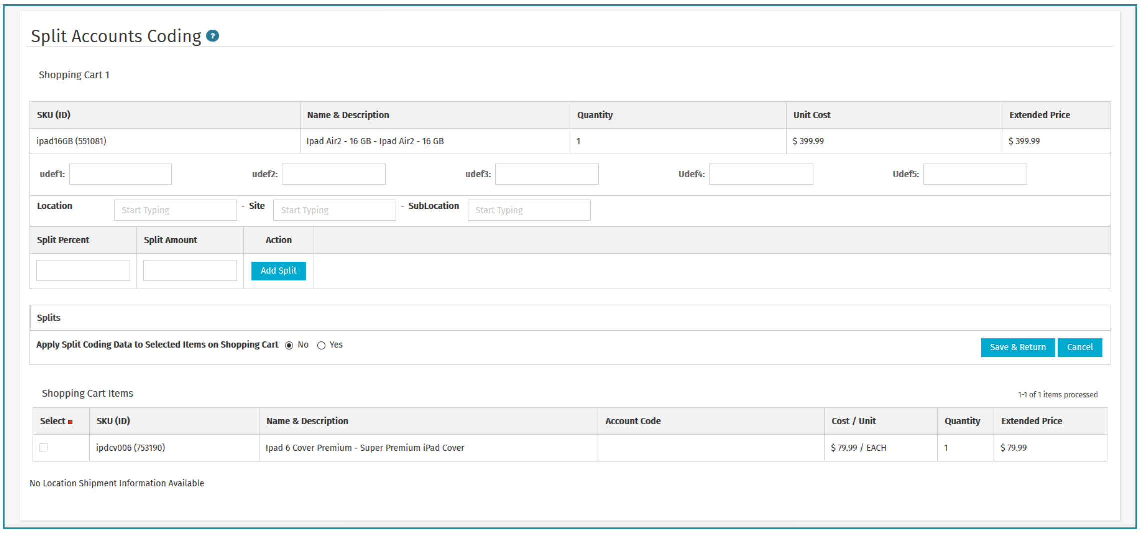


Figure 66: Split Account Code page

Table 44: Account Code Split Page Field Definitions

Field	Definition
Item	Displays the item added to the shopping cart whose account codes need to be split. This is a non-editable field.
Item Total/Qty	Displays the total cost of the line item and the quantity. This is a non-editable field.
Purpose (expense drafts only)	A space for the user to enter a purpose or description for the expense. This text is added to the description field of the expense upon clicking **Save & Return**. Must be enabled by a system administrator with system setting 2274.
Account Code	Enter the account code for the line item level. If an account code was entered for the line item in the shopping cart, this field is pre-populated with that value.
Udefs	Displays which Udef system settings (918, 919, 16920, 16921, and 16922 – Display Order Request Udef 1 – 5 Fields) are set to Yes.
Split Code	Enter the account code to which the cost needs to be applied.
Split Percent	Enter a percentage value (in decimals) of the total cost that is to be applied for the entered split code. The value entered must be between 0 and 1.
Split Amount	Enter a part of the amount of the total cost that is to be applied for the entered split code. Only enter a split percent or split amount. If split percent is entered then it automatically displays the corresponding split amount and vice versa.
Udefs	To split Udef data for line items, set the system settings 16800, 16801, 16802, 16803, 16804 – Enable Order Request Line Udef 1-5 Splits) to Yes.
Apply Split Code Data to Selected Items on Shopping Cart (header will change to reflect the document type)	Determines whether the entered accounts coding information should be applied to other items in the shopping cart or request. Select the desired items in the table to apply the accounts coding information.

Accounts Coding Splits Import

When system setting *977 - Accounting Code: Allow use of Code Split Template* is enabled and an import map is created, the user can import split code information using the Accounting Splits import specifications. The action **Apply Split Template** is displayed on the Split Codes Admin page.

Import Field Definition for Accounting Splits

1-9 of 9 items processed

Field Name	Field Label	Field Type	Default	Max. Size	Required	Primary Key	Allow Expression	Hashable
AccCode	Account code	Text Box		100	Yes	No	Yes	No
SplitPercent	Split Percent	Currency		19,4	No	No	Yes	No
SplitTotal	Split Total	Currency		25,10	No	No	Yes	No
SplitNote	Split Note	Text Box		255	No	No	Yes	No
UsrItem1	User Item 1	Text Box		50	No	No	Yes	No
UsrItem2	User Item 2	Text Box		50	No	No	Yes	No
UsrItem3	User Item 3	Text Box		50	No	No	Yes	No
UsrItem4	User Item 4	Text Box		50	No	No	Yes	No
UsrItem5	User Item 5	Text Box		50	No	No	Yes	No

Figure 67: Accounting Splits Import Specification

The following validations are performed on this import:

- AccCode cannot be blank
- Cannot include duplicate account codes in the file
- Either the split percent or the split total is required for each line
- A split total cannot be more than the item to which a user is adding the splits.
- Split percent must be a value between 0 and 1.
- The sum of all the split percentages must equal 1.

6.6.1 Split Account Codes from Shopping Cart

Location: Shopping Cart

Before splitting account codes, ensure you have all desired items in the shopping cart to complete the request.

To split a line item cost to multiple account codes:

1. Click the split icon for the line item the split is to be applied.
2. Enter the account code in the Split Code field.
3. Enter the account code's corresponding percent value or amount in the Split Percent or Split Amount field respectively.
4. Click **Add**.

If the split is applied then the total percent has to equal 100% before the user can return to the shopping cart.

5. Complete Step 4 again if more split codes needs to be added. When the percent reaches 100 or when the total amount equals the line item total, click **Done**.

6.6.2 Import Split Accounts Coding Data

Location: Shopping Cart

The following system setting must be enabled to import split accounts coding data:

- 977 - Accounting Code: Allow use of Code Split Template

Before splitting account codes, ensure you have all desired items in the shopping cart to complete the request. Additionally, you must have an Accounting Splits import map created in order to import the data. This functionality is only available from the shopping cart.

1. Click the split icon for the line item the split is to be applied.
2. Click **Apply Split Template**.
3. Select the **Import Map** to use with the import.
4. Click **Choose File** and browse for the file to import.
5. Click **Import**.
   The import analysis page displays.
6. If needed, review and correct the data using **Review and Correct**.
7. When all data is correct, click **Save and Import Now** to apply the split coding data to the line.

The splits data displays on the Split Account Code page.

6.7 Accounting Periods

Companies can choose to set custom accounting periods if their accounting period differs from the defaults available. Custom accounting periods are used to accurately match incoming Level 3 Credit Card Data to expense drafts.

The Accounting Periods management grid always uses the date format DD/MM/YYYY, not the date format set in system setting 826.

The following system setting is required:

- 2310 - Credit Card Expense Report Cycle Frequency. Must be set to Custom Accounting Period.

To manage accounting periods, a user must have the following permission:

- 94 - Manage Accounting Periods

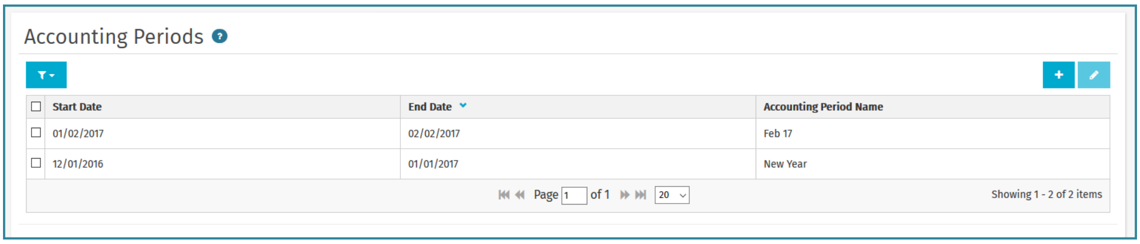


Figure 68: Accounting Periods Management

Once created, custom fiscal periods can be edited, but cannot be deleted.

6.7.1 Creating Custom Accounting Periods

To create a custom accounting period:

1. From the Dashboard, navigate to > **Accounting** > **Accounting Periods**.
2. Click .
3. Enter the accounting period start date, end date, and name (optional). Date Formats are always in DD/MM/YYYY format.
4. Click **Submit**.

6.7.2 Editing Custom Accounting Periods

1. From the Dashboard, navigate to > **Accounting** > **Accounting Periods**.
2. Click .
3. Update the accounting period start date, end date, and name (optional).

   When editing, if either the Start Date or End Date has already passed, it will be a read-only field.
4. Click **Submit**.

6.8 Accounts Coding Segment Labels

When configured to do so by PSO, tenant administrators can define system-wide accounts coding segment labels, up to 15.

Once defined and enabled, the Accounts Coding Types Configuration wizard displays the labels as options for Segment Label in a drop-down list, instead of allowing the user to type in a custom label.

Defined accounts coding segment labels provide consistency among accounts coding type configuration and enables reporting by accounts coding segment.

6.8.1 Define and Enable Accounts Coding Segment Labels

Location: > **Accounting** > **Accounting Split Segment Labels**

Additionally, the tenant must have hidden system setting 999200040 set to Yes by a Basware administrator.

When an accounts coding segment label is enabled, it is made available as an option for **Segment Label** when configuring segments for Accounts Coding Types. When the segment label is changed, the change is reflected in the same drop-down list.

1. Select the segment to edit or enable. Only one segment may be selected at a time.
2. Click .
3. Select an external table name to associate the segment label to. This field only displays if an external datasource is configured with system setting 975. Only one label may be assigned to each table.

   For more information on external tables, see Manage External Account Codes

4. Change the name of the segment label if desired.
5. For the **Enable** option, select Yes.
6. Click **Edit Segment Label**.

The segment label is enabled and, if applicable, the name is edited. The segment label is now available for use when configuring segments for accounts coding types.

7 Permissions

Permissions drive group and user behavior. This includes access as well as restrictions.

General permissions dictate the extent of rights that the groups and users have in the system on a general level. Permissions typically are assigned on the group level, where they are easier to manage. In some cases, permissions can be assigned on the user level although this practice is not recommended. These general permissions are not specific to any particular group.

7.1 User/Group Permissions Page

The following permission is required to access this functionality:

- 6 – Manage Permissions

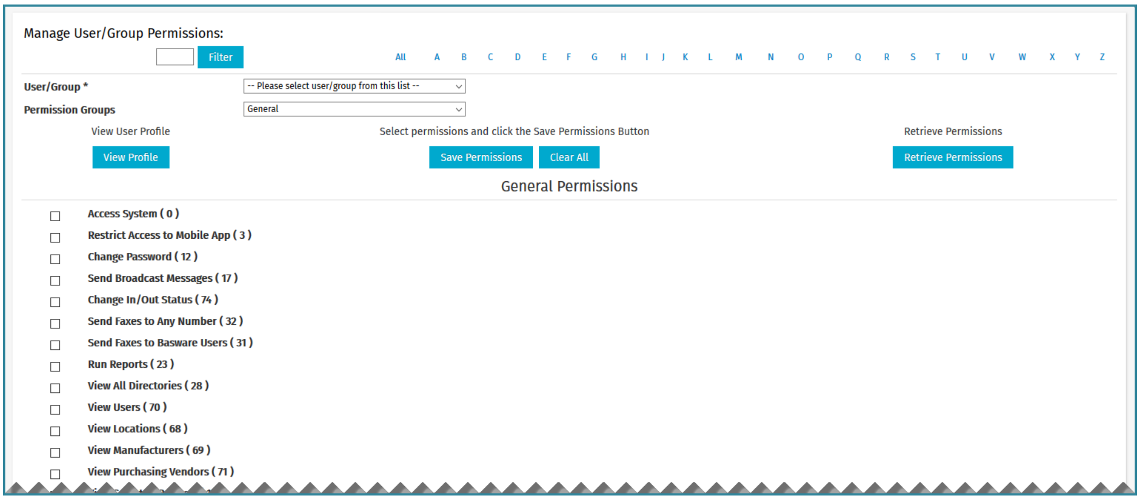


Figure 69: User/Group Permissions page

Table 45: User/Group Permissions page action definitions

Action	Definition
Filter	Allows the user to filter the user/group list displayed in the user/group field.
View Profile	Allows the user to view the profile of any selected user/group.
Save Permissions	Allows the user to save the changes made to permissions.
Clear All	Allows the user to clear any unsaved entries or selections.
Retrieve Permissions	Allows the user to retrieve the permissions of the selected user/group and permission group.

7.1.1 Inherited Link

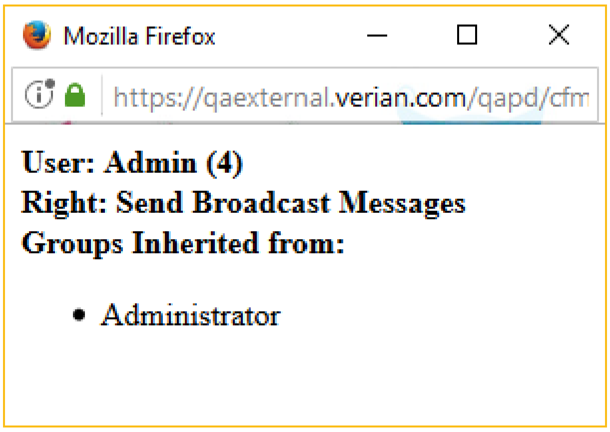


Figure 70: Inherited Link pop-up

When viewing the permissions for a user, if a user inherits the permissions from a group to which he is assigned, Inherited is displayed next to the permission. Clicking the link displays the group or groups the user inherited the permission from.

7.1.2 Adding or Editing Permissions for a User/Group

To add/edit permission for a user/group:

1. From the Dashboard, navigate to >> .
2. Select the user/group from the user/group drop-down list. Enter filter data to limit the users/groups that appear in the list.
3. Select the permission group associated with the permission to set.
4. Click **Retrieve Permissions**.
5. Click the check boxes beside the permissions that are to be set for the selected user/group.

   For certain permissions, additional data must be defined before the permission is active. For example, if the Manage Purchase Orders (8) permission is set, locations must be set for the user/group to manage.

6. Click **Save Permissions**.

If additional data is necessary, a link is activated beside the associated permission once **Save** is clicked. Click the link to access the appropriate page.

The affected users must log out and log back in for changes in permissions to take effect.

7.2 Distributed Permissions

Distributed group admin permission is used to restrict the administrator's ability to manage certain groups. Distributed location admin permission is used to restrict the administrator's ability to manage certain locations. These are very powerful permissions and if set incorrectly all the administrator settings are disabled.

Only your Basware Implementation Team or Client Care Team can administer these permissions. If there is a business need for distributed permissions please contact Basware.

Available Distributed Permissions

- 83 – Distributed Group Admin Permissions
- 82 – Distributed Location Admin Permissions

System Implications and Considerations

- These are restrictive permissions. Once assigned, the initial permissions to administer by location or group are restricted. The user is no longer able to remove permissions or grant permissions outside of his allotted group or location.
- Group permissions of distributive management must be given before locations or groups can be assigned.
- If group permissions are assigned, but not distributive permissions, the user is not able to administer for any group or location.

7.3 Catalog Permissions by Item Category, Item Type, and Vendor

These are restrictive permissions to aid large organizations with many users, to distribute administrative responsibilities across many organizational units and employees, while maintaining global control.

Only your Basware Implementation or Client Care team can administer these permissions. If there is a business need for these catalog permissions please contact Basware.

By Item Category

84 – Restrict Catalog Management to Selected Item Categories: This permission gives the user/group administrative catalog permissions for a specific item category.

By Item Type

85 – Restrict Catalog Management to Selected Item Types: This permission enables user/groups to manage catalog data for selected item types.

By Vendor

86 – Restrict Catalog Management to Selected Vendors: This permission enables a user/group to manage catalog data for a specific vendor.

8 Rules Setup

Rules enable the customization of purchasing, expense, and invoice workflow using the administrative data entered during the implementation phases.

Rules are used throughout the system to route orders in a particular manner, based on a multitude of criteria.

> If customized rules are required, contact your Basware Implementation or Client Care teams to assist in the rule design.

8.1 Rule Management

The following permission is required to access this functionality:

- 26 – Manage Rules

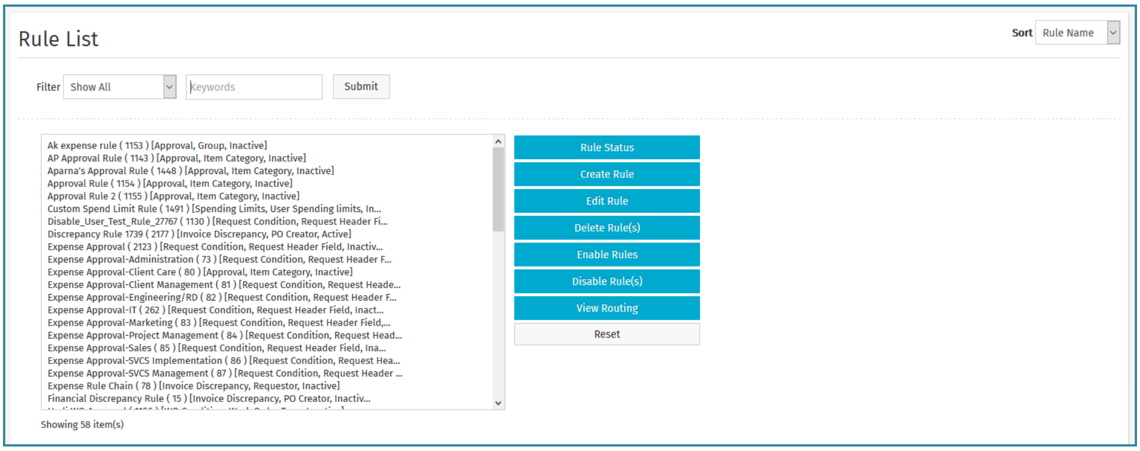


Figure 71: Rules Management page

Table 46: Rule Management page action definitions

Action	Definition
Rule Status	Allows the user to view the rule status information.
Create Rule	Allows the user to create a new rule.
Edit Rule	Allows the user to edit an existing rule.
Delete Rule(s)	Allows the user to delete an existing rule.
Enable Rules	Allows the user to enable a rule that has been disabled.
Disable Rule(s)	Allows the user to disable a rule without deleting it.
View Routing	Allows the user to view the rule routing.
Clear Entries	Allows the user to clear any unsaved entries.

The list of rules displayed can be filtered based on the status or rule type. The following options are available:

- Show All – Displays all the rules.
- Active – Displays only active rules.
- Inactive – Displays only inactive rules.
- Item Selection – Displays all item selection rules.
- Budget – Displays all budget rules.
- Approval – Displays all the approval rules.
- Condition – Displays all the request condition rules.
- Chain – Displays all chain rules.

To filter either on the rule status or the rule type, select the option in the Filter drop-down field and click **Filter/Sort**.

The rules displayed can be sorted based on these options:

- Rule Name
- Rule Type
- Rule Subtype
- Status
- Start Date
- End Date

To sort the rules, select the option in the Sort drop-down field and click **Filter/Sort**.

8.1.1 Enhanced Routing Concepts

Organization Tree Routing Type

The Org tree option is similar to the chain rule, in that it follows a hierarchy of approval. The difference is that instead of following a determined list of approvers, the Org tree routing type follows a predetermined list of management.

Whenever a user is added to the system, his user profile contains his manager. If Org tree is selected, the user/requisitioner's manager determines the routing type. The request is then routed to his/her manager's manager, etc. until the determined level of the Org tree is reached.

To determine the level of the Org tree that the routing should go to, one must manually enter a numeric value in step 4.

Example: If '2' has been entered for the tree levels, 2 manager routing levels take effect.

A user makes a request. The request is routed to two levels for approval. The first approver is the user's manager and the second approver is the manager's manager.

With this rule active, all requisitions generated by the determined group are routed to their manager, through the Org tree, until it reaches the level entered in the tree levels field. The levels within the Org tree vary with the complexity of the management of the organization.

8.1.2 Rule Status

Rule status displays information about the

- Rule type
- Routing method
- Activation status
- Selection method

Figure 72: Rule Status page

8.1.2.1 Viewing Rule Status

To view the rule status:

1. From the Dashboard, navigate to ⚙ > **Users** > **Rules**.
2. Select a rule from the Rule list to view and click **Rule Status**.

8.1.3 Deleting Rules

If a rule that is still active in the system is deleted, an error message is displayed.

To delete a rule:

1. From the Dashboard, navigate to ⚙ > **Users** > **Rules**.
2. Select a rule to delete from the rule list and click **Delete Rule(s)**.
3. Click **OK** in the confirmation pop-up window.

8.1.4 Disabling a Rule

The option to disable a rule allows the user to prevent a rule from being used without deleting it. The user can then re-enable the rule at a later time.

To disable an active rule:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Select a rule from the Rule list that is active and click **Disable Rule(s)**.

The selected rule's status changes to *inactive*.

8.1.5 Enabling a Rule

A rule is typically enabled when it is created. However, rules that have been manually disabled may need to be re-enabled.

To enable an inactive rule:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Select a rule from the Rule list that is inactive and click **Enable Rules**.

The selected rule’s status is changed to active.

8.1.6 View Rule Routing

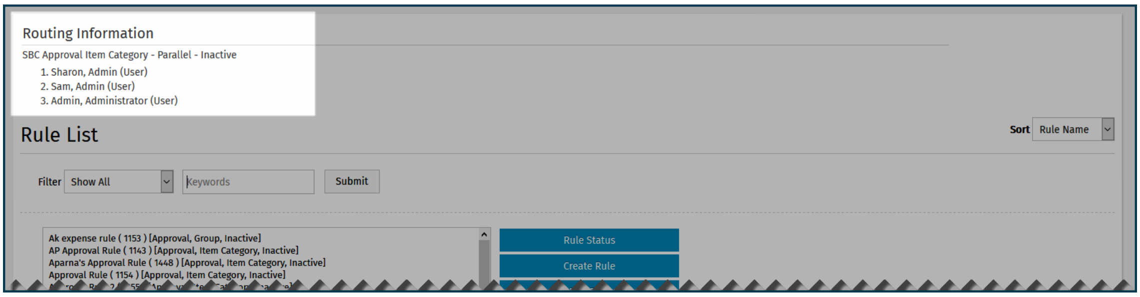


Figure 73: Rule Routing Information page

To view rule routing:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Select a rule from the Rule list to view and click **View Routing**.

8.2 Rule Types and Subtypes

Rules are an extremely powerful management tool. The ability to create, edit, enable, and delete different rule types is available.

The following rule types are available:

- Item Selection
- Budget Rules
- Approval Rules

- Request Condition Rules
- Rule Chain
- Invoice Condition
- Invoice Spend
- Spending Limits
- Invoice Discrepancy
- Work Order Condition
- Card Service Request

Each rule type contains different subsets. The following table should be used as a reference to the different rule types and their components.

Rule Types	Rule Class Subtypes	Applies to
Item Selection	Item Type Item Category Vendor Vendor Types Contract	Catalog View Customization
Budget	Item Type Item Category Contract User Location Location User Budget Projects Order	Purchase Requests and Expense Requests
Approval	Item Category Item Group Project	Purchase Requests and Expense Requests
Request Condition	Request Header Field Request Header Event Request Detail Field Request Detail Event Request Account Code Request Account Code Event	Purchase Requests and Expense Requests
Rule Chain	Standard Chain Funneling Chain	Purchase Requests and Expense Requests
Invoice Condition	Invoice Header Invoice Detail Invoice Distribution	Purchase Manager and Invoice Manager

Rule Types	Rule Class Subtypes	Applies to
Invoice Spend	Department Contact Creator Project Manager Invoice Type Owner	Invoice Manager
Spending Limits	User Spending Limits Account Code Based Group Spending Limits	Purchase Manager and Invoice Manager
Invoice Discrepancy	Requester Purchaser Department Contact Project Manager Last Approver Last Approval Path PO Creator User Group	Purchase Manager
Card Service Request	Replacement Card Request Card Limit Increase Request	Expense Manager

8.2.1 Item Selection Rule

This rule allows the selective choosing of item type/item category/vendor/vendor types/contract availability in the system, when accessing a catalog or creating a free form request, by restricting groups or users from seeing certain item types/item categories/vendors/vendor types/contracts in the system. This type of rule is ideal for any type of separation or for companies that use local vendors. This rule is also ideal for users or groups, such as IT that can purchase specific equipment, while the rest of the organization is restricted.

Item selection rules enable the restriction of users/groups from requesting specific items based on one of the following information classes:

Rule class	Impact of Item Selection Rules for this class
Item Type	Item type rules restrict selected users/groups from requesting items of a specific item type. The item type for an item is usually selected when the item is added to the database. Item types are standard. The following types are available: Product - An item ordered by a user. Most items in the catalog are classified as a product item type. Service - A service ordered using the system. Do not select asset or expense types for this rule.

Rule class	Impact of Item Selection Rules for this class
Item Category	Item category rules restrict selected users/groups from requesting items assigned to a specific item category. Item categories are client specific.
Vendor	Vendor rules restrict selected users/groups from requesting items assigned to specific vendors. Vendors are client specific.
Vendor Types	Rules for vendor types restrict selected users/groups from requesting items assigned to specific vendor types. Vendor types are client specific. Restricting by a vendor type also restricts users from viewing any items for which the preferred vendor belongs to the restricted vendor type.
Contract	Contract rules restrict selected users/groups from requesting items assigned to specific contracts. Contracts are client specific.

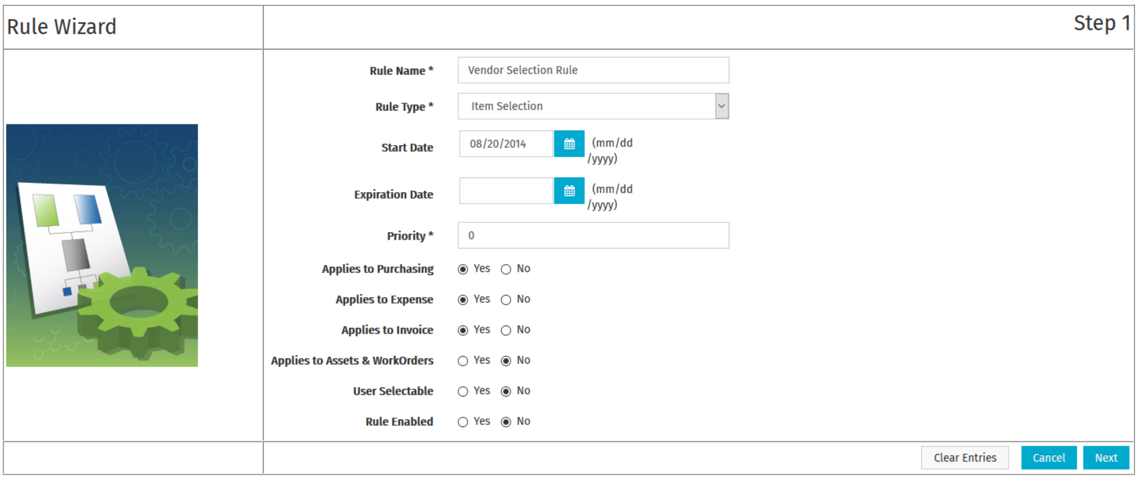


Figure 74: Add Rule – Step 1

Table 47: Add/Edit Rule - Step 1 field definitions

Field	Definition
Rule Name	Enter the name of the rule. This name is the one that is displayed in the Rule list. It should be distinct for each Rule to enable easy identification in the list.
Rule Type	Select the type of rule.
Start Date	Enter the date this rule becomes effective. Use the Calendar icon or enter a date in mm/dd/yyyy format. Must be the current date or a future date.

Table 47: Add/Edit Rule - Step 1 field definitions (continued)

Field	Definition
Expiration Date	Enter the date this rule automatically expires. Use the Calendar icon or enter a date in mm/dd/yyyy format. The expiration date cannot be before the start date or the current date.
Priority	Enter the priority for this rule. Select a priority status from 0 to 99. This value is used to avoid conflict with rules that contain overlapping criteria. The higher priority rule takes precedence over a lower priority rule.
Applies to Purchasing	Select if this rule applies to the Purchase Manager. Yes is selected by default. If this is not a purchasing item, select No.
Applies to Expense	Select if this rule applies to the Expense Manager. Yes is selected by default. If this is a purchasing item or Expense Manager is not enabled, select No.
Applies to Invoice	Select if this rule applies to PO reconciliation and/or non-PO invoices. Yes is selected by default. If this is a purchasing item or Expense Manager is not enabled, select No.
Applies to Assets & Work Orders	Select if this rule applies to work orders. No is selected by default. This rule does not work in conjunction with other rules. When it is set to Yes, all the other modules must be set to No.
Rule Enabled	Determines if this rule is active. Yes is automatically selected. If the rule is to be enabled later, select No.

1. When editing a rule and the expiration date is entered for the first time, a warning message is not displayed when the expiration date is after the start date and before the current date.
2. When Applies to Assets & Work Orders is set to Yes, all of the modules listed must be set to No. The system does not allow you to proceed to Step-2 until this is corrected:
3. When Applies to Purchasing, Applies to Expense, and/or Applies to Invoice are set to Yes, Applies to Assets & Work Orders must be set to No. The system does not allow you to proceed to Step-2 until this is corrected.

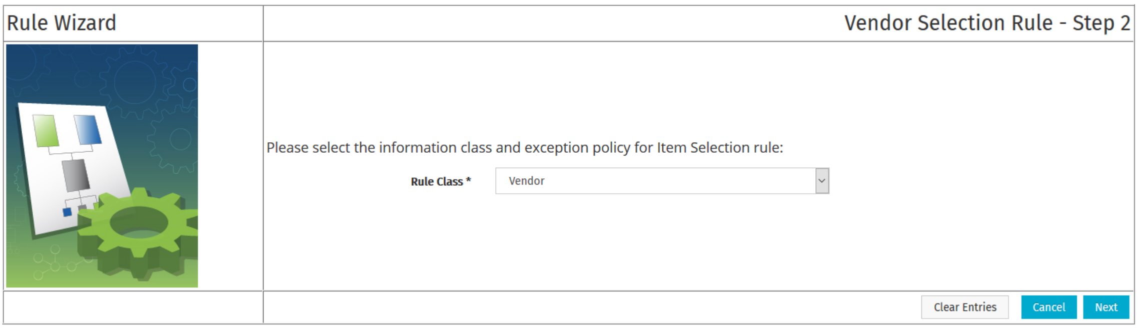


Figure 75: Add Rule – Step 2

Table 48: Add/Edit Rule - Step 2 field definitions

Field	Definition
Rule Class	Allows the user to select the class criteria for this rule. Different classes are available for each rule type. The following classes are available for item selection rule type: Item Type Item Category Vendor Vendor Types Contract

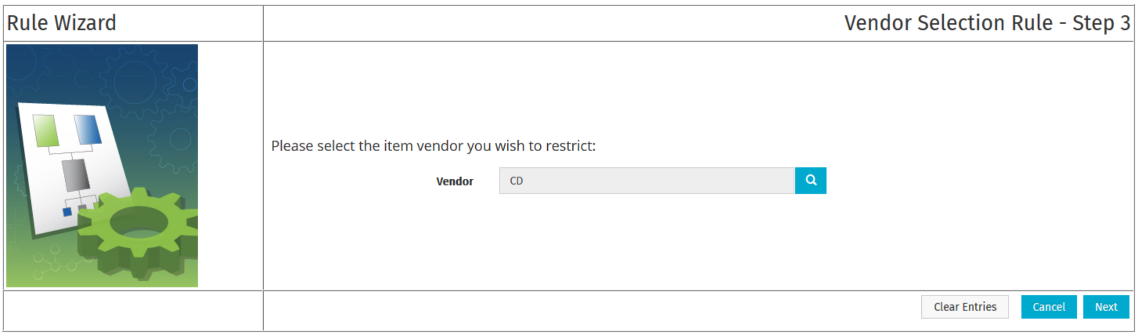


Figure 76: Add Rule – Step 3

Table 49: Add/Edit Rule - Step 3 field definitions

Field	Definition
Item Type	Select the appropriate item type. The following options are available: Asset Expense Product Service
Item Category	Select the appropriate item category. Click Browse to view a list of the available categories.
Vendor	Select the appropriate vendor. Click Browse to view a list of the available vendors.
Vendor Types	Select the appropriate vendor type. Click Browse to view a list of available vendor types.
Contract	Select the appropriate contract. Click Browse to view a list of available contracts.

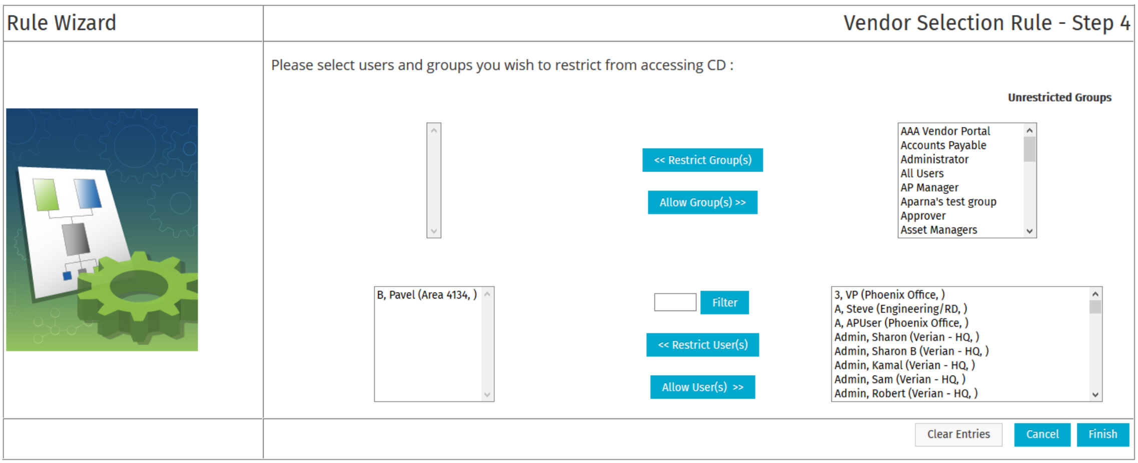


Figure 77: Add Rule – Step 4

Table 50: Add/Edit Rule - Step 4 field definitions

Field	Definition
Restricted Groups	Select groups in the Unrestricted Group list and click Restrict Groups. The selected groups appear in the restricted groups' field. These groups are restricted based on the criteria selected in Steps 1 through 3 of the Rule Wizard.
Unrestricted Groups	A list of all groups available for restriction.
Restricted Users	Select users in the Unrestricted User list and click Restrict Users. The selected users appear in the restricted users' field. These users are restricted based on the criteria selected in Steps 1 through 3 of the Rule wizard.
Unrestricted Users	A list of all users available for restriction.

8.2.1.1 Creating or Editing Item Selection Rule

To create or edit item selection rule:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.

   The Add Rule – Step 1 page appears.
3. Enter a name for the rule in the Rule Name field.
4. Select item selection from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:
   - Item Type
   - Item Category
   - Vendor

- Vendor Types
- Contracts

8. Click **Next**.
9. Select an item type/item category/vendor/vendor types/contract from the drop-down list or use **Browse** depending on the option chosen in Step 7.
10. Click **Next**.
11. Complete the required fields and click **Finish**.

8.2.2 Budget Rules

The budget rule allows users to set up a financial budget for an individual user or group in the system based on a period. This rule is used to set financial limits in the system. The options once the budget is reached are to automatically decline subsequent orders, send the request for additional approvals, or send warnings to approvers once a percentage of the budget is reached.

Information class	Impact of Budget rules for this class
Item Type	An item type rule restricts and routes selected users/groups based on budget criteria specified for the item type. The item type for an item is usually selected when the item is added to the database. Item types are standard. The following types are available: Product - An item ordered by a user. Most items in the catalog are classified as a product item type. Service - A service ordered through the system. Asset or Expense types cannot be selected for this rule.
Item Category	An item category rule restricts and routes selected users/groups based on budget assigned to a specific item category. Item categories are client specific.
Contract	A contract rule restricts and routes selected users/groups based on budget assigned to specific contracts. Contracts are client specific. Contract information is identified by the contract associated with each order request.
User	A user rule restricts and routes orders for selected users based on budget criteria.
Location	A location rule restricts and routes orders for selected locations based on budget criteria.
Location User Budget	Location user budget rules are operated within the constraints of the location budget rule. The location rule defines the budget amount for the entire location. The location user budget rule defines how much of the location budget can be used by one user on one order request.
Order	An order rule restricts all orders according to the budget criteria.
Advanced Budgeting	An advanced budgeting rule works in conjunction with the Advanced Budgets module. This rule is used for approving budgets at determined threshold.

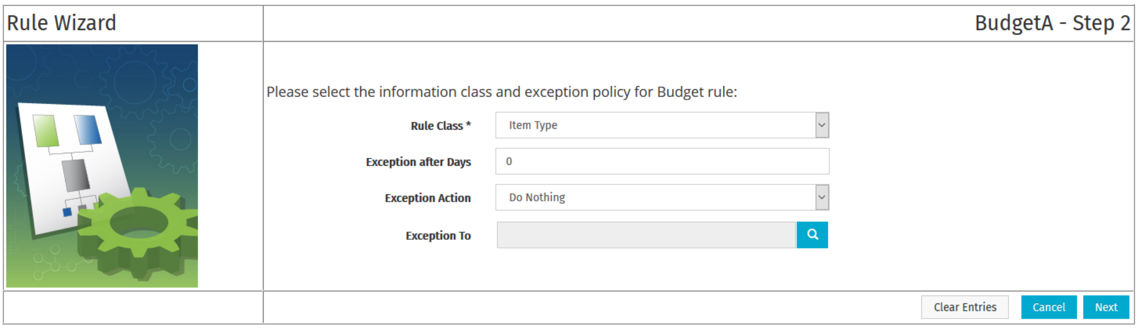


Figure 78: Add Rule for Budget Type – Step 2

Table 51: Add Rule for Budget – Step 2 field definitions

Field	Definition
Rule Class	Allows the user to select the class criteria for this rule. The following classes are available: Item Type — Select the appropriate item type. Item Category — Select the appropriate item category. Contract — Select a contract. User — Select the appropriate user. Click Browse to view a list of available users. Location — Select the appropriate location. Click Browse to view a list of available locations. Location User Budget — Select the appropriate location. Click Browse to view a list of available locations. Project — Select the appropriate project. Order — Applied to all orders created. Advanced Budgeting — Applies to approval rules for the Budget Manager module.
Exception after Days	Allows the user to enter the number of days after the exception occurs to establish when the exception notice needs to be sent.
Exception Action	Allows the user to select an action to be taken when an exception occurs. The available options are: Do Nothing Route Request Notify Other User Decline Route to Manager Remind Notify Manager
Exception To	Allows the user to select a user to whom the exception notice needs to be sent. Click the magnifying glass icon to view the available list of users to select from. This is only applicable if the notify other user option is selected in the Exception Action field. If a user is excluded from rule escalations per his user profile, his name is not displayed here. When an approver's route for a request is canceled due to escalation, a note is displayed in the approval sections for order requests and expense requests.

Exception Actions

- Do Nothing - Nothing happens after specified time in the exception after days' field.
- *Route Request – The next approver in the route is replaced with this person in exception to field after the specified time in the exception after days' field.
- *Notify Other User – Reminds the person in the exception to field that request has not been approved after the time specified in the exception after days field.
- Decline – Decline after the specified time in exception after days' field.

- Route to Manager – Routes the request to the APPROVER'S manager after the specified time in the exception after days' field.
- Remind – Reminds the APPROVER that request has not been approved after the specified time in the exception after days' field.
- Notify Manager –- Reminds the APPROVER'S manager if it has not yet been approved after the specified time in the exception after days' field.

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1. Only fields above denoted with an asterisk require a name in the Exception To field to be selected.
2. The Exception To fields creates the parameters for rule escalations.
3. If a user is excluded from rule escalations per his user profile, his name is not displayed in the Exception To field.
4. If a user's profile is configured to be excluded from rule escalations and a rule is escalated to him, the system automatically declines the request/invoice.
5. If a user's profile is configured to be excluded from rule escalations, he does not receive the following:
   - Route Request
   - Notify Other User
   - Remind
6. If a manager's profile is configured to be excluded from rule escalations, the following occurs:

If Notify Manager is the required action, the system notifies the manager regardless of the user profile configuration. If Route to Manager is the required action, the system declines the request/invoice.

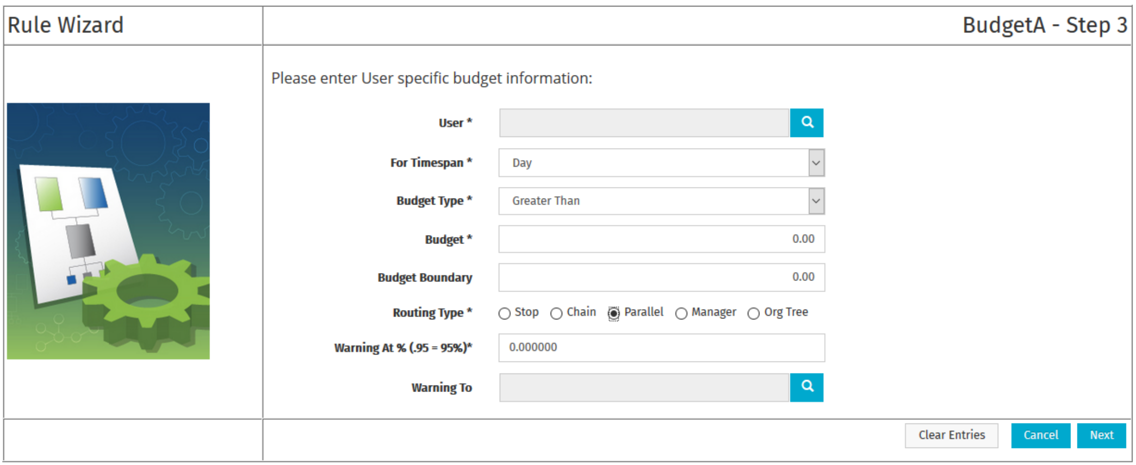


Figure 79: Add Rule for Budget – Step 3

Table 52: Add Rule for Budget – Step 3 field definitions

Field	Definition
Item Type	Select the item type from the drop-down list. This field varies depending on the rule class selected in Step 2.
For Timespan	Click the Timespan drop-down to select day, week, 2 weeks, month, quarter, half year, or year. This is how long the budget rule is in place. Once the selected timespan is ends, the budget restarts.
Budget Type	Select greater than, smaller than, greater or equal to, or smaller or equal to in the Budget Type drop-down field. This is the criteria used for comparison.
Budget	Enter a numeric value in the Budget Constraint field. This is the dollar amount to trigger the budget rule.
Budget Boundary	Use the Budget Boundary field to specify an upper or lower range for the budget. For example, to apply the rule for a range ($1500 to $5000). For a budget range if greater than is selected enter a greater value in the Budget Boundary field than the Budget field. For a budget range if lesser than is selected enter a lower value in the Budget Boundary field than the Budget field.
Routing Type	Select one of the following routing types: Stop — Routing is not used. This causes the order to be declined. When Next is clicked, the rule creation/edit is complete. Chain — Approval is routed to the selected users in the order listed. Parallel — Approval is routed to the selected users simultaneously. Any user that approves the order causes the order to be approved for that rule. Manager — Approval is submitted to the user's manager. When Next is clicked, the rule creation/edit is complete. Routing managers does not need to be defined. The system automatically uses the management hierarchy indicated on the user profile. Org Tree - Approval is submitted to the user's manager and on, up the organization trees as many levels as are indicated in Step 4.
Warning At %	Enter a warning percentage and select a warning user if desired. When the ordered total reaches the specified percentage of the budget indicated, the system sends a notification to the specified user.
Warning	Click Browse to select the user to receive the warning. If a user is selected and no warning percentage is entered, no warnings are sent.

Tip

You have a budget rule that is set for a day for a location with a budget greater than or equal to $10.00. Until the total of the order requests created for the location for that day are greater than or equal to $10.00, the order requests are not sent for approval. Once the threshold is crossed, all order requests for that location regardless of the amount are sent for approval.

If Chain or Parallel is selected in Step 3, the following fields appear in Step 4:

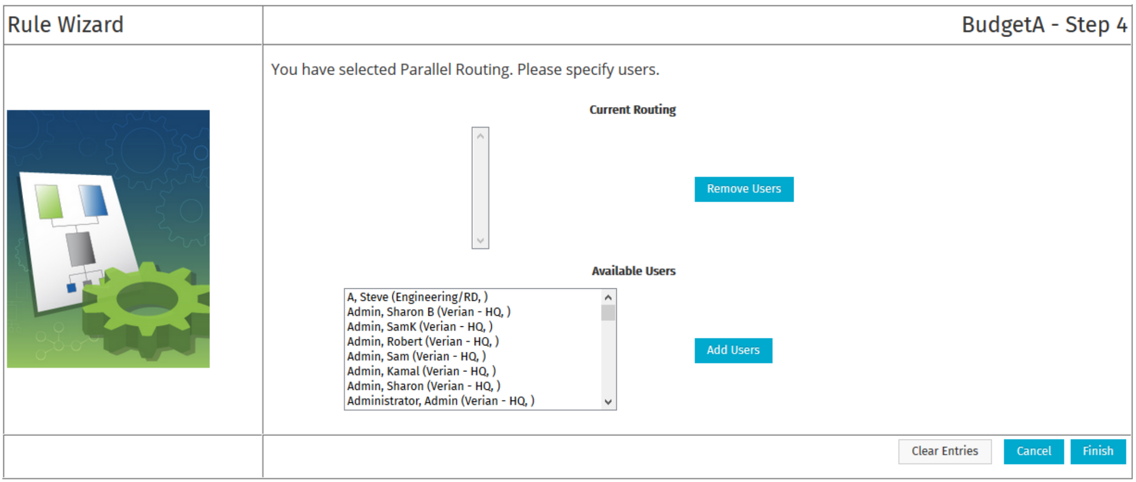


Figure 80: Add Rule – Step 4 for Chain or Parallel Routing Type

Table 53: Add Rule – Step 4 for Chain or Parallel Routing Type field definitions

Field	Definition
Current Routing	Select users in the Available Users list and click Add Users. The selected users move to the Current Routing field. Orders meeting the criteria established for this rule are submitted to these users for approval. If chain routing was selected, the order is submitted to each of the users in this list in the order they are listed. Select a user; click the Move Up and Move Down actions to adjust the order of the list. Only users with approval permissions are displayed on this list.
Available Users	The list of users available for approval routing.

If Org Tree is selected in Step 3, the following field appears for Step 4.

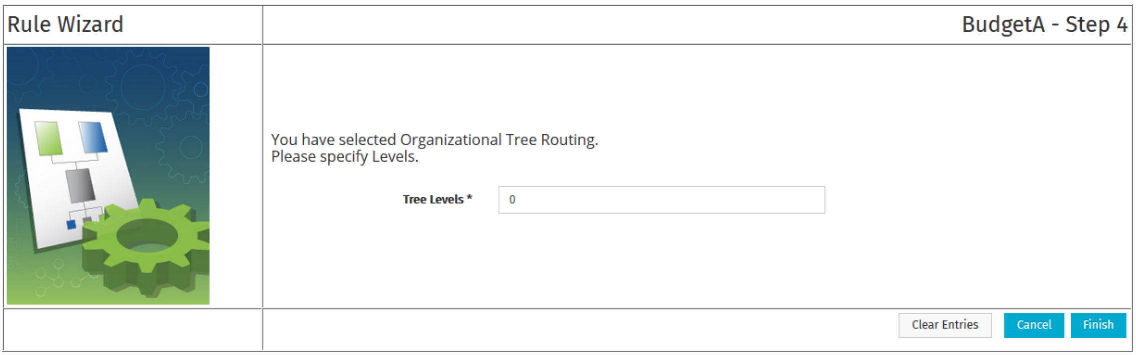


Figure 81: Add Rule – Step 4 for Org Tree Routing Type

Table 54: Add Rule – Step 4 for Org Tree Routing Type field definitions

Field	Definition
Tree Levels	Select the appropriate organization tree level. This level indicates how many of the defined management levels are included in the approval chain. For example, if 2 is entered, then an order request that meets the established rule criteria is forwarded to the user’s manager and the manager's manager. Thus, two levels of the organization tree are used for approval.

8.2.2.1 Creating or Editing Budget Rules

To create or edit budget rules:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select budget from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:
    - Item Type
    - Item Category
    - Contract
    - User
    - Location
    - Location User Budget
    - Project
    - Order
    - Advanced Budgeting
8. Click **Next**.
9. Select an item type/item category/contract/user/location/location user budget/project/order from the drop-down list or click Browse depending what option was chosen in Step 7.
10. Complete the other required fields.
11. Click **Next**.
12. If Stop or Manager was selected as the routing type, the rule creation is complete. If Chain, Parallel, or Org Tree was selected as the routing type, complete the required route configuration and click **Finish**.

8.2.3 Approval Rules

Approval rules can be applied to groups, item categories, items, or projects to route general requests for approval. These are not financially associated rules and cannot be used for individuals.

Approval rules enable the enforcement of the approval policies for item categories, items, and groups.

Information class	Impact of Approval Rules for this class
Item Category	Item category rules apply specific approval routing to all order request line items that include the items that are part of the selected item category.
Item	Item rules apply specific approval routing to all order request line items that include the selected item.
Group	Group rules apply specific approval routing to all order requests submitted by users that are a part of the selected group.
Project	Project rules apply specific approval routing to all order requests submitted by users that are part of the selected project.

Groups cannot be deleted if they are associated with any rule that is active or inactive. This includes rule restrictors.

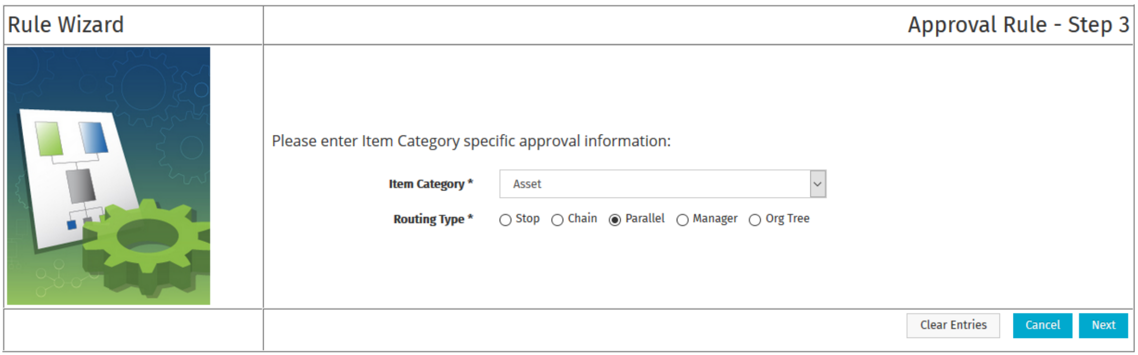


Figure 82: Add Rule – Step 3 for Approval Rule Type

8.2.3.1 Creating or Editing Approval Rules

To create or edit approval rules:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select approval from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:

- Item Category - Select the appropriate item category. The drop-down field contains a list of available categories.
- Item - Enter the appropriate Item ID. To obtain the ID number for an item, click the **Items** link under . Select the appropriate item in the Item list and click **View**. The first field on the page is the Item ID field.
- Group - Select the appropriate group. The drop-down field contains a list of available groups.
- Project - Select the appropriate project. The drop-down field contains a list of available projects.

8. Click **Next**.
9. Select an item category/item/group from the drop-down list depending on the option chosen in Step 7.
10. Complete the other required fields.
11. Click **Next**.
12. If Stop or Manager was selected as the routing type, the rule creation is complete. If Chain, Parallel, or Org Tree was selected as the routing type, complete the required route configuration and click **Finish**.

8.2.4 Request Condition Rules

A rule class that enables the user to pick any data field from the Order Request header or Order Request detail and create a comparison condition for triggering it. Comparisons are freely selectable from a list of predefined comparisons (greater, equals, begins with, contains, etc.) and flexible criteria can be entered. A custom comparison method is provided as well.

Condition rules can be used when other rules do not capture the business process as needed. This allows the user to set up criteria based on information captured in the request header or request detail field. This includes the user ID of the requester or of the creator. Conditional rules allow the setup of mathematical expressions with the user IDs. These typically are used in rule chains with other criteria.

Information class	Impact of Condition Rules for this class
Request Header field	Request Header field rules apply specific approval routing to all order requests that include specific information on the Request header of the order request.
Request Header Event	Request Header event rules request a 3rd party system to return the route.
Request Detail field	Request Detail field rules apply specific approval routing to all order requests that include specific information in the line item information of the order request.
Request Detail Event	Request Detail event rules request a 3rd party system to return the route.
Request Account Code	Request Account Code rules apply specific approval routing to all order request line items that include specific account codes in either the main account code field or the split code fields.
Request Account Code Event	Request Account Code event rules request a 3rd party system to return the route.

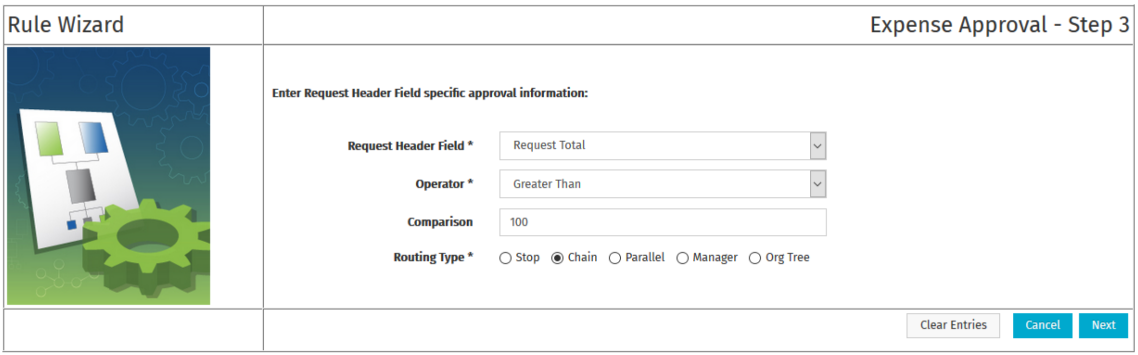


Figure 83: Add Rule – Step 3 for Request Condition Rule Type

Table 55: Add Rule Step 3 for Request Condition Rule Type field definitions

Field	Definition
Request Header Field	Select a Request Header field from the drop-down list.
Operator	Select an operator from the drop-down list. The options available are greater than, is equal, smaller than, greater or equal to, smaller or equal to, starts with, contains, ends in, does not exist, custom, list, not in list.
Comparison	Depending on the operator selected, enter a value for the comparison.
Routing Type	Select one of the following routing types: **Stop** Select if routing is not used. This causes the order to be declined. When Next is clicked, the rule is complete. **Chain** Approval is routed to the selected users in the order listed. **Parallel** Approval is routed to the selected users simultaneously. Any user that approves the order causes the order to be approved for that rule. **Manager** Approval is submitted to the user's manager. When Next is clicked, the rule is complete. The manager does not need to be defined. The system automatically uses the management hierarchy indicated on the user profile. **Org Tree** Approval is submitted to the user's manager and on up the organization tree as many levels as are indicated in Step 4.

8.2.4.1 Creating or Editing Request Condition Rules

To create or edit request condition rules:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule.**
3. Enter a name for the rule in the Rule Name field.
4. Select request condition from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.

   The Add Rule – Step 2 page appears.

7. Select a rule class from the Rule Class drop-down field. The following options are available:
    - Request Header Field
    - Request Header Event
    - Request Detail Field
    - Request Detail Event
    - Request Account Code
    - Request Account Code Event
8. Click **Next**.
9. Select a request header field /request header event/request details field/request detail event/request account code/request account code event from the drop-down list depending on the option chosen in Step 7.
10. Complete the other required fields.
11. Click **Next**.
12. If Stop or Manager was selected as the routing type, the rule creation is complete. If Chain, Parallel, or Org Tree was selected as the routing type, complete the required route configuration and click **Finish**.

8.2.5 Request Account Code

The request account code rule routes the request based on the account code value specified in the main account code field or the split code as specified in the Split Code page. The system routes a request which has more than one line to the appropriate approver based on the line. If there are multiple lines, each with a different account number, the system takes into account how to route the request. Only the line(s) that have the same account number are sent for approval together. Otherwise, the request is broken up by line and sent to the appropriate approver based on the rule structure for each account number.

If both the main account code and the split code are specified, the main account code takes precedence over the split codes and the rule is routed based on the value in the main account code field.

If the rules do not have priorities, they are treated as parallel rules. If the rules have priorities, they are treated as chain rules.

8.2.6 Rule Chain

Rule chains are a method by which a combination of rules is used to specify routing. For example, budget rules cannot be applied to the individual user, but a conditional rule identifying the user ID and a budget rule could be used in combination to accomplish that goal.

Users can also create routing to cross multiple rule chains.

Information class	Impact of Chain Rule for this class
Standard Chain	Rule chain affects all rules in the chain Rules in the rule chain must be disabled for the rule chain to work. If the first rule in the rule chain is not satisfied, the following rules are overlooked and a PO is created. If the first rule is satisfied, it continue to the next rule in the rule chain until a rule is not satisfied and create approval routing for all the rules satisfied in the rule chain.
Funneling Chain	Funnels the line items that are sent for approval based on the subset of rules that would affect all the line items. The subset always is based on the rules that affect the first line item

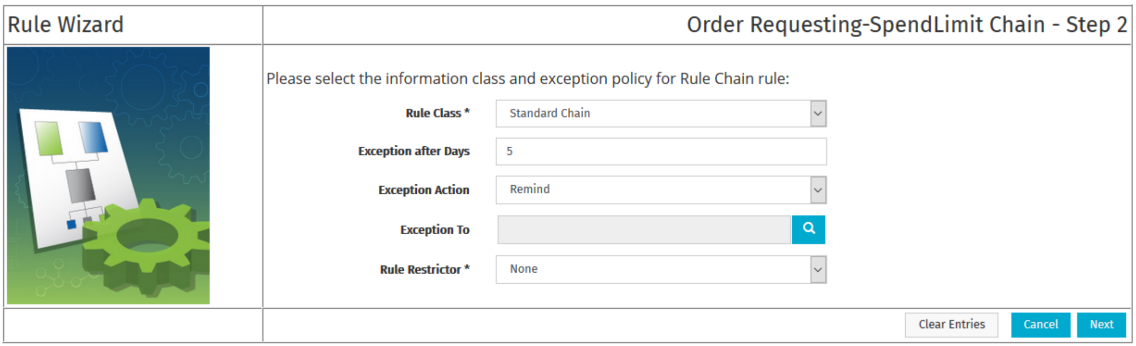


Figure 84: Add Rule – Step 2 for Rule Chain

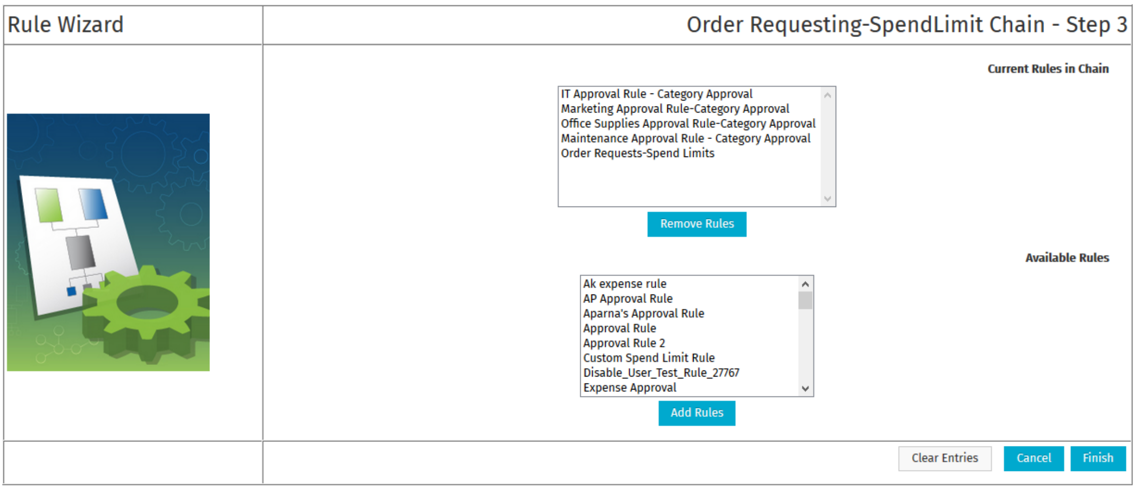


Figure 85: Add Rule – Step 3 for Standard Rule Chain

Table 56: Add Rule - Step 3 for Standard Rule Chain Field Definitions

Field	Definition
Current Rules in Chain	Selects the available rules that are used in rule chain. Select rules in the Available Rules list and click Add Rules. The selected rules move to the current rules in the chain field. Note: The way this list is numbered is very important. Determines what rule is first, second, etc.
Available Rules	Lists all the available rules that can be used in the rule chain.

1. For rule chains to work correctly, the individual rules within the rule chain should be disabled, or the resulting approval flow may conflict with the rule chain.
2. When system setting *1160 – Process Only Rules with Highest Priority* is set to No and rule chains are being used, each individual rule escalation is used.
3. When system setting 1160 is set to Yes, the escalation for the rule chain is used.

8.2.6.1 Funneling Rule Chain

The funneling chain option acts as a funnel; each rule that applies reduces (funnels) the set of line items that are affected by the rules in the chain.

More specifically, the funneling rule chain evaluates the first rule in the chain to create a subset of line items to which it applies. Then, the second rule is only able to operate on the subset of the lines that applied to the first rule and determine line items that applied to the first and second rule, etc. for all subsequent rules. Once all the rules are applied, the final subset of line items is the ones that go for approval. All items that did not apply to all rules in the rule chain in the order specified are auto approved.

Scenario

Rule Chain consists of 2 Rules:

- Rule 1 - Approval rule for item category
- Rule 2 - Budget rule for location (amount > 50)

Order Request has 3 line items:

- Line1 – Item category used in approval rule and budget > 50$
- Line2 – Item category used in approval rule and budget < 50$
- Line3 – Different item category and budget > 50$

Rule 1 applies to Line 1 & Line 2.

Rule 2 applies to Line 1 & Line 3.

Only Line 1 is sent for approval, and Lines 2 & 3 are auto approved.

8.2.6.2 Creating or Editing Rule Chains

To create or edit a rule chain:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select rule chain from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:
    - Standard Chain
    - Funnelling Chain
8. Click **Next**.
9. Select rules in the Available Rules list and click Add Rules. The selected rules move to the Current Rules in Chain list.
10. Click **Finish**.

8.2.7 Invoice Condition Rules

Invoice Condition Rules enable the enforcement of approval policies for Invoice Header fields, Invoice Detail fields, and Invoice Distribution fields.

Information class	Impact of Condition Rules for this class
Invoice Header field	The invoice header field rules apply specific approval routing to all invoices that include specific information on the invoice header level.
Invoice Detail field	The invoice detail field rules apply specific approval routing to all invoices that include specific information on the line item level.
Invoice Distribution	The invoice distribution rules apply approval routing to invoices that include specific information based on the GL code specified.

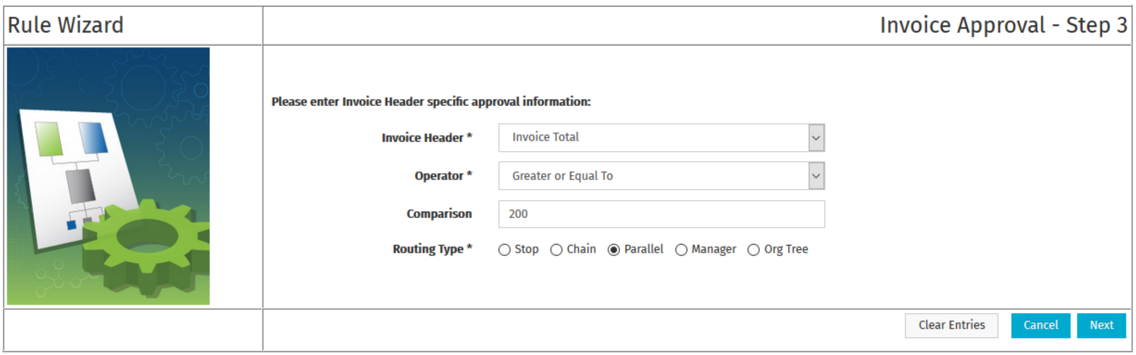


Figure 86: Add Rule – Step 3 for Invoice Condition Rule – Invoice Header

Table 57: Add Rule Step 3 for Request Condition Rule Type field definitions

Field	Definition
Invoice Header	Select an Invoice Header field from the drop-down list.
Operator	Select an operator from the drop-down list. The options available are greater than, is equal, smaller than, greater or equal to, smaller or equal to, starts with, contains, ends in, does not exist, custom, list, not in list, between, IS not.
Comparison	Depending on the operator selected, enter a value for the comparison.
Routing Type	Select one of the following routing types: Stop – Select if routing is not used. This causes the order to be declined. When Next is clicked, the rule is complete. Chain - Approval is routed to the selected users in the order listed. Parallel - Approval is routed to the selected users simultaneously. Any user who approves the order causes the order to be approved for that rule. Manager - Approval is submitted to the user's manager. When Next is clicked, the rule is complete. The manager does not need to be defined. The system automatically uses the management hierarchy indicated on the user profile. Org Tree - Approval is submitted to the user's manager and on up the organization tree as many levels as are indicated in Step 4.

8.2.7.1 Creating or Editing Invoice Condition Rules

To create or edit invoice condition rules:

1. From the Dashboard, navigate to ⚙ > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select invoice condition from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:
    - Invoice Header
    - Invoice Detail
    - Invoice Distribution
8. Click **Next**.
9. Select invoice header field /invoice details field/invoice distribution from the drop-down list depending on the option chosen in Step 7.
10. Complete the other required fields.
11. Click **Next**.
12. Complete the required fields and click **Finish**.

8.2.8 Invoice Spend Rules

Invoice spend rules allow the user to create budget rules that apply to invoices. Invoice spend rules are triggered when the set spending limits are reached based on certain fields on the invoice.

Information class	Impact of Condition Rules for this class
Department Contact	The entered invoice is routed to the departmental contact if above the budget and then the rest of the Org hierarchy based on spending limits of the user in the user profile. The department contact is the user assigned as the location contact for the location.
Creator	The entered invoice is routed to the creator of invoice and then the rest of the Org hierarchy based on the spending limits of the user in the user profile.
Project Manager	The entered invoice is routed to the project manager and then the rest of the Org hierarchy based on the spending limits of the user in the user profile.
Invoice Type Owner	The entered invoice is routed to the invoice type owner and then the rest of the Org hierarchy based on the spending limits of the user in the user profile.

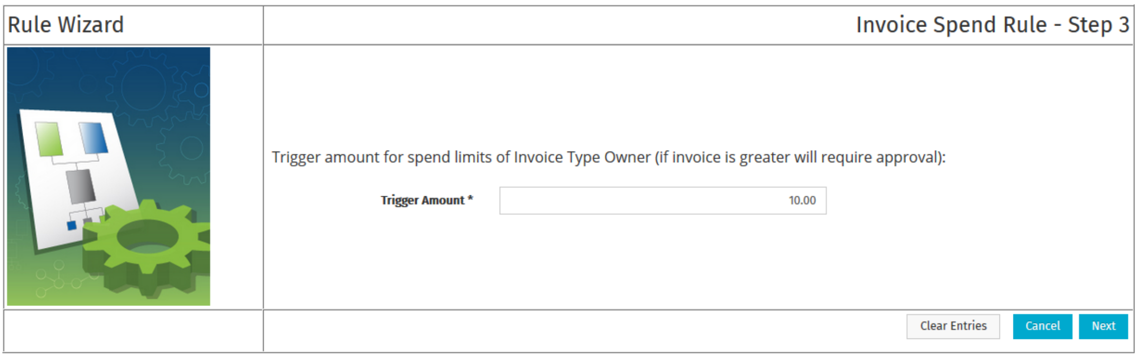


Figure 87: Add Rule Step 3 for Invoice Spend Rule

8.2.8.1 Creating or Editing Invoice Spend Rules

To create or edit invoice spend rules:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select invoice spend from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:
   - Department Contact
   - Creator
   - Project Manager
   - Invoice Type Owner
8. Click **Next**.

9. Enter the trigger amount for the rule class selected in step 7.
10. Click **Next**.
11. Click **Finish**.

8.2.9 Spending Limits Rule

Spending limits rule allows the creation of rules on a user, group, or account code level. These rules are triggered when the set spending limits are reached for specific categories set up in the user profile as shown in the above section or in the group profile for user and group spending limits. The rules are triggered for account code based rules are triggered when approvers are assigned to account code groups.

- Spending limits can be incorporated within rule chains.
- Administrators can create spending limits and spending categories on the respective user's profile.
- The system allows the spending limit rules to be processed at any desired time and not only at the beginning of the route.
- The order of rule execution should be definable.
- The system allows an administrator to be able to see spending limits when building rules within the normal rule wizard, which can be found in the Administration Tools Users Rules.
- The system allows exception rule processing to take place before spending rules are triggered if desired.

8.2.9.1 Spend Approval for User Groups

The management of spend approvals are done through a conjunction of accounting codes, accounting codes groups, groups, and group attributes. A typical business process flow for this would be:

Add account code groups (Refer to Ch. 8 Miscellaneous Data – Manage Account Code Groups).

Assign account codes to account code groups (Refer to Ch. 8 Miscellaneous Data – Assign Account Codes).

Assign the spend limits to the user group (Refer to Ch. 7 User Management – Assign Spend Limits to User Groups).

Information class	Impact of Condition Rules for this class
Spending Limits	The Order Request is routed to the User's Manager if above the Spending Limit set.

- System Setting 1163 – Use Spending Rules as Normal Rules: Set this value to Yes to include the spending limits in normal rule chain. If this setting is set to No, the spending limits are always triggered independently and take a higher precedence.

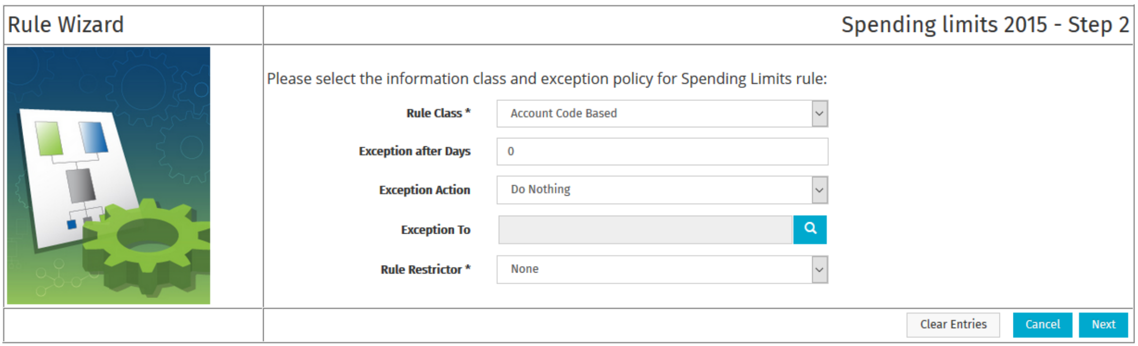


Figure 88: Add Rule Step 2 for Spending Limits Rule

8.2.9.2 Creating or Editing Spending Limits Rule for Users

To create or edit spending categories spending limits rule:

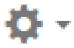
1. From the Dashboard, navigate to > **Users** > **Users**.
2. Select the user to set the spending limits for and click **Edit**.
3. In the Manager Field, select the user's manager. This is the user the request needs to be routed to for approval.
4. Enter the spending categories for the limits that need to be set in the Spending Categories field and the spending limits in the Spending Limits field.
5. Click **Edit User**.
6. Navigate to > **Users** > **Users**.
7. Click **Create Rule**.
8. Enter a name for the Rule in the Rule Name field.
9. Select spending limits from the Rule Type drop-down.
10. Fill in the other required fields.
11. Click **Next**.
12. Select user spending limits from the Rule Class drop-down.
13. Click **Next**.

8.2.9.3 Creating or Editing Spending Limits Rule for Groups

To create or edit spending categories spending limits rule:

1. From the Dashboard, navigate to > **Users** > **Groups**.
2. Select the group to set the spending limits for and click **Spend Limits**.
3. Enter spend limits for the necessary accounting code groups.
4. Click **Assign Spend Limits**.
5. Edit the user profile and in the manager field select the user's manager to whom the request needs to be routed to.

6. Click **Edit User**.

7. navigate to  > **Users** > **Rules**.

8. Click **Create Rule**.

9. Enter a name for the rule in the Rule Name field.

10. Select spending limits from the Rule Type drop-down.

11. Fill in the other required fields.

12. Click **Next**.

13. Select group spending limits from the Rule Class drop-down.

14. Click **Next**.

8.2.9.4 Account Code Based Rule

Account code based spending limits rules are used in conjunction with account code groups. If account code group approvers have not been established, then account code based rules do not work. See Account Code Groups Management for more information.

For the account code based rule, a primary approval routing attribute (field split) and an account type needs to be selected. The system checks if system setting *829 – Account Code Selection Type* is set to Split Field Entry Format.

Field splits must be configured correctly in the database for the Field Split Entry Format option to work. Contact your Basware Implementation Team or Client Care Team for more information.

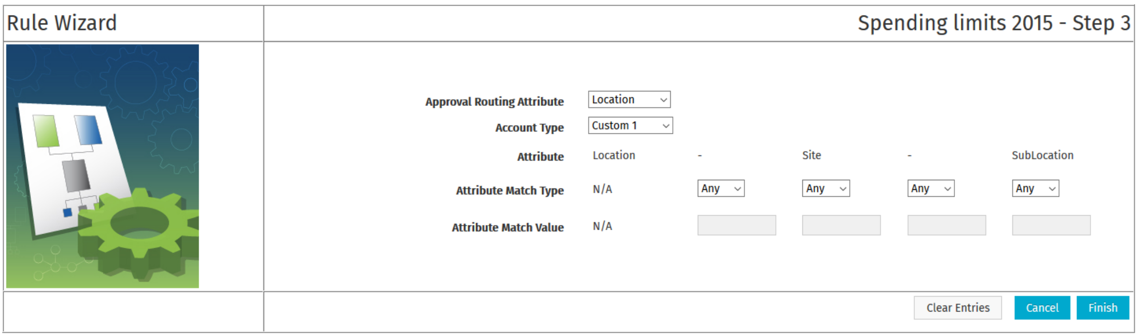


Figure 89: Add Rule – Step 3 Account Code Based Rule System Setting 829 Set to Split Field Entry Format

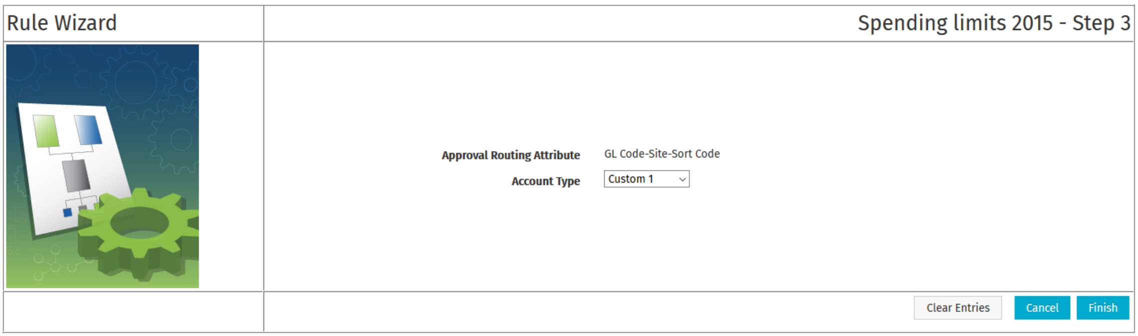


Figure 90: Add Rule – Step 3 Account Code Based Rule System Setting 829 not set to Split Field Entry Format

Table 58: Add Rule – Step 3 Account Code Based Rule Page Field Definitions

Field	Definition
Approval Rule Routing Attribute	Allows the user to select the primary field split to associate the approval routing with for this rule. If the drop-down is not available, the base account code is the primary field split.
Accounts Coding Type	Allows the user to select the accounts coding type to associate this rule with. It will only run for requests/orders coded with the selected accounts coding type. This option is only available to clients with AP Automation integration. For all other clients, the account code based rule automatically applies to the accounts coding type with ID = 1.
Account Type	Allows the user to select the account type to associate this rule with. Required only if Accounts Coding Type is not available.
Attribute	Displays the field splits defined in the system. If the field splits are not named, the system displays them as Field 1, Field 2, etc.
Attribute Match Type	Allows the user to provide a filter type for the other field splits. These field splits can be matched by any or exact values. This is marked N/A for the primary Approval Rule Routing Attribute field.
Attribute Match Value	Allows the user to enter a value when exact is entered for attribute match type. This is marked N/A for the primary Approval Rule Routing Attribute field.

- The following fields are not available when system setting 829 is set to any value other than Split Field Entry Format – Approval Rule Routing Attribute, Attribute, Attribute Match Type, and Attribute Match Value.
- The approval rule routing attribute is the base account code.
- The label for the approval rule routing attribute is determined by system setting 760 – Label for Account Code across the System.

Account Code Based Rule with External Datasource

The account code based spending limit rule works with an external datasource only if the following configurations are completed:

- External Accounts Coding Data Source must be configured (SS 975)
- Storage of accounting split segments must be enabled (SS 999200040)
- On the Manage Accounts Coding Segment Labels page (**Accounting** > **Accounting Split Segment Labels**), all segments in use must be mapped to an external table.
- All accounts coding groups must be mapped to an accounts coding segment. (See Account Code Groups Addition and Editing)
- Accounts Coding Types must be configured with Cascading Type set to QuerySQL (See Configure Cascading for Accounts Coding Types)
- Cascading configuration must use a Segment Label for all fields (See Configure Cascading for Accounts Coding Types)
- Records in the external database tables (segmentslevel01, segmentslevel02, etc.) must provide either AccCodeGroup_ID or AccCodeGroupName field in order to match to an accounts coding group in the system. If both fields are provided and match, the match by ID is used.

8.2.9.5 Create or Edit Account Code Based Rules

To create or edit an account code based rule:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select spending limits from the Rule Type drop-down.
5. Fill in the other required fields.
6. Click **Next**.
7. Select account code based from the Rule Class drop-down.
8. Click **Next**.
9. If available, select the accounts coding type from the list. The attributes will update to reflect the segments and segment labels set for the accounts coding type.
10. Select the approval routing attribute from the Approval Routing Attribute drop-down if system setting 829 is set to field splits.
11. Select the account type from the Account Type drop-down.
12. Select the attribute match type from the Attribute Match Type drop-downs.
13. Enter the attribute match values if necessary in the Attribute Match Value fields.
14. Click **Finish**.

    The rule is added to the system and the Rule List page is displayed.

8.2.9.6 Work Order Spending Limit

Work Order spending limit rules are used to trigger approvals for work orders based on spend limits configured in the user profile.

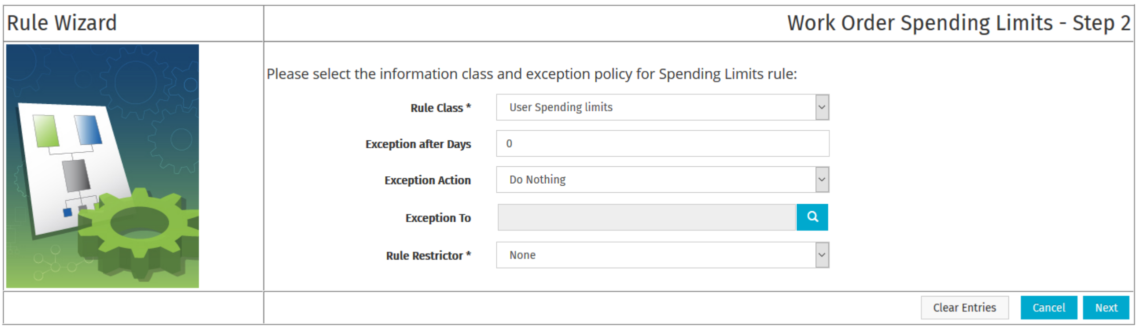


Figure 91: Add Rule – Step 2 for WO Spending Limit Rule Type

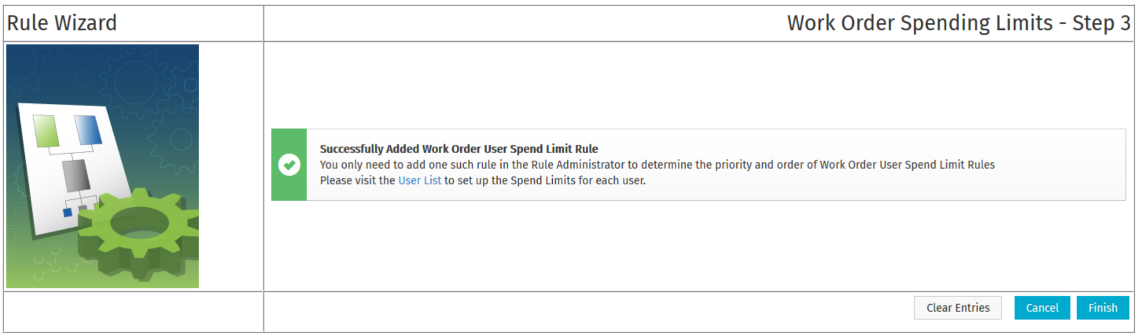


Figure 92: Add Rule – Step 3 for WO Spending Limit Rule Type

8.2.9.7 Creating or Editing Work Order Spending Limit Rules

To create or edit Work Order spending limit rules:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select Spending Limits from the Rule Type drop-down list.
5. Fill in the other required fields.

Only Applies to Assets & Work Orders can be set Yes when creating a Work Order rule. All other modules must be set to No. The system does not let you move to Step 2 until this is corrected.

6. Click **Next**.
7. Select user spending limits from the Rule Class drop-down field.
8. Click **Next**.
9. Click **Finish**.

8.2.10 Invoice Discrepancy Rules

Invoice discrepancy rules are used to trigger financial discrepancy for purchase orders. Financial discrepancy is triggered when the difference between the entered invoice cost and purchase order cost is greater than the set discrepancy parameters in invoice settings.

Invoice discrepancy rules can be set up to be routed to the following users/group of users:

Information class	Impact of Condition Rules for this class
Requester	The entered invoice is routed to the requester if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy.
Purchaser	The entered invoice is routed to the purchaser(s) for the location on the order request if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy. Note: The purchaser is any user who has permission 8 – Manage POs for the location on the order request. The routing for this selection is parallel.
Department Contact	The entered invoice is routed to the departmental contact if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy. Note: If a department contact does not exist for the location used on the order request, the invoice is declined by the system.
Project Manager	The entered invoice is routed to the project manager if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy. Note: If a project was not selected when creating the order request, the invoice is declined by the system.
Last Approver	The entered invoice is routed to the last approver for the order request if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy. Note: If an approval was not triggered when creating the order request, the invoice is declined by the system.
Last Approval Path	The entered invoice is routed via the last approval path of the order request if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy. Note: If an approval was not triggered when creating the order request, the invoice is declined by the system.
PO Creator	The entered invoice is routed to the PO creator if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy.
User	The entered invoice is routed to a specific user selected in the next step if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy.
Group	The entered invoice is routed to a specific group selected in the next step if above the set discrepancy parameters in invoice settings Max % Diff to flag PO Discrepancy or Max Amount Diff to flag PO Discrepancy.

Figure 93: Add Rule Step 3 for Invoice Discrepancy Rule for User option

8.2.10.1 Creating or Editing Invoice Discrepancy Rules

To create or edit invoice discrepancy rules:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select invoice discrepancy from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:
   - Requester
   - Purchaser
   - Department Contact
   - Project Manager
   - Last Approver
   - Last Approval Path
   - PO Creator
   - User
   - Group
8. Click **Next**.
9. Click **Finish**; or select the user or group and click **Next**.
10. Click **Finish**.

8.2.11 Work Order Condition Rule

Work Order condition rules are used to trigger approvals for work orders. The approvals for work orders are triggered when certain conditions in the work order header is met upon the work order creation. The rule triggers are based on work order categories, work order types, or comparisons which are freely selectable from a list of predefined comparisons (greater, equals, begins with, contains, etc.) and flexible criteria can be entered. A custom comparison method is provided as well.

User groups are included in the rule routing for work order rules only. If a group is selected, routes for all active users on the group are created. When one member of the group approves/declines, the approval process is completed for the group.

To be displayed in the Current Routing list, the group must have permission *1 – Approve Requests*.

Work Order Condition rules are used for the following work order rules:

- Work Order Category
- Work Order Type
- Work Order Header Field

A work order header field rule can be combined with a work order category or a work order type rule to make a compound rule.

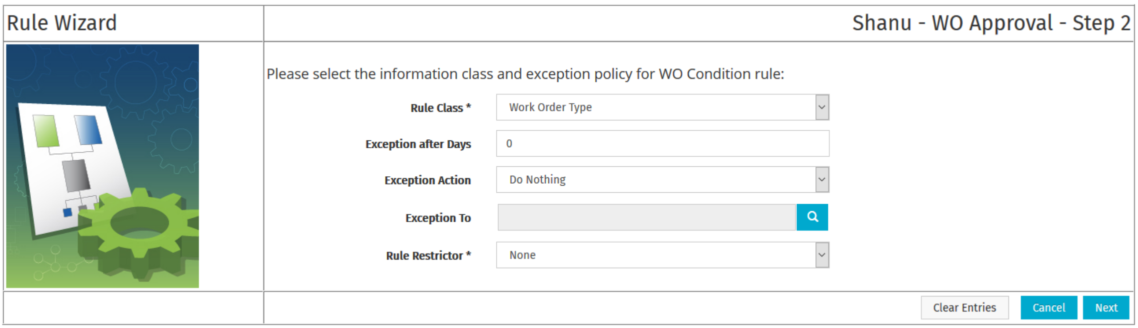


Figure 94: Create Rule – Step 2 for Work Order Condition Rule Type

Table 59: Add Rule Step 2 for Work Order Condition Rule Type field definitions

Field	Definition
Rule Class	Allows the user to select the class criteria for this rule. The following classes are available: • Work Order Type — Select the appropriate work order type. • Work Order Category — Select the appropriate work order category. • Work Order Header Field — Select the appropriate operator and enter the correct comparison.
Exception after Days	Allows the user to enter the number of days after the exception occurs to establish when the exception notice needs to be sent.

Table 59: Add Rule Step 2 for Work Order Condition Rule Type field definitions (continued)

Field	Definition
Exception Action	Allows the user to select an action to be taken when an exception occurs. The available options are: • Do Nothing • Route Request • Notify Other User • Decline • Route to Manager • Remind • Notify Manager
Exception To	Allows the user to select a user to whom the exception notice needs to be sent. Click the magnifying glass icon to view the available list of users to select from. This is only applicable if the notify other user option is selected in the Exception Action field.

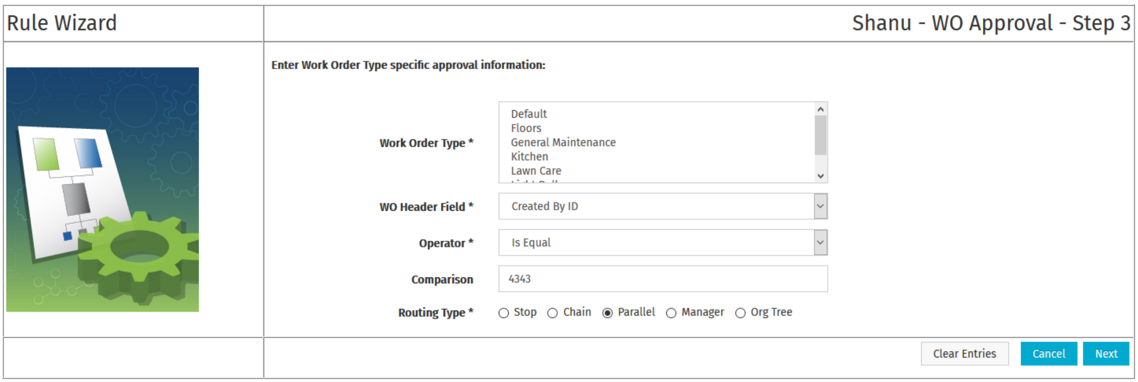


Figure 95: Create Rule – Step 3 for Work Order Condition Rule Type

Table 60: All Rule Step 3 for Work Order Condition Rule Type Field Definitions

Field	Definition
Work Order Category	Select a work order category from the list. This field is displayed only if work order category was selected as the rule class.
Work Order Type	Select a work order type from the list. This field is displayed only if work order type was selected as the rule class.
Work Order Header Field	Select a Work Order Header field from the drop-down list.
Operator	Select an operator from the drop-down list. The options available are greater than, is equal, smaller than, greater or equal to, smaller or equal to, starts with, contains, ends in, does not exist, custom, list, not in list.
Comparison	Depending on the operator selected, enter a value for the comparison.

Table 60: All Rule Step 3 for Work Order Condition Rule Type Field Definitions (continued)

Field	Definition
Routing Type	Select one of the following routing types: • Stop – Select if routing is not used. This causes the order to be declined. When Next is clicked, the rule is complete. • Chain - Approval is routed to the selected users in the order listed. • Parallel - Approval is routed to the selected users simultaneously. Any user that approves the order causes the order to be approved for that rule. • Manager - Approval is submitted to the user's manager. When Next is clicked, the rule is complete. The manager does not need to be defined. The system automatically uses the management hierarchy indicated on the user profile. • Org Tree - Approval is submitted to the user's manager and on up the organization tree as many levels as are indicated in Step 4.

Only one work order condition can be applied to a rule.

8.2.11.1 Creating or Editing Work Order Condition Rules

To create or edit work order condition rules:

1. From the Dashboard, navigate to ⚙ > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select Work Order Condition from the Rule Type drop-down list.
5. Fill in the other required fields.

   Only Applies to Assets & Work Orders can be set Yes when creating a Work Order rule. All other modules must be set to No. The system does not let you move to Step 2 until this is corrected.

6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:
   - Work Order Category
   - Work Order Type
   - Work Order Header Field
8. Click **Next**.
9. Complete the required fields.
10. Click **Next**.

Users or groups with permission *1 – Approve Requests* can be selected on this page. This only applies to Work Order rules.

11. Complete the required fields for approval configuration and click **Finish**.

8.2.12 Create Card Service Request Rules

Location: > **Users** > **Rules**

This rule defines the approval routing that occurs when an Expense Manager user submits a request to replace a credit card or increase their card's spending limit. The rule can only be used for Expense Manager, and has no approval conditions. The rule is triggered whenever the specified user/group creates a card replacement or spend limit increase request.

Rule Class	Function
Replacement Card Request	Defines the route a request for a replacement credit card must be approved through. Triggered when someone in the specified user/group clicks "Request replacement" on the My Cards page and submits the required form.
Card Limit Increase Request	Defines the route a request for an increased spend limit must be approved through. Triggered when someone in the specified user/group clicks "Request increase" on the My Cards page and submits the required form.

To create a card service request rule:

1. Click **Add**.
2. Set the Rule Type to **Card Service Request**.
3. Set *Applies to Expense* to **Yes**, and *Applies to Purchasing*, *Applies to Invoice*, and *Applies to Assets & WorkOrders* to **No.**
4. Fill out all other required information in Step 1. Click **Next**.
5. In Step 2, select your Rule Class from the drop-down list:
   - **Replacement Card Request** - to define the approval route for all requests for a replacement credit card
   - **Card Limit Increase Request** - to define the approval route for all requests for an increased spend limit
6. *(Optional)*Set all desired exception information.
7. Choose a Rule Restrictor:
   - **None**: the created rule will apply to all users of the Expense module.
   - **Location Group / Location**: the created rule will apply only to the locations or location groups you choose in step 3.
   - **User Group / User**: The created rule will apply only to the user groups or users you choose in step 3.
8. Click **Next**.

9. In Step 3, select the location or user groups for which the rule will apply and click **Add Group(s)**. In order to select individual users or locations, you must first select the respective group on this page.
10. Click **Next**.
11. In Step 4, select the individual locations or users for which the rule will apply and click **Add User(s)**.
12. Click **Next**.
13. In Step 5, select the type of approval routing for the rule:
    - **Stop**: the action is not sent to any manager for approval. If this is selected, the designated users/locations are not allowed to perform the request at all.
    - **Chain**: you can specify a series of approvers, and the request must go through each approver before it is approved.
    - **Parallel**: you can specify parallel approvers; when any one of the approvers approves the request, it is processed as approved.
    - **Manager**: the request is automatically routed to the user's manager.
    - **Org Tree**: the request must follow a specified number of levels in the organization's tree. For example, if 2 levels is selected, then the request must be approved by the manager and the manager's manager before it can be processed.
14. Click **Next**.
15. In Step 6, define the approval route based on the type chosen in Step 5 of the Wizard. The fields on this page vary depending on the type chosen. If you selected **Stop**, you do not see this page and your rule configuration is complete.
16. Click **Finish.**

If you did not enable the rule in Step 1 of the Wizard, you must enable the rule before it is active in the system.

8.3 Advanced Rule Routing Options

Advanced rule routing can be used for clients who have purchased the Enterprise Version of the system. Advanced rules are created in the Edit User page. If the Enterprise version has been purchased two additional fields are shown in the Edit User page.

The following permission is required to access this functionality:

- 5 – Manage Users and groups

Figure 96: Add User Partial View page

These fields are:

- Spending Categories - Spending categories are related to item category identification numbers, which are automatically assigned when item categories are established. More than one item category ID can be entered in the spending categories field.
- Spending Limits - Spending limits can be entered based upon the spending categories.

Spending limit based rules always have the lowest priority.

Options for the spending categories field:

- Enter “0” or “–1” for a limit on entire order request.
- Enter “–2” for a specific limit on entire expense request.
- Enter “–6” for a specific limit on non-PO invoice.

8.4 Dynamic Rule Chain

Dynamic rules are the rules that are built on the fly based on the individual rules setup. System setting *1160 – Process Only Rules with Highest Priority* needs to be set to No for the dynamic rules to take effect.

Dynamic rule characteristics

- The system evaluates all the rules setup.
- Based on the priority for each rule, the system determines the order of the rules.
- Using the determined order one giant rule chain is built on demand.

8.5 Rule Restrictors

Rule restrictors act as filters and allows the rules to be restricted to certain location groups/locations or user groups/users.

System setting *1196 – Evaluate Rule Restrictors in Conjunction with All Other Rules* determines whether all rules and rule restrictors are evaluated or just rule restrictors are evaluated. If set to Yes, all rules and rule restrictors are evaluated. If set to No, only rule restrictors are evaluated.

The following rule types can be used with rule restrictors:

- Approval
- Request Condition
- Rule Chain
- Spending Limits

- Only non-restrictor rules can be used in a restrictor rule chain.
- When using spending limit rules with rule restrictors, system setting 1163– Use Spending Rules as Normal Rules needs to be set to Yes.

The following are required to implement and access this functionality:

- System setting 1196 - Evaluate Rule Restrictors in Conjunction with all other Rules
- Permission 26 - Manage Rules

8.5.1 Creating or Editing Rule Restrictors

To create or edit rule restrictors:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select approval from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Click **Next**.
7. Select a rule class from the Rule Class drop-down field. The following options are available:
   - Item Category
   - Item
   - Group
   - Project
8. Select a rule restrictor from the Rule Restrictor drop-down box.
9. Click **Next**.
10. Select the location groups or user groups.
11. Click **Next**.
12. Select the locations or users.
13. Click **Next**.
14. Select the rule type.
15. Select the routing type.
16. Click **Next**.

    Step 6 of the Rule Wizard is displayed or the user is returned to the Manage Rules page depending on the routing type selected.
17. Select users to add to the approval route.
18. Click **Finish**.

8.6 User Selectable Rules

User selectable rules are rules that can be manually selected by the user during the order request creation. When the user is creating the order request, he/she is able to select a rule from a list of rules available.

The following rule types can be used with user selectable rules:

- Approval
- Request Condition
- Rule Chain
- Spending Limits

- This feature requires setup by your Basware Implementation or Client Care Team.
- User selectable rule chains do not support user selectable rules.

Warehouse withdrawals do not support user selectable rules.

The following permission is required when implementing this functionality:

- 26 – Manage Rules

8.6.1 Creating or Editing User Selectable Rules

To create or edit user selectable rules:

1. From the Dashboard, navigate to > **Users** > **Rules**.
2. Click **Create Rule**.
3. Enter a name for the rule in the Rule Name field.
4. Select approval from the Rule Type drop-down list.
5. Fill in the other required fields.
6. Select Yes in the user selectable field.
7. Click **Next**.
8. Select a rule class from the Rule Class drop-down field. The following options are available:
    - Item Category
    - Item
    - Group
    - Project
9. Select a rule restrictor from the Rule Restrictor drop-down box.
10. Click **Next**.
11. Select the location groups or user groups.

12. Click **Next**.
13. Select the locations or users.
14. Click **Next**.
15. Select the rule type.
16. Select the routing type.
17. Click **Next**.

    Step 6 of the Rule Wizard is displayed or the user is returned to the Manage Rules page depending on the routing type selected.
18. Select users to add to the approval route.
19. Click **Finish**.

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