Logix User Manual

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Preface

NCR thanks you for using the NCR Advanced Marketing Solution. We're pleased that the functionality AMS provides can help to strengthen and streamline your organization's marketing efforts, and hope that you'll find it an easy-to-use and productive resource.

Purpose of this manual

If you're a new user, this manual will introduce you to the workings of Logix – the UI component of the AMS – and will guide you through step-by-step instructions on how to build and manage offers, customer groups, product groups and more. If you're an experienced user, it can be a handy reference, particularly for some of the more advanced aspects of the application.

How it's organized

Roughly speaking, this manual starts with the most fundamental concepts and ends with the most advanced:

- **Logix** covers the basics needed for new users – what Logix is, how to get into it and how to move around.
- **Elements** describe the building blocks that will be used in making offers, such as customer and product groups.
- **Offers** are a guide to assembling and editing offers, including offer templates.
- **Inquiry** describes how to find and edit customer-specific data and UPC collision information.
- **Administration** covers user management, system settings and system configuration.
- **Reference**, near the end of the manual, includes helpful appendices and a glossary that defines the key terms you're likely to encounter in Logix.

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Contents

Part I: Logix

1 Solution overview

1.1 What is Logix?

At its very simplest, Logix is the interface to the AMS, which is principally a tool for building offers. Logix enables a marketing professional to assemble from the initial building-blocks of customer and product data the intricate architecture of an offer, complete with all the specifications necessary to precisely govern all aspects of its behavior. The major features of Logix, as well as its place in the larger Advanced Marketing Solution, are described below.

Offers

- Create, edit and delete offers.
- Manage the distribution of offers to promotion engines.
- View offer redemption reporting.

Customers

- View customer account data, including primary/secondary identifiers, name, address, email and phone.
- View and adjust customer continuity balances, including point, item and dollar accumulations.
- Allow customers to view and edit their account information via a public website.

Products

- Organize products into hierarchies.
- Create and edit groups of products manually or via a hierarchy.

Locations

- Organize stores into hierarchies (i.e., regions, sub-regions, zones, stores).
- Manage terminals, store information and ad hoc groups of stores.

Programs

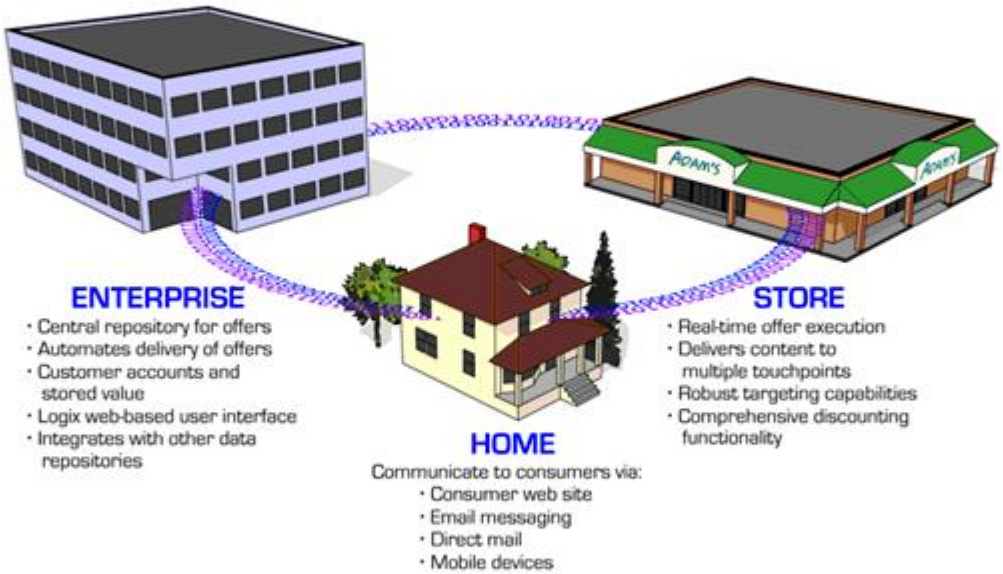
- Manage points and stored value programs for use as either conditions or rewards.

Administration

- Manage user permissions and access rights using a role-based system.
- Configure system settings.
- Receive system health alerts.
- View system log files.
- Allow help desks or customer service representatives to access and manage customer account data.

1.2 The NCR Advanced Marketing Solution

Logix is one piece of a larger solution known as the NCR Advanced Marketing Solution, the other major elements of which are enterprise and store-level systems. The AMS provides a consolidated means of executing targeted marketing through content management, offer automation, customer account management and enterprise/store communication.



1.2.1 Enterprise systems

Central servers at the enterprise level store system data and coordinate system actions. One or more web servers and one or more database servers are the key components.

Database servers act as the main repository for offer variables (customer groups, product groups, etc), execution parameters (limits, periods, locations, etc.) and offer content, all of which are managed through the Logix web interface.

Web servers manage the communication of data through the system and run applications which automate the delivery and reconciliation of incentives among channels. The web server also operates the Logix web interface.

1.2.2 Store systems

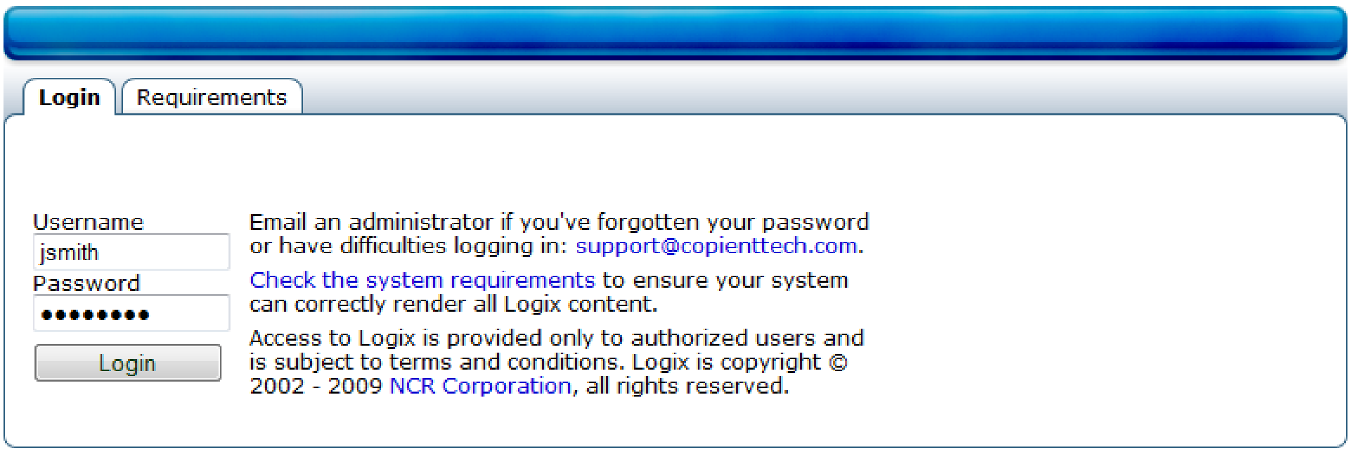
The Advanced Marketing Solution offers multiple store-level systems that act as promotion engines. The first is the Copient Promotion Engine (CPE) which is typically used at retail locations where non-NCR POS workstations are installed. Others include the Consumer Marketing Engine (CM) which is used in NCR POS environments and integrates with the Advanced Checkout Solution. The Universal Engine (UE) can be used in both NCR and non-NCR POS environments. The AMS also can integrate with other pre-existing promotion engines if a store solution is already in place.

These store-level systems distribute offer content and incentives to terminals, and also request store-specific offer content, variables and parameters from the enterprise at configurable intervals, ensuring the accuracy of account information across locations. Local servers monitor customer purchases and interaction at the POS and at other customer touchpoints and deliver incentives in real time.

2 Logging in

To access Logix, point your Web browser to the address provided by your Logix system administrator. The page that appears will prompt you to enter your username and password. If you've forgotten your username or password, of if you experience any other difficulties logging in, click the "Email an administrator" link to request assistance. Clicking "Requirements" lists the system requirements for Logix, described in the following section.

Once in, your session will remain valid until you log out or close your browser, or until the session times out. Time outs occur when Logix detects no user activity for an hour.



2.1 Requirements

To use and display Logix properly, NCR recommends the following.

2.1.1 Browser

Use a modern browser with popups allowed for the domain where Logix resides (e.g., copienttech.com). AMS Logix officially supports Microsoft Internet Explorer 8.0 and 9.0. The browser box on the Requirements page detects and displays your browser version and operating system.

2.1.2 JavaScript

Many Logix pages use JavaScript to streamline how the UI operates. The JavaScript box on the Requirements page indicates if your browser has JavaScript enabled.

2.1.3 Display

NCR recommends a minimum 800x600 (SVGA) color display. The display box on the Requirements page detects and shows the resolution and color depth of your display.

2.1.4 Unicode

Logix content is encoded in Unicode UTF-8, a standard that facilitates displaying non-English or non-standard characters (Ã, Σ, Я, 書, etc.). If any text in Logix renders incorrectly, or if you experience other display issues with any non-English content, you might consider installing a Unicode-capable font. Code2000 is one of many general-purpose Unicode fonts freely available for download, available at www.code2000.net.

2.1.5 Accessibility

NCR endeavors to make Logix accessible to users with disabilities. To that end, Logix complies with the major provisions of the Web Content Accessibility Guidelines set forth in the World Wide Web Consortium's Web

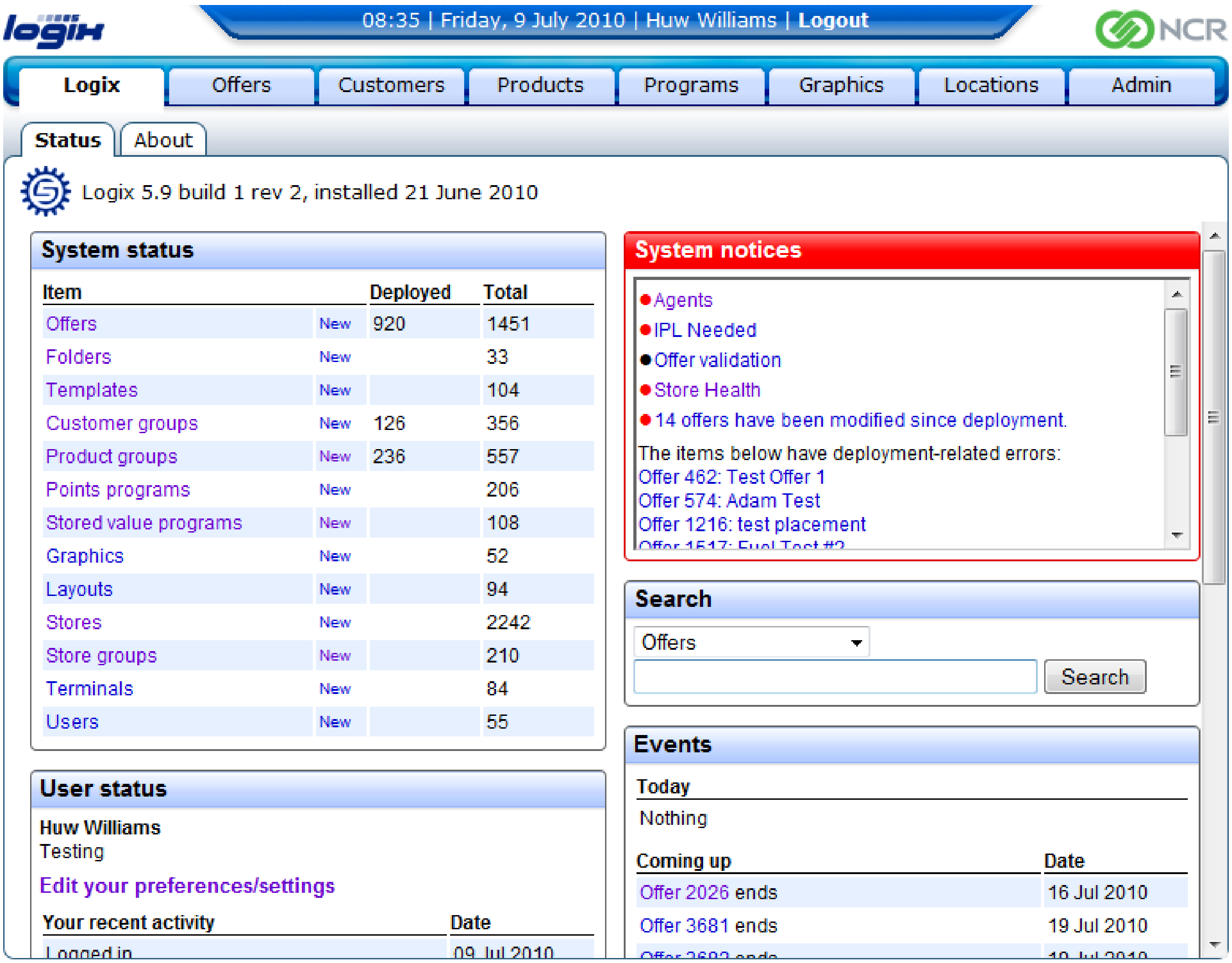
Accessibility Initiative. Logix also voluntarily adheres to the relevant provisions of the new Section 508 of the Rehabilitation Act of 1973 (Subpart B, §1194.22).

Some browsers support access keys, which allow you to jump to certain sections of a web page using only the keyboard. In most browsers, the main sections of Logix can be reached by pressing the Alt key (Ctrl key on Macs) plus the section number. For instance, you can load the offers section by pressing Alt+2, the products section by pressing Alt+4, etc., then pressing Enter. Some browsers require you to press Alt+Shift to use access keys. A page's save button can be activated by pressing Alt+S and the delete button by pressing Alt+D.

Note that different browsers support access keys in different ways and to different extents, so this functionality may or may not be available to you depending on your software.

3 Interface

The main areas of the Logix user interface are described below.



3.1 Status bar

At the very top of the Logix interface is the status bar. This bar shows the time, the day of the week, the date, your username and a logout link. Clicking the logout link will end your session and return you to the Login page. Clicking your username will open your User>Edit page where you can set your personal information and preferences. Hovering over the time shown in the status bar reveals seconds and time zone.

The licensee's logo appears to the right of this bar and the Logix logo to the left.

3.2 Section tabs

Below the status bar are a series of tabs that link to the main sections of Logix. Clicking any one of the tabs will take you to that section. The tab of the section you're currently viewing is in highlighted.

3.3 Page tabs

Each section in Logix is divided into various pages, indicated by one or more tabs arranged in a row toward the left of the screen. For instance, the Logix section is divided into three pages: *Status*, *About* and *Manual*. Clicking any one of the tabs will take you to that page. The tab of the page you're currently viewing is in highlighted.

In some cases a page may include subpages. Subpages are also indicated by tabs, but are aligned to the right of the interface rather than to the left. For instance, the *Groups* page in the *Product* section includes subpages named *Edit* and *History*.

3.4 Active page

Most of the Logix interface is taken up by the active page, i.e., the content you've chosen to view. It's lined at the top by various page tabs and is surrounded by a thin border. If the contents of the active page are too long to fit on a single screen, a scroll bar will appear along the right edge.

3.4.1 Heading

If you're viewing or editing a particular object, its Logix ID number and name will appear as a dark red heading in the upper left corner of the page.

3.4.2 Controls

The upper right corner of the page is the controls area. The controls that are shown in this area depend on the page you're viewing and on the permissions you've been assigned as a user.

For list pages (such as a list of offers, a list of customer groups, etc.) the controls area will have a box for search terms and a Search button. It will also show how many total items match the search criteria, how many of those are being shown, and Next/Previous and First/Last links to let you go forward or backward in the list. Some page, such as *Offers>List*, also have a button with an ellipsis (...) that opens an advanced search window.

For pages that detail a particular item (such as a points program, a store group, etc.) the controls area may contain Save and Delete buttons. Other buttons may also be provided, depending on the page and your permissions.

On pages where several controls are available, they may be grouped together under a single dropdown called "Actions".

3.4.3 Boxes

The content of most pages is divided up into various boxes that group related items together, in order to make the information on the page easier to view and digest. In some cases you can collapse or hide boxes you're not interested in seeing, done by clicking the small round button near the box's upper right corner.

3.4.4 Name

Note that this manual sometimes refers to pages by name using the following form: *Section>Page* or *Section>Page>Subpage*. For example, the page where you edit a customer group is the *Customers>Groups>Edit* page.

3.5 Notes

Most items in Logix have a small, yellow "sticky note" icon near the upper right corner of the page. Clicking this icon lets you see notes that other users have left, or leave one of your own. If you decide to leave a note, you can check the box marked "private" to prevent others from seeing your note; otherwise, anyone will be able to read it. (Logix indicates your private notes with a grey dotted border along the note's left-hand side.)

If no one has attached any notes to the item you're looking at, the sticky note icon will be empty; otherwise, the icon will have lines to show that there's at least one note. If there are recently-added notes, the lines on the icon will be dark; after a day or two they will fade to indicate there are no recent notes.

Mouse over the icon to see how many notes there are.

3.6 Popups

Logix launches small popup windows to display certain types of content. If you make edits to anything in a popup, be sure you click the Save button before closing. Depending on how your system is configured, clicking the Save button on a popup may automatically save and close the popup.

3.7 Printing

Logix is designed to make printed copies of its pages clear and easy to read. However, some aspects of how pages are printed (such as whether or not to include background images) are controlled by your browser:

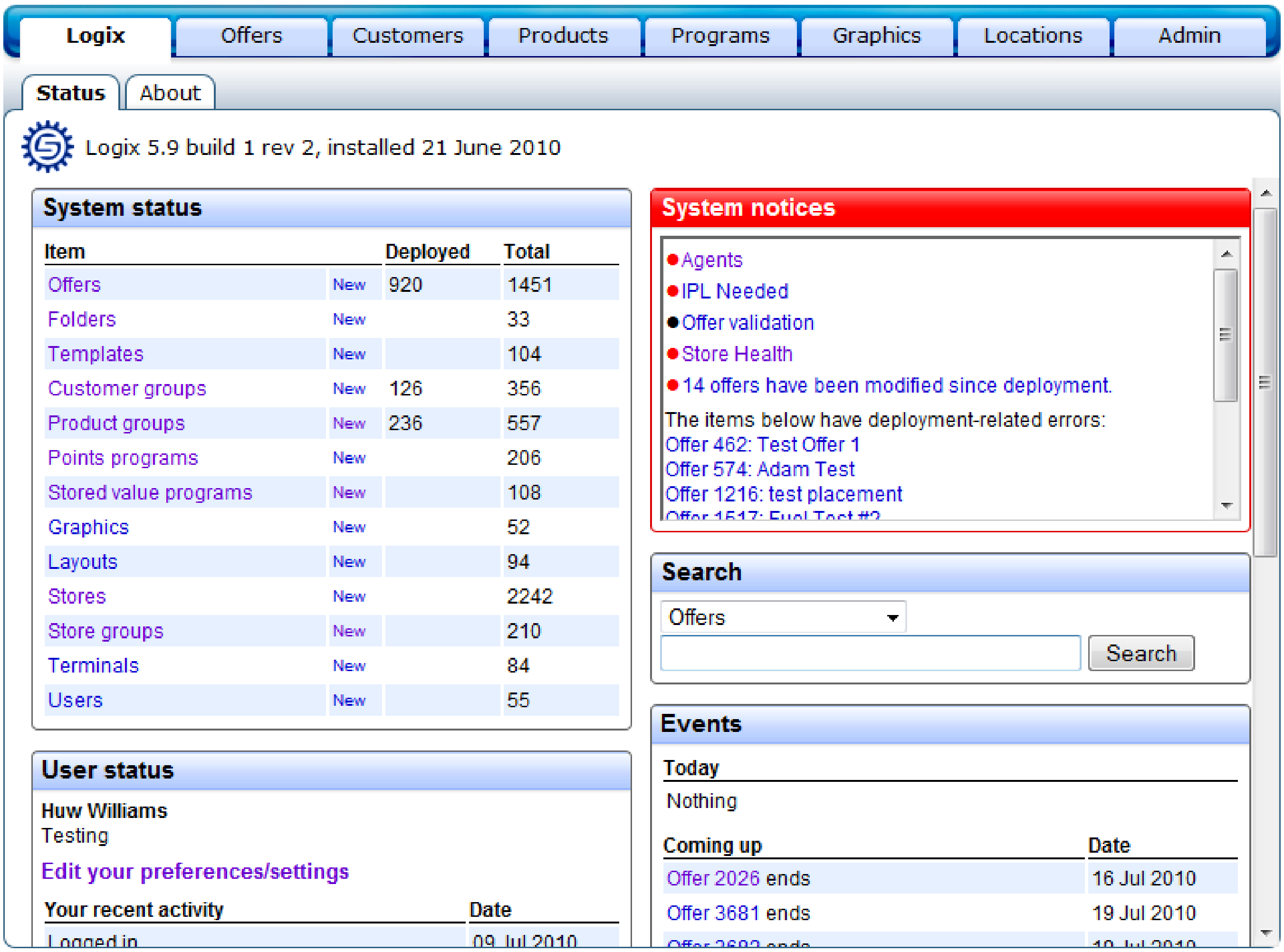
- In Internet Explorer see "Tools>Internet Options>Advanced>Printing"

Note that in order to maximize the amount of relevant material that it can fit onto a page, Logix may suppress the printing of certain elements that are useful only on screen, including navigation tabs, certain buttons and selectors, etc.

4 Logix

4.1 Status page

When you log in, the first thing you'll likely see is the *Status* page. It shows various data on the contents and state of the system.



4.1.1 System status

This box lists the number of offers, groups, programs, stores, terminals and users currently in Logix. For offers, customer groups and product groups, it also shows the number that are deployed. If you have the appropriate permissions, you can click the "new" links to create new items.

4.1.2 User status

This box shows your name and the role(s) you've been assigned. Clicking the "Edit your preferences/settings" link allows you to change your account settings, including your name, password, email address, language, email alert preferences, etc.

Also shown here is a recap of your most recent actions in Logix.

4.1.3 System notices

The notices box indicates the status of several key aspects of Logix, including agents, Sanity Check, IPL, Incentive Fetch and Store Health. (Each of these areas is described in detail in the administration section of this manual.) A green circle indicates that Logix has detected no current problems related to that area; a red circle means there may be an issue.

Also shown in the notices box is a list of offers or groups that have experienced deployment-related errors.

4.1.4 Search

The search box allows you to look up items in Logix by name; simply select the area you want to search, enter your search terms, and click "search".

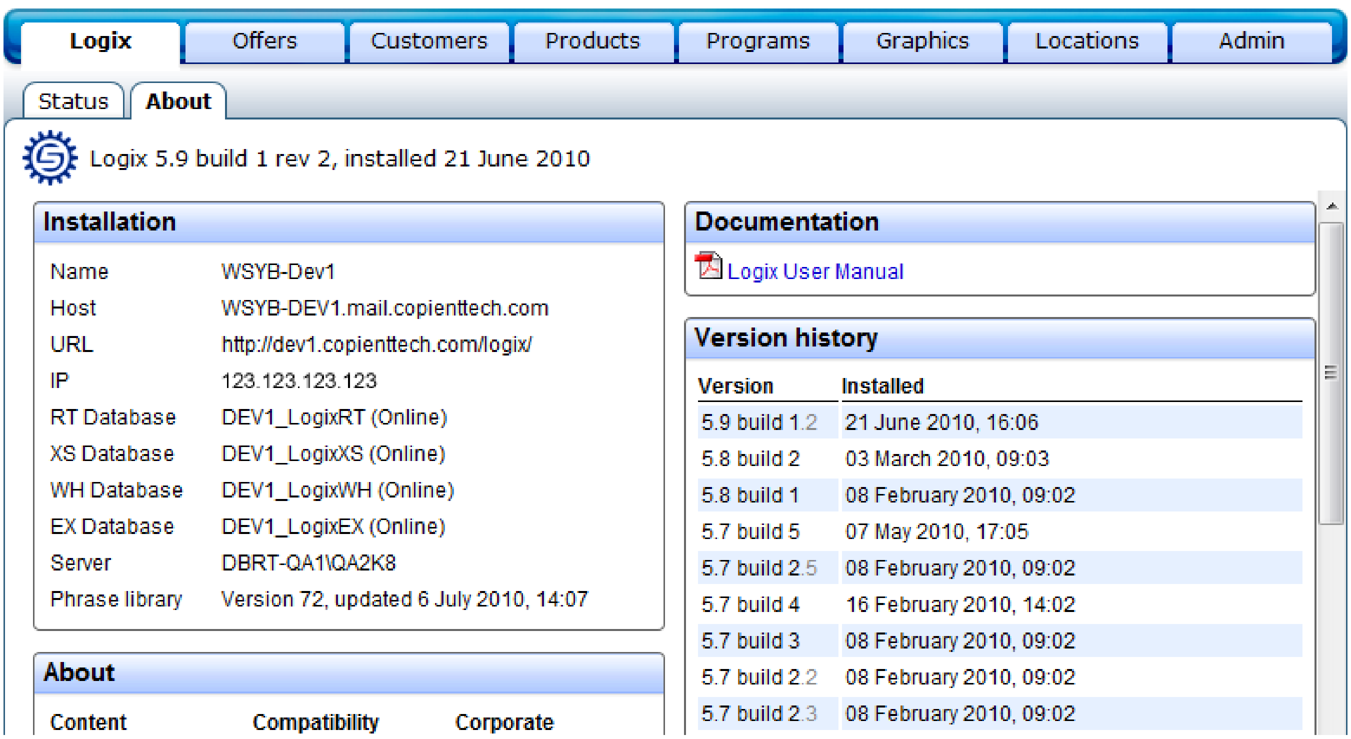
4.1.5 Events

The events box lists actions (such as the starting or ending of offers) that are scheduled to take place today and in the near future. It also recaps the most recent actions in Logix and who carried them out.

4.2 About

In addition to the *Status* page, the Logix overview section includes an *About* page. This page shows the current software version and build, as well as the version history of the installation and contact information for NCR. It also describes the types of content Logix includes and its standards conformance.

A copy of the *Logix User Manual* is provided on the *About* page in PDF form. To view the manual, you'll need to have the Adobe Reader, available from get.adobe.com/reader/.



Part II: Elements

5 Customers

In Logix, a customer is any shopper, including those who have no loyalty cards. A customer who does have a loyalty card number is referred to as a cardholder, and it's by this number (referred to as the customer ID) that he or she is identified. Customer IDs are generally 19 digits long; if IDs shorter than 19 are entered or uploaded, Logix automatically pads them with leading zeros.

Logix is configurable to use multiple types of loyalty cards for assignment to customer accounts. Customer IDs within each of the loyalty card types are unique and serve to identify the cardholder to a Logix customer record.

Customers may also be identified by what's known as a household ID number. This number identifies a small group of individual but closely-related shoppers, commonly spouses. Members of a household share rewards, contribute together to point totals, and in general are considered a single entity for the purposes of an offer.

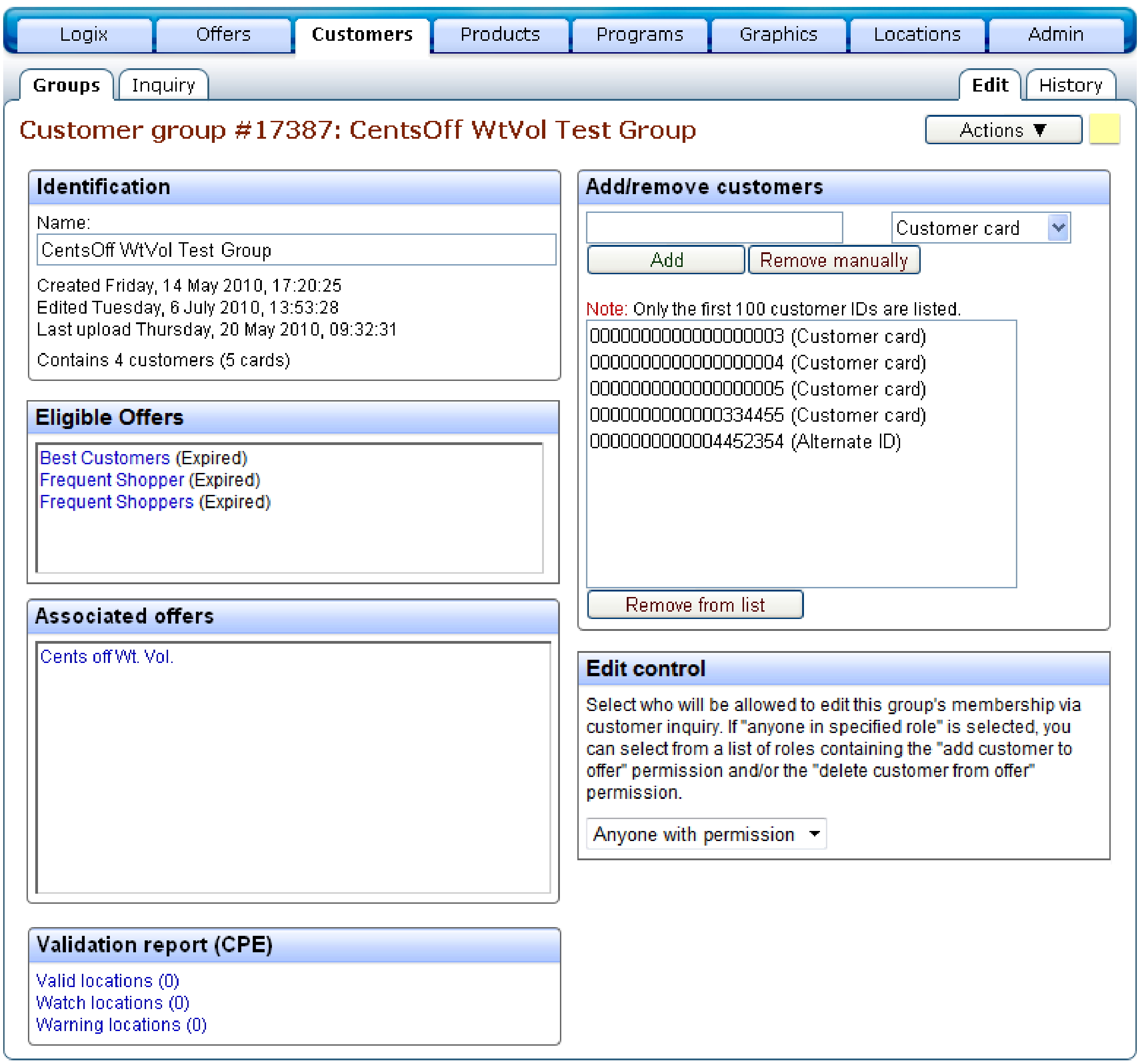
Creating and managing individual customers and household occurs in the *Customers>Inquiry* section of Logix. For details, please see Part IV: Inquiry.

6 Customer groups

A collection of customer IDs (and/or household IDs) is called a customer group. All customer IDs used in offer building must be part of customer groups. Customer groups exist independently of any offer and can be used simultaneously in multiple offers, or can persist without being used in any.

The *Customers>Groups>Edit* page shows the details of each group, including its name, ID, contents, a list of the offers that make use of it, and information about when it was last deployed. A customer group is marked as deployed when an offer using it is deployed. (For more about offer deployment, see the "Offers" chapter.)

Note that if CAM (Canadian Air Miles) is installed, users have the option on the *Customers>Groups>New* screen of creating customer groups that consist either of regular cardholders/households or of CAM card numbers. Once a group is created as a CAM group, only valid CAM numbers can be added to it, and vice versa.



Customer groups are maintained in Logix on the *Customers>Groups>Edit* page, as shown above. On this page there are five sections which define the group, a history tab available to view past changes to the group, and an action button for maintaining the group.

The “Identification” section on the page contains general information about the group. “Associated offers” lists all offers using this customer group. “Validation report” informs the user all the locations where this customer group is used and whether the customer group is correctly distributed to each of the locations using that group. “Eligible Offers” lists all offers that have this customer group associated to an eligible customer condition. Finally, “Add/remove customers” allow users to maintain the customer list that comprise the customer group.

When clicking on the *History* tab, users are linked to the customer group’s history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the “Action” button on the *Customers>Groups>Edit* page provides a menu of actions available for maintaining the group. Actions include: Save, Delete, Upload, Download, New, and Redeploy. Save is used both when creating and editing a customer group. The following sections define the correct usage of each of these actions.

6.1 Create

Click the New button on the *Customers>Groups* list page to create a new customer group. You will then be taken to a blank *Edit* page where you can input the group's name and set its membership, either by uploading a file or by manually entering customer IDs. Newly created customer groups are empty.

6.2 Edit/Upload

6.2.1 Membership

The membership of a customer group can be edited manually or by uploading a file.

- To manually edit the membership of a customer group, enter the customer ID you wish to add or remove in the box, then click Add or Remove. (You can identify an ID entered in this fashion as a Household ID by ticking the "Household ID" checkbox.) If the current population of the group is 100 or less, you can also select entries to remove from the "Remove" list provided.

- To upload a membership file, first select Upload from the Actions menu, then click Browse. You will be prompted to select a plain text file (ANSI encoded) from your computer that contains a list of customer IDs (one per line), and to select whether you want the file to either replace the existing contents, or be added to the existing contents. When you've made the appropriate selections, click Upload.

Note that customer IDs shorter than 19 digits are automatically padded with leading zeros. When you're finished editing the group, click Save.

When a customer group is deployed, the "Validation Report" box will indicate the results of the deployment by showing valid, watch and warning locations – stores to which the group did or did not deploy correctly, determined by comparing the times on the local and central servers. Watch locations are those in which the times do not match, but the difference is within the defined grace period. Warning locations are those that do not match and the difference exceeds the grace period.

6.2.2 Edit control type

All customer groups have an “edit control type” as shown in the “Edit Control” box. This setting determines who is allowed to alter the membership of the group through customer inquiry. Possible options are:

- Anyone – Any user, regardless of their permissions, can add customers to this group or remove customers from this group via customer inquiry.
- Anyone with permission – Any user who has the appropriate permission can alter the group’s membership in customer inquiry. In other words, a user with the “Add customer to offers” permission can add customers; those with the “Delete customer from offers” permission can remove them.
- Anyone in specified role – A user who has the specified role will be able to alter the group’s membership in customer inquiry. Only roles that contain the “Add customer to offers” permission, the “Delete customer from offers” permission, or both, can be selected.
- No one – No user, regardless of permission, can alter the group’s membership in customer inquiry.

It’s important to note that this edit control setting will always override a user’s role-based permissions in customer inquiry. This means, for example, that a user who has every possible permission will still *not* be able to remove a customer from an offer if that offer uses a group with an edit control type of “no one”. Alternately, a user who lacks the permission to add customers to offers *will* be able to do so if the offer uses a customer group with an edit control type of “anyone”.

6.3 Redeploy

Customer groups are automatically deployed when the offers with which they're associated are deployed. To manually redeploy a group, click the Redeploy button.

6.4 Download

To save the contents of the group to a plain text file, click Download. The file Logix produces will contain one customer ID per line.

6.5 Delete

To delete a customer group, first ensure it's not needed, and then click Delete. You cannot delete a customer group that is associated with an offer.

6.6 History

Logix tracks changes made to customer groups, who made the changes, and when. Click the *History* tab to see this list.

7 Products

Products are represented in Logix by alpha-numeric codes called product IDs. In practice, these product IDs are typically numeric-only identifiers; however, Logix allows for character data in the product ID field to facilitate a more flexible approach to product identification. A configurable system option (97) is available to turn on/off numeric-only product IDs; see the System Options chapter for further details.

Product IDs may be of several different types:

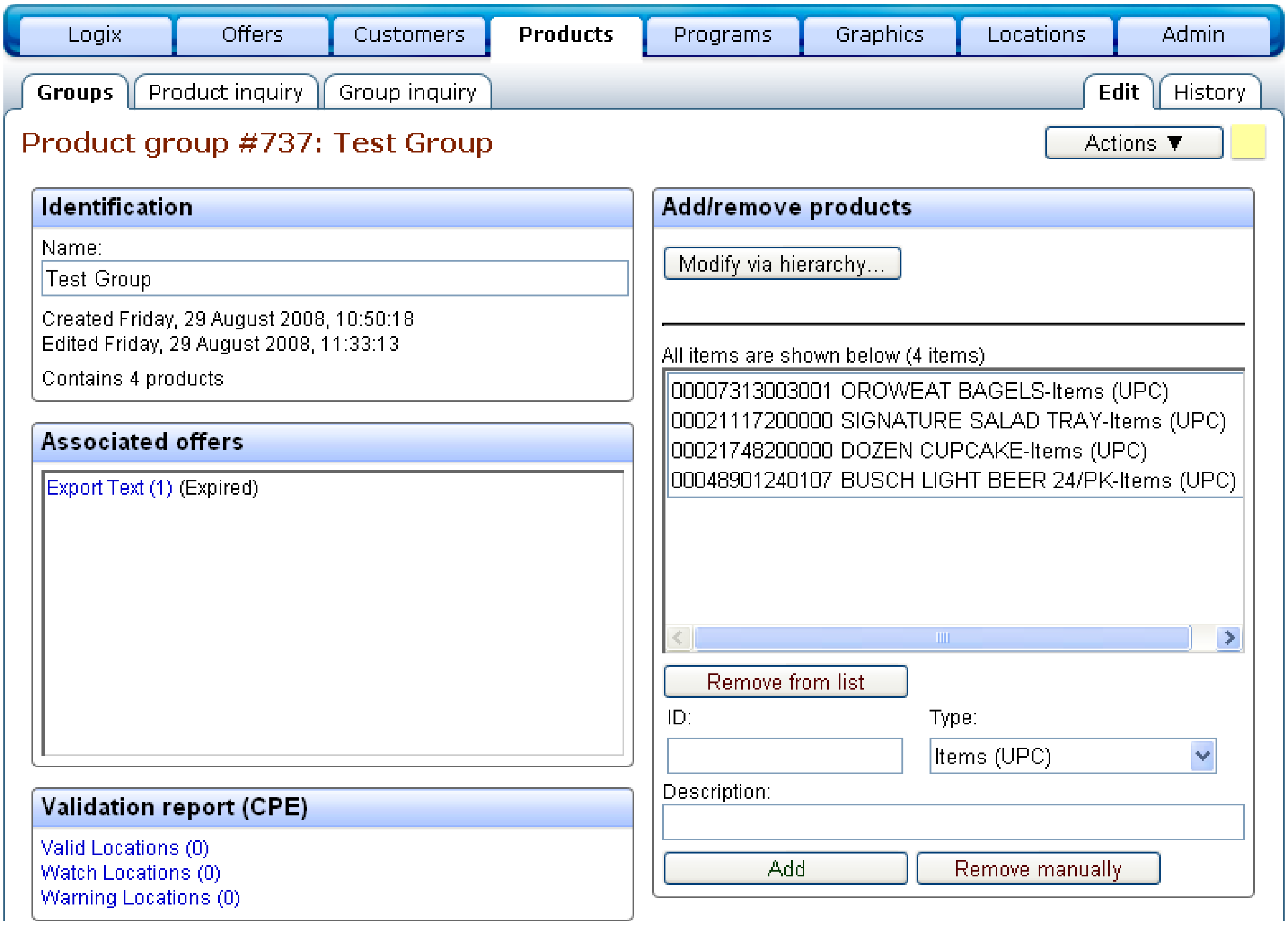
- UPC (Universal Product Code) numbers, which represent individual products. Logix zero-pads UPCs to a configurable number of digits as defined by the padding length set in the LogixRT - “ProductTypes” table.
- Trigger Code UPC (Universal Product Code) numbers that generally must be scanned during a transaction in order to meet an offer’s condition. Logix zero-pads trigger code UPCs to a configurable number of digits as defined by a system option (52).
- PLU (Price Look-Up) numbers, generally used to identify products that are sold loose or by weight. PLUs are 4 digits, but Logix zero-pads them to a system-configurable number of digits.
- Department IDs, representing all products in a given retail department. These are 4-digit codes are padded to a configurable number of digits as defined by a system option (54).
- Manufacturer/Family Codes, which identify groups of products related by manufacturer or class of product.
- Mix/Match Codes. These are POS fields in a PLU file that describe how to group items together for 3/$1.00-type pricing.
- Pool Codes. Customer-specific codes used to define an ad hoc group of products within a POS.

Product-related reporting is conducted through the *Product>Inquiry* and *Product group>Inquiry* sections of Logix. For details, please Part IV: Inquiry.

8 Product groups

A collection of product IDs is called a product group. All product IDs used in offer building must be part of product groups. Product groups exist independently of any offer and can be used simultaneously in multiple offers, or can persist without being used in any.

The *Products>Groups>Edit* page shows the details of each group, including its name, ID, contents, a list of the offers that include it, and information about when it was last deployed. (A product group is marked as deployed when an offer using it is deployed. For more about offer deployment, see the offer builder document.)



Product groups are maintained in Logix on the *Products>Groups>Edit* page, as shown above. On this page there are four main sections which define the group, a *History* tab available to view past changes to the group, and an action button for maintaining the group.

The "Identification" section on the page contains general information about the group. "Associated offers" lists all offers using this product group. "Validation report" informs the user all the locations where this product group is used and whether the product group is correctly distributed to each of the locations using that group. Finally, "Add/remove products" allow users to maintain the product list that comprise the product group.

When clicking on the *History* tab, users are linked to the product group's history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the "Action" button on the *Product>Group>Edit* page provides a menu of actions available for maintaining the group. Actions include: Copy, Save, Delete, Upload, Download, New, and Redeploy. Save is used both when creating and editing a product group. The following sections define the correct usage of each of these actions.

8.1 Hierarchy linking

Product groups are linked to a product hierarchy on this page by click the "Link to Hierarchy…" button and ticking the checkbox in the Hierarchy Explorer of the folders on the right in which the product group should be linked to the loaded product group. After the desired linking folders on the left are checked, click the "Actions" button in the upper right corner of the Hierarchy Explorer window. Four options are then presented: "Link to Group","Remove Link to Group", "Exclude from Group", and "Remove Exclusion". Selecting the "Link To Group" option effectively binds those folders of the selected hierarchy to the product group.

Only hierarchy folders, and not individual items within those folders, are selectable in the Hierarchy Explorer. The contained items in those folders are added to the product group when linked. Furthermore, if a parent folder is already linked then all child folders are automatically selected and it is not necessary, or permitted, for the child folders to be linked.

Once a hierarchy folder is linked to a product group, one may wish to remove the linking. To do so, tick the checkbox for the folder on the left side of the Hierarchy Explorer and click the "Remove Link to Group" action menu item option. This will remove the reference to that folder within the selected product group and the items contained in the folder will no longer be included in the product group.

One of the useful features of product hierarchy is the ability to exclude a child folder, or item, of a linked folder from the product group. For example, if the parent folder "A" is linked to the product group, however, one of its child folders, say "A1", should not be included in the product group, then an exclusion for this folder is possible through the Hierarchy Explorer. To do this, simply navigate to the child folder of linked folder, in this example navigate until the folder "A1" appears on the right side of the Hierarchy Explorer, then tick the checkbox for the "A1" folder, click on the "Exclude from Group" action menu item and then the "A1" folder and all the items contained therein will no longer be linked to the product group.

To remove an exclusion, simply navigate to the folder designated as an exclusion, these folders are denoted with red folder icons. When that folder is on the right side of the Hierarchy Explorer, tick the checkbox for the folder and select the "Remove Exclusion" from the Actions menu button. This will remove the exclusion and add all the items contained in that folder and all child folders to the product group.

Note that both folders and items are excludable from linking the product hierarchy to the product group. This allows the ability to exclude, down to the item level, one or more items within the hierarchy. Items are excluded in the same manner as folders, by simply ticking the item's checkbox on the right side of the Hierarchy Explorer and clicking the "Exclude from Group" Action menu item option. Hierarchy linking panel in the product group page contains excluded items section. Under this section we will only show first 10 nodes that were excluded and each node shows first 100 items followed by a label “more..” that shows there are more number of products for that node.

The product group edit page displays a list of the linked and excluded items from each of the selected folders. Note that only the first hundred items are shown on the page for quicker page load times in the list for each linked node. For a full list of all items in a product group, one may click the Action – Download option to receive a list of all the items in the group.

In the “Identification” section on the product group edit page, a total count of all products in the group is displayed. This count is a sum of both the linked items and the manually added / uploaded items in the group.

Manually added items in the “Add/remove products” section are always included in the product group regardless of what changes might occur within the linked hierarchy. Therefore, it is possible to manually add an item to a product group that either is or isn’t included in the hierarchy folder and ensure that the product is always included in the product group.

Likewise, if an item that is linked via the hierarchy is manually removed in the “Add/remove products” section then that item will be marked as an excluded item. This is to ensure that when the product group resynchronizes with the linked hierarchy folder that item isn’t simply added back to the group.

When any changes are made to a hierarchy via the Product Hierarchy Agent, then those changes are automatically applied to all product groups linked to that hierarchy. The resynchronization ensures that all items linked in a hierarchy to a product group are added to the group and all items that are no longer in the linked hierarchy folders are removed from the product group.

8.2 Create

Click the New button on *the Products>Groups* list page to create a new product group. You will then be taken to a blank *Edit* page where you can input the group's name and set its membership, either by uploading a file or by manually entering customer IDs. Newly created product groups are empty.

To create a new product group based on the existing product group, click the “Copy group” button in the Actions menu. The newly-created group will be an exact duplicate of the original, except that the name will have the words “copy of” prepended to its name.

8.3 Edit/Upload

The contents of a product group can be edited in several different ways: by manually entering IDs, by selecting IDs to remove from a list, by uploading a file or by picking products out of a hierarchy.

- To manually edit the group's contents, enter the product ID you wish to add or remove in the Id input of the "Add/Remove" box, specify what kind of ID it is using the dropdown, then click “Add” or “Remove manually”.
- If the current number of entries in the group is 100 or less, you can select entries to remove from the "Remove" list provided. Click the item in the list you want to take out of the group, then click “Remove from list”.
- To upload a list of product IDs, first select Upload from the Actions menu, then click Browse. You will be prompted to select a plain text file (ANSI encoded) from your computer that contains a list of product

IDs (one per line). Depending on the option you select, the uploaded file will be applied in one of three ways:
  - "Full replace" overwrites the existing products from this group with those in the uploaded file.
  - "Add to group" augments this group with the new products in the uploaded file.
  - "Remove from group" deletes the products found in the uploaded file from this group.
- To select or remove products from a hierarchy, click "Modify via hierarchy" and use the controls provided to navigate through the product hierarchy of your choice until you find the products you want to include or remove. Clicking "Remove All" will clear all products from the group. Clicking "Search" will allow you to find products by keyword. Note: If your organization uses multiple banners, then only those hierarchies associated with the banners to which you're assigned will be displayed.

When you're finished editing the group, click Save.

When a product group is deployed, the "Validation Report" box will indicate the results of the deployment by showing valid, watch and warning locations – stores to which the group did or did not deploy correctly, determined by comparing the times on the local and central servers. Watch locations are those in which the times do not match, but the difference is within the defined grace period. Warning locations are those that do not match and the difference exceeds the grace period.

Note that administrative users can set certain product groups to be "system wide exclusions". Setting this flag on a product group indicates that those products will be unavailable for use in any offer conditions or rewards. System-wide exclusion groups are denoted on this page by a faint red background, and in the list page by a small red circle with a slash.

8.4 Redeploy

Product groups are automatically deployed when the offers with which they're associated are deployed. To manually redeploy a group, click the Redeploy button.

8.5 Download

To save the contents of the group to a plain text file, click Download. The file Logix produces will contain one product ID per line.

8.6 Delete

To delete a product group, first ensure it's not needed, then click Delete. You cannot delete a product group that is associated with an offer.

8.7 History

Logix tracks changes made to product groups, who made the changes, and when. Click the History tab to see this list.

8.8 Attribute based product groups

The attribute based product group builder allows users to create groups of products that belong to a set of Product hierarchy node(s) and share certain attributes such as color, size, style, etc. It is only available for installations using the UE promotion engine. Products are associated with hierarchy via import processed by

Product hierarchy Agent and Attribute information is associated with products via an import processed by the product update agent.

When creating a new product group, an option is available to create either a standard product group or an attribute based group. Once one of these two types has been selected, a product group cannot be changed to a different type.

To build an attribute based product group, a user first selects a hierarchy node(s) and then create an attribute set by adding different attributes with one or more values related to the attributes and then clicks the 'Apply Attribute Set' button. The attribute set is used to narrow down the product set from the selected hierarchy node(s). While building the attribute set, when user adds first pair of attribute – value(s), the attribute type and value drop downs are repopulated based on the resultant product set. User can further narrow down the resultant product set by adding more attribute-value pairs to the attribute set. For instance, if a user selected a hierarchy node(s) which consist of 'Red Color; Size 7, 8, 9; Brand Puma' shoes and 'White Color; Size 8, 9, 10; Brand Nike' shoes. On create attribute set screen, Attribute Type and Value drop downs will show values corresponding to the Nike and Puma shoes only. I.e. 'Attribute Type' drop down will have values Brand, Size and Color while 'Attribute Value' drop down will have values Puma and Nike for Brand; Red and White for Color; 7,8,9,10 for Size . On adding one attribute-value(s) filter to the set eg: Brand: Puma, the attribute type and value drop down will be re-populated with values for Puma shoes only i.e. 'Attribute Type' drop down will have values Size and Color while 'Attribute Value' drop down will have values Red for Color; 7,8,9 for Size After selecting hierarchy node, user will have an option to view detailed product list for the resultant product set by clicking link 'View detailed product list'. Individual products can also be excluded from the group by checking any of the boxes under the 'Excluded' column from the detailed product list.

When the user is finished specifying attribute set and clicks save, the attribute product group builder agent actually assembles all of the products from the select hierarchy node(s) that match the attribute set into the product group that can be sent to the promotion engines for offer execution.

The attribute based product group builder is also accessible when creating an UE offer within the product condition and discount reward screens. Because of this, attribute based product groups can be created within an offer without any need to navigate to the product group page.

When product attributes are updated via imports to the product update agent, attribute based product groups will automatically be updated to include/exclude products that match the attribute/value criteria specified for each attribute based product group.

When product hierarchy is updated via imports, attribute based product groups will automatically be updated to include/exclude products that match the hierarchy criteria specified for each attribute based product group.

The columns that appear in the attribute builder product grid can be customized by going to Admin > Configuration > PG Attribute Configuration.

When user creating the Attribute based Product group is a Buyer, only the Department hierarchy node(s) to which the buyer has access and all child nodes of those department nodes will be selectable by the buyer. All other hierarchy node(s) will not be selectable by the buyer.

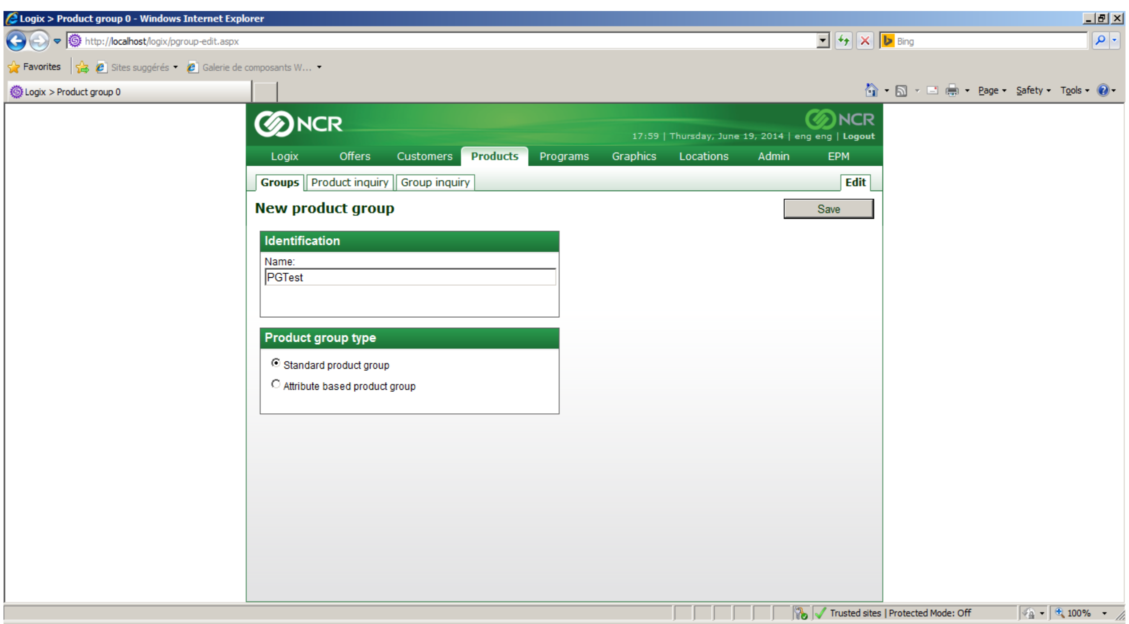
Note:

1. **UE_SystemOption(157)** is used to enable the feature of Attribute Based Product Group. After this AttributeProductGroupBuilder Agent is necessary to restart so the Agent can read the new UE Settings. If UE_SystemOption(157) is disabled then whole Attribute feature will be disabled.(e.g. user can't import attributes and values, can't import product with attributes and values and user can't import product group with attributes and values)

2. **UE_SystemOption(156)** is used to show the Default Product Group Type on UI.

System Option Value	Product Group Type
1	Standard Product Group
2	Attribute Based Product Group

E.g. If Value is set to 1 then By Default Standard Product Group Radio Button will be selected else Attribute Based Product Group Radio Button will be selected



8.8.1 Import of Product Hierarchy

Product Hierarchy information is imported into logix using Product Hierarchy Agent. Product Hierarchy is used to build attribute based product group. The 'Add Node' method of the Product Hierarchy XML consists of element "Node Type" which determines which Nodes in the hierarchy are Department

Nodes. These nodes are displayed as the Departments on the Buyer Edit page as well in Buyer Role Data connector. The “NodeType” element should be added for the Department Type Nodes. For hierarchy nodes that do not represent Department, element “Node Type” should not be included in the import file.

- Following is the sample Product hierarchy Import file showing the “Node type” Element.

Sample Product Hierarchy.pha

- For Department nodes in the hierarchy, the element “Node Type” should be included with value set as 1.
- User can delete some or all the hierarchy nodes which is used in attribute based product group if the UE System Option “Allow deletion of a hierarchy node when used in a attribute based product group” is set to ‘Yes’.
- If the system option is set to ‘NO’ user should not be able to delete the hierarchy node which is being used in an attribute based product group

8.8.2 Import of Attributes and values

Attributes and values are actually the properties of a product. In *Logix* Attributes and values can be imported via a XML. Using this User can filter Products from the a node or group of nodes to build attribute based product group.

Note: *XML to Import Attributes and values will follow the schema of ProductUpdateAgent.xsd.*

*Extension of the file will be pua (e.g. *.pua). Product Update Agent will process this file.*

- Following is the sample file to Import Attributes and values.

AddAttributeandValue.pua

- Place above File under Following Copient Folder

  AgentFiles >> Import

- Wait for Product Update Agent to Process the file. If any Error comes in processing the file then file will be converted into error file.

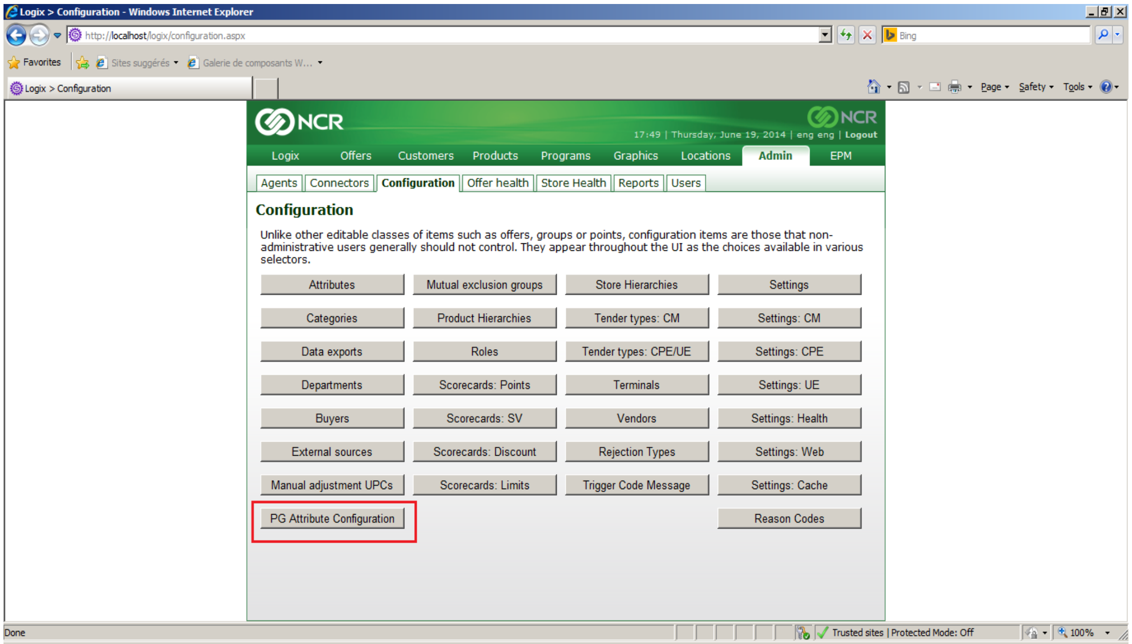
- Attributes Types and values will be saved in following Database tables:

  Attribute Types - LogixRT.dbo.ProductAttributeTypes

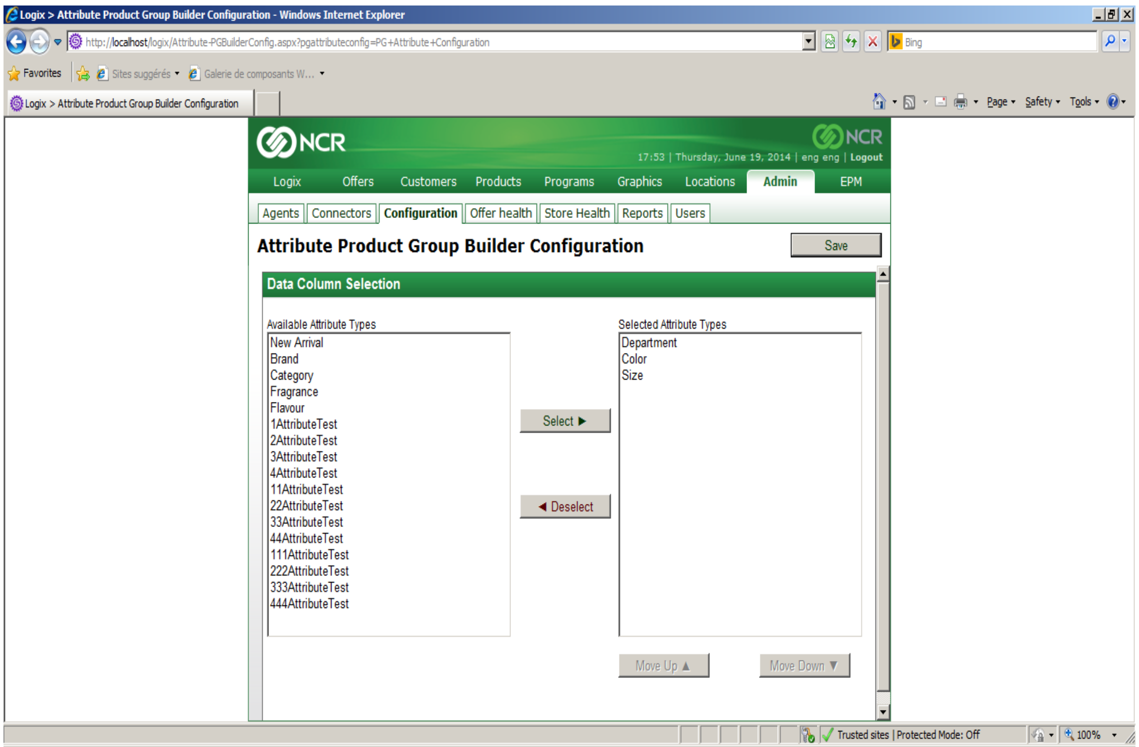
  Attribute Values – LogixRT.dbo.ProductAttributeValues

- Once Attributes and values are imported into Logix .User can select the fields to be shown on Attribute Product Builder Grid.

- For selecting the Fields, Navigate to Admin >> Configurations >> PG Attribute Configuration



E.g. Attributes to be displayed on Grid will be selected using the following Logix Page



Note: *Now if user wants to create Product Group with Attributes and values from UI then Products must be imported into Logix else Product Groups with Attributes and values can be imported into Logix via XML.*

8.8.3 Import of Product with Attributes and values

Products with their associated attributes and values can be import using XML. New product records can be created with/without linking to attributes and values. Existing product records can be updated or created such that related attributes and values for the product are set. There is no operation to add/remove attributes and values to a product, only update can be thought of as a replacement of all the attribute/value data related to the product.

If Products are imported using any Attribute/value which does not exist in database then a message will be written in database stating that Products are not imported as Attribute or value doesn't exist in database.

Note: *XML to Import Product with Attributes and values will follow the schema of ProductUpdateAgent.xsd.*

*Extension of the file will be pua (e.g. *.pua). Product Update Agent will process this file.*

- Following is the sample file to Import Product with Attributes and values.

AddProductwithAttr.pua

- Place above File under Following Copient Folder

  AgentFiles >> Import

- Wait for Product Update Agent to Process the file. If any Error comes in processing the file then file will be converted into error file.
- Once Products are imported into Logix. Now User can create Product Group with Attribute values and pair.

8.8.4 Importing Product Group with Hierarchy node and Attributes-values via XML

Attribute based Product Group can be imported via XML. This XML match the schema definition of ***"ProcessProductGroups.xsd".*** *Extension of XML File will be pgi (e.g. *.pgi).ProcessProductGroup Agent Process this file.*

- *Following is the sample attached file to import product group with hierarchy node and attributes-values information:*

ImportPG.PGI

- *Place above file under following Copient Folder*

  Agent Files >> Import

- *Wait for ProcessProductGroup Agent to Process the file.*

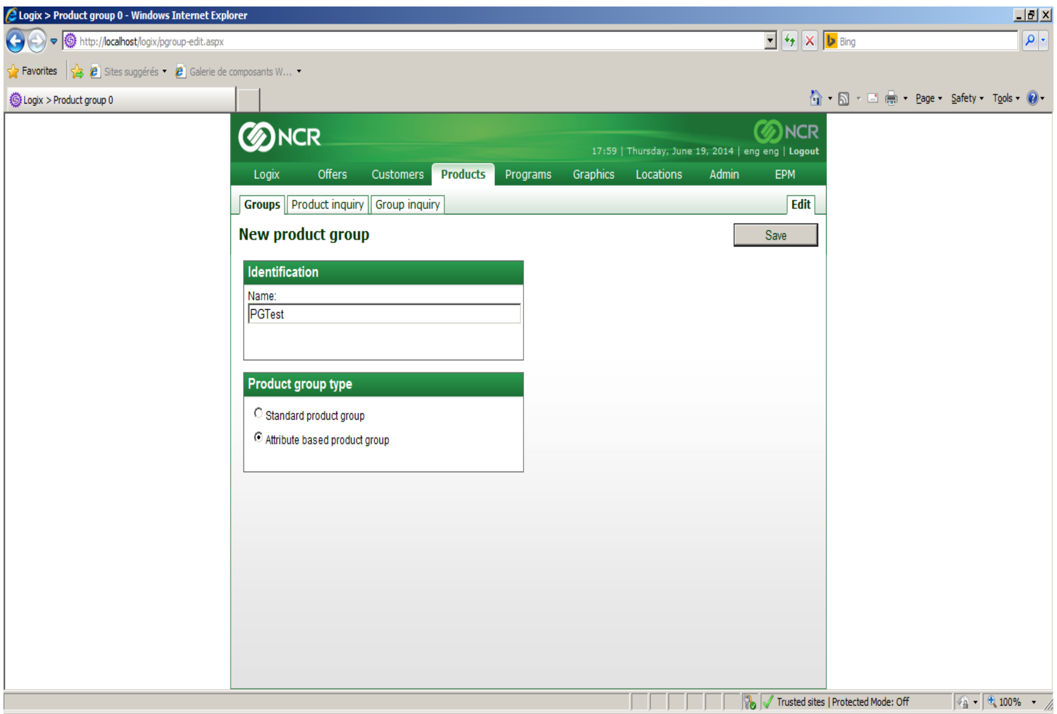
If Attributes and values that does not exist in database are passed into Product Group XML then that product group will be skipped and message will be logged into ProcessProductGroup log file

8.8.5 Creating Attribute Based Product Group from UI

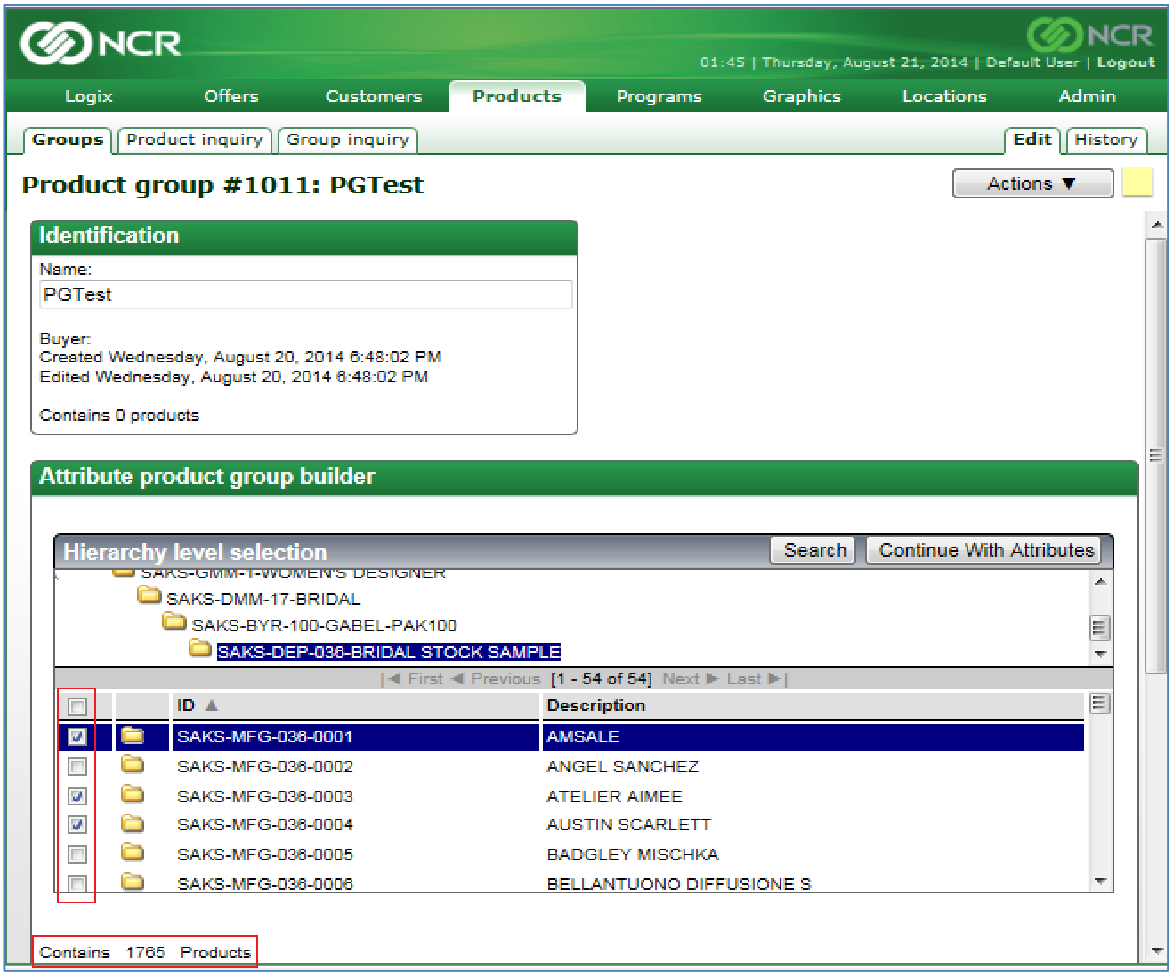
Attribute Based Product Group can be created only when UE_SystemOption(157) is enabled. Also in Attribute Type and values drop down only those attributes will be displayed that are linked with products from the selected hierarchy node.

Steps to Create Attribute Based Product Group:

1. Navigate to Products >> Group >> Create New Product Group
2. Select Attribute Based Product Group Radio Button

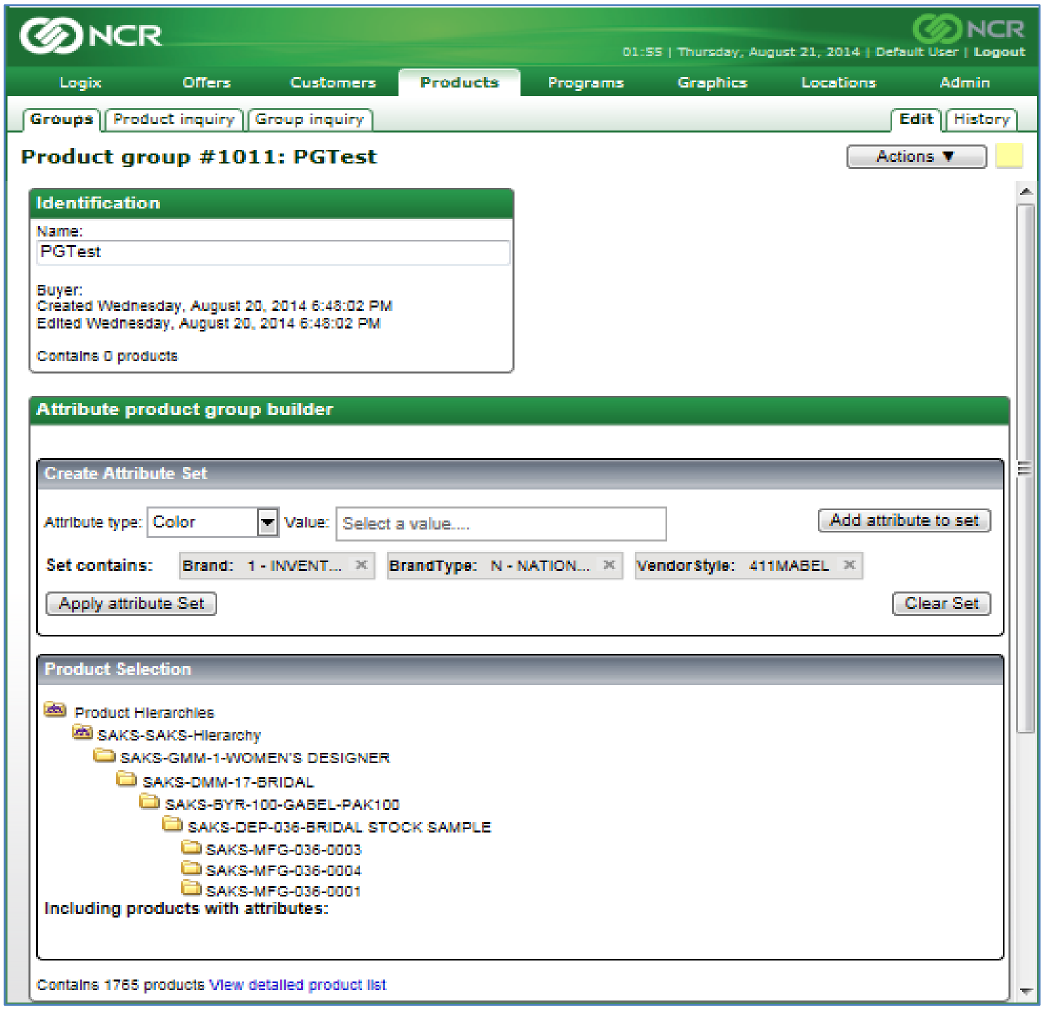


3. Click Save Button
4. On Saving Following Screen will Appear for Attribute Based Product Group which will allow user to select a hierarchy node(s):

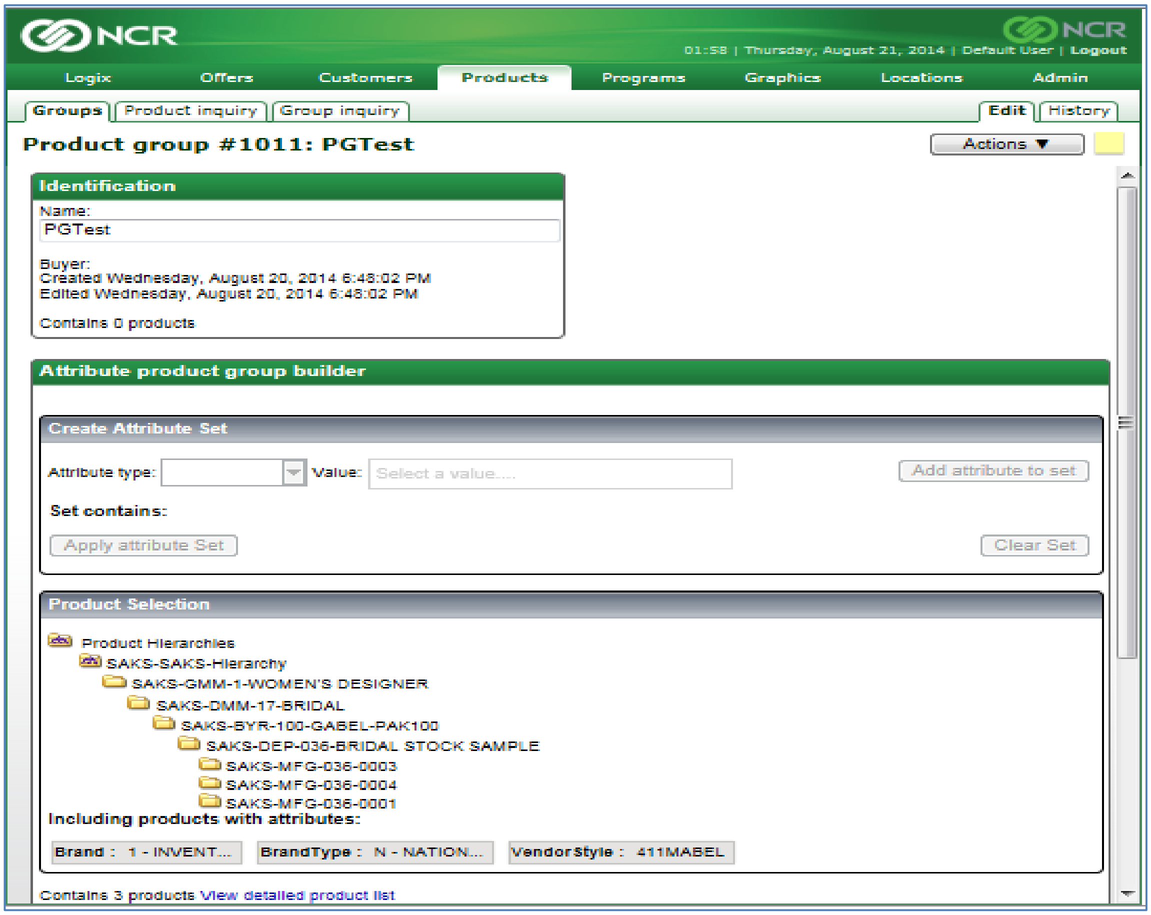


In Attribute Product Group Builder, Hierarchy Level Selection section allows user to select required hierarchy node(s). A count is displayed at the bottom of the section displaying count of products at or below the selected hierarchy node(s). User can only select node(s) which are at same level in the hierarchy.

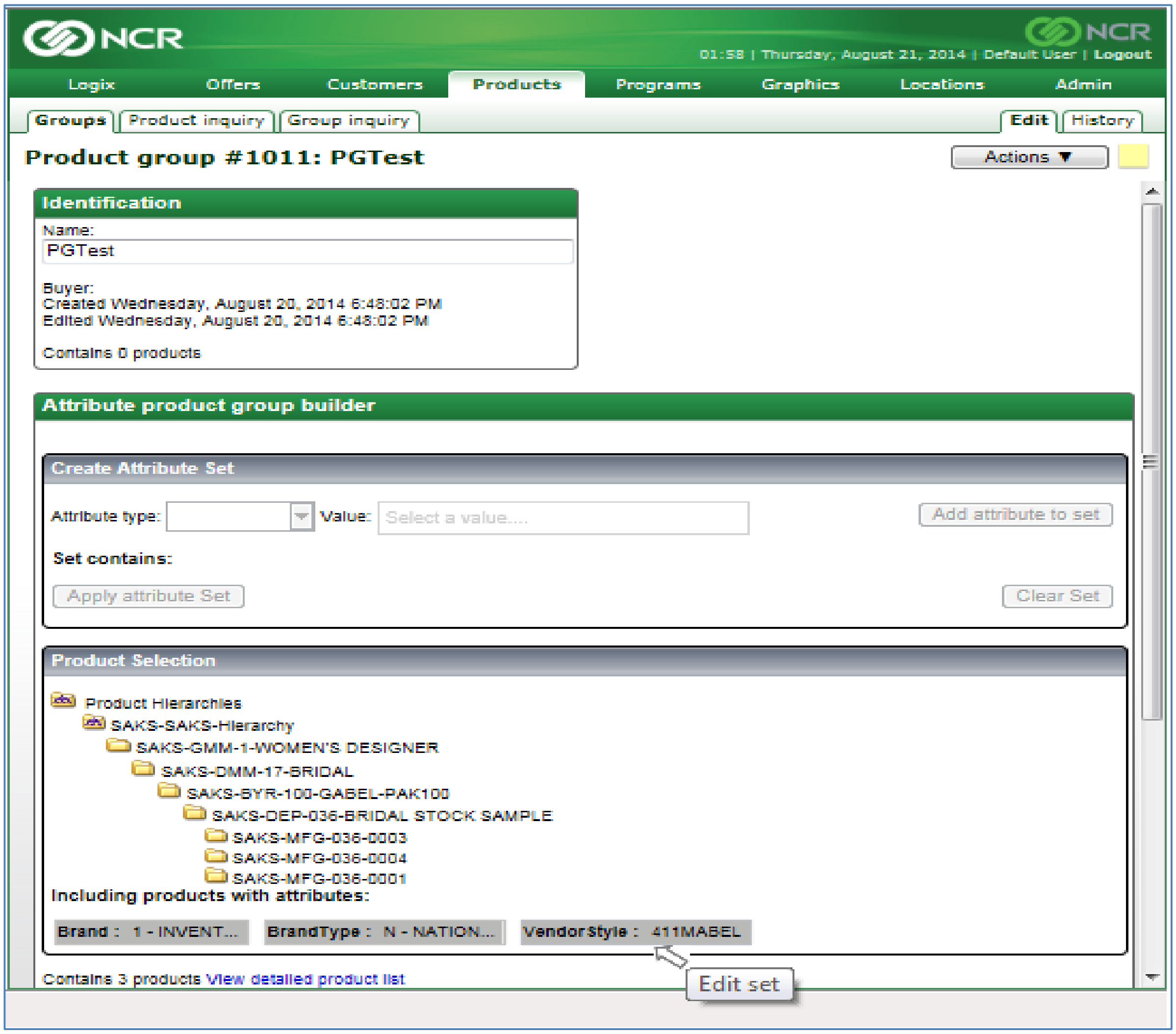
5. After selecting hierarchy node(s), user will click on ‘Continue with Attributes’ button to navigate to next screen where an Attribute Set can be created and applied on the resultant products from the hierarchy node selection.



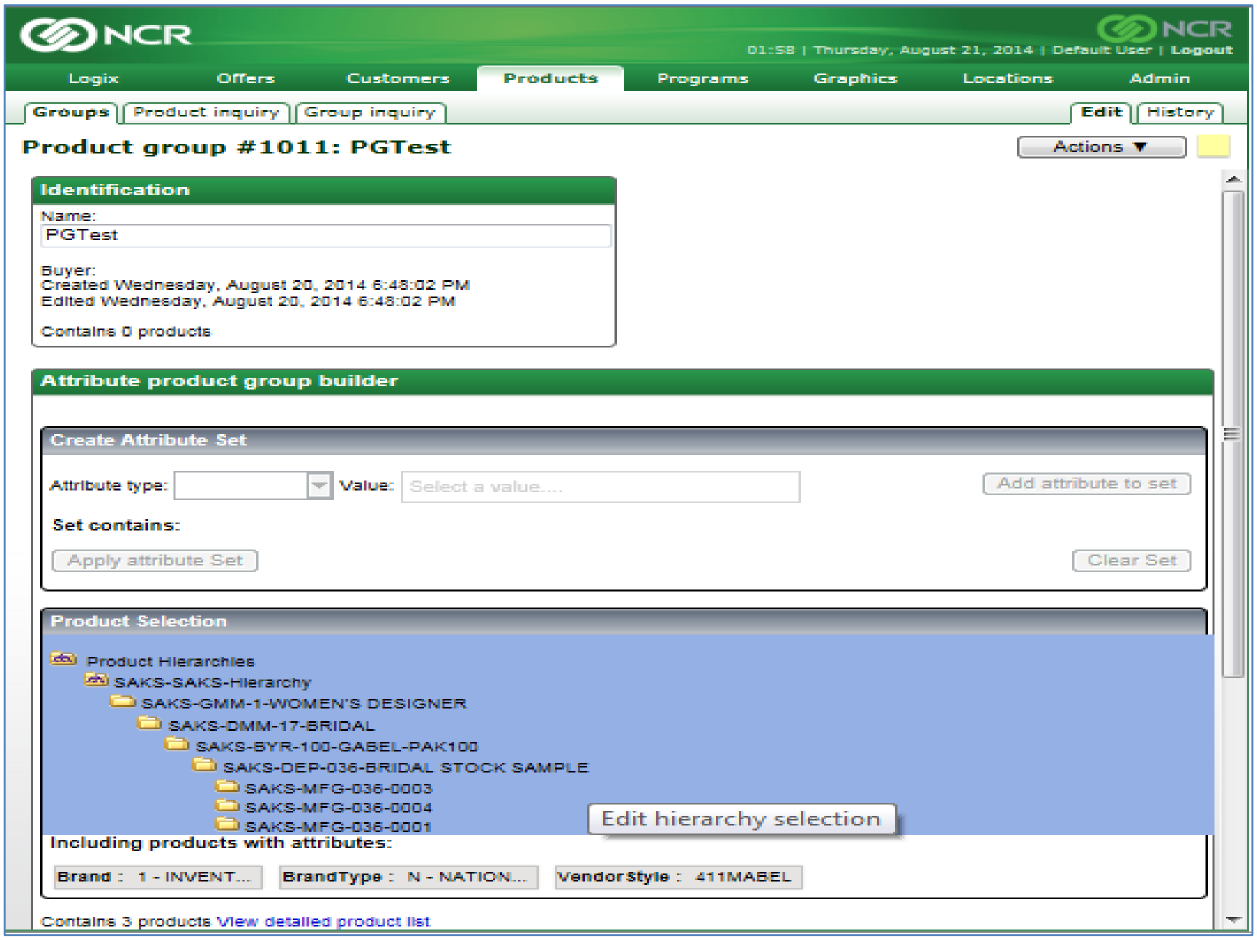
- When user lands on this screen, 'Attribute type' drop down will be populated with values only for the products from the hierarchy node(s) selected from the previous screen.
- When user select an attribute from the 'Attribute type' drop down, value drop down will show values for the selected attribute type for the products from the hierarchy node(s) selected from the previous screen.
- On selecting a value(s) for the attribute, clicking the 'Add attribute to set' button will add the attribute-value filter to the Attribute Set in 'Set Contains' field.
- 'Attribute type' and 'Value' drop down will be reloaded to display values for the resultant products from the hierarchy node selection and the attribute-value filter added to the Attribute Set.
- Clicking on 'Apply attribute Set' will apply the attribute set on the hierarchy node selection and will be displayed in the 'Product Selection' Section. 'Create Attribute Set' section will be disabled. Also, the product count at the bottom of the section will be updated to show the count of products from the hierarchy node(s) meeting the specified Attribute Set criteria. (see image below)



- Mouse over on Applied attribute set will highlight the attribute set and display tool tip “Edit Set”. Clicking on the applied set will remove the attribute set from the Product selection section and will display the attribute set in ‘Create Attribute Set’ section and the set will be editable (as shown below).

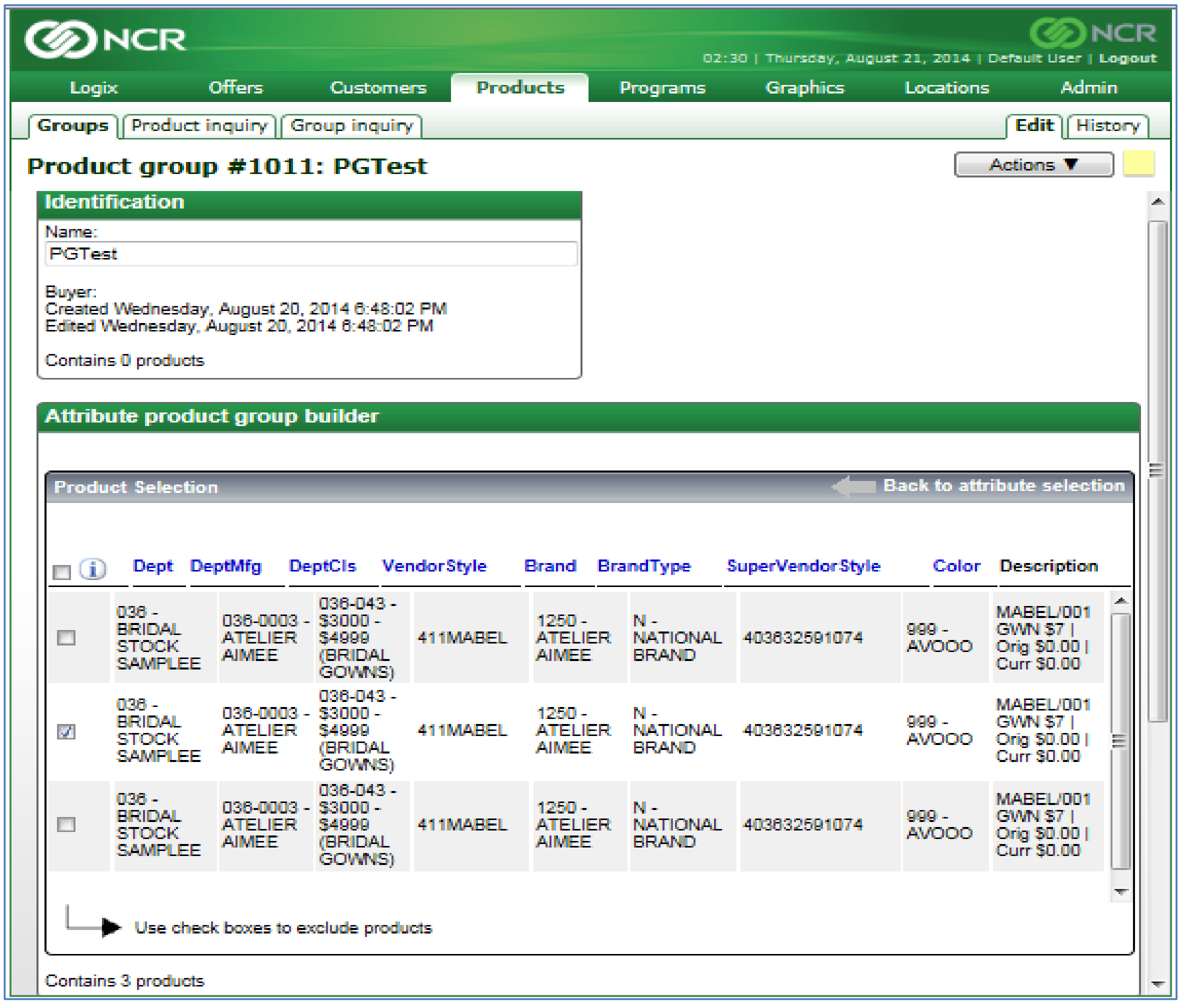


- Mouse over on hierarchy node selection in the 'Product Selection' section will highlight the hierarchy node selection and display tool tip "Edit Hierarchy Selection". Clicking on the hierarchy nodes selection will remove any applied attribute set and would require user confirmation. Once user confirms the action, the applied attribute set will be removed and user will be navigated back to 'Hierarchy level selection' screen with all the previously selected nodes will be shown as selected. (as shown below)



6. Clicking 'View detailed product list' link from the bottom of the section will display the list of products from the selected hierarchy node that match the attribute set applied.

7. If user wants some specific products to be excluded then products can be excluded by selecting the checkbox from the detailed product list.



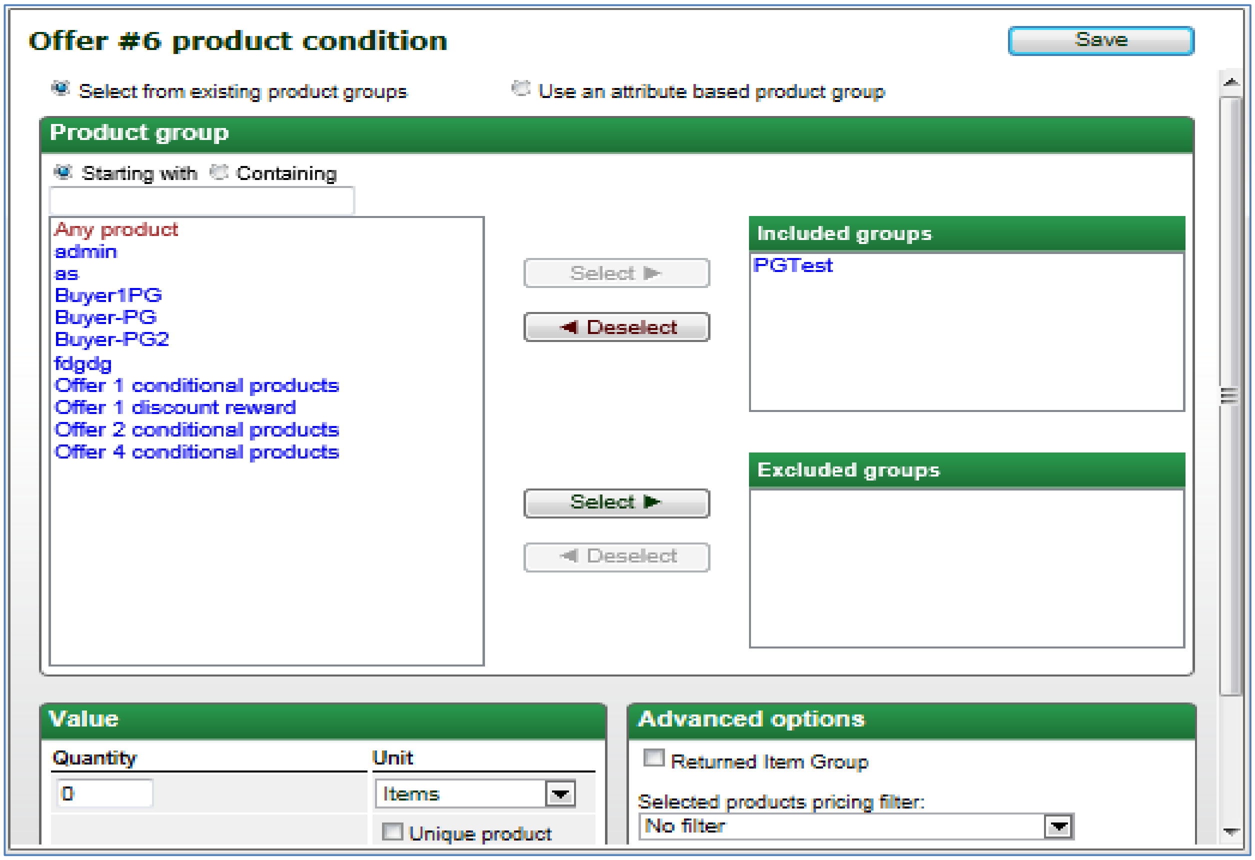
8. Click Save button . New Product Group will be created.

8.8.6 Creating Attribute Based Product Group from Product Condition Page

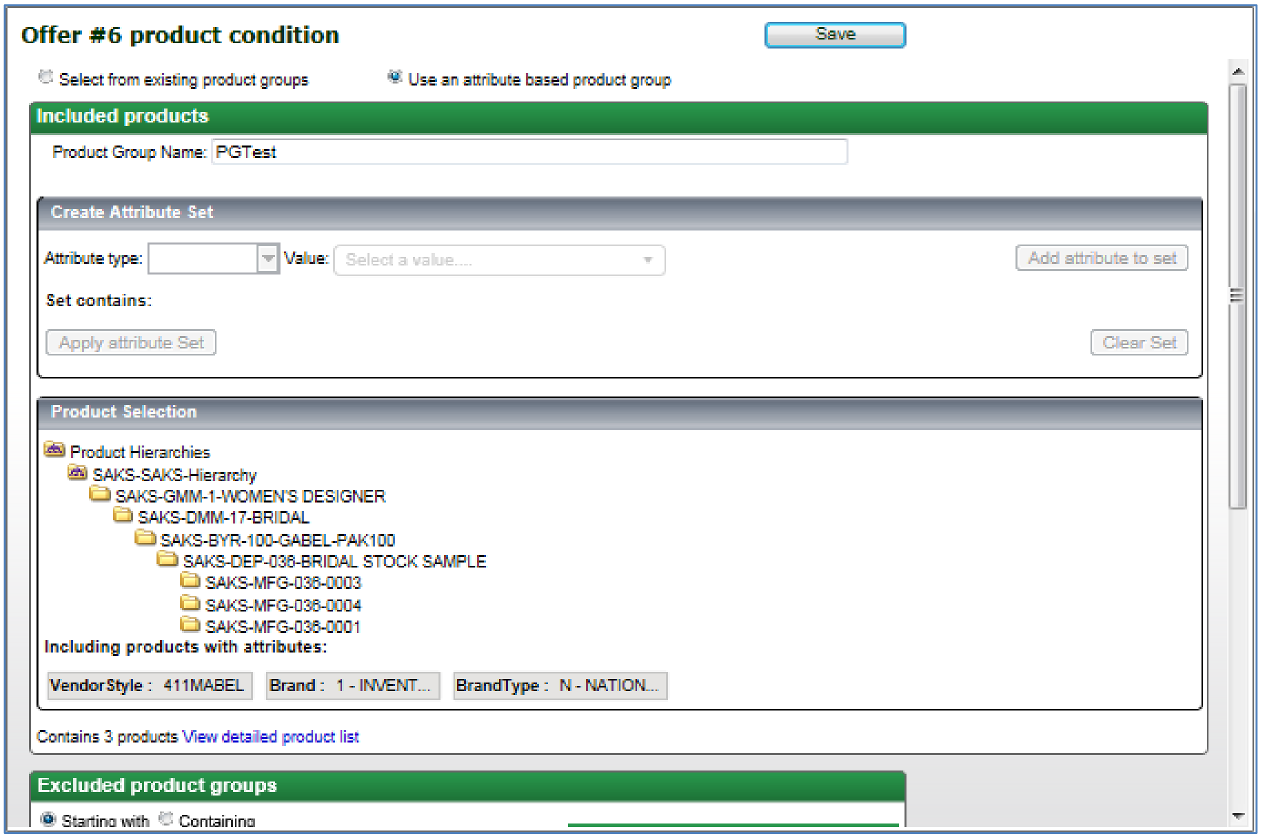
Attribute based Product Group can also be created from Product Condition Page.

On Product Condition Page, if user selects any Existing Product Group and that selected Product Group is attribute based Product Group (Product Group marked in blue color) then Product group Screen will automatically switch to attribute based product group screen.

E.g. If user selects PGTest(An Attribute based Product Group) then user will be directed to Attribute based Product Group Screen(As Displayed in following two screens)

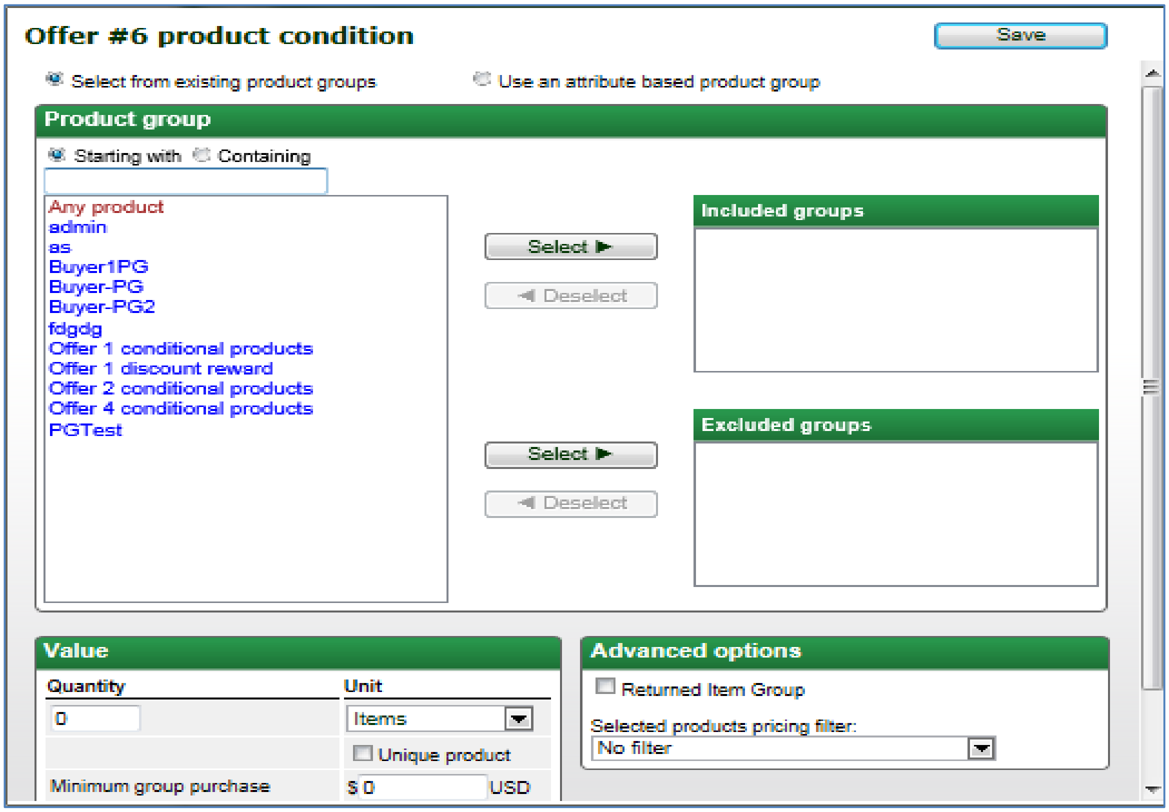


Redirecting to Attribute Based product Group Screen

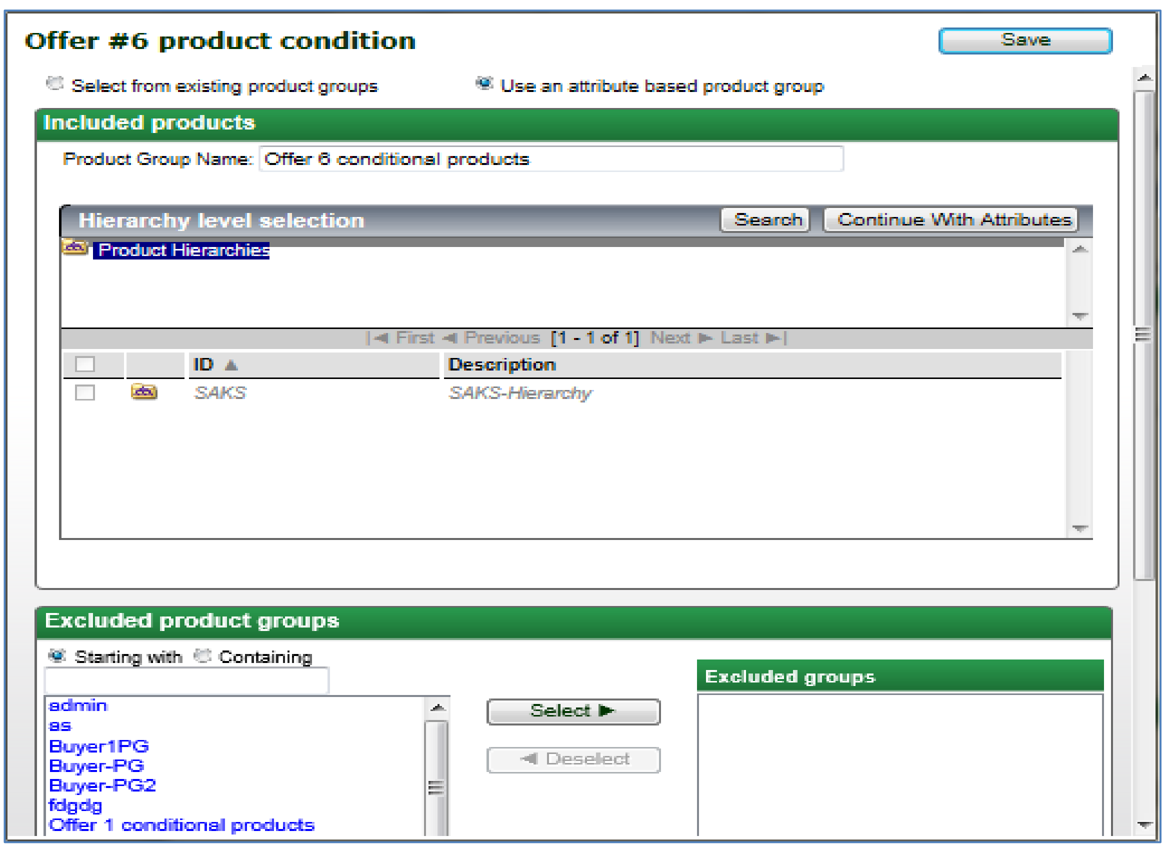


Steps to Create Attribute Based Product Group from Product Condition Page:

1. Create UE Offer
2. Add Customer Condition
3. Add Product Condition
4. Select Attribute Based Product Group Radio Button without selecting any product group (As displayed in below figure)

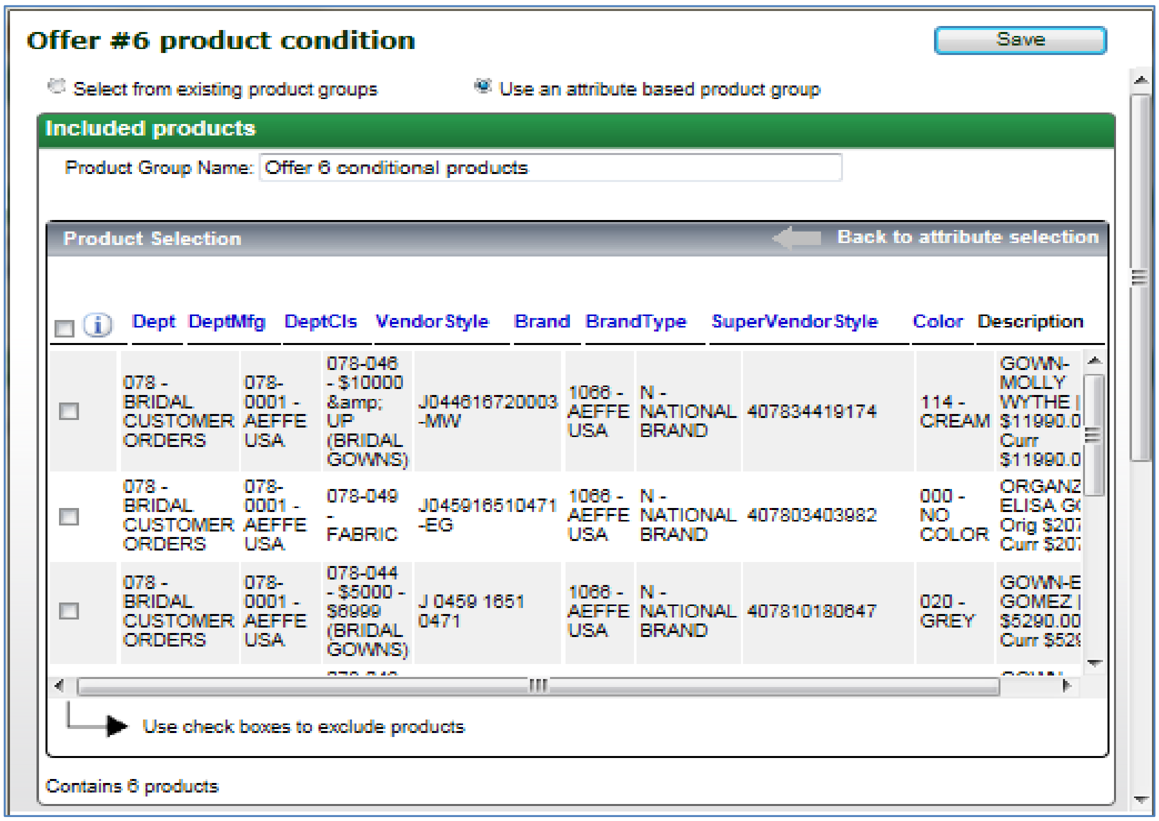


After selecting Attribute based Radio Button Following screen will be displayed



5. Navigate through Product hierarchy and select the desired hierarchy node(s) and click on ‘Continue with Attributes’ button

6. Now Select Some Attribute Value pair to create an attribute set and apply the attribute set (As displayed in following screen)



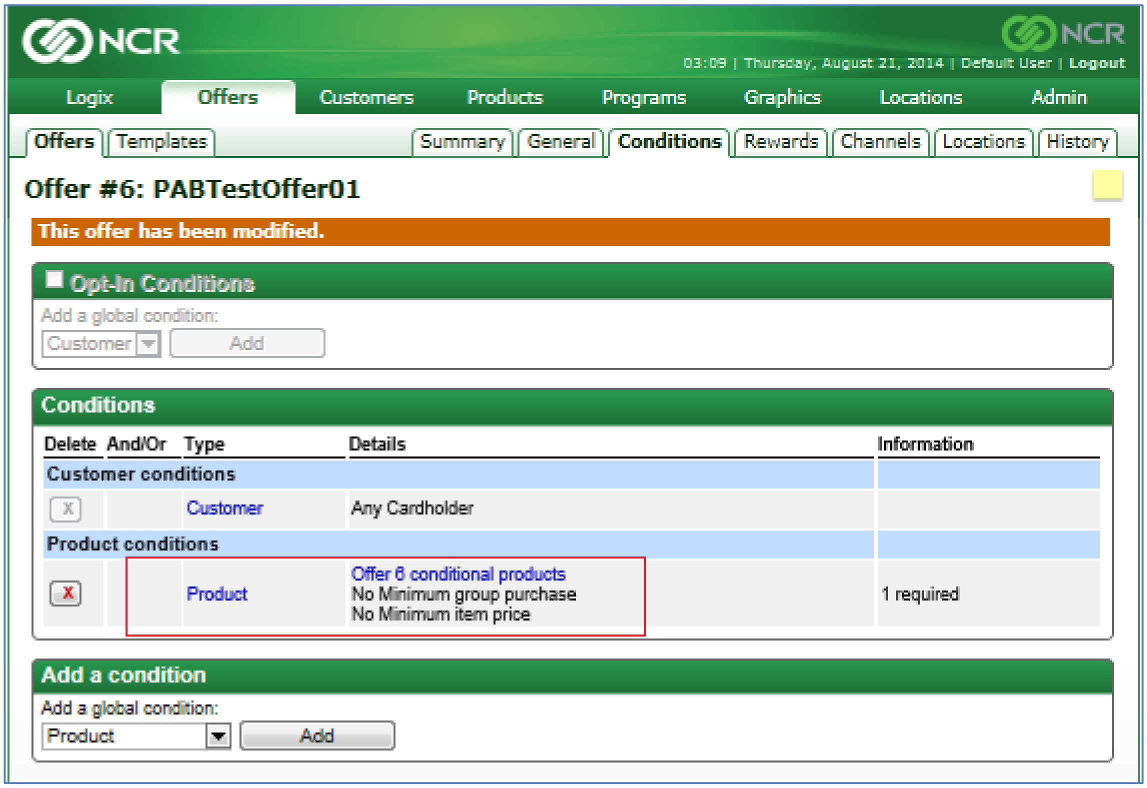
7. Click on ‘View detailed product list’ to view the product list and exclude specific product (if required).

8. Enter other required details for the product condition like Quantity, etc.

9. By default the product group for offer condition will be created with following name format “Offer [id] Conditional Product” BUT user can modify the product group name to any user defined name from the screen.

10. Click Save Button.

After clicking save button , a new product group will be created (as shown below)

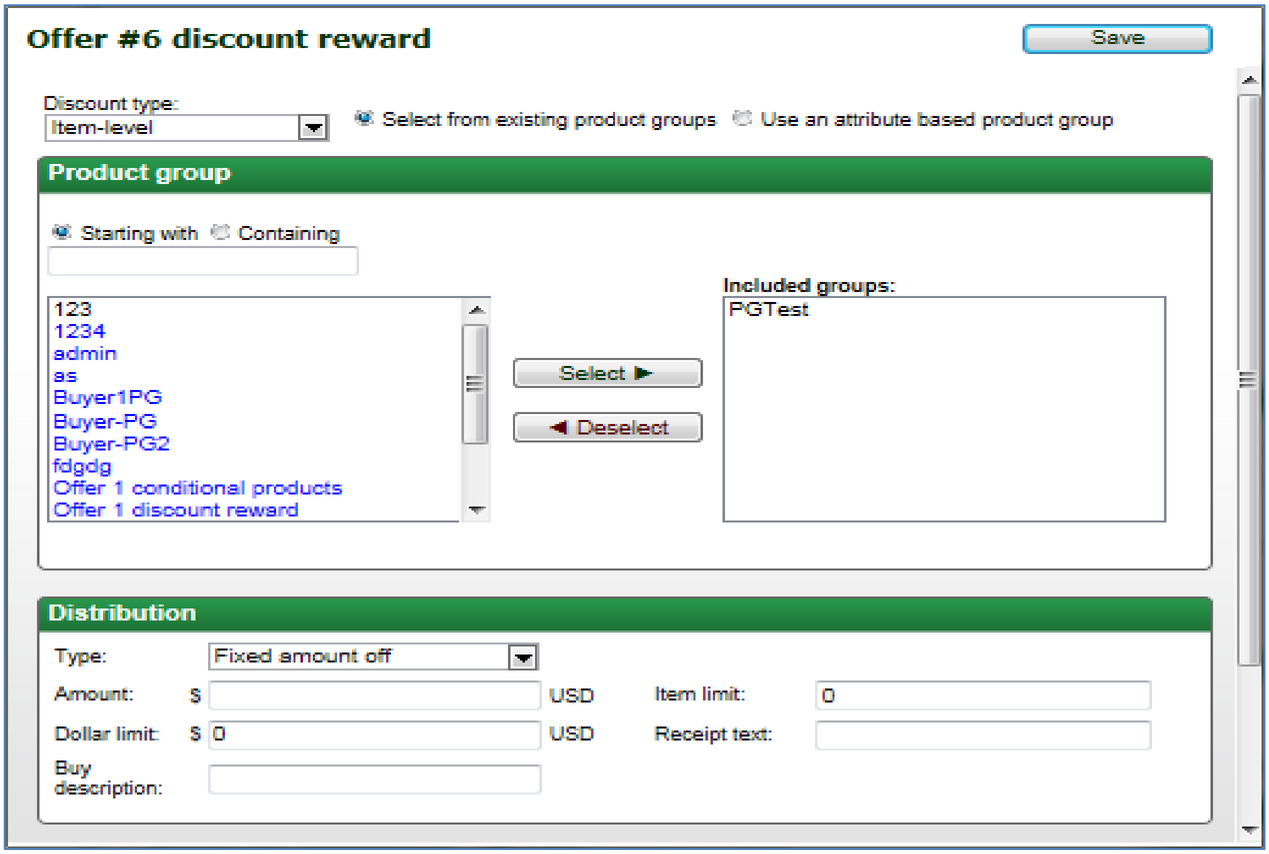


8.8.7 Creating Attribute Based Product Group from Discount Reward Page

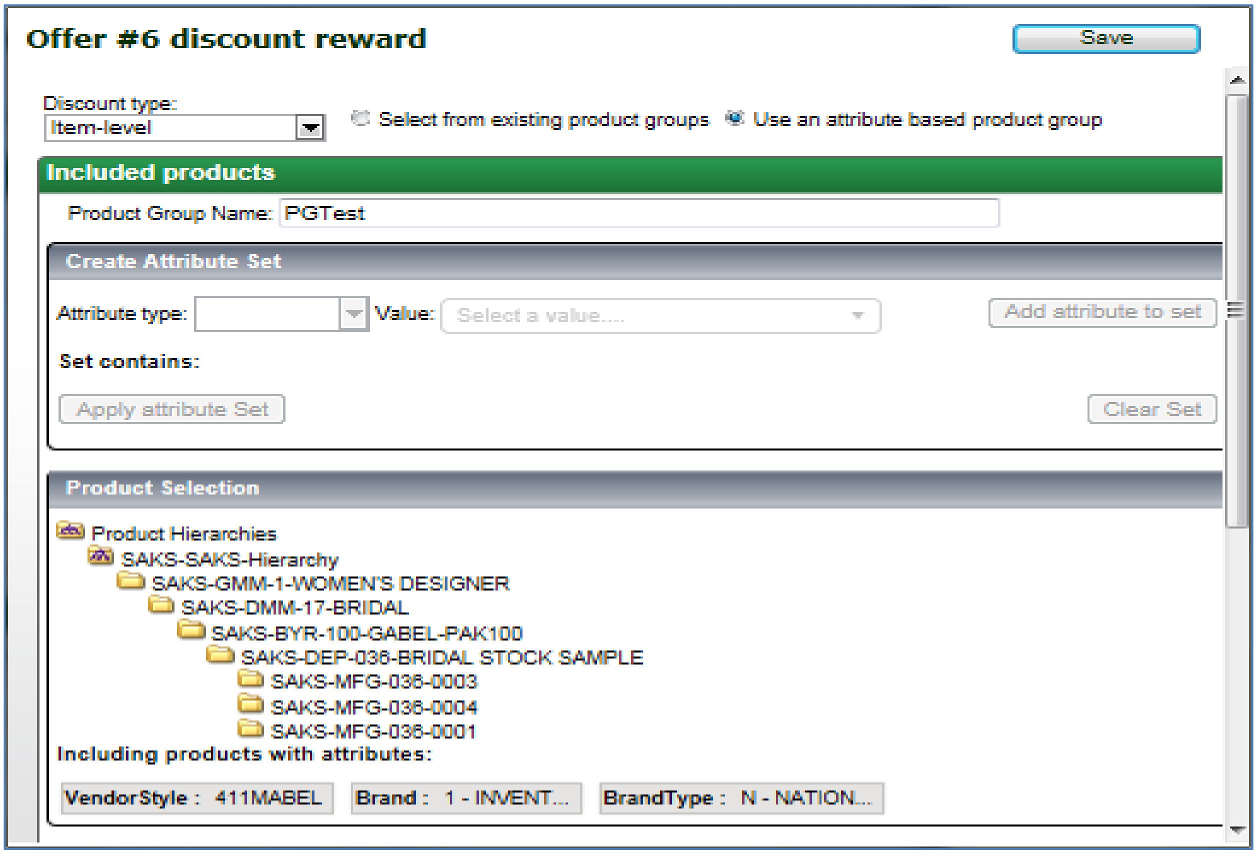
Attribute based Product Group can also be created from Discount reward Page.

On Discount reward page, if user selects any Existing Product Group and that selected Product Group is attribute based Product Group (Product Group marked in blue color) then Product group Screen will automatically switch to attribute based product group screen.

E.g. If user selects PGTest(An Attribute based Product Group) then user will be directed to Attribute based Product Group Screen(As Displayed in following two screens)

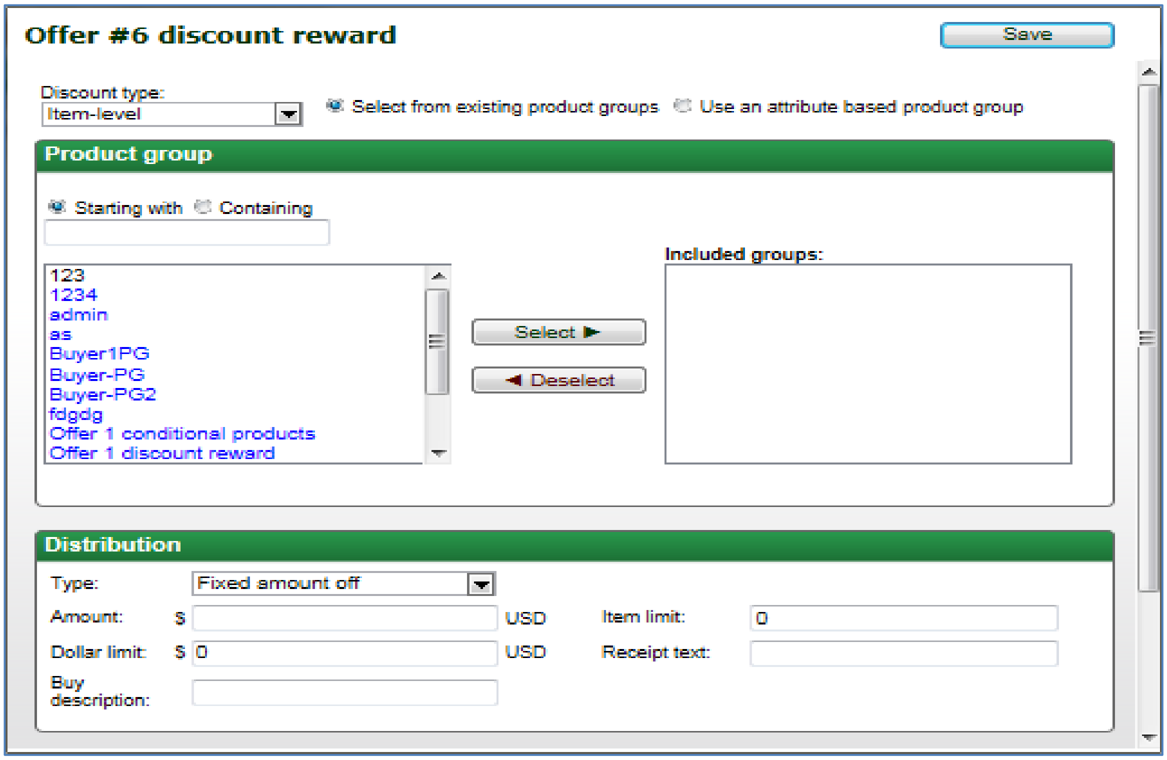


Redirecting to Attribute Based Product Group

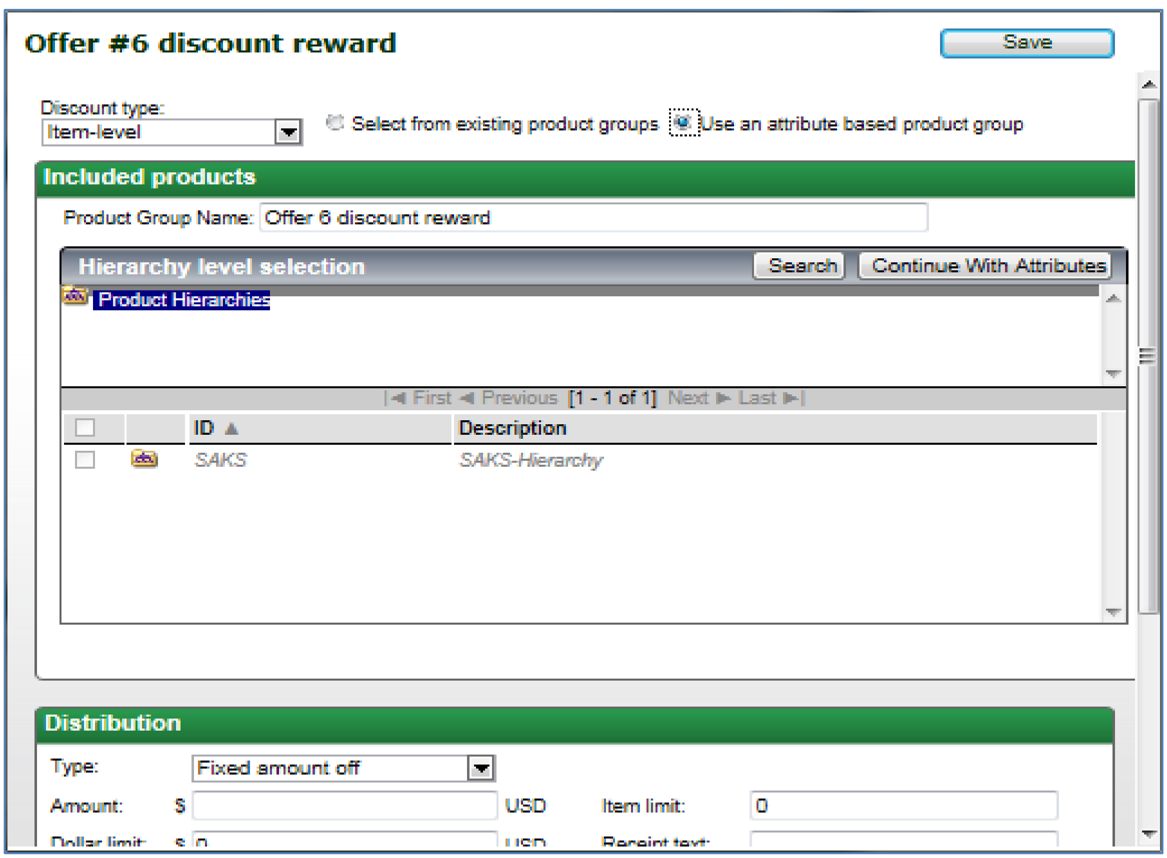


Steps to Create Attribute Based Product Group from Discount Reward Page:

1. Create UE Offer
2. Add Customer Condition
3. Add Product Condition
4. Navigate to Rewards. Add Discount Reward
5. Select Attribute Based Product Group Radio Button without selecting any product group (As displayed in below figure)

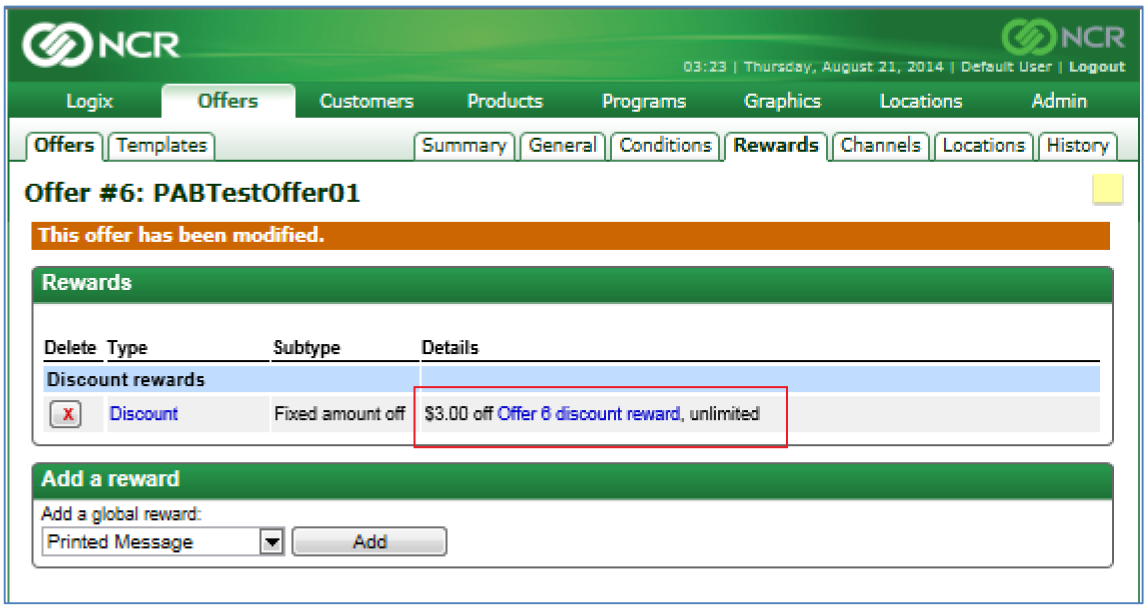


After selecting Attribute Based radio button following screen will be displayed



6. Navigate through Product hierarchy and select the desired hierarchy node(s) and click on 'Continue with Attributes' button
7. Now Select Some Attribute Value pair to create an attribute set and apply the attribute set (As displayed in following screen)
8. Click on 'View detailed product list' to view the product list and exclude specific product (if required).
9. Enter other required details for the discount reward like Amount, Receipt Text, etc.
10. By default the product group for offer discount reward will be created with following name format "Offer [id] Discounted Rewar" BUT user can modify the product group name to any user defined name from the screen.
11. Click Save Button.

    After clicking save button , a new product group will be created (as shown below)

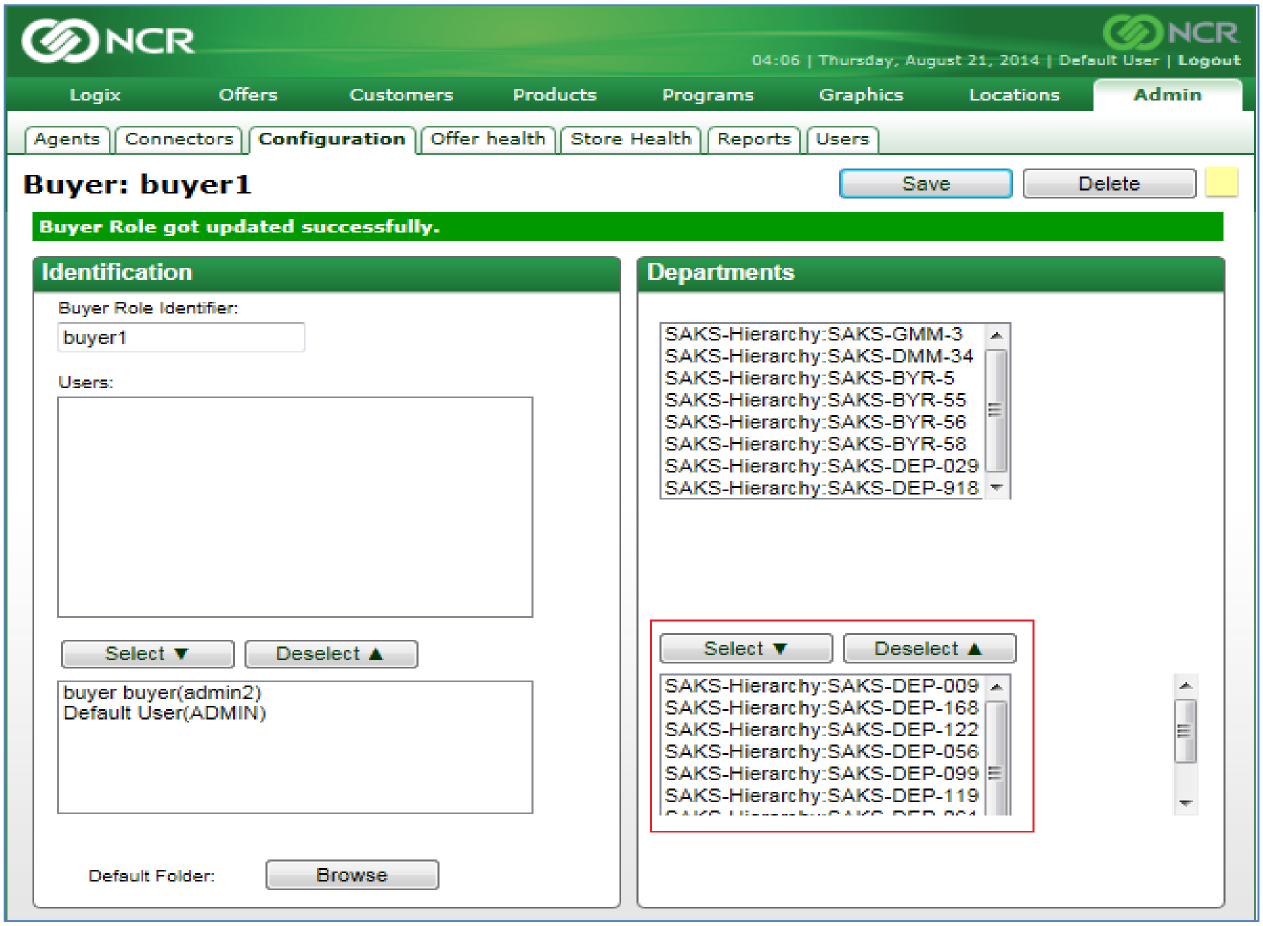


8.8.8 Creation of Attribute based product group as a Buyer

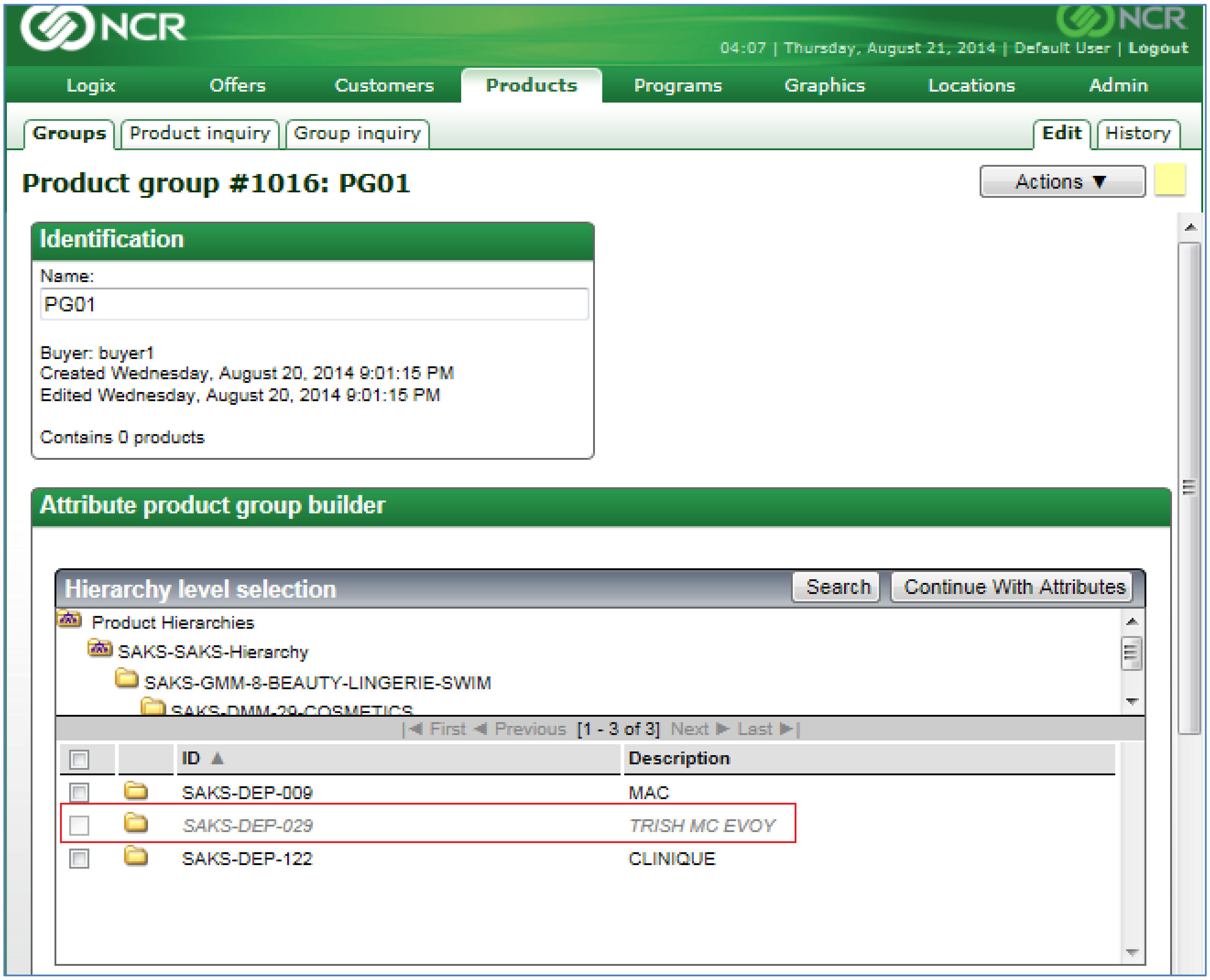
User when logged in as a buyer can create attribute based product group from all the 3 different logix pages viz:

1. Product Group Edit Page
2. Offer product condition page
3. Offer discount reward page

A buyer can be mapped to one or more department type nodes (NodeType = 1) from the product hierarchy from the buyer edit page (as shown below).



- While creating attribute based product group, a buyer will only be able to select those hierarchy nodes from the hierarchy selection screen on which the buyer has the access or all the child nodes of such nodes (as shown below).
- Buyer will not be able to select any node in the hierarchy above the nodes on which buyer has access.



8.8.9 AttributeProductGroupBuilder Agent

AttributeProductGroupBuilder Agent is the agent which actually links the Products with Product Groups and vice-versa in the following scenarios:

1. When User Imports new Products or update products via product hierarchy import or update product attribute-value information via product update agent then this agent links these products to the product group(s) for which the product matches the product hierarchy and attribute\value criteria of the product group.
2. When user imports new product groups or update product groups via Process Product group agent, then this agent will automatically links Product Groups with those products that matches product hierarchy and Attribute\Value criteria of the product group. If in Product Group XML Any Product is marked as Excluded then this agent will automatically mark the product as excluded in product group if the product group satisfied the product hierarchy and attribute\value criteria of the product group.

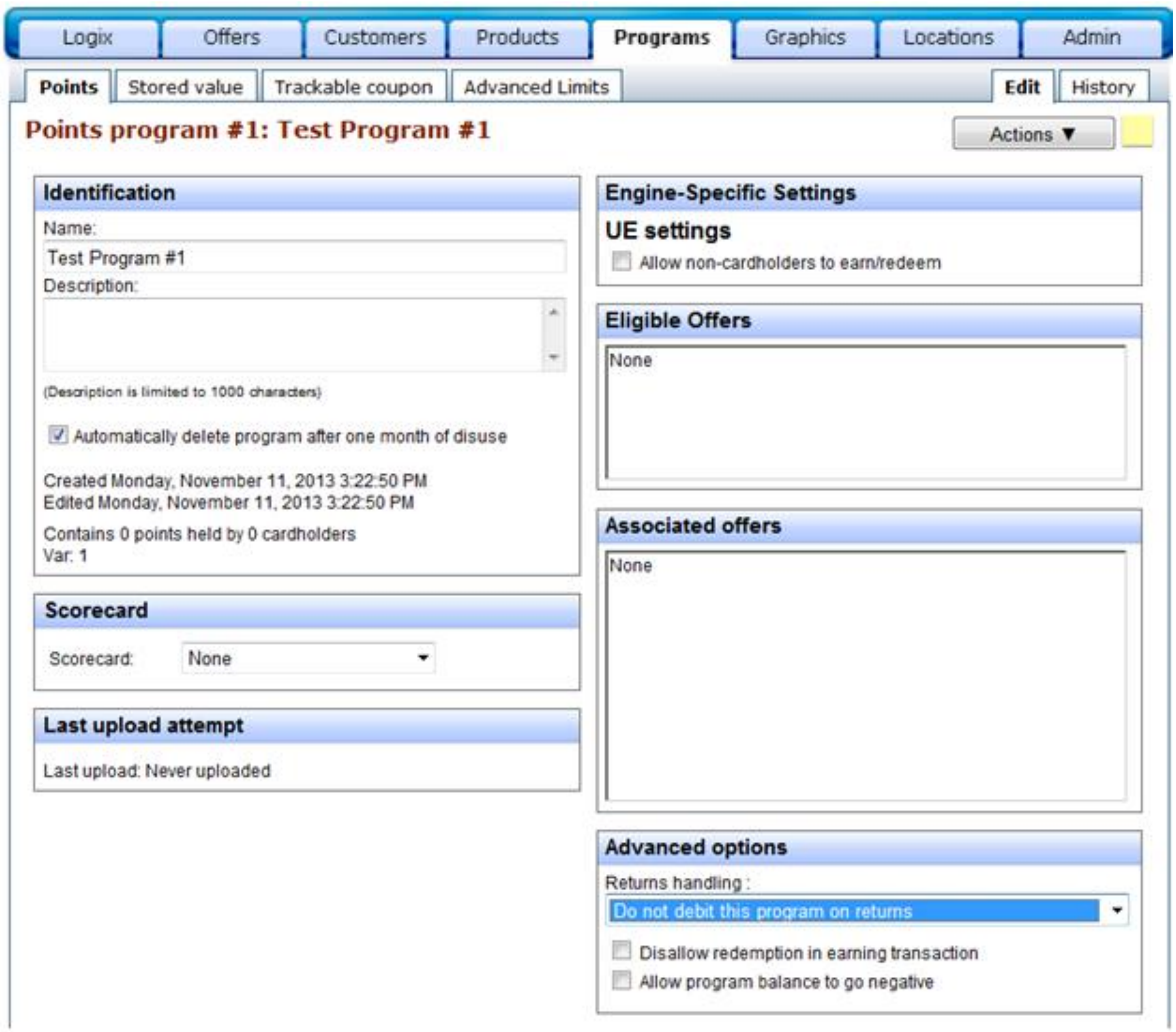
9 Points programs

Programs are collections of arbitrary units of currency, like airline miles, cereal points, etc. Retailers use programs to encourage a desired behavior by allowing cardholders to accumulate units and then redeem them for rewards.

A points program is a class of points used for a particular purpose. For instance, a retailer might create a Fuel Points program to grant points to customers whenever they purchase gasoline, or a Bread Points program to encourage shoppers to visit the bakery.

The *Programs>Points>Edit* page shows the details of each program, including its ID, name, description, and the total balance of points currently held by all customers. The "Associated offers" box lists the offers that use the program. While the “Eligible offers” box lists all offers that have this points program associated to an eligible points condition

Note that, if CAM (Canadian Air Miles) is installed, points programs can be defined as being either normal programs or CAM programs. CAM programs can only be used by CAM offers, and vice versa.



Points programs are maintained in Logix on the *Programs>Points>Edit* page, as shown above. On this page, there are five main sections which define the group, a *History* tab available to view past changes to the program, and an action button for maintaining the program.

When clicking on the *History* tab, users are linked to the program's history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the "Action" button on the *Points>Program>Edit* page provides a menu of actions available for maintaining the program. Actions include: Save, Delete, Download, and New. Save is used both when creating and editing a points program. The following sections define the correct usage of each of these actions.

9.1 Create

Click the New button on the *Programs>Points* list page to create a new points program. You will then be taken to a blank *Edit* page where you can input the program's name and an optional description. Newly created points programs contain no points.

9.1.1 External programs

System option 80 ("External points integration") determines if your installation of Logix can support points programs that are managed through an outside points management system. If this option is enabled, then the *Programs>Points>New* page will give you the option of ticking a checkbox to indicate that the program you're creating is external.

If external, then you will be able to define additional program attributes, which may include one or both of the following:

- External ID, the identifier by which the external source will know the program.
- Decimal values, which controls whether users are allowed to submit non-integer balance adjustments for the program.

9.2 Edit

The program's name and description can be edited in the Identification box. Point balance information can be downloaded by clicking Download in the Actions menu, then clicking the Browse button to select the appropriate file from your machine, then clicking Download.

Logix can automatically delete the points program after a certain period of disuse – i.e., a period during which the program isn't associated with any non-expired offers. To enable this functionality, tick the checkbox. (Note: the period is controlled by the "Auto delete offers after expired for (days)" setting in *Admin>Settings*.)

A scorecard can also be selected on the edit page. A scorecard is an area on a printed receipt in which changes to one's points balance are summed and summarized, rather than having those changes sprinkled throughout the receipt. By selecting a scorecard on the Points>Edit page, you're determining that all point changes made to this program during a transaction will be summarized in the selected scorecard. (Note: If a pre-existing points reward exists that uses this program but that's associated with another scorecard, you will be unable to set the scorecard for the entire program.)

Optionally, you can also associate a UPC with the program, used when performing manual balance adjustments. Enter the UPC into the input in the "Manual Adjustment UPC" box, either with or without leading zeros (Logix will automatically zero-pad the UPC if needed), or select a UPC by double-clicking one in the list. The list shows the top 100 codes within the defined range (set in *Admin>CPE Settings*) that haven't been used in other offers. Depending on the settings, codes outside the range may or may not be accepted.

A user can optionally choose to enable the "Allow non-cardholders to earn/redeem" flag located under the Engine-Specific Settings for the points program. This flag will allow all customers to earn/redeem points within a transaction without being a cardholder. However, once the transaction has completed, the points will be discarded.

If you are not able to disable the "Allow non-cardholders to earn/redeem" flag, check if the Points Program is associated to an offer. If it is, first remove the Points Program from the offer and then disable the flag.

If you enable "Allow non-cardholders to earn/redeem" flag, then make sure that you enable the UE system option #147 (Add shadow member to transaction) as well to avoid any customer related errors in your transaction.

Advanced options allow the user to define additional program attributes:

- **Returns handling:** This setting is used when determining whether to return points' information to the POS to store for return handling.
- **Disallow redemption in earning transaction:** This setting is used to allow/disallow a user to redeem points in the same transaction that the points were earned.
- **Allow program balance to go negative:** This setting is used to allow points to be taken away from the program balance.

When you're finished editing the program, click Save.

9.3 Download

To see a spreadsheet of the points balances held by individual customers, click the Download button. Logix will prompt you to save or open the spreadsheet, which will be in Excel-readable CSV (comma-delimited) format.

9.4 Delete

To delete a points program, first ensure it's not associated with any offers, and then click Delete.

9.5 History

Logix tracks changes made to points programs, who made the changes, and when. Click the History tab to see this list.

10 Stored value programs

Programs are collections of arbitrary units of currency, like airline miles, cereal points, etc. Retailers use programs to encourage a desired behavior by allowing cardholders to accumulate units and then redeem them for rewards. Like a points program, a stored value program is a collection of units that customers can earn and redeem, but unlike point each unit in a stored value program is associated to a particular value, such as a dollar amount.

The *Programs>Stored Value>Edit* page shows the details of each program, including its ID, name, description. It also displays the monetary value that each unit of the program is equal to and the number of days for which each unit is valid, as well as a checkbox indicating if values should be stored as units.

Stored value balances can expire after a set amount of time. In the Expiration box, select the type of expiration to apply:

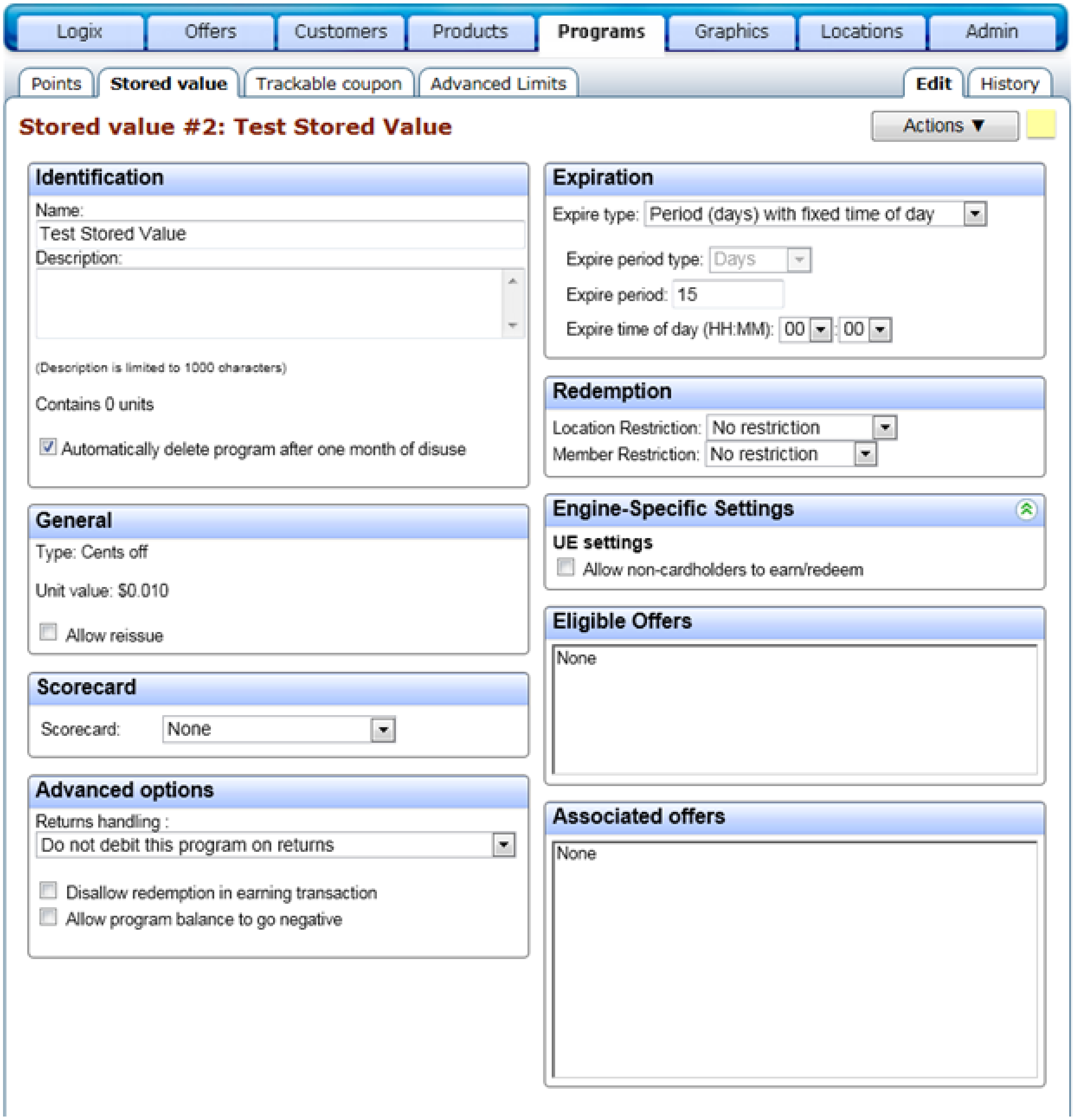
- Fixed date/time, which will set the expiration to the particular date and time you input.
- Period (days) with fixed time of day, which will set the expiration to occur at a specific time of day after a certain number of days.
- Exact period, which will the set the expiration to occur exactly x days from the time the stored value was earned.

The "Associated offers" box lists the offers that use the program. The “Eligible offers” box lists all offers that have this stored value program associated to an eligible Stored Value condition

Stored value programs now have a “redemption restriction” selector that allows the user to define where stored value can be redeemed. Options are:

- No restriction: redemption can occur anywhere.
- Earning location: redemption is only allowed at the same store where the value was originally earned.
- Earned store group: redemption is only allowed at stores within the store group associated to the offer.

This selection is stored as the RedemptionRestriction field (int) in the StoredValuePrograms table on RT. The three possible options for the dropdown are stored in a new RedemptionRestrictions table on RT.



Stored value programs are maintained in Logix on the *Programs>Stored Value>Edit*, as shown above. On this page there are five main sections which define the group, a *History* tab available to view past changes to the program, and an action button for maintaining the program.

When clicking on the *History* tab, users are linked to the stored value program history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the “Action” button on the *Programs>Stored value>Edit* page provides a menu of actions available for maintaining the program. Actions include: Save, Delete, and New. Save is used both when creating and editing a stored value program. The following sections define the correct usage of each of these actions.

10.1 Create

Click the New button on the *Programs>Stored Value* list page to create a new stored value program. You will then be taken to a blank Edit page where you can input the program's name and optional description, plus the following:

- Type: This is the type of stored value that the program represents and includes points, cents, or cents off per unit value. If you select points, you can enter a unit value that each unit of stored value represents; otherwise the value will be one cent. For cents off per unit measure-type stored value, you can enter a limit on the unit of measure.
- Allow reissue. Indicates whether partially redeemed stored value will be reissued as a new record.
- Disable bulk earning. This determines how earnings and adjustments for this program are recorded. If bulk earning is enabled, an adjustment of ten units would be recorded as a single entry; if disabled, the adjustment would be recorded as ten separate adjustments of one unit apiece. Note: This option will not appear if CPE system option #49 ("Show stored value storage type") is disabled.
- Expiration type. This sets when and how the stored value expires. Options are fixed date/time (which expires the value at a particular time on a particular day), period with fixed time of day (which expires the value at a particular time of day after the specified number of days has elapsed), or exact period (which expires the value an exact number of days\hours\months[maximum value of 120 months is allowed] after it's earned).

10.2 Edit

The program's name, description, expiration settings and flags (allow reissue and disabled bulk earning) can be edited after the program is created. Type, however, cannot.

Logix can automatically delete the stored value program after a certain period of disuse – i.e., a period during which the program isn't associated with any non-expired offers. To enable this functionality, tick the checkbox. (Note: the period is controlled by the "Auto delete offers after expired for (days)" setting in *Admin>Settings*.)

A scorecard can also be selected on the edit page. A scorecard is an area on a printed receipt in which changes to one's stored value balances are summed and summarized, rather than having those changes sprinkled throughout the receipt. By selecting a scorecard on the *Stored value>Edit* page, you're determining that all balance changes made to this program during a transaction will be summarized in the selected scorecard. (Note: If a pre-existing reward exists that uses this program but that's associated with another scorecard, you will be unable to set the scorecard for the entire program.)

Optionally, you can also associate a UPC with the program, used when performing manual balance adjustments. Enter the UPC into the input in the "Manual Adjustment UPC" box, either with or without leading zeros (Logix will automatically zero-pad the UPC if needed), or select a UPC by double-clicking one in the list. The list shows the top 100 codes within the defined range (set in *Admin>CPE Settings*) that haven't been used in other offers. Depending on the settings, codes outside the range may or may not be accepted.

A user can optionally choose to enable the "Allow non-cardholders to earn/redeem" flag located under the Engine-Specific Settings for the Stored value program. This flag will allow all customers to earn/redeem Stored value within a transaction without being a cardholder. However, once the transaction has completed, the Stored value will be discarded.

If you are not able to disable the “Allow non-cardholders to earn/redeem” flag, check if the Stored value Program is associated to an offer. If it is, first remove the Stored value Program from the offer and then disable the flag.

If you enable “Allow non-cardholders to earn/redeem” flag, then make sure that you enable the UE system option #147 (Add shadow member to transaction) as well to avoid any customer related errors in your transaction.

Advanced options allow the user to define additional program attributes:

- **Returns handling:** This setting is used when determining whether to return points’ information to the POS to store for return handling.
- **Disallow redemption in earning transaction:** This setting is used to allow/disallow a user to redeem points in the same transaction that the points were earned.
- **Allow program balance to go negative:** This setting is used to allow points to be taken away from the program balance.

When you're finished editing the program, click Save.

10.3 Delete

To delete a stored value program, first ensure it's not associated with any offers, and then click Delete.

10.4 History

Logix tracks changes made to stored value programs, who made the changes, and when. Click the *History* tab to see this list.

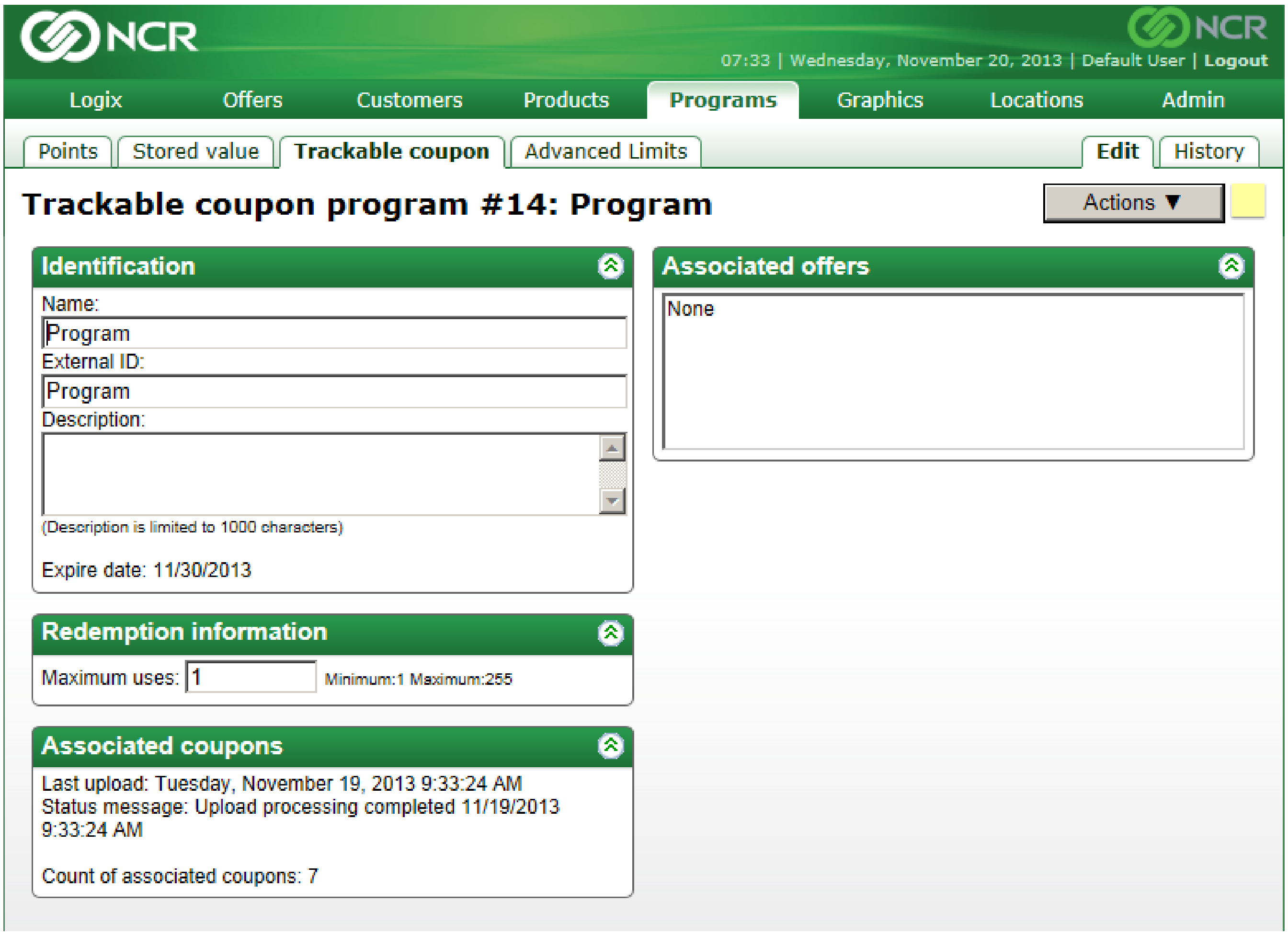
11 Trackable Coupon Programs

Trackable Coupon Programs are collections of coupons that any customer or cardholder can redeem. Retailers use coupon programs to encourage a desired behavior by allowing customers to redeem coupons for rewards. Unlike other programs, coupons can only be redeemed and cannot be earned.

The *Programs>Trackable Coupon Program>Edit* page shows the details of each program, including its External ID, Name and Description. It also displays the number of coupons associated with the program, expiry date, maximum uses and associated offers.

The "Associated offers" box lists all offers using this trackable coupon program.

Once a trackable coupon program is associated to an offer, the expiry date of the offer becomes the expiry date of the trackable coupon program and the associated offer will appear in the Associated Offers section of the trackable coupon program page.



Trackable coupon programs are maintained in Logix on the *Programs>Trackable Coupon Program>Edit*, as shown above. On this page there are four main sections which define the program, a *History* tab available to view past changes to the program, and an action button for maintaining the program.

When clicking on the *History* tab, users are linked to the trackable coupon program history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the "Action" button on the *Programs>Trackable Coupon Program>Edit* page provides a menu of actions available for maintaining the program. Actions include: Save, Delete, and New. Save is used both when creating and editing a trackable coupon program. The following sections define the correct usage of each of these actions.

11.1 Create

Click the New button on the *Programs>Trackable Coupon Program* list page to create a new trackable coupon program. You will then be taken to a blank Edit page where you can input the program's name and external id, the description is optional. Other details of the program include:

- Redemption Information: This determines the maximum number of times the coupons associated with the program can be redeemed.
- Associated Coupons. Indicates the number of coupons that are associated with the program. This section also displays the last time coupons were uploaded to the program
- Associated Offers: Once the Trackable coupon program is associated with an offer, the associated offer will show up in this section of the screen.

The program's name, description and external ID can be edited after the program is created. Maximum uses, however, cannot.

Note: Trackable Coupon Programs can only be populated with coupons by externally uploading coupons to a flat file with a .tcp extension (For other than English servers the text file should be imported with ANSI encoding). This file is processed by the Trackable Coupons Processing agent at a configurable interval. Once the file has been processed, all coupons located within the file will be imported into the specified program. *(See Logix SDK.doc ("Trackable Coupons Processing Agent") for more details.)*

When you're finished editing the program, click Save.

11.2 Delete

To delete a trackable coupon program, first ensure it's not associated with any offers, and then click Delete.

11.3 History

Logix tracks changes made to trackable coupon programs, who made the changes, and when. Click the *History* tab to see this list.

12 Advanced limits

In CM, **promotion variables** are used behind the scenes for accumulating totals of various types for a particular customer or household. Prior to the advanced limits feature, promotion variables were used as follows:

1. Each **points program** has a unique promotion variable associated with it. So, the accumulated points total for a particular customer or household is maintained via the associated promotion variable.

2. If an offer has a limit defined, each **offer** has a unique promotion variable associated with it.

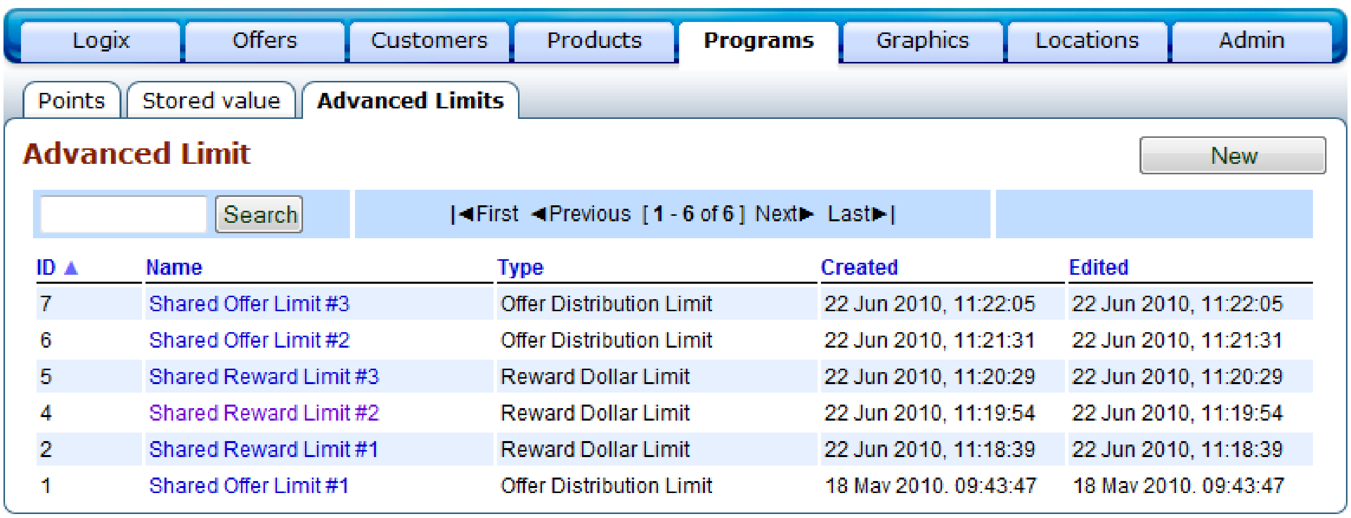
3. If a reward has a limit defined, each **reward** has a unique promotion variable associated with it.

In case 1 the promotion variable for a points program is shared across offers via the points program. In cases 2 and 3 above, the limits (promotional variables) are local to a specific offer (case 2) or local to a specific offer and reward (case 3). In other words, the accumulated totals for limits were *not* shared across multiple offers.

CM now has the concept of “advanced limits” which can be shared across multiple offers. An advanced limit is very similar to a points program in the way that it is stored and processed.

12.1 List

If the CM engine is installed, advanced limit programs may be created and maintained under the *Programs* tab.

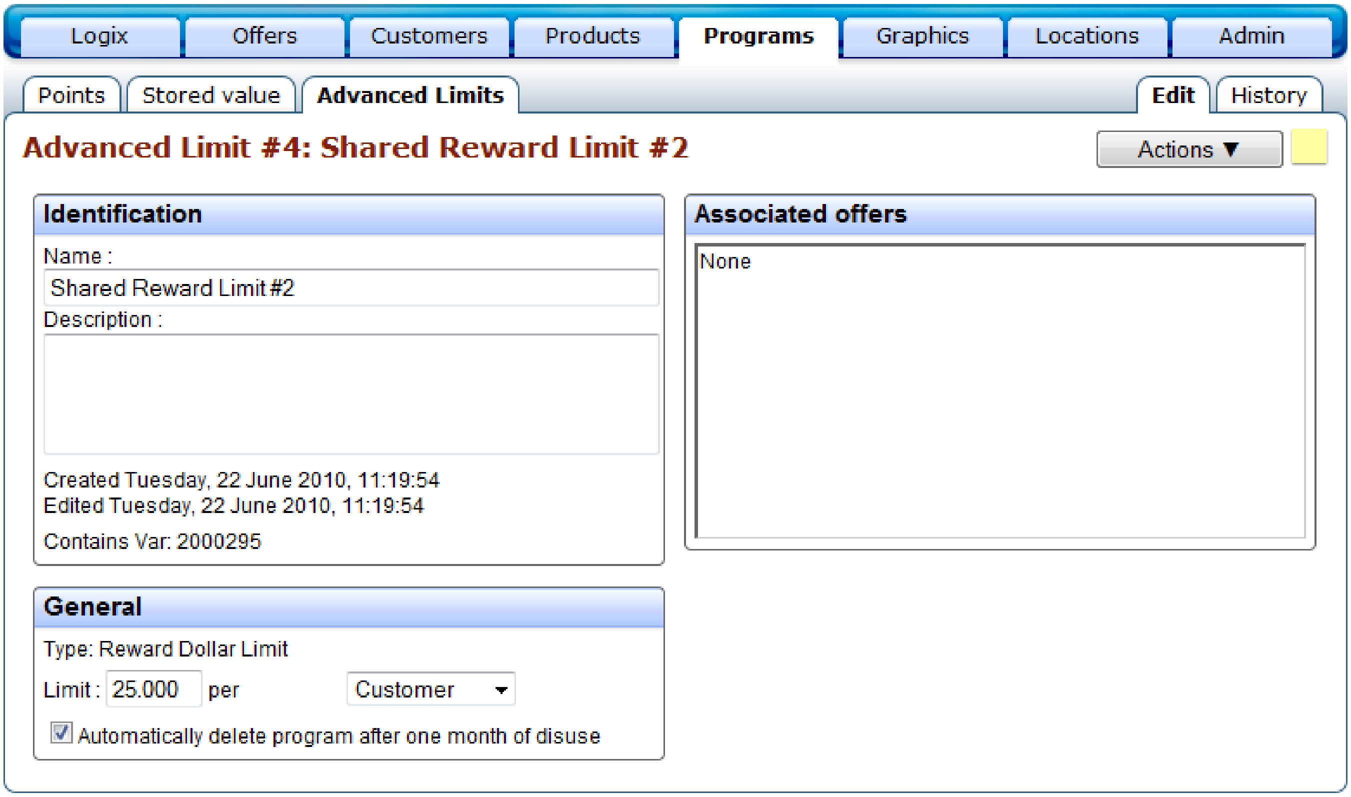


ID ▲	Name	Type	Created	Edited
7	Shared Offer Limit #3	Offer Distribution Limit	22 Jun 2010, 11:22:05	22 Jun 2010, 11:22:05
6	Shared Offer Limit #2	Offer Distribution Limit	22 Jun 2010, 11:21:31	22 Jun 2010, 11:21:31
5	Shared Reward Limit #3	Reward Dollar Limit	22 Jun 2010, 11:20:29	22 Jun 2010, 11:20:29
4	Shared Reward Limit #2	Reward Dollar Limit	22 Jun 2010, 11:19:54	22 Jun 2010, 11:19:54
2	Shared Reward Limit #1	Reward Dollar Limit	22 Jun 2010, 11:18:39	22 Jun 2010, 11:18:39
1	Shared Offer Limit #1	Offer Distribution Limit	18 May 2010, 09:43:47	18 May 2010, 09:43:47

12.2 Edit

Currently CM offers and all reward types, except “Grant Membership” and “Remove Membership”, allow limits to be set. Each limit is associated with a promotional variable which is unique to any particular limit. The Advanced Limits feature allows one to define a limit program and subsequently reference this limit anywhere in the offer that a limit is allowed. This “external reference” allows limits to be shared across offers and rewards. This is true even for transaction level Advanced Limits.

Upon creating a new Advanced Limit, the user selects the type of limit that the Advanced Limit is to be used for. The available Advanced Limit types are defined at installation via install scripts.



Advanced Limits may be defined and used for limits as shown below:

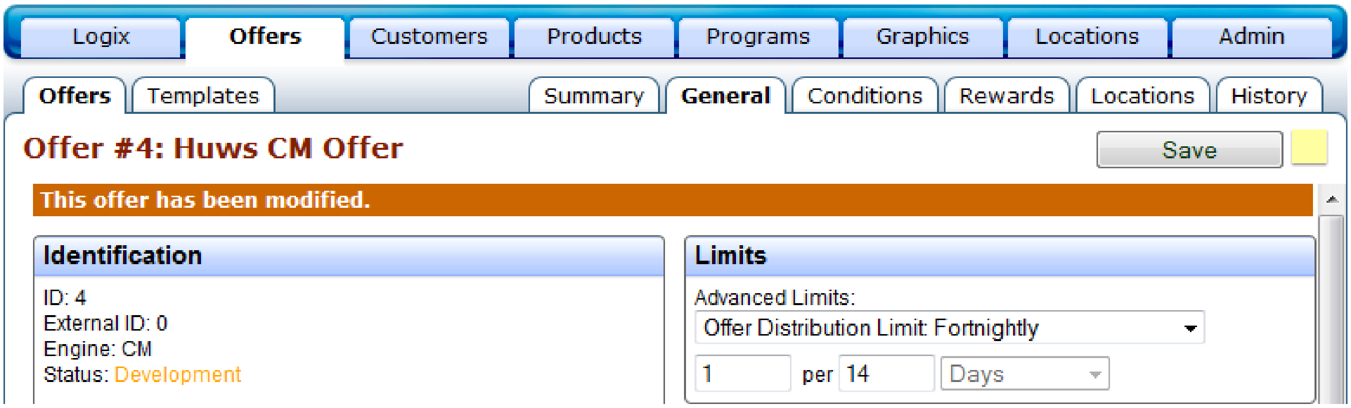
- Offer distribution – Offer distribution at offer level.
- Reward – Discount reward type
- Reward weight – Discount reward type.
- Reward volume – Discount reward type.
- Reward points – Points reward type.
- Reward points – Stored value reward type.
- Reward message – Cashier message reward type.
- Reward message – Printed message reward type.
- Advanced Limit Reward – Advanced Limit reward type.

All defined advanced limits may be used for the new advanced limit condition type and reward type.

12.3 Offer distribution limit

Offer distribution of the “advanced limits” type are available via a dropdown within the offer builder, in the “Limits” area of the *Offer>General* page. If no advanced limits of type “Offer Distribution” have been defined then the dropdown will not be displayed. If the user selects “None” (the default), then the limits (promotion variable) must set manually as normal.

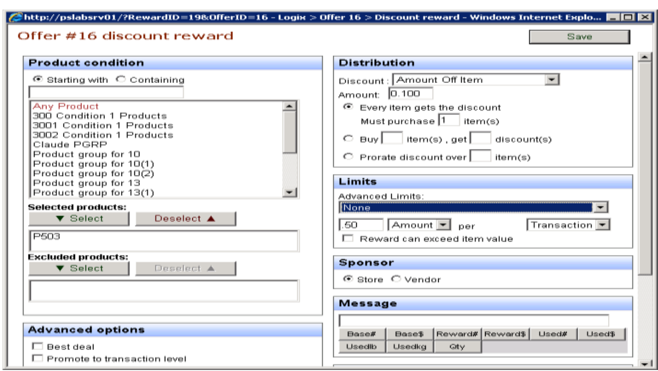
If an advanced limit program is selected then the data for that program is used by this offer. The data is displayed but grayed out and disabled so the user may not modify it.

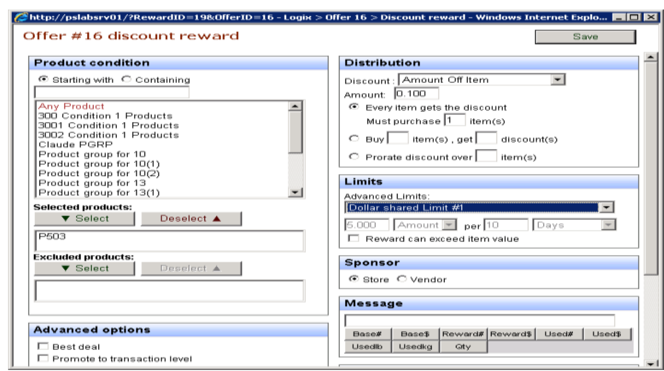


12.4 Reward limits

In addition to being available to offers as a whole, advanced limits can be used for individual rewards. The advanced limit programs displayed in each reward edit page are based on the reward type; if no advanced limits for this reward type are defined then the dropdown is not displayed. If the user selects “None” (the default) then the limits can be set manually as normal.

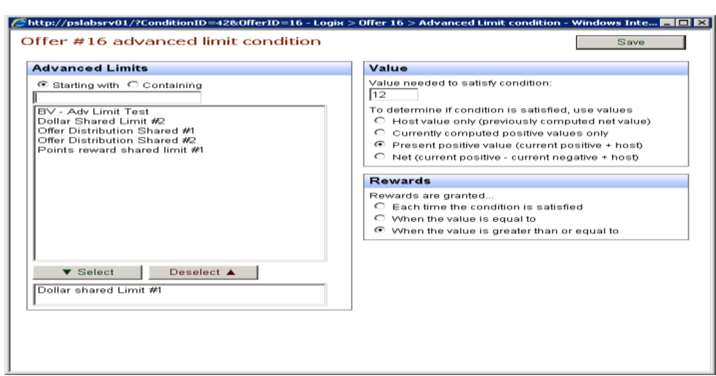
If an advanced limit program is selected then the data for that program is used by this reward. The data is displayed but greyed out and disabled so the user may not modify it.





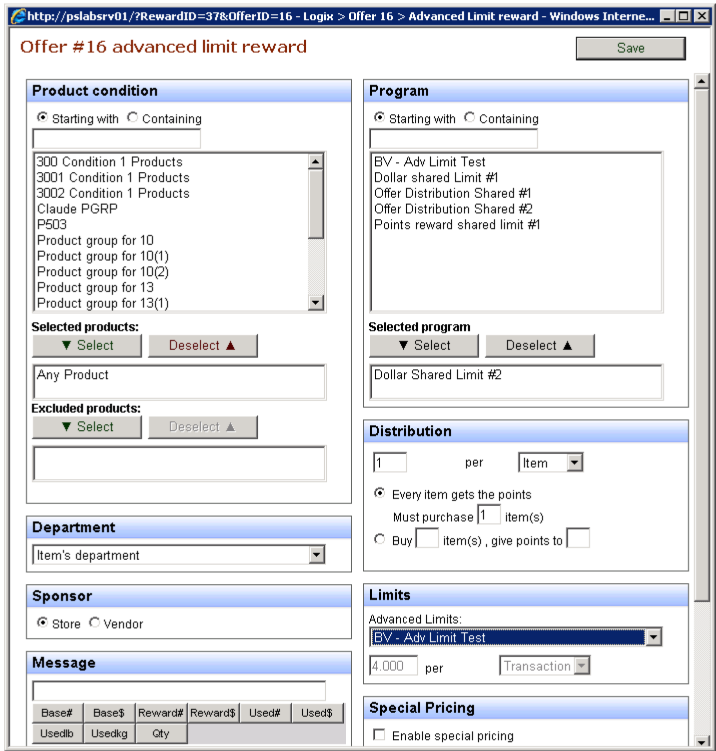
12.5 Advanced limit condition

The condition type “Advanced Limits” allows a condition to test the total value for a customer or household of any advanced limit that has been defined.



12.6 Advanced Limit reward

The reward type "Advanced Limits" allows a reward to modify the total value for a customer or household of any advanced limit that has been defined. Also this new reward type may be limited by any advanced limit of type "Advanced Limit reward".



12.7 Limit periods

In general all limits (normal & advanced) may be specified as an amount per:

- Transaction
- Specified number of days
- Customer

12.7.1 Per transaction

A "per transaction" limit is, as the name implies, computed over the duration of a single POS transaction. In the case of a normal limit no promotional variable is defined; however, advanced limits which are "per transaction" have an associated promotion variable. This allows the limit to span multiple offers even though the database at central (host) is *not* updated. In this case, the Limit Period = 0.

12.7.2 Per specified number of days

In this case there is always an associated promotional variable which is updated at the end of a POS transition for this customer or household. The current total value for this promotional variable is sent to the POS at the beginning of each POS transaction for this customer or household. In order to enforce the per specified number of days rule for a promotional variable of this type, the value of the promotional variable is reset based of the number of days specified and a particular start date. The specified number of days is input along with the limit selection. However, the start date used to reset a limit promotional variable depends on the limit type. The start date is obtained as follows:

- Normal offer distribution limit – the offer start date.
- Normal reward limit – the offer start date.
- Advanced limit – the start date defined for the advanced limit.

The reset of promotional variables used for limits is performed by the PromoVar Agent. In this case, the Limit Period = "specified number of days".

12.7.3 Per customer

In this case there is always an associated promotional variable which is updated at the end of a POS transition for this customer or household. The current total value for this promotional variable is sent to the POS at the beginning of each POS transaction for this customer or household. This is the same behavior as for "per specified number of days" except that total value is never reset. In this case, the Limit Period = -1. Sometimes this type of period is also referred to as "Per Offer".

13 Graphics

Graphics are images used in Logix as deliverables. They can appear on kiosk screens, display units or other visual media that may be present in retail locations. Graphics consist of an uploaded image along with additional data such as display duration and touchpoints.

The *Graphics>Edit* page shows the details of each graphic, including its ID, name, display duration, touchpoints (if any) and a list of screen cells with which it's compatible, as well as a list of the offers currently using it. The "Image" box displays a thumbnail of the image with its filename, file type and dimensions.

Graphics are maintained in Logix on the *Graphics>Edit*, as shown above. On this page, there are seven main sections which define the graphic, a *History* tab available to view past changes to the graphic, and an action button for maintaining the graphic.

The seven main sections are: Identification, Display duration, Associated offers, Validation report, Image, Touchpoints, and screen cells. Identification, Display duration, Image, and Touchpoints are explained in the Edit section below. Associated offers list all offers which use the graphic. Validation report shows all the locations to which this graphic is currently distributed. Screen cells are a list all screen cells for which this graphic is compatible, based on the image's width and height.

When clicking on the history tab, users are linked to the graphic's history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the "Action" button provides a menu of actions available for maintaining the graphic. Actions include: Save, Delete, New, Redeploy, and Upload. Save is used both when creating and editing a graphic.   The following sections define the correct usage of each of these actions.

13.1 Create

Click the New button on the *Graphics>List* page to create a new graphic. You will then be taken to a blank *Edit* page where you can upload an image file and can define the name and other characteristics of the graphic.

13.2 Edit

You can edit the following characteristics of a graphic:

- Name
- Description
- Image – The image you upload appears as a thumbnail in the Image box. Clicking the "See full-sized version" link will display the image in its native size.
- Display duration – This is the length of time (in seconds) that the image will appear on a display unit.
- Touchpoints – These are areas of the graphic that, when presented on a touch screen, can be touched to produce certain results. You can define a touchpoint by entering the X and Y coordinates of the area's upper left corner, then entering the width and height of the area. Alternatively, you can click the "Map" link in the Touchpoints box – this will allow you to obtain the coordinates and dimensions by dragging a box over a preview of the image. Clicking Preview displays existing touchpoints in actual size.

When you're finished editing the graphic, click Save.

13.3 Delete

To delete a graphic, first ensure that it's definitely approved for removal and that its deletion won't interfere with active or pending offers, then click Delete.

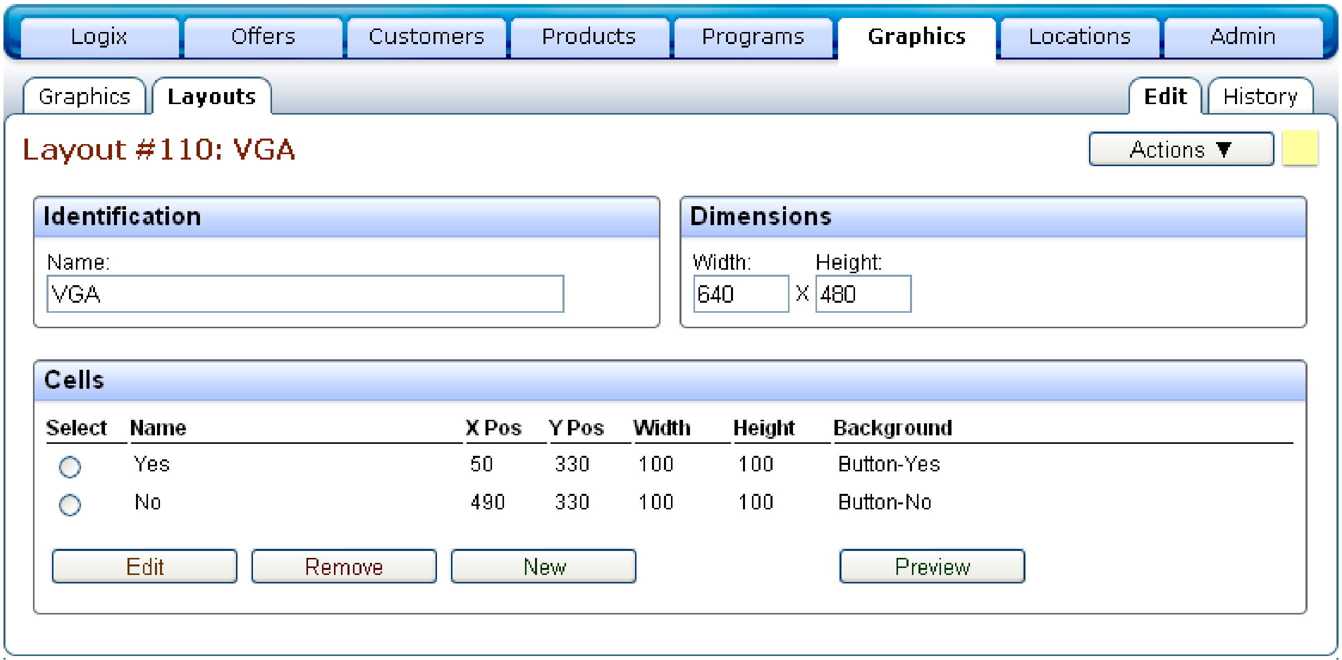
13.4 History

Logix tracks changes made to graphics, who made the changes, and when. Click the *History* tab to see this list.

14 Layouts

A layout is an area of a particular width and height in which graphics can be displayed, and is sometimes subdivided into smaller areas called cells. For instance, a layout could be the entire screen area of a display device (say, 800x600 pixels), or it could be two areas of a 640x480 screen (say, 240x480 and 400x480).

The *Graphics>Layouts>Edit* page shows the name, size and cells for each layout.



Layouts are maintained in Logix on the *Graphics>Layouts>Edit*, as shown above. On this page there are three main sections which define the layout, a history tab available to view past changes to the layout, and an action button for maintaining the layout.

The three main sections are: Identification, Dimensions, and Cells. Each section is explained in the Edit section below.

When clicking on the history tab, users are linked to the layout's history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the "Action" button provides a menu of actions available for maintaining the layout. Actions include: Save, Delete, and New. Save is used both when creating and editing a layout. The following sections define the correct usage of each of these actions.

14.1 Create

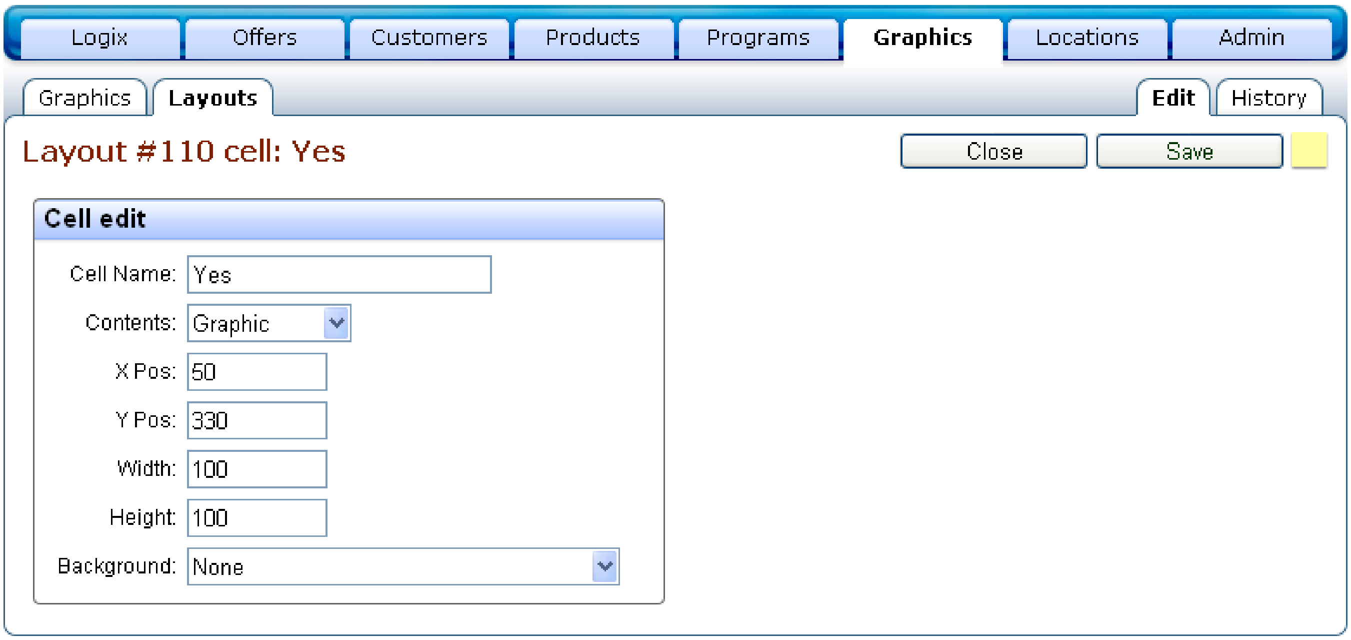
Click the New button on the *Graphics>Layouts* list page to create a new layout. You will then be taken to a blank Edit page where you can define the name and other characteristics of the layout.

14.2 Edit

You can control the following aspects of a layout:

- Name

- Dimensions – The overall width and height of the layout, measured in pixels.
- Cells – These are optional sub-areas within the layout, each of a particular size and occupying a particular position within the layout. Graphics that match the size of a cell can be displayed within that cell. To create a cell, click the "New" button; to delete one, select it and click Delete. To edit a cell, select it and click the Edit button – a page will appear on which you can enter the name, size, position and background of the cell (see figure 7 below). When clicking the preview button, a popup window is shown that displays the cells which overlays the cells background image.



When you're finished editing the layout, click Save.

14.3 Delete

To delete a layout, first ensure that it's definitely approved for removal and that its deletion won't interfere with active or pending offers, then click Delete.

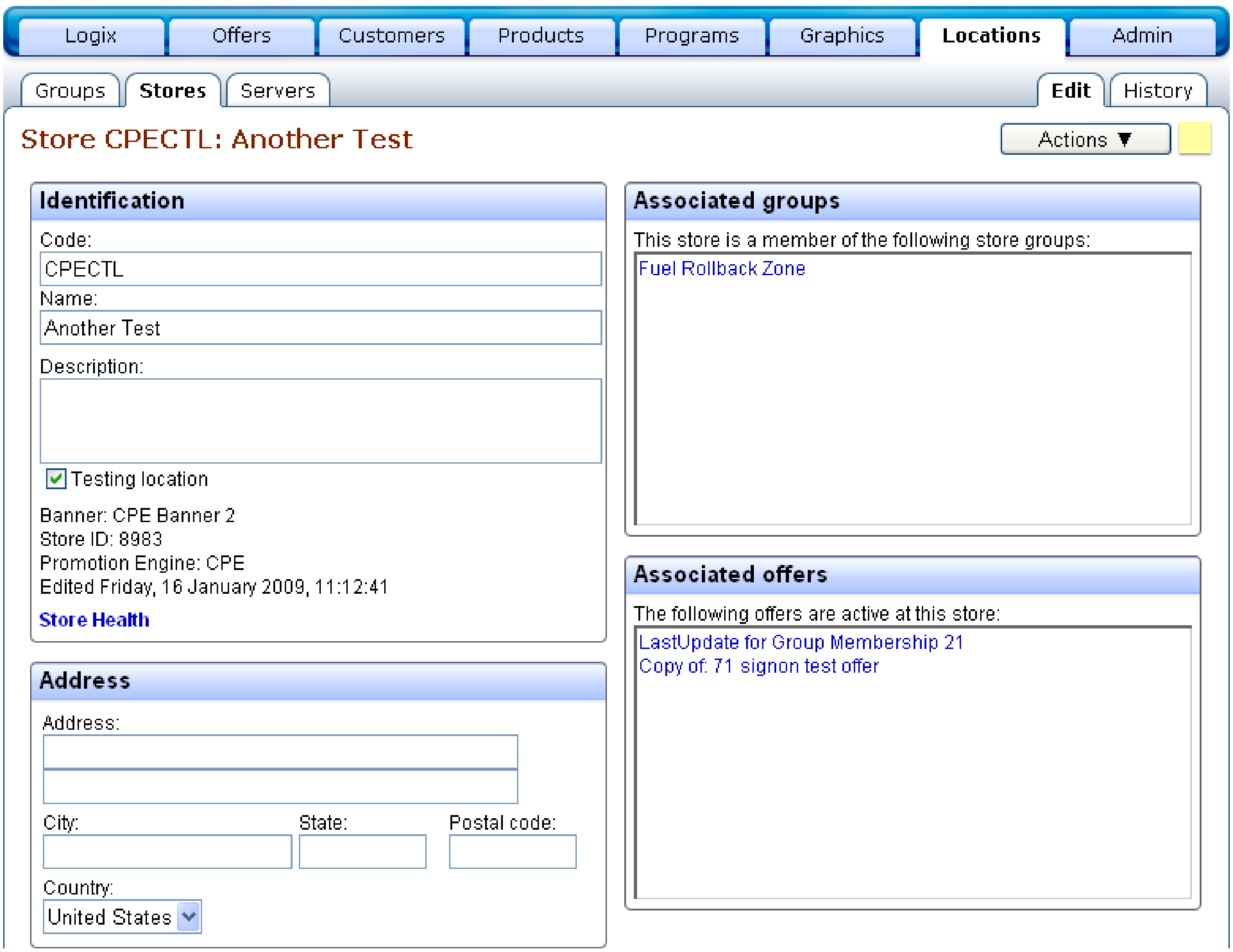
14.4 History

Logix tracks changes made to layouts, who made the changes, and when. Click the *History* tab to see this list.

15 Stores

A store is any facility where offers may be delivered. In addition to retail locations, the term is also used to refer to non-retail facilities such as test labs.

If your installation of Logix is configured to operate at enterprise, you can also create what are known as *servers*. Servers are similar to stores, but rather than being associated to a particular location they instead operate at the enterprise level and may service multiple retail locations. If enabled, the servers sub-tab will appear next to the stores sub-tab.



Stores are maintained in Logix on the *Locations>Stores>Edit*, as shown above. On this page there are six main sections which define the store, a *History* tab available to view past changes to the store, and an action button for maintaining the store.

The six main sections are: Identification, Address, Contact, Localization, Associated groups, and Associated offers. Each section is explained in the Edit section below.

When clicking on the *History* tab, users are linked to the store's history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the "Action" button provides a menu of actions available for maintaining the store. Actions include: Save, Delete, and New. Save is used both when creating and editing a store. The following sections define the correct usage of each of these actions.

15.1 Create

Click the New button on the *Locations>Stores* list page to create a new store. You can then input the store's name, code, location and contact information.

If your organization has more than one banner, you'll also need to select which banner the store is under.

15.2 Edit

Users can edit the following fields for a store:

- Code - the number assigned by the retailer to the store.
- Name - "West Lafayette Store", "Village Mall Store", "Store 75", etc.
- Testing location – Tick this box for test labs and other such facilities. Testing locations are indicated parenthetically in the stores list.
- Contact person – This is usually the store manager.
- Phone.
- Address.
- City.
- State/Province.
- Postal code.
- Country.
- Time Zone – Select the time zone in which the store is located. This is available only for CPE installations that operate at the enterprise.
- System settings – Logix supports the following two store-specific settings: *Canadian pricing*, which determines whether the store uses U.S. or Canadian rules for pricing; and *external offers*, which determines whether offers generated externally (outside of Logix) are supported at the store.
- Currency-allows for selection of the currency used in the store (UE only)
- Language- allows for selection of languages in each store (CPE & UE)
- Unit of Measure- allows for the specification of a UOM subtypes in each location (UE only)

The edit page also lists the offers active at the store and the groups to which the store belongs. When you're finished editing the store, click Save.

15.3 Store health

The edit page for each store (or server) will have a link to the associated *Store Health* page. Clicking this link

15.4 Delete

To delete a layout, first ensure that it's definitely approved for removal and that its deletion won't interfere with active or pending offers, then click Delete.

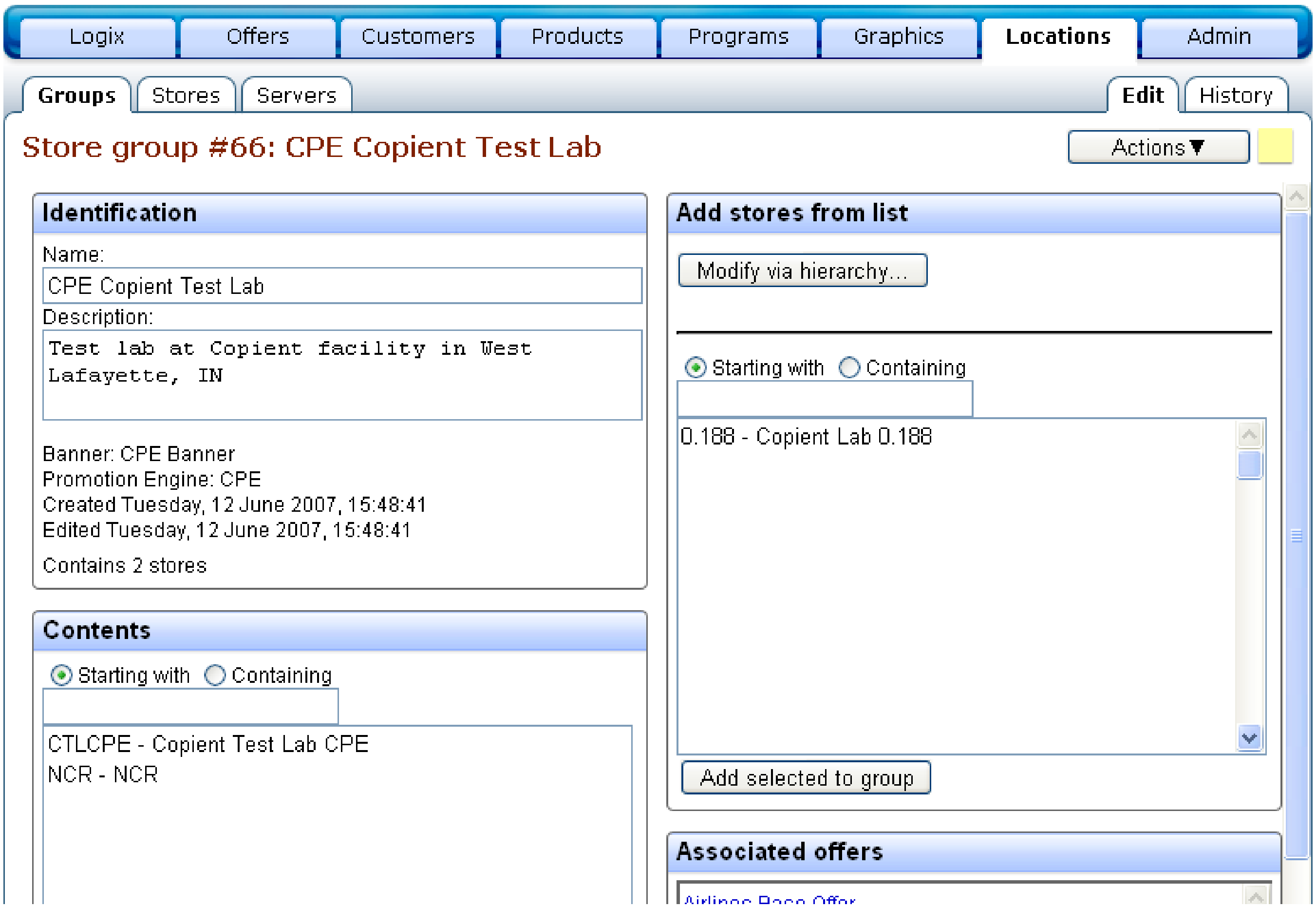
15.5 History

Logix tracks changes made to layouts, who made the changes, and when. Click the *History* tab to see this list.

16 Store groups

Individual stores may be collected into store groups. These groups may overlap, and any given store may be part of multiple groups. Store groups are used to define where offers are active.

The *Locations>Groups>Edit* page shows the details of each group, including its ID, name, contents and a list of the offers that make use of it.



Store groups are maintained in Logix on the *Locations>Groups>Edit*, as shown above. On this page there are four main sections which define the group, a history tab available to view past changes to the group, and an action button for maintaining the store group.

The four main sections are: Identification, Contents, Associated offers, and Add stores from list. Each section is explained in the Edit section below.

When clicking on the *History* tab, users are linked to the store group's history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the "Action" button provides a menu of actions available for maintaining the group. Actions include: Save, Delete, and New. Save is used both when creating and editing a store group. The following sections define the correct usage of each of these actions.

16.1 Create

Click the New button on the *Locations>Groups* list page to create a new store group. You will then be taken to a blank Edit page where you can define the name, description and contents of the group.

If your organization has more than one banner, you'll also need to select which banner the group is under. Stores in any store group must all be under the same banner.

16.2 Edit

You can input the following information for a store group:

- Name - "Indiana Stores", "Region 3 Locations", "Rural Stores", etc.
- Description – an optional field for providing more details about the nature of the group, its purpose, etc.

You can then define the contents of the store group by selecting the ones you want from a list of all stores, or from the store hierarchy. The store hierarchy is described in more detail in the Administration section, but basically is a tree-like arrangement of stores that closely resembles the way folders are files are organized on your computer. You can Click "Modify via hierarchy" to see the hierarchy and add or remove stores.

When you're finished editing the group, click Save.

16.3 Delete

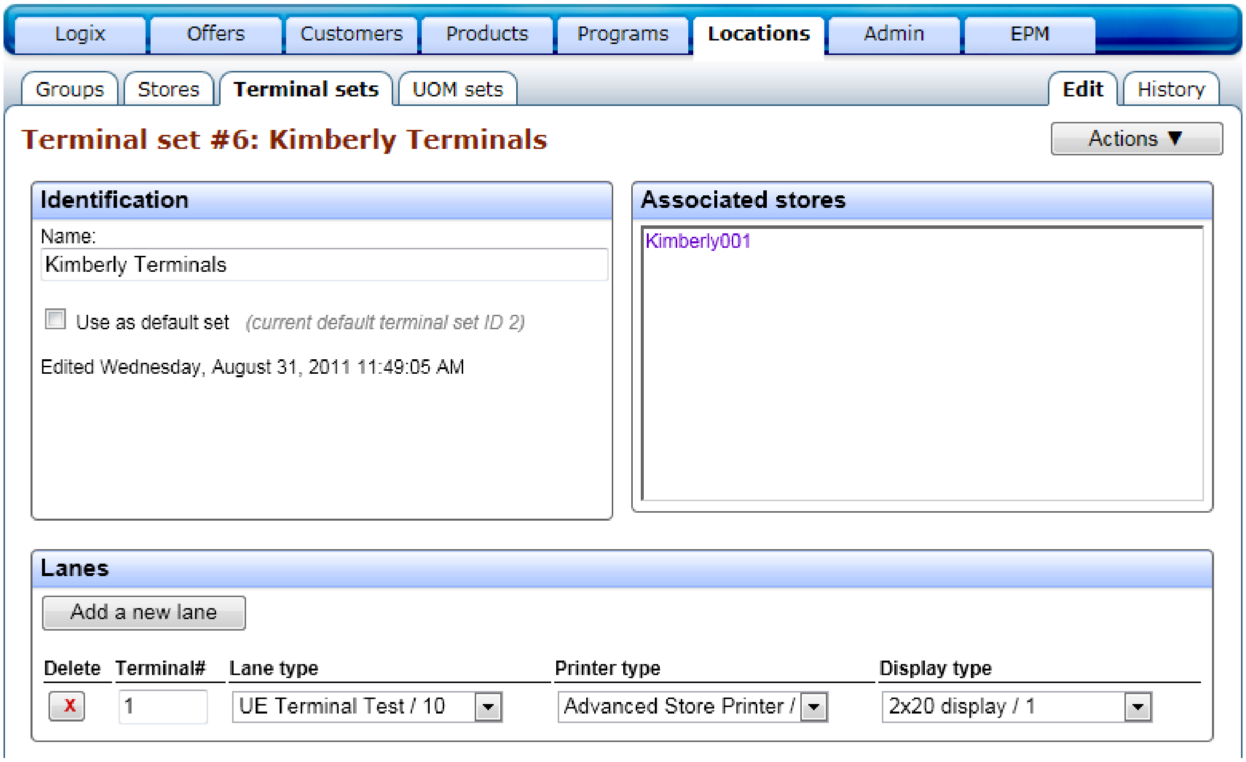
To delete a store group, first ensure that it's definitely approved for removal and that its deletion won't interfere with active or pending offers, then click Delete.

16.4 History

Logix tracks changes made to store groups, who made the changes, and when. Click the *History* tab to see this list.

17 Terminal Sets

Individual stores must configure their in store terminals into terminal sets. Each Terminal in a Terminal Set is configured with a Terminal Type.



Terminal Sets are maintained in Logix on the *Locations>Terminal Sets page*, as shown above. On this page there are three main sections which define the group, a history tab available to view past changes to the group, and an action button for maintaining the store group.

The three main sections are: Identification, Associated Stores, and Lanes. Each section is explained in the Edit section below.

When clicking on the *History* tab, users are linked to the terminal set's history page. History is recorded and presented chronologically on the page. It provides a description of the change as well as which user made those changes.

Lastly, the "Action" button provides a menu of actions available for maintaining the group. Actions include: Save, Delete, and New. Save is used both when creating and editing a terminal set. The following sections define the correct usage of each of these actions.

17.1 Create

Click the New button on the *Locations>Terminal Sets* list page to create a new Terminal Set. You will then be taken to a blank Edit page where you can define the name and lanes of the group.

17.2 Edit

You can input the following information for a store group:

- Name - "Indiana Store B Terminal ", "Region 3 Terminals", etc.

You can Click "Use as Default Set" to use the current Terminal Set values as the default values for all other terminal sets created.

- Lane – Field to configure terminals/lanes that are present in the store.

When you're finished editing the group, click Save.

17.2.1 Lane Type

The Terminal Types listed in the Lane Types drop down is configured in the Admin> Configuration > Terminals page.

17.2.2 Printer Types

The Printer Types listed in the Printer Types drop down is configured through the LogixRT Database. The following tables must be modified:

- LogixRT – "Printer Types" Table: Locate the PrinterTypeID for the Printer you have installed and Set "Installed" = 1. (i.e., PrinterTypeID=10, Installed =1)

- LogixRT – "PromoEnginePrinterTypes" Table: Verify EngineID=9 is set for the PrinterTypeID installed. (i.e., EngineID=9; PrinterTypeID=10)

17.2.3 Display Types

Once the Terminal Types have been configured in the Admin > Configuration > Terminals page, the Display Types drop down will be populated.

17.3 Delete

To delete a terminal set, first ensure that it's definitely approved for removal and that its deletion won't interfere with active or pending offers, then click Delete.

17.4 History

Logix tracks changes made to terminal sets, who made the changes, and when. Click the *History* tab to see this list.

Part III: Offers

18 Offers

Creating and manipulating offers is the paramount function of Logix. Each offer pulls together numerous elements into a single, coherent whole that can easily be created and managed through online "offer builders". An offer builder is the set of pages and tools in Logix that allows an offer to be created for a particular promotion engine. Promotion engines in turn are the rules by which an offer is built, stored, communicated and issued. Offers created for two different promotion engines may be stored in different database tables, have different sets of allowable condition and rewards, and behave differently in the store. Logix supports several promotion engines, the most significant of which are UE,CM, and CPE.

CM (Consumer Marketing) is a promotion engine created by NCR and used to deliver offers to ACS points of sale or other similar NCR environments. **CPE** (Copient Promotion Engine) is an engine developed by NCR's Advanced Marketing Solution and designed to operate principally in non-NCR environments. **UE** (Universal Engine) is an engine developed by NCR's Advanced Marketing Solution and designed to operate in both NCR and non-NCR environments.

Based on and closely resembling the main CPE and UE promotional engines are several additional ones:

- CAM (Canadian Air Miles), designed to manage offers that award airmiles to customers.
- Website, intended to target offers to customer-facing websites.
- Instant Win, which grants customers the possibility of winning special rewards out of an enterprise-wide pool.
- US Airmiles.

Note that your installation of Logix will likely have either UE, CM or CPE promotion engines installed, but not all three. Details of these engines and their associated offers builders are not included in the *Logix User Manual*, but instead are provided in separate accompanying documents: *Logix User Manual: UE Offers*, *Logix User Manual: CM Offers* and *Logix User Manual: CPE Offers*. Please refer to the one that matches your company's installation.

18.1 List

The *Offers>List* pages show every existing offer in Logix, plus its ID, engine, name, the dates on which it begins and ends, and its status. To export this list of offers to a spreadsheet, click the "Export List" button; the resulting XLS file will contain a list of offers with the following data: offer ID, external offer ID, engine, name, description, category, dates and status.

18.1.1 Tabs

Depending on how your installation of Logix is configured, you may see multiple offer list tabs, including some or all of the following:

- Folders: This tab lists offers according to their arrangement in “folders”, editable, user-made containers used to group similar offers together. Folders are detailed later in this chapter.
- Templates: Items listed here are offer *templates*, semi-completed offers sometimes used as an aid in offer creation. Templates are detailed in the following chapter.
- External: This page shows only offers that were generated outside of Logix and gives you the option of filtering the list by external offer source. Offers shown here are not included in the main offer list.
- CAM: This page lists only offers associated with the Canadian Air Mile (CAM) engine, and only appears if CAM is installed. These offers are not included in the main offer list.
- Banners: This page lists offers according to banner, and will only be present if banners are enabled, per system option #66). Offers on this page can be sorted by banner, or you can select one particular banner from the filter dropdown.

18.1.2 Searching

To find an offer, enter a search term in the box near the upper-left corner of the list, then click “Search”. If a single offer’s name matches the term, Logix will redirect you to the summary page for that offer; otherwise if there are multiple matches it will list all matching offers that are appropriate selected filter (described in the following subsection).

To search for offers based on criteria other than just name, click the ellipsis button (…) next to the search input to open the *Offers>Advanced Search* popup. This page will allow you to select from many different offer characteristics including name, description, IDs, dates, etc. Select the criteria you want to search by, enter the appropriate keywords or values, then click “Search”. You will be taken back to the *Offers>List* page with your search criteria applied; the criteria will also be summarized in the dark bar near the top of the page. To modify your selections and search again, click the “Edit” link in this bar; to clear the results, click “Clear”.

18.1.3 Filtering

The dropdown filter near the upper-right corner of the list allows the page’s results to be winnowed accordingly to various criteria:

- Show all – All offers regardless of status are shown.
- Show all but expired – All offers are shown except for those whose end dates have passed.
- Show only active – Only offers in an active state are shown.

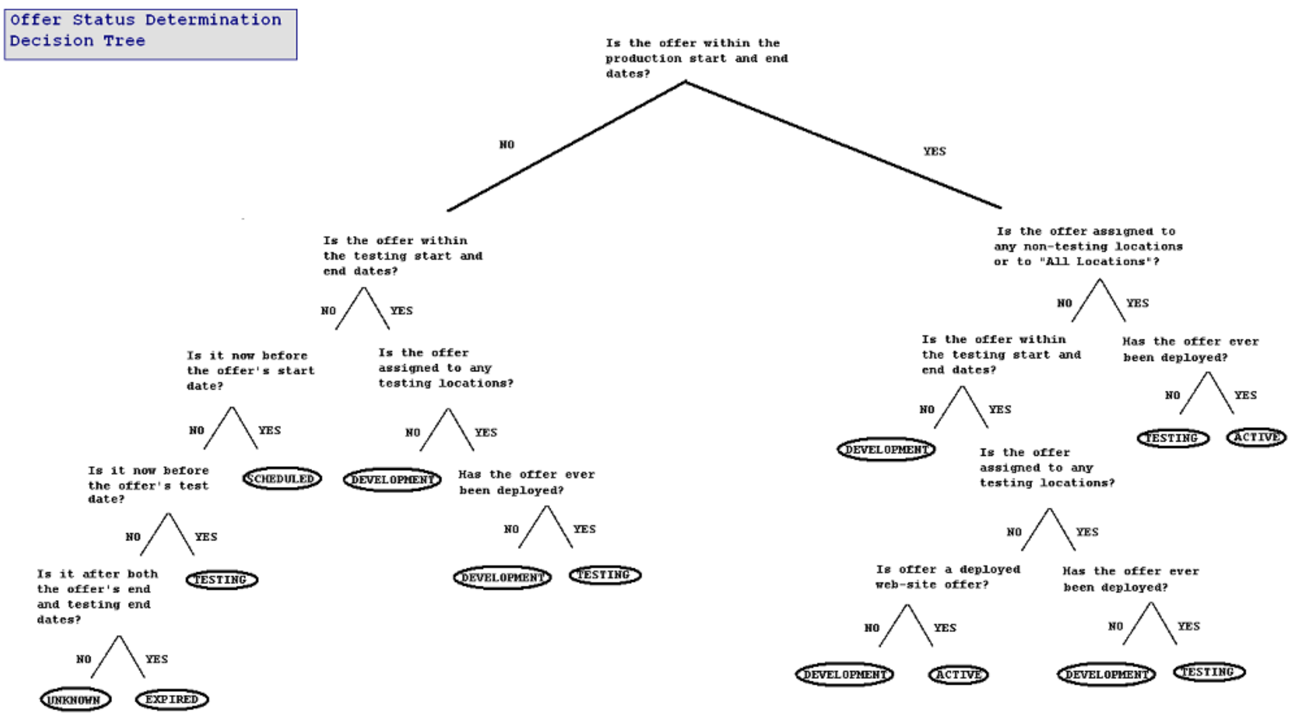
- Show discrepancies – All offers are shown that have been deployed and then subsequently modified.

18.1.4 Status

The status column on the *Offer>List* pages describe "where an offer is" in the development process. Possible status types are:

- Active – the offer is "live" and in production.
- Development – the current date lies between the start and end dates of the offer, but the offer has not been deployed or is not active at any production locations.
- Testing – the current date lies between the testing start and testing end dates of the offer (but not the production start and end dates), or the offer is active only in test locations.
- Scheduled - the start dates of both the testing and production periods are in the future.
- Expired – the end date of the offer has passed.

The following decision tree provides a step-by-step means of determining the status of any offer.



18.2 Folders

Just like folders in Windows Explorer, offer folders in Logix (available under the *Folders* subtab) are containers that you can use to group similar items together. For instance, you might create an offer folder to contain all your July offers, or a folder for all offers giving discounts on paper products. Unlike Windows Explorer, an offer can be in any number of different folders simultaneously, or can be in none.

The folders view is divided into two panes: a left pane which shows the hierarchy of folders and sub-folders, and a right pane which shows the offers (if any) contained within whatever folder is highlighted.

18.2.1 Folder management

To create a new folder, click the folder icon overlaid with a green plus sign and enter a name for the folder. It will be created beneath whatever folder you currently have selected. To create a new folder at the very highest level of the tree, click the icon while no folder is selected.

To delete a folder, click the folder icon overlaid with a red X, and then confirm that you want to delete it. Any sub-folders beneath it will be removed.

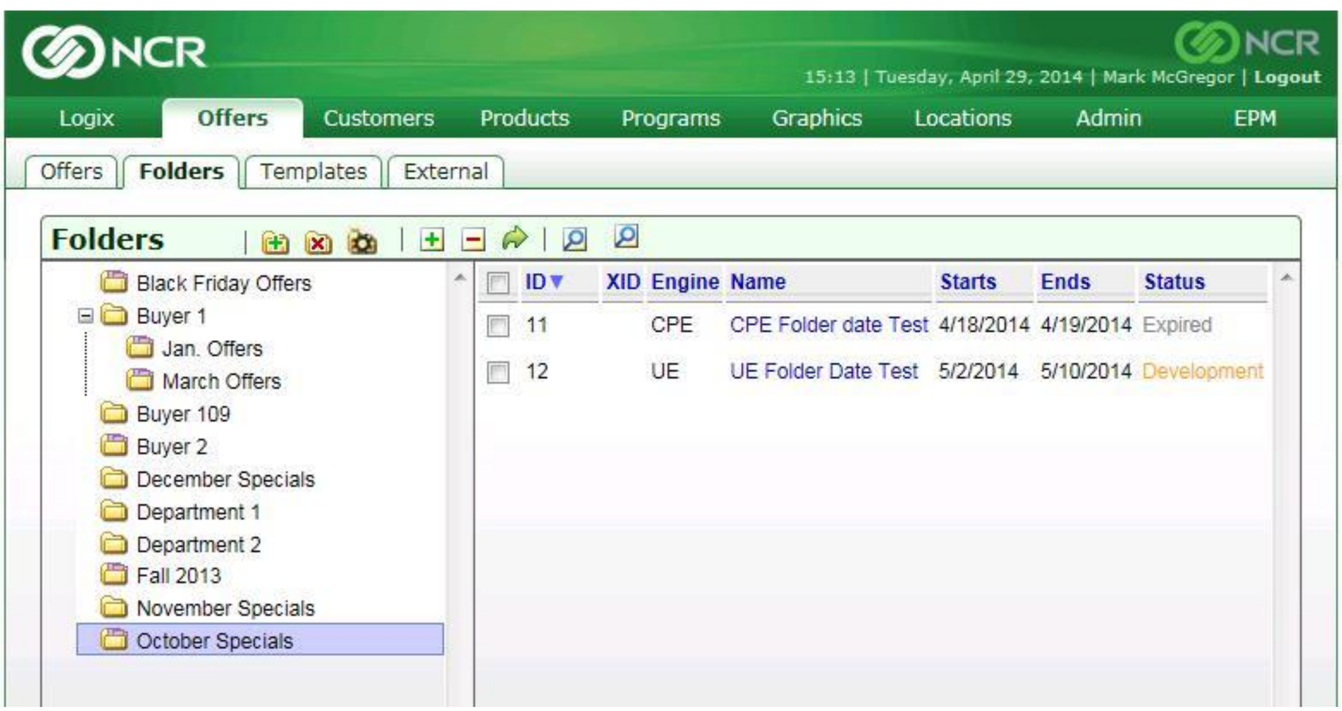
To rename an existing folder, click the one you want to change, then click the folder icon overlaid with a capital A and enter a new name.

18.2.2 Item management

To add an offer to a folder, first click the folder you want to add it to, then click the plus (+) icon. In the popup that appears, enter a search term, then review the list of offers that gets returned. For each offer you want to add to the folder, tick its checkbox, then click "Add". To remove an item from a folder, tick its checkbox and click the minus (-) icon.

To find all occurrences of an offer in all folders, click the magnifying glass icon and enter a search term, then using the dropdown selector choose whether you're looking for folders or offers. When you click "Search", Logix will return a list of hits. For folders, the list of hits will show the folder name and the name of its parent; both are links that when clicked will return you to the main folder view with the selected folder highlighted. For items, the list of hits will show the offer name and the name of its containing folder; again, both are links that will open the main folder view to the selected location.

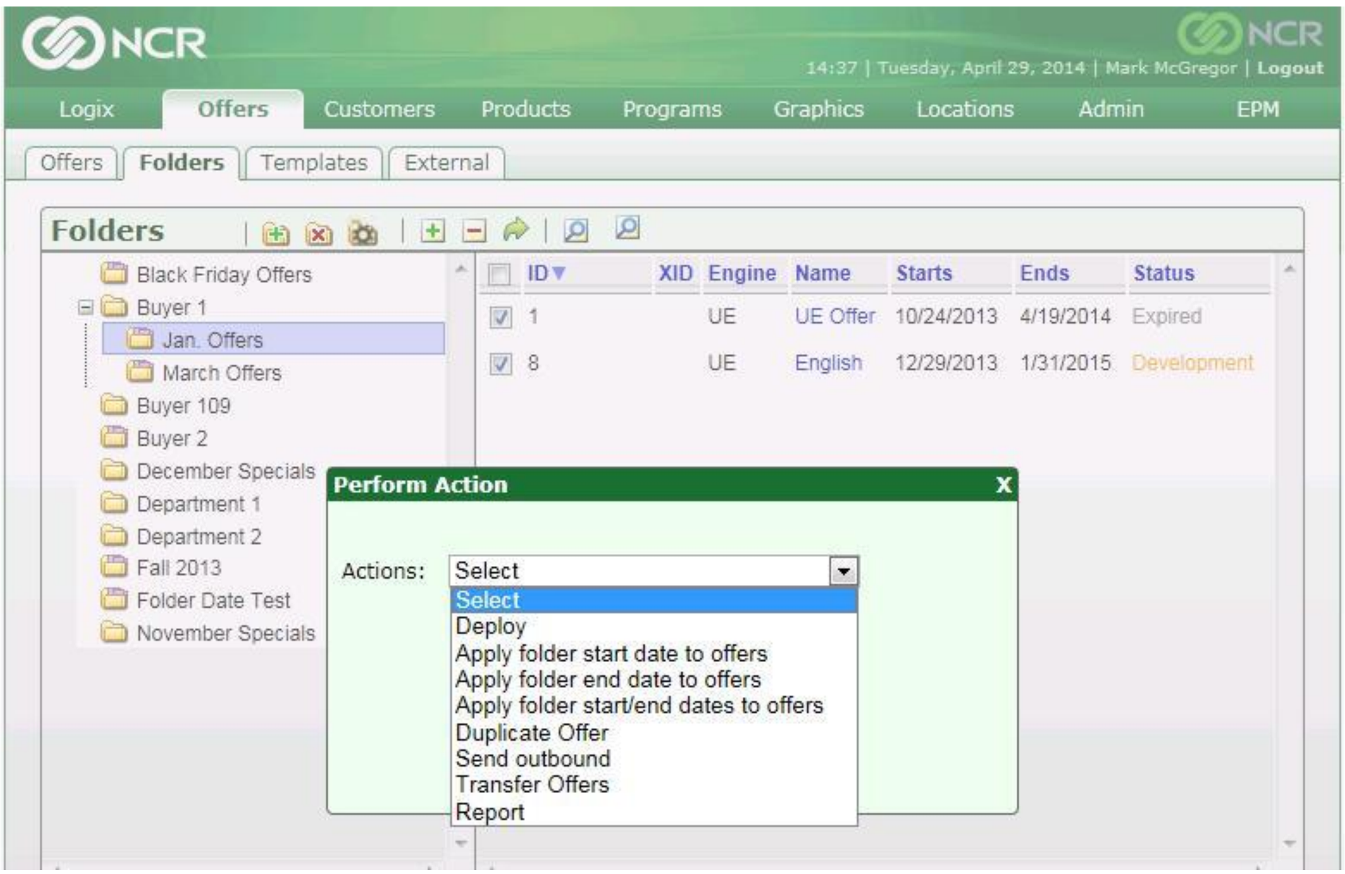
Folder settings can be maintained by selecting the folder settings button on the tool bar (the folder icon with a gear). Here you can change the folder name, as well as start and end dates for the folder. Only users who have the 'edit folders' permission will be able to change folder settings.



18.2.3 Mass changes to folder contents

Actions can be applied to offers within a folder en masse by selecting a folder, selecting multiple items within the folder, and clicking on the green 'action' (arrow) button in the folder toolbar. The list of possible actions includes: deployment of offers, applying start/end dates to offers, duplication of offers, sending offers outbound to externally integrated systems (via the CRM connector), transfer of offers to other folders, and generation of reports. The execution of the various actions may be restricted by applicable permissions such as access to offers or buyer role association.

Any deployment errors that might occur during the mass deployment of offers will be indicated by the offer and containing folders being displayed in red. The error message may be examined in a tool-tip by moussing over the offer name, or by navigating to the offer's summary page and examining the contents of the validation message in the 'deployment' box.



18.2.4 Mass Update

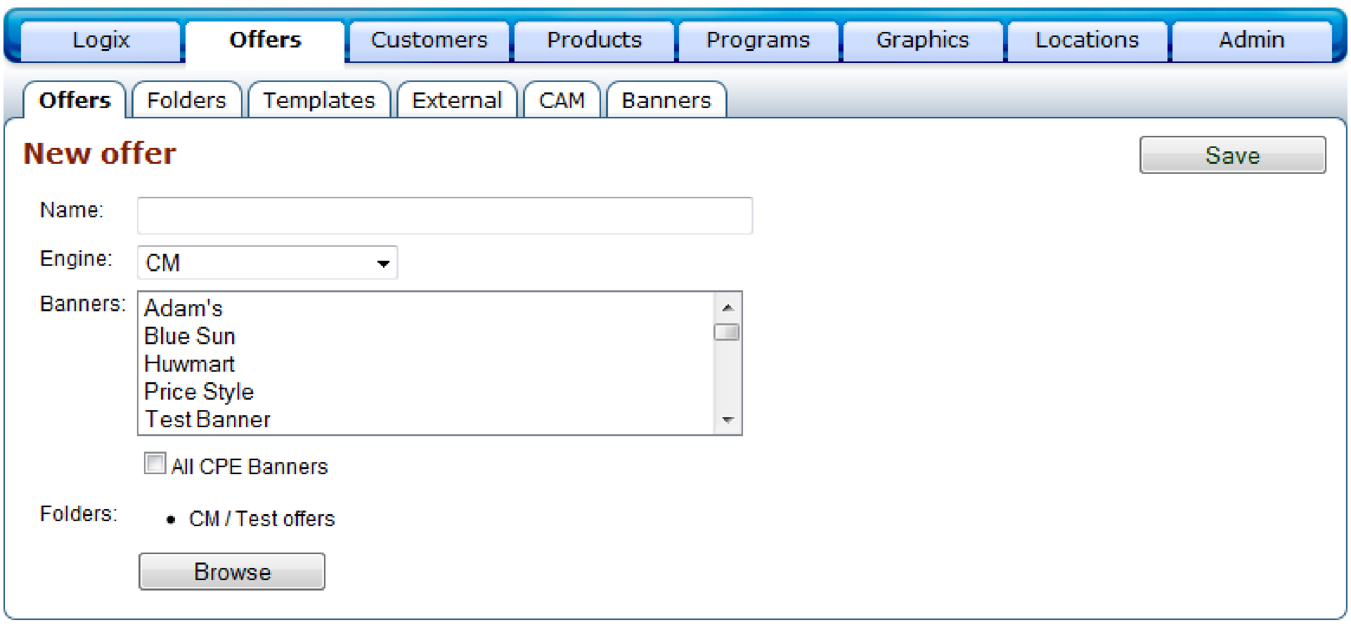
Users can perform mass update action on the offers in a particular folder. Mass update means the user can change the start/end dates of the offers in a folder by changing the folder dates. There are some restrictions which should be taken care .e.g. the start date or end date of the offer should lies in the range of the new folder dates otherwise it gives the error that offer is not in the given date range. To override these restrictions a system option 226 is created which is enabled by default. To do so, select a folder in the left pane and click on the gear type icon next to the delete icon. The dates selected for the folders will be passed to the offers. During the mass update action for active offers the old folder start date should not be different than the new folder start date. Expired offers are not treated in mass update action and error is logged in the MassActionLog file.

18.2.5 Default folder

Users of the UE promotion engine will be able to select one folder as the default folder into which all offers will be placed when an offer is created (unless a different folder is selected explicitly, or the user is a buyer with their own default folder). Only one folder can be designated as the default. The selection of the default folder can be made when a folder is created or by editing a folder's settings. The default folder can be changed by editing the default folder's settings and deselecting the default folder option, navigating to a different folder, editing its settings and enabling the default folder option.

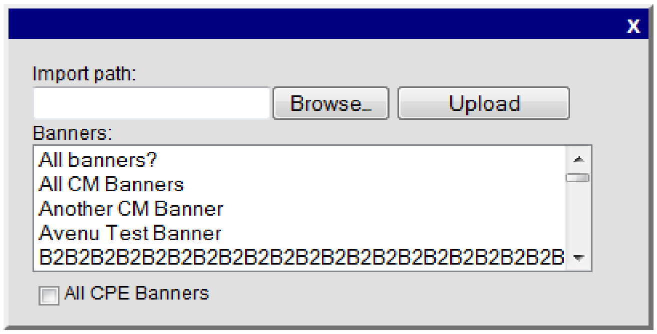
18.3 Create

Logix offers users several ways to create new offers. To create a new offer from scratch, click the "New" button on the *Offers>List* page. You will be prompted to select a name and engine for the offer, and will then be taken to a blank *General* page where you can begin defining the new offer's characteristics.



You can also create a new offer based on a template that includes certain preset data. If you'll be creating many offers with a large number of identical characteristics, making and using templates can save time and ensure consistency. Please see the Templates chapter for details.

Finally, users can import offers into Logix from files, which for instance you might have exported from some other installation of Logix. If you wish to load such an offer file into Logix, first click the Browse button on the *List* page to open the import dialog (screenshot below), then pick the XML file to import from your computer and click Import.


x
Import path:
Browse...
Upload
Banners:
All banners?
All CM Banners
Another CM Banner
Avenu Test Banner
B2B2B2B2B2B2B2B2B2B2B2B2B2B2B2B2B2B2B2B
All CPE Banners

19 Offer templates

Logix users may sometimes need to create several offers that are very similar to each other, with only a handful of differences between them. To make creating these offers easier, Logix lets you make templates – semi-completed offers that already have certain information pre-entered.

Unless otherwise noted, the inputs and fields in a template are the same as those in a regular offer. Template pages are identified in the Logix UI by a faint hexagonal background pattern.

19.1 Create

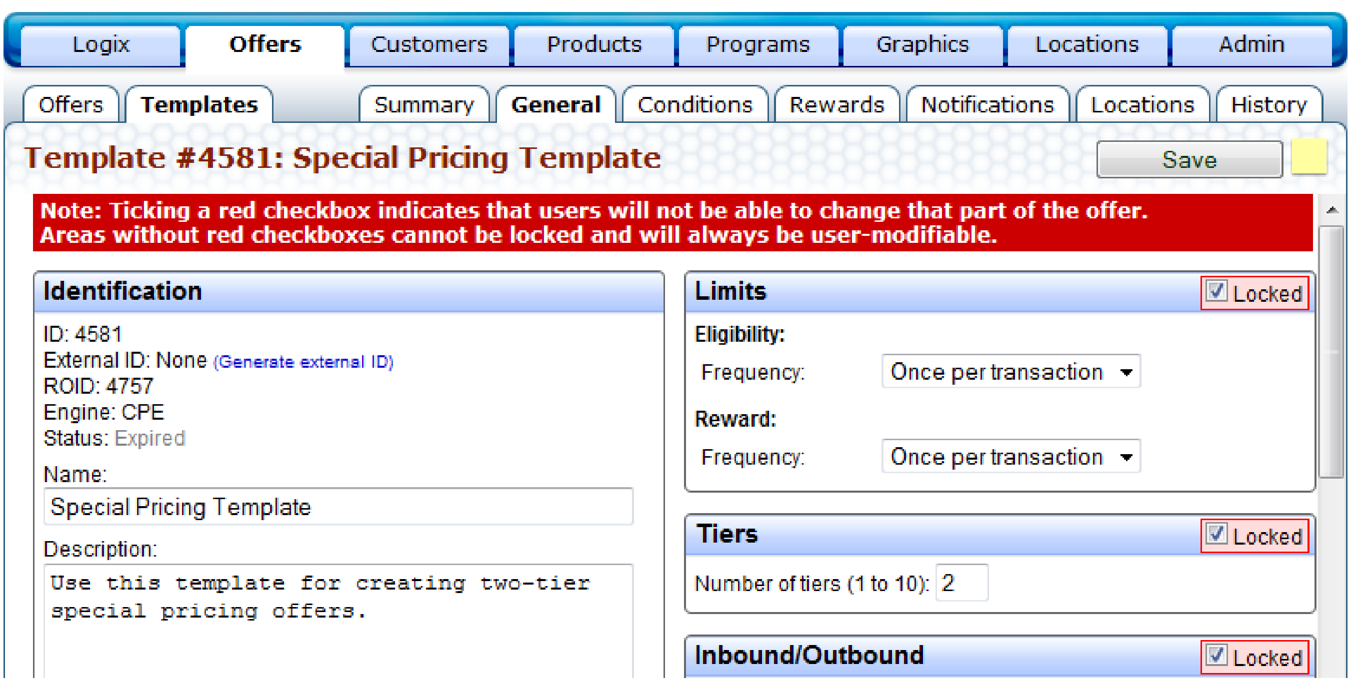
To create an offer template, configure a new offer with the information that the template should include and then click "Save as template" on the *Summary* page. The offer will then be converted into a template that you can further edit, as described below. Existing templates can also be copied, creating new templates from existing ones. The newly-created template is identical to the original, except that the phrase "Copy of" is prepended to the name. Use the “Copy” action from the *Summary* page to copy a template.

19.2 Locking

Templates let you control how users can edit the offers derived from it. You can allow users the freedom to edit certain areas while preventing them from changing others. The red checkboxes on the *General*, *Conditions* and *Rewards* pages mark the areas that you can lock or unlock.

For instance, if you want offers based on your template to always have a priority of 75, you'd enter that value, then check the "Priority" lock box. If you want users to add their own limits, you'd leave the "Limits" lock box unchecked.

A few areas, like "Identification" on the *General* page, cannot be locked. (This prevents users from being forced to create a new offer that has the same name as its template, which might cause confusion.)



19.3 Export

A template's data can be exported from Logix into a file on your local machine. To do this, click the Export button on the *Summary* page, and you'll be prompted to specify where the file should be saved. Use the Export to engine action on the *Summary* page to export offer data to a particular engine for it to process into a PMT file.

19.4 Delete

To delete an offer template, first ensure it's no longer needed, then click Delete. A dialogue box will appear asking you to verify that you want to delete the template; click Yes if you're certain.

19.5 History

Logix maintains a history of all the edits and adjustments that have been made to the template, who made them and when. To see this information, click the *History* tab.

Part IV: Inquiry

20 Customer inquiry

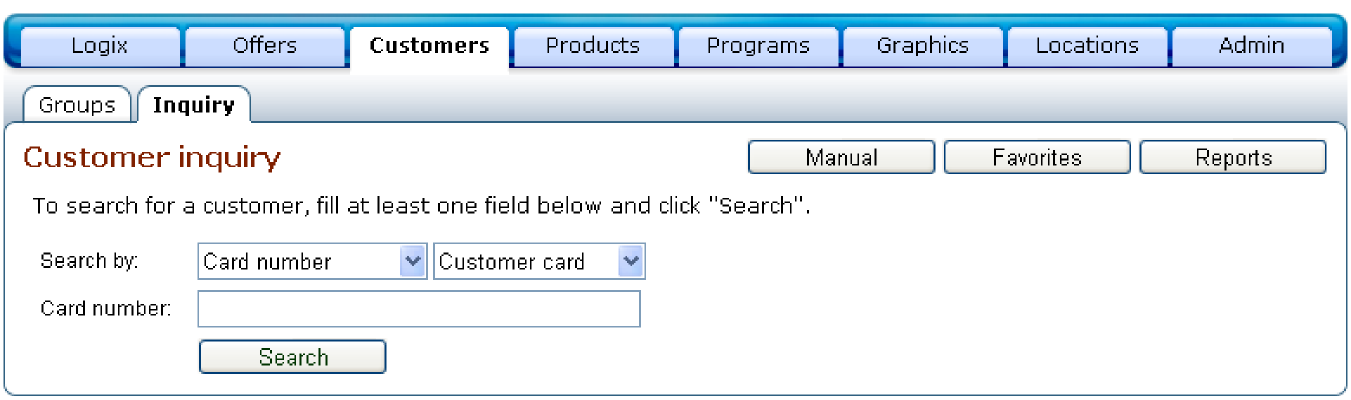
The customer inquiry section of Logix is one of the system's most important and powerful features. Via the *Customers>Inquiry* page users can view and edit detailed information about any given customer, add new customers, make adjustments to their balances, change the offers they're eligible to receive, and run reports on user activity. To perform a customer inquiry, enter a customer ID or other identifier into the search box, select the appropriate "search by" area, and click Search.

If multiple results are found for the search, these results will be displayed below the search box. If there are more than 20 results returned, then a navigation link will be present that will allow the user to view additional results (20 per page).

If Logix can't find a match to the customer you're searching for, and if you have permission to create new customers, the page will present you with the option to add the customer.

A few significant features of customer records are particularly important to note:

- Households – Logix allows for a customer record to take a couple of different forms: a record can stand alone, unconnected to any other customers, in which case it's simply called a "customer"; or the record can represent a collection of related customers, in which case it's called a "household". With this exception, customers and households are otherwise treated much the same in customer inquiry. Where there are differences in behavior between the two, they're noted in the text.
- Cards – Logix originally considered a customer and his or her loyalty card to be one and the same, and used the card number as a means of identifying the customer. Recently, however, Logix was enhanced to draw a distinction between customers and their cards. Depending on how your installation is configured, any given customer can now hold a single loyalty card, or may be able to hold multiple cards, or may even have no card at all.
- Customer Card Types – When multiple card customer types are available (e.g. Customer Card, Alternate ID), a dropdown box will be available for selection of the correct card type to use when searching.

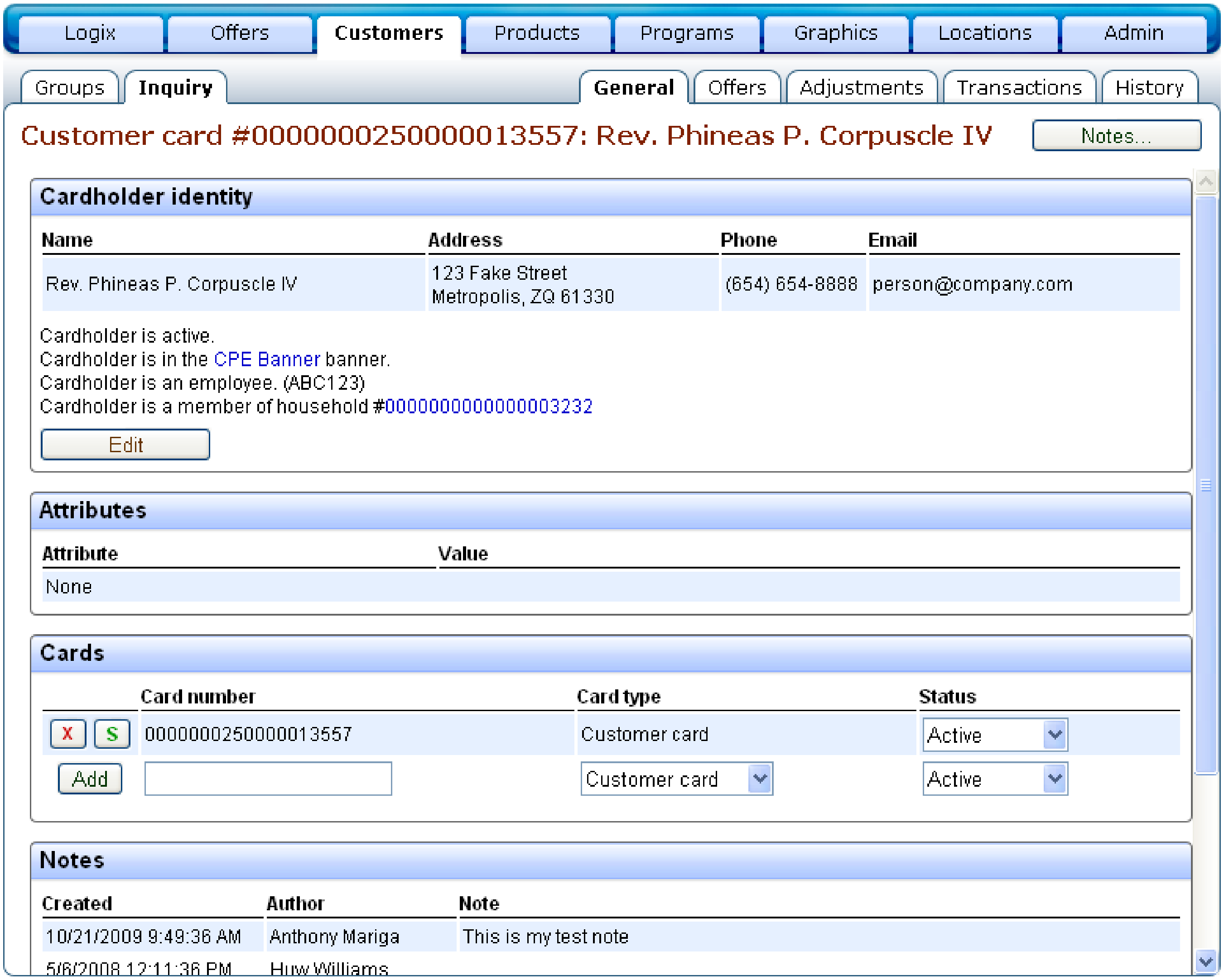


Three buttons on the search page link to an administrator page for their respective area within the Customer Inquiry application. “Manual” is only shown if the CAM promotion engine is installed and links to the CAM

(Canadian Air Mile) manual adjustment page. “Favorites” links to an administrator page that allows the user to mark offers as a favorite offer for one or more roles or users. Lastly, when the “Reports” button is clicked it links the user to the customer inquiry reports criteria generator page. These pages are covered in more depth later in this section of the manual (sections 7 through 9).

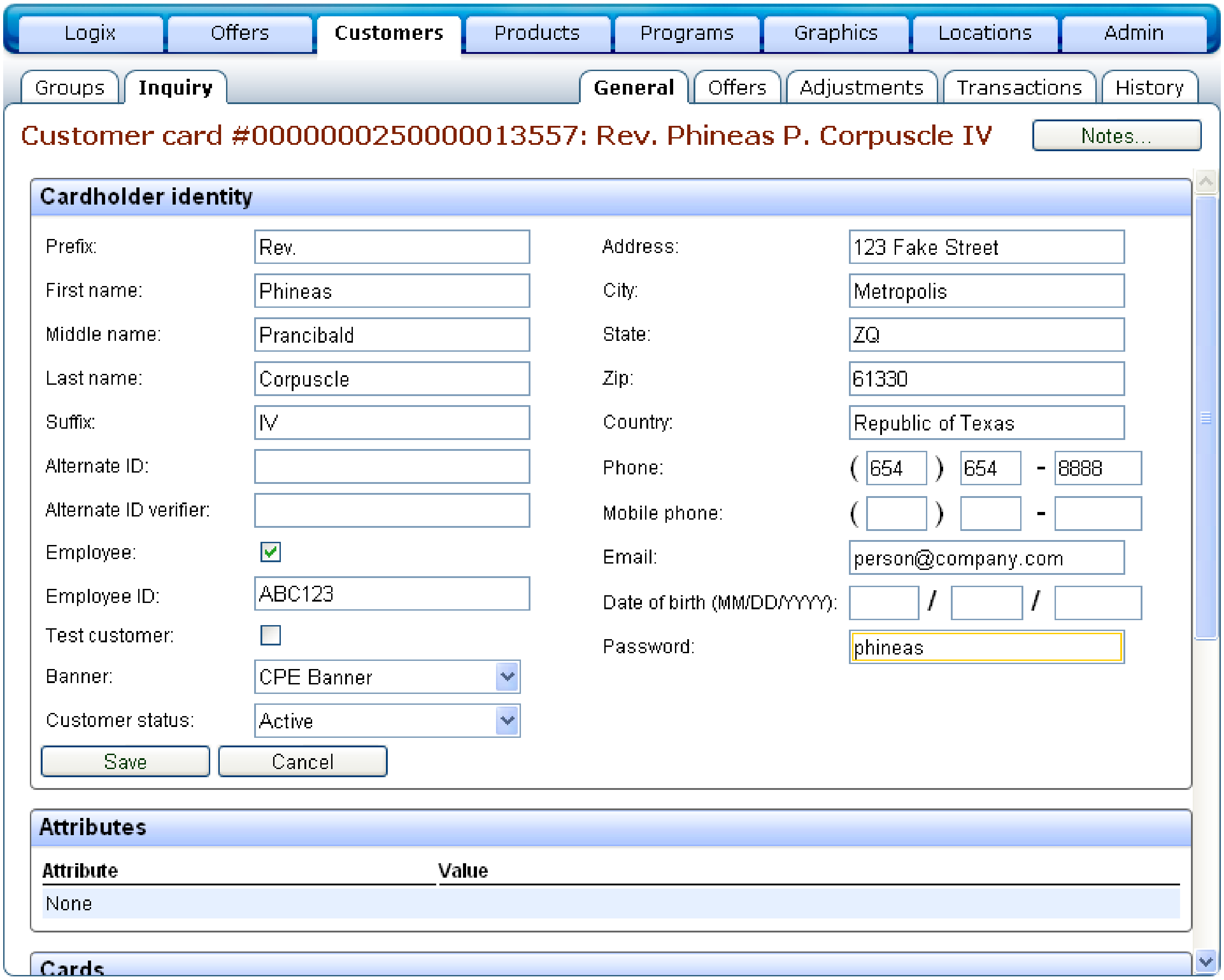
20.1 General

This sub-page provides general information about the customer, including ID number, name and contact information. It also displays the attributes associated with the customer, provides a means for card and household management, and displays any notes attached to this customer’s account. The screenshot below shows a sample customer account when the *Customer>General* page initially loads.



20.1.1 Cardholder identity

Click the Edit button to adjust any of these data; the page will then re-display in edit mode as shown below. Once changes are made, the user may click either “Save” to save the changes, or “Cancel” to discard them.



The identity section displays the following information about the customer or household:

- Name – Can include first, middle and last names, plus a prefix (e.g., Mr. or Mrs.) and a suffix (e.g., Senior, III).
- Employee – The customer is a company employee.
- Test customer – The customer is used for testing purposes.
- Banner – When banners are enabled at an installation, the banner to which customer is assigned.
- Customer status – Indicates whether the customer is considered active or inactive.
- Address – Consists of a street address, city, state, postal code and country.
- Phone – Can include both regular and cellular numbers.
- Email.
- Date of birth – A date in the form of Month/Day/Year.
- Password.
- Airmile member ID – This field is only displayed and editable if the customer already has an Airmile member ID assigned; otherwise this field is not accessible. Either the Customer Update Agent or the Customer Update web service is used for initial assignment of Airmile member IDs.

20.1.2 Attributes

An attribute is a characteristic that allows for grouping of like-customers who share that attribute. Some examples of attributes are an Air miles program, deciles ranking, or a customer communication preference. Attributes are maintained in the *Admin>Configuration>Attributes* page of Logix.

Attributes are assigned to customers through use of either the Customer Update Agent or the Customer Update web service. Once assigned to a customer, all that customer's attributes are displayed within the Attributes section of the customer general page (see below).

Attributes

Attribute	Value
Instant Win Engine	IW1
US Airmiles Engine	USA1

20.1.3 Base points

A points program may be specified as being the "base" program for the installation; the ID of this program is defined in the installation's system options. If the customer has a balance in this program, it will be shown in the points box on the *Customer>General* page.

20.1.4 Cards

A customer may be associated with a loyalty card, which is identified by a particular card number. (Depending on your system configuration, he or she may be associated with more than one.) This section, as shown in the screenshot below, shows the card(s) held by the customer and allows card status to be edited. Valid card status types include:

- Expired
- Lost/stolen
- Default card
- Active
- Inactive
- Canceled

To make changes to a customer's card status, select the appropriate status from the dropdown on the card number row and then click the "S" button to save those changes. To remove a card from a customer, click the red "X" button next to the appropriate card number. The ability to remove a card from a customer can be turned on/off based on an individual users' permission located in *Admin > Roles*. To add a card to a customer, enter the card number into the box provided, ensure the appropriate card type and card status is selected, and then click "Add".

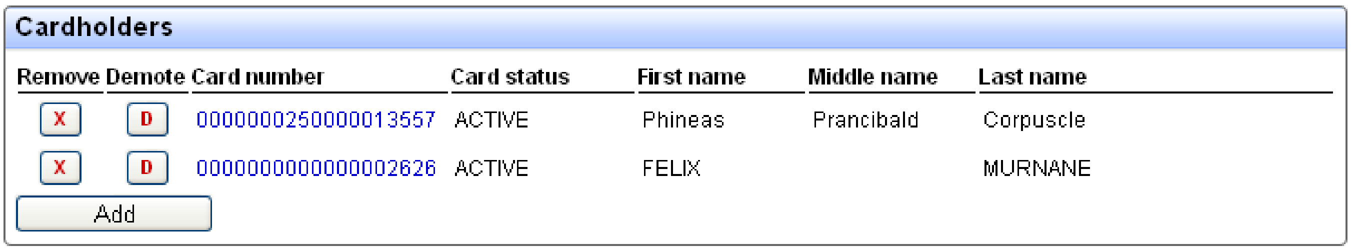
Cards

	Card number	Card type	Status
X S	0000000046900696990	Customer card	Active
Add		Customer card	Active

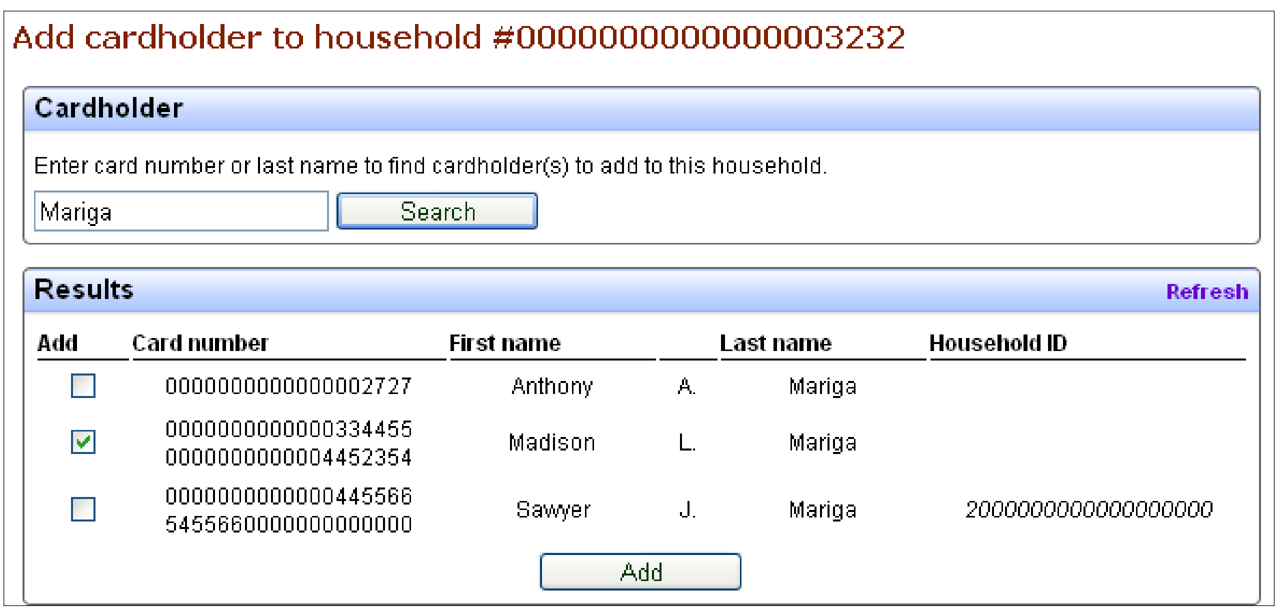
20.1.5 Cardholders

If the record you're examining is for a household, you'll see a cardholders section that lists the customers who are members of the household. Each member's name and any cards assigned to that customer are shown, along with controls that allow you to remove or demote the customer.

- Remove – Clicking the "Remove" button cleanly disassociates that customer from the household and performs transfers of continuity balances, copies offer group membership eligibility, transfers reward accumulation, and copies reward distribution based on the settings in the Customer Update Agent (see *Admin>Agents>Customer Update Agent* in Logix for value of settings.)
- Demote – Clicking "Demote" disassociates the customer from the household, and performs transfers of continuity balances according to the "Household continuity demotion policy" system setting. (See the System Settings chapter for details.)



If you wish to add a cardholder to the household, click the "Add" button. A popup window is launched (screenshot below) that allows searching and selection of cardholders to move into the selected household. Tick the Add checkbox on the customer(s) you wish to add to the household. Once your selection is made, click the "Add" button to include the selected customer(s) in the household.



Note that adding a customer to or removing a customer from a household may cause balances to be transferred to or from the household in ways determined by the configuration of your installation. For details, please see the Household Update Agent document.

20.1.6 Unique Coupon

When unique coupons are enabled by system option 112, the *Customer>General* page includes a section entitled “Unique Coupons”. The section contains a brief summary of the current coupons (the total number of coupons and the number that have been voided) along with a button that opens a popup to manage the coupons.

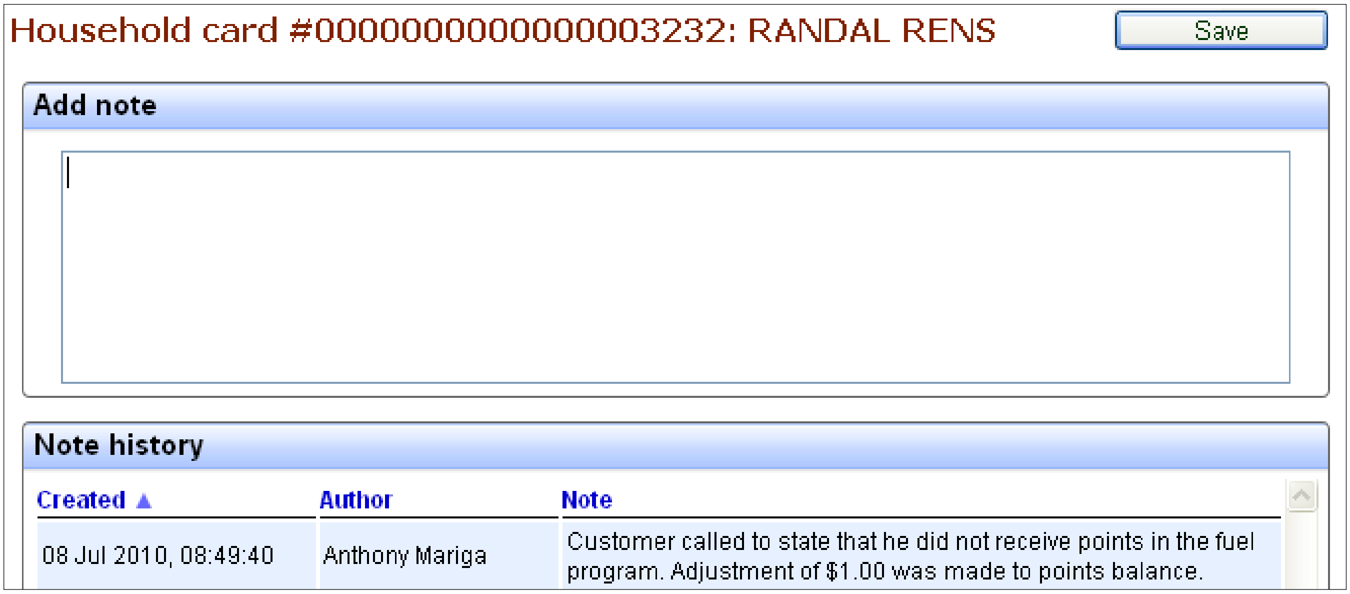
The unique coupon popup provides a list of the unique coupons associated to the selected customer, and for each gives the following details:

- Void status. If a coupon has been voided, the column will state “void” in red; otherwise, if the user has the “Edit customer coupons” permission, it will have a button marked with an “X” that can be clicked to mark the coupon as voided.
- Barcode. This is the code used by the coupon.
- The date/time the coupon was issued.
- The location where the coupon was issued.
- The date/time the coupon was redeemed.
- An identifier for who redeemed it.
- The location where it was redeemed.
- The date (if any) when the coupon expires.

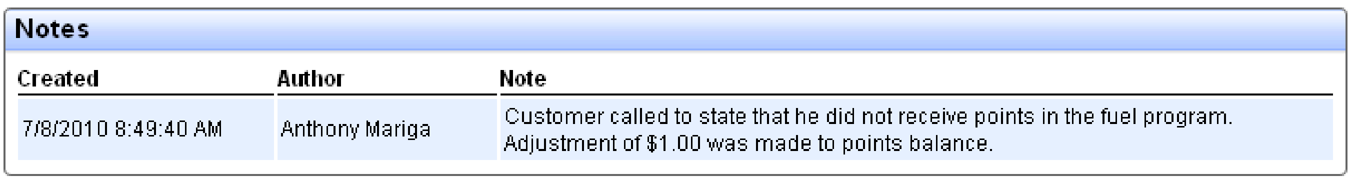
This list of coupons can be searched and refined by providing a barcode and/or a date range. It can also be filtered to show all coupons, only voided coupons, only unredeemed non-expired coupons, or only unredeemed expired coupons.

20.1.7 Notes

Customer inquiry users can attach notes to customer records by clicking the "Notes" button near the upper-right corner of the screen. The screenshot below shows the Add note screen that is displayed when this button is clicked.



All notes for a given customer are shown in the popup, and the most recent notes are also listed in the notes section of the *General* page (below).



20.2 Offers

Listed on the *Customer>Offers* page are the offers in which the customer is eligible to participate. The "offer", "ID" and "XID" columns show the offers' names and numbers, the "status" column shows the status of the offer, and the "group" column shows the customer group being used in that offer (of which the customer if a member).

Note that a list of your favorite offers appears first when you visit the *Customers>Inquiry>Offers* page. To see a filtered list of offers users may select one of these options from the dropdown:

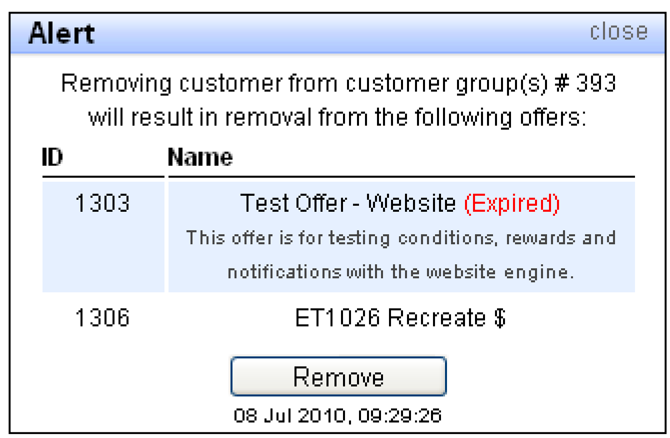
- Show all offers – all offers within Logix that are in either Active or Expired statuses.
- Show favorite offers – all offers that the user has favored.
- Show all but expired – all offers in the Active status.
- Show offers with credit – only offers that have a balance in at least one program (e.g. points, stored value, or accumulation).

20.2.1 Favorites

The small icon in the leftmost column indicates those offers that have been "favorited". A favorite offer, indicated by a blue star, is simply one that will appear first in the offer list, which can help customer service agents reach frequently-used offers quickly. If you have permission to alter favorites, you can favor or unfavor any given offer by clicking the star icon.

20.2.2 Remove offer

Clicking the X in the remove column, entitled “Rem”, will take the customer out of that group and offer. A popup (right) will ask you to confirm removal of the customer, and will inform you if doing so will affect other offers.

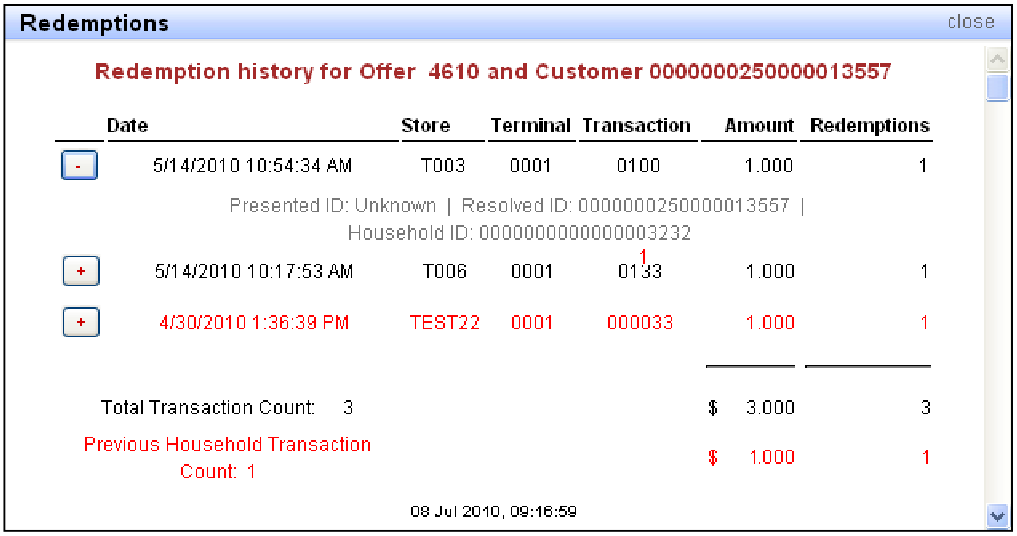


Note that in some cases you may not have an X button next to an offer, despite having the appropriate permissions to remove a customer from an offer. (Or you may *have* the X button even if you don’t have permissions). This is due to the edit control type used by the customer group (or groups) associated with that offer, as described in the “Customer Groups” chapter of this manual. For example, if a customer has an offer that uses a customer group with an edit control type of “no one”, then you will not be able to remove the customer from that offer. The edit control type of a customer group will always overrule a user’s own permissions.

In cases where an offer uses multiple customer groups that have conflicting edit control types (say, “anyone” and “no one”), then clicking the X button will remove the customer from the offer *as far as you’re allowed to.* This means that you may be able to remove the customer from one of the groups, but not the other, with the result that the customer will still be eligible for the offer. If this is the case, customer inquiry will alert you to the fact.

20.2.3 Customer redemptions

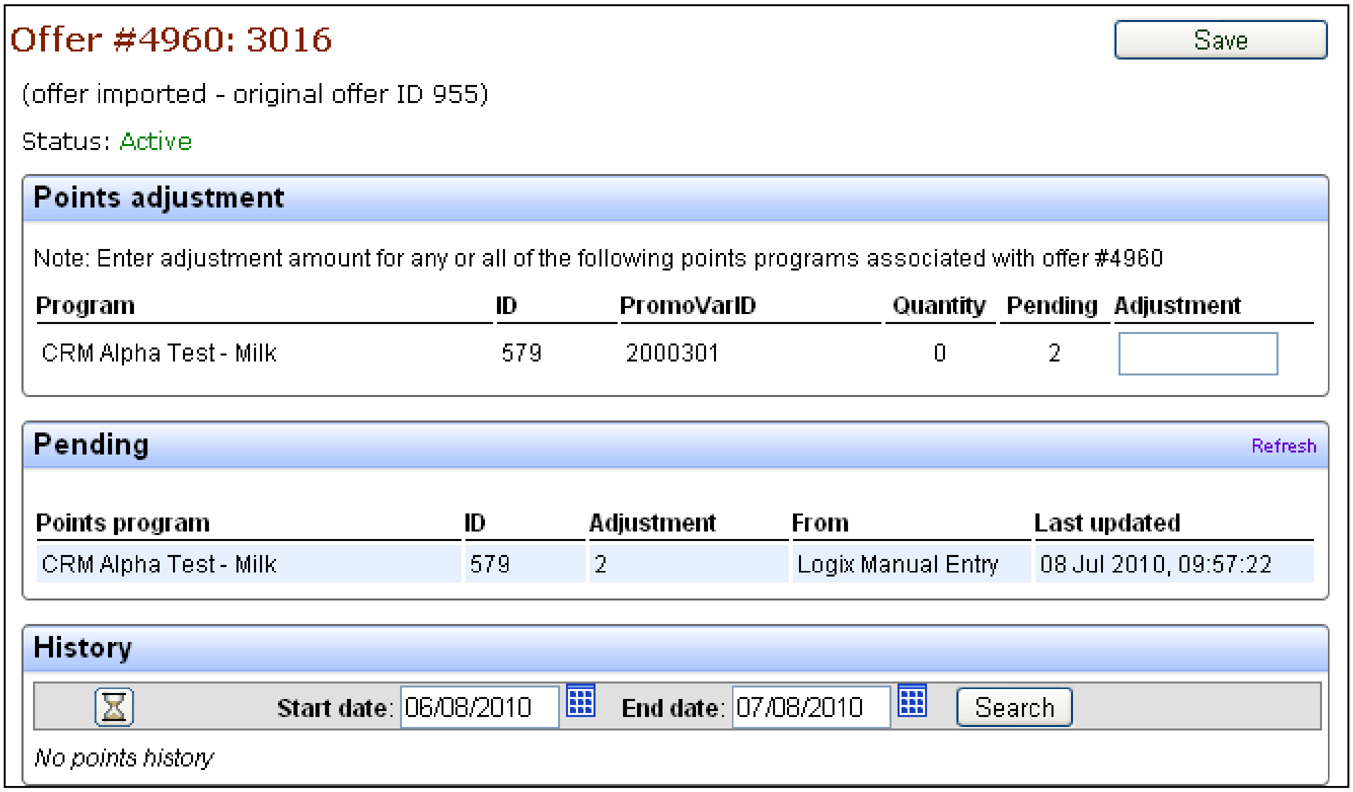
Clicking the ellipsis button in the "view" column displays the customer's redemption history for the selected offer, as shown below.



20.2.4 Points program adjustments

Clicking the P button in the "Adjustment" column launches a popup window that displays the points balance that the customer has in any points programs associated with the offer. The “P” button will have either a light background when the customer has a balance in the offer’s points program or a darker background with an italicized “P when the customer has no balance.

To adjust the balance, enter an amount in the "adjust" box and click Save. The adjustment is sent to the pending points adjustment queue for processing by an agent that handles both adjustments and store-received points changes. Once the agent processes the adjustment, the customer’s balance is adjusted and the pending entry is removed and displayed in the history section of the page.



Reason Codes

When reason codes are enabled by system option 108, the points-adjust popup (accessible from *Customer>Offers*) and the points-adjust-program popup (accessible from *Customer>Adjustments*) now include a dropdown selector and a text input box that the user must complete before being allowed to submit an adjustment.

The dropdown selector includes a pre-populated set of reasons from which the user must choose. The text input box must include a brief description of why the adjustment is being made.

Reports generated through the *Customer>Inquiry>Reports* page can be filtered by reason by using the "reason" selector. The generated CSV report contains columns form the reason type and reason text for each adjustment.

External programs

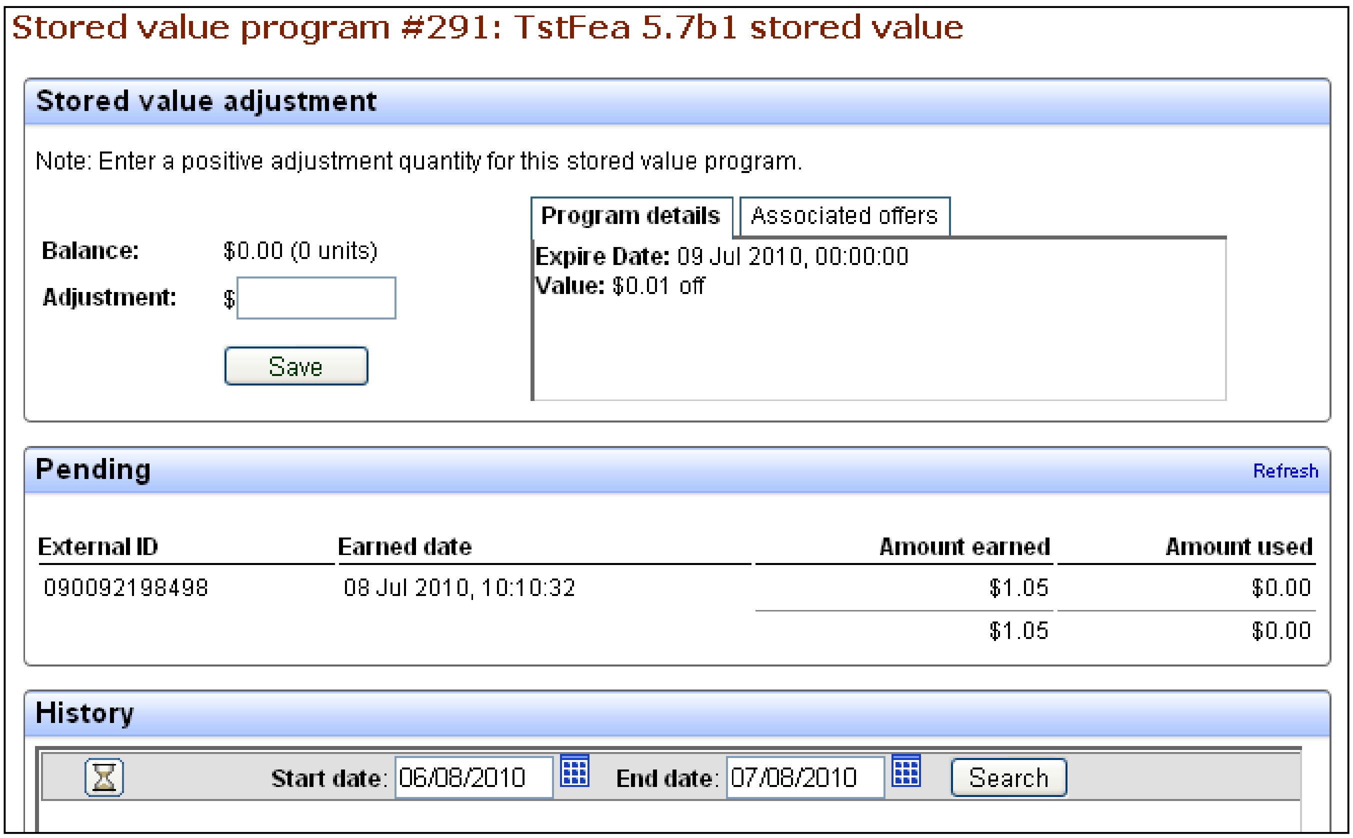
If your installation of Logix is configured to support an external points integration (system option #80), then you may encounter external points programs while making adjustments, and will observe that they behave a little differently than regular programs.

For an EME external integration, the points adjustment popup allows users to see the program's history but doesn't permit manual adjustments. For a CRM integration, the popup will show neither history nor pending adjustments, but will allow adjustments to be submitted to the external points management system, possibly in the form of a decimal or currency value.

20.2.5 Stored value program adjustments

Clicking the S button in the "Adjustment" column launches a popup window that displays the stored value balance that the customer has in any stored value programs associated with the offer. Like the “P” button, the “S” button will have either a light background when the customer has a balance in the offer’s stored value program or a darker background with an italicized “P when the customer has no balance.

To adjust the balance, enter an amount in the "adjustment" box and click Save. The adjustment is sent to the pending stored value adjustment queue for processing by an agent that handles both adjustments and store-received points changes. Once the agent processes the adjustment, the customer’s balance is adjusted and the pending entry is removed and displayed in the history section of the page.



History:

This section of Stored value program displays the history of Stored value adjustments which are removed from pending section after customer’s balance adjustments.

Hour glass: Clicking on the Hour glass disables the loading history.

Start date: Calendar icon allows to select start date from which history to be searched.

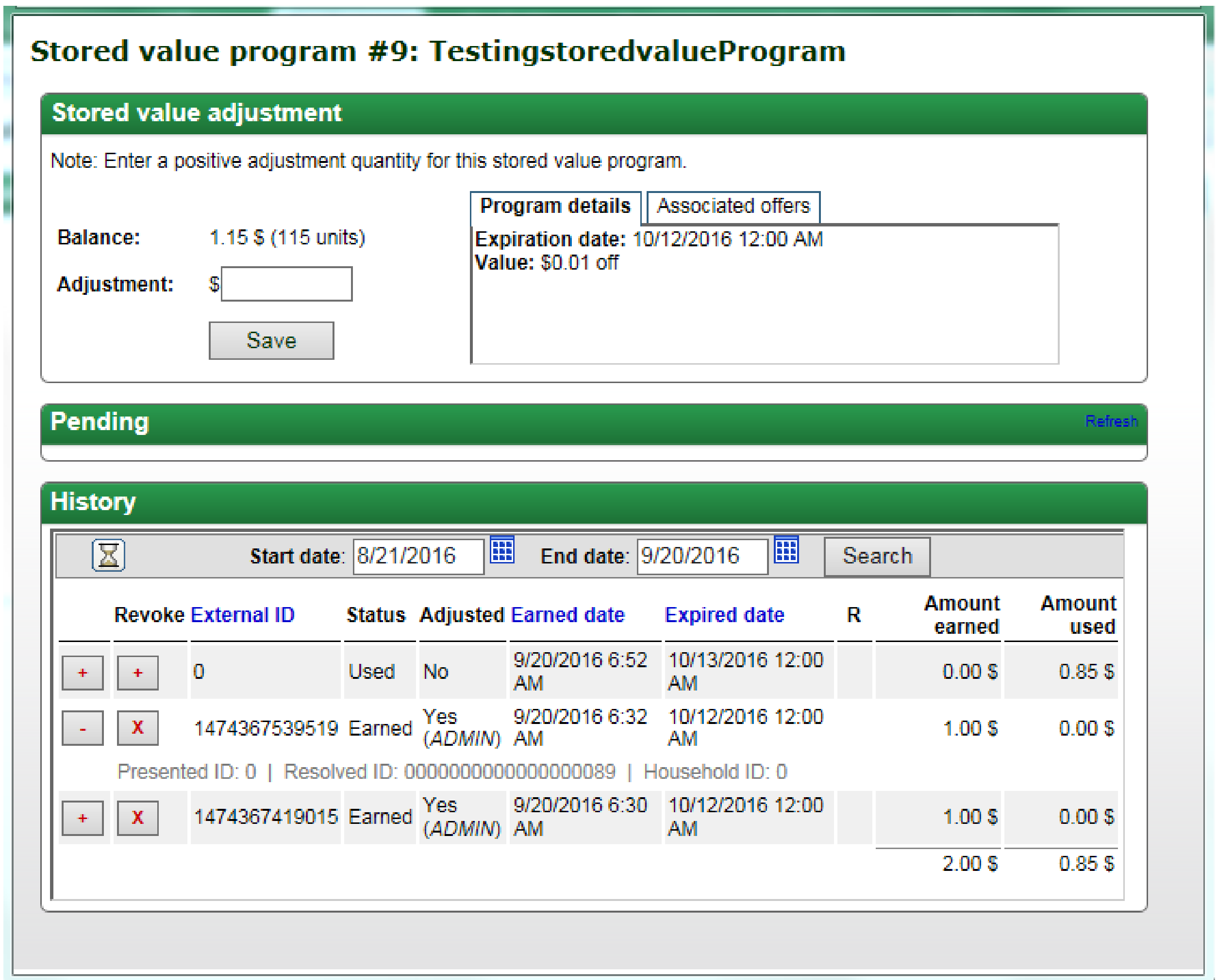
End date: Calendar icon allow to select end date to which history to be searched.

Search icon: Searches Customer’s Stored value history according to the start date and end date selected based on Earned date.

The history section lists the following data for each Customer balance adjustment:

- External ID – specifies unique id provided to each adjusted value of store value program.
- Status – tells the status of stored value adjusted (Used: stored value redeemed, earned: Balance adjusted to Stored value program).
- Adjusted – tells the status as stored value is adjusted or not adjusted.
- Earned date – specifies date on which the Stored value was awarded via transaction or adjustment.
- Expired date – specifies date on which stored value will get expired.
- R – Replayed. If this field contains a red “R”, then the transaction initially failed to be processed and was received later.
- Amount earned – specifies amount added to the stored value program.
- Amount used – specifies amount decremented from stored value program.

If a history included at least one adjusted stored value row, then you can click the “+” button to see details, including the Presented ID, Resolved ID and Household ID.
If you click the “X” button, alert will be open asking permission to revoke the particular External Id. When click on “OK” system will revoke that particular External Id.



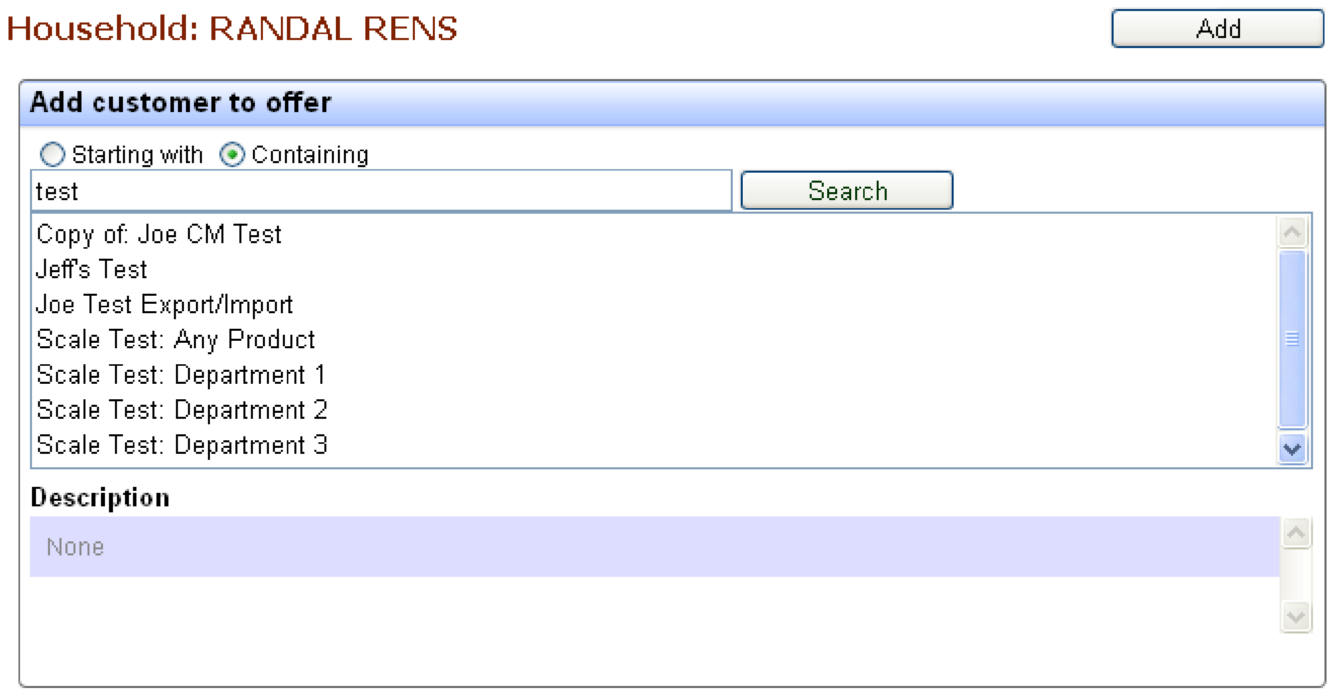
20.2.6 Accumulation adjustments

Clicking the A button in the "Adjustment" column launches a popup window that displays the customer's accumulation balance for the selected offer. Like the “P” and “S” buttons, the “A” button will have either a light background when the customer has a current accumulation balance in the offer or a darker background with an italicized “P when the customer has no balance.

To adjust the balance, enter an amount in the "Adjustment accumulation amount" box and click Save. The adjustment is sent to the pending adjustment queue for processing by an agent that handles both adjustments and store-received accumulation changes. Once the agent processes the adjustment, the customer’s balance is adjusted and the pending entry is removed and displayed in the history section of the page.

20.2.7 Add offers

The "Available Offers" popup, accessible from the *Customers>Inquiry>Offers* page, lists offers the customer is not currently a part of. If you want to add the customer to an offer, pick if from the list and click "Add". To see the description of an offer, click its name and the description will appear below the list.

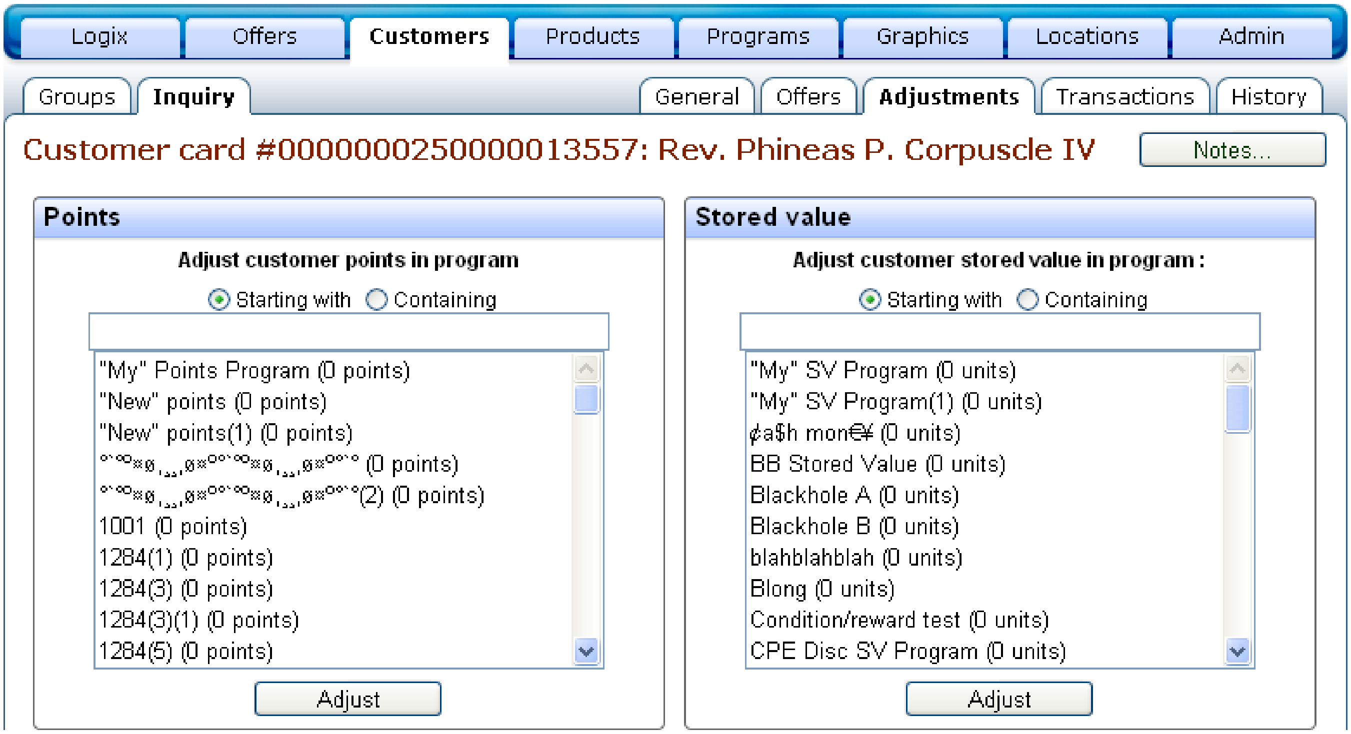


Just as in the case of *removing* customers from offers, it's important to note when *adding* customers to offers that the offers available for you to add depend in part on the edit control type settings of the customer groups used by those offers. For example, if an offer that you might otherwise be able to give to a customer uses a single customer group that has an edit control type of “no one”, then that offer will not appear in the list. For details on edit control types, see the “Customer Groups” chapter of this manual.

20.3 Adjustments

Listed on the *Customers>Inquiry>Adjustments* page (shown below) are the individual points programs and stored value programs in which the customer has balances, plus the balance in each one. To adjust a balance, select a program and click "Adjust". In the popups, enter the appropriate value in the "Adjustment" box and click save. To lower a balance, enter a negative value.

Clicking the "Notes…" button launches a popup which allows note viewing and creation for the customer.



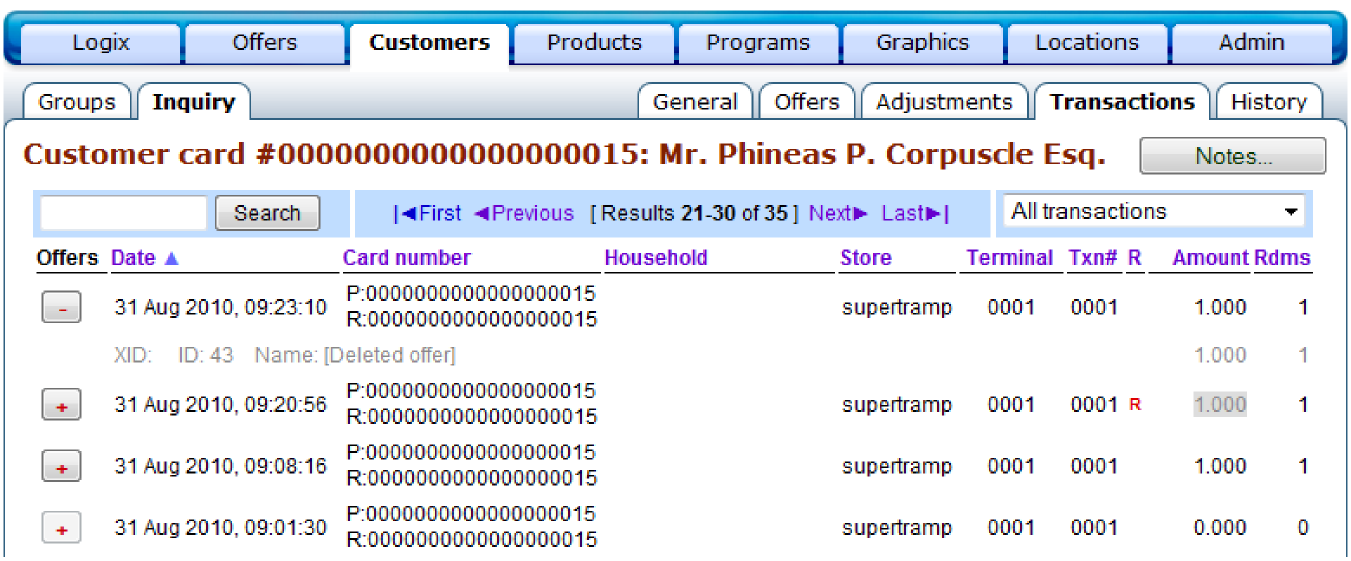
Note that in the case of external points programs (those set up to use an external host type), a balance may not be shown next to the name of the program; instead, it will say "External".

20.4 Transactions

The *Customers>Inquiry>Transactions* page summarizes the customer's recent offer-related activity. It can be filtered by using the dropdown near the upper right corner, which allows you to see all recent transactions for the customer, only those transactions where the customer redeemed one or more offers, or only those transactions where the customer redeemed nothing.

The page lists the following data for each transaction:

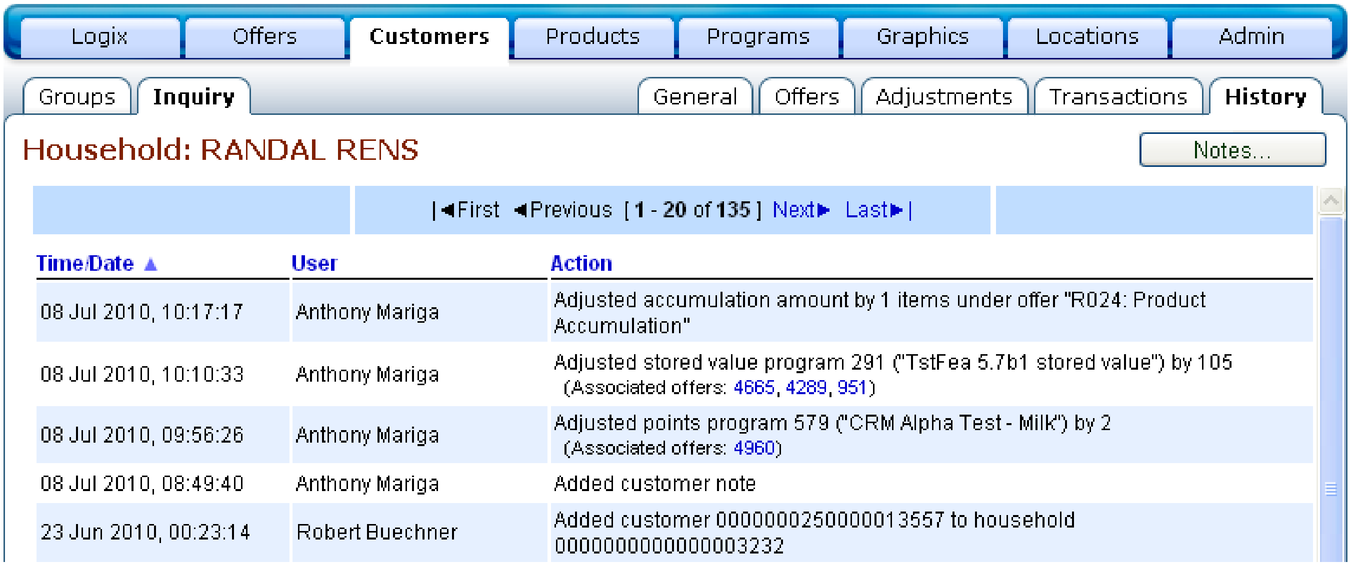
- Date – The date and time the transaction occurred
- Card number – A single customer may be identified by multiple means, so the card number field is divided into two rows. The first ("P") indicates the identifier that the customer presented during the transaction to identify himself. The second ("R") is the single card number that the customer's identifiers resolve to.
- Household – The household (if any) of which the customer is a part.
- Store – The location where the transaction occurred.
- Terminal – The local identifier of the terminal where the transaction occurred.
- Txn# – The local transaction number. Hovering over this field reveals the longer, unique transaction number that Logix uses to refer to the transaction.
- R – Replayed. If this field contains a red "R", then the transaction initially failed to be processed and was received later.
- Amount – The dollar value of all offer redemptions within the transaction. If some of the transactions' redemptions with a dollar value were replayed, this value will be highlighted in grey.
- Rdms – The total number of redemptions in the transaction.



If a transaction included at least one offer redemption, then you can click the "+" button to see details, including the ID and name of the offer, the amount redeemed, and the number of redemptions. Replayed transactions with a redemption dollar amount will be highlighted in grey; other replays will be shown in red.

20.5 History

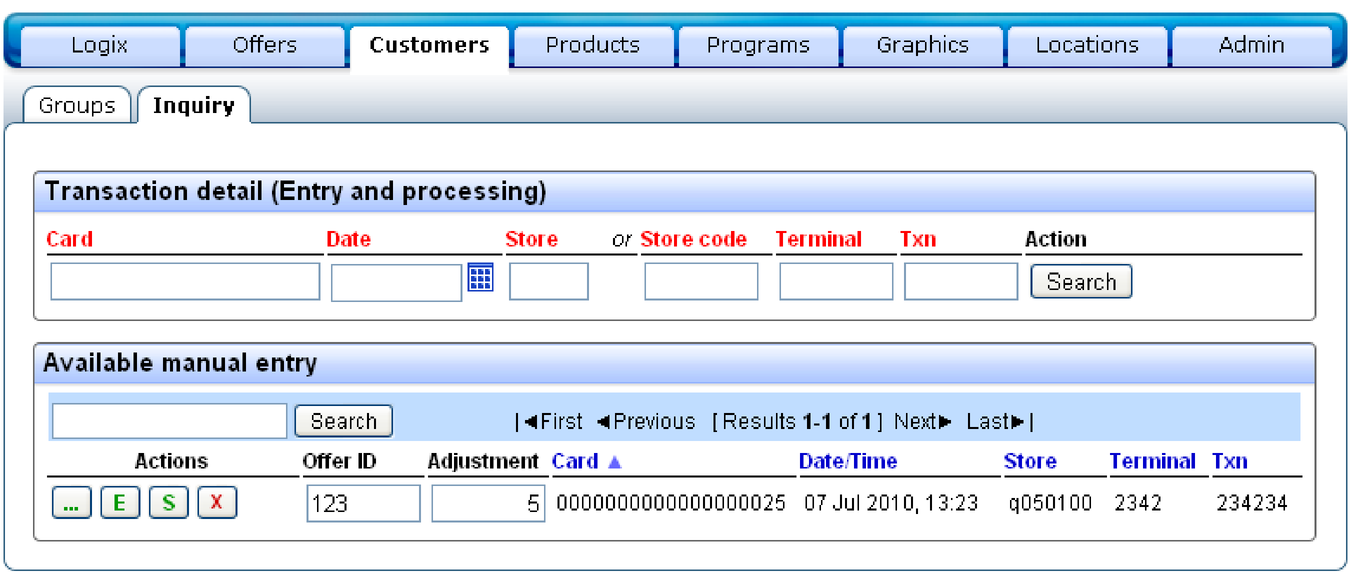
Logix tracks changes made to customer records, who made the changes, and when. Click the *History* tab to see this list. If you have the "Access customer inquiry reporting" permission, you can also obtain more detailed historical information across multiple customers by visiting the *Customer>Reports* page from the main *Customer>Inquiry* screen.



When transupload is done using customer proxy failover, history for transaction would be reflected using enterprise store id instead of store id. Transactions would be reflected as adjustments.

20.6 Manual

When the Canadian Air Miles (CAM) promotion engine is enabled at an installation, the "Manual" button will appear for users with permissions to make CAM customer manual adjustments. Clicking this button will link the user to the CAM Manual Adjustment page shown below.



The Transaction detail section consists of five input fields needed in order to find a transaction:

- Cardholder ID – this should be the CAM cardholder ID
- Date – the date the transaction took place
- Store or Store code – enter either the last four digits of the store code in the store textbox, or the full store code in the store code textbox.
- Terminal – the terminal identifier where the transaction took place.
- Transaction number (Txn) – the transaction identifier.

To search for a specific transaction, first enter the values in the required fields and click the Search button. If the transaction is found, then that transaction may be used for the adjustment. If not, though, users may either search again with different criteria, or create a new transaction for the adjustment using the supplied criteria.

The Available manual entry section serves as a pool for pending manual adjustments. This section consists of the following actions:

- Offer popup selection ("…") – selects a valid CAM offer to use for an adjustment
- Execute ("E") – applies the adjustment to the customer and removes it from the pending table.
- Save ("S") – saves any changes made to the adjustment row.
- Delete ("X") – deletes the pending adjustment and removes it from the pending table.
- Note (Optional) – If a note was created during a manual adjustment, then a "note" icon will be displayed on the adjustment row. Users may click on this icon to view the note.

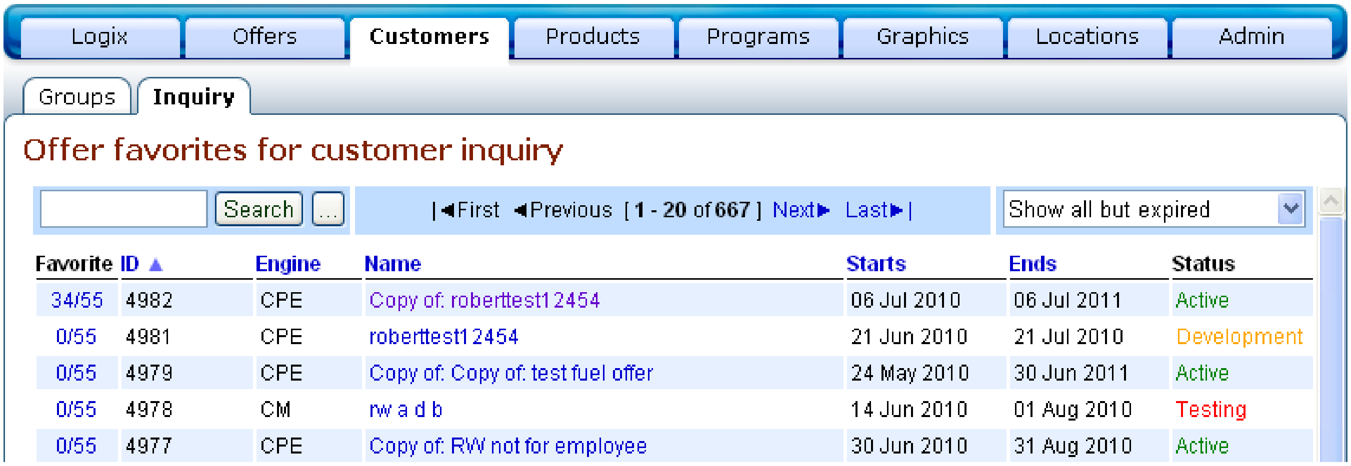
Offer ID and the adjustment amount are editable on each of the rows. Other fields on the row are for informational purposes only. Once the adjustment row is correct, the user may either click execute to issue the adjustment or save to review later.

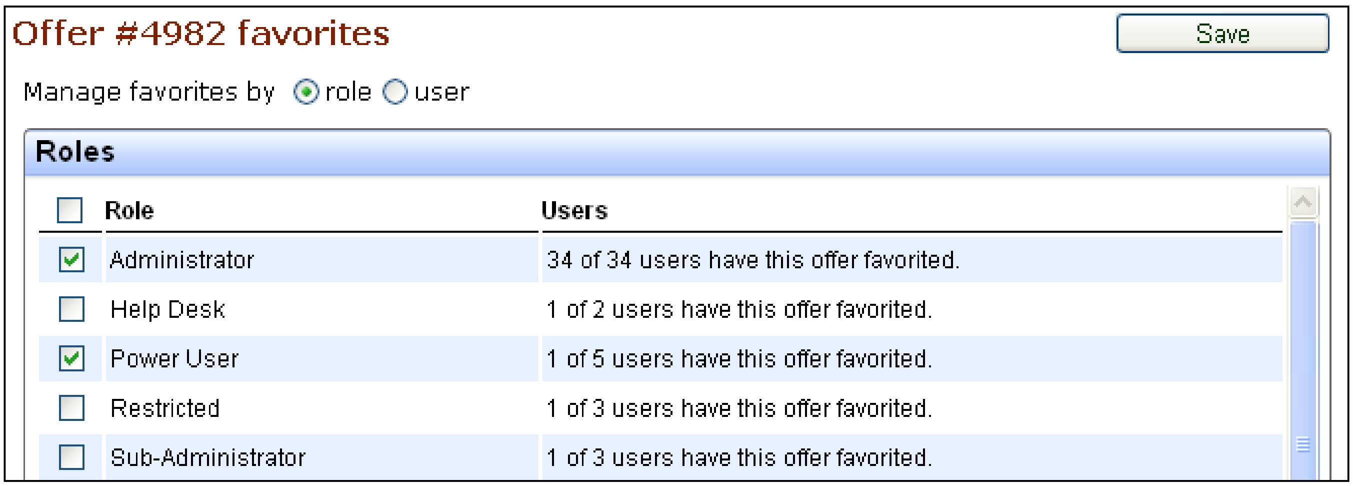
20.7 Favorites

If Logix contains many offers, the *Customers> Inquiry >Offers* page can become quite lengthy, and finding a particular, frequently-used offer can require either searching or moving from page to page. To avoid this, the most popular offers can be marked as "favorites", which causes them to appear preferentially in the Customers>Offers list. This "favoriting" is recorded by user, so each user can have his or her personal set of favorite offers.

If you have the "favorite offers for others" permission, the customer inquiry page will have a button labeled "Favorites" which loads a list of offers. Each offer will have a fraction next to it indicating the number of users favoring the offer, and the total number of users. Clicking this link opens a popup from which you can favor or unfavor offers by user or by role.

Administration of the favorite offer for users is accessible to those Logix users with the "Favorite offers for others" permission. A list of all offers is displayed with the first column indicating how many users within the enterprise have that particular offer favorited. Users may click on the link in the "Favorite" column on the desired row and a popup window will launch (bottom screenshot). This window allows users to edit the favorite status of an offer on either a user-by-user basis or on a role basis.





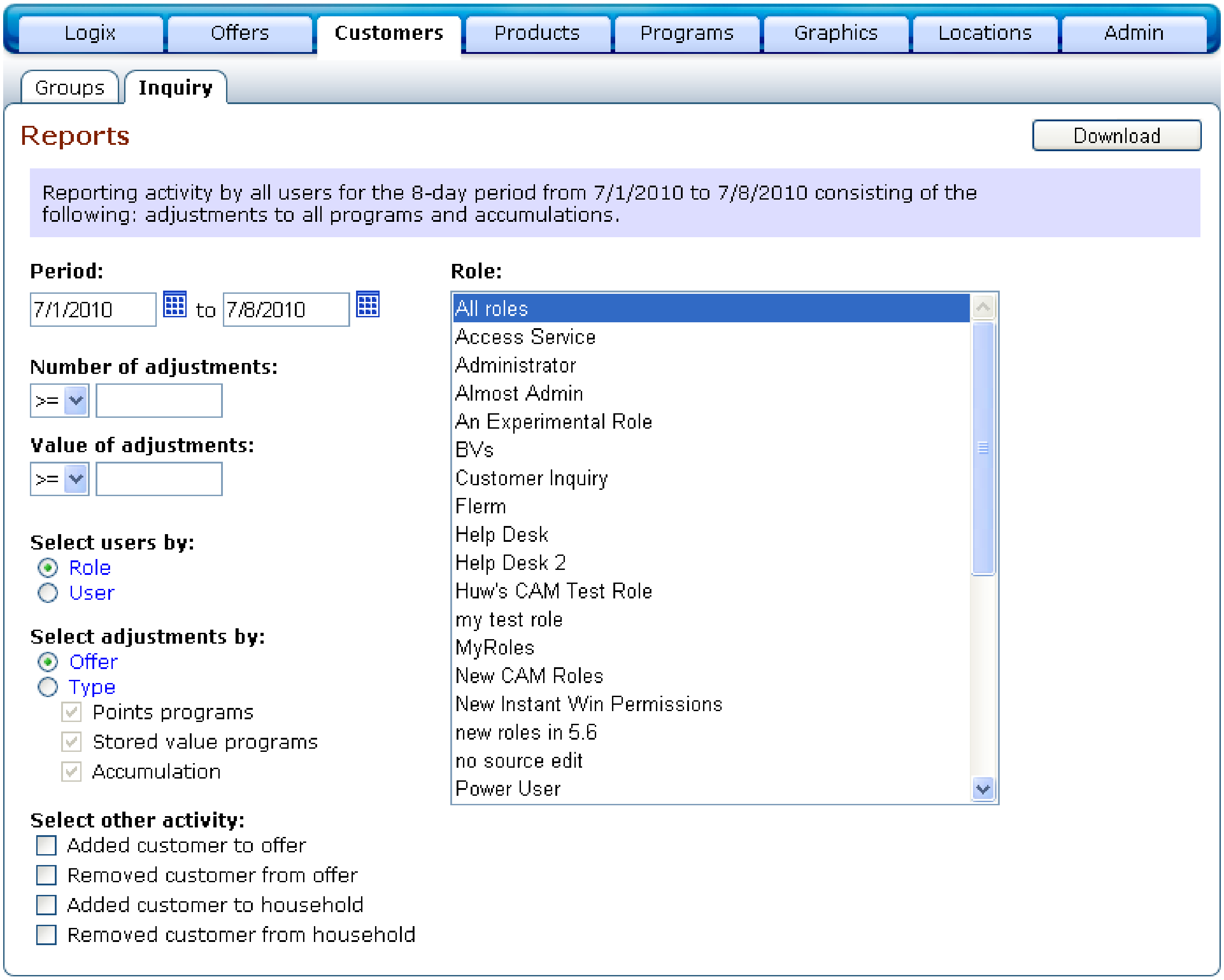
20.8 Reports

If you have the "access customer inquiry reporting" permission, you will see a "Reports" button on the main customer inquiry page. Clicking this button loads a page that allows you to generate reports concerning adjustments to customers' balances made by Logix users.

Reports can be generated based on the following criteria:

- Date range
- Number of adjustments made
- Value of each adjustment
- Role
- User
- Points program
- Stored value program

When you've selected the appropriate criteria for the report you wish to see, click the "Download" button. Logix will provide the report in a comma-separated value file suitable for use with Excel.


Logix
Offers
Customers
Products
Programs
Graphics
Locations
Admin
Groups
Inquiry
Reports
Download
Reporting activity by all users for the 8-day period from 7/1/2010 to 7/8/2010 consisting of the following: adjustments to all programs and accumulations.
Period:
7/1/2010
to
7/8/2010
Number of adjustments:
>=
Value of adjustments:
>=
Select users by:
Role
User
Select adjustments by:
Offer
Type
Points programs
Stored value programs
Accumulation
Select other activity:
Added customer to offer
Removed customer from offer
Added customer to household
Removed customer from household
Role:
All roles
Access Service
Administrator
Almost Admin
An Experimental Role
BVs
Customer Inquiry
Flerm
Help Desk
Help Desk 2
Huw's CAM Test Role
my test role
MyRoles
New CAM Roles
New Instant Win Permissions
new roles in 5.6
no source edit
Power User

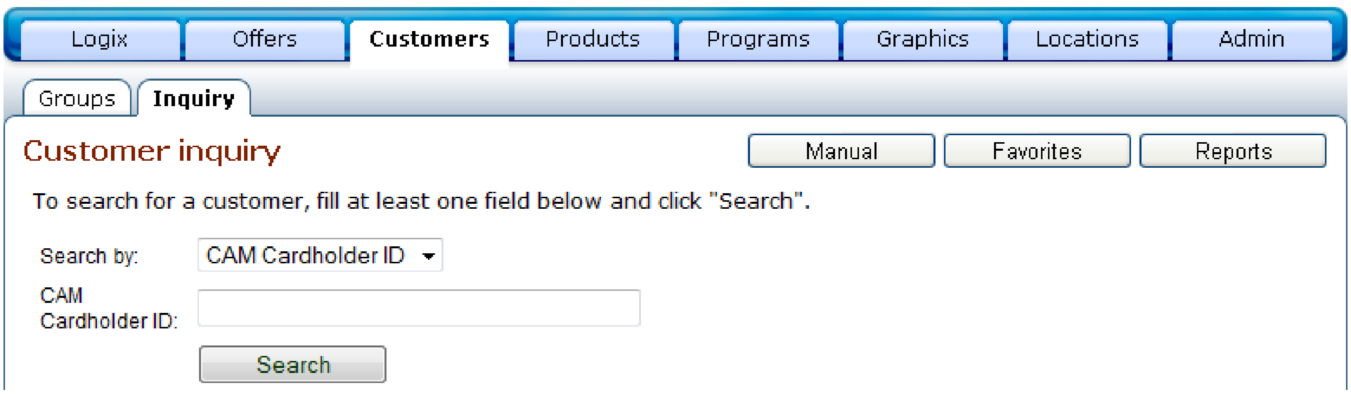
21 CAM customer inquiry

If your organization's installation of Logix has the Canadian Air Miles (CAM) promotion engine enabled, then customers who have CAM cards can be managed in Logix via a CAM-specific set of customer inquiry pages, accessible from *Customers>Inquiry*. Unless otherwise specified, functionality in these pages is the same as described in the main customer inquiry chapter.

21.1 Lookup

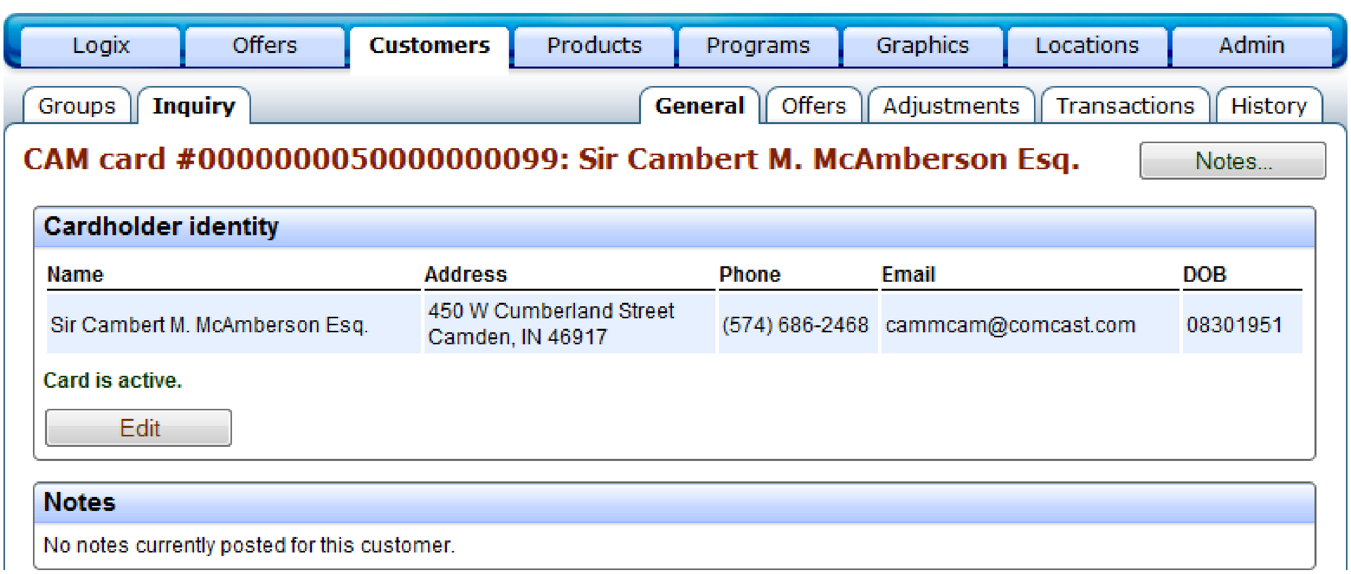
When the CAM engine is installed, the "CAM Cardholder ID" option is included in the "Search by" dropdown box. All CAM IDs are verified against an algorithm to verify their authenticity.

If an invalid CAM Cardholder ID is entered, an error message is returned to the screen alerting the user of the invalid entry. After keying in a valid CAM Cardholder ID and clicking the Search button, the user will be redirected to the *Customers>Inquiry>Offers* tab. Searching via last name for CAM cardholders is another option to find the appropriate CAM account.



21.2 General

The *General* page for a CAM customer offers much the same functionality as the matching page for a non-CAM customer. Depending on their permissions, users can access and edit personal information about the customer and can view and create notes about them.



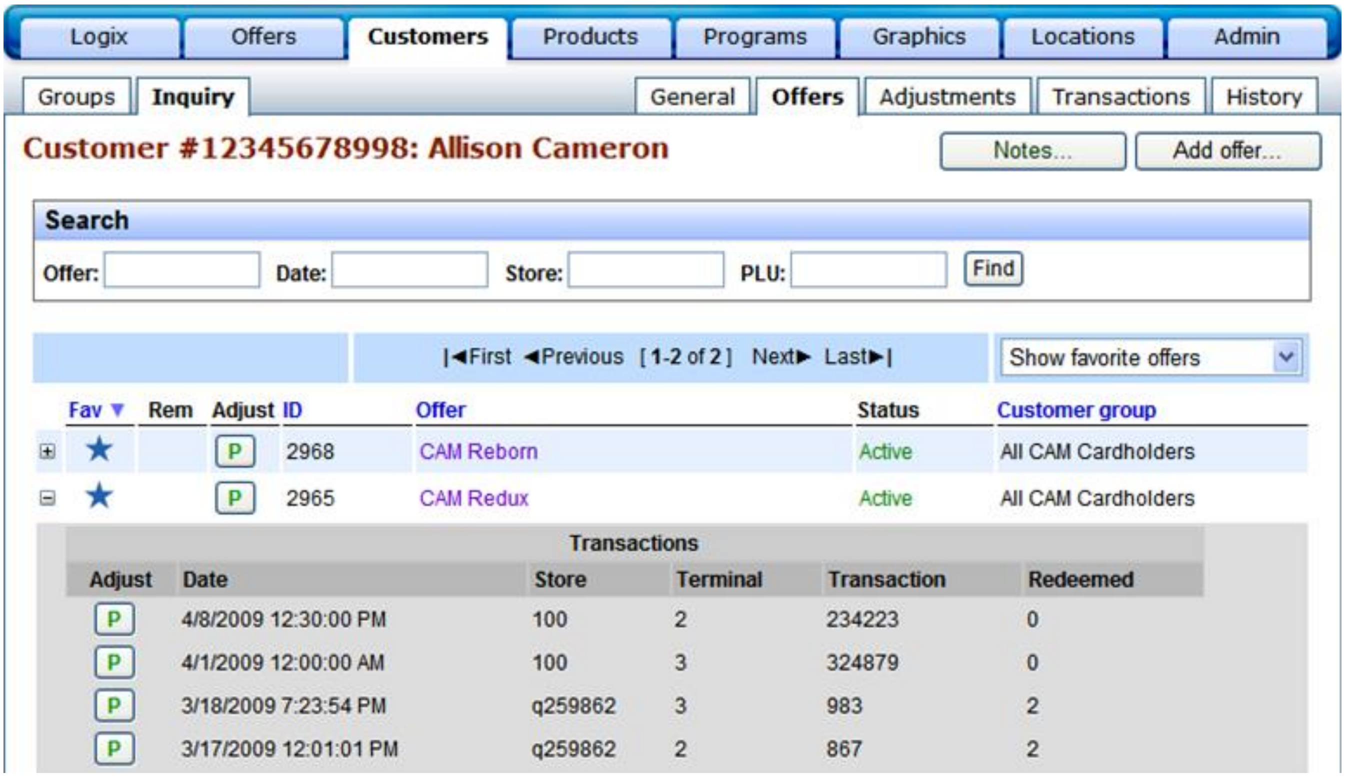
21.3 Offers

The *Customer>Inquiry>Offers* page lists all those active and expired CAM offers of which the customer is a part.

21.3.1 Search

A user may search for specific offers by entering any one of the following data into the Search input box and then clicking the Find button:

- Offer/Group – Returns offers matching the specified name or offer ID, or that include a customer group of the specified name.
- Date – Returns offers that were active or expired on the specified date; the "Status" column reflects the status of the offers on that date (*not* the present). When no date is entered, results are for the current date.
- Store number – Returns a list where the specified store is in a location group associated with the offer.
- PLU number – In a future iteration will return a list of offers associated with the specified PLU number.



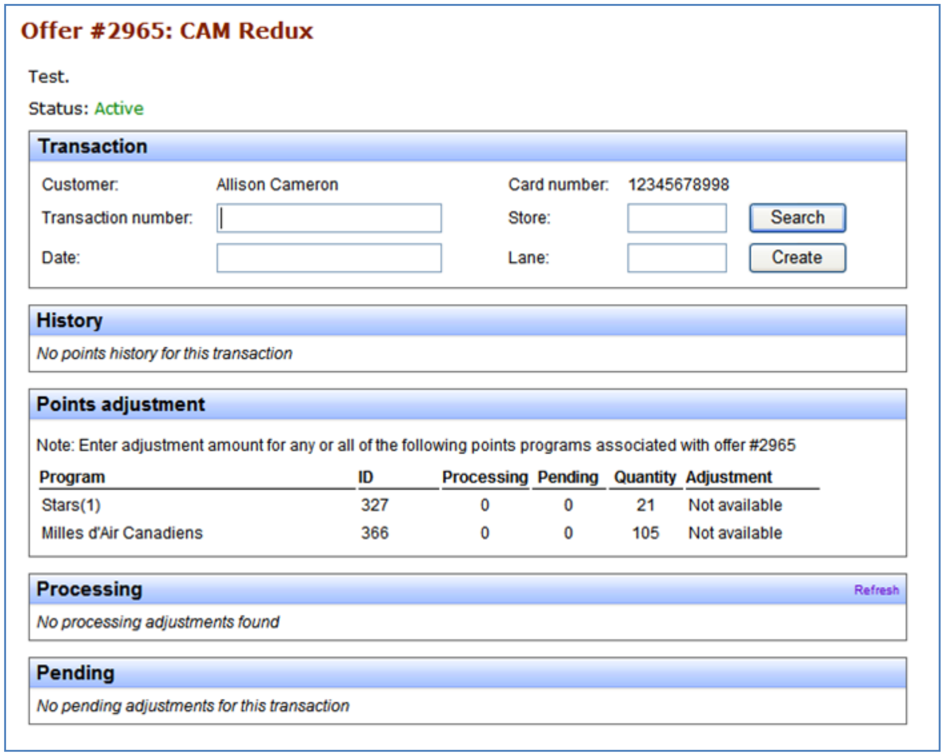
21.3.2 Transactions

The offer list includes an expand/collapse feature that allows the user to view all customer transactions for each of the customer's current offers. To see these transactions, click the plus sign on each row; the data will appear in a grey box below the selected row and will include the following:

- An adjustment button for each transaction.
- The date and time when the transaction occurred.
- The store where the transaction occurred.
- The local terminal number.
- The local transaction number.

- The quantity of points redeemed.

By clicking on the "P" button on a transaction row, the points adjustment popup window will appear. This feature allows the user to select an existing transaction to assign the points adjustment. Alternatively, if the transaction is not present in the list then users may click on the "P" button in the main offer row, and a popup with no transaction data will be preloaded.

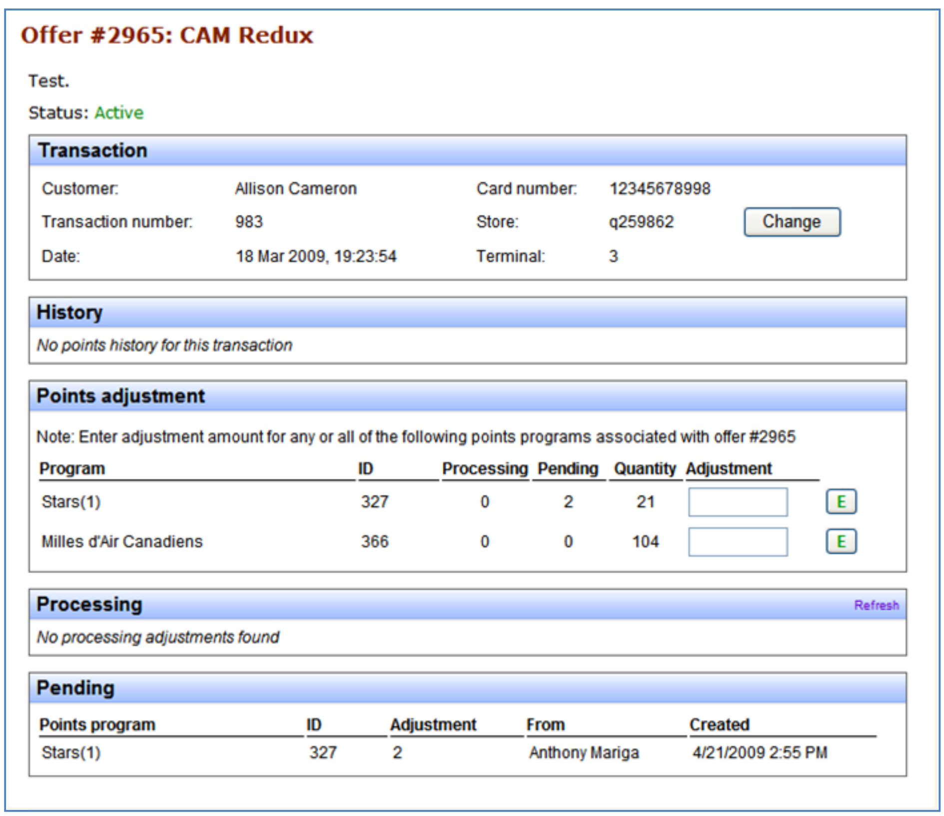


21.4 Points adjustment

Clicking the "P" button in the offer list opens the points balance adjustment tool which is divided into several sections.

21.4.1 Transactions

The first section is the Transaction box. This includes customer data as well as transactional data and is preloaded if the user clicks on a particular transaction to adjust the points for; otherwise, it will be empty and have textboxes for entry to search and/or create a transaction to use for this adjustment. No adjustments are permitted at this juncture as it does not have an assigned transaction. Once a transaction is either found or created, then the screen will reload and look like the lower screenshot.



Users may enter in one or more criteria in the textboxes and click search to find if a transaction matching the criteria already exists. These criteria are:

- Customer
- Card number
- Transaction number
- Date of transaction
- Store number
- Terminal number

If a match is found, then that transaction is loaded and the screen will look like the lower screenshot. When multiple matches are found, Logix shows a message alerting the user and advising him to enter more detailed criteria. If no transaction is found then Logix will inform the user.

Users can create transactions to use for points adjustment by entering the data in the textboxes and clicking the "Create" button. If only one transaction already exists with the entered data then that transaction is simply loaded and not created. Optionally, users may click the "Change" button when the screen has a preloaded transaction to clear it and search and/or create a new one.

21.4.2 History

The "History" area lists all previously-applied points adjustments made for this transaction.

21.4.3 Points adjustment

In the "Points adjustment" section users can enter adjustment amounts for any points programs associated to the selected transaction. Enter a value into the input box in the "adjustment" column, then click the "E" button to execute the adjustment. When executed, the adjustment will appear in the "Processing" or "Pending" areas, described below.

This section displays the following data for each points program:

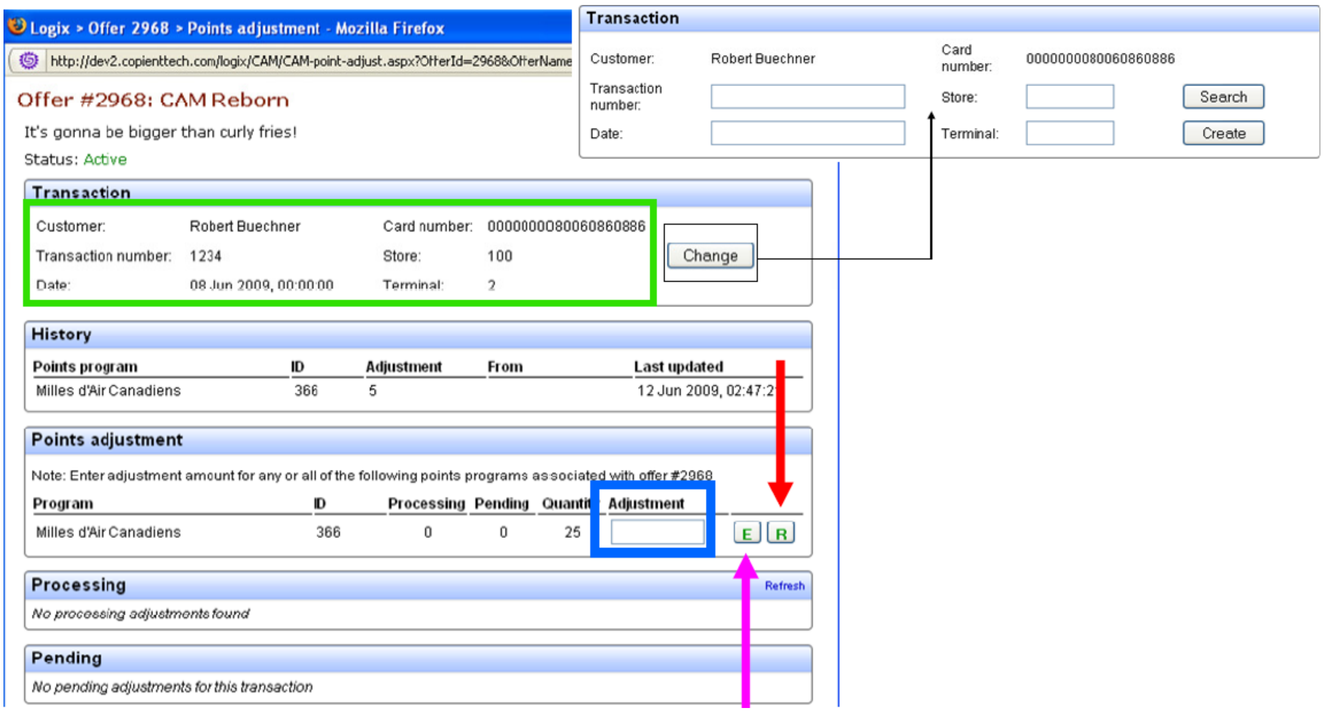
- Program – The points program's name.
- ID – The points program's ID.
- Processing – The quantity of points in that program for that card number that are processing (see below).
- Pending – The quantity of points in that program for that card number that are pending (see below).
- Quantity – The CAM customer's points balance.
- Adjustment – Not available on the offer-level points adjustment page; allowed only on transaction-level.

Before a manual points adjustment can occur, a user must do one of two things:

- Search for and find a specific transaction by entering one or more of the four transaction field inputs and clicking the Search button, *or*
- Create a transaction by entering *all of the inputs* above and clicking the Create button.

After a transaction is found or created, the points adjustment page is on the transaction-level and a user can perform three functions:

- Enter a positive or negative value into the Adjustment input box (outlined in blue) for the transaction (outlined in green), and click the “E” button (pink arrow) to execute.
- Enter a negative value into the Adjustment input box (outlined in blue) for the transaction (outlined in green), and click the “R” button (red arrow) for reversal refund.
- Press the Change button (outlined in black) to return to the offer-level points adjustment page (black arrow) where a user can search for or create a transaction (black arrow) for the card number.



If you attempt to enter a value greater than the maximum allowable adjustment value and press the “E” button (pink arrow) to execute, the user will then receive a warning that they must override by clicking the “E” button again to confirm the execution of the manual adjustment.

Following a manual adjustment or reversal refund, the adjustment is automatically populated into the Processing section, described below. It is also added to the History section and the value is added to the total quantity in the Points section.

Points adjusted can now be recognized via a sequence of colors based on the adjustment applied:

- Points adjustments made as manual adjustments are now shaded in red.
- Points adjustments that are expired are shaded in blue.

A small legend has been added near the adjustment history list that indicates, through mouse-over text, what each color signifies.

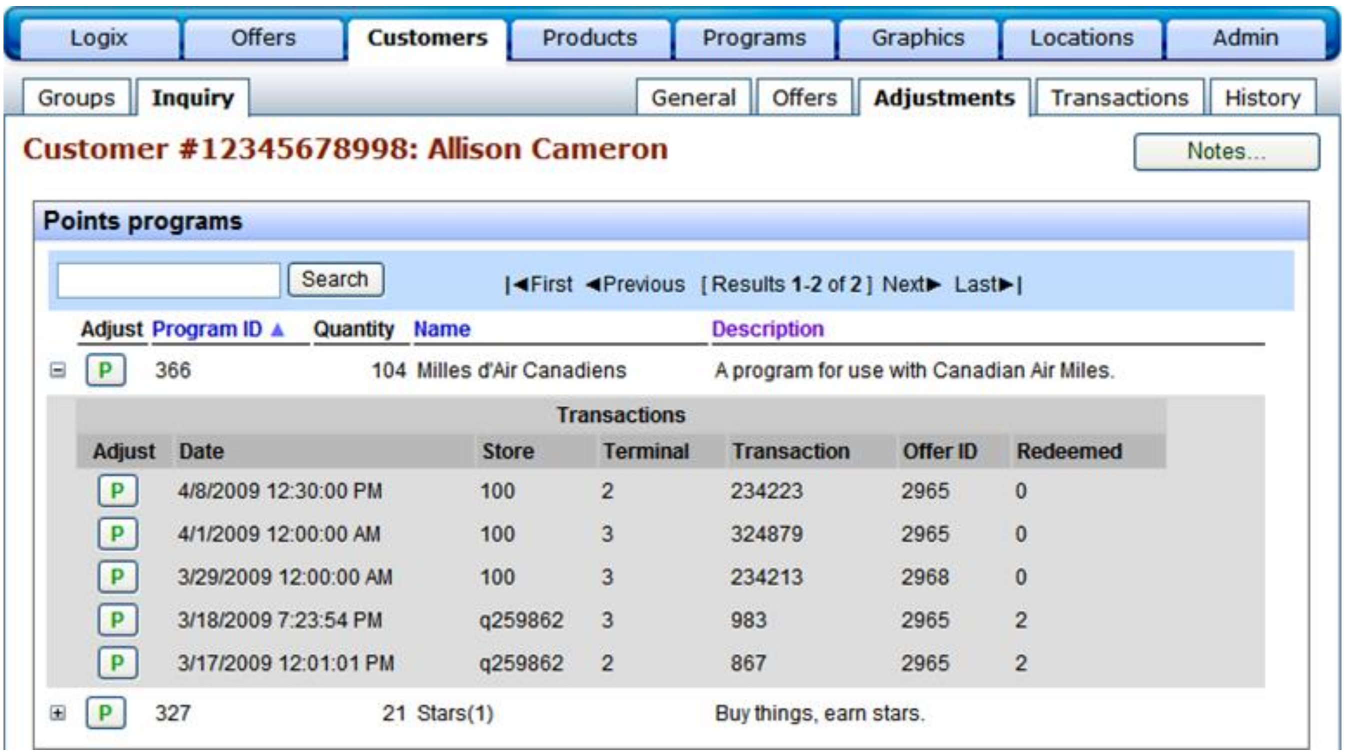
21.4.4 Processing, Pending

This “Processing” area reflects the adjustments that were just entered and that are awaiting to be processed by an automated Logix agent which runs at regular intervals. You can click the “Refresh” link to refresh the page and see the current status of the adjustment; once processed, it will no longer appear in the Processing area.

The “Pending” section shows adjustments that have not yet been applied because they require higher level approval; items listed here serve as a notice that the adjustment is pending approval by a supervisory user.

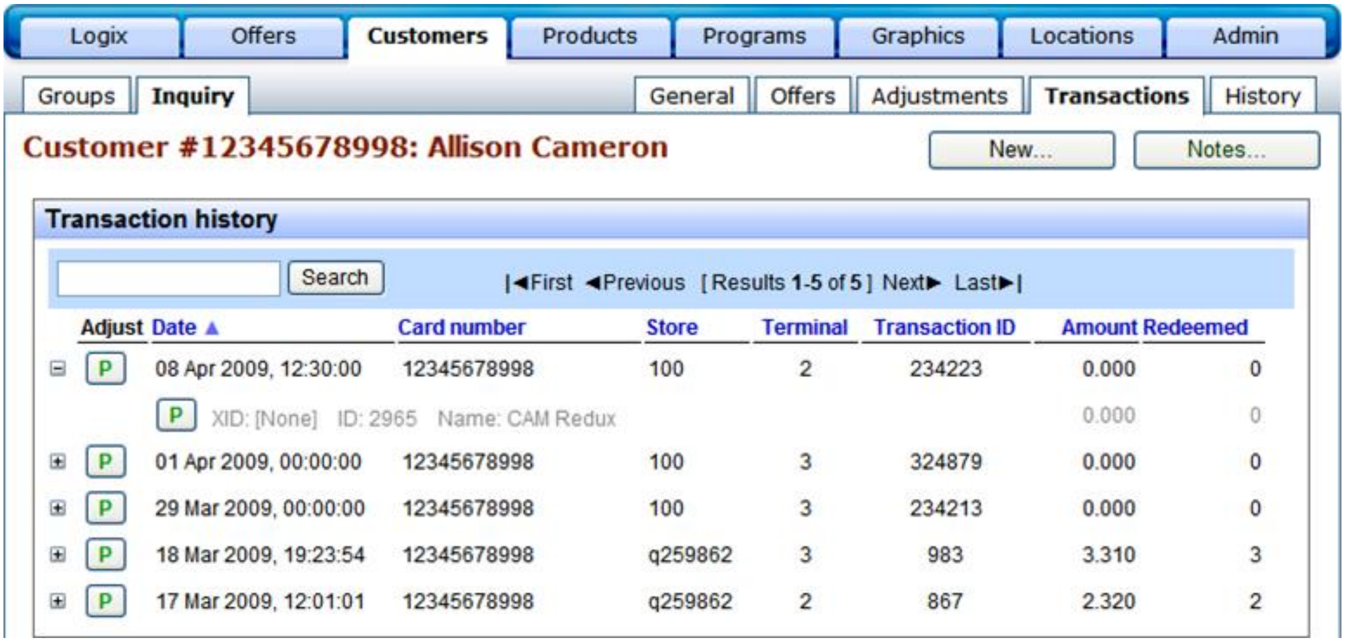
21.5 Adjustments

Similar to the *Offers* page, the *Customers>Inquiry>Adjustments* page includes transactional details for each program. It operates in the same manner as the *Offers* page, where clicking on the “P” button in any transactional row will cause a points adjustment popup to be opened for that transaction, and clicking the “P” at the top level will open the popup without a transaction pre-loaded. Again, a transaction must be found or created before points are allowed to be adjusted from this screen.

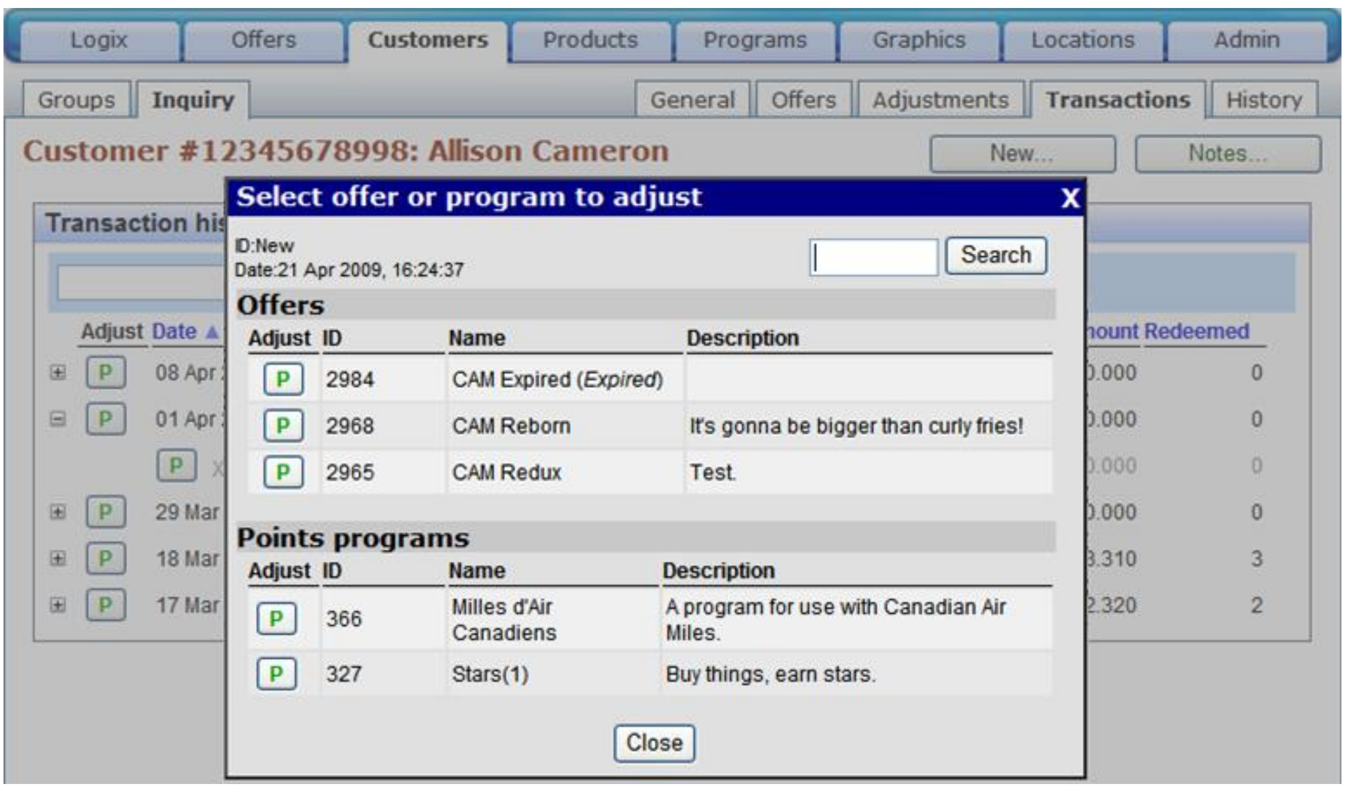


21.6 Transactions

The *Transactions* page is similar to the *Offers* page in that it provides a means of reaching the points adjustment functionality; however, instead of grouping adjustments by offer, this page groups them by transaction. Transactions may be associated to one or more offers and one or more points programs, so if an offer is found within the transaction then clicking the “P” button next to the offer’s name will launch the points adjustment offer popup page. If the offer is *not* found in the transaction then clicking the “P” button at the top level will display an offer/program selection screen. Likewise, if the transaction doesn’t exist on the page, clicking the “New” button on the page will also popup the offer selection screen, but without transactional information.



Once an offer or program is selected from the list, then the respective points adjustment screen will be displayed. If a transaction was selected then that data will be preloaded into the popup.



22 Cashier history

Cashier customer inquiry is an optional CM-specific section of Logix present under the *Customers* tab that allows users to view the changes made by cashiers to customer data. The *Customers>Cashier history* section appears if the CM promotion engine is installed, if the functionality is specifically enabled (via CM system option 35), and if you have permission to view history.

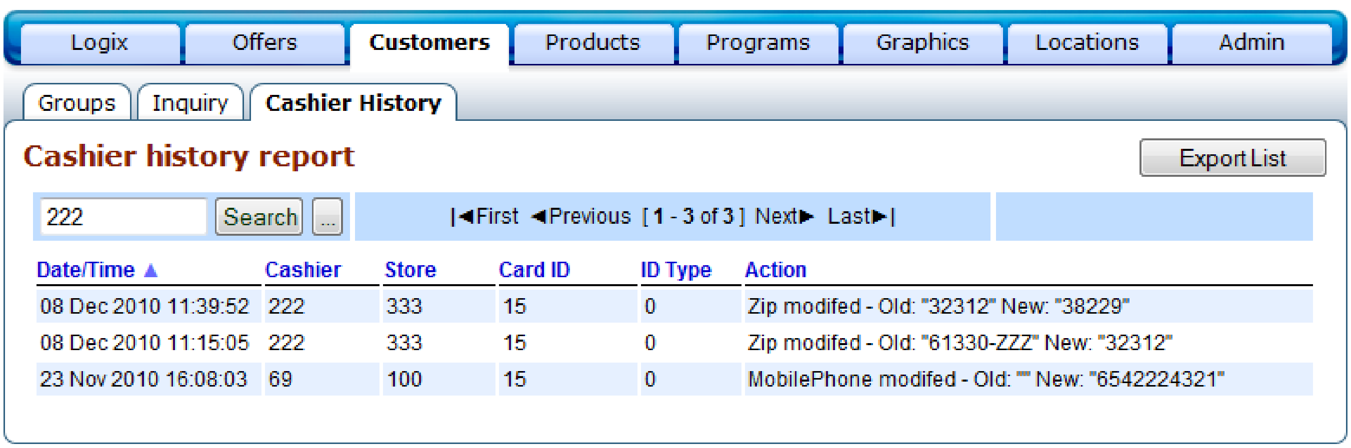
22.1 Cashier history report

The cashier history report page summarizes recent changes to customer data that were made by individuals at retail locations. The report's fields are:

- Date/time
- Cashier – the retailer-assigned ID of the cashier or staff member who performed the change.
- Store – the external code of the location where the change occurred.
- Card ID – the card number of the customer to whom the change applied.
- ID Type – the type of card in the previous field; 0 is a customer card, 1 is a household card.
- Action – the change that was made. Generally this will show the field that was altered and both the original and modified values for that field.

To search the report for any occurrences of a particular ID or keyword, enter it into the search box and click "Search". To perform a more advanced search, click the ellipsis button (…) and enter the desired criteria into the popup, then click "Search".

To get a copy of the report as an Excel spreadsheet, click the "Export list" button.



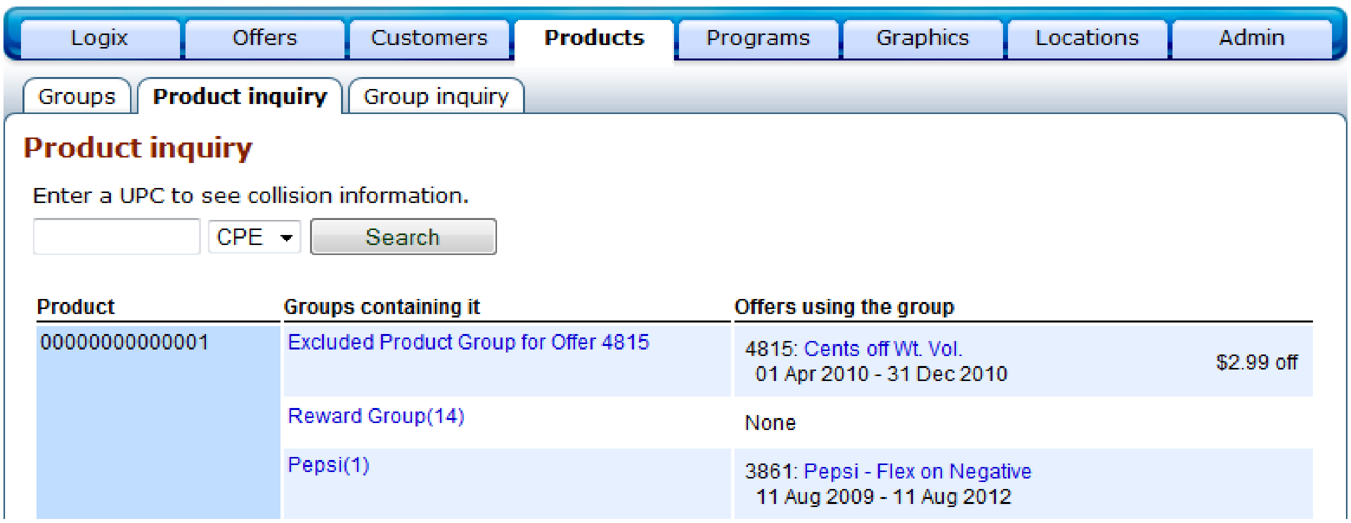
Date/Time ▲	Cashier	Store	Card ID	ID Type	Action
08 Dec 2010 11:39:52	222	333	15	0	Zip modifed - Old: "32312" New: "38229"
08 Dec 2010 11:15:05	222	333	15	0	Zip modifed - Old: "61330-ZZZ" New: "32312"
23 Nov 2010 16:08:03	69	100	15	0	MobilePhone modifed - Old: "" New: "6542224321"

22.2 Cashier history settings

If cashier history is enabled, the *Admin>Configuration* page will include a button labeled "Settings: CM Cashier" that will open cashier history settings. The settings determine which fields will be displayed in the reports, as well as which fields are available to be edited by cashiers.

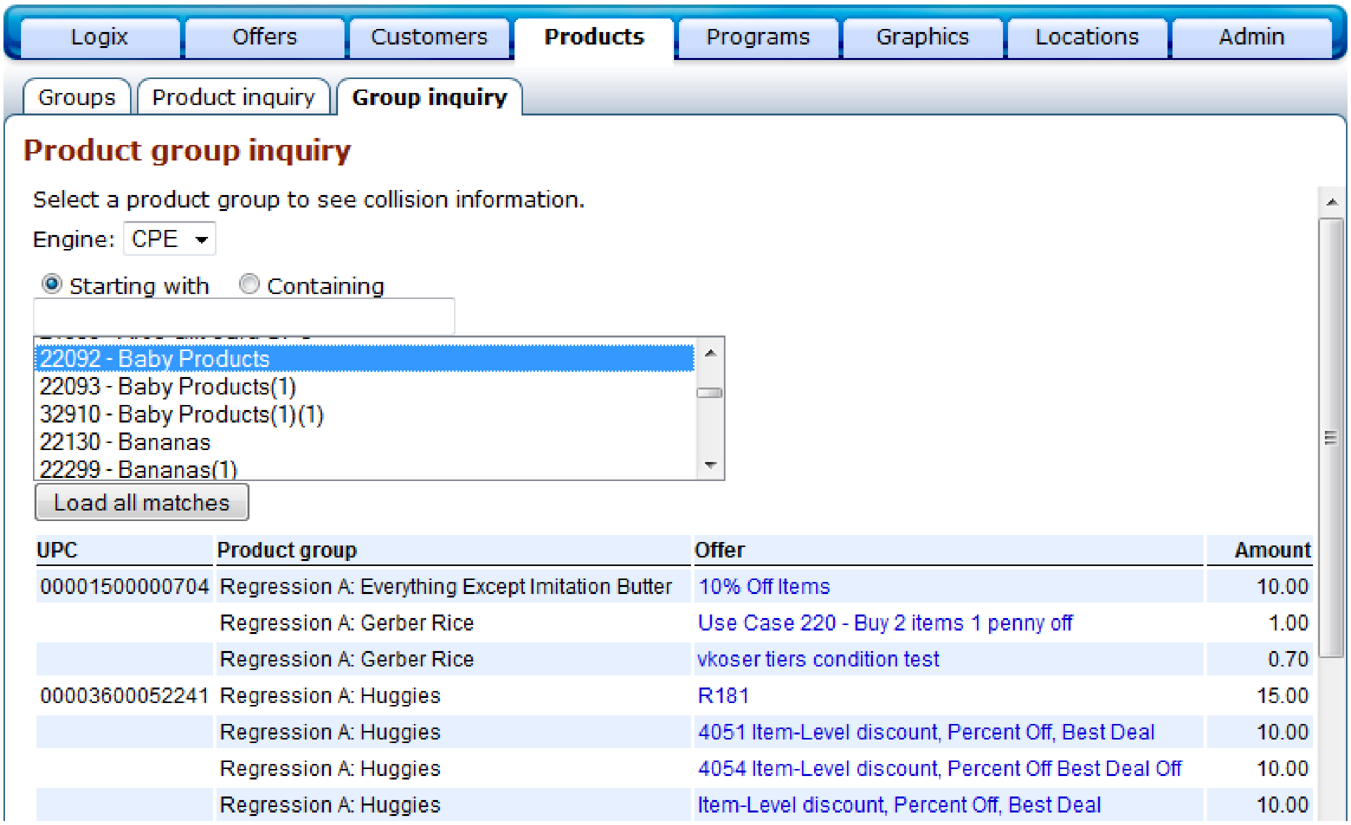
23 Product inquiry

The product inquiry page allows users to see how and where a specific product is being used in Logix, including the product groups that contain the specified product, the offers using those product groups, and the discounts those offers award. To retrieve this data, enter a unique product ID in the input box and click Search. In environments where multiple promotion engines are installed, you can select the engine (CM, CPE, or UE) for which you wish to see results.



24 Product group inquiry

A product group inquiry is similar to a single product inquiry, but returns details for all the UPCs in a specified group rather than a single UPC. Like a product inquiry, it shows the groups that the UPCs are a part of, the offers that use those groups, and the discounts awarded by the offers.



135Part V: Administration

25 Agents

Running on the web server that hosts Logix are various other applications known as *agents* which perform specialized functions that support the solution. Details for these agents are shown in *Admin>Agents.*

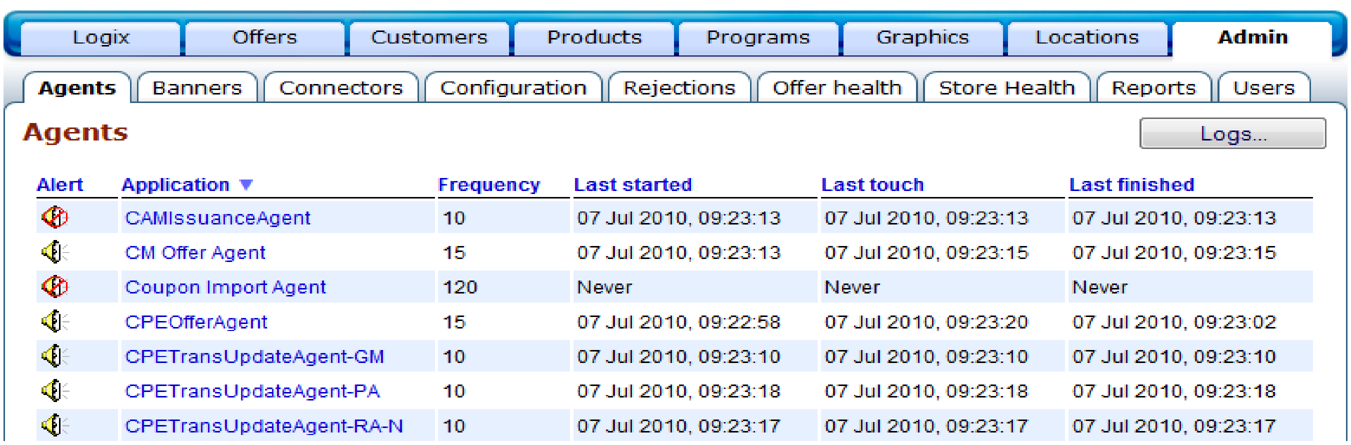
25.1 List

The *Admin>Agents* page lists all the solution's applications (as defined in the database's LastSync table). For each application, the page shows its name, next to which is a small speaker icon. Clicking the icon sets whether the application will send out alert emails when it encounters a problem. Applications in a problem state will be highlighted in the list in red.

Most agents operate at regular intervals, waking to perform certain operations and then sleeping again for a prescribed period. This period, expressed in seconds, is shown in the "Frequency" column. Next to the frequency are the dates and times when the agent last started and when it last finished; in between is the last touch time which the agent updates while it's running. For those that perform time-consuming tasks, this touch time provides reassurance that the agent is running.

The "Logs" button near the upper right corner of the page launches the Log File Viewer, a resource for exploring the log files written out by the various agents as they perform their tasks.

For detailed descriptions of each agent, please refer to the Server Architecture Document.

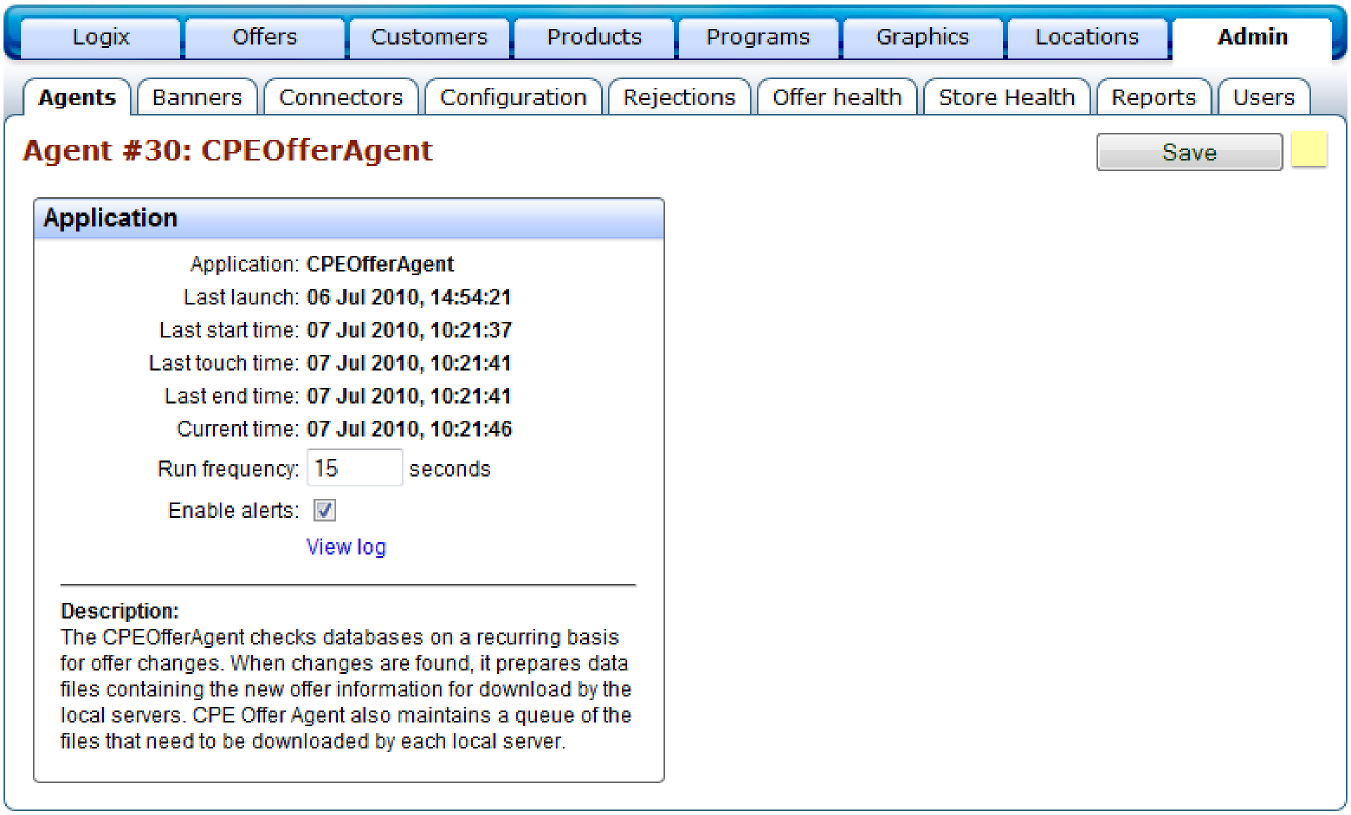


25.2 Detail

Clicking the name of an agent in the list brings up its full details. These are:

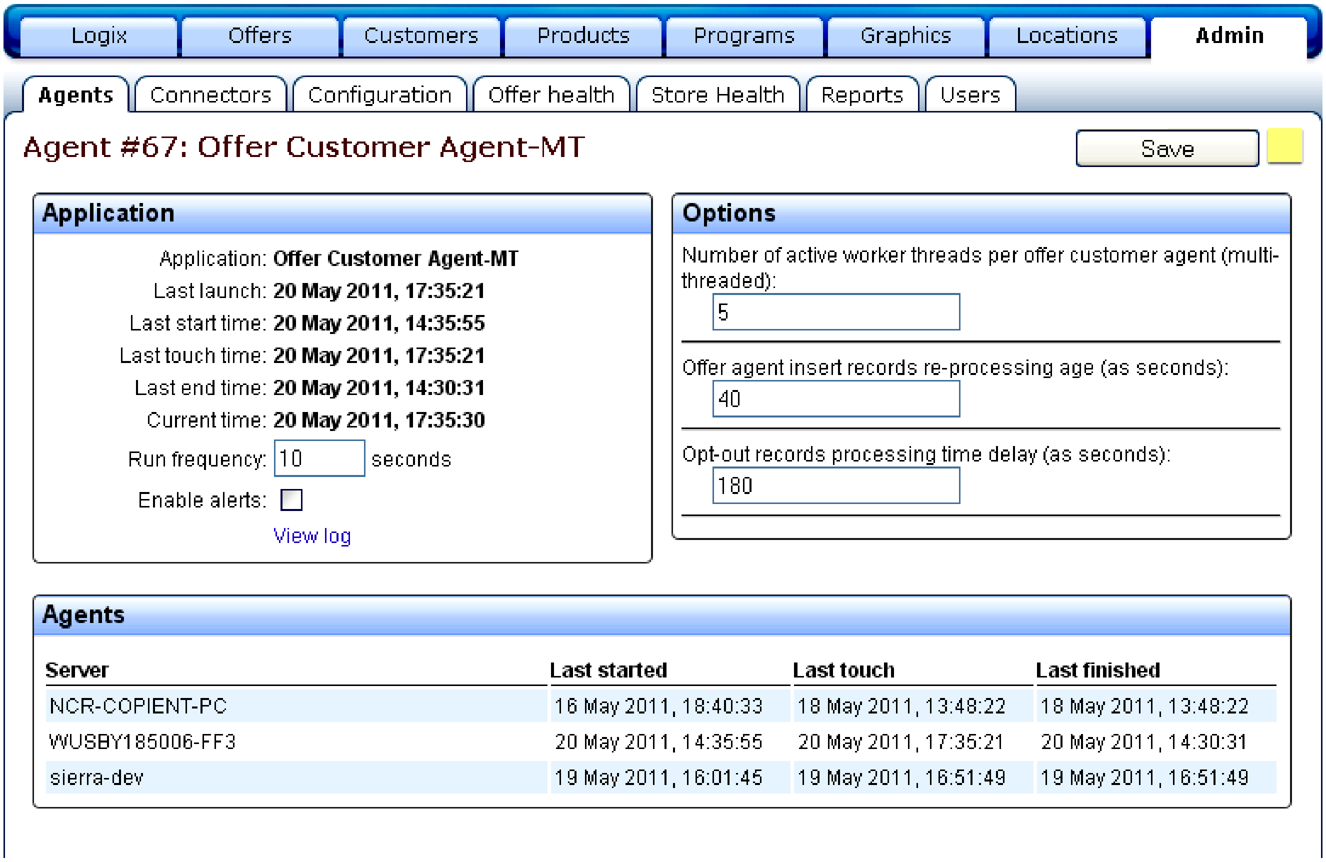
- Application name.
- Last launch time. This is when the application itself began running.
- Last start time. This refers to when the application last began its scheduled process, not when the application itself was launched.
- Last touch time. In cases where a process takes a long time to run, the "touch time" value keeps updating itself to show that the process is still continuing.

- Last end time. This is when the application's scheduled process last concluded.
- Current time (at the Central Server).
- Run frequency in seconds. Changes made to an agent's run frequency may take up to 10 minutes to apply.
- Enable alerts. When this box is checked, problems with the application will generate alert emails which will be sent to any users set up to receive them.
- View Log. Clicking this launches the Log File Viewer.



Depending on your permissions, you may be able to edit an application's frequency and alerts. If you alter these, remember to click the Save button to apply the change.

- Agent specific options and agent instances:
    - Some agents may have specific options and may also run on multiple servers. For example, the Offer Customer Agent-MT has its own options and runs with multiple instances.


Logix
Offers
Customers
Products
Programs
Graphics
Locations
Admin
Agents
Connectors
Configuration
Offer health
Store Health
Reports
Users
Agent #67: Offer Customer Agent-MT
Save
Application
Application: Offer Customer Agent-MT
Last launch: 20 May 2011, 17:35:21
Last start time: 20 May 2011, 14:35:55
Last touch time: 20 May 2011, 17:35:21
Last end time: 20 May 2011, 14:30:31
Current time: 20 May 2011, 17:35:30
Run frequency: 10 seconds
Enable alerts:
View log
Options
Number of active worker threads per offer customer agent (multi-threaded):
5
Offer agent insert records re-processing age (as seconds):
40
Opt-out records processing time delay (as seconds):
180
Agents
Server
Last started
Last touch
Last finished
NCR-COPIENT-PC
16 May 2011, 18:40:33
18 May 2011, 13:48:22
18 May 2011, 13:48:22
WUSBY185006-FF3
20 May 2011, 14:35:55
20 May 2011, 17:35:21
20 May 2011, 14:30:31
sierra-dev
19 May 2011, 16:01:45
19 May 2011, 16:51:49
19 May 2011, 16:51:49

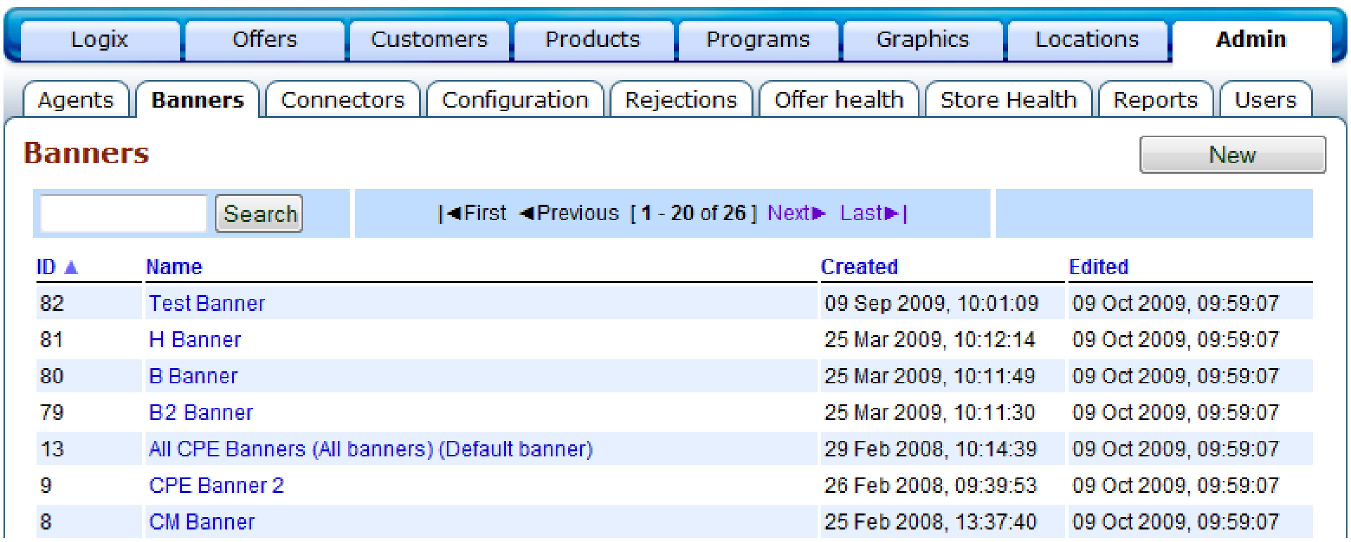
26 Banners

A banner is a name under which a set of stores within a single retail organization operates. All the stores in your company may operate under a single banner, or the stores may be organized under several different banners. The *Admin>Banners* page lets you see and manage these collections.

Note that banner pages will only be available in the UI if system option #66 ("Banners enabled") is turned on.

26.1 List

The *Admin>Banners* page lists all current banners and the dates they were created and edited. To edit a banner or see its details, click its name. To create a new banner, click the "New" button. To find a banner by name, enter a keyword into the search box above the top of the list, then click "Search".

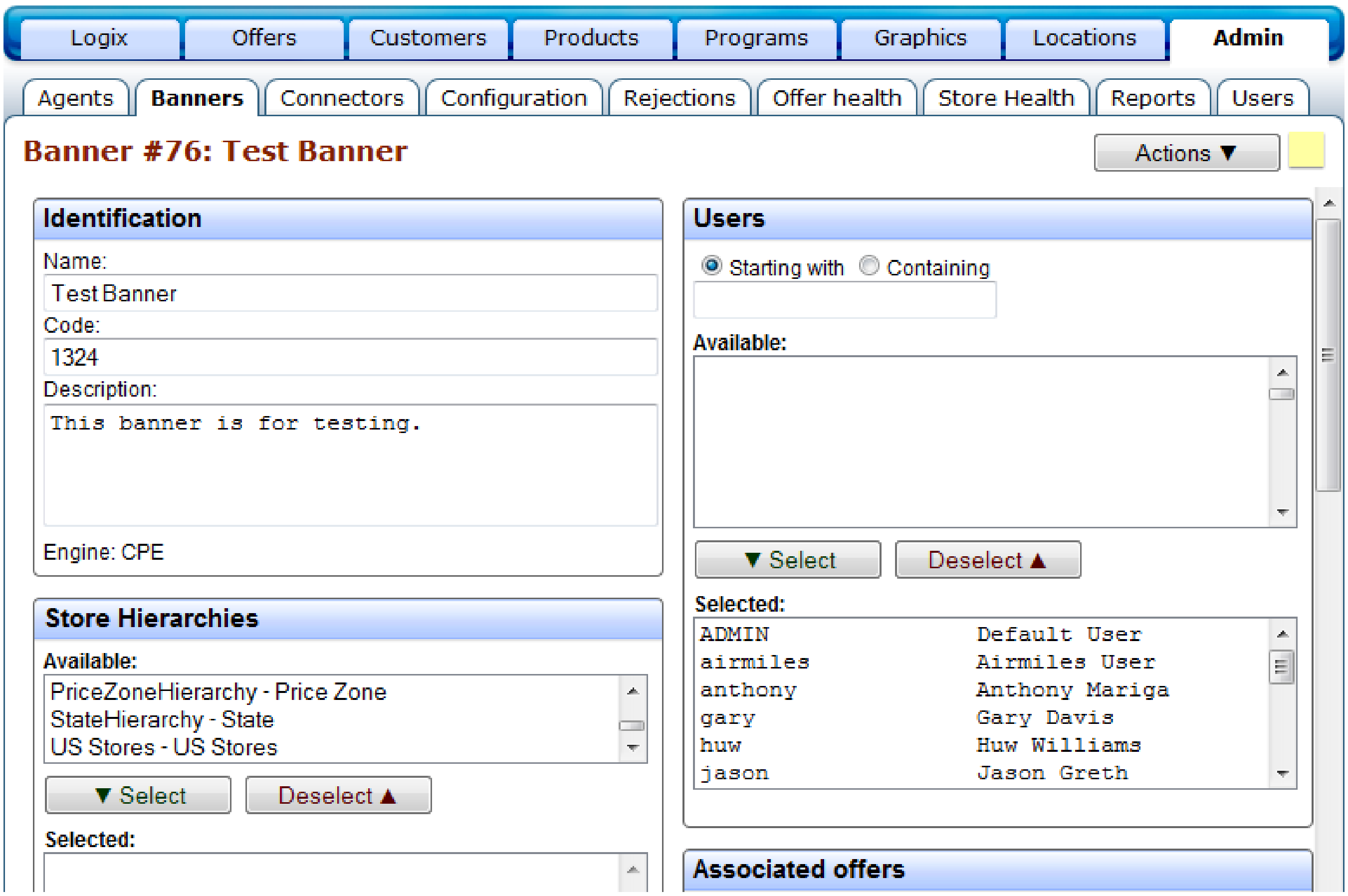


26.2 Edit

Each banner has the following characteristics:

- Name.
- Description.
- Promotion engine. A banner can be associated to only one particular engine, so in environments with more than one engine installed this must be selected when a banner is created. Once a banner is associated to a promotion engine, it cannot be changed.
- All banners. Ticking this checkbox indicates that the current banner actually represents all banners within the selected promotion engine.
- Store hierarchies. Any location groups assigned to this banner will show only the selected store hierarchies when a user clicks "Modify via hierarchy" from the *Store>Edit* page.
- Product hierarchy. Any product groups assigned to this banner will show only the selected product hierarchies when a user clicks "Modify via hierarchy" from the *Product>Group>Edit* page.
- Departments. These are the chargeback departments that will appear for use with any offers assigned to this banner. You can select departments from the list or enter new ones using the inputs provided. To set the department that will be shown as the default in offer discounts, highlight a department and click "Default".

- Terminals. These are the terminals that will be available for use with any offers assigned to this banner. (Associated offers will also have access to “all banner” terminals.) You can select terminals from the list or enter new ones using the inputs provided.
- Users. Only those users added to the “Selected” box will have access to offers and groups associated with this banner.
- Associated offers. The offers shown here are associated to the current banner.
- Associated groups. The store groups shown here are associated to the current banner.
- Associated stores. The stores shown here are associated to the current banner.



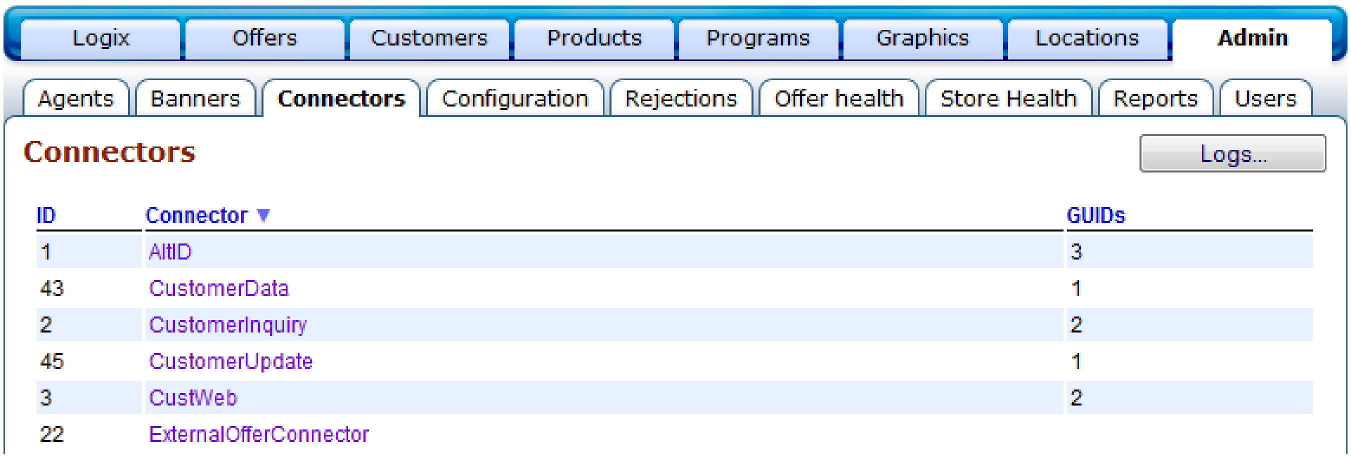
If you modify a banner, remember to click the “Save” button to apply the changes. To delete a banner, first ensure that it's not needed by any offer or group, then click “Delete”.

27 Connectors

Connectors are web service files (in this case Active Server Method files, or ASMXs) that can be accessed via HTTP and that have one or more operations that often, though not always, emulate functionality in the Logix UI. For instance, there are connector methods to update offers, adjust customers' point balances, or remove a customer from an offer. To see connectors in use by AMS, go to *Admin>Connectors*.

27.1 List

The *Admin>Connectors* page lists connectors used by AMS that are present in the database's Connectors table and that are marked as both installed and visible. For each connector, the page shows its name, its ID, and whether the connector uses GUIDs (see below). To see or edit a connector, click its name; to view log files associated to connectors, click the "Logs" button to launch the Log File Viewer.



27.2 Edit

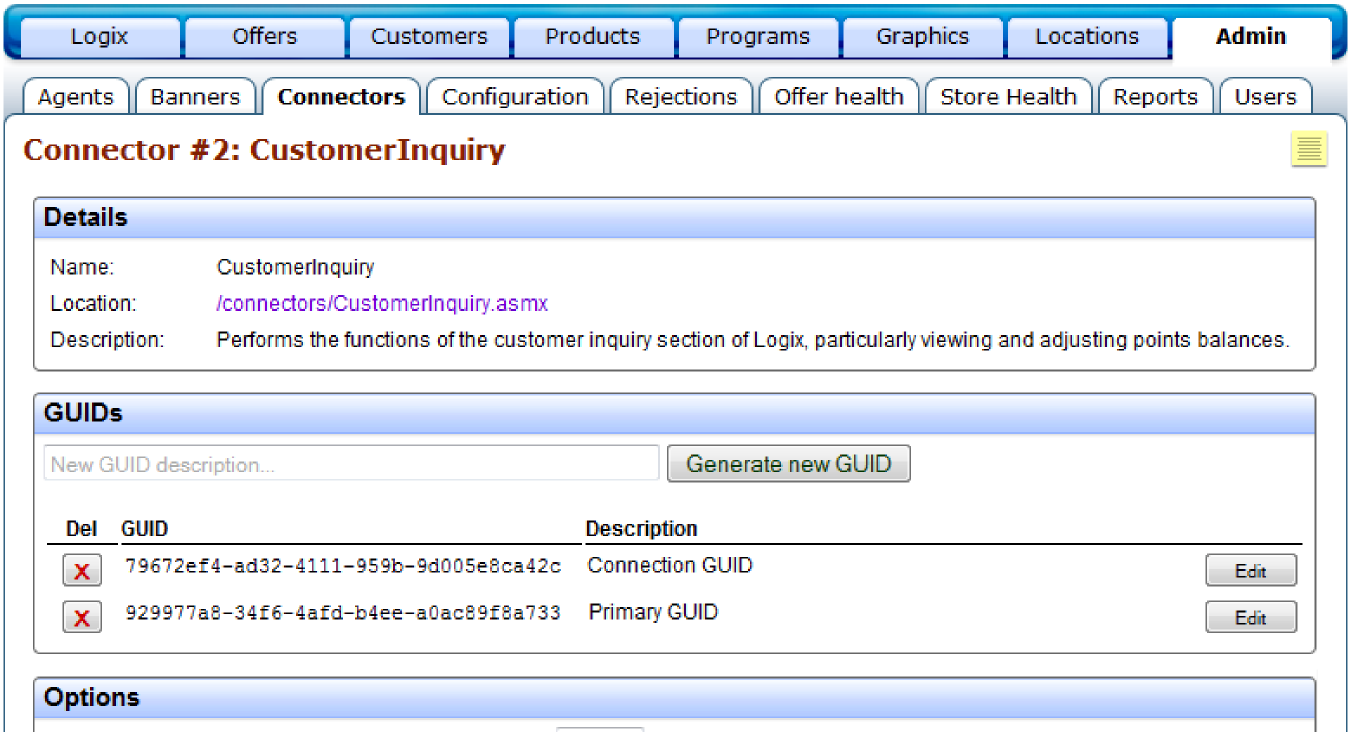
The *Admin>Connector>Edit* page for each connector has a "Details" box that shows the following three data, all of which are static and cannot be edited from the UI.

- Name.
- Location. This is the path on the web server where the connector ASMX is saved; clicking it will open the connector in a new window or tab.
- Description. This short description summarizes the purpose and use of the connector.

Some connectors control access to their operations through the use of Globally Unique Identifiers (GUIDs), 32-character hexadecimal codes that act as passwords. If the connector uses GUIDs, the page will list them in their own section with the following details:

- GUID.
- Description. A brief text description of the GUID; this may, for example, be used to indicate the party for whom the GUID was generated.

If you have sufficient permissions, you can edit the descriptions of existing GUIDs by clicking the "Edit" button on each line, or delete GUIDs by clicking the red "X" button. To create a new GUID, enter a description into the "New GUID description" box and click "Generate new GUID".



The operation of some connectors can be controlled by setting certain connector-specific options; if the connector has these, they'll be shown in the "Options" section at the bottom of the *Connector>Edit* page.

27.3 External Connectors

27.3.1 AltID

Alternate ID can be managed via a web service, such as enrolling and updating an Alternate ID. It indicates whether or not an Alternate ID exists, should be created, or requested.

27.3.2 Card Authorization

CardAuthorization.asmx, a web service designed to authorize customer/card usage. It indicates whether or not a member's account is valid, if the member is registered, the member's name, and the member's balance in the base points program.

27.3.3 Cust Web Connector

CustWeb.asmx is a web service designed to provide information and execute functions related to the customer-facing website such as Customer Details, Membership Edit, Offer List, Update External Points, and Status Results.

27.3.4 Customer Data

CustomerData.asmx is a web service designed to provide general customer data changes made in Customer Inquiry within the Logix application.

- Get Logix Customer Updates (By Batch/Date)

27.3.5 Customer Inquiry

CustomerInquiry.asmx is a web service designed to provide information and execute functions related to customer inquiry.

- Get Point/ Stored Value Balances
- Adjust Point/ Stored Value Balances
- Get Points/Stored Value Adjust Report (By User/Customer)

27.3.6 Customer Update

CustomerUpdate.asmx is a web service designed to provide create and modify customer data within the Logix application.

27.3.7 CRMOfferConnector

The CRM Offer Connector web service enables offer creation, maintenance and retrieval of offer data from outside of the Logix User Interface. An offer may be created in Logix and exported via the CRM Offer Connector to an external CRM source. An offer originally created in Logix may be re-imported, or a new offer may be created in Logix, from an external CRM source. Offers are imported and exported in a standard XML offer description format.

27.3.8 External Offer Connector

The External Offer Connector (EOC) web service enables clients to add, update, and retrieve offer information in a manner similar to maintaining offers in the Logix user-interface. The EOC is especially useful to allow third party entities (known in Logix as external sources) to run offers in a client's enterprise. It allows partners to create and maintain their offers while the client still retains offer approval and modification rights. External sources are defined in the Logix UI which allows certain third parties to send offers to the EOC. The EOC uses the external source's credentials, as supplied as parameters to the method call, to authenticate and also determine how to handle the offer.

27.3.9 Issuance

Issuance.asmx is a web service designed to provide issuance data retrieval.

27.3.10 Kiosk Web Connector

KioskWeb.asmx, a web service designed to handle offer operations at a kiosk.

- Get Accumulation Balance
- Get Web Kiosk Targeted Items
- Get Web Kiosk Offers By Location Code
- Lookup by Alternate ID

27.3.11 LDAP

LDAP is the Lightweight Directory Access Protocol, an application protocol for querying and modifying directory services running over TCP/IP. Logix can leverage an external LDAP server for user authentication. Logix will leverage an external LDAP server for authentication information of a users password. The user must exist in Logix and LDAP must be enabled for this to occur. Current validated LDAP servers are Sun ONE , and OpenLDAP, other servers should function provided they follow the standard LDAP api.

27.3.12 Universal Offer Connector

The Universal Offer Connector (UOC) web service enables clients to retrieve offer(s) information in a format that based on the promo engine type. The UOC is especially useful to allow third party entities (known in Logix as external interface IDs) to get offers to a client's enterprise. The UOC uses the external interfaces' credentials, as supplied as parameters to the method call along with the engine ID, to authenticate and also determine what offer(s) will be getting.

27.3.13 BuyerRoleData

BuyerRoleData.asmx is a web service designed to provide information and execute functions related to buyer roles.

- Get information about a buyer role
- Create a new buyer role
- Update an existing buyer role
- Delete a buyer role

27.3.14 AdminUserData

AdminUserData.asmx is a web service designed to provide information and execute functions related to Logix administrative user accounts.

- Get information about a user account
- Create a new user account
- Update an existing user account
- Delete a user account

27.3.15 AMSActivityLogData Connector

AMSActivityLogData.asmx is a web service designed to provide information on the activities on logix and the execution of the agents related to Logix user accounts.

The webmethod ***GetActivityLogData*** retrieves activities of the logix users in a given date range.

27.4 Internal Connectors

27.4.1 CM Connectors

The CMConnector Web Service allows for synchronizing the points balance of an external points program with the internal Logix Points Program. This enterprise level web service provides two main services to the client system located at individual stores:

- **GetAccount** - Retrieves current loyalty enterprise level information for a particular customer to be used by the POS in processing sales transaction data for this customer.
- **PutTransaction** - Processes updates to the enterprise level loyalty information for a particular customer generated during a POS transaction.

27.4.2 Phone Home

The PhoneHome Connector is used to request account information for customers whose data does not reside on a particular store level server. If the requested customer information does not reside on the Logix server, a new customer account is created.

27.4.3 Reporting Upload

ReportingUpload.aspx retrieves and writes data to a file and inserts records to a Logix database. Data is collected in the standard manner for retrieval and storage.

27.4.4 Trans Download

The TransDownload Connector is used to send data resulting from the execution of offers on store level servers to cross shopping locations, as well as data entered/updated at the host level.

27.4.5 Trans Upload

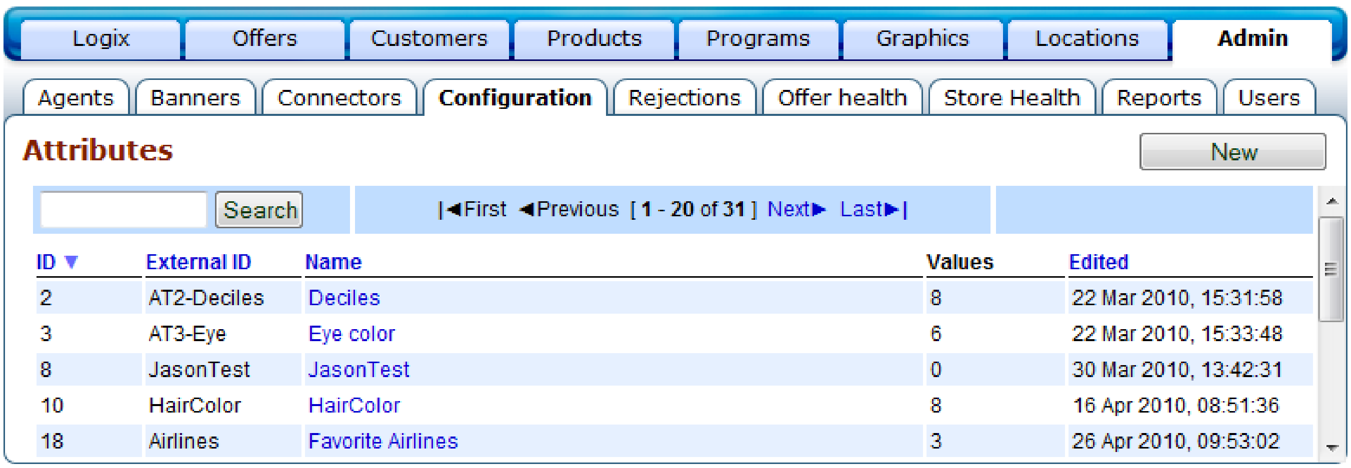
The TransUpload Connector is used to receive data resulting from the execution of offers on store level servers

28 Attributes

Sometimes you may wish to identify a customer not by his customer ID but instead by some other characteristic, like the airline he prefers to travels on, or his favorite brand of soda. These kinds of arbitrary personal identifiers are called *attributes* and can be created and managed from the *Admin>Attributes* page. Once configured, attributes can be associated to particular customers – for instance, you might have an attribute indicating the customer owns a cat that you assign to customers who are cat owners. These customers can then be targeted in CPE offers through the use of attribute conditions, either in place of or in addition to conventional customer conditions.

28.1 List

The *Admin>Attribute>List* page shows the name and ID of all the attributes currently in the system, as well as the number of possible values the attribute possesses (see below) and the date and time the attribute was last edited. To see details of any attribute, click its name. Click the “New” button to create an attribute, or enter a keyword in the search box to find an existing attribute.



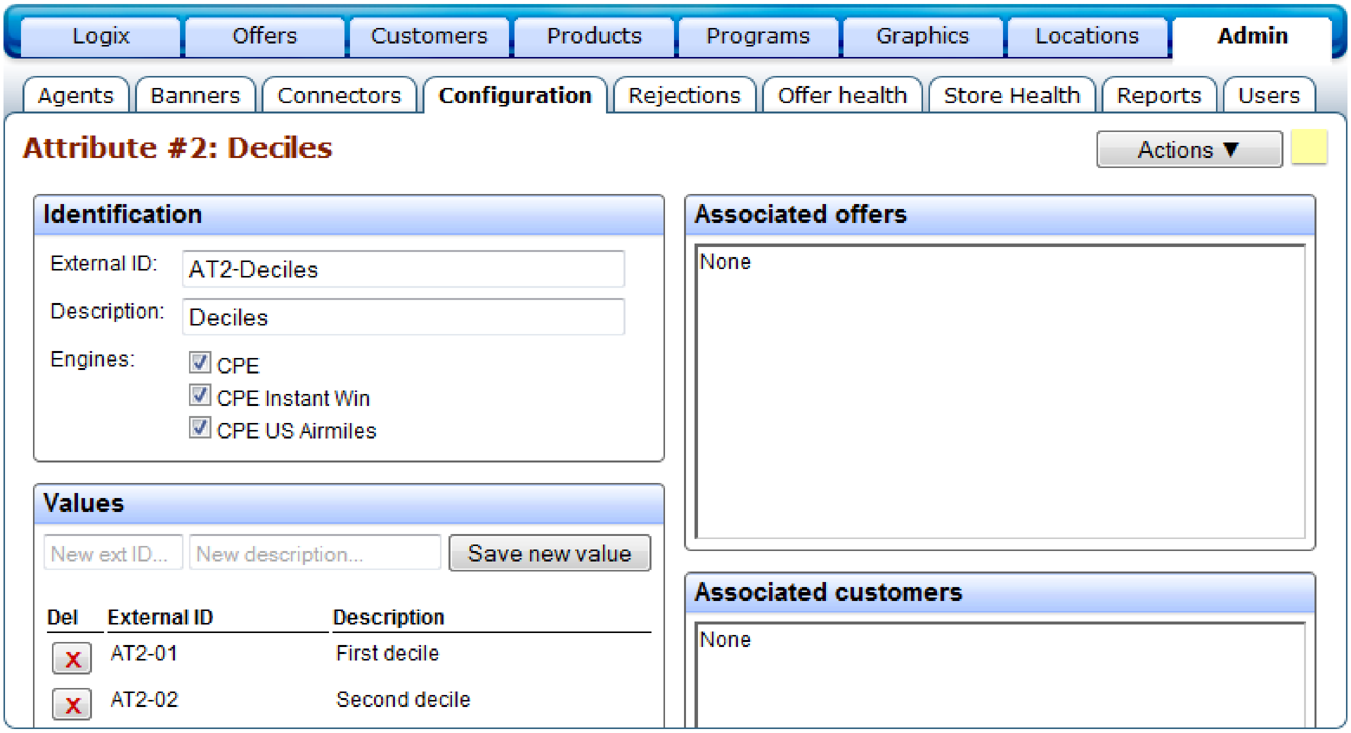
28.2 Edit

All attributes have the following basic characteristics, editable from the *Admin>Attributes>Edit* page:

- External ID – A brief code by which the attribute can be identified.
- Description – The name of the attribute, e.g. “Home town” or “Favorite sports team”.
- Engine(s) – The attribute will be available in the offer builders for the selected promotion engine(s).

Attribute also have one or more values. For example, if the attribute was “Pet”, the associated values might be “Cat”, “Dog” and “Other”. Values have their own external IDs and descriptions which can be set in the “Values” box on the *Edit* page. Existing values can be deleted by clicking the red “X” button.

Note that attributes that are in use, either by being associated to a customer or in use as a condition in an offer, cannot be deleted. The same is true of values: only those that are not in use can be deleted.


Logix
Offers
Customers
Products
Programs
Graphics
Locations
Admin
Agents
Banners
Connectors
Configuration
Rejections
Offer health
Store Health
Reports
Users
Attribute #2: Deciles
Actions ▼
Identification
External ID:
AT2-Deciles
Description:
Deciles
Engines:
CPE
CPE Instant Win
CPE US Airmiles
Values
New ext ID...
New description...
Save new value
Del
External ID
Description
AT2-01
First decile
AT2-02
Second decile
Associated offers
None
Associated customers
None

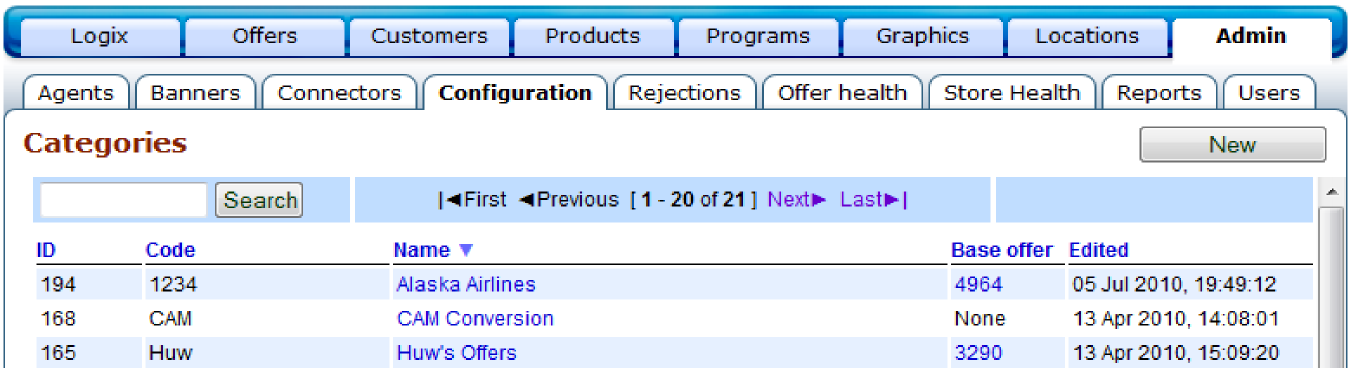
29 Categories

A category is an arbitrary group to which one or more offers can be assigned. Grouping similar offers into a category can be useful, since from the *Offer>List>Advanced Search* page you can search for offers by category.

29.1 List

The *Admin>Configuration>Categories* page shows the names of all current offer categories, as well as the code, the Logix-assigned ID and the last edit date for each. The page also shows if the category has a base offer specified; if it does, the offer's ID is shown as a hyperlink.

To create a new category, click the "New" button. To find a category by name, enter a keyword into the search box above the top of the list, then click "Search".

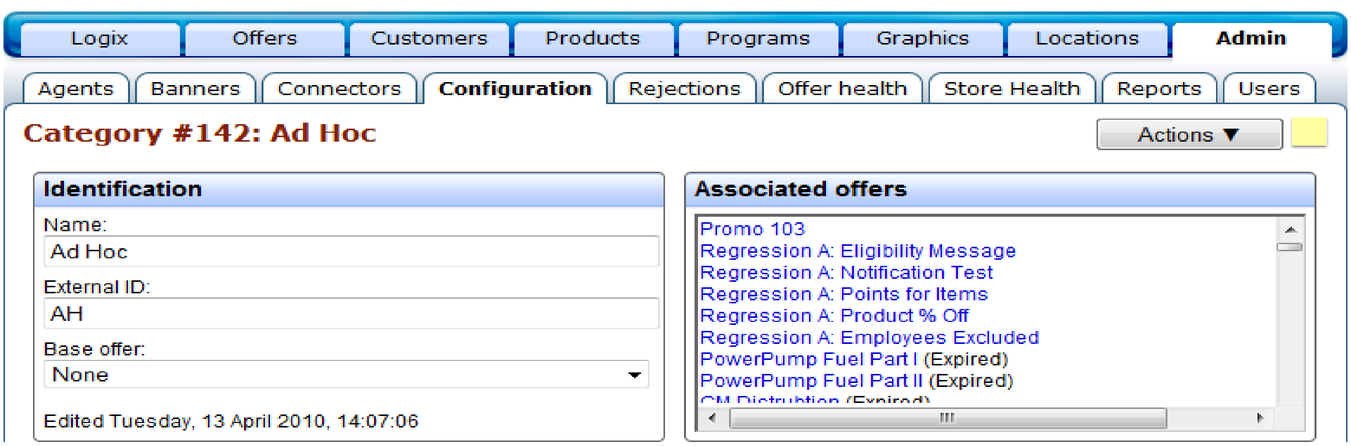


29.2 Edit

The *Admin>Configuration>Categories>Edit* page shows the following editable category data:

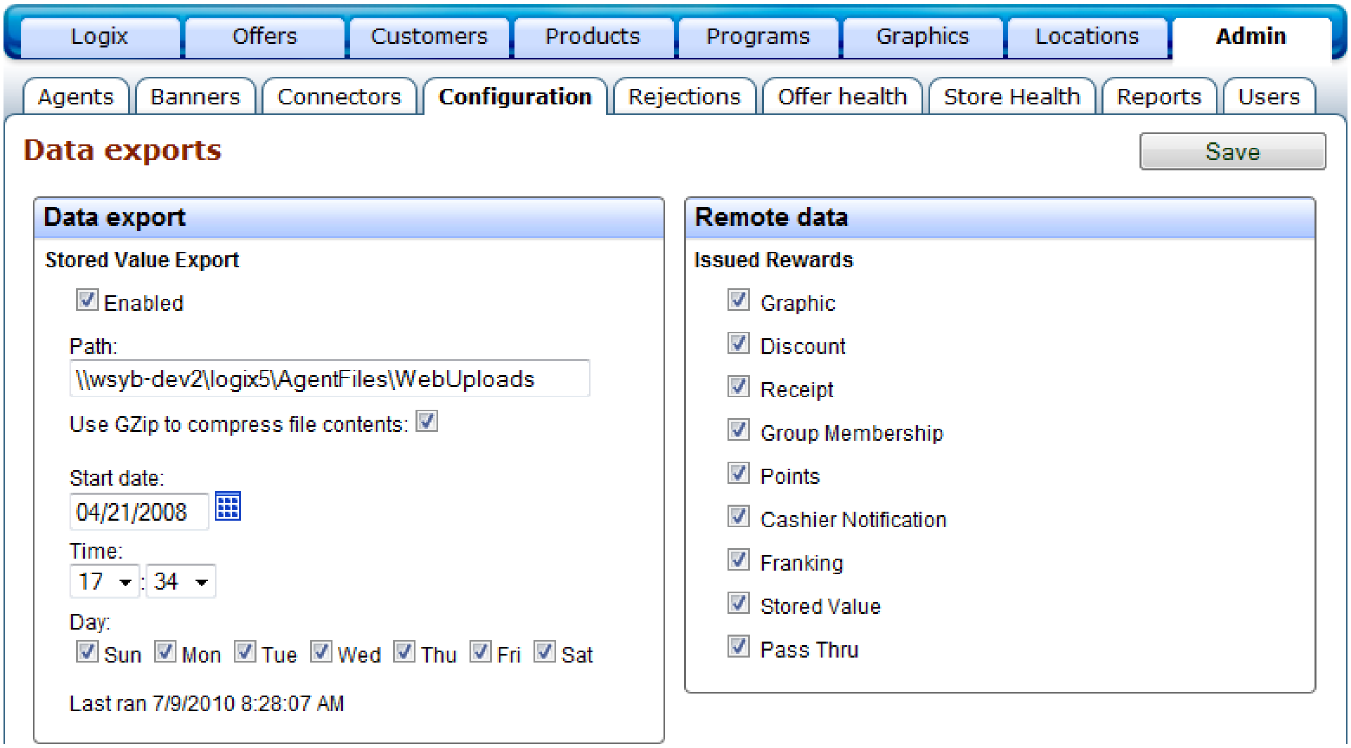
- Name.
- External ID. This field can be up to 20 characters and is used as a short code to identify the category.
- Base offer. Any category can have one offer specified as its "base" offer. Offers that use base or bonus programs can be grouped together within a category via the category's specified base offer.

The "Associated Offers" box lists all the offers in the category, both expired (noted parenthetically) and current.



30 Data exports

The *Admin>Configuration>Data exports* section of Logix administration is divided into two sections, data exports and remote data, described below.



30.1 Data export

The data export section of the page controls how and when data is exported from central, to where, and in what format. The options you can control for each are listed below:

- Path – The server file path to which exported data is saved.
- GZip – Use GNU Zip to compress the file's contents.
- Start date – The starting date on which the export will occur.
- Time – The time in 24-hour format at which the export will occur.
- Day – The day of the week on which the export will occur.

30.2 Remote data

The checkboxes in the "Remote data" section control what data gets gathered from local sources and aggregated by central. Issuance reports sent up from local servers are a common form of remote data gathering; these issuance data describe things like discounts that have been redeemed or printed messages that have been presented at the store.

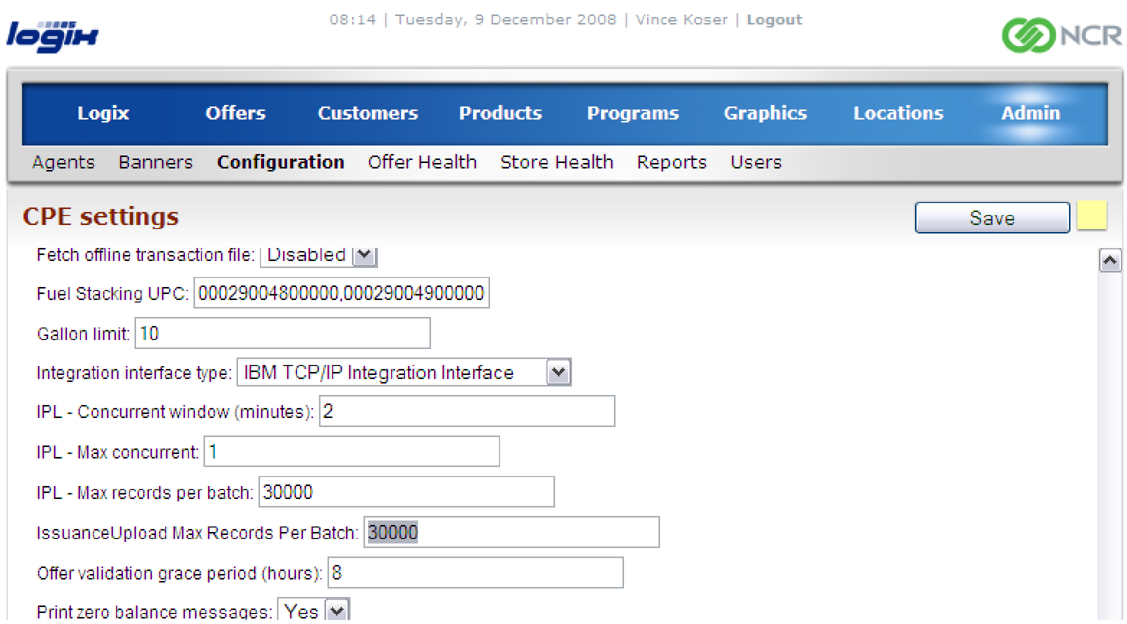
31 Issuance

The Engine grants multiple reward types that are issued during the transaction. The issuance functionality adds the ability to turn on issuance logging for the engine during operations. The engine encounters rewards during transactions that are issued or voided and that reward is logged to a database table (IssuanceData) along with any associated information related to the reward.

31.1 Scheduling

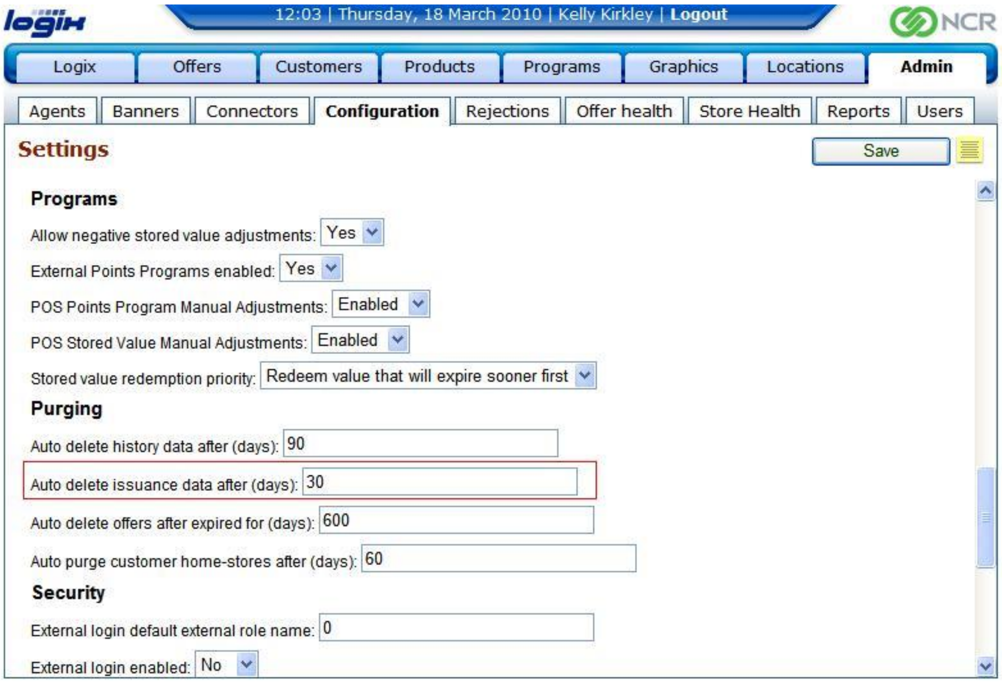
The data transmission scheduling is accomplished by adding an entry into the engine. The recommended frequency for upload should be determined by your network availability and issuance data load size.

The settings can be adjusted in Logix to configure the amount of records and the frequency of Upload.



31.2 Purging Issuance Data

It is recommended that the issuance tables be purged regularly of aged data to ensure it does not grow too large. This can be achieved by setting the “Auto delete issuance data after (days)” field in Logix on the “Admin > Configuration> Settings” screen as seen below:

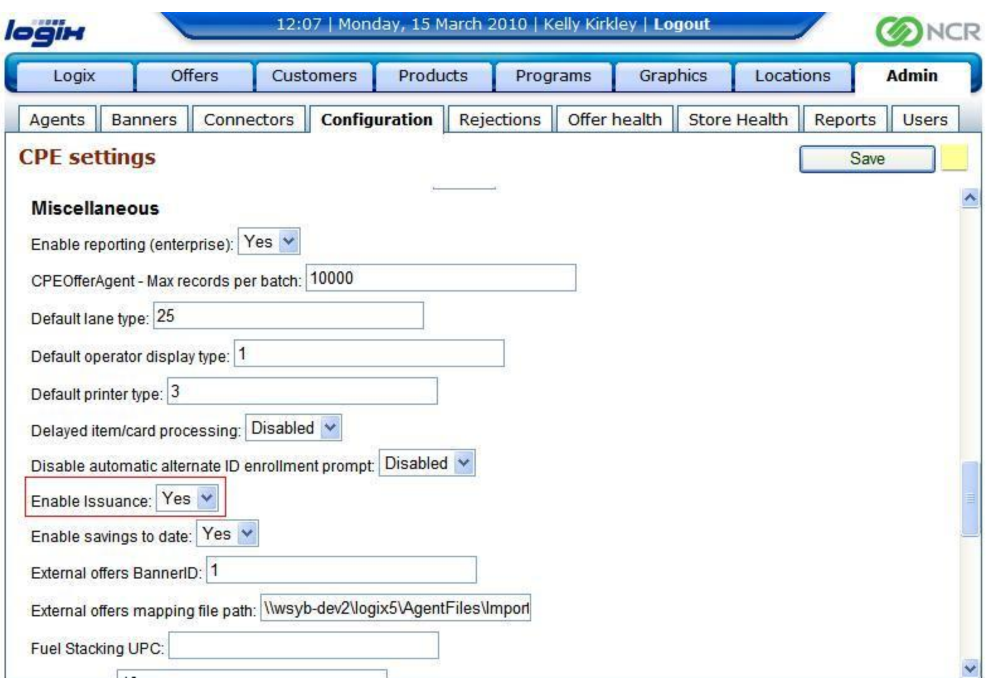


It is recommended that the client customize this setting based on their individual data retention needs:

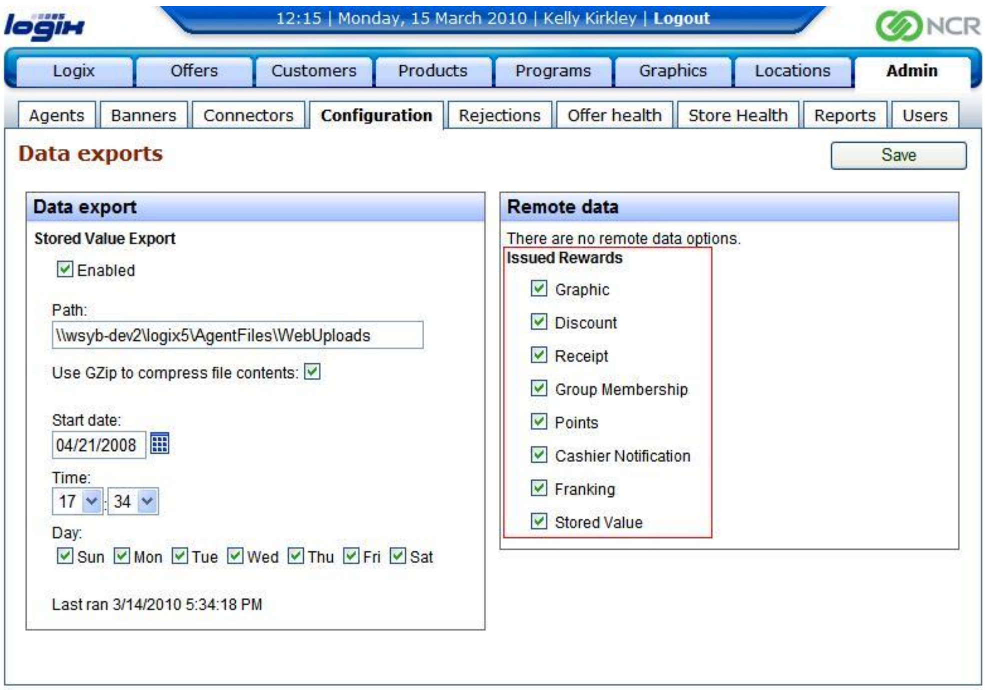
31.3 Activating Issuance

In order to active Issuance as described above, the following must be configured in Logix:

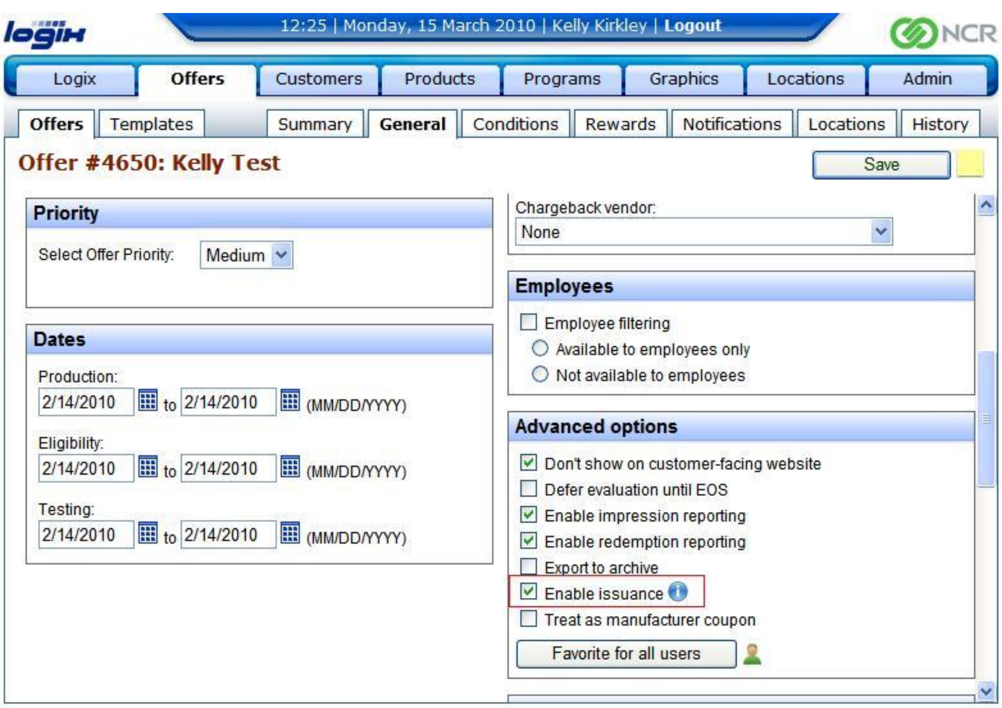
Enabling Issuance: The option “Enable Issuance” should be set to “Yes” under the “Admin > Configuration> Settings: CPE” screen:



Selecting Rewards: Any of the following reward types under "Admin > Configuration > Data Export" can generate Issuance data:



Selecting Offers: Issuance data fro the Rewards selected above is captured per offer if the "Enable Issuance" option is selected under the "Offers > General" screen:

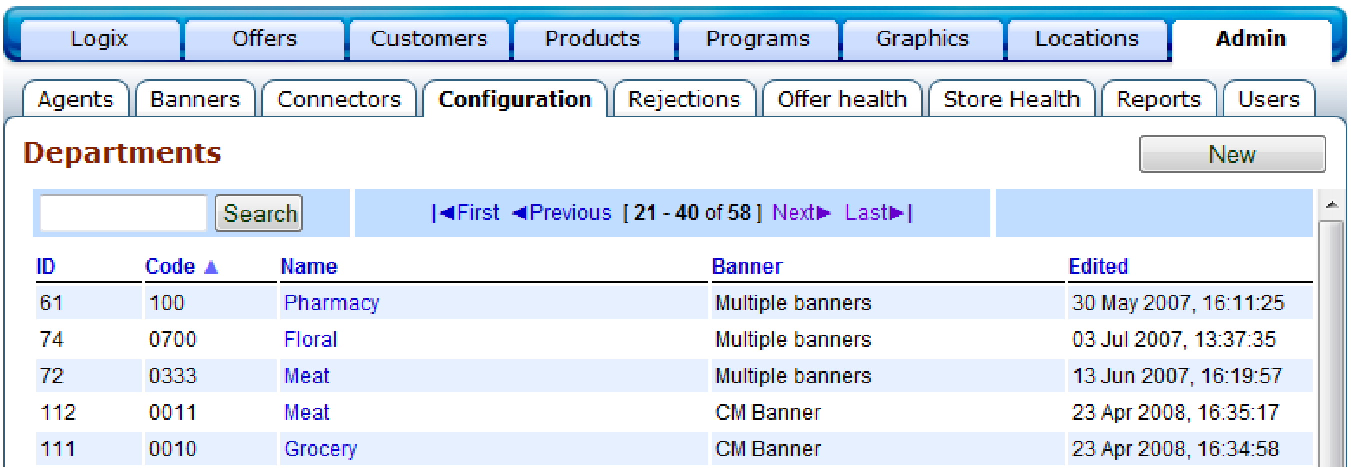


32 Departments

Any offer can be associated with a chargeback department, used for accounting purposes to determine how the costs of the offer are charged. Offers on produce, for instance, can be associated to the store's produce department.

32.1 List

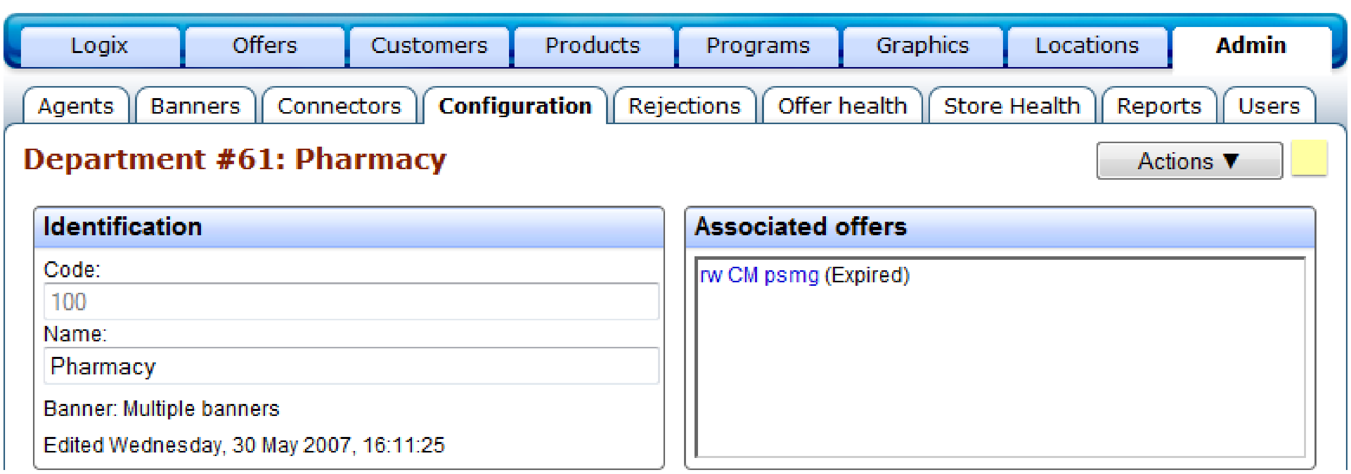
The *Admin>Configuration>Departments* page lists the names of existing departments, their codes, IDs, and the banner to which it's associated, as well as the date and time it was last edited. To find a particular department, enter a keyword in the search box and click "Search", or to create a department click the "New" button.



32.2 Edit

Departments have the following characteristics, editable on the *Admin>Configuration>Departments>Edit* page:

- Code – A four-digit department identifier.
- Name.
- Banner – The banner with which the department is associated. A department can be under a single banner or can be available to multiple banners. Once this banner choice is set, it cannot be changed.



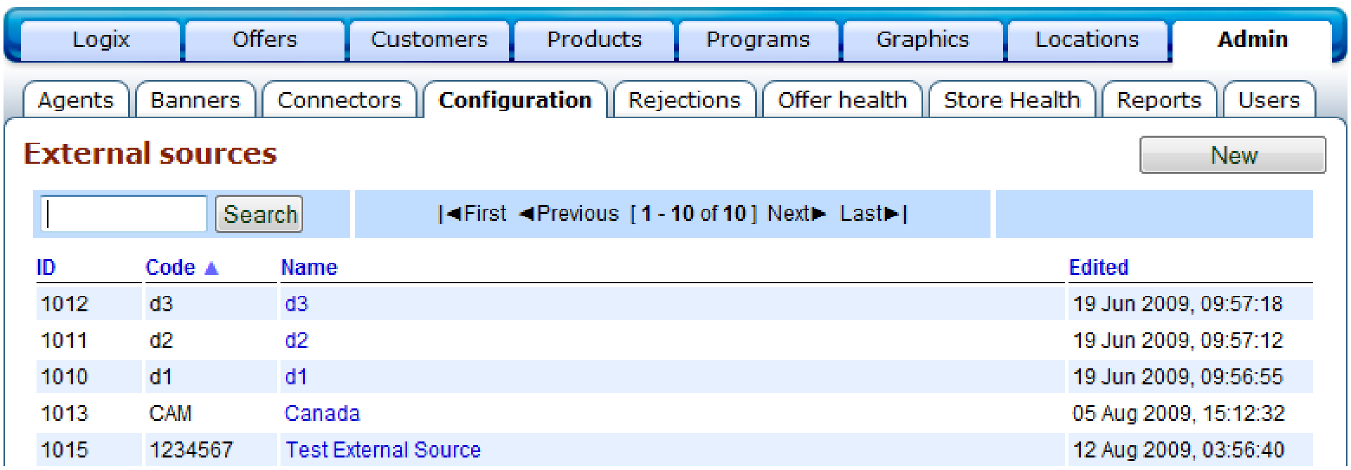
To delete a department, select it from the list and click Delete. Any offers associated with that department (listed in the "Associated offers" box) become associated with no department.

33 External sources

Logix can accept the importation of offers generated by various third-party sources. These external sources are defined using the *Admin>Configuration>External sources* page and appear in the "Source" section of the *Offer>General* page.

33.1 List

The *Admin>Configuration>External sources* page lists the names, IDs and codes of currently-defined sources. Click a source's name to see its details, or create a source by clicking the "New" button. To find an existing source, enter a keyword into the search box and click "Search".



33.2 Edit

Each source has the following primary characteristics:

- Code – This identifier cannot be changed while the source is in use.
- Name.
- Description.

Sources also have the following options:

- Concurrent offer submission limit – This controls how many current offers can come from this source simultaneously; it can be set to "disabled" to prevent offer submissions, to "unlimited" to allow any number, or "limited" which caps offers at the specified number.
- Automatically deploy offers from this source – If this is set, offers generated from this external source will automatically be marked for deployment when they're imported into Logix.
- By default, offers sent from this external source should be treated as manufacturer coupons.
- By default, assign the Logix ID to offers as the client offer identifier when one isn't already assigned.
- By default, enable issuance for offers sent from this external source.

- Allow external offer ID changes – If enabled, the external offer ID accessible from the *Offer>General* page will be editable.

To delete a source, first ensure that it's not used by any offer, then click Delete.

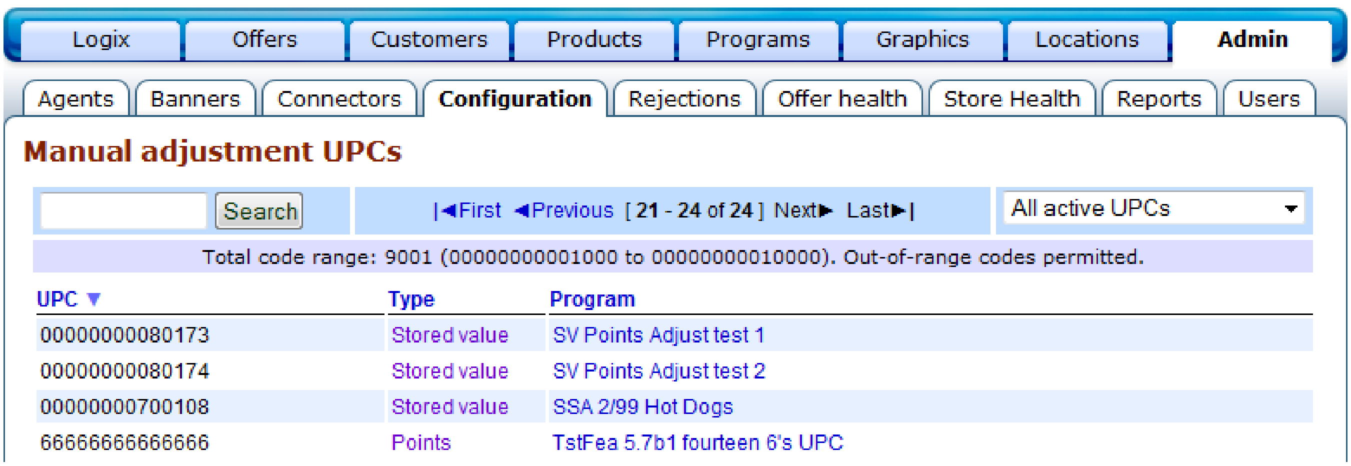
34 Manual adjustment UPCs

Manual adjustment UPCs are product codes that can be associated with points programs or stored value programs, and which can be required to perform manual balance adjustments. In other words, in order to grant a certain number of points, you might require a certain barcode to be scanned, the code for which is stored as a manual adjustment UPC.

34.1 List

The *Admin>Configuration>Manual adjustment UPCs* page shows the range in which such UPCs should fall (per the installation's CPE system settings 100 and 101) and whether UPCs outside the specified range are allowable (102). Only UPCs currently assigned to a points program or stored value program are shown in the list. Using the filter dropdown near the upper right corner of the page you can control whether the list includes all UPCs, or only those within or outside the specified range.

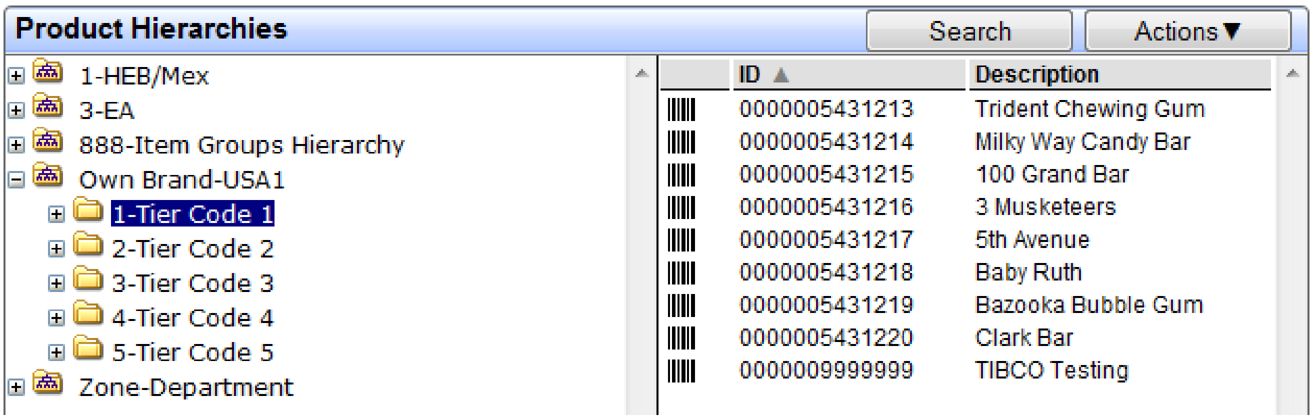
Note that manual adjustment UPCs aren't entered or managed from this page, only shown. UPCs are entered in the point and stored value rewards screens of the CPE offer builder.



35 Hierarchies

Logix allows products or stores to be organized into hierarchies, tree-like structures that logically group similar entries together. For instance, one might have a hierarchy that organizes all products by their manufacturers, or one that groups stores by region. The file explorer on your computer is a good comparison and works in a similar way, with "folders" in a window on the left and "files" in a window on the right.

To see and edit hierarchies, go to the *Admin>Configuration>Product hierarchies* or *Admin>Configuration>Store hierarchies* pages.



35.1 Nodes

Hierarchies are composed of what are called nodes – levels in the hierarchy that may contain items, other nodes or both. Nodes may also be empty. In the hierarchy explorer, nodes are listed in the left window with folder icons. Clicking one of these nodes will expand it, revealing the nodes and items (if any) that are within it.

To delete a node, click the Actions button and select "Delete from Hierarchy".

35.2 Items

Items are the things that hierarchies are intended to organize. In a store hierarchy, items are individual stores; in a product hierarchy they may be products or departments. In the hierarchy explorer, items are listed in the right window with icons representing stores, UPCs or departments.

To find a particular item name, click the Search button, then enter an appropriate keyword. The results will be displayed in the hierarchy explorer.

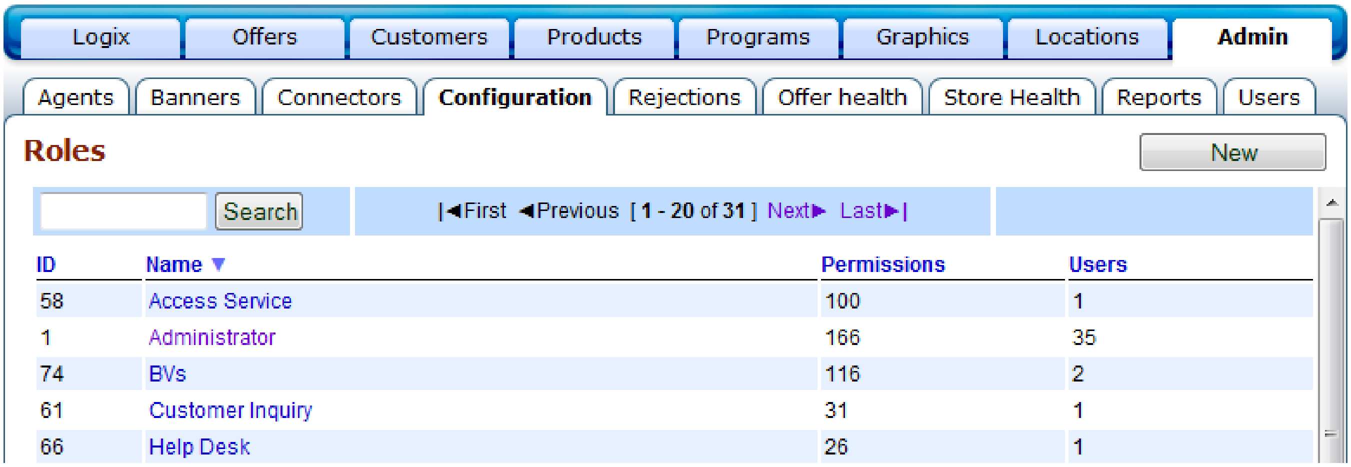
To delete an item, click the Actions button and select "Delete from Hierarchy".

36 Roles

Roles are groups of permissions, assigned to users to control the areas of Logix they're allowed to view or edit. The individual permissions themselves are fixed features of the system and cannot be edited. For more information and a complete list of permission, please see the appendix.

36.1 List

The *Admin>Configuration>Roles* page lists the system's current roles, plus the number of permissions contained within each one and the number of users who possess that role. Click the name of a role to see its details, or "New" to create a new one.



36.2 Edit

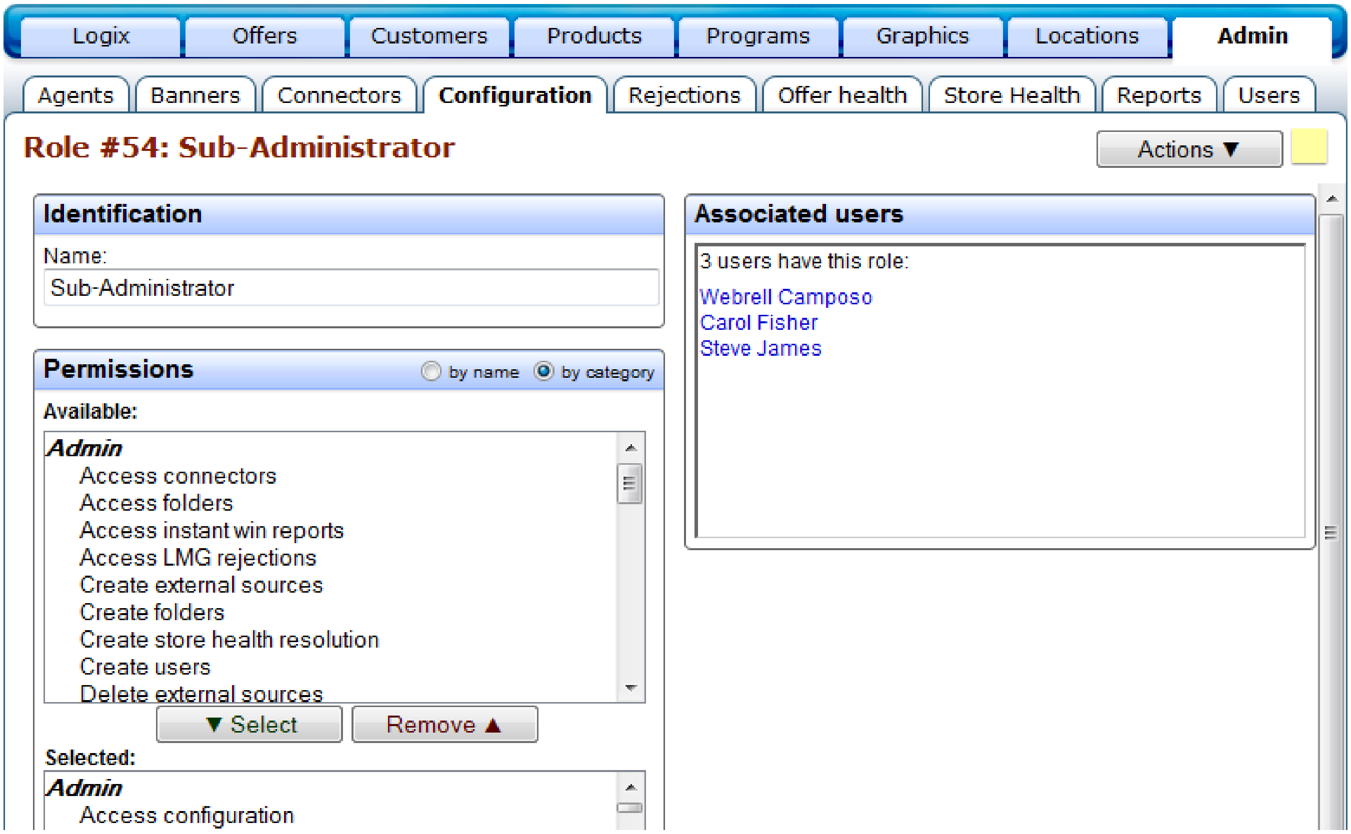
Each role has two editable characteristics:

- Name.
- Permissions.

Permissions are listed in two select boxes, one above the other. The first box shows those permissions that are currently part of the role; the second shows the remaining permissions that can be added. Most roles will have some but not all permissions selected. Use the "select" and "remove" buttons to move permissions between these boxes.

To delete a role, first ensure it's no longer needed, then click "Delete". Any users assigned that role will lose the permissions that it granted.

Note that role #1, "Administrator", is a special role that comes pre-made with installations of Logix. This role, which contains all available permissions, is not editable and cannot be deleted.


Logix
Offers
Customers
Products
Programs
Graphics
Locations
Admin
Agents
Banners
Connectors
Configuration
Rejections
Offer health
Store Health
Reports
Users
Role #54: Sub-Administrator
Actions ▼
Identification
Name:
Sub-Administrator
Permissions
by name
by category
Available:
Admin
Access connectors
Access folders
Access instant win reports
Access LMG rejections
Create external sources
Create folders
Create store health resolution
Create users
Delete external sources
▼ Select
Remove ▲
Selected:
Admin
Access configuration
Associated users
3 users have this role:
Webrell Camposo
Carol Fisher
Steve James

37 Scorecards

A scorecard is a printed summary of the points, stored value or discounts that a customer has earned in a transaction and is normally applied at the bottom of a printed receipt. The value of the scorecard is that it makes line-by-line reporting of earned points unnecessary – for instance, if a customer earned points in a given program ten times during a transaction, a scorecard would show the final balance on a single line rather than the individual earnings on ten separate lines.

37.1 List

The *Admin>Configuration* page provides three scorecards buttons: for points, for stored value and for discounts. Clicking these buttons takes you to the appropriate list page.

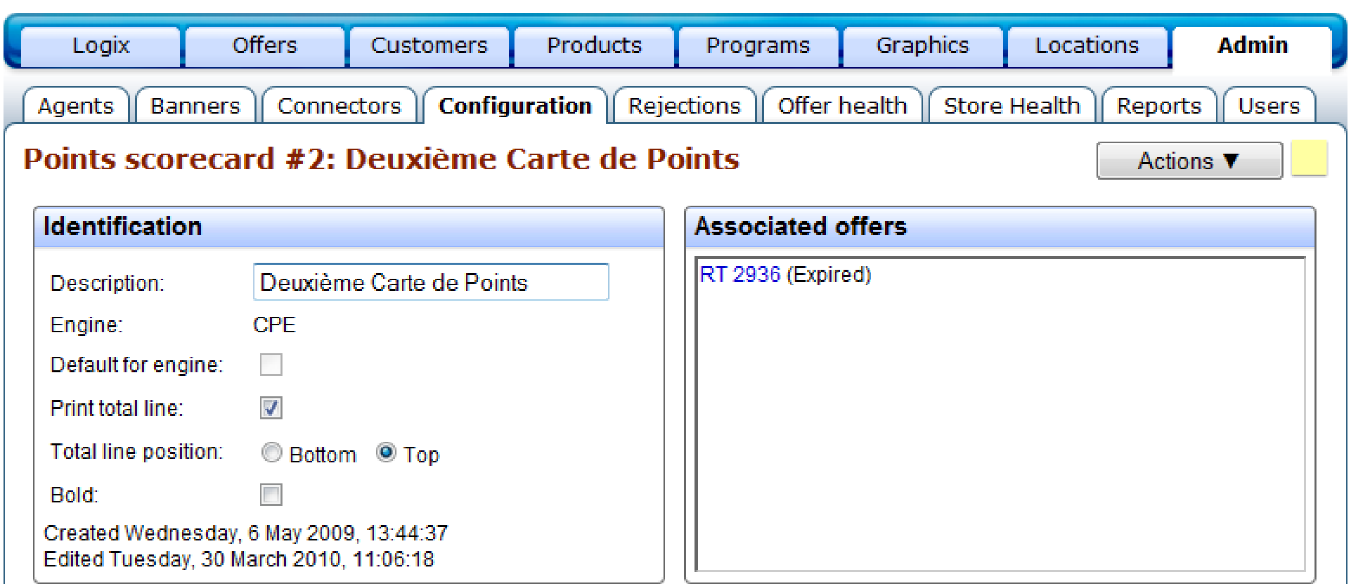
The list page shows the names of all available scorecards, the engine with which each one is associated, and the date and time it was last edited. If a user has set a scorecard to be the default for its engine, this will be indicated after the name. Clicking a scorecard name will load the *Scorecard>Edit* page. Clicking the New button will allow you to create a new scorecard.

37.2 Edit

The *Scorecard>Edit* page allows users to set the following characteristics for a scorecard:

- Description, the name of the scorecard.
- Engine, the promotional engine with which the scorecard is associated. Once set, this cannot be changed.
- Default for engine, an option that indicates that this scorecard will be the one shown by default when creating a new points or stored value reward for that engine. If another scorecard is already set as the default, it must be unchecked in that scorecard in order for this option to become available in others.
- Print total line, which controls whether a line showing the sums of each program are printed on the receipt.

The page also lists in the “Associated offers” box all the offers with rewards that use the scorecard.

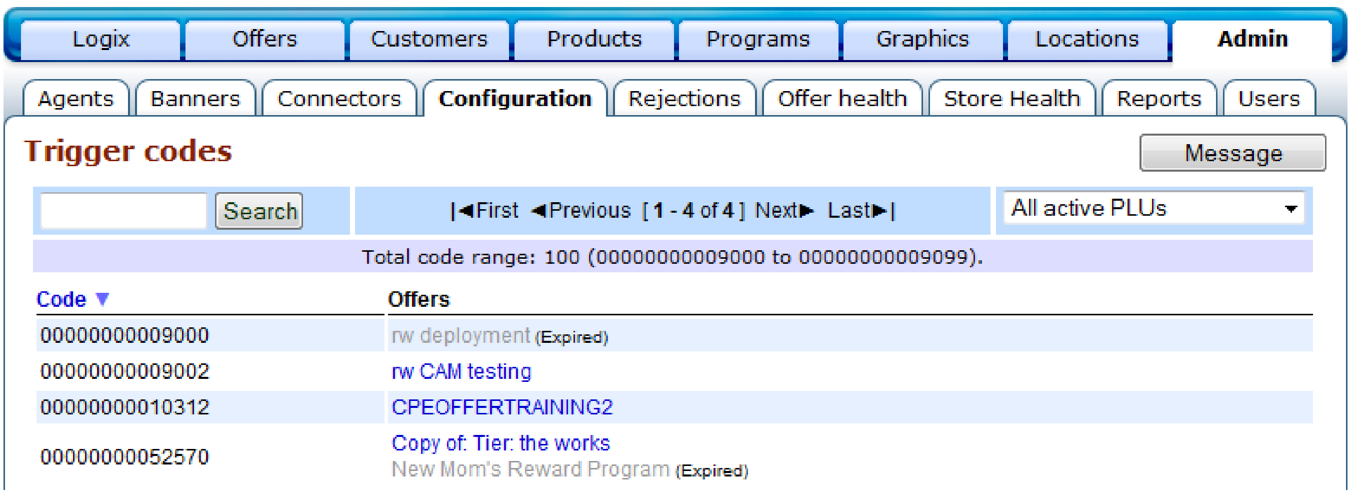


38 Trigger codes

Trigger codes are UPCs that must be scanned during a transaction in order to meet an offer's conditions. They also serve a second purpose by informing the cashier if the code is scanned but the other associated conditions of the offer are not met; in this case the cashier is normally told in the message to return the unused coupon to the customer.

38.1 List

The *Admin>Configuration>Trigger codes* page shows the range in which such codes should fall (per the installation's CPE system settings 92 and 93) and whether UPCs outside the specified range are allowable (95). Only codes currently used as condition in offers are shown in the list. Using the filter dropdown near the upper right corner of the page you can control whether the list includes all codes, or only those within or outside the specified range.



Clicking the "Message" button will open a popup in which you can set the cashier message that gets returned if the trigger code is present in a transaction but all the conditions for its associated offer are not met. Only the first line of the message can be configured; the second line is reserved for the trigger code.

Note that trigger codes aren't entered or managed from this page, only shown. Codes are entered in the trigger code condition page of the offer builder.

39 Tender types

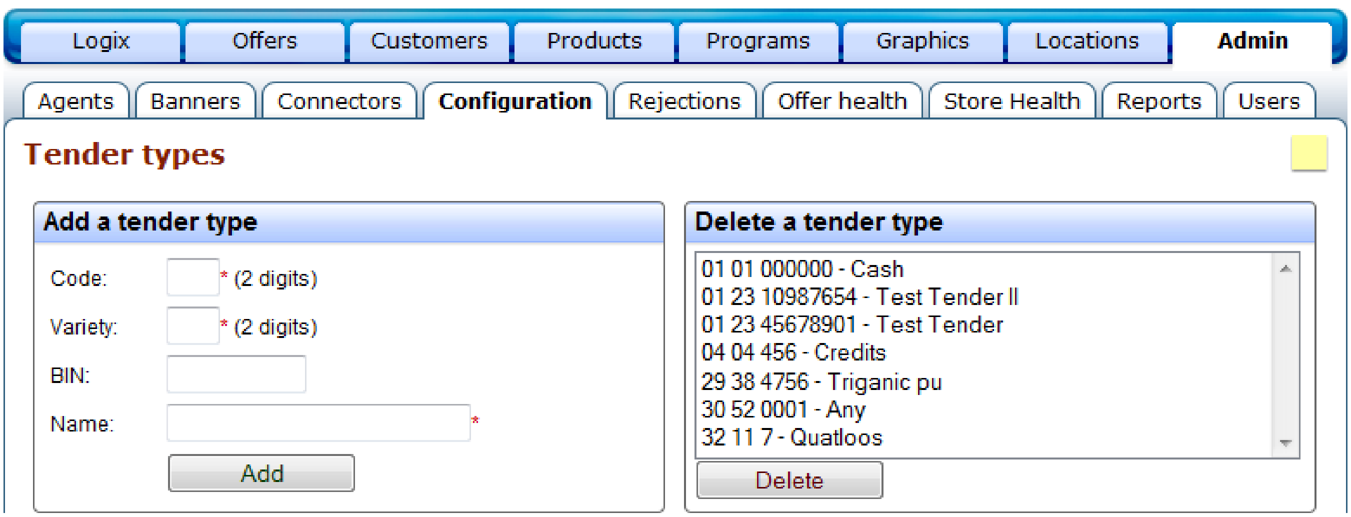
Tender types are methods of payment that can be proffered for a transaction, such as cash, check, Visa, etc., and can be used as conditions for offers. Tenders are managed from the *Admin>Configuration>Tender types: UE,* Admin>*Configuration>Tender types: CM* or *Admin>Configuration>Tender types: CPE* pages.

To create a new tender type, enter the following data into the boxes provided and click Add. The tender type is immediately available for use.

- Code – This two-digit code represents a general class of tender.
- Variety – This two-digit code represents a specific type of tender. It applies only to CPE and UE tender types.
- BIN – Bank Identification Number. This optional eight-digit number represents a particular institution. It applies only to CPE and UE tender types.
- Name – This is the name of the tender type.

Note that the combination of code, variety and bin number must be unique for each tender type. Tender types for the CM engine require only a code (up to 5 digits) and name, and not variety and BIN.

To delete a tender type, select it from the list and click Delete. A tender type in use by one or more offers cannot be deleted.

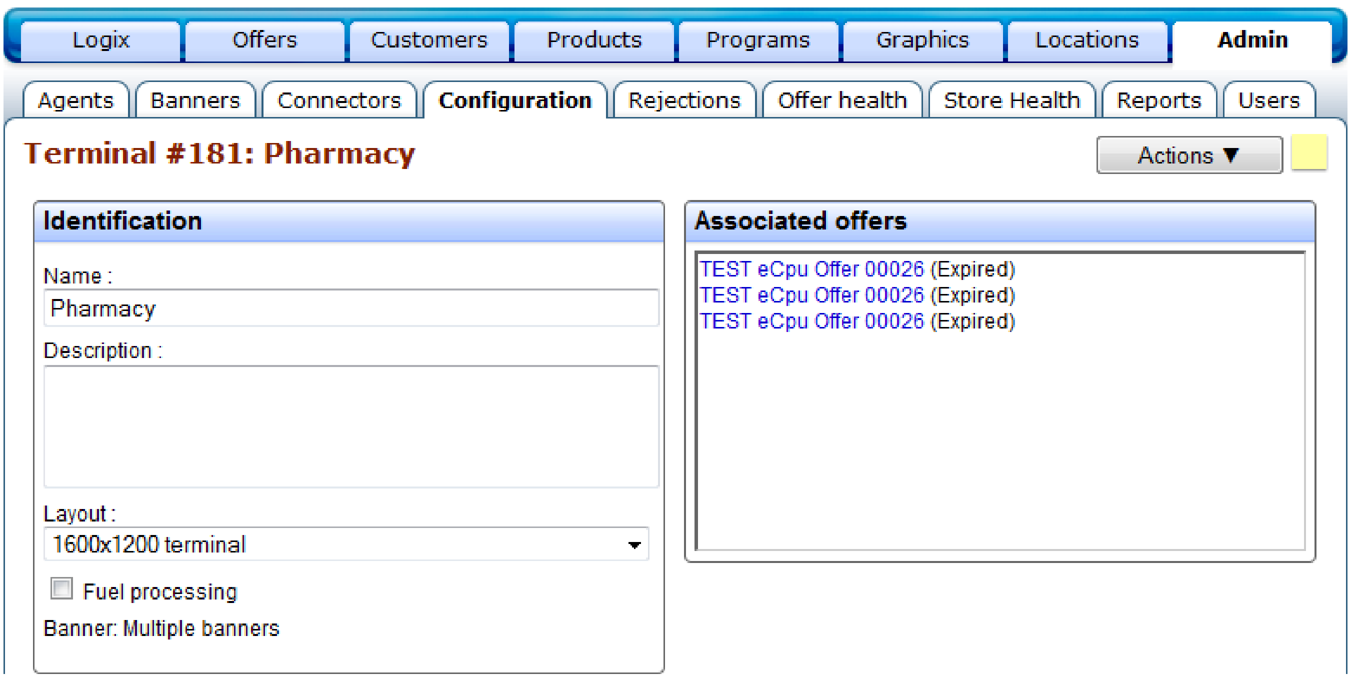


40 Terminals

Terminals are points at which transactions can occur, and include regular checkout lanes, express lanes, customer service locations and other points of sale. The terminal list page, accessible from *Admin>Configuration*, lists the system's current terminals; click a terminal's name to see its details.

Terminals have the following characteristics:

- Name.
- Description.
- Layout – This optional layout selection sets what kind of screen layout the terminal uses (if any). A terminal that has a graphic display unit and a layout can (under the CPE offer engine) receive and display graphics as offer rewards. Layouts themselves are configurable from the *Graphics>Layouts* page.
- Fuel processing – The terminal is treated as a fuel station.
- Banner – The banner (or multiple banners) with which the terminal operates. Once set when the terminal is created, the banner cannot be changed.



41 Terminal locking groups

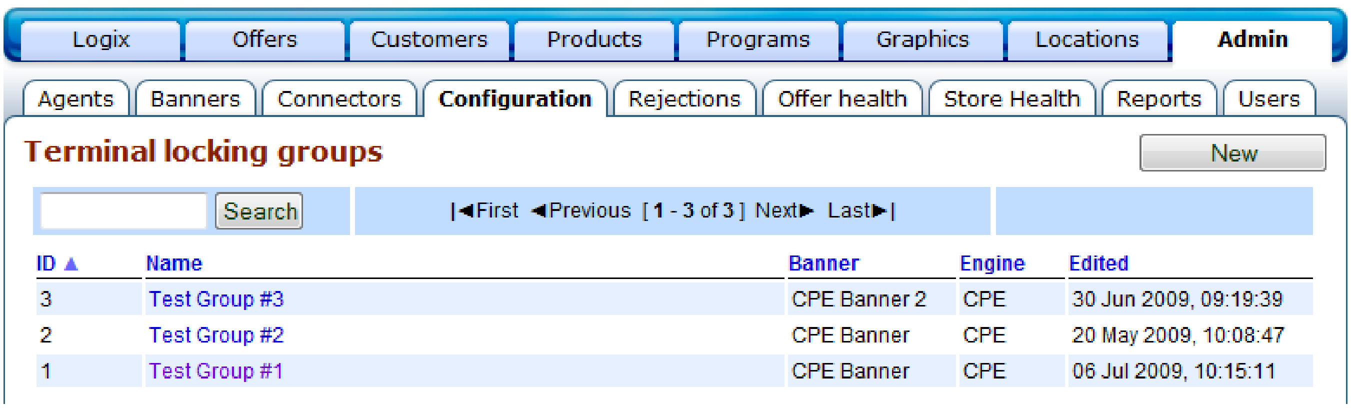
Customer locking for the CPE engine is handled via the PhoneHome connector. The type of customer locking, if any, is determined by the CPE system option #86, "Customer locking type." Allowed option values are:

- 0 – "No locking"
- 1 – "Lock based on customer ID only"
- 2 – "Lock based on customer ID and terminal locking group"

If option #86 is set to 2, the user may define terminal locking groups via the *Admin>Configuration* section. The user may also assign individual terminals to locking groups from the *Admin>Configuration>Terminals>Edit* page.

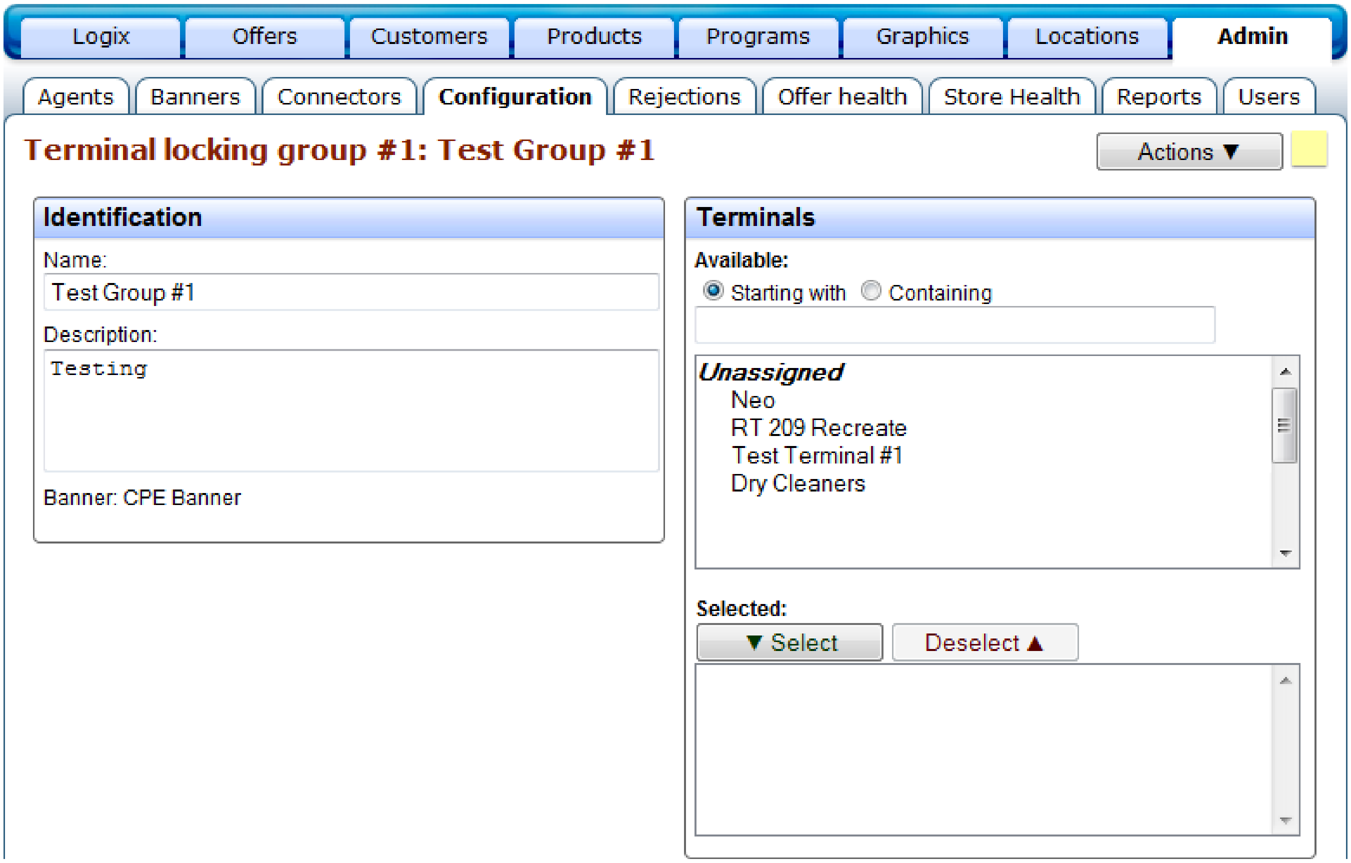
41.1 List

A terminal locking group contains a list of terminals which are a member of this group. A particular terminal can belong to only one terminal locking group. Terminal locking groups may be maintained by selecting the "Terminal Locking Groups" button shown on the *Configuration* page. The list page, shown below, allows the user to create new terminal locking groups or edit existing ones.



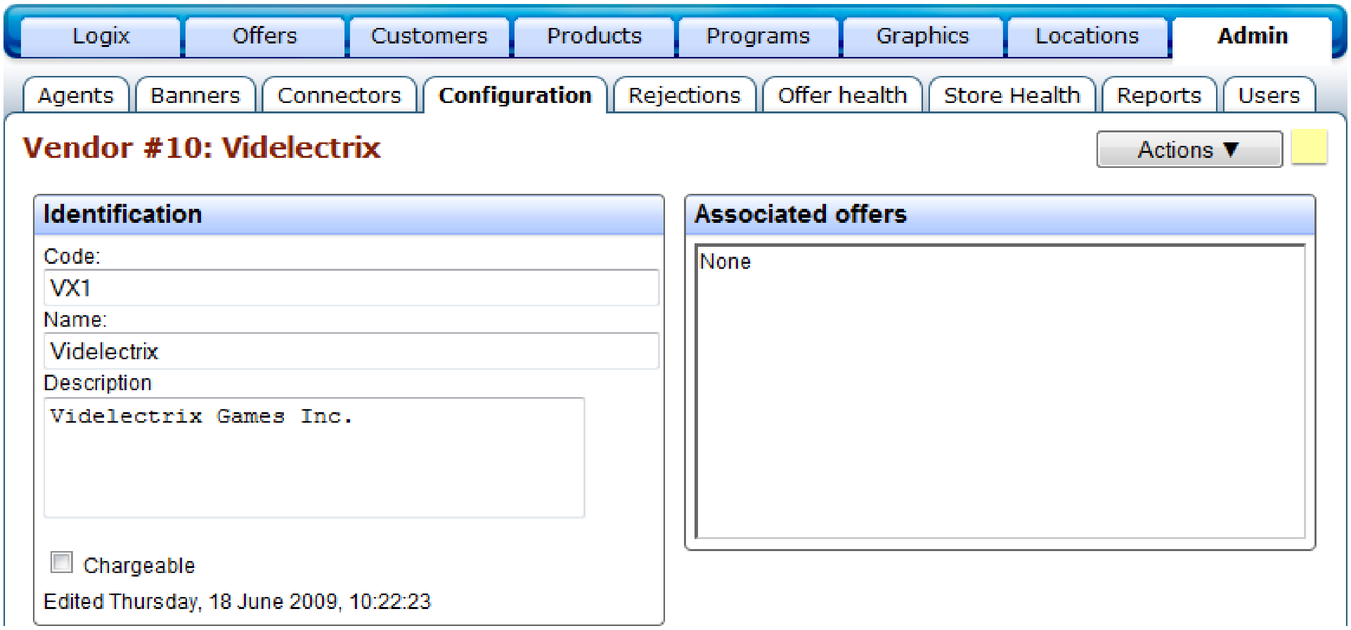
41.2 Edit

Upon selecting a particular terminal group, the following *Edit* page allows the user to select the terminals which are members of the locking group. All defined terminals are listed and grouped by their current locking group assignments. If a terminal currently assigned to another locking group is selected for the current locking group, then it is removed from the original group.


Logix
Offers
Customers
Products
Programs
Graphics
Locations
Admin
Agents
Banners
Connectors
Configuration
Rejections
Offer health
Store Health
Reports
Users
Terminal locking group #1: Test Group #1
Actions ▼
Identification
Name:
Test Group #1
Description:
Testing
Banner: CPE Banner
Terminals
Available:
Starting with
Containing
Unassigned
Neo
RT 209 Recreate
Test Terminal #1
Dry Cleaners
Selected:
▼ Select
Deselect ▲

42 Vendors

Offers may be sponsored by or charged back to particular vendors; for instance, an offer providing a discount on a certain kind of cereal might be charged back to General Mills. The *Admin>Configuration>Vendors* page allows you to create and manage records for these vendors, which can be made to appear in the vendor dropdown on the *Offer>General* page.



Vendors have the following characteristics:

- Code.
- Name.
- Description.
- Chargeable. If set, the vendor can be selected from the “Vendor” dropdown on the *Offer>General* page.

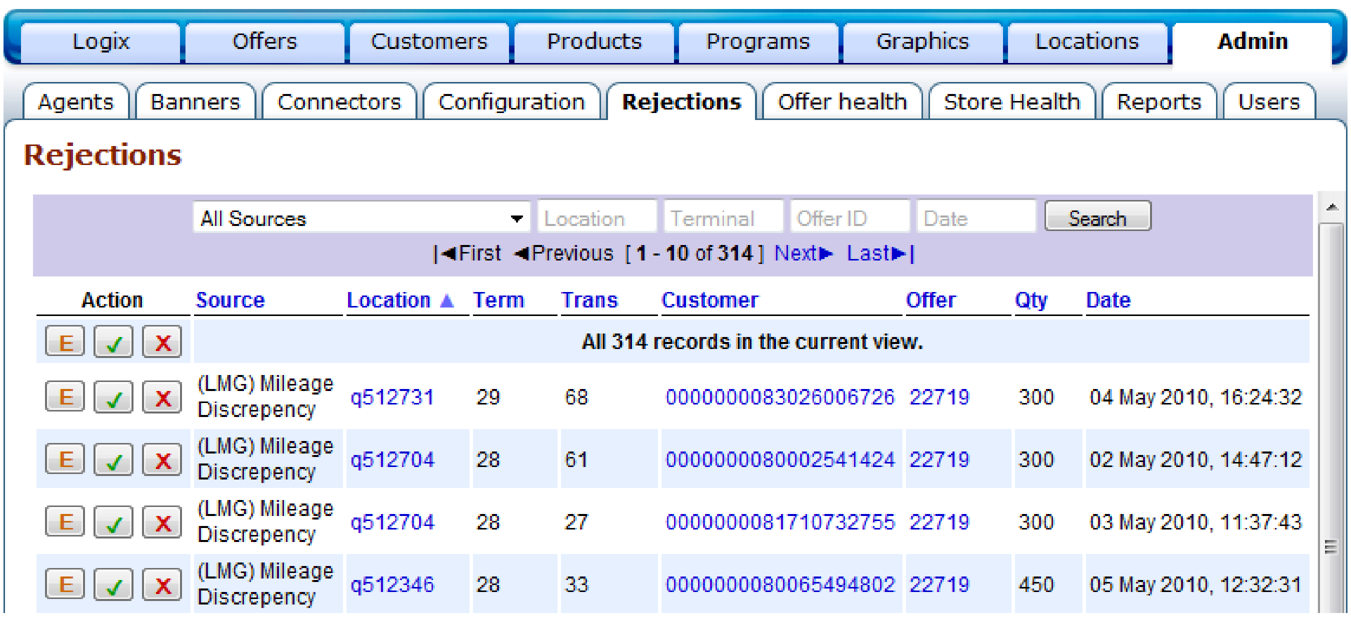
43 Rejections

The *Admin>Rejections* page in the Administration section of Logix is available only if Canadian Air Miles (CAM) offers are enabled in your installation. Air mile-related awards made through these offers are validated by Loyalty Management Group (LMG), which determine if each award gets accepted or rejected. If rejected, the record is sent back to Logix and appears in the Rejections page.

You can search for a particular subset of rejection records by entering search criteria into the boxes above the top of the list. Records can be filtered by source (e.g., LMG), the store or terminal at which the reward was given, the offer in which the reward occurred, or the date of the reward.

Three actions can be performed on individual LMG rejection records, or on all listed records.

- Edit - Clicking the orange "E" button on a rejection record allows you to edit the details of that record, including the store, terminal, transaction number, offer ID and quantity of awarded points. Once you've made the appropriate changes to the data, you can click the "Save and Retry" button, which will record you changes and send the modified record back to LMG for another attempt at validation. Clicking the "E" on the topmost line will do this for all records included in the current set of results.
- Retry - Clicking the green checkmark button on a rejection record will send that record as-is back to LMG for another attempt at validation. Clicking the retry button on the topmost line will send all records included in the current set of results back to LMG.
- Delete - Clicking the red "X" button on a rejection record will permanently delete that record from the system. Clicking the "X" on the topmost line will delete all records included in the current set of results.

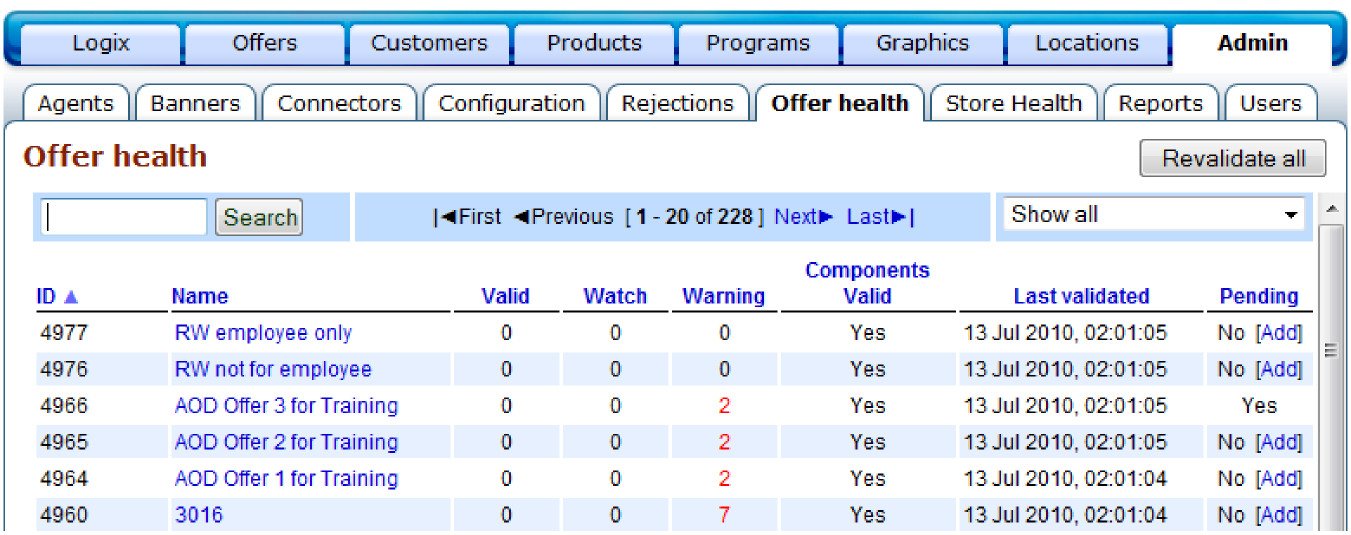


44 Offer health

The *Admin>Offer Health* page summarizes the status of offers in the Logix, particularly those it identifies as potentially problematic. The data displayed for each offer is based on deployment validation and shows the number of stores to which the offer did or did not deploy correctly, determined by comparing the times on the local and central servers.

- Valid Locations. This indicates how many locations (if any) the offer is associated with to which deployment is successful.
- Watch Locations. Watch locations are those for which the server times do not match, but the difference is within the defined grace period.
- Warning Locations. Warning locations are those for which the server times do not match and the difference exceeds the grace period.
- Components Valid. If all the components of a given offer (e.g., product groups, customer groups, stores, etc.) are valid, this column will be "Yes"; otherwise, if any of the components are invalid, it will be "No".
- Last validated. The day and time when the offer was last validated.
- Pending. Indicates if offer validation is pending. By default, all offers are automatically validated once a day; clicking Add, however, will put the offer in a queue for quicker validation (usually within two minutes).

Clicking the name of any of the offers will take you to the *Offer>Summary* page for that offer.



ID ▲	Name	Valid	Watch	Warning	Components Valid	Last validated	Pending
4977	RW employee only	0	0	0	Yes	13 Jul 2010, 02:01:05	No [Add]
4976	RW not for employee	0	0	0	Yes	13 Jul 2010, 02:01:05	No [Add]
4966	AOD Offer 3 for Training	0	0	2	Yes	13 Jul 2010, 02:01:05	Yes
4965	AOD Offer 2 for Training	0	0	2	Yes	13 Jul 2010, 02:01:05	No [Add]
4964	AOD Offer 1 for Training	0	0	2	Yes	13 Jul 2010, 02:01:04	No [Add]
4960	3016	0	0	7	Yes	13 Jul 2010, 02:01:04	No [Add]

44.1 Filters

The dropdown at the right end of the blue bar is a filter that controls what data the health page shows:

- Show all. This will show offers with both valid and invalid components, and with or without warning locations.
- Show valid only. This filter shows only offers that have valid offer components and that have no warning locations.
- Show invalid only. This filter shows only offers that have invalid offer components or that have one or more warning locations.

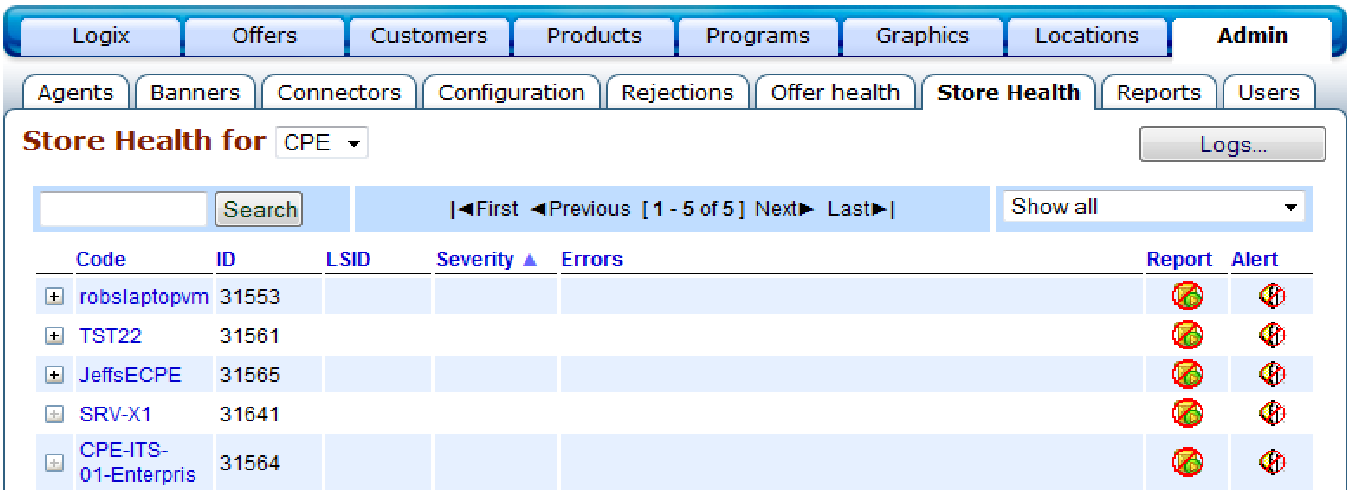
- Show CRM offers. This filter is available if your installation of Logix has external CRM integrations enabled, and shows a different set of data from the other filters: offers that are either going out to or coming in from an external CRM service. Outgoing offers are initially labeled as “outbound processing” (when someone clicks “Send outbound” from the *Offer>Summary* page), and are then labeled “outbound prepared” when that offer has been prepared by the automated agent. Incoming offers, those in the process of being sent to Logix from the CRM service, are labeled “inbound pending”. Each record indicates in days, hours and minutes how long the offer has been in its current state.

45 Store health (CPE)

The *Admin>Store Health* section provided detailed server- and performance-related information about each store.

45.1 List

The list page displays a list of stores associated with the default promotion engine. If more than one engine is installed, you can select it from a dropdown next to the title.



The dropdown to the right of the screen controls different "filters" that can be applied to the list of stores, each of which shows stores matching certain criteria. By default, the Store Health list page comes up with the "All Errors" filter applied, but others are also available. Below is a list of filters and what each one displays:

- Show All – Lists all stores.
- Communications OK – Lists only those stores identified as communicating and checking in properly by monitoring TransUpload, TransDownload, LastHeard, IncentiveFetch and SanityCheck.
- All errors – Lists only those stores that have at least one reported error.
- Central errors – Lists only those stores that have at least on reported central server-related error.
- Local errors – Lists only those stores that have at least on reported local server-related error.
- All active failovers – Lists currently active failover servers. When this filter is selected, the failover server's last IP address is displayed in the list.
- All failovers – Lists all failover servers, both active and inactive. When this filter is selected, the failover server's last IP address is displayed in the list.
- IPL needed – Lists those stores identified as needing to be IPL'ed (Initial Program Load).
- Show active locations – Lists those locations that have a local server.

The list of stores displayed in the main body of the page includes the following information:

- Code – the retailer-defined store code.
- ID – the identification number assigned by Logix to the store.
- LSID – the identification number of the store's local server.

- Severity – Indicates the severity of the most severe error reported for that location. May be high, medium or low.
- Errors – This column summarizes the errors that have been reported for each location. This summary shows the number of high- and low-severity errors associated with the local server and the central server.
- Report – The small report icon in this column toggles whether or not error reports associated with the location will cause the store to appear in a list of locations with errors, or to appear highlighted red in broader lists of stores.
- Alert – The small speaker icon in this column toggles whether or not errors associated with the location will generate alert emails. Stores will be highlighted in red if they have at least one reported error and reporting is not disabled.

Clicking the plus sign next to each entry in the list will reveal details about each error reported for the selected location. These details include:

- Severity – The severity (high, medium or low) of each error.
- From – This indicates if the errors are associated with the local server or with the central server.
- ID – This ID uniquely identifies the error. Local server errors have IDs in the form of "LS42", while central sever errors have IDs like "CS10". Clicking these IDs opens a popup with further details and possible resolutions for the error. This is more fully described in the "Knowledge Base" section later in this chapter.
- Description – A brief summary of the nature of the error.
- Duration – Indicates how long the error condition has been in effect.

Clicking the "Logs" button at the top of the list page launches the *Log File Viewer*.

45.2 Details

Clicking any of the stores in the list displays additional details about the store:

- Identification, including the name, number and location of the store, as well as the promotion engine on which it operates and whether or not it's a testing location.
- Local server, which shows the ImageFetch and IncentiveFetch paths on the server and the results of the last SanityCheck.
- Server, which shows its local server ID, its Logix-assigned location ID, its IP address and MAC address, and whether or not it's set to act as a failover.
- Communication, which shows when the store last communicated with the central server, conducted a cardholder lookup, did a transaction upload or download, did an offer update, ran SanityCheck or did an IPL. Ticking the checkboxes at the end of the list will cause email alerts to be sent out if communications with the store should cease, or enabled or disable error reporting.
- Warnings, which lists the errors reported for the location. As on the Store Health list page, errors are identified by severity (high, medium or low), by the server with which they're associated (central or local) and the duration over which the error has been in effect. Clicking the ID of any error will open a popup with details and possible resolutions for the error.

- Files, which lists all the files that are ready to be downloaded by the store's local server. Clicking any of the filenames will open that file.

If you change the ImageFetch URL, IncentiveFetch URL or alert status for the store, click Save to apply your changes.

45.3 Knowledge base

The Knowledge Base is a resource that stores information on individual server errors and allows users to edit or submit information to share with others. You can reach the Knowledge Base by clicking the ID of an error, either on the Store Health list page or on the Store Detail page.

The Knowledge Base popup for each error is divided into three sections:

- Definition – Shown here is a brief summary of the error and the severity (high, medium or low) assigned to the error by Copient.
- Resolutions – Listed in this box are any resolutions or details concerning the error that users have submitted. Each resolution will have a brief title, next to which will be buttons to move it up and down in the list (if there's more than one resolution) and to delete it. You can also click the "Edit" button to the right of the title to make changes to an existing resolution.
- New resolution – Here you can submit a new resolution for the error. Enter a brief title for your entry in the "Title" box, enter a full description of the resolution into the "Text" box, then click "Save".

See the appendix for a list of errors.

46 Store health (CM)

The *Admin>Store Health* page provides detailed server- and performance-related information about each store.

46.1 List

The page displays a list of stores associated with the default promotion engine. If more than one engine is installed, you can select it from a dropdown next to the title.

- Alert – The small speaker icon in this column toggles whether or not errors associated with the location will generate alert emails.
- ID – The identification number assigned by Logix to the store.
- LSID – The identification number of the store's local server.
- Code – The retailer-defined store code.
- Location – The name of the store.
- Failover – This indicates whether or not the store's server is a failover server. Failover servers are those that other store controllers can contact when their own local servers are unavailable.
- Communications – This indicates if the store is communicating and checking in properly by monitoring TransUpload, TransDownload, LastHeard, IncentiveFetch and SanityCheck. If any of these do not appear to be communicating, the entry for that store in the table will be shaded red.

46.2 Details

Clicking any of the stores in the list displays additional details about the store:

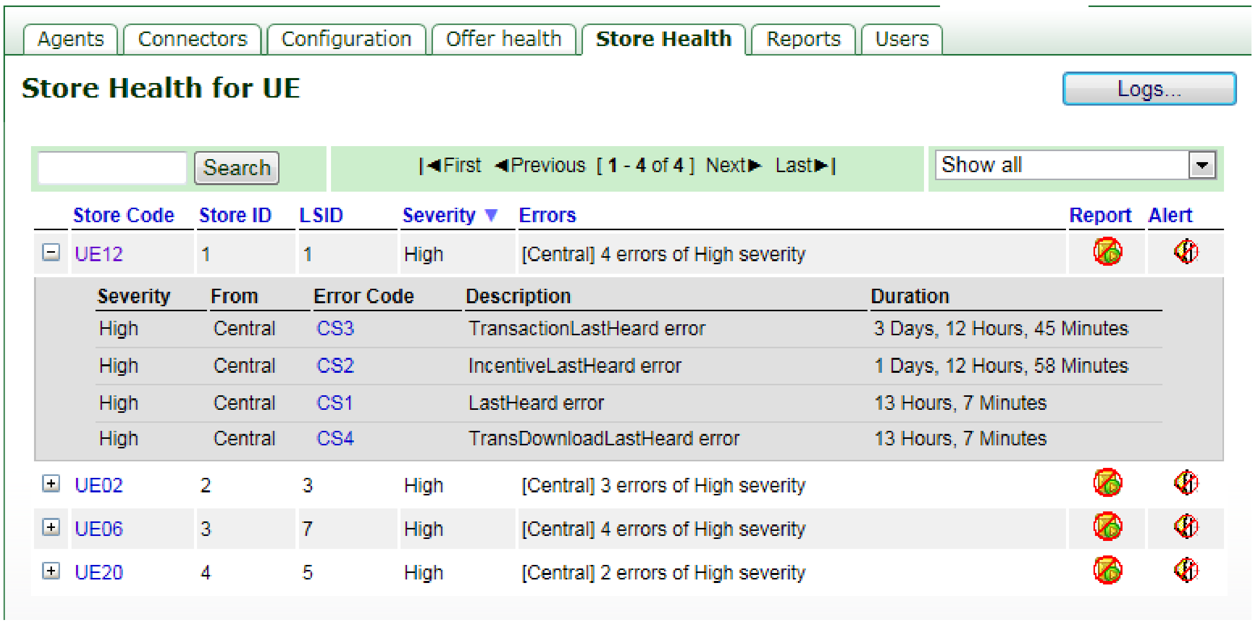
- Identification, including the name, number and location of the store, as well as the promotion engine on which it operates.
- Store status, which shows when the store last communicated with the central server or last did an IPL. It also indicates if email alerts are enabled or disabled, and whether reporting from local is enabled or not.
- IPL status, which shows when an IPL was last attempted and last run successfully, and the most recent status. To generate an IPL manually, click the "Generate IPL" button.
- Files, which lists all the files that are ready to be downloaded by the store's local server. Clicking any of the filenames will open that file.
- Validation report, which summarizes the validation state of offers and product groups that are at the store.

47 Store health (UE)

The *Admin>Store Health* section provided detailed server- and performance-related information about each store.

47.1 List

The list page displays a list of stores associated with the default promotion engine.



The dropdown to the right of the screen controls different "filters" that can be applied to the list of stores, each of which shows stores matching certain criteria. By default, the Store Health list page comes up with the "All Errors" filter applied, but others are also available. Below is a list of filters and what each one displays:

- Show All – Lists all stores.
- Communications OK – Lists only those stores identified as communicating and checking in properly by monitoring TransUpload, TransDownload, LastHeard, IncentiveFetch and SanityCheck.
- All errors – Lists only those stores that have at least one reported error.
- Central errors – Lists only those stores that have at least on reported central server-related error.
- All active failovers – Lists currently active failover servers. When this filter is selected, the failover server's last IP address is displayed in the list.
- Failover History -- History of active failover servers. When this filter is selected, the failover server's last IP address is displayed in the list.
- IPL needed Yes – Lists those stores identified as needing to be IPL'ed (Initial Program Load).
- Show active locations – Lists those locations that have a local server.

The list of stores displayed in the main body of the page includes the following information:

- Store Code – the retailer-defined store code.
- Store ID – the identification number assigned by Logix to the store.
- LSID – the identification number of the store's local server.
- Severity – Indicates the severity of the most severe error reported for that location. May be high, medium or low.
- Errors – This column summarizes the errors that have been reported for each location. This summary shows the number of high- and low-severity errors associated with the local server and the central server.
- Report – The small report icon in this column toggles whether or not error reports associated with the location will cause the store to appear in a list of locations with errors, or to appear highlighted red in broader lists of stores.
- Alert – The small speaker icon in this column toggles whether or not errors associated with the location will generate alert emails. Stores will be highlighted in red if they have at least one reported error and reporting is not disabled.

Clicking the plus sign next to each entry in the list will reveal details about each error reported for the selected location. These details include:

- Severity – The severity (high, medium or low) of each error.
- From – This indicates if the errors are associated with the local server or with the central server.
- Error Code – This ID uniquely identifies the error. Local server errors have IDs in the form of "LS42", while central sever errors have IDs like "CS10". Clicking these IDs opens a popup with further details and possible resolutions for the error. This is more fully described in the "Knowledge Base" section later in this chapter.
- Description – A brief summary of the nature of the error.
  (Note: For Failover, the IP Address, Server ID and Description received from the UE will be displayed in the Description field)
- Duration – Indicates how long the error condition has been in effect.
  (Note: For Failover, this field indicates the amount of time the Secondary Server has been active.

Clicking the "Logs" button at the top of the list page launches the *Log File Viewer*.

47.2 Details

Clicking any of the stores in the list displays additional details about the store:

- Identification, including the name, number and location of the store, as well as the promotion engine on which it operates and whether or not it's a testing location.
- Local server, which shows the ImageFetch and IncentiveFetch paths on the server and the results of the last SanityCheck. Local Server also includes a drop down list of Terminal sets that are predefined at *Locations > Terminal Sets*.

- Server, which shows its local server ID, its Logix-assigned location ID, its IP address and MAC address, and whether or not it's set to act as a failover.
- Communication, which shows when the store last communicated with the central server, conducted a cardholder lookup, did a transaction upload or download, did an offer update, ran Sanity Check, last fail over, or did an IPL. Ticking the checkboxes at the end of the list will cause email alerts to be sent out if communications with the store should cease, or enabled or disable error reporting.
- Files, which lists all the files that are ready to be downloaded by the store's local server. Clicking any of the filenames will open that file.

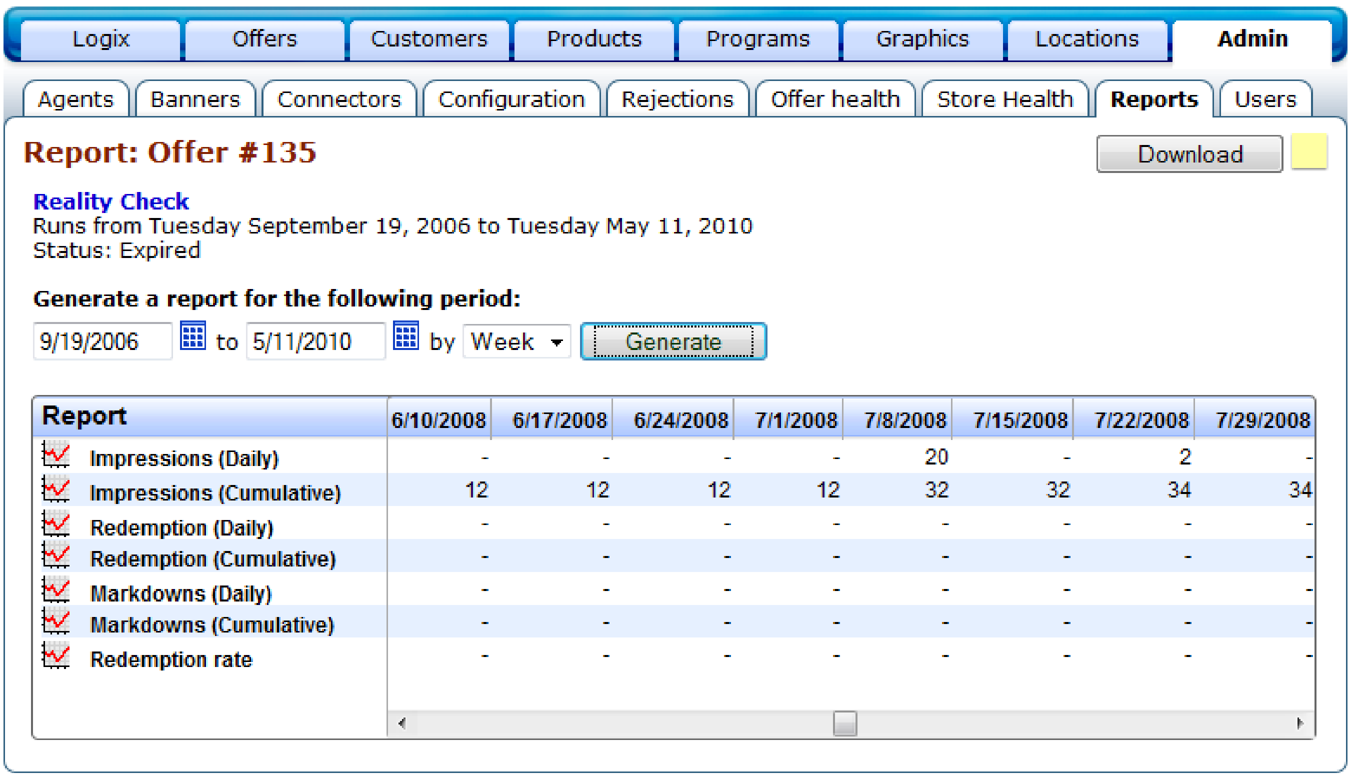
If you change the ImageFetch URL, IncentiveFetch URL or alert status for the store, click Save to apply your changes.

48 Reports

The *Admin>Reports* feature in Logix allows users to see detailed information about the performance of an offer. To create a report, first select an offer from the list, then choose a date range and select whether the report should show figures on a daily or weekly basis. When you'd made these selections, click Generate.

The report that Logix produces shows impression, redemption and markdown figures in both daily and cumulative form. Clicking the graph icon next to each line displays a graphic representation of the data.

Click the Download button to get a copy of the report in CSV (comma-separated value) format, suitable for use with Excel.



49 Users

The *Admin>Users* area is where user accounts are created and modified, tasks that are generally reserved for administrators.

49.1 Create

To create a new user, click New from the user list. You'll then be taken to the user edit page where you can enter the person's details, assign their roles, etc.

49.2 Edit

Logix maintains the following data for each user:

- Username.
- First and last names.
- Title – The user's job title or position. For example, "Project Manager".
- Organization – For example, "NCR/Copient" or "Acme Retail".
- Password – Entered twice. Always ensure that user passwords are complex enough that they cannot be easily guessed.
- Employee ID – The retailer's identifier for the user.
- Email – The user's primary email address.
- Alert email – The email address where alert messages should be sent. This can be the same as the primary email address, or can be left empty if the user will not receive alerts.
- Display language – The language in which all text in the Logix interface will be displayed (with the exception of user-created content which is not translated).
- Start page – The first page to be displayed when the user logs in.
- Style – The name of the stylesheet Logix uses to style the UI.
- Roles – Select from the list of available roles shown in the box to the right. To see what permissions are included in each role, see Admin>Roles. Users cannot alter their own roles.
- Banners – Select from the list of banners those that the user should have access to.
- Alerts – Tick the boxes to indicate which alerts the user should receive, and to what email address the alerts should be sent.

Click "See this user's recent activity" for a list of the user's most recent actions.

49.3 Delete

To delete a user, first ensure that the account is definitely no longer needed, then click Delete.

50 Buyer Roles

Buyers are like job roles for Logix administrative users. Buyers are responsible for creating product groups and offers, typically within certain departments. Buyer roles can be accessed in Admin > Configuration > Buyers.

A user with a buyer role can only edit offers which were created by that buyer role unless they have been granted the "Edit offers regardless of Buyer association" permission. Likewise, a user with a buyer role can only edit product groups which were created by that buyer role unless they have been granted the "Edit product groups regardless of Buyer association" permission. Users that are not associated with a buyer role are not affected by these business rules.

A user with a buyer role can only view offers on the offer list page or the folders page which were created by that buyer role, unless they have been granted the "View offers regardless of Buyer association" permission. Likewise, a user with a buyer role can only view product groups on the product group list page which were created by that buyer role unless they have been granted the "View product groups regardless of Buyer association" permission. Users that are not associated with a buyer role are not affected by this business rule.

When select a product group for a product condition or discount reward, a user with a buyer role can only select from product groups created by that buyer or the Any Product group unless they have been granted the "View offers regardless of Buyer association" permission. Users that are not associated with a buyer role are not affected by this business rule.

50.1 Create

To create a new buyer role, click the 'new' button on the buyer list page. You'll then be taken to the buyer edit page where you can enter the buyers details, assign departments, etc.

50.2 Edit

Logix maintains the following information for a buyer role:

- Buyer role identifier – The retailer's identifier for the buyer. This field cannot be changed if there are any non-expired offers or non-deleted product groups associated with the buyer role. No two buyer roles can share the same buyer role identifier.
- Users – The Logix users that are participating in the buyer role.
- Default folder – The folder in which offers created under the buyer role will be placed by default.
- Departments – The departments for which the buyer is responsible. The buyer will only be able to create offers using products from these departments.

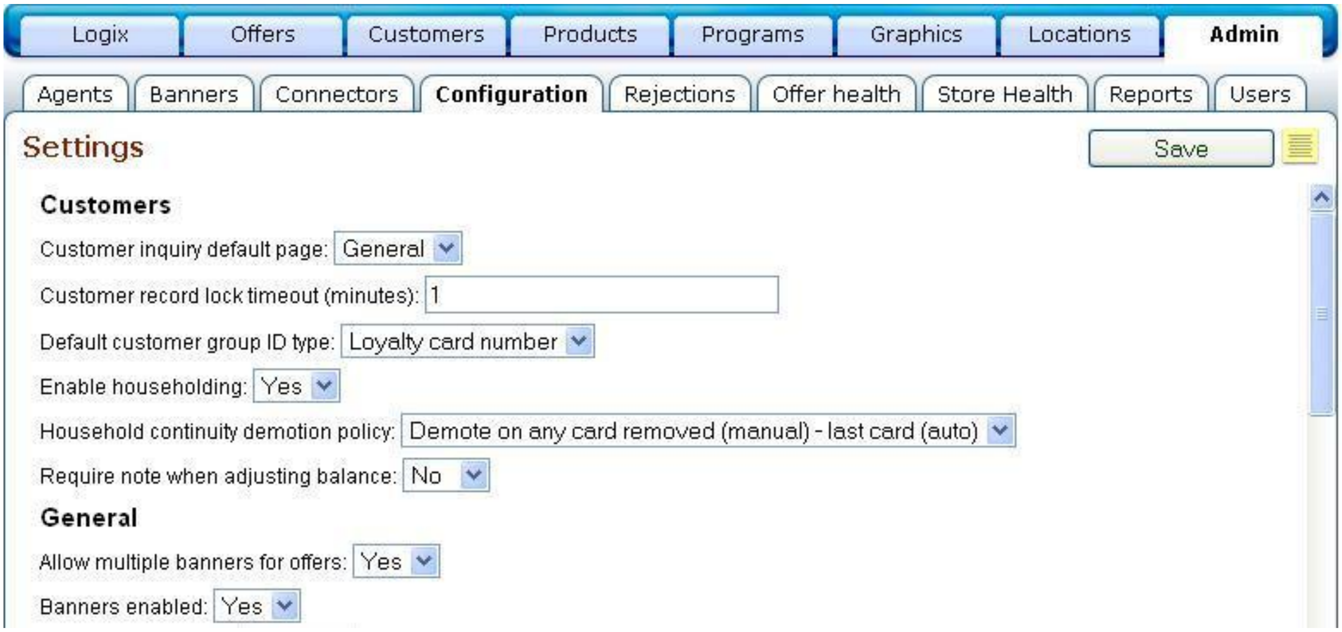
50.3 Delete

To delete a buyer role, selected 'delete' from the action button drop-down on the buyer edit page. Buyer roldes cannot be deleted if non-expired offers or non-deleted product groups are associated with the buyer role.

51 System settings

The *Admin>Configuration>Settings* page allows administrators to configure the system and set its business rules. Depending on which engines are installed, the settings may be divided between multiple pages – one for general, system-wide settings and one or more for settings that are specific to the installed engines. These options are also divided into separate option types to order them into similar categories.

This chapter describes general settings that are not specific to any promotion engine.



51.1 Visible settings

51.1.1 Customers

Allow customer record creation if not found in customer inquiry

When enabled, this option allows who's conducting a customer inquiry for a record that doesn't exist to create that record.

Customer inquiry start page

This setting controls which page will first appear when a user runs a customer inquiry. Choices include *General* and *Offers*.

Customer inquiry transactions default view

This sets the filter that will be selected by default when users first visit the *Customer>Offers>Transactions* page: "All transactions", "Only with redemptions", or "Only without redemptions".

Customer record lock timeout

When a customer shopping at a store checks out, that customer's record on the central server is locked until the store signals that the transaction is complete. (This prevents members of a single household from simultaneously taking advantage of a single offer at different locations, which could be problematic.) However, if for some reason the central server doesn't receive this signal, the customer record could be stuck in a locked state. In this case, Logix will automatically unlock the customer record after a number of minutes determined by this setting.

Default customer group ID type
This is the default identifier datum used to identify a customer, and can be a loyalty card number (0) or household ID (1).

Enable householding
Sets whether or not the system allows householding, which is the grouping together of multiple customer IDs (often family members) for the purpose of sharing offers, accumulations, etc.

Household continuity demotion policy
This setting handles the what happens when a customer card is demoted from a household and when a card can be demoted from households.

- Never demote continuity: The demote option is never available and all cards can only be removed from the household.
- Demote when last card removed (manual): When there is more than one card in the household then the demote option is not available. The last card in the household has the option to be removed or demoted.
- Demote on any card removed (manual): The demote option will be available for all card in the household at all times.
- Demote on any card removed (manual) – last card (auto): The demote option can be used on any card that is in the household but the last card in the household must be demoted and does not have the option to be removed.

Require note when adjusting balance
Adds or removes the requirement of entering an explanation when making an adjust to the points or stored value balance of a customer. This can be set to "Yes" which adds a note section to the adjustment pages and an adjustment cannot be made without entering a note. The other option is "No" which will not show the notes section and does not require it for an adjustment to be made.

Display Advanced Search Button on Customer Inquiry
An "Advanced Search" button will be displayed on the Customer Inquiry page. The search capabilities have been enhanced to include several new searching techniques.

Customized Customer Inquiry
When this option is set to visible, the Customer Inquiry page will only display one search field, "Customer Card/Loyalty Number"

Search Results Page
A new option (result set size= 1) has been added to initially load the Customer Details screen bypassing the Edit button on the Cardholder Identity screen after a user selects a customer to modify from the search results.

51.1.2 General

Allow multiple banners for offers
Sets whether a single offer can be within more than one banner.

Banners enabled
Sets whether banners and banner-related functionality is enabled.

Default CRM engine

Sets the CRM engine that will be selected by default when new offers are created.

Default scorecard total line location
Sets the position of where the total line is when the scorecards are printed. This can be set to either the top or bottom of the scorecard text.

External CRM customer group level
Sets CRM's customer group type as either customer or household.

External CRM integration
Sets the CRM engine to which the offer setup information should be sent.

Installation name
The name of the current installation of Logix.

Enable notes
Sets whether or not users can attach notes to items in Logix (using the yellow "sticky note"). This does not affect note-taking functionality in customer inquiry.

Offer validation enabled on status page
Sets whether a summary of offer validation is displayed on the *Status* page.

- No: Do not have offer validation at all on the Status page.
- Yes: Have the offer validation on the Status page
- Link: Do not show offer validation on the *Status* page but instead put a link to the *Offer Validation* page.

Support email address
The address to which users should send system support emails. The address appears on the Logix login page.

System email address
The "from" address that appears in automatically-generated alert emails.

51.1.3 Localization

Default country
This is the ID of the country that will be selected by default when creating new stores. The country that's chosen also determines which term Logix uses for national subdivisions (i.e., *state*, *province*, etc.). Default data for all major languages has been created.

Default language
There are two default languages one is within Logix which is the language that is assigned to a new Logix administrative user when a new account is created. The other language is the default customer facing language that is displayed on a customer facing website if EPM –Enterprise Preference Manager is not installed. They are both set in Admin > Configuration > Settings.

Multi language
A system option should be added to indicate if multi-language will be used on the system. If multi language is in use, and EPM is not integrated a Logix system option should be available for selecting the customer facing language at the enterprise level. If multi-language is not in use, system options (Logix and EPM separately) should be available for selecting the single language that is to be used.

51.1.4 Offers

Default offer category
New offers will be assigned to this category by default. *(Not currently used)*

Deferred deployment time
Offers marked for deferred deployment will be deployed at the specified time. Use 24-hour format (e.g., "20:00" for 8PM).

Enable "save and close" for offer popups
This determines whether popup windows (principally used with offers) will automatically close when saved. Leaving this off will make sure the popup stays open after saving.

Offer validation time
The time at which a daily validation of all offers in the system will automatically occur. Note that individual offers can be validated manually by a) visiting the offer's summary page, or b) visiting *Admin>Offer Health* and clicking "Add".

Template default locking state
The default state (locked or unlocked or Retain original) of fields in newly-created offer templates.

When a template is copied / offer is saved as template:

Locked: Default state of fields in copied templates will be locked.
Unlocked: Default state of fields in copied templates will be unlocked.
Retain Original: Default state of fields in copied template will retain the state as original.

51.1.5 Paths

Agent import file path
Specifies where files associated with hierarchy agents, update agents and the offer import agent will be saved.

Graphics storage path
The server path where images that are uploaded through for graphics are stored.

Logging path
The server path where logging information is stored. Logs are accessible through the UI via the *Log File Viewer*.

SMTP address
The IP address of the SMTP (Simple Mail Transfer Protocol) server which will handle email messaging for things such as the alert emails.

Workspace File Path
When a file is uploaded through the UI, it's held at this location on the Web Server. This is the path where the agent that picks up the file will look.

51.1.6 Products

ID field to show for product hierarchy
This is the prefix identifier for Product Hierarchy folders. This can be set to use the External ID set for the product hierarchy, the Display ID set for the product hierarchy or no prefix at all.

Numeric only product IDs in Product Groups
Setting this to “Yes” will then only allow numeric only product IDs to be put into product groups. Setting this to “No” will allow product IDs to be numbers, letters, and characters.

51.1.7 Programs

Allow negative stored value adjustment
Allows the adjustments of stored vale balances to be negative so the balances may be reduced.

External points programs enabled
Allows points programs to be created as external programs and be given external IDs. If this is not enabled then these options will not be available for points programs.

POS Points Program Manual Adjustments
If enabled, points programs will be able to use the manual adjustment UPC functionality. If not enabled, that functionality will not be available under the points programs.

POS Stored Value Manual Adjustments
If enabled, stored value programs will be able to use the manual adjustment UPC functionality. If not enabled, that functionality will not be available under the stored value programs.

Stored value redemption priority
All stored value records have an expiration date. Depending on the expiration settings for the individual programs, some records will expire on different days and/or times. If the user chooses to "Redeem value that will expire sooner first", then the customer is less likely to have records expire than if the user chooses to "Redeem value that will expire later first".

Enable Trackable Coupons
If enabled, allows trackable coupon programs to be created and attached to offers. If not enabled, that functionality will not be available under programs.

Trackable Coupon Cache Refresh Interval (Hours)
Amount of time a trackable coupon is cached since last inquiry or use.

Trackable coupon lock timeout (seconds)
Amount of time a trackable coupon is locked once it is scanned. While a coupon is locked, it cannot be scanned again and must either be redeemed or unlocked by an outside source. This setting allows a coupon to be automatically unlocked after a set time period allowing for another scan without an explicit unlock.

Trackable Coupons Processing Agent SQL server timeout (seconds)
Amount of time the Trackable Coupons Processing agent is allowed to import trackable coupons into the database before timeout.

Display coupon count on Trackable coupon program
If enabled, the number of trackable coupons imported for a particular program is displayed in the user interface.

51.1.8 Purging

Auto delete history data

Logix will delete history data older than the specified number of days.

Auto delete issuance data
Logix will delete issuance reports older than the specified number of days.

Auto delete offers
Logix will delete expired offers older than the specified number of days.

Auto purge customer home-stores
Logix will automatically delete information associating a customer to a home store after the specified number of days.

Number of days of inactivity for points expiry:
Logix will delete points older than the specified number of days.

51.1.9 Security

LDAP authentication enabled
Sets whether LDAP (lightweight directory access protocol) is enabled. If enabled, Logix will leverage an external LDAP server for all user authentications, with the exception of the "admin" account. If disabled, authentication will be accomplished with the standard username and password fields in Logix.

LDAP authentication type
The authentication type required by the external LDAP server. Types include:

- None. Normal, original-style LDAP connection.
- Secure. When this flag is set, the WinNT provider uses NTLM to authenticate the client. Active Directory Domain Services uses Kerberos, and possibly NTLM, to authenticate the client.
- SecureSocketsLayer. Attaches a cryptographic signature to the message that both identifies the sender and ensures that the message hasn't been modified in transit. Active Directory Domain Services requires the Certificate Server be installed to support SSL encryption.

LDAP connection string
This is the URI of the server connection, which may need to include the base dn string and an optional port. For instance: "ldaps://ldap.copienttech.com:5555".

LDAP Expired password redirect URL
When using the external login, this is the URL the user will be redirected to when the password the user uses for authentication has expired and must be renewed.

LDAP user search string
This is the search string used to lookup the user account on the directory server. This string *must* contain the token “LogixUserName” which is replaced by the username of the individual logging in. For instance: "uid=LogixUserName,ou=people,ou=associates,dc=Copient,dc=com".

51.1.10 Stores

ID field to show for store hierarchy
The prefix identifier for Store Hierarchy folders. This can be set to use the External ID set for the store hierarchy, the Display ID set for the store hierarchy or no prefix at all.

Store health maximum offline

The maximum amount of time in minutes that a store can be offline before generating warnings.

Watchdog store alert frequency
The period in minutes that an agent must be offline before it's noted by Watch Dog.

51.2 Hidden settings

Some system options are "hidden" and don't appear in the UI, normally because they're rarely changed (or it's dangerous to change them) after they're set during the initial install.

Customer alternate ID
Indicates the customer datum to use as an alternate customer ID (e.g., phone number).

Customer alternate ID uniqueness
Defines the rules for the uniqueness setting of the alternate customer ID.

- Non unique(0): Customer alternate ID does not have to be unique at all
- Unique AltID across the enterprise (1): The value set for the customer's alternate ID must be unique from all others across the enterprise.
- Unique AltID per banner(2): The value set for the customer's alternate ID must be unique from all others within a given banner
- Unique AltID and Verifier across the enterprise (3): The values set for the customer's alternate ID and verifier must be unique from all others across the enterprise.

Customer ID length
Defines the number of digits that must be in a customer ID. Logix will automatically zero-pad entries shorter than this to reach the specified length.

Customer ID verifier
Indicates the customer datum (e.g., date of birth) to use as a customer identifier.

Transfer program balances to household
Indicates whether balances in points or stored value programs are transferred from individual customers to customer households.

Enable customer test cards
Enable or disable the ability for customer cards to be set as test cards. Customer cards set as a testing card will only earn or redeem continuity at locations set as a testing location

Banner identification field
Set which type of banner ID is used for processing by the Location Hierarchy Agent. This can be set to use either the Logix banner ID or the external banner ID.

Localization
The localization setting specifies the currency and the units of weight and volume to display in Logix. Normal values are:

- English units with dollars.
- Metric units with dollars.
- Metric units with euros.

Maximum tier level
This will set the maximum number of tiers an offer is allowed to have. This option will only be in effect for the offers made under the UE, CPE, Website, and CAM engines.

Generated report path
The server path where offer reports are stored. (Not currently being used)

Offer archival export path
Sets the server path of the location where the offer files are created when they are archived.

Alt ID length
The number of digits that must be in a customer alternate ID. Logix will automatically zero-pad entries shorter than this to reach the specified length.

Department length
The minimum number of digits that must be in a department code. Logix will automatically zero-pad entries shorter than this to reach the specified length.

UPC length
The minimum number of digits in a product ID (normally a UPC). Logix will automatically zero-pad entries shorter than this to reach the specified length.

Stored value external ID style
Sets whether external IDs are not generated at all (0), or are generated in a particular style.

Stored value sequence ID maximum size
Stored value uses a sequence to ensure that the external ID is unique. This limit represents how many IDs can be used before the sequence ID is reset.

These options are only applicable for use with a specific external login system. If this system is being used then these options will be visible on the Settings page.

External login default external role name
This is the default external user role name that will be used to assign a Logix user role to an external user created on the fly. This is only used if there are no role names sent with the external login that correspond to a Logix defined user role name.

External login enabled
This will enable or disable the use of an external login method. If enabled, all authentication will be redirected to the URL defined in another option. If this is disabled then all authentication will use the username/password combinations setup within Logix.

External login time-out enabled
Enables or disabled the external login time-out logic. When rendering a Logix page, there is a check that will be done to see if the user has been inactive during the session for a certain length of time. If the user has been active (time out), then the user is redirected to the login page to re-authenticate. After re-authentication, the user is redirected to the originally requested page. If this is disabled then the time is ignored and the user is directed to the requested page.

External login URL

This is the URL the user will be directed to for authentication when the external login is enabled.

Customer Offer Screen

This option changes the default view for the Customers Offer screen. If this option is set to '6', only active, targeted offer will be displayed on the Customers Offer screen.

Customer Barcodes

This option enables/disables the "Customer Barcodes" box and the "Generate Barcodes" button located on the Customer Group page. Once the user clicks the "Generate Barcodes" button, a new dialog box will appear, allowing the user to generate a barcode for a specific Stored Value program.

Enable asynchronous product group loading

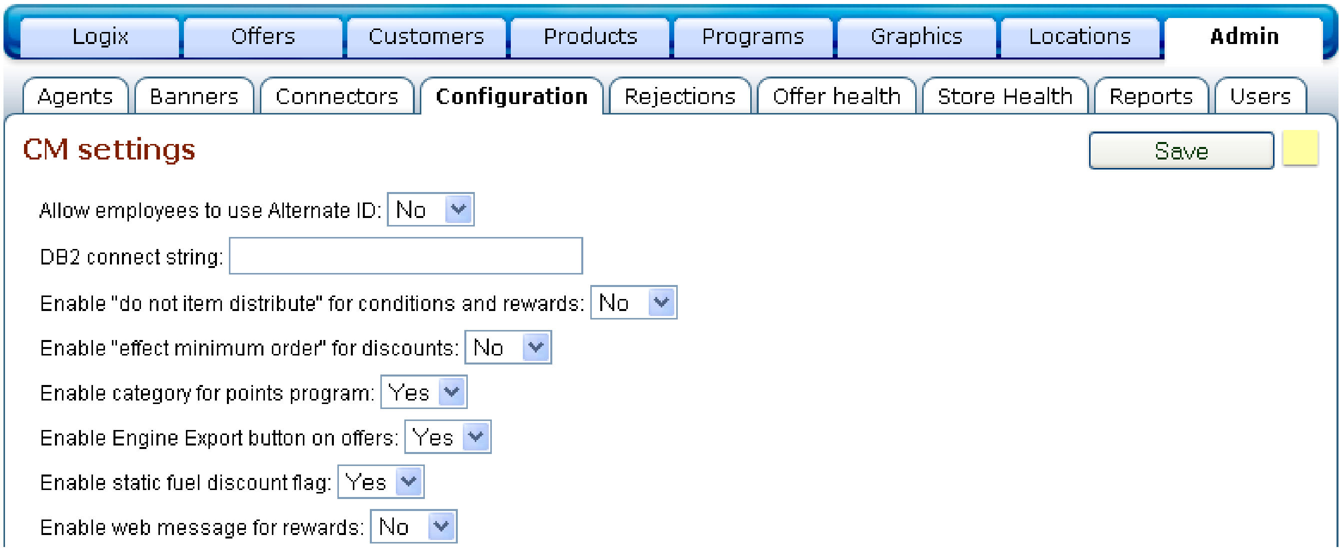
On setting the value to 1 this option allows Product Group loading on the Product condition and Discount reward page in asynchronous manner.

Size of Product group in one page

This setting contains the size of the list of Product groups to be fetched when the system option "Enable asynchronous product group loading" above is enabled.

52 CM settings

Settings related to the CM engine are managed from the *Admin>Configuration>Settings: CM* page. The settings only apply to and will only affect the CM engine functionality.



52.1 Visible settings

Allow employees to use Alternate ID

Customer records with their employee bits enabled can have alternate IDs.

DB2 connect string

This gives information necessary to connect to the DB2 system in order to conduct card lookups.

Enable "do not item distribute" for conditions and rewards

This determines whether the "do not item distribute" checkbox appears as an option on the conditions and rewards popups.

Enable "effect minimum order" for discounts

This determines whether the "effect minimum order" checkbox appears as an option on discount rewards.

Enable cashier customer inquiry

Enables or disables the presence of the cashier history reports page under the *Customers* tab.

Enable category for points program

Enables or disables the ability to place points programs into categories , much like offer, so that they may be organized by them.

Enable engine export button on offers

This determines whether or not the "export to engine" button appears on the *Offer>Summary* page.

Enable static fuel discount

Sets whether an offer discount can be set to be a static fuel discount or not.

Enable web message for rewards

Allows the definition of messages to be used by web kiosks when displaying offers and rewards.

External offers banner ID
When offers from an external source are imported into Logix, this is the banner ID to which these offers will be assigned.

External offers mapping file path
For external offers, the Logix offer ID and the external client offer ID must be associated. The file that stores this mapping is saved in the path specified by this setting.

Global offer end time
This is the time of day at which offers end, in 24-hour notation.

Global offer start time
This is the time of day at which offers begin, in 24-hour notation. For the end of the day, enter 23:59.

Offer file path for Catalina
Directories used by CMOfferAgent and OfferFileAgent, to which XML files are written which will be sent to Catalina.

Offer file path for CM
Directories used by CMOfferAgent and OfferFileAgent, to which XML files are written which will be sent to CM stores.

Offer validation warning grace period
Validation that an offer or group has reached a store will not produce a warning until the time difference between the store's local server and the central server exceed this grace period value (expressed in hours).

Offer validation watch grace period
Watch locations are those in which the times do not match, but the difference is within the defined grace period. Validation that an offer or group has reached a store will not produce a watch status until the time difference between the store's local server and the central server exceed this grace period value (expressed in hours).

52.2 Hidden settings

Some system options are "hidden" and don't appear in the UI, normally because they're rarely changed (or it's dangerous to change them) after they're set during the initial install.

Customer auto add default first name
The default first name that is set for a customer when a new customer record is created if one is not given.

Customer auto add default last name
The default last name that is set for a customer when a new customer record is created if one is not given.

Enable auto-householding in customer groups
This option allows CM to permit all cardholders in a household to be eligible for the offers targeted to the other members of the household. In other words, if one member of a household is targeted, then the entire household is eligible to receive the offer. This option affects all CM offers; its default state is disabled.

Enable best deal
Enables the CM offer to follow the best deal logic when receiving a discount reward.

Enable offer distribution
Enables offer distribution functionality in CM offers.

File path for CM redemption export
The server path where files containing data about CM offer redemptions will be stored.

File path for fuel partner export
Specify the directory path for the exported fuel partner rewards. This setting is not currently used.

Include time in offer start and end dates
When enabled, this allows CM offers to have their start dates and end dates also include time of day.

Max number of files downloaded by a store at one time (0 => No limit)
Determines the maximum number of files that may be included in the response from a call to CMConnector's GetdistributionList method. A value of 0 means there is no limit. The value of this option is obtained by the CMConnector and is subsequently passed to the new stored procedure "pa_CmConnector_FileListGet". The default value is 0 (No Limit). This value should remain set to 0 until such time the applications at the ACS local server are modified to handle the processing of offers and product groups as deltas rather than reprocessing all existing data in order to generate the final file used by the CM engine.

Max number of files updated by a store at one time (0 => 1)
Determines how many rows (files) in the OfferDLBuffer table are updated in one SQL update statement. The default value is 50. The value of 50 was determined via testing on lab system and may need to be tuned in real environments.

Max number of stores allowed to download files at one time (0 => No limit)
Determines the maximum number of stores that may be downloading at one time. This option should be set high enough to allow for the possibility that some stores could go offline temporarily after invoking a call to GetDistributionList and before actually downloading and processing. This option defaults to 0 (No Limit).

Min number of files pending in order for a store to be designated as downloading (0 => 1)
This option is only used if the previous option is set to a value other than 0. The value for this option determines how many files a store may be downloading or processing in order for this location to be included when it is being determined how many stores are in the "act" of downloading and processing files at a time. For example, if this option has a value 5, then only stores which are currently downloading at least five files will be considered in the "act" of downloading and processing files. This value defaults to 5.

Max number of IPLs processed in one pass of the CmOfferAgent (0 => No limit)
Limits the number of IPL requests that will be honored in each pass of the CMOfferAgent. It mainly is used to prevent the CMOfferAgent from using too much CPU time in one pass if per chance a lot of stores request an IPL (e.g. each store is configured to request an IPL each night at 2AM). The default value for this option is 10. If this option value is set to 0 then there is no limit to the number of allowed IPLs in one pass.

Lapsed minutes before agent resets download status from Notified to Ready (0 => No reset)
Determines how long a file in the OfferDLBuffer table can have a StatusFlag value of "1" (Notified) before the StatusFlag value is reset to "0" (Ready). This allows "resending" files to the store when the client application,

for whatever reason, loses the fact that it has been notified of files to download (i.e. has invoked CMConnector's GetDistributionList method). In the previous version of the CMOfferAgent this value was hard-coded to be 60 minutes. The default value for this option is 60. If this option value is set to 0 then the files are never reset.

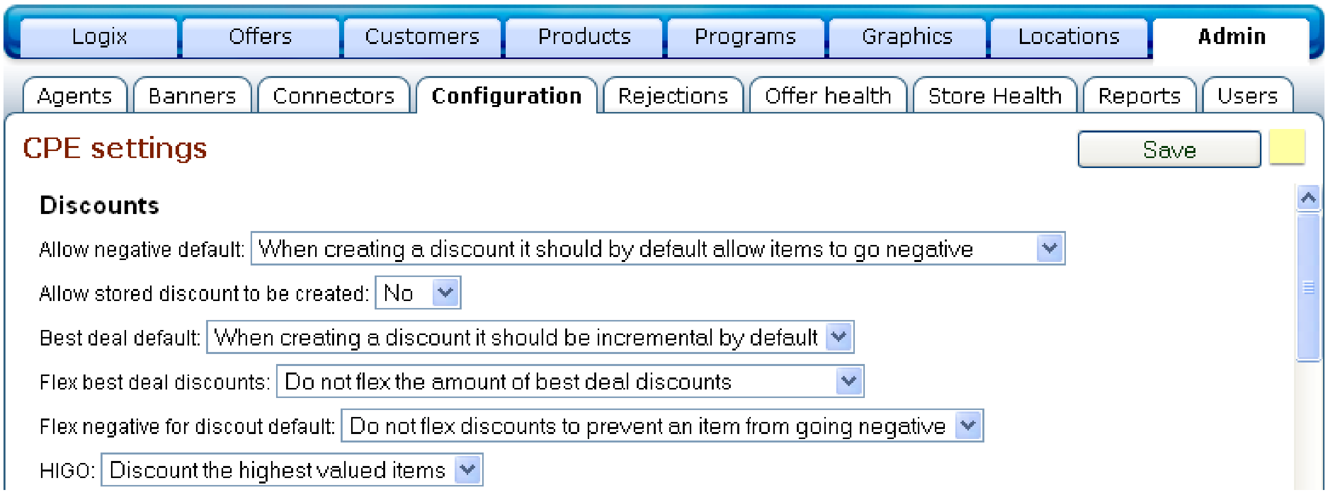
Lapsed days before agent sets location inactive due to files not being downloaded (0 => Never)
Determines how long a file can be listed in the OfferDLBuffer table for a specific location before the location to receive this file is set to inactive. A location is set inactive by setting the MustIPL flag in the LocalServers table for that location. The StatusFlag for all files in the OfferDLBuffer table for this location is then set to 4 (Skipped). In the previous version of the CMOfferAgent this value was hard-coded to be 10 days. The default value for this option is 10. If the value is set to 0 then locations are never automatically set to require an IPL.

Stored value program ID for fuel partner program
Specify which stored value program ID is to be used for the fuel partner program ID.

Stored value stacking limit
Sets the maximum number of stored value records to return for a customer through the CM connector.

53 CPE settings

Settings related to the CPE engine are managed from the *Admin>Configuration>Settings: CPE* page. The settings only apply to and will only affect the CPE engine functionality.



53.1 Visible settings

53.1.1 Discounts

Allow negative default

Sets whether or not values are normally allowed to go negative. If enabled, the “Flex negative” option will be disabled.

Best deal default

Sets whether discounts default to being awarded in incremental or best deal fashion.

Default discount chargeback department code (basket-level):

The chargeback department that will be selected by default in basket-level discounts for CPE offers. This setting appears only if banners are not enabled.

Default discount chargeback department code (department-level):

The chargeback department that will be selected by default in department-level discounts for CPE offers. This setting appears only if banners are not enabled.

Default discount chargeback department code (item-level):

The chargeback department that will be selected by default in item-level discounts for CPE offers. This setting appears only if banners are not enabled.

Flex best deal discounts

Allows discounts to be automatically adjusted in the presence of external discounts.

Flex negative

Allows discounts to be automatically adjusted to prevent it from going negative.

HIGO

Sets whether the lowest-priced or highest-priced items are discounted.

Send item-level discounts as earned
If enabled, item-level discounts are delivered as they're scanned; otherwise, they're delivered at total time.

Take net of external discounts
Sets whether the value net is used for an external discount.

53.1.2 Customers

Card filter
Selects a pre-programmed style of loyalty card filter.

CPE customer ID
Sets the field that the system uses as the customer ID: Member ID as household or card number, or Card ID as household or card number.

Cross-shop eligibility limits
Sets whether the eligibility limits for an offer will be shared between stores.

Customer group accuracy
This value represents the variation in the number of entries between instances of a customer group that Logix considers acceptable. The value can range from 0.00 to 0.99.

Customer locking type
Sets the type of locking used when a customer card is locked.

- No locking: Cards are not locked when being used.
- Lock based on customer ID only: Lock the card so that is may not be used anywhere else while locked.
- Lock based on customer ID and terminal locking group: Lock the customer card so that it may not be used at any other terminal in the locking group while it is locked.

53.1.3 Paths

Central server install path
This is the file path in which central server software is installed.

CPE Offer Agent file path
The server file path used by the CPE Offer Agent.

Default ImageFetch URL
The standard URL used by ImageFetch.

Default IncentiveFetch URL
The standard URL used by IncentiveFetch.

Default PhoneHome ID address
The default PhomeHome address used when creating a new local server record.

IPL temp file path
The file path where IPL temporary files are written while they're being prepared to be sent to the store.

53.1.4 Alternate ID

Alternate ID cache expiration days
The number of days after which the alternate cache ID will expire.

Alternate ID empty verifier
When CPE receives an alternate ID message from the POS, it returns a list of matches. Each response includes a verifying datum (e.g. date of birth) that should be used by the POS to distinguish between matches. This setting controls whether or not the CPE will send a matching record to the POS if the verifying information is empty or not set for the matching record. Recommended setting: "Include record if only one match found".

Alternate ID host timeout seconds
If an alternate ID cannot be resolved by CPE, it will make an enterprise-level call to resolve the Alternate ID and wait the specified number of seconds for a response. NCR advises keeping the number of seconds small (e.g., 3 seconds) because the customer will be waiting for a response at the POS and the POS will likely have a timeout associated with a MEMBER_ID_RESPONSE.

53.1.5 Store health

High severity threshold
The number of minutes after which a server error is considered high priority.

Medium severity threshold
The number of minutes after which a server error is considered medium priority.

Low severity threshold
The number of minutes after which a server error is considered low priority.

Item Message Extended Price Field Use
Setting for how to use the Extended Price field received from the POS when processing transactions.

- Normal: Use the Extended Price field in the normal manner
- Use for quantity 1 items: Use the Extended Price field on quantity one items in a transaction only
- Use for all items: Use the Extended Price field on all items in a transaction.

53.1.6 Offline file processing

Fetch offline transaction file
Causes the fetchOffline process on the local server to attempt to connect to any remotely connected clients to fetch an offline transaction file. The connection details must be negotiated and agreed upon prior to enabling this. Do not enable this feature without cooperation from NCR Copient.

Process offline default FTP IP address
Sets the default FTP IP address that local servers use for offline file processing.

Process offline default FTP password
Sets the default FTP password that local servers use for offline file processing.

Process offline default FTP path
Sets the default FTP folder location that local servers use for offline file processing.

Process offline default FTP username

Sets the default FTP username that local servers use for offline file processing.

Process offline files in failover
Setting for whether or not the local server will process offline files when the server has gone into a failover state.

53.1.7 Trigger codes

Trigger code range begin
The beginning number of the range of trigger codes that will be available to use in offer conditions.

Trigger code range end
The last number to be used in the range of trigger code that will be available for use in offer conditions.

Trigger codes permitted in multiple offers
Allows trigger codes to be used in more than one offer condition at a time. If this is disallowed, trigger codes will only be available to be used in an offer if not used in any other offer condition.

Trigger codes permitted outside of designated range
Allows trigger codes to be used in offers that are outside of the range specified in other options. If disallowed, trigger codes entered into offers have to be within the range specified in other options.

Unused Trigger codes Notification Message
Allows trigger codes notification to be sent either after the *End of Sale (EOS)* or at *Total*.

53.1.8 Manual adjustment UPCs

Adjustment UPC range begin
The beginning number of the range of adjustment UPCs that will be available to use in points or stored value programs.

Adjustment UPC range end
The last number to be used in the range of adjustment UPCs that will be available for use in points or stored value programs

Adjustment UPCs permitted outside of designated range
Allows adjustment UPCs to be used in points or stored value programs that are outside of the range specified in other options. If disallowed, adjustment UPCs entered into points or stored value programs have to be within the range specified in other options.

53.1.9 Miscellaneous

Base offer ROID and program ID
Program ID used when determining the Points balance for a member's card in the base program. Used by the CardAuthorization connector.

Collect impression reporting data
Sets whether Logix will gather impression reporting data from offers.

CPEOfferAgent max records per batch
The number of offer records included per batch for the CPEOfferAgent.

Default lane type
A numeric indicator that sets the default checkout lane type.

Default operator display type
This sets whether cashier displays are on or off by default

Default printer type
A numeric indicator that sets the default printer type.

Delayed item/card processing
When enabled, items will not be processed until the following item scan and results in all external information being gathered before processing such as any external discounts around that item being processing.

Disable automatic alternate ID enrollment prompt
If users have not enrolled in alternate ID or opted out and alternate ID is enabled and this option is not enabled, users will be prompted to enroll in alternate ID at the end of a transaction.

Enable Specialized BOGO Processing
Enabling this setting will allow the specialized BOGO processing to be used on BOGO offers. The recommended setting for this is No. The rules applied when this setting is YES address a very specific set of business rules for a small subset of retailers. (This setting will be deprecated in a future version)

Enable issuance
Enabling this setting will allow the issuance option to be available on the advanced options of offers.

Enable reporting (enterprise)
Enabling this setting will allow the impression and redemption reporting option to be available on the advanced options of offers.

Enable savings to date
Sets whether the display of a customer's "saving to date" is enabled.

External offers banner ID
When offers from an external source are imported into Logix, this is the banner ID to which these offers will be assigned.

External offers mapping file path
For external offers, the Logix offer ID and the external client offer ID must be associated. The file that stores this mapping is saved in the path specified by this setting.

Fuel stacking UPC
The dummy fuel UPC sent from a fuel pump during inquiries for fuel stacking offers.

Gallon limit
The gallon limit of triplet base fuel programs.

IncentiveFetch batch threshold
The maximum number of records that will be processed together in a batch by IncentiveFetch.

Impression reporting default
Setting used to determine if offers should send impression reporting by default or not. If not on then the impression reporting for a new offer must be set manually.

Integration interface type
Selects from IBM SA RS485, IBM Serial or IBM TCP/IP integration interfaces.

IPL – Concurrent window
The window (in minutes) in which multiple IPLs are considered to be concurrent.

IPL – Max concurrent
The number of maximum simultaneous IPLs allowed.

IPL – Max records per batch
The maximum number of records that are written into an IPL file.

IssuanceUpload Max Upload Transactions per batch
The number of records to be sent at one time to the central server to be processed as Issuance transactions.

Lock deployed offers and purge from CPE after they expire
If this is set, offers that have been deployed will lock and make only the offer general page available when the offer expires. Expired offers will also be purged for the CPE server with this setting.

Maximum eligibility printed messages per transaction
The maximum number of eligibility printed messages the CPE will send in a single transaction. Further messages will be revoked and not sent to the POS.

Offer validation grace period
Validation that an offer or group has reached a store will not produce a warning until the time difference between the store's local server and the central server exceed this grace period value (expressed in hours).

Operate At Enterprise
This option configures Logix so that it can connect to Enterprise UE Server. Separate section named *Messaging* containing configurations would be displayed once this feature is turned on.

Redemption reporting default
Setting used to determine if offers should send redemption reporting by default or not. If not on then the redemption reporting for a new offer must be set manually.

ReportingUpload max records per batch
The number of records that will be bundled together in a batch generated by ReportingUpload.

Product filter
Selects a pre-programmed style of product filter.

Targeted graphics expiration
The duration in seconds after which targeted graphics expire.

TransUpload max records per batch
The number of records that will be bundled together in a batch generated by TransUpload.

Triplet promotion report directory
Directory where reports for triplet offers are written.

Web household display
Sets whether householding information is displayed on the customer-facing website.

Zero balance messages default
Sets whether or not messages that communicate a balance (e.g., of points) will be printed if the balance is zero.

53.1.10 Excluded group flags

Discountable flag group ID
Indicates the product group in Logix that is marked as the system-wide exclusion group.

Points apply flag group ID
Indicates the product group in Logix that is marked as being unable to earn points when purchased.

53.2 Hidden settings

Some system options are "hidden" and don't appear in the UI, normally because they're rarely changed (or it's dangerous to change them) after they're set during the initial install.

Allow attribute editing
Allows or disallows the creation, editing, or deleting of attributes through the Logix UI.

Auto-generate card number during AltID enrollment
Enables the creation of a customer record including a generated card number when during the AltID enrollment. The generated card numbers will start at the number set in another hidden option.

Card Scan ID Status
Setting to use or ignore the card scan ID sent in the transaction information from the protocol messages.

CPE Protocol build

The CPE protocol build is used to determine if extended franking reward message fields should be shown in the UI.

Create Customer at Enterprise
If enabled, a customer lookup on an enterprise CPE server that returns no resuslts will create the customer record.

Create customer in master data
Create a customer record for the card sent up in a PhoneHome and create a household for the created customer if neccesary.

Discount scorecard is header
When enabled, then if there’s a scorecard that needs to be printed at the end of the transaction, all printed messages are held until the end of sale. At EOS, all of these printed messages are printed after the discount

score card. If this system option is not enabled or there's no scorecard to print, the printed messages are *not* held until EOS.

Enable Display Immediate for tiered offers
Allow the cashier messages of offers with more than one tier to be set as display immediate. If disabled, this option will not be available on the cashier messages.

Enable employee ID response
Enables the member ID reponse messages for partner perks.

Enable HHID attribute lookup for customer card
Determines in customer inquiry if a customer will be shown with the attributes of its containing household.

Enable product condition rounding
Enables the option to set rounding for offer dollar and weight/volume product conditions.

IPL – Runaway window
The "runaway window" is determined by this value which represents the number of minutes between IPLs from the same server.

Operate at Enterprise
Configuation of the local server communication with the central servers and the number of store locations handled by individual local servers.

Show stored value storage type
When set to 1, this value makes a checkbox named "Store in units" appear on the *Stored Value>Edit* page. Storing in units instructs Logix to write stored value in individual units when earned.

Show stored value storage type
Enables the option to set "Disable bulk earning" for stored value programs. If this setting is not enabled then the option is not available for this in stored value programs.

Starting card number for AltID enrollment
Sets the card number to start at for the auto-generated card numbers from the AltID enrollment.

Triplet promotion
Special setting to tie three offers together for a special style of fuel offer.

Rounding method for customer spending
Select the type of rounding that will be used when determining rewards for offers.

- Standard rounding to nearest whole number
- Rounding up
- Rounding down
- No rounding

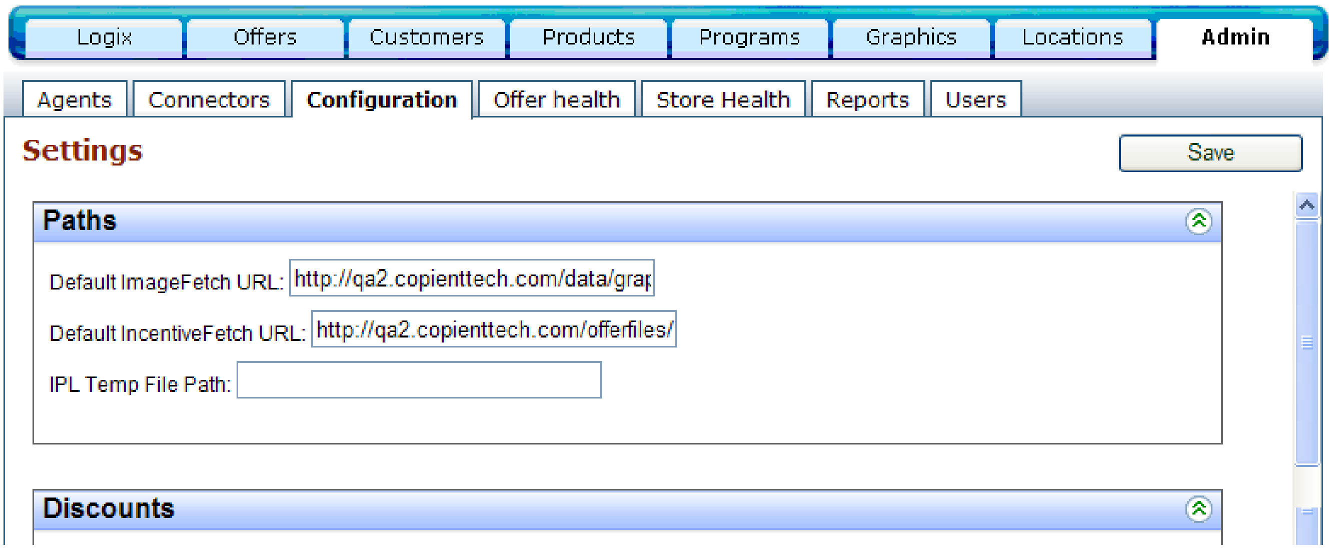
Percent off discount rounding
Select the type of rounding that will be used when determining rewards for percent off discounts.

- Standard rounding to nearest whole number
- Rounding up

- Rounding down
- No rounding

54 UE settings

Settings related to the UE engine are managed from the *Admin>Configuration> Settings: UE* page. The settings only apply to and will only affect the UE engine functionality.



54.1 Visible settings

54.1.1 Path

Default ImageFetch URL
The standard URL used by ImageFetch.

Default IncentiveFetch URL
The standard URL used by IncentiveFetch.

IPL temp file path
The file path where IPL temporary files are written while they're being prepared to be sent to the store.

54.1.2 Discounts

Allow discounts for offers with tender conditions
Sets whether or not discounts are allowed on offers that have tender conditions

Discount rounding behavior
Sets how discounts will be rounded

Display alternate price application selection
When this option is set to yes, “Alternate Price” will be a discounting option.

Flex negative for discount default
Allow discounts to be automatically adjusted to prevent it from going negative.

54.1.3 Store health

High severity threshold
The number of minutes after which a server error is considered high priority.

Medium severity threshold
The number of minutes after which a server error is considered medium priority.

Low severity threshold
The number of minutes after which a server error is considered low priority.

54.1.4 Trigger codes

Trigger code range begin
The beginning number of the range of trigger codes that will be available to use in offer conditions.

Trigger code range end
The last number to be used in the range of trigger code that will be available for use in offer conditions.

Trigger codes permitted in multiple offers
Allows trigger codes to be used in more than one offer condition at a time. If this is disallowed, trigger codes will only be available to be used in an offer if not used in any other offer condition.

Trigger codes permitted outside of designated range
Allows trigger codes to be used in offers that are outside of the range specified in other options. If disallowed, trigger codes entered into offers have to be within the range specified in other options.

Unused Trigger codes

- **Do not remove unused trigger codes from the transaction**
  UE base default behavior. When a trigger code is entered, if an offer is found and the other conditions of the offer are met, the rewards are issued. Otherwise, the trigger code is queued into the transaction. If subsequent changes to the transaction make the offer conditions true, then the rewards are issued. NO indication is returned to the client when the trigger codes do not result in issued rewards.
- **Remove unused trigger code immediately**
  When a trigger code is entered, if no rewards are issued, the trigger code is removed from the transaction and a result code and associated text are returned to the client which indicates a reason why the rewards were not issued.
- **Remove unused trigger codes at Total and End Transaction processing**
  This options also includes the behavior of "Remove unused trigger code immediately." If a trigger code is entered into the transaction and rewards are issued and then subsequent changes to the transaction cause the reward to be revoked, the trigger code which was once associated with a rewarded offer, becomes queued into the transaction. If subsequent changes to the transaction make the offer conditions true again, then the rewards are issued. If, at Total or End and the previously rewarded but now unrewarded and queued trigger code has not been rewarded again, a 72 UNUSED_TRIGGER_CODE message is returned with a list of every such trigger code and the reason why it remained queued but

unused. After the UNUSED_TRIGGER_CODE message is sent the trigger codes are removed from the transaction.

- **Remove unused trigger codes at End Transaction processing**
  This options also includes the behavior of "Remove unused trigger code immediately." If a trigger code is entered into the transaction and rewards are issued and then subsequent changes to the transaction cause the reward to be revoked, the trigger code which was once associated with a rewarded offer, becomes queued into the transaction. If subsequent changes to the transaction make the offer conditions true again, then the rewards are issued. If, at End and the previously rewarded but now unrewarded and queued trigger code has not been rewarded again, a 72 UNUSED_TRIGGER_CODE message is returned with a list of every such trigger code and the reason why it remained queued but unused. After the UNUSED_TRIGGER_CODE message is sent the trigger codes are removed from the transaction.

54.1.5 Miscellaneous

Allow return discounting

Program ID used when determining the Points balance for a member's card in the base program. Used by the CardAuthorization connector.

Default lane type
A numeric indicator that sets the default checkout lane type.

Default operator display type
This sets whether cashier displays are on or off by default

Default printer type
A numeric indicator that sets the default printer type.

Enable issuance
Enabling this setting will allow the issuance option to be available on the advanced options of offers.

Enable reporting (enterprise)
Enabling this setting will allow the impression and redemption reporting option to be available on the advanced options of offers.

GetCustomerInfo IP address
The address that the UE would use to execute a GetCustomerInfo call against Logix if the retailer has set up a dedicated server to handle only calls to GetCustomerInfo.

Impression reporting default
Setting used to determine if offers should send impression reporting by default or not. If not on then the impression reporting for a new offer must be set manually.

IPL – Concurrent window
The window (in minutes) in which multiple IPLs are considered to be concurrent.

IPL – Max concurrent
The number of maximum simultaneous IPLs allowed.

IPL – Max records per batch
The maximum number of records that are written into an IPL file.

Item Level Adjustment Application
Sets whether or not an Item Level Adjustment sent by the POS will be saved or not

Offer validation grace period
Validation that an offer or group has reached a store will not produce a warning until the time difference between the store's local server and the central server exceed this grace period value (expressed in hours).

Zero balance messages default
Sets whether or not messages that communicate a balance (e.g., of points) will be printed if the balance is zero.

54.1.6 Localization

Enable multi unit of measure for UE

Enable/Disable whether multiple unit of measurements can be configured and used within an offer and location.

Enable multi currency for UE

Enable/Disable whether multiple currency can be configured and used within an offer and location.

Default currency type

Default currency that will be used.

Enable legacy offer text

Base translation that will be used with offers in multiple language situations.

54.1.7 Messaging

Messaging Server Host

Host address of RabbitMQ Server

Messaging Server Port

Port needed to connect to RabbitMQ Server. Default is 5672

Messaging Username

RabbitMQ server username. Default is guest.

Messaging Password

RabbitMQ server password. Default is guest.

54.1.8 Products

Allow Node deletion even if it is used in product groups

Allow user to delete hierarchy node while it is being used in an Attribute based product group. Default is NO.

54.2 Hidden settings

Some system options are "hidden" and don't appear in the UI, normally because they're rarely changed (or it's dangerous to change them) after they're set during the initial install.

Allow locations to re-initiate customer locks
Allows customer lock to be reused if the reuse request comes from the same store as the original lock request
Auto-generate card number during AltID enrollment
Enrolling an Alternate ID will generate a new card number

Customer locking unlock delay (minutes)
The time to wait before the unlocking a customer card

Default chargeback department(basket-level)
Default chargeback department for basket-level discounts

Default chargeback department(dept-level)
Default chargeback department for department-level discounts

Default chargeback department(item-level)
Default chargeback department for item-level discounts.

Discount issuance timing
Discount issuance occurs when the discount is earned or at total time.

Enable BOGO
Enable Buy One Get One

Enable Preference data distribution for UE
When enabled, customer preference values are sent to the promotion engines via TransDownload. When Disabled, promotion engines are responsible for calling web services at host to fetch customer promotion values.

Lock offers after expiration
Offers cannot be edited or re-deployed after expiration. It is assumed that the local server will also purge offers at the time of expiration if this setting is enabled.

Send Item Level Discounts as Earned
When enabled, Item Level Discounts will be sent to POS as they are earned

Take net of internal discounts
Sets whether the value net is used for an internal discount.

UE CustomerID
Sets the field that the system uses as the customer ID: Member ID as household or card number, or Card ID as household or card number.

UEOfferAgent - Max records per batch
The number of offer records included per batch for the UEOfferAgent

Messaging Download Exchange
RabbitMQ messaging exchange name for sending data to Customer Broker. Default value is *ams.exchange.download.*

Messaging Download Routing Key
RabbitMQ messaging routing key for sending data to Customer Broker. Default value is *ams.routing_key .download.*

Messaging Upload Exchange
RabbitMQ messaging exchange name for receiving data from Customer Broker. Default value is *ams.exchange.upload.*

Messaging Upload Routing Key
RabbitMQ messaging routing key for receiving data from Customer Broker. Default value is *ams.routing_key .upload.*

Message Sending Queue
RabbitMQ queue which would be used to send customer related data from Logix to Customer Broker. Default value is *ams.queue.download*.

Message Receiving Queue
RabbitMQ queue which would be used to receive transaction related data from Customer Broker to Logix. Default value is *ams.queue.upload*.

Maximum UE Servers
Maximum number of UE servers that can be created on Logix. Default value is *1.*

55 Health settings

The following settings, controlled from the *Admin>Configuration>Settings: Health* page, control the health survey data displayed on the *Admin>Store Health* page.

Health survey frequency
Sets how frequently a store health survey is conducted.

Health survey purge days
Sets the number of days that survey data is retained; after this time the data is purged.

Health survey timeout
This setting represents the number of minutes the server will wait for health survey data from any particular server. If survey data has not been received for a server after this time, an exception report will be sent to Logix. Default value is 30 minutes.

56 Web settings

The following settings apply to the customer-facing website and are controlled from the *Admin>Configuration>Settings: Web* page.

Customer editable
Sets whether a customer is allowed to edit his or her account information.

Display active offers
Sets whether currently active offers are displayed in the offers list on the site.

Display customer information
Sets whether a customer's account information is displayed.

Display savings to date
Sets whether the customer's savings to date total is displayed.

Display website offers
Sets whether offers are displayed that are marked to be shown on the website.

Enable communications profiles
Sets whether a customer can control how frequently and through which channels he or she will receive communications from the retailer.

Session timeout
Sets the timeout duration in minutes for a customer's session, after which the customer is automatically logged out.

Transactions to display
Set the number of transactions that will appear in the website's list of a customer's recent transactions.

57 Cache settings

The following settings are available in *Admin>Configuration>Settings: Cache*, they control the time interval before refreshing Cache.

The user can set an Auto Refresh Cache Refresh Interval in hours that will apply to all the items listed in the Clear Cache Data section.

The user can choose to clear the cache of each item listed in the Clear Cache Data section individually.

Clear All Cache
Clears the cache for all the options listed when clicked.

All System Options
Clears the cache for all the system options when clicked.

Card Types
Clears the cache for all the card types when clicked.

Special Customer Groups (System Defined)
Clears the cache for Special Customer Groups when clicked.

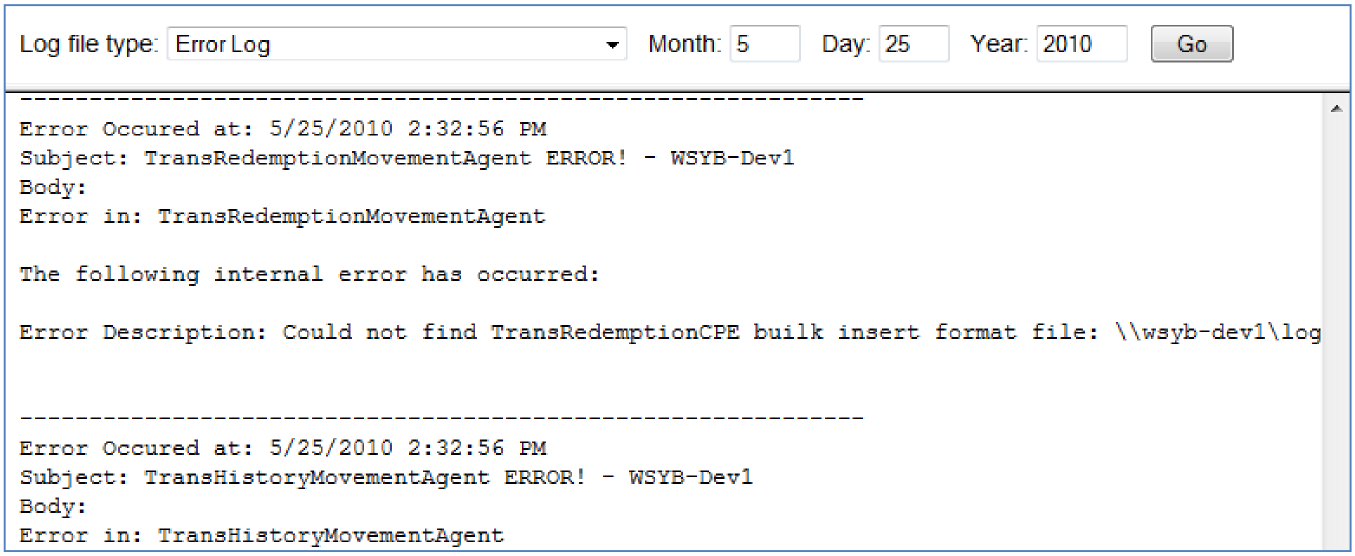
Stored Value Types
Clears the cache for Stored Value Types when clicked.

Trackable Coupon Status
Clears the cache for Trackable Coupon Status when clicked.

58 Logs

For each application, Logix maintains a log file documenting its activity. You can reach these files via the "Logs" button at the top of the *Admin>System Health* or *Admin>Store Health* pages, or via the "View Log" link at the bottom of the application summary.

The log file shows the current day's activity by default. To see another day's log (or to see the log of a different application), use the selectors at the top of the page.



58.1 Log files

You can reach the following log files through the Log File Viewer:

- Error Log – Records internal server errors, including problems with stored procedures, tables, queries, syntax, etc.
- AltIDWebService Log – Records activity and errors produced by the operation of the AltID connector.
- Air Mile Rejection Agent Log:-Records the activity of the Air Mile Rejectiion Agent , processing time , files imported as well as errors encountered
- Admin User Data Log -records the activity of Admin User Data connector.
- Browser Log – Records data about the web browsers and operating systems used to access Logix.
- Buyer Role Data Log -Records the activity of Buyer role data connector
- Badge Extract Agent log -Records the activity of Badge extract agent , processing time as well as errors encountered.
- Barcode Batch Generation Agent log -Records the activity of barcode batch generation agent ,default customer information as well as errors encountered.
- CAMs Issuance Agent Log – Whenever the CAM Issuance Agent processes data, this log records its activity, including the date and time the agent ran, the files it processed, and other details of its activity including any errors it encountered.

- Channel Purge Agent Log -Records the activity of Channel Purge Agent ,number of purged old user authentication tokens , number of purged old channel offer cache data as well as errors encountered.
- Channel Connector log -Records the activity of channel connector.
- CM Connector Log – Records check-ins made to the central server from CM locations.
- CM Offer Agent Log – Keeps record of offer files generated and sent down to CM stores.
- CM Offer Transfer Agent log-Records the activity of CM Offer Transfer agent ,numbers of offers to be transferred ,system to be transferred (production/ archive) as well as errors encountered.
- CM Redemption Export Log – Records the activity of the CM Redemption Export Agent, including the date and time it ran, the number of rows it processed, and other details including any errors it encountered.
- Coupon Import Agent Log – Records the activity of the Coupon Import Agent, including processing times, the number of affected rows, etc., as well as any errors the agent encountered.
- CPE IncentiveFetch Log – Records the activity of the CPEIncentiveFetch agent.
- CPE InstantWin Log – In installations using enterprise instant win, this log records activity relating to the use of EIW triggers.
- CPE LS-Health Log – Records when local server health records are processed and if any errors occurred.
- CPE TransUpdate Log – Records Transupload and Transdownload Connectors for CPE locations.
- CPE PhoneHome Log – Records PhoneHome Connector logging for CPE stores.
- CPE OfferAgent Log – Keeps record of offer files generated and sent down to CPE stores.
- CPE OfferValidation Log – Records the activity of the Offer Validation Connector.
- CPE RemoteData Log—Records the receipt of remote data files and the date, time, IP address, mode and server, and logs any errors encountered.
- CPE SanityCheck Log – Daily store check in. Verifies local CPE database contents against central (right groups, offers, records, etc.).
- Customer Removal Agent Log – Records the number of customers removed by the Customer Removal Agent each time it runs, and the date and time of the removal.
- Customer Update Agent Log – Records changes made to individual customer and household records.
- CRM Export Agent log -Records the activity of CRM export agent ,number of offers exported with their id's , external interface name as well as errors encountered.
- CRM Import Agent log -Records the activity of CRM Import Agent ,number of offers updated as well as errors encountered
- Data Export Agent Log – Records details of any automatic exports conducted by Logix.
- DBPurge Agent Log – Records details of the DBPurge Agent's activity, including the number and type of files purged (distribution files, export files, expired records, etc.).
- EOC Acceptance Log – Records successful calls to operations within the External Offer Connector, including date, time and source.
- Export All Promotions Agent log -Records the activity of Export All Promotions Agent, processing time as well as errors.
- EOC Rejection Log – Records unsuccessful calls to operations within the External Offer Connector, including date, time, source, and error code.
- Household Update Agent Log – Records the actions of the Household Update Agent: adding offers to customers

- Issuance DBPurge Agent Log
- Issuance Extract Agent Log
- LDAP Log – Records the date and time of each failed LDAP login attempt.
- Location Hierarchy Agent Log – Records the ID number and location of any nodes that have been updated or added, and the location of these nodes in the hierarchy. Records which stores in the hierarchy were added or updated. Records any errors that occur during the processing of such additions or changes.
- Location Update Agent Log – Records changes made to individual stores.
- Login Attempts – Records the date and time of each login attempt, as well as the username and IP address of the person attempting access.
- Message Sender Agent log-records the activity of Message Sender agent , processing time as well as errors encountered.
- Mass Action Log-Records the information about mass action operations in the folders tab.
- Message Receiver Agent log-Records the activity of message receiver agent , processing time as well as errors encountered.
- Offer Customer Log
- Offer File Agent Log – Records the processing of offer files. Once generated, the offer file agent determines which stores the files should be sent to, and determines if certain stores needs to pick up files.
- Offer Validation Agent Log – Records the date and time of each automatic offer revalidation, or of manual revalidations initiated through the Admin>Offer Health page in UI. Also shows the total number of offers validated.
- Offer Import Agent Log:-Records the activity of offer import agent , processing time ,no of offers imported as well as errors encountered.
- Points Update Connector Log
- Points History Movement Agent log- Records activity of Point History Movement agent , number of records inserted into point history as well as errors encountered.
- Points Migration Agent log - Records the activity of Points Migration Agent ,Information about the points migrated from the programs , the number of the customers for whom the points migrated ,status of points migration system option as well as errors encountered.

- Process Customer Groups Log – Records the activity of Process Customer Groups Agent. When customer groups are uploaded, the agent takes the uploaded files and populates their information into the database.

- Process Points Agent Log -Records the activity of Process points programs agent ,processing time, points adjustment applied to point program as well as errors occurred during processing of the points update file.
- Product Hierarchy Agent Log – Records the ID number and location of any nodes that have been updated or added, and the location of these nodes in the hierarchy. Records which products in the hierarchy were added or updated. Records any errors that occur during the processing of such additions or changes.

- Product Attribute Update Agent- Records the activity of Product attribute update agent , processing time, attributes updated and removed as well as errors encountered.
- Product Hierarchy Link Agent log -Records the activity of Product hierarchy link agent , processing time as well as errors encountered.
- Process Issuance Log
- Process Product Groups log -Records the activity of Process Product Groups agent , product group imported as well as errors encountered.
- Process Location Groups log -Records activity of Process Location groups agent , processing time ,location group added or removed as well as errors encountered.
- Process Stored Values Agent log -records the activity of Process Stored Values agent, stored value adjustment applied to stored value program as well as errors encountered.
- Product Update Agent Log – Records changes made to individual product records.
- PromoMovement Agent Log – Records the agent's regular resetting of promotion variables.
- Promo Var Agent Log – Records the regular resetting of offers' distribution variables.
- TCRM Agent Log – Records any activity with Teradata, such as transmission of offers or groups.
- Trackable Coupons Processing Agent Log – Records importation and processing of trackable coupons. Records any coupon or system errors that occur during importation or processing.
- Trans Update Agent-PREF log-Records the activity Trans Update Agent-PREF, processing time as well as errors encountered.
- Trans Update Agent-PREFMV-Records the activity Trans Update Agent-PREFMV, processing time as well as errors encountered.
- Trans History Movement Agent Log
- Trackable Coupons Connector log - Records the activity of Trackable coupons connector
- TransRedemption Movement Agent Log
- UE Offer Agent Log – Checks databases on a recurring basis for offer changes.
- UE-GetCustomerInfoLog – Records changes and updates to customer information
- UE- IncentiveFetchLog -
- UE- InstantWinLog - In installations using enterprise instant win, this log records activity relating to the use of EIW triggers.
- UE-LS-HealthLog - Records when local server health records are processed and if any errors occurred.
- UE-Messaging Log
- UE-OfferValidationLog - Records the activity of the Offer Validation Connector.
- UE- RemoteDataLog - Records the receipt of remote data files and the date, time, IP address, mode and server, and logs any errors encountered.
- UE- SanityCheckLog - Daily store check in. Verifies local UE database contents against central (right groups, offers, records, etc.).
- UE- SerialLog
- UE- TransUpdateLog - Records Trans upload and Trans download Connectors for UE locations.
- Watchdog Agent Log

Part VI: Reference

59 Permissions

With the exception of administrative users, most individuals have access to some areas of Logix but not to others. For instance, a customer service representative might have access to customer inquiry but not to the offer builder; or someone authorized to create offers might not be allowed to modify system settings. To enforce this kind of access control, Logix uses *permissions*, each one of which grants access to one particular part of Logix – a page, a control, etc. Any user who possesses that permission can use that functionality.

Logix administrators group permissions together into *roles*, and it's these roles that are assigned to users. If you have the "access configuration" permission, you can see a list of roles and their constituent permissions by going to the *Admin>Configuration>Roles* page. Logix has over 160 permissions that fall into eight broad categories:

- Administration
- Banners
- Customers
- Graphics
- Locations
- Offers
- Products
- Programs

The following sections describe the permissions in each of these categories. Note that some permissions logically depend on others – for instance, Logix has a permission called "edit stores" that allows a user to modify retail location details, but also has a broader permission called "access stores" that controls whether a user can even see a list of existing stores. To have the "edit" permission without the corresponding "access" permission would be useless, since a user necessarily needs to be able to access something in order to edit it, so a user would need both these permissions in order to edit a store. The following sections make clear through the use of multi-leveled lists which permissions depend on others.

59.1 Administration

Administrative permissions govern those parts of the UI that deal principally with system configuration and management.

- **Access configuration** – Grants the user permission to see (but not create, edit or delete) items within the *Admin>Configuration* section, which contains pages governing attributes, categories, data exports, departments, external sources, manual adjustment UPCs, product and store hierarchies, roles, scorecards, trigger codes, tender types, terminals, vendors and system settings.
    - **Access external sources** – See (but not modify) external sources.
        - **Create external sources**
        - **Delete external sources**
        - **Edit external sources**

  - **Access system health** – See a list of AMS agents and their frequency and run times, and edit their individual settings.
  - **Access system settings** – See and modify all system settings, including general settings, engine-specific settings and health settings.
  - **Delete from hierarchy** – Remove items or nodes from product or store hierarchies.
  - **Edit attributes** – Create, edit and delete customer attributes.
  - **Edit categories** – Create, edit and delete offer categories.
  - **Edit departments** – Create, edit and delete offer chargeback departments.
  - **Edit product hierarchies** – Create, edit and delete product hierarchies. *This permission is currently unused and deprecated*.
  - **Edit roles** – Create, edit and delete user roles.
  - **Edit scorecards** – Create, edit and delete printed message scorecards, including scorecards for points, stored value and discounts.
  - **Edit store hierarchies** – Create, edit and delete store hierarchies. *This permission is currently unused and deprecated*.
  - **Edit tender types** – Create, edit and delete tender types.
  - **Edit terminals** – Create, edit and delete terminal types.
- **Access connectors** – See (but not modify) records for AMS connectors, which in this case are those records in the Connectors table which are marked as both installed and visible.
  - **Edit connectors** – Create, edit and delete GUIDs for any connector that uses GUIDs.
- **Access folders** – See (but not modify) folders, which currently consist of hierarchical groupings of offers. Folders are accessible under the *Offers* tab.
  - **Create folders** – Create new folders.
  - **Delete folders** – Delete existing folders.
  - **Edit folders** – Rename folders or modify the contents of folders.
- **Access history** – See all activity history. This history is accessible in the *History* subtabs that accompany most major edit pages in Logix.
- **Access instant win reports** – See a summary of enterprise instant win conditions and their associated triggers. This summary is accessible from the *Admin>Reports* page.
- **Access LMG rejections** – See (but not modify) CAM-related airmile award records that have been returned by LMG.
  - **Edit LMG rejections** – Edit, delete or retry airmile reward records returned by LMG.
- **Access logs** – See all the log files generated by AMS, its agents and connectors, etc.
- **Access notes** – See (but not modify) notes. Notes are bits of information attached to particular pages in the Logix UI, created by clicking the yellow sticky-note icon near the upper-right corner of those pages.
  - **Create notes** – Create new notes.
  - **Delete notes** – Delete existing notes.
- **Access offer health** – See a summary of health-related data for offers, including warnings, invalid components, last validation times, etc., and revalidate offers on demand.
- **Access other users' info** – See (but not modify) the personal settings pages of other users.
  - **Edit other users** – Edit the personal settings of other users (name, contact info, roles, etc.).
- **Access reports** – See and download reports of impressions, redemptions and markdowns for any offer over a specified period.

- **Access store health** – See a summary of store-related health issues, including known errors per location, and enable or disable reports and alerts per location.
- **Access store health resolutions** – See a knowledge base of resolution procedures for various known store health issues.
  - **Create store health resolutions** – Create a new entry in the knowledge base.
  - **Delete store health resolutions** – Delete an entry from the knowledge base.
  - **Edit store health resolutions** – Edit existing entries in the knowledge base.
- **Create users** – Create new user accounts and edit all user information- including users that were not initially created by the end user.
- **Delete users** – Delete existing user accounts.
- **Edit own roles** – Add or remove roles to/from your own user account.
- **Edit own user info** – Edit your personal settings, including identity, contact information, alerts, etc., but excluding roles.
- **Access Customer Languages** – Assign default languages to administrative users when a new account is created, and default customer facing website if multi language is enabled at the system option level (applies if EPM -Enterprise Preference Manager is installed).
- **Access Units of Measure**- Assign units of measure types such as weight and volume and specify the number of decimal places used for each type.
- **Access user defined fields** – See (but not modify) user defined fields in an offer. User defined fields can have a specific datatype defined by the user and are only used in the Logix user interface. They can also be imported and exported with offers through the CRM and External Offer Connectors as well as exported through the Universal Offer Connector.
  - **Add user defined fields** – Create a new user defined field for an offer in the user interface.
  - **Delete user defined fields** – Delete a user defined field from the user interface.
  - **Edit user defined fields** – Edit existing user defined fields in the user interface.
- **Assign offers to folders –** Move existing offers into folders within the user interface.
- **Edit mutual exclusion groups –** Add, remove, or modify mutual exclusion groups within the user interface. Mutual exclusion groups allow exclusion rules to be setup around an offer. There are two types of mutual exclusion groups, offer level and item level. In offer level, only the offer with the highest priority will be given or earned in the transaction. In item level, if an item in a transaction qualifies for multiple offers that are part of the group, only the offer with the highest priority will be earned.

59.2 Banners

These permissions relate to *banners*, which in AMS is considered to be a subset of an enterprise's stores that operate under a particular name.

- **Access banners** – See (but not modify) existing store banners.
  - **Add users to banners** – Grant any user access to a banner.
  - **Remove users from banners** – Deny any user access to a banner.
  - **Create banners** – Create a new banner.
  - **Delete banners** – Delete an existing banner.
  - **Edit banners** – Modify the banner's name, code, description, etc.

- **Edit banner chargeback department** – Modify the chargeback department associated to the banner.
- **Edit banner product hierarchy** – Modify the product hierarchy associated to the banner.
- **Edit banner store hierarchy** – Modify the store hierarchy associated to the banner.

59.3 Customers

Customer permissions control access to customer groups and to individual customer records. Permissions marked in purple (**thus**) are engine-specific permissions that are applicable only to CAM or US Airmiles promotion engines.

- **Access customer groups** – See (but not modify) customer groups.
  - **Create customer groups** – Create a new group.
  - **Edit customer groups** – Modify customer groups: rename, add members, remove members, etc.
  - **Delete customer groups** – Delete an existing group.
- **Access customer inquiry** – This permission broadly grants access to the *Customer>Inquiry* section of Logix, and allows a user to conduct an inquiry and find a customer record.
  - **Access adjustments page** – See (but not adjust) points balances and stored value.
  - **Access airmiles points balances** – Access (but not modify) points balances the customer holds in programs associated to airmiles offers.
    - **Edit airmiles points balances** – Increment or decrement the customer's balances in programs associated to airmiles offers.
  - **Access CAM Manual Adjustments** – Access the CAM Manual Adjustment page, accessible via the button on the main *Customer>Inquiry* page; button doesn't appear if permission is absent.
  - **Access customer identity data: [Field]** – These field-level permissions control whether the specific customer identity field (e.g., first name, street address, ZIP code, etc.) is displayed to the user.
    - **Edit customer identity data** – Edit any customer identity data accessible to the user.
  - **Access customer inquiry reporting** – Generate and download reports of customer inquiry activity based on user, customer, date range, and various other criteria. Accessible via the button on the main *Customer>Inquiry* page; button doesn't appear if permission is absent.
  - **Access customer notes** – See (but not add) notes about the customer. These notes are shown on the *Customer>General* page.
    - **Add customer notes** – Create notes about the customer, added via the notes popup launched from the *Customer>General* page.
  - **Access customer offers** – See the list of offers in which the customer is a participant.
    - **Access accumulation balances** – Access (but not modify) the balances a customer has accrued towards rewards in accumulation offers.
      - **Edit accumulation balances** – Increment or decrement said balances.
    - **Access airmiles accumulation balances** – Access (but not modify) the balances a customer has accrued towards rewards in airmiles offers with accumulation.
      - **Edit airmiles accumulation balances** – Increment or decrement balances associated to airmiles offers.

        - **Access redemption history** – See recent transactions in which the customer has redeemed the offer. This data is accessible via the ellipsis button on the *Customer>Offers* page; the button is disabled if the permission is absent.
        - **Add customer to offer** – Add the customer to customer group used by specified offer, which will result in the customer being added to one or more offers. This is accessible via the button on the *Customer>Offers* page; the button does not appear if the permission is absent.
        - **Delete customer from offer** – Remove the customer from the customer group used by the specified offer, which will result in the customer being removed from one or more offers. This is accessible via the "X" button on the *Customer>Offers* page; the button is disabled if the permission is absent.
    - **Access household cardholder** – See the cardholders that are members of the selected household.
    - **Access points balances** – See (but not adjust) balances the customer holds in points programs.
        - **Edit points balances** – Increment or decrement the customer's points balances.
        - **Execute CAM point adjustments** – Apply submitted adjustments to the customer's balances in CAM points programs.
    - **Access stored value** – See (but not adjust) balances the customer holds in stored value programs.
        - **Edit stored value** – Increment or decrement the customer's stored value balances.
    - **Access transaction history** – See a summary of the customer's recent transactions (the *Customer>Transactions* page).
        - **Create transactions** – Create a transaction.
    - **Add household cardholder** – Add a customer to a household, done via the add button in the "cardholders" box on *Customer>General*. Button doesn't display if permission is absent.
    - **Assign attributes** – Assign attribute values to a customer. Currently unused and deprecated.
    - **Delete household cardholder** – Remove a customer from a household, done via the "X" button in the "cardholders" box on *Customer >General*. Button is disabled if permission is absent.
- **Create customers** – Create a new customer.

59.4 Graphics

Graphics permissions control the creation and management of images for use as rewards in CPE offers, and the screen layouts associated to those image. Graphics and layouts are normally only used if your solution delivers content to display units.

- **Access graphics** – See (but not modify) existing graphics.
    - **Create graphics** – Create a new graphic.
    - **Edit graphics** – Modify an existing graphic: rename, upload a new image, etc.
    - **Delete graphics** – Delete a graphic.
- **Access layouts** – See (but not modify) existing screen layouts.
    - **Create layouts** – Create a new layout.
    - **Edit layouts** – Modify existing layouts: rename, change dimensions, etc.
    - **Delete layouts** – Delete a layout.

59.5 Locations

Location is a term that applies to stores (i.e., physical retail locations), and, if the installation of AMS is operating at the enterprise level, to servers. Stores may be collected together into store groups which are then used to determine where offers will be available.

- **Access stores** – See (but not modify) existing stores and servers.
  - **Create stores** – Create a new store or server.
  - **Edit stores** – Modify an existing store or server: rename, change address, etc.
  - **Delete stores** – Delete a store or server.
- **Access store groups** – See (but not modify) existing store groups.
  - **Create store groups** – Create a new store group.
  - **Edit store groups** – Modify an existing store group, including changing the constituent stores.
  - **Delete store groups** – Delete a store group.

59.6 Offers

The permissions in this section control access to the Logix offer builder.

- **Access offers** – See (but not modify) offers. This permission controls whether a user is able to reach the main *Offer>List* page, as well as the *External* and *CAM* offer lists.
  - **Access instant win offers** – See (but not modify) CPE offers of the Enterprise Instant Win engine subtype.
    - **Edit instant win offers** – Create, delete and modify Enterprise Instant Win offers.
  - **Create external offers** – Create an offer marked as coming from an external source, using the "Create offer for external source" selector on the *Offer>New* page.
  - **Create offers from blank** – Create a new offer from scratch. This permission grants access to the *Offer>New* page; it also puts a "New" button on the *Offer>List* page and in the actions menu of the *Offer>Edit* page.
  - **Create offers from templates** – Create a new offer based on an existing offer template. This permission puts a "New offer from template" button in the actions menu of the *Template>Edit* page.
  - **Delete offers** – Delete an existing offer.
  - **Deploy non-template offers** – Mark for deployment any offer that did not originate from a template.
  - **Deploy template offers** – Mark for deploy any offer that originated from a template.
  - **Edit offers** – Modify an existing offer, including making changes to its general characteristics (name, period, etc.) and adding, removing or changing its constituent parts (conditions, rewards).
    - **Edit offers' locations** – Modify the store groups and terminals selected in an offer.
    - **Edit offer source** – Modify the "creation source" of an offer on the *Offer>General* page.
  - **Favorite offers for oneself** – Mark an offer as a favorite for yourself; this makes the offer appear in the "show favorite offers" view of the *Customer>Offers* page in customer inquiry.
  - **Favorite offers for others** – Mark an offer as a favorite for other users.
  - **Export offers** – Export an offer to a GZip file using the "Export" control on the *Offer>General* page.

  - **Import offers** – Create a new offer by importing it from a file, using the “Import” control on the *Offer>List* page.
  - **Send offers outbound** – If an offer has an external interface selected (in the “Send outbound data to” selector on *Offer>General*), then send the offer to the selected interface. This permission puts a “Send outbound” control into the actions menu of the *Offer>Summary* page.
- **Access templates** – See (but not modify) offer templates.
  - **Create templates** – Create new offer templates.
  - **Delete templates** – Delete existing offer templates.

59.7 Products

Products permissions control access to product groups and to the product inquiry pages.

- **Access product inquiry** – Use the *Product Inquiry* page to see collision information on a given UPC.
- **Access group inquiry** – Use the *Group Inquiry* page to see collision information for all products in a group.
- **Access product groups** – See (but not modify) existing product groups.
  - **Create product groups** – Create a new product group.
  - **Edit product groups** – Modify existing product groups: rename, add or remove products, etc.
  - **Delete product groups** – Delete a product group.

59.8 Programs

The programs section consists of points programs and stored value programs.

- **Access points programs** – See (but not modify) existing points programs.
  - **Create points programs** – Create a new points program.
  - **Edit points programs** – Modify existing points programs: rename, edit description, etc.
  - **Delete points programs** – Delete a points program.
- **Access stored value programs** – See (but not modify) existing stored value programs.
  - **Create stored value programs** – Create a new stored value program.
  - **Edit stored value programs** – Modify existing stored value programs: rename, edit desc, etc.
  - **Delete stored value programs** – Delete a stored value program.
- **Access trackable coupon programs** – See (but not modify) existing trackable coupon programs.
  - **Create points programs** – Create a new trackable coupon program.
  - **Edit points programs** – Modify existing trackable coupon programs: rename, edit description, etc.
  - **Delete points programs** – Delete a trackable coupon program.
- **Redeploy offers using stored value program** – Save a stored value program and automatically mark associated offers for redeployment. Appears as an option in the actions menu on the *Stored Value>Edit* page.
- **Update offers using stored value program** – Save a stored value program and automatically update associated offers. Appears as an option in the actions menu on the *Stored Value>Edit* page.

60 Message tags

Tags are special codes inserted into printed messages or cashier messages that produce certain effects or display certain kinds of data when they're displayed to the customer.

60.1 Printed message tags

Below are the tags supported in Logix for printed messages and print lines, and the effect that each one produces. Note that, unlike in HTML, most of these tags have no corresponding closing tags. Instead, they're all self-closing, except for the style tags below which remain open and active until reset by the |NORMAL| tag (or by the end of the line, depending on the printer).

Please note also only a subset of these tags may be available for any given message. The tags that are available depend on installed printers and available engines.

60.1.1 Style

Once turned on, the effects of the following tags continue until reaching the end of the line or until reset by the `|NORMAL|` tag, depending on the printer.

|B|
Bold-face text (thus).

|I|
Italicized text (thus).

|U|
Underlined text (thus).

|V|
Overlined text (thus).

|INV|
Inverted text, e.g. white letters on black (thus)

|SMALL|
Small-sized text.

|MEDIUM|
Text slightly larger than normal size.

|MEDIUMB|
Bold text slightly larger than normal size.

|MEDIUMBWIDE|
Bold text slightly larger than normal size, stretched to double width.

|BIG|
Large-sized text.

|BIGB|

Bold large-sized text.

|HIGH|
Doubles the height of text.

|WIDE|
Doubles the width of text.

|CENTER|
Centers text.

|RIGHT|
Right justifies text.

|NORMAL|
Returns all print characteristics to normal.

60.1.2 Actions

|LINE|
Prints a horizontal line across the receipt.

|STARS|
Prints a horizontal line of asterisks across the receipt.

|LOGO|
Prints the pre-stored logo bitmap.

|LOGOBIG|
Prints the pre-stored logo bitmap at double size.

|CUT|
Completely cuts the receipt paper.

|CUT85|
Cuts the receipt paper by 85%.

60.1.3 Barcodes

|UPCA|[…]
Prints a UPC-A barcode. The number in brackets should be 11 digits (no check digit).

|UPCB|[…]
Prints a UPC-B barcode. The number in brackets should be 11 digits (no check digit).

|EAN13|[…]
Prints an EAN-13 barcode (also known as a JAN-13 in Japan). The number in brackets should be 13 digits.

|CODE39|[…]
Prints a Code 39 barcode. The number in brackets is the variable-length string to be encoded.

60.1.4 Variables

|CUSTOMERID|
The customer ID.

|FIRSTNAME|
The customer's first name.

|LASTNAME|
The customer's surname.

|CURRDATE|
The current date.

|OFFERSTART|
The offer's production start date.

|OFFEREND|
The offer's production end date.

|NET#[…]|
The net value of a discount in dollars, where the argument is the promotion variable ID of the discount.

|INITIAL#[…]|
The initial value of a discount in dollars, where the argument is the promotion variable ID of the discount.

|EARNED#[…]|
The earned value of a discount in dollars, where the argument is the promotion variable ID of the discount.

|REDEEMED#[…]|
The redeemed value of a discount in dollars, where the argument is the promotion variable ID of the discount.

|TSD|
Total savings to date.

|LYTS|
Total savings for the previous year.

|HHSTD|
Household-level savings to date.

|TOTALPOINTS|
The customer's total points balance in the offer's program.

|PTSASPEN|
The number of points formatted to display in decimal currency form. (15 points would display as 0.15.)

|ACCUMAMT|
The amount the customer has earned toward the offer's accumulation threshold (if any).

|REMAINAMT|

The remaining amount the customer must gain to reach the offer's accumulation threshold (if any).

|NET$[…]|
The net number of points, where the argument the promotion variable ID of the points program.

|INITIAL$[…]|
The initial number of points, where the argument is the promotion variable ID of the points program.

|EARNED$[…]|
The earned number of points, where the argument is the promotion variable ID of the points program.

|REDEEMED$[…]|
The redeemed number of points, where the argument is the promotion variable ID of the points program.

|SVBAL[…]|
The user's store value balance in a selected program.

|SVBALEXP[…]|
The expiration date of the selected program's balance.

|SVVAL[…]|
The total value earned in a selected stored value program.

|SVVALEXP|
The expiration date of the selected program's value.

|SVLIMIT[…]|
The unit limit of the selected stored value program.

|SVREDEEM[…]|
Stored value redeemed in the specified program during the transaction.

|SVSCRATIO[…,…,…]|
Stored value redemption ratio for all programs related to the specified scorecard.

|SVRATIO[…,…,…]|
Stored value redemption ratio for the specified scorecard.

|FTSPG|
Fuel: total savings per gallon.

|FTS|
Fuel: total savings in current transaction.

|SCORECARD[…]|
Prints the specified scorecard. User should enter next line when tag is added

|DSCORECARD[…]|
Prints the specified discount scorecard. User should enter next line when tag is added.

|CASHIERID|
Prints the ID of the transaction's cashier.

|POSNUM|
Prints the ID of the transaction's terminal.

60.1.5 Print line
Discount rewards or points rewards in Logix may include a short, single-line text message called a "print line". The tags below are for use exclusively in the print line, and cannot be used in regular printed messages.

|BASE#|
The base reward as a quantity of points.

|BASE$|
The base reward as a dollar amount.

|REWARD#|
The reward as a count (i.e., a number of points).

|REWARD$|
The reward as a dollar amount.

|USED#|
The rewarded number of points.

|USED$|
The rewarded dollar amount.

|USEDLB|
The rewarded weight in pounds.

|USEDKG|
The rewarded weight in kilograms.

|QTY|
The rewarded quantity > 1 as "2@".

60.2 Cashier message tags
|PTBAL[…]|
The customer's balance in the specified points program.

|SVBAL[…]|
The customer's balance in the specified stored value program.

61 Error codes

Below are lists of errors associated with central server and local server operations. Details on each error, along with user-submitted fixes and resolutions, can be found in the Logix Knowledge Base, accessible from the Store Health page.

61.1 Central errors

The following errors are specific to central servers.

Error ID	Failure text
CS1	LastHeard error
CS2	IncentiveLastHeard error
CS3	TransactionLastHeard error
CS4	TransDownloadLastHeard error
CS5	Sanity Check failed

61.2 Local errors

The following errors are specific to local servers.

Error ID	Failure text
LS1	Survey data not received
LS2	Unable to ping server
LS3	Unable to connect to server with SSH
LS4	Error encountered while processing survey data
LS5	Error encountered while analyzing survey results
LS11	CPU load average too high
LS12	Postgres not running
LS13	CPE not running
LS14	System rebooted recently
LS15	register_globals not enabled for mod_php
LS16	Postgres module not available for mod_php
LS17	PHP version not matching for mod_php
LS18	register_argc_argv not enabled for PHP client
LS19	Postgres module not available for PHP client
LS20	Sockets module not available for PHP client
LS21	PHP version not matching for PHP client
LS22	Unexpected IncentiveFetchURL for incentive file downloads
LS23	Unexpected ImageFetchURL for graphic downloads
LS27	Too many socket connections rejected

Error ID	Failure text
LS28	Number of socket connections seems excessive
LS29	Number of socket connections dropped seems excessive
LS30	Server is an acting primary and the socket is not connected
LS31	Copient code version not correct
LS32	Copient code build not correct
LS33	Unexpected value for TCP/IP integration protocol build
LS34	Unexpected value for TCP/IP integration protocol version
LS35	Unrecognized conf/copient.conf config file
LS45	Unrecognized conf/centralserverIP config file
LS46	Unrecognized conf/centralserverPath config file
LS49	Unrecognized conf/curl.conf config file
LS51	Unrecognized conf/www.conf config file
LS55	Copient communications cache folder is filling up
LS59	Copient log folder is filling up
LS62	System /tmp/ folder is filling up
LS65	PostgreSQL database folder is filling up
LS68	System / partition is filling up
LS70	Database maintenance Tidy has not been run recently.
LS71	Average vacuum time exceeds maximum vacuum time
LS72	Too many transactions offline due to IPL conditions
LS73	Too many transaction timeout flags sent from POS
LS79	Socket handler encountered Fatal PHP errors
LS82	The CPE encountered Fatal PHP errors
LS85	The CPE encountered Fatal PHP errors
LS88	Query errors found in CPE log
LS91	Query errors found in socket handler Log
LS94	Query errors found in CPE queue handler log
LS97	PHP errors encountered in ipLog
LS100	PHP errors encountered in CPE queue handler log
LS103	PHP errors encountered in CPE log
LS106	incentiveFetch mass insert error in communications log
LS109	transDownload mass insert error in communications log
LS112	autoIPL mass insert error in communications log
LS115	transUpload general error

Error ID	Failure text
LS118	reportingUpload general error
LS121	IPL Required: transDownload irreparable error
LS124	IPL Required: incentiveFetch irreparable error
LS127	IPL Runaway detected: Logix sending runaway throttle to server
LS128	Bad owner UID for conf/copient.conf config file
LS129	Bad owner GUID for conf/copient.conf config file
LS130	Bad permissions for conf/copient.conf config file
LS131	Bad owner UID for conf/centralserverIP config file
LS132	Bad owner GUID for conf/centralserverIP config file
LS133	Bad permissions for conf/centralserverIP config file
LS134	Bad owner UID for conf/centralserverPath config file
LS135	Bad owner GUID for conf/centralserverPath config file
LS136	Bad permissions for conf/centralserverPath config file
LS137	Bad owner UID for conf/curl.conf config file
LS138	Bad owner GUID for conf/curl.conf config file
LS139	Bad permissions for conf/curl.conf config file
LS140	Bad owner UID for conf/www.conf config file
LS141	Bad owner GUID for conf/www.conf config file
LS142	Bad permissions for conf/www.conf config file
LS144	Unrecognized bin/autoIPL file md5sum
LS145	Bad owner UID for bin/autoIPL file
LS146	Bad owner GUID for bin/autoIPL file
LS147	Bad permissions for bin/autoIPL file
LS149	Unrecognized bin/serial file md5sum
LS150	Bad owner UID for bin/serial file
LS151	Bad owner GUID for bin/serial file
LS152	Bad permissions for bin/serial file
LS154	Unrecognized bin/getGlobal file md5sum
LS155	Bad owner UID for bin/getGlobal file
LS156	Bad owner GUID for bin/getGlobal file
LS157	Bad permissions for bin/getGlobal file
LS159	Unrecognized bin/staggerJobs file md5sum
LS160	Bad owner UID for bin/staggerJobs file
LS161	Bad owner GUID for bin/staggerJobs file

Error ID	Failure text
LS162	Bad permissions for bin/staggerJobs file
LS164	Unrecognized bin/tidy file md5sum
LS165	Bad owner UID for bin/tidy file
LS166	Bad owner GUID for bin/tidy file
LS167	Bad permissions for bin/tidy file
LS169	Unrecognized bin/vacNuke file md5sum
LS170	Bad owner UID for bin/vacNuke file
LS171	Bad owner GUID for bin/vacNuke file
LS172	Bad permissions for bin/vacNuke file
LS174	Unrecognized www/ClearDisplay.php file md5sum
LS175	Bad owner UID for www/ClearDisplay.php file
LS176	Bad owner GUID for www/ClearDisplay.php file
LS177	Bad permissions for www/ClearDisplay.php file
LS179	Unrecognized www/deliverables.php file md5sum
LS180	Bad owner UID for www/deliverables.php file
LS181	Bad owner GUID for www/deliverables.php file
LS182	Bad permissions for www/deliverables.php file
LS184	Unrecognized www/fuel.php file md5sum
LS185	Bad owner UID for www/fuel.php file
LS186	Bad owner GUID for www/fuel.php file
LS187	Bad permissions for www/fuel.php file
LS189	Unrecognized www/ipLogView.php file md5sum
LS190	Bad owner UID for www/ipLogView.php file
LS191	Bad owner GUID for www/ipLogView.php file
LS192	Bad permissions for www/ipLogView.php file
LS194	Unrecognized www/lanetype.php file md5sum
LS195	Bad owner UID for www/lanetype.php file
LS196	Bad owner GUID for www/lanetype.php file
LS197	Bad permissions for www/lanetype.php file
LS199	Unrecognized www/lsconfig.php file md5sum
LS200	Bad owner UID for www/lsconfig.php file
LS201	Bad owner GUID for www/lsconfig.php file
LS202	Bad permissions for www/lsconfig.php file
LS204	Unrecognized www/onscreenad.php file md5sum

Error ID	Failure text
LS205	Bad owner UID for www/onscreenad.php file
LS206	Bad owner GUID for www/onscreenad.php file
LS207	Bad permissions for www/onscreenad.php file
LS209	Unrecognized www/phaseA.php file md5sum
LS210	Bad owner UID for www/phaseA.php file
LS211	Bad owner GUID for www/phaseA.php file
LS212	Bad permissions for www/phaseA.php file
LS214	Unrecognized www/PromoDebug.php file md5sum
LS215	Bad owner UID for www/PromoDebug.php file
LS216	Bad owner GUID for www/PromoDebug.php file
LS217	Bad permissions for www/PromoDebug.php file
LS219	Unrecognized www/scan.php file md5sum
LS220	Bad owner UID for www/scan.php file
LS221	Bad owner GUID for www/scan.php file
LS222	Bad permissions for www/scan.php file
LS224	Unrecognized www/viewpromos.php file md5sum
LS225	Bad owner UID for www/viewpromos.php file
LS226	Bad owner GUID for www/viewpromos.php file
LS227	Bad permissions for www/viewpromos.php file
LS229	Unrecognized www/watchdog.php file md5sum
LS230	Bad owner UID for www/watchdog.php file
LS231	Bad owner GUID for www/watchdog.php file
LS232	Bad permissions for www/watchdog.php file
LS234	Unrecognized www/ybDisplay.php file md5sum
LS235	Bad owner UID for www/ybDisplay.php file
LS236	Bad owner GUID for www/ybDisplay.php file
LS237	Bad permissions for www/ybDisplay.php file
LS239	Unrecognized www/yellowbox-xp.exe file md5sum
LS240	Bad owner UID for www/yellowbox-xp.exe file
LS241	Bad owner GUID for www/yellowbox-xp.exe file
LS242	Bad permissions for www/yellowbox-xp.exe file
LS244	Unrecognized apps/com/communications.inc file md5sum
LS245	Bad owner UID for apps/com/communications.inc file
LS246	Bad owner GUID for apps/com/communications.inc file

Error ID	Failure text
LS247	Bad permissions for apps/com/communications.inc file
LS249	Unrecognized apps/com/fetchData file md5sum
LS250	Bad owner UID for apps/com/fetchData file
LS251	Bad owner GUID for apps/com/fetchData file
LS252	Bad permissions for apps/com/fetchData file
LS254	Unrecognized apps/com/getAlternateIDInfo file md5sum
LS255	Bad owner UID for apps/com/getAlternateIDInfo file
LS256	Bad owner GUID for apps/com/getAlternateIDInfo file
LS257	Bad permissions for apps/com/getAlternateIDInfo file
LS259	Unrecognized apps/com/getCardholderInfo file md5sum
LS260	Bad owner UID for apps/com/getCardholderInfo file
LS261	Bad owner GUID for apps/com/getCardholderInfo file
LS262	Bad permissions for apps/com/getCardholderInfo file
LS264	Unrecognized apps/com/incentiveFetch file md5sum
LS265	Bad owner UID for apps/com/incentiveFetch file
LS266	Bad owner GUID for apps/com/incentiveFetch file
LS267	Bad permissions for apps/com/incentiveFetch file
LS269	Unrecognized apps/com/massInsert file md5sum
LS270	Bad owner UID for apps/com/massInsert file
LS271	Bad owner GUID for apps/com/massInsert file
LS272	Bad permissions for apps/com/massInsert file
LS274	Unrecognized apps/com/moveData file md5sum
LS275	Bad owner UID for apps/com/moveData file
LS276	Bad owner GUID for apps/com/moveData file
LS277	Bad permissions for apps/com/moveData file
LS279	Unrecognized apps/com/moveDataResponse file md5sum
LS280	Bad owner UID for apps/com/moveDataResponse file
LS281	Bad owner GUID for apps/com/moveDataResponse file
LS282	Bad permissions for apps/com/moveDataResponse file
LS284	Unrecognized apps/com/offerValidation.php file md5sum
LS285	Bad owner UID for apps/com/offerValidation.php file
LS286	Bad owner GUID for apps/com/offerValidation.php file
LS287	Bad permissions for apps/com/offerValidation.php file
LS289	Unrecognized apps/com/PhoneHome.inc file md5sum

Error ID	Failure text
LS290	Bad owner UID for apps/com/PhoneHome.inc file
LS291	Bad owner GUID for apps/com/PhoneHome.inc file
LS292	Bad permissions for apps/com/PhoneHome.inc file
LS294	Unrecognized apps/com/reportingUpload.php file md5sum
LS295	Bad owner UID for apps/com/reportingUpload.php file
LS296	Bad owner GUID for apps/com/reportingUpload.php file
LS297	Bad permissions for apps/com/reportingUpload.php file
LS299	Unrecognized apps/com/sanityCheck.php file md5sum
LS300	Bad owner UID for apps/com/sanityCheck.php file
LS301	Bad owner GUID for apps/com/sanityCheck.php file
LS302	Bad permissions for apps/com/sanityCheck.php file
LS304	Unrecognized apps/com/SanityTables.inc file md5sum
LS305	Bad owner UID for apps/com/SanityTables.inc file
LS306	Bad owner GUID for apps/com/SanityTables.inc file
LS307	Bad permissions for apps/com/SanityTables.inc file
LS309	Unrecognized apps/com/signal.inc file md5sum
LS310	Bad owner UID for apps/com/signal.inc file
LS311	Bad owner GUID for apps/com/signal.inc file
LS312	Bad permissions for apps/com/signal.inc file
LS314	Unrecognized apps/com/transDownload file md5sum
LS315	Bad owner UID for apps/com/transDownload file
LS316	Bad owner GUID for apps/com/transDownload file
LS317	Bad permissions for apps/com/transDownload file
LS319	Unrecognized apps/com/transUpload file md5sum
LS320	Bad owner UID for apps/com/transUpload file
LS321	Bad owner GUID for apps/com/transUpload file
LS322	Bad permissions for apps/com/transUpload file
LS324	Unrecognized apps/common/ConfigFunctions.inc file md5sum
LS325	Bad owner UID for apps/common/ConfigFunctions.inc file
LS326	Bad owner GUID for apps/common/ConfigFunctions.inc file
LS327	Bad permissions for apps/common/ConfigFunctions.inc file
LS329	Unrecognized apps/common/logging.inc file md5sum
LS330	Bad owner UID for apps/common/logging.inc file
LS331	Bad owner GUID for apps/common/logging.inc file

Error ID	Failure text
LS332	Bad permissions for apps/common/logging.inc file
LS334	Unrecognized apps/ipconnect/fetchOffline.php file md5sum
LS335	Bad owner UID for apps/ipconnect/fetchOffline.php file
LS336	Bad owner GUID for apps/ipconnect/fetchOffline.php file
LS337	Bad permissions for apps/ipconnect/fetchOffline.php file
LS339	Unrecognized apps/ipconnect/IntegrationSocket.inc file md5sum
LS340	Bad owner UID for apps/ipconnect/IntegrationSocket.inc file
LS341	Bad owner GUID for apps/ipconnect/IntegrationSocket.inc file
LS342	Bad permissions for apps/ipconnect/IntegrationSocket.inc file
LS344	Unrecognized apps/ipconnect/interface.php file md5sum
LS345	Bad owner UID for apps/ipconnect/interface.php file
LS346	Bad owner GUID for apps/ipconnect/interface.php file
LS347	Bad permissions for apps/ipconnect/interface.php file
LS349	Unrecognized apps/ipconnect/ipconnect.php file md5sum
LS350	Bad owner UID for apps/ipconnect/ipconnect.php file
LS351	Bad owner GUID for apps/ipconnect/ipconnect.php file
LS352	Bad permissions for apps/ipconnect/ipconnect.php file
LS354	Unrecognized apps/ipconnect/iplogging.inc file md5sum
LS355	Bad owner UID for apps/ipconnect/iplogging.inc file
LS356	Bad owner GUID for apps/ipconnect/iplogging.inc file
LS357	Bad permissions for apps/ipconnect/iplogging.inc file
LS359	Unrecognized apps/ipconnect/msg995 file md5sum
LS360	Bad owner UID for apps/ipconnect/msg995 file
LS361	Bad owner GUID for apps/ipconnect/msg995 file
LS362	Bad permissions for apps/ipconnect/msg995 file
LS364	Unrecognized apps/ipconnect/offline.php file md5sum
LS365	Bad owner UID for apps/ipconnect/offline.php file
LS366	Bad owner GUID for apps/ipconnect/offline.php file
LS367	Bad permissions for apps/ipconnect/offline.php file
LS369	Unrecognized apps/promoengine/cardfilters.inc file md5sum
LS370	Bad owner UID for apps/promoengine/cardfilters.inc file
LS371	Bad owner GUID for apps/promoengine/cardfilters.inc file
LS372	Bad permissions for apps/promoengine/cardfilters.inc file
LS374	Unrecognized apps/promoengine/common.inc file md5sum

Error ID	Failure text
LS375	Bad owner UID for apps/promoengine/common.inc file
LS376	Bad owner GUID for apps/promoengine/common.inc file
LS377	Bad permissions for apps/promoengine/common.inc file
LS379	Unrecognized apps/promoengine/discounting.inc file md5sum
LS380	Bad owner UID for apps/promoengine/discounting.inc file
LS381	Bad owner GUID for apps/promoengine/discounting.inc file
LS382	Bad permissions for apps/promoengine/discounting.inc file
LS384	Unrecognized apps/promoengine/DisplayRoutines.inc file md5sum
LS385	Bad owner UID for apps/promoengine/DisplayRoutines.inc file
LS386	Bad owner GUID for apps/promoengine/DisplayRoutines.inc file
LS387	Bad permissions for apps/promoengine/DisplayRoutines.inc file
LS389	Unrecognized apps/promoengine/EOS.inc file md5sum
LS390	Bad owner UID for apps/promoengine/EOS.inc file
LS391	Bad owner GUID for apps/promoengine/EOS.inc file
LS392	Bad permissions for apps/promoengine/EOS.inc file
LS394	Unrecognized apps/promoengine/interface.inc file md5sum
LS395	Bad owner UID for apps/promoengine/interface.inc file
LS396	Bad owner GUID for apps/promoengine/interface.inc file
LS397	Bad permissions for apps/promoengine/interface.inc file
LS399	Unrecognized apps/promoengine/kiosk.inc file md5sum
LS400	Bad owner UID for apps/promoengine/kiosk.inc file
LS401	Bad owner GUID for apps/promoengine/kiosk.inc file
LS402	Bad permissions for apps/promoengine/kiosk.inc file
LS404	Unrecognized apps/promoengine/MessageID.inc file md5sum
LS405	Bad owner UID for apps/promoengine/MessageID.inc file
LS406	Bad owner GUID for apps/promoengine/MessageID.inc file
LS407	Bad permissions for apps/promoengine/MessageID.inc file
LS409	Unrecognized apps/promoengine/printing.inc file md5sum
LS410	Bad owner UID for apps/promoengine/printing.inc file
LS411	Bad owner GUID for apps/promoengine/printing.inc file
LS412	Bad permissions for apps/promoengine/printing.inc file
LS414	Unrecognized apps/promoengine/PromoDebugRoutines.inc file md5sum
LS415	Bad owner UID for apps/promoengine/PromoDebugRoutines.inc file
LS416	Bad owner GUID for apps/promoengine/PromoDebugRoutines.inc file

Error ID	Failure text
LS417	Bad permissions for apps/promoengine/PromoDebugRoutines.inc file
LS419	Unrecognized apps/promoengine/promoengine.inc file md5sum
LS420	Bad owner UID for apps/promoengine/promoengine.inc file
LS421	Bad owner GUID for apps/promoengine/promoengine.inc file
LS422	Bad permissions for apps/promoengine/promoengine.inc file
LS424	Unrecognized apps/promoengine/svexternalid.inc file md5sum
LS425	Bad owner UID for apps/promoengine/svexternalid.inc file
LS426	Bad owner GUID for apps/promoengine/svexternalid.inc file
LS427	Bad permissions for apps/promoengine/svexternalid.inc file
LS429	Unrecognized apps/promoengine/void.inc file md5sum
LS430	Bad owner UID for apps/promoengine/void.inc file
LS431	Bad owner GUID for apps/promoengine/void.inc file
LS432	Bad permissions for apps/promoengine/void.inc file
LS434	Bad owner UID for logs/ipLog file
LS435	Bad owner GUID for logs/ipLog file
LS436	Bad permissions for logs/ipLog file
LS438	Bad owner UID for logs/comLog file
LS439	Bad owner GUID for logs/comLog file
LS440	Bad permissions for logs/comLog file
LS442	Bad owner UID for logs/scanLog file
LS443	Bad owner GUID for logs/scanLog file
LS444	Bad permissions for logs/scanLog file
LS446	Bad owner UID for logs/yellowboxSync file
LS447	Bad owner GUID for logs/yellowboxSync file
LS448	Bad permissions for logs/yellowboxSync file
LS450	Bad owner UID for logs/surveyLog file
LS451	Bad owner GUID for logs/surveyLog file
LS452	Bad permissions for logs/surveyLog file
LS453	Cannot connect to Postgres
LS454	SSH daemon not found in process list on server

62 Appendix – A -- Householding

1. Households vs. Customers

A shopper can be considered a household or a customer. Moreover, a customer is any shopper, including those who have no loyalty cards. A customer who does have a loyalty card is referred to as a cardholder, and is identified by their unique customer ID.

A household is a small group of individuals but closely-related shoppers, commonly family members. Members of a household share rewards, contribute together to point totals, and in general are considered a single entity for the purposes of an offer. A household can have a loyalty card associated to it as does a customer, and is identified by its unique household ID.

Households can be viewed as a container that can hold multiple objects. These objects can be unlimited cardholders and/or cards. Household Cards, Customer Cards, Alternate ID, or Retailer Payment Cards are all types of cards that can be a part of a household or a customer.

Households can act as a single customer, or can be a collection of related customers. Customers and households can be one and the same; however, there are differences in behavior between the two.

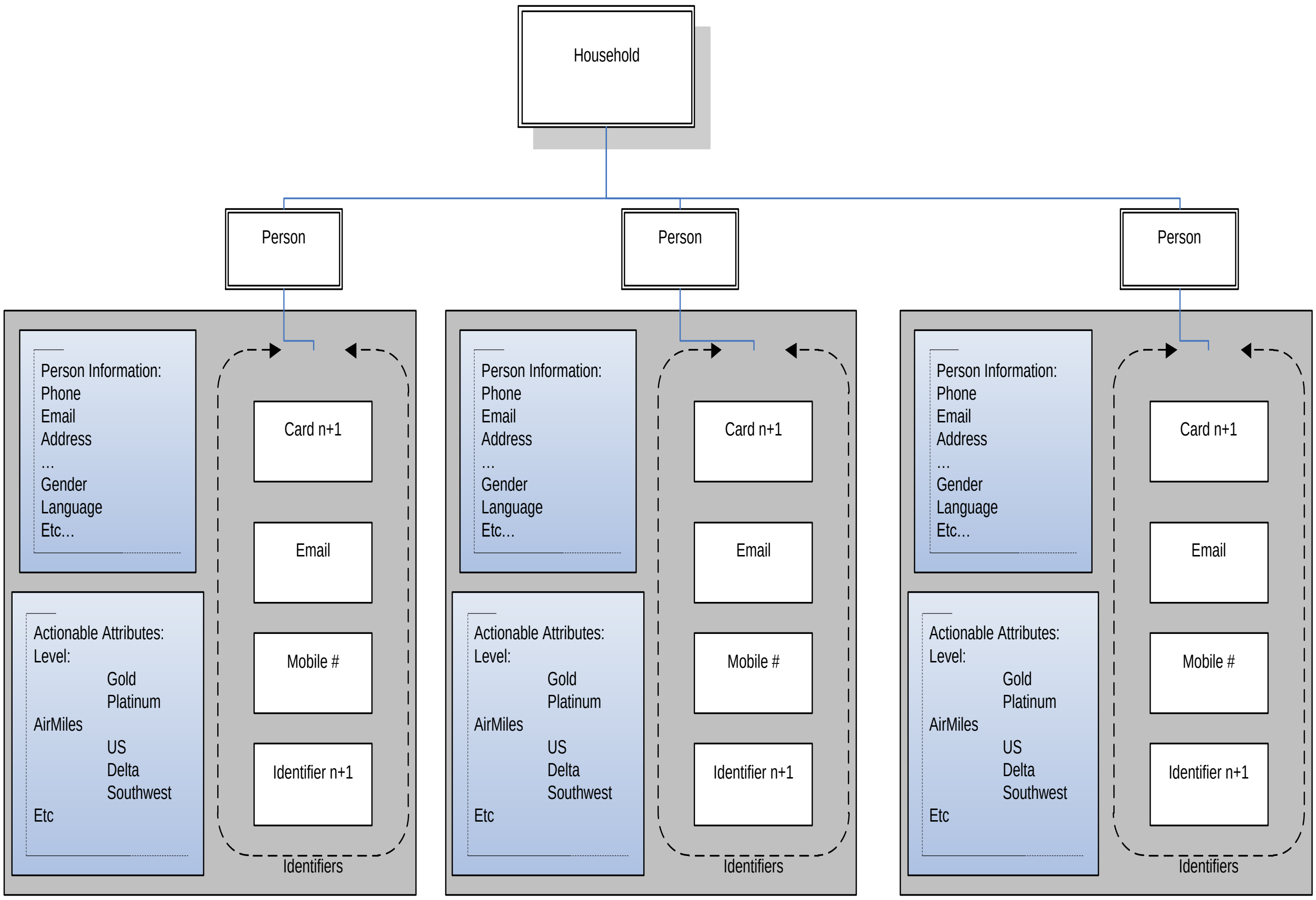
Households Characteristics:

- Can be turned on/off according to system settings
- Can have multiple customers and multiple cards
- Cardholders can be added, demoted, and removed from a household
- Two independent households can not be combined
- Offers may be targeted to customers or households.

Customer Characteristics

- Can have a single card, multiple cards, or no cards at all
- Standalone and unconnected to any other customer
- Targeted offers are only eligible for individual customer
- Customer Card ID and Household ID can be the same number

Architectural Representation

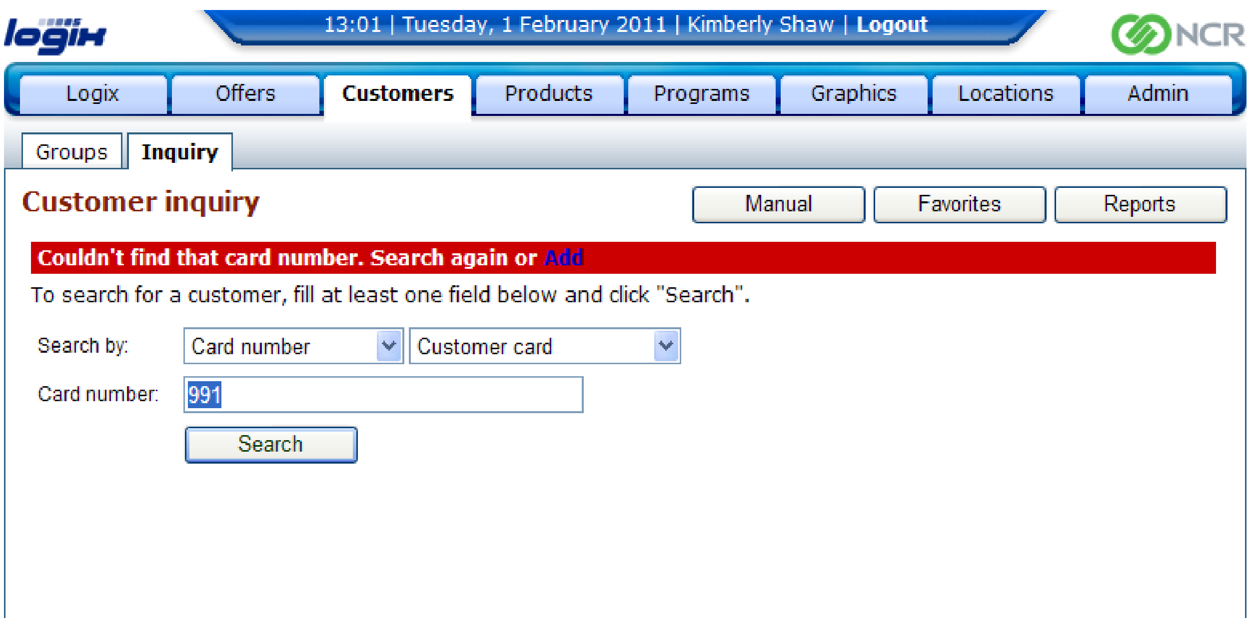


Creating a New Customer/Household Card

Customer Inquiry

The customer inquiry page allows users to add new customers/household cards. Begin by entering a customer ID or other identifier into the search box. When multiple card customer types are available (e.g. Customer Card, Household), a dropdown box will be available for selection of the correct card type to use when searching. If the ID number you are searching for is not available, an option will appear that will allow the user to “Add” the customer.

Note: Any given customer can hold a single loyalty card, or may be able to hold multiple cards, or may even have no card at all.



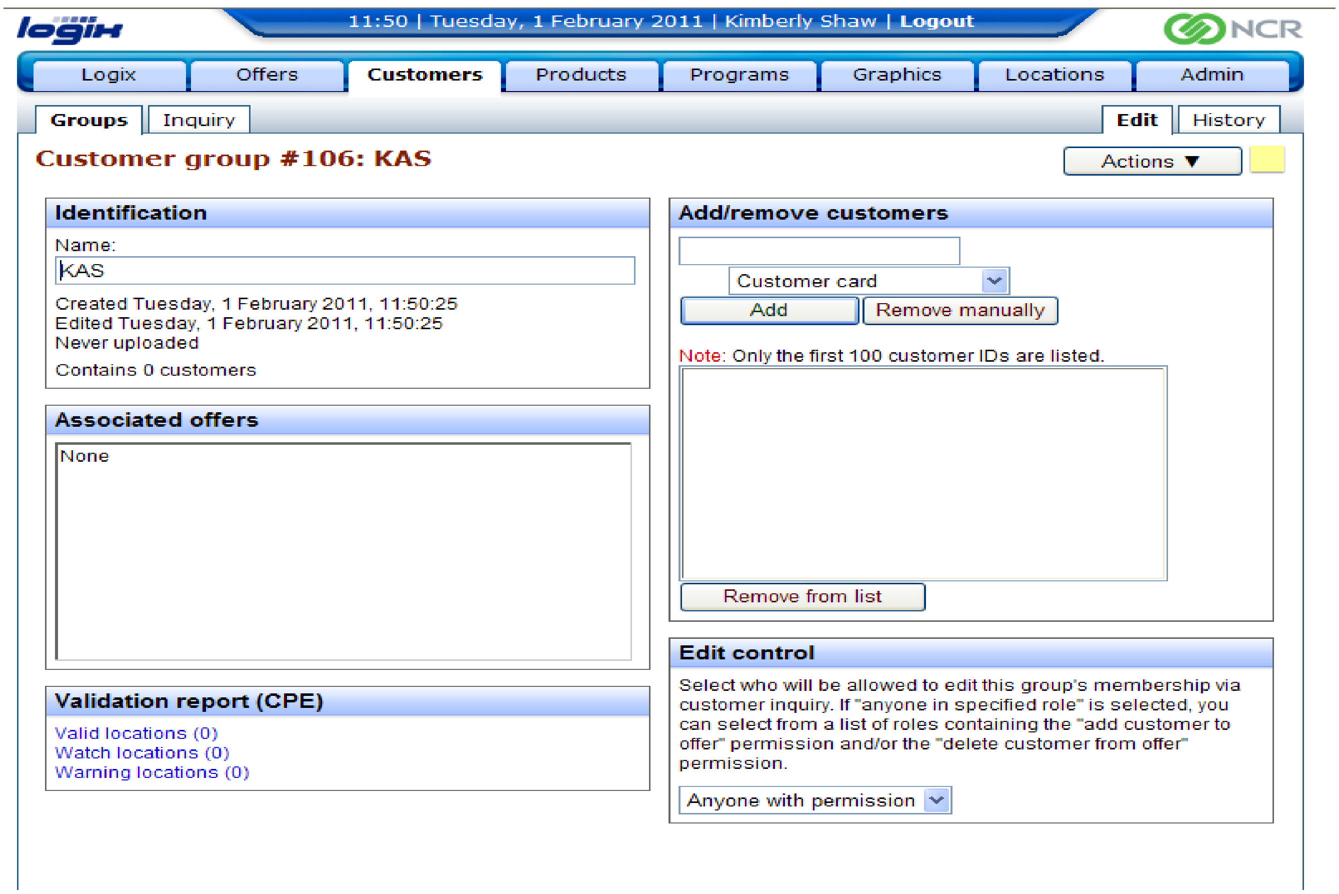
Customer Groups

A customer group is a collection of customer ID (and/or household IDs). All customer IDs used in offer building must be part of customer groups. Customer groups exist independently of any offer and can be used simultaneously in multiple offers, or can persist without being used in any.

Add/Remove Customers

To manually add or remove customers, enter the customer ID you wish to add or remove in the box, select the type of card (Customer Card, Household Card) then click Add or Remove.

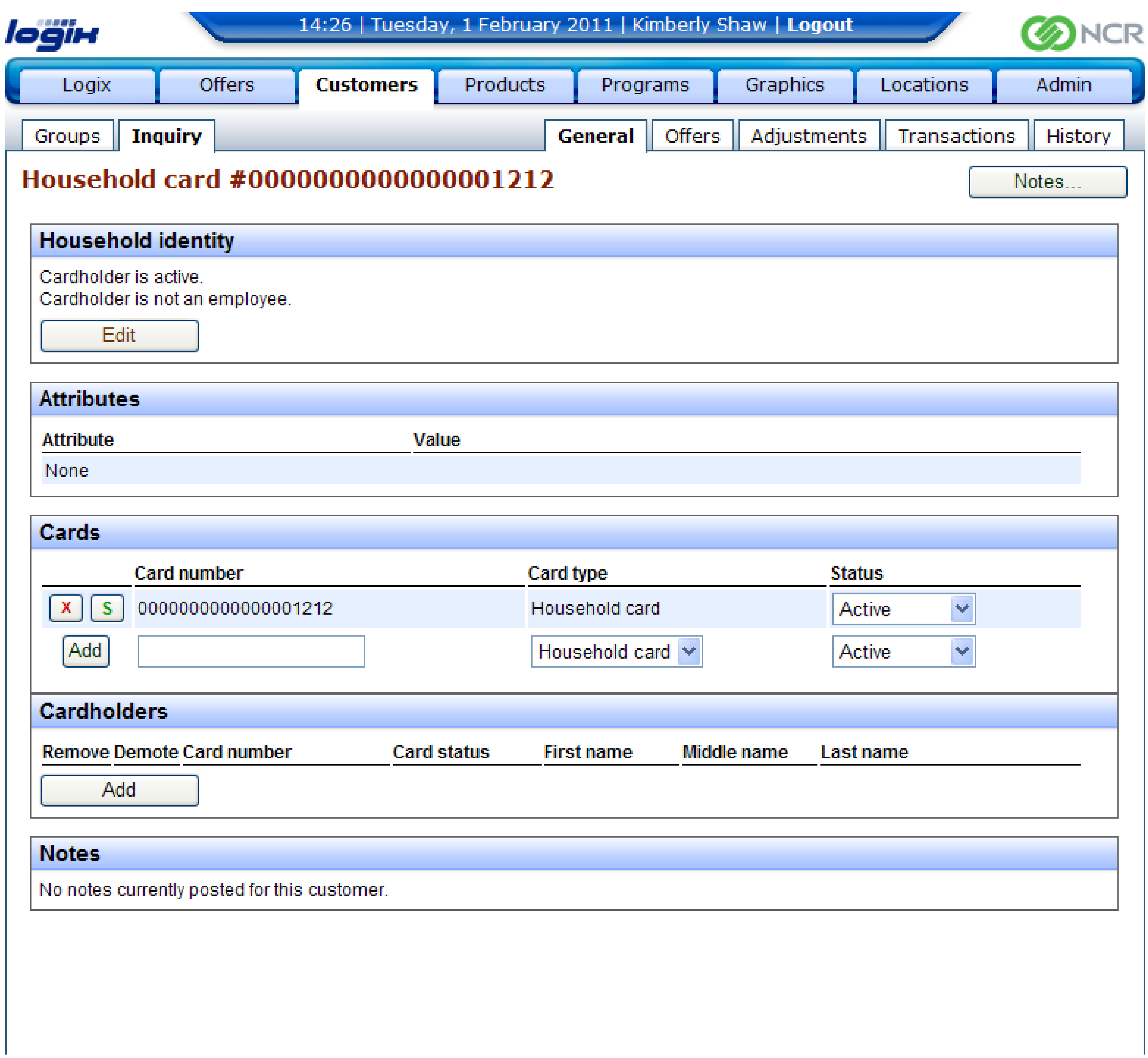
To upload a customer file, first select Upload from the Actions menu, then click Browse. You will be prompted to select a plain text file from your computer that contains a list of customer IDs (one per line), and to select whether you want the file to either replace the existing contents, or be added to the existing contents. When you've made the appropriate selections, click Upload.



Modify Customer Information

The customer inquiry section of Logix also allows users to view and edit detailed information about any given customer. To perform a customer inquiry, enter a customer ID or other identifier into the search box, select the appropriate "search by" area, and click Search.

If Logix finds a match to the customer you're searching for, the user is directed to the page displayed in the figure below.



Click the Edit to adjust any of the following:

- Name
- Employee
- Test customer
- Banner
- Customer status
- Address/Phone/Email
- Date of Birth
- Password

Add an additional card to customer account

A customer has the option to be associated to various loyalty cards (e.g. Customer, Household). Each card has its own identifying card number. To add a new card to a customer account, enter the card number into the box provided, ensure the appropriate card type and card statuses are selected and click "Add".

Note: Customer Cards, Alternate ID, and Retailer Payment Cards can only be added to a household if a cardholder possesses them first. However, Household Cards can be added to a household directly without a cardholder.

Other Card Types

Alternate ID

Retailer Payment Card : A special payment card, such as a visa

Add multiple customers to household account

If the record you're examining is for a household, you'll see a cardholders section that lists the cardholders who are members of the household. Each member's name and any cards assigned to that cardholder are shown, along with controls that allow you to add, remove, or demote them.

- **Add**- Clicking "Add" will launch a popup window that allows searching and selection of cardholders to move into the selected household. Adding a customer to a household may cause balances to be transferred.

- **Remove**- Clicking “Remove” disassociates that customer from the household and performs transfers of continuity balances, copies offer group membership eligibility, transfers reward accumulation, and copies reward distribution. Removing a customer from a household may cause balances to be transferred.

- **Demote**- Clicking “demote” disassociates the customer from the household, and performs transfers of continuity balances.

2. Customer Attributes

An attribute is a characteristic that allows for grouping of like-customers who share that attribute. Attributes are an additional way to identify a customer other than using his customer ID.

Once an attribute is configured, it can be associated to particular customers. These customers can then be targeted in CPE offers through the use of attribute conditions, either in place of or in addition to conventional customer conditions.

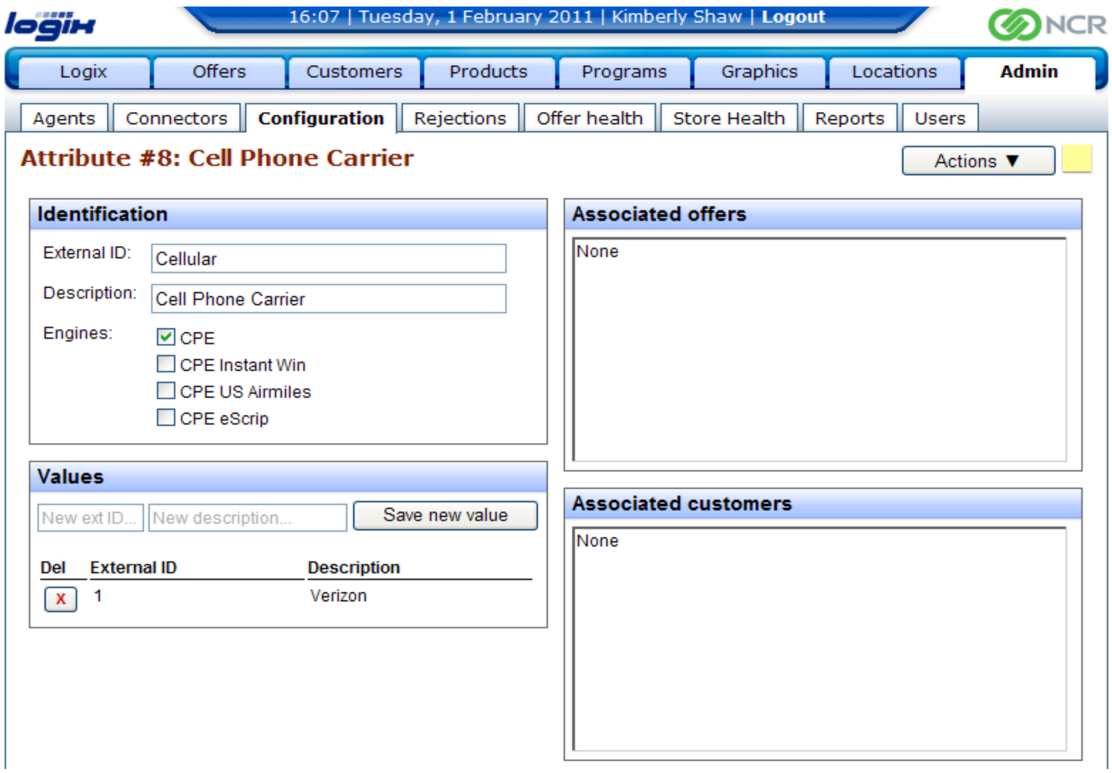
Some example of attributes includes:

- Airline preference
- Favorite brand of soda
- Cat/dog lovers

Attributes can be managed from the Admin> Configuration> Attributes page. This page shows a list of attributes by name and ID that are currently in the system. Once a new attribute is created, an external ID, description, and engine should be specified.

An attribute can have one or more values. For example, if the attribute was “Pet”, the associated values might be “Cat”, “Dog”, “Other”.

If an attribute is in use, either by being associated to a customer or in use as a condition in an offer, it can not be deleted. The same rule applies to values.



3. Card Status vs. Customer Status

Card Status

- Defines the different status levels associated with a customer's account.

Expired

- Card can no longer be used because the allotted amount of time to use the card has exceeded.
- Card Status underneath the customer account is set as "Expired".

Lost/stolen

- Card has been reported lost or stolen. Card can no longer be used in any transactions.
- Card Status underneath the customer account is set as "Lost/Stolen".

Active

- Card is active, and can be used in transactions.
- Card Status underneath the customer account is set as "Active"

Inactive

- Card has not been used in a certain period of time.
- Card Status underneath the customer account is set as "Inactive"

Canceled

- Card has been canceled, and can no longer be used.

Customer Status

- Customer status indicates whether the customer is considered active or inactive.

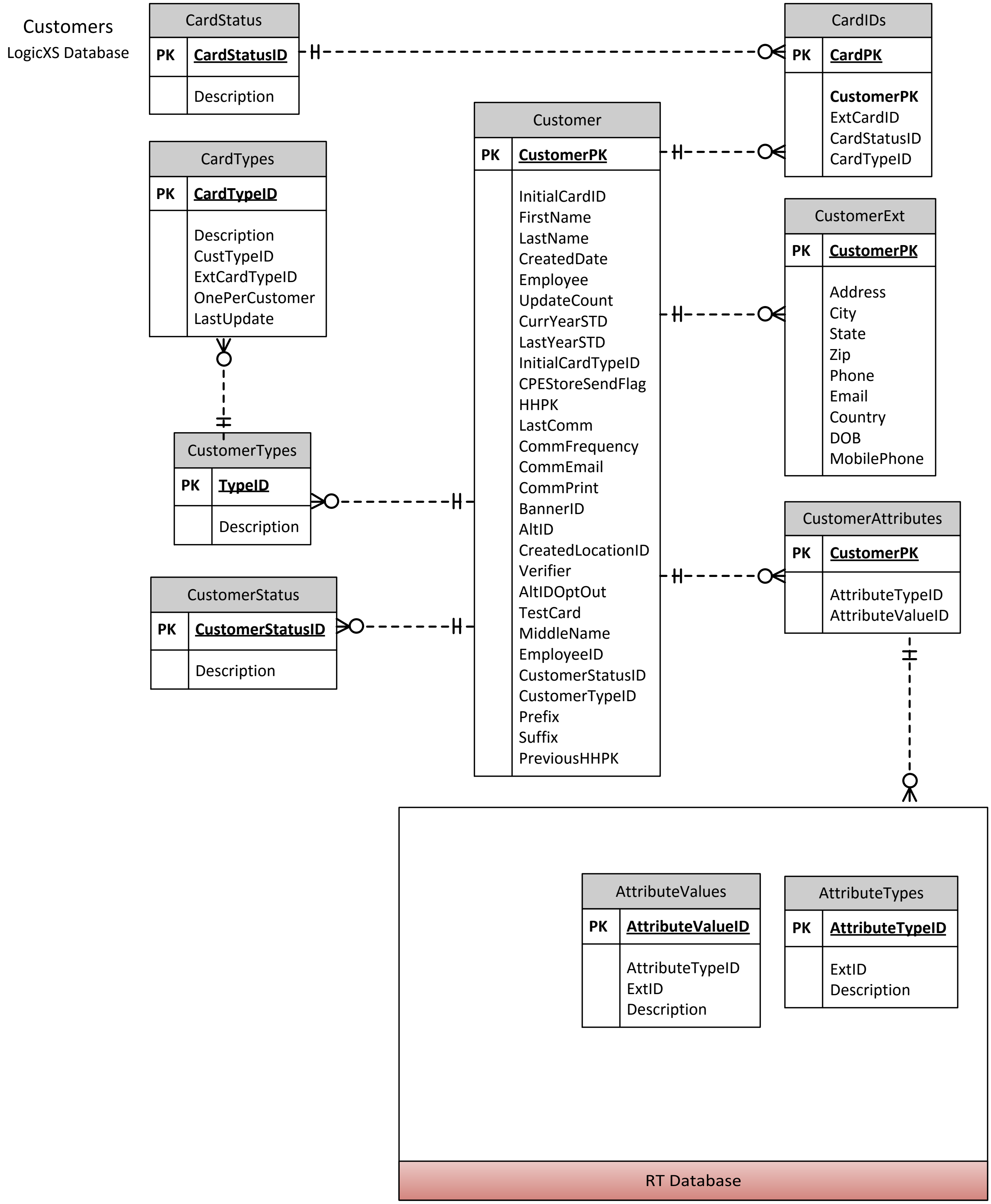
Active

- Customer is considered as an active user, and is eligible for offers.

Inactive

- Customer is not an active user, and is ineligible for offers.

4. Data mapping



Below you will find a list of database tables that are associated with customers and household cards. Each table stores information that directly or indirectly relates to another table (as shown in the diagram above). Not every table of the database is listed, but the tables that are listed, diagrams the major concepts and relationships for household and customer cards.

The attributes are defined below, and contains an example of a populated table of an existing household.

Customer

Usage: Stores information about customers
CustomerPK— automatically generated PK for this table
FirstName—the customer's given name
LastName—the customer's surname
CreatedDate—the date the customer record was created
Employee—indicated if the customer is an employee
UpdateCount—Counter that increments everytime the customer promotion variables are updated.
CurrYearSTD—customer's total savings for this year
LastYearSTD—customer's total savings for last year
CPEStoreSendFlag—indicates that the customer record should be sent to the local servers –
HHPK—indicated the household of which the customer is a member.
LastComm—stores the date and time of the communication with the customer
CommFrequency—Frequency with which Logix communicates with the customer
CommEmail—determines if the customer wishes to receive email communication
CommPrint—Determines if the customer wishes to receive printed message communication
BannerID—The banner to which this customer is assigned
CreatedLocationID—The location where this customer was originally added.
Verifier—selecting the correct Alternate Identifiers when they are returned at POS
AltIDOptOut—indicates that the customer has chosen to opt out of the alternate ID program
TestCard—indicates that the loyalty card associated with this customer record is for testing purposes only
MiddleName—Customer's middle name
EmployeeID—specifies the ID if the customer is an employee
CustomerStatusID—FK links to Customer Status
PreviousHHPK—Former household the customer belonged too.

CustomerPK	15	332045
InitialCardID	40002591415	510014890614
FirstName	Wilma	
LastName	Flintstone	Flintstone
CreatedDate	7/26/2006 3:43:43 PM	12/3/2007 9:17:56 AM
Employee	0	0
UpdateCount	23	32
CurrYearSTD	0	0
LastYearSTD	0	0
InitialCardTypeID	0	1
CPEStoreSendFlag	0	0
HHPK	332045	0
LastComm	NULL	NULL
CommFrequency	NULL	NULL

CommEmail	NULL	NULL
CommPrint	NULL	NULL
BannerID	NULL	NULL
CreatedLocationID	NULL	NULL
Verifier		
AltIDOptOut	0	0
TestCard	0	0
MiddleName		
EmployeeID		
CustomerStatusID	1	1
CustomerTypeID	0	1
Prefix		
Suffix		
PreviousHHPK	332047	0

CardIDs

Usage: Stores single or multiple card information for the customer
CardPK—the primary Key for this Table
CustomerPK—FK links to Customers
ExtCardID—the retailers primary ID for this customer
CardStatusID—FK links to CardStatus
CardTypeID—FK links to CardTypes

CardPK	8	230990
CustomerPK	15	332045
ExtCardID	40002591415	0000000510014890614
CardStatusID	1	1
CardTypeID	0	1

CardStatus

Usage: Defines the different status levels associated with a customer's account.
CardStatusID—The primary Key for this Table
Description—The text description of the card status type.

CardStatusID	Description
1	ACTIVE
2	INACTIVE
3	CANCELED
4	EXPIRED
5	LOST_STOLEN
6	DEFAULT_CARD

CardTypes

Usage: Defines the various types of Card Types
CardTypeID—The primary Key for this Table
Description—The text description of the card status type.
CustTypeID— FK links to Customer types. TypeID
ExtCardTypeID—External retailer ID for card types
OnePerCustomer- Defines whether only one card of this type is valid per customer
LastUpdate- Last time updated

CardTypeID	Description	CustTypeID	ExtCardTypeID	OnePerCustomer	LastUpdate
0	Customer card	0	0	0	5/5/2010 11:32:14 AM
1	Household card	1	1	1	5/5/2010 11:32:14 AM
2	CAM card	2	2	0	5/5/2010 11:32:14 AM
3	Alternate ID	0	Alternate ID	0	6/17/2010 9:03:01 AM
10	Retailer Payment Card ID	0	Retailer Payment Card	1	8/10/2010 2:20:52 PM

CustomerStatus

Usage: Defines the status of the Customer.
CustomerStatusID—The primary Key for this Table
Description—The text description of the customer status.

CustomerStatusID	Description
1	Active
2	InActive

CustomerTypes

Usage: Defines the various customer types
TypeID— Automatically generated PK for this table
Description—The text description of the customer type (cardholder, household).

TypeID	Description
0	Customer
1	Household
2	CAM

CustomerEXT

Usage: Defines the various customer types
CustomerPK— Primary key. FK, links to Customers
Address—Customer's street address
City—Customer's city
State—Customer's state
Zip—Customer's zip code
Phone—Customer's phone number
Email—Customer's email address
Country—Customer's country
DOB—Customer's date of birth
MobilePhone—Mobile phone number of the customer

CustomerPK	15
Address	123 Stone Way
City	Bedrock
State	
Zip	
Phone	
email	
Country	
DOB	NULL
MobilePhone	

CustomerAttributes

Usage: Stores attribute values that are associated with a customer
CustomerPK— FK links to Customers
AttributeTypeID— FK links to LogixRT.AttributeTypes
AttributeValueID—FK links to LogixRT.AttributeValues

CustomerPK	AttributeTypeID	AttributeValueID
15	7	14

LogixRT.AttributeTypes

Usage: Defines the customer attribute types
AttributeTypeID— Automatically generated PK for this table
ExtID— External ID for attribute types
Description-- The text description of the attribute types

AttributeTypeID	ExtID	Description
7	HAIR	Hair color

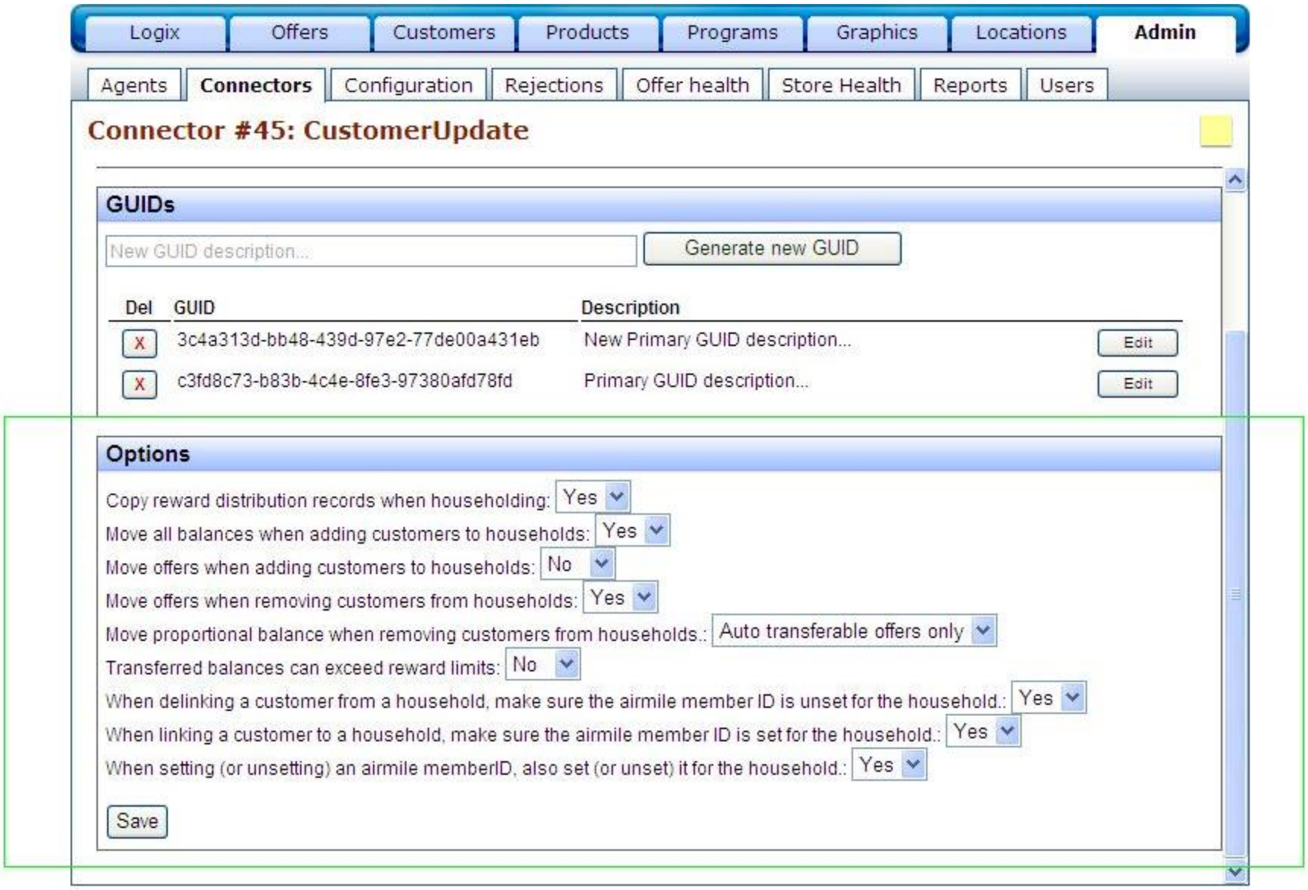
AttributeValues

Usage: Defines the various customer types
AttributeValueID— Automatically generated PK for this table
AttributeTypeID— FK links to LogixRT.AttributeTypes
ExtID— External ID for attribute values
Description-- The text description of the attribute value

AttributeValueID	AttributeTypeID	ExtID	Description
39	7	HAIR_BLOND	Blond
40	7	HAIR_BROWN	Brown
41	7	HAIR_BLACK	Black
42	7	HAIR_BALD	Bald
43	7	HAIR_RED	Red
44	7	HAIR_GREEN	Green

5. Accumulation/Balances Options

Logix has a set of options that determine how rewards will be distributed, how balances will be combined, and whether or not eligible offers will be available when accounts merge. These options are located under Admin>Agents> Household Update Agent. The Customer Update Web Service & Household Update Agent uses these options to determine how the service processes requests.



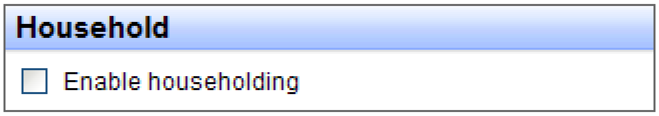
Option	Option Description
Copy reward distribution records when householding	Determines whether to copy reward distribution records to a household when being added to the household.
Move all balances when adding customers to households	Determines whether to transfer all program and accumulation balances from the customer to the specified household.
Move offers when adding customers to households	Determines whether to transfer offers marked as "auto-transferable" from the customer to the specified household
Move offers when removing customers from households	Determines whether to transfer offers marked as "auto-transferable" from the household to the customer leaving the household.
Transfer balances can exceed reward limits	Reward limits are calculated for programs by combining all offers that use that program and summing their limits.

	When set to "Yes", the balance transfer will go through even if the post-transfer balance would exceed the reward limits. If, however, the option is set to "No", the transferred amount will be set to an amount that equals the reward limit.
Move proportional balance when removing customers from households	Governs the transfer of points and stored value program balances, offer reward accumulation balances, and reward distribution balances. **Do not transfer balances** – all points, stored value, and accumulations will stay with the household when a customer is leaving a household. **Proportional for all offers** – when a customer leaves the household, all program balances and offer accumulation is proportionally divided. For example, in a household of four with 100 points accrued in a program, if one member leaves the household then that customer will have a balance of 25 points and the household will keep 75 points (Point total / # in household). **Auto transferable offers only** – similar to the proportional for all offers option value, except the only transferable balances are on those that are used in offers marked as "Auto transferable" on the Logix offer general page. 

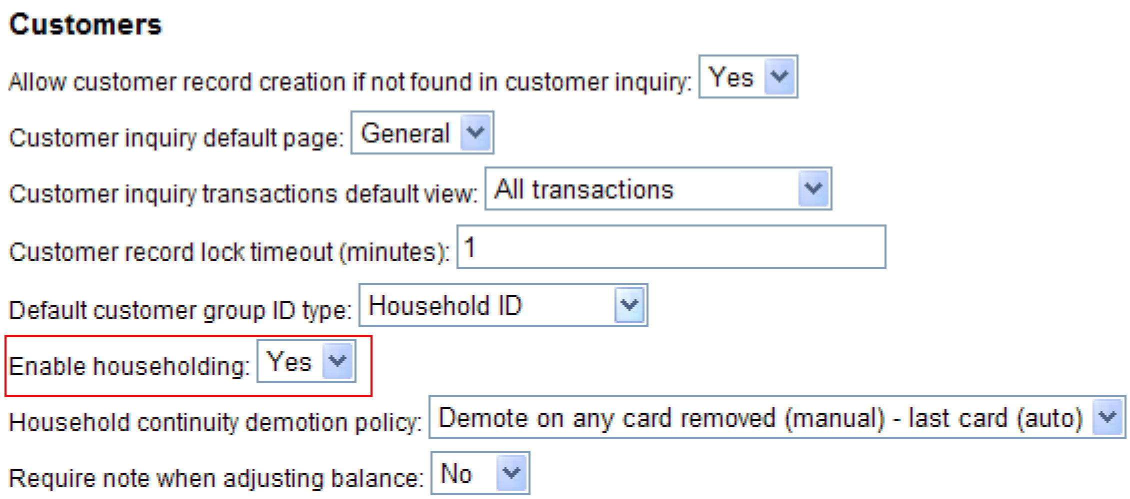
Note: Accumulation offer balances are only transferred for those offers where the Accumulation minimum is greater than 0 and the period and limit are equal to zero. This is necessary to ensure that thresholds for offer redemption, due to adding customers to households, are not exceeded.

Enable Householding

Selecting this option, will roll accumulation up to the household level rather than the card level



Admin> Configuration> Settings has a householding option. This option enables the ability to have householding used overall.



Customer Specific Enhancements to Householding:

- When using the customer inquiry screen for viewing the customer account at the household level, a new option has been added to be able to click on the Transaction History tab and view transactions for all cards associated to the household, e.g., pulling transactions for every card associated to the household when the household is selected.
- Household-level Savings To Date can be printed on the receipt or displayed on the customer facing website using the customer number to access the household-level total.

6. Use Cases

Use Case 1

Use Case Name	Replacing Lost/Stolen Card
Goal	Mark customer card as lost/stolen and replace with a new one
Summary	Customer card has been reported lost/stolen. User will need to mark the card as lost/stolen and issue the customer a new card
Actors	▪ Logix
Preconditions	▪ Existing Customer
Trigger	n/a
Scenario / Basic Flow	1. On the customer inquiry page, search for the customer. 2. Once the system finds the customer, the customer account details screen will display. 3. Locate the card that is reported lost under the "Cards" section. 4. Change the card status to Lost/Stolen, and click "S" to save. 5. In the space provided, enter a new card number, verify the card status is set to active, and click "Add".
Alternate Flow	The new card number entered can be a card number already in use. ▪ The system will display a message informing the user the card number already exists.
Post conditions	The card is added to the account.

Use Case 2

Use Case Name	Split two households
Goal	Split a household into two independent household accounts
Summary	One household with multiple cardholders will be split into separate accounts.
Actors	▪ Logix
Preconditions	▪ Existing Customers ▪ Household must have multiple cardholders

Trigger	n/a
Scenario / Basic Flow	1. On the customer inquiry page, search for the household card. 2. Once the system finds the household card, the customer account details screen will display. 3. Under the "Cardholder" section, click the "X" button under "Remove".
Alternate Flow	The "X" button under "Remove" is grayed out. ▪ Can't remove the last cardholder on the account, or it will leave the household empty.
Post conditions	The cardholder will be removed from the current household account.

Use Case 3

Use Case Name	Combine customer into existing household
Goal	Combine a customer into an existing household
Summary	A customer will be merged into a household that already exists.
Actors	▪ Logix
Preconditions	▪ Existing Household
Trigger	n/a
Scenario / Basic Flow	1. On the customer inquiry page, search for the household card. 2. Once the system finds the household card, the customer account details screen will display. 3. Under the "Cardholder" section, click "Add". 4. A popup window will appear, enter the card number or last name to find the cardholder to add to the household. 5. Once the results are displayed, select the checkbox next to the cardholder and select "Add"
Alternate Flow	The card number or last name entered, can not be found ▪ A message will display alerting the user that the cardholder could not be found.
Post conditions	The cardholder will be added to the current household account.

Use Case 4

Use Case Name	Add a card to an account
Goal	Add an additional card to an existing account
Summary	An additional card needs to be added to a customer account.
Actors	▪ Logix
Preconditions	▪ Existing Customer
Trigger	n/a
Scenario / Basic Flow	1. On the customer inquiry page, search for the customer. 2. Once the system finds the customer, the customer account details screen will display. 3. Under the “Card” section, enter the card number in the box provided. 4. Select the Card Type and Card Status 5. Click “Add” to add the card to the customer account.
Alternate Flow	The new card number entered can be a card number already in use. ▪ The system will display a error message informing the user the card number already exists, and can not be added to the account.
Post conditions	The card is added to the account.

Use Case 5

Use Case Name	Customer Account is inactive
Goal	Set Customer Status as inactive
Summary	Customer account has become inactive, the status need to be updated to reflect this change.
Actors	▪ Logix
Preconditions	▪ Existing Customer
Trigger	
Scenario / Basic Flow	1. On the customer inquiry page, search for the customer. 2. Once the system finds the customer, the customer account details screen will display. 3. Click “Edit” under Cardholder Identity

	4. Under Cardholder Identity, select either “Inactive” from the drop-down list next to customer status
Alternate Flow	n/a
Post conditions	The customer status is changed to inactive.

Use Case 6

Use Case Name	Customer has identified that two cards/customers are actually the same person
Goal	Combine two existing customer records into one customer
Summary	Customer has primary card and a secondary card and they are setup as separate people in the AMS system.
Actors	▪ Logix
Preconditions	▪ Existing Customer 1 – has Card #1 ▪ Existing Customer 2 – has Card #2
Trigger	
Scenario / Basic Flow	1. Is there a combine/merge feature for this or does it need to be done manually by removing Card #2 from Customer #2, Deleting Customer #2 and then finally Adding Card #2 to Customer #1? How does that impact existing customer groups and would those need to be updated or redeployed?
Alternate Flow	n/a
Post conditions	There is now only Customer #1 in the DB and both Card #1 and Card #2 are associated with it. Removing card #2 from customer #2 will remove the card from all of its associated customer groups. Adding card #2 to customer #1, will cause it to be added to all the customer groups that are associated to card #1. Next add card #1 to all the customer groups associated to card #2.

7. Glossary

24-hour notation
Time format in which a day begins at 00:00 and (in Logix) ends at 23:59.

accumulation
Accruing quantities of points, products, etc. toward a reward.

ACK
An acknowledgement that data sent from one system to another has been received.

ACS
Advanced Checkout Solution, a cashier interface used on NCR RealPOS DynaKey and NCR RealPOS touch display systems. CM is an extension of ACS.

agent
A server application that supports solution functionality. Agents are Windows Services – background applications that start when the Windows operating system boots and that run all the time, independent of any user.

alert
A message automatically generated by Logix and distributed to selected users when a particular event occurs.

AMS
Advanced Marketing Solution. A hardware and software solution that provides retailers with comprehensive, customer-specific, multi-channel offer management. The AMS is comprised of Logix, enterprise systems and store-level systems.

AOD
Automatic offer distribution.

ASP / ASPX
Active Server Pages. Server-side web-scripting technology from Microsoft, used in Logix for dynamically generating pages.

banner
The name under which a subset of stores within a company operates.

barcode
A visual, machine-readable representation of data. Common barcode symbologies include UPC (11 digits plus a check digit), EAN/JAN (13 digits) and Code 39.

basket

All the products purchased by a customer in a single transaction.

beep
Simple audio feedback generated by a terminal.

best deal
The single most beneficial discount for the customer.

BIN
Bank Identification Number. A numeric code sometimes used in tender types that indicates the institution that issued a card.

bin range
A range or subset of customers within a customer group.

BOGO
Buy one, get one free.

CAM
Canadian Air Miles.

campaign
Multiple offers that together are meant to achieve a particular objective.

cardholder
A customer who's associated with a customer ID (loyalty card number).

cashier message
A text message intended to be shown on a terminal's pole display or other similar display device. Cashier messages are given as offer rewards.

Catalina coupon
A coupon identified by an MCLU number.

category
An arbitrary class to which an offer can be assigned.

cell
An area within a layout in which content can be displayed.

Central Server
The central repository for offer data. Manages the distribution and reconciliation of offers among multiple locations and across channels.

CG
Customer group.

channel

A means of communicating with a customer. Channels include point-of-sale, kiosks, email, the World Wide Web, direct mail and others.

chargeback department
See *department*.

check digit
A digit, computed from others in a barcode and used to detect errors when it's scanned or manually entered. In UPCs, the check digit is placed at the end of the code.

cluster
A set of customer groups used to track the behavior of broad classes of customer (e.g., top decile).

CM
Consumer Marketing, an extension of NCR's Advanced Checkout Solution (ACS). The CM engine is used in NCR POS environments.

collision
Multiple offers simultaneously affecting the same product.

collision detection
Viewing product IDs to see the markdowns or offers associated with each product.

condition
A condition is a criterion that must be met for a customer to be eligible to receive an offer's rewards. Conditions can be customer groups, product groups, point values, tender types or a particular time of day or day of the week.

connector
A communications service on a web server that communicates with outside sources (stores).

continuity
Establishing and maintaining a long-term relationship with a customer.

controller
See *store controller*.

Copient Solution
See *Advanced Marketing Solution*

Copient Technologies
A technology company acquired by NCR in 2002, subsequently becoming a division of NCR and then becoming the Copient Solution, now known as the Advanced Marketing Solution.

CPE
Copient Promotion Engine. A promotion engine typically used at retail locations where non-NCR POS workstations are installed.

CRM
Customer Relationship Management. Enterprise-level software applications that manage all aspects of customer interactions with the aim of building lasting relationships and loyalty. Generally includes data mining features.

CRM engine
An external engine to which offer information can be sent.

cross-shopping
Visiting multiple stores, requiring customer-specific data to be transmitted from one store to another.

CSV
Comma-separated values. Some downloads from Logix, such as lists of points balances, are in CSV form and can be loaded into spreadsheet applications such as Calc or Excel.

customer
Any potential shopper, including those with and without loyalty cards.

customer ID
The loyalty card number of a customer. Logix pads customer IDs with leading zeros to be 19 digits.

data mining
Searching and analyzing large volumes of data for useful patterns (e.g., analyzing retail data to determine shopping habits).

DB
Database.

deliverable
A discount, receipt message, cashier message, quantity of points or change in group membership delivered to a customer through an offer.

department
A retail department (e.g., produce, floral, etc.) against which the cost of an offer can be charged. Also called a chargeback department.

department ID
A 4-digit code used to represent all products within a given department.

deployment
Marking an offer as ready to be active in stores.

discount
A reward that defines a price or deduction, the product groups to which the price/deduction is applied (and those that are excluded) and other settings that control its characteristics and behavior.

display unit

A hardware device at the POS or elsewhere in a retail location, used to convey messages and/or graphics, and sometimes offering interactive services such as price checking, offer opt-in, surveys, etc.

DP
Digital Promotions.

DST
Daylight Saving Time.

EAN
European Article Number. Like UPCs, EANs are a barcode symbology used to identify products, but use 13 digits instead of 12. In Japan, EANs are called JANs (Japanese Article Number).

EDW
Enterprise data warehouse.

eligibility deliverable
A message that communicates eligibility for a particular offer.

EM
Electronic marketing.

EME
Electronic Marketing Enterprise. A system that enables a point of sale to access customer data from a central database.

EMEA
Europe, the Middle East and Africa.

engine
A promotion management and delivery system. The Copient Solution integrates with various promotion engines, including Consumer Marketing (CM) and Copient Promotion Engine (CPE).

EOD
End of day.

EOS
End of sale.

e-receipt
The display of receipt information on an electronic display device.

escape sequence
A series of characters used to trigger a command.

execution engine
An external system upon which an offer is executed.

external offer
An offer created outside of Logix, most commonly by a CRM application. An external offer imported into Logix has both an XID (external ID) and a regular offer ID.

failover
A process that occurs when a local server becomes unavailable. The store controller instead makes a connection to a secondary local server, called a failover server.

flexing
Automatically adjusting one value in response to another, to ensure that a predefined condition is (or is not) met. Example: lowering the amount of a discount to prevent the total value of a basket from going negative.

franking
In the context of retail, franking describes the practice of printing a message (on a form, check or other slip) to indicate that it has been presented.

GIF
Graphics Interchange Format. A compressed, lossless image file format that uses 256 or fewer colors, best suited for iconic, non-photographic images. Logix supports both static GIF images and animated GIF89a images as graphic rewards within Copient Promotion Engine offers.

global condition or reward
In a tiered offer, a condition or reward with a single set of values that applies to the entire offer. Its opposite is a *tiered* condition or reward.

graphic
An offer deliverable consisting of an image file (GIF or JPEG) plus data defining its display duration, layout and any desired touchpoints.

GZip
GNU Zip, a compressed file format that uses the .gz extension. Logix exports offers as XML files contained in GZips.

HHID
Household ID.

HIGO
A discount in which the highest-priced item is discounted.

hierarchy
A tree-like organization of objects into various levels and sublevels (called *nodes*).

home store
The retail location a shopper visits most frequently.

household

An association of multiple customer IDs (e.g., those of a husband and wife) for the purpose of sharing accumulation deliverables, rewards, etc.

ID

The reference number assigned to any object created in Logix (offers, groups, stores, etc.). ID numbers are unique within their given section: for instance, there will never be two customer groups assigned ID #123, though there may be both a customer group and a points program with that number. ID numbers are never recycled or reassigned, even when the original object is deleted.

Objects that are created outside of and imported into Logix have XIDs (external IDs).

IID

Incentive ID. A number automatically assigned when an offer is created that's used to identify all of the incentives that will be associated with that offer.

IIS

Internet Information Services. A set of Internet-based services for servers using Microsoft Windows.

impression

The delivery of an eligibility deliverable such as a printed message to a customer or household. Impressions can be cumulative or unique. Cumulative impressions represent the total number of times an eligibility deliverable was given away during the entire length of an offer, including multiple impressions to a single customer.

Unique impressions represent the number of customers that have received the deliverable.

internal offer

An offer created entirely within Logix.

IP

Internet Protocol. IP addresses identify devices on a network, and are required to establish communications and send data using TCP/IP.

IPL

Initial Program Load. A process that populates a local server's database structure with the complete set of data relevant to that location, sent from the central server. The IPL process consists of two parts: the first is GetIncentives, which wipes out any existing data in the local server's database, and TransUpdate, which sends the new data.

item

Anything purchased in a transaction.

item-level

Applying to an individual item or items with a transaction, rather than to the transaction as a whole.

JPEG

Joint Photographic Experts Group. A lossy image file format that can be compressed to varying degrees, and best suited for static, photographic-type images (as opposed to simple graphics, line art or animated images for which GIFs are preferable).

layout
An arrangement that divides a screen into variously sized cells. Example: A 640x480 screen could be divided into two 320x480 cells.

LDAP
Lightweight Directory Access Protocol, an application protocol for querying and modifying directory services running over TCP/IP. In Logix, LDAP is used to control access to Logix without requiring users to enter a username and password at the Logix login screen.

level
A set of associated conditions and rewards within a CPE offer. The "lowest" level in an offer is called the base and contains universally-applied conditions and rewards (i.e., the customer condition and eligibility and accumulation messages). Subsequent levels are ordered by number.

limit
The frequency at which an offer can be presented. Limits can be defined in an offer, or can be inherited from (or shared with) other offers.

local server
An in-store offer server that houses the promotional engine and communicates to the store controller.

location
A physical place or set of places, used in Logix to control where offers are active. Locations may be stores or groups of stores. If the solution is operating at the enterprise level, they may also be servers which serve multiple stores.

Logix
The Web-based interface to the Copient Offer Management System.

LOGO
A discount in which the lowest-priced item is discounted.

loyalty card
A card that identifies the holder as a registered member of a loyalty program. Sometimes also called a club card or rewards card.

MAC
Media Access Control. A MAC address is a unique identifier for a particular network device or piece of equipment.

manufacturer/family code
A code that identifies groups of products related by manufacturer or class of product.

MCLU

Master Coupon Look-Up. The primary ID used to identify a Catalina coupon.

minimum order

Everything in a basket minus any items flagged as non-discountable.

mix/match code

A POS field in a PLU file that describe how to group products together for 3/$1-type pricing.

multi-handler

A back-end process that creates multiple instances of a promotion engine in order to handle multiple points of sale concurrently.

NAK

A negative acknowledgement, indicating that data sent from one system to another arrived in an incomplete or corrupted form.

node

A level within a hierarchy. A node may contain objects, other nodes or a mix of both; a node may also be empty.

notification

A printed message, cashier message or graphic used to notify a customer about an offer.

offer

The complete set of specifications necessary to precisely govern the distribution of one or more deliverables. Offers may be created internally within Logix or may be created externally and imported.

OMS

Offer Management System. See *Copient Solution*.

operator

A means of associating objects in an operation. For example: Boolean operators (AND, OR) and mathematical operators (=, <, >).

OTM

Open Transaction Manager.

PCI

Payment Card Industry. PCI DDS (Data Security Standards) are safeguards designed to protect customer information.

PDE

Price Determination Engine. A component of NCR's Advanced Store used to deliver offers.

permission

Access to a particular feature of Logix. Permissions are grouped into roles.

PG

Product group.

Phase A
An offer that delivers a general-purpose message not targeted to any particular customer group. Also called a general advertisement.

Phrase Manager
A system used to manage the text that appears in the Logix UI.

pipe
1. An operating system object used to connect the output of one process to the input of another.

2. The character (|) used in Logix to delimit a printed message tag.

PK
Primary key. A unique identifier for an item (row) in a table.

PLU
Price Look-Up. A code assigned to items such as produce that are sold loose or in bulk.

PMT
1. Promotion Maintenance Tool, a software application from NCR.

2. The file format used by the Promotion Maintenance Tool.

PNG
Portable Network Graphics. A lossless image file format used by the Logix UI.

POE
Point of entry. The point at which customers enter and exit a retail location.

point
An abstract unit of currency (airline mile, cereal point, etc.) that a customer can accumulate and redeem.

pole display
A text display device attached to a terminal, sometimes called a 2x20.

pool code
A customer-specific code used to define an ad hoc group of products within a POS.

POP
Point of purchase. The point at which a customer selects product to purchase.

POS
Point of sale. A terminal or other site where a transaction occurs.

price point

The target retail price of a product. Discounts designed to set a particular price point (e.g., making all widgets $5) may adjust automatically to ensure the price always stays at that amount, as opposed to discounts that reduce prices by a fixed amount/percentage.

primary ID
The principal means of identifying an object.

printed message
A printed passage of text that's presented to a customer. Printed messages are given as offer rewards.

print line
A short, single-line text message that can be included with a discount reward or points reward.

priority
A value that sets the precedence of an offer, from 1 (lowest) to 99 (highest).

product hierarchy
An organization of products into a tree-like structure of nodes.

product ID
Generally the UPC number of a product. Logix pads product IDs with leading zeros to be 14 digits.

production
The period during which an offer is active at all its selected locations.

promotion
See *offer*.

prorate
To divide proportionately.

receipt
The printed record of a transaction. See *printed message*.

replay
Capturing transactional data for off-line processing.

reward
A reward is something granted to a customer when an offer's conditions are met. Rewards include discounts, messages, quantities of points or the granting (or removal) of membership to a customer group.

ROID
Reward Option ID. A number automatically assigned when an offer is created that's used to identify all of the rewards that will be associated with that offer.

ROG
Regional Operations Group. A term applied by some retailers to geographically-associated groupings of stores.

role
A set of permissions assigned to a user that controls what actions that user is allowed to perform.

RT
1. Real time.

2. Request Tracker.

Sanity Check
A connector that monitor various database tables and returns an ACK, NAK, InvalidSerial or MustIPL as a result.

schema
A model that defines the structure and types of content contained in a set of data.

segment
A subset of a population, usually customers.

SKU
Stock keeping unit. A unique numeric identifier used to refer to a specific product.

SMTP
Simple Mail Transfer Protocol. A text-based client-server protocol for sending email.

special pricing
A means of assigning a repeating pattern of prices or values to multiple items.

sponsor
The party who pays for the cost of an offer.

SQL
Structured Query Language. A computer language used for relational database management operations.

STD
Savings to date.

store
A facility where offers may be delivered. In addition to retail locations, the term is also used in Logix to refer to non-retail facilities such as test labs.

store controller
A computer that governs the data sent to and from terminals within a store.

store group
A set of stores, used to govern where an offer is deployed. Store groups may overlap, and any given store may be part of multiple groups.

store hierarchy
An organization of stores into a tree-like structure of nodes.

stored value
An abstract unit similar to a point that can be equated to a dollar or point value, and which can be made to expire at a specific time.

tag
A code added to printed message text, used to control how the text is printed or to insert variable data.

TCP/IP
Transmission Control Protocol / Internet Protocol. A set of protocols for communicating data between networked devices.

TCRM
Teradata Customer Relationship Management. A data analytics and management engine.

template
A type of non-production offer in which some data are fixed and others are empty or modifiable. Templates serve as starting points to more easily create production offers.

tender
A form of payment. For CM, tender types bear a four-digit identifying code. For CPE, tender types consist of a two-digit code, a two-digit variety, and an optional BIN.

Teradata
A relational database management and data warehousing system.

terminal
A checkout, such as an express lane, pharmacy counter, floral department, fuel pump, customer service desk, etc.

testing
The period prior to production during which an offer is active only in designated testing locations.

tier
One of multiple levels in a tiered CM offer, defined by values in the offer's conditions and/or rewards. Tiers allow for an offer's behavior to vary in response to multiple criteria (i.e., give $1 if X occurs, but give $2 if Y occurs).

TLog
Transaction log. A complete record of everything that occurs during a transaction.

TOD
Time of day.

touchpoint
1. A point of direct interaction between the system and a customer.

2. An area of a graphic that produces a response when touched.

trailer

An area at the end of a receipt where the retailer may include messages to the customer.

transaction

A complete customer checkout.

transaction-level

Applying to a transaction as a whole, rather than to any individual items within it.

trigger code

A code, normally a coupon UPC, used as a condition for a reward. If a code that's a condition for an offer is present in a transaction, but other conditions necessary to receive the offer are not, the code may cause a cashier message to display, informing the cashier to return the coupon to the customer.

TRM

Teradata Relationship Manager. An advanced CRM analytics solution from Teradata.

TSA

Terminal Sales Application.

TSD

Total savings to date.

UAT

User acceptance testing.

UE

Universal Engine.

UI

User interface.

Unicode

A method of encoding text and symbols, suited to situations where non-English or non-standard content may be displayed.

UPC

Universal Product Code. A barcode symbology used to identify products. UPCA barcodes encode twelve decimal digits, with the first (left-most) being a UPC prefix and the last (right-most) being a check digit. UPCBs are also 12 digits but have no check digit.

URL

Uniform Resource Locator. Generally a Web address.

UTF

Unicode Transformation Format. Logix content is encoded using UTF-8, an 8-bit character encoding format.

validation

A process initiated by IncentiveFetch or an IPL that seeks to validate whether something that's been deployed in Logix (an offer, group, etc.) has successfully reached its destination local servers. Validation locations are those in which the time on the local and central servers match. Watch locations don't match, but the difference is within a configurable grace period. Warning locations don't match and the difference is larger than the grace period.

WH
Warehouse.

WOD
Whole-order discount.

WS
Web server.

XID
External ID. The identification number assigned to an external offer (one generated outside of Logix).

XML
Extensible Markup Language. A general-purpose markup language used for describing various data, including offers exported from or imported into Logix. XML data is often accompanied by a schema that describes its structure and content.

XS
Cross-shopping.

YB
YellowBox.

zero-padding
Attaching zeros to the start or end of a code to ensure it contains a set number of digits. Logix uses leading zero-padding to make all product IDs and customer IDs 14 and 19 digits, respectively.

8. Notes