Core Release Bulletin

CostGuard Solution 21.10 Release

October 2021

Table of Contents

About this Document

IDI's Core Release Bulletins describe new Core functionality introduced with the release through either Adaptive (AR) or Feature (FR) requests. Core functionality is defined as a capability that is available to all customers that upgrade to the release, although in some cases additional custom work may be required to use it. This document includes an overview of the new capabilities as well as the required configuration or setup information. Supporting documentation can be found on E-Support under Resources > Knowledge Center and Resources Help Resources.

Additional training opportunities are also available through IDI University. Please contact your Account/Project Manager for more information.

1 Release Summary

1.1 CHANGE ORDERS/ENHANCEMENTS

The following change orders and other enhancements are included in this release.

Functional Area	AR/FR	Description
Security	FR 3082	**Restrict access to CostGuard environments by allowed IP addresses** Security lets you specify a pre-defined list of allowed IP addresses to restrict access to CostGuard web modules (Customer Care, Orders, Workflow, etc...). This helps ensure your employees or contractors are only accessing CostGuard environments from networks, work spaces, and computers that have proper security controls in place. **Note**: The functionality will not be immediately available for all customers when CostGuard version 21.10 is released at the beginning of October. The feature will be released for each customer over the first two weeks of October.
Orders – POS Make Sale	AR 8751	**Bypassing current serial number restrictions on retail device sales** Current wireless retail functionality in the CostGuard system supports configuring devices (Handsets) by *Technology Type*. In doing so, the system enforces business rules for the expected serial number (Equipment ID) formats per the Technology Type (15 or 16 numeric characters maximum, no alpha characters allowed). Some carriers now offer a home internet setup with wireless routers. These devices may use a different Equipment ID format that prevents them from being sold in POS as a traditional wireless equipment associated to a service. To support the sale of such devices in POS Make Sale this enhancement lets you bypass handset Equipment ID restrictions by associating a retail product SKU with an *equipment type* created in the Inventory web module. For these retail products the Equipment ID can be up to 50 alphanumeric characters. In CostGuard Client and Customer Care you can view the device on the service. If the product is returned the association is removed such that the serial number is available for use on another service.

Functional Area	AR/FR	Description

Address Validation	FR 3400	**Minimizing address validation calls to CoreLogic**
		
		As part of a larger effort to minimize duplicate Address Validation calls to CoreLogic, starting with 21.10:
		
		• The Address Validation Log will display the Special District Codes that may be associated with a CoreLogic related Address Validation Request.
		• The system will now support reviewing previous successful CoreLogic Address Validation Requests, made within an Environment, to use the previous response rather than re-issuing the same request. The system will attempt to match any new validation request against any previous request and/or response. The previous requests/responses that are eligible for matching must have been:
		  ▪ completed since the 21.10 release
		  ▪ validated no older than the days configured by the setting *Enhanced Address Validation Setting Re-validate age (Days)*.
		
		Notes:
		• A new SaaS Config setting must be enabled for this feature to take affect :'ADDRESSVALIDATIONMANAGEMENT/VALIDATION/MATCHPREVIOUSREQUEST'.
		• Other enhancements related to this effort were previously deployed in CostGuard version 21.9.

Payment Gateway Application	FR 3401	**Full support for USAePay in Customer Care** This enhancement integrates USAePay into the Payment Gateway Application (PGA) for full support of USAePay in Customer Care. This includes the ability to perform the following E-Pay transactions in Customer Care: • Create new E-Pay accounts in Customer Care through USAePay • Edit Credit Card and ACH E-Pay accounts • Make Payments • Issue a Credits In PGA users can: • Search / View transactions that were initiated via Customer Care • Configure a profile for USAePay that can be used in PGA APIs
Provisioning	AR 8897	**Calix provisioning action enhancement** The Calix Link E7 GPON ONT provisioning action was updated to be in line with Calix requirements. The updated action sends an empty *intf xml* node when the default port is set to **None**.

1.2 RESOLVED KNOWN ISSUES

The following known issues have been resolved in this release.

Functional Area	PR	Description
Orders	83769	**Order timeout** The following error occurred on some orders where a starting code was used: *Order Placement web service unhandled fault and subsequent retries of the entire set of operations were successful.* This caused a timeout. To correct this, the wait time was updated to 2 minutes to give the system more time to complete before timing out. Also, other logic optimizations were added to help avoid timeouts.
	83798	**Overlapping alternate service numbers** Placeholder service line items were causing service number validation to start already active services which led to overlap errors. This was only an issue in the Order Placement Web Service. CostGuard Client works correctly. This occured when a service was changed, but the number didn't change. The web service was updated such that the service number overlap check is skipped when the service is a placeholder and the service number hasn't changed.
CostGuard Client POS – Equipment Protection Plans	83823	**Can't add multiple protection plans to an order** When attempting to add multiple Protection Plan MRCs in one order in CostGuard POS, only one MRC would actually be added. POS business rules prevent more than one instance of the same SKU. The POS restriction is lifted when the SKU's Product Class is *Protection Plan.* This lets multiple instances of the same Protection Plan MRC be added in the order, allowing you to add the device serial number to the corresponding MRC.
OnlineBill	83796	**Issues paginating corporate account balances** In OnlineBill under Account Management and view corporate accounts, the page was not displaying the second page of results accurately and preventing the export from completing. This occurred when working with large nested corporate account structures. This page was updated to display the correct data. This also allows the export to complete successfully.
	83810	**Security update** Security update to resolve a minor vulnerability in OnlineBill which may lead to an authorized user gaining elevation of privileges.

Functional Area	PR	Description
Address Validation	83833	**Address Validations Error When Running Hotline Treatments** While attempting to run hotline treatments an error was received due to a caching issue. This issue has been resolved in the Address Validation web service.
Task Plan Provisioning	83790	**Orders in *Pending Provisioning* state longer than normal** CostGuard 21.3 release, added a configurable setting (SendIndividualResponses) that directs provisioning jobs to handle service order responses on a per-service order basis as they finish during ongoing processing of other order responses. If this setting is not enabled, all responses are handled en masse at the end of the processing loop, once all of the service orders in that job's run were finished. An issue was encountered when this setting was enabled (opting to handle individual responses as they finish). The same logic to *handle* the responses was being used, which released ALL of the service orders for a given provisioning worker and provisioning company. As a result, after the first service order in a batch was handled, the rest appeared to be released to any other available worker. Workers then picked up service orders that are already being handled by one or, often, more workers. The cumulative effect was a massive duplication of work spread amongst the workers that could have resulted in any or all of the following: • more frequent errors • more *stuck* orders • longer per-order provisioning processing time The handling flow of *individual* responses was updated to only release the orders for THAT service + worker + provisioning company, not ALL orders for that worker + and provisioning. Furthermore, the provisioning scripts were updated to show the time of a log entry including partial seconds. This facilitates troubleshooting and diagnosing issues where actions occur in very quick succession.
	83838	**IMS provisioning – restriction-override element issue** This applies to carriers that use IMP provisioning. The element <restriction-override> is declared for the element <oip-operator-configuration>; however, the value was not being serialized into the request. This has been updated so the restriction-override value is passed correctly and matches the provider specification.

Functional Area	PR	Description
RateBill	83782	**XML to PDF operation timeouts** The XML to PDF operation was not logging or reporting an error when an operation failed due to a timeout. This caused an empty PDF to get generated and halted all subsequent XML to PDF operations. The XML to PDF operation was updated with these three enhancements: • Increased the default for the configurable timeout • Added logging of operations that fail • Allowing operations to continue when one fails due to a timeout
	83826	**Remove Blank Lines from XML Invoices** Some XML invoices created for corporate accounts had blank lines within the XML causing issues when invoices were sent to a third party print vendor. The blank lines have been removed in the generation of the XML files allowing them to be processed correctly.

2 Restricting Access to CostGuard Environments

New settings in Security let you specify a pre-defined list of *allowed* IP addresses to restrict access to CostGuard web modules (Customer Care, Orders, Workflow, etc…). Only users from an *allowed* IP address will have access to the web modules. This helps ensure your employees or contractors are only accessing CostGuard environments from networks, work spaces, and computers that have proper security controls in place.

You can bypass this restriction for certain *power* users as appropriate for your organization. For example, you may want to let trusted associates that travel frequently to access web modules from IP addresses not included in the allowed list.

Note: The functionality will not be immediately available for all customers when CostGuard version 21.10 is released at the beginning of October. The feature will be released for each customer over the first two weeks of October.

2.1 SETUP FOR COSTGUARD USERS

Access to required setup in Security for CostGuard users requires *Manage Domain* permission. Users with this permission can:

- Set up and manage allowed IP addresses
- Exempt certain users from the allowed IP address restriction on an individual user basis
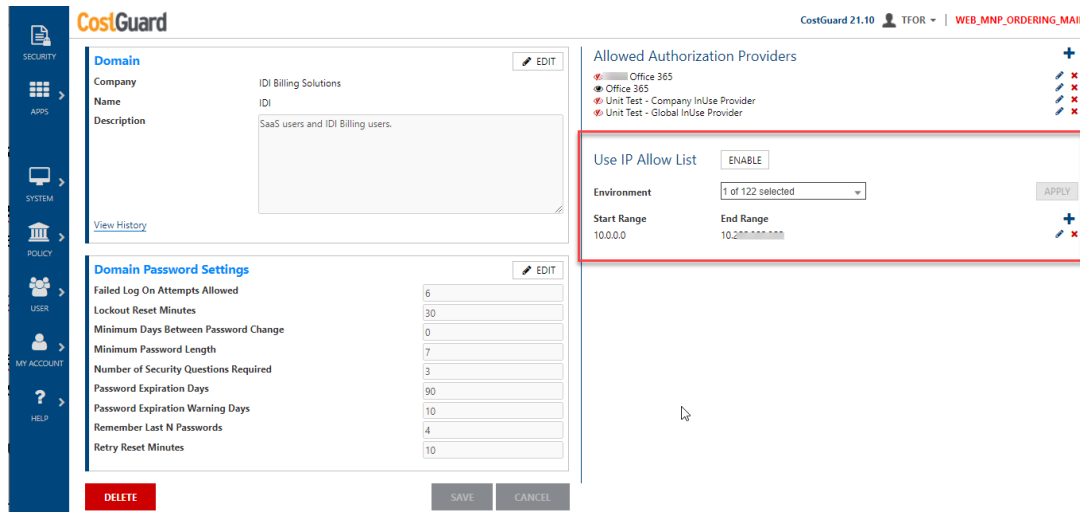
2.1.1 CREATING THE LIST OF ALLOWED IP ADDRESSES

Lists are created on a Domain/Environment basis.
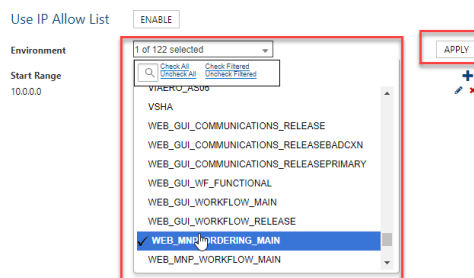
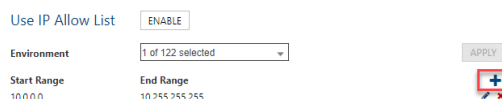- From the Apps tray, select **POLICY** > **Domains**.
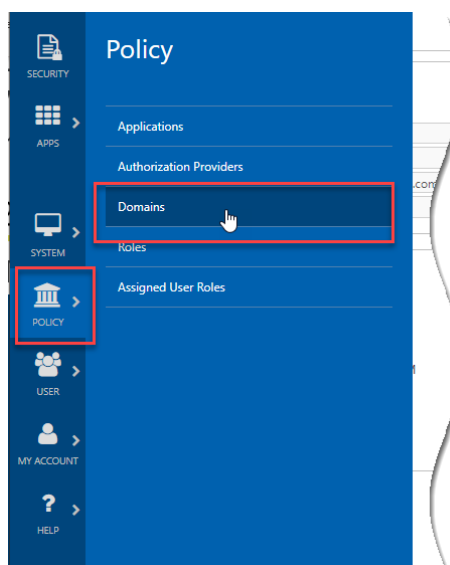
- On the Domain page, navigate to the applicable domain. Then set up and enable one or more lists in the *Use IP Allow List* section. **Note**: OnlineBill domains should be left open (unrestricted), so your customers can access their OnlineBill accounts.
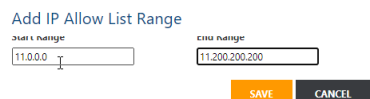

- Start by selecting one or more environments. Click **APPLY** to apply your selections. You'll be prompted to confirm your selections. Click **OK** (or **CANCEL**) as needed.

- Then specify one or more IP Address ranges. **Note**: At least one range must be specified before you can enable (use) this functionality. To add IP address ranges:
  - Click the Add button (blue **+** icon) on the far right side of the Use IP Allow List.

  - In the Add dialog enter the Start and End values for the IP Address range. **Note**: Enter values in IPv4 format. Click **SAVE** when you're done.

- Add more ranges as needed.
- When you're finished specifying ranges and ready to enforce the IP address restrictions click **ENABLE**. You'll be prompted to confirm this action. Click **OK** (or **CANCEL**) as needed.

Use IP Allow List   ENABLE

| Environment | 1 of 122 selected ▾ | APPLY |

Start Range	End Range	✚
10.0.0.0	10.255.255.255	✎ ✗
11.0.0.0	11.255.255.0	✎ ✗

Note: Once enabled, the label on the button changes to **DISABLE** to let you disable the restrictions if needed.

2.1.2   MANAGING ALLOWED IP ADDRESS LISTS

You can edit or delete a selected IP address range using the associated Edit (pencil) and Delete (red **X**) icons at the far right. On Delete actions, you'll be prompted to confirm. Click **OK** (or **CANCEL**) as needed.

Use IP Allow List   DISABLE

| Environment | 1 of 122 selected ▾ | APPLY |

Start Range	End Range	✚
10.0.0.0	10.255.255.255	✎ ✗
11.0.0.0	11.255.255.0	✎ ✗

You can also disable all restrictions if needed by clicking **DISABLE**. You'll be prompted to confirm the action. Click **OK** (or **CANCEL**) as needed.

Use IP Allow List   DISABLE

| Environment | 1 of 122 selected ▾ | APPLY |

Start Range	End Range	✚
10.0.0.0	10.255.255.255	✎ ✗
11.0.0.0	11.255.255.0	✎ ✗
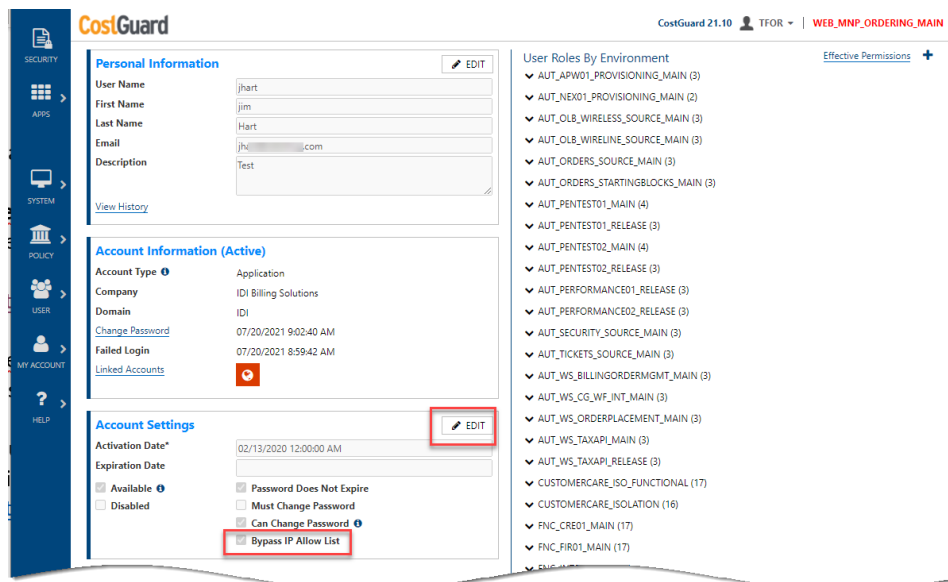
2.1.3 EXEMPTING USERS FROM THE ALLOWED IP ADDRESS RESTRICTION

You may need to let certain *power* users access web modules from IP addresses not included in an allowed list. This is done on an individual user basis via the Users page.

- From the Apps tray select **USER** > **Users**.
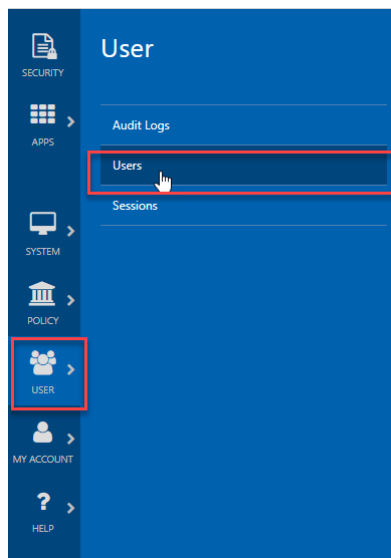
- On the Users page, navigate to the applicable user. Then, in the *Account Settings* section, click the **EDIT** button to enable the settings and toggle the **Bypass IP Allow List** check box as needed.
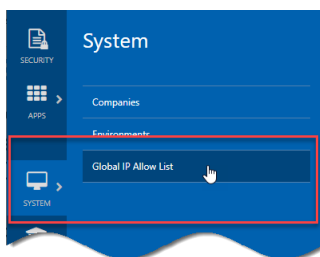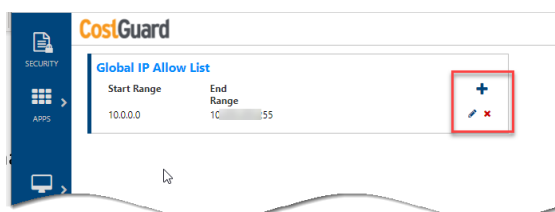

2.2   IDI SETUP

Note: This functionality is only available to authorized IDI associates. It's needed to let those associates and applicable CostGuard processes login on behalf of a user where the request originates from an IDI IP address. This setup requires *Manage Companies* permission.

From the Apps tray, select **SYSTEM** > **Global IP Allow List**.

This page lets authorized IDI associates set up one or more lists of allowed IDI IP addresses.

3 Wireless Router Service Sales in POS

Current wireless retail functionality in the CostGuard system supports configuring devices (Handsets) by *Technology Type*. In doing so, the system enforces business rules for the expected serial number (Equipment ID) formats per the *Technology Type* (15 or 16 numeric characters maximum, no alpha characters allowed).

Some carriers now offer a *home internet* setup with wireless routers. These devices may use a different Equipment ID format that prevents them from being sold in POS as a traditional wireless equipment associated to a service. To support the sale of such devices in POS Make Sale this enhancement lets you bypass Equipment ID business rules for handset Technology Type by associating a retail product SKU with an equipment type created in the Inventory web module. This changes the business rules for the Make Sale Wizard *[Product Name} Detail* page where you enter the Equipment ID. This version of the Product Detail page supports Equipment ID values of up to 50 *alphanumeric* characters.

In CostGuard Client and Customer Care you can view the retail device with associated equipment type and Equipment ID on the service. This lets you see devices on a service (other than handsets) that may contribute to charges on the service.

If the product is returned the association is removed such that the serial number is available for use on another service.

3.1 SETUP
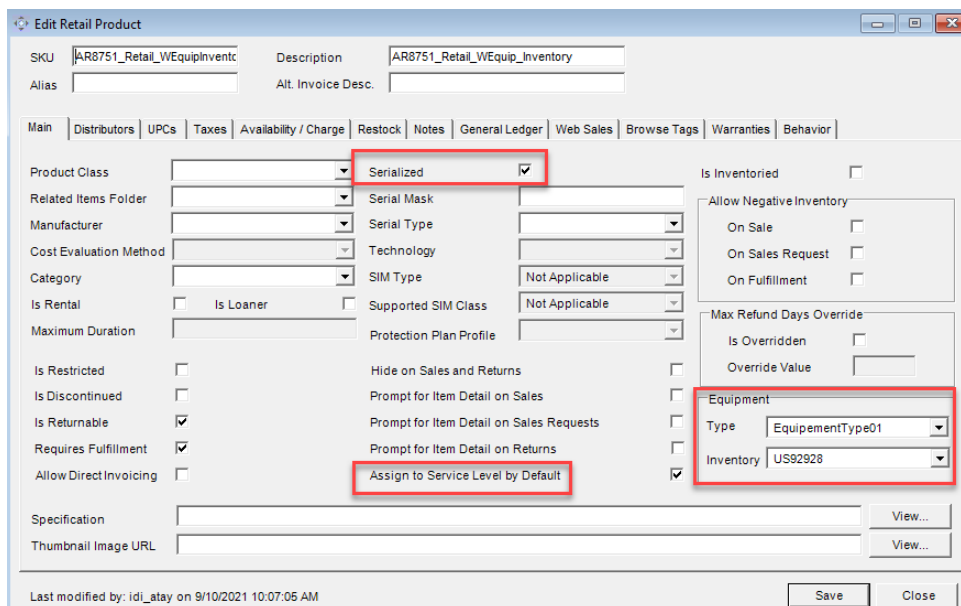
This functionality requires the following setup:

- **Create *Equipment Types* in the Inventory web module**. Follow the instructions in Inventory web help (available on E-Support > Help Resources page). There are no specific requirements for these equipment types.

- **For each device that needs to bypass handset Equipment ID restrictions,** associate an equipment type (and Inventory) to a serialized retail product. This is done in the CostGuard Client Product Catalog as described below.

3.1.1 ASSOCIATING AN EQUIPMENT TYPE ON A RETAIL PRODUCT SKU

The Add/Edit Retail Product form in the Product Catalog has a new set of *Equipment* fields that let you associate the product to an *equipment type* created in the Inventory web module. **Note**: These fields are only enabled when the **Serialized** check box is checked; otherwise, they're disabled.

To make the association, with the **Serialized** checkbox checked:

- Check the **Assign to Service level by Default** check box. This setting is a required to support the equipment association.
- In the *Equipment* section make your selections in the **Type** and **Inventory** drop down menus.

3.2 POS MAKE SALE WIZARD

When you sell a retail product associated to an equipment type as described above, the Make Sale Wizard *[Product Name] Detail* page lets you enter a serial number of up to 50 alphanumeric characters.

- Start by selecting a guided sales flow that includes the retail product you created to bypass the current expected maximum number and alpha character restrictions and proceed as normal.
  The Product Detail page is presented before the Service Option page unless your guided flow is configured to *Select Service First*. The title for this page is the name of your retail product SKU followed by the word *Detail* (for example *AR8751 Detail*).

- On this page fill in the **Equipment ID** and **Inventory Status**. The Equipment ID field accepts from 1 to 50 alphanumeric characters. The equipment ID supplied cannot be associated to any other service.


- Then finish in the wizard as normal.

## 3.3 VIEWING EQUIPMENT ASSOCIATIONS FOR A SERVICE

Once a retail product with an equipment type association is sold out to a service, the system creates a record for this association in the CostGuard database. The information stored in this record enables you to view the equipment association in both CostGuard Client as well as Customer Care. This lets you see devices on a service (other than handsets) that may contribute to charges on the service. **Note**: For database replication purposes, the name of the table where these records are stored is *InventoryItemAssociation*.

CostGuard Client – Customer Management

In CostGuard Client, in the Customer window go to the **Services** tab. When you right click on a service, there is a new submenu option in the **View** menu. Right-click on a service and choose **View** > **Equipment Associations**.
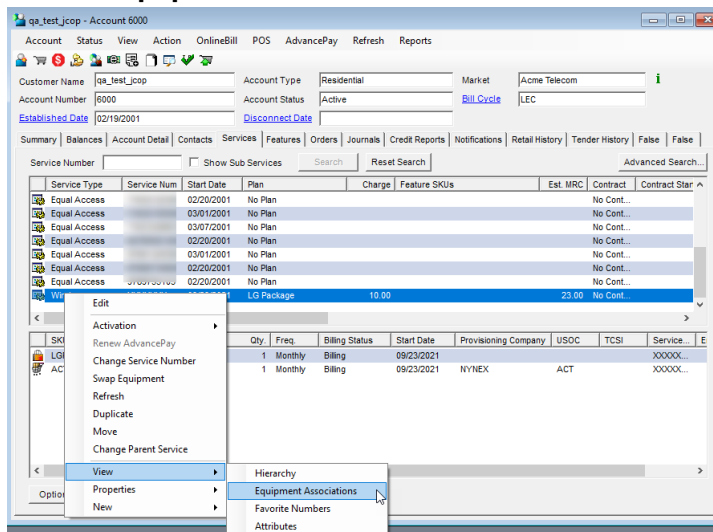
This displays the Equipment Associations view that lists the Equipment Type and Serial Number of the device now associated to the service.
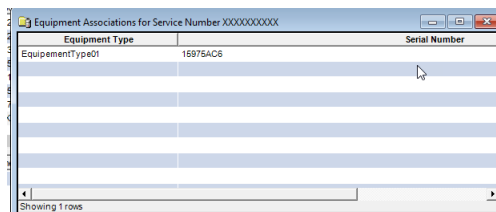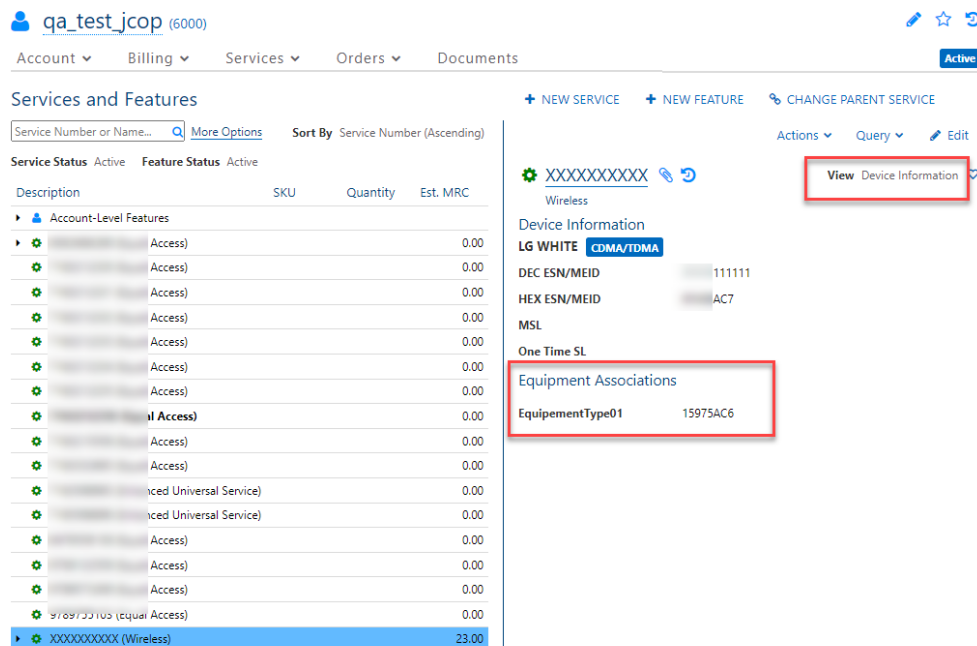

You can also see a history of the transaction on the **Retail History** tab.
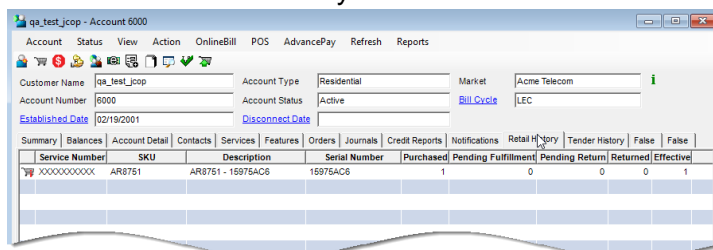
Customer Care

In Customer Care, this equipment association can be found in the Device Information section of the Services and Features page, as well as the Device section of the Service Details page. In the customer menu select **Services** > **Services and Features**. Then on the Services and Features page select the service in the left pane and select **View** > **Device** Information in the right pane.
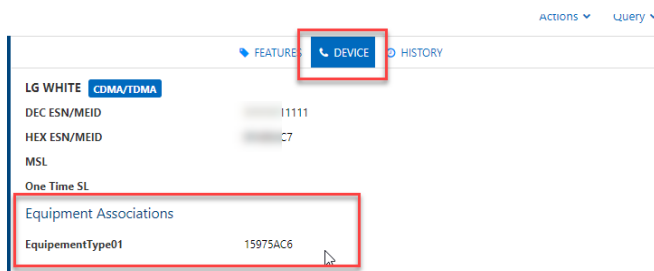
Or click service number link and select the **DEVICE** tab.

3.4 RETURNS

The device associated with the service number can be returned by right-clicking the line item in the **Retail History** tab and selecting **Return**. This is not new functionality. Returning the device will DELETE the association record between the service and equipment inventory item. This means there will not be a history of equipment associations, and the serial number will be freed up for use on another service.

4 Full Support for USAePay in Customer Care

This enhancement integrates USAePay into the Payment Gateway Application (PGA) for full support of USAePay in Customer Care. This includes the ability to perform the following E-Pay transactions in Customer Care:

- Create new E-Pay accounts in Customer Care through USAePay
- Edit credit card and ACH E-Pay accounts
- Make payments
- Issue a credits

In PGA users can:

- Search for and view transactions that were initiated via Customer Care
- Configure a profile for USAePay that can be used via PGA APIs

4.1 SETUP

To use USAePay in Customer Care, USAePay must be configured as the Provider in Admin Console Payment Gateway Configuration.

Notes:

- This must be set up by an authorized IDI associate. The settings are not available to CostGuard users.
- If you already use USAePay for processing E-Pay transactions in CostGuard Client Customer Management, USAePay will already be the provider configured in Admin Console.

4.2 NEW FUNCTIONALITY

When USAePay is configured as the Provider, the functionality listed above is available for USAePay in Customer Care and PGA. Refer to the applicable web help for details.