

Core Release Bulletin

CostGuard Solution 21.3 Release

March 2021



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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 |
|-----------------|---------|---|
| Document | FR 3296 | Separate permissions for adding and managing documents |
| Storage | | Two new user permissions let you break out authorization for adding and managing documents separately: |
| | | Add documents – Lets you add a document using the Attach Documents button in the document tray. |
| | | Manage documents – Lets you edit, replace and delete a document using the icons in the document tray. |
| | | The ability to add and manage documents was previously granted for Roles having the Allow Logon permission. Going forward after taking this release, Roles that have the Allow Logon permission will need to be updated with the Add documents and/or Manage documents permissions as needed. |
| | | This functionality was originally released for the Inventory and Orders web modules in CostGuard release 20.11. In CostGuard 21.3 this functionality also applies in Customer Care and Tickets (now covering any web module that supports viewing and attaching documents). In particular roles related to Customer Care Admin, Customer Care Sales Agent and Tickets should be updated |
| Inventory | FR 3336 | Automated removal of location on service disconnect |
| | | When a service is disconnected the location must be removed from the service to return inventory to the proper status. Prior to this release, the step could only be completed manually. If this step was missed, the inventory remained in an undesirable state and was difficult to identify once the order moved forward. |
| | | With this release users can automate removal of locations from services as part of their order processing through a new Workflow action. This can eliminate manual overhead and improve accuracy when processing orders where locations and equipment must be removed from services. |
| | | The automation removes the location(s) and assigned equipment to the appropriate status based on configuration. Users are informed of the updates that were made. If an error occurs when the automation attempts to complete, users are made aware of the reasons why the automation failed. The system logs the updates to Inventory history. This history displays when viewing the equipment. |
| Provisioning | FR 3111 | Ability to configure provisioning driven by order workflows |
| Platform | | This platform supports provisioning of services and features via order workflows. This functionality requires at minimum, CostGuard version 21.2. Benefits include: |
| | | Improved availability and scalability |
| | | Reducing calls into IDI support for assistance in setting up and managing provisioning |
| | | Reducing the need for Adaptive Requests to update provisioning scripts |
| | | Helping CostGuard user's to be more self-sufficient in troubleshooting, and reducing the time to diagnose issues |



| Functional Area | AR/FR | Description |
|--|---------|---|
| Product Catalog – Retail Product Configuration | FR 3347 | Support for electronic SIM on handsets and similar devices The Embedded Universal Integrated Circuit Card (eUICC) also known as an Embedded SIM (eSIM) is replacing the plastic SIM card currently used in a majority of |
| Comiguration | | devices. With this release (21.3) the following areas in CostGuard software have been enhanced to let wireless carriers offer devices that use SIM card and/or eSIM: |
| | | Product Catalog - Lets you configure devices to use electronic SIM or SIM card or both. |
| | | Device Management - Supports entering EID for eSIM devices rather than EMEI or ESN/MEID as required for SIM card devices in Add/Edit and Search dialogs. |
| | | SIM Management – A new column in SIM Search results shows whether the device is configured for eSIM, SIM card only or both. |
| | | Customer Management – Supports viewing/editing EID on add service and swap equipment orders as well as on the service itself (Edit Service > Equipment tab). |
| | | Note: There will be additional enhancements to support eSIM in upcoming releases. |
| Product Catalog – Grant Discounts | AR 8816 | Ability to edit number of units on a grant discount after it's assigned/billed Authorized users (through permission profile) can now modify the <i>Number of Units</i> field on an assigned/billed grant discount via the Product Catalog Grant Discount Configuration wizard. Prior to this, the value would be locked (uneditable) once the discount was billed. With this enhancement you can now analyze actual usage on accounts and then adjust the discount to better fit your needs. The path to the permission in Admin Console Permission Profiles is: Application > CostGuard Client > Product Management > Discount Configuration > Number of Units > Edit. |

1.2 RESOLVED KNOWN ISSUES

The following known issues have been resolved in this release.

| Functional Area | PR | Description |
|---------------------|-------|---|
| Orders | 83627 | Allow sub-package with > 50 children to be added via Order Placement Order Placement did not allow adding packages having a sub package with more than 50 children. This restriction has been removed. |
| | 83629 | Rounding error resulted in inaccurate tax credit on returns This PR is related to a prior PR 83391 delivered in CostGuard release 20.4 that fixed an issue where returned Direct Invoicing items were not credited correctly. When a retail item was sold via Order Placement web service and then returned in CostGuard Client, taxes were subtracted from the return amount rather than added. This resulted in the return amount being less than the purchase amount. To fix this, with PR 83391 the rounding sign (+/-) was corrected such that taxes are added rather than subtracted when a retail item sold via order placement is returned via CostGuard Client. However, this didn't fix all cases. The previous logic relied on negating the <i>Original Property</i> value to get the rounded amount which proved to be problematic in some cases. This logic no longer relies on the <i>Original Property</i> value to negate the rounded amount. |
| POS Make Sale | 83644 | Make Sale wizard loses warranty product serial number The Make Sale wizard lost serial numbers for warranty products when users scrolled back more than one page from where the product was added, and then forward to complete the wizard. To resolve this the serialized retail product page now refreshes its object reference on forward page. |
| Usage Processing | 83637 | Maintenance Operation - All current bill periods Bill period parameter values were not updating within a maintenance operation requested in the Ratebill scheduler when the all bill periods option was selected. Parameter values now update for bill periods when all bill periods option is selected. |



| Functional Area | PR | Description |
|-----------------|-------|---|
| RateBill | 83641 | Duplicate error logic for rate plan details did not account for different criteria types and criteria values Having duplicate Rate Plan Details in a Pricing Plan is not allowed. Attempting to add a Rate Plan Detail that has the same Distance Type and Rating Method as another detail in the Pricing Plan correctly results in a <i>duplcate</i> error. However, if the details have different Criteria Type and Criteria Value they should not be considered duplicates and should be allowed. The duplcate error logic was not taking this into account. Duplicate error logic has been updated to eliminate duplicate errors when adding Rate |
| | | Plan Details having the same Distance Type and Rating Method if the details have different Criteria Types and Criteria values. |
| Security | 83642 | Security cannot export users from app.idibilling.com |
| | | When attempting to export a large number of users (nearly 20k rows) from Security, a timeout was occurring. Steps were taken to increase the performance of the export. However, a large number could still encounter a timeout so a limit of 10,000 was set on the export. If you need to export a list that contains more records, the export will need to be broken into smaller pieces. |
| Workflow | n/a | Maintenance release with system optimizations |



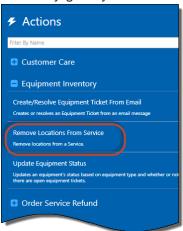
2 Automate Remove Location on Service Disconnect

When a service is disconnected the location must be removed from the service to return inventory to the proper status. Prior to this release, the step could only be completed manually. If this step was missed, the inventory remained in an undesirable state and was difficult to identify once the order moved forward.

With this release users can automate removal of locations from services as part of their order processing through a new Workflow action. This can eliminate manual overhead and improve accuracy when processing orders where locations and equipment must be removed from services.

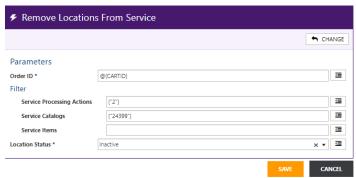
The automation removes the location(s) and assigned equipment to the appropriate status based on configuration. Users are informed of the updates that were made. If an error occurs when the automation attempts to complete, users are made aware of the reasons why the automation failed. The system logs the updates to Inventory history. This history displays when viewing the equipment.

The new *Remove Equipment From Service* Workflow action is available in the Equipment Inventory gallery.



Order ID and Location Status are required. The action sets all Active Locations linked to services in the order to the specified Location Status (Inactive or Left-in).

Filtering parameters are optional and can be used selectively specify which services on the order are impacted by the action. If no filters are specified all services on the order are impacted. Note: Service Processing Actions is typically set to "2" (Disconnect) as the action removes locations from a disconnected service.





3 Provisioning Through Order Workflows

The *Provisioning* platform system supports of provisioning services and features via order workflows. Benefits include:

- Improved availability and scalability.
- Reducing calls into IDI support for assistance in setting up and managing provisioning.
- Reducing the need for Adaptive Requests to update provisioning scripts.
- Helping CostGuard user's to be more self-sufficient in troubleshooting, and reducing the time to diagnose issues.

Note: This functionality requires at minimum CostGuard version 21.2.

The following is a quick overview. Complete instructions for configuring, running and managing order-based provisioning requests is available as web help on the E-Support Help Resources page and can be provided in PDF form on request.

3.1 BASIC ARCHITECTURE

The order workflow-driven provisioning process is illustrated below.



- **Product Catalog SKUs** SKUs (services and features) that require provisioning are configured in the CostGuard Product Catalog.
- Provisionable Object Definitions Provisionable Objects represent the items (SKUs) to be provisioned on a network. Provisionable Object Definitions (PODs) let you configure the properties sent with the provisioning request for a product.
- **Profiles** Profiles map PODs to a Provider (network element or end-point where products are provisioned) and a provisioning action. An example provisioning action may be: add a business line or suspend a wireless line.
- Workflow Profiles are mapped to workflows through Provision From Order actions.
 One such action is required per provisioning request. The action identifies the Order (Cart ID) and the specific Profile to be applied to fulfill the request. The Workflow sends the data in the Profile parameters to the provisioning process.
- Provisioning sends information to network element.



3.2 INTUITIVE AND FLEXIBLE CONFIGURATION CAPABILITIES

Intuitive and flexible tools in the provisioning web application let you set up order-based provisioning requests that meet your unique requirements.



For example Global Information is one of several data sources for provisioning requests. Global Information is similar to Extended Data in a Workflow in that it facilitates resuse of data when the same value applies to multiple requests. Other data sources let you select from standard (seed data) lists or add custom lists as needed.

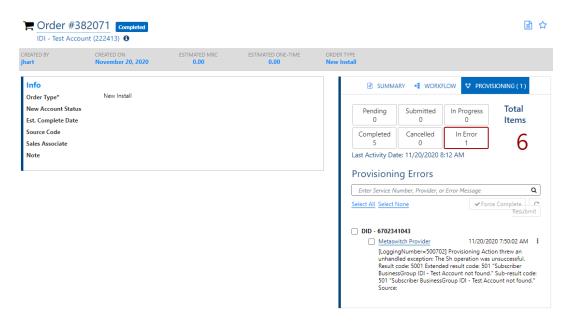
All Providers available for use with the Provisioning web application are IDI versions of the commercially available provisioning interfaces (e.g. IDI's supported implementation of Metaswitch 1.0 is not 100% equivalent to the actual Metaswitch version). Versioning is supported so different carriers can be on different versions of the same network element as may be required by their hardware and system setup.

You can test your configuration in a *Safeguard mode* where you can limit the items sent in a provisioning request to avoid disrupting existing services and products. Once you're satisfied with the setup and ready to move to production you can toggle out of safeguard mode.



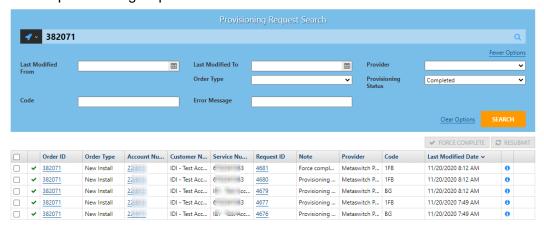
3.3 EFFECTIVELY MONITOR AND MANAGE PROVISIONING REQUESTS

The Orders web module has been enhanced to let you effectively monitor and manage provisioning requests. A new **PROVISIONING** tab on the Order page lets you monitor and manage provisioning requests on the order. You can see at a glance, the total number of provisioning requests for the order, and a breakdown of the number of requests by status (*Pending, In Progress, In Error* etc...).



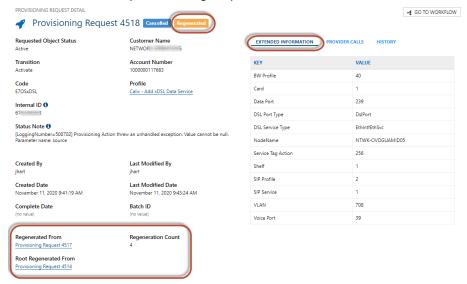
From here you can easily navigate to other views in Orders where you can:

- Manage in-error provisioning requests If any provisioning errors occurred they're
 listed under Provisioning Errors. The ellipsis button to the right the date/time stamp for
 any listed In Error request lets you choose to Force Complete, Resubmit or Regenerate
 the request. When you resubmit a provisioning request, the system simply resends the
 same request again. When you regenerate, the system creates a new request and
 sends it out.
- Search provisioning requests on the order.

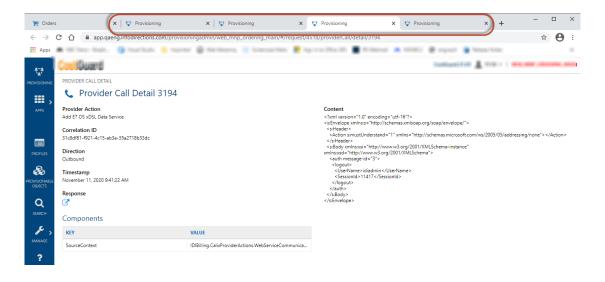




View details for a provisioning request.

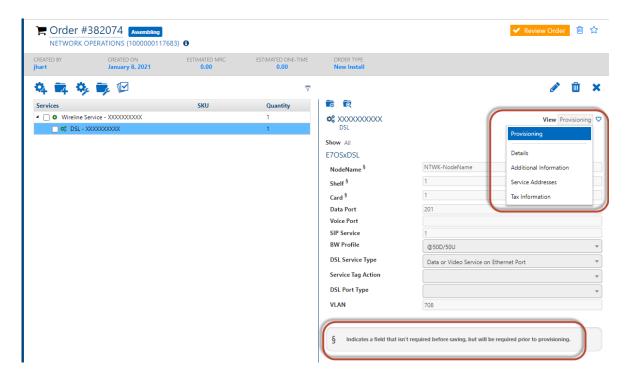


- The HISTORY tab lists all regenerated requests. This is helpful if you want to trace all your steps and look at all the values and transactions that were sent. Clicking the PROVISIONING REQUEST ID link takes you to the Detail view for that request.
- The PROVIDER CALLS tab lists all inbound calls from the Provider into CostGuard and outbound calls from CostGuard to the Provider. Having this information at your disposal lets you begin troubleshooting any issues that may have occurred without having to rely on IDI support to extract the information from the provisioning system.





• The Order Details view lets you view and edit POD properties that you choose to make *visible* on the order.





4 Support for Electronic SIM on Handsets

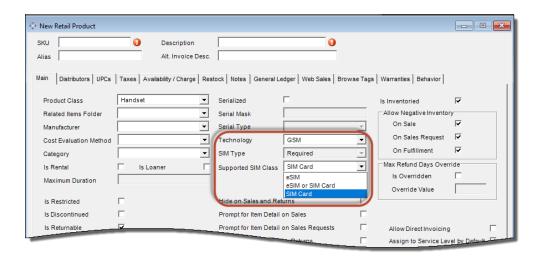
The Embedded Universal Integrated Circuit Card (eUICC) also known as an Embedded SIM (eSIM) is replacing plastic SIM cards currently used in most wireless devices. With this release (21.3) the following areas in CostGuard software have been enhanced to let wireless carriers continue to use SIM cards, move exclusively to eSIM or support both:

- Product Catalog lets you configure handsets to use eSIM or SIM card or both (Supported SIM Class).
- **Device Management** Add/Edit Device and Device Search dialogs let you specify an EID for eSIM devices rather than IMEI or ESN/MEID as required for SIM card devices.
- SIM Management SIM search results has a new column to indicate a device's Supported SIM Class: eSIM or SIM card or both.
- Customer Management When you add/edit a service or swap equipment, the
 Equipment Tab has a new field for viewing/editing the EID if the device on the service
 is eSIM. The rules governing data entry depend on the equipment's Supported SIM
 Class.

Note: There will be additional enhancements to support eSIM in upcoming releases as summarized in the *Upcoming Enhancements* section below.

4.1 PRODUCT CATALOG HANDSET CONFIGURATION

Retail product configuration in the Product Catalog lets you configure handsets to use electronic SIM or SIM card or both. When *Product Class* is **Handset** and *Technology* is **Dual Mode** (**CDMA-SIM**) or **GSM**, the *Supported SIM Class* drop down menu is enabled and you can select **eSIM**, **eSIM or SIM Card** (both) or **SIM Card**. The *eSIM* options specify the device can use an electronic SIM instead of a SIM Card.

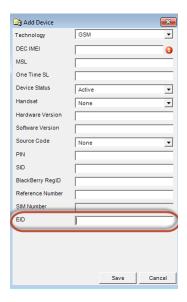


4.2 DEVICE MANAGEMENT SUPPORT FOR ESIM

Add/Edit and Device Search dialogs have a new field for entering EID for eSIM devices rather than IMEI or ESN/MEID as required for SIM card devices. **Note**: The EID observes the same



formatting rules that apply to IMEI or ESN/MEID (i.e. 19-20-digit values, that are sometimes appended with F and/or a Luhn Algorithm-calculated check digit).

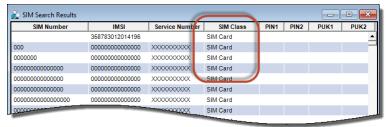






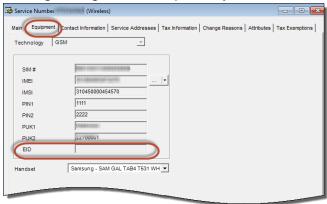
4.3 SIM MANAGEMENT SUPPORT FOR ESIM

SIM search results has a new column to indicate the device's configured Supported SIM Class.



4.4 CUSTOMER MANAGEMENT SUPPORT FOR ESIM

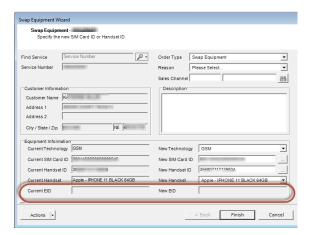
When you add/edit a service in Customer Management the Equipment Tab has a new field for viewing/editing the EID required by eSIM devices.



The following rules apply when creating a new wireless service that allows an eSIM and on swap equipment orders involving an eSIM device:

- If device Supported SIM Class = **eSIM Only** the EID field is required.
- If device Supported SIM Class = eSIM or SIM Card you must choose to assign an eSIM or a SIM Card.
 - EID is required if using an eSIM. It's optional if using a SIM Card.
- For Customer-provided equipment (CPE), the user-entered EID must be 32 digits in length and not already exist in Device Management.
- If the entered equipment MEID/IMEI is found and already a record in the Device table, it will auto-populate the EID with the value from the table, if available.
 - If the EID value is auto-populated, then it cannot be modified
- The entered eSIM value must be either:
 - a temporary value that will be updated later in the process (e.g. XXXXXXXXXX) or,
- a valid eSIM number (where the eSIM value already exists in SIM Management by having been pre-loaded and is then either entered by the user or auto-assigned by the solution)





4.5 UPCOMING ENHANCEMENTS (LATER RELEASE)

The following additional eSIM enhancements will be provided in a future release:

- POS Orders:
 - Allow new services to specify EID when required
 - Allow CPE to indicate what type of SIM is supported by incoming device
 - Auto selection of EID when device is known by CostGuard
 - Add EID values to equipment swap pages
- Web Orders:
 - Allow new services to specify EID when required
 - Allow CPE to indicate what type of SIM is supported by incoming device
 - Auto selection of EID when device is known by CostGuard
 - Add EID values to equipment swap pages
- Customer Care:
 - Add EID and SIM Type to Device tab
- API Updates:
 - Order Placement
 - Catalog Service
 - Customer Service
 - Service and Feature Management
 - Device Management Create, Get, Search and Update Device
- Support for EID in Device File and Samsung Manifest File Uploads
- Support for Supported SIM Class for SIM Card Uploads

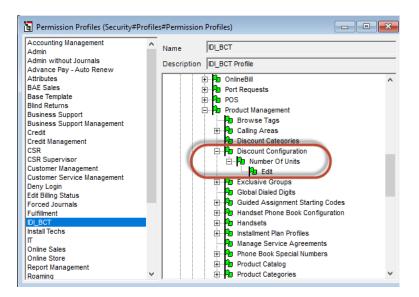


5 Editing Number of Units on a Billed Grant Discount

Authorized users can now modify the *Number of Units* field on an assigned/billed grant discount via the Product Catalog Grant Discount Configuration wizard. Prior to this, the value would be locked (not editable) once the discount was billed. With this enhancement you can now analyze actual usage on accounts and then adjust the discount to better fit your needs.

5.1 PERMISSION SETUP

The ability to edit the *Number of Units* field is controlled by a new permission in Admin Console Permission Profiles. The path is: Application > CostGuard Client > Product Management > Discount Configuration > Number of Units > Edit.





5.2 EDITING NUMBER OF UNITS IN PRODUCT MANAGEMENT

To edit number of units for a grant discount:

- Right-click on the discount in the Product Catalog and select **Edit Configuration**.
- Browse to the *Units* page.
- If the Edit Number of Units permission is enabled in your permission profile, the Number of Units field will be editable.

A note at the bottom of the page indicates changes to this field are not reflected in rated data until a full bill period rerate has been completed. If you modify the Number of Units field mid-bill period, the new value will not be observed until the next Bill Period, unless the current Bill Period has a re-rate completed on it.

