Network Manager
Alarms
User Guide

Introduction

This document will take you through the steps you will need to understand how to view, create, modify, delete, and use alarms using the Network Manager tool.

You can create alarms to receive an email notification when a specified number of calls route down a branch in a routing tree during a defined time interval. The alarms you create work with the notification node in a routing plan to activate that alarm and trigger the email notifications. A notification node can be placed anywhere in a plan but is typically used following an inline overflow node to notify a user that calls are not being answered on the primary termination.

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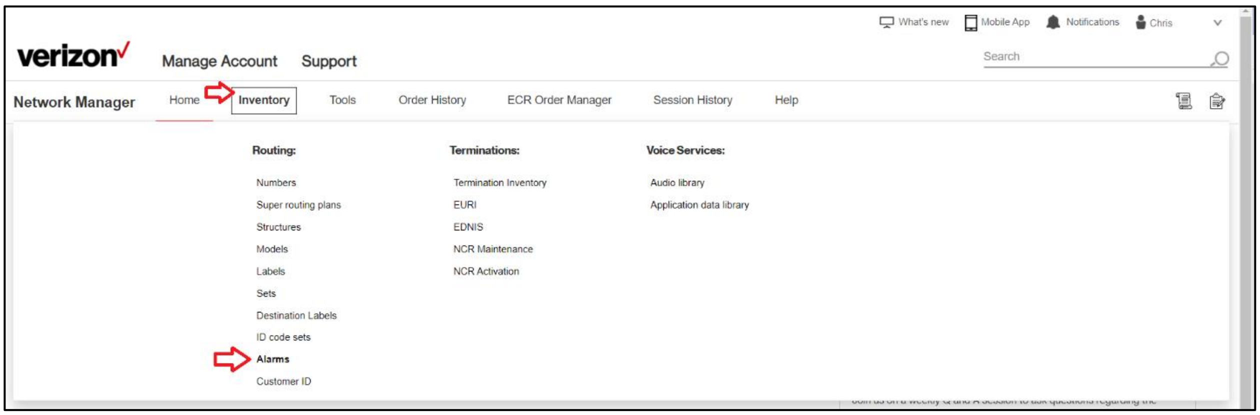
Alarms Inventory

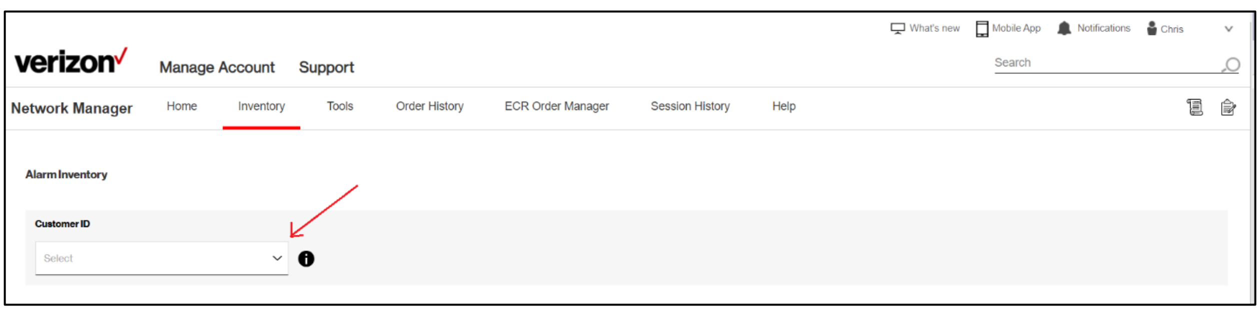
The *Alarms Inventory* screen lists all the alarms related to the Customer ID you select. You can view the inventory list, export it, and search your inventory.

Navigating to Alarms Inventory

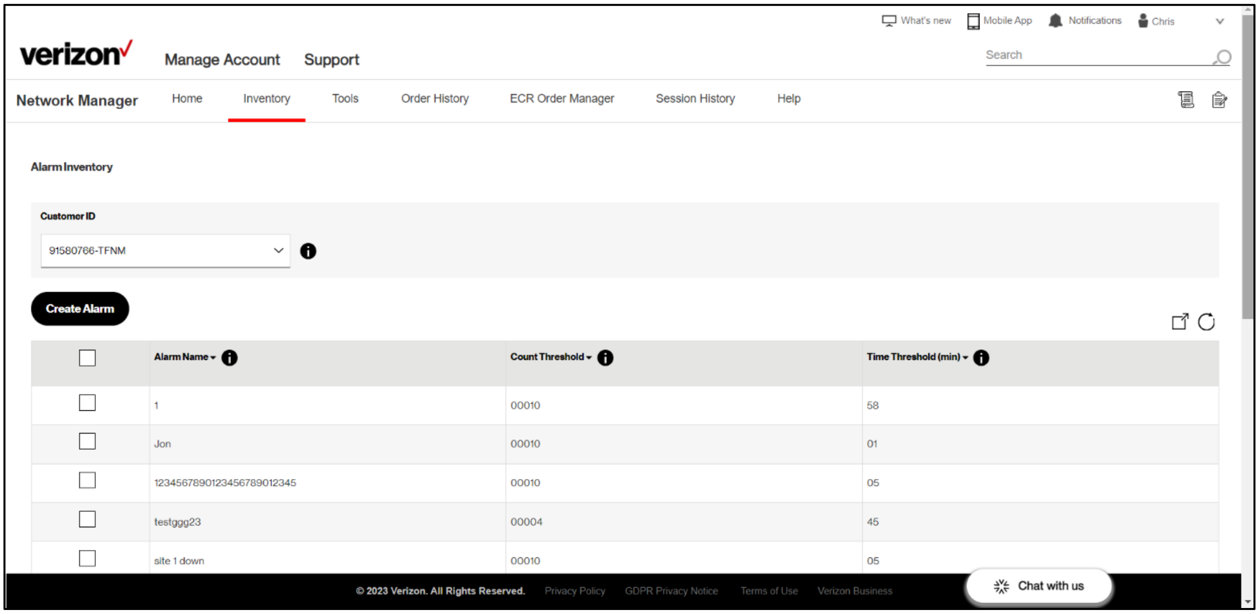
1. From any page, to navigate to the Alarms Inventory, click **Inventory** on the top-level menu. Once the menu fully expands, under the **Routing** heading, click **Alarms**.



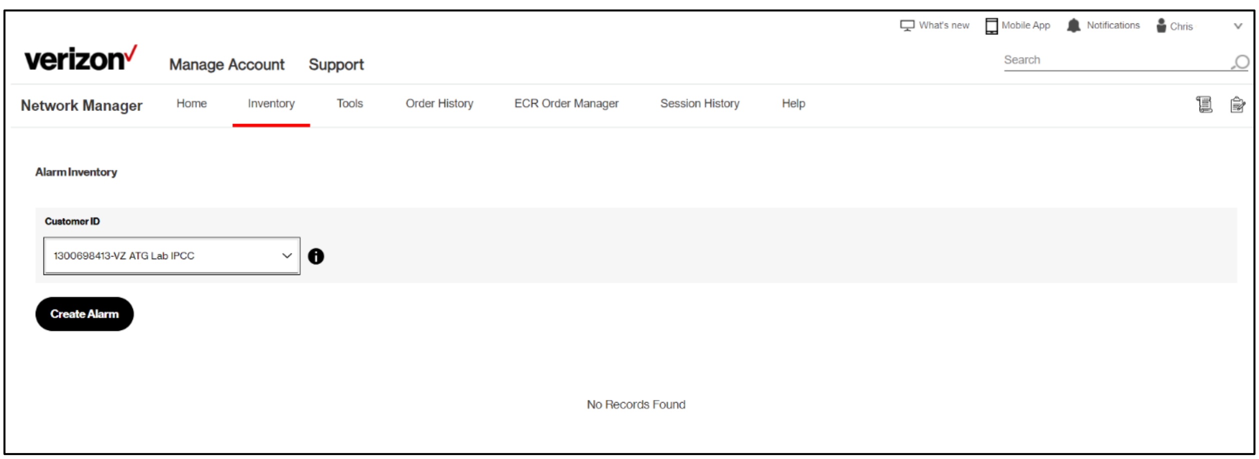
2. Note: when this is the first time you are navigating to the Alarms Inventory in your web browser session, you will need to select your **Customer ID** from the dropdown control.



3. Alarms Inventory will display the first page of alarms that have previously been defined for your selected Customer Identifier.

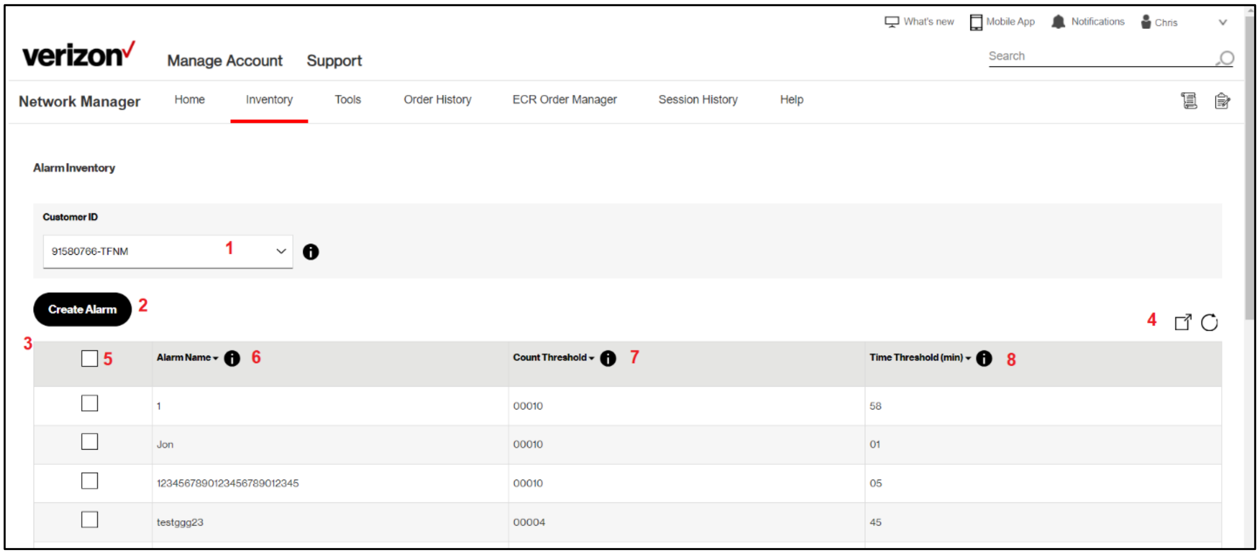


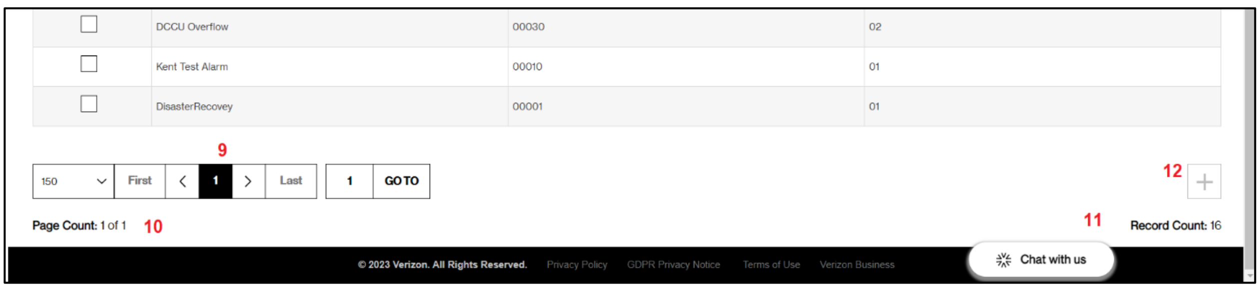
If your selected Customer Identifier does not have any Alarms defined, the system will display "No Records Found".



Layout of Alarms Inventory

Alarms Inventory will display a list of alarms for the selected **Customer ID**.

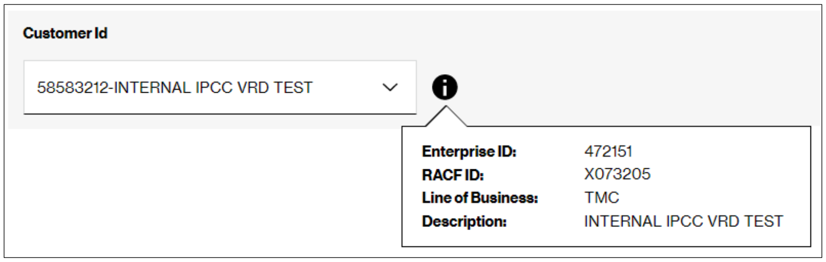




Area	Description
1	Customer ID control
2	Create Alarm button
3	Alarms results grid
4	Results grid controls
5	Row selector
6	Alarm Name column
7	Count Threshold column
8	Time Threshold column
9	Results grid page navigation
10	Page count
11	Record count
12	More button

Customer ID control (1)

4. To view further information concerning the selected Customer ID, click the information icon (🛈) to the right of the **Customer ID** control.



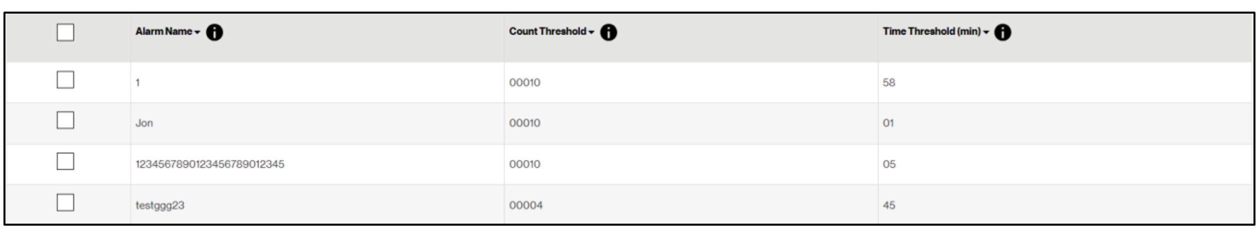
The pop-up window will display the Customer ID's associated Enterprise ID / Customer Legal Entity (CLE), your RACF-ID/CM-ID, the Line of Business indication, as well as the Description (Company Name) associated with the Customer ID.

Create Alarm button (2)

5. Click the Create Alarm button to navigate to the **Create Alarm** screen.

Alarms results grid (3)

6. The Alarms results grid displays information related to the alarms you have defined for the selected Customer ID, listing commonly requested information for each alarm.



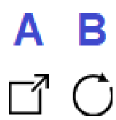
Column Sorting

The Alarms Inventory results grid displays a list of the alarms, with a default sorting based on alarm-id (which is a hidden field used by the system to uniquely identify an alarm), smallest sequentially to largest. Click a column's down-arrow symbol (▾) to sort the results in the grid of data from largest to smallest, or alphabetically (Z to A). Click a column's up-arrow symbol (▴) to sort the results in the grid of data from smallest to largest, or alphabetically (A to Z).

> **Note**: an empty field is considered lower/smaller than a field with information populated.

Results grid controls (4)

7. At the top right of the results grid, Network Manager presents additional results grid controls that help manipulation of the information.



Label	Control
A	Export
B	Refresh

Export (A)

Click the Export button to initiate an export of the current results to a Comma Separated Values (CSV) file to your browser. The system will display a pop-up message indicating when the export action has been completed. Click the pop-up message's "OK" button to close that message. Once completed, please go to your file directory where your web browser stores downloaded files.

Refresh (B)

Click on the Refresh button to instruct the system to refresh the results with up-to-date information.

Row selector (5)

8. For each alarm on the results grid, each row displays a button with the addition symbol (the plus sign). To display the details for that number, click the + button to expand. Below the

Alarm Name column (6)

9. For each alarm, the results grid will display the alarm's name that has been assigned to that specific alarm.

Count Threshold column (7)

10. For each alarm, the results grid will display the alarm's count threshold that has been assigned to that specific alarm.

Time Threshold column (8)

11. For each alarm, the results grid will display the alarm's time threshold that has been assigned to that specific alarm.

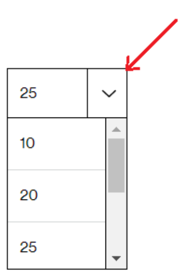
Results grid page navigation (9)

12. At the bottom of the results grid, Network Manager presents results grid page navigation controls that will help the user more effectively view the information.

Label	Control
A	Items per page
B	Navigate to first page
C	Previous page
D	Current page
E	Next page
F	Navigate to last page
G	Go to page

Items per page (A)

Controls how many records will display per page for the current results grid. To change, click on the dropdown control to display the list of available values. Click to select the items per page you want to view for the current results.



Navigate to first page (B)

Click on the “First” button to quickly navigate to the first page of results. The button will be disabled if you are currently on the first page of results.

Previous page (C)

Click on the < button to navigate to the previous page of results. The button will be disabled if you are currently on the first page of results.

Current page (D)

The current page will be highlighted. The controls will also display up to 2 previous and up to 2 next page numbers (when available) to which you may click to navigate to that page of results.

Next page (E)

Click on the > button to navigate to the next page of results. The button will be disabled if there are no more pages of results available.

Navigate to last page (F)

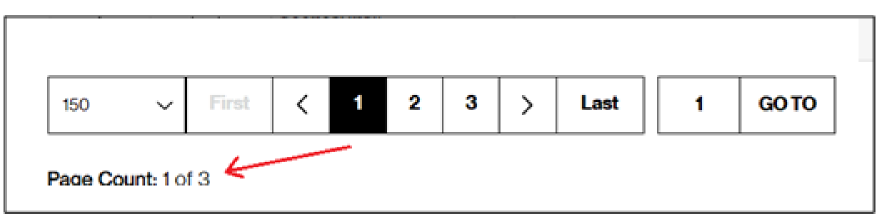
Click on the “Last” button to quickly navigate to the last page of results. The button will be disabled if you are currently on the last page of results.

Go to page (G)

Click the Go To page number text box and type in the page number you wish to view. Then, click the GO TO button to be directed to that page of results. You may only navigate to a page number that is available (example: you may *not* navigate to page 3 if there are only 2 pages of results available).

Page Count (10)

13. On the bottom left corner of the page, just underneath the results grid navigation controls, Network Manager displays the **Page Count**. For those results that have been loaded into that browser session, Network Manager informs you which page of data the results grid is currently displaying (e.g.: **Page Count:** x of y, where x is the page number you are currently on). It also informs you how many total pages of data are currently available to display (e.g.: **Page Count:** x of y, where **y** is the total quantity of pages available in the browser session).

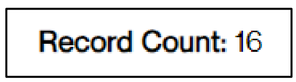


> **Important note**: the **Page Count** value and total pages available may vary from one user to another depending on how many **Items per Page** had been selected and/or your VEC user setting. For example, a user that has selected 100 **Items per Page** will have fewer total pages of data available compared to a user who has selected 20 **Items per Page**.

> **Important note**: the **Page Count** and total pages of data available will be affected by whether or not the user has first retrieved all of the data from the database for the results grid. See the section on MORE BUTTON (12) for more information.

Record count (11)

14. On the bottom right corner of the results, Network Manager displays the **Record Count** of the quantity of database records are currently loaded into the results grid.

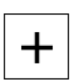


More button (12)

15. There is also a button that displays a *plus* sign. This is the **Retrieve More** button (also called the "**More** button") that, when enabled, allows you to **retrieve more** records from the database.
    - When the button is disabled, the button appears in a light grey color. This indicates that there are no more database records that may be retrieved for this screen.

    - When the button is enabled, the button appears in a black color. This indicates that there are more available database records that may be retrieved for this screen.

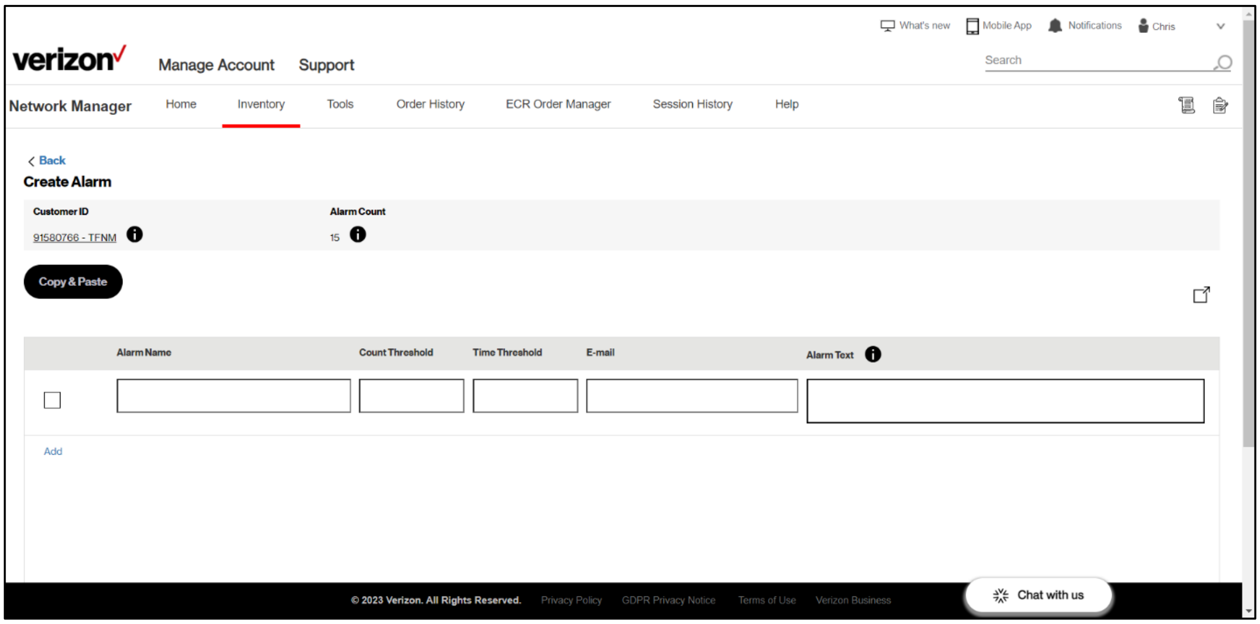
    

Create Alarm

Create a new alarm

1. From the **Alarm Inventory** main screen, click the Create Alarm button to navigate to the **Create Alarm** screen.

Note: each Customer Id may have a maximum of 75 alarms defined at any given time.



2. In the related **Alarm Name** text box, type in the name of the alarm you wish to create. Note: an alarm name must be at least 1 character in length and no more than 25 characters in length; an alarm name must be unique per customer id.

3. Press [tab] or click to move your cursor to the **Count Threshold** text box. Type in the threshold counter for the alarm. *Note*: an alarm threshold count must be at least 1 and no more than 99,999; enter only digits (no commas or periods).

4. Press [tab] or click to move your cursor to the **Time Threshold** text box. Type in the quantity of *minutes* for the alarm. The **Time Threshold** is the number of minutes in which the specified number of calls in the **Count Threshold** has to be reached in order for the notification to be sent. *Example*: If you set the count threshold to 10 calls and the time threshold to 5 minutes, if you only get 9 calls into the notification node counter before the 5 minutes expire, you will not receive a notification and the timer and counter reset. If you reach 10 calls within 2 minutes, the notification is sent and the timer and counter threshold reset immediately and

start over, it will not wait for 3 more minutes to reset. *Note*: an alarm's time threshold must be at least 1 minute but no more than 60 minutes.

5. Press [tab] or click to move your cursor to the **E-Mail** text box. Type in the email address of the person or team email distribution list that you want to receive the alarm notification email when the alarm is triggered during call processing.

> **Note**: the **E-Mail** value must be in a valid email format, however, the system does *not* validate that the email itself is legitimate. Take care to ensure the email address you type is *exactly* what you want. For example, if you mistype the ".com" of the email address to instead be ".cm" (i.e.: you missed the "o" in ".com"), the system *will* accept it and you will *not* receive your alarm emails at all.

6. Press [tab] or click to move your cursor to the **Alarm Text** field. Type in the text you want to be emailed to you in the body of the email. Include literal text information and/or dynamically determined information about the call that triggered that alarm email to be generated. For example, typing an alarm text of "Call problem with {ODN}" will result in the alarm email's body to display "Call problem with 18005551234", where "18005551234" is the actual original dialed number of the call that triggered the alarm; "18005551234" replaces the dynamic tag of "{ODN}".

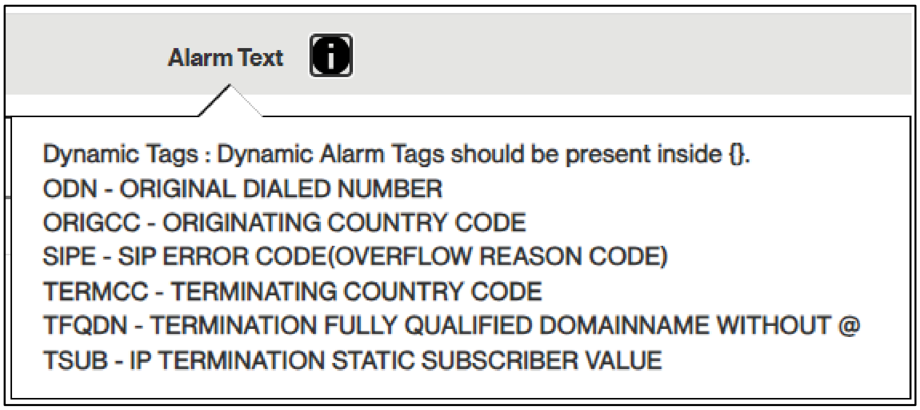
Dynamic Alarm Tags

7. Alarm Text may be defined to include dynamically calculated information that is based on the actual call that triggered the alarm email to be generated. The following dynamic tags may be used one or more times in the alarm text.

Tag	Tag Name	Tag Description
{ODN}	Original Dialed Number	Telephone number the caller dialed (E.164 format)
{ORIGCC}	Originating Country Code	Numeric country code (E.164) of the caller's originating telephone number.
{SIPE}	SIP Error Code (Overflow Reason Code)	SIP error code that is returned on a call that does not connect to its intended target.
{TERMCC}	Terminating Country Code	Numeric country code (E.164) of the terminating telephone number, when the call is delivered to a public switched telephone network telephone number.

{TFQDN}	Terminating Fully Qualified Domain Name	Fully Qualified Domain Name (FQDN) of the terminating IP CPE.
{TSUB}	IP Termination static subscriber	IP termination subscriber value (everything to the left of the @ sign, in the full URI) that is defined in the Network Manager tool for the IP termination.

If you ever forget what dynamic tags are available, click the information icon next to the Alarm Text column heading to bring up help.



Adding and Removing Rows

8. To add another alarm, click the Add link. Doing so will create another empty row in the grid in which you may create another alarm (repeat steps 17 through 21).

9. To remove an alarm on the **Create Alarm** screen, to the far right of the row you wish to delete, click the Remove link. Note: the Remove link only is displayed when there are more than one rows on the **Create Alarm** screen.

Copy an Alarm

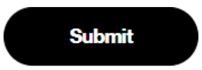
10. To copy an entire row and to create a new row with the same information, first click the checkbox to the left of the row you wish to copy. Once a row is selected, the Copy & Paste button becomes enabled.

11. Click the 

button. A new row will be added to the screen with the same values as the copied row. Note: only one row may be copy-and-pasted at a time. If you click the checkbox for more than one row, where more than one row is checked, the Copy & Paste button will become disabled.

12. After the copied row has been pasted to create the new alarm record/row, modify whatever you need to make your new alarm how you want it.

Submitting the Alarm Order

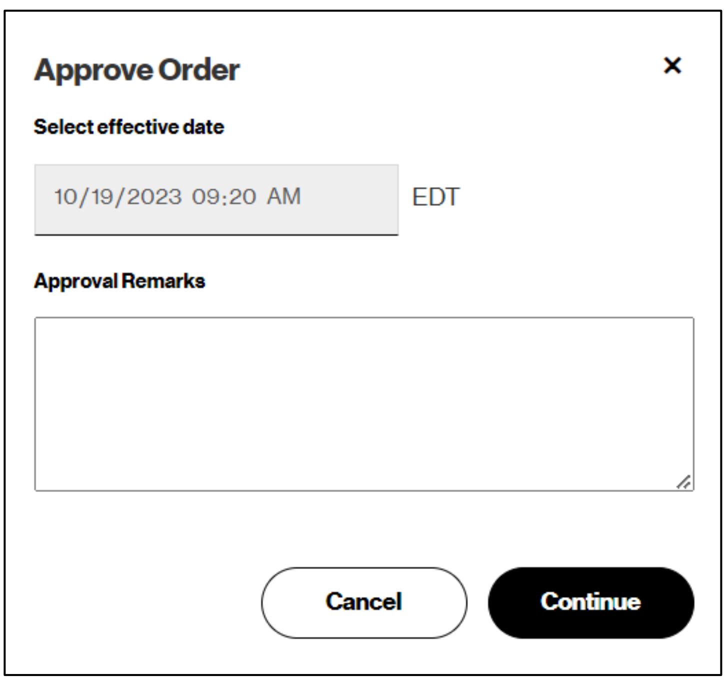
13. Click the 

button to submit the order.

    Click the 

button to cancel the outstanding actions. You will be sent back to the **Alarm Inventory** screen, and the unsubmitted alarm information on that order will be lost.

14. After clicking **Submit**, the **Approve Order** pop-up window will be presented.

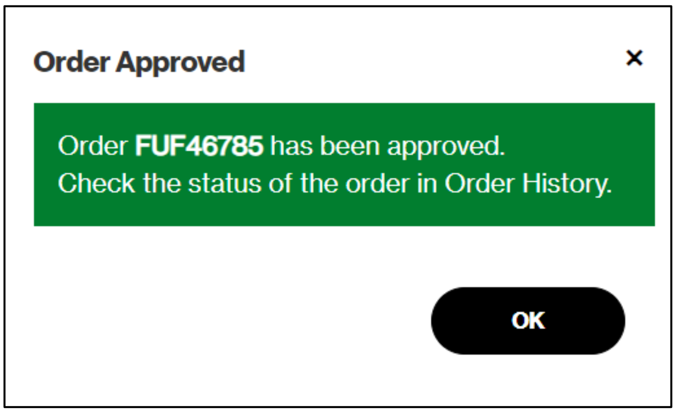


Optionally, type in **Approval Remarks**.

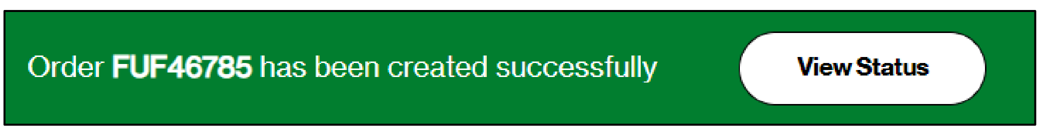
Note: Alarm orders are *immediate* orders, meaning they will be transmitted to the network for provisioning immediately, and cannot be scheduled for the future, i.e.: future-dated.

Click the **Cancel** button to return to the previous screen (the **Create Alarm** screen).
Click the **Continue** button to submit the order for provisioning.

15. After continuing to approve the order, Network Manager will display the **Order Approved** screen, listing the order number it created. Click the **OK** button or the X in the window's upper right corner to close the pop-up window.



16. You will be routed to the **Alarm Inventory** screen. On the page's top banner, you will be shown a message with the order's number and a **View Status** button. Optionally, click the **View Status** button to track the order's progress, or optionally, click the banner's **X** to close the banner.



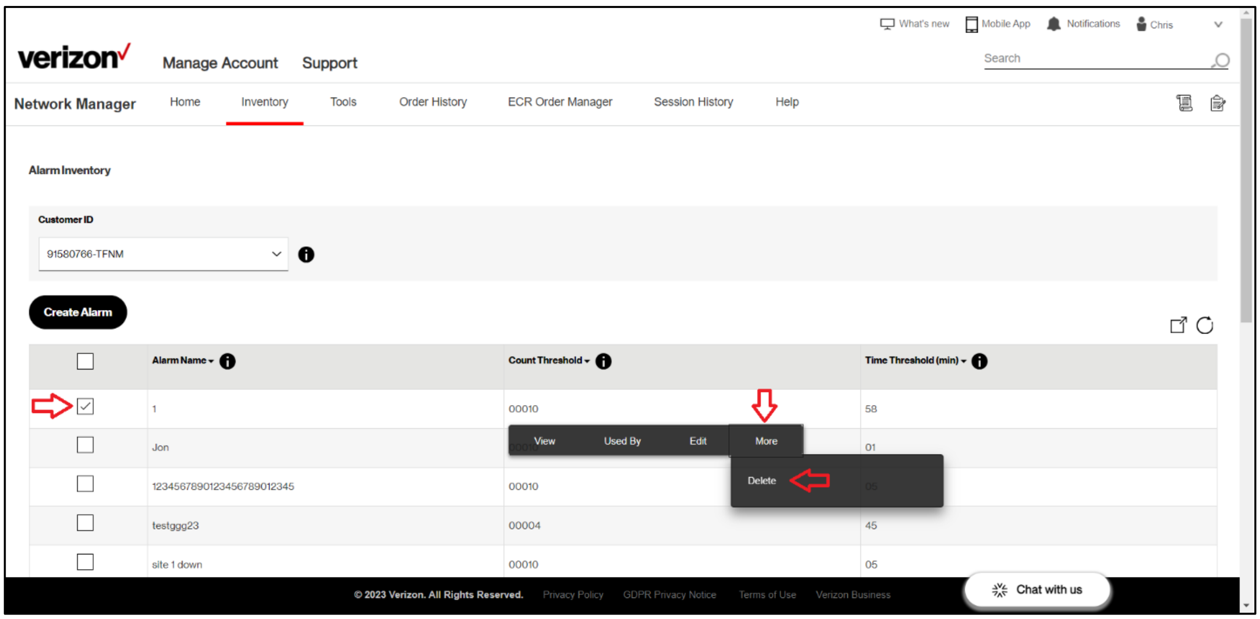
Delete Alarm

Deleting an Alarm

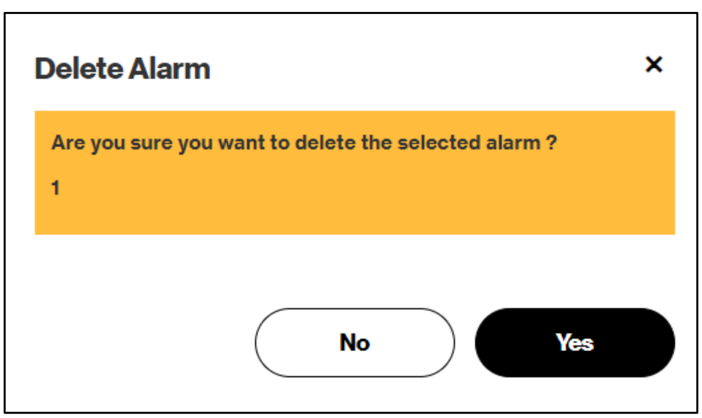
1. Navigate to the [Alarm Inventory] main page.

2. Locate the Alarm you want to delete.

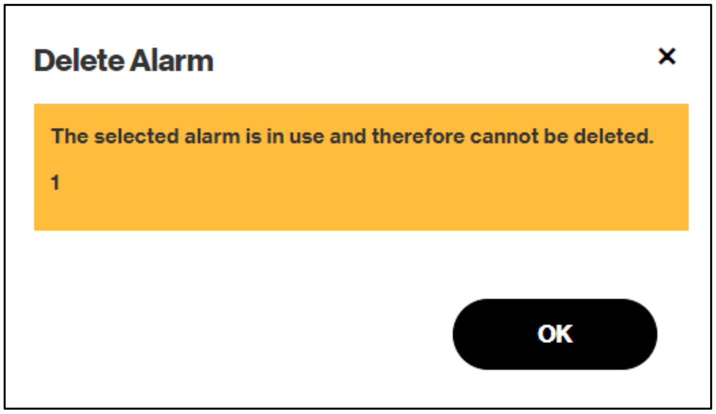
3. Click to check the alarm's row selection checkbox. The floating context menu will appear on the right side of the page. Click the **More** menu selection. Click **Delete**.



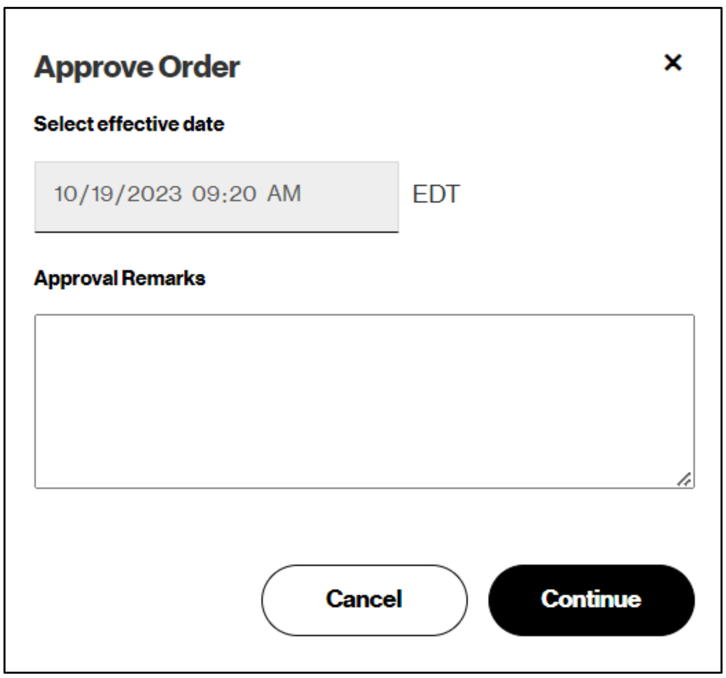
4. The system will display a pop-up window asking if you are sure you want to delete the alarm. Click **No** to abandon the delete action. Click **Yes** to continue with deleting the alarm.



5. If the alarm is actively being used by a Notification node (NFY) in a routing plan, you will be presented with an error. Click the **OK** button (or the **X**) to close the warning window.



6. If the alarm is not actively being used by a Notification node (NFY) in a routing plan, the **Approve Order** pop-up window will be presented.

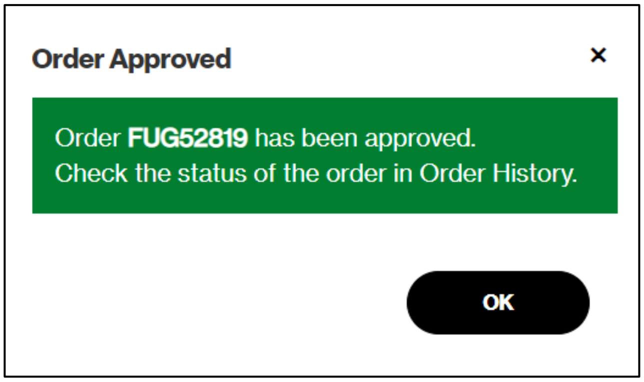


Optionally, type in **Approval Remarks**.

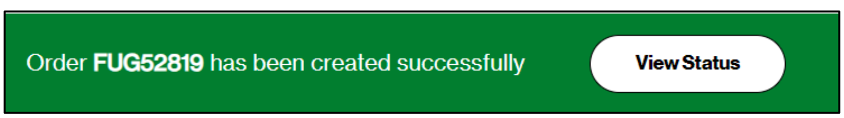
Note: Alarm orders are *immediate* orders, meaning they will be transmitted to the network for provisioning immediately, and cannot be scheduled for the future, i.e.: future-dated.

Click the **Cancel** button to return to the previous screen.
Click the **Continue** button to submit the order for provisioning.

7. After continuing to approve the order, Network Manager will display the **Order Approved** screen, listing the order number it created. Click the **OK** button or the **X** in the window's upper right corner to close the pop-up window.



8. You will be routed to the **Alarm Inventory** screen. On the page's top banner, you will be shown a message with the order's number and a **View Status** button. Optionally, click the **View Status** button to track the order's progress, or optionally, click the banner's **X** to close the banner. Note: remember to click the refresh button to refresh the Alarm Inventory results to ensure your deleted alarm is no longer there.



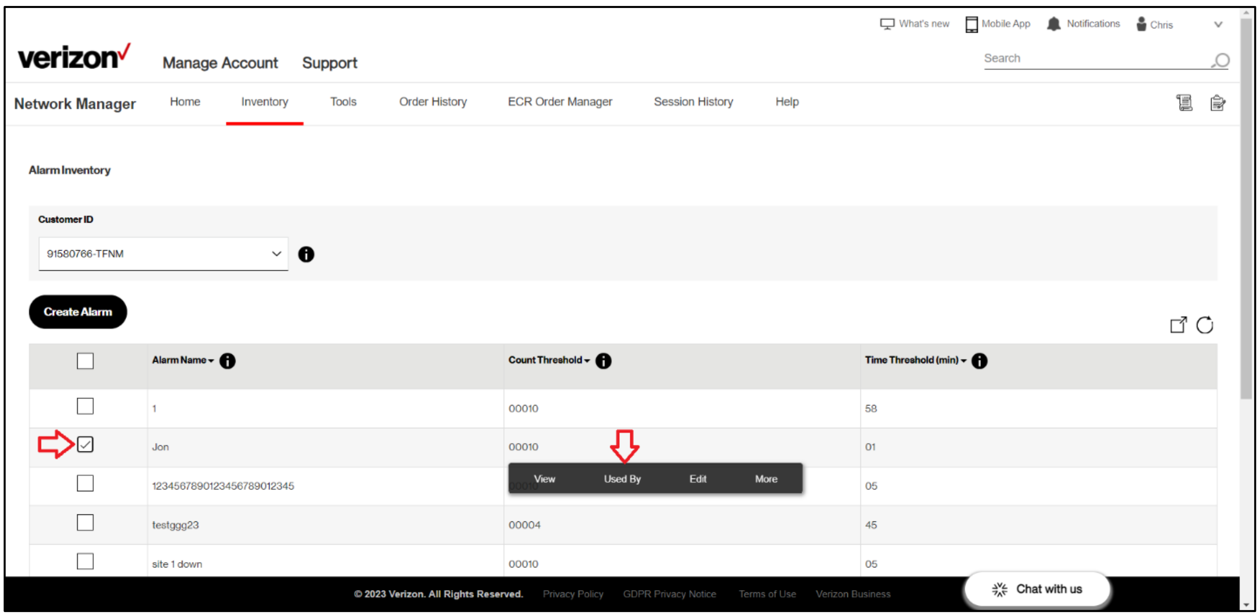
Determine where an Alarm is being used

Used By for an Alarm

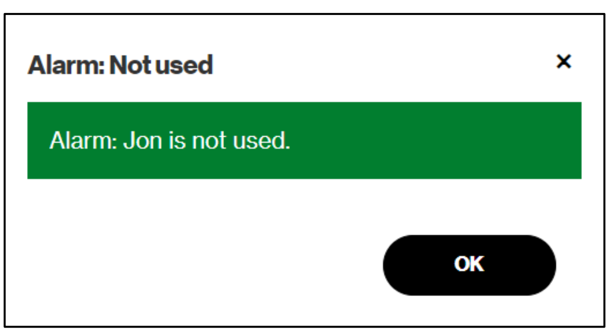
1. Navigate to the Alarm Inventory main page.

2. Locate the Alarm you want to query to see if it is in-use.

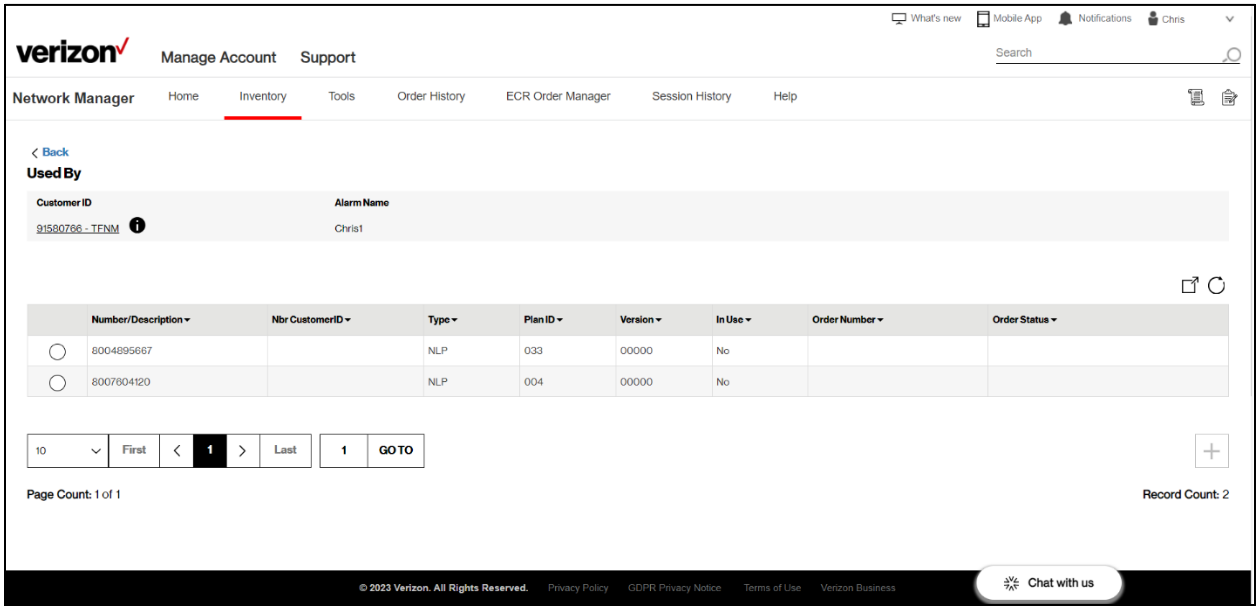
3. Click to check the alarm's row selection checkbox. The floating context menu will appear on the right side of the page. Click the **Used By** menu selection.



4. If the alarm is not currently being used, the system will display a notification window telling you so. Click the **OK** button (or the **X**) to close the window.

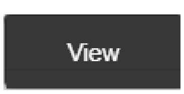


5. If the alarm is currently being used in one or more routing plans, the system will navigate you to display the **Used By** screen. Click the ‹ Back button to return to the previous screen.

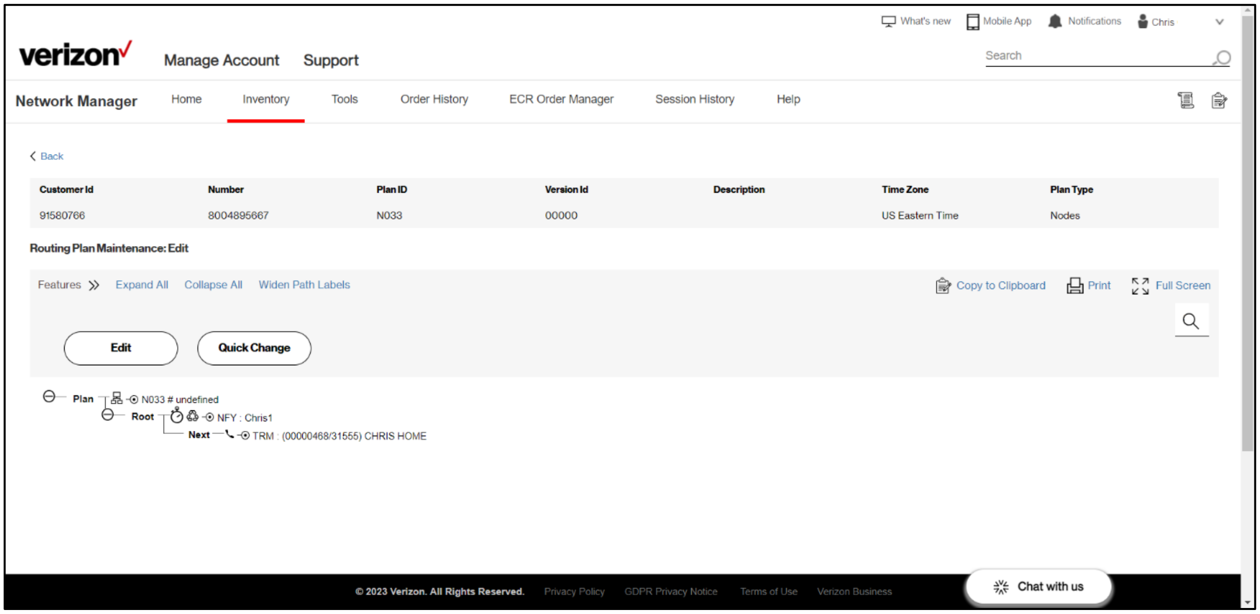


The results grid displays a list of all of the routing trees (Super Routing Plans, Number-level plans, Structures) in which the alarm is used from within a Notification (NFY) node. Each row includes information such as the **Number**, the **Customer ID** that owns that number (i.e.: it could be a Cross-Corp agreement scenario), the **Type** of routing plan (e.g.: NLP Number-level Plan, SRP, Super Routing Plan, etc.), the routing tree's **Plan ID**, the plan's **Version** number, the **In Use** indicator for whether that number's routing plan is currently active (i.e.: actively processing live traffic), the **Order Number** (if the alarm is defined in a pending order), and the **Order Status**.

6. To navigate directly to the routing tree, select the radio button for the row of the routing tree you wish to further explore. The floating context menu will display. Click the **View** button to continue.



7. Network Manager will route you to the **Routing Plan Maintenance: Edit** screen to the routing tree where the alarm is being used. View or continue to edit the routing tree.

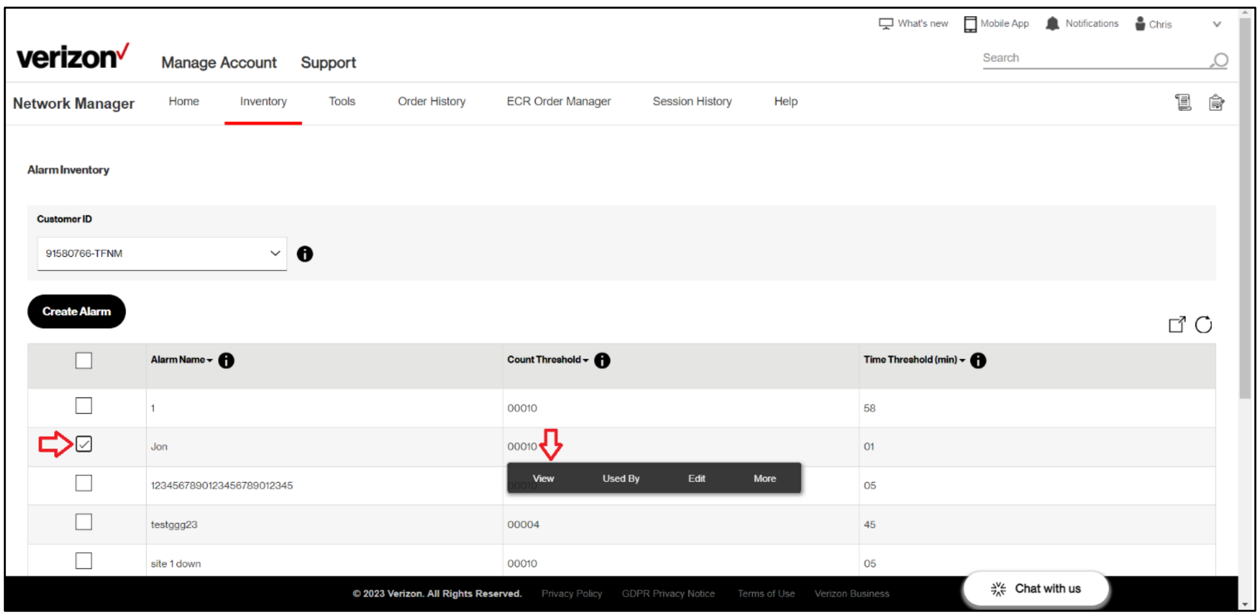


View Alarm

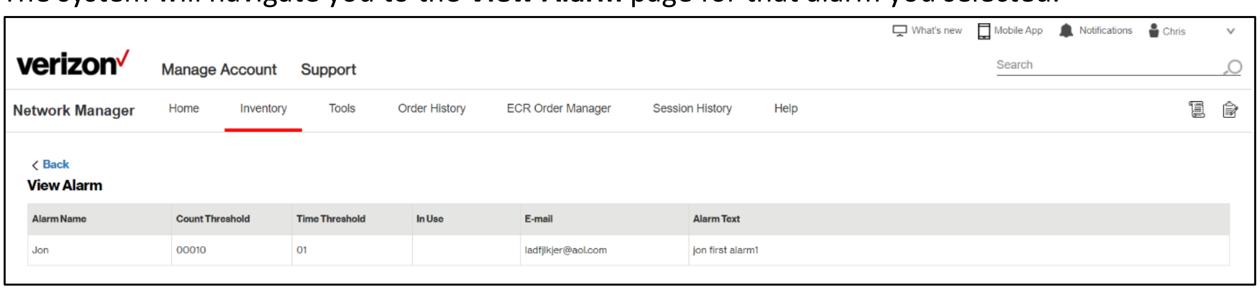
Viewing an Alarm

1. Navigate to the [Alarm Inventory](#) main page.

2. Locate the Alarm you want to view. Click to check the alarm's row selection checkbox. The floating context menu will appear on the right side of the page. Click the **View** selection.



3. The system will navigate you to the **View Alarm** page for that alarm you selected.



The results grid will display the **Alarm Name**, the **Count Threshold**, the **Time Threshold** (in minutes), an indicator as to whether that alarm is **In Use**, the **E-mail** address where the alarm notifications are delivered, and the **Alarm Text**.

None of data are editable. Click the ‹ Back button to return to the previous screen.

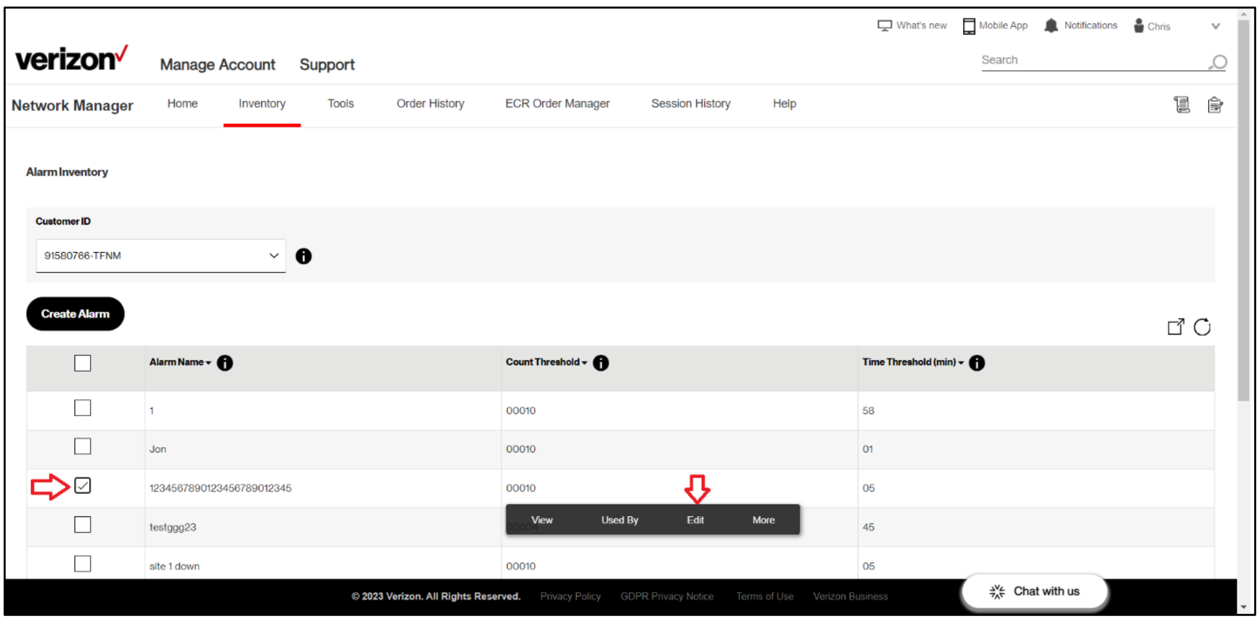
Edit Alarm

Editing an Alarm

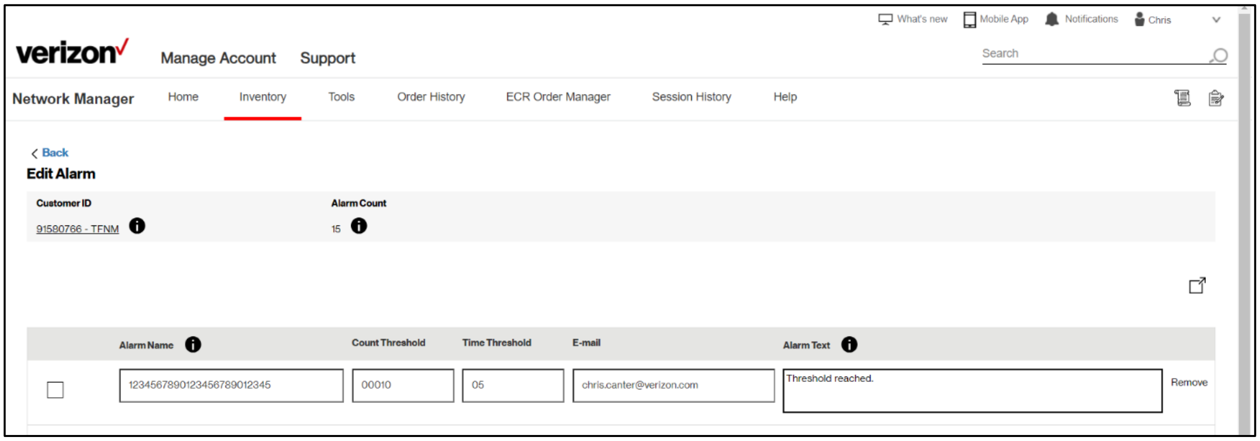
1. Navigate to the [Alarm Inventory]() main page.

2. Locate the Alarm you want to edit.

3. Click to check the alarm's row selection checkbox. The floating context menu will appear on the right side of the page. Click the **Edit** selection.



4. The system will navigate you to the **Edit Alarm** page for that alarm you selected.



The results grid will display the **Alarm Name**, the **Count Threshold**, the **Time Threshold** (in minutes), the **E-mail** address where the alarm notifications are delivered, and the **Alarm Text**. All fields are editable. Follow the instructions in **Create Alarm**; the **Edit** and **Create** screens behave identically.

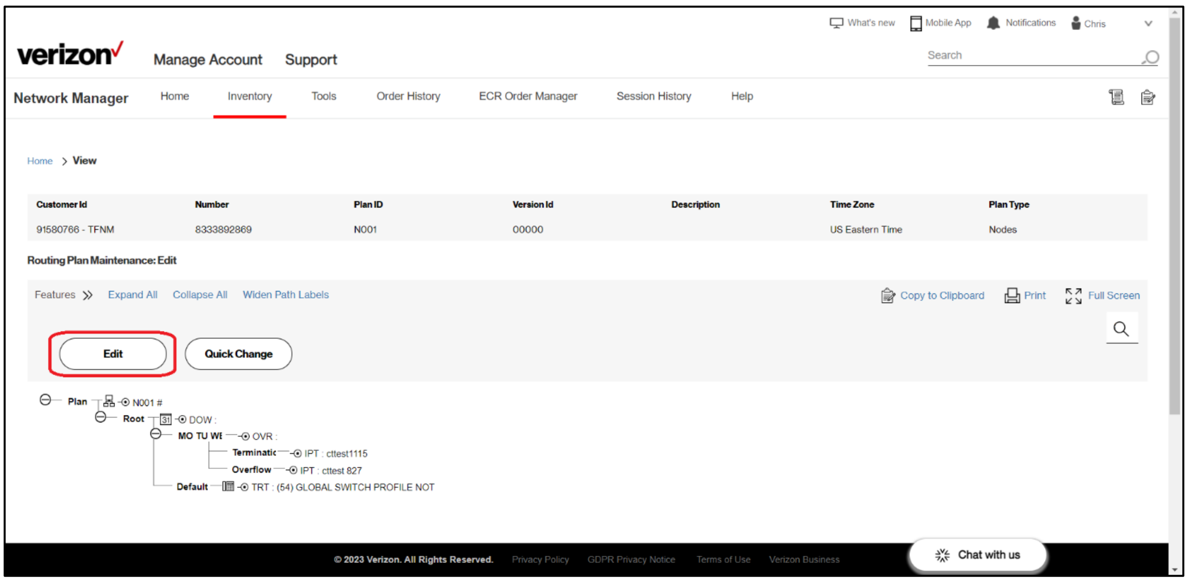
Click the ‹ Back button to return to the previous screen.

Using an Alarm in a Routing Plan

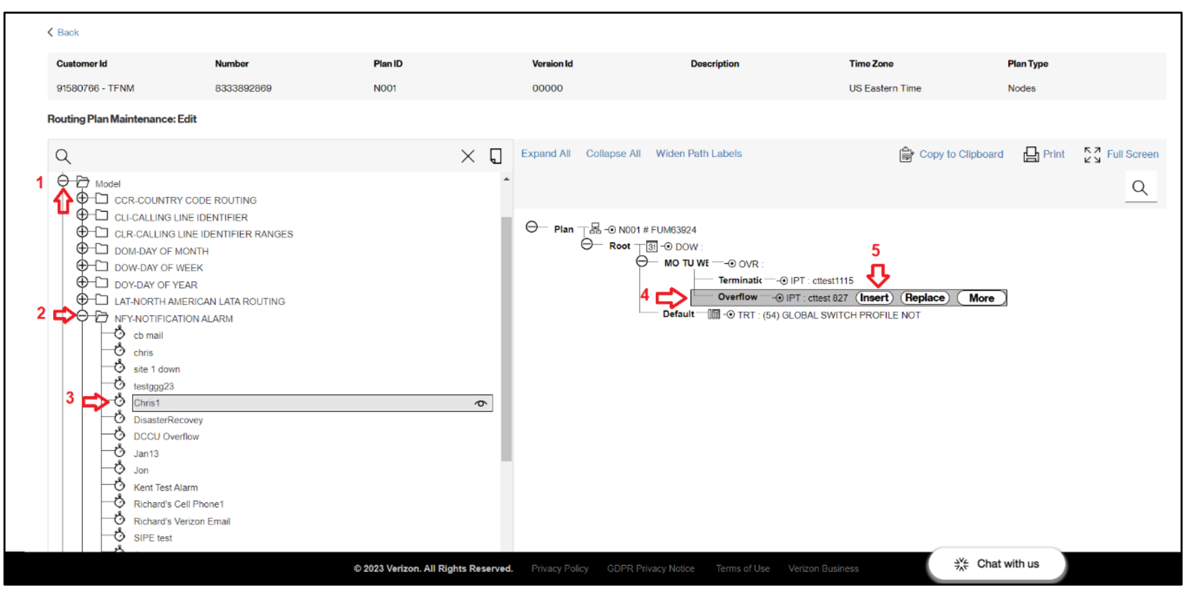
Using an Alarm

1. Navigate to the **Number Inventory** main page.

2. Locate the routing plan you wish to insert a notification node into. Click the **Edit** button to initiate the creation of a new order which will accomplish your change requests.



3. The system will route you to the **Routing Plan Maintenance: Edit** screen.



To insert the notification into your routing plan, first (1) click to expand the Model folder in the left-side node type panel. Then, (2) click to expand the **NFY-NOTIFICATION ALARM** folder, which will display your previously defined alarms. Click (3) to highlight the alarm you want to insert. Then (4), click the node on the right-side routing tree which you want to insert the alarm above (i.e.: the notification will be inserted immediately preceding the node you select). Lastly, (5) click the **Insert** button.

4. Click the Submit button to submit the order. Proceed until the order is complete.