Last Updated: February 26, 2024

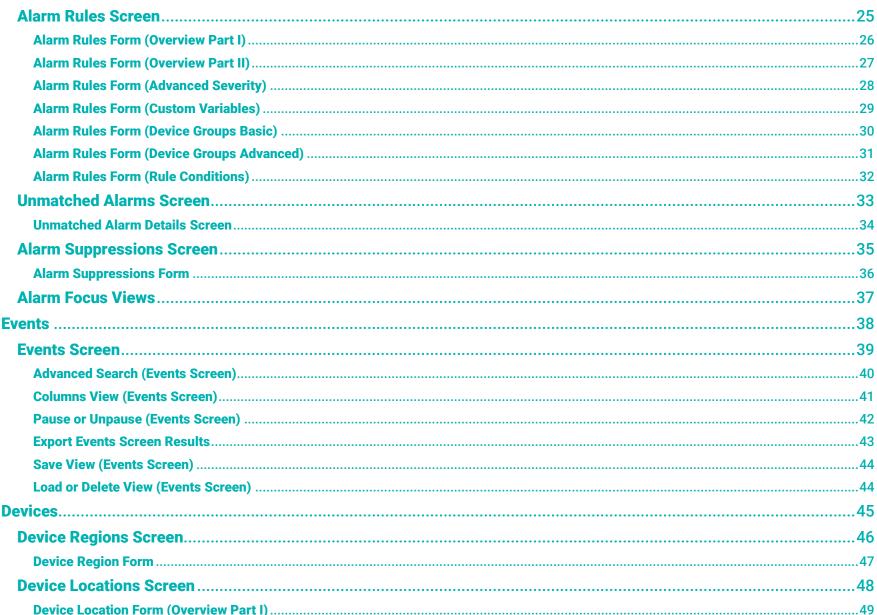
Nex-Tech CLOUD

Table of Contents



About the Nex-Tech NOC Cloud	5
Initial Training for NOC Cloud	5
Important Notes within this User Guide	5
General Tips for Using and Administering NOC Cloud	5
Dashboard	6
Dashboard and Navigation Menu	7
Navigation Submenus	8
Account	9
Initial Account Setup	10
Two Factor Authentication (2FA) Setup (Part I)	11
Two Factor Authentication (2FA) Setup (Part II)	12
Two Factor Authentication (2FA) Setup (Part III)	
Account Settings Form	
Alarms	
Alarms Screen	
Wall View (Alarms Screen)	
Advanced Search (Alarms Screen)	18
Columns View (Alarms Screen)	19
Pause or Unpause (Alarms Screen)	20
Export Alarms Screen Results	
Save View (Alarms Screen)	
Load or Delete View (Alarms Screen)	
Alarm Details Screen (Overview Part I)	
Alarm Details Screen (Overview Part II)	24

Last Updated:	February	26,	2024
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About the Nex-Tech NOC Cloud

NOC Cloud is a highly configurable, comprehensive Network Management System (NMS). It allows organizations of any size to dynamically track and resolve issues that occur on their network. In today's rapidly advancing technological society, NOC Cloud enables companies to keep pace with and effectively manage their networks.

NOC Cloud is a web-based platform that supports all major browsers and can run on any operating system with web-browsing capabilities. It offers sophisticated analysis, visualization, and reporting of network information in real-time, allowing teams to promptly prioritize and respond to any issues that occur.

NOC Cloud increases overall effectiveness in network monitoring through responsive dynamic reporting, automated assignment and routing processes, easy configuration tools, trend analysis, detection of network anomalies, and quality assurance.

Initial Training for NOC Cloud

NOC Cloud application purchases include up to four hours of training by Nex-Tech via Microsoft Teams video meeting sessions. If your organization uses another video meeting platform, such as Zoom, Webex, or Google Meet, or you are not familiar with Microsoft Teams, Nex-Tech recommends downloading Teams prior to the trainings, to ensure the best experience. If you have additional questions, please contact your team's NOC Cloud Administrator.

Important Notes within this User Guide

IMPORTANT: All red text is an important note regarding the material.

General Tips for Using and Administering NOC Cloud

Below are also a few things you may find helpful while using NOC Cloud:

- To access the NOC Cloud platform, navigate to: https://noccloud.nex-tech.com/ and login.
- Nex-Tech recommends using the latest version of **Google Chrome** for the best web browser experience.
- Fields that must be filled in are marked with an asterisk "*" in NOC Cloud. Users will not be able to submit any form until these fields contain valid values.



Dashboard



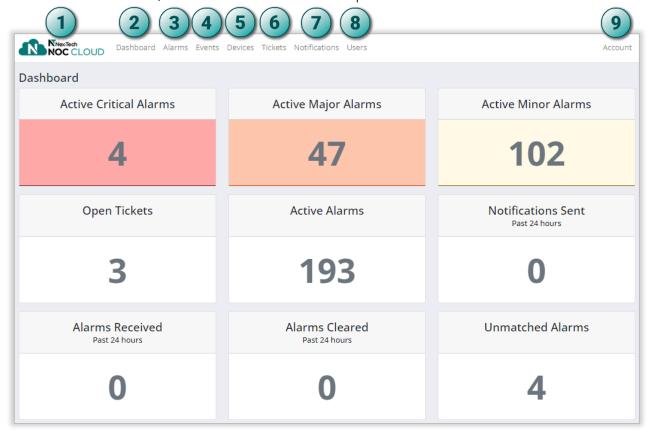
Category Topics

- Dashboard and Navigation Menu
- Navigation Submenus



Dashboard and Navigation Menu

The home screen of NOC Cloud is the dashboard, which provides a snapshot of the latest information on alarms, tickets and notifications as pictured here.





Buttons with a light teal outline are links.

- Now Tech
- Clicking the logo or dashboard from any screen navigates back to the dashboard.
- Alarms

 Click the alarms button to view a **Submenu** of additional options.
- Click the events button to view the **Events**
- Devices

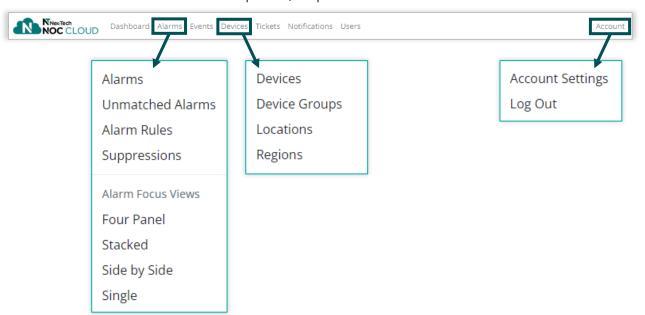
 Click the devices button to view a
 Submenu of additional options.
- Click the tickets button to view the **Tickets**Screen.
- 7 Notifications
 Click the notifications button to view the Notification Rules Screen.
- Click the users button to view the **Users**Screen. ADMIN VIEW ONLY
- Click the account button to view a **Submenu** of additional options.

NOC CLOUD

Navigation Submenus



From the dashboard, or any other screen in NOC Cloud, several options in the navigation menu contain submenus with additional options, as pictured below.



Submenus with a light teal outline are links.

The Alarm Rules option in the Alarms submenu is available in **ADMIN VIEW ONLY**



Account



- Initial Account Setup
- Two Factor Authentication (Part I)
- Two Factor Authentication (Part II)
- Two Factor Authentication (Part III)
- Account Settings Form

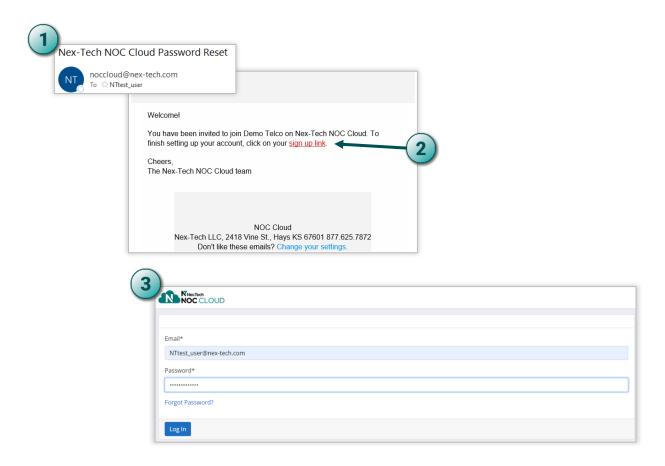




Initial Account Setup



These steps explain how to login and setup your account in NOC Cloud when using it for the first time. If additional assistance needed to access your account, refer to the **Troubleshooting Section**.



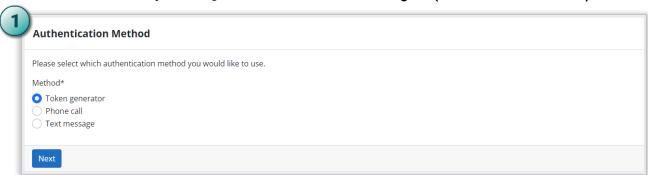
- 1 INVITATION EMAIL will be sent from: noccloud@nex-tech.com.
- 2 CLICK SIGN UP AND CREATE PASSWORD which should be 8-12 characters long, containing numbers, upper case, lower case, and special characters. **Two Factor Authentication (2FA)** setup is also recommended for NOC Cloud.
- 3 LOGIN TO NOC CLOUD by navigating to: https://noccloud.nex-tech.com/

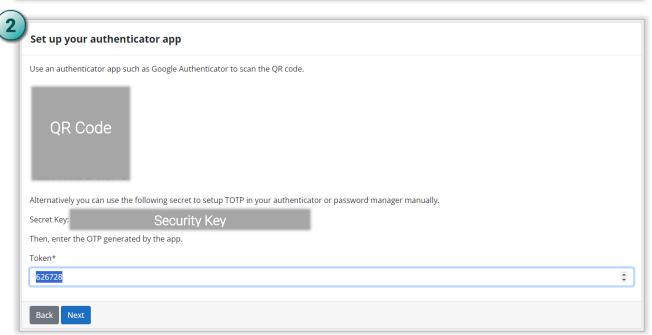
Google Chrome is recommended.



Two Factor Authentication (2FA) Setup (Part I)

Locate this feature by clicking Account > Account Settings > (click Configure Two Factor Authentication).







- 1 CHOSE AUTHENTICATION METHOD
 Token generator is typically the best option
 if your company uses an app such as **Duo**or **Google Authenticator** for single-sign on
 and/or 2FA security. Text and Phone call
 options are also available.
- 2 SCAN QR CODE/ENTER SECURITY KEY TO SETUP AUTHENTICATOR APP

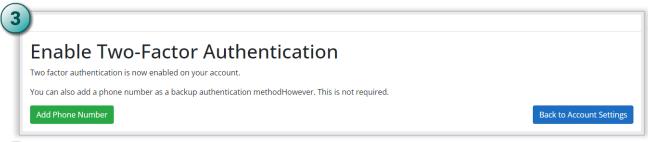
The token generator option takes you to a screen where you can scan a QR code on your mobile device (QR code scanning options are typically available in whichever authenticator app you are using). Scanning the QR code will complete the 2FA setup process.

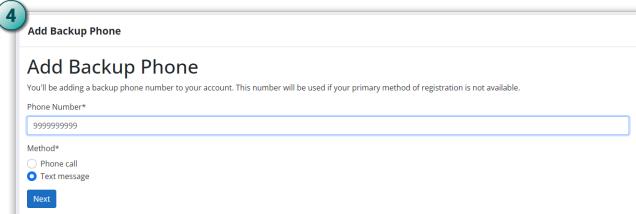
You can also manually enter a security key into your authenticator app if a QR code setup option is not available.

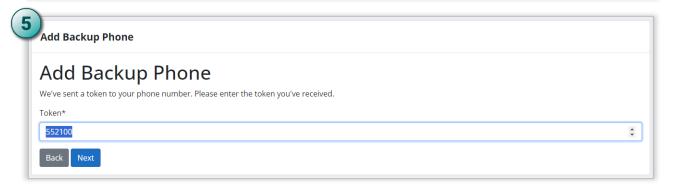


Two Factor Authentication (2FA) Setup (Part II)

Locate this feature by clicking Account > Account Settings > (click Configure Two Factor Authentication).







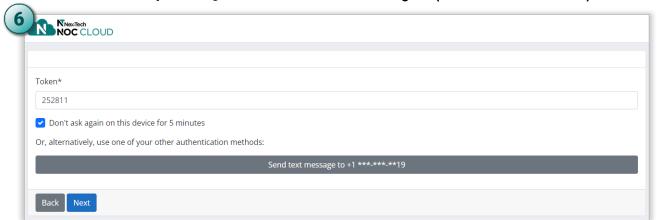


- 3 FINISH 2FA SETUP OR ADD ALTERNATIVE AUTHENTICATION METHOD
 Clicking the green Add Phone Number button allows you to add an alternative authentication method.
- 4 ENTER BACKUP PHONE NUMBER
 The number entered will be used in the event that the authenticator app is unavailable to 2FA login to NOC Cloud.
- 5 ENTER CODE TO VERIFY PHONE NUMBER
 A verification number will be provided on
 your mobile device, which will be the value
 you enter in the Token field to complete
 setup.



Two Factor Authentication (2FA) Setup (Part III)

Locate this feature by clicking Account > Account Settings > (click Configure Two Factor Authentication).



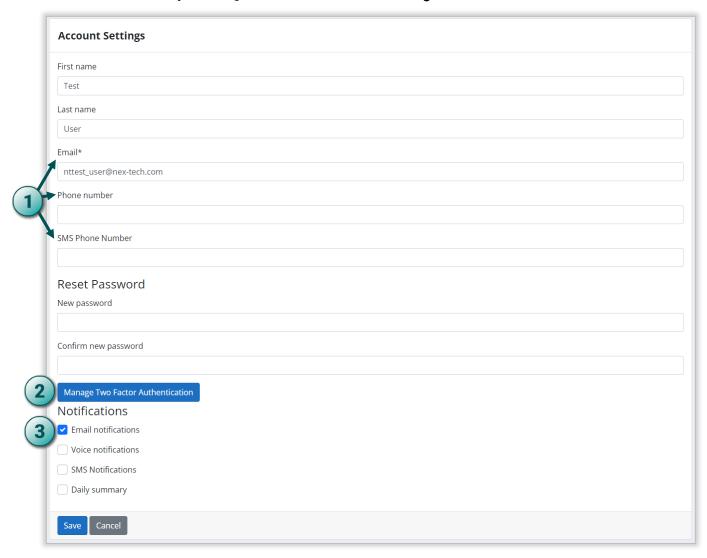


6 2FA WILL BE REQUIRED AT LOGIN
If a backup phone number was configured,
this can also be used to verify at login for
NOC Cloud.



Account Settings Form

Locate this screen by clicking Account > Account Settings.





- 1 EMAIL, PHONE NUMBER, AND SMS PHONE NUMBER each determine how the user will receive email, voice, and text notifications from NOC Cloud, based on the **Notification Rules** that have been setup. Email is the only required field.
- Manage Two Factor Authentication

Click to modify Two Factor Authentication (2FA) settings for the user account.

Configure Two Factor Authentication

The 2FA button will display this way if Two Factor Authentication has not yet been setup by the user.

3 CHECKBOXES enable (checked) or disable (unchecked) options for the notification methods the user will receive from NOC Cloud, based on **Notification Rules**.

NOC CLOUD

Alarms



- Alarms Screen
 - Wall View
 - Advanced Search
 - Columns View
 - Pause or Unpause
 - Export
 - Save View
 - Load or Delete View
 - Alarm Details Screen (Overview Part I)
 - Alarm Details Screen (Overview Part II)

- Alarms Rules Screen
 - Alarm Rules Form (Overview Part I)
 - Alarm Rules Form (Overview Part II)
 - Alarm Rules Form (Advanced Severity)
 - Alarm Rules Form (Custom Variables)
 - Alarm Rules Form (Device Groups Basic)
 - Alarm Rules Form (Device Groups Advanced)
 - Alarm Rules Form (Rule Conditions)



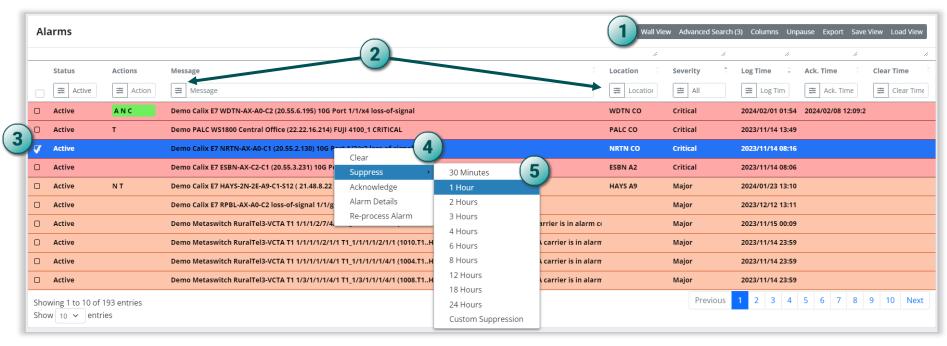
- Unmatched Alarms Screen
 - Unmatched Alarm Details Screen
- Alarm Suppressions Screen
 - Alarm Suppressions Form
- Alarm Focus Views



Alarms Screen



Locate this screen by clicking Alarms > Alarms.



- Wall View Advanced Search (3) Columns Pause Export Save View Load View
 - This gray controls menu contains multiple options for working within the alarms screen.

Click these buttons to view the methods available for filtering the corresponding column based on the values entered in the adjacent field.

3

Click the checkboxes to select multiple alarms at the same time, which is useful for certain tasks in the Alarms Screen.

Clear
Suppress
Acknowledge
Alarm Details

Right-clicking any alarm will display a submenu with available alarm actions

Re-process Alarm

30 Minutes
1 Hour
2 Hours
3 Hours
4 Hours
6 Hours
8 Hours
12 Hours
18 Hours
24 Hours
Custom Suppression

Hovering over the suppress option in the alarm submenu will reveal an additional menu where the duration of a suppression can be chosen from preset values or further customized.

Page 16 of 74

Return to Alarms Menu

Return to Table of Contents

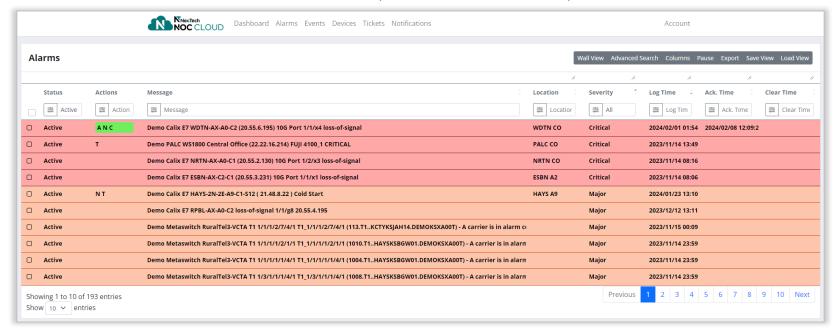


Wall View (Alarms Screen)



Locate this view by clicking Alarms > Alarms > Wall View (Controls Menu). This view optimizes the Alarms Screen for display on overhead/wall-mounted monitors.

Alarms Screen (Standard NOC Cloud View)



Alarms Screen (Wall View)

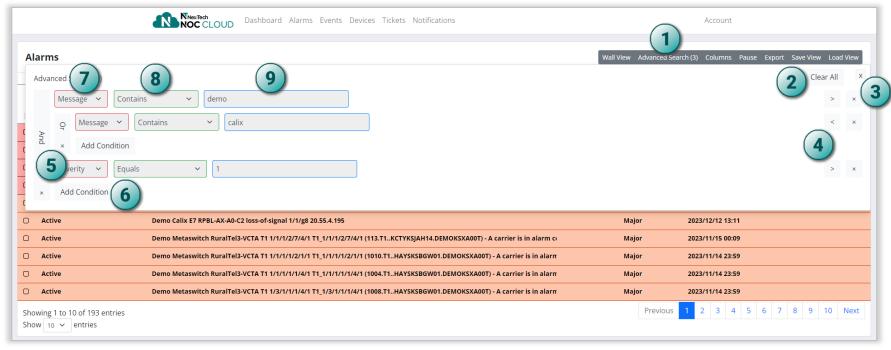
Status	Actions	Message	Location	Severity	Log Time	Ack. Time	Clear Time
Active	ANC	Demo Calix E7 WDTN-AX-A0-C2 (20.55.6.195) 10G Port 1/1/x4 loss-of-signal	WDTN CO	Critical	2024/02/01 (01: 2024/02/08 12	2:0!
Active	Т	Demo PALC WS1800 Central Office (22.22.16.214) FUJI 4100_1 CRITICAL	PALC CO	Critical	2023/11/14 1	13:	
Active		Demo Calix E7 NRTN-AX-A0-C1 (20.55.2.130) 10G Port 1/2/x3 loss-of-signal	NRTN CO	Critical	2023/11/14 (08:	
Active		Demo Calix E7 ESBN-AX-C2-C1 (20.55.3.231) 10G Port 1/1/x1 loss-of-signal	ESBN A2	Critical	2023/11/14 (08:	
Active	NT	Demo Calix E7 HAYS-2N-2E-A9-C1-S12 (21.48.8.22) Cold Start	HAYS A9	Major	2024/01/23 1	13:	
Active		Demo Calix E7 RPBL-AX-A0-C2 loss-of-signal 1/1/g8 20.55.4.195		Major	2023/12/12 1	13:	
Active		Demo Metaswitch RuralTel3-VCTA T1 1/1/1/2/7/4/1 T1_1/1/1/2/7/4/1 (113.T1KCTYKSJAH14.DEMOKSXA00T) - A carrier is in alarm condition Alarm Indication Signal.		Major	2023/11/15	00:	
Active		Demo Metaswitch RuralTel3-VCTA T1 1/1/1/1/2/1/1 T1_1/1/1/1/1/1/1/1 (1010.T1HAYSKSBGW01.DEMOKSXA00T) - A carrier is in alarm condition Alarm Indication Signal.		Major	2023/11/14 2	23:	
Active		Demo Metaswitch RuralTel3-VCTA T1 1/1/1/1/1/4/1 T1_1/1/1/1/1/4/1 (1004.T1HAYSKSBGW01.DEMOKSXA00T) - A carrier is in alarm condition Alarm Indication Signal.		Major	2023/11/14 2	23:	
Active		Demo Metaswitch RuralTel3-VCTA T1 1/3/1/1/1/4/1 T1_1/3/1/1/1/4/1 (1008.T1HAYSKSBGW01.DEMOKSXA00T) - A carrier is in alarm condition Alarm Indication Signal.		Major	2023/11/14 2	23:	



Advanced Search (Alarms Screen)



Locate this feature by clicking Alarms > Alarms > Advanced Search (Controls Menu).



Advanced Search (3)

Click to open the Advanced Search area. The number in parentheses indicates how many filters are currently being applied to the view.

2 Clear All

This button removes all search rows.

3 ×

X next to Clear All closes the search area. X to right of a search row clears that row.

4 > <

> to right of a search row indents that row.

< to right of search row reverses indent.

5 And or

Click these side buttons to toggle AND/OR relationships between search rows.

6 Add Condition

Click this button to add another row to the advanced search.

7 Data v

Determines the column affected by the other field entries within the same row,

8 Condition~

Affects how the entry in Value Field will search the column targeted by the Data Field in the same row.

9 Value >

Dropdown or text field accepts specific values to search the target column in the row's Data Field based on the Condition Field option.

Page 18 of 74

Return to Alarms Menu

Return to Table of Contents



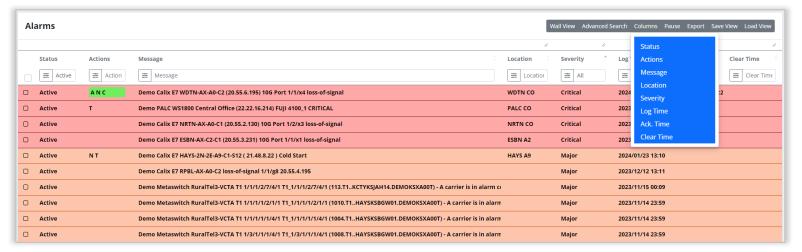


Columns View (Alarms Screen)

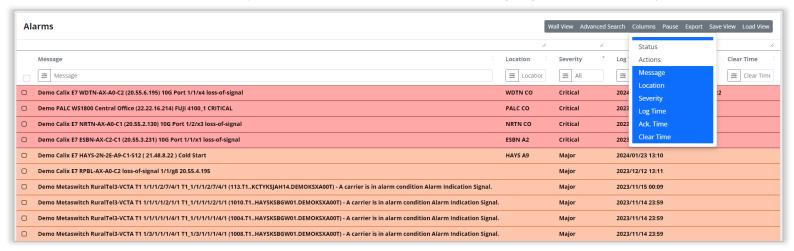


Locate this view by clicking **Alarms > Columns (Controls Menu)**. This view shows or hides columns in the **Alarms Screen** based on whether they are highlighted blue (displayed), or not (hidden).

Alarms Screen (All Columns Highlighted and Displayed)



Alarms Screen (Status and Actions Columns Not Highlighted and Hidden)





Page 19 of 74

Return to Alarms Menu

Return to Table of Contents

Pause or Unpause (Alarms Screen)



Locate this feature by clicking Alarms > Alarms > Pause/Unpause (Controls Menu). Clicking Pause prevents the screen from updating (NOC Cloud also automatically pauses the screen in some scenarios). If paused, the Controls Menu shows the Unpause option. A message may appear in the upper right of the screen when this option is toggled.

Alarms Screen (PAUSED: Controls Menu shows Unpause option, updates stop, and Updates Paused message will always appear)



Alarms Screen (UNPAUSED: Controls Menu shows Pause option, updates resume, and Refreshing message may also appear)



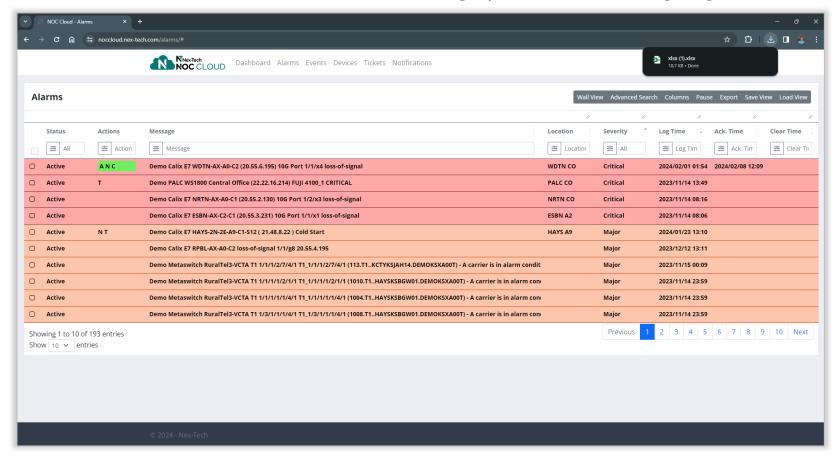


Export Alarms Screen Results



Locate this feature by clicking **Alarms > Alarms > Export (Controls Menu)**. Click Export to download the results in the **Alarms Screen** as a Microsoft Excel Spreadsheet File (.xslx). By default, this saves to the browser's downloads folder.

The screenshot below shows Alarms Screen results being exported/downloaded using Google Chrome

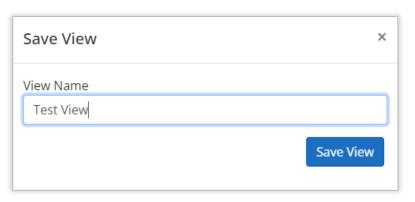




Save View (Alarms Screen)



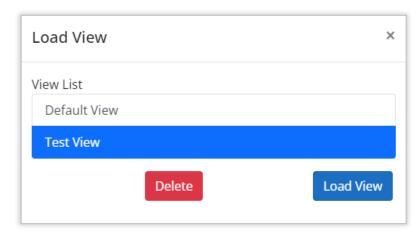
Locate this view by clicking Alarms > Alarms > Save View (Controls Menu).



The pop-up that appears after clicking Save View in the **Alarms Screen** allows you to add a unique name for the custom view you have created.

Load or Delete View (Alarms Screen)

Locate this view by clicking Alarms > Alarms > Load View (Controls Menu).



The pop-up that appears after clicking Load View in the **Alarms Screen** allows you to select the Default View or one of the custom views that have been created. You can also delete custom views by selecting them and clicking delete.



Alarm Details Screen (Overview Part I)

letails).



Locate this screen by clicking Alarms > (click the Message column of any alarm to see details).



Clear Alarm

Click to change the status of the alarm to "cleared."

2 Acknowledge

Click to acknowledge the alarm. This adds an "A" for that alarm in the Actions column of the **Alarms Screen**.

3 Pause Notifications

Click to toggle between pausing or unpausing notifications for the alarm.

4 Notification Log

Click this button to reveal a pop-up screen displaying the entire **Notification Log** for the alarm.

5 Re-process alarm

Click to re-process the alarm. This sends the trap information (**see step 9 on next page**) through NOC Cloud to check for rule matches again.

Create New Rule

Click to **Add New Rule** based on alarm details. **Alarm Rules** are viewable only to NOC Cloud Administrators.

7 MATCHED RULE indicates whether a rule has already been matched with the alarm. If a match has occurred, the matched rule will appear as a clickable link with blue text as pictured here. Alarm Rules are viewable only to NOC Cloud Administrators.



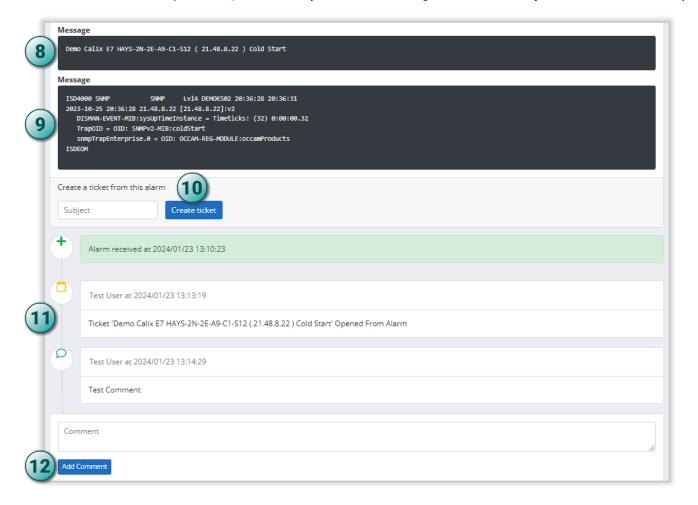
Page 23 of 74

Return to Alarms Menu

Return to Table of Contents

Alarm Details Screen (Overview Part II)

Locate this screen by clicking Alarms > (click the Message column of any alarm to see details).





- MESSAGE (1st Section) displays the text in Message column of the alarm as it is shown in the main Alarms Screen of NOC Cloud.
- **9** MESSAGE (2nd Section) displays the SNMP trap information for the alarm.
- Create ticket

Clicking this button opens the form to **add a new ticket** based on the alarm details.

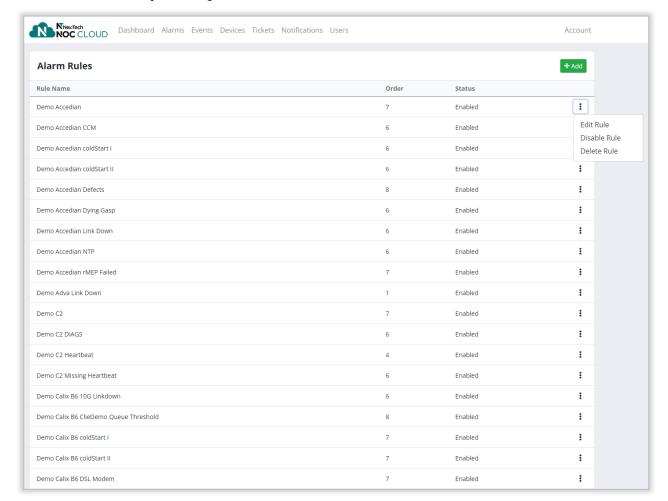
- **11** ALARM ACTIVITY section displays all actions and comments associated with the alarm.
- 12 Add Comment

Click to add a comment to the Activity section of the unmatched alarm after entering a value in the Comment field. After clicking Add Comment, the comment cannot be edited.



Alarm Rules Screen

Locate this screen by clicking Alarms > Alarm Rules. ADMIN VIEW ONLY

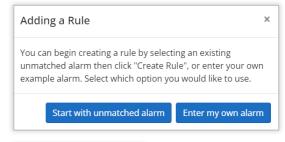


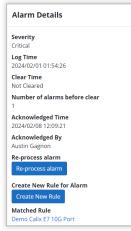


Alarm rules in NOC Cloud are configured based on the information matched to corresponding SNMP traps. This is in the Message field of each alarm.

THREE WAYS TO ADD ALARM RULES

Clicking the +Add button at the top of the Alarm Rules screen reveals a pop-up with two options to create a new rule with the **Alarm Rules Form**.





The third way to create an alarm is by clicking any alarm within the **Main**

Alarms Screen.

This displays the Alarm Details Screen, which has the option to add a new rule based on the alarm by clicking the Create Rule button. This will also open the **Alarm Rules Form**.

:

Click the three vertical dots (ellipsis) to the right of an existing rule to view a submenu with options to edit, disable or enable, and delete that rule.

NexTech NOC

Page 25 of 74

Return to Alarms Menu

Return to Table of Contents

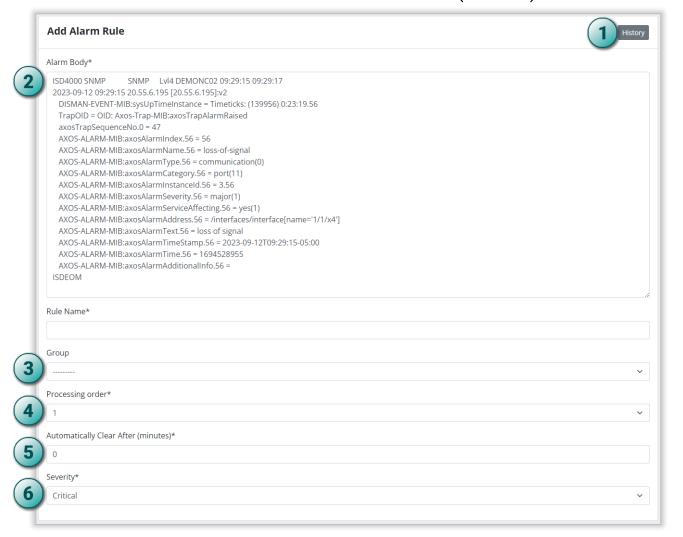


Alarm Rules Form (Overview Part I)



ALARMS SCREEN: To locate click Alarms > Alarms (click an alarm) > Alarm Details (click Create New Rules).

ALARM RULES SCREEN: To locate click Alarms > Alarm Rules (click + Add). ADMIN VIEW ONLY



History

Click to view time-stamped history of all configuration changes made to a rule.

- **2** ALARM BODY contains the SNMP Trap (can be a set or clear trap). The first line must be from/include the ISD4000. The last line must say ISDEOM.
- **Q GROUP** feature not available at this time.
- PROCESSING ORDER values range from 1-10. Traps will be matched to rules starting with the process order of 1 (highest priority). Utilize the process order for traps that meet the criteria for multiple rules. A best practice is to start rules at a processing order of 5 and adjust additional rules as needed.
- 5 AUTOMATICALLY CLEAR AFTER (Minutes) is utilized to automatically clear the alarm after the specified number of minutes (For traps that do not already have a clear). Leave this option at 0 for traps that include a set and clear. Minutes must be whole numbers in this field.
- **SEVERITY** should be based on trap info. Selecting Advanced Severity in this field will display the Advanced Severity section pictured in **Alarm Rules Form (Part II)**.

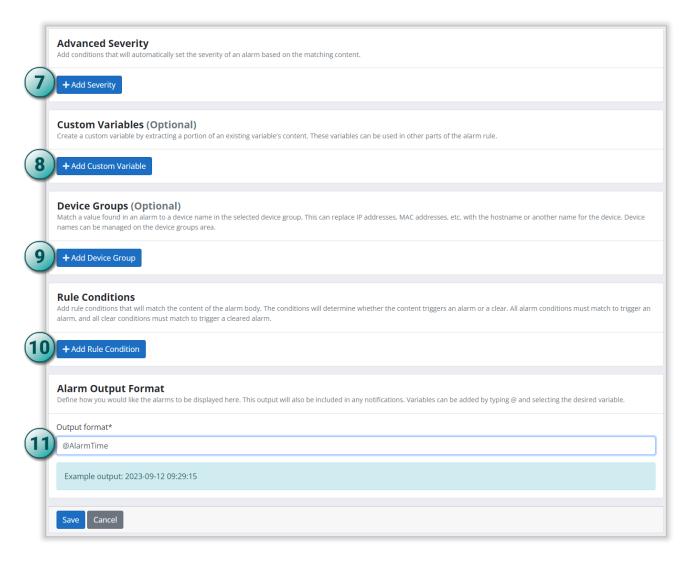


Alarm Rules Form (Overview Part II)



ALARMS SCREEN: To locate click Alarms > Alarms (click an alarm) > Alarm Details (click Create New Pole).

ALARM RULES SCREEN: To locate click Alarms > Alarm Rules (click + Add). ADMIN VIEW ONLY



Buttons with a light teal outline are links.

7 + Add Severity

This button displays more parameters for matching severity within the SNMP trap information. It only appears if Advanced Severity is selected from the Severity field in this form. Click the +Add Severity button in this guide jumps to more information about this section of the form.

+ Add Custom Variable

This button allows for the creation of custom variable configurations which can be referenced in other parts of the form. Click the +Add Custom Variable button in this guide jumps to more information about this section of the form.

+ Add Device Group

This button shows additional options for matching device group parameters in the rule. Click the +Add Device Group button in this guide jumps to more information about this section of the form.

+ Add Rule Condition

This button displays additional options for adding specific conditions to the rule. Click the +Add Rule Condition button in this guide jumps to more information about this section of the form.

11 ALARM OUTPUT FORMAT previews what the alarm message will look like. The @ symbol displays additional options.

Page 27 of 74

Return to Alarms Menu

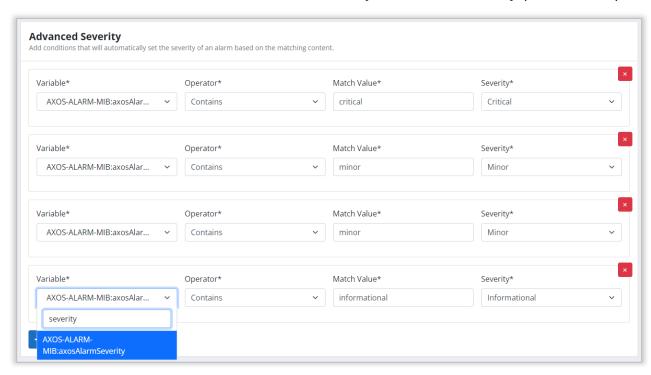
Return to Table of Contents



Alarm Rules Form (Advanced Severity)



ALARM RULES FORM: To locate click Alarm Severity > Advanced Severity (click +Add Severity). ADMIN VIEW ONLY



ADVANCED SEVERITY allows you to build one rule for traps with consistent structure but requiring varying severity.

There is no limit to the number of severities you can add.

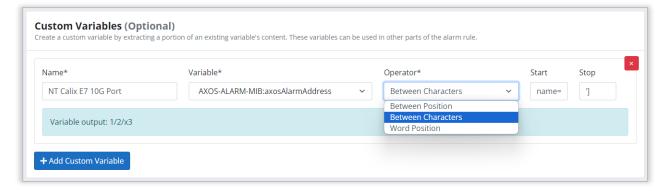
Select the variable associated with a verbiage required for specific severity (this can be selected using the search field if desired, as pictured).

A variable can be the Alarm Body SNMP trap line number or the Alarm Body trap variable preceding the equal sign.



Alarm Rules Form (Custom Variables)

ALARM RULES FORM: To locate (click +Add Custom Variable). ADMIN VIEW ONLY



BETWEEN POSITION OPERATOR

- If using an Alarm Body trap variable preceding the equal sign, Start will be the position number of the first character after the equal sign (count the characters on the line to determine their position number).
- If using an Alarm Body SNMP trap line number, the Start position number will be 1.
- You can use Start only, Stop only, or both Start and Stop fields as needed.

BETWEEN CHARACTERS OPERATOR

- If using an Alarm Body trap variable preceding the equal sign, Start will be the first character after the equal sign.
- If using an Alarm Body SNMP trap line number, the Start will be the first character on that line.
- Enter values in Start only, Stop only, or both Start and Stop fields as needed.

WORD POSITION OPERATOR

- If using an Alarm Body trap variable preceding the equal sign, Start will be the first word after the equal sign.
- If using an Alarm Body SNMP trap line number, the Start will be the first word on that line.
- Enter values in Start only, Stop only, or both Start and Stop fields as needed.



CUSTOM VARIABLES are created by extracting a portion of an existing variable's content. These variables can then be used in other parts of the alarm rule.

Use names that identify the custom variable's function.

Select the variable associated with verbiage required for specific severity.

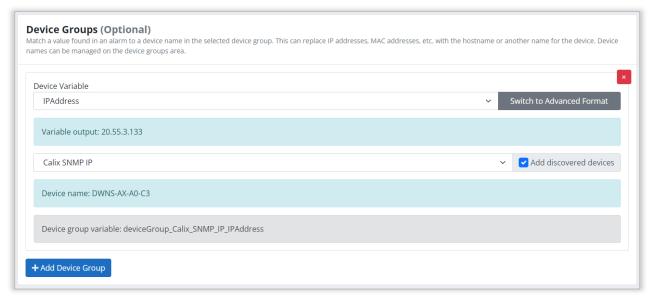
A variable can be the Alarm Body SNMP trap line number or the Alarm Body trap variable preceding the equal sign.

After selecting the best Operator, indicate the Start and Stop parameters, which will capture all characters/words in between (based on the Operator selected).



Alarm Rules Form (Device Groups Basic)

ALARM RULES FORM: To locate (click +Add Device Group). ADMIN VIEW ONLY



BASIC SELECTION

- Device Variable utilizes output in the Alarm Body SNMP trap line number or Alarm Body trap variable following the equal sign and associates it to the selected Device Group. The variable equals the Match Alarm Content of the selected Device Group. Variable output displays the selected Device Variable output.
- Check Add discovered devices to automatically learn device group entries.
- Add discovered devices adds the device variable output automatically to the matched allowed content in the selected device group. The entry name will need to be updated manually.
- If Add discovered devices is not checked, the selected variable must match content in the device group, or the trap will not be matched by the rule.
- Device name displays the name associated with the Match Alarm Content in the selected Device Group.
- Device group variable displays the device group name selectable in the Alarm Output Format.



Buttons with a light teal outline are links.

DEVICE GROUPS match a value found in an alarm to a device name in the selected device group. This can replace IP addresses, MAC addresses, etc. with the hostname or another name for the device (Device names can be managed in the **Devices Screen** of NOC Cloud).

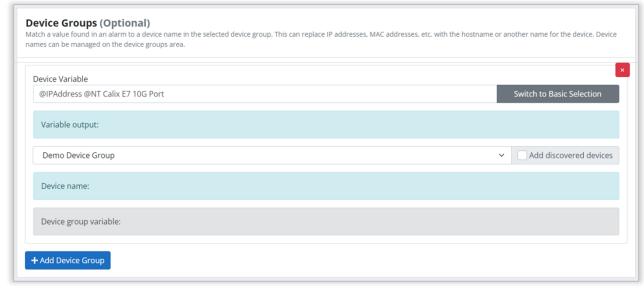
Switch to Advanced Format

Click this button in the guide to jump to the information covering the Advanced Format mode of the Device Groups section within the **Alarm Rules Form**. In NOC Cloud, clicking this button will toggle between Basic Selection and Advanced Format modes in the Device Groups section of that form.



Alarm Rules Form (Device Groups Advanced)

ALARM RULES FORM: To locate (click +Add Device Group). ADMIN VIEW ONLY



ADVANCED FORMAT

- Device Variable can use one or more of the following variables: Alarm Body SNMP trap line number, Alarm Body trap variables following the equal sign or any configured custom variable.
- Enter the @ symbol to display variable options.
- Variable output displays the selected Device Variable output.
- Select appropriate device group name from drop down (below the Variable output).
- Check Add discovered devices to automatically device group entries.
- Add discovered devices adds the device variable output automatically to the matched allowed content in the selected device group. The entry name will need to be updated manually.
- If Add discovered devices is not checked, the selected variable must match content in the device group, or the trap will not be matched by the rule.
- Device name displays the name associated with the Match Alarm Content in the selected Device Group.
- Device group variable displays the device group name selectable in the Alarm Output Format.



Buttons with a light teal outline are links.

DEVICE GROUPS match a value found in an alarm to a device name in the selected device group. This can replace IP addresses, MAC addresses, etc. with the hostname or another name for the device (Device names can be managed in the **Devices Screen** of NOC Cloud).

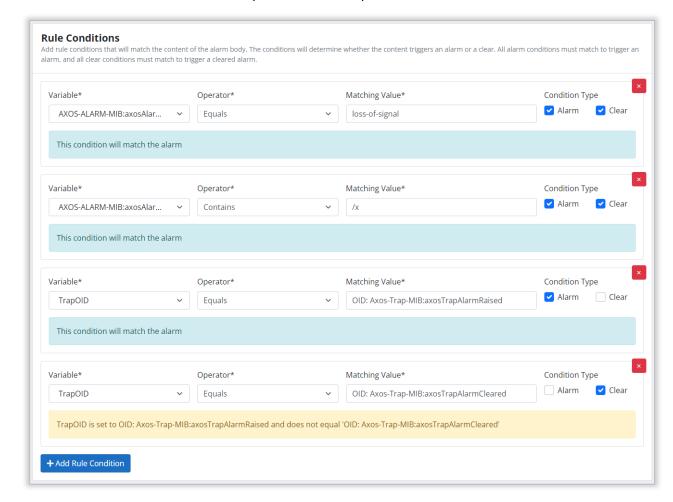
Switch to Basic Selection

Click this button in the guide to jump to the information covering the Basic Selection mode of the Device Groups section within the **Alarm Rules Form**. In NOC Cloud, clicking this button will toggle between Basic Selection and Advanced Format modes in the Device Groups section of that form.



Alarm Rules Form (Rule Conditions)

ALARM RULES FORM: To locate (click +Add Rule Condition). ADMIN VIEW ONLY





RULE CONDITIONS match content in the **Alarm Body**. Conditions affect whether content triggers an alarm or a clear.

All conditions must match to trigger an alarm, and all clear conditions must match to trigger a cleared alarm.

At least one rule condition is required. Multiple conditions can also be set for the same rule as pictured here.

Variable field options can be Alarm Body SNMP trap line numbers, or the trap variable preceding the equal sign. Choose an Operator and a Matching Value. You can check one or both Condition Types based on what is being matched.

Traps without a clear need Alarm checked as Condition Type. Set **Automatic Clear After (minutes)** as desired.

Do not select both alarm and clear for rules with only one rule condition as they will only clear and never alarm.

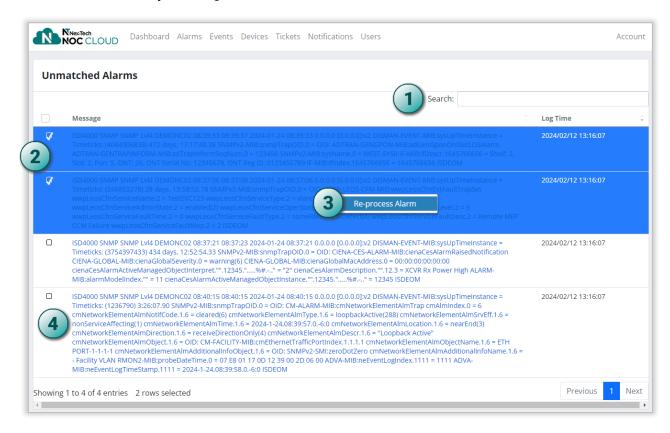
Traps with a related set and clear need at least one condition with Alarm checked as the Condition Type, and a separate condition where Clear is checked.

Additional rule conditions may contain variables available on both set and clear traps, allowing both Alarm and Clear Condition Types to be check marked.



Unmatched Alarms Screen

Locate this screen by clicking Alarms > Unmatched Alarms.





- 1 Use the Search field to narrow results if a large quantity of unmatched alarms displays on this screen.
- Click the checkboxes to select multiple unmatched alarms at the same time, which is useful for tasks like re-processing.
- Re-process Alarm

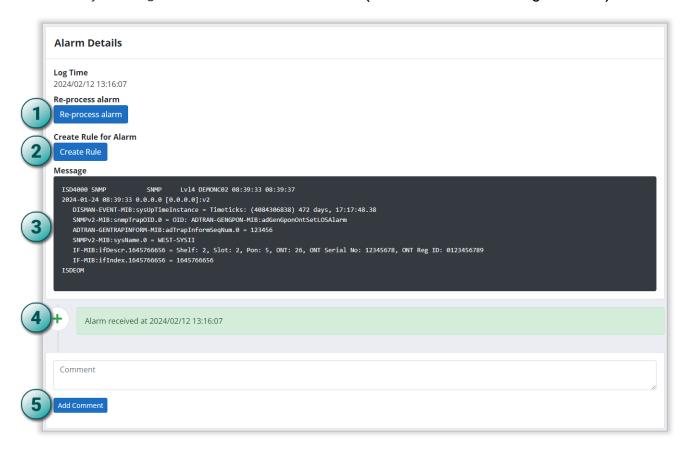
 Click to re-process all check marked items.
- 4 Click the blue text in the Message column of an unmatched alarm to view the **Details**Screen for that alarm.



Unmatched Alarm Details Screen



Locate by clicking Alarms > Unmatched Alarms (click blue text in Message column).



- Re-process alarm

 Click to reprocess the unmatched alarm.
- 2 Create Rule

Click to open the Alarm Rule Form, which will automatically populate the Alarm Body with the SNMP trap information in the Message field of the unmatched alarm.

- **3** MESSAGE displays the SNMP trap information for the unmatched alarm.
- **4** ALARM ACTIVITY section displays all actions and comments associated with the unmatched alarm.
- 5 Add Comment

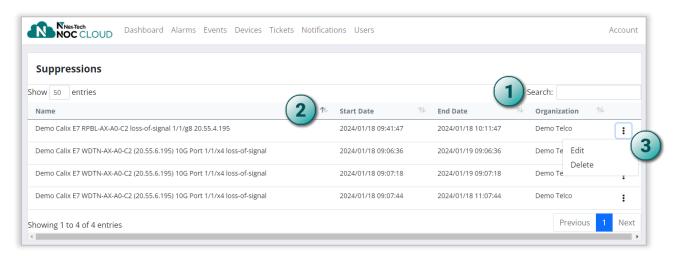
Click to add a comment to the Activity section of the unmatched alarm after entering a value in the Comment field.

After clicking Add Comment, the comment cannot be edited.



Alarm Suppressions Screen

Locate this screen by clicking Alarms > Suppressions.





- 1 Use the Search field to narrow results if a large quantity of suppressions displays on this screen.
- Click the arrows to change the sort order of the suppression results in this screen.
- Click the three dots (ellipsis) to reveal a submenu with options to Edit or Delete the existing suppression.

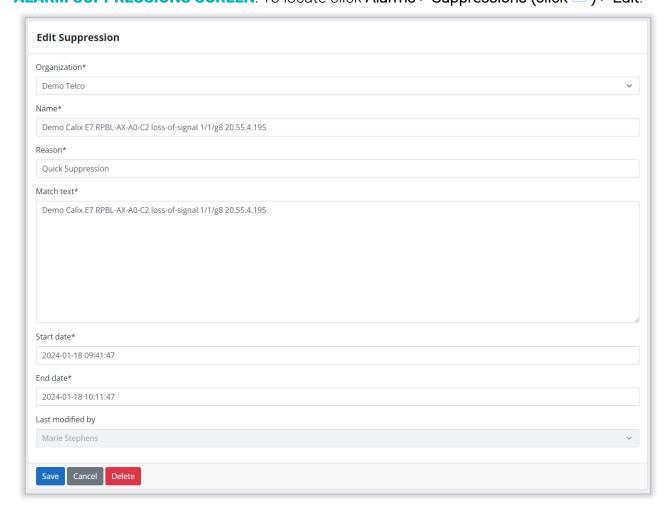


Alarm Suppressions Form



ALARMS SCREEN: To locate click Alarms > (right-click any alarm) Suppress > Custom Suppression).

ALARM SUPPRESSIONS SCREEN: To locate click Alarms > Suppressions (click 1) > Edit.



Currently, the option to add suppression to an existing alarm is only available by right-clicking an alarm, then selecting Suppress > Custom Suppression from the **Alarms Screen**. After a suppression is added, you can Edit or Delete it from the **Suppressions Screen**.

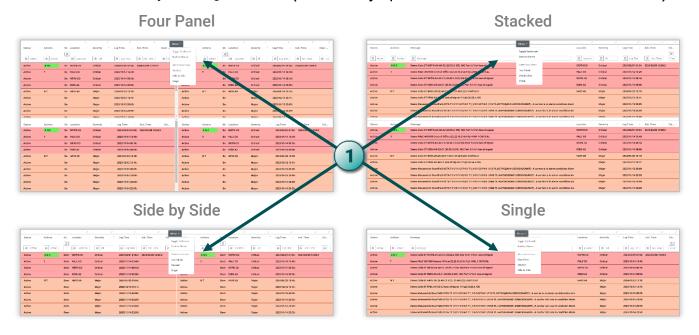
Suppression allows users to "hide" an alarm for a specified amount of time. Alarm Suppression is useful in situations such as new turn-ups where alarms may occur but do not require action. Alarm notifications will not be sent for suppressed alarms.



Alarm Focus Views

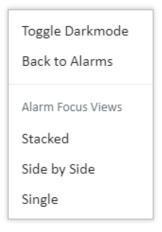


Locate these views by clicking Alarms > (choose any option under Alarm Focus Views section).



Menu

Clicking the Menu button (above) that appears at the top of each Alarm Focus View, reveals the submenu pictured below. This submenu contains options to toggle between light and dark mode, go back to the main **Alarms Screen**, or switch to one of the other Alarm Focus Views available in NOC Cloud.





Events



- Events Screen
 - Advanced Search
 - Columns View
 - Export
 - Save View
 - Load or Delete View

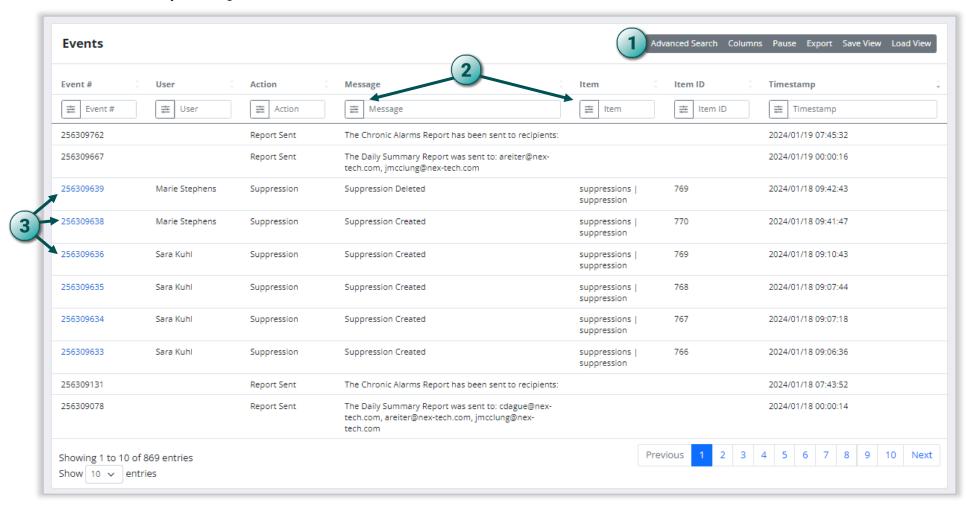




Events Screen



Locate this screen by clicking Events.



- Advanced Search Columns Pause Export Save View Load View
 This gray controls menu contains multiple options for working within the Events Screen.
- Click to view methods for filtering a column based on values entered.
- Numbers in blue text in the Event # column link to the Ticket Details Screen for that event.

Page 39 of 74

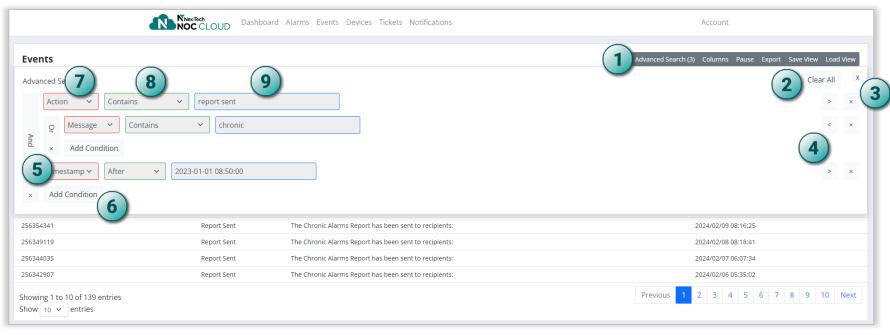
Return to Events Menu



Advanced Search (Events Screen)



Locate this feature by clicking Events > Advanced Search (Controls Menu).



Advanced Search (3)

Click to open the Advanced Search area. The number in parentheses indicates how many filters are currently being applied to the view.

2 Clear All

This button removes all search rows.

3 ×

X next to Clear All closes the search area. X to right of a search row clears that row.

4 > <

> to right of a search row indents that row. < to right of search row reverses indent.

Click these side buttons to toggle AND/OR relationships between search rows.

6 Add Condition

Click this button to add another row to the advanced search.

Data 🗸

Determines the column affected by the other field entries within the same row.

8 Condition >

Affects how the entry in Value Field will search the column targeted by the Data Field in the same row.

9 Value >

Dropdown or text field accepts specific values to search the target column in the row's Data Field based on the Condition Field option.

Page 40 of 74

Return to Events Menu

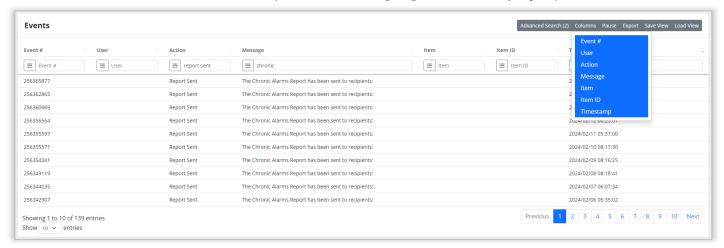


Columns View (Events Screen)

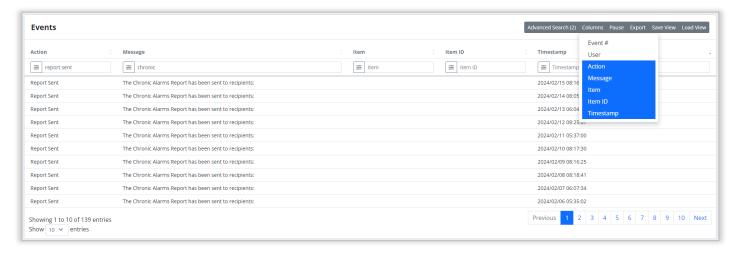


Locate this view by clicking **Events > Columns (Controls Menu)**. This view shows or hides columns in the **Events Screen** based on whether they are highlighted blue (displayed), or not (hidden).

Events Screen (All Columns Highlighted and Displayed)



Events Screen (Event # and User Columns Not Highlighted and Hidden)





Page 41 of 74

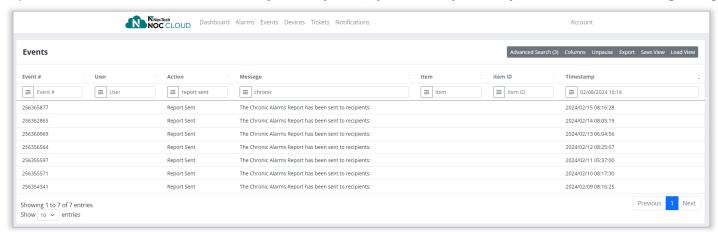
Return to Events Menu

Pause or Unpause (Events Screen)

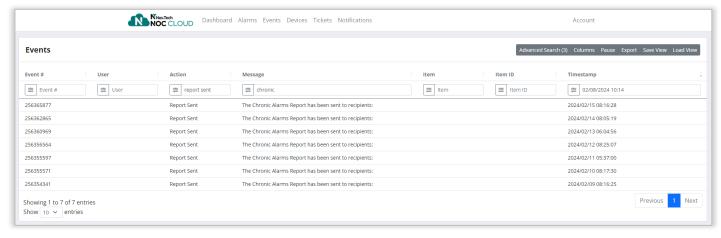


Locate this feature by clicking Events > Pause/Unpause (Controls Menu). Clicking Pause prevents the Events Screen from updating (NOC Cloud also automatically pauses the screen in some scenarios). If paused, the Controls Menu shows the Unpause option. A message may appear in the upper right of the screen when this option is toggled.

Events Screen (PAUSED: Controls Menu shows Unpause option, updates stop, and Updates Paused message may also appear)



Events Screen (UNPAUSED: Controls Menu shows Pause option, updates resume, and Refreshing message may also appear)



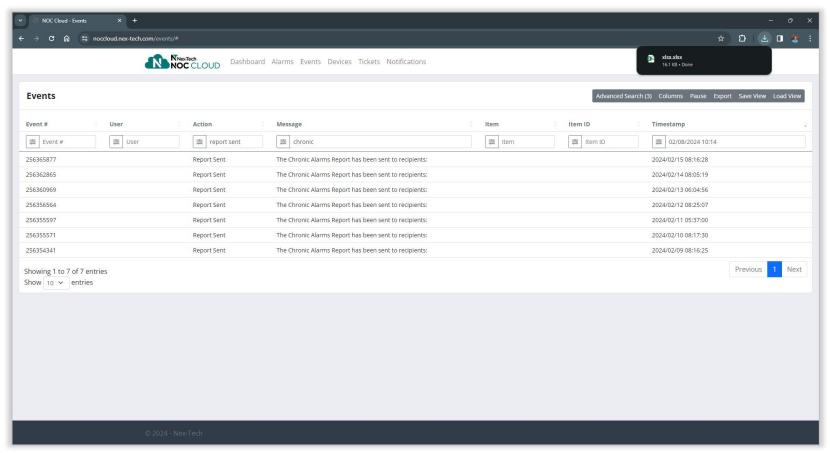


Export Events Screen Results



Locate this feature by clicking Events > Export (Controls Menu). Click Export to download the results in the Events Screen as a Microsoft Excel Spreadsheet File (.xslx). By default, this saves to the browser's downloads folder.

The screenshot below shows Events Screen results being exported/downloaded using Google Chrome

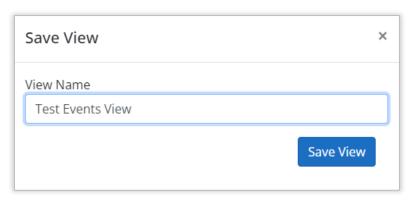




Save View (Events Screen)



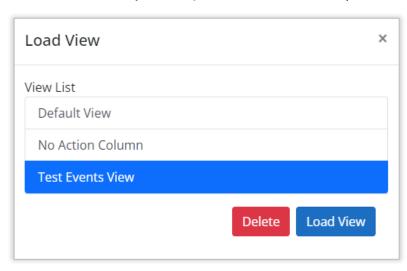
Locate this view by clicking Events > Save View (Controls Menu).



The pop-up that appears after clicking Save View in the **Events Screen** allows you to add a unique name for the custom view you have created.

Load or Delete View (Events Screen)

Locate this view by clicking Events > Load View (Controls Menu).



The pop-up that appears after clicking Load View in the **Events Screen** allows you to select the Default View or one of the custom views that have been created. You can also delete custom views by selecting them and clicking delete.



Devices



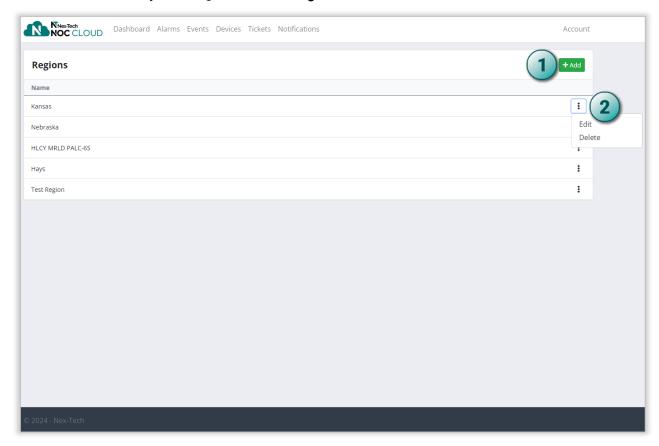
- Device Regions Screen
 - Device Region Form
- Device Locations Screen
 - Device Location Form (Overview Part I)
 - Device Location Form (Overview Part II)
- Device Groups Screen
 - Device Group Form
- Devices Screen
 - Device Form





Device Regions Screen

Locate this screen by clicking **Devices > Regions**.





Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.

+ Add

Clicking this green button opens the **Add Region** form in NOC Cloud.

2 :

Click the three vertical dots (ellipsis) to the right of an existing region to view a submenu with options to Edit or Delete that region.



Device Region Form

Locate this screen by clicking Devices > Regions > (click •) or (click) > Edit.





Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.

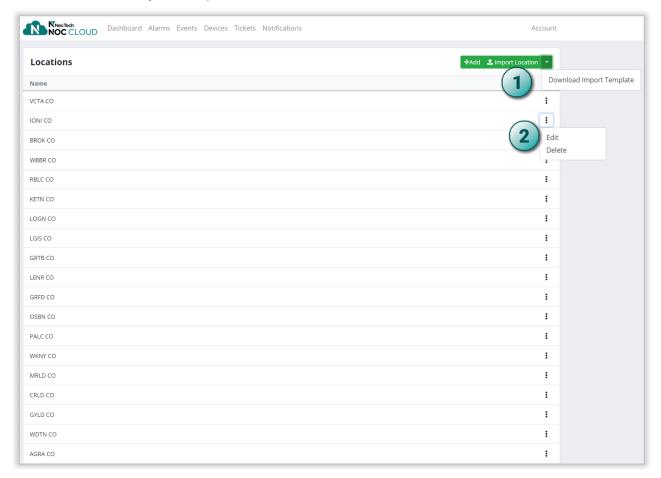
One or multiple locations can be selected for a region in NOC Cloud.





Device Locations Screen

Locate this screen by clicking **Devices > Locations**.



Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.

+Add **1** Import Location ▼

The green "button" pictured above is actually three buttons that perform different functions within the Locations Screen:

Excel file configured as the Location Template.

Add 1 Import Location

Shows a submenu with the form to download a Microsoft Excel file configured as a template for adding location information.

2 :

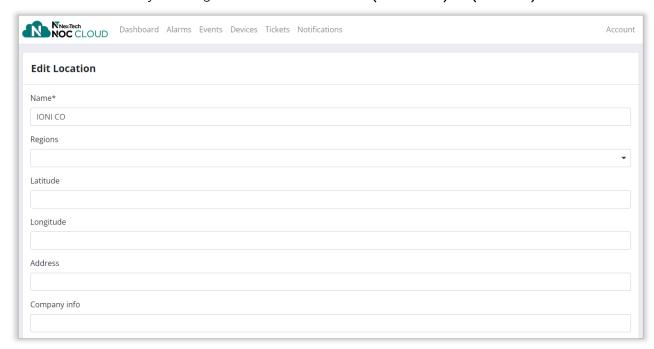
Click the three vertical dots (ellipsis) to the right of an existing location to view a submenu with options to Edit or Delete that location.





Device Location Form (Overview Part I)

Locate this screen by clicking Devices > Locations > (click •) or (click) > Edit.



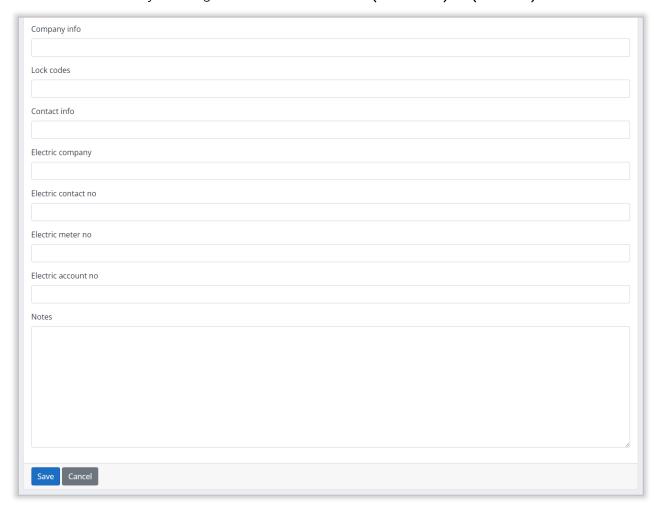
Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.





Device Location Form (Overview Part II)

Locate this screen by clicking Devices > Locations > (click •) or (click) > Edit.

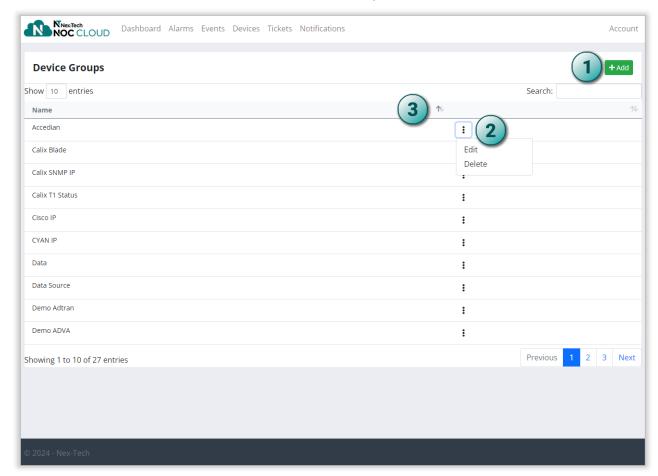


Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.



Device Groups Screen

Locate this screen by clicking **Devices > Device Groups**.





Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.

+ Add

Clicking this green button opens the **Add Device Group** form in NOC Cloud.

Click the three ve

Click the three vertical dots (ellipsis) to the right of an existing device group to view a submenu with options to Edit or Delete that device group.

3 №

Click the arrows to change the sort order of the device group results in this screen.



Device Group Form

Locate this screen by clicking Devices > Device Groups > (click •) or (click) > Edit.

Add Device Group			
Name*			
Test Device Group			
Save Cancel			

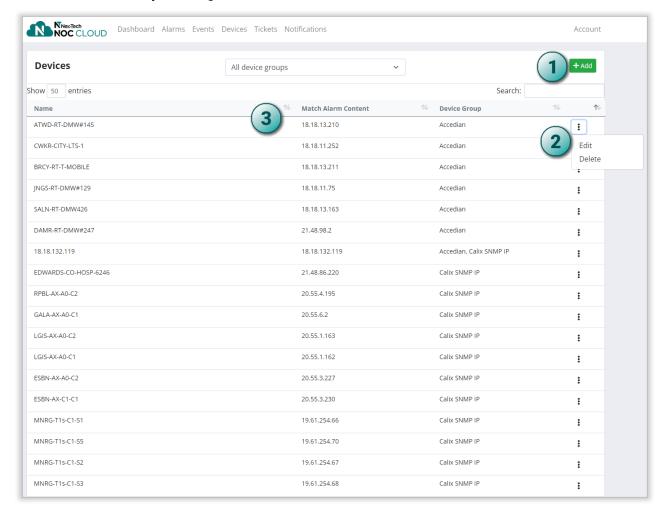


Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.



Devices Screen

Locate this screen by clicking **Devices > Devices**.





Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.

+ Add

Clicking this green button opens the **Add Device** form in NOC Cloud.

2 :

Click the three vertical dots (ellipsis) to the right of an existing device to view a submenu with options to Edit or Delete that device.

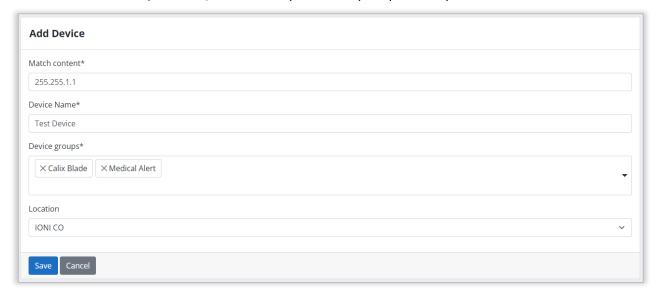
3 №

Click the arrows to change the sort order of the device results in this screen.



Device Form

Locate this screen by clicking Devices > (click •) or (click) > Edit.





Order is important when adding Regions, Locations, Device Groups and/or Devices in NOC Cloud. Add new Regions, then Locations, and then Device Groups, initially to avoid having to back track and do this in the middle of adding a new device or setting up a notification rule.

When adding or editing devices in NOC Cloud, one or multiple device groups can be selected, but only one device location.



Tickets



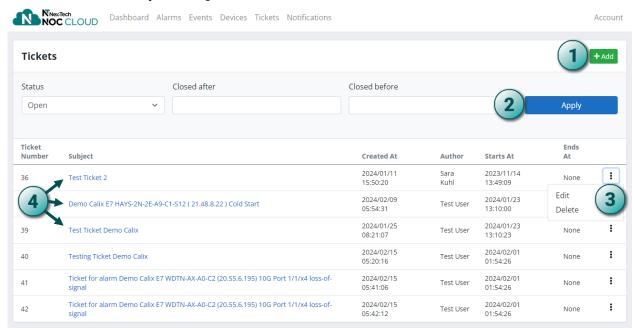
- Tickets Screen
 - Ticket Form (Overview Part I)
 - Ticket Form (Overview Part II)
- Ticket Details Screen
 - View Ticket Notification Log





Tickets Screen

Locate this screen by clicking Tickets.



+ Add

Clicking this green button opens the **Add Ticket** form in NOC Cloud.

2 Apply

Click the Apply button to filter results in the Tickets Screen, after selecting a Status, Closed After, and Closed before date.

3 :

Click the three vertical dots (ellipsis) to the right of an existing ticket to view a submenu with options to Edit or Delete that ticket.

4 Click the blue text in the Subject column of a ticket to view the **Details Screen** for that ticket.



Ticket Form (Overview Part I)



TICKETS SCREEN: To locate click Tickets > (click +Add) or (click 1) > Edit.

TICKET DETAILS SCREEN: To locate click Tickets > (click blue text in Subject column) > (click to blue text in Subject colum



- 1 STATUS defaults to "Open" when adding a new ticket. Other options, such as Closed, Waiting for Parts, or Waiting for Vendor can also be used if appropriate.
- 2 SUBJECT becomes the blue text in the Subject column of the Tickets Screen, that opens the Details Screen for that ticket when clicked.
- **3** STARTS and ENDS fields may be used for outage start and stop times or maintenance start and stop times.
- **4** ASSIGNED USERS allows for one or more NOC Cloud users to be assigned to a ticket. Assigned users will receive notifications when the ticket status changes or comments are added.

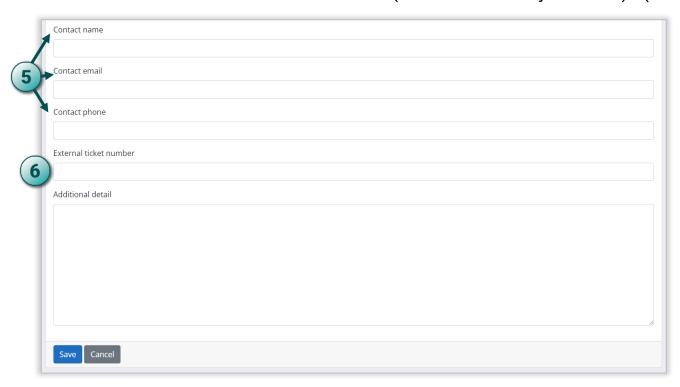


Ticket Form (Overview Part II)



TICKETS SCREEN: To locate click Tickets > (click +Add) or (click 1) > Edit.

TICKET DETAILS SCREEN: To locate click Tickets > (click blue text in Subject column) > (click to blue text in Subject colum

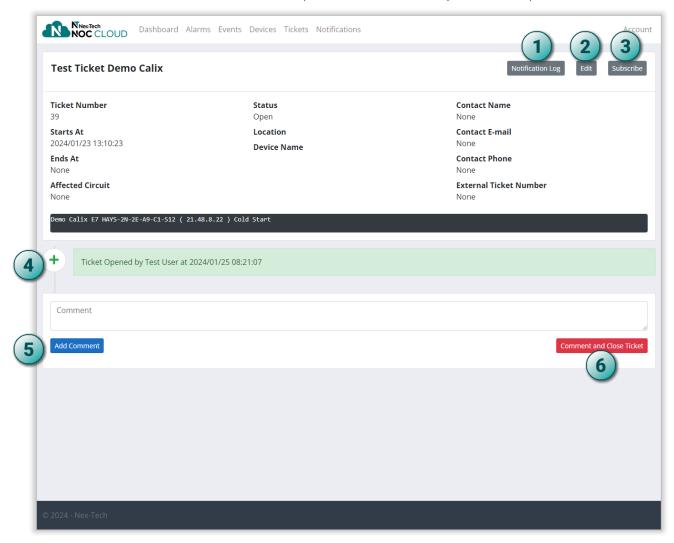


- CONTACT NAME, CONTACT EMAIL, and CONTACT PHONE are for reference only, and DO NOT assign other NOC Cloud users to receive notifications regarding alarms related to the ticket. Alarm notifications must be configured within Notification Rule forms.
- 6 EXTERNAL TICKET NUMBER is also for reference only, and not connected to other functions within NOC Cloud.



Ticket Details Screen

Locate this screen by clicking Tickets > (click blue text in Subject column).



Buttons with a light teal outline are links

Notification Log

Clicking this button opens the **Notification Log** in NOC Cloud.

2 Edit

Click to open the **Edit Ticket** form and modify the existing ticket details.

3 Subscribe

This will toggle subscribing/unsubscribing to notifications regarding alarm activity related to the ticket.

- **4** TICKET ACTIVITY section displays all actions and comments for the ticket.
- Add Comment

Click to add a comment to the Activity section of the ticket after entering a value in the Comment field. After clicking Add Comment, the comment cannot be edited.

Comment and Close Ticket

Click to add any content in the Comment field into the Ticket Activity section, and simultaneously close the ticket in NOC Cloud. Only available if the ticket is open.

Comment and Open Ticket

Click to add any content in the Comment field into the Ticket Activity section, and simultaneously open the ticket in NOC Cloud. Only available if the ticket is closed.

NOC CLOUD

View Ticket Notification Log



Locate this log by clicking Tickets > (click blue text in Subject column) > (click Notification Log).



The pop-up that appears after clicking the Notification Log button in the **Ticket Details Screen** indicates which NOC Cloud users are currently receiving alarm notifications associated with the ticket, and the methods by which the notifications are sent. Information will only display in this pop-up due to activity related to an alarm.



Notifications



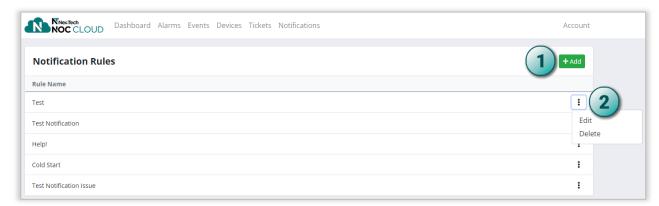
Category Topics

- Notification Rules Screen
 - Notification Rule Form
 - Notification Rule Escalation Steps



Notification Rules Screen

Locate this screen by clicking Notifications.





+ Add

Clicking this green button opens the **Notification Rule** form in NOC Cloud.

2:

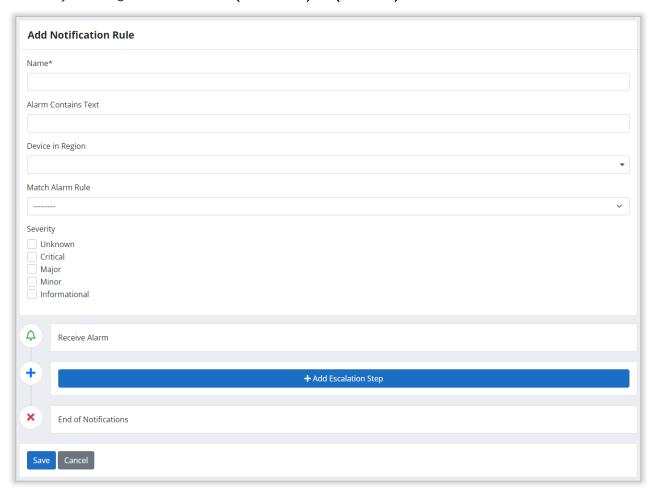
Click the three vertical dots (ellipsis) to the right of an existing notification rule to view a submenu with options to Edit or Delete that rule.



Notification Rule Form



Locate by clicking Notifications > (click +Add) or (click) > Edit.



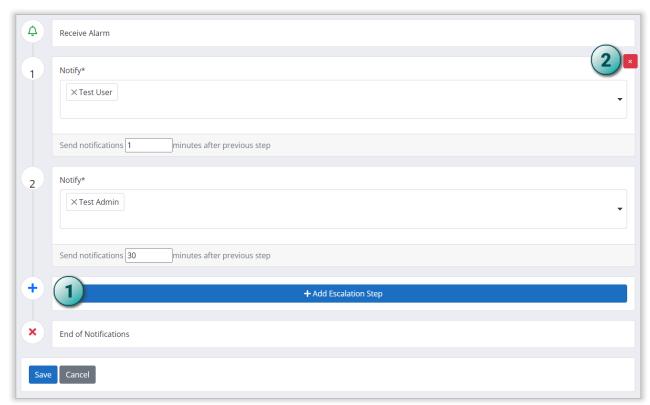
ALARM CONTAINS TEXT, DEVICE IN REGION, OR MATCH ALARM RULE fields are not required, but a value is needed in at least one of their fields to create a functional notification rule.

MATCH ALARM RULE provides the option for the notification rule to be matched to an existing alarm rule, by selecting one from the dropdown menu.



Notification Rule Escalation Steps

Locate by clicking Notifications > (click + Add) or (click) > Edit.





- + Add Escalation Step

 Click to add a new Notify section to the

 Notification Rule form in NOC Cloud.
 - Click the red X button to Delete an escalation step. This button is only available when editing the **Notification Rule** form. If an escalation step is added, but then needs to be removed, the form must be saved, and then re-opened by selecting Edit from the submenu for the corresponding rule in the **Notification Rules Screen**

After selecting one or more users to notify, and setting the number of minutes for NOC Cloud to wait after the previous escalation step before sending the new notification, additional escalation steps may be added by continuing to click the +Add Escalation Step button. There is no limit to how many steps can be added.

Changing the notifications methods for a user can be done in the individual's **Account Settings** or by a NOC Cloud Administrator in the **Users Screen**.



Users

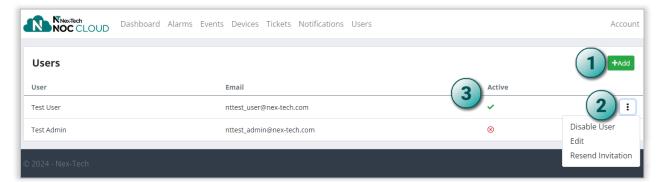


- Users Screen
 - User Account Form



Users Screen

Locate this screen by clicking Users. ADMIN VIEW ONLY





+ Add

Clicking this green button opens a blank **User Account** form in NOC Cloud.

2 :

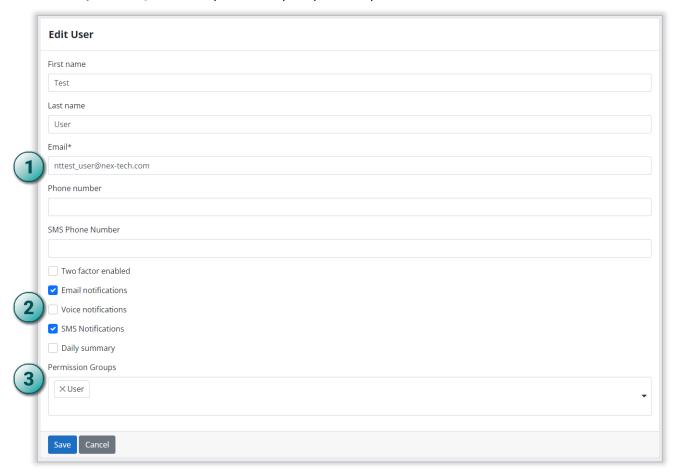
Click the three vertical dots (ellipsis) to the right of an existing user to view submenu options to Enable or Disable that user, Edit their **Account Settings**, or resend an invitation to complete **Initial Account Setup** for NOC Cloud using the email listed for that user.

- 3 ACTIVE COLUMN
 - indicates user is currently active.
 - indicates user is currently disabled.

User Account Form



Locate by clicking Users > (click +Add) or (click) > Edit. ADMIN VIEW ONLY



The form used by NOC Cloud Administrators to view and modify existing user accounts is similar to the **Account Settings** form accessible to non-administrators. This form also provides additional options to determine the permissions of the user within NOC Cloud.

- 1 EMAIL indicates the address the user will receive email notifications, and the invite to complete **Initial Account Setup** for NOC Cloud.
- 2 CHECKBOXES enable (checked) or disable (unchecked) options like Two Factor Authentication (2FA) and alarm notification methods for the user account. Checking Daily summary sends one notification to the user every 24 hours that includes a list of all alarms, with a count of each one triggered.
- **3** PERMISSION GROUPS can include one or multiple selections, which will determine what access the user will have to various features of NOC Cloud (based on how permissions were configured with your organization).



Troubleshooting



Category Topics

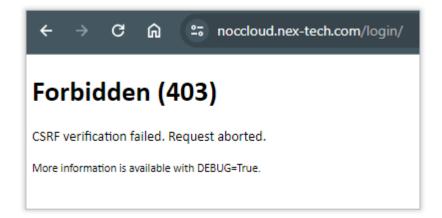
- Login Issue: Forbidden (403)
- Unmatched Alarms Issue: Server Error (500)
- Advanced Search Issue: Values Field



Login Issue: Forbidden (403) TROUBLESHOOTING



Follow these steps to troubleshoot NOC Cloud if you are unable to login, and/or get an error such as the Forbidden (403) message pictured below.



PROBLEM NOC CLOUD CANNOT AUTHENTICATE THE USER

In the case of this error, an issue has occurred where the user trying to access NOC Cloud could not be authenticated.

SOLUTIONS 1. CLEAR BROWSER CACHE

Follow the steps to clear cache in the browser you are using to access NOC Cloud. Nex-Tech recommends using the latest version of Google Chrome. Below are the websites to find support for the Chrome browser:

Download Google Chrome

https://support.google.com/chrome/answer/95346?hl=en&co=GENIE.Platform%3DDesktop

Update Latest Version of Google Chrome

https://support.google.com/chrome/answer/95414?hl=en-GB&co=GENIE.Platform%3DDesktop&sjid=4447825371073933412-NC

Clear Cache in Google Chrome

https://support.google.com/chrome/answer/2392709?hl=en-GB&co=GENIE.Platform%3DDesktop&sjid=4447825371073933412-NC

2. RETURN TO NOC CLOUD WEB PAGE AND RETRY LOGIN

After clearing browser cache, navigate back to NOC Cloud in your browser and attempt to login again.

NOC Cloud Login Page

https://noccloud.nex-tech.com/login/

3. CONTACT NOC CLOUD ADMINISTRATOR

If you still receive this error while attempting to access NOC Cloud after trying the first solution, it is best to contact your NOC Cloud Administrator for immediate assistance before attempting additional troubleshooting.



Unmatched Alarms Issue: Server Error (500) TROUBLESHOOTING



Follow these steps to troubleshoot NOC Cloud if you get a Server Error (500) such as the one pictured below, after clicking the blue Messages link for an unmatched alarm.



PROBLEM UNMATCHED ALARM IS RESOLVED BUT NOT OUT OF QUEUE YET

This error occurs when clicking on the blue Messages link of an Unmatched Alarm that has been modified or resolved, but the NOC Cloud system has not yet removed it from the results section within the Unmatched Alarms Screen.

SOLUTIONS 1. DISREGARD THE UNMATCHED ALARM FOR 7 DAYS

Unmatched alarms that display this error typically will be automatically removed from the results section of the **Unmatched Alarms Screen** within seven days.

2. CONTACT NOC CLOUD ADMINISTRATOR

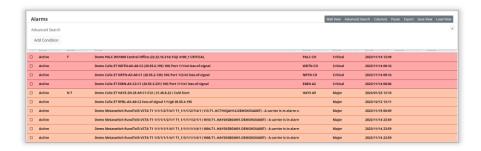
If the unmatched alarm remains in the results section of the **Unmatched Alarms Screen** longer than seven days, and clicking the blue Messages link still results in the same error, it is best to contact your NOC Cloud Administrator for assistance rather than attempting further troubleshooting.

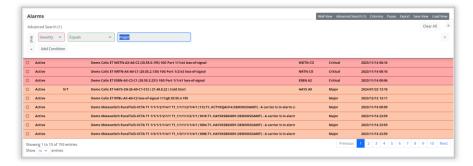


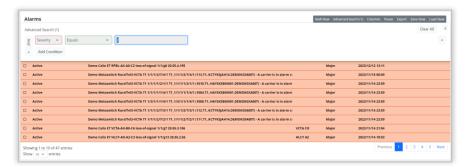
Advanced Search Issue: Values Field TROUBLESHOOTING



Follow these steps to troubleshoot NOC Cloud if you are having difficulty getting the desired results using the Advanced Search feature. This is commonly encountered when filtering by severity in the **Alarms Screen**.







PROBLEM NOC CLOUD DOES NOT RECOGNIZE VALUES IN THE VALUES FIELD

The values entered in the Values field of each advanced search row must match the values the NOC Cloud system is using to find matching results based on the selected Data and Condition options in the same row. If what is entered in the Values field of the search row is not what NOC Cloud is using to find a match, no results will be returned.

SOLUTION ENSURE THE CORRECT VALUE IS ENTERED IN THE VALUES FIELD

Some Data Options (such as Severity) require specific values in the Values field of the advanced search row. For example, typing the name "major" in this field does return all alarms with major severity, but using the number "2" in the Values Field will return only alarms with major severity.

EXAMPLE: Severity Values

DESIRED RESULT	CORRECT VALUE		
Critical	1		
Major	2		
Minor	3		
Informational	4		

Page 71 of 74

Return to Troubleshooting Menu



Resources



Category Topics

- Viewing NOC Cloud on Mobile Devices
- Resources for Print Guides



Viewing NOC Cloud on Mobile Devices

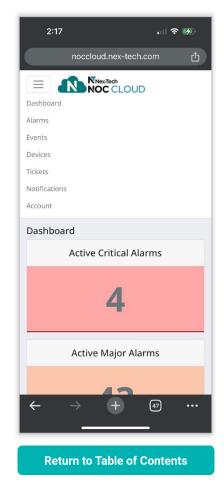
Since NOC Cloud is a web-based application, it can be accessed on mobile devices in addition to desktop and laptop computers. When viewing NOC Cloud on your mobile device, you will find that the **Dashboard Screen** is optimized for mobile viewing, with the **Navigation Menu** displaying as a is icon that will reveal the navigation options when tapped. While the Dashboard is optimized for mobile, other NOC Cloud screens (Alarms, Events, Tickets, etc.) may not display in a way that is user-friendly on a mobile device. To utilize these features, a Desktop or Laptop is recommended.



NOC Cloud Dashboard



NOC Cloud Navigation Menu



NOC Cloud Alarms Screen



Page 73 of 74

Return to Resources Menu

NOC



Resources for Print Guides

The PDF version of this guide offers many features such as hyperlinked text that cannot be accessed in the printed format. This page includes the full web address (URL) information for these resources if using a printed copy of the guide. Nex-Tech recommends using the latest version of Google Chrome, along with a Password Manager when using the NOC Cloud application. For additional questions or assistance please contact your system administrator.





Web Address (URL) for Accessing NOC Cloud by Nex-Tech https://noccloud.nex-tech.com/

Where to Get Support for NOC Cloud by Nex-Tech https://www.nex-tech.com/carrier/network-monitoring/



How to Download the Google Chrome Web Browser

https://support.google.com/chrome/answer/95346?hl=en&ref_topic=7439538&sjid=6404140718643717510-NC

How to Update to the Latest Version of Google Chrome Web Browser https://support.google.com/chrome/answer/95414?hl=en&sjid=6404140718643717510-NC



How to Download the Microsoft Edge Web Browser

https://support.microsoft.com/en-gb/microsoft-edge/download-the-new-microsoft-edge-based-on-chromium-0f4a3dd7-55df-60f5-739f-00010dba52cf

How to Update to the Latest Version of Microsoft Edge

https://support.microsoft.com/en-us/topic/microsoft-edge-update-settings-af8aaca2-1b69-4870-94fe-18822dbb7ef1



How to Download the Mozilla Firefox Web Browser

https://support.mozilla.org/en-US/kb/how-install-firefox-windows

How to Update to the Latest Version of Mozilla Firefox

https://support.mozilla.org/en-US/kb/update-firefox-latest-release

