

How to Setup Derived Controls in Your NetGuardian Platform: NetGuardian 832A G2, G4, G5

There are some instances where you should make a human confirmation before issuing a control (like discharging a halon or similar system). In many cases, however, routine controls can and should be issued automatically by your monitoring system. Generators can fail and tower lights can go dark. An automatic response from your monitoring system will correct the problem within seconds. The results will also be reported to you, so you’ll know what’s happening with your network.



Use the following techno knowledge paper to create derived controls with the Netguardian. Derived controls are a proactive approach to minimizing network downtime, allowing your NetGuardian to automatically respond to complex network threats.

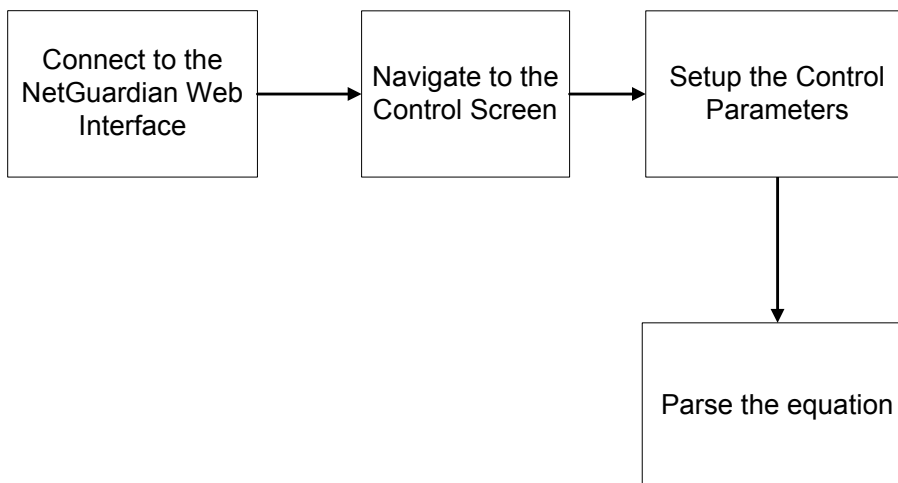
This “techno knowledge” paper can help you if:

- ❑ You want to create derived controls within your NetGuardian

Quick Reference Chart

(for more details, review the troubleshooting checklist, starting on page 2 of this guide)

START HERE



Derived Control Setup

There are several ways you can use the relay controls on the NetGuardian. DPS refers to different relay control operations in 2 different ways. This TKP will discuss how to make an "Echo alarm point to relay" or a "Derived Control". The Echo function basically looks at another alarm in the NetGuardian and toggles the relay whenever the alarm is toggled. Because we are most likely monitoring a relay input with the NetGuardian we would then "echo" that to an output relay.

- ❑ **Connect to the Netguardian Web Interface**
 - Connect to the Netguardian with your web browser by typing the Netguardian's IP address into the address bar.
 - Log on with the Netguardian password to reach the alarm summary screen



The image shows a web form titled "NetGuardian Logon". It features a red header bar with the title. Below the header, there is a "Password:" label followed by a text input field containing ten black dots. To the right of the input field is a "submit" button. At the bottom of the form, there is the DPS Telecom logo.

- ❑ **Click on the Edit > Control link**
 - The link is located in the left pane under the green Edit menu. Now you will be at Control setup menu.



Example #3: In the third relay we are using the logical AND command which means: IF base (discrete) alarm point #6, and #7, and #8, and #9, and #10 are all active at one

time, then toggle the relay. All alarms within that display need to be active in order to toggle the relay, if one clears, then the relay releases.

Example #4: Let's say that I am monitoring the temperature in a server closet and if the temperature drops below my Major Under Threshold I want to be paged every 5 minutes. We have a system alarm called Timed Tick that I can set to go into alarm and clear at a given interval (under the Timers Tab of the NGD). If I use the logical AND operation along with the Timed Tick and then wire this relay back to an un-used discrete (base) alarm point I can make this happen. You would need to wire this back into the NetGuardian because relays do not have notifications associated with them, base alarms do have this ability.

The following list shows how the Analog alarm thresholds are used as alarm points.

Analogs 1-8 use Displays 3-10 on the NetGuardian.

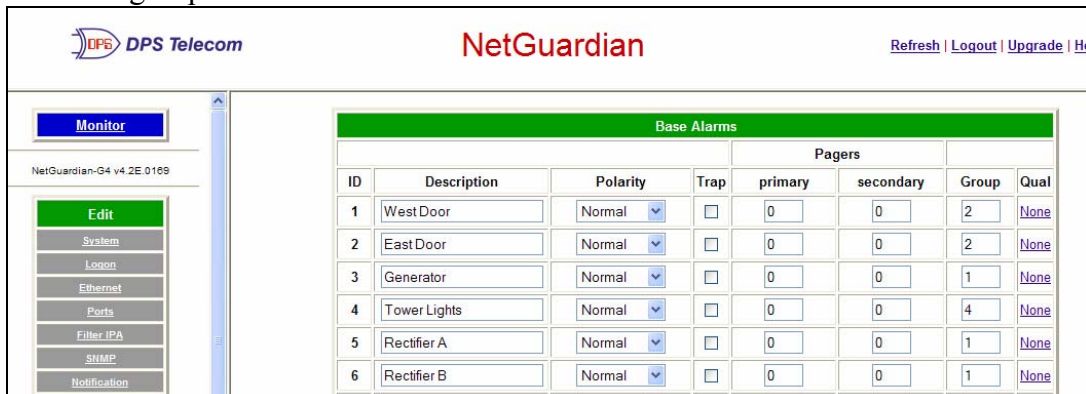
- Minor Under = Alarm Point #1**
- Minor Over = Alarm Point # 2**
- Major Under = Alarm Point # 3**
- Major Over = Alarm Point # 4**

Timed tick is a system alarm that is found on Display 11, point #17. Your logical operation when all done should look like:

_AN D3.3 D11.17

This means that the relay will toggle when analog alarm point #1, which is display 3, has a Major Under alarm and when the timed tick alarm gets triggered. You can find the Timed Tick frequency in the Timers Tab.

Example #5: One of the most common and easiest ways of using a derived alarm is to use a logical operation and a Group. In this example I have several Base Alarms using the same group. You can see in the screen shot that both rectifiers and the generator are part of the same group.



The screenshot shows the NetGuardian interface with a table titled "Base Alarms". The table has columns for ID, Description, Polarity, Trap, Pagers (primary, secondary), Group, and Qual. The data rows are as follows:

| ID | Description | Polarity | Trap | Pagers | | Group | Qual |
|----|--------------|----------|--------------------------|---------|-----------|-------|------|
| | | | | primary | secondary | | |
| 1 | West Door | Normal | <input type="checkbox"/> | 0 | 0 | 2 | None |
| 2 | East Door | Normal | <input type="checkbox"/> | 0 | 0 | 2 | None |
| 3 | Generator | Normal | <input type="checkbox"/> | 0 | 0 | 1 | None |
| 4 | Tower Lights | Normal | <input type="checkbox"/> | 0 | 0 | 4 | None |
| 5 | Rectifier A | Normal | <input type="checkbox"/> | 0 | 0 | 1 | None |
| 6 | Rectifier B | Normal | <input type="checkbox"/> | 0 | 0 | 1 | None |

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If you continue to have issues creating derived controls within your NetGuardian, please contact DPS Telecom Tech Support: (559) 454-1600 or send an email to support@dpstele.com.
