

Configuring Flap Damping to Reduce the Number of BGP Update Messages(NSM Procedure)

To advertise network reachability information, BGP systems send an excessive number of update messages. You can use flap damping to reduce the number of update messages sent between BGP peers, thereby reducing the load on these peers without adversely affecting the route convergence time. Damping reduces the number of update messages by marking these routes as ineligible, so that they cannot be selected as active or preferable routes. Applying damping leads to some delay, or suppression, in the propagation of route information, but the result is increased network stability. You can define actions by creating a named set of damping parameters and including the set in a routing policy.

To configure damping for a BGP routing policy in NSM:

1. In the navigation tree, select **Device Manager > Devices**.
2. In the **Devices** list, double-click the device to select it.
3. Click the **Configuration** tab.
4. In the configuration tree, expand **Policy Options**.
5. Select **Damping**.
6. Add or modify the parameters as specified in Table 1.
7. Click one:
 - **OK**—To save the changes.
 - **Cancel**—To cancel the modifications.
 - **Apply** — To apply the protocol settings.



NOTE: After you make changes to a device configuration, you must push that updated device configuration to the physical security device for those changes to take effect. You can update multiple devices at one time. See the *Updating Devices* section in the *Network and Security Manager Administration Guide* for more information.

Table 1: Damping Configuration Details

Option	Function	Your Action
Name	Specifies the name of the damping parameter setting.	Enter a name.
Comment	Specifies the comment for the damping parameter setting.	Enter a comment.

Table 1: Damping Configuration Details *(continued)*

Option	Function	Your Action
Disable	Enables you to disable damping on a per-prefix basis. Any damping state that is present in the routing table for a prefix is deleted if damping is disabled.	Select the check-box to disable damping. Clear the check-box to enable damping.
Half Life	Indicates the time in minutes interval after which the accumulated figure-of-merit value is reduced by half if the route remains stable. Figure-of-merit values correlate to the probability of future instability of a device. Routes with higher figure-of-merit values are suppressed for longer periods of time.	Enter the time limit in minutes or select it from the list.
Reuse	Indicates the figure-of-merit value below which a suppressed route can be used again.	Enter the value or select it from the list.
Suppress	Indicates the figure-of-merit value above which a route is suppressed for use or inclusion in advertisements.	Enter the value or select it from the list.
Max Suppress	Indicates the maximum time in minutes that a route can be suppressed no matter how unstable it has been.	<ol style="list-style-type: none">1. Enter the time limit or select it from the list.2. Click OK.

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