SOPHOS XG QoS for Digital Island VoIP

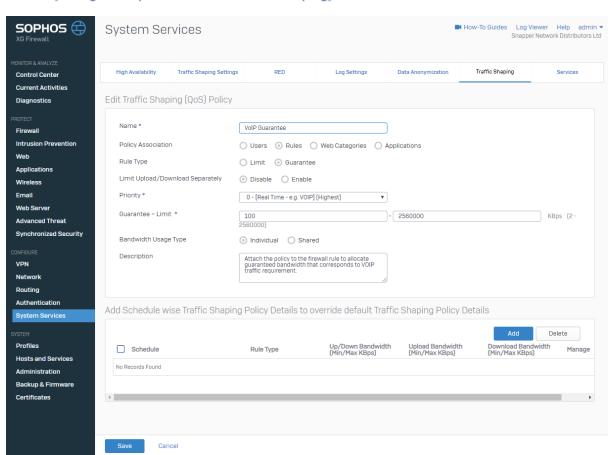
To ensure quality of service for Digital Island VoIP traffic when using a SOPHOS XG make sure that there is a firewall rule in place that is applying a traffic shaping policy to the VoIP traffic.

In this example we're allocating a 100KBps bandwidth guarantee per potential simultaneous call to allow for the 96KB requirement of a G711 call with IP overheads. This rule will be applied to all traffic going to the Digital Island FQDN hostnames used for testing. An IP address group could be used instead of an FQDN group. This will utilize an outbound firewall rule since SIP registration traffic is expected to be initialized from the LAN. If SIP peering is used then an inverse rule should be created for WAN initiated traffic.

Method

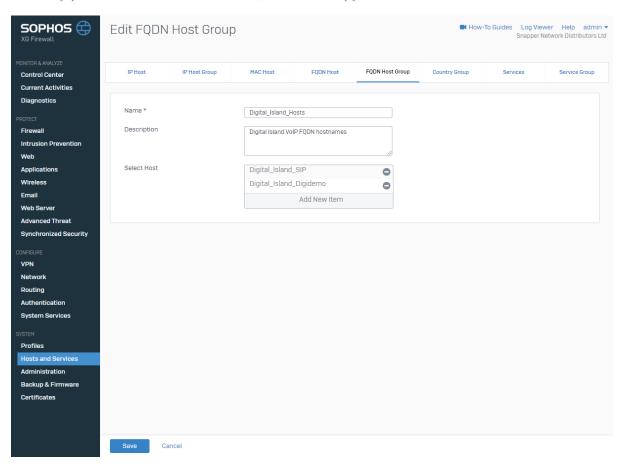
1. Check that the VoIP Guarantee traffic shaping policy exists and has a guaranteed bandwidth of 100KBps for each potential simultaneous VoIP call. e.g. If your phone system has potential for 10 simultaneous calls then set the guarantee value at 1000.

[Configure > System Services > Traffic Shaping]



2. Create an FQDN Host group that includes the FQDN hosts used by the Digital Island SIP servers. Be sure to include the media (RTP) server too. For this example we use FQDN hosts in an FQDN host group but IP hosts in an IP host group could be used too or instead if the sip servers do not resolve at a known FQDN.

[System > Hosts and Services > FQDN Host Group]



3. Create a new firewall at the top of the firewall rules list to apply to traffic with the following conditions;

Source Zone: LAN

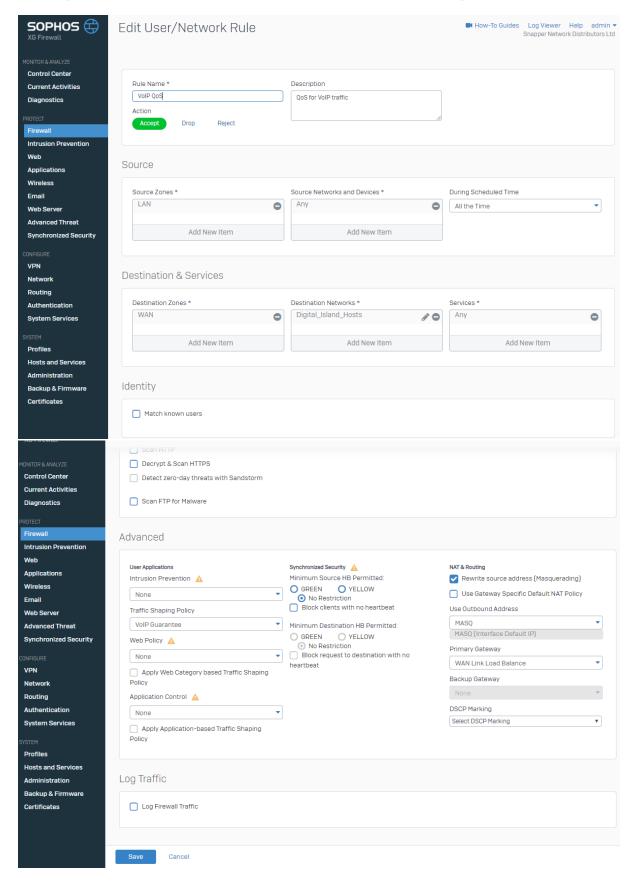
Destination Zone: WAN

Destination Networks: Digital_Island_Hosts (as defined in previous step)

Do not match known users

Traffic Shaping Policy: VoIP Guarantee rewrite source address (masquerading): Yes

[Protect > Firewall > IPv4 > Add Firewall Rule > User/Network Rule]



4. As VoIP traffic is processed by the VoIP QoS rule it will be prioritized according to the traffic shaping policy and the byte count of the rule will increment.

