Video over IP

Switch setup

Typical installation

One encoder feeds two decoders by multicast on a dedicated switch. All three devices use the same network, VLAN 1.

1 Connect the encoder and decoders

Connect the endpoints and your laptop to the same AV network. Open the switch's management address in a browser and sign in. In System Information, confirm NRS8T2P. Use Configuration > Ports to check the connected links. Check the encoder's bitrate against the port speed. Allow room for other traffic on any shared link.

2 Check the encoder's frame-size requirement

Open Configuration > Ports. Keep the existing standard Maximum Frame Size unless the encoder or decoder guide specifies jumbo frames. If it does, apply the specified frame allowance across every media link. This Niveo field includes the Ethernet frame check sequence.

3 Enable multicast forwarding

Under Configuration > IPMC > IGMP Snooping > Basic Configuration, enable Snooping and save. Keep Fast Leave clear. Under VLAN Configuration, enable Snooping and Querier Election on VLAN 1. Save. The querier checks which receivers still want each stream.

4 Leave receiver shortcuts off

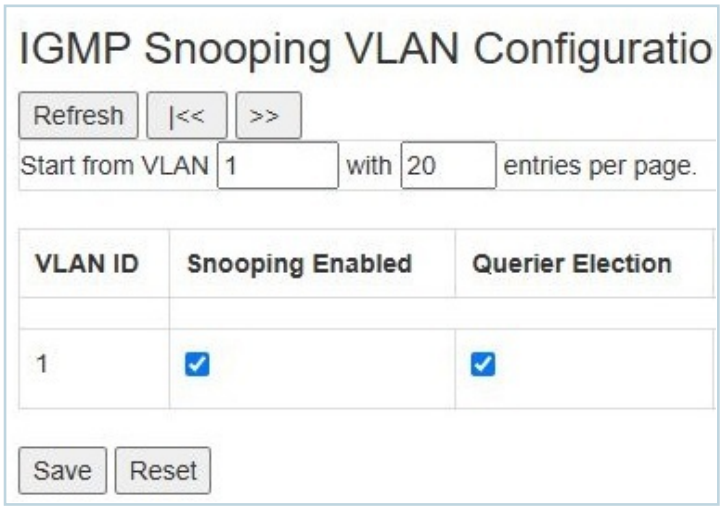
Keep Fast Leave clear for the basic setup. If the decoder maker requires faster source switching, enable it only on the port of a single directly connected compatible decoder. Keep it off uplinks and ports feeding several devices.

Which port is an uplink?

A cable to a decoder serves one receiver. A cable to another switch can serve many. This second connection is an uplink; leave Fast Leave clear there.

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Save and test



On this single-switch example, VLAN 1 has Snooping and Querier Election selected.

Save the settings

Click Save on each page you changed. Open Maintenance > Configuration > Save startup-config. Click Save Configuration and wait for “startup-config saved successfully.” Reopen the changed page and check the values.

Test with the equipment

Select the same encoder on both decoders. Confirm picture and sound. Switch one decoder to another source or stop its stream. The other display should keep playing. Check the port error and drop counters during playback.

When the installation differs

Use the encoder maker’s settings for PoE, jumbo frames and flow control when specified. On a network that already has an active querier, keep the existing one.

References

Niveo NRS user manual