SETUP GUIDE / KB19008

HD-over-IP on physically stacked switches

The original example uses legacy NGSM24G4S switches. Stack port assignment, cabling, software compatibility and reboot behavior must be confirmed for the exact devices before cabling.

Build and qualify the stack

1. Back up each switch and isolate the stack build from production. Verify that every unit supports physical stacking and the same supported software combination. Record each member, stack ports, allowed media and leader election behavior.
2. Configure stacking on each isolated member per the model documentation. Restart where required. Use only designated stack ports and approved stack links. A ring is appropriate only when supported by the stacking technology. Do not create a ring using ordinary Ethernet ports as a substitute.
3. Confirm all members, the leader, link state and health in the stack manager. Verify the usable stack bandwidth and behavior with a failed link or member.

Add media and test

- Configure the media VLAN, global and per-VLAN snooping, and one active querier for each multicast media VLAN. Use the endpoint-required IGMP version. Keep Fast Leave off on trunks or shared ports. Leave proxy and unknown multicast policy as designed until tested.
- Verify same-member and cross-member streams at peak load. Inspect stack links, group state and queue drops during source changes and a controlled failure. Save startup configuration and record member roles. If your model only supports virtual stacking, use a separately designed Ethernet topology.

References

Niveo NGSME8H/16/24 managed-switch manual

IETF RFC 4541, IGMP and MLD snooping considerations

Documentation review. Validate with the exact firmware and endpoints before deployment.