SETUP GUIDE / LEGACY SWITCH FAMILIES

Q-SYS on NGSM and NGSME switches

Use this guide with Q-SYS Designer and the exact NGSM or NGSME switch manual. Historical Q-SYS examples apply to the listed models and firmware, rather than certifying every switch in either family.

Match the design preset

1. In Q-SYS Designer, review Design Properties and select the QoS preset appropriate for the system. Q-LAN uses DSCP 46 for PTPv2, 34 for audio and 26 for video. In an Audinate-preset design, confirm the current Q-SYS markings and map them with the Dante requirements. The same DSCP can represent different traffic in different presets.
2. Use gigabit-or-faster non-blocking paths for real-time AV and confirm the Q-SYS queue, buffer and latency requirements. Disable EEE where the Q-SYS documentation directs. Use the platform's recommended pause and frame-size settings for this equipment.
3. In the documented legacy QoS menu, enable DSCP classification on trusted media ports and uplinks. Map the selected preset so clock is above audio, then video, then best effort. Verify strict-priority scheduling for the designated queues and check counters.

Multicast and timing

- On the required media VLANs, enable snooping and verify the active querier and endpoint-compatible IGMP version. Use IGMPv2 when required by the deployed Q-SYS profile. Keep Fast Leave off on shared ports. Apply static multicast router ports or proxy only where the actual topology requires them.
- Preserve native Q-LAN PTPv2 forwarding. Keep existing loop protection and management access. Change PTP domain, priority or switch clock role only as part of the approved timing design.

Save and validate

- Save startup configuration. In Q-SYS Designer, check design bandwidth, device discovery, clock lock, audio and video. Retest with competing traffic and any redundant paths. Check queue and port drops before sign-off.

References

Q-SYS Networking Requirements

Niveo NGSME8H/16/24 managed-switch manual

Q-SYS configuration example for Niveo NGSM48T2

IETF RFC 4541, IGMP and MLD snooping considerations

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