Using HDA Audio with Network VLAN Settings

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This article provides integration information for using **HDA Audio with Network VLAN Settings** used in routers and managed network switches.

URC HDA devices use “AVB” (Audio Video Bridging) to share audio streams among other HDA products on a network.

System:

- Multiple HDA amplifiers or HDA-IO units
- One or more HDA-SW5 or third-party AVB switches
- Network using multiple VLANs within a router or a managed network switch

  (Must be using multiple HDA units and at least one AVB switch)

Problem:

- Intermittent distorted HDA audio streams
- HDA audio stream dropouts
- Missing HDA audio streams

Possible Fix:
If the router or managed network switch is using “VLAN 2” for non-URC devices on the network, move those devices to a different VLAN number within the router or managed network switches. Do not use “VLAN 2” in the router or managed network switches.

Synopsis:
When using multiple HDA Audio amplifiers and adapters in a system that requires one or more HDA-SW5 switches (or third-party AVB switches), “VLAN 2” should not be used in the system’s router or managed network switch.

VLAN 2 is reserved for the VLAN that is created when using one or more HDA-SW5 units or third-party AVB switches.

An AVB switch creates a VLAN for the AVB streams within the network. The AVB streams created may be affected by traffic created by a router or managed network switch that is ***also set to use “VLAN 2”.***

Important Note: A URC HDA-SW5 switch or suitable third-party AVB switch is still required and needs to be included in the system.
The alert here is so that you do not also use VLAN 2 for other purposes while HDA devices are present in a multiple-VLAN network topology.

If VLANS or other complex networking methods are required, please contact your regional URC Sales Engineer to consult on potential resolutions.

Additional Information & Resources:

A good resource that explains IGMP Snooping can be found by clicking this link.
A good resource that explains AVB can be found by clicking this link.

To learn more about HDA products and programming, please see the HDA Programmers Guide or the Accelerator 3 online Programming Guide.