



VLAN Trunking

6300-CX

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Skill level: *Moderate*

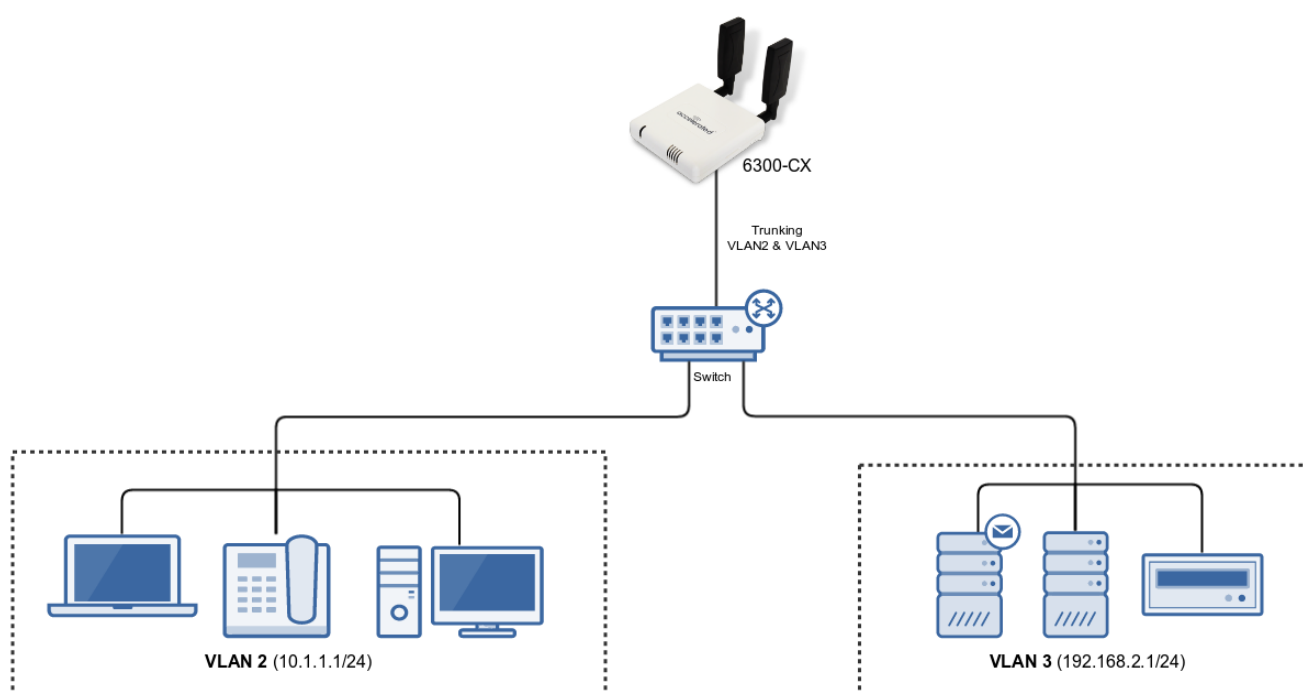
Goal

The primary benefit of the VLAN features on the 6300-CX is to provide multiple LAN networks on a single Ethernet port. This allows users to create a segmented network, where certain devices are sectioned off in their own network, for increased performance, improved manageability, simplified software configurations, and increased security options.

Technical Details

What the 6300-CX and 6300-LX supports is closest to a [trunked VLAN](#) behavior. That is, the 6300-CX supports multiple VLANs per Ethernet port, the packets arrive with tags already, and it doesn't add tags to the incoming packets. The difference is that since the 6300-CX acts as a router, we can't forward the tag on. The Ethernet header and VLAN tag are stripped before the packet enters the IP stack. So to the IP stack, it appears as the packet appeared on a virtual interface called "eth0.%d", and it needs to decide how to route the packet based on that. There's no concept of a trunk interface that sends and receives all VLAN tags. The outgoing packet will then only have a VLAN tag if it is being routed out one of these virtual interfaces, and this VLAN tag doesn't have to be the same as the VLAN tag on the incoming packet.

Example Setup



Sample Configuration

The following configuration reflects the VLAN trunking setup in the diagram, where we have two trunked VLAN interfaces on the 6300-CX's LAN Ethernet port. Also, please ensure that the **Modem** → **Passthrough** → **Enabled** option is un-checked, as enabling passthrough mode will override any VLAN settings.

