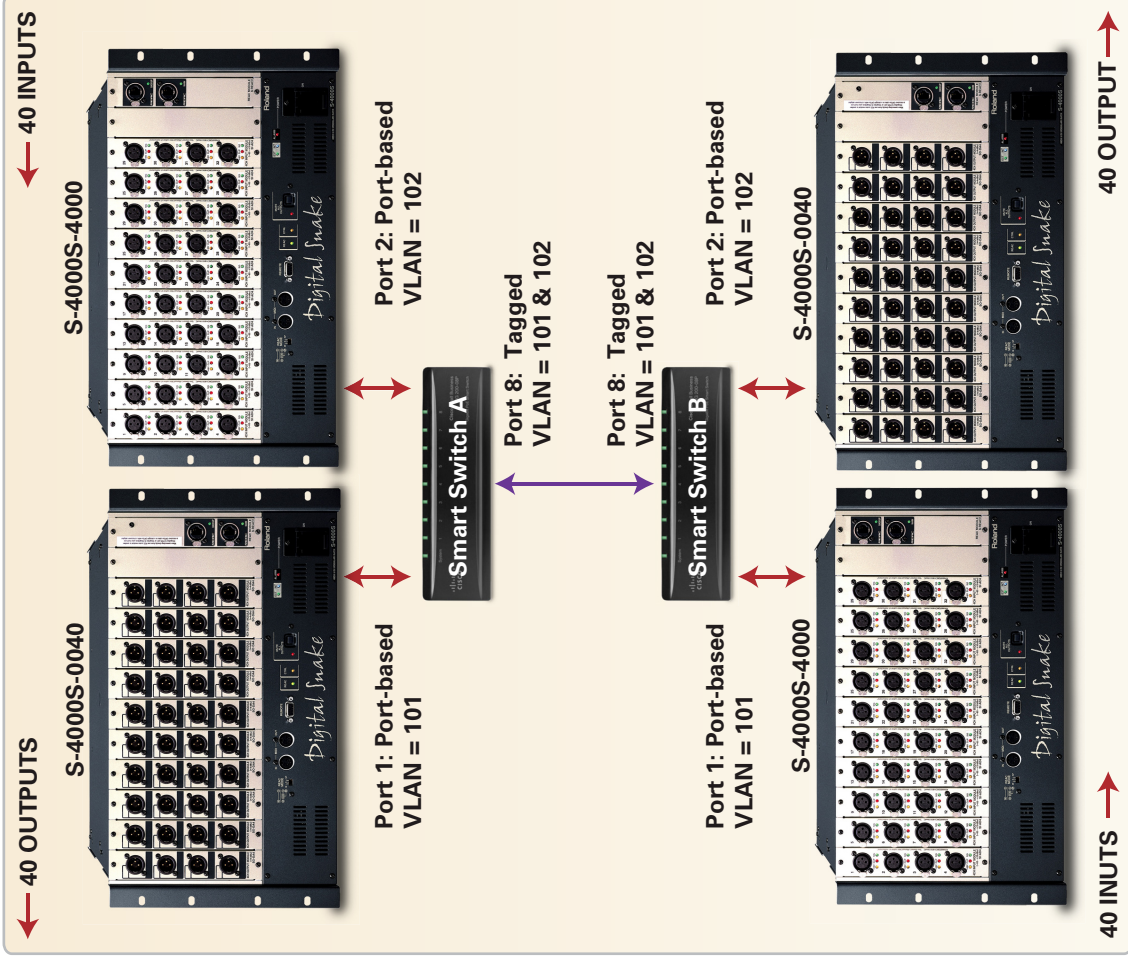


Create a 40x40 Digital Snake using VLAN

Using VLAN technology, a single Cat6 cable can be used to transfer 40 inputs and 40 outputs between two points using Roland Digital Snakes.

1. Using a gigabit smart switch, create a VLAN for each REAC network/path.
2. Create an additional VLAN assigned to a specific port that consists of tagged VLANs defined in step 1.
3. Setup the second smart switch with the same configuration.

Two separate REAC networks are running but the smart switches have the ability to amalgamate multiple REAC networks down one physical CAT6 cable and separate out again at the other end. Setting up additional ports on the switch as "seeing" a specific VLAN allows normal splits to occur.



Step 1: Create VLAN

Small Business
cisco SG 200-08 8-Port Gigabit Smart Switch

Getting Started
Status and Statistics
Administration
Port Management
VLAN Management
Create VLAN
Interface Settings
Port To VLAN
Port VLAN Membership
Default VLAN Settings
Voice and Media
Spanning Tree
MAC Address Tables
Multicast
IP Configuration
Security
Quality of Service

Create VLAN

VLAN ID	VLAN Name	Type
1	Default	Default
101	REACA	Static
102	REACB	Static
103	REAC-MUX	Static

Add... Edit... Delete

This table is sortable

Step 2: Port VLAN Membership

Small Business
cisco SG 200-08 8-Port Gigabit Smart Switch

Getting Started
Status and Statistics
Administration
Port Management
VLAN Management
Create VLAN
Interface Settings
Port To VLAN
Port VLAN Membership
Default VLAN Settings
Voice and Media
Spanning Tree
MAC Address Tables
Multicast
IP Configuration
Security
Quality of Service

Port VLAN Membership

Filter: Interface Type equals to | Port |

Interface	Mode	PVID	Operational VLAN Membership
g1	Access	101	101U
g2	Access	102	102U
g3	General	103	101T,102T
g4	Trunk	1	1U
g5	Trunk	1	1U
g6	Trunk	1	1U
g7	Trunk	1	1U
g8	Trunk	1	1U

Edit... Details...

This table is sortable

Set up 3 VLANs: One for each REAC network and one to group the two.

Port 1 and 2 dedicated to separate REAC networks (VLANs 101 and 102) with port 3 (VLAN 103) being a combination of both VLANs tagged.