Configuring Routed VLAN Interfaces (CLI Procedure)

Routed VLAN interfaces (RVIs) enable the EX-series switch to recognize which packets are being sent to local addresses so that they are bridged whenever possible and are routed only when needed. Whenever packets can be switched instead of routed, several layers of processing are eliminated. Switching also reduces the number of address look-ups. For redundancy purposes, RVI can be combined with implementations of the Virtual Router Redundancy Protocol (VRRP) in both bridging and VPLS environments.

To configure the routed VLAN interface:

1. Create the VLAN by assigning it a name and a VLAN ID:

```
[edit]
user@switch# set vlans support vlan-id 111
```

2. Assign an interface to the VLAN by specifying the logical interface (with the unit statement) and specifying the VLAN name as the member:

```
[edit]
user@switch# set interfaces ge-0/0/18 unit 0 family ethernet-switching
vlan members support
```

3. Create the subnet for the VLAN's broadcast domain:

```
[edit]
user@switch# set interfaces vlan unit 111 family inet address
111.111.111.1/24
```

4. Bind a Layer 3 interface with the VLAN:

```
[edit]
user@switch# set vlans support l3-interface vlan.111
```

NOTE: Layer 3 interfaces on trunk ports allow the interface to transfer traffic between multiple VLANs. Within a VLAN, traffic is bridged, while across VLANs, traffic is routed.

You can display the configuration settings:

```
user@switch> show interfaces vlan terse
regress@tp-robin# run show interfaces vlan terse
Interface               Admin Link Proto    Local                 Remote
vlan                    up    up
vlan.111                up    up   inet     111.111.111.1/24

user@switch>  show vlans
```

```
Name            Tag     Interfaces
default
                        None
employee-vlan   20
                        ge-1/0/0.0, ge-1/0/1.0, ge-1/0/2.0
hurricane-pubs  40
                        ge-1/0/10.0, ge-1/0/20.0, ge-1/0/30.0
support         111
                        ge-0/0/18.0
mgmt
                        bme0.32769, bme0.32771*
```

```
user@switch> show ethernet-switching table
Ethernet-switching table: 1 entries, 0 learned
  VLAN              MAC address       Type         Age Interfaces
  support           00:19:e2:50:95:a0 Static         - Router
```

Related Topics

- Understanding Bridging and VLANs on EX-series Switches
- Example: Setting Up Bridging with Multiple VLANs for EX-series Switches
- Example: Connecting an Access Switch to a Distribution Switch
- Example: Setting Up Basic Bridging and a VLAN for an EX-series Switch