

Example: Configuring IPv4 Dynamic VLAN Demux Interfaces Over an Aggregated Ethernet Underlying Interface with DHCP Local Server

This example shows how to configure the dynamic creation of IPv4 VLAN demux interfaces with aggregated Ethernet as the underlying interface. DHCP Local Server configuration enables the association of subscribers to the VLAN demux interface by listing the aggregated Ethernet interface in the DHCP local server configuration.

To configure dynamic subscribers on dynamic VLAN demux interfaces:

1. Enable VLAN tagging and VLAN auto-configuration on the underlying aggregated Ethernet interface that you plan to use for dynamically created VLAN demux interfaces.

```
interfaces {
  ae1 {
    vlan-tagging;
    auto-configure {
      vlan-ranges {
        dynamic-profile auto-vlanDemux-profile {
          accept inet;
          ranges {
            any;
          }
        }
      }
    }
    aggregated-ether-options {
      minimum-links 1;
      lacp {
        active;
        periodic slow;
        link-protection {
          non-revertive;
        }
      }
    }
  }
}
```

2. Define the gigabit Ethernet interfaces that are part of the aggregated Ethernet interface.

```
interfaces {
  ge-5/0/0 {
    gigether-options {
      802.3ad ae1;
    }
  }
  ge-5/2/0 {
    gigether-options {
      802.3ad ae1;
    }
  }
}
```

```
}
```

3. Define the loopback interface.

```
interfaces {  
  lo0 {  
    unit 0 {  
      family inet {  
        address 192.16.1.1/32;  
      }  
    }  
  }  
}
```

4. Configure a dynamic profile for subscriber access.

```
dynamic-profiles {  
  user-profile {  
    interfaces {  
      "$junos-interface-ifd-name" {  
        unit "$junos-underlying-interface-unit" {  
          family inet;  
        }  
      }  
    }  
  }  
}
```

5. Configure a dynamic profile for VLAN demux interface creation.

```
dynamic-profiles {  
  auto-vlanDemux-profile {  
    interfaces {  
      demux0 {  
        unit "$junos-interface-unit" {  
          vlan-id "$junos-vlan-id";  
          demux-options {  
            underlying-interface "$junos-interface-ifd-name";  
          }  
          family inet {  
            filter {  
              input rate_limit;  
              output rate_limit;  
            }  
            unnumbered-address lo0.0 preferred-source-address 192.16.1.1;  
          }  
        }  
      }  
    }  
  }  
}
```

6. Configure the access method used to dynamically create the subscriber interfaces. The following stanza specifies the aggregated Ethernet interface (**ae1.0**) for use with the dynamically-created subscriber interfaces.

```

system {
  services {
    dhcp-local-server {
      group myDhcpGroup {
        authentication {
          password test;
          username-include {
            user-prefix igmp-user1;
          }
        }
        dynamic-profile user-profile;
        interface ae1.0;
      }
    }
  }
}

```

Instead of using the aggregated Ethernet interface, you can alternatively specify demux0 as the device to use with the subscriber interfaces as follows:



NOTE: Because the demux interfaces and unit values are created dynamically, the unit number is not specified for the demux0 interface.

```

system {
  services {
    dhcp-local-server {
      group myDhcpGroup {
        authentication {
          password test;
          username-include {
            user-prefix igmp-user1;
          }
        }
        dynamic-profile user-profile;
        interface demux0;
      }
    }
  }
}

```

- Related Topics**
- [Configuring Dynamic Subscriber Interfaces Using VLAN Demux Interfaces in Dynamic Profiles](#)
 - [Attaching Dynamic Profiles to DHCP Subscriber Interfaces](#)

Published: 2010-04-15