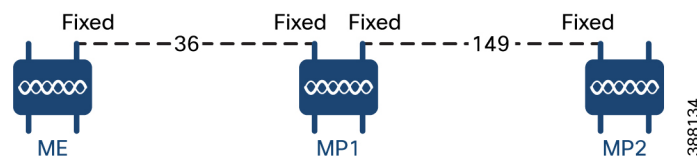# Configuring and Validating of Point-to-Point Relay Topology

Configuring and Validating of Point-to-Point Relay Topology

Two radio interfaces on a single device (MP1) to implement a point-to-point relay topology as depicted in the picture below.

Figure 1: point to point relay topology

To configure point to point relay topology, follow the scenarios listed below

1. Configure ME (Mesh End) on channel 36, MP1 on channel 36 and MP2 on the default channel 149.

2. Continue from step 1 configuration.

3. Re-enable the second slot interface on MP2 (Mesh Point) and wait for 30 seconds then point-to-point relay topology implemented by two radio interfaces on a single devicet.

Configuring Point to Point Relay Topology from CLI

To configure a point-to-point relay topology use the following CLI commands.

1. Configure the wireless device with radio interface number <1 or 2>.

   ```
   Device# configure dot11Radio <interface>
   ```

2. Set wireless interface admin state to enable or disable mode.

```
Device# configure dot11Radio <interface> > {enable | disable}
```

3. Configure an operating mode for the specified interface (fixed or Fluidity or Fluidmax)

```
Device# configure dot11Radio <interface> > [enable | disable] mode { fluidity | fixed |
 fluidmax }
```

4. Set the operating channel for the specified interface and the operating channel id between 1 to 256

```
Device# configure dot11Radio <interface> > [enable | disable] mode [fluidity | fixed |
fluidmax] channel <channel id>
```

5. End of configuration mode.

```
Device (configure dot11Radio <interface> > {enable | disable} mode {fluidity | fixed |
fluidmax} channel <channel id>) #end
```

Example:

```
Device# Configure dot11Radio <2> {enable | disable} mode {fluidity} channel <36>
```

Example for point-to-point relay topology configuration.

ME (Mesh End) Configuration

```
Device# Configure dot11Radio 2 enable
Device# Configure dot11Radio 2 mode fixed
Device# Configure dot11Radio 2 channel 36
```

MP1 (Mesh Point) Configuration

```
Device# Configure fluidity id infrastructure
Device# Configure dot11Radio 1 enable
Device# Configure dot11Radio 1 mode fixed
Device# Configure dot11Radio 1 channel 36
Device# Configure dot11Radio 2 enable
Device# Configure dot11Radio 2 mode fixed
Device# Configure dot11Radio 2 channel 149
```

MP2 Configuration

```
Device# Configure fluidity id infrastructure
Device# Configure dot11Radio 1 enable
Device# Configure dot11Radio 1 mode fixed
Device# Configure dot11Radio 1 channel 149
```

Validating Point to Point Relay Topology from CLI

To validate point to point relay topology configuration, use the following show commands.

```
Device# show dot11Radio <interface> config
```

ME (Mesh End) Statistics

```
Device# show dot11Radio 2 config
Interface : enabled
Mode : fixed infrastructure
Frequency : 5180 MHz
Channel : 36
……
Passphrase : Cisco
AES encryption : enabled
AES key-control : enabled
```

MP1 (Mesh Point) Statistics

```
Device# show dot11Radio 1 config
Interface : enabled
Mode : fixed infrastructure
Frequency : 5180 MHz
Channel : 36
……
Passphrase : Cisco
AES encryption : enabled
AES key-control : enabled
Device# show dot11Radio 2 config
Interface : enabled
Mode : fixed infrastructure
Frequency : 5745 MHz
Channel : 149
……
Passphrase : Cisco
AES encryption : enabled
AES key-control : enabled
```

MP2 Statistics

```
Device# show dot11Radio 1 config
Interface : enabled
Mode : fixed infrastructure
Frequency : 5745 MHz
Channel : 149
……
Passphrase : Cisco
AES encryption : enabled
```