



Modeled Network Examples

This chapter provides examples of typical optical networks you can model using Cisco MetroPlanner.

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3.1 Supported Cisco MetroPlanner Topologies

Cisco MetroPlanner supports the following topologies:

- Bus (single span, point-to-point, and linear)
- Open (or hubbed) ring
- Closed (or meshed) ring

An example of each topology is given in this chapter.

3.2 Bus Topologies

Bus topologies comprise three types of topologies: single span, point-to-point, and linear.

3.2.1 Single-Span Topology

[Figure 3-1](#) shows an example of a single-span topology. Single-span topologies are characterized by a single span link. The single-span configuration only supports two terminal sites (full terminal or flexible channel-count terminal) without any intermediate line amplifier or optical add/drop multiplexing (OADM) sites.

Figure 3-1 Single-Span Topology Example



3.2.2 Point-to-Point Topology

Figure 3-2 shows an example of a point-to-point topology. In a point-to-point topology, all the wavelengths are terminated at the same point in the chain. In the point-to-point configuration, no channels are added or dropped in intermediate sites.

Figure 3-2 Point-to-Point Topology Example



3.2.3 Linear Topology

Figure 3-3 shows an example of a linear topology. Linear configurations are characterized by the presence of two terminal sites (full terminal or flexible channel-count terminal). Between the two terminal sites, OADM or line amplifiers nodes can be inserted. In a linear configuration, specific wavelengths are terminated at different points in the chain and only unprotected traffic can be provisioned.

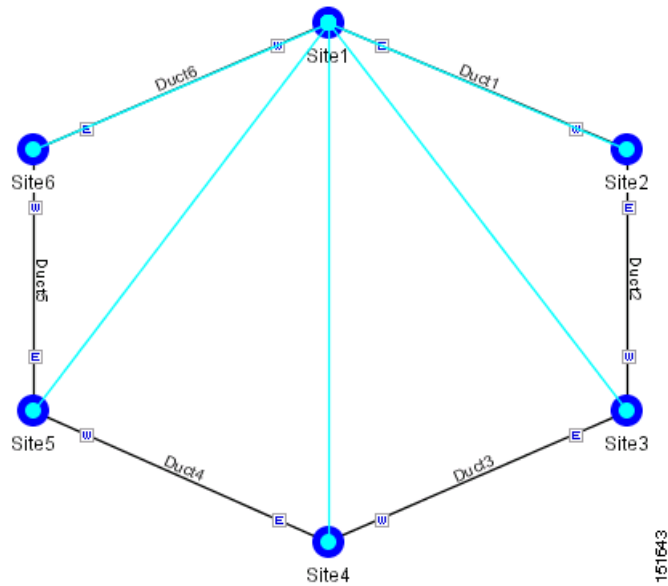
Figure 3-3 Linear Topology Example



3.3 Hubbed Ring Topology

Figure 3-4 shows an example of a hubbed ring topology. In this configuration, at least one of the sites must be a hub site, where all channels are terminated.

Figure 3-4 Hubbed Ring Topology Example



3.4 Meshed Topology

Figure 3-5 provides an example of a meshed ring topology. A meshed ring is characterized by the absence of a hub node.

Figure 3-5 Meshed Ring Topology Example

