



APPENDIX **A**

Using Optical Splitters with 10 GBE Links

Revised: December 21, 2012, OL-26784-02

Introduction

When designing a deployment with the Cisco SCE 8000, it is important to keep in mind certain characteristics of the 10 GBE link that affect the configuration of optical splitters and SPAN ports:

- 10 GBE does not support autonegotiation (unlike regular GBE). The fixed 10 GBE configuration is as follows:
 - duplex = full
 - speed = 10 GBE
- The 10 GBE port is UP once it detects light (and correct sync pattern) in the RX input.
- A Switch or Router port will not transmit data unless it is UP (that is, it detects a good signal on the RX input).

This chapter contains the following sections:

- [Supported Configurations, page A-1](#)
- [Unsupported Configuration, page A-2](#)

Supported Configurations

With regard to the 10 GBE characteristics described in the introduction, the following configurations are supported in the 10 GBE environment as shown in [Figure A-1](#) and [Figure A-2](#).

Figure A-1 Supported Optical Splitter Configuration

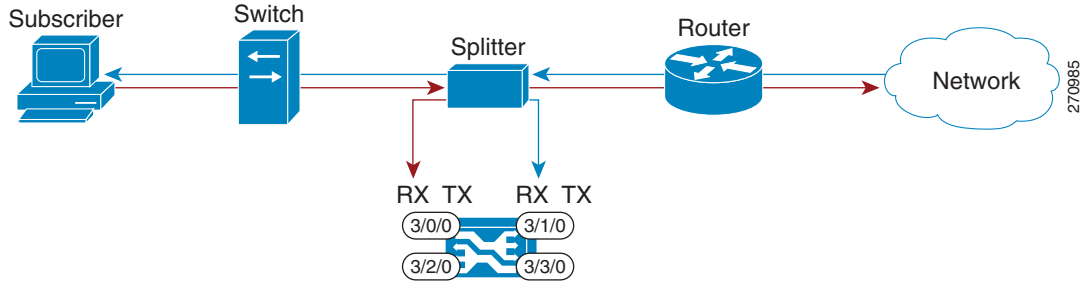
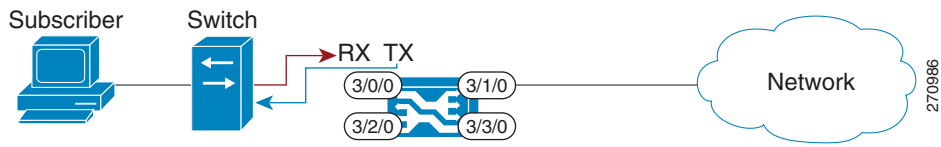


Figure A-2 Supported SPAN Port Configuration



Note

In the preceding configuration, it is essential that the Cisco SCE 8000 be operating in receive-only mode. Other configurations may cause SPAN port traffic to be returned to the switch, causing unpredictable behavior.

Unsupported Configuration

With regard to the preceding 10 GBE characteristics, the following configuration is not supported in the 10 GBE environment as shown in [Figure A-3](#). In this configuration, the switch port remains in the DOWN state and therefore does not transmit.

Figure A-3 Unsupported SPAN Port Configuration

