Connecting the External Power Failure Bypass Unit

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Overview

Introduction

The external bypass unit ensures that network traffic continues to pass if the appliance fails or loses power.

This document explains how to connect an external bypass unit to Proventia Network Intrusion Prevention System GX5000 series and GX6000 appliances. For more information about using these appliances, see the Proventia Network Intrusion Prevention System documentation at the following location:
http://www.iss.net/support/documentation/

In this document

This document contains the following topics:

Topic	Page
Requirements	2
General Cabling Guidelines	3
Connecting the Bypass Unit to the Appliance	4

Requirements

Introduction   This section describes the items you need in order to connect the bypass unit to the appliance.

How many units do I need?   Each bypass unit has eight ports, configured in two-port segments. Each bypass unit can handle up to eight ports (four segments) on a appliance.

For appliances with more than eight ports, you *may* need two bypass units. You need two bypass units if your appliance has more than eight ports and you want bypass capabilities on more than four segments.

Included items   The external bypass unit box contains the following items:

● single pre-assembled bypass unit

● one USB cable

● cables appropriate to bypass unit configuration

   Reference: See "About the cables" on page 4 for more information.

Network cables required   You must have two additional network cables per module to connect the external bypass unit to the network. These cables are not included with the bypass unit.

Contents of document subject to change.   DOC-PROVNIPSBP-002

2

General Cabling Guidelines

Introduction   As a network professional, you are aware of the wide variety of networking equipment available and the almost unlimited network configuration options. The approach you should use to cable the bypass unit is largely dependent on your specific networking equipment and configuration. These general guidelines are designed to help you successfully connect and configure the bypass unit in your environment.

Guidelines   Keep the following guidelines in mind as you configure the appliance:

- If the appliance is running, turn it off before you connect it to the bypass unit.

- Start with a straight cable between the appliance and the bypass unit.

- Verify that traffic passes through the bypass unit *before* you turn on the appliance. If traffic does not pass through the bypass unit with the appliance off, try a crossover cable instead of a straight cable.

Best practice   Always verify that traffic passes through the bypass unit *before* you turn on the appliance.

**External power failure bypass configurations**   Depending on your appliance model, the external bypass can be configured one of four ways:

- 4 TX copper segments (BYP-4T-0S-0L)

- 2 TX copper segments/2 LX single-mode fiber segments (BYP-2T-0S-2L)

- 2 TX copper segments/2 SX multi-mode fiber segments (BYP-2T-2S-0L)

- 2 TX copper segments/1 LX single-mode fiber segment/1 SX multi-mode fiber segment (BYP-2T-1S-1L)

Connecting the Bypass Unit to the Appliance

Introduction   This section describes how to connect the bypass unit to the appliance.

External bypass diagram   Figure 1 illustrates the external bypass unit.
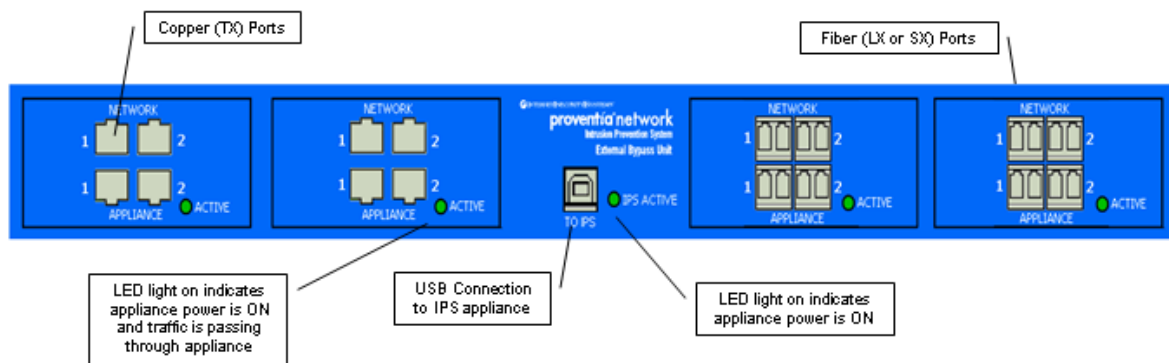
Figure 1: *External bypass unit*

Note: For illustration purposes, this figure displays two copper (TX) bypass modules and two fiber (SX or LX) modules. The configuration of your model may vary, depending on your network and appliance configuration.

About the cables   Depending on your appliance and external bypass unit configuration, your bypass unit comes with the following cables:

External bypass unit configuration	Cables included with unit
All copper (TX)	8 2-meter CAT-5 cables (green)
Two copper (TX)	4 2-meter CAT-5 cables (green)
Two single-mode (LX) fiber (blue connector)	4 LC-to-LC 9-micron, single mode fiber-optic cables (yellow with blue connectors)
Two copper (TX)	4 2-meter CAT-5 cables (green)
Two multi-mode (SX) fiber (beige connector)	4 LC-to-LC 62.5-micron, multi mode fiber-optic cables (orange with beige connectors)
Two copper (TX)	4 2-meter CAT-5 cables (green)
One single-mode fiber (LX)	2 LC-to-LC 9-micron, single mode fiber-optic cables (yellow with blue connectors)
One multi-mode fiber (SX)	2 LC-to-LC 62.5-micron, multi mode fiber-optic cables (orange with beige connectors)

Table 1: *Cables*

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4

Connecting the cables
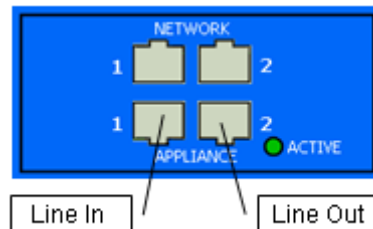
To connect the bypass unit to the appliance:

1. If the appliance is running, shut down the appliance.

2. Connect the cables from the network ports on the external bypass unit to your network.

   Traffic passes into the bypass unit through Network Port 1 and passes out through Network Port 2.

3. Verify that traffic is flowing through the bypass unit.

   Tip: To do this, ping through to a computer on the line-out side of the appliance. If you are able to ping the computer, traffic is flowing through the bypass unit.

4. Connect the cables from the ports on the external bypass unit to the corresponding ports on the appliance.

   Example: Connect the bypass unit Appliance Port 1 to Protected Port 1A on the appliance, and then connect the bypass unit Appliance Port 2 to Protected Port 1B.

5. Connect the USB cable from the USB port labeled **To IPS** on the external bypass unit to either USB port on the appliance.

6. Power on the appliance.

   When the appliance has power, the IPS Active light on the bypass unit is illuminated. When traffic is flowing normally, the Appliance Active light on each bypass module is illuminated.

Removing external bypass unit

If you need to remove the bypass unit for any reason, you must first shut down the appliance. To reintroduce the bypass unit, follow the steps in "Connecting the cables."

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6