SwitchBlade Chassis and Fan Tray
Quick Install Guide
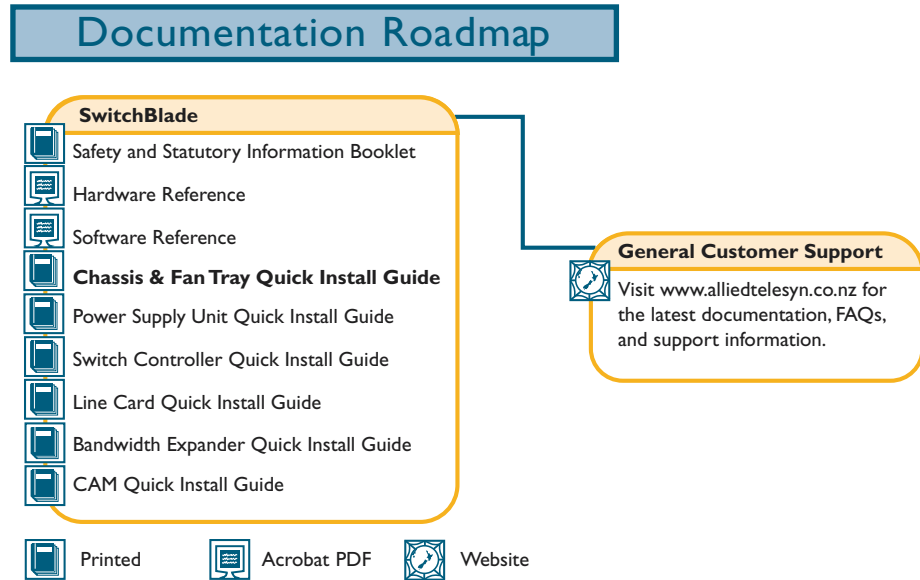
Allied Telesyn

SwitchBlade Chassis and Fan Tray Quick Install Guide
Document Number C613-04029-01 REV C.

Documentation Roadmap

SwitchBlade

Safety and Statutory Information Booklet

Hardware Reference

Software Reference

Chassis & Fan Tray Quick Install Guide

Power Supply Unit Quick Install Guide

Switch Controller Quick Install Guide

Line Card Quick Install Guide

Bandwidth Expander Quick Install Guide

CAM Quick Install Guide

General Customer Support

Visit www.alliedtelesyn.co.nz for the latest documentation, FAQs, and support information.

Printed   Acrobat PDF   Website

Models Covered By This Guide

This Quick Install Guide includes information on installing the following components:

- AT-SB4108-00   SwitchBlade 8 triple feed AC chassis.

- AT-SB4108-60   SwitchBlade 8 dual feed AC chassis.

- AT-SB4104-00   SwitchBlade 4 dual feed AC chassis.

- AT-SB4108-80   SwitchBlade 8 dual feed DC chassis.

- AT-SB4104-80   SwitchBlade 4 dual feed DC chassis.

- AT-SB4152   SwitchBlade 8 fan tray.

- AT-SB4151   SwitchBlade 4 fan tray.

Quick Install Guide updates can be downloaded from www.alliedtelesyn.co.nz/support/switchblade/

Chassis Package Contents

The following items are included with each SwitchBlade chassis. These items may arrive in more than one package. Contact your sales representative if any items are damaged or missing.

- One SwitchBlade chassis.

- One SwitchBlade fan tray (pre-installed at factory).

- One fan tray faceplate (pre-installed at factory).

- Blank faceplates for all but one switch controller bay and one line card bay (pre-installed at factory). That is, eight faceplates for the SwitchBlade 8 and four faceplates for the SwitchBlade 4.

- One blank faceplate for each PSU bay (pre-installed at factory).

- Two rack-mount brackets (pre-installed at factory).

- One 19 inch rack-mount kit.

- Two RS-232 DB9 cables for connecting switch controller RS-232 ASYN0 ports to a terminal or PC.

- Two Ethernet patch cables for connecting switch controller RJ-45 ETH0 ports to a terminal or PC.

- One SwitchBlade Documentation and Tools CD-ROM (which includes the complete SwitchBlade documentation set and utilities).

- One SwitchBlade Chassis and Fan Tray Quick Install Guide.

- One Safety and Statutory Information booklet.

- One warranty card.

- One cable manager with four wire loops (with the SwitchBlade 8 only).

- One rack crossbar (to support the chassis's weight during installation).

Related items that can be purchased separately:

- Blank faceplates for switch controller and line card bays (AT-SB4193).

- Blank faceplates for PSU bays (AT-SB4192).

- Fan trays (AT-SB4152 for the SwitchBlade 8 or AT-SB4151 for the SwitchBlade 4).

- Blank faceplates for fan tray bays (AT-SB4191 for the SwitchBlade 8 or AT-SB4194 for the SwitchBlade 4).

Selecting A Site

The chassis can be installed in a standard 19-inch rack or on a level surface such as a sturdy bench. When installing the chassis, choose a site that:

- allows adequate airflow around the chassis and its vents.

- is free of dust and moisture.

- will allow the chassis and its components to operate within a temperature range of 0 to 40º C (32 to 104º F) and a humidity range of 5 to 95% non-condensing.

- has a reliable and earthed (grounded), preferably dedicated and filtered power supply circuit.

- does not expose cabling to sources of electrical noise, such as radios, transmitters, broadband amplifiers, power lines, electric motors, and fluorescent fixtures.

- allows easy access to the chassis's power and cable connections.

- will allow all related network devices to be connected to the chassis without exceeding maximum cable length limitations. See the *SwitchBlade Hardware Reference* for cable length specifications.

Installing A Chassis

All AC and DC versions of this equipment must be earthed.

Follow these steps to install a chassis:

1.   Read the safety information

The *SwitchBlade Safety and Statutory Information* booklet includes all relevant safety information. A copy of the safety booklet is supplied with each chassis. A PDF version can be found on the CD-ROM that ships with every switch controller and every chassis, or can be downloaded from www.alliedtelesyn.co.nz/support/switchblade/.

2.   Gather the tools and equipment you will need

To install the chassis in a rack you will need a Phillips #2 screwdriver, screws and cage nuts.

Due to the chassis' size and weight, it is recommended that you have someone assist you with the rack-mounting procedure.
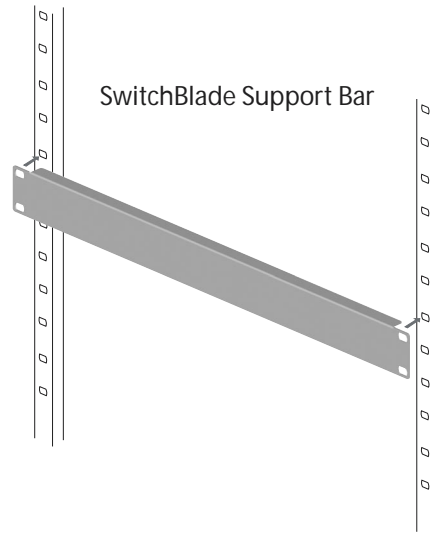
3.   Choose a suitable site for the switch

Either a stable flat surface or a 19 inch rack. For more information, see "Selecting A Site" earlier in this guide.

4.   Unpack the chassis and place it in its operating location

If installing the chassis in a rack:

- Ensure the rack has sufficient space for the chassis and its associated cables.

- Check the rack-mounting brackets. The brackets can be front or mid mounted.

- Install the rack crossbar in the rack, just below the chassis' intended position (see Figure 1 on page -6). The crossbar will support the chassis' weight during installation.

- Mount the chassis in the rack. This step is easier and safer if performed by two people.

Figure1: SwitchBlade rack crossbar.

SwitchBlade Support Bar

5. **Remove any packaging and protective material**

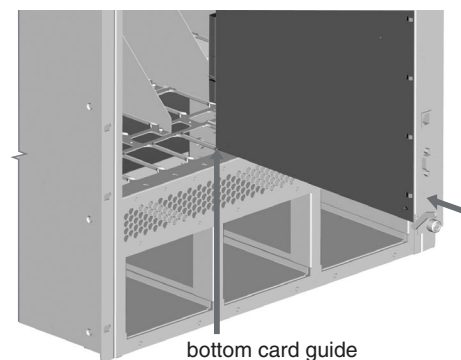   Inside the chassis: Check that the internal spaces are free of packaging and protective material.

    Outside the chassis: Check that all vents are free from obstruction.

6. **Insert the blank faceplates (if not factory fitted)**

    When inserting a faceplate, make sure the faceplate's metal back-panel is aligned with the card guides (see Figure 2 on page -6).

☞ *Faceplates are mounted vertically in the SwitchBlade 8 chassis (AT-SB4108) and horizontally in the SwitchBlade 4 chassis (AT-SB4104).*

Figure2: Card guides.

bottom card guide

Carefully slide the faceplate into the chassis. The faceplate's captive screws should line up with the threaded holes on the chassis.

7. **Secure the blank faceplates**

   Press each faceplate home (until its front panel engages, or nearly engages, the threaded holes inside the chassis).

   Use the captive Phillips screws to secure each faceplate to the chassis (two screws per faceplate).

Secure blank faceplates to all switch controller and line card bays that will not have controllers or cards installed. The faceplates prevent dust and debris from entering the switch and maintain proper airflow.

The switch may overheat or be damaged by dust and debris if bays are left uncovered.

Fan Tray Package Contents

If you purchased a SwitchBlade chassis, the fan tray will be pre-installed in the chassis.

If you purchased a SwitchBlade fan tray without also purchasing a SwitchBlade chassis, the following items are included with each fan tray.

■ One fan tray.

■ One SwitchBlade Chassis and Fan Tray Quick Install Guide.

■ One warranty card.

Related items that can be purchased separately:

■ Blank faceplates for fan tray bays (AT-SB4191 for the SwitchBlade 8 or AT-SB4194 for the SwitchBlade 4).

Contact your sales representative if any items are damaged or missing.

Installing A Fan Tray

Fan trays can be hot swapped. The switch will continue to operate for brief periods while fan trays are exchanged.

Do not operate the switch for extended periods without an operational fan tray. Doing so will cause the switch to overheat and shut down, and may also damage the switch, switch controllers and line cards.

Follow these steps to install a fan tray:

1. **Read the safety information**

    The *SwitchBlade Safety and Statutory Information* booklet includes all relevant safety information. A copy of the safety booklet is supplied with each fan tray. A PDF version can be found on the CD-ROM that ships with every switch controller and every chassis, or can be downloaded from www.alliedtelesyn.co.nz/support/switchblade/.

2. **Gather the tools and equipment you will need**

    To loosen or secure a fan tray you will need a Phillips #2 screwdriver.

3. **Prepare the fan tray**

    In an antistatic environment, remove the fan tray from its packing material. Be sure to observe ESD precautions.
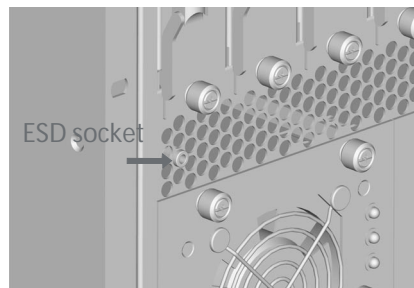
Do not attempt to install a fan tray without observing correct antistatic procedures. Failure to do so may damage the chassis or fan tray. If you are unsure what the correct procedures are, contact your authorised Allied Telesyn distributor or reseller.

An ESD socket is provided on the front panel of the SwitchBlade chassis. The socket is designed to be used in conjunction with an ESD wrist strap (see Figure 3 on page -8).

Figure3: ESD socket on the SwitchBlade 8 chassis.

4. **Detach the cable manager (for the SwitchBlade 8)**

    If a cable manager is attached to the fan tray's front panel, remove it by loosening its mounting screws and lifting it clear of the fan tray bay. If network cables are attached, let the cable manager tilt forward, taking care not to disturb any cable connections.

5. **Remove the fan tray bay faceplate or existing fan tray**

    To remove a blank faceplate:

    If a faceplate is attached to the chassis, use a Phillips #2 screwdriver to loosen the faceplate's two mounting screws until they disengage from the chassis, then remove the faceplate.

    To remove an existing fan tray:

    Remove the fan tray faceplate (as described above).
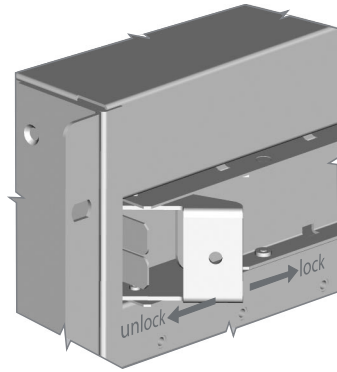
    Release the fan tray's two locking mechanisms by pulling and rotating the tray's ejector levers until they have swivelled approximately 90 degrees (see Figure 4 on page -9).

Slide the fan tray out of the chassis, making sure to keep the tray in a straight alignment so that it doesn't jam.

When removing fan trays, avoid contact with spinning fan blades. Contact may cause personal injury or fan damage.
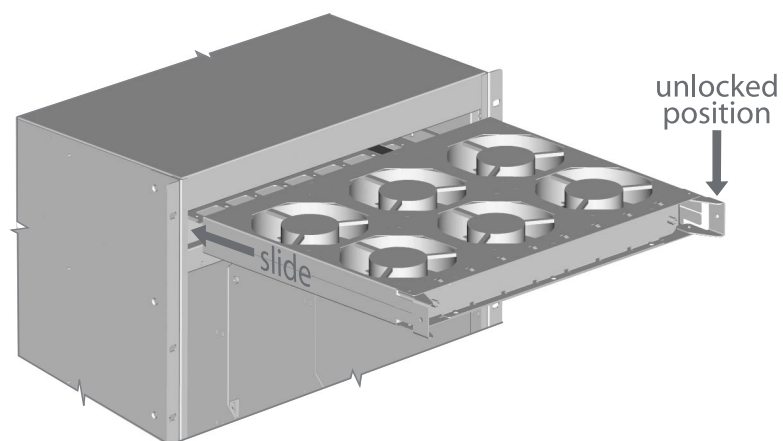
Figure4: Fan tray ejectors.

6. Insert the new fan tray

With the fan tray's ejector levers in the unlocked position (see Figure 4 on page -9), slide the fan tray into the chassis, making sure to keep the tray in a straight alignment so that it doesn't jam (see Figure 5 on page -9).

Fan trays are mounted horizontally in the SwitchBlade 8 chassis (AT-SB4108) and vertically in the SwitchBlade 4 chassis (AT-SB4104).

Figure5: Fan tray insertion.
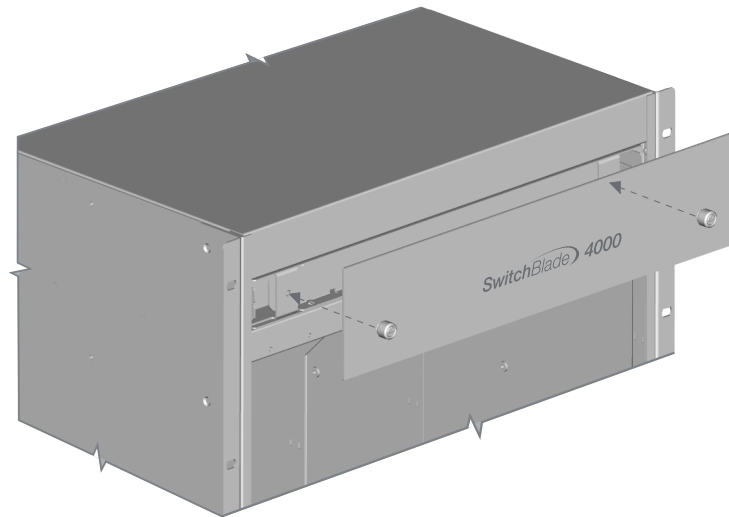
7. Secure the fan tray

Rotate the ejector levers until both locking mechanisms engage their holes in the chassis.

8. Install the fan tray faceplate

Place the faceplate over the fan tray so that the plate's two mounting screws line up with the threaded holes on the fan tray (see Figure 6 on page -10).

Tighten the mounting screws.

Figure 6: Installing fan tray faceplate.

9. Check the fan tray's operation

If the chassis is receiving power and the stand-by switch is in the Run position, you should hear the fans running and feel air movement across the chassis vents.

10. Attach the cable manager

If you detached a cable manager to install the fan tray, re-attach it now.

A cable manager for the AT-SB4108 (SwitchBlade 8) can be purchased separately, contact your authorised Allied Telesyn distributor or reseller for more information.

Where To Find More Information

Sources of further information:

■   The Documentation and Tools CD-ROM bundled with every switch controller and every chassis, which contains the complete Documentation Set for your switch and its expansion options, as well as tools for managing the switch.

■   The *SwitchBlade Safety and Statutory Information* Booklet, provides safety and statutory information for the SwitchBlade and its accessories.

■   The *SwitchBlade Hardware Reference*, provides detailed information on the switch and its hardware features.

■   The *SwitchBlade Software Reference*, provides detailed information on configuring the switch and its software.

■   The *SwitchBlade Power Supply Unit Quick Install Guide*, outlines the procedure for installing AC and DC power supply units.

■   The *SwitchBlade Switch Controller Quick Install Guide*, outlines the procedure for installing switch controllers.

■   The *SwitchBlade Line Card Quick Install Guide*, outlines the procedure for installing line cards.

■   The *SwitchBlade Bandwidth Expander Quick Install Guide*, outlines the procedure for installing bandwidth expanders.

■   The *CAM Quick Install Guide,* outlines the procedure for installing Content Addressable Memory.

■   www.alliedtelesyn.co.nz/support/switchblade/.