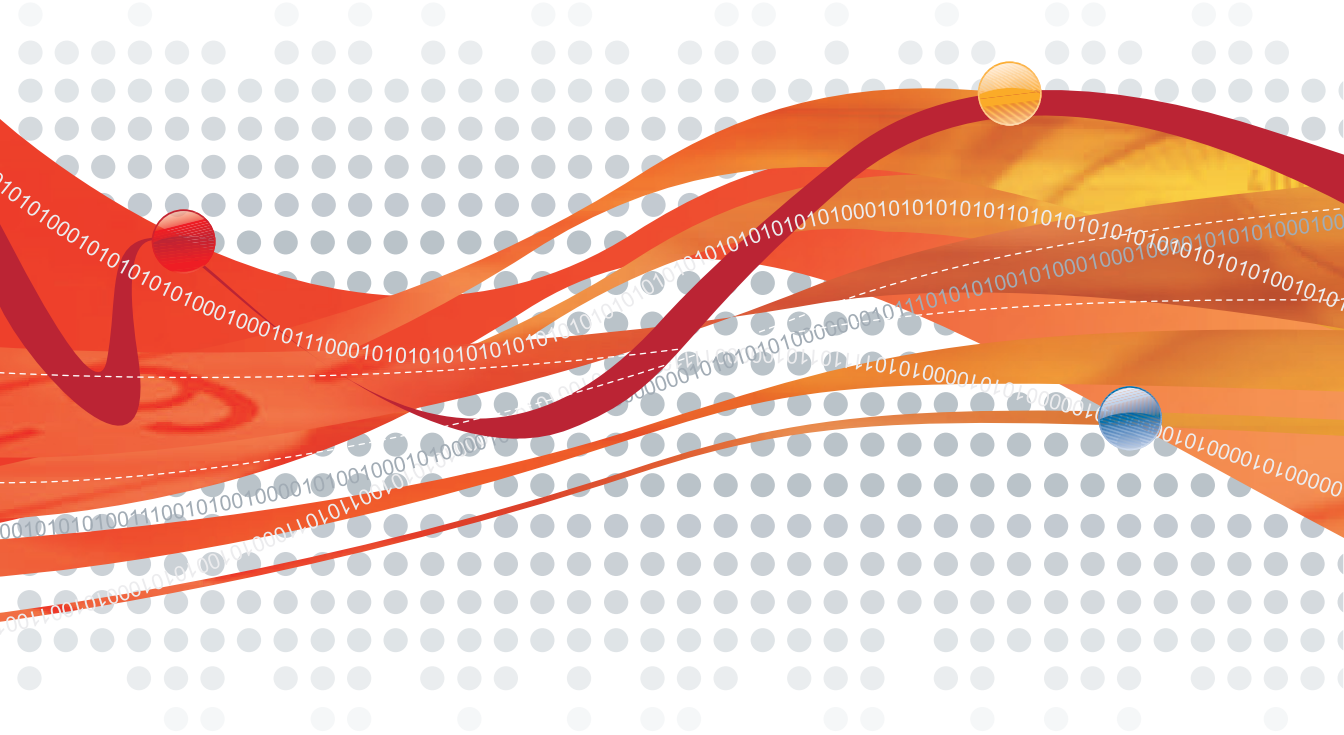
TREND MICRO

InterScan™ Messaging Security Suite 7

for Enterprise and Medium Business

for Crossbeam X-Series

Installation Guide



Messaging Security

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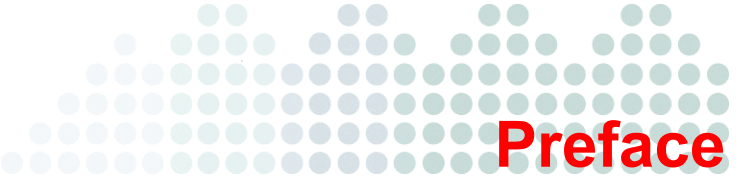
Document Part No.: MSEM73555/80225

Release Date: March 2008

Crossbeam Systems Copyright Information

Contents



Preface

Welcome to the *Trend Micro™ InterScan™ Messaging Security Suite for Crossbeam X-Series Installation Guide*. This guide describes how to install and configure InterScan Messaging Security Suite on a Crossbeam Systems X-Series (XOS) security switch.

This preface discusses the following topics:

Related Documentation

InterScan Messaging Security Suite Related Documentation

The following Trend Micro documentation may be helpful:

- InterScan Messaging Security Suite for Linux v7.0 Readme
- InterScan Messaging Security Suite for Linux v7.0 Getting Started Guide

To obtain this documentation, visit http://www.trendmicro.com/download.

Crossbeam Systems Related Documentation

The following Crossbeam Systems documentation may be helpful when configuring our product:

- X40 and X80 Security Services Switch Hardware Installation Guide
- XOS Commands Reference Guide
- XOS Release Notes
- XOS Configuration Guide
- Install Server Users Guide

Visit the Crossbeam Systems Customer Service portal at http://www.crossbeamsys.com/service-support/on-line.cfm for the latest updates to Crossbeam technical documentation.

Audience

The IMSS documentation is written for IT managers and email administrators. The documentation assumes that the reader has in-depth knowledge of email messaging networks.

The documentation does not assume the reader has any knowledge of antivirus or anti-spam technology.

Document Conventions

To help you locate and interpret information easily, the IMSS documentation uses the following conventions.

CONVENTION	DESCRIPTION
ALL CAPITALS	Acronyms, abbreviations, and names of certain commands and keys on the keyboard
Bold	Menus and menu commands, command buttons, tabs, options, and other tasks
Italics	References to other documentation
Monospace	Examples, sample command lines, program code, Web URL, file name, and program output
Note:	Configuration notes
Tip:	Recommendations
WARNING!	Reminders on actions or configurations that should be avoided

Chapter 1

Introducing InterScan Messaging Security Suite

This chapter provides a brief introduction to InterScan Messaging Security Suite and its operation on a Crossbeam Systems XOS platform.

Topics include:

About InterScan Messaging Security Suite

InterScan Messaging Security Suite (IMSS) 7.0 is a gateway email security software solution that integrates multi-tiered anti-spam and anti-phishing with award-winning antivirus and anti-spyware capabilities. Innovative techniques such as customer-specific reputation services and patent-pending image spam detection keep customers safe as threats evolve while predictive techniques such as zero-day protection, advanced heuristics, and behavior analysis block targeted attacks.

This comprehensive email protection solution also provides flexible content filtering to enforce compliance and to prevent data leakage. With a highly scalable platform and centralized management for easy administration, the solution is optimized to block the full range of standalone, blended-threat, and customer-specific attacks at the POP3 and SMTP gateway.

Deployment Options

IMSS 7.0 only supports the distributed deployment option for X-Series platforms. In this scenario, the Central Controller and the EUQ run on the high-performance, general-purpose hardware with redundant components (power supplies, cooling fans, hard drives, etc). The components participating in scanning and content filtering (MTA, Scanner, NRS, and IP Profiler) run on the X-Series APM blades.

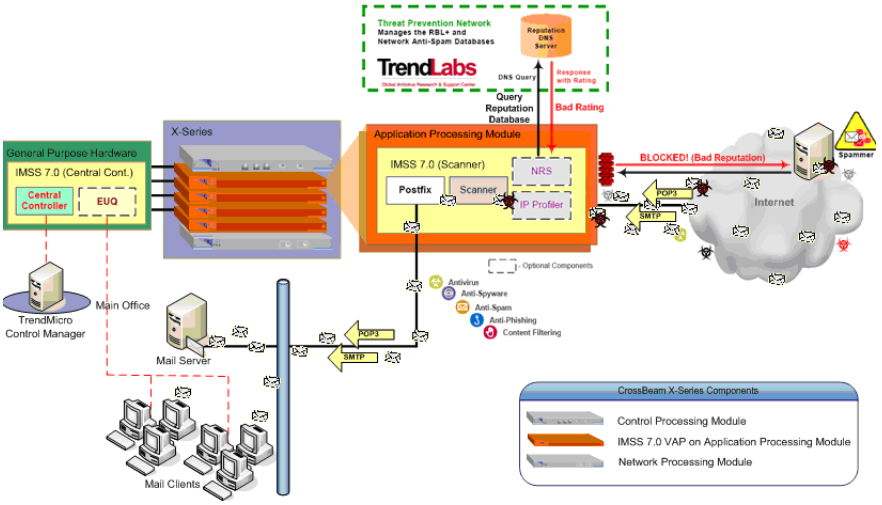


FIGURE 1-1 Deployment Options

Chapter 2

Before You Begin

This chapter presents product-specific prerequisites and pre-installation setup required for installing this application on a Crossbeam Systems X-Series platform.

Topics include:

Prerequisites for Using InterScan Messaging Security Suite

Licensing Requirements

InterScan Messaging Security Suite has the following licensing requirements:

- InterScan Messaging Security Suite Antvirus and Content Filter
- InterScan Messaging Security Suite Spam Prevention Solution and IP Filtering Service

Other Requirements

InterScan Messaging Security Suite requires Postfix 2.1 or above. It may require these other components:

- Directory Servers:
  - Microsoft Active Directory 2000 and 2003
  - IBM Lotus Domino 6.0 or above
  - Sun Java System Directory Server
- Trend Micro Control Manager Version 3.5

XOS-Specific Requirements

X-Series Platform Hardware Requirements

The following table lists the hardware requirements for this application. In addition, heavy traffic or a large sustained number of network connections require more memory

TABLE 2-1. XOS Hardware Requirements

X-Series Chassis Models Supported	X40, X80
APM Modules Supported	APM 8400, APM 8600

TABLE 2-1. XOS Hardware Requirements

Minimum APM Memory	2GB RAM
Recommended APM Memory	4GB RAM
Supported CPM Modules	CPM 8400, CPM 8600
Supported NPM Modules	NPM 82xx
Local Disk Requirements	On the APM: • One APM Local Disk is required • For an APM 8600 two Local Disks configured in Raid-1 is recommended • An APM 8600 configured with one Local Disk must have this disk connected to the SATA1 port as labeled on the board • 10GB disk space for mail storage • 4GB disk space for the working quarantine folder On the general-purpose hardware: • 50GB disk space for the Admin Database • 20GB disk space for the EUQ Database (Based on 500,000 email messages per day, 50% quarantine rate, and logs preserved for a month)

Ensure that the Crossbeam Systems X-Series platform on which you are installing InterScan Messaging Security Suite meets the following requirements:

- A supported X-Series system, running XOS version 7.3.x
- VAP Group OS Requirements: xslinux_v3

General XOS Setup Information

Consider the following general setup recommendations for this application on an XOS system:

- Trend Micro recommends that you run only one application per VAP Group.
- If you uninstall the application, do not reuse the VAP Group; delete the group and create a new VAP Group.

- In most cases, when using an increment-per-vap circuit, you should enable the ip-flow-rule-no-failover parameter.

XOS Setup Requirements

The following XOS-related setup requirements are discussed in the next section in this chapter:

- *Create and Configure a VAP Group for the Application* on page 2-4
- *Create and Configure a Management Circuit* on page 2-5
- *Create Traffic Circuits* on page 2-7

XOS Setup Instructions

Before installing IMSS, you must perform the following steps to configure the XOS.

Note: Refer to the *Crossbeam Systems XOS Configuration Guide* and *CLI Command Reference Guide* to modify the XOS setup commands for your installation requirements.

Create and Configure a VAP Group for the Application

To create and configure a VAP group for the application:

```
CBS# configure vap-group <vAP group name> xslinux_v3
  vap-count <number of vAPs>
  ap-list <list of ap>
  max-load-count <number of vAPs set to run>
    ip-flow-rule <flow rule name>
    action load-balance
    activate
    end
```

For example:

```
CBS# configure vap-group imss xslinux_v3
  vap-count 2
  ap-list ap1 ap2
  max-load-count 2
    ip-flow-rule imss_fr
    action load-balance
    activate
    end
```

WARNING! **Quarantined messages reside on the local disk and are accessed through the IMSS scanner that quarantined them. In order for users to gain access to the quarantined messages, the VAP *MUST* always use the same APM blade. Therefore, VAP failover *SHOULD NOT* be performed. This risk is avoided by specifying the ap-list in the example above.**
Make sure that the max-load-count is set to the same number as the vap-count before continuing the installation.

Create and Configure a Management Circuit

To create and configure a circuit to manage the application:

1. Create a management circuit.

```
CBS# configure circuit <name of management circuit>
  device-name <name of the device>
  vap-group <vAP group name>
    ip-flow-rule-no-failover
    ip <starting ip-address>/<netmask> <broadcast-address>
     increment-per-vap <high range ip-addr>
    end
```

For example:

```
CBS# configure circuit management
  device-name mgmt
  vap-group imss
    ip-flow-rule-no-failover
    ip 192.168.10.124/24 192.165.10.255 increment-per-vap
     192.168.10.125
    end
```

Note: You must specify the increment-per-vap parameter even if the VAP group contains only one VAP.

2. Associate the management circuit with the VAP group.

```
CBS# configure management-circuit vap-group <vAP group name>
circuit <name of management circuit>
```

For example:

```
CBS# configure management-circuit vap-group imss circuit mgmt
```

3. Assign the circuit to a physical interface (chassis slot #/port #).

```
CBS# configure interface <interface type> <slot number>/<port
number>
  logical <name of logical>
  circuit <name of management circuit>
  end
```

For example:

```
CBS# configure interface gigabitethernet 1/1
  logical lgcl11
  circuit mgmt
  end
```

4. Configure a default route.

```
CBS# configure ip route 0.0.0.0/0 <default_gateway_ip> vap-group
<vap_group_name>
```

For example:

```
CBS# configure ip route 0.0.0.0/0 192.168.10.1 vap-group imss
```

5. Setup a DNS server for the VAP group.

```
CBS# configure dns server <dns_server_ip> vap-group
<vap_group_name>
```

For example:

```
CBS# configure dns server 192.168.15.25 vap-group imss
```

Create Traffic Circuits

Since the flow originates from the APM, you must specify a unique IP address for the external network side of the VAP so that return packets will be correctly load-balanced. To accomplish this, you must configure increment-per-vap on the external circuit. Please refer to the *XOS Configuration Guide* and the *XOS Commands Reference Guide* for configurations involving advanced circuit and interface options.

To create a multiple interface configuration:

1. Create one circuit for the internal traffic interface.

```
CBS# configure circuit <name of internal traffic circuit>
  device-name <name of the device>
  vap-group <vAP group name>
    ip-flow-rule-no-failover
    ip <ip-address>/<netmask> <broadcast-address>
    end
```

For example:

```
CBS# configure circuit inttraffic
  device-name trf1
  vap-group imss
    ip 10.201.162.3/23 10.201.163.255
    end
```

2. Create one circuit for the external traffic interface.

```
CBS# configure circuit <name of external traffic circuit>
  device-name <name of the device>
  vap-group <vAP group name>
    ip-flow-rule-no-failover
    ip <starting ip-address>/<netmask> <broadcast-address>
     increment-per-vap <high range ip-addr> alias <shared-ip>
    end
```

For example:

```
CBS# configure circuit exttraffic
  device-name trf2
  vap-group imss
    ip 10.201.164.3/23 10.201.165.255 increment-per-vap
    10.201.164.6 alias 10.201.164.7/23
    end
```

3. Assign each circuit to a physical interface (chassis slot#/port #).

```
CBS# configure interface <interface type> <slot number>/<port
number>
  logical <name of logical>
  circuit <name of internal traffic circuit>
  end
```

```
CBS# configure interface <interface type> <slot number>/<port
number>
  logical <name of logical>
  circuit <name of external traffic circuit>
  end
```

For example:

```
CBS# configure interface gigabitethernet 1/4
  logical lgcl14
  circuit inttraffic
  end

CBS# configure interface gigabitethernet 1/5
  logical lgcl15
  circuit exttraffic
  end
```

To create a single interface configuration:

1. Create one circuit for the internal and external side traffic interface. The alias is used to connect from the internal side while the increment-per-vap addresses are used for the external side.

```
CBS# configure circuit <name of external traffic circuit>
  device-name <name of the device>
  vap-group <vAP group name>
    ip-flow-rule-no-failover
    ip <starting ip-address>/<netmask> <broadcast-address>
    increment-per-vap <high range ip-addr> alias <shared-ip>
    end
```

For example:

```
CBS# configure circuit traffic
   device-name trf1
```

```
vap-group imss

   ip 10.201.162.3/23 10.201.163.255 increment-per-vap
   10.201.162.6 alias 10.201.162.7/23

    end
```

2. Assign the circuit to a physical interface (chassis slot#/port #).

```
CBS# configure interface <interface type> <slot number>/<port
number>

  logical <name of logical>

  circuit <name of external traffic circuit>

  end
```

For example:

```
CBS# configure interface fastethernet 1/4

  logical trflgcl14

  circuit traffic

  end
```

Chapter 3

Installing the Application

This chapter provides instructions for loading, installing, and verifying the installation.

WARNING! **Ensure to complete the pre-configuration requirements in the previous chapter before continuing.**

Topics include:

Loading the Application

Complete the following steps to load the application on your Crossbeam Systems XOS.

To load the application:

1. Log on to your XOS system as root.

```
CBS# unix su
Password:
[root@xxxx admin]#
```

2. Copy the CBI package to /crossbeam/apps/archive/.

```
[root@xxxxx admin]# cp imss-7.0-x.cbi /crossbeam/apps/archive/
```

3. Save the running configuration.

```
CBS# wr
```

4. Check that the application is present.

```
CBS# show application
App ID:imss
Name:Interscan Messaging Security Suite
Version:7.0
Release:6-xos
CBI Version:1.0.0.0
```

Installing the Application

Complete the following steps to install the application on your Crossbeam Systems X-Series Platform.

To install the application:

1. Install the CBI <insert proper name>.

```
CBS# application imss version 7.0 vap-group imss install
```

2. When the license agreement is displayed, accept the license agreement.
3. Type the Admin database information of the existing Central Controller.

```
All instances of the Scanner Service need to be registered to an
existing Central Controller.

Please provide database info of existing IMSS server:

IMSS database server IP []: <ip of the Central Controller>

IMSS database name [imss]: <name of the database on the Central
Controller>

IMSS database user name [sa]:<username>

IMSS database user password

Password: <password>

Confirm Password: <password>
```

For example:

```
Please provide database info of existing IMSS server:

IMSS database server IP []: 192.168.13.50

IMSS database name [imss]: imss

IMSS database user name [sa]: sa

IMSS database user password

Password: ******

Confirm Password: *******
```

4. Type the local IP address the IMSS instances will use to connect to the existing Central Controller. This would be the increment-per-vap IP address assigned to each VAP.

```
(imss_1) Please enter the IP address this IMSS instance will use
to connect to the existing IMSS server []: <ip address of the
management interface on the first vap>

(imss_2) Please enter the IP address this IMSS instance will use
to connect to the existing IMSS server []:<ip address of the
management interface on the second vap>
```

For example:

```
(imss_1) Please enter the IP address this IMSS instance will use
to connect to the existing IMSS server []: 192.168.10.124
```

```
(imss_2) Please enter the IP address this IMSS instance will use
to connect to the existing IMSS server []: 192.168.10.125
```

5. Type the domain name that you want to specify in the mydomain parameter of the Postfix configuration file.

   ```
   Enter your domain name []: <domain name>
   ```

   For example:

   ```
   Enter your domain name []: yourcompany.com
   ```

6. Confirm/deny installation of the Network Reputation Services (NRS).

   ```
   Do you want to install Network Reputation Services? [y]: y
   ```

7. If you choose to install the NRS, the installer prompts for the NRS Activation Code:

   ```
   Please enter your NRS Activation Code []:
   <XX-XXXX-XXXXX-XXXXX-XXXXX-XXXXX-XXXXX>
   ```

8. Confirm/deny installation of the IP Profiler.

   ```
   Do you want to install IP Profiler? [y]: y
   ```

WARNING! **IP Profiler uses port 25 by default. Postfix listens to the same port by default. If IP Profiler is installed, change the Postfix listening port to 2500 in the IMSS Web console before installing IMSS on the X-Series for proper operation.**

9. When prompted to indicate whether changes need to be made, type n and press **Enter**.

   ```
   Are any changes needed? [n]: n

   At this stage, the IMSS installer is extracted and installed on
   every member of the VAP group.

   ** A reboot is required for the change(s) to take affect. **

   Extracting Bundle: [####################] 100% [ok]

   Installing imss on VAP imss_2: [####################] 100% [ok]

   Installing imss on VAP imss_1: [####################] 100% [ok]
   ```

WARNING! **When IMSS is installed, Postfix 2.0 is removed from the VAP and Postfix 2.1 is installed. The bind-libs and bind-utils RPMs are also installed. IMSS is installed with Service Pack 1 and Hot Fix 31670 (Build 3167). Please note that both should be installed on the Central Controller in distributed architecture. Service Pack 1 can be obtained from the Trend Micro Web site. The hot fix may be obtained from Trend Micro Technical Support.**

10. Reload the vap-group.

```
CBS# reload vap-group imss
```

During reboot, when a local disk is present, the following folders are redirected to the local disk (local disk names may be in the format of 'aplocaldisk1' or 'aplocaldisk2' depending on your APM type and configuration):

- `/opt/trend/imss/temp -> /mnt/aplocaldisk/imss/temp`
- `/opt/trend/imss/queue -> /mnt/aplocaldisk/imss/queue`
- `/opt/trend/imss/log -> /mnt/aplocaldisk/imss/log`
- `/var/spool/postfix -> /mnt/aplocaldisk/imss/postfix`
- `/tmp -> /mnt/aplocaldisk/imss/tmp`

11. Save the running configuration again.

```
CBS# wr
```

Verifying the Installation

Execute the following command to verify the operational state of the application:

```
CBS# show application [vap-group <vap-group-name>]
```

The following example displays the operational state of the application on a VAP group named imss:

```
CBS# show application vap-group imss

VAP Group      : imss

App ID         : imss

Name           : InterScan Messaging Security Suite

Version        : 7.0
```

```
Release         : 6-xos
Start on Boot   : yes

imss_1          : running
imss_2          : running
```

Chapter 4

Application Management

This chapter provides information about basic application management controls. For additional information refer to the *XOS Command Reference Guide*.

Topics include:

XOS Basic Application Management Commands

Use the following commands at the XOS system prompt to perform basic application management:

Note: The VAP must be listed as "UP" for the following Start, Stop, and Restart commands to take effect.

TABLE 4-1. XOS Commands

COMMAND	Function
`application imss vap-group <vap-group-name> start`	Start an application
`application imss vap-group <vap-group-name> stop`	Stop an application
`application imss vap-group <vap-group-name> restart`	Restart an application
`application-update vap-group <vap-group-name>`	**Update VAPs.** This command is used when the VAP count of the VAP group is incremented after the application configuration. The update command installs the application on the newly created VAPs.
`show application [vap-group <vap-group-name>]`	Display (show) all applications installed on all VAP groups or a specified VAP group.

Show Application Command

The following example shows the state of the application on a VAP group named imss:

```
VAP Group       : imss
App ID          : imss
Name            : InterScan Messaging Security Suite
Version         : 7.0
```

```
Release         : 6-xos
Start on Boot   : yes


imss_1          : running
imss_2          : running
```

Start on Boot indicates whether the application will start during VAP boot (enabled) or not (disabled). Start on Boot is enabled at install time and when the user runs the application start CLI command. Similarly, Start on Boot is disabled when the user runs the application stop CLI command.

The command also shows the application's status (running or not running) for each VAP in the VAP Group. The XOS health system polls the application every five seconds to determine the application's state and reports it to the CLI.

Uninstalling the Application

To uninstall the application:

1. At the XOS CLI prompt, type the following command to uninstall the application:

```
CBS# application imss version 7.0 vap-group <vap-group-name>
uninstall


Trend Micro, InterScan Messaging Security Suite  7.0  release 1
Stopping imss on VAP imss_2: [####################] 100% [ ok ]
Stopping imss on VAP imss_1: [####################] 100% [ ok ]
Uninstalling imss on VAP imss_2: [#################] 100% [ ok ]
Uninstalling imss on VAP imss_1: [#################] 100% [ ok ]
** A reboot is required for the change(s) to take affect. **
```

Note: If the application is installed on multiple VAP groups, repeat the previous step for each VAP group.

WARNING! **When IMSS 7.0 is uninstalled, all IMSS files and directories are deleted. This includes any archived or quarantined mails. Postfix 2.1 is also removed and Postfix 2.0 restored. All Postfix settings are reset to default. The `/mnt/aplocaldisk/imss` folder is renamed to `/mnt/aplocaldisk/imss_old` and deleted the next time an uninstall is performed.**

2. Reload VAP group

```
CBS# reload vap-group imss
```

3. (Optional) Remove the application files.

```
CBS# application-remove imss
```

Appendix A

Troubleshooting

This chapter provides troubleshooting options if InterScan Messaging Security Suite does not install.

Topics include:

IMSS Installation Issues

If the IMSS installation does not succeed, examine the following files:

- /tmp/imss_install.out
- /tmp/nrs_install.out
- /tmp/ip_install.out
- /tmp/sp1_install.out
- /tmp/hf3167_install.out

These files contain a record of the recent IMSS installation and any errors that were encountered during installation.

If you see the following error in `/var/log/messages`:

```
IMSSXPlugin: The specified database cannot be accessed. Verify the
IP address, user name, and password
```

The installer cannot reach the existing Central Controller from the VAP on which you are installing IMSS. Verify that the VAP can ping the Central Controller IP address, and that the PostgreSQL database on the existing IMSS server is started.

If you see the following error in `/var/log/messages`:

```
IMSSXPlugin: NRS AC validation failed. NRS AC invalid or host
utility not installed. Please note an Internet connection is needed
to validate the NRS AC
```

The installer cannot validate the NRS activation code. This problem may be caused by one or more of the following problems:

- The VAP has no route to the Internet. To perform validation of the activation code, the installer needs to connect to Trend Micro's RBL database.
- The host utility is not present on the VAP. By default, the IMSS CBI installs the bind-libs and bind-utils RPMs to provide this utility. To verify that the RPMs were installed properly, run the host utility on the VAP.
- The activation code is invalid.

Support and Training

Refer to the following Web site regarding support for this application:

http://esupport.trendmicro.com

Support calls related to your Crossbeam Systems platform should be directed to:

- Crossbeam Systems Customer Service at 1-800-331-1338 (within the U.S. only) or +1-978-318-7595 for international customers.
- For additional information, please contact your account representative or refer to www.crossbeamsystems.com for product training offerings and schedules.

Customer Comments

To submit comments regarding the products or their documentation send an email to alliance_support@trendmicro.com.