SOPHOS
Security made simple.

Pocket Guide

Configure Discover (TAP) Mode and Security Audit Report

Product: Sophos XG Firewall

Contents

Overview **3**
Prerequisites **3**
Features supported in TAP mode **4**
Network Diagram **5**
Configuration **6**
Deploy XG Firewall in Discover Mode 6
Step 1: Connect and Access XG Firewall 6
Step 2: Connect and Enable Discover Mode 6
CLI 6
Wizard 7
Step 3: Verify Configuration 8
Step 4: Configure Port Mirroring on Network Switch 8
Step 5: Security Audit Report (SAR) 9
Schedule SAR Emails 9
Result **11**
Appendix **12**
Configure Authentication Server to send API Request and Integrate it with XG Firewall 12
Configure Sophos Firewall to accept API Request 13
Copyright Notice **14**

Overview

This document describes how you can deploy Sophos XG Firewall device in discover (TAP) mode to enable passive monitoring of traffic flow in your network. When you connect an interface of the device to a SPAN or mirror port on a switch, traffic from the other switch ports is copied and provided to the device for analysis. The device can work with any existing firewall, and does not displace or disrupt existing IT security infrastructure.

Prerequisites

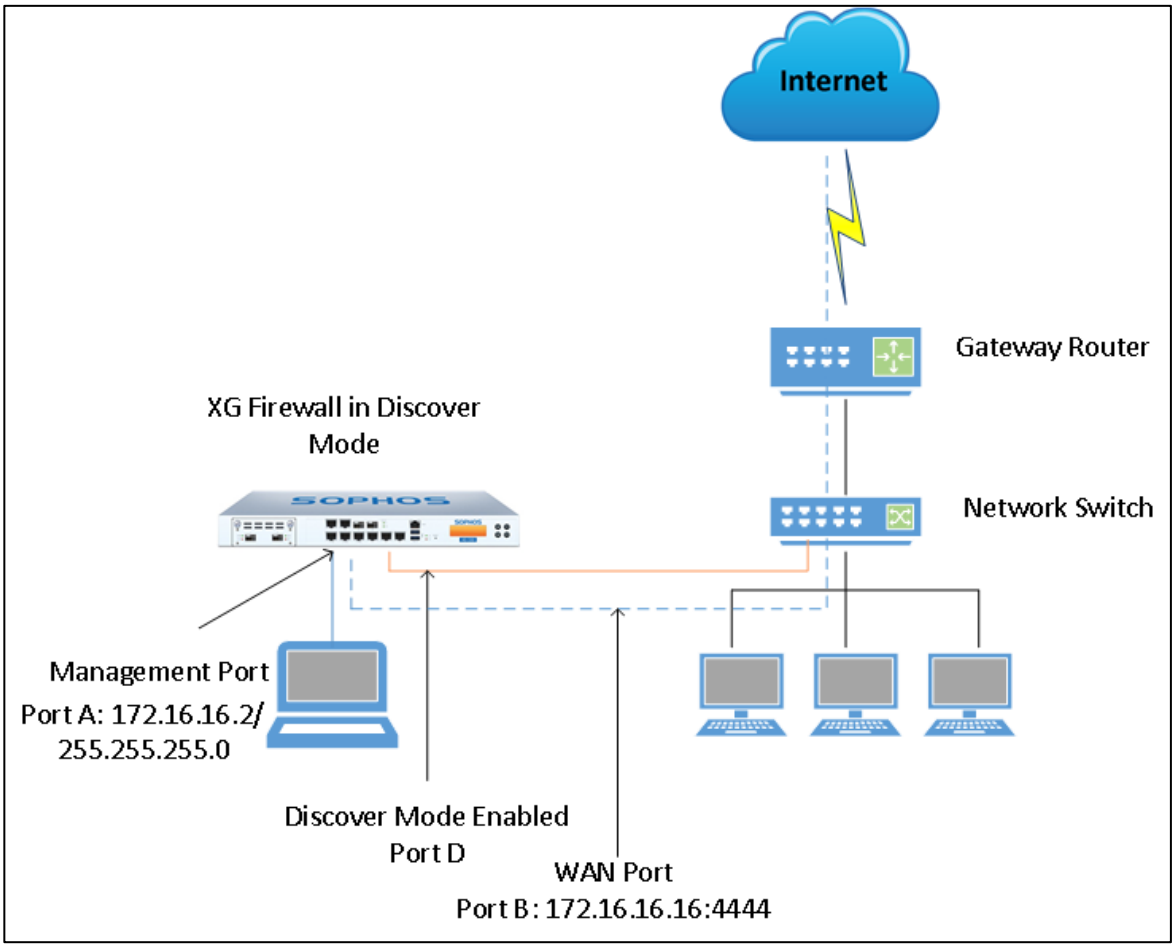
- You must have read-write permissions on the SFOS Admin Console and Command Line Interface for the relevant features.
- XG Firewall should be connected to the Internet for on-cloud web classification, IPS updates and SAR generation.
- The device must be connected to a switch that supports SPAN or mirror port configuration.
- You must have an unbound interface to enable discover mode.

Note: To unbind an interface, go to **Configure** > **Network** > **Interfaces**, select the interface and set **Network Zone** to **None**.

Features supported in TAP mode

Subscription	Features	Availability
Network Protection	Synchronized App Control	Yes
	Heartbeat	Yes
	IPS Detection	Yes
	Advanced Threat Protection	Yes
	IPS Control	No
	RED Device Support	No
Base Subscription	Reports	Yes
	Traffic Discovery	Yes
	DoS	Yes
	User Identity	Yes
	High Availability	Yes (HA can be configured in TAP mode)
	User Identity-based Control	No (User-based policy cannot be applied)
	Network Services (ARP, Routing, DNS, DHCP)	No
	Firewall	No
	Spoofing	No
	QoS	No
	Traffic ACLs	No
	VPN	No
	SSL VPN	No
	IPv6	No
	Wireless Device Support	No
Email Protection	Mail Usage	No
	AntiSpam	No
Web & Email Protection	AntiVirus	No
Web Protection	Application Classification (Signature-based)	Yes
	Web Categorization (Uses IPS)	Yes (Categorization against URLs)
	Microapps (HTTPS Micro Apps)	No
	Application Filtering	No
	Web Filtering	No
Web Server Protection	WAF	No

Network Diagram



Configuration

Deploy XG Firewall in Discover Mode

Step 1: Connect and Access XG Firewall

- Connect one end of the straight-through cable to Port A of the device. Connect the other end to the Management Computer.
- Make the following changes to the LAN computer from which you wish to access the Admin Console of XG Firewall (Management Computer):
  - IP Address: 172.16.16.2
  - Subnet mask: 255.255.255.0
- On the Management Computer, go to https://172.16.16.16:4444. Log in to the SFOS Admin Console.

Step 2: Connect and Enable Discover Mode

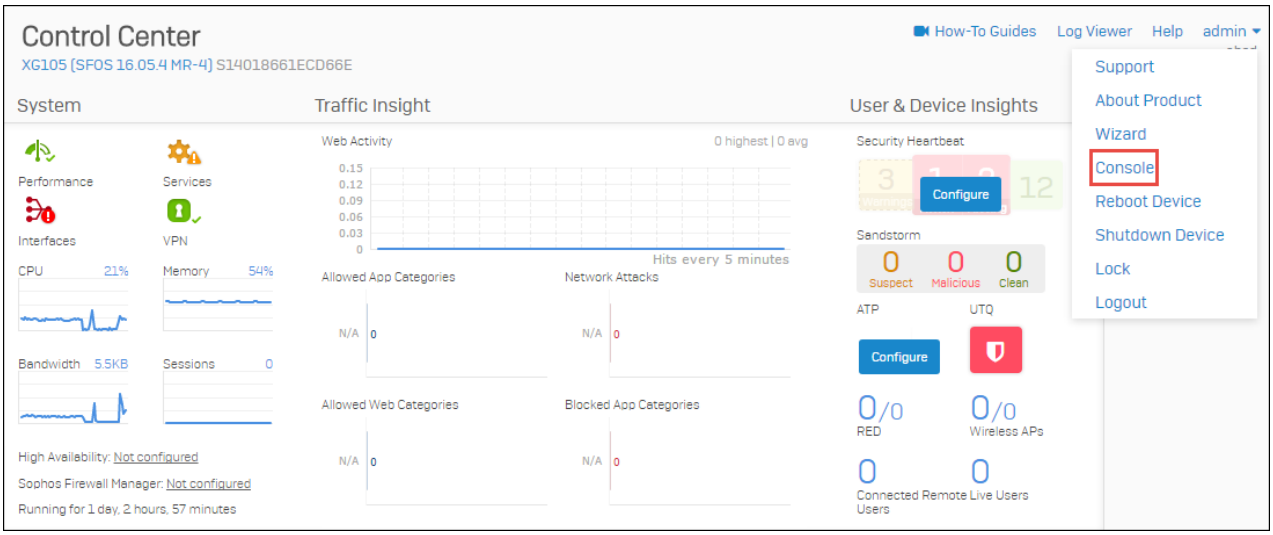
Connect another cable from an unbound XG Firewall port (Example: Port D in this illustration) to the mirror port (on which you wish to configure port mirroring) on the network switch.

You can enable discover mode through:

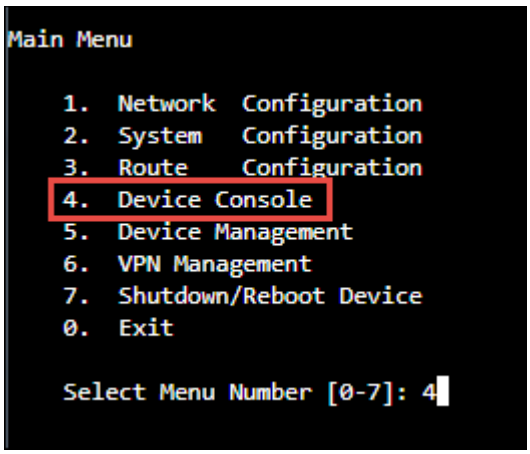
1. CLI
2. Wizard

CLI

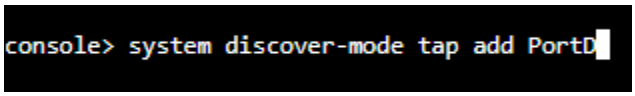
- Go to **admin** > **Console** in the upper-right corner.



- Type 4 to select Device Console.

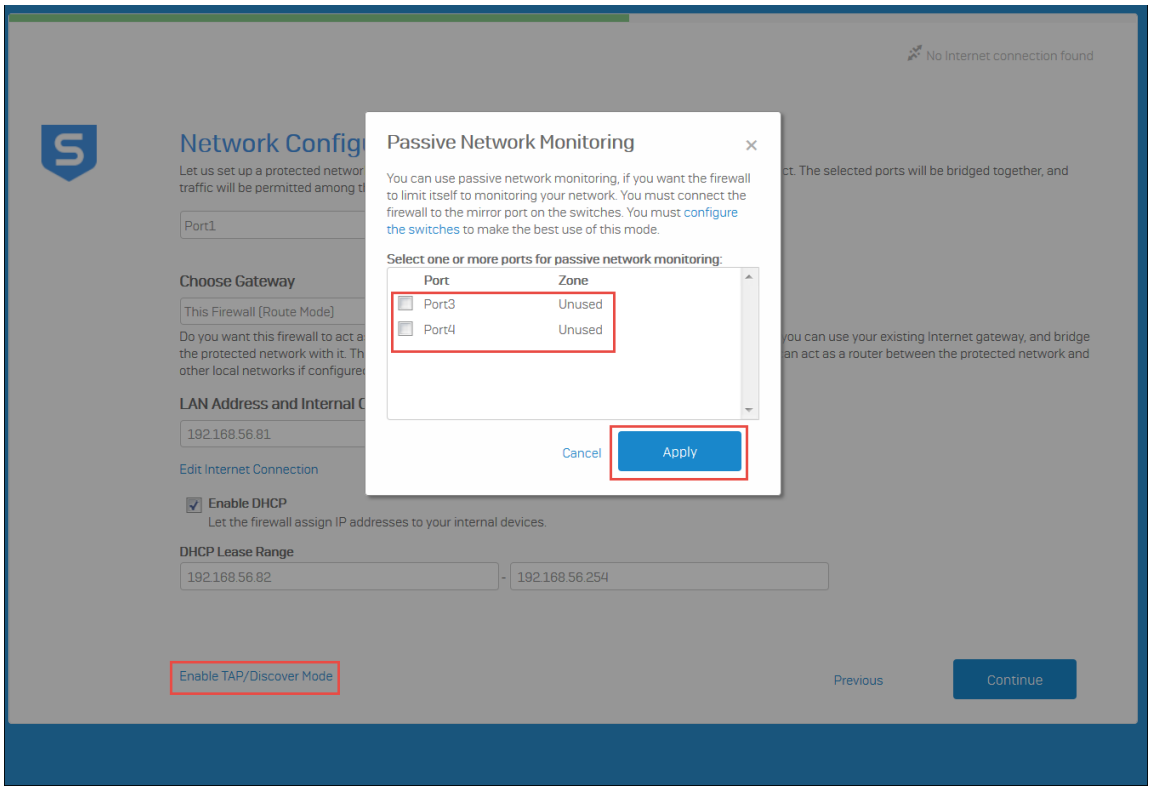


- Execute the following command to enable discover mode on Port D.
  console> system discover-mode tap add PortD



Wizard

- Go to https://172.16.16.16:4444 from the Management Computer. Click **Start** and follow the on-screen instructions.
- Go to **Network Configuration (LAN)**, click **Enable TAP/Discover Mode**.
- Select one or more ports to connect to the mirror port on the switch, click **Apply**.



Step 3: Verify Configuration

On **Configure > Network > Interfaces**, the discover mode interface will display **Discover, Physical (TAP)**.

Note: When XG Firewall is deployed in discover mode, it functions in promiscuous mode, and no security policy is applied.

Step 4: Configure Port Mirroring on Network Switch

To configure the mirror port on the network switch, refer to the switch vendor's documentation.

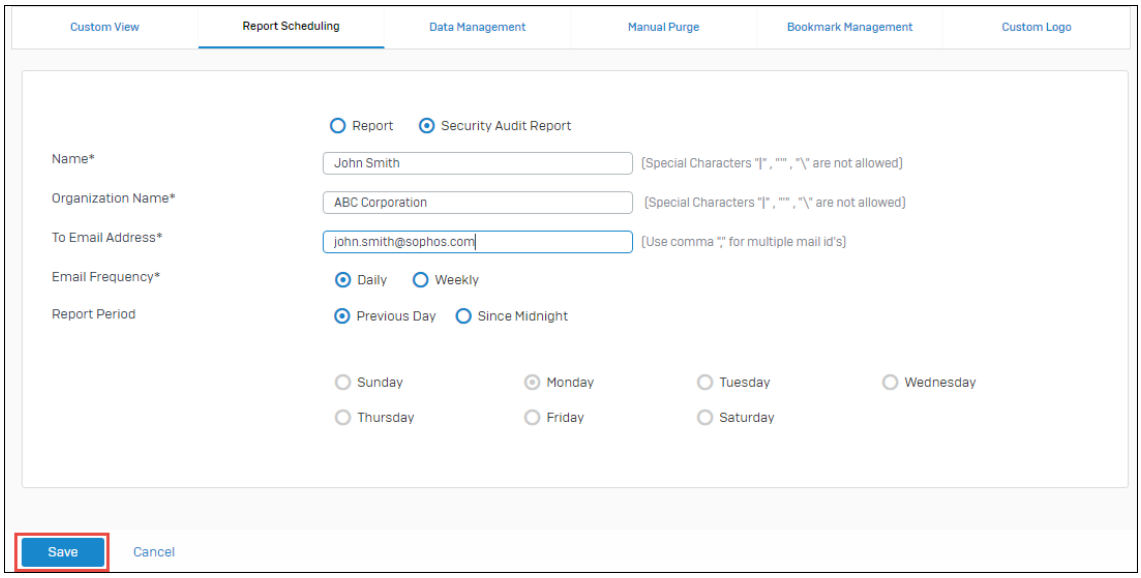
Note: Mirror port is the one connected to the XG Firewall port on which Discover mode has been enabled.

Step 5: Security Audit Report (SAR)

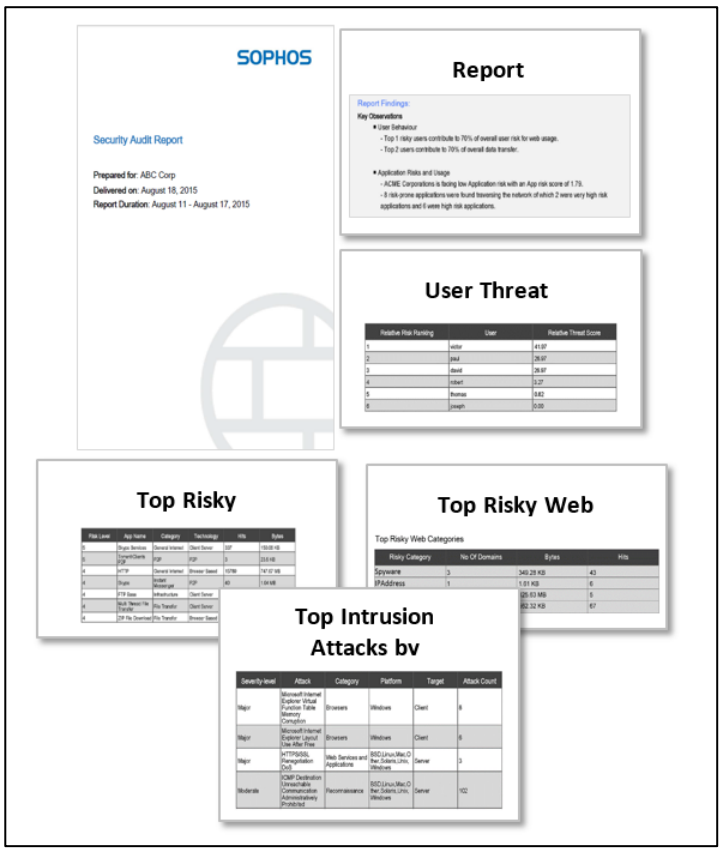
You can configure periodic email notifications with the Security Audit Report. It provides key observations, users with risk-prone behavior, including User Threat Quotient (UTQ), user application risks and usage, including Application Risk Score, high risk applications and application categories by data transfer, synchronized applications, web risks based on objectionable domains, web usage based on data transfer and hits, intrusion attacks, Advanced Threat Protection (ATP) visibility, and Security Heartbeat of endpoints.

Schedule SAR Emails

- Go to **Monitor & Analyze** > **Reports.** Click **Show Reports Settings** above the menu. Click **Report Scheduling** and click **Add**.
- Select **Security Audit Report.**
- Enter the **Name, Organization Name**, and **To Email Address**.
- Select the **Email Frequency**.



SAR Report



Click **Save**.

Note: SAR can also be generated when XG Firewall is deployed in in-line modes: gateway mode, bridge mode or mixed mode.

Result

You have deployed XG Firewall in discover mode and configured the SAR Report. For successful deployment, ensure the following:

- Verify:
  - Device can connect to the Internet
  - All services are running (Configure > System Services > Services)
- Apply the latest versions (System > Backup & Firmware):
  - IPS signatures
  - Application signatures
  - AP firmware
  - RED firmware
- Retain default settings for :
  - Pattern updates (System > Backup & Firmware > Pattern Updates)
  - DoS settings (Protect > Intrusion Prevention > DoS & Spoof Prevention)
- When you create security policies:
  - IPS: Apply the default 'generalpolicy'
  - Web and Application filters: Apply **Allow All** filters and check for traffic flow
  - Configure email notification settings
  - Advanced Threat Protection: Set **Policy** to **Log Only**.

Note: SFOS does not support HTTPS in TAP mode.

Appendix

Configure Authentication Server to send API Request and Integrate it with XG Firewall

This configuration will ensure user-specific data in reports. The Authentication Server will send an API request to the device when a user sends a login or logout request.

Sample API Request Codes:

Login Request

```
<Request>
<LiveUserLogin>
<UserName>Sophos</UserName>
<Password>Sophos</Password>
<IPAddress>10.21.18.15</IPAddress>
<MacAddress>00:0C:29:2D:D3:AC</MacAddress>
</LiveUserLogin>
</Request>
```

Logout Request

```
<Request>
<LiveUserLogout>
<Admin>
<UserName>admin</UserName>
<Password>admin</Password>
</Admin>
<UserName>Sophos</UserName>
<IPAddress>10.21.18.15</IPAddress>
</LiveUserLogout>
</Request>
```

API link format

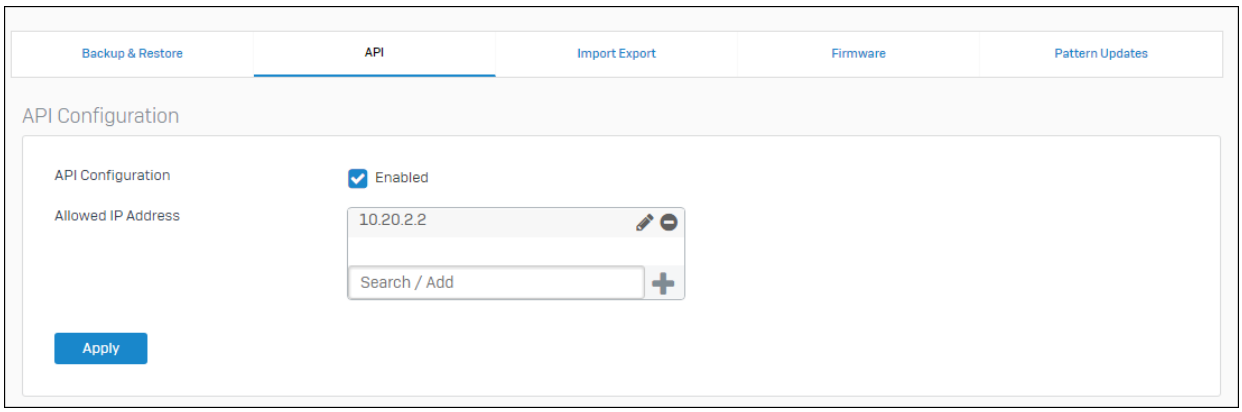
https://<SophosIP>/corporate/APIController?reqxml=<Add the XML request here>

Example:

https://172.16.16.16/corporate/APIController?reqxml=<Request><LiveUserLogin><UserName>sophos</UserName><Password>sophos</Password><IPAddress>10.21.18.15</IPAddress><MacAddress>00:0C:29:2D:D3:AC</MacAddress></LiveUserLogin></Request>

Configure Sophos Firewall to accept API Request

- Log in to the SF Admin Console as administrator.
- Go to **System > Back Up & Firmware > API** and enable **API Configuration**.
- Add the **IP Address** from which SFOS receives API Requests.



Click **Apply**.

Copyright Notice