

Configuration Management

This chapter describes additional information about configuring the Threat Grid Appliance after the initial configuration.

Note The initial configuration is described in the *Cisco Threat Grid Appliance Setup and Configuration Guide*. Refer to this guide for configuring the TGSH Dialog Interface and using the OpAdmin Configuration Wizard.

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Introduction

The initial Threat Grid Appliance configuration is performed during the appliance setup, as documented in the Cisco Threat Grid Appliance Setup and Configuration Guide, using the TGSH Dialog and the OpAdmin portal.



Note

Threat Grid organizations and user accounts are managed in the Threat Grid Portal UI (from the drop-down arrow next to your login name in the navigation bar).

Network Configuration Using TGSH Dialog

The initial network configuration is completed using the TGSH Dialog (see Cisco Threat Grid Appliance Setup and Configuration Guide). This section provides some additional information about using the TGSH Dialog.

Configure Network Using TGSH Dialog

If you want to make changes to your initial network configuration, perform the following steps.



If you are using DHCP to obtain IPs, see Network Configuration and DHCP.

Procedure

Step 1	Login to TGSH Dialog.
	Note If you are configured for LDAP Only authentication, you can only log into TGSH Dialog using LDAP. If authentication mode is set to System Password or LDAP , the TGSH Dialog login only allows the System login.
Step 2	In the TGSH Dialog interface, select CONFIG_NETWORK.
	The Network Configuration console opens and displays the current network settings.
Step 3	Make any necessary changes (you need to backspace over the old entry before you can enter the new one).
Step 4	Leave the Dirty network DNS Name blank.
Step 5	After you finish updating the network settings, tab down and select Validate to validate your entries.
	If invalid values have been entered, you may see errors. Correct the entries and then select Validate again.
	After validation, the Network Configuration Confirmation displays the entered values.
Step 6	Select Apply to apply your configuration settings.
	Detailed information about the configuration changes that have been made are displayed.
Step 7	Select OK .

The Network Configuration Console refreshes again and displays the IP addresses. Network configuration is now complete.

Reconnect to TGSH Dialog

TGSH Dialog remains open on the console and can be accessed either by attaching a monitor to the appliance or, if CIMC is configured, via remote KVM.

To reconnect to the TGSH Dialog, SSH into the Admin IP address as the user **'threatgrid**'. The required password is either the initial randomly generated password, which is visible initially in the TGSH Dialog, or the new Admin password you create during the first step of the OpAdmin Configuration (see the *Cisco Threat Grid Appliance Getting Started Guide*).

Configure Networking in Recovery Mode

Network configuration in recovery mode mirrors the full system (v2.7 and later):

• All interfaces are brought up.

• Firewall rules and policy routing restricts which processes can communicate on which interfaces.



Support mode traffic on port 19791 is allow-listed across all three interfaces.

Perform the following steps to set up networking in recovery mode.

Procedure

- **Step 1** Reboot the appliance and then choose **Recovery Mode** in the boot menu.
- **Step 2** Once the system is up, press Enter several times to get a clean command prompt.
- **Step 3** Enter **netctl clean** and provide the following information:
 - Configuration type static
 - IP Address <Clean IP Address>/<Netmask>
 - Gateway Address < Clean network gateway>
 - Routes <leave blank>
 - Final Question Enter y

Step 4 Enter **Exit** to apply the configuration.

The appliance will attempt to open an outbound support connection on the Clean interface on port 19791/tcp.

Configuration Using OpAdmin Portal

The initial setup and configuration wizard is described in the Cisco Threat Grid Appliance Setup and Configuration Guide. New Threat Grid Appliances may require the administrator to complete additional configuration, and OpAdmin settings may require updates over time.

The OpAdmin Portal is the Threat Grid Appliance administrator's main configuration interface. It is a Web portal that can be used once an IP address has been configured on the Threat Grid Appliance Admin interface.

OpAdmin is the recommended tool for configuring your appliance, and in fact, much of the appliance configuration can only be done via OpAdmin. OpAdmin is used to configure and manage a number of important Threat Grid Appliance configuration settings, including:

- The administrator's passwords (for OpAdmin and the threatgrid user)
- Threat Grid License
- Rate Limits
- SMTP

- SSH
- SSL Certificates
- DNS servers (including DNS configuration for AMP for Endpoints Private Cloud integrations)
- NTP servers
- Server Notifications
- · Syslog messages and Threat Grid Notifications remote server setup
- CA Certificate Management (for AMP for Endpoints Private Cloud integrations)
- LDAP Authentication
- Third-party Detection and Enrichment Services (including ClamAV, OpenDNS, Titanium Cloud, and VirusTotal)



- Note
- Configuration updates in OpAdmin should be completed in one session to reduce the chance of an interruption to the IP address during configuration.
- OpAdmin does not validate the gateway entries. If you enter the wrong gateway and save it, the OpAdmin interface will not be accessible. You will need to use the console to fix the networking configuration if that was done on the Admin interface. If Admin is still valid, you can fix it in OpAdmin and reboot.
- Threat Grid Appliances (v2.7 or later) use the serial number as the hostname to improve interoperability with some NFS v4 servers.

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Important OpAdmin uses HTTPS. Pointing a browser at the Admin IP is not sufficient; you must point to:

https://adminIP/

OR

https://adminHostname/

Configure SSH Keys

Setting up SSH keys provides the Threat Grid appliance administrator with access to the TGSH Dialog via SSH (threatgrid@<host>).

It does NOT provide root access or a command shell. Multiple keys may be added in **Configuration > SSH**.

On Threat Grid Appliances (v2.7 and later), configuring a SSH public key for access to the appliance disables password-based authentication via SSH; this makes SSH authentication methods one or the other, not both. After a successful SSH connection using key-based authentication, tgsh-dialog prompts for a password, such that both tokens are required.

Configure Remote Syslog Server for Notifications

In addition to the periodic notifications that can be set up to deliver system notifications via email (in OpAdmin under **Configuration** > **Notifications**), you can configure a remote syslog server to receive syslog messages and Threat Grid notifications.

Procedure

Step 1	Log in to the OpAdmin portal and click Configuration > Syslog .
Step 2	Enter the server DNS and then choose a protocol from the drop-down list (TCP is the default, the other is UDP).
Step 3	Check the Verification check box to perform a DNS lookup after you save the configuration.
	If the host cannot resolve the name, it will print an error and will not save (until you enter a valid hostname). If you do not check the Verification check box, the appliance will accept any name, whether valid in DNS or not.
Step 4	Click Save.
	To edit or delete the Syslog DNS, open Configuration > Syslog and make your modifications, and then click Save .

Configure LDAP Authentication

The Threat Grid Applicance supports LDAP authentication and authorization for OpAdmin and TGSH Dialog login.

You can authenticate multiple appliance administrators with different credentials that are managed on the domain controller or the LDAP server. Authentication modes include: System Password Only, System Password or LDAP, and LDAP Only.

There are three LDAP Protocol options: LDAP, LDAPS, and LDAP with STARTLS.

The following considerations should be reviewed:

- The dual authentication mode (System Password or LDAP) is required to avoid accidentally locking
 yourself out of the appliance when setting up LDAP. Selecting LDAP Only is not allowed initially; you
 must first go through dual mode to make sure it works. You will need to log out of OpAdmin after the
 initial configuration, and then log back in using LDAP credentials in order to toggle to LDAP Only.
- You can only log into TGSH Dialog using LDAP if you are configured for LDAP Only authentication. If authentication mode is set to System Password or LDAP, then the TGSH Dialog login will only allow the System login.
- If the appliance is configured for LDAP authentication only (**LDAP Only**), then resetting the password in recovery mode will reconfigure the authentication mode to allow login with system password as well.
- Make sure that the authentication filter is set up to restrict membership.
- TGSH Dialog and OpAdmin require LDAP credentials only in **LDAP Only** mode: if **LDAP only** is configured, TGSH Dialog will not ask for the system password but for an LDAP user/password.
- If authentication is configured for **System Password or LDAP**, TGSH Dialog will continue to ask for the system pw only, it'll not have both.

- Troubleshooting LDAP: If it breaks, disable it by doing a password reset in Recovery Mode.
- TGSH Dialog access via SSH: A system password or a configured SSH key is required **in addition to** LDAP credentials for tgsh-dialog access via ssh when in LDAP Only mode.
- LDAP is outbound from the Clean interface.

Configure LDAP Authentication in OpAdmin

Perform the following steps to configure LDAP authentication in the OpAdmin portal.

Procedure

Step 1

Log in to the OpAdmin portal and choose **Configuration > LDAP** to open the LDAP configuration page.

Figure 1: LDAP Authentication Configuration

		Supp	iort =		100	
		use	ELDAP for login authentication.			
Hostname	O HELP	0	ad.acme.test			
Port	O HELP	0	389			
Authentication Mode	O HELP	0	System Password or LDAP .			
LDAP Protocol	O HELP	0	LDAP with STARTTLS			
Bind DN	O HELP	0	CN=LDAP,CN=Managed Service Accounts.			
Bind Password	O HELP	0				
Base	• HELP	0	cn=users.dc=acme.dc=test			
Authentication Filter	O HELP	0	(sAMAccountName=%LOGIN%)			

Step 2 Complete the fields on the page. You can click the **Help** icon next to each field for a detailed description and more information.

Note

The first time you configure LDAP authentication, you must select **System Password** or **LDAP**, log out of OpAdmin, and then log back in using your LDAP credentials. You can then change the setting to implement **LDAP Only**.

Step 3 Click Save.

When users log in to OpAdmin or TGSH Dialog, they will now see one of the following screens:

Figure 2: LDAP Only

Aι	uthentication Required	
	uthentication is required to administer your ThreatGRID Appliance. uthenticate using LDAP:	
•	LDAP Login	
	a	
A	Authenticate	
	This site is best viewed in: Internet Explorer 10+, Firefox 14+, Safari 6+, or	Chrom

Figure 3: System Password or LDAP

Authentication is required to a	dminister your ThreatGRID Appliance.
Authenticate using LDAP:	
LDAP Login	Authenticate using System Password
A	or 🔒
	Authenticate
Authenticate	

Configure Third-party Detection and Enrichment Services

Integrations with several third-party detection and enrichment services, including OpenDNS, TitaniumCloud, and VirusTotal, can be configured on the appliance using the Integration Configuration page. This applies to Version 2.2 and later.



Note If OpenDNS is not configured, the **whois** information on the Domains entity page in the analysis report in the portal (in the Mask version of the UI) will not be rendered.

Procedure

Step 1 Log in to the OpAdmin portal and choose **Configuration > Integrations** to open the Integrations configuration page.

Figure 4: Integrations Configuration

Configuration - Operation	s • Status • S	ipport +)m -
Configure your ThreatGRI	Appliance inte	grations.	
Virus Total:			
- URL	O HELP	•	
- Key	O HELP	Q ₄	
Titanium Cloud:			
- User	O HELP	4	
- Password	O HELP		
- URL	O HELP	•	
OpenDNS:			
- Investigate API Token	O HELP	Q.	
ClamAV:			
- Auto Update	O HELP	Enabled	

Step 2 Enter the authentication or other values required.

Note

ClamAV signatures can be automatically updated on a daily basis. This is enabled by default, and can be disabled on the Integrations Configuration page (**ClaimAV** field).

Step 3 Click Save.

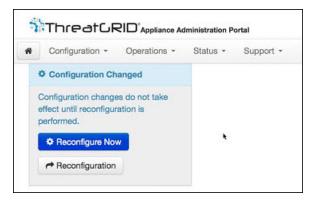
Apply Configuration Change

Any time changes are made to configuration settings, a light blue **Configuration Changed** alert appears below the **Configuration** menu. When you are done updating any OpAdmin configuration settings, you must save the new configuration in a separate step.

Procedure

Step 1 Click **Configuration Changed** to open the dialog.

Figure 5: Configuration Changed Dialog



Step 2 Click **Reconfigure Now** to apply your changes to the appliance.

Using DHCP

Most Threat Grid Appliance users do not use a network configured with DHCP. However, if you are connected to a network configured to use DHCP, then read this section.



Note If the initial appliance network configuration used DHCP and you now need to switch to static IP addresses, see Network Configuration and DHCP.

TGSH Dialog displays the information you will need to access and configure the OpAdmin portal interface. It may take some time for the IP addresses for DHCP to display after your appliance boots.

Explicit DNS for DHCP

Threat Grid Appliances (v1.3 and later) that use DHCP need to explicitly specify DNS.



Warning An upgrade of a system without a DNS server explicitly specified to v1.3 will fail.

Open the TGSH Dialog and note the following information.

Figure 6: TGSH Dialog (Connected to a Network Configured to Use DHCP)

our ThreatGRID	Main Menu device can be managed at:
	: https://10.90.3.127 / 90:e2:ba:79:db:08
	/ MAC : https://10.90.2.127 / 1c:6a:7a:18:56:64
	: mSG7SbJp11F03f2vW1Ni
he nassword sho	own above has been automatically generated for you.
	ired to change this password when you first login.
CONFIG NETWO	ORK Configure the system's network interfaces.
SAVE	Save configuration changes but do not apply.
	Save and apply configuration changes.
APPLY	
CONSOLE	
	CLI-based configuration access.
CONSOLE	
CONSOLE	CLI-based configuration access.

- Admin URL The Admin network. You will need this address in order to continue the remaining configuration tasks with OpAdmin.
- Application URL The Clean network. Note: This is the address to use after completing the configuration with OpAdmin, in order to access the Threat Grid application.

The Dirty network is not shown.

 Password - The initial administrator's password, which is randomly generated during the appliance installation. You will need to change this password later as the first step the OpAdmin configuration process.

If you plan to use DHCP on a permanent basis, then no additional network configuration is necessary, unless you need to change the Admin IP address to static.

Network Configuration and DHCP

If you used DHCP for initial configuration, and you now need to adjust the IP assignment from DHCP to your permanent static IP addresses for all three networks, perform the following steps.



Note OpAdmin will not validate the gateway entries. If you enter the wrong gateway and save it, the OpAdmin interface will be inaccessible. You will need to use the console to fix the networking configuration if that was done on the admin interface. If Admin is still valid, you can fix it in OpAdmin and reboot.

Procedure

Step 1 In the OpAdmin portal, click **Network** in the navigation pane (although **Configuration > Network** is checked in the License window, the DHCP network configuration has not yet been done).

The Network configuration page opens.

Step 2 Complete the following fields:

Note

The Admin network settings were configured using the TGSH Dialog during the initial appliance setup and configuration.

- IP Assignment Choose Static from the drop-down menu for both Clean and Dirty network interface.
- IP Address Enter a static IP address for the Clean or Dirty network interface.
- Subnet mask Complete as appropriate for the type of network interface.
- Validate DNS Name For Clean network interface, check the Validate DNS Name check box to verify that the DNS resolves to the IP address.
- Primary and Secondary DNS Enter the primary and secondary DNS server information.

Step 3 Click Next (Applies Configuration) to save your network configuration settings.

Note

Email configuration is managed from the Email page and Time NTP servers are managed on the Date and Time page.

Step 4 Click **Configuration Changed** and choose **Reconfigure Now** to apply your DHCP configuration settings.

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