TREND MICRO™

9.7 TREND MICRO™ Mobile Security™

Patch 3

Administrator's Guide

(for Full Version Deployment Mode)

Comprehensive security for enterprise handhelds

Endpoint Security

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The user documentation for Trend Micro™ Mobile Security for Enterprise introduces the main features of the product and provides installation instructions for your production environment. Read through the documentation before installing or using the product.

Detailed information about how to use specific features within the product is available in the Online Help and the Knowledge Base at the Trend Micro website.

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Preface

Preface

Welcome to the Trend Micro™ Mobile Security for Enterprise version 9.7 Patch 3 Administrator's Guide. This guide provides detailed information about all Mobile Security configuration options. Topics include how to update your software to keep protection current against the latest security risks, how to configure and use policies to support your security objectives, configuring scanning, synchronizing policies on mobile devices, and using logs and reports.

This preface discusses the following topics:

- *Audience on page viii*
- *Mobile Security Documentation on page viii*
- *Document Conventions on page ix*

Audience

The Mobile Security documentation is intended for both administrators—who are responsible for administering and managing Mobile Device Agents in enterprise environments—and mobile device users.

Administrators should have an intermediate to advanced knowledge of Windows system administration and mobile device policies, including:

- Installing and configuring Windows servers
- Installing software on Windows servers
- Configuring and managing mobile devices
- Network concepts (such as IP address, netmask, topology, and LAN settings)
- Various network topologies
- Network devices and their administration
- Network configurations (such as the use of VLAN, HTTP, and HTTPS)

Mobile Security Documentation

The Mobile Security documentation consists of the following:

- *Installation and Deployment Guide*—this guide helps you get "up and running" by introducing Mobile Security, and assisting with network planning and installation.
- *Administrator's Guide*—this guide provides detailed Mobile Security configuration policies and technologies.
- *Online help*—the purpose of online help is to provide "how to's" for the main product tasks, usage advice, and field-specific information such as valid parameter ranges and optimal values.
- *Readme*—the Readme contains late-breaking product information that is not found in the online or printed documentation. Topics include a description of new features, installation tips, known issues, and release history.

- *Knowledge Base*— the Knowledge Base is an online database of problem-solving and troubleshooting information. It provides the latest information about known product issues. To access the Knowledge Base, open:

  http://esupport.trendmicro.com/

Tip

Trend Micro recommends checking the corresponding link from the Download Center (http://www.trendmicro.com/download) for updates to the product documentation.

Document Conventions

The documentation uses the following conventions.

TABLE 1. Document Conventions

CONVENTION	DESCRIPTION
UPPER CASE	Acronyms, abbreviations, and names of certain commands and keys on the keyboard
Bold	Menus and menu commands, command buttons, tabs, and options
Italics	References to other documents
`Monospace`	Sample command lines, program code, web URLs, file names, and program output
Navigation > **Path**	The navigation path to reach a particular screen For example, **File** > **Save** means, click **File** and then click **Save** on the interface
Note	Configuration notes
Tip	Recommendations or suggestions

CONVENTION	DESCRIPTION
Important	Information regarding required or default configuration settings and product limitations
WARNING!	Critical actions and configuration options

Chapter 1

Introduction

Trend Micro™ Mobile Security for Enterprise 9.7 Patch 3 is an integrated security solution for your mobile devices. Read this chapter to understand Mobile Security components, features and how they protect your mobile devices.

This chapter includes the following sections:

- *Understanding Mobile Threats on page 1-2*
- *About Trend Micro Mobile Security on page 1-2*
- *Architecture of Mobile Security System on page 1-3*
- *Components of Mobile Security System on page 1-3*
- *What's New in this Release (9.7 Patch 3) on page 1-7*
- *Main Mobile Device Agent Features on page 1-13*
- *Supported Mobile Device OS Features on page 1-15*

Understanding Mobile Threats

With the standardization of platforms and their increasing connectivity, mobile devices are susceptible to an increasing number of threats. The number of malware programs that run on mobile platforms is growing and more spam messages are sent through SMS. New sources of content, such as WAP and WAP Push are also used to deliver unwanted material.

Additionally, the theft of mobile devices may lead to the compromise of personal or sensitive data.

About Trend Micro Mobile Security

Trend Micro™ Mobile Security for Enterprise is a comprehensive security solution for your mobile devices. Mobile Security incorporates the Trend Micro anti-malware technologies to effectively defend against the latest threats to mobile devices.

The integrated filtering functions enable Mobile Security to block unwanted network communication to mobile devices. Some of these unwanted network communications include: SMS messages, WAP push mails and data received through 3G/GPRS connections.

This version of Mobile Security is independent of OfficeScan™ and can be installed separately as a standalone application on a Windows computer.

WARNING!

Trend Micro cannot guarantee compatibility between Mobile Security and file system encryption software. Software products that offer similar features like anti-malware scanning and SMS management, are may be are incompatible with Mobile Security.

About Machine Learning in Trend Micro Mobile Security

Trend Micro Predictive Machine Learning uses advanced machine learning technology to correlate threat information and perform in-depth file analysis to detect emerging unknown security risks through digital DNA fingerprinting, API mapping, and other file

features. Predictive Machine Learning is a powerful tool that helps protect your environment from unidentified threats and zero-day attacks.

After detecting an unknown or low-prevalence file, Mobile Security scans the file using the next generation mobile engine to extract file features and sends the report to the Predictive Machine Learning engine, hosted on the Trend Micro Smart Protection Network. Through use of malware modeling, Predictive Machine Learning compares the sample to the malware model, assigns a probability score, and determines whether the file is malicious or not. Mobile Security can prevent the affected file from installation and remind user to uninstall or remove it.

Architecture of Mobile Security System

Depending on your company needs, you can implement Mobile Security with different client-server communication methods. You can also choose to set up one or any combination of client-server communication methods in your network.

Trend Micro Mobile Security supports three different models of deployment:

- Enhanced Security Model (Dual Server Installation) with Cloud Communication Server
- Enhanced Security Model (Dual Server Installation) with Local Communication Server
- Basic Security Model (Single Server Installation)

Refer to the *Installation and Deployment Guide* for the details.

Components of Mobile Security System

The following table provides the descriptions of the Mobile Security components.

TABLE 1-1. Components of Mobile Security System

COMPONENT	DESCRIPTION	REQUIRED OR OPTIONAL
Management Server	The Management Server enables you to manage Mobile Device Agents from the administration web console. Once mobile devices are enrolled to the server, you can configure Mobile Device Agent policies and perform updates.	Required
Communication Server	The Communication Server handles communications between the Management Server and Mobile Device Agents. Trend Micro Mobile Security provides two types of Communication Server: • Local Communication Server (LCS)—this is a Communication Server deployed locally in your network. • Cloud Communication Server (CCS)—this is a Communication Server deployed in the cloud and you will not need to install this server. Trend Micro manages the Cloud Communication Server and you only need to connect to it from the Management Server. See *Comparison Between Local and Communication Servers on page 1-7*.	Required

Component	Description	Required or Optional
Exchange Connector	Trend Micro Mobile Security uses Exchange Connector to communicate with the Microsoft Exchange server, detects all the mobile devices that use Exchange ActiveSync service, and displays them on Mobile Security web console. The Microsoft Exchange server Integration with Mobile Security enables the administrators to monitor the mobile devices that access the Microsoft Exchange server. Once the feature is enabled and configured, Mobile Security administrators can perform Remote Wipe and block the access to the Microsoft Exchange server for such mobile devices. The integration of Microsoft Exchange server with Mobile Security also enables the administrators to control the user access to cooperate data (such as, emails, calendar, contacts, and so on).	Optional
Mobile Device Agent (MDA)	The Mobile Device Agent is installed on the managed Android and iOS mobile devices. The agent communicates with the Mobile Security Communication Server and executes the commands and policy settings on the mobile device.	Required
Microsoft SQL Server	The Microsoft SQL Server hosts the databases for Mobile Security Management Server.	Required
Active Directory	The Mobile Security Management Server imports users and groups from the Active Directory.	Optional
Certificate Authority	The Certificate Authority manages security credentials and public and private keys for secure communication.	Optional

COMPONENT	DESCRIPTION	REQUIRED OR OPTIONAL
SCEP	The Simple Certificate Enrollment Protocol (SCEP) is a communication protocol that provides a networked front end to a private certificate authority. In some environments, it is important to make sure that corporate settings and policies are protected from prying eyes. To provide this protection, iOS allows you to encrypt profiles so that they can be read only by a single device. An encrypted profile is just like a normal configuration profile except that the configuration profile payload is encrypted with the public key associated with the device's X. 509 identity. The SCEP works with the Certificate Authority to issue certificates in large enterprises. It handles the issuing and revocation of digital certificates. The SCEP and Certificate Authority can be installed on the same server.	Optional
APNs Certificate	(**Full Version** deployment mode, and **Security Scan** deployment mode with unlisted MDM vendor only.) The Mobile Security Communication Server communicates through the Apple Push Notification Service (APNs) to iOS devices.	Required, if you want to manage iOS mobile devices
SSL certificate	(**Full Version** deployment mode, and **Security Scan** deployment mode with unlisted MDM vendor only.) Trend Micro Mobile Security requires an SSL server certificate issued from a recognized Public Certificate Authority for the secure communication between mobile devices and Communication Server using HTTPS.	Required, if you want to manage Windows Phone or iOS mobile devices

Component	Description	Required or Optional
SMTP Server	Connect SMTP server to make sure administrators can get reports from Mobile Security Management Server, and send invitations to users.	Optional

Comparison Between Local and Communication Servers

The following table provides the comparison between the Local Communication Server (LCS) and the Cloud Communication Server (CCS).

Table 1-2. Comparison between Local and Cloud Communication Servers

Features	Cloud Communication Server	Local Communication Server
Installation required	No	Yes
User authentication method supported	Enrollment Key	Active Directory or Enrollment Key
Agent Customization for Android	Supported	Supported
Manage Windows Phone	Not supported	Supported

What's New in this Release (9.7 Patch 3)

The following new features are available in Trend Micro Mobile Security 9.7 Patch 3:

Feature	Description
Provides QR Code for Quick Agent Deployment (Security Scan Deployment Mode Only)	Provides enrollment information using QR code on the agent deployment settings screen for quick and simple agent deployment. This feature is only available in Security Scan Deployment Mode with integration with AirWatch and MobileIron.
Supports Predictive Machine Learning	Supports Trend Micro Predictive Machine Learning to perform in-depth file analysis to detect emerging known security risks.

What's New in Release 9.7 Patch 2

The following new features are available in Trend Micro Mobile Security 9.7 Patch 2:

Feature	Description
Integration with MobileIron Mobile Device Management Solutions	Provides security scan for Android and iOS mobile devices while integrating with the following MobileIron mobile device management solutions: • MobileIron Core Hosted • MobileIron Core On-Premise
Integration of Online Help	Links all the UI screens to the help files available on Trend Micro Online Help Center.
Supports iOS Activation Lock	Activation Lock is a feature of Find My iPhone that is built into mobile devices with iOS 7 and later. It prevents reactivation of lost or stolen mobile device by requiring the user's Apple ID and password before anyone can turn off Find My iPhone, erase, or reactivate and use the mobile device.

What's New in Release 9.7

The following new features are available in Trend Micro Mobile Security 9.7:

Feature	Description
Multiple Deployment Modes	Enables you to deploy Trend Micro Mobile Security in: • **Full Version** deployment mode, that includes all the features of Trend Micro Mobile Security. • **Security Only** deployment mode, that provides security scan for Android and iOS mobile devices while integrating with other mobile device management (MDM) solutions.
Integration with AirWatch	Provides security scan for Android and iOS mobile devices while integrating with AirWatch mobile device management solution.
Cyber Security News Widget on Dashboard Screen	Includes a widget on the **Dashboard** screen to display Cyber Security News for mobile devices, published by Trend Micro.
Server Certificate Verification on Android Devices	Enables you to perform server certificate verification on Android mobile devices.
New MARS API for Security Scanning	Integrates with the latest Mobile Application Reputation Service (MARS) API to enhance the vulnerability detection and description.
Support for Latest Android and iOS Versions	Adds Android 7 and iOS 10 support.

What's New in Release 9.6 SP1

The following new features are available in Trend Micro Mobile Security 9.6 SP1:

Feature	Description
Ransomware Detection Widgets	New widgets on the Dashboard allows administrators to view ransomware detection statistics.

Feature	Description
Android App Version Selection	Administrators can choose to deploy the **Full version** or **Security scan only** app for Android and iOS devices.
Automatic App Activation on Android Devices	This version of Mobile Security provides automatic activation on Android devices during app deployment.
Exchange Server Data Cleanup	Administrators can perform a data cleanup before transferring to another Exchange server. This allows administrators to remove existing Exchange Connector and Exchange ActiveSync device data on Mobile Security.
Group Setting for Multiple Active Directory Users	Administrators can apply the group setting to multiple Active Directory users.
Report Generation by Device Platform	Enhancements to the report generation feature allow administrators to generate reports for selected device platforms.
Device Information Update	Administrators can update the device information of a managed mobile device before the next scheduled update.

What's New in Release 9.6

The following new features are available in Trend Micro Mobile Security 9.6:

Feature	Description
User Management	Enables administrators to manage users and invitations separately.
On-Demand Reports	Administrators now have the option of generating reports as needed.
Scheduled Scan	Enables administrators to run the malware and security scans daily, weekly, or monthly based on the specified schedule.

Feature	Description
Security Scan for Android	In addition to the privacy scan, Mobile Security now supports the vulnerability scan and modified apps scan for increased security.
New Widgets	This release introduces five new widgets that display information about the Android security scans and the iOS malware scan.
New iOS App Version	Administrators can choose to deploy a new version of the iOS app that only supports security scans and works with 3rd-party mobile device management (MDM) apps.

What's New in Release 9.5

The following new features are available in Trend Micro Mobile Security 9.5:

Feature Name	Description
Volume Purchase Program (VPP) Enhancements in iOS 9	Enables administrators to assign application licenses to users or devices.
Feature Lock for iOS 9 or later	New feature lock options available for mobile devices running on iOS 9 or later.
Reports Enhancements	The following enhancements are made in this release: • New HTML view for improved usability. • New charts provide more information on managed devices and applications.
Compliance Violation Details	Compliance violation reasons are now displayed on the web console for each non-compliant mobile device.
Web Console QR Code Enrollment	Administrators can now enroll users from the web console using the new preset Enrollment Key QR code on the Device Enrollment Settings screen.

Feature Name	Description
Exchange Access Control Enhancements	The following new options are available in this release: • Administrators can choose to automatically block unmanaged devices from accessing the Exchange Server • Administrators can choose to automatically enable the Auto Allow/Block Access option for all managed devices
App Management Enhancement in iOS 9	Unmanaged applications are installed as managed apps when users install them from the Enterprise App Store or when the administrator adds a required app to a policy.

What's New in Release 9.3

The following new features are available in Trend Micro Mobile Security 9.3:

Feature Name	Description
Mobile Device Agent available on Google Play	From this release, users can download Android mobile device agent from Google Play store.
Facebook Scan for Android and iOS	Scans your Facebook privacy settings, and provides recommendations on adjusting them to increase your privacy.
Security Scan for iOS	Scans every app you have installed to filter out viruses, malicious apps, and spyware that can steal your information and cost you money.
Scan from Cloud	Improves scanning from the cloud on Android mobile devices, when the mobile devices use a proxy server.
Location Awareness for Android Feature Lock	Enables you to enforce the feature lock policy when the mobile device is in the range of an access point; and then restores the feature settings when the user leaves the range.
Added SMS Sender Support	Added support for SMS Sender to send notification text messages to users.

Main Mobile Device Agent Features

Feature Name	Description
Anti-Malware Scanning	Mobile Security incorporates Trend Micro's anti-malware technology to effectively detect threats to prevent attackers from taking advantage of vulnerabilities on mobile devices. Mobile Security is specially designed to scan for mobile threats.
Web Security	As technology increases for mobile devices, the sophistication of mobile threats is also increasing. Trend Micro Mobile Security provides Web Reputation and Parental Controls to protect your mobile device from unsafe websites and the websites that may contain objectionable material for children, teenagers and other family members. You can modify your Web Reputation and Parental Controls setting levels as per your desired settings. Mobile Security also maintains the log of the websites that were blocked by Web Reputation or Parental Controls in their specific logs.
SMS Anti-Spam	Mobile devices often receive unwanted messages or spam through SMS messaging. To filter unwanted SMS messages into a spam folder, you can specify the phone numbers from which all SMS messages will be considered spam or you can specify a list of approved phone numbers and configure Mobile Security to filter all messages from senders that are not in the approved list. You can also filter unidentified SMS messages or messages without sender numbers. Your mobile device will automatically store these messages to the spam folder in your inbox. **Note** The SMS Anti-Spam feature is not available on mobile devices without phone capabilities.

FEATURE NAME	DESCRIPTION
Call Filtering	Mobile Security enables you to filter incoming or outgoing calls from the server. You can configure Mobile Security to block incoming calls from certain phone numbers or you can specify a list of approved phone numbers to which the calls may be made from the mobile device. Mobile Security also enables mobile device users to specify their own Blocked or Approved list to filter unwanted incoming calls. **Note** The Call Filtering feature is not available on mobile devices without phone capabilities.
WAP Push Protection	WAP Push is a powerful method of delivering content to mobile devices automatically. To initiate the delivery of content, special messages called WAP Push messages are sent to users. These messages typically contain information about the content and serve as a method by which users can accept or refuse the content. Malicious users have been known to send out inaccurate or uninformative WAP Push messages to trick users into accepting content that can include unwanted applications, system settings, and even malware. Mobile Security lets you use a list of trusted senders to filter WAP Push messages and prevent unwanted content from reaching mobile devices. The WAP Push protection feature is not available on mobile devices without phone capabilities.
Authentication	After installing the Mobile Device Agent, the mobile device user need to provide the authentication information to enroll the mobile devices with the Mobile Security Management Server.
Regular Updates	To protect against the most current threats, you can either update Mobile Security manually or configure it to update automatically. To save cost, you can also set a different update frequency for the mobile devices that are in “roaming”. Updates include component updates and Mobile Security program patch updates.

Feature Name	Description

Logs	The following Mobile Device Agent logs are available on the Management Server:
	• malware protection log
	• web threat protection log
	• event log
	• violation log
	• privacy scan log
	• vulnerability scan log
	• modified app scan log
	You can view the following logs on mobile devices:
	• Android:
	  • malware scan history
	  • vulnerability scan log
	  • modified app scan log
	  • privacy scan history
	  • web blocking history
	  • call blocking history
	  • text blocking history
	  • update history

Supported Mobile Device OS Features

The following table shows the list of features that Trend Micro Mobile Security supports on each platform.

TABLE 1-3. Trend Micro Mobile Security 9.7 Patch 3 Feature Matrix

POLICY	FEATURES	SETTINGS			
Provisioning	Wi-Fi	Standard Wi-Fi configuration	●	●	
		Legacy hotspot configuration	●		
		Hotspot 2.0 configuration	●		
	Exchange ActiveSync	Exchange ActiveSync configuration	●		
	VPN	VPN configuration	●		
	Global HTTP Proxy	Global HTTP Proxy configuration	●		
	Single Sign-on	Single sign-on configuration	●		
	Certificate	Certificate configuration	●		
	Cellular network	Cellular network configuration	●		
	AirPlay/AirPrint	AirPlay/AirPrint configuration	●		
	Themes (Supervised only)	Wallpaper configuration	●		
		Font configuration	●		
	Managed Domains	Unmarked Email Domains	●		
		Managed Safari Web Domains	●		
Device Security	Security Settings	Real-time scan		●	
		Scan after pattern update		●	
		Manual scan	●	●	
		Facebook scan	●	●	
Data Protection	Spam SMS Prevention	Server-side control		●	

POLICY	FEATURES	SETTINGS			
		Use blocked list		●	
		Use approved list		●	
	Spam WAP Push Prevention	Server-side control		●	
		Use approved list		●	
	Call Filtering	Server-side control		●	
		Use blocked list		●	
		Use approved list		●	
	Web Threat Protection	Server-side control		●	
		Use blocked list		●	
		Use approved list		●	
		Allow specific websites only	●		
		Allow limited adult content	●		
Data Protection	Password Settings	Use password for login	●	●	●
		Allow simple password	●	●	●
		Require alphanumeric password	●	●	●
		Minimum password length	●	●	●
		Password expiration	●	●	●
		Password history	●	●	●
		Auto-lock	●	●	●
		Password failure action	●	●	●
	Feature Lock	Camera	●	●	

POLICY	FEATURES	SETTINGS			
		FaceTime	●		
		Screen capture	●		
		Apps installation	●		
		Sync while roaming	●		
		Voice dialing	●		
		In-app purchase	●		
		Multiplayer gaming	●		
		Adding game center friends	●		
		Game Center (Supervised Only)	●		
		Force encrypted backups	●		
		Explicit music, podcast and iTunes U	●		
		Passbook while device is locked	●		
		Bluetooth and Bluetooth discovery		●	
		WLAN/Wi-Fi		●	
		3G data network		●	
		Tethering		●	
		Developer mode		●	
		Speaker/speakerphone/ microphone			
		Restrict memory cards		●	

Policy	Features	Settings			
		Siri	●		
		Siri while device is locked	●		
		Enable profnity filter	●		
		Enable access to iCloud services	●		
		Cloud backup	●		
		Cloud document sync	●		
		Photo Stream	●		
		Shared Photo Streams	●		
		Diagnostic data	●		
		Accept untrusted Transport Layer Security (TLS)	●		
		Force iTunes to store password	●		
		YouTube	●		
		Open documents from managed apps in other apps	●		
		Open documents from other apps in managed apps	●		
		iTunes	●		
		Safari Web browser	●		
		AutoFill	●		
		JavaScript	●		
		Popups	●		

POLICY	FEATURES	SETTINGS			
		Force fraud warning	●		
		Accept cookies	●		
		Removing apps (Supervised only)	●		
		Bookstore (Supervised only)	●		
		Erotica (Supervised only)	●		
		Configuration Profile Installation (Supervised only)	●		
		iMessage (Supervised only)	●		
		Ratings region	●		
		Movies	●		
		TV Shows	●		
		Apps	●		
		Account modification (Supervised only)	●		
		AirDrop (Supervised only)	●		
		Applications cellular data modification (Supervised only)	●		
		Assistant (Siri) user-generated content (Supervised only)	●		
		Cloud keychain synchronization	●		
		Find My Friends modification (Supervised only)	●		

Policy	Features	Settings			
		Fingerprint for unlocking a device	●		
		Host pairing (Supervised only)	●		
		Lock screen control center	●		
		Lock screen notifications view	●		
		Lockscreen today view	●		
		Over the Air Public Key Infrastructure (OTAPKI) updates	●		
		Force limit ad tracking	●		
		Force AirPlay outgoing requests pairing password	●		
		Allow managed apps to store data in iCloud	●		
		Allow backup of enterprise books	●		
		Allow configuration restrictions	●		
		Allow Erase All Content and Settings	●		
		Allow Handoff	●		
		Allow Internet results in spotlight	●		
		Allow notes and highlights sync for enterprise books	●		
		Allow sharing of managed documents using AirDrop	●		

POLICY	FEATURES	SETTINGS			
		Allow iCloud Photo Library	●		
		Allow installing apps from device	●		
		Allow keyboard shortcuts	●		
		Allow paired Apple Watch	●		
		Allow passcode modification	●		
		Allow device name modification	●		
		Allow wallpaper modification	●		
		Allow automatic downloading of apps	●		
		Allow trusting of enterprise apps	●		
	Compliance Settings	Rooted/Jailbroken	●	●	
		Unencrypted	●	●	
		OS version check	●	●	
Application Management	Application Monitor & Control	Required Applications	●	●	
		Permitted Applications	●	●	
		Lock to App (Supervised only)	●		
	Volume Purchasing Program	Volume Purchasing Program	●		
Remote Control	Register		●	●	
	Update		●	●	
	Anti-theft	Remote locate		●	

Policy	Features	Settings			
		Remote lock	●	●	
		Remote wipe	●	●	●
		Reset password	●	●	
	Samsung KNOX Workspace	Create container		●	
		Remove container		●	
		Lock container		●	
		Unlock container		●	
		Reset container password		●	
Samsung KNOX Workspace Policy	Container account setting	Blocked list		●	
		Approved list		●	
	Restriction settings	Allow users to use camera		●	
		Allow display the share via list of applications		●	
	Browser settings	Enable auto fill setting		●	
		Enable cookies setting		●	
		Enable popups setting		●	
		Enable force fraud warning setting		●	
		Enable JavaScript setting		●	
		Enable Web Proxy		●	
Samsung KNOX Workspace Policy	Container password settings	Enable password visibility		●	
		Minimum password change length		●	

POLICY	FEATURES	SETTINGS			
		Minimum password length		●	
		Maximum inactivity timeout		●	
		Maximum number of failed attempts		●	
		Password history		●	
		Maximum password age		●	
		Minimum number of special characters required in a password		●	
		Password complexity		●	
	Application settings	Installation approved list		●	
		Installation blocked list		●	
		Required applications		●	
		Disabled applications		●	
Device Enrollment Program			●		

Chapter 2

Getting Started with Mobile Security

This chapter helps you start using Mobile Security and provides you the basic usage instructions. Before you proceed, be sure to install the Management Server, Communication Server, and the Mobile Device Agent on mobile devices.

This chapter includes the following sections:

- *Accessing the Administration Web Console on page 2-2*
- *Dashboard Information on page 2-5*
- *Administration Settings on page 2-10*
- *Command Queue Management on page 2-19*
- *Managing Certificates on page 2-21*

Administration Web Console

You can access the configuration screens through the Mobile Security administration web console.

The web console is the central point for managing and monitoring Mobile Security throughout your corporate network. The console comes with a set of default settings and values that you can configure based on your security requirements and specifications.

You can use the web console to do the following:

- Manage Mobile Device Agents installed on mobile devices
- Configure security policies for Mobile Device Agents
- Configure scan settings on a single or multiple mobile devices
- Group devices into logical groups for easy configuration and management
- View registration and update information

Accessing the Administration Web Console

Procedure

1. Log on to the administration web console using the following URL structure:

   ```
   https://
   <External_domain_name_or_IP_address>:<HTTPS_port>/mdm/web
   ```

   Note

   Replace <External_domain_name_or_IP_address> with the actual IP address, and <HTTPS_port> with the actual port number of the Management Server.

The following screen appears.

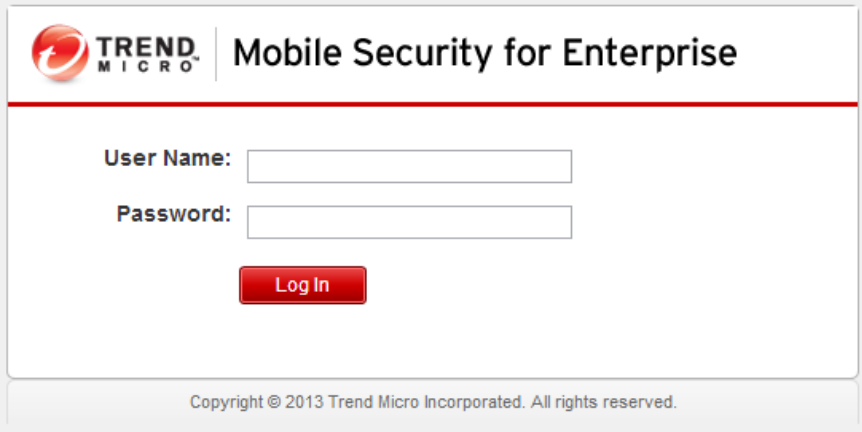

FIGURE 2-1. Administration Web console login screen

2. Type a user name and password in the fields provided and click **Log In**.

Note

The default **User Name** for administration web console is "root" and the **Password** is "mobilesecurity".

Make sure that you change the administrator password for the user "root" after your first sign in. See *Editing an Administrator Account on page 2-16* for the procedure.

Important

If you are using Internet Explorer to access the administration web console, make sure the following:

- the **Compatibility View for Websites** options is turned off. See *Turning Off Compatibility Mode in Internet Explorer on page 2-4* for details.
- the JavaScript is enabled on your browser.

Note

If you are unable to access the administration web console in Windows 2012 using Internet Explorer 10 in Metro mode, verify that the **Enhanced Protected Mode** option is disabled in Internet Explorer.

Turning Off Compatibility Mode in Internet Explorer

Trend Micro Mobile Security does not support **Compatibility View** on Internet Explorer. If you are using Internet Explorer to access the Mobile Security administration web console, turn off the web browser's Compatibility View for the website, if it is enabled.

Procedure

1. Open Internet Explorer and click **Tools** > **Compatibility View settings**.

   The **Compatibility View Settings** window displays.

2. If the administration console is added to the **Compatibility View** list, select the website and click **Remove**.

3. Clear **Display intranet sites in Compatibility View** and **Display all websites in Compatibility View** checkboxes, and then click **Close**.

Product License

After the Evaluation version license expires, all program features will be disabled. A Full license version enables you to continue using all features, even after the license expires. It's important to note however, that the Mobile Device Agent will be unable to obtain updates from the server, making anti-malware components susceptible to the latest security risks.

If your license expires, you will need to register the Mobile Security Management Server with a new Activation Code. Consult your local Trend Micro sales representative for more information.

To download updates and allow remote management, Mobile Device Agent must enroll to the Mobile Security Management Server. For instructions to manually enroll Mobile Device Agent on mobile devices, refer to the *Installation And Deployment Guide*.

To view license upgrade instructions for Management Server, click the **View license upgrade instructions** link in Mobile Security **Product License** screen.

Dashboard Information

The **Dashboard** screen displays first when you access the Management Server. This screen provides an overview of the mobile device registration status and component details.

The dashboard screen is divided into five tabs:

- **Summary**—shows cyber security news related to mobile devices, the device health status and device operating system summary.
- **Security**—shows Android malware scan summary, Android privacy data leak scan summary, Android modified app scan summary, Android vulnerability scan summary, iOS malware scan summary, top five (5) malware detected summary, and top five (5) blocked websites.
- **Health**—shows the components and policy update and mobile device health status. In this category, you can:
    - View mobile devices' status:
        - **Healthy**—shows that the device is enrolled to the Mobile Security Management Server and the components and policies on the mobile device are up-to-date.
        - **Non-Compliant**—shows that the device is enrolled to the Mobile Security Management Server, but does not comply with the server policies.
        - **Out of Sync**—shows that the device is enrolled to the Mobile Security Management Server, but either the components or the polices are out-of-date.

    - **Inactive**—shows that the device is not yet enrolled to the Mobile Security Management Server.

- View the total number of enrolled and unregistered mobile devices managed by Mobile Security.

  A mobile device may remain unregistered if a connection to the Communication Server is unsuccessful.

- View mobile device program patch and component update status:

    - **Current Version**—the current version number of the Mobile Device Agent or components on the Mobile Security Management Server

    - **Up-to-date**—the number of mobile device with updated Mobile Device Agent version or component

    - **Out-of-date**—the number of mobile devices that are using an out-of-date component

    - **Update Rate**—the percentage of mobile devices using the latest component version

    - **Upgraded**—the number of mobile devices using the latest Mobile Device Agent version

    - **Not Upgraded**— the number of mobile devices that have not upgraded to use the latest Mobile Device Agent version

    - **Upgrade Rate**—the percentage of mobile devices using the latest Mobile Device Agent

- View server update status:

    - **Server**—the name of the module

    - **Address**—the domain name or IP address of the machine hosting the module

    - **Current Version**—the current version number of the Mobile Security Management Server modules

    - **Last Updated**—the time and date of the last update

- **Compliance**—shows the app control, encryption and jailbreak/root status of mobile devices. In this category, you can:
  - View the mobile device jailbreak/root status:
    - **Jailbroken/Rooted**—the number of mobile devices that are jailbroken/rooted
    - **Not Jailbroken/Rooted**—the number of mobile devices that are not jailbroken/rooted
  - View the mobile device encryption status:
    - **Encrypted**—the number of mobile devices that are encrypted
    - **Not Encrypted**—the number of mobile devices that are not encrypted
  - View the mobile device application control status:
    - **Compliant**—the number of mobile devices that comply with the Mobile Security's compliance and application control policy
    - **Not Compliant**—the number of mobile devices that do not comply with the Mobile Security's compliance and application control policy
- **Inventory**—shows mobile device operating system version summary, telephone carriers summary, mobile device vendors summary and top 10 applications installed on mobile devices.

Note

On each of the widgets on the **Dashboard** screen, you can either select **All**, or the group name from the drop-down list to display the information of the relevant devices.

Customizing the Dashboard

Mobile Security enables you to customize the **Dashboard** information according to your needs and requirements.

Adding a New Tab

Procedure

1. On the **Dashboard** screen, click the + button.
2. On the **New Tab** pop-up window, do the following:
   - **Title**: type the tab name.
   - **Layout**: select the layout for the widgets displayed on the tab.
   - **Auto-fit**: select **On** or **Off** to enable or disable the setting for the widgets on the tab.
3. Click **Save**.

Removing a Tab

Procedure

1. Click the tab, and then click the × button displayed on the tab.
2. Click **OK** on the confirmation pop-up dialog.

Adding Widgets

Procedure

1. On the **Dashboard** screen, click the tab on which you want to add widgets.
2. Click **Add Widgets** on the top-right of the tab.

   The **Add Widgets** screen displays.
3. Select the category from the left menu and/or type the keywords in the search field to display the relevant widgets list.

4. Select the widgets that you want to add, and then click **Add**.

   The selected widgets appear on the tab on the **Dashboard**.

Removing Widgets

Procedure

1. On the **Dashboard** screen, click the tab from which you want to remove widgets.
2. On the widget that you want to remove, click × on the top-right of the widget.

Changing Widget's Position

Procedure

1. On the **Dashboard** screen, click the tab whose widgets you want to rearrange.
2. Click and hold the widget title bar, then drag and drop it to the new position.

Refreshing the Information on the Widgets

Procedure

1. On the **Dashboard** screen, click the tab whose widget you want to refresh.
2. On the widget that you want to refresh, click ⟳ on the top-right of the widget.

Viewing or Modifying Tab Settings

Procedure

1. On the **Dashboard** screen, click the tab whose settings you want to view or modify.

2. Click **Tab Settings**.

3. Modify the settings as required, and then click **Save**.

Administration Settings

Configuring Active Directory (AD) Settings

Trend Micro Mobile Security enables you to configure user authorization based on the Active Directory (AD). You can also add mobile devices to the device list using your AD. Refer to the *Initial Server Setup* section in the *Installation and Deployment Guide* for the detailed configuration steps.

Configuring User Authentication

Trend Micro Mobile Security enables you to configure user authentication based on the Active Directory (AD) or through an Enrollment Key. Refer to the *Initial Server Setup* section in the *Installation and Deployment Guide* for the detailed configuration steps.

Configuring Database Settings

Refer to the *Initial Server Setup* section in the *Installation and Deployment Guide* for the detailed configuration steps.

Configuring Communication Server Settings

Refer to the *Initial Server Setup* section in the *Installation and Deployment Guide* for the detailed configuration steps.

Configuring Deployment Settings

Refer to the *Initial Server Setup* section in the *Installation and Deployment Guide* for the detailed configuration steps.

Switching from Full Version to Security Scan Deployment Mode

You can switch the deployment mode for Mobile Security at anytime.

Refer to the following Knowledge Base article about switching from **Full Version** deployment mode to **Security Scan** deployment mode:

https://success.trendmicro.com/solution/1115884

Configuring AirWatch Integration with Trend Micro Mobile Security

Trend Micro Mobile Security enables you to integrate with AirWatch device management solution.

Refer to the topic *Integration with AirWatch* in *Chapter 3, Integration with Other MDM Solutions* in *Administrator's Guide for Security Only Deployment Mode* for the details.

Configuring MobileIron Integration with Trend Micro Mobile Security

Trend Micro Mobile Security enables you to integrate with MobileIron device management solution.

Refer to the topic *Integration with MobileIron* in *Chapter 3, Integration with Other MDM Solutions* in *Administrator's Guide for Security Only Deployment Mode* for the details.

Managing Administrator Accounts

The **Administrator Account Management** screen enables you to create user accounts with different access role for the Management Server.

Default Administrator Account Name and Role

The default administrator account is "root" (password: "mobilesecurity"). The root account cannot be deleted and can only be modified. See *Editing an Administrator Account on page 2-16* for the detailed procedure.

TABLE 2-1. The root account properties

ROOT ACCOUNT PROPERTIES		CAN BE MODIFIED?
Administrator Accounts	Account name	No
	Full name	Yes
	Password	Yes
	Email address	Yes
	Mobile phone number	Yes
Administrator Roles	Administrator role modification	No

The default administrator role is **Super Administrator**, which has the maximum access to all settings. The **Super Administrator** role cannot be deleted and can only be modified. See *Editing an Administrator Role on page 2-18* for the detailed procedure.

TABLE 2-2. The Super Administrator role properties

SUPER ADMINISTRATOR ROLE PROPERTIES		CAN BE MODIFIED?
Role Details	Administrator role	No
	Description	Yes
Group Management Control	Managed Groups	No

Super Administrator Role Properties		Can be Modified?
Exchange Server Domain Control	Domain selection	No

Table 2-3. Access rights for Super Administrator and a Group Administrator

Server Components	Permissions	Super Administrator	Group Administrator
Administration	Updates	Supported	Not supported
	Administrator Account Management	Can modify all the account	Can only modify own account information
	Device Enrollment Settings	Supported	Not supported
	Certificate Management	Supported	Supported
	Command Queue Management	Can manage all commands	Can only view commands for the related groups
	Database Settings	Supported	Not supported
	Communication Server Settings	Supported	Not supported
	Active Directory Settings	Supported	Not supported
	Management Server Settings	Supported	Not supported
	Deployment Settings	Supported	Not supported
	Exchange Server Integration	Supported	Not supported
	Configuration and Verification	Supported	Not supported
	Product License	Supported	Not supported

Server Components	Permissions	Super Administrator	Group Administrator
Notifications/ Reports	Log Query	All the groups	Managed groups only
	Log Maintenance	All the groups	Managed groups only
	Administrator Notifications/Reports	Supported	Not supported
	User Notifications	Supported	Not supported
	Settings	Supported	Not supported
Applications	Enterprise App Store	Supported	Not supported
	Installed Apps	Supported	Supported for managed groups only
Policy	Create a policy	Supported	Supported for managed groups only
	View a policy	Supported	Supported for managed groups only
	Copy a policy	Supported	Supported for managed groups only
	Delete a policy	Supported	Supported for managed groups only

SERVER COMPONENTS	PERMISSIONS	SUPER ADMINISTRATOR	GROUP ADMINISTRATOR
Devices	View devices	Supported	Supported for managed groups only
	Add group	Supported	Supported
	Exchange ActiveSync Devices	Supported	Supported for managed groups only
Users	Invite users	Supported	Supported for managed groups only

Adding Administrator Accounts

Procedure

1. On the Mobile Security administration web console, go to **Administration** > **Administrator Account Management**.
2. On the **Administrator Accounts** tab, click **Create** to add a new account.

   The **Create Administrator Account** screen appears.
3. Under section **Account Details**, do one of the following:
   - Select **Trend Micro Mobile Security User**, and specify the following user account details:
     - **Account name**: name used to log on to the Management Server.
     - **Full name**: the user's full name.
     - **Password** (and **Confirm Password**).
     - **Email address**: the user's email address.
     - **Mobile phone number**: the user's phone number.

- Select **Active Directory user**, and do the following:

  a. Type the user name in the search field and click **Search**.

  b. Select the user name from the list on the left and click **>** to move the user to the **Selected users** list on the right.

Note

To remove the user from the **Selected users** list on the right, select the user name and click **<**.

You can also select multiple users at the same time by holding Ctrl or Shift keys while clicking on the username.

4. Under section **Administrator Role**, select the role from the **Choose the administrator role:** drop-down list.

   See *Creating an Administrator Role on page 2-17* for the procedure for creating administrator roles

5. Click **Save**.

Editing an Administrator Account

Procedure

1. On the Mobile Security administration web console, go to **Administration** > **Administrator Account Management**.
2. On the **Administrator Accounts** tab, click **Create** to add a new account.

   The **Edit Administrator Account** screen appears.
3. Modify the administrator account details and access role as required.
   - Account Details
     - **Account name**: name used to log on to the Management Server.
     - **Full name**: the user's full name.

- **Email address**: the user's email address.
- **Mobile phone number**: the user's phone number.
- **Password**: click **Reset Password** to change the user account password, type the new password in the **New Password** and **Confirm Password** fields, and click **Save**.

- Administrator Role
  - **Choose the administrator role**: select the administrator role from the drop-down list.

    For the procedure to create an administrator role, see *Creating an Administrator Role on page 2-17*.

4. Click **Save**.

Deleting an Administrator Account

Procedure

1. On the Mobile Security administration web console, go to **Administration** > **Administrator Account Management**.
2. On the **Administrator Accounts** tab, select the administrator accounts that you want to delete, and then click **Delete**.

   A confirmation message appears.

Creating an Administrator Role

Procedure

1. On the Mobile Security administration web console, go to **Administration** > **Administrator Account Management**.
2. On the **Administrator Roles** tab, click **Create**.

The **Create Administrator Role** screen appears.

3. Under section **Role Details**, provide the following information:
   - Administrator Role
   - Description
4. Under section **Group Management Control** select the mobile device groups that this administrator role can manage.
5. Click **Save**

Editing an Administrator Role

Procedure

1. On the Mobile Security administration web console, go to **Administration** > **Administrator Account Management**.
2. On the **Administrator Roles** tab, click **Create**.

   The **Create Administrator Role** screen appears.
3. Modify the role details as required and then click **Save**.

Deleting an Administrator Role

Procedure

1. On the Mobile Security administration web console, go to **Administration** > **Administrator Account Management**.
2. On the **Administrator Roles** tab, select the administrator role you want to delete, and click **Delete**.

   A confirmation message appears.

Changing Administrator Password

Refer to the topic *Editing an Administrator Account on page 2-16* for the procedure of changing the administrator account password.

Command Queue Management

Mobile Security keeps a record of all the commands you have executed from the web console and enables you to cancel or resend a command, if required. You can also remove the commands that have already been executed and are not required to be displayed on the list.

To access the **Command Queue Management** screen, go to **Administration** > **Command Queue Management**.

The following table describes all the command statuses on the **Command Queue Management** screen.

COMMAND STATUS	DESCRIPTION
Waiting to Send	The Mobile Security Management Server is in the process of sending the command to mobile device. You can cancel the command while it is in this status.
Waiting Acknowledgment	The Mobile Security Management Server has sent the command to mobile device and is waiting for the acknowledgement from the mobile device.
Unsuccessful	Unable to execute the command on mobile device.
Successful	The command has been executed successfully on the mobile device.
Canceled	The command has been canceled before it was executed on the mobile device.

To keep the size of commands from occupying too much space on your hard disk, delete the commands manually or configure Mobile Security administration web console

to delete the commands automatically based on a schedule in the **Command Queue Maintenance** screen.

Configuring Schedule for Deleting Old Commands

Procedure

1. Click **Administration** > **Command Queue Management**.

   The **Command Queue Management** screen displays.

2. On the **Command Queue Maintenance** tab, select **Enable scheduled deletion of commands**.

3. Specify the number of days old commands you want to delete.

4. Specify the commands queue deletion frequency and time.

5. Click **Save**.

Deleting Old Commands Manually

Procedure

1. Click **Administration** > **Command Queue Management**.

   The **Command Queue Management** screen displays.

2. On the **Command Queue Maintenance** tab, select **Enable scheduled deletion of commands**.

3. Specify the number of days old commands you want to delete.

4. Click **Delete Now**.

Managing Certificates

Use the **Certificate Management** screen to upload `.pfx`, `.p12`, `.cer`, `.crt`, `.der` certificates to the Mobile Security Management Server.

Uploading a Certificate

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Administration** > **Certificate Management**.
3. Click **Add**.

   The **Add certificate** window appears.
4. Click **Choose File** and then select a `.pfx`, `.p12`, `.cer`, `.crt`, `.der` certificate file.
5. Type the certificate password in the **Password** field.
6. Click **Save**.

Deleting a Certificate

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Administration** > **Certificate Management**.
3. Select the certificates that you want to delete, and then click **Delete**.

Exchange Server Integration

Configuring Exchange Server Integration Settings

Refer to the topic *Configuring Exchange Server Integration Settings* in the *Installation and Deployment Guide* for the detailed configuration steps.

Configuring Exchange Connector

You can configure the Exchange Connector to update automatically whenever a higher version is available.

Procedure

1. On the computer where Exchange Connector is installed, click the **Show hidden icons** button in the system tray on the Windows taskbar (near the system clock).
2. Right-click the **Exchange Connector** icon, and then click **About Trend Micro Mobile Security-Exchange Connector**.

   About Trend Micro Mobile Security-Exchange Connector screen appears.
3. Configure the following:
   - **Enable automatic upgrade**—when selected, the Exchange Connector automatically upgrades to a new version whenever it is available.
   - **Server Address**—Mobile Security Management Server IP address.
   - **HTTPS Port**—Mobile Security Management Server HTTPS port number for the administration web console.

Transferring to a New Exchange Server

To transfer to a new Exchange server, complete the following steps:

Procedure

1. Stop the existing Exchange Connector service on the computer where Exchange Connector is installed.
2. Log on to the Mobile Security administration web console.
3. Click **Administration** > **Exchange Server Integration**.
4. Click **Data Cleanup**.
5. Download and install the new Exchange Connector on the computer.

   For detailed information, see *Installation and Deployment Guide*.
6. Configure the Exchange Connector settings.

   See *Configuring Exchange Connector on page 2-22*.

Chapter 3

Managing Mobile Devices

This chapter helps you start using Mobile Security. It provides basic setup and usage instructions. Before you proceed, be sure to install the Management Server, Communication Server, and the Mobile Device Agent on mobile devices.

The chapter includes the following sections:

- *Managed Devices Tab on page 3-2*
- *Managing Groups on page 3-3*
- *Managing Mobile Devices on page 3-4*
- *Mobile Device Status on page 3-8*
- *Mobile Device Agent Tasks on page 3-10*
- *Updating Mobile Device Agents on page 3-10*
- *Integration with Trend Micro Control Manager on page 3-26*

Managed Devices Tab

The **Managed Devices** tab on the **Devices** screen enables you to perform tasks related to the settings, organization or searching of Mobile Device Agents. The toolbar above the device tree viewer lets you perform the following tasks:

- configure the device tree (such as creating, deleting, or renaming groups and creating or deleting Mobile Device Agents)
- search for and display Mobile Device Agent status
- on-demand Mobile Device Agent component update, wipe/lock/locate remote device, and update policy
- configure Mobile Device Agents information
- export data for further analysis or backup

Groups in Mobile Security

Mobile Security Management Server automatically creates a root group **Mobile Devices** with the following two sub-groups:

- **default**—this group contains Mobile Device Agents that do not belong to any other group. You cannot delete or rename the **default** group in the Mobile Security device tree.
- **unauthorized**—Mobile Security Management Server automatically creates this group if **Device Authentication** is enabled in **Device Enrollment Settings**, and a list of mobile devices is used to authenticate. If there is an enrolled mobile device that is not in the list of mobile devices, Mobile Security moves such mobile device to the **unauthorized** group. Mobile Security also creates other groups and regroups all mobile devices according to the list that you use.

Note

- If you enable **Device Authentication** in **Device Enrollment Settings**, and upload a blank mobile device list for authentication, Mobile Security will move all the current enrolled mobile devices to the group "Unauthorized".
- **Device Authentication** supports Android and iOS mobile devices only.

For instructions, refer to the Mobile Security Management Server *Online Help*.

Managing Groups

You can add, edit or delete groups under the **Mobile Devices** root group. However, you cannot rename or delete the root group **Mobile Devices** and the group **default**.

Adding a Group

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, click the root group **Mobile Devices**, and then click **Add Group**.
4. Configure the following:
   - **Parent group**: Select the group under which you want to create a sub-group.
   - **Group name**: Type a name for the group.
   - **Policy**: Select the policy from the drop down list that you want to apply to the group.
5. Click **Add**.

Renaming a Group

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, click the group that you want to rename.
4. Click **Edit**.
5. Modify the group name, and then click **Rename**.

Deleting a Group

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, click the group that you want to delete.
4. Click **Delete**, and then click **OK** on the confirmation dialog box.

Managing Mobile Devices

You can edit mobile device information, delete mobile devices, or change the mobile device group on the **Devices** screen.

Reassigning Devices

Procedure

1. On to the Mobile Security administration web console, go to **Devices** > **Managed Devices**.

   The **Devices** screen displays.

2. From the device tree, select the device that you want to reassign.

   The device information appears.

3. Click **Change User**, and then modify the user name in the field provided.

4. Click **Save**.

Editing Mobile Device Information

Procedure

1. Log on to the Mobile Security administration web console.

2. Click **Devices** on the menu bar.

   The **Devices** screen displays.

3. On the **Managed Devices** tab, click the mobile device from the device tree whose information you want to edit.

4. Click **Edit**.

5. Update the information in the following fields:

   - **Phone Number**—the phone number of the mobile device.
   - **Device Name**—the name of the mobile device to identify the device in the device tree.
   - **Group**—the name of the group to which the mobile device belongs from the drop-down list.

- **Asset Number**—type the asset number assigned to the mobile device.
- **Description**—any additional information or notes related to the mobile device or the user.

6. Click **Save**.

Deleting Mobile Devices

Mobile Security provides the following two options for deleting mobile devices:

- *Deleting Single Mobile Device on page 3-6*
- *Deleting Multiple Mobile Devices on page 3-6*

Deleting Single Mobile Device

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, click the mobile device from the device tree that you want to delete.
4. Click **Delete** and then click **OK** on the confirmation dialog box.

The mobile device is deleted from the mobile device tree, and is no longer enrolled with the Mobile Security Management Server.

Deleting Multiple Mobile Devices

Procedure

1. Log on to the Mobile Security administration web console.

2. Click **Devices** on the menu bar.

   The **Devices** screen displays.

3. On the **Managed Devices** tab, click the group from the device tree whose mobile devices you want to delete.

4. Select the mobile devices from the list on the right pane, click **Delete** and then click **OK** on the confirmation dialog box.

   The mobile devices are deleted from the mobile device tree, and are no longer enrolled with the Mobile Security Management Server.

Moving Mobile Devices to Another Group

You can move mobile devices from one group to another. Mobile Security will automatically send the notification to the user about the policies that you have applied to the group.

Procedure

1. Log on to the Mobile Security administration web console.

2. Click **Devices** on the menu bar.

   The **Devices** screen displays.

3. On the **Managed Devices** tab, click the group whose mobile devices you want to move to another group.

4. Select the mobile devices from the list on the right pane and then click **Move**.

   The **Move Devices** dialog box displays.

5. From the drop-down list, select the target group and then click **OK**.

Mobile Device Status

On the **Managed Devices** tab in the **Devices** screen, select the mobile device to display its status information on the right-pane. Mobile device information is divided into the following sections:

- **Basic**—includes registration status, phone number, LDAP Account, and platform information.
- **Hardware, Operating System**—shows the detailed mobile device information including device and model names, operating system version, memory information, cellular technology, IMEI and MEID numbers, firmware version information, and last iCloud backup.
- **Security**—displays the mobile device's encryption status, mobile device's jail broken status, and the active iTunes account.
- **Network**—displays the Integrated Circuit Card ID (ICCID), bluetooth and WiFi MAC information, detailed network information including carrier network name, settings version, roaming status, Mobile Country Codes (MCC) and Mobile Network Codes (MNC) information, and personal hotspot status.
- **Policy**—shows the times the configuration and the security policy were last updated.
- **Installed Applications**—displays the list of all the applications that are installed on the mobile device, and the compliance check result. This tab is available only for Android and iOS mobile devices.
- **Samsung KNOX Information**—displays additional information about the mobile devices that support Samsung KNOX.

Basic Mobile Device Agent Search

To search for a Mobile Device Agent based on the mobile device name or phone number, type the information in the **Devices** screen and click **Search**. The search result displays in the device tree.

Advanced Mobile Device Agent Search

You can use the **Advanced search** screen to specify more Mobile Device Agent search criteria.

Procedure

1. In the **Devices** screen, click the **Advanced search** link. A pop-up window displays.
2. Select the search criteria and type the values in the fields provided (if applicable):
   - **Device Name**—descriptive name that identifies a mobile device
   - **Phone Number**—phone number of a mobile device
   - **User Name**—user name of a mobile device
   - **Asset Number**—asset number of a mobile device
   - **IMEI**—IMEI number of a mobile device
   - **Serial Number**—serial number of a mobile device
   - **Wi-Fi MAC Address**—Wi-Fi MAC address of a mobile device
   - **Description**— description of a mobile device
   - **Operating System**—confine the search to the specific operating system the mobile device is running; or to the version number for Android and iOS
   - **Group**—group to which the mobile device belongs
   - **Agent Version**—Mobile Device Agents version number on the mobile device
   - **Last Connected**—time range in which a mobile device was last connected to the Mobile Security server
   - **Malware Pattern Version**—Malware Pattern file version number on the mobile device
   - **Malware Scan Engine Version**—Malware Scan Engine version number of the mobile device
   - **App Name**—application installed on mobile devices

- **Mobile Device Agent Uninstalled by User**—confine the search to mobile devices on which Mobile Device Agent is uninstalled by the user
- **Rooted Mobile Device**—confine the search to rooted mobile devices
- **Infected mobile device agent**—confine the search to mobile devices with the specified number of detected malware
- **Device Status**—confine the search to the selected mobile devices' status(es)

3. Click **Search**. The search result displays in the device tree.

Device Tree View Options

If you select a group in the device tree, you can use the **Column** drop-down list box to select one of the pre-defined views: **General view** and **View all**. This enables you to quickly view information presented in the device tree. The information displayed in the device tree varies according to the selected option.

Mobile Device Agent Tasks

Trend Micro Mobile Security enables you to perform different tasks on the mobile devices from the **Devices** screen.

Updating Mobile Device Agents

You can send the update notification to mobile devices with out-of-date components or security policies from the **Managed Devices** tab in **Devices** screen.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.

3. On the **Managed Devices** tab, click the group whose mobile devices you want to update.

4. Click **Update**.

Mobile Security sends the update notification to all the mobile devices with out-of-date components or security policies.

You can also use the **Update** screen to set Mobile Security to automatically send update notification to mobile devices with out-of-date components or policies or initiate the process manually.

See *Updating Mobile Security Components on page 7-2* for more information.

Updating Mobile Device Information

The Mobile Security server automatically obtains the device information from managed mobile devices at scheduled intervals and displays the device information on the **Devices** screen.

You can update the device information of a managed device on the **Managed Devices** tab before the next scheduled automatic update.

Procedure

1. Log on to the Mobile Security administration web console.

2. Click **Devices** on the menu bar.

   The **Devices** screen displays.

3. On the **Managed Devices** tab, select a mobile device from the device tree.

4. Click **Update**.

Lost Device Protection

If a user loses or misplaces the mobile device, you can remotely locate, lock or delete all of the data on that mobile device.

Locating a Remote Mobile Device

You can locate the mobile device through the wireless network or by using mobile device's GPS. The Management Server displays the mobile device location on Google Maps.

Note

This feature is available for Android and iOS mobile devices only.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, click the mobile device from the device tree that you want to locate.
4. Click **Device Locate** and then click **OK** on the confirmation dialog-box.

   The Mobile Security Management Server tries to locate the mobile device and displays the Google Maps link on the **Remote Locate Device** screen.
5. Click the Google Maps link on the **Remote Locate Device** screen to see the mobile device's most recent GPS location on the map.

Locking a Remote Mobile Device

You can send lock instruction from the administration web console to remotely lock a mobile device. Users will require to type the power-on password to unlock the mobile device.

Note

This feature is supported on Android and iOS mobile devices only.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, click the mobile device from the device tree that you want to lock.
4. Do one of the following:

   For an Android mobile device, click **Remote Lock** and then click **OK** on the confirmation dialog-box.

   For an iOS mobile device, click **Remote Lock** then type the user's phone number and a message that you want to send to the user, and then click **Lock**.

   The **Success** message displays on the screen if the lock command is generated successfully. To check whether the mobile device is locked successfully, you can check the command status in the **Command Queue Management** screen. See *Command Queue Management on page 2-19* for details.

Wiping a Remote Mobile Device

WARNING!

Be careful when you use this feature as the action CANNOT be undone. All data will be lost and irrecoverable.

You can remotely reset the mobile device to factory settings and clear the mobile device internal memory/SD card. This feature helps ensure the security of the data for lost, stolen or misplaced mobile devices. You can also choose to clear only the following corporate data on the mobile device:

- for Android: Exchange mail, calendar and contacts
- for iOS: MDM profiles, related policies, configurations and data

Note

This feature is supported on Android, iOS, and Windows Phone mobile devices only.

For instructions on wiping a mobile device that uses Exchange ActiveSync, see *Wiping a Remote ActiveSync Mobile Device on page 3-21*.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, click the mobile device from the device tree that you want to wipe.
4. Click **Remote Wipe**.

   The **Remote Wipe Device** screen displays.
5. Select the appropriate Device Name checkbox.
6. Do one of the following:
   - For Android mobile device, select one of the following:
     - **Wipe all data to factory settings. (All applications and stored data will be removed. The inserted memory card will be formatted. This action cannot be undone.)**
     - **Wipe email, calendar and contact list.**—also known as "selective wipe".

       If you select this option, you can also select **Wipe all data to factory settings if selective wipe failed.**.
   - For iOS mobile device, select one of the following:

- **Wipe all data to factory settings. (All applications and stored data will be removed. The inserted memory card will be formatted. This action cannot be undone.)**
- **Wipe out all the provisioned profiles, policies, configurations, and its related data.**

- For Windows Phone mobile device, select the following:
  - **Wipe all data to factory settings. (All applications and stored data will be removed. The inserted memory card will be formatted. This action cannot be undone.)**

7. Click **Remote Wipe Device**.

   The selected data is deleted from the mobile device and the Mobile Device Agent is unregistered from the server.

Resetting Password Remotely

If a user has forgotten the power-on password, you can remotely reset the password and unlock the mobile device from the Management Server. After the mobile device is successfully unlocked, the user is able to change the power-on password.

Note

This feature is supported on Android, and iOS mobile devices only.

Resetting Password for an Android Mobile Device

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. Select the mobile device from the tree, and then click **Password Reset**.

4. Type and confirm the new six-digit password on the pop-up dialog box that appears.

Removing the Password for an iOS Mobile Device

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. Select the mobile device from the tree, and then click **Password Reset**.
4. Click **OK** on the confirmation dialog box that appears. The power on password for the selected iOS mobile device will be removed.

Managing Samsung KNOX Workspace Remotely

You can send commands to manage Samsung KNOX workspaces from Mobile Security management web console. These commands include creating container, removing container, locking container, unlocking container, and resetting container password. This feature is available for Samsung mobile devices only.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, select a Samsung mobile device from the device tree that you want to manage.
4. Do one of the following:

- To create KNOX workspace on the mobile device, click **KNOX Operations** > **Create Container**.
- To remove the workspace from the mobile device, click **KNOX Operations** > **Remove Container**.
- To enable user to reset workspace password, click **KNOX Operations** > **Reset Password**.
- To lock the workspace on the mobile device, click **KNOX Operations** > **Lock Container**.
- To unlock the workspace on the mobile device, click **KNOX Operations** > **Unlock Container**.

Modifying iOS Settings Remotely

You can change the iOS mobile device settings remotely from the administration web console. These settings include data roaming, voice roaming, personal hotspot.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. On the **Managed Devices** tab, select an iOS mobile device from the device tree that you want to manage.
4. Do one of the following:
   - To enable data roaming, click **iOS Operations** > **Enable Data Roaming**.
   - To disable data roaming, click **iOS Operations** > **Disable Data Roaming**.
   - To enable voice roaming, click **iOS Operations** > **Enable Voice Roaming**.
   - To disable voice roaming, click **iOS Operations** > **Disable Voice Roaming**.

- To enable personal hotspot, click **iOS Operations** > **Enable Personal Hotspot**.
- To disable personal hotspot, click **iOS Operations** > **Disable Personal Hotspot**.
- To start Airplay mirroring, click **iOS Operations** > **Request AirPlay Mirroring**.
- To stop AirPlay mirroring, click **iOS Operations** > **Stop AirPlay Mirroring**.

Exporting Data

You can export data for further analysis or a backup from the **Managed Devices** tab on **Devices** screen.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. Select the mobile device group from the device tree whose data you want to export.
4. Click **Export**.
5. If required, click **Save** on the pop-up that appears to save the `.zip` file on your computer.
6. Extract the downloaded `.zip` file content and open the `.csv` file to view the mobile device information.

Sending Messages to Mobile Devices

You can send a text message to a user or a group from the **Managed Devices** tab in the **Devices** screen.

Note

When you send a text message to an iOS device, the information does not appear on the **Command Queue Management** screen.

Procedure

1. Log on to the Mobile Security administrator web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. From the device tree, select the mobile device or the device group to which you want to send a text message.
4. Click **Send Message**.

   The **Send a Text Message** screen appears.
5. Type your message in the field provided, and then click **Send**.

Exchange ActiveSync Devices Tab

After enabling the Exchange Server Integration on the Mobile Security Management Server, the **Exchange ActiveSync Devices** tab on **Devices** screen displays the list of mobile devices that connect to the Exchange Server through ActiveSync service.

On the **Exchange ActiveSync Devices** tab, you can perform the following actions:

- Allow or block access to Exchange Server
- On-demand remote wipe
- Cancel remote wipe command
- Remove mobile devices from the list

Inviting Exchange ActiveSync Users

Before inviting Exchange ActiveSync users, make sure that you have configured the notifications and reports settings on the Management Server. Refer to the topic *Configuring Notifications & Reports Settings* in the *Installation and Deployment Guide*.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. Click the **Exchange ActiveSync Devices** tab.
4. Select a mobile device assigned to the user that you want to invite to Mobile Security.
5. Click **Invite**, and then click **OK** on the confirmation screen that appears.

   Mobile Security sends an email message to the invited user. After the mobile device enrolls to the Mobile Security Management Server, the **Managed Device** column displays the status of the mobile device agent.

Allowing or Blocking Access to Exchange Server

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. Click the **Exchange ActiveSync Devices** tab.
4. Select a mobile device for which you want to allow or block access to Exchange Server.

5. Click **Allow Access** or **Block Access** and then click **OK** on the confirmation dialog box.

   The mobile device status in the **Exchange Access State** column displays the new status after the mobile device syncs with the Exchange Server.

Wiping a Remote ActiveSync Mobile Device

WARNING!

Be careful when you use this feature as the action CANNOT be undone. All data will be lost and unrecoverable.

You can remotely reset the ActiveSync mobile device to factory settings and clear the mobile device internal memory/SD card. This feature helps ensure the security of the data for lost, stolen or misplaced mobile devices.

For instructions on wiping a mobile device that does not use ActiveSync, see *Wiping a Remote Mobile Device on page 3-13*.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. Click the **Exchange ActiveSync Devices** tab.
4. Select the mobile device that you want to wipe.
5. Click **Remote Wipe**.

   The **Remote Wipe Device** screen pops up.
6. Select the device and then click **Remote Wipe Device**.

Removing an ActiveSync Mobile Device

The mobile device that you have remotely wiped from the Mobile Security Management Server will no longer be able to access the Exchange Server. You can remove such mobile device information from the **Exchange ActiveSync Devices** tab on the **Devices** screen.

Note

You can only remove mobile devices that are remotely wiped from the Mobile Security Management Server.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen displays.
3. Click the **Exchange ActiveSync Devices** tab.
4. Select the mobile device that you want to remove from the list.
5. Click **Remove**, and then click **OK** on the confirmation screen.

Device Enrollment Program Tab

The Device Enrollment Program (DEP) provides a fast, streamlined way to deploy your corporate-owned iOS mobile devices. You can enroll your organization into the DEP program.

Trend Micro Mobile Security integrates with Apple Device Enrollment Program to streamline the enrollment of company-issued iOS 7 and iOS 8 mobile devices purchased directly from Apple. If you have configured the integration with the Device Enrollment Program, the users who are issued a corporate-owned iOS mobile devices are prompted to enroll with Mobile Security when they configure the mobile device using iOS activation process.

Integrating Mobile Security with DEP means that you do not need to communicate the enrollment instructions to the users, but still ensure that all the mobile devices are enrolled on the their first use. Additionally, this integration also removes the associated support cost.

Device Enrollment Program User Experience

If you configure Mobile Security integration with the Apple's Device Enrollment Program, the user experience is as follows:

- A user receives a new company-issued iOS mobile device, unpacks it, and switches it on.
- The mobile device connects to Apple.
- From the mobile device ID, the Apple servers detect that the device has been added to your Device Enrollment Program account and send device settings and connection details for your Mobile Security deployment.
- The user then uses the iOS Setup Assistant to complete the initial activation of the mobile device, which includes enrollment with Mobile Security.

You can determine the screens that appear in the iOS Setup Assistant when you configure integration with the Device Enrollment Program. This enables you to further streamline the activation process by skipping screens for settings that you configure through device management. For example, if you plan to require that Location Services is enabled on the devices as part of a geo-fencing configuration, you can configure the iOS Setup Assistant to skip the screen that lets users choose whether to enable Location Services.

As part of the device activation process, the user is prompted to enroll with Mobile Security. The user does not need to enter credentials or an email address, and does not need to know connection details for Mobile Security. A specific Device Enrollment Program profile that admin creates automatically when you configure integration with the Device Enrollment Program is deployed to the device.

Setting Up Mobile Security for the Device Enrollment Program

Before you can configure Mobile Security for the Device Enrollment Program (DEP), make sure that you have already enrolled your organization to the DEP program on the following Apple website:

http://deploy.apple.com/

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Devices** on the menu bar.

   The **Devices** screen appears.
3. Click the **Device Enrollment Program** tab.
4. Click **Settings**.
5. Click the **Download** link before **Public Key** to download the public key to the local computer from Mobile Security Management Server.
6. Click the **Apple Deployment Programs** link before **Deployment**.

   The **Apple Deployment Programs** web portal opens in the Internet web browser.
7. Sign in to your **Device Enrollment Program** account and create a new MDM server using the public key you downloaded from the Mobile Security Management Server. Refer to the following document for the detailed steps to enroll to the Device Enrollment Program.

   https://www.apple.com/iphone/business/docs/DEP_Business_Guide_EN_Feb14.pdf
8. On the MDM server, generate an access token and save the token file to a suitable location, and then assign mobile devices for enrollment to the MDM server.
9. Upload the token file you generated through the **Apple Deployment Programs** web portal to the Mobile Security Management Server. Wait until the upload completes.

After the upload completes, the **Device Enrollment Program Settings** screen appears.

10. Under the **Device Enrollment Program Detail** section, configure the following setup profile settings for mobile devices.

    - **Profile name**: a name for the setup profile displayed on the mobile device.
    - **Require supervision**: to place the mobile devices enrolled through the Device Enrollment Program to the supervised mode.
    - **Removable configuration**: to allow users to remove the device management configuration from devices enrolled through the Device Enrollment Program.
    - **Allow pairing**: to enable devices enrolled through the Device Enrollment Program to be managed through Apple tools such as iTunes and Apple Configurator.
    - **Mandatory configuration**: to prevent users from skipping the Mobile Security enrollment step in the device activation process.
    - **Business unit**: the name of the department to which the mobile device is assigned to.
    - **Unique service ID**: if you have multiple Mobile Security deployments, enter in the Unique service ID box a name that uniquely identifies the deployment you are configuring.
    - **Support phone number**: the phone number for users to call for assistance.
    - **Required setup items**: the setup items that are required for the users to configure. By default, all the setup items are required. If you disable any of these items, the users will be able to skip that item during setup.

11. Click **Save**.

    Mobile Security Management Server synchronizes the mobile device list with the Apple Device Enrollment Programs server and displays the mobile devices on the **Devices Enrollment Program** tab on **Devices** screen.

Integration with Trend Micro Control Manager

Trend Micro Mobile Security provides integration with Trend Micro Control Manager (also referred to as Control Manager or TMCM). This integration enables the Control Manager administrator to:

- create, edit or delete security policies for Mobile Security
- deliver security policies to enrolled mobile devices
- view Mobile Security **Dashboard** screen

For the detailed information about Trend Micro Control Manager and handling Mobile Security policies on Control Manager, refer to the product documentation at the following URL:

http://docs.trendmicro.com/en-us/enterprise/control-manager.aspx

Creating Security Policies in Control Manager

The Trend Micro Control Manager web console displays the same security policies that are available in Mobile Security. If a Control Manager administrator creates a security policy for Mobile Security, Mobile Security will create a new group for this policy and move all the target mobile devices to this group. To differentiate the policies that are created in Mobile Security with the policies created in Control Manager, Mobile Security adds a prefix **TMCM_** to the group name.

Deleting or Modifying Security Policies

The Control Manager administrator can modify a policy at any time and the policy will be deployed to the mobile devices immediately.

Trend Micro Control Manager synchronizes the policies with Trend Micro Mobile Security after every 24 hours. If you delete or modify a policy that is created and deployed from Control Manager, the policy will be reverted to the original settings or created again after the synchronization occurs.

Security Policy Statuses on Control Manager

On the Trend Micro Control Manager web console, the following statuses are displayed for the security policies:

- **Pending**: The policy is created on the Control Manager web console and has not yet been delivered to the mobile devices.
- **Deployed**: The policy has been delivered and deployed on all the target mobile devices.

Chapter 4

Managing Users and Invitations

This chapter shows you how to manage the users and invitations lists.

The chapter includes the following sections:

- *Users Tab on page 4-2*
- *Invitations Tab on page 4-4*

Users Tab

The **Users** tab enables you to perform the following tasks:

- invite a user to register
- invite a user again and change the assigned group
- edit user information
- delete a user
- search for a user

Viewing the Users List

Procedure

1. On the Mobile Security administration web console, go to **Users**.

   The **Users** screen appears.

2. To sort the list, click the header for any of the following columns.

   - User Name
   - Email
   - Devices
   - Invited On

3. To search for a user, type the user name or email address in the **Search** bar and then press Enter.

   If the user is in the list, Mobile Security displays the information.

Inviting a User Again

Note

This topic applies only to Mobile Security deployment in **Security Scan** mode with unlisted MDM solutions.

If your Mobile Security is integrated with AirWatch or MobileIron, this feature is disabled.

Procedure

1. On the Mobile Security administration web console, go to **Users**.

   The **Users** screen displays.

2. Select the user and then click **Invite Again**

   The **Invite Again** screen appears.

3. Select the group from the drop-down list.

4. Click **Save**.

   A confirmation message appears.

Editing User Information

Procedure

1. On the Mobile Security administration web console, go to **Users**.

   The **Users** screen displays.

2. Click the user name from the list.

   The **Edit User Information** screen appears.

3. Modify the user name and email address as required.

4. Click **Save**.

Mobile Security updates the user information.

Deleting a User

Note

You can only delete users without devices registered to the Mobile Security server.

Procedure

1. On the Mobile Security administration web console, go to **Users**.

   The **Users** screen displays.

2. Select the user from the list and then click **Delete**.

3. On the confirmation message that appears, click **OK**.

   Mobile Security deletes the selected user.

Invitations Tab

The **Invitations** tab on the **Users** screen enables you to perform the following tasks:

- view the invitations list
- resend an invitation
- cancel an active invitation
- remove an invitation from the list
- search for an invitation

Viewing the Invitations List

Procedure

1. On the Mobile Security administration web console, go to **Users** > **Invitations**.

   The **Invitations** tab appears.

2. To filter the list, select the invitation status from the drop-down list.

INVITATION STATUS	DESCRIPTION
Active	The invitation is valid and the user can use the information in the invitation message to enroll.
Expired	The invitation has expired and the user can no longer use the information in the invitation message to enroll.
Used	The user has already used the information in the invitation message to enroll and the Enrollment Key has become invalid. **Note** This status will only appear when the **Enrollment Key usage limitation option** is set to **Use for one time** in Device Enrollment Settings.
Canceled	The invitation is canceled from the server and the user cannot use the information in the invitation message to enroll.

3. To search for an invitation, type the user name, phone number, or email address in the **Search** bar and then press Enter.

   If the invitation is in the list, Mobile Security displays the information.

Resending Invitations

Procedure

1. On the Mobile Security administration web console, go to **Users** > **Invitations**
2. Select invitations from the list.
3. Click **Resend Invitation**.

   Mobile Security resends the invitation to the selected users.

Canceling Active Invitations

Procedure

1. On the Mobile Security administration web console, go to **Users** > **Invitations**
2. Select invitations from the list.
3. Click **Cancel Invitation**.

   The selected invitations are canceled.

Removing Invitations from the List

Note

You can only remove invitations with either **Used** or **Canceled** status.

Procedure

1. On the Mobile Security administration web console, go to **Users** > **Invitations**
2. Select invitations from the list.
3. Click **Remove Invitation**.

The selected invitations are removed from the list.

Chapter 5

Protecting Devices with Policies

This chapter shows you how to configure and apply security policies to mobile devices in a Mobile Security group. You can use policies related to provisioning, device security and data protection.

The chapter includes the following sections:

- *About Security Policies on page 5-2*
- *Managing Policies on page 5-3*
- *Security Policies in Mobile Security on page 5-7*

About Security Policies

You can configure security policies for a Mobile Security group on the Management Server. These policies apply to all mobile devices in the group. You can apply security policies to all Mobile Security groups by selecting the **Mobile Devices** group (the root group). The following table lists the security policies available in Mobile Security.

TABLE 5-1. Security Policies in Mobile Security

POLICY GROUP	POLICY	REFERENCE
General	Common Policy	See *Common Policy on page 5-7*.
Provisioning	Wi-Fi Policy	See *Wi-Fi Policy on page 5-8*.
	Exchange ActiveSync Policy	See *Exchange ActiveSync Policy on page 5-8*.
	Certificate Policy	See *Certificate Policy on page 5-9*.
	VPN Policy	See *VPN Policy on page 5-8*.
	Global HTTP Proxy Policy	See *Global HTTP Proxy Policy on page 5-9*.
	Single Sign-On Policy	See *Single Sign-On Policy on page 5-9*.
	Cellular Network Policy	See *Cellular Network Policy on page 5-10*.
	AirPlay/AirPrint Policy	See *AirPlay/AirPrint Policy on page 5-10*.
	Theme Policy	See *Theme Policy on page 5-11*.
	Managed Domains Policy	See *Managed Domains Policy on page 5-11*.

Policy Group	Policy	Reference
Device Security	Security Policy	See *Security Policy on page 5-12*.
	Spam Prevention Policy	See *Spam Prevention Policy on page 5-13*.
	Call Filtering Policy	See *Call Filtering Policy on page 5-16*.
	Web Threat Protection Policy	See *Web Threat Protection Policy on page 5-18*.
Devices	Password Policy	See *Password Policy on page 5-18*.
	Feature Lock Policy	See *Feature Lock Policy on page 5-18*.
	Compliance Policy	See *Compliance Policy on page 5-19*.
Application Management	Application Monitor & Control Policy	See *Application Monitor and Control Policy on page 5-19*.
	Volume Purchasing Program Policy	See *Volume Purchasing Program Policy on page 5-22*.
Samsung KNOX	Container Policy	See *Container Policy on page 5-22*.

Managing Policies

Mobile Security enables you to quickly create a policy using the default security policy templates.

Use the **Policy** screen to create, edit, copy or delete security policies for mobile devices.

Creating a Policy

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Policies** on the menu bar.

   The **Policy** screen displays.
3. Click **Create**.

   The **Create Policy** screen displays.
4. Type the policy name and description in their respective fields and then click **Save**.

   Mobile Security creates a policy with the default settings. However, the policy is not assigned to a group. To assign the policy to a group, see *Assigning or Removing Policy from a Group on page 5-5*.
5. (Super Administrator only) If you want to use this policy as a template, click the arrow button under the **Type** column on the **Policy** screen. The group administrators can use templates created by the Super Administrator to create policies for their assigned groups.

   Note

   - You cannot assign a template to any group.
   - You can also convert a template to policy. However, you can only convert a template to policy if the template is not assigned to any group.

Editing a Policy

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Policies** on the menu bar.

The **Policy** screen displays.

3. In the policy list, click the policy name whose details you want to edit.

   The **Edit Policy** screen displays.

4. Modify the policy details and then click **Save**.

Assigning or Removing Policy from a Group

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Policies** on the menu bar.

   The **Policy** screen displays.

3. In the **Applied Groups** column of a policy, click the group name. If the policy is not assigned to a group, click **None**.
4. Do one of the following:
   - To assign a policy to a group: from the **Available groups** list on the left side, select the group to which you want to apply the policy, and then click **>** to move the group to the right side.
   - To remove policy from a group: from the group list on the right side, select a group that you want to remove, and then click **<** to move the group to the **Available groups** list on the left side.
5. Click **Save**.

Copying a Policy

Procedure

1. Log on to the Mobile Security administration web console.

2. Click **Policies** on the menu bar.

   The **Policy** screen displays.

3. Select the policy that you want to copy, and then click **Copy**.

Deleting Policies

You cannot delete the **Default** policy and any policy that is applied to a group. Make sure to remove the policy from all the groups before deleting a policy. See *Assigning or Removing Policy from a Group on page 5-5* for the procedure.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Policies** on the menu bar.

   The **Policy** screen displays.

3. Select the policy that you want to delete, and then click **Delete**.

Configuring Application Availability

Mobile Security enables you to configure apps that you want to make available on iOS and Android mobile devices for a particular policy.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Policies** on the menu bar.

   The **Policy** screen displays.

3. Click the number of apps for the policy, under the **Available Apps** column.

   The **Available Apps** screen displays.

4. Click **iOS Applications** or **Android Applications** tab.
5. Do one of the following:
   - To enable or disable an app, click on the button under the **Permission** column for the app to toggle.
   - To enable or disable all apps, click **Enable All** or **Disable All**.
6. Toggle the availability of a application in the **Permission** column.

Security Policies in Mobile Security

This section introduces the security policies that are available in Mobile Security.

Using the superuser account, you can specify any policy as a template for group admins to create further security policies in Mobile Security. However, once you specify a security policy as a template, you cannot assign that security policy to any group.

Common Policy

Common Policy provides the common security policies for mobile devices. To configure common security policy settings, click **Policies**, then click the policy name, and then click **Common Policy**.

- **User Privileges**: You can enable or disable the feature that allows users to uninstall the Mobile Device Agent. Additionally, you can select whether to allow users to configure Mobile Security device agent settings.

  The following is a list of features associated with uninstall protection:

  - turn On/Off uninstall protection from the administration console
  - password length must have a minimum of six (6) and a maximum of twelve (12) characters; password may contain numbers, characters or symbols.
  - password can be set for each group from the administration console.

  If you do not select the **Allow users to configure Mobile Security client settings** check box, users cannot change Mobile Device Agent settings. However, the

filtering lists for **Spam Prevention Policy**, **Call Filtering Policy** and **Web Threat Protection Policy** are not affected when this option is selected. For more information, see *Spam SMS Prevention Policies on page 5-14*, *Spam WAP Push Prevention Policies on page 5-15* and *Web Threat Protection Policy on page 5-18*.

- **Update Settings**: You can select to have the Mobile Security Management Server notify Mobile Device Agents when a new component is available for update. Or you can select the auto-check option to have Mobile Device Agents periodically check for any component or configuration updates on the Mobile Security Management Server.
- **Log Settings**: When Mobile Device Agents detect a security risk, such as a malware on Android operating system, a log is generated on the mobile device.

Wi-Fi Policy

Wi-Fi Policy enables you to deliver your organization's Wi-Fi network information to Android and iOS mobile devices; including the network name, security type and password.

To configure Wi-Fi policy settings, click **Policies**, then click the policy name, and then click **Wi-Fi Policy**.

Exchange ActiveSync Policy

Exchange ActiveSync Policy enables you to create an Exchange ActiveSync policy for your organization and deliver it to iOS mobile devices.

To configure Exchange ActiveSync policy settings, click **Policies**, then click the policy name, and then click **Exchange ActiveSync Policy**.

VPN Policy

VPN policy settings enable you to create a VPN Policy for your organization and deliver it to iOS mobile devices.

To configure VPN policy settings, click **Policies**, then click the policy name, and then click **VPN Policy**

Global HTTP Proxy Policy

Global HTTP Proxy Policy enables you to deliver your organization's proxy information to mobile devices. This policy only applies to iOS mobile devices that are in supervised mode.

To configure global HTTP proxy policy settings, click **Policies**, then click the policy name, and then click **Global HTTP Proxy Policy**

Certificate Policy

Certificate Policy enables you to import certificates that you need to deploy on iOS mobile devices.

To configure certificate policy settings, click **Policies**, then click the policy name, and then click **Certificate Policy**.

Single Sign-On Policy

Single sign-on (SSO) policy enables the users to use the same credentials across applications, including Mobile Securityand applications from the App Store. Each new application configured with SSO certification verifies user permissions for enterprise resources, and logs users in without requiring them to reenter their passwords.

The single sign-on policy includes the following information:

- **Name**: the Kerberos principal name.
- **Realm**: The Kerberos realm name.

  The Kerberos ream name should be properly capitalized.
- **URL Prefixes** (Optional): List of URLs that must be matched in order to use an account for Kerberos authentication over HTTP. If this field is blank, the account is eligible to match all http and https URLs. The URL matching patterns must begin with either http or https.

Each entry of this list must contain a URL prefix. Only the URLs that begin with one of the strings in an account are allowed to access the Kerberos ticket. URL matching patterns must include the scheme. For example, http://www.example.com/. If a matching pattern does not end in /, it will automatically add a / to the URL.

- **Application Identifiers** (Optional): List of application identifiers that are allowed to use the account. I f this field is blank, this account matches all application identifiers.

  The **Application Identifiers** array must contain strings that match application bundle IDs. These strings may be exact matches (such as com.mycompany.myapp) or may specify a prefix match on the bundle ID by using the * wildcard character. The wildcard character must appear after a period character (.), and may appear only at the end of the string (such as com.mycompany.*). When a wildcard is used, any application whose bundle ID begins with the prefix is granted access to the account.

To configure Single Sign-On Policy for iOS settings, click **Policies**, then click the policy name, and then click **Single Sign-On Policy**.

AirPlay/AirPrint Policy

AirPlay/AirPrint policy settings enable you to create AirPlay and AirPrint policies for your organization and deliver it to iOS mobile devices.

To configure AirPlay and/or AirPrint policy settings, click **Policies**, then click the policy name, and then click **AirPlay/AirPrint Policy**.

Cellular Network Policy

Celluar network policy settings enables you to configure cellular network settings for your organization and deliver it to iOS mobile devices.

To configure the celluar network policy settings, click **Policies**, then click the policy name, and then click **Celluar Network Policy**.

Theme Policy

Theme policy settings enable you to push a font and set a wallpaper for home screen and lock screen for the iOS mobile devices. This policy applies to iOS mobile devices that are in the supervised mode only.

To configure theme policy settings, click **Policies**, then click the policy name, and then click **Theme Policy**.

Managed Domains Policy

Managed domains policy enables you to configure the email and/or web domains that your organization manages.

- Unmarked Email Domains: When a user is composing an email using the system email client, any email address entered which does not match the configured domains will be highlighted (marked) in red. Administrators should consider using this functionality, to warn users who may be inadvertently attempting to send sensitive information to untrusted email addresses.
- Managed Safari Web Domains: You can specify that files downloaded from specific domains using Safari may only be opened with managed apps. For example, a PDF downloaded from internal.example.com may be opened with Adobe Reader (a managed app) but not Dropbox (an unmanaged app). This provides improved containerization of Safari and wider the use as an enterprise browser.

Important

You must disable the following iOS features in the Feature Lock Policy. Otherwise, the managed Safari Web domains settings will not have any effect, since the downloaded files can be opened with other (unmanaged) apps:

- Open documents from managed apps in other apps (7.0 or above)
- Open documents from other apps in managed apps (7.0 or above)

To configure managed domain policy settings, click **Policies**, then click the policy name, and then click **Managed Domain Policy**.

Security Policy

You can configure the **Security Settings** from the **Security Policy** screen.

To configure the security protection policy settings, click **Policies**, click the policy name, and then click **Security Policy**.

The following table describes the available settings for this policy.

TABLE 5-2. Security Policy Settings

SECTION	ITEM	DESCRIPTION	SUPPORTED MOBILE DEVICE OS
Security Settings	**Scan installed applications only**	Select this option if you want to scan installed applications only	
	Scan installed applications and files	Select this option if you want to scan installed applications and other files stored on the mobile device. If you select this option, specify whether you want to scan only APK files or all files.	
	Scan after pattern update	Enable this option if you want to run the malware scan after every pattern update. Mobile Security runs a scan automatically after successful pattern update on Android mobile devices.	

SECTION	ITEM	DESCRIPTION	SUPPORTED MOBILE DEVICE OS
	Enable Facebook scan	Enable this option to scan the Facebook privacy settings. **Note** Enabling **Facebook scan** allows users to protect their information and make sure that they only share data with people they trust.	
Scan Schedule	**Daily**	The scan runs every day on the specified day at the **Start time**.	
	Weekly	The scan runs once a week on the specified day at the **Start time**.	
	Monthly	The scan runs once a month on the specified day at the **Start time**.	

Spam Prevention Policy

The spam prevention policy in Mobile Security provides protection against spam WAP push and SMS text messages.

To configure spam prevention policy settings, click **Policies**, then click the policy name, and then click **Spam Prevention Policy**.

Spam SMS Prevention Policies

This feature provides you server-side control of SMS spam prevention policies. The following features are available when configuring the SMS Spam Prevention Policies:

- enable or disable spam SMS prevention for mobile device
- configure the mobile device to use a blocked list, approved list or disable the SMS anti-spam feature for mobile device.
- configure an approved list from the administration console
- configure a blocked list from the administration console

Refer to the following table for approved or blocked filtering list configuration details.

TABLE 5-3. Filtering list configuration for Spam SMS Prevention Policy

CENTRAL CONTROL	USER CONTROL	DESCRIPTION
Disabled	Enabled	The user can edit the approved/blocked list on the mobile device agent. Mobile Security allows or blocks the messages based on the following priority: 1. Approved List on Mobile Device Agent 2. Blocked List on Mobile Device Agent
Enabled	Disabled	The user is only allowed to edit the approve/ blocked list on the mobile device agent. Mobile Security allows or blocks the messages based on the following priority: 1. Approved List or Blocked List on server 2. Approved List on Mobile Device Agent 3. Blocked List on Mobile Device Agent

CENTRAL CONTROL	USER CONTROL	DESCRIPTION
Enabled	Enabled	The user can view or edit the approved/blocked list defined by the administrator and can also use the approved/blocked list on the mobile device agent. When the security policies sync with the mobile device agent, it does not sync the filtering lists, and updates all other settings according to the policies. Mobile Security allows or blocks the messages based on the following priority: 1. Approved List on Mobile Device Agent 2. Blocked List on Mobile Device Agent 3. Approved List or Blocked List on server

Note

The SMS approved and blocked list must use the format: "[name1:]number1; [name2:]number2;...".

The 'name' length should not exceed 30 characters, while phone number should be between 4 and 20 characters long and can contain the following: 0-9, +, -, #, (,) and spaces. The maximum number of entries should not exceed 200.

Spam WAP Push Prevention Policies

This feature provides you server-side control of WAP Push Prevention. If enabled, you can select whether to use a WAP approved list.

Note

The WAP approved list must use the format: "[name1:]number1;[name2:]number2;...".

The 'name' length should not exceed 30 characters, while phone number should be between 4 and 20 characters long and can contain the following: 0-9, +, -, #, (,) and spaces. The maximum number of entries should not exceed 200.

The following is a list of features available when configuring WAP Push Prevention policies:

- enable or disable WAP Push Prevention for mobile device
- configure the mobile device to use an approved list or disable WAP Push Prevention on the mobile device
- configure an approved list from the administration console
- if the administrator has enabled server-side control, the user will be unable to change the WAP Push Prevention type defined by the administrator
- if the administrator has disable server-side control, and allowed users to configure Mobile Security settings on mobile device, the user will be unable to view or edit the WAP Push Prevention list configured by the administrator, and may edit the personal WAP Push Prevention list on the mobile device side

Note

The users' personal settings for spam messages will be cleared after the Spam Prevention Policy is applied on the Mobile Device Agents.

Call Filtering Policy

This feature provides you server-side control of call filtering policies. To configure call filtering policy settings, click **Policies**, then click the policy name, and then click **Filtering Policy**.

The following features are available when configuring the Call Filtering Policies:

- enable or disable call filtering for mobile device
- configure the mobile device to use a blocked list or an approved list
- configure an approved list from the administration console
- configure a blocked list from the administration console

Refer to the following table for approved or blocked filtering list configuration details.

TABLE 5-4. Filtering list configuration for Call Filtering Policy

CENTRAL CONTROL	USER CONTROL	DESCRIPTION
Disabled	Enabled	The user can edit the approved/blocked list on the mobile device agent. Mobile Security allows or blocks the URLs based on the following priority: 1. Approved List on Mobile Device Agent 2. Blocked List on Mobile Device Agent
Enabled	Disabled	The user is only allowed to edit the approved/ blocked list on the mobile device agent. Mobile Security allows or blocks the incoming calls based on the following priority: 1. Blocked List on server 2. Approved List on Mobile Device Agent 3. Blocked List on Mobile Device Agent You can also configure server-side control for outgoing calls on Android mobile devices.
Enabled	Enabled	The user can view or edit the approved/blocked list defined by the administrator and can also use the approved/blocked list on the mobile device agent. When the security policies sync with the mobile device agent, it does not sync the filtering lists, and updates all other settings according to the policies. Mobile Security allows or blocks the incoming calls based on the following priority: 1. Approved List on Mobile Device Agent 2. Blocked List on Mobile Device Agent 3. Blocked List on server You can also configure server-side control for outgoing calls on Android mobile devices.

Note

The call filtering approved and blocked list must use the format: "[name1:]number1; [name2:]number2;...".

The 'name' length should not exceed 30 characters, while phone number should be between 4 and 20 characters long and can contain the following: 0-9, +, -, #, (,) and spaces. The maximum number of entries should not exceed 200.

Web Threat Protection Policy

Enables you to manage Web threat protection policy from the Mobile Security Management Server and deploys it on Android mobile devices. It also enables Android mobile devices to send the Web threat protection log back to the server.

Note

Mobile Security Web Threat Protection only supports the default Android browser and Google Chrome.

To configure Web Threat Protection Policy settings, click **Policies**, then click the policy name, and then click **Web Threat Protection Policy**.

Password Policy

The password policy prevents unauthorized access to data on mobile devices.

To configure password policy settings, click **Policies**, then click the policy name, and then click **Password Policy** from the left-menu.

Feature Lock Policy

With this feature, you can restrict (disable) or allow (enable) the use of certain mobile device features/components. For example, you can disable the camera for all mobile devices in a particular group.

To configure Feature Lock Policy settings, click **Policies**, then click the policy name, and then click **Feature Lock Policy** from the left-menu.

See *Supported Mobile Device OS Features on page 1-15* for the list of supported features/components.

WARNING!

Use caution while disabling WLAN/WIFI and/or Microsoft ActiveSync. The mobile device may not be able to communicate with the server if both these options are unavailable.

For Android mobile devices, you can also add access point(s) to control the availability of the device components within the range of those access point(s).

Compliance Policy

Compliance policy enables you to set the compliance criteria for the mobile devices. If any mobile device does not match the criteria, Mobile Security displays its non-compliant status on the server UI. Mobile Security also sends an email to the non-compliant iOS mobile device, while it displays a notification on non-compliant Android mobile devices. The compliance check list includes:

- **Rooted/Jailbroken**—checks whether the mobile device is rooted/jailbroken or not.
- **Unencrypted**—checks whether the encryption is enabled on the mobile device or not
- **OS version check**—checks whether the OS version matches the defined criteria or not.

To configure compliance policy settings, click **Policies**, then click the policy name, and then click **Compliance Policy**.

Application Monitor and Control Policy

Application monitor and control policies provide you server-side control of the applications installed on mobile devices and push the required applications to the mobile devices.

To configure application monitor and control policy settings, click **Policies**, then click the policy name, and then click **Application Monitor and Control Policy**.

- **Required Applications**—using this option will push all the applications that you add in the list, to the mobile devices. You can also link a VPN to applications, so that the applications always use this VPN to connect to the network.
- **Permitted Applications**—control the applications installed on mobile devices by using approved and blocked lists.

  For iOS mobile devices, Mobile Security sends notification to administrator and the user for any application that does not comply with the policy.

  For Android mobile devices, Mobile Security blocks the application that does not comply with the policy and will allow all others.

  - **Enable system apps blocking** (Android only):

    if selected, Mobile Security will block all the system apps on Android mobile devices.

  - **Enable Application Category**: select the application category that you want to enable or disable on mobile devices. You can also make the exception by adding the applications that belong to these categories to the approved or blocked list. For example, if you have disabled a category type Games, Mobile Security will block all the applications that belong to this category, unless any such application exists in the approved list.

    Mobile Security allows or blocks the applications according to the following priority:

    1. **Approved List**—Mobile Security allows applications that are in the approved list even if they belong to the category that you have disabled.
    2. **Blocked List**—Mobile Security blocks applications that are in the blocked list even if they belong to the category that you have enabled.
    3. **Application permissions**—Mobile Security allows or blocks applications according to your selected permission status for the category that they belong to.

  - **Enable Application Permissions** (for Android only): select the application services that you want to enable or disable on Android mobile devices. You can also make the exception by adding the applications that use these services to the approved or blocked list. For example, if you have disabled service type

Read Data, Mobile Security will block all the applications that use the Read Data service, unless any such application exists in the approved list.

Mobile Security allows or blocks the applications according to the following priority:

1. **Approved List**—Mobile Security allows applications that are in the approved list even if they use the services that you have disabled.
2. **Blocked List**—Mobile Security blocks applications that are in the blocked list even if they use the services that you have enabled.
3. **Application permissions**—Mobile Security allows or blocks applications according to your selected permission status for the services that they use.

- **Only allow the following applications**: add the applications to the approved list that you want to allow users to use on their mobile devices. If enabled:
  - Mobile Security displays a pop-up warning message on Android mobile devices if it detects applications that are not in the approved list.
  - On iOS mobile devices, if Mobile Security detects any application that is not in the approved list, Mobile Security sends an email notification to the user.
- **Only block the following applications**: add the applications to the blocked list that you do not want users to use on their mobile devices. If enabled:
  - Mobile Security displays a pop-up warning message on Android mobile devices if it detects applications that are in the blocked list.
  - On iOS mobile devices, if Mobile Security detects any application that is in the blocked list, Mobile Security sends an email notification to the user.
- **Lock to App (for Supervised Mode Only)**—restrict the iOS mobile device to the specified application.

Mobile Security checks for restricted applications and sends email alert to the users:

- automatically according to the **Information Collection Frequency** settings in **Administration** > **Communication Server Settings** > **Common Settings (tab)**, or

- when you update the **Information Collection Frequency** settings in **Administration** > **Communication Server Settings** > **Common Settings (tab)**.

Volume Purchasing Program Policy

This policy enables the administrator to import the iOS applications to the Mobile Security administration web console that are purchased through the Apple's Volume Purchase Program. Mobile Security will push all the applications in the Volume Purchasing Program List to mobile devices in a group.

To configure Volume Purchasing Program policy:

1. Add applications to the Enterprise App Store. See *Adding an Application on page 6-2* for the procedure.
2. Click **Policies**, then click the policy name, and then click **Volume Purchasing Program Policy**.
3. Click **Import** and then select applications to import from the Enterprise App Store.
4. Click **Save** to push all the applications to the iOS mobile devices.

Container Policy

This policy enables you to manage Samsung KNOX container security settings. You can configure approved list or blocked list for accounts, apply restrictions, and configure browser, password, and application setttings.

Note

You must configure KNOX license in Mobile Security before enabling this policy. To configure the KNOX license, navigate to **Administration** > **Product License** on the administration web console.

- **Account Settings**: Specify accounts that can be added or restricted on Samsung KNOX containers by using approved and/or blocked lists.
- **Restriction Settings**: Disable camera or file sharing on Samsung KNOX containers.

- **Browser Settings**: Configure security settings for the native Android web browser on Samsung KNOX containers.
- **Password Settings**: Configure password security settings for Samsung KNOX container.
- **Application Settings**: Configure the following lists:
  - **Filter Applications List**: Configure approved list or blocked list to restrict applications installation on Samsung KNOX container.
  - **Required Applications**: Configure the required applications list to specify applications that must be installed on Samsung KNOX.
  - **Disable Applications**: Configure the disable applications list to disable certain applications on the mobile device. If the applications on this list are installed on the mobile device, they will not be removed, but the user will not be able to use these applications.

To configure container policy settings, click **Policies**, then click the policy name, and then click **Container Policy**.

Chapter 6

Managing Apps

This chapter shows you how to manage apps for iOS and Android mobile devices.

The chapter includes the following sections:

- *About the Enterprise App Store on page 6-2*
- *About Installed Apps on page 6-10*

About the Enterprise App Store

The Enterprise App Store enables you to create a list of webclips and apps for the users to download and install on their Android or iOS mobile devices.

You can also upload iOS applications purchased through Apple's Volume Purchase Program to the Enterprise App Store on the Mobile Security administration web console.

Managing Enterprise Apps

Adding an Application

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store**.

   The **Enterprise App Store** screen displays.

2. Click the **Android** or **iOS** tab.

3. Click **Add**.

   The **Add Application** window displays.

4. You can now add an application to the list using one of the following options:

   - **Add from local computer**—select an installation file for Android or iOS mobile devices.
   - **Add a Webclip**—type the application's URL and the application's icon will appear on the home screen of user's mobile device, and the link will open in the default web browser on the mobile device.
   - (Android) **Add from external application store**—type the link to the application in an external app store. The application's icon will appear on the home screen of user's mobile device, and the link will open in the default web browser on the mobile device.

- (iOS) **Please input search keyword**—type the name of the VPP application you want to search and select a country to search the application in its Apple app store, and then select the application you want to add from the search results. Once added, the VPP application is only available in the **App Store** on Mobile Security administration web console. To push the application to mobile devices, you will need to add the application to the **Volume Purchasing Program Policy**. See *Volume Purchasing Program Policy on page 5-22* for the procedure.

5. Click **Continue**.

   The **Edit Application** screen displays.

6. Configure the following:

   - **Application name**: type a name for the application.
   - **Application icon**: if the application icon does not appear, click Upload app icon to select and upload the application icon.
   - **Application ID**: if the application ID does not appear, type the application ID.
   - **VPP codes file**: For iOS VPP application, upload the Volume Purchase Code files that you have received from Apple.
   - **Category**: select a category for the application.

     Note

     You must select a category from the drop-down list. To add or delete a category, click the **Category** button.

   - **Description**: type the description for the application.
   - **Publish**: select one of the following:
     - **Do not publish**—to upload the application on the server, but keep hidden from the mobile devices.
     - **Publish as production version**—to upload the application on the server, and publish it for mobile devices to download.

- **Publish as beta version**—to upload the application on the server, and publish it as a beta version for mobile devices to download.

- **Screenshots**: select and upload application screenshots.

7. Click **Continue**.

   The application appears in the applications list.

Editing Application Information

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store**.

   The **Enterprise App Store** screen displays.

2. Click the **Android** or **iOS** tab.

3. Click the application name whose information you want to edit.

   The **Edit Application** window displays.

4. Modify the details on the screen.

5. Click **Continue**.

Deleting Applications from the App Store

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store**.

   The **Enterprise App Store** screen displays.

2. Click the **Android** or **iOS** tab.

3. Select the applications that you want to delete.

4. Click **Delete** and then click **OK** on the confirmation dialog box.

Managing Application Categories

Adding an Application Category

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store**.

   The **Enterprise App Store** screen displays.

2. Click the **Android** or **iOS** tab.

3. Click **Manage Category**.

4. Click **Add**.

   The **Add Category** window displays.

5. Type the category name and description, and then click **Save**.

Editing an Application Category

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store**.

   The **Enterprise App Store** screen displays.

2. Click the **iOS Applications** tab or **Android Applications** tab.

3. Click **Manage Category**.

4. Click the category name that you want to edit.

The **Edit Category** window displays.

5. Modify the category details, and then click **Save**.

Deleting an Application Category

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store**.

   The **Enterprise App Store** screen displays.

2. Click the **Android** or **iOS** tab.

3. Click **Manage Category**.

4. Select the categories that you want to delete, click **Delete**, and then click **OK** on the confirmation dialog box.

Managing Apps Purchased through the Volume Purchase Program

Important

VPP is only available in certain regions. Make sure that your organization qualifies. Refer to the following link for the details:

http://www.apple.com/business/vpp/

Apple uses redemption codes and the Volume Purchase Program (VPP) licenses for the volume purchase of apps. Since you cannot convert the redemption codes into VPP licenses, Mobile Security supports both of these options.

The Volume Purchase Program enables you to distribute VPP licenses to users or devices for iOS applications.

You can manage VPP apps by monitoring the number of remaining licenses and by reclaiming licenses. Users can use VPP apps even if they have not installed the Mobile Security client application on their mobile devices.

Note

Mobile Security does not push VPP apps to mobile devices. Users need to download them manually to their mobile devices from the Apple App Store from the following location: **App Store** > **Update** > **Purchased**.

Setting Up Volume Purchase Program Licenses

Procedure

1. Navigate to the following URL:

   http://www.apple.com/business/vpp/

2. Sign in with your Apple account and download the service token file from the Apple Volume Purchase Program web portal.

3. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store** > **iOS**.

   The **iOS Enterprise App Store** screen displays.

4. Go to **Volume Purchase Program (VPP) Management** > **VPP Setting**.

5. Upload the token file you downlaoded from the Apple web portal in the field provided, and wait until the upload completes.

6. Click **Sync Now**.

Assigning or Reclaiming VPP Licenses

Mobile Security enables you to assign or reclaim application licenses purchased through the Volume Purchase Program to a user or device.

Important

Before assigning or reclaiming applications, make sure that the Volume Purchase Program Licences are ready.

For more information, see *Setting Up Volume Purchase Program Licenses on page 6-7*.

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store** > **iOS** > **Volume Purchase Program (VPP) Management**.
2. Under the **Application List**, locate the application and then click **Assign/Reclaim**.

   The **Assign/Reclaim Licenses** screen appears.
3. To assign licenses, perform the following steps.
   - Assigning license to a device:
     a. On the **Devices** tab, select a device or multiple devices with an **Unassigned** status.
     b. Click **Assign**.

     Note

     Volume Purchasing Program has the following limitations when assigning apps to devices:
     - You can only assign VPP apps to devices running on iOS 9 or later.
     - App developers must opt in to device assignment.
   - Assigning license to a user:
     a. On the **Users** tab, select a user or multiple users with an **Unassigned** status.
     b. Click **Assign**.

> **Note**
>
> Mobile Security sends a notification to users after a VPP license is assigned.
>
> To modify the user notification settings, go to **Notification & Reports** > **User Notifications** > **VPP User Notification**.

The licenses are assigned successfully.

4. To reclaim licenses, perform the following steps.

   - Reclaiming license from a device:

     a. On the **Devices** tab, select a device or multiple devices with an **Assigned** status.

     b. Click **Reclaim**.

   - Reclaiming license from a user:

     a. On the **Users** tab, select a user or multiple users with an **Assigned** status.

     b. Click **Reclaim**.

   The licenses are reclaimed successfully.

Checking Status for VPP Users

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store** > **iOS**.

   The **iOS Enterprise App Store** screen displays.

2. Go to **Volume Purchase Program (VPP) Management** > **VPP User List**.

3. Under the **Status** column, check the user status.

   The **Status** column may display one of the following statuses:

   - **-** : You have not yet assigned any application to this user.

- **Registered**: You have assigned at least one application to the user, but the user has not yet associated the Apple ID with the email address.
- **Associated**: You have assigned at least one application to the user and the user has already associated the Apple ID with the email address.
- **Retired**: You have reclaimed all the licences assigned to this user.

Reclaiming All Licenses from a User

Mobile Security enables you to reclaim all the licenses from a user.

Procedure

1. On the Mobile Security administration web console, go to **Applications** > **Enterprise App Store** > **iOS**.

   The **iOS Enterprise App Store** screen displays.
2. Click the **Volume Purchase Program (VPP) Management** > **VPP User List**.
3. Select the users from the list, and then click **Retire**.
4. Click **Close** on the **User List** screen.

About Installed Apps

The **Installed Apps** screen lists all apps installed on all managed Android and iOS devices.

The following table lists the information available for Android and iOS apps.

TABLE 6-1. Installed App Information

INFORMATION	DESCRIPTION	ANDROID	IOS
App name	Name of the app	●	●

INFORMATION	DESCRIPTION	ANDROID	IOS
Version	App version number	●	●
Malware scan result	The malware scan may have any of the following results: • **Normal**—No malware detected • **PUA**—Potentially unwanted applications or PUAs are grayware apps that could possibly pose a high risk on user security and/or privacy. For more information, see http://www.trendmicro.com/vinfo/us/security/definition/potentially-unwanted-app. • **Malware**—Known malware • **Unknown**—No information available	●	●
Vulnerability scan result	The vulnerability scan may have any of the following risk ratings: • **Normal** • **Medium** • **High** • **Unknown**—No information available	●	
Privacy scan result	The privacy scan may have any of the following risk ratings: • **Normal** • **Medium** • **High** • **Unknown**—No information available	●	

INFORMATION	DESCRIPTION	ANDROID	IOS
Modified	The modified app scan may have any of the following results: • **Yes**—Original app was modified or repackaged for possibly malicious purposes • **No**—No modifications have been made to the original app • **Unknown**—No information available	●	
Number of installations	Number of devices installed with the app	●	●
Last scanned	Date and time of the last scan	●	●

Viewing the Installed Android Apps List

Procedure

1. On the Mobile Security web console, go to **Applications** > **Installed Apps** > **Android**.

   The **Android** tab appears.

2. To view the scan details of an app, click the result under any of the following columns.

   - Vulnerability Scan Result
   - Privacy Scan Result

   The **Scan Details** page of the selected result appears.

3. To view the devices installed with an app, click the number under the **Number of Installations** column.

   The **Devices** screen appears and displays the list of devices under the **Managed Devices** tab.

4. To view information on a specific app, type the app name in the **Search** bar and then press Enter.

   If the app is in the list, the table displays the app information.

Viewing the Installed iOS Apps List

Procedure

1. On the Mobile Security web console, go to **Applications** > **Installed Apps** > **iOS**.

   The **iOS** tab appears.

2. Go to the **iOS** tab.

   The **iOS** tab appears.

3. To view the devices installed with an app, click the number under the **Number of Installations** column.

   The **Devices** screen appears and displays the list of devices under the **Managed Devices** tab.

4. To view information on a specific app, type the app name in the **Search** bar and then press Enter.

   If the app is in the list, the table displays the app information.

Chapter 7

Updating Components

This chapter shows you how to update Mobile Security components.

The chapter includes the following sections:

- *About Component Updates on page 7-2*
- *Updating Mobile Security Components on page 7-2*
- *Manually Updating a local AU server on page 7-6*

About Component Updates

In Mobile Security, the following components or files are updated through ActiveUpdate, the Trend Micro Internet-based component update feature:

- Mobile Security Server—program installation package for Mobile Security Communication Server.
- Malware Pattern—file containing thousands of malware signatures, and determines the ability of Mobile Security to detect hazardous files. Trend Micro updates pattern files regularly to ensure protection against the latest threats.
- Mobile Device Agents installation program—program installation package for the Mobile Device Agents.

Updating Mobile Security Components

You can configure scheduled or manual component updates on the Mobile Security Management Server to obtain the latest component files from the ActiveUpdate server. After a newer version of a component is downloaded on the Management Server, the Management Server automatically notifies mobile devices to update components.

Manual Update

You can perform a manual server and Mobile Device Agent update in the **Manual** tab on **Updates** screen. You should have already configured the download source in the **Source** screen (see *Specifying a Download Source on page 7-5* for more information).

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Administration** > **Updates**.

   The **Updates** screen displays.
3. Click the **Manual** tab.

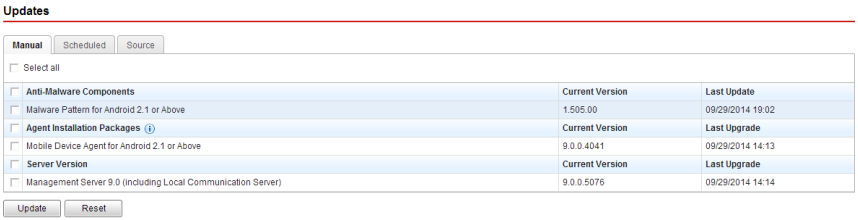

FIGURE 7-1. The Manual tab on Updates screen

4. Select the check box of the component you want to update. Select the **Anti-Malware Components**, **Agent Installation Packages** and/or **Server Version** check box(es) to select all components in that group. This screen also displays the current version of each component and the time the component was last updated. See *About Component Updates on page 7-2* for more information on each update component.

5. Click **Update** to start the component update process.

Scheduled Update

Scheduled updates allow you to perform regular updates without user interaction; thereby, reducing your workload. You should have already configured the download source in the **Source** screen (refer to *Specifying a Download Source on page 7-5* for more information).

Procedure

1. Log on to the Mobile Security administration web console.

2. Click **Administration** > **Updates**.

   The **Updates** screen displays.

3. Click the **Scheduled** tab.

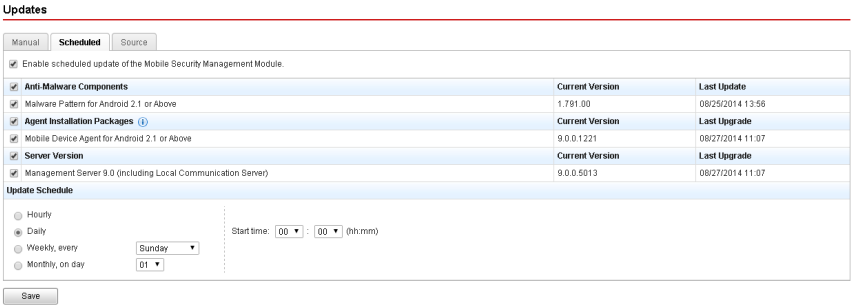

FIGURE 7-2. The Scheduled tab on Updates screen

4. Select the check box of the component you want to update. Select the **Anti-Malware Components**, **Agent Installation Packages** and/or **Server Version** check box(es) to select all components in that group. This screen also displays each component's current version and the time the component was last updated.

5. Under **Update Schedule**, configure the time interval to perform a server update. The options are **Hourly**, **Daily**, **Weekly**, and **Monthly**.

   - For weekly updates, specify the day of the week (for example, Sunday, Monday, and so on.)
   - For monthly updates, specify the day of the month (for example, the first day, or 01, of the month and so on).

   Note

   The **Update for a period of x hours** feature is available for the `Daily`, `Weekly`, and `Monthly` options. This means that your update will take place sometime within the number of hours specified, following the time selected in the **Start time** field. This feature helps with load balancing on the ActiveUpdate server.

   - Select the **Start time** when you want Mobile Security to initiate the update process.

6. Click **Save** to save the settings.

Specifying a Download Source

You can set Mobile Security to use the default ActiveUpdate source or a specified download source for server update.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Administration** > **Updates**.

   The **Updates** screen displays. For more information about the update see *Manual Update on page 7-2* or for scheduled update see *Scheduled Update on page 7-3*.
3. Click the **Source** tab.

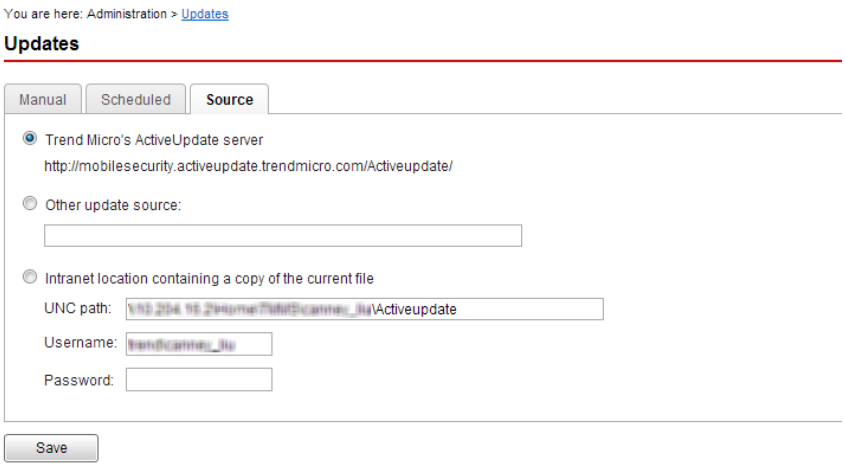

FIGURE 7-3. The Source tab on Updates screen

4. Select one of the following download sources:
   - **Trend Micro ActiveUpdate server**—the default update source.

- **Other update source**—specify HTTP or HTTPS website (for example, your local Intranet website), including the port number that should be used from where Mobile Device Agents can download updates.

  Note

  The updated components have to be available on the update source (web server). Provide the host name or IP address, and directory (for example, `https://12.1.123.123:14943/source`).

- **Intranet location containing a copy of the current file**—the local intranet update source. Specify the following:

  - **UNC path**: type the path where the source file exists.
  - **Username** and **Password**: type the username and password if the source location requires authentication.

Manually Updating a local AU server

If the Server/Device is updated through a Local AutoUpdate Server, but the Management Server cannot connect to the Internet; then, manually update the local AU Server before doing a Server/Device Update.

Procedure

1. Obtain the installation package from your Trend Micro representative.
2. Extract the installation package.
3. Copy the folders to the local AutoUpdate Server.

Note

When using a local AutoUpdate Server, you should check for updates periodically.

Chapter 8

Viewing and Maintaining Logs

This chapter shows you how to view Mobile Device Agent logs on the Mobile Security administration web console and configure log deletion settings.

The chapter includes the following sections:

- *About Mobile Device Agent Logs on page 8-2*
- *Viewing Mobile Device Agent Logs on page 8-2*
- *Log Maintenance on page 8-4*

About Mobile Device Agent Logs

When Mobile Device Agents generate a malware protection log, Web threat protection log, policy violation log or an event log, the log is sent to the Mobile Security Management Server. This enables Mobile Device Agent logs to be stored on a central location so you can assess your organization's protection policies and identify mobile devices at a higher risk of infection or attack.

Note

You can view SMS anti-spam, WAP push protection, and call filtering logs on the mobile devices.

Viewing Mobile Device Agent Logs

You can view Mobile Device Agent logs on mobile devices or view all Mobile Device Agent logs on Mobile Security Management Server. On the Management Server, you can view the following Mobile Device Agent logs:

- Malware Protection Logs—Mobile Device Agent generates a log when a malware is detected on the mobile device. These logs allow you to keep track of the malware that were detected and the measures taken against them.
- Privacy Scan Logs—Mobile Security Agent generates a log when it detects a privacy threat and then uploads the log to the server.
- Web Threat Protection Logs—Mobile Security Agent generates a log when it blocks a dangerous or malware-infected web page and then uploads the log to the server.
- Event Logs—these logs are generated when certain actions are taken by the server and the Mobile Device Agent.
- Policy Violation Logs—these logs include information about the policy compliant status of Mobile Device Agents.
- Vulnerability Scan Logs—Mobile Security Agent generates a log when it detects a vulnerability risk and then uploads the log to the server.

- Modified App Scan Logs—Mobile Security Agent generates a log when it detects a modified app and then uploads the log to the server.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Notifications & Reports** > **Log Query**.

   The **Log Query** screen displays.

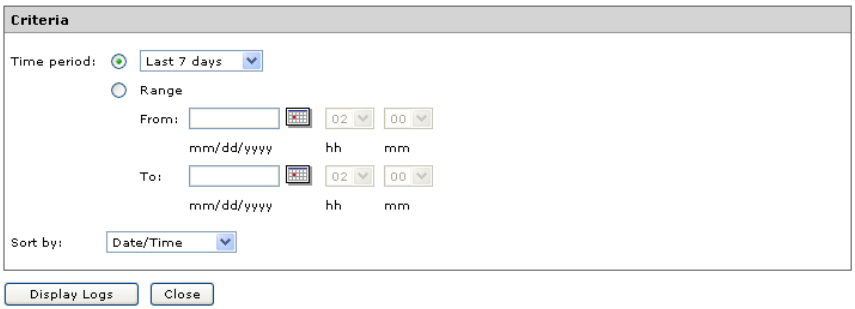

FIGURE 8-1. Log Query screen

3. Specify the query criteria for the logs you want to view. The parameters are:
   - **Log types**—select the log type from the drop down menu.
   - **Category**—select the log category from the drop down menu.
   - **Admin name**—type the administrator name whose generated logs you want to search.
   - **Time period**—select a predefined date range. Choices are: **All**, **Last 24 hours**, **Last 7 days**, and **Last 30 days**. If the period you require is not covered by the above options, select **Range** and specify a date range.
     - **From**—type the date for the earliest log you want to view. Click the icon to select a date from the calendar.
     - **To**—type the date for the latest log you want to view. Click the icon to select a date from the calendar.

- **Sort by**—specify the order and grouping of the logs.

4. Click **Query** to begin the query.

Log Maintenance

When Mobile Device Agents generate event logs about security risk detection, the logs are sent and stored on the Mobile Security Management Module. Use these logs to assess your organization's protection policies and identify mobile devices that face a higher risk of infection or attack.

To keep the size of your Mobile Device Agent logs from occupying too much space on your hard disk, delete the logs manually or configure Mobile Security administration web console to delete the logs automatically based on a schedule in the Log Maintenance screen.

Scheduling Log Deleting

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Notifications & Reports** > **Log Maintenance**.

   The **Log Maintenance** screen displays.
3. Select **Enable scheduled deletion of logs**.
4. Select the log types to delete: Malware, Event or Policy Violation.
5. Select whether to delete logs for all the selected log types or those older than the specified number of days.
6. Specify the log deletion frequency and time.
7. Click **Save**.

Deleting Logs Manually

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Notifications & Reports** > **Log Maintenance**.

   The **Log Maintenance** screen displays.
3. Select the log types to delete.
4. Select whether to delete logs for all the selected log types or only older than the specified number of days.
5. Click **Delete Now**.

Chapter 9

Using Notifications and Reports

This chapter shows you how to configure and use notifications and reports in Mobile Security.

The chapter includes the following sections:

- *About Notification Messages and Reports on page 9-2*
- *Configuring Notification Settings on page 9-2*
- *Configuring Email Notifications on page 9-2*
- *Administrator Notifications on page 9-3*
- *Reports on page 9-4*
- *User Notifications on page 9-9*

About Notification Messages and Reports

You can configure Mobile Security to send notifications and reports via email to the administrator(s) and/or users.

- **Administrator Notifications**—sends email notifications to the administrator in case any system abnormality occurs.
- **Reports**—sends reports to the specified email recipients.
- **User Notifications**—sends email and/or a text message to notify mobile devices to download and install Mobile Device Agent.

Configuring Notification Settings

Configuring Email Notifications

If you want to send email message notifications to the users, then you must configure these settings.

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Notifications & Reports** > **Settings**.

   The **Notifications & Reports Settings** screen displays.
3. Under **Email Settings** section, type the **From** email address, the SMTP server IP address and its port number.
4. If the SMTP server requires authentication, select **Authentication**, and then type the username and password.
5. Click **Save**.

Administrator Notifications

Use the **Administrator Notifications** screen to configure the following:

- **System Error**—sends email notification to the administrator in case any system abnormality occurs. Token variables `<%PROBLEM%>`, `<%REASON%>` and `<%SUGGESTION%>` will be replaced by the actual problem, reason and the suggestion to resolve the problem.
- **Deactivated Device Administrator for Mobile Security**—sends email notification to administrator when Mobile Security is disabled in the **Device administrators** list on any Android mobile device. Token variable `<%DEVICE%>` will be replaced by the mobile device name in the email.
- **APNS Certificate Expired Warning**—sends email notification to administrator one month before the APNs certificate expires.
- **Real-time Malware Detection Warning**—sends email notification to administrator when the agent detects a malware.
- **VPP Token Expiry Warning**—sends email notification to administrator 15 days before the VPP token expires.
- **DEP Token Expiry Warning**—sends email notification to administrator 15 days before the DEP token expires.

Enabling Administrator Notifications

Procedure

1. Go to **Notifications & Reports** > **Administrator Notifications**.

   The **Administrator Notifications** screen displays.

2. Select the notifications and reports you want to receive via email.

3. Click **Save**.

Configuring Administrator Notification Settings

Procedure

1. Go to **Notifications & Reports** > **Administrator Notifications**.

   The **Administrator Notifications** screen displays.

2. Under **Notification Settings**, click a notification name.

   The **Email Settings** screen of the selected notification appears.

3. Update the following as required:

   - **To**: Email address of the administrator.

     Note

     Use a semicolon ";" to separate multiple email addresses.

   - **Subject**: Subject line of the notification email.
   - **Message**: Message body of the notification .

     Important

     Include the token variables provided in the default email template when modifying a notification message.

4. Click **Save**.

Reports

Mobile Security allows you to generate and send the following reports:

- **Devices Inventory Report**—displays comprehensive information on all managed devices.
- **Compliance Violation Report**—displays information on compliance violation.

- **Malware Detection Report**—displays information on detected malware.
- **Web Threat Protection Report**—displays information on blocked URLs.
- **Application Inventory Report**—displays information on top applications installed on Android and iOS devices.
- **Devices Enrollment Report**—displays information on device enrollment.
- **Devices Unenrollment Report**—displays information on device unenrollment.

You can perform the following tasks from the **Reports** screen.

TABLE 9-1. Report Tasks

TASK	DESCRIPTION
Generate	You can generate new reports whenever you need them. For more information, see *Generating Reports on page 9-5*.
View	You can view the last generated reports from the On-Demand tab. For more information, see *Viewing Reports on page 9-6*.
Send	You can choose to send reports via email whenever needed. For more information, see *Sending Reports on page 9-7*.
Schedule	You can specify a fixed schedule for sending reports to administrators and other users. For more information, see *Scheduling Reports on page 9-8*.

Generating Reports

Note

Mobile Security only keeps one copy of each report type on the server.

Save a copy of the latest report before generating a new version.

Procedure

1. On the Mobile Security administration web console, go to **Notifications & Reports** > **Reports** > **On-Demand**.

   The **On-Demand** screen displays.

2. Select the time period.
   - Today
   - Last 7 days
   - Last 30 days
3. Select all or one device platform.
   - All Types
   - iOS
   - Android
   - Windows Phone
4. Select the user information to include in the report.
   - All
   - Specific
5. Select the reports that you want to generate.
6. Click **Generate**.

   Mobile Security generates the selected reports and overwrites all existing versions.

Viewing Reports

Procedure

1. On the Mobile Security administration web console, go to **Notifications & Reports** > **Reports**.

2. Locate the report you want to view from any of the following tabs.
   - **On-Demand**—Select to view on-demand reports.
   - **Scheduled**—Select to view scheduled reports.
3. Click **View**.

Note

If you do not see the link, you must first generate the report.

For more information, see *Generating Reports on page 9-5*.

The selected report opens up in a new tab or window.

Sending Reports

Procedure

1. On the Mobile Security administration web console, go to **Notifications & Reports** > **Reports** > **On-Demand**.

   The **On-Demand** screen displays.
2. Locate the report you want from the **Report** table.
3. Click **Send**.

Note

If you do not see the link, you must first generate the report.

For more information, see *Generating Reports on page 9-5*.

The **Send Report** screen appears.

4. Type the email address of the recipient.
5. You can choose to modify the email subject and message.

6. Click **Send**.

   A confirmation message appears.

Scheduling Reports

Procedure

1. On the Mobile Security administration web console, go to **Notifications & Reports** > **Reports** > **Scheduled**.

   The **Scheduled** screen displays.

2. Select the report frequency from the drop-down list.

   - **Daily**
   - **Weekly**: Specify the day of the week when the report will be sent out using the drop-down list.
   - **Monthly**: Specify the day of the month when the report will be sent out using the drop-down list.

3. Click **Save**.

Modifying the Email Template

Procedure

1. On the Mobile Security administration web console, go to **Notifications & Reports** > **Reports** > **Scheduled**.

   The **Scheduled** screen displays.

2. Click a report name.

   The **Email Settings** screen of the selected report appears.

3. Update the following as required:

- **To**: Email address of the administrator.

  Note

  Use a semicolon ";" to separate multiple email addresses.

- **Subject**: Subject line of the report email.
- **Message**: Message body of the report.

4. Click **Save**.

   A confirmation message appears.

User Notifications

Use the **User Notifications** screen to configure the following email message notification:

- **Mobile Device Enrollment**—sends email and/or a text message to notify mobile devices to download and install Mobile Device Agent. Token variable <%DOWNLOADURL%> will be replaced by the actual URL of the setup package.
- **Policy Violation**—sends email notification to mobile devices if the compliance criteria is not met. Token variables <%DEVICE%> and <%VIOLATION%> will be replaced by the mobile device's name in the email, and the policies that it violates.
- **VPP User Notification**—sends email notification to a mobile device when administrator assigns a VPP app to a user.

Configuring User Notifications

Procedure

1. Log on to the Mobile Security administration web console.
2. Click **Notifications & Reports** > **User Notifications**.

   The **User Notifications** screen displays.

3. Select the notifications you want to send to user via email or text message, and then click on individual notifications to modify their contents.

   - To configure email notification messages, update the following details as required:

     - **Subject**: The subject of the email message.

     - **Message**: The body of the email message.

   - To configure text notification messages, update the body of the message in the **Message** field.

4. Click **Save** when done, to return back to the **User Notifications** screen.

Chapter 10

Troubleshooting and Contacting Technical Support

Here you will find answers to frequently asked questions and you learn how to obtain additional Mobile Security information.

The chapter includes the following sections:

- *Troubleshooting on page 10-2*
- *Before Contacting Technical Support on page 10-5*
- *Sending Suspicious Content to Trend Micro on page 10-6*
- *TrendLabs on page 10-6*
- *About Software Updates on page 10-6*
- *Other Useful Resources on page 10-8*
- *About Trend Micro on page 10-8*

Troubleshooting

This section provides tips for dealing with issues you may encounter when using Mobile Security.

- **User cannot input nanoscale passwords on their devices.**

  Mobile device keypads can only support a certain set of characters. Mobile Security recommends that the administrator compile a list of characters supported by the devices. After compiling the list of supported characters, the administrator can then set the uninstall protection password from the management console using the list of supported characters.

- **After canceling the Communication Server uninstallation process, the Communication Server fails to function normally.**

  If the uninstallation process started deleting the files and services that are important for the Communication Server's normal operation before the process was stopped, the Communication Server may not function normally. To resolve this issue, install and configure the Communication Server again.

- **iOS mobile devices cannot enroll successfully to the Management Server, and displays "Unsupported URL" error message.**

  This issue may happen if the system clock of SCEP server is set to the incorrect time or the Simple Certificate Enrollment Protocol (SCEP) certificate is not obtained by Trend Micro Mobile Security. Make sure that the system clock of SCEP server is set to the correct time. If the issue persists, perform the following steps:

  1. Log on to the Mobile Security administration web console.
  2. Click **Administration** > **Communication Server** Settings.
  3. Without changing the settings, click **Save**.

- **Unable to save Database Settings if you use SQL Server Express.**

  If you are using SQL Server Express, use the following format in the Server address field: `<SQL Server Express IP address>\sqlexpress`.

Note

Replace `<SQL Server Express IP address>` with the IP address of SQL Server Express.

- **Unable to connect to the SQL Server.**

  This problem may occur when the SQL Server is not configured to accept remote connections. By default, the SQL Server Express and SQL Server Developer editions do not allow remote connections. To configure the SQL Server to allow remote connections, perform the following steps:

  1. Enable remote connections on the instance of SQL Server that you want to connect to from a remote computer.
  2. Turn on the SQL Server Browser service.
  3. Configure the firewall to allow network traffic that is related to the SQL Server and to the SQL Server Browser service.

- **Unable to connect to SQL Server 2008 R2.**

  This problem may occur if Visual Studio 2008 is not installed in the default location and therefore, the SQL Server 2008 setup cannot find devenv.exe.config configuration file. To resolve this issue, perform the following steps:

  1. Go to `<Visual Studio installation folder>\Microsoft Visual Studio 9.0\Common7\IDE` folder, find and copy `devenv.exe.config` file and paste it to the following folder (you may need to enable display extensions for known file types in folder options):
     - For 64-bit Operating System:

       ```
       C:\Program Files (x86)\Microsoft Visual Studio 9.0\Common7\IDE
       ```

     - For 32-bit Operating System:

       ```
       C:\Program Files\Microsoft Visual Studio 9.0\Common7\IDE
       ```

  2. Run the SQL Server 2008 setup again and add BIDS feature to the existing instance of SQL Server 2008.

- **Unable to export the client device list in Device Management.**

  This may occur if the downloading of encrypted files is disabled in the Internet Explorer. Perform the following steps to enable the encrypted files download:

  1. On your Internet Explorer, go to **Tools** > **Internet options**, and then click the **Advanced** tab on the **Internet Options** window.
  2. Under **Security** section, clear **Do not save encrypted pages to disk**.
  3. Click **OK**.

- **The status of certain Android mobile device is always Out of Sync.**

  This is because the Mobile Security device administrator is not activated on that mobile device. If the user does not activate Mobile Security in the Device administrators list, then the Mobile Security cannot synchronize server policies with the mobile device, and displays its status as Out of Sync.

- **The content on the Policy pop-up window does not display and is blocked by Internet Explorer.**

  This happens if your Internet Explorer is configured to use a .pac automatic configuration file. In that case, the Internet Explorer will block the access to a secure website that contains multiple frames. To resolve this issue, add the Mobile Security Management Server address to the Trusted sites security zone in Internet Explorer. To do this, perform the following steps:

  1. Start Internet Explorer.
  2. Go to **Tools** > **Internet options**.
  3. On the **Security** tab, click **Trusted sites**, and then click **Sites**.
  4. In the **Add this website to the zone** text field, type the Mobile Security Management Server URL, and then click Add.
  5. Click **OK**.

  For more details on this issue, refer to the following URL:

  http://support.microsoft.com/kb/908356

Before Contacting Technical Support

Before contacting technical support, here are two things you can quickly do to try and find a solution to your problem:

- **Check your documentation**—The manual and online help provide comprehensive information about Mobile Security. Search both documents to see if they contain your solution.
- **Visit our Technical Support Website**—Our Technical Support website, called Knowledge Base, contains the latest information about all Trend Micro products. The support website has answers to previous user inquiries.

  To search the Knowledge Base, visit

  http://esupport.trendmicro.com

Contacting Trend Micro

In the United States, Trend Micro representatives are available by phone, fax, or email:

Address	Trend Micro, Inc., 225 E. John Carpenter Freeway, Suite 1500, Irving, Texas 75062
Phone	Phone: +1 (817) 569-8900 Toll free: (888) 762-8736
Website	http://www.trendmicro.com
Email address	support@trendmicro.com

- Worldwide support offices:

  http://www.trendmicro.com/us/about-us/contact/index.html

- Trend Micro product documentation:

  http://docs.trendmicro.com

Sending Suspicious Content to Trend Micro

Several options are available for sending suspicious content to Trend Micro for further analysis.

File Reputation Services

Gather system information and submit suspicious file content to Trend Micro:

http://esupport.trendmicro.com/solution/en-us/1059565.aspx

Record the case number for tracking purposes.

TrendLabs

Trend Micro TrendLabs℠ is a global network of antivirus research and product support centers providing continuous, 24 x 7 coverage to Trend Micro customers worldwide.

Staffed by a team of more than 250 engineers and skilled support personnel, the TrendLabs dedicated service centers worldwide ensure rapid response to any virus outbreak or urgent customer support issue, anywhere in the world.

The TrendLabs modern headquarters earned ISO 9002 certification for its quality management procedures in 2000. TrendLabs is one of the first antivirus research and support facilities to be so accredited. Trend Micro believes that TrendLabs is the leading service and support team in the antivirus industry.

For more information about TrendLabs, please visit:

http://us.trendmicro.com/us/about/company/trendlabs/

About Software Updates

After a product release, Trend Micro often develops updates to the software, to enhance product performance, add new features, or address a known issue. There are different types of updates, depending on the reason for issuing the update.

The following is a summary of the items Trend Micro may release:

- **Hotfix**—A hotfix is a workaround or solution to a single customer-reported issue. Hotfixes are issue-specific, and therefore not released to all customers. Windows hotfixes include a Setup program, while non-Windows hotfixes do not (typically you need to stop the program daemons, copy the file to overwrite its counterpart in your installation, and restart the daemons).
- **Security Patch**—A security patch is a hotfix focusing on security issues that is suitable for deployment to all customers. Windows security patches include a Setup program, while non-Windows patches commonly have a setup script.
- **Patch**—A patch is a group of hotfixes and security patches that solve multiple program issues. Trend Micro makes patches available on a regular basis. Windows patches include a Setup program, while non-Windows patches commonly have a setup script.
- **Service Pack**—A service pack is a consolidation of hot fixes, patches, and feature enhancements significant enough to be considered a product upgrade. Both Windows and non-Windows service packs include a Setup program and setup script.

Check the Trend Micro Knowledge Base to search for released hotfixes:

http://esupport.trendmicro.com

Consult the Trend Micro website regularly to download patches and service packs:

http://www.trendmicro.com/download

All releases include a readme file with the information needed to install, deploy, and configure your product. Read the readme file carefully before installing the hotfix, patch, or service pack file(s).

Known Issues

Known issues are features in Mobile Security that may temporarily require a workaround. Known issues are typically documented in the Readme document you received with your product. Readmes for Trend Micro products can also be found in the Trend Micro Download Center:

http://www.trendmicro.com/download/

Known issues can be found in the technical support Knowledge Base:

http://esupport.trendmicro.com

Trend Micro recommends that you always check the Readme text for information on known issues that could affect installation or performance, as well as a description of what's new in a particular release, system requirements, and other tips.

Other Useful Resources

Mobile Security offers a host of services through its website, http://www.trendmicro.com.

Internet-based tools and services include:

- Virus Map– monitor malware incidents around the world
- Virus risk assessment– the Trend Micro online malware protection assessment program for corporate networks.

About Trend Micro

Trend Micro, Inc. is a global leader in network anti-malware and Internet content security software and services. Founded in 1988, Trend Micro led the migration of malware protection from the desktop to the network server and the Internet gateway–gaining a reputation for vision and technological innovation along the way.

Today, Trend Micro focuses on providing customers with comprehensive security strategies to manage the impacts of risks to information, by offering centrally controlled server-based malware protection and content-filtering products and services. By protecting information that flows through Internet gateways, email servers, and file servers, Trend Micro allows companies and service providers worldwide to stop malware and other malicious code from a central point, before they ever reach the desktop.

For more information, or to download evaluation copies of Trend Micro products, visit our award-winning website:

http://www.trendmicro.com

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