

# Sophos Mobile Control installation prerequisites form

Product version: 7

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# 1 About this document

This document provides a checklist for the installation requirements of Sophos Mobile Control.

You must provide all required information to ensure that the Sophos Mobile Control server runs properly on your network configuration.

**Note:** In this document, SMC is used as an abbreviation for Sophos Mobile Control.

# 2 System environment

## 2.1 Managed devices

Specify which device types you want to use with Sophos Mobile Control. Check all that apply.

- Apple iPhone with iOS 8 or higher
- Apple iPad or iPod Touch with iOS 8 or higher
- Android 4.1 or higher
- Windows Phone 8.1
- Windows 10 Mobile or Mobile Enterprise
- Windows 10 Pro, Enterprise, Education or Home

## 2.2 Server SSL Certificate

Specify if you want to use an officially signed or a self-signed certificate for the SMC web interface.

- Self-signed certificate (Android app package installation not possible)
- Existing official certificate signed by, for example, VeriSign or GoDaddy

**If you want to use a self-signed certificate or a certificate that is issued by your own certificate authority (CA), you must manually install that self-signed certificate or your CA certificate on your devices before enrolling them with Sophos Mobile Control.**

**Note:** The certificate should be provided in a PKCS #12 file including all certificates in the certificate path.

## 2.3 Operating system for SMC server

Specify which server operation system you want to use:

- Windows Server 2008 R2 (64-bit)
- Windows Server 2012 (64-bit)
- Windows Server 2012 R2 (64-bit)
- Windows Server 2016 (64-bit)

## 2.4 Other

Make sure that the following applies:

- No IIS installed and no other application using ports 80 or 443

## 2.5 Database

Specify which database server you want to use:

- new Microsoft SQL Server 2014/2016 Express (64 bit), created by SMC installer
- existing Microsoft SQL Server 2008 (32 bit, 64 bit)
- existing Microsoft SQL Server 2008 R2 (64 bit)
- existing Microsoft SQL Server 2012 (64 bit)
- existing Microsoft SQL Server 2014 (64 bit)
- existing Microsoft SQL Server 2014 Express (64 bit)
- existing Microsoft SQL Server 2016 (64 bit)
- existing Microsoft SQL Server 2016 Express (64 bit)
- existing MySQL 5.6

Microsoft SQL Server must have Windows authentication or SQL server authentication.

Existing SQL account with sysadmin role (no AD credentials)

- SQL management tools have been installed (required for Microsoft SQL Server Express)
- TCP IP is enabled
- The SQL browser service is enabled (useful only if an external database is used)
- The language of the account that is used to log in to SQL is set to English

## 2.6 LDAP configuration

If you want to use the SMC Self Service Portal, create an LDAP group containing all users who need to access the Self Service Portal. Alternatively, you can use \* to grant access to users of all LDP groups.

LDAP group name

## 2.7 Network details

Provide the required information for pre-configuring your Sophos Mobile Control server installation.

External IP address of the SMC server

Internal IP address of the SMC server (if different from external)

DNS name of the SMC server.

Example: *mobilecontrol.yourcompany.com*

**Note:** Make sure that the DNS name can be resolved over the internet.

IP address or hostname and port of the database server.

Example: *127.0.0.1:1433* (for MS SQL Server), *127.0.0.1:3306* (for MySQL)

IP address or hostname of your corporate SMTP server

SSL is used to connect to the MS SQL Server

User name and password for SMTP authentication are known (if required)

For the optional EAS proxy, the URL of the Exchange ActiveSync server

Example: *exchange.yourcompany.com*

**Note:** For EAS to work, you also must configure your Exchange server to allow access by iOS, Windows Phone/Mobile and Android devices.

SSL is used to connect to the Exchange ActiveSync server

For optional LDAP support, your corporate LDAP server for personalized profiles

Example: *ldap.yourcompany.com:389*

SSL is used for connects to the LDAP server. Example: *ldap.yourcompany.com:636*

User name and password for LDAP authentication are known

For optional SCEP support, the URL of Certification Authority with SCEP support for iPhones

Example: *http://ca.yourcompany.com/certsrv/mscep/mscep.dll*

## 2.8 Firewall

The following ports of the SMC server must be reachable from the internet.

### 2.8.1 Allow traffic from corporate LAN and the internet

Port	Protocol	Description	Available?
80	HTTP	Forwards to HTTPS-Port	<input type="checkbox"/>
443	HTTPS	Access to web interface and for data synchronization (inbound/outbound)	<input type="checkbox"/>

### 2.8.2 Allow traffic from SMC server to database host

**Note:** If no local database installation is used.

Port	Protocol	Description	Available?
1433	MS SQL server	Database access	<input type="checkbox"/>
3306	MySQL server	Database access	<input type="checkbox"/>

### 2.8.3 Allow traffic from SMC server to SMTP host

Port	Protocol	Description	Available?
25 465 587	SMTP or SMTPS or SMTP/TLS	Send error reports by email for device enrollment, distribution of passwords, and notification of administrators in case of compliance violations or expiry of APNs certificates.	<input type="checkbox"/>

### 2.8.4 Allow traffic from SMC server to Sophos Service Center

The Sophos Service Center is used for iOS, Windows Phone push messages (MPNS) and Baidu Push for the SMC apps, for example for compliance violation notifications.

[Knowledge Base Article #120875](#) explains in which cases which data is sent via Sophos servers.

Port	Protocol	Description	Available?
443	TCP	SSL secured connection to IP address 85.22.154.49 (services.sophosmc.com)	<input type="checkbox"/>

### 2.8.5 Optional: Allow traffic from SMC server to Exchange and LDAP

Port	Protocol	Description	Available?
80 or 443	HTTP/S	Exchange server for EAS proxy	<input type="checkbox"/>
389 or 636	LDAP/S	LDAP connection (plain or SSL-protected)	<input type="checkbox"/>

### 2.8.6 Optional: Allow traffic from SMC server to SCEP server

Port	Protocol	Description	Available?
80 or 443	HTTP/S	CA server with SCEP	<input type="checkbox"/>

## 2.8.7 Optional: Allow traffic from SMC server to SGN server

Sophos Mobile Control can synchronize corporate keyrings from Sophos Safeguard Enterprise (SGN) to Sophos Secure Workspace.

Port	Protocol	Description	Available?
80 or 443	HTTP/S	Your SGN server	<input type="checkbox"/>

## 2.8.8 Optional: Allow traffic from SMC server to Apple Volume Purchasing Program (VPP)

Port	Protocol	Description	Available?
443	HTTPS	vpp.itunes.apple.com IP address: 17.0.0.0/8	<input type="checkbox"/>

## 2.8.9 Optional: Allow traffic from SMC server to Apple Device Enrollment Program (DEP)

Port	Protocol	Description	Available?
443	HTTPS	mdmenrollment.apple.com IP address: 17.0.0.0/8	<input type="checkbox"/>

## 2.8.10 For iOS devices: Allow traffic from SMC server to APNs

iOS devices receive notifications over the Apple Push Notification service (APNs).

You need to create your own APNs certificate to use with SMC for the connection to Apple.

Port	Protocol	Description	Available?
2195	TCP/SSL	gateway.push.apple.com (IP address: 17.0.0.0/8)	<input type="checkbox"/>

## 2.8.11 For iOS devices: Allow traffic from SMC server to Apple iTunes service

Port	Protocol	Description	Available?
443	HTTPS	itunes.apple.com (IP address: 17.0.0.0/8)	<input type="checkbox"/>



### 2.8.12 Optional: Allow traffic from SMC server to Apple Activation Lock Bypass service for supervised devices

Port	Protocol	Description	Available?
443	HTTPS	deviceservices-external.apple.com (IP address: 17.0.0.0/8)	<input type="checkbox"/>

### 2.8.13 For Android devices: Allow traffic from SMC server to GCM

To trigger Android devices silently, Google offers Google Cloud Messaging (GCM).

Port	Protocol	Description	Available?
443	HTTPS	android.googleapis.com gcm-http.googleapis.com	<input type="checkbox"/>

### 2.8.14 For Windows Phone devices: Allow traffic from SMC server to WNS

To trigger Windows Phone 8.1 devices silently, Microsoft offers the Windows Push Notification Service (WNS).

Port	Protocol	Description	Available?
443	HTTPS	login.live.com db3.notify.windows.com	<input type="checkbox"/>

## 2.9 Prerequisites for standalone EAS proxy

Sophos Mobile Control offers a separate installer for configuring a standalone EAS proxy (for example for load balancing). For the external EAS proxy, several aspects have to be considered. Depending on usage scenario, the EAS proxy cannot be addressed directly. With several customers (tenants) for example, a Reverse Proxy has to be used that directs the incoming traffic for each customer to a separate port (for example 8080, 8081 and so on). The EAS redirects the ActiveSync traffic to the configured Exchange server.

Before you configure an external EAS proxy, fill out the following checklist.

**Which ports should the EAS Proxy use?**

**Is a Reverse Proxy or something similar already available?**

**Has redirection to the relevant ports been configured at the Reverse Proxy?**

**What is the external/internal IP/DNS name of the Reverse Proxy?**

**Will the EAS proxy be installed on the same computer as the SMC server or on a separate computer?**

**If installed on a separate computer, what is the IP address for the EAS proxy?**

**What are the IP or DNS names of the Exchange servers?**

- ActiveSync is activated on the Exchange servers
- Firewall allows communication between the Reverse Proxy and the EAS proxy
- Firewall allows communication between the EAS proxy and the https port on the SMC host
- Firewall allows communication between the EAS proxy and the http or https port on the Exchange servers

### 3 Communication between devices and push servers

#### 3.1.1 For iOS devices: Allow communication with APNs

Port	Destination	Description	Available?
5223	17.0.0.0/8	Communication between iOS devices and the Apple Push Notification service (APNs) within your corporate WLAN	<input type="checkbox"/>

#### 3.1.2 For Android devices: Allow communication with GCM

Port	Description	Available?
5228, 5229, 5230	<p>Communication between Android devices and the Google Cloud Messaging (GCM) service.</p> <p>Typically, GCM only uses port 5228, but ports 5229 and 5230 are used occasionally as well.</p> <p>IP addresses for GCM are changed frequently.</p>	<input type="checkbox"/>

## **4 Technical support**

You can find technical support for Sophos products in any of these ways:

- Visit the Sophos Community at <http://community.sophos.com/> and search for other users who are experiencing the same problem.
- Visit the Sophos support knowledgebase at <http://www.sophos.com/support/>.
- Download the product documentation at <http://www.sophos.com/support/docs/>.
- Send an email to [support@sophos.com](mailto:support@sophos.com) including your Sophos software version number(s), operating system(s) and patch level(s), and the text of any error messages.

## **5 Legal notices**

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