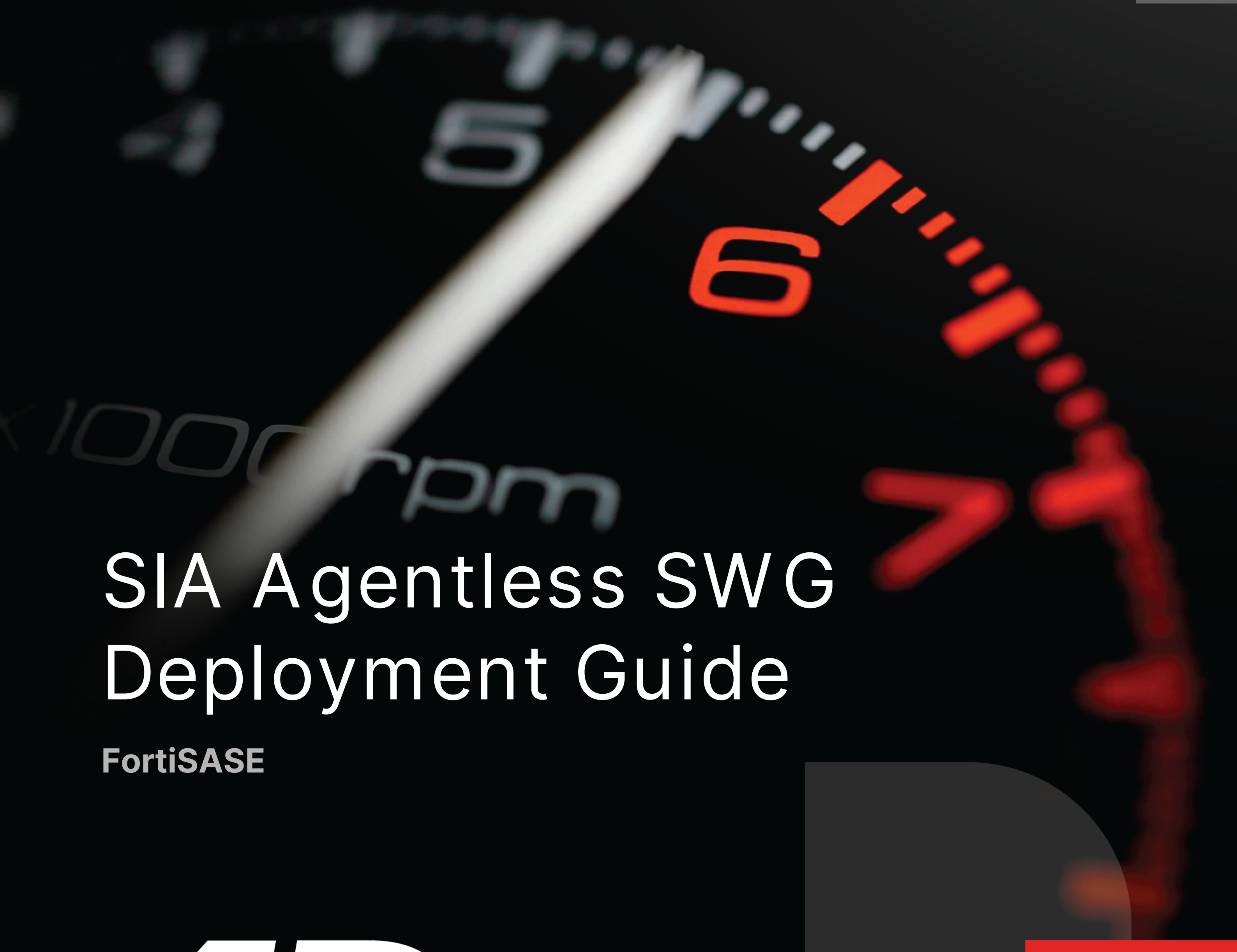


# SIA Agentless SWG Deployment Guide

**FortiSASE**

DEFINE / DESIGN / DEPLOY / DEMO

# Table of Contents

# Change log

| Date | Change description |
|---|---|
| 2024-02-12 | Initial release. |
| 2024-04-11 | Updated Configuring SSO SAML users on page 9. |
| | |

# Deployment overview

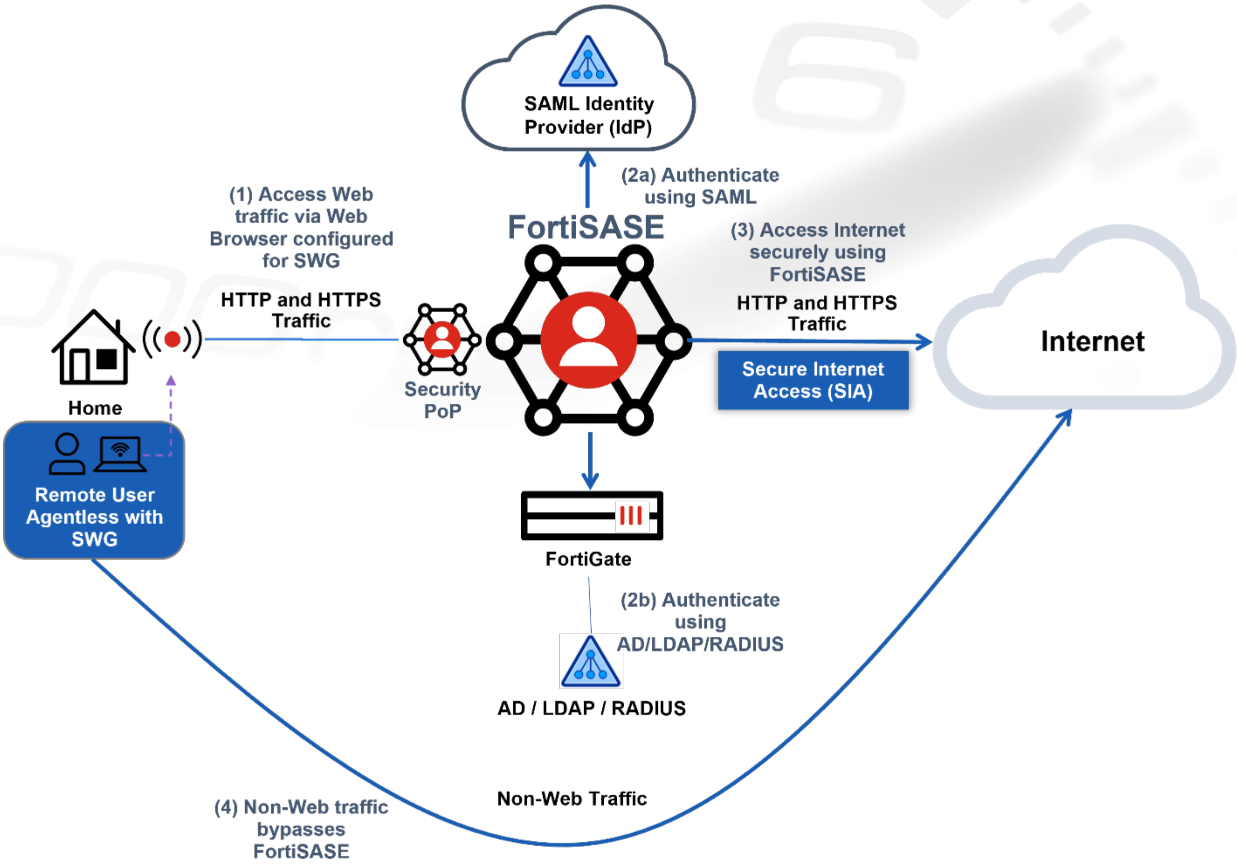
FortiSASE secure Internet access (SIA) extends an organization’s security perimeter that a next generation firewall typically achieves to remote users by enforcing common security policy for Intrusion Prevention Systems and Application Control, web and DNS filtering, antimalware, sandboxing, and antibotnet/command and control.

SIA for agentless remote users involves setting up a web browser, or a browser-based device using a proxy autoconfiguration (PAC) file to use the FortiSASE secure web gateway (SWG) service as an explicit web proxy. The web browser redirects HTTP and HTTPS traffic to the SWG, which secures user web traffic by implementing SWG security policies. All other non-web traffic bypasses FortiSASE and is forwarded to the Internet directly.

You can achieve agentless remote user authentication by configuring the authentication source as Active Directory/LDAP or RADIUS or as a SAML identity provider.

You can automate initial configuration of the proxy settings for web browsers using Windows group policy objects or Microsoft System Center Configuration Manager.

A typical topology for deploying this example design is as follows:


SAML Identity Provider (IdP)
(2a) Authenticate using SAML
(1) Access Web traffic via Web Browser configured for SWG
HTTP and HTTPS Traffic
FortiSASE
(3) Access Internet securely using FortiSASE
HTTP and HTTPS Traffic
Internet
Home
Security PoP
Secure Internet Access (SIA)
Remote User Agentless with SWG
FortiGate
(2b) Authenticate using AD/LDAP/RADIUS
AD / LDAP / RADIUS
Non-Web Traffic
(4) Non-Web traffic bypasses FortiSASE

This deployment guide describes how to configure FortiSASE SIA for agentless remote users to redirect, or forward traffic to the FortiSASE SWG or explicit proxy.

## Intended audience

Midlevel network and security architects, engineers, and administrators in companies of all sizes and verticals looking to deploy FortiSASE SIA for agentless remote users using FortiSASE SWG should find this guide helpful. A working knowledge of FortiOS, FortiGate, and web browser proxy configuration is helpful.

For comments and feedback about this document, visit FortiSASE Secure Web Gateway Deployment on community.fortinet.com.

## About this guide

This deployment guide describes the steps involved in deploying a specific architecture for the FortiSASE SIA use case for agentless remote users using SWG.

Readers should first evaluate their environment to determine whether the architecture outlined in this guide suits them. Reviewing the reference architecture guide(s), such as the FortiSASE Architecture Guide, is advisable if readers are in the process of selecting the right architecture. See also the FortiSASE Concept Guide.

This deployment guide presents one of possibly many ways to deploy the solution. It may also omit specific steps where readers must make design decisions to further configure their devices. It is recommended that readers also review supplementary material found in product administration guides, example guides, cookbooks, release notes, and other documents where appropriate on the Fortinet Document Library.

# Design concept and considerations

## Proxy configuration

This solution's design uses FortiSASE secure web gateway mode, which involves configuring and hosting a proxy autoconfiguration (PAC) file for respective endpoints to connect to the FortiSASE gateway. FortiSASE provides a preconfigured PAC file hosted on the FortiSASE server for use. You can download and customize the PAC to exclude the SSL VPN gateway and internal networks from being proxied. The customer server must host the custom PAC file.

Once the PAC file is hosted, endpoint computers must be configured to enable the proxy server and point to the PAC file to retrieve the proxy settings. On a Windows machine, configuring proxy settings at the operating system (OS) level is recommended so that all traffic is proxied. On other OSes where there is no option to configure proxy settings at the OS level, you can configure the browser to point to the PAC file.

To centrally manage proxy settings on endpoints, customers should consider using group policy management for Windows or other centralized management systems like mobile device management.

## User configuration

You configure users on FortiSASE for endpoints to authenticate and connect to the FortiSASE gateway. If SAML SSO is enabled on FortiSASE, you cannot configure an LDAP or RADIUS connection. When designing the solution, consider where users are defined in your organization and use one of the following methods to integrate it with FortiSASE:

| User type | Integration method |
|---|---|
| LDAP | **1.** Configure an LDAP connection.<br>**2.** Import users and groups from the LDAP server to FortiSASE. |
| RADIUS | **1.** Configure a RADIUS connection.<br>**2.** Import users and groups from the RADIUS server to FortiSASE. |
| Single sign on (SSO) | Configure an SSO connection, with FortiSASE as the service provider and another service, such as Azure Active Directory, as the identity provider. |

See Authentication Sources and Access for information on authentication methods.

SSO authentication is strongly recommended for SWG users. See Known issues for details.

See Configuring SSO SAML users on page 9 for steps on configuring SSO authentication for SWG users.

# Product prerequisites

Customers should obtain enough FortiSASE Secure Web Gateway seats to support the number of remote endpoints that will use this service.

# Deployment plan

This outlines the major steps to deploy this solution. Go to Deployment procedures on page 9 for detailed configuration steps:

1. Provision your FortiSASE instance and select the regions where your users will be located. Input licenses as needed. See Provisioning your FortiSASE instance on page 9.
2. Configure users. See Configuring SSO SAML users on page 9 and Configuring RADIUS users on page 11.
3. Configure Secure Web Gateway policies to apply desired scanning and filtering for your users. See Configuring security profiles and SWG policies on page 12.
4. Download the proxy autoconfiguration (PAC) file from the FortiSASE portal. Customize the file to exclude SSL VPN gateway and internal corporate networks. Host the custom PAC file on an externally accessible server. See Customizing the PAC file on page 13.
5. Install the FortiSASE CA certificate on endpoints using steps that are specific to each operating system. See Installing the FortiSASE CA certificate on endpoints on page 17.
6. Configure proxy settings on endpoints to point to the PAC file. See Configuring proxy settings on endpoints on page 20.
7. 7. (Optional) Configure the FortiSASE SWG Chrome extension for managed Chrome browsers and Chromebook support. See (Optional) Installing and configuring the SWG Chrome extension on page 25.
8. Test connections to the Internet on a SWG user device. See Testing SWG user connections to the Internet on page 28.

# Deployment procedures

## Provisioning your FortiSASE instance

Ensure that you have purchased the contract to provision FortiSASE.

To provision your FortiSASE instance:

1. From the Fortinet Support site, register your FortiSASE contract.
2. Once registered, go to *Services > Cloud Services > FortiSASE* to provision your FortiSASE instance.
3. When provisioning, select the geographic location for your security sites and logging.
4. Once provisioned, the FortiSASE dashboard displays your entitlement in the *Remote User Management* widget. The number of FortiSASE SWG users that the widget lists is the number of users that are entitled to use this service in SWG mode.
5. Go to *System > SWG Configuration*. Toggle *Enable* to on, then click *OK*. The GUI may take a few minutes to reload to display SWG configuration options in the menu.

SSO authentication is strongly recommended for SWG users. See Known issues for details.

See Configuring SSO SAML users on page 9 for steps on configuring SSO authentication for SWG users.

## Configuring SSO SAML users

SSO authentication is strongly recommended for SWG users. See Known issues for details.

See Configuring SSO SAML users on page 9 for steps on configuring SSO authentication for SWG users.

Depending on the authentication source, the user configuration steps differ. This example shows configuring single sign on (SSO) users and user groups against an Azure Active Directory (AD) identity provider (IdP).

For configuring other authentication sources, see Authentication Sources and Access. When SSO is configured, other user types do not work.

To configure the SSO SAML configuration:

1. Go to *Configuration > SWG User SSO*.
2. In step one, *Configure Identity Provider*, collect the URLs on FortiSASE and enter them into the respective fields in the SSO settings of the respective Azure AD enterprise application.

   | FortiSASE SAML field | Azure AD Basic SAML Configuration field |
   |---|---|
   | **Entity ID** | Identifier (Entity ID) |
   | **Assertion Consumer Service (ACS) URL** | Reply URL (Assertion Consumer Service URL) |
   | **Portal (Sign On) URL** | Sign on URL |
   | **Single Logout Service (SLS) URL** | Logout Url (Optional) |

   Click *Next*.
3. In step two, *Configure Service Provider*, collect the URLs from the Azure AD enterprise application *Single sign-on > Set up <application name>*. Enter them into the respective fields in FortiSASE.

   | Azure AD > *Set up <application name>* fields | FortiSASE SAML field |
   |---|---|
   | **Login URL** | IdP Single Sign-On URL |
   | **Azure AD Identifier** | IdP Entity ID |
   | **Logout URL** | IdP Single Log-Out URL |

   Click *Next*.
4. With claims mapping, you can specify the identifier for the username and group name attributes in Azure. The default configuration uses username and group respectively, which matches the attribute names in Azure. If you need custom names, modify them here.
5. Enable and configure *SAML Group Matching* if you only want Azure AD users of a certain group to be allowed to authenticate. Otherwise, leave this setting disabled. You can further define more granular groups when you configure user group settings.
6. FortiSASE requires the IdP certificate is required. Configure the IdP certificate. Download the certificate from Azure AD enterprise application > *Single sign-on > SAML Signing Certificate*. Download Certificate (Base64).
   a. On the *IdP Certificate* dropdown list, click *Create*.
   b. In the *Import Remote Certificate* slide-in, upload the certificate from Azure.
   c. Enter a unique name for the certificate, then click *OK*.
   d. Select the certificate, then click *Next*.
7. In the *Service Provider Certificate* field, use *FortiSASE Default Certificate* or your own custom certificate. Click *+* to add your own custom certificate.
8. For *Digest Method*, select *SHA-1* or *SHA-256*. The digest method should match the digest method on Azure if *Certificate Verification* is enabled on Azure.

*FortiSASE Default Certificate* is a built-in wildcard certificate on FortiSASE signed by a well-known public CA and remains same across all of your points of presence.

*FortiSASE Default Certificate* also periodically renews. Thus, if the IdPs are using *Service Provider Certificate* in their configuration, administrators must periodically update their IdP configuration with new SP certificate. To avoid having to update your IdP configuration frequently, we recommend uploading your own certificate.

9. Review your settings. The click *Submit* to apply. Upon successful configuration, FortiSASE prompts for instructions to onboard users. Follow the steps under *SWG Users* to download the SWG certificate for usage on the client. The certificate package contains the built-in certificate authority certificate for the FortiSASE instance. This must be installed in the certificate store on the client to trust the certificate chain for pages that FortiSASE has signed.

To configure an SSO user group:

1. Go to *Configuration > Users*.
2. Click *Create*. Select *User Group*, and click *Next*.
3. In the *Name* field, enter the desired name.
4. Under *Remote Groups*, click *Create*.
5. From the *Remote Server* dropdown list, select the SAML server that you created.
6. In the *Groups* field, enter the names of the group(s) that you will allow access on FortiSASE. This is the group object ID of the user group defined on Azure.
7. Click *OK* to finish. Click *OK* again to create the user group. You can apply this new user group to your SWG policies.

# Configuring RADIUS users

SSO authentication is strongly recommended for SWG users. See Known issues for details.

See Configuring SSO SAML users on page 9 for steps on configuring SSO authentication for SWG users.

Depending on the authentication source, the user configuration steps differ. The example shows configuring a RADIUS server and user groups. For configuring other authentication sources, see Authentication Sources and Access.

If Secure Web Gateway (SWG) user single sign on (SSO) is configured, RADIUS user configuration does not take effect. If you plan to use RADIUS, first delete your SWG user SSO configuration.

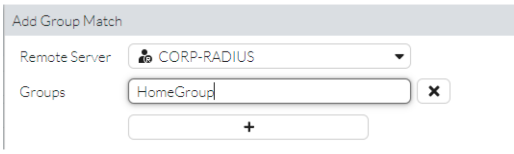
To configure the RADIUS server:

1. Go to *Configuration > RADIUS*.
2. Click *Create* to add a new RADIUS server.
   a. Configure the RADIUS server settings:
   b. Enter the desired server name.
   c. Do not enable *Include All Users* unless you want all users on the RADIUS server to be allowed access to FortiSASE.

   d. Click *Next*.
   e. In the *Primary Server > IP/Name* field, enter the primary server IP address or fully qualified domain name.
   f. In the *Primary Server > Secret* field, enter the primary server secret.
   g. If your organization has a redundant RADIUS server, enter its information in the *Secondary Server* section.
3. Click *Test Connection*.
4. Do one of the following:
   a. If the connection succeeds, click *Next*.
   b. If the connection does not succeed, try again. Confirm your RADIUS server allows traffic from the FortiSASE gateway IP address. This may require sniffing for traffic on port 1812.
5. Review and submit the settings.

To configure a RADIUS user group:

1. Go to *Configuration > Users*.
2. Click *Create*.
3. Configure the RADIUS user group(s):
   a. In the *Name* field, enter the desired name.
   b. Under *Remote Groups*, click *Create*.
   c. From the *Remote Server* dropdown list, select the RADIUS server that you created.
   d. In the *Groups* field, enter the group names of the group(s) that will be allowed access on FortiSASE.


Add Group Match

Remote Server: CORP-RADIUS

Groups: HomeGroup

4. Click *OK*.
5. Click *OK* again.
6. A slide-in appears with instructions on how to onboard an end user. Follow the steps under *SWG Users* to download the SWG certificate for usage on the client. The certificate package contains the built-in certificate authority certificate for the FortiSASE instance. This must be installed in the certificate store on the client to trust the certificate chain for pages that FortiSASE has signed.
7. Click *Close*.

## Configuring security profiles and SWG policies

FortiSASE has a default security profile configured, which is applied to the Allow-All Secure Web Gateway (SWG) policy. When all users, sources, and destinations require the same scanning and protection, maintaining only one default security profile suffices. However, if different users, sources, or destinations require different protection, create different profile groups for each group of users.

The default SWG policies block any traffic destined for Botnet and C&C servers but allow the rest. Consider your user base and design your SWG policies carefully. FortiSASE matches policies from top down, so add more restrictive policies at the top and less restrictive policies at the bottom.

To configure a new security profile:

1. Go to *Configuration > Security*.
2. On the top-right, click the dropdown list beside *Profile Group*, then click *Create*.

3. In the *Create Profile Group* slide-in, enter a name for the new profile.
4. In *Initial Configuration*, select whether to use a basic initial configuration or base the profile on an existing profile.
5. Click *OK*.
6. On the top-right, click the dropdown list again, and select your newly created profile.
7. Edit the profile as desired. See Security for details.

To create an SWG policy:

1. Go to *Configuration > SWG Policies*.
2. Click *Create*.
3. Configure the SWG policy:
   a. In the *Name* field, enter the desired policy name.
   b. For *Action*, select *ACCEPT*.
   c. In the *Source* field, specify source subnet(s) as desired.
   d. In the *User* field, specify the user group used for your remote users.
   e. In the *Destination* field, specify destination subnet(s) as desired.
   f. In the *Profile Group* field, specify the profile that you created.
   g. In the *Log Allow Traffic* field, select *All Sessions*.
4. Click *OK*.
5. Move the new policy above the Allow-All policy.

# Customizing the PAC file

FortiSASE secure web gateway (SWG) mode involves configuring and hosting a proxy autoconfiguration (PAC) file for respective endpoints to connect to the FortiSASE gateway.

A PAC file is based on JavaScript and contains rules for the proxy client to follow to route traffic to the proxy server or directly to the Internet. For FortiSASE SWG users:

- The proxy client is a web browser or another proxy-aware application.
- The proxy server is the FortiSASE SWG.
- Routing traffic to the proxy uses the FortiSASE SWG as a web proxy.
- Routing traffic directly to the Internet bypasses the FortiSASE SWG.

Typically, some web applications require traffic to be routed directly to the Internet for specific domains which do not support redirection for security reasons or are required for authentication, such as common SAML identity providers, to load correctly. In these cases, you must customize the PAC file with specific IP addresses and hostnames, and then host the custom PAC file on a server that the endpoints can access.

The workflow for customizing and using a PAC file is as follows:

1. FortiSASE provides a preconfigured PAC file hosted on the FortiSASE server for use. Download the PAC file to a computer for editing.
2. Customize the PAC file in a text editor to exclude certain hosts from being proxied.
3. Host the custom PAC file on a server accessible by the endpoints.
4. On an endpoint, download and install the SWG certificates provided in the FortiSASE portal.
5. On an endpoint, install and configure the client browser or OS settings to point to the hosted custom PAC file.

## Downloading the preconfigured PAC file

The *System* > *SWG Configuration* page displays the Secure Web Gateway (SWG) servers, port, and hosted proxy autoconfiguration (PAC) file. You can download the predefined PAC file to customize.

By default, the FortiSASE hosted PAC file contains the global (recommended) URL and the SWG port specific to your instance. This global (recommended) URL automatically directs users to the closest geographical location for all browsers and proxy-aware applications. For example:

```
function FindProxyForURL(url, host) {
    return "PROXY turbo-hqwdvq17.edge.prod.fortisase.com:10925; DIRECT";
}
```

This simple PAC file specifies that the web request should be sent through the proxy server turbo-hqwdvq17.edge.prod.fortisase.com on TCP port 10925 and if the proxy does not respond to this request, the browser sends the web request directly to the Internet without using the proxy.

## Downloading, customizing, and hosting the PAC file

This example customizes the PAC file to exclude common external URLs and networks from being forwarded to the FortiSASE secure web gateway (SWG) server, which allows specific domains which do not support redirection for security reasons or are required for authentication, such as common SAML identity providers, to load correctly.

You must replace the final return statement at the end of the PAC file with the corresponding proxy URL and port listed in your preconfigured PAC file in Downloading the preconfigured PAC file on page 14.

```
function FindProxyForURL(url, host) {
// Apple
if (dnsDomainIs (host, "albert.apple.com") ||
       dnsDomainIs (host, "captive.apple.com") ||
       dnsDomainIs (host, "gs.apple.com") ||
       dnsDomainIs (host, "humb.apple.com") ||
       dnsDomainIs (host, "static.ips.apple.com") ||
       dnsDomainIs (host, "sq-device.apple.com") ||
       dnsDomainIs (host, "tbsc.apple.com") ||
       shExpMatch (host, "*.push.apple.com") ||
       dnsDomainIs (host, "deviceenrollment.apple.com") ||
       dnsDomainIs (host, "deviceservices-external.apple.com") ||
       dnsDomainIs (host, "gdmf.apple.com") ||
       dnsDomainIs (host, "identity.apple.com") ||
       dnsDomainIs (host, "iprofiles.apple.com") ||
       dnsDomainIs (host, "mdmenrollment.apple.com") ||
       dnsDomainIs (host, "setup.icloud.com") ||
       dnsDomainIs (host, "vpp.itunes.apple.com") ||
       shExpMatch (host, "*.business.apple.com") ||
       shExpMatch (host, "*.school.apple.com") ||
       dnsDomainIs (host, "upload.appleschoolcontent.com") ||
       dnsDomainIs (host, "ws-ee-maidsvc.icloud.com") ||
       dnsDomainIs (host, "axm-adm-enroll.apple.com") ||
       dnsDomainIs (host, "axm-adm-mdm.apple.com") ||
       dnsDomainIs (host, "axm-adm-scep.apple.com") ||
       dnsDomainIs (host, "axm-app.apple.com") ||
       dnsDomainIs (host, "appldnld.apple.com") ||
       dnsDomainIs (host, "configuration.apple.com") ||
       dnsDomainIs (host, "gdmf.apple.com") ||
       dnsDomainIs (host, "gg.apple.com") ||
       dnsDomainIs (host, "gnf-mdn.apple.com") ||
       dnsDomainIs (host, "gnf-mr.apple.com") ||
       dnsDomainIs (host, "gs.apple.com") ||
       dnsDomainIs (host, "ig.apple.com") ||
       dnsDomainIs (host, "mesu.apple.com") ||
       dnsDomainIs (host, "ns.itunes.apple.com") ||
       dnsDomainIs (host, "oscdn.apple.com") ||
       dnsDomainIs (host, "osrecovery.apple.com") ||
       dnsDomainIs (host, "skl.apple.com") ||
       dnsDomainIs (host, "swcdn.apple.com") ||
       dnsDomainIs (host, "swdist.apple.com") ||
       dnsDomainIs (host, "swdownload.apple.com") ||
       dnsDomainIs (host, "swscan.apple.com") ||
       dnsDomainIs (host, "updates-http.cdn-apple.com") ||
       dnsDomainIs (host, "updates.cdn-apple.com") ||
       dnsDomainIs (host, "xp.apple.com") ||
       shExpMatch (host, "*.itunes.apple.com") ||
       shExpMatch (host, "*.apps.apple.com") ||
       shExpMatch (host, "*.mzstatic.com") ||
       dnsDomainIs (host, "itunes.apple.com") ||
       dnsDomainIs (host, "ppq.apple.com") ||
       dnsDomainIs (host, "appldnld.apple.com") ||
       dnsDomainIs (host, "appldnld.apple.com.edgesuite.net") ||
       dnsDomainIs (host, "itunes.com") ||
       dnsDomainIs (host, "itunes.apple.com") ||
       dnsDomainIs (host, "updates-http.cdn-apple.com") ||
       dnsDomainIs (host, "updates.cdn-apple.com") ||
       dnsDomainIs (host, "lcdn-registration.apple.com") ||
       dnsDomainIs (host, "suconfig.apple.com") ||
       dnsDomainIs (host, "xp-cdn.apple.com") ||
       dnsDomainIs (host, "lcdn-locator.apple.com") ||
       dnsDomainIs (host, "serverstatus.apple.com") ||
       dnsDomainIs (host, "17.248.128.0/18") ||
       dnsDomainIs (host, "17.250.64.0/18") ||
       dnsDomainIs (host, "17.248.192.0/19") ||
       shExpMatch (host, "*.appattest.apple.com") ||
       dnsDomainIs (host, "bpapi.apple.com") ||
       dnsDomainIs (host, "cssubmissions.apple.com") ||
       dnsDomainIs (host, "fba.apple.com") ||
       dnsDomainIs (host, "diagassets.apple.com") ||
       dnsDomainIs (host, "doh.dns.apple.com") ||
       dnsDomainIs (host, "certs.apple.com") ||
       dnsDomainIs (host, "crl.apple.com") ||
       dnsDomainIs (host, "crl.entrust.net") ||
       dnsDomainIs (host, "crl3.digicert.com") ||
       dnsDomainIs (host, "crl4.digicert.com") ||
       dnsDomainIs (host, "ocsp.apple.com") ||
       dnsDomainIs (host, "ocsp.digicert.cn") ||
       dnsDomainIs (host, "ocsp.digicert.com") ||
       dnsDomainIs (host, "ocsp.entrust.net") ||
       dnsDomainIs (host, "ocsp2.apple.com") ||
       dnsDomainIs (host, "valid.apple.com") ||
       dnsDomainIs (host, "appleid.apple.com") ||
       dnsDomainIs (host, "appleid.cdn-apple.com") ||
       dnsDomainIs (host, "idmsa.apple.com") ||
       dnsDomainIs (host, "gsa.apple.com") ||
       shExpMatch (host, "*.apple-cloudkit.com") ||
       shExpMatch (host, "*.apple-livephotoskit.com") ||
       shExpMatch (host, "*.apzones.com") ||
       shExpMatch (host, "*.cdn-apple.com") ||
       shExpMatch (host, "*.gc.apple.com") ||
       shExpMatch (host, "*.icloud.com") ||
       shExpMatch (host, "*.icloud.com.cn") ||
       shExpMatch (host, "*.icloud.apple.com") ||
       shExpMatch (host, "*.icloud-content.com") ||
       shExpMatch (host, "*.iwork.apple.com") ||
       dnsDomainIs (host, "mask.icloud.com") ||
       dnsDomainIs (host, "mask-h2.icloud.com") ||
       dnsDomainIs (host, "mask-api.icloud.com") ||
       dnsDomainIs (host, "audiocontentdownload.apple.com") ||
       dnsDomainIs (host, "devimages-cdn.apple.com") ||
       dnsDomainIs (host, "download.developer.apple.com") ||
       dnsDomainIs (host, "playgrounds-assets-cdn.apple.com") ||
       dnsDomainIs (host, "playgroups-cdn.apple.com") ||
       dnsDomainIs (host, "sylvan.apple.com"))
    return "DIRECT";

// VMWare
if (shExpMatch (host, "*.awmdm.com"))
    return "DIRECT";

// Okta
if (shExpMatch (host, "*.okta.com") ||
    shExpMatch (host, "*.oktacdn.com"))
    return "DIRECT";

// Microsoft
if (dnsDomainIs (host, "login.microsoftonline.com") ||
       shExpMatch (host, "*.officeconfig.msocdn.com") ||
       dnsDomainIs (host, "config.office.com") ||
       dnsDomainIs (host, "graph.windows.net") ||
       dnsDomainIs (host, "enterpriseregistration.windows.net") ||
       shExpMatch (host, "*.manage.microsoft.com") ||
       dnsDomainIs (host, "manage.microsoft.com") ||
    shExpMatch (host, "*.microsoftonline.com") ||
    shExpMatch (host, "*.msauth.net"))
    return "DIRECT";

// Google
if (dnsDomainIs (host, "client1.google.com") ||
    dnsDomainIs (host, "client2.google.com") ||
    dnsDomainIs (host, "client3.google.com") ||
    dnsDomainIs (host, "client4.google.com") ||
    dnsDomainIs (host, "client5.google.com") ||
    dnsDomainIs (host, "client6.google.com") ||
    dnsDomainIs (host, "chrome.google.com") ||
    dnsDomainIs (host, "commondatastorage.googleapis.com") ||
    dnsDomainIs (host, "dl-ssl.google.com") ||
    dnsDomainIs (host, "dl.google.com") ||
    dnsDomainIs (host, "gweb-gettingstartedguide.appspot.com") ||
    dnsDomainIs (host, "m.google.com") ||
    dnsDomainIs (host, "hangouts.google.com") ||
    dnsDomainIs (host, "pack.google.com") ||
    dnsDomainIs (host, "safebrowsing-cache.google.com") ||
    dnsDomainIs (host, "safebrowsing.google.com") ||
    dnsDomainIs (host, "ssl.gstatic.com") ||
    dnsDomainIs (host, "storage.googleapis.com") ||
    dnsDomainIs (host, "tools.google.com") ||
    dnsDomainIs (host, "www.googleapis.com") ||
    shExpMatch (host, "*.gstatic.com") ||
    dnsDomainIs (host, "play.google.com") ||
    dnsDomainIs (host, "mtalk.google.com") ||
    dnsDomainIs (host, "accounts.google.com") ||
    dnsDomainIs (host, "aadcdn.msftauthimages.net") ||
    dnsDomainIs (host, "aadcdn.msftauth.net") ||
    dnsDomainIs (host, "omahaproxy.appspot.com") ||
    dnsDomainIs (host, "cros-omahaproxy.appspot.com"))
    return "DIRECT";

// Replace this line with the corresponding line from your FortiSASE deployment’s
preconfigured PAC file
return "PROXY turbo-hqwdvq17.edge.prod.fortisase.com:10925; DIRECT";
}
```

To selectively use sections of exempted URLs above, you can comment them out using the double slash // at the beginning of each JavaScript line to prevent the URLs from being exempted and force them to go through the FortiSASE SWG.

For example, to ensure VMware Workspace One traffic is sent to the proxy, since the rule consists of an if statement and a return statement, comment them out both:

```
// VMWare
// if (shExpMatch (host, "*.awmdm.com"))
//    return "DIRECT";
```

## Hosting the custom PAC file

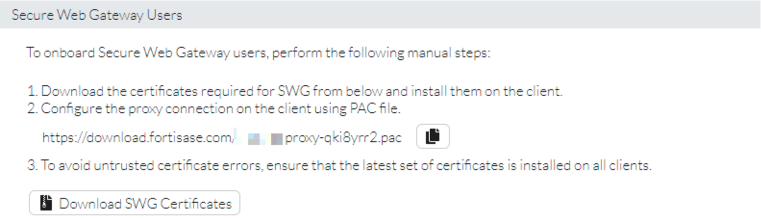
Once you have modified the proxy autoconfiguration (PAC) file, you should host it on a web server (such as Amazon S3) that is externally accessible by your remote users. The web server must be configured to allow .PAC file extensions to be downloaded and specified using the MIME type application/x-ns-proxy-autoconfig.

The PAC file does not require user authentication to access. However, any user that is pointing to the PAC file will be subject to authentication by FortiSASE when it accesses the Internet.

# Installing the FortiSASE CA certificate on endpoints

When users connect to FortiSASE in secure web gateway (SWG) mode, FortiSASE proxies traffic from the client. While being proxied, connections using secure protocols like HTTPS have their certificates replaced and signed by FortiSASE. To avoid seeing warnings and errors, the client must trust the signing Certificate Authority (CA) and have a valid certificate chain back to the root CA. Therefore, installing FortiSASE’s CA certificate on the client’s trusted certificate store is important.

You should provide users with the required CA certificate during onboarding. In SWG mode, when you onboard users from the GUI, download the SWG Certificates package that appears at the end of the Secure Web Gateway Users instructions. You can also find this on the right side of the *System > SWG Configuration* page.



Secure Web Gateway Users

To onboard Secure Web Gateway users, perform the following manual steps:

1. Download the certificates required for SWG from below and install them on the client.
2. Configure the proxy connection on the client using PAC file.

https://download.fortisase.com/[redacted]proxy-qki8yrr2.pac

3. To avoid untrusted certificate errors, ensure that the latest set of certificates is installed on all clients.

The following instructions demonstrate installing certificates on various operating systems:

- Windows on page 18
- macOS on page 18

- Chrome OS on page 18
- Managed Chromebook on page 19

## Windows

To install the FortiSASE CA certificate on a Windows 10 device:

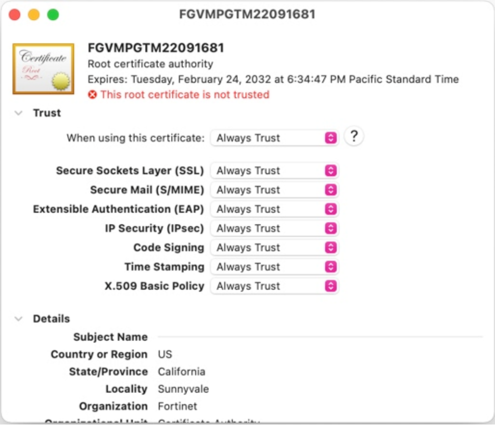
1. Double-click the FortiSASE certificate that the administrator provided during onboarding.
2. On the *General* tab, click *Install Certificate*.
3. You can install the certificate for the current user or local machine. Installing for the local machine requires administrator permissions. Select the desired option and click *Next*.
4. Choose where you want the certificate to be kept. To customize this, select *Place all certificates in the following store* and browse the store. Then select *Trusted Root Certification Authorities*. Click *Next*.
5. Review and click *Finish* to install the certificate.

## macOS

To properly browse any HTTPS websites, you must install the FortiSASE root certificate on the endpoint.

To upload the FortiSASE CA certificate on a mac:

1. Double-click the FortiSASE certificate that the administrator provided during onboarding.
2. From the *Keychain* dropdown list, select *System*, then click *Add*.
3. When you view the certificate, the root certificate appears as not trusted. Expand the *Trust* section. From the *When using this certificate* dropdown list, select *Always Trust*.



FGVMPGTM22091681

FGVMPGTM22091681
Root certificate authority
Expires: Tuesday, February 24, 2032 at 6:34:47 PM Pacific Standard Time
This root certificate is not trusted

Trust

| | |
|---|---|
| When using this certificate: | Always Trust |
| Secure Sockets Layer (SSL) | Always Trust |
| Secure Mail (S/MIME) | Always Trust |
| Extensible Authentication (EAP) | Always Trust |
| IP Security (IPsec) | Always Trust |
| Code Signing | Always Trust |
| Time Stamping | Always Trust |
| X.509 Basic Policy | Always Trust |

Details

| | |
|---|---|
| Subject Name | |
| Country or Region | US |
| State/Province | California |
| Locality | Sunnyvale |
| Organization | Fortinet |

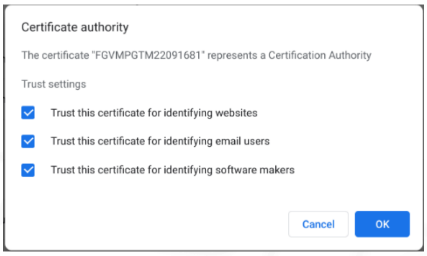
4. Save the configuration and add the certificate to the system keychain. You can connect to HTTPS websites without seeing a warning.

## Chrome OS

To upload the FortiSASE CA certificate on a Chromebook:

1. In Chrome, open *Settings* from the menu or go to `chrome://settings`.
2. Go to *Privacy and security*. On the configuration page, click *Security*.
3. In the *Security settings* page, scroll to the bottom to find *Advanced > Manage certificates*. Click the right arrow.
4. In the *Manage certificate* page, select *Authorities*.

5. Click *Import* to import the FortiSASE certificate authority (CA) certificate.
6. If the Fortinet_CA_SSL.cer file does not appear, change the file selection page to show all files. Then select the Fortinet_CA_SSL.cer cert and click open.
7. The next screen asks for your trust settings for this certificate. Select all options, then click *OK*.



Certificate authority

The certificate "FGVMPGTM22091681" represents a Certification Authority

Trust settings

☑ Trust this certificate for identifying websites

☑ Trust this certificate for identifying email users

☑ Trust this certificate for identifying software makers

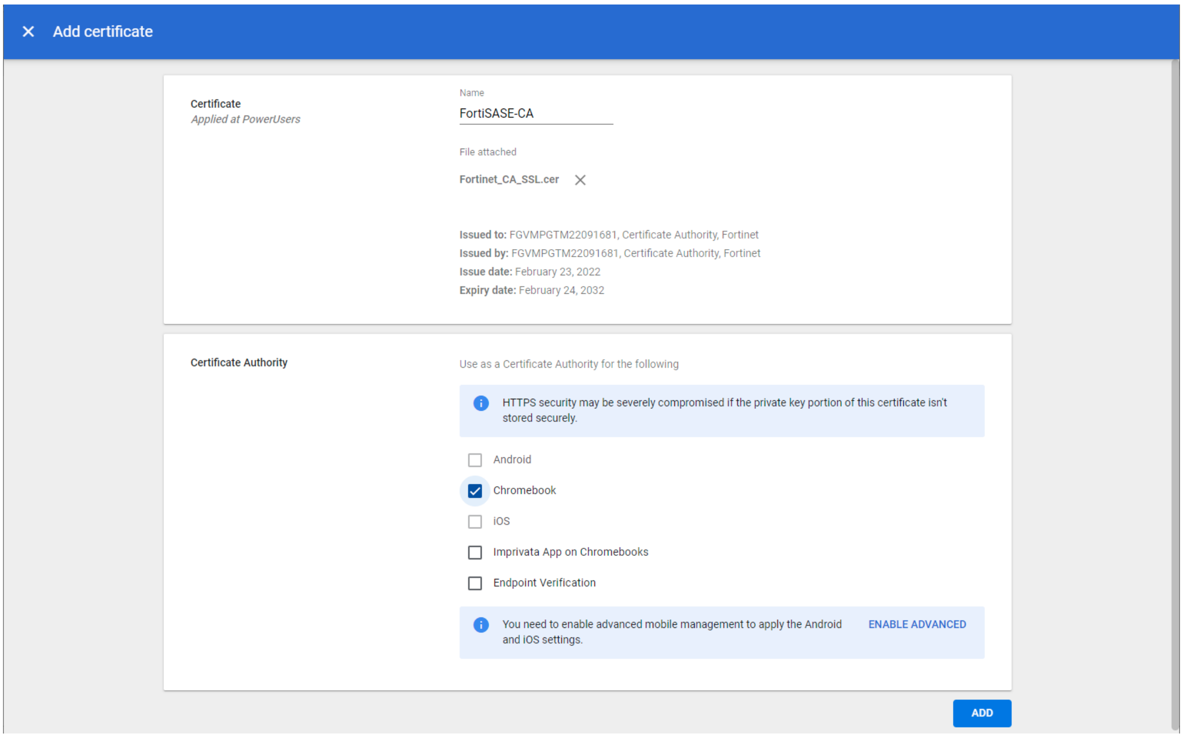
8. You have now imported the FortiSASE CA certificate. Scroll down to see the org-Fortinet entry. Expand to see the certificate and view its details.

## Managed Chromebook

If your organization manages Chromebooks using the Google Admin console, you can centrally install the FortiSASE certificate authority certificate on the Admin console and distribute it to each managed Chromebook.

To upload the FortiSASE CA certificate on Google Admin Console:

1. On the Google Admin console, go to *Device > Networks*.
2. Select the organizational unit in which to apply these settings.
3. Under *Certificates*, click *Create Certificate*.
4. Enter a name for this certificate entry, then click *Upload* to upload the Fortinet_CA_SSL.cer certificate.
5. Under *Certificate Authority*, select *Chromebook*. Click *ADD*.



Add certificate

Certificate
*Applied at PowerUsers*

Name: FortiSASE-CA

File attached: Fortinet_CA_SSL.cer

**Issued to:** FGVMPGTM22091681, Certificate Authority, Fortinet
**Issued by:** FGVMPGTM22091681, Certificate Authority, Fortinet
**Issue date:** February 23, 2022
**Expiry date:** February 24, 2032

Certificate Authority

Use as a Certificate Authority for the following

HTTPS security may be severely compromised if the private key portion of this certificate isn't stored securely.

☐ Android
☑ Chromebook
☐ iOS
☐ Imprivata App on Chromebooks
☐ Endpoint Verification

You need to enable advanced mobile management to apply the Android and iOS settings.

To verify the CA certificate is installed on a Chromebook:

1. In Chrome, open *Settings* from the menu or go to `chrome://settings`.
2. Go to *Privacy and security*. On the configuration page, click *Security*.
3. In the *Security settings* page, scroll to the bottom to find *Advanced > Manage certificates*. Click the right arrow.
4. In the *Manage certificate* page, select *Authorities*.
5. Scroll down to the org-Fortinet entry. Expand this entry. You will see the certificate and an icon indicating that Google Admin console is managing it.

# Configuring proxy settings on endpoints

To connect to FortiSASE in Secure Web Gateway (SWG) mode, each endpoint client must configure proxy settings within its network or browser settings to point to FortiSASE's servers. You can configure this individually on the endpoint or, if you are using an enterprise management system, push it out to managed endpoints centrally.

You should provide users one of the following during the user onboarding process:

- URL to the hosted proxy autoconfiguration (PAC) file
- Proxy server addresses and port if users are to configure proxy settings manually.

From the *System > SWG Configuration* page, make note of the following information:

| Field | Description |
|---|---|
| Global (Recommended) | Global FortiSASE server address for your instance. |
| Secure Web Gateway Server(s) | Lists address of each individual regional FortiSASE server for your instance. |
| Secure Web Gateway Port | Port that client should connect to in their proxy settings. |
| PAC File | Static copy of the PAC file, which you can customize and rehost on your server. |
| Hosted PAC File | Address of the PAC file hosted on the FortiSASE server. |

Refer to SWG Configuration for more information.

Users are expected to have installed the FortiSASE certificate authority certificate on their devices. See Installing the FortiSASE CA certificate on endpoints on page 17.

Proxy settings on endpoint clients can differ between operating systems (OS) and browsers. While the following examples demonstrate the configuration for the selected OSes, refer to your OS or browser for complete instructions on configuring proxy settings.

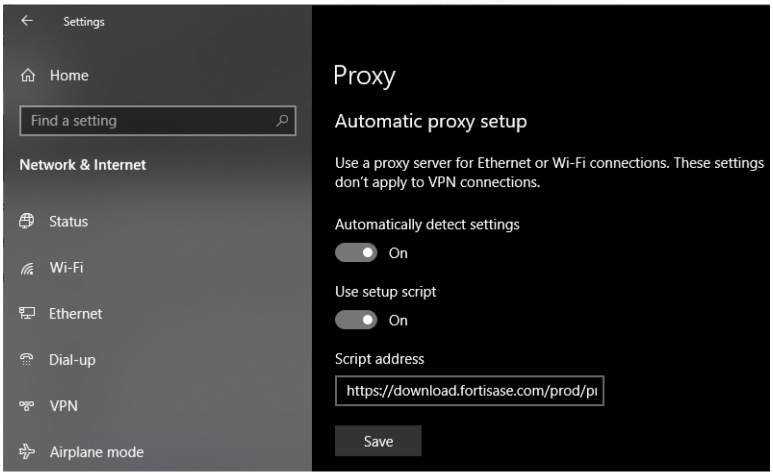
- Windows on page 21
- macOS on page 21
- Chrome OS on page 22
- Managed Chromebook on page 24

## Windows

The end user can configure proxy settings at the operating system (OS) level or in a browser. When you configure Secure Web Gateway (SWG) settings at the OS level, Windows applies them to all installed browsers. The following gives instructions for configuring SWG settings at the OS level on a Windows 10 device.

To configure Windows 10 to use the FortiSASE SWG server:

1. In Windows, go to *Windows Settings > System > Proxy Settings*.
2. Enable *Use setup script*.
3. In the *Script address* field, enter the *Hosted PAC File* URL.



Proxy

Automatic proxy setup

Use a proxy server for Ethernet or Wi-Fi connections. These settings don't apply to VPN connections.

Automatically detect settings: On

Use setup script: On

Script address: https://download.fortisase.com/prod/pı

Save

4. The next time the user starts a browser session, the browser displays an authentication prompt. The end user enters their FortiSASE credentials in the prompt. After ten minutes of inactivity, the browser reprompts for authentication credentials.

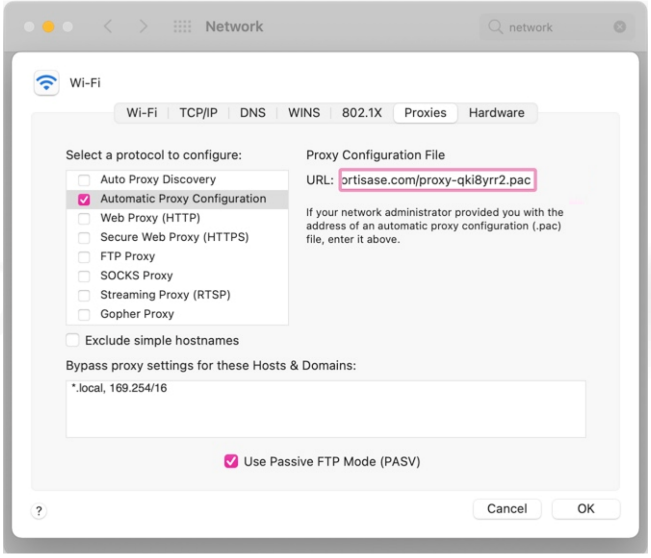
## macOS

This example demonstrates manually configuring proxy settings on macOS. See also Change proxy settings in Network preferences on Mac.

To manually configure proxy settings on a macOS endpoint:

1. Go to the *Apple menu > System Preferences > Network*.
2. In the list, select the Network service. For example, you may select your connected wireless SSID.
3. Click *Advanced*.
4. On the *Proxies* tab, select the protocol to configure. Enable *Automatic Proxy Configuration*, then enter the URL to your hosted PAC file.

5. Click *OK*, then apply to apply the changes.



Select a protocol to configure:

- □ Auto Proxy Discovery
- ☑ Automatic Proxy Configuration
- □ Web Proxy (HTTP)
- □ Secure Web Proxy (HTTPS)
- □ FTP Proxy
- □ SOCKS Proxy
- □ Streaming Proxy (RTSP)
- □ Gopher Proxy

Proxy Configuration File

URL: ortisase.com/proxy-qki8yrr2.pac

If your network administrator provided you with the address of an automatic proxy configuration (.pac) file, enter it above.

□ Exclude simple hostnames

Bypass proxy settings for these Hosts & Domains:

*.local, 169.254/16

☑ Use Passive FTP Mode (PASV)

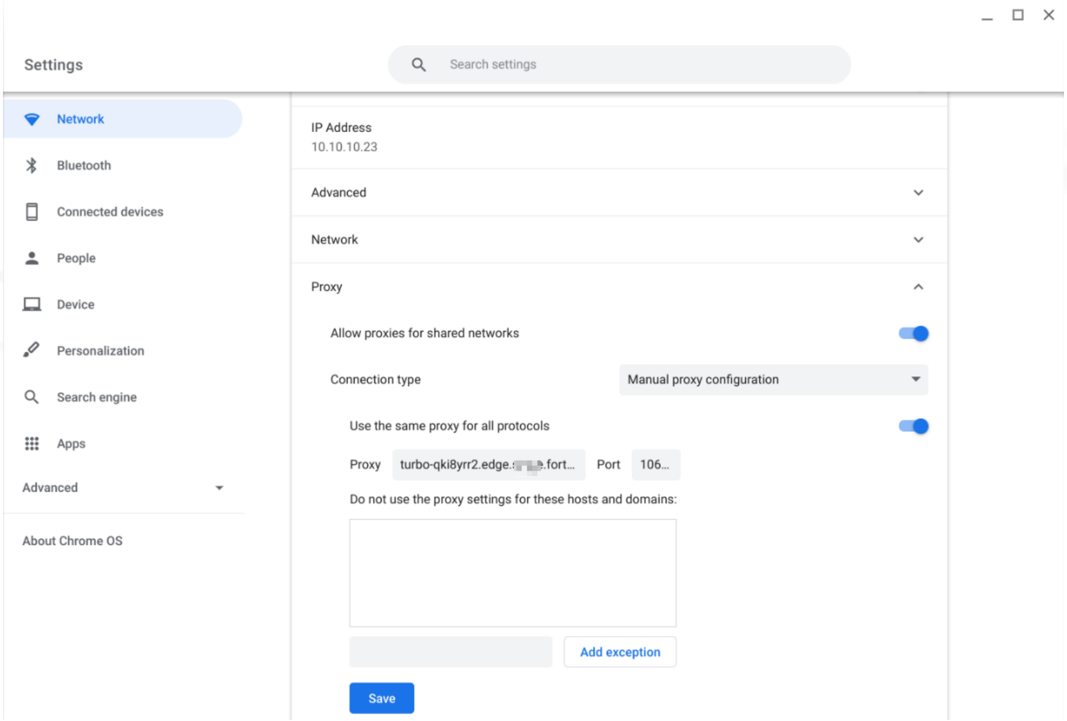
6. The next time that the user starts a browser session, the browser displays an authentication prompt. The end user enters their FortiSASE user credentials in the prompt to authenticate.

## Chrome OS

To configure proxy as a system-wide setting:

1. Open the Launcher, and search for *Settings*.
2. Click *Network* on the left menu. Then select your Wireless Network SSID and click the right arrow to expand.
3. Scroll to the bottom and expand the proxy settings.
4. For *Connection type*, select one of the following:
   a. Select *Automatic proxy configuration*. This is the recommended method. Point the *Autoconfiguration URL* to the FortiSASE hosted PAC file.
   b. To configure manual proxy configuration, do the following:
      i. Select *Manual proxy configuration*.
      ii. Enable *Use the same proxy for all protocols*.
      iii. Enter the proxy server address, and the Secure Web Gateway port that your administrator provided. You can select the global proxy or the server closest to you.

**iv.** Click *Save*.



IP Address
10.10.10.23

Advanced

Network

Proxy

Allow proxies for shared networks

Connection type: Manual proxy configuration

Use the same proxy for all protocols

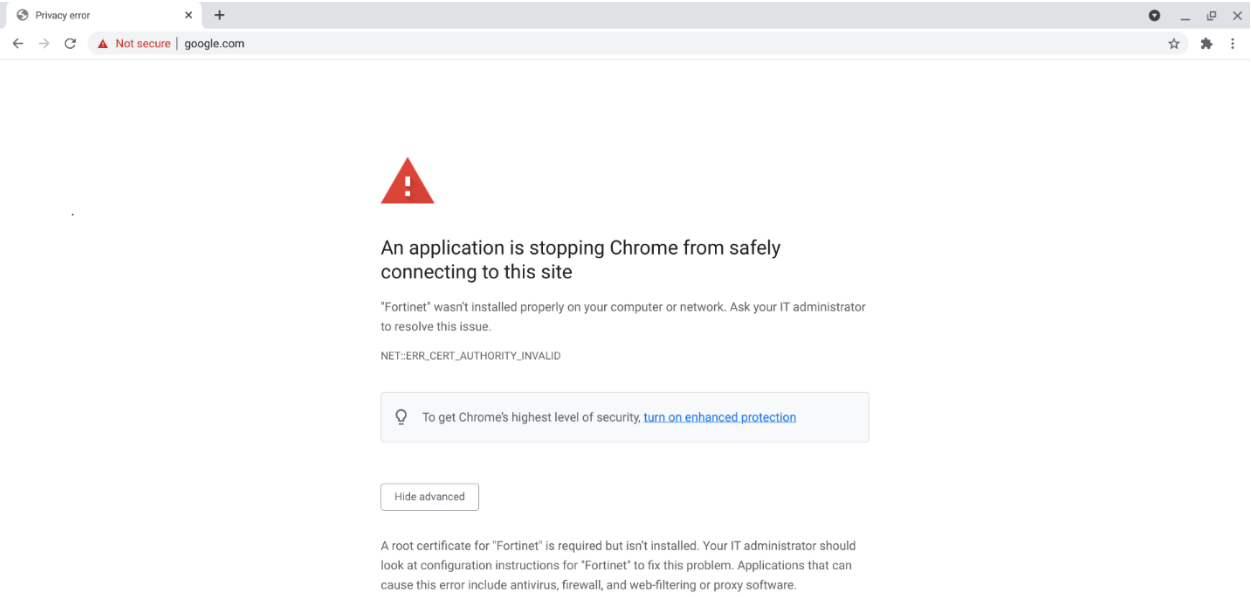
Proxy: turbo-qki8yrr2.edge.[redacted]e.fort... Port: 106...

Do not use the proxy settings for these hosts and domains:

If issues arise with some websites using SOCKS, you can work around this by disabling *Use the same proxy for all protocols*. Then only define the proxy server address for HTTP proxy and secure HTTP proxy.

**5.** On a successful connection, your browser prompts you to authenticate. Enter your user credentials to authenticate to FortiSASE and continue browsing the web.

If you receive a warning message from Chrome preventing you to go further, you must disable your proxy settings, and install the FortiSASE certificate authority certificate before reenabling proxy.



An application is stopping Chrome from safely connecting to this site

"Fortinet" wasn't installed properly on your computer or network. Ask your IT administrator to resolve this issue.

NET::ERR_CERT_AUTHORITY_INVALID

To get Chrome's highest level of security, turn on enhanced protection

A root certificate for "Fortinet" is required but isn't installed. Your IT administrator should look at configuration instructions for "Fortinet" to fix this problem. Applications that can cause this error include antivirus, firewall, and web-filtering or proxy software.

## Managed Chromebook

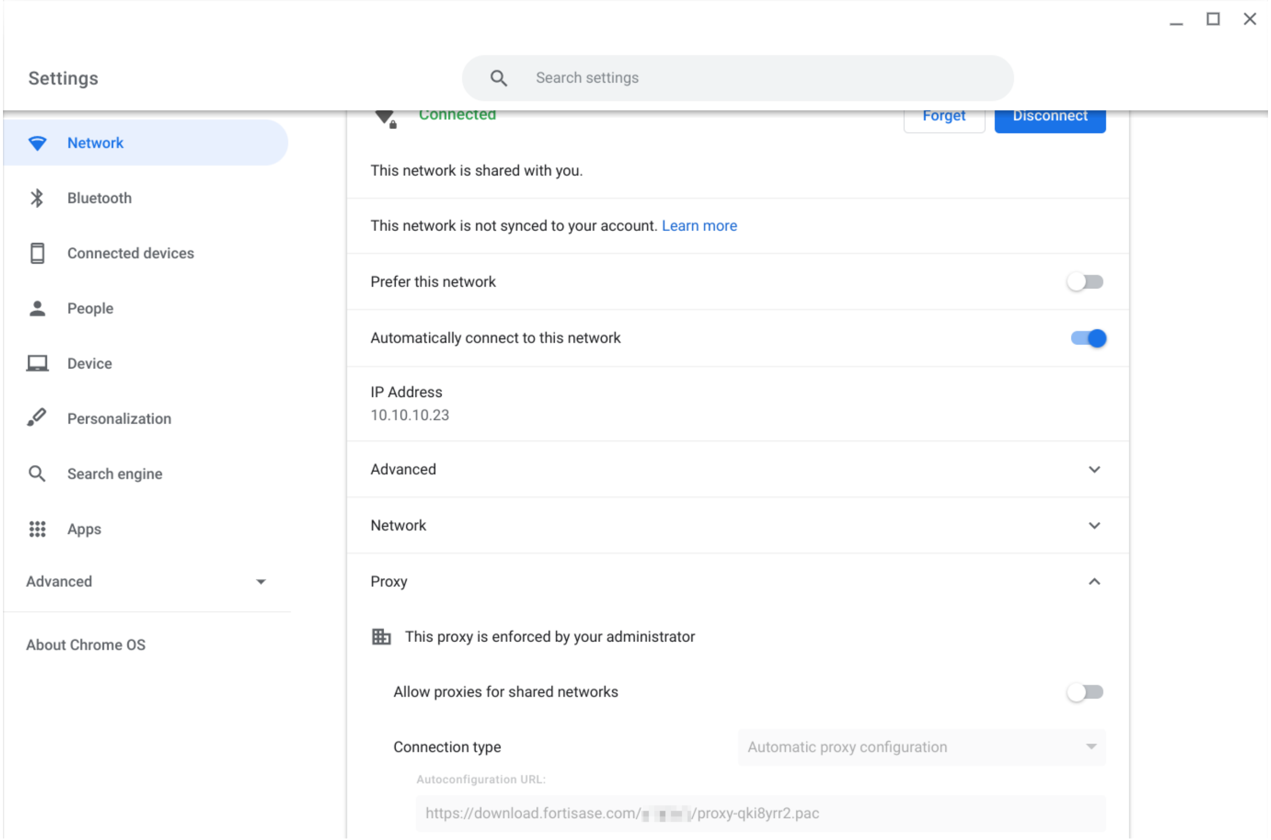
If your organization manages Chromebooks using the Google Admin console, you can centrally configure proxy settings on the Admin console and distribute them to each managed Chromebook.

To configure proxy as a system-wide setting on Google Admin Console:

1. On the Google Admin console, go to *Device > Chrome > Settings > Users & Browsers..*
2. Select the organizational unit in which to apply these settings.
3. Under *User and Browser Settings*, filter for the keyword `Proxy`. The *Network* section appears.
4. For *Proxy mode*, use one of the following options:
   a. Select *Always use the proxy auto-config specified below*. Enter FortiSASE's hosted PAC file address. Save.
   b. Select *Always use the proxy specified below*. Enter the proxy server URL in the format <proxy server address>:<SWG port>. Save.

To verify proxy settings are configured on the managed Chromebook:

1. Open the Launcher and search for Settings.
2. Click *Network* on the left menu. Then select your Wireless Network SSID and click the right arrow to expand.
3. Scroll to the bottom and expand the proxy settings. The settings pushed from the Google Admin Console appear with an icon and warning that your administrator is enforcing this setting.



This network is shared with you.

This network is not synced to your account. Learn more

Prefer this network: off

Automatically connect to this network: on

IP Address
10.10.10.23

Advanced

Network

Proxy

This proxy is enforced by your administrator

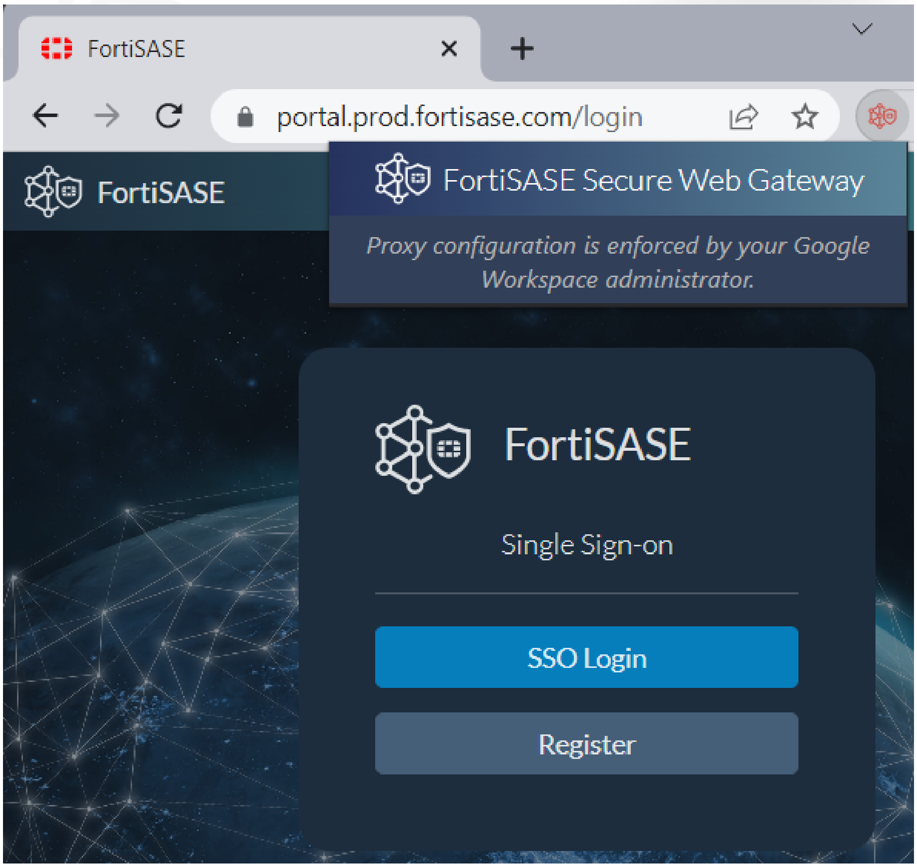
Allow proxies for shared networks: off

Connection type: Automatic proxy configuration

Autoconfiguration URL:
https://download.fortisase.com/[redacted]/proxy-qki8yrr2.pac

# (Optional) Installing and configuring the SWG Chrome extension

FortiSASE supports a Chrome extension that allows enforcing FortiSASE secure web gateway (SWG) connectivity for selected endpoints with the Chrome browser installed, including Chromebooks, based on the endpoint operating system (OS) and the corresponding extension policy that the Google Workspace administrator configured.



*Proxy configuration is enforced by your Google Workspace administrator.*

This extension relies on the following features being configured in FortiSASE:

- SWG single sign-on
- SWG configuration

The extension also requires that the user has already downloaded and installed the SWG certificates to the device certificate store as Installing the FortiSASE CA certificate on endpoints on page 17 describes. Alternatively, you can use Google Workspace to install certificates on Chromebooks as Managed Chromebook on page 24 describes.

Since this extension is not installed in Chrome incognito mode, the administrator should disable incognito mode in Google Workspace.

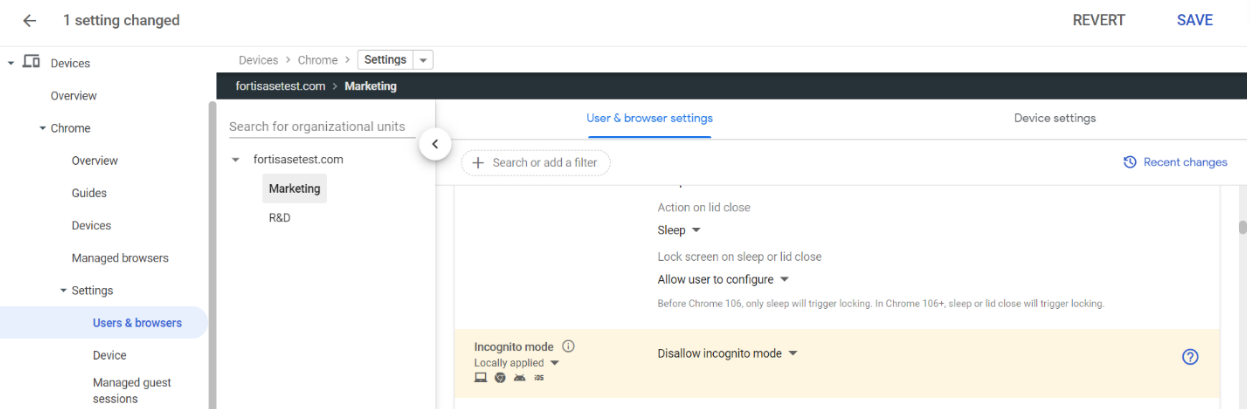
This extension allows you to configure the following settings on an endpoint through Google workspace:

- Default or custom hosted PAC file URL
- User ability to view PAC file URL within the extension
- Configuration of supported platforms (ChromeOS, Linux, macOS, and Windows) where SWG is enforced

To disable incognito mode in Google Workspace:

Since this extension is not installed in incognito mode, SWG policies are not enforced when using incognito mode. The Google Workspace administrator must disallow incognito mode to ensure that SWG is always enforced on the Chromebook and other devices with managed Chrome browsers.

1. Go to *Devices > Chrome > Settings > Users & browsers*.
2. Select the desired organizational unit (OU).
3. Scroll to *Security > Incognito mode*.
4. From the dropdown menu, select *Disallow incognito mode*.
5. Click *Save*.



Action on lid close
Sleep

Lock screen on sleep or lid close
Allow user to configure

Before Chrome 106, only sleep will trigger locking. In Chrome 106+, sleep or lid close will trigger locking.

Incognito mode
Locally applied
Disallow incognito mode

To configure the extension policy for FortiSASE SWG Chrome extension:

You can apply the FortiSASE SWG extension to one or more user OUs within Google Workspace. All users assigned within an OU that the FortiSASE SWG extension is applied to have the extension installed and SWG enforced on their Chromebook and Chrome browser.

1. In the Google Admin console, go to *Devices > Chrome > Apps & extensions > Users & browsers*.
2. Select the desired OU to install and enforce the FortiSASE SWG extension.
3. Add the Chrome extension to the OU by clicking the + button on the bottom right, clicking *Chrome app or extension by ID*, and searching using the ID aecejhdejcnfihadbfidmndehobfdpcc.
4. Select the *FortiSASE Secure Web Gateway extension* to push to Chromebooks and devices with managed Chrome browsers.

5. Configure the policy using the following parameters:

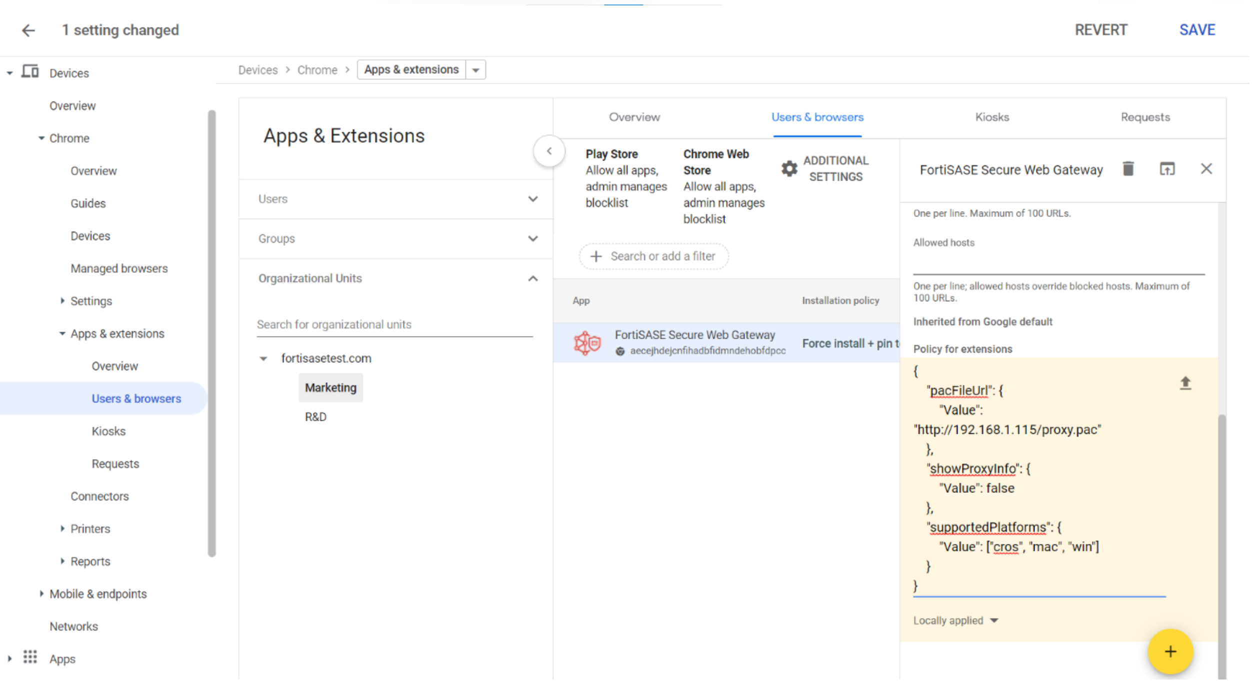
| Parameter | Description |
|---|---|
| **pacFileUrl** | PAC file that the extension will enforce. Configure one of the following:<br>• Default hosted PAC file link from FortiSASE in *System > SWG Configuration*. See SWG Configuration.<br>• Custom hosted PAC file link from a server accessible to endpoints. See Customizing the PAC file on page 13. |
| **showProxyInfo** | Possible values: `false` or `true`.<br>• Setting this to `false` hides the PAC file URL from the extension.<br>• Setting this value to `true` makes the PAC file URL visible to the extension. |
| **supportedPlatforms** | Possible values include `cros`, `linux`, `mac`, and `win` to specify ChromeOS (Chromebook), Linux, macOS, and Windows, respectively.<br>To exempt a device from SWG enforcement, you can set one of these options:<br>• Remove the device OS from the `supportedPlatforms` array<br>• Set `pacFileUrl` to an empty string<br>• Remove the `pacFileUrl` key-value pair from the policy configuration |

6. Click *Save*.

Following is an example extension policy configuration using a custom PAC file hosted on a LAN server with the PAC file URL hidden from extension and the extension applied to ChromeOS, macOS, and Windows devices:

```
{
    "pacFileUrl": {
        "Value": "https://192.168.1.115/proxy.pac"
    },
    "showProxyInfo": {
        "Value": false
    },
    "supportedPlatforms": {
      "Value": ["cros", "mac", "win"]
    }
}
```

The following shows the FortiSASE SWG extension and example extension policy applied to users within the Marketing OU:



| App | Installation policy |
|---|---|
| FortiSASE Secure Web Gateway<br>aecejhdejcnfihadbfidmndehobfdpcc | Force install + pin t |

FortiSASE Secure Web Gateway

One per line. Maximum of 100 URLs.

Allowed hosts

One per line; allowed hosts override blocked hosts. Maximum of 100 URLs.

Inherited from Google default

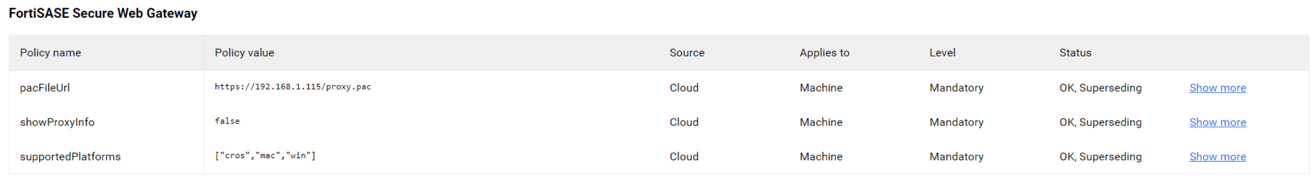
Policy for extensions

```
{
   "pacFileUrl": {
      "Value":
"http://192.168.1.115/proxy.pac"
   },
   "showProxyInfo": {
      "Value": false
   },
   "supportedPlatforms": {
      "Value": ["cros", "mac", "win"]
   }
}
```

Locally applied

To verify the policy has been enforced on the device with the extension installed:

On the Chromebook or device with Chrome browser installed, go to chrome://policy from the Chrome browser to verify the aforementioned example policy has been enforced on the Chromebook or device with managed Chrome browser:



FortiSASE Secure Web Gateway

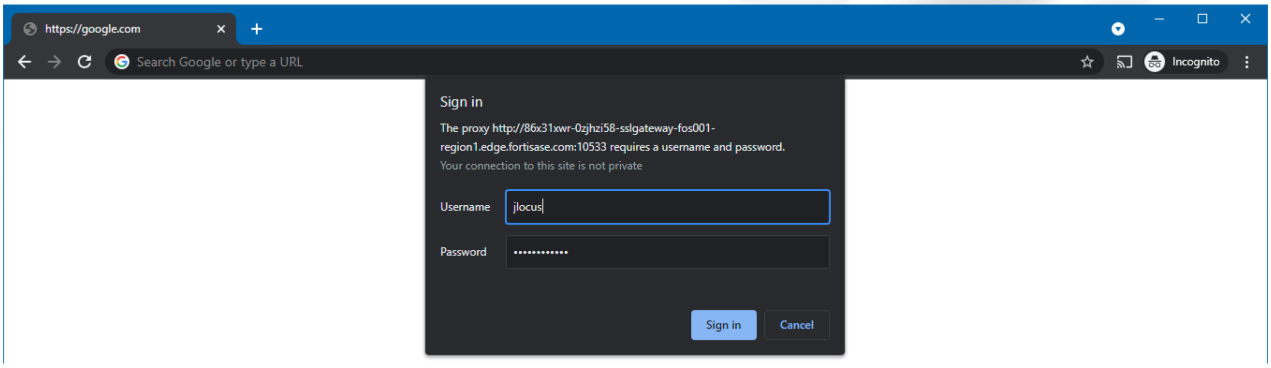
| Policy name | Policy value | Source | Applies to | Level | Status | |
|---|---|---|---|---|---|---|
| pacFileUrl | https://192.168.1.115/proxy.pac | Cloud | Machine | Mandatory | OK, Superseding | Show more |
| showProxyInfo | false | Cloud | Machine | Mandatory | OK, Superseding | Show more |
| supportedPlatforms | ["cros","mac","win"] | Cloud | Machine | Mandatory | OK, Superseding | Show more |

# Testing SWG user connections to the Internet

The basic configuration is complete at this point. Test the connections to the Internet and corporate networks on an endpoint.

To test connection to the Internet on a Windows computer with a RADIUS user:

1. From the endpoint, open a browser.
2. Browse to a webpage.
3. An authentication prompt appears. Enter your username and password.



Sign in

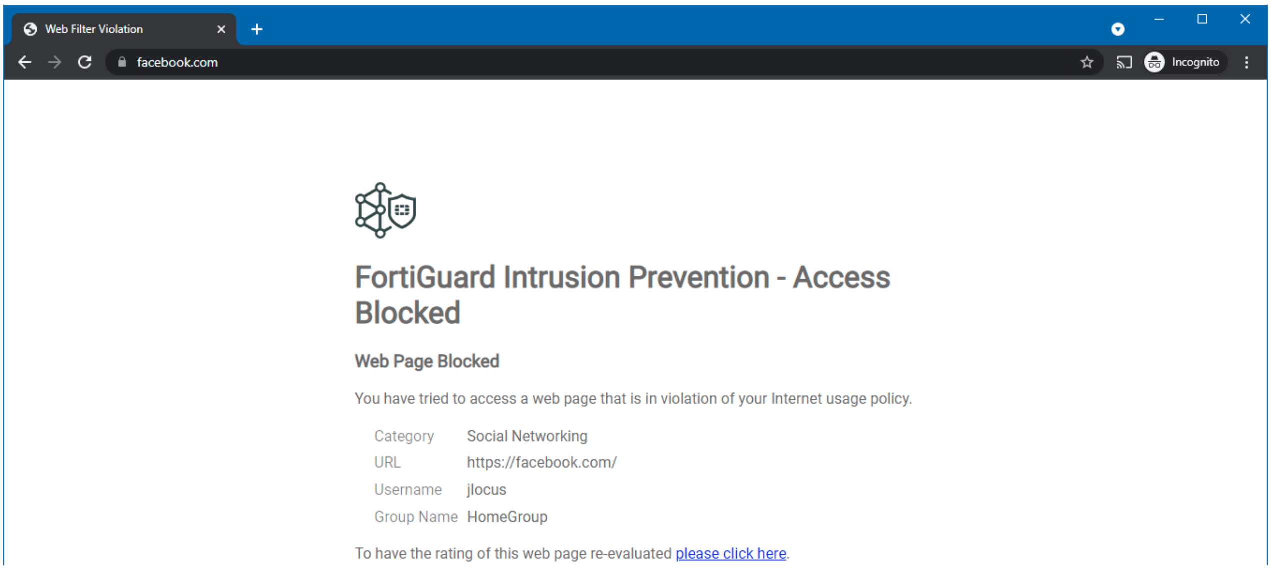
The proxy http://86x31xwr-0zjhzi58-sslgateway-fos001-region1.edge.fortisase.com:10533 requires a username and password.

Your connection to this site is not private

Username: jlocus

Password: ••••••••••••

4. Once authenticated, you can browse to any webpage. FortiSASE scans this traffic.
5. Browse to a webpage that triggers a Web Filter violation. The browser shows a message that FortiSASE blocks the webpage.



FortiGuard Intrusion Prevention - Access Blocked

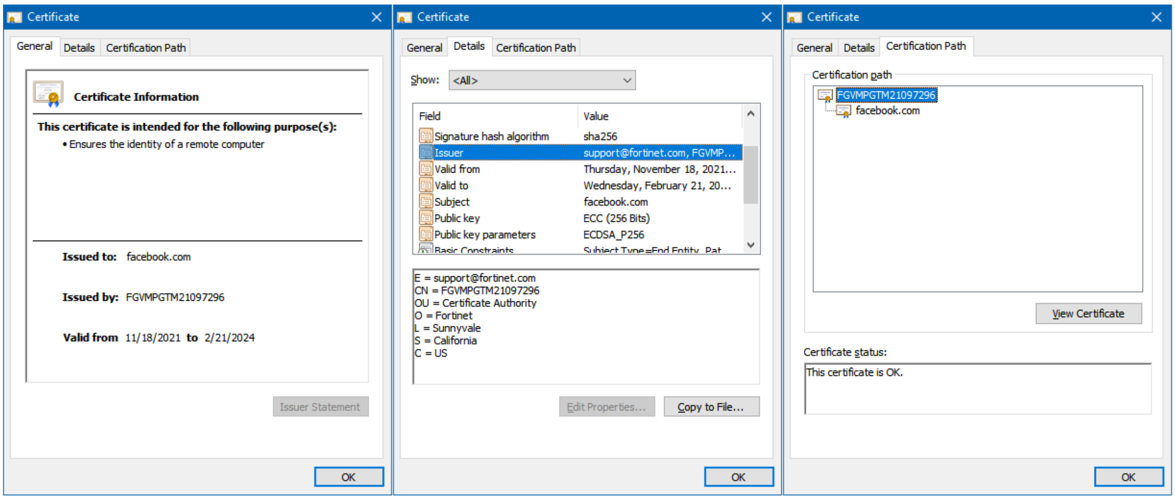
Web Page Blocked

You have tried to access a web page that is in violation of your Internet usage policy.

| | |
|---|---|
| Category | Social Networking |
| URL | https://facebook.com/ |
| Username | jlocus |
| Group Name | HomeGroup |

To have the rating of this web page re-evaluated please click here.

For the blocked webpage message to display without a certificate warning, you must install the FortiSASE root certificate authority certificate on the endpoint. The following shows a valid certificate chain:



Certificate Information

This certificate is intended for the following purpose(s):

- Ensures the identity of a remote computer

Issued to: facebook.com

Issued by: FGVMPGTM21097296

Valid from 11/18/2021 to 2/21/2024

| Field | Value |
|---|---|
| Signature hash algorithm | sha256 |
| Issuer | support@fortinet.com, FGVMP... |
| Valid from | Thursday, November 18, 2021... |
| Valid to | Wednesday, February 21, 20... |
| Subject | facebook.com |
| Public key | ECC (256 Bits) |
| Public key parameters | ECDSA_P256 |
| Basic Constraints | Subject Type=End Entity, Pat |

```
E = support@fortinet.com
CN = FGVMPGTM21097296
OU = Certificate Authority
O = Fortinet
L = Sunnyvale
S = California
C = US
```

Certification path

FGVMPGTM21097296
- facebook.com

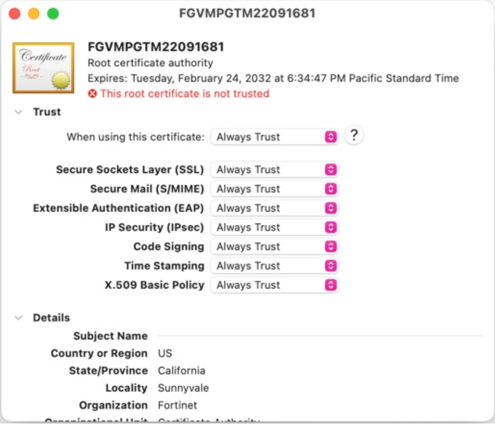
Certificate status:

This certificate is OK.

6. In FortiSASE, go to *User Connection Monitor* to see the logged in user.

To test connection to the Internet on a macOS computer with an Azure Active Directory (AD) user:

1. From the endpoint, open a browser.
2. Browse to a webpage. The page redirects to a Microsoft login page to perform single sign on.
3. Log in using your Azure AD credentials.
4. Once authenticated, you can browse to any webpage. FortiSASE scans this traffic.
5. To properly browse any HTTPS websites, you must install the FortiSASE root certificate on the endpoint. Double-click the FortiSASE certificate that the administrator provided during onboarding. In the *Keychain* field, select *System*, then click *Add*.
6. When you view the certificate, the root certificate appears as not trusted. Expand the *Trust* section. In the *When using this certificate* field, select *Always Trust*.



FGVMPGTM22091681

FGVMPGTM22091681
Root certificate authority
Expires: Tuesday, February 24, 2032 at 6:34:47 PM Pacific Standard Time
This root certificate is not trusted

Trust

| | |
|---|---|
| When using this certificate: | Always Trust |
| Secure Sockets Layer (SSL) | Always Trust |
| Secure Mail (S/MIME) | Always Trust |
| Extensible Authentication (EAP) | Always Trust |
| IP Security (IPsec) | Always Trust |
| Code Signing | Always Trust |
| Time Stamping | Always Trust |
| X.509 Basic Policy | Always Trust |

Details

| | |
|---|---|
| Subject Name | |
| Country or Region | US |
| State/Province | California |
| Locality | Sunnyvale |
| Organization | Fortinet |
| Organizational Unit | Certificate Authority |

7. Save the configuration and add the certificate to the system keychain.
8. You can connect to HTTPS websites without seeing a warning. Browse to an HTTPS website, then go to *User Connection Monitor* in FortiSASE to see the logged in user.

# More information

## Appendix A: Documentation references

### Feature documentation

| Product document | Specific chapter if available |
|---|---|
| FortiSASE Admin Guide | • SWG Policies<br>• Configuring FortiSASE with a RADIUS server for remote user authentication<br>• Configuring FortiSASE with Azure AD SSO: SAML configuration fields<br>• Configuring FortiSASE with Azure Active Directory single sign on in SWG mode<br>• SWG client onboarding |

### 4-D resources: SASE

- https://docs.fortinet.com/4d-resources/SASE

www.fortinet.com