



# FortiSandbox - Cloud Deployment Guide

Version 22.2

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FortiSandbox 22.2 Cloud Deployment Guide

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# Change Log

Date	Change Description
2022-05-17	Initial release.
2022-06-09	Added <a href="#">Ingress and egress IP addresses on page 22</a> .
2022-06-20	Updated <a href="#">Deploying FortiSandbox Cloud on page 6</a> .
2022-07-20	Updated <a href="#">Ingress and egress IP addresses on page 22</a> .

# Introduction

FortiSandbox is a cloud-based sandbox service based on FortiSandbox. The service subscription is available for purchase under FortiCloud.

## Requirements

The following items are required before you can initialize FortiSandbox Cloud:

- **FortiCloud account:** Subscribe to a FortiCloud Premium account. A FortiCloud account is required to launch FortiSandbox Cloud.
- **FortiGate firmware:** For version 6.4, you must use 6.4.2 or higher. For version 6.2, you must use 6.2.5 or higher. For other models, contact [Customer Service & Support](#).
- **FortiMail firmware:** Version 6.4.3 or higher. For other models, contact [Customer Service & Support](#).
- **Internet access:** You must have Internet access to create a FortiSandbox Cloud instance.
- **Browser:** A device with a browser to access FortiSandbox Cloud.



After creating a new FortiCloud account, wait 30 minutes before proceeding.

---

## Licensing

FortiSandbox Cloud requires the following licenses:

- FortiCloud Premium license.
- FortiSandbox Cloud Entitlement: Purchase FortiSandbox Cloud licenses for full functionality or use the trial version with limited features.
- Security Fabric devices.
  - FortiGate license: You must have a FortiGate license. Register the FortiGate on the same account as the FortiCloud.
  - FortiMail license: You must have a FortiMail license. Register the FortiMail on the same account as the FortiCloud.

# Deploying FortiSandbox Cloud

This section explains how to deploy and manage FortiSandbox Cloud with FortiGate and FortiMail devices.

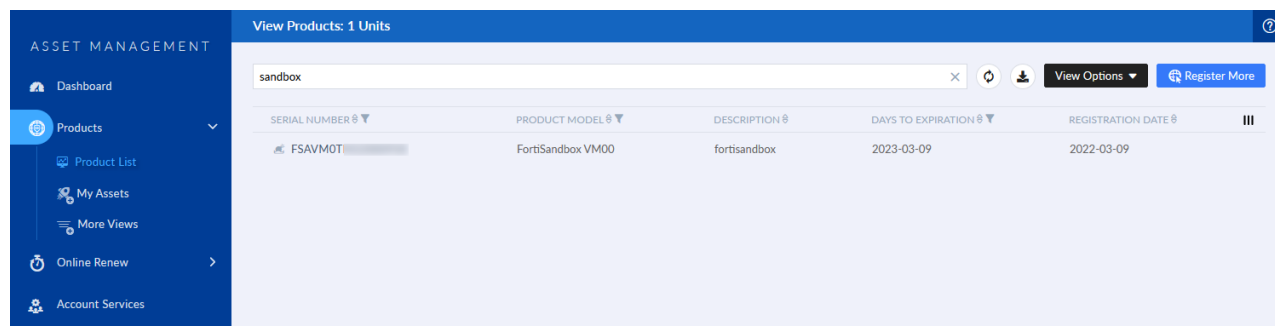
FortiSandbox Cloud supports TLS v1.2. Ensure your browser and firewall setting permits TLS v1.2.



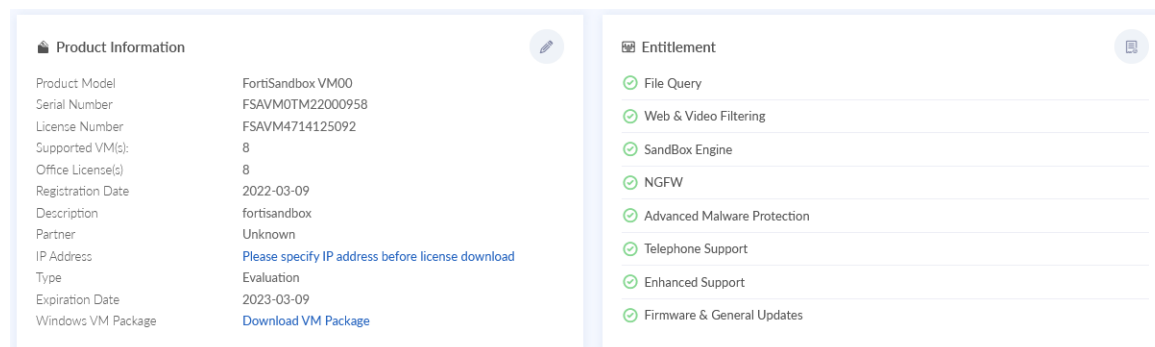
FortiSandbox Cloud can only communicate with FortiGate, FortiMail and FortiClient.

## To verify you have a product entitlement:

1. Log in to [FortiCloud](#). The Asset Management portal opens.
2. Go to *Products > Product List* and search for FortiSandbox.



3. Click the Serial Number and check the *Product Entitlements* for *FortiSandbox Cloud*.

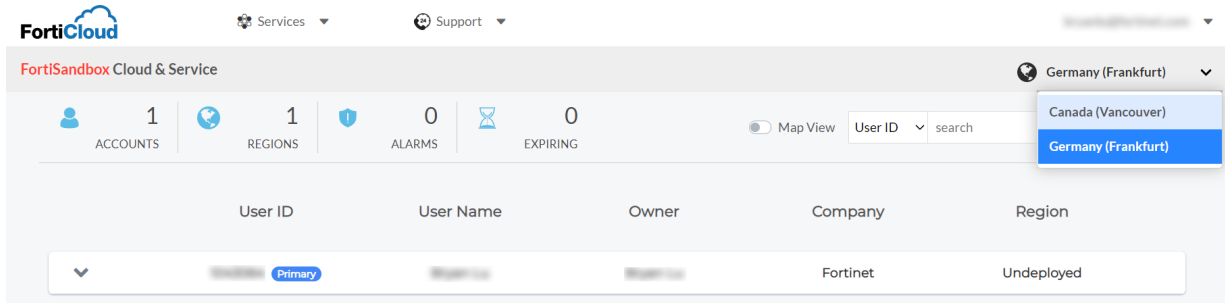


## To launch FortiSandbox Cloud:

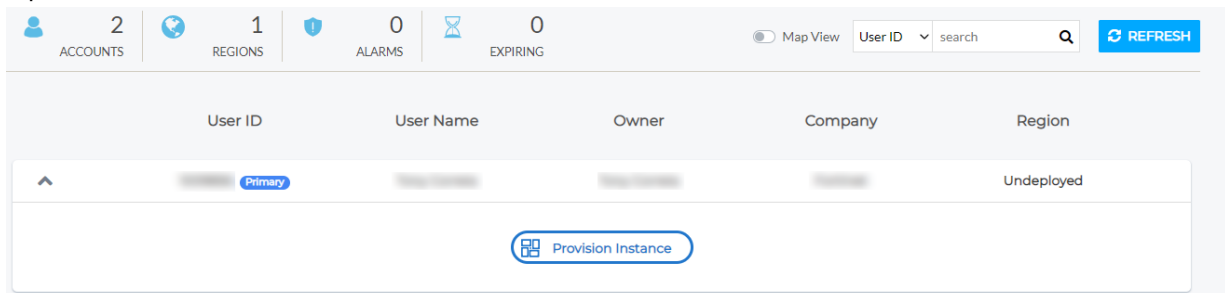
1. In the Asset Portal, click Services > Cloud Services > FortiSandbox Cloud. The *FortiSandbox Cloud & Service* page opens. Alternatively, you can launch the Cloud instance from <https://fortisandboxcloud.com>.

2. Select the region and provision the instance.

a. Select the region from the dropdown menu.



b. Select the account that contains the FortiSandbox Cloud entitlement and expand the instance. The *User ID* represents the dedicated instance.

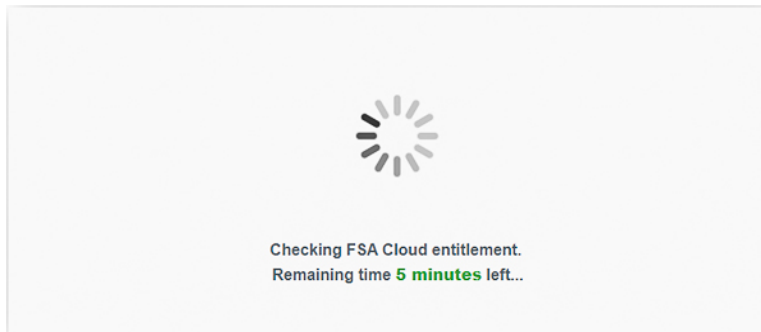


c. Click *Provision Instance*. Allow a few minutes for the FortiSandbox Cloud instance to be provisioned.

3. Confirm the instance region as it cannot be moved to another region.

Once your cloud instance is deployed in the current region, it cannot be deployed in another region. Are you sure to provision instance?

FortiSandbox Cloud instance is provisioned in a few minutes.




If an entitlement is not set up correctly, the provisioning reports an error. For information, see [Requirements on page 5](#) and [Licensing on page 5](#)



Unable to provision the cloud instance.  
Entitlement is required to provision the instance. (code: -3015)

4. When provisioning is complete, the dedicated VM instance displays the resources and firmware information, click *Enter* to access the web GUI.



@qatest.com

### FortiSandbox Cloud & Service

Please choose your account

User ID	User Name	Owner	Company
10... (Primary)			Fortinet

CPUs (4 VCPU) 0.3%  
 RAM (16.0 G) 17.7%  
 Disk (185.0 G) 3.1%

Stop Reboot Enter

Firmware Version: FSACLP-3.2-0-5108-...  
 Serial Number: FSA...  
 Expiry Date: 2021-07-16

REFRESH Can't find your account? Try to refresh it.

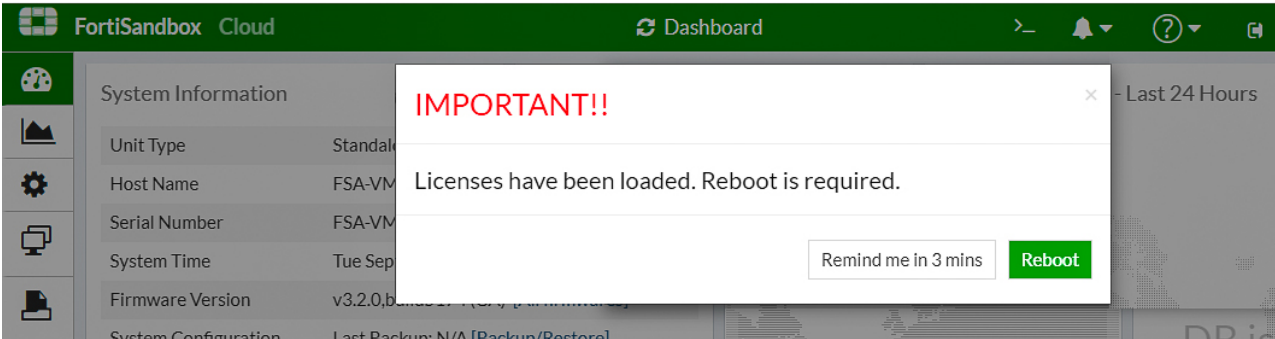


You can directly access FortiSandbox Cloud at <http://fortisandboxcloud.com> using your Fortinet support login credentials.

5. On the FortiSandbox VM instance, Go to the Dashboard and verify the following:

- A serial number has been assigned
- The licenses are valid

In some cases where the internal sync does not happen in time, you may find the licenses are invalid. FortiSandbox is designed to automatically resolve that. When the licenses are properly loaded, you must reboot the unit.



FortiSandbox Cloud Dashboard

System Information

Unit Type	Standalone
Host Name	FSA-VM
Serial Number	FSA-VM
System Time	Tue Sep
Firmware Version	v3.2.0, build 27 (2021-07-16)
System Configuration	Last Backup: N/A [Backup/Restore]

**IMPORTANT!!**

Licenses have been loaded. Reboot is required.

Remind me in 3 mins **Reboot**



## Verifying system status

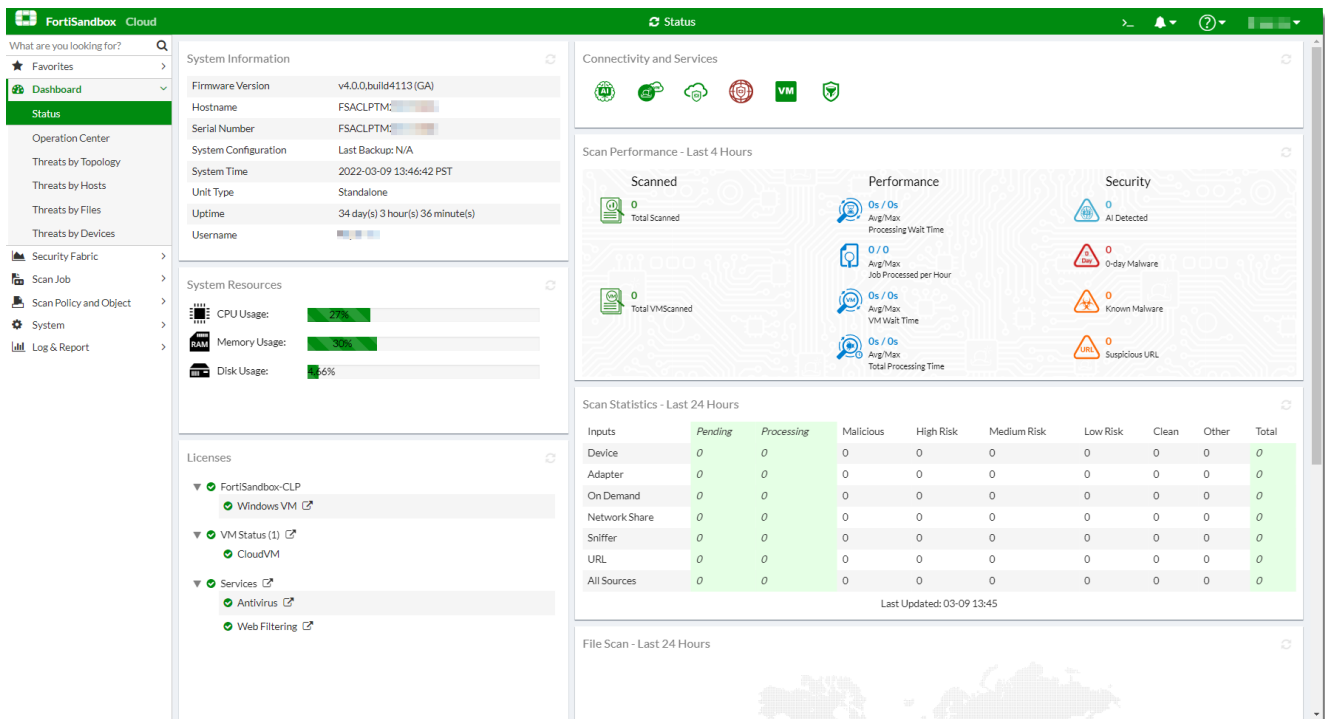
When you log in to FortiSandbox Cloud, *Dashboard > Status* is displayed.

In the Dashboard, verify the following:

- The *Windows VM* and servers (*FDN Download Server*, *Community Cloud Server*, and *Web Filtering Server*) connectivity display a green icon to show they are up.
- The *Antivirus DB* and *Web Filtering* contracts display a green icon to show they are valid.
- The *Sandbox Cloud Contract* is valid and shows at least one (1) count.
- The *System Resources* and *Disk Monitor* widgets show normal usage.

Other than the *MacOS VM* and *Industry Security Signature* contracts, verify that all contracts and services are valid as they are included in the FortiSandbox entitlement.

*MacOS VM* and *Industry Security Signature* contracts are not currently supported so they show *No Contract*.

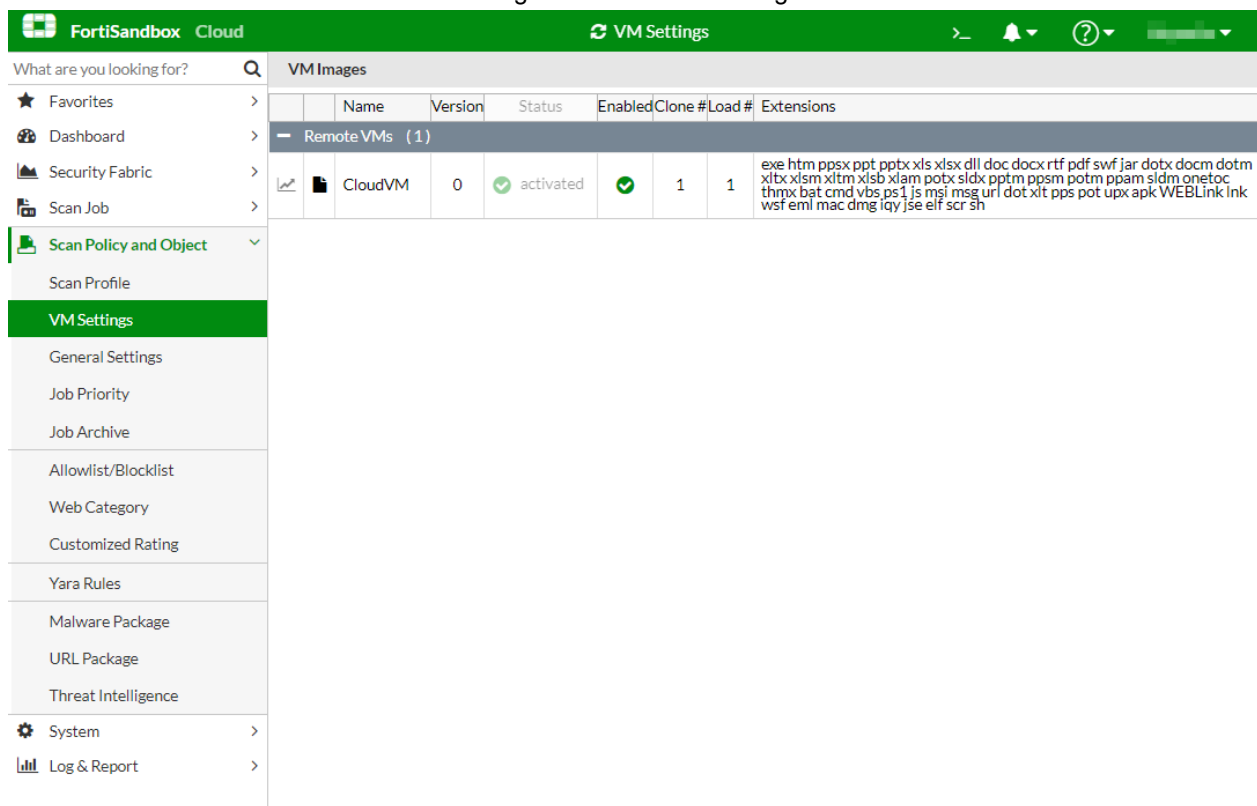


## Assigning sandboxing VM

For new setups, the sandboxing VM clones are not assigned by default since there are different types of VM. Assign a clone number to use the dynamic analysis feature.

**To assign a clone number:**

1. In FortiSandbox Cloud, go to *Virtual Machine > VM Settings*.
2. Double-click the CloudVM's *Clone #* and change the number to 1 or higher.



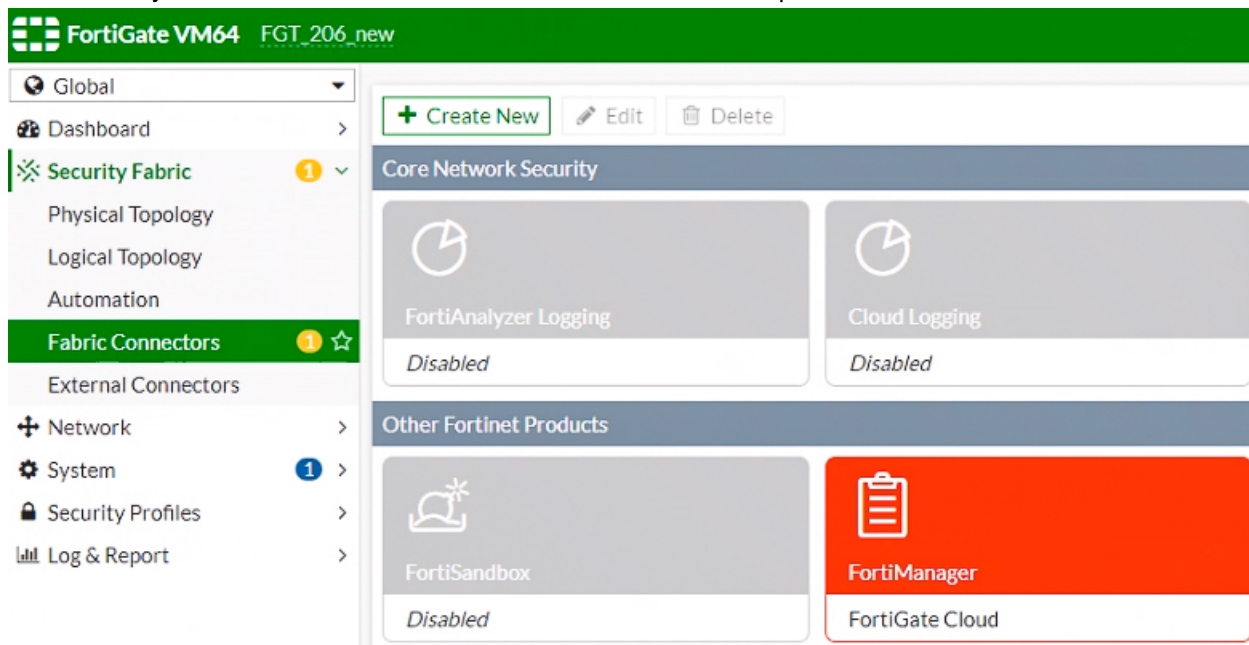
## Integrating Security Fabric

FortiSandbox Cloud uses port TCP/514 for client connectivity (FortiGate). Ensure any firewall in between allows that.

For devices connected to Security Fabric, ensure they are configured properly. Do all related configuration from either the root Fabric or FortiManager.

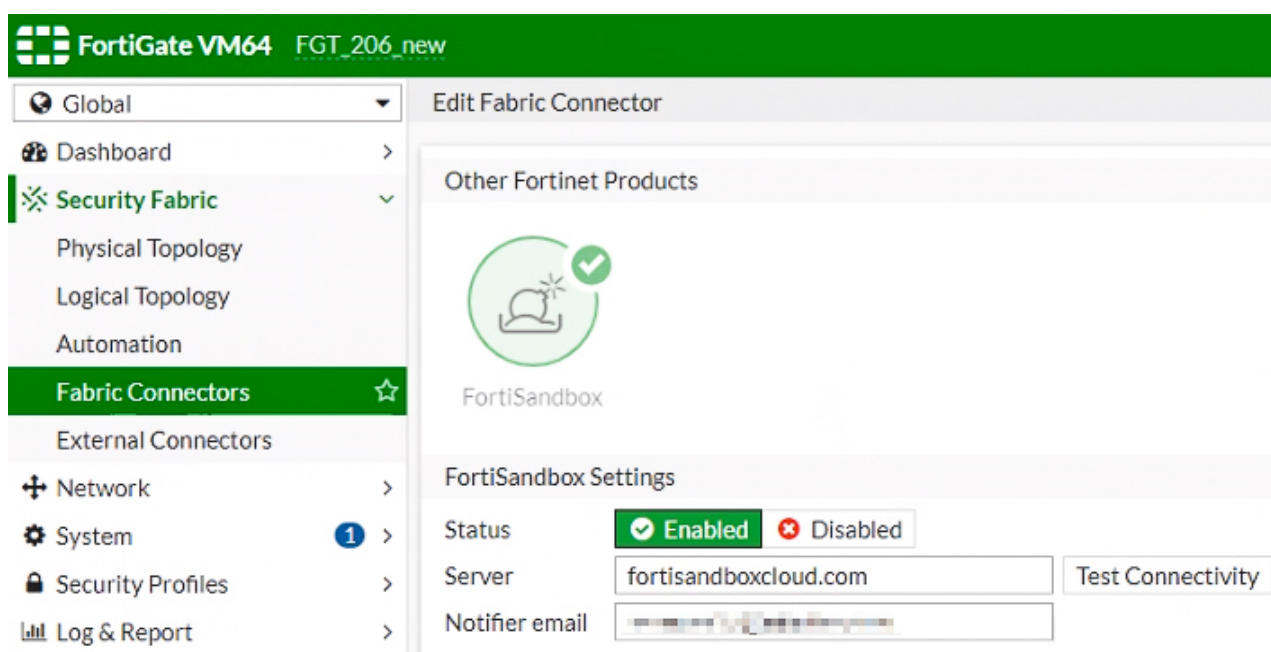
**To integrate with Security Fabric in FortiGate:**

1. In FortiOS, enable FortiSandbox Cloud.
2. Go to *Security Fabric > Fabric Connectors* and click FortiSandbox to open it.



3. In the *Edit Fabric Connector* pane, configure the *FortiSandbox Settings* and OK.

<b>Status</b>	Click Enabled.
<b>Server</b>	Enter <i>fortisandboxcloud.com</i> .
<b>Notifier email</b>	(Optional) Enter an email address for notifications.



4. In FortiSandbox, click the *Authorize* icon so that FortiGate can establish Fabric connectivity. Verify that the *Status* is updated.

[illegible]

5. In FortiGate, click *Test Connectivity* to verify that the FortiGate can be linked and connected to FortiSandbox Cloud.



Specific firmware versions of FortiGate models support the above Security Fabric connectivity. See [Requirements on page 5](#).

### To integrate with Security Fabric in FortiMail:

1. In FortiMail, go to *Dashboard* > *Status* and verify that the FortiCloud license is activated.
2. Go to *System* > *FortiSandbox*.

3. For *FortiSandbox* type, click *Enhanced Cloud*.

**FortiMail VM04 FortiMail**

**FortiSandbox**

FortiSandbox Inspection ☒ [Statistics...](#)

FortiSandbox type: **Appliance** **Cloud** **Enhanced Cloud**

Server name/IP: fortisandboxcloud.com

Notification email: tmg@fortinet.com

Statistics interval: 5 (minutes)

Scan timeout: 30 (minutes)

Scan result expires in: 60 (minutes)

**File Scan Setting**

File types: ☒ Windows executable ☒ Microsoft Office document  
☒ PDF ☒ Adobe flash  
☒ JavaScript ☒ Jar  
☒ HTML ☒ Archive

File patterns: eml

File size: ☐ Maximum file size to upload 1024 (KB)

**URL Scan Setting**

Email selection: **All email** Suspicious email

URL selection: all

Upload URL on rating error: ☐

Number of URLs per email: 3

4. In FortiSandbox, click the *Authorize* icon so that FortiGate can establish Fabric connectivity. Verify that the *Status* is updated.

Device Name	Serial	Malicious	High	Medium	Low	Clean	Others	Mal Pkg	URL Pkg	Auth	Limit	Status
✓ Demo-FortiMailGateway	FEVM040000204896	1	0	0	1	7	0	N/A	N/A		<input type="checkbox"/>	
✓ Demo-FortiMailGateway:Unprot...	FEVM040000204896	0	0	0	0	0	0	N/A	N/A		<input type="checkbox"/>	



Specific firmware versions of FortiMail models support the above Security Fabric connectivity. See [Requirements](#) on page 5.

## Setting up and making an API call

To set up and establish a session to your VM instance, first generate a token in FortiSandbox Cloud. On the client software, use the token to authorize and make the API call to establish the session.

### To generate a token in FortiSandbox Cloud:

1. In FortiSandbox Cloud, click the CLI icon at the top right to open the CLI console.
2. In the CLI console, run the following CLI command to generate a new token.

```
login-token -g
```

### To authorize and make the API call on the client software:

1. On your client software, make the following API call to:

```
https://<account-id>.fortisandboxcloud.com/jsonrpc

{
  "method": "get",
  "params": [
    {
      "url": "/sys/login/token",
      "token": "<token>"
    }
  ],
  "session": "",
  "id": 53,
  "ver": "2.5"
}
```

Field	Description
id	The user-id on the portal or one used in the URL in your FortiSandbox Cloud VM instance.
token	The token you just generated.

When the session is established, all API calls are similar to the FortiSandbox API documentation.

We recommend renewing your token on a regular basis to keep access to your VM instance secure.

## Establishing a connection to a region

FortiSandbox 22.2 supports the EMEA region. When EMEA is selected, FortiOS v7.0.4 will automatically re-establish the connection to the location where the FortiSandbox Cloud is provisioned.

### FortiOS v7.0.3

For FortiOS v7.0.3 and earlier, we recommend making the following configurations using the CLI:

```
config system fortisandbox
set status enable
```

```
set forticloud enable
set server "<your Instance ID>.eu-central-1.fortisandboxcloud.com"
set email "<your email>"
end
```

---

FortiMail and FortiClient connectivity to the EMEA region are not currently supported since the server cannot be overridden.

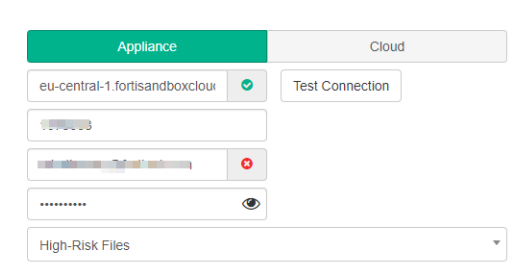
---

### FortiMail v7.0.3 and earlier

For FortiMail 7.0.3 and earlier, the network traffic is directed to *fortisandboxcloud.com* that is mainly hosted in Canada . The traffic is then forwarded to the EMEA location.

### FortiClient EMS v7.0.3

For FortiClient EMS 7.0.3, configure the server to `eu-central-1.fortisandboxcloud.com`.



The screenshot shows the FortiClient EMS configuration interface. At the top, there are two tabs: 'Appliance' (selected) and 'Cloud'. Under the 'Appliance' tab, there is a text input field containing 'eu-central-1.fortisandboxcloud.com' with a green checkmark icon to its right. Below this is a 'Test Connection' button. There are two more input fields: one with a red 'X' icon and another with a red eye icon. At the bottom, there is a dropdown menu labeled 'High-Risk Files'.

# Maintaining FortiSandbox Cloud

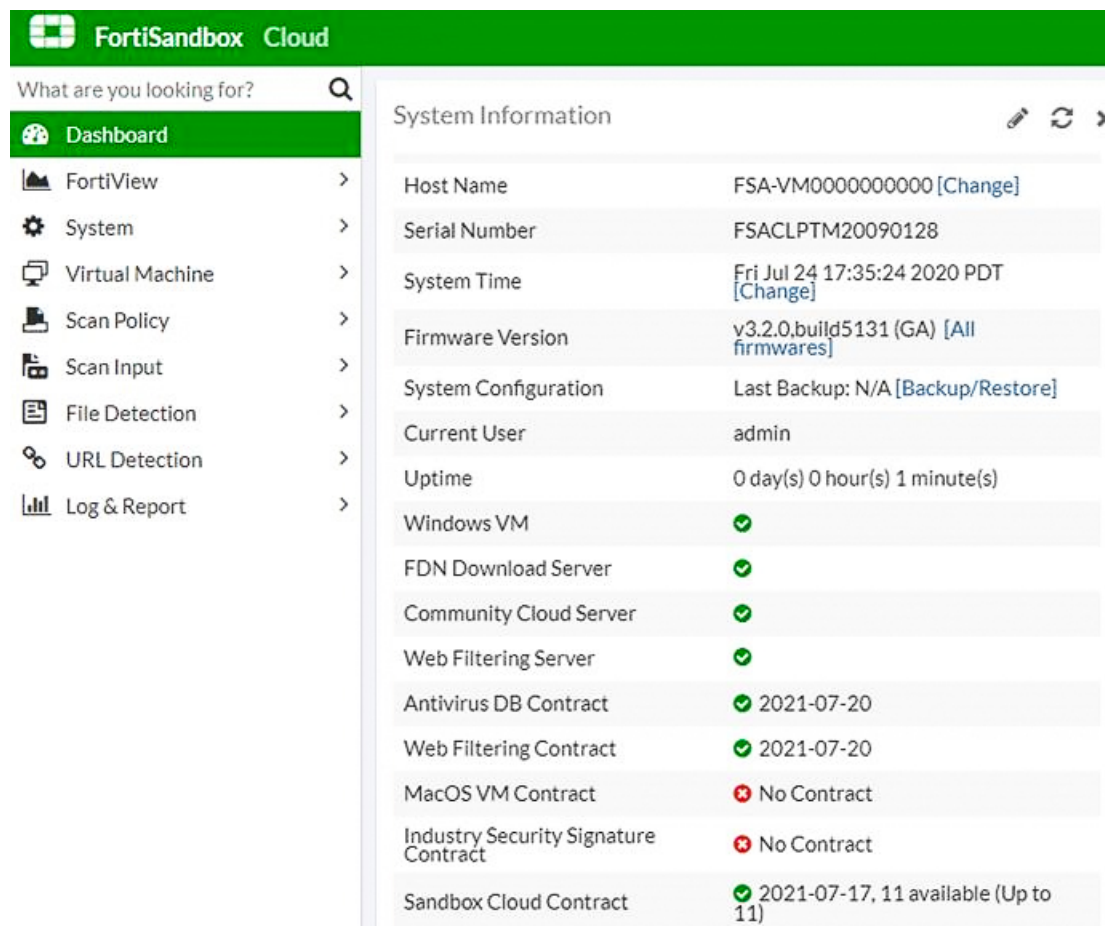
You are responsible for maintaining the FortiSandbox Cloud firmware, VM capacity, and users. Fortinet maintains the contracts, services, and infrastructure.

## Expanding VM capacity

VMs can be easily expanded to hold more files for sandboxing. The limit is 200 VMs. The current VM count is displayed in the *Dashboard > Sandbox Cloud Contract*.

You can purchase additional Cloud VMs and add them to your existing deployment.

When adding VMs, you must change the *Clone #* to 1 or higher. For details, see [Assigning sandboxing VM on page 9](#).



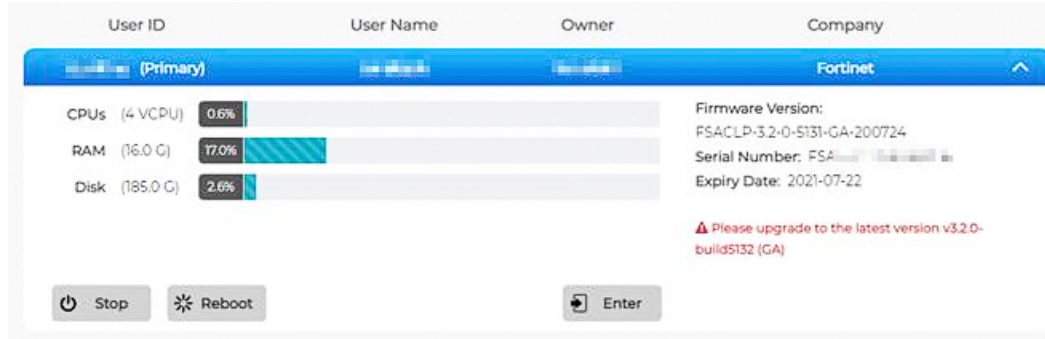
The screenshot displays the FortiSandbox Cloud interface. On the left is a navigation menu with options: Dashboard, FortiView, System, Virtual Machine, Scan Policy, Scan Input, File Detection, URL Detection, and Log & Report. The main content area is titled 'System Information' and contains the following data:

System Information	Value
Host Name	FSA-VM0000000000 [Change]
Serial Number	FSACLPTM20090128
System Time	Fri Jul 24 17:35:24 2020 PDT [Change]
Firmware Version	v3.2.0,build5131 (GA) [All firmwares]
System Configuration	Last Backup: N/A [Backup/Restore]
Current User	admin
Uptime	0 day(s) 0 hour(s) 1 minute(s)
Windows VM	✓
FDN Download Server	✓
Community Cloud Server	✓
Web Filtering Server	✓
Antivirus DB Contract	✓ 2021-07-20
Web Filtering Contract	✓ 2021-07-20
MacOS VM Contract	✗ No Contract
Industry Security Signature Contract	✗ No Contract
Sandbox Cloud Contract	✓ 2021-07-17, 11 available (Up to 11)



## Keeping firmware up-to-date

Firmware updates include new features and bug fixes. If there is updated firmware, the Dashboard displays a notification and a download link. Your maintenance schedule should include upgrading the firmware.



## Renewing the contract

The contract must be renewed annually. FortiSandbox Cloud notifies you to renew the contract before it expires.

If the contract expires, the banner displays a red **EXPIRED** notification. You can still access the instance for reports and existing data. Entitlements and the sandboxing service is not available until you renew the contract. If you renew the contract after the expiry date, it may take a day for the license to be applied.



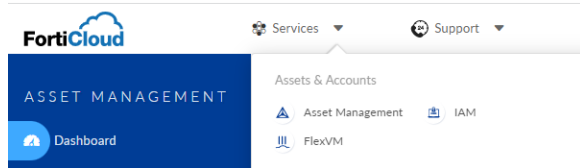
An expired instance is preserved for 30 days.

## Adding an IAM user

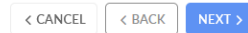
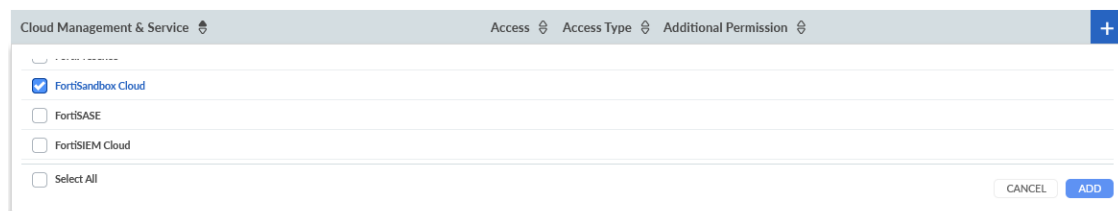
Identity and Access Management (IAM) is a service to manage user access and permissions to FortiCloud portals and assets. For more information about IAM users, see [Identity & Access Management \(IAM\)](#).

## To add an IAM user:

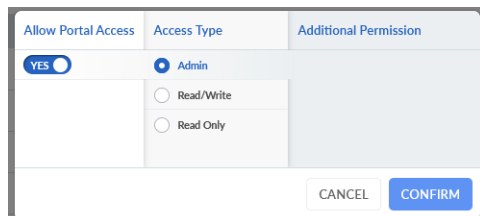
1. Log in to [FortiCloud](#). The Asset Management portal opens.
2. In the banner, click *Services > Asset & Accounts > IAM*. The *IAM Users* page opens.



3. Click *Add IAM User*. The *User Details* page opens.
4. Enter the IAM User information, and click *Next*. For more information, see [Adding IAM users](#).
5. Configure the IAM User Asset and Portal permissions. For more information, see [Adding IAM users](#).
6. In the *Cloud Management & Service Section*, click the Add symbol (+).
7. Search for and select *FortiSandbox Cloud* and click *Add*. FortiSandbox Cloud is added.



8. Click the *Edit* icon. The *Allow Portal Access* dialog opens.
9. Enable the toggle and set the *Access Type* to either *Admin*, *Read/Write*, or *Read Only* and click *Next*. The *Confirmation* page opens.



10. Click *Confirm*.
11. Click *Download CSV* to download the IAM User's credentials as an Excel file. Send these credentials to the new

## IAM User.

Add IAM User
1 user add user
2 sidenav permissions
3 user confirmation
4 common complete
?

4. Successful User Registration : FStein
BACK TO IAM USER LIST
ADD ANOTHER IAM USER

IAM User Group
None

Effective Asset Permissions
My Assets

Effective Portal Permissions

Portals	Access	Access Type	Additional Permission
IAM	❌	Denied	-
Organization	❌	Denied	-
Cloud Management & Service			
FortiSandbox Cloud	✅	Read/Write	-

DOWNLOAD CSV

When the user logs in to FortiCloud, they can click *Sign in as IAM user* and use either the *Account ID/Alias* or *Username* to log in.

FortiCloud

Account ID / Alias:  
Account

Username:  
Username

Password:  
\*\*\*\*\*

ⓘ All fields are Case-Sensitive

LOGIN

Sign in using email | Forgot password?

Learn more about FortiCloud Privacy Terms

## Adding a secondary account

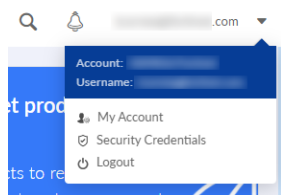
You can create a secondary account for FortiSandbox Cloud. A secondary account allows the Fortinet support team to troubleshoot the FortiSandbox Cloud deployment.



You can also create secondary accounts for additional users.

### To add a secondary account:

1. Log in to [FortiCloud](#).
2. In the banner, click the Account menu and click *My Account*. The *Account* page opens.



3. Click *Manage User*.
4. Click the new user icon to add a new user.

Account

Company:

Title:

Email:

Telephone:

Activated Since

2020-02-05

Account

Account Profile

Change Account ID (Email)

Manage User

My Account (IAM version)

Manage User

Current Users

Name

Email (Account ID)

Description

Action

5. When creating an account for the Fortinet support team, specify an email for the secondary account, and select *Full Access* or *Limit Access*.

A user with full access has the same access level as a primary account user. A user with limited access can only manage the assigned product serial number and will be unable to receive renewal notices or create additional secondary account users.

Account

Account Profile
Change Account ID (Email)
Manage User

### Add User

User Information

User Name:\*

Telephone:\*

Email (Account ID):\*

Confirm Email (Account ID):\*

Description:

Permissions

☒ Customer Service
☒ RMA/DOA
☒ Technical Assistance
☐ Notify the master account of ticket updates
☒ Send renewal notices
☒ Can create user

☒ Full Access
☐ Limit Access

You are about to create a sub-account for Fortinet, Inc. By doing so, you agree to share visibility for this account, including ticket history and asset management, as per the settings that you have defined. You agree to assure that sharing visibility does not breach any confidentiality obligations or applicable data protection legislation.

**Note:** If you have another account same email address, those accounts will be consolidated into one login account. Your original connection between email and accounts (master account or sub account) will be kept, you will use one login user ID/ password to access those accounts.

Save
Cancel

- Log in to the personal FortiCare portal. In the FortiSandbox Cloud section, you will see an account listed as a secondary member.

FortiManager Cloud & Service

Please choose your account

User ID	User Name	Owner	Company
363363 (Primary)	Travis H.	Travis H.	Fortinet
162930 (Secondary)	Travis H.	Travis H.	Fortinet
218927 (Secondary)	Travis H.	Travis H.	Fortinet

REFRESH
Can't find your account? Try to refresh it.

## Appendix A - Ingress and egress IP addresses

The following provides a list of ingress and egress IP addresses for FortiSandbox. You can use this list in access control lists to allow access to internal applications from FortiSandbox only.

Data center	Security ingress	Security egress
Burnaby	66.35.19.98	173.243.137.20 - 29
Frankfurt	154.52.2.163	194.69.174.8



**FORTINET**



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