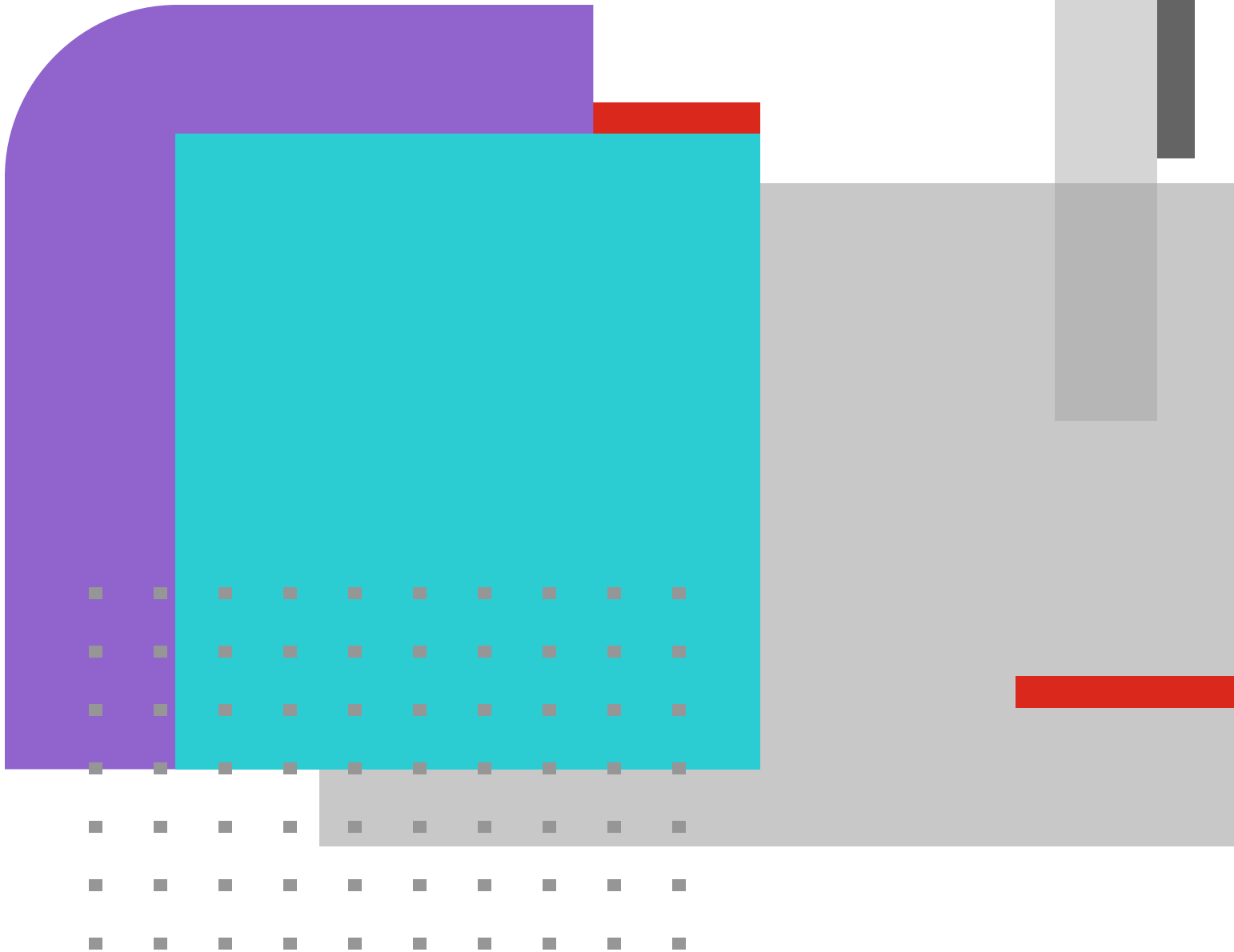


DEPLOYMENT GUIDE

Fortinet and OneLayer Integration Guide



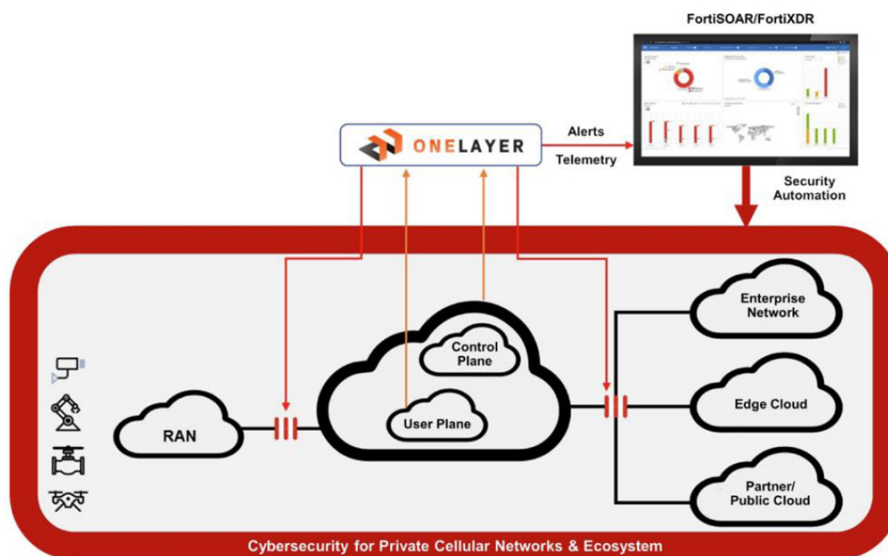
Overview

Fortinet and OneLayer have partnered to provide integrated security for LTE and 5G private networks. The joint solution includes real-time device identification, segmentation, policy enforcement, anomaly detection, and zero-trust security. This addresses the unique security challenges of private cellular networks and IoT devices, safeguarding against threats and preventing lateral movement between networks.

Architecture Overview

The OneLayer bridge integrates with the cellular packet core with the control and data planes. OneLayer OneID identifies and fingerprints the devices and correlates their cellular identifiers, such as IMEI and IMSI, to their IT network identifiers, such as IP address and MAC address, to enable securing the devices on the private cellular network, including devices behind cellular routers.

Device information, such as IPs and device types, is shared with the FortiGate Next-Generation Firewall (NGFW), enabling the creation of segmentation and security policies for enforcement between the cellular network and other enterprise networks. The FortiGate NGFW allows policies based on the device identity and context to mitigate unauthorized access. OneLayer applies segmentation policies inside the cellular network to prevent lateral movement between cellular devices.



FortiGate Configuration

Integrating the Fortinet FortiGate and the OneLayer OneID requires a two-way configuration to synchronize devices, groups, and policies automatically.

Step 1: FortiGate Configuration

API-based integration (recommended)

Create a new API token for OneLayer:

1. On the FortiGate GUI, select System > Admin Profiles > Create New.
2. Configure the firewall topic with read and write permissions.
3. Create a REST API Admin.
 - a. On the FortiGate GUI, select System > Administrators > Create New > REST API Admin.
 - b. Populate the fields as shown below:

4. In 6.4.2 and earlier, the Trusted Host must be specified to ensure your local host can reach FortiGate. For example, to restrict requests as coming from only 10.20.100.99, enter 10.20.100.99/32. The Trusted Host is created from the Source Address obtained in Step 1: Determine your Source Address.
5. Click OK, and an API token will be generated.
6. Copy and paste the key into the designated field in the OneLayer platform as described in Step 2 of this document. Note the API token, as it is only shown once and cannot be retrieved again.
7. Click Close to complete the creation of the REST API Admin.

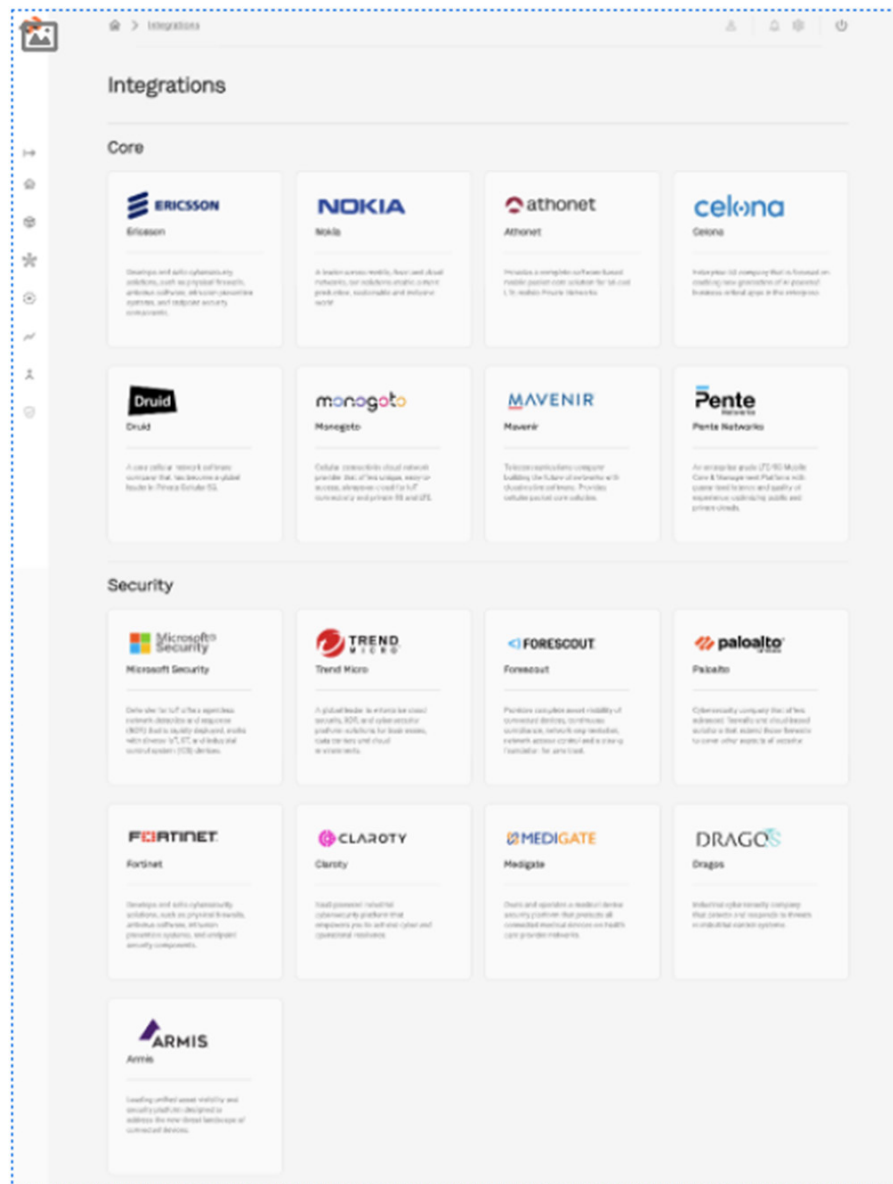
CLI integration: Create a new user for OneLayer.

Step 1: Create a new user for OneLayer to access FortiGate for the integration.

1. Go to System > Administrators and click "Create New." Enter the details for the user account and enter the details as shown in the screenshot below.
2. Enter the Username, Password, and Comments.
3. Select the Type of the user to be "Local User."
4. Set Administrator Profile to "super_admin."
5. Enable Restrict login to trusted hosts and put in the IP of the OneLayer.
6. Click OK.

Step 2: OneLayer Configuration

1. In the OneLayer dashboard, go to the Integrations page, and click on Fortinet.



Fortinet Integration page:

1. Choose a use case (currently available is policy groups update).
2. Configure the API token.
3. Select the groups to synchronize with FortiGate; options include all or specific groups.
4. Configure groups prefix (default: None).
5. Activate.

Fortinet

Policy Groups Update:

API Token:
[Where do I get the token from?](#)

Group configuration:

Group prefix:

Latest change: 2023/04/22 13:21

Similar integrations:

Druid

Druid

A core cellular network software company that has become a global leader in Private Cellular 5G.

monogoto

Monogoto

Cellular connectivity cloud network provider that offers unique, easy-to-access, always-on cloud for IoT connectivity and private 5G and LTE.

MAVENIR

Mavenir

Telecommunications company building the future of networks with cloud-native software. Provides cellular packet core solution.

Pente

Pente Networks

An enterprise-grade LTE/5G Mobile Core & Management Platform with guaranteed latency and quality of experience, optimizing public and private clouds.