

Alkira Platform Integration Guide

Partner Information	Company Name	https://www.alkira.com
	Website	Alkira, Inc.
	Partner Product	Alkira Platform
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Product Description	The Alkira Platform is an as-a-service multi-cloud network that offers a simple, secure, and scalable solution to connect users, branches, and data centers to a cloud or multiple clouds.	

Integration Details by Product

Palo Alto Networks Product	Integration Status	Palo Alto Networks Versions Tested	Alkira Versions Tested
VM-Series	Validated	VM-300, VM-700 PAN-OS 9.0.5-XFR	May 2020 (Alkira Platform is delivered as-a-service and hence does not have a software version)
Panorama	Validated	PAN-OS 9.1.2 Run same OS as VM-Series or higher	May 2020 (Alkira Platform is delivered as-a-service and hence does not have a software version)

Use Cases for Integration with the Palo Alto Networks VM-Series

Leveraging the Alkira Platform, organizations can now enforce their business security policies in the cloud with Palo Alto Networks VM-Series Virtual Next-Generation Firewalls. VM-Series firewalls would secure communication in the following use cases:

- ✓ On-premises to cloud
- ✓ Cloud to cloud
- ✓ Cloud to internet
- ✓ Cloud DMZ
- ✓ On-premises to internet

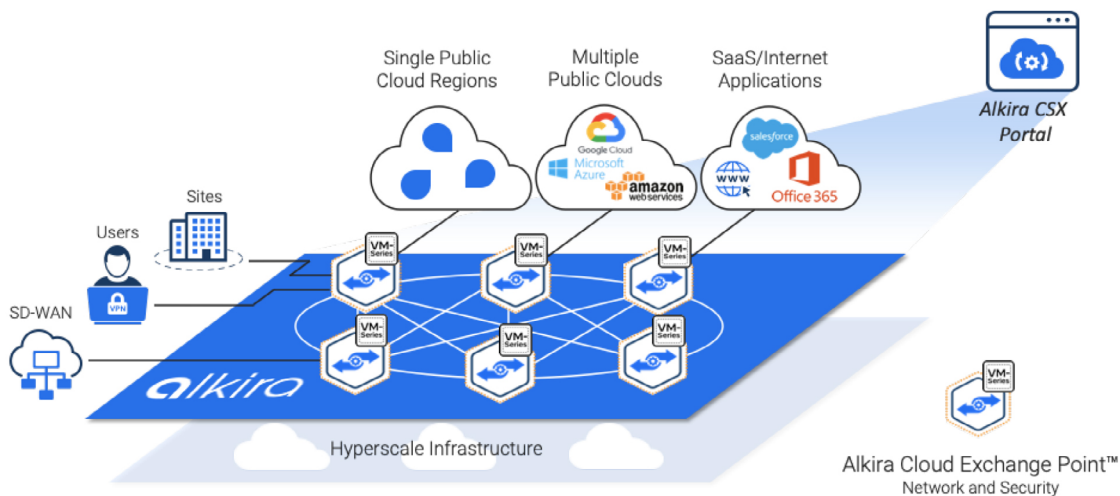
Integration Diagram

The Alkira Platform consists of globally distributed virtual infrastructure of Alkira Cloud Exchange Points™ (CXP). The CXPs are virtual multi-cloud points of presence with full routing stack and network services capabilities. The VM-Series firewall is deployed as a network service in the CXP.

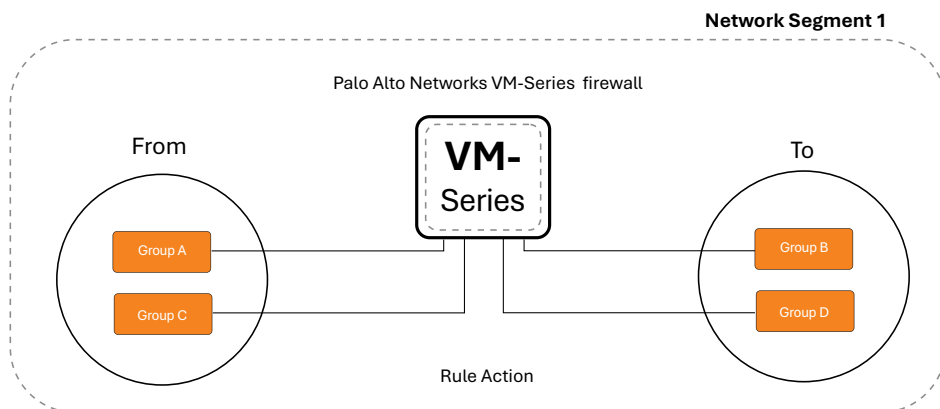
Integration Benefits

The ability to insert Next-Generation Firewalls for network traffic to and across clouds is imperative for successful cloud adoption. Integration of the Palo Alto Networks VM-Series firewall on the Alkira Platform provides customers the following benefits:

- ✓ The capability to point and click Palo Alto Networks VM-Series firewalls (VM-300 and VM-700) into a global on-demand multi-cloud network
- ✓ The capability to easily map various cloud and on-premises workloads to security zones on the firewall
- ✓ The ability to inspect and apply policies on the VM-Series for traffic on the Alkira Platform
- ✓ Symmetric traffic steering and simplification of the deployment for the customer
- ✓ Instantiation of VM-Series firewalls with correct instance sizing and capacity
- ✓ Ease of auto-scaling the firewall deployment based on real-time capacity demand. This is done with a simple setting on the Alkira Portal (graphical user interface)
- ✓ The ability to connect the VM-Series firewall to on-premises Palo Alto Networks Panorama™ network security management through an overlay network. This helps customers have a consistent enterprise security policy and operating model across a multi-cloud environment



Organizations create Alkira policies and rules in order to forward the application traffic of interest to the globally provisioned Palo Alto Networks firewalls. Policies identify the communication from/to parties and the particular network segment they belong to (different segments can have different policies). Communicating parties can be different cloud instances, sites communicating to the cloud, sites communicating to the internet and so on.



Rule 1: Send traffic from Group A (Zone 1) to Group B (Zone 2) to the Firewall for inspection

Rule 2: Send traffic from Group C (Zone 3) to Group D (Zone 4) to the Firewall for inspection

Before You Begin



License

Customers can deploy the VM-series on the Alkira Platform using their own enterprise license (ELA). This is considered the BYOL mode on the Alkira Platform. To do this, customers need to obtain Auth Codes corresponding to the VM-Series model (VM-300 or VM-700) they choose to deploy. Customers also need to obtain the Licensing API key from their Palo Alto Networks Support Portal.



Panorama

- ✓ Managing the VM-Series on the Alkira Platform through the existing enterprise Panorama is optional but recommended. It is mandatory if deploying more than one VM-Series on the Platform.
- ✓ Customers need to obtain Auth Key, Device Group name, Panorama IP address, and Template Stack name to connect the VM-Series to their existing enterprise Panorama.
- ✓ The Panorama version should be higher than the VM-series version to be deployed.

Partner Product Configuration

With Alkira, your multi-cloud network and VM-Series firewall security are offered as a service, on-demand, when you need it. You do not need to perform tedious network and routing configuration tasks. Your entire global multi-cloud network with Palo Alto Networks firewalls is modeled through the intuitive Alkira Cloud Services Exchange graphical user interface in point-and-click fashion.

The integration process includes:

✓ Selecting the Alkira Cloud Exchange Point where you want to provision the VM-Series firewall

The screenshot displays the Alkira Network Topology interface. At the top, a dark banner reads "Selecting the Alkira Cloud Exchange Point where you want to provision the VM-Series firewall". Below this, the interface shows a "Network Topology" view with a search bar and an "ACTIONS" dropdown. The main area features a central "US-WEST" configuration panel with three columns: "CONNECTORS", "SERVICES", and "APPLICATIONS". The "CONNECTORS" column shows a "Csprem" connector linked to a cloud region box containing "Los Angeles", "San Jose", and "Sacramento". The "SERVICES" column shows an "iPsec" service. The "APPLICATIONS" column shows a "VM-Series" application. A green "Add PAN Firewall" button is visible at the bottom of the configuration panel. To the right, an "Aws_prod" connector is linked to a cloud region box containing "production_e" and "production_w". A "Legend" button is located at the bottom left of the main area. At the bottom of the interface, a status bar indicates "Provisioning status: PENDING | 3 topology updates, across 1 CXPs" and a green "PROVISION" button.

✓ Optionally enabling firewall auto-scaling for dynamic capacity management

Network Topology / Add Palo Alto Networks Firewall (US-WEST)

Name: fw_prod

1. Configure Firewall

Panorama (Yes) No Yes

Device Group: grp1 IP Address: 172.31.1.2

Template Stack Name: stack1 Instance Scale: Autoscale ON (Min: 1, Max: 2)

Licensing (BYOL)

BYOL

License Key: [] FW Version: 9.0.5 FW Type: VM-300

Credentials

Username: admin Password: [] Confirm Password: []

Instances (2)

Instance #1 Auth Key: [] Instance #1 Auth Code: []

Instance #2 Auth Key: [] Instance #2 Auth Code: []

2. Sizing

S M L

3. Select target segment

Create a new segment

Default

on-prem []

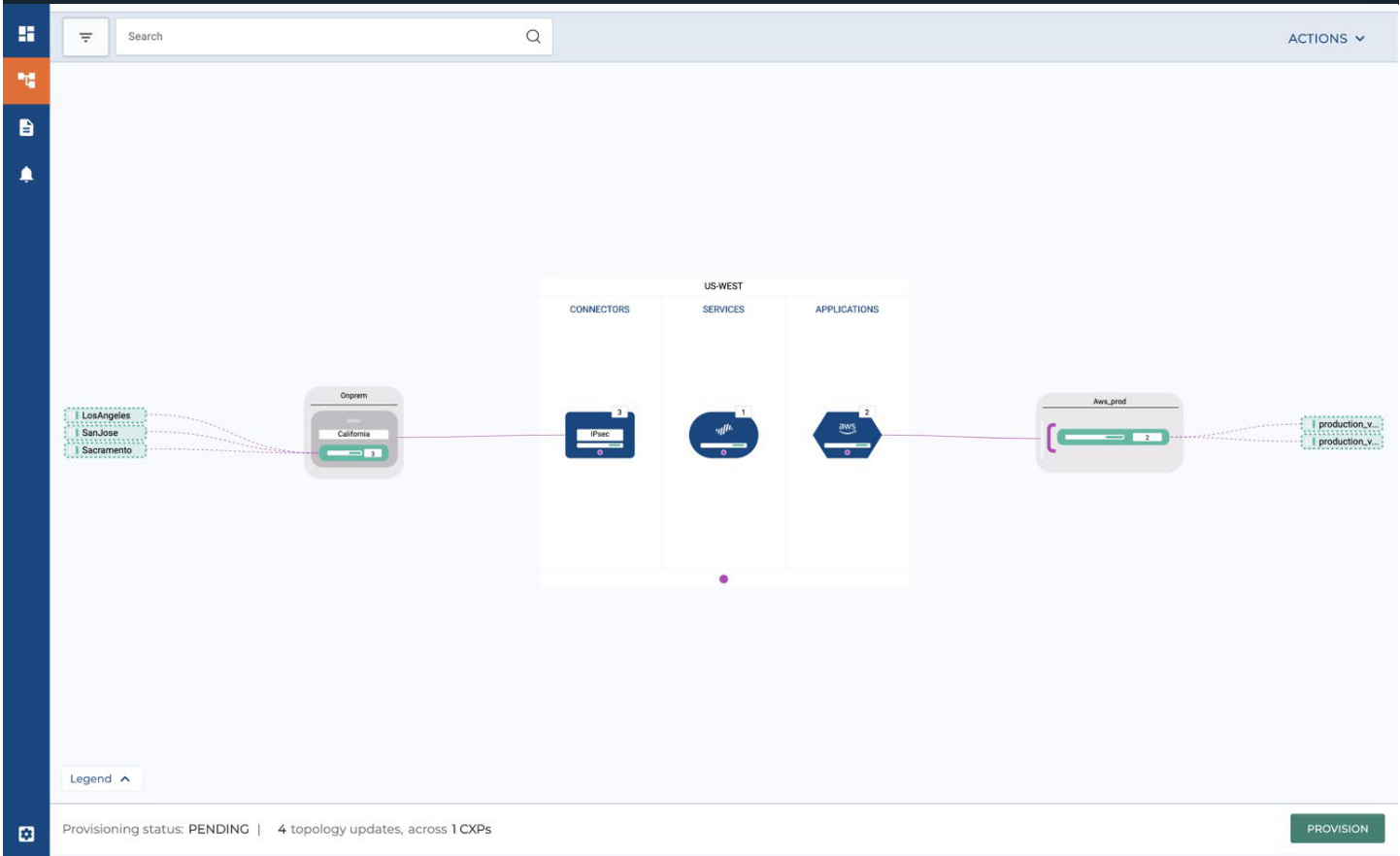
cloud []

Add a new Zone

Management Segment: Select Segment... Default

CANCEL SAVE

✓ Creating Alkira policies to forward traffic to the VM-Series firewalls



✓ Choosing licensing options (BYOL) for the VM-Series firewall deployment

The screenshot displays the Alkira management console interface. On the left, a sidebar contains navigation icons. The main area is titled 'Network Topology' and shows a central diagram with three server icons labeled 'SERVERS' connected to a central firewall icon labeled 'FW'. To the right, a 'Global Policies' panel is open, showing details for a policy named 'OnPrem_to_Cloud'. The policy details include: Name: OnPrem_to_Cloud, Description: IPv4 inspection policy for on-prem to AWS Production, Segments: Default, State: Disabled, Type: LMSI COMPLIED, Scope: onprem and aws_prod, Status: On Hold, and a rule named 'nat1' with traffic from ANY IP to ANY IP and to ANY IP with the action SERVICE FW.

Provisioning status: PENDING | 4 topology updates, 1 policy updates, across 1 GXP

- ✓ Choosing licensing options (BYOL) for the VM-Series firewall deployment
- ✓ Configuring Panorama integration (recommended for centralized management)
- ✓ Providing firewall-specific details like model and version
- ✓ Mapping network segments to corresponding zones on the VM-Series firewalls
- ✓ Enforcing enterprise security policies on the VM-Series firewalls

