VM-Series Firewall Auto Scaling Template for AWS (v2.0) Release Notes

Revision Date: November 20, 2018

Review important information about open issues and workarounds, and issues that are addressed in the current version of the VM-Series Firewall Auto Scaling template.

What's New

The VM-Series Firewall Auto Scaling Template for AWS allows you to deploy an auto scaling tier of VM-Series firewalls in a AWS load balancer sandwich topology. Version 2.0 of the template includes many changes that simplify the workflow for securing a larger number of application workloads for single or multi-VPC deployments within a single AWS account and cross-account deployments.

To help you manage increased application scale, version 2.0 of the template leverages the AWS ELB service and includes the following changes:

- New hub and spoke architecture that simplifies deployment.
- Multiple VPC architecture support for single, large VPC or many smaller VPCs.
- Native integration for publishing custom PAN-OS metrics to AWS CloudWatch
- Template design separation to simplify customization and enable better supportability of the VM-Series firewalls deployed using the auto scaling template.
- Automated NAT policy rules created on the firewalls to support new applications in your AWS environment.
- Support for referencing a custom AMI ID instead of the AWS Marketplace AMI ID to deploy the VM-Series firewall.
  Note: The auto scaling template does not support an AMI with an EBS volume that is encrypted using a customer managed key. Use the default key on the AWS KMS, to encrypt the EBS volume of the AMI you want to use for the auto scaling template.

Upgrade from Version 2.0.0 to Version 2.0.1

If you have deployed the auto scaling template version 2.0.0, you need to update the AWS Lambda functions that are being used in your currently deployed stack. Use the following procedure to update the Lambda functions in the panw-aws.zip file and get the fixes for the issues addressed in version 2.0.1:

Upgrade from Auto Scaling Template version 2.0.0 to 2.0.1	
Step 1 Set up access to the AWS CLI.	1. Refer to the AWS documentation to set up the AWS CLI: https://docs.aws.amazon.com/lambda/latest/dg/setup-awscli.html Make sure to set the AWS region to match the region in which you have deployed version 2.0 of the auto scaling template. 2. Enter **`aws configure`** to make sure the access keys are setup correctly: https://docs.aws.amazon.com/cli/latest/userguide/cli-chap-getting-started.html

Upgrade from Auto Scaling Template version 2.0.0 to 2.0.1		

Step 2	Copy and replace the AWS Lambda functions in your currently deployed stack.	1. Copy the *panw-aws.zip* file from the GitHub repository to the system where you are running the CLI.
		2. To get the AWS Lambda function names used in your current stack, use the following command:
		• On a Macintosh or Linux system:
		`aws lambda list-functions | grep Function-Name | grep <stack_name>`
		replace <*stack_name*> with the stack name in your AWS region. For example:
		user@Mac:~/code/PAN/aws$ **`aws lambda list-functions | grep FunctionName | grep rr-ascE`**
		`"FunctionName": "rr-ascE-az2n-Z3ZVPHT2RRLD-InitLambda-SD3ASBPGOUTQ",`
		`"FunctionName": "rr-ascE-az2n-Z3ZVPHT2RRLD-lambda-sched-event",`
		`"FunctionName": "rr-ascE-az2n-Z3ZVPHT2RRLD-AddENILambda-13825VV7YMOLI"`
		• On a Windows system:
		`aws lambda list-functions --output json | findstr FunctionName |findstr <stack_name>`
		replace <*stack_name*> with the stack name in your AWS region. For example:
		C:\Users\windows>**`aws lambda list-functions --output json | findstr FunctionName | findstr OarkSTK16`**
		`"FunctionName": "OarkSTK16-az2-ZOWPZ-VEB4PW7-AddENILambda-P3UNT2YHD0VR",`
		`"FunctionName": "OarkSTK16-az2-ZOWPZ-VEB4PW7-lambda-sched-event",`
		`"FunctionName": "OarkSTK16-az2-ZOWPZ-VEB4PW7-InitLambda-15S9VWF7TX1G4",`
		3. Run the following command to update the AWS Lambda function code for each function listed above:
		`aws lambda update-function-code --function-name <function_name> --zip-file fileb://<path_to_zip_file>`
		where `<path_to_zip_file>` is the location where you copied the panw-aws.zip file. For example:
		`aws lambda update-function-code --function-name OarkSTK16-az2-ZOWPZVEB4PW7-AddENILambda-P3UNT2YHD0VR --zip-file fileb://C:\AWS\Version-2-0-1\panw-aws.zip`

Step 3	Verify that you see the updated files on the AWS Management Console.	1. Log in to the AWS Managament Console. 2. Select **Services > Lambda > Functions**, and search for the function name you just updated. 3. Verify that the Last Modified timestamp is updated. 4. Select the function name, and verify that line 23 displays the version 2.0.1.

Known Issues

The following list describes known issues in the VM-Series Auto Scaling Template for AWS version 2.0:

Issue ID	Description
HYPI-121	You cannot deploy the auto scaling template in Sao Paolo (sa-east-1). This is because some of the resources that the template requires are not available in the Sao Paolo region.
HYPI-189	If you are using Panorama to manage the firewalls deployed using the template, the firewalls deployed using the PAN-OS 8.0.6 AMI report the status as **Out of Sync** for Shared Policy and Templates on **Panorama > Managed Devices**.
HYPI-207	When you deploy the application template multiple times in the same region within the same account, you must provide a unique name (instead of default name) for the AWS DynamoDB table. If you use the default table name, the same table is reused across multiple instances of the application stack and results in a port mismatch issue when you delete a stack. The mismatch can cause firewalls to route traffic to the wrong network load balancer.
HYPI-208	The template stack name must be 128 characters or less. A longer stack name results in a template validation error and results in a failure to deploy the stack.
HYPI-211	Bootstrapping fails in the Ohio and Oregon regions, when you create a new S3 bucket and reference it when launching the template.
HYPI-290	The auto scaling template does not support an AMI with an EBS volume that is encrypted using a customer managed key. Workaround: Use the default key on the AWS KMS, to encrypt the EBS volume of the AMI you want to use for the auto scaling template.

For PAN-OS 8.0 and 8.1 issues, refer to the

- Known issues for 8.0, 8.1,the page includes a link for critical updates.
- Addressed Issues for 8.0. 8.1,

Getting Help

Related Documentation

Refer to the following documentation on the Technical Documentation portal or search the documentation for more information on our products:

- **PAN-OS Administrator's Guide**—Provides the concepts and solutions to get the most out of your Palo Alto Networks next-generation firewalls. This includes taking you through the initial configuration and basic set up on your Palo Alto Networks firewalls for PAN-OS 8.0.
- **Panorama Administrator's Guide**—Provides the basic framework to quickly set up the Panorama™ virtual appliance or an M-Series appliance on version 8.0 for centralized administration of the Palo Alto Networks firewalls.
- **VM-Series Deployment Guide**—Provides details on deploying and licensing the VM-Series firewall on all supported hypervisors for PAN-OS 8.0.
- **Online Help System**—Detailed, context-sensitive help system PAN-OS 8.0 integrated with the firewall web interface.

Requesting Support

For contacting support, for information on support programs, to manage your account or devices, or to open a support case, refer to https://www.paloaltonetworks.com/support/tabs/overview.html.

To provide feedback on the documentation, please write to us at: documentation@paloaltonetworks.com.

Contact Information

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