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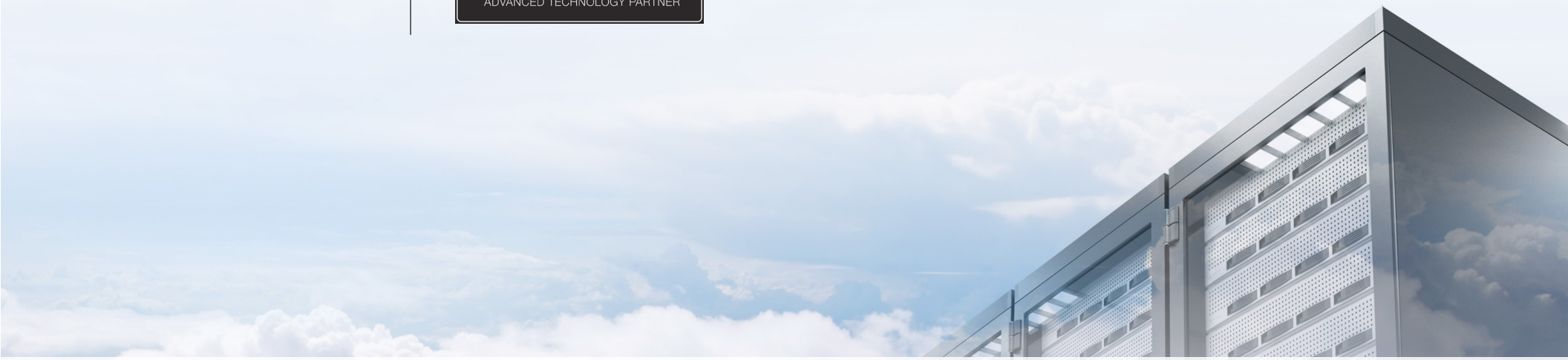

FortiGate AWS Sizing Guide

FortiGate VM

An integral part of Fortinet's Security Fabric is the FortiGate VM. The FortiGate VM is a fully functional Enterprise Firewall.

Using the advanced FortiOS™ operating system, FortiGate appliances effectively neutralize a wide range of security threats facing your virtualized environment. Whether deployed at the edge as a front-line defense, or deep within the virtual infrastructure for interzone security, FortiGate appliances protect your infrastructure with some of the most effective security available today by enabling security features you need.

FortiGate virtual appliances offer protection from a broad array of threats, with support for all of the security and networking services offered by the FortiOS operating system. In addition, the appliances increased visibility within virtualized infrastructure and supported rapid and simplified deployment capabilities, especially with support for auto scaling and on-demand deployment capabilities on AWS.

Supported Deployment Types

With a multitude of deployment methods supported across various private and public cloud deployments, on AWS the FortiGate VM is supported in two models:

- Pay-as-You-Go / On-Demand Model
- BYOL Model

CHOOSING BETWEEN BYOL AND ON-DEMAND

BYOL

BYOL is ideal for migration use cases, where an existing private cloud deployment is migrated to a public cloud deployment. When using an existing license, the only additional cost would be the price for the AWS instances.

Under the BYOL model, there are presently four VM models:

Type	Maximum CPU	Maximum Memory	Deployment Sizes
VM-01	1	2 GB	Small
VM-02	2	4 GB	Medium
VM-04	4	8 GB	Large
VM-08	8	12 GB	Large

When deploying these on AWS, there are various supported options for the instance sizes.

On-Demand Pricing

On-demand licensing is a highly flexible option for both initial deployments and growing them as needed. With a wide selection of supported instance types, there is a solution for every use case.

About EC2 Sizes

AWS offers various EC2 sizes (e.g., c4.large, c4.xlarge, c4.2xlarge, and so on). Each size refers to a specific configuration in terms of processor, cores, memory, etc. For more detailed information about EC2 sizes, refer to Amazon's latest EC2 sizing chart.

The FortiGate VM is supported in the following EC2 instance types:

EC2 Instance Type	vCPU	Memory (GB)
m3.medium	1	3.75
m3.large	2	7.5
m3.xlarge	4	15
m3.2xlarge	8	30
c4.large	2	3.75
c4.xlarge	4	7.5
c4.2xlarge	8	15
c3.large	2	3.75
c3.xlarge	4	7.5
c3.2xlarge	8	15

When using on-demand licensing, the FortiGate configuration is the same as the instance type in use.

For example:

FOR C4.LARGE

Instance Configuration	2 vCPU	3.75 GB Memory
FortiGate Configuration	2 vCPU	3.75 GB Memory

This maps most closely to a FortiGate VM 02, but has more memory.

FOR C4.XLARGE

Instance Configuration	4 vCPU	7.5 GB Memory
FortiGate Configuration	4 vCPU	7.5 GB Memory

This maps most closely to a FortiGate VM 04, but has more memory.

FOR C4.2XLARGE

Instance Configuration	8 vCPU	15 GB Memory
FortiGate Configuration	8 vCPU	15 GB Memory

This maps most closely to a FortiGate VM 08, but has more memory.

CHOOSING EC2 INSTANCE TYPES

Below are some of the key offerings of the two supported instance types.

M3 INSTANCES

M3 instances are general-purpose instances designed to provide a good balance of memory, CPU, and networking. They are ideal for both mid-size databases and memory-hungry data processing tasks. Overall, these instances provide the lowest-cost options. M3 instances do not support SR-IOV and so have lower network performance throughput than C3 instances.

- Processor – Intel Xeon E5-2670
- Storage – SSD
- SR-IOV/Enhanced Networking – Not Available

C3 INSTANCES

C3 is a computed optimized instance, and it is designed for compute-intensive applications including distributed analytics. They have a higher ratio of vCPUs to memory. C instances provide the lowest cost per vCPU in AWS. C3 instances support SR-IOV and hence are great for high network throughput.

- Processor – Intel Xeon E5-2680 v2
- Storage – SSD
- SR-IOV/Enhanced Networking – Supported

C4 INSTANCES

C4 is a computed optimized instance, and it is designed for compute-intensive applications including distributed analytics. It has a higher ratio of vCPUs to memory. C instances provide the lowest cost per vCPU in AWS. C4 instances support SR-IOV and hence are great for high network throughput.

- Processor – Intel Xeon E5-2666 v3
- Storage – SSD
- SR-IOV/Enhanced Networking – Supported

When deciding on instance type for a BYOL use case, make sure that the AWS instance type and the FortiGate configurations match up well.

FortiGate VMs on AWS are fully capable of auto scaling. Auto scaling helps you to scale your Amazon EC2 capacity up or down automatically based on need and predefined parameters.

REFERENCES

- Fortinet AWS
  http://www.fortinet.com/aws
- Amazon EC2 Instances
  http://aws.amazon.com/ec2/instance-types

DON'T TAKE OUR WORD FOR IT – CHECK IT OUT YOURSELF

- Test drive an HA demo in AWS http://www.fortinet.com/promo/aws-testdrive.html 
- Fire up a free 15 day trial in Amazon Marketplace https://aws.amazon.com/marketplace/pp/B00PCZSWDA/ref=sp_mpg_product_title?ie=UTF8&sr=0-5 
- Call 1-866-868-3678 about EC2 proof of concept credits 
- Contact Fortinet AWS Sales awssales@fortinet.com 

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