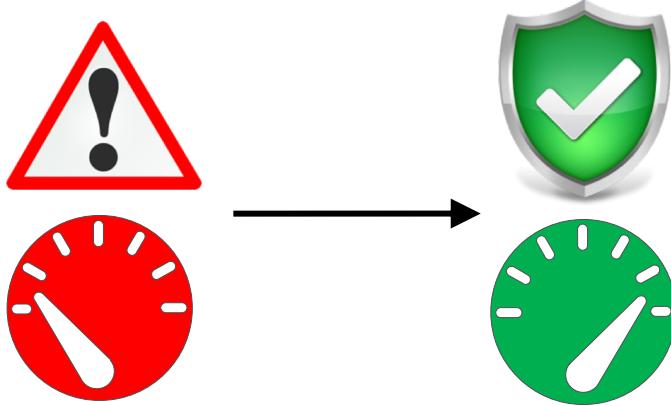




# Cloud Solution Templates

# Why do I need F5's Cloud Solution Templates?



## Tested & Validated

- Manual configuration of app services is time consuming and prone to error
- Templates designed and tested by F5 experts following cloud best practices.
- VE Deployments in minutes



## Simple & Automated

- Templates Integrate with 3<sup>rd</sup> party automation tools such as Chef, Puppet & Ansible
- Improves efficiency while reducing cost, variability and deployment risks



## Common Solutions Across Clouds

- F5 is striving towards template parity across cloud vendors
- Enabling fast & simple replication of app services across multiple cloud platforms.

# General Template Information

1. These templates simplify and speed up the deployment of BIG-IP VE's in public cloud environments by packaging together all of the necessary resources and BIG-IP configuration parameters needed to launch fully functioning BIG-IP VE's in a virtual cloud network.
2. This deck contains only '*F5 supported*' templates, which are those that have been created, tested and verified by F5 Networks engineers, allowing customers to request assistance with them should they need it. There are also 'Experimental' templates on [GitHub](#) which have not been fully validated and are not subject to customer support.
3. All templates support BIG-IP v12.1.x through v13.1
4. All templates have built-in security checks, allowing customers to ensure the integrity of the template
5. All deployment times (both manual and templated times) stated in this deck are **ESTIMATES**, and assume the user has an intermediate level of experience with both the BIG-IP and the cloud platform in question. All times include boot time for the VE's (~20mins). Pre-req's are not included since they are required for both manual and templated deployments, but are adjudged to take around 15-20mins. It is important to note that with the more complex configurations such as the auto scaling solutions, somebody without BIG-IP or cloud experience would take much longer than the estimated times (magnitude of days to weeks) to replicate the set-up.

# AWS Template Updates/Notes – Release 8

- ***BIG-IP v13.1.0.2 Support***

All supported templates now support BIG-IP v13.1.0.2

- ***GovCloud Template Support***

All supported templates can now be used to launch BIG-IP solutions in the AWS GovCloud region.

# Azure Template Updates/Notes – Release 8

- ***BIG-IP v13.1.0.2 Support***

All supported templates now support BIG-IP v13.1.0.2

- **Upcoming Support for Azure Stack**

Azure ARM templates can be used across both Azure and Azure Stack, however, Azure Stack currently only supports 1NIC instances. As such only the Standalone 1NIC template will be supported in Azure Stack at launch. As the Azure Stack platform matures, more of F5's ARM templates will be supported.

# Google Template Updates/Notes – Release 8

- ***BIG-IP v13.1.0.2 Support***

All supported templates now support BIG-IP v13.1.0.2

- ***Standalone 1NIC, 2NIC & 3NIC Hourly Templates***

Deploy standalone, pay-as-you-go BIG-IP VE instances in GCP with 1, 2 or 3 network interfaces.

- ***Standalone 2NIC & 3NIC BYOL Templates***

Deploy standalone BYOL BIG-IP VE instances in GCP with 2 or 3 network interfaces.

- ***Service Discovery***

All supported templates now support service discovery of workloads.

# Supported Public Cloud Solution Templates



- 1NIC Architecture
- 2NIC Architecture
- 3NIC Architecture
- 2 Clustered BIG-IP's (Same AZ)
- 2 Clustered BIG-IP's (Across AZ)
- Auto Scale Cloud WAF (Gbps & vCPU)
- Auto Scale Cloud LTM (Gbps & vCPU)

## Microsoft Azure

- 1NIC Architecture
- 2NIC Architecture
- 3NIC Architecture
- n-NIC Architecture
- 2 Clustered BIG-IP's (A/A 1NIC)
- HA Pair (A/S 3NIC)
- Auto Scale Cloud WAF (Gbps & vCPU)
- Auto Scale Cloud LTM (Gbps & vCPU)



Google Cloud Platform

- 1NIC Architecture
- 2NIC Architecture
- 3NIC Architecture

# Cloud Solution Templates by Use Case

## Application Security

- Auto Scale Cloud WAF [AWS, Azure]

## Advanced Traffic Management

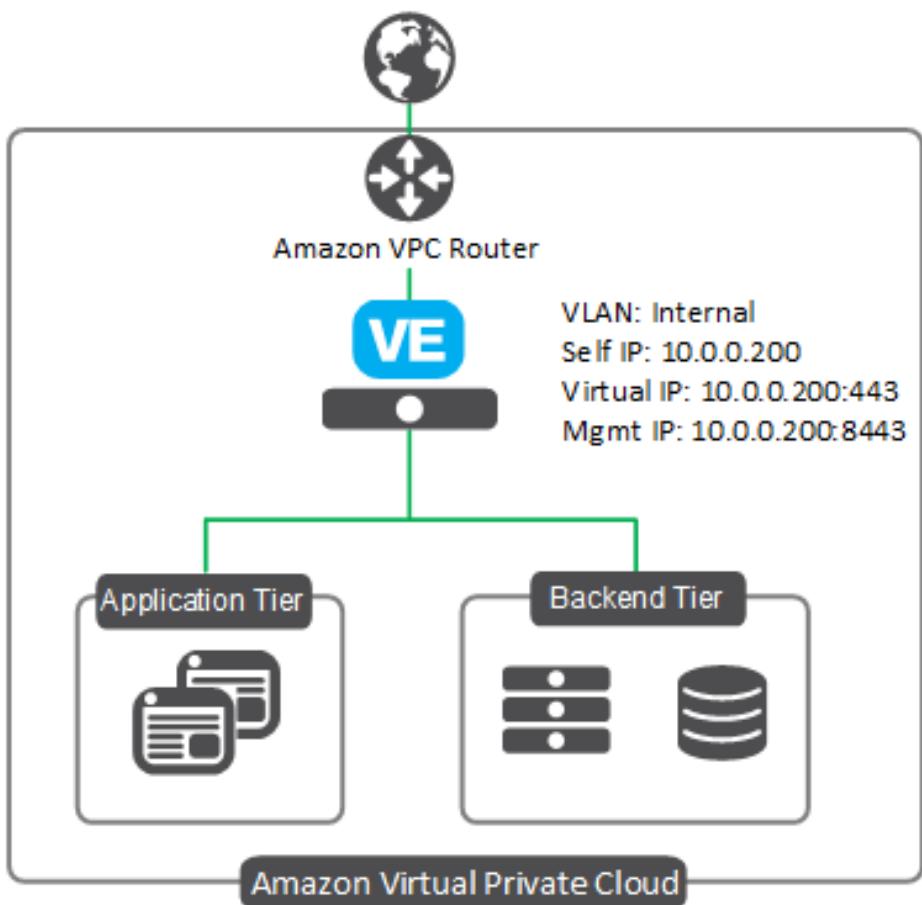
- Auto Scale Cloud LTM [AWS, Azure]

## Deployment Topologies

- 1NIC VE Deployment [AWS, Azure, Google, OpenStack]
- 2NIC VE Deployment [AWS, Azure, Google, OpenStack]
- 3NIC VE Deployment [AWS, Azure, Google]
- n-NIC VE Deployment [Azure, OpenStack]
- HA (Active/Active) [AWS, Azure]
- HA (Active/Standby) [Azure, OpenStack]

# 1-NIC BIG-IP VE Deployment on AWS

For deploying a single, standalone BIG-IP device with one network interface



Deploys a standalone BIG-IP VE in a pre-existing AWS VPC, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 1 network interface, processing both management and data plane traffic from the internet. This is the set-up most cloud native developers are accustom to and is best for single tenant or ‘per app’ services.

- BYOL and PAYG templates available

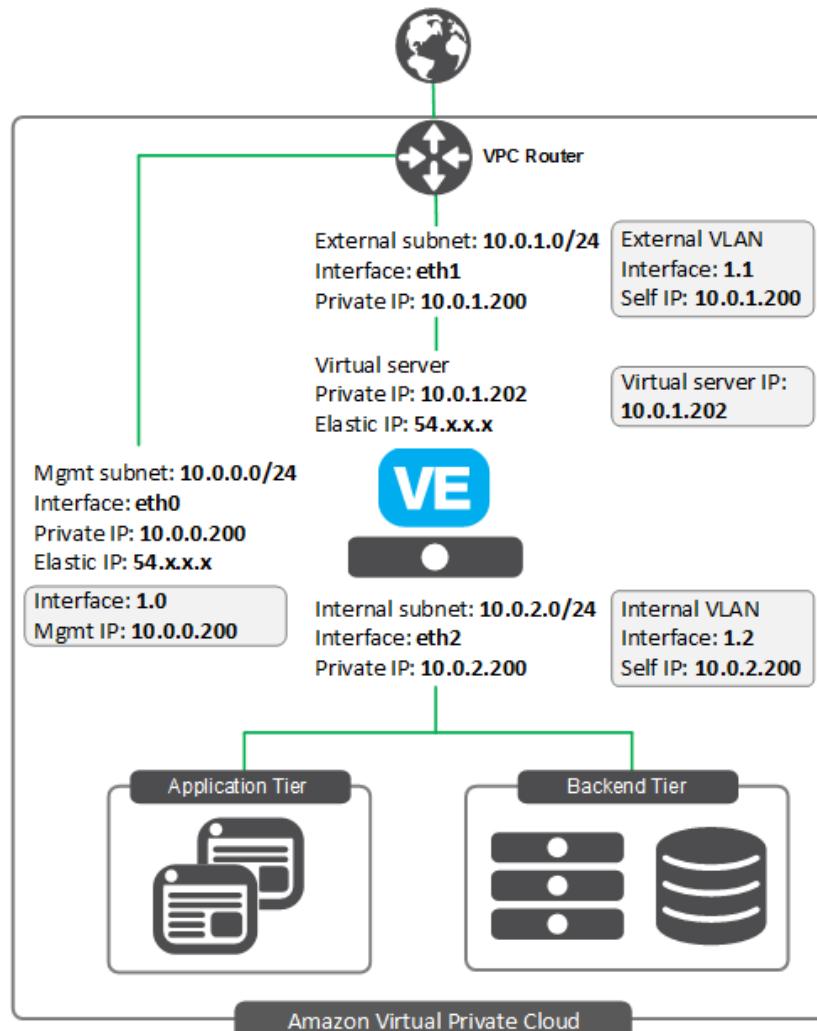
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# 2-NIC BIG-IP VE Deployment on AWS

For deploying single, standalone BIG-IP device(s) with two network interfaces



Deploys a standalone BIG-IP VE in a pre-existing AWS VPC, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 2 network interfaces, One for management & data-plane traffic from the internet and another for traffic from the AWS network providing greater autonomy to control the management functions

- BYOL and PAYG templates available

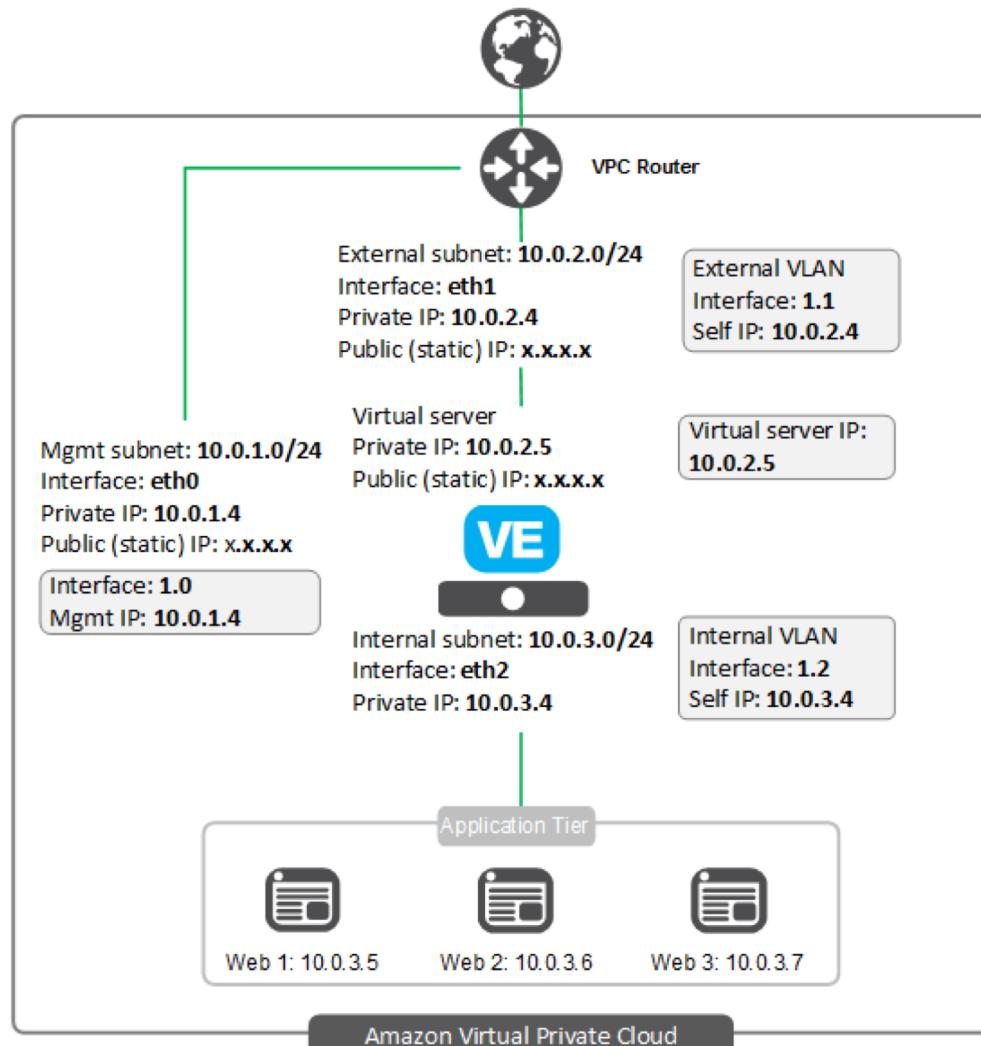
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# 3-NIC BIG-IP VE Deployment on AWS

For deploying single, standalone BIG-IP device(s) with two network interfaces



Deploys a standalone BIG-IP VE in a pre-existing AWS VPC, where traffic automatically flows via the VE to the application servers. The BIG-IP VE instance operates with 3 network interfaces and is most similar to an ‘on-premise’ deployment, with one interface for management, one for front-end application traffic and one for back end application traffic

- Multi-NIC configurations are necessary when deploying multiple applications on different IP addresses, or multi-tenant configurations.
- BYOL and PAYG templates available

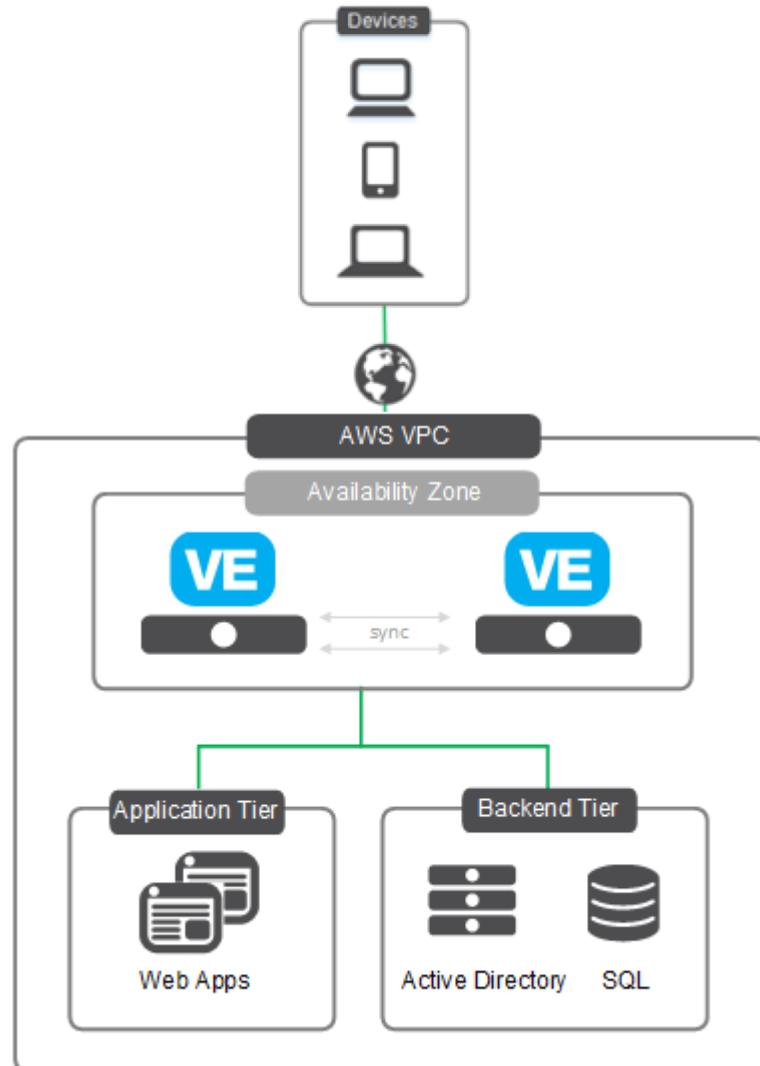
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# Clustered Deployment of 2 BIG-IP VE's on AWS (Same AZ)

For deploying BIG-IP's in parallel in the same AZ for increased availability



Launches and configures two BIG-IP VE's in a single availability zone in an Active-standby arrangement for high availability, such that should one BIG-IP fail, traffic is automatically redirected to the unaffected device until the issue is resolved.

- The BIG-IP instance operates with 2 network interfaces:
  - One for management & data-plane traffic from the internet
  - Another for traffic from the AWS network
- BYOL and PAYG templates available

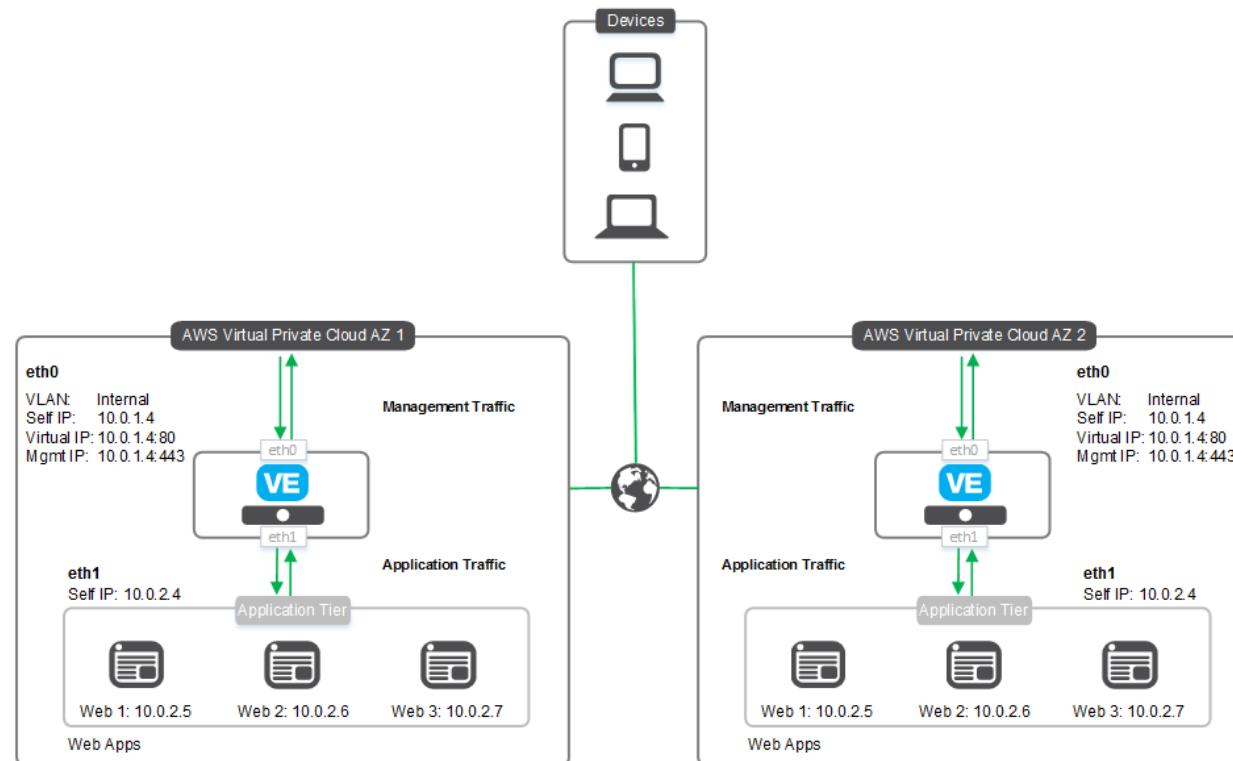
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 8+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# Clustered Deployment of 2 BIG-IP VE's on AWS (Across AZ)

For deploying BIG-IP's in parallel across AZ's for further enhanced availability



Launches and configures two BIG-IP VE's in 2 separate availability zones (AZ) in an active-standby arrangement for high availability, such that should one AZ fail, public traffic is automatically re-directed to the unaffected one.

- The BIG-IP instance operates with 2 network interfaces:
  - One for management & data-plane traffic from the internet
  - Another for traffic from the AWS network
- BYOL and PAYG templates available

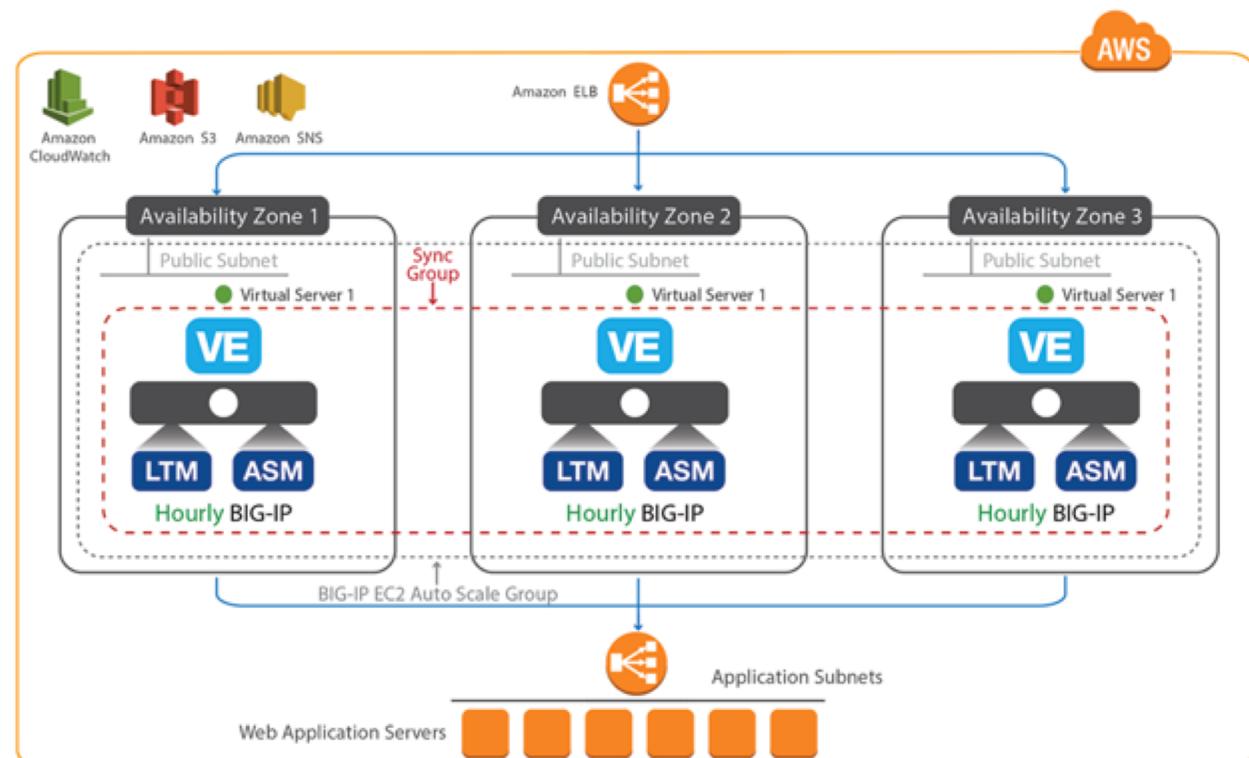
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 8+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# Auto Scale WAF deployment on AWS

For consistent application protection regardless of traffic volume or CPU utilization



Launches a PAYG BIG-IP VE instance with LTM and ASM provisioned for intelligent traffic management and application security. As traffic or vCPU consumption fluctuates, identical instances are automatically spun up or down to provide the optimal solution for processing application traffic.

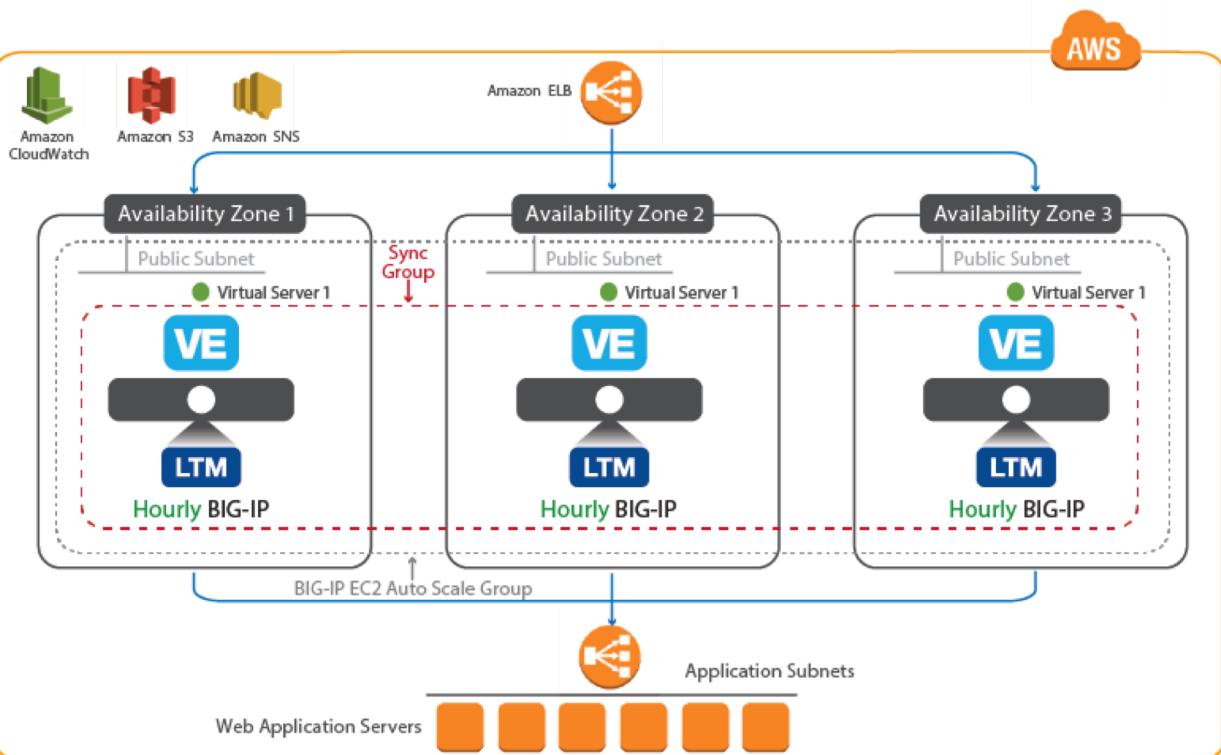
- The BIG-IP instances operate with 1 network interface
- Scale up & Scale down events based on a pre-defined % of traffic or vCPU thresholds, typically 80% for scale up, 20% for scale down.
- AWS resources required include: S3 bucket, IAM role, CloudWatch, Auto Scale Group and SNS Topic.
- Available with PAYG instances or with BYOL licenses when used in conjunction with BIG-IQ License Manager (free).
- Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 7+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# Auto Scale BIG-IP LTM deployment on AWS

For consistent application protection regardless of traffic volume or CPU utilization



Deploys BIG-IP LTM in an Auto Scaling group, to consistently provide intelligent traffic management services to applications under varying traffic loads. As traffic or vCPU consumption fluctuates, identical instances are automatically spun up or down to provide the optimal solution for processing application traffic.

- BIG-IP instances operate with 1 network interface
- Scale up & Scale down event triggers based on a pre-defined % of traffic or vCPU thresholds, typically 80% for scale up, 20% for scale down.
- AWS resources required include: S3 bucket, IAM role, CloudWatch, Auto Scale Group and SNS Topic.
- Available with PAYG instances or with BYOL licenses when used in conjunction with BIG-IQ License Manager (free).

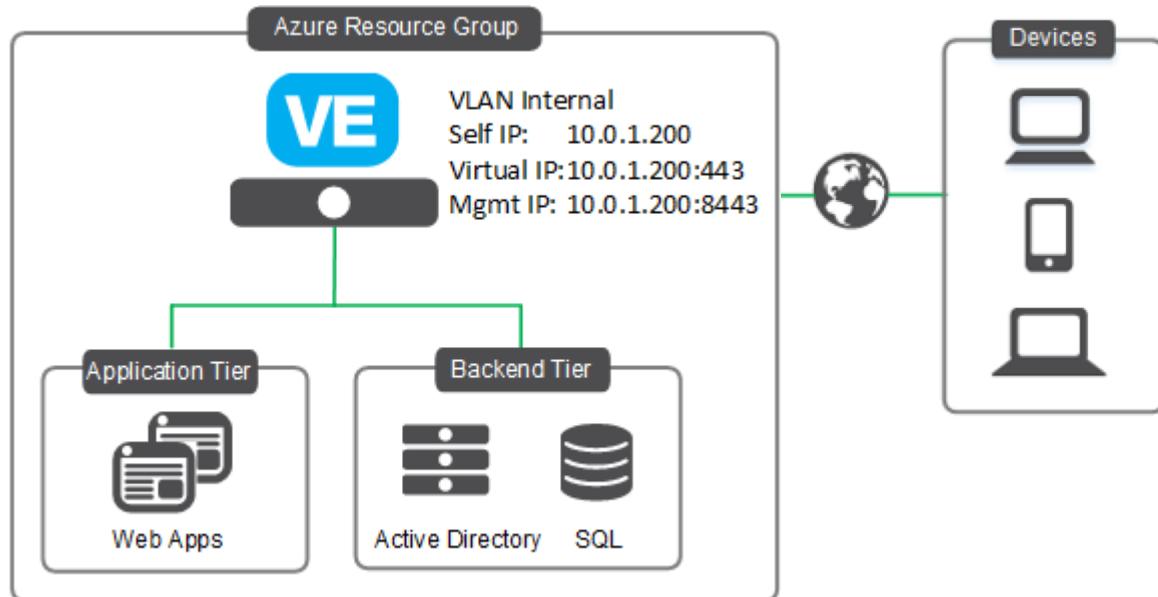
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 6+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# 1-NIC BIG-IP VE Deployment in Azure/Azure Stack

For deploying a single, standalone BIG-IP device with one network interface



Deploys a standalone BIG-IP VE in a new or pre-existing Azure virtual network, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 1 network interface, processing both management and data plane traffic from the internet. This is the set-up most cloud native developers are accustom to and is best for single tenant or 'per app' services.

- BYOL and PAYG templates available

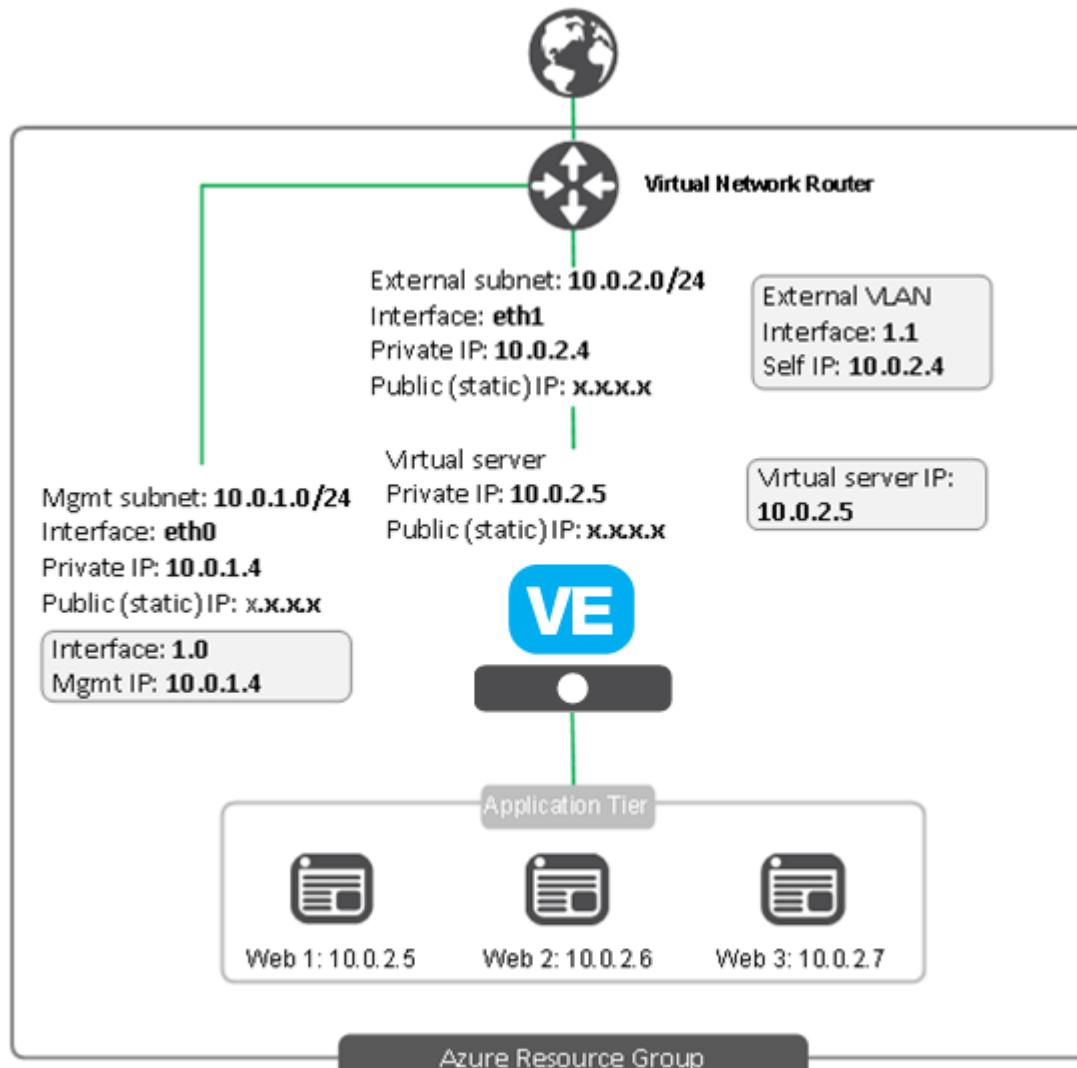
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# 2-NIC BIG-IP VE Deployment in Azure

For deploying single, standalone BIG-IP device(s) with two network interfaces



Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

Deploys a standalone BIG-IP VE in a new or pre-existing Azure virtual network, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 2 network interfaces, one for management & data-plane traffic from the internet and another for traffic from the AWS network providing greater autonomy to control the management functions

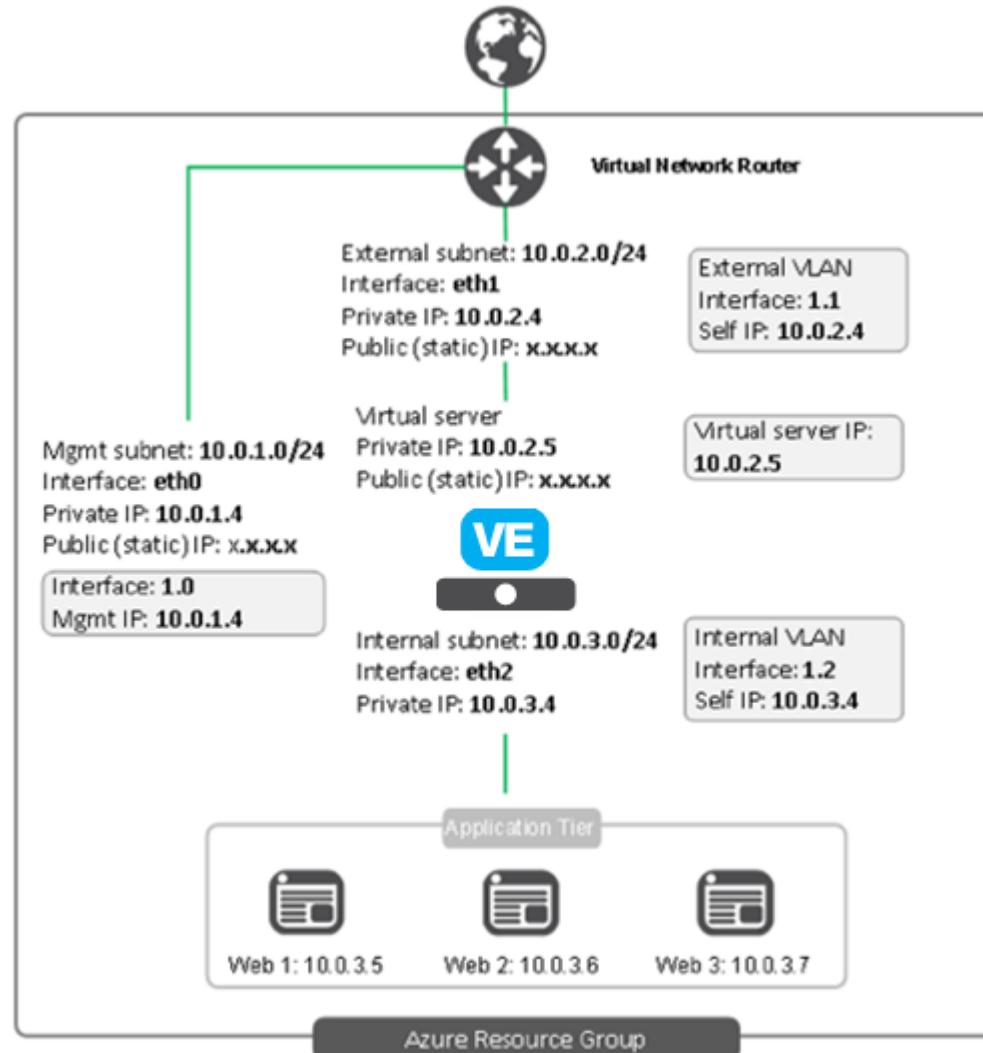
- Multiple public/private IP addresses available per NIC
- BYOL and PAYG templates available

Pre-requisites to this template can be found [here](#)

[Link to GitHub](#)

# 3-NIC BIG-IP VE Deployment in Azure

For deploying single, standalone BIG-IP device(s) with three network interfaces



Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

Deploys a standalone BIG-IP VE in a new or pre-existing Azure virtual network, where traffic automatically flows via the VE to the application servers. The BIG-IP VE instance operates with 3 network interfaces and is most similar to an ‘on-premise’ deployment, with one interface for management, one for front-end application traffic and one for back end application traffic

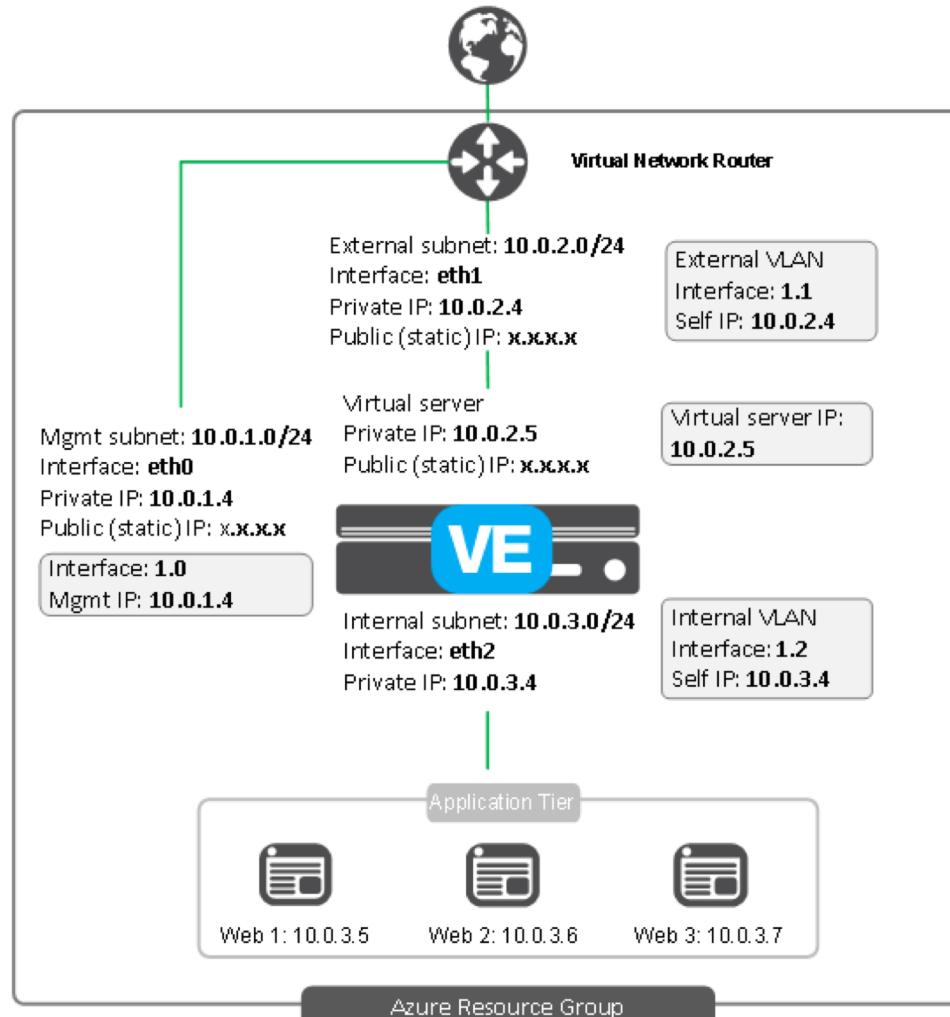
- Multi-NIC configurations are necessary when deploying multiple applications on different IP addresses, or multi-tenant configurations.
- BYOL and PAYG templates available

Pre-requisites to this template can be found [here](#)

[Link to GitHub](#)

# Multi-NIC BIG-IP VE Deployment in Azure

For deploying single, standalone BIG-IP device(s) with 3+ network interfaces



Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

Deploys a standalone BIG-IP VE in a new or existing Azure virtual network, where traffic automatically flows via the VE to the application servers. The BIG-IP VE instance is launched with 3 network interfaces but the template has the capability to add additional interfaces (up to a total of 8). This template is useful when the VE is acting as a traffic controller requiring more than 3 interfaces.

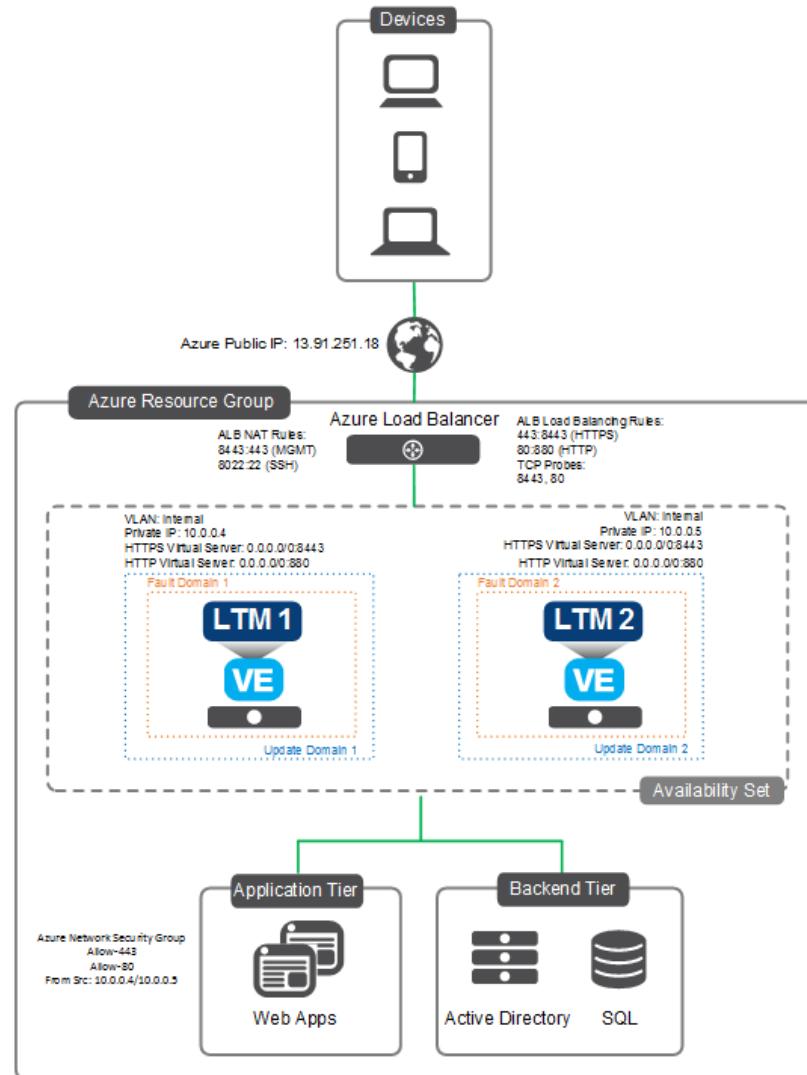
- Multi-NIC configurations are necessary when deploying multiple applications on different IP addresses, or multi-tenant configurations.
- BYOL and PAYG templates available

Pre-requisites to this template can be found [here](#)

[Link to GitHub](#)

# Clustered deployment of 2 BIG-IP VE's in Azure (1NIC)

For deploying BIG-IP VE's in parallel for increased availability



Manual Deployment ~ 8+ hours  
Templated Deployment ~ 40 mins

Deploys two BIG-IP VE's across an Azure availability set in an Active-Active configuration for enhanced availability. The BIG-IP's are configured in front of pre-existing application servers, and thus traffic traverses the BIG-IP's to these servers.

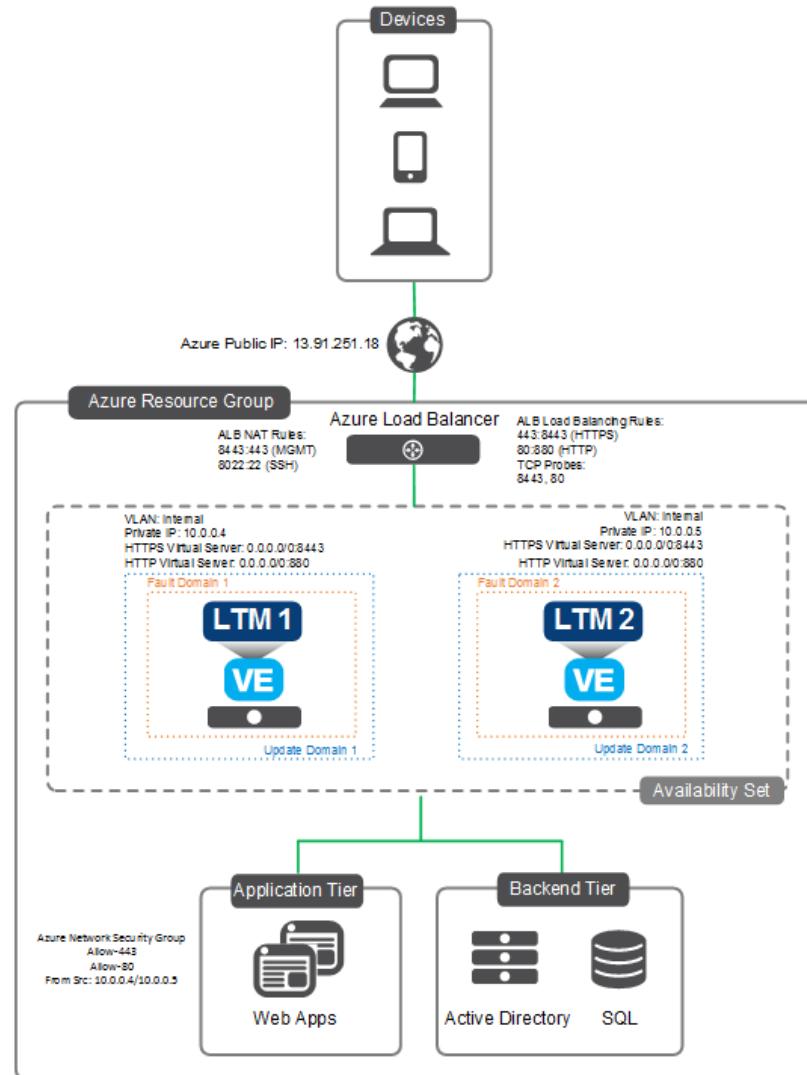
- The BIG-IP VE instance operates with 1 network interface used for both management and data plane traffic.
- Requires use of an Azure Load Balancer
- BYOL and PAYG templates available

Pre-requisites to this template can be found [here](#)

[Link to GitHub](#)

# Clustered deployment of 2 BIG-IP VE's in Azure (3NIC)

For deploying BIG-IP VE's in parallel for increased availability



Manual Deployment ~ 8+ hours  
Templated Deployment ~ 40 mins

Deploys two BIG-IP VE's across an Azure availability set in an Active-Active configuration for enhanced availability. The BIG-IP's are configured in front of pre-existing application servers, and thus traffic traverses the BIG-IP's to these servers.

- The BIG-IP VE instance operates with 3 network interfaces, with one interface for management, one for front-end application traffic and one for back end application traffic
- Requires use of an Azure Load Balancer
- BYOL and PAYG templates available

Pre-requisites to this template can be found [here](#)

[Link to GitHub](#)

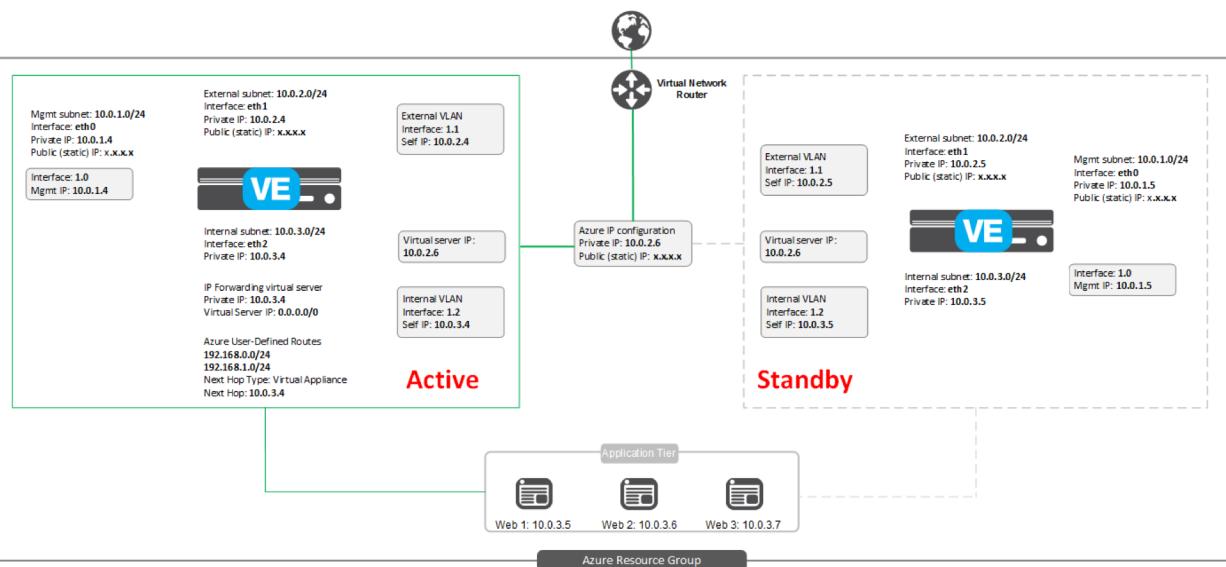
# HA Pair in Azure Availability Set

For deploying BIG-IP VE's in active/standby for increased availability

Deploys two BIG-IP VE's in an Active-Standby configuration to ensuring high availability in both cases. The VE's are within an Azure availability set allowing them to be spread across different update and fault domains. The VE's can be added to an existing Azure stack or can be deployed into a new stack.

- Each VE has 3 Network interfaces, and is most similar to an ‘on-premise’ deployment, with one interface for management, one for front-end application traffic and one for back end application traffic
- Does not require use of an Azure Load Balancer
- PAYG & BYOL templates available

Pre-requisites to this template can be found [here](#)

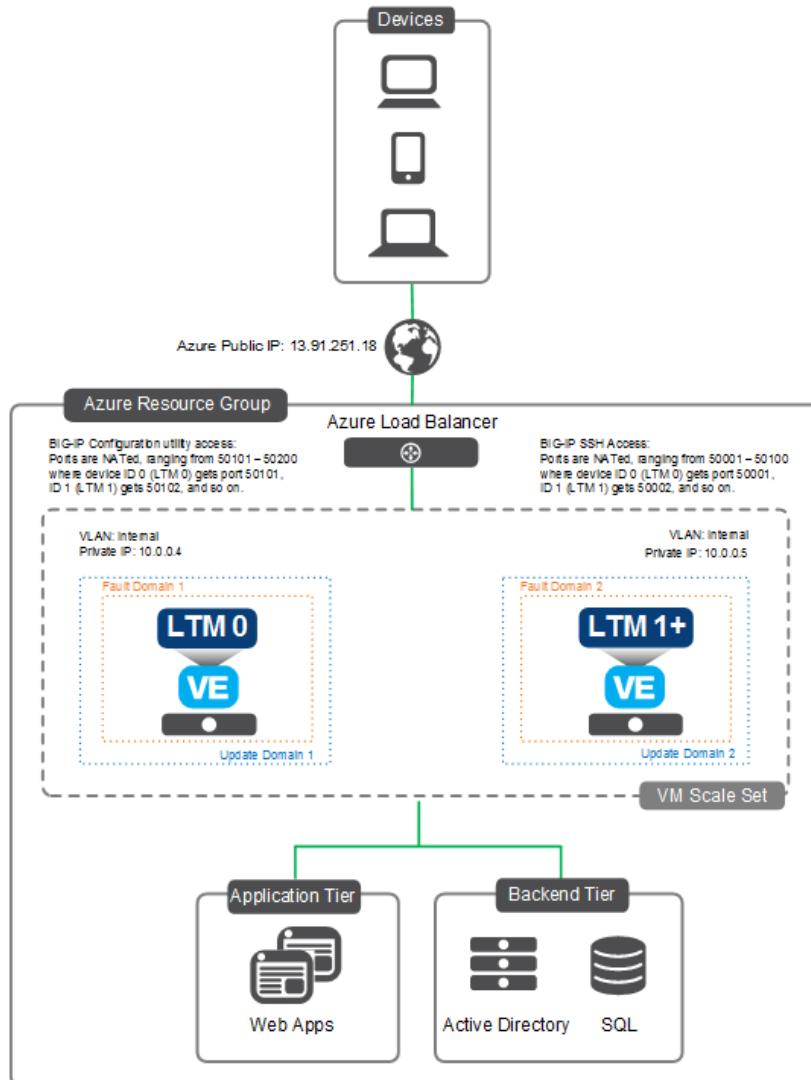


Manual Deployment ~ 8+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# Auto Scale BIG-IP LTM Deployment in Azure

For deploying an optimized application availability solution



Manual Deployment ~ 6+ hours  
Templated Deployment ~ 40 mins

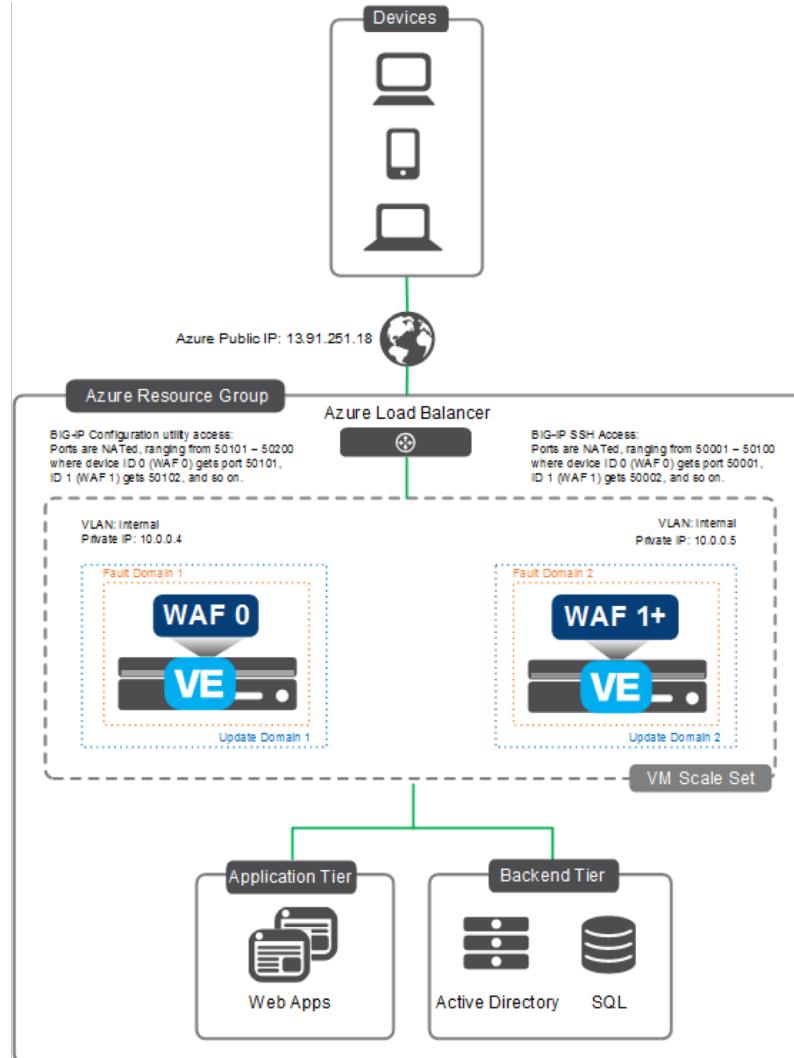
Deploys BIG-IP LTM in an Auto Scaling group, to consistently provide intelligent traffic management services to applications under varying traffic loads or vCPU strain. As traffic or vCPU utilization increases or decreases and crosses pre-defined thresholds, BIG-IP LTM instances are either spun up or spun down, accordingly.

- This solution can be deployed into a **new or existing** stack.
- The BIG-IP VE instance operates with 1 network interface used for both management and data plane traffic.
- Requires use of an Azure Load Balancer (ALB)
- Multiple email addresses can be added to templates to receive notifications when scaling events occur
- Scaling events based on either traffic throughput or vCPU consumption
- Available with PAYG instances or with BYOL licenses when used in conjunction with BIG-IQ License Manager (free).

Pre-requisites to this template can be found [here](#)  
[Link to GitHub](#)

# Auto Scale WAF Deployment in Azure

For deploying an optimized application availability solution



Manual Deployment ~ 6+ hours  
Templated Deployment ~ 40 mins

Deploys BIG-IP with LTM/ASM provisioned in an Auto Scaling group, to consistently provide intelligent traffic management services to applications under varying traffic loads or vCPU strain. As traffic or vCPU utilization increases or decreases and crosses pre-defined thresholds, BIG-IP LTM instances are either spun up or spun down, accordingly.

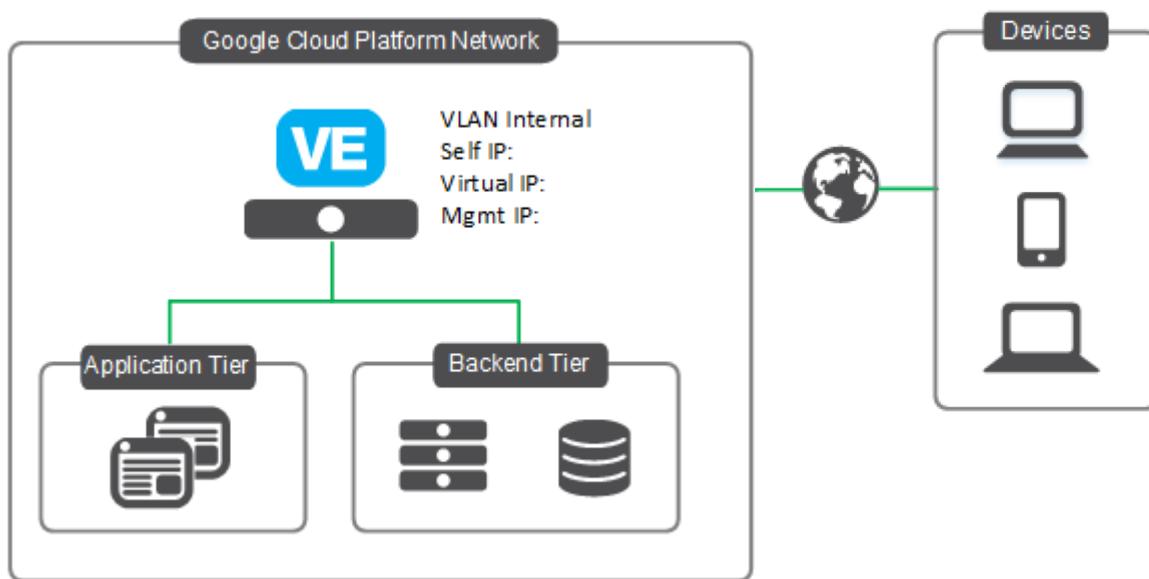
- This solution is deployed into a **new** networking stack which is created along with the solution.
- The BIG-IP VE instance operates with 1 network interface used for both management and data plane traffic.
- Requires use of an Azure Load Balancer (ALB)
- Multiple email addresses can be added to templates to receive notifications when scaling events occur
- Scaling events based on either traffic throughput or vCPU consumption
- Available with PAYG instances or with BYOL licenses when used in conjunction with BIG-IQ License Manager (free).

Pre-requisites to this template can be found [here](#)

[Link to GitHub](#)

# 1-NIC BIG-IP VE Deployment in Google

For deploying a single, standalone BIG-IP device with one network interface



Deploys a standalone BIG-IP VE in a pre-existing Google virtual network, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 1 network interface, processing both management and data plane traffic from the internet. This is the set-up most cloud native developers are accustom to and is best for single tenant or 'per app' services.

- BYOL and PAYG templates available

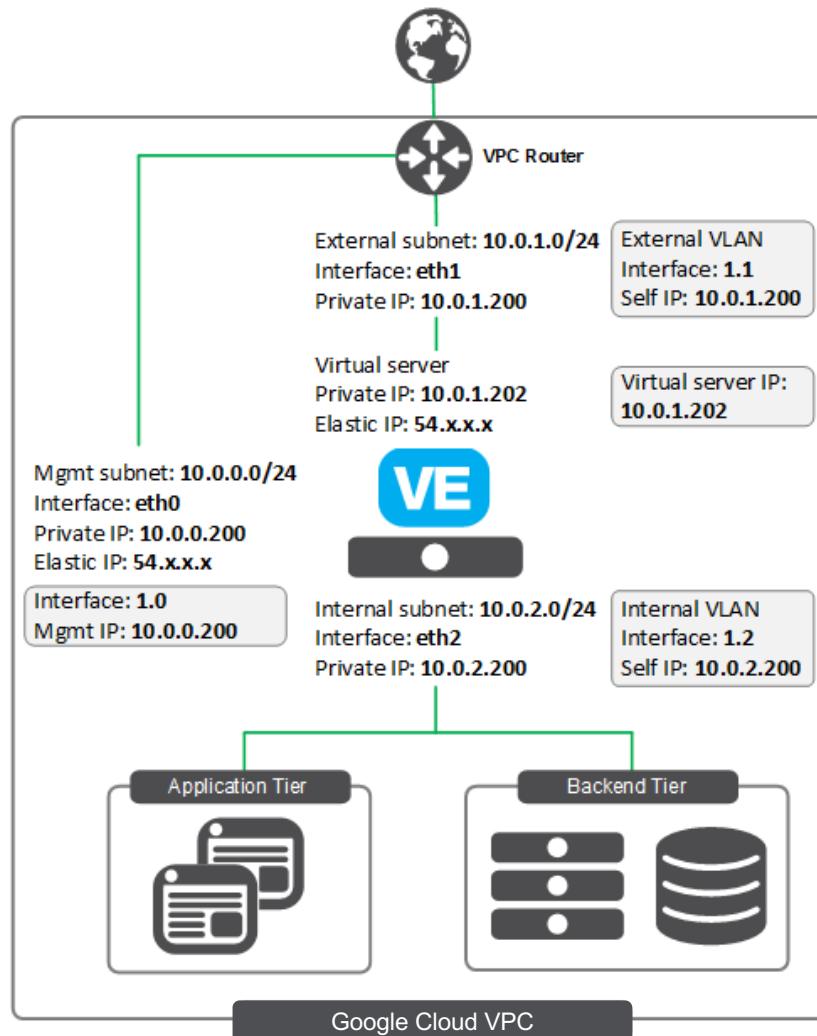
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# 2-NIC BIG-IP VE Deployment on Google

For deploying single, standalone BIG-IP device(s) with two network interfaces



Deploys a standalone BIG-IP VE into a Google VPC, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 2 network interfaces, One for management & data-plane traffic from the internet and another for traffic from the AWS network providing greater autonomy to control the management functions

- BYOL and PAYG templates available

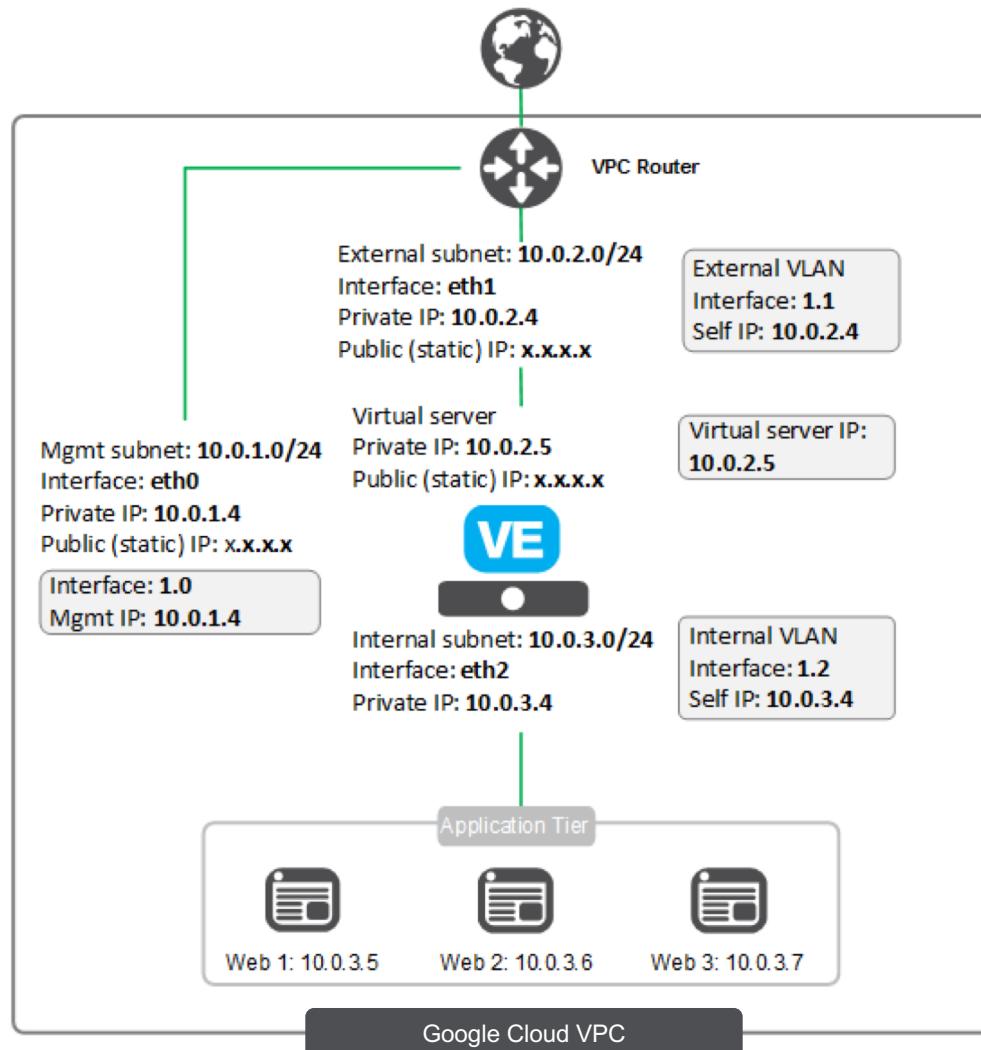
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# 3-NIC BIG-IP VE Deployment in Google

For deploying single, standalone BIG-IP device(s) with two network interfaces



Deploys a standalone BIG-IP VE in a Google VPC, where traffic automatically flows via the VE to the application servers. The BIG-IP VE instance operates with 3 network interfaces and is most similar to an ‘on-premise’ deployment, with one interface for management, one for front-end application traffic and one for back end application traffic

- Multi-NIC configurations are necessary when deploying multiple applications on different IP addresses, or multi-tenant configurations.
- BYOL and PAYG templates available

Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)



# Integrated Marketplace Solutions

# Integrated Marketplace Solutions: *The Basics*

1. These solutions are available direct from each cloud vendor's respective marketplace and run off of F5 created cloud solution templates, which essentially aggregate together all of the necessary resources and BIG-IP configuration parameters needed to launch these fully functioning F5 solutions in a customers virtual cloud network.
2. At this point, solutions are available for AWS and Azure for multiple different use case scenarios.
3. All deployment times (both manual and templated times) stated in this deck are **ESTIMATES**, and assume the user has an intermediate level of experience with both the BIG-IP and the cloud platform in question. All times include boot time for the VE's (~20mins). Pre-req's are not included since they are required for both manual and templated deployments, but are adjudged to take around 15-20mins
4. All solutions now support BIG-IP v13.1

# Integrated Marketplace Solutions: *The Value*

- These solutions speed up the deployment of specific BIG-IP VE configurations as well as reducing complexity; deploying fully configured solutions in a matter of minutes and just a few clicks.
- Deployable direct from the marketplace for simplified consumption of F5 services
- No prior knowledge of the BIG-IP system required to implement, and allows a customer to deploy their VE's confidently, in the knowledge that the pre-configured solutions have been designed following best practices by F5 experts.
- Automate VE deployments by integrating solutions with cloud native or 3<sup>rd</sup> party automation tools

# Integrated Marketplace Solutions by Use Case

## Application Security

- WAF Solution (Inside Azure Security Center) [\[Azure\]](#)
- WAF Solution [\[Azure\]](#)
- Auto Scale WAF Solution [\[AWS, Azure\]](#)

## Application Access

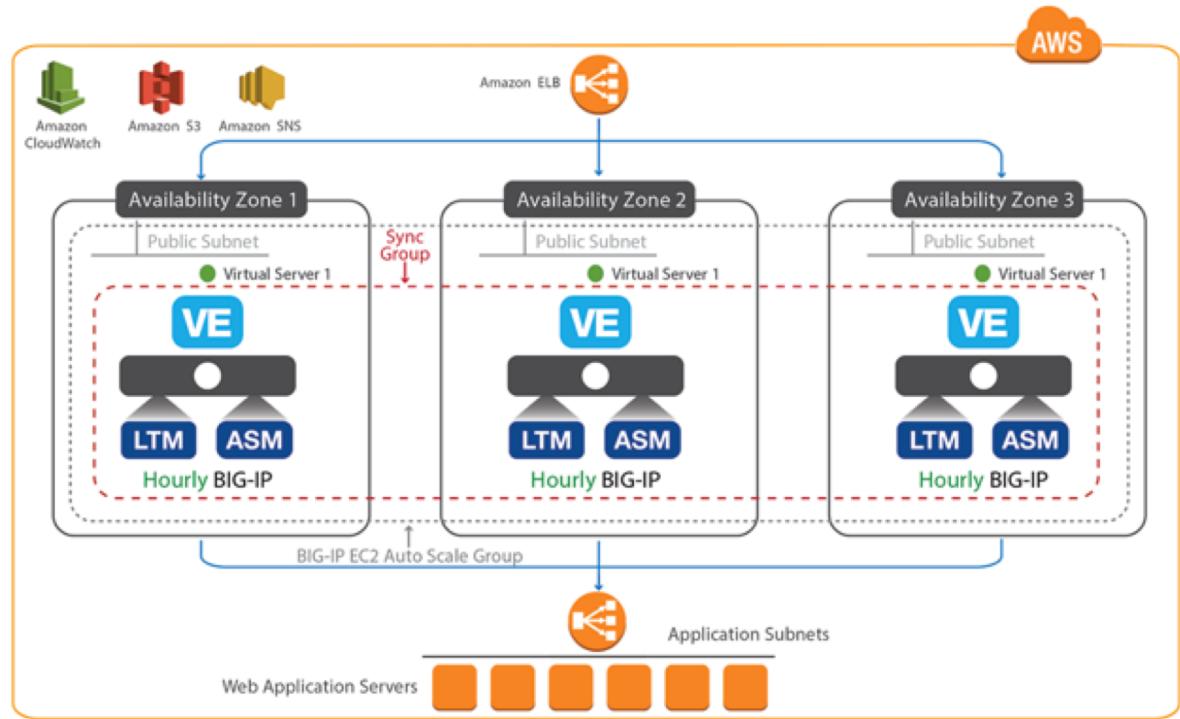
- Federated Access to Office365 Applications [\[Azure\]](#)

## Advanced Traffic Management

- Auto Scale Cloud LTM [\[Azure\]](#)

# Auto Scale WAF Solution for AWS

Optimize application security and operational expenditure



Deploys VE instances with BIG-IP LTM and ASM provisioned in an AWS auto scaling group to provide intelligent traffic management and application security services to applications under varying traffic loads. Instances scale up or down depending on traffic throughput, ensuring application security and operational expenditure are optimized. As traffic passes pre-defined thresholds, instances are spun up or down.

- Comprehensive, layer 7 application protection and guaranteed compliance with all major regulatory standards. Out-of-the-box deployment using pre-built, F5 developed, security policies – which can be customized further for more advanced policy creation.
- Additional instances are scaled across AWS availability zones, improving WAF availability
- Deployed directly from AWS marketplace via a fully integrated CloudFormation template for increased agility
- AWS resources required include: S3 bucket, IAM role, CloudWatch, Auto Scale Group and SNS Topic



## F5 WAF Solution - 1Gbps

★★★★★ (0) | Version 12.1.2.1.0.271 | Sold by F5 Networks

Starting from \$3.06/hr or from \$16,888.00/yr (37% savings) for software + AWS usage fees

The F5 Web Application Firewall solution is delivered by F5's industry-leading BIG-IP Application Security Manager (ASM) and BIG-IP Local Traffic Manager (LTM), providing...

Linux/Unix, CentOS 6.5 - 64-bit Amazon Machine Image (AMI)

Manual Deployment ~ 7 hours  
Templated Deployment ~ 30 mins

# WAF Solution for Microsoft Azure (Inside ASC)

Industry leading application protection in minutes

The image shows two screenshots. The top screenshot is the F5 WAF Solution for ASC landing page, featuring the F5 logo, product name, a brief description, and a 'Get it now' button. The bottom screenshot is the Azure Security Center interface, showing a dashboard with resource health, recommendations, and a list of security controls and their status.

Manual Deployment ~ 9 hours  
Marketplace Deployment ~ 30 mins

- Simple deployment experience integrated with Azure workflow and services
- Deploys 2 clustered WAF's for increased redundancy
- Out-of-the-box choice of security settings preconfigured by F5 experts, plus ability to make more customized settings/policies
- Comprehensive application security with advanced L7 protections
- Guaranteed compliance with all leading regulatory standards
- BYOL deployment, inside ASC (Azure Security Centre)
- WAF Solution for ASC has Integration with Azure dashboard and alert/visualization services

BYOL Marketplace Offering

# WAF Solution for Microsoft Azure (Outside ASC)

Industry leading application protection in minutes



A detailed screenshot of the Microsoft Azure Marketplace product page for the F5 WAF Solution - PAYG. It shows the product title, vendor (F5 Networks), overview, pricing information, and deployment components. The page includes sections for Overview, Plans, and a detailed description of the solution's capabilities and compliance.

Manual Deployment ~ 9 hours  
Marketplace Deployment ~ 30 mins

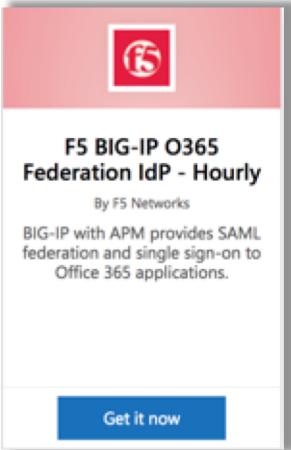
- Simple deployment experience integrated with Azure workflow and services
- Deploys 2 clustered WAF's for increased redundancy
- Out-of-the-box choice of security settings preconfigured by F5 experts
- Comprehensive application security with advanced L7 protections
- Guaranteed compliance with all leading regulatory standards
- Choice of pay-as-you go and BYOL to best fit business scenario, deployable outside of ASC (Azure Security Centre)
- ASC service is not required to implement this solution

[BYOL Marketplace Offering](#)

[PAYG Marketplace Offering](#)

# Federated Access to O365 Apps in Microsoft Azure

## Secure access for Office365 Applications



A detailed screenshot of the Microsoft Azure Marketplace product page for the F5 BIG-IP O365 Federation IdP - BYOL. The page includes the F5 logo, the product name, a "GET IT NOW" button, and sections for Overview, Pricing, and Details. The Details section contains technical information about Microsoft Office 365 and the deployment of BIG-IP Access Policy Manager (APM). The bottom of the page shows legal links like License Agreement and Privacy Policy.

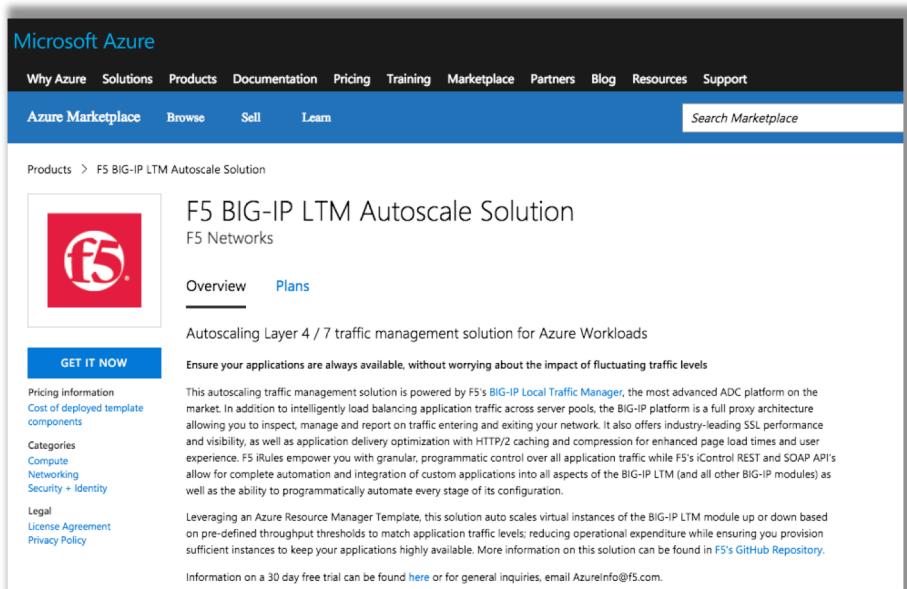
Manual Deployment ~ 4 hours  
Marketplace Deployment ~ 30 mins

- Deploys an F5 built, pre-configured VE with BIG-IP APM provisioned
- Leverage an existing active directory and SAML 2.0 to provide federated access to O365 applications
- Extend security with other APM features including MFA, geo-location based control and device checks.
- Simple deployment experience direct from marketplace and integration with Azure workflow and services
- Choice of PAYG and BYOL deployments to best fit business scenario

BYOL Marketplace  
Offering

PAYG Marketplace  
Offering

# Auto Scale LTM in Azure Marketplace



The screenshot shows the Microsoft Azure Marketplace interface. At the top, there's a navigation bar with links like 'Why Azure', 'Solutions', 'Products', 'Documentation', 'Pricing', 'Training', 'Marketplace', 'Partners', 'Blog', 'Resources', and 'Support'. Below that is a blue header bar with 'Azure Marketplace' and 'Search Marketplace' buttons. The main content area displays a product listing for 'F5 BIG-IP LTM Autoscale Solution' by 'F5 Networks'. The listing includes a red F5 logo, the product name, a brief description ('Autoscaling Layer 4 / 7 traffic management solution for Azure Workloads'), a 'Price varies' note, and a 'Get it now' button. On the left side of the listing, there's a sidebar with categories like 'Pricing information', 'Cost of deployed template components', 'Categories', 'Compute', 'Networking', 'Security + Identity', 'Legal', 'License Agreement', and 'Privacy Policy'. At the bottom of the listing, there's some fine print about trial periods and GitHub repositories.

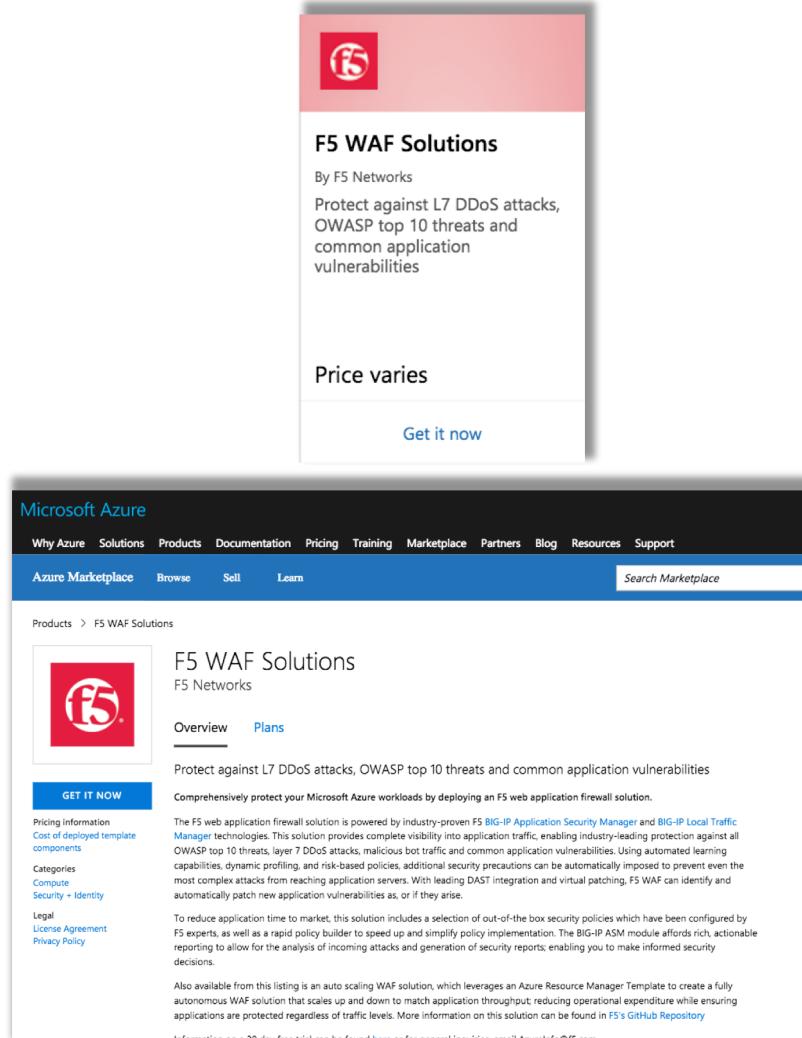
Manual Deployment ~ 7 hours  
Templated Deployment ~ 30 mins

Deploys BIG-IP VE with LTM provisioned in an Azure VM Scale Set that has been configured for auto scaling, to consistently provide intelligent traffic management services to applications under varying traffic loads.

- As traffic increases/decreases and crosses pre-defined ‘network out’ throughput thresholds, BIG-IP LTM instances are either spun up or spun down, accordingly.
- The BIG-IP VE instance operates with 1 network interface used for both management and data plane traffic.
- Deployed directly from Azure marketplace via a fully integrated Azure Resource Manager template for increased agility
- Azure resources required include: Azure load balancer and VM Scale Set

PAYG Marketplace Offering

# Auto Scale WAF in Azure Marketplace



The screenshot shows the Microsoft Azure Marketplace listing for 'F5 WAF Solutions'. At the top, there's a red header with the F5 logo and the text 'F5 WAF Solutions' and 'By F5 Networks'. Below it, it says 'Protect against L7 DDoS attacks, OWASP top 10 threats and common application vulnerabilities'. A 'Price varies' badge is present. A 'Get it now' button is at the bottom. The main page below the header includes a navigation bar with links like 'Why Azure', 'Solutions', 'Products', etc., and a search bar. The product page itself has sections for 'Overview' and 'Plans', a detailed description of the solution, and links for 'GET IT NOW', 'Pricing information', and 'Cost of deployed template components'. It also includes legal links for 'Categories', 'Compute', 'Security + Identity', 'Legal', 'License Agreement', and 'Privacy Policy'.

Manual Deployment ~ 7 hours  
Templated Deployment ~ 30 mins

Deploys VE instances with BIG-IP LTM and BIG-IP ASM provisioned in an Azure VM Scale Set that has been configured for auto scaling, to provide intelligent traffic management and application security services to applications under varying traffic loads. Instances scale up or down depending on traffic throughput, ensuring application security and operational expenditure are optimized. As traffic passes pre-defined thresholds, instances are spun up or down. Thresholds are based on '*network out*' throughput.

- Comprehensive, layer 7 application protection and guaranteed compliance with all major regulatory standards. Out-of-the-box deployment using pre-built, F5 developed, security policies – which can be customized further for more advanced policy creation
- Deployed directly from Azure marketplace via a fully integrated Azure Resource Manager template for increased agility
- Azure resources required include: Azure load balancer and VM Scale Set

PAYG Marketplace Offering

# OpenStack Template Updates/Notes – Release 8

- *BIG-IP v13.1.0.2 Support*

All supported templates now support BIG-IP v13.1.0.2

# VMWare Template Updates/Notes – Release 8

NEW!

- ***EXPERIMENTAL Standalone 3NIC***

Deploys a standalone, BYOL BIG-IP VE instance with 3 network interfaces in a VMWare environment. This template will be fully supported in future releases.

# Supported Private Cloud Solution Templates



- 1NIC Architecture
- 2NIC Architecture
- n-NIC Architecture
- HA Pair (A/S 2NIC)



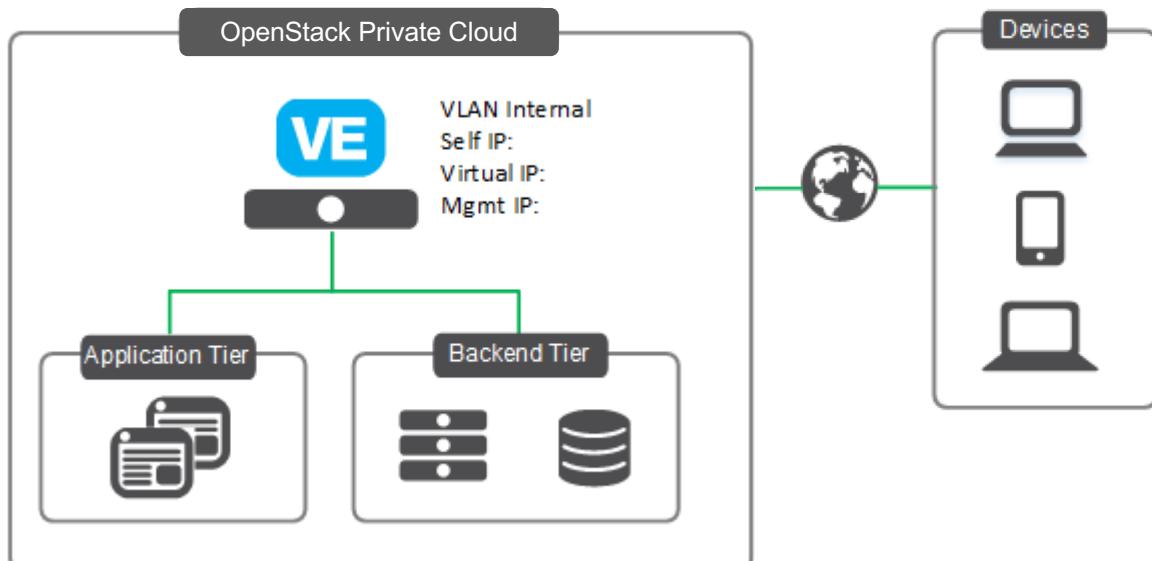
Azure Stack

- 1NIC Architecture

vmware®

# 1-NIC BIG-IP VE Deployment in OpenStack

For deploying single, standalone BIG-IP device(s) with one network interface



Deploys a standalone BIG-IP VE in a pre-existing OpenStack Private Cloud, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 1 network interface, processing both management and data plane traffic from the internet. This is the set-up most cloud native developers are accustom to and is best for single tenant or 'per app' services.

- Only BYOL templates available

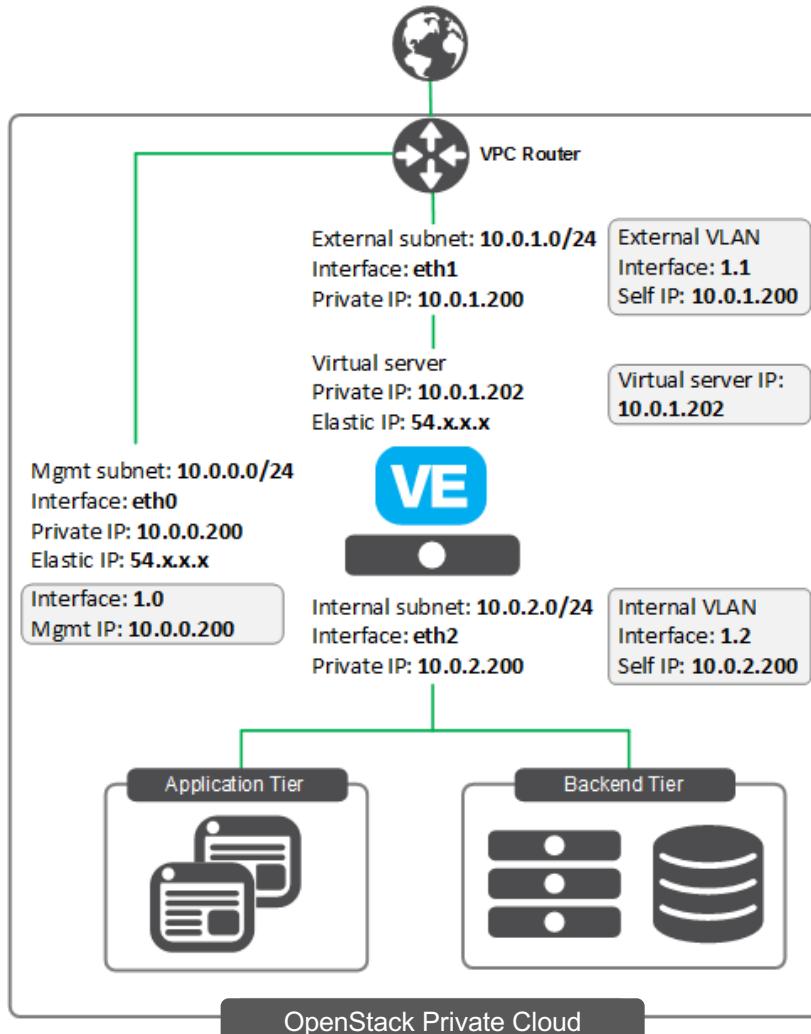
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# 2-NIC BIG-IP VE Deployment in OpenStack

For deploying single, standalone BIG-IP device(s) with two network interfaces



Deploys a standalone BIG-IP VE in a pre-existing OpenStack Private Cloud, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 2 network interfaces, one for management & data-plane traffic from the internet and another connected into the Neutron network where traffic is processed by pool members

- Only BYOL templates available

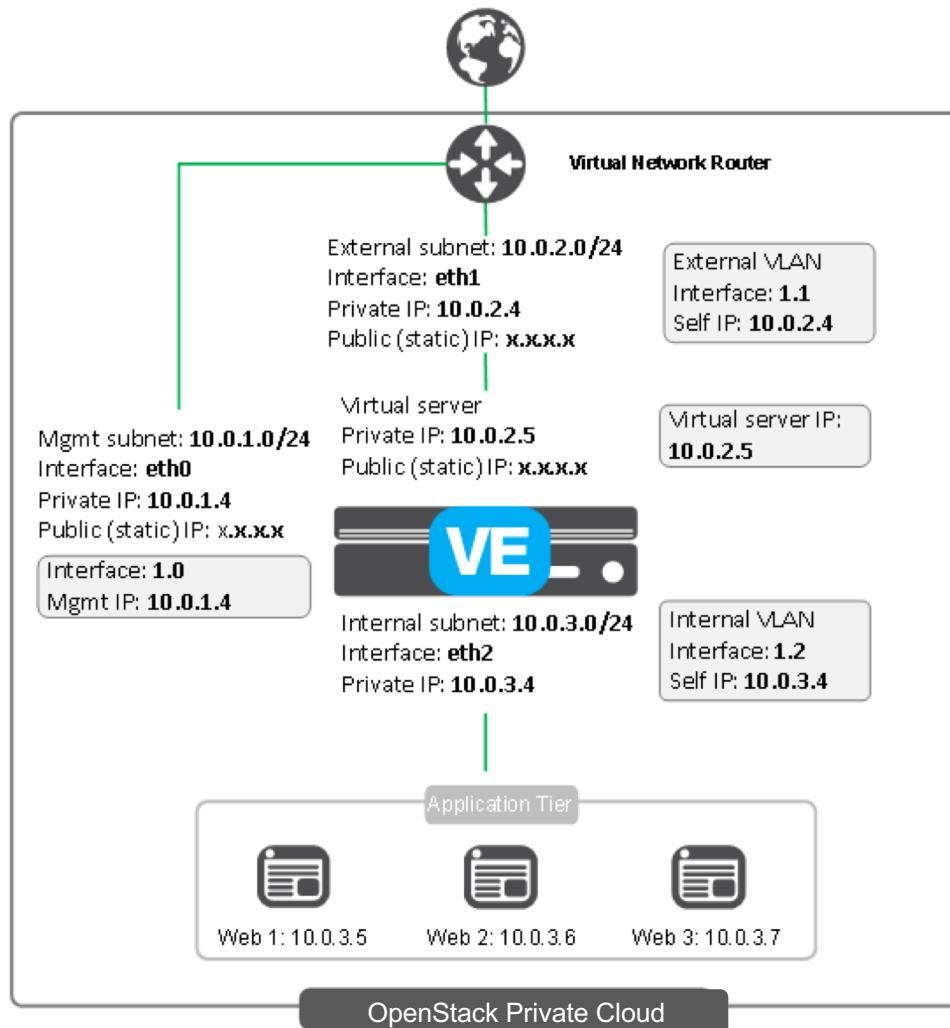
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# Multi-NIC BIG-IP VE Deployment in OpenStack

For deploying single, standalone BIG-IP device(s) with 3+ network interfaces



Deploys a standalone BIG-IP VE in a new or existing virtual network, where traffic automatically flows via the VE to the application servers. The BIG-IP VE instance is launched with 3 network interfaces but the template has the capability to add additional interfaces (up to a total of 8). This template is useful when the VE is acting as a traffic controller requiring more than 3 interfaces.

- Multi-NIC configurations are necessary when deploying multiple applications on different IP addresses, or multi-tenant configurations.
- BYOL and PAYG templates available

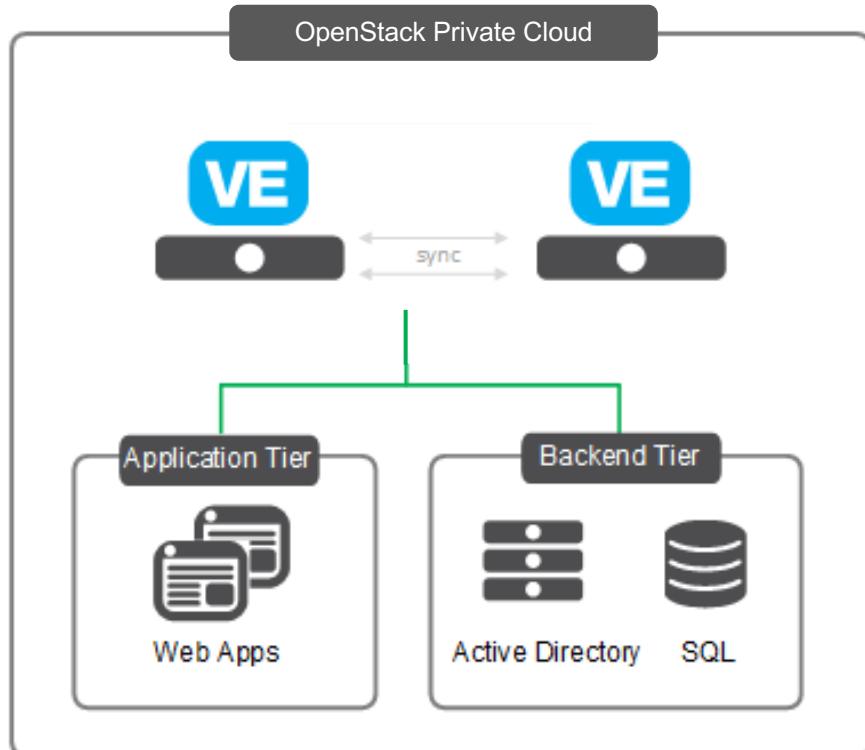
Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# HA Pair Deployment in OpenStack

For deploying 2 BIG-IP VE's in an active/standby configuration for increased availability



Launches and configures two BIG-IP VE's in a single availability zone in an Active-standby arrangement for high availability, such that should one BIG-IP fail, traffic is automatically redirected to the unaffected device until the issue is resolved.

- The BIG-IP instance operates with 2 network interfaces:
  - One for management & data-plane traffic from the internet
  - Another connected into the Neutron networks where traffic is processed by pool members.
  - Only BYOL templates available

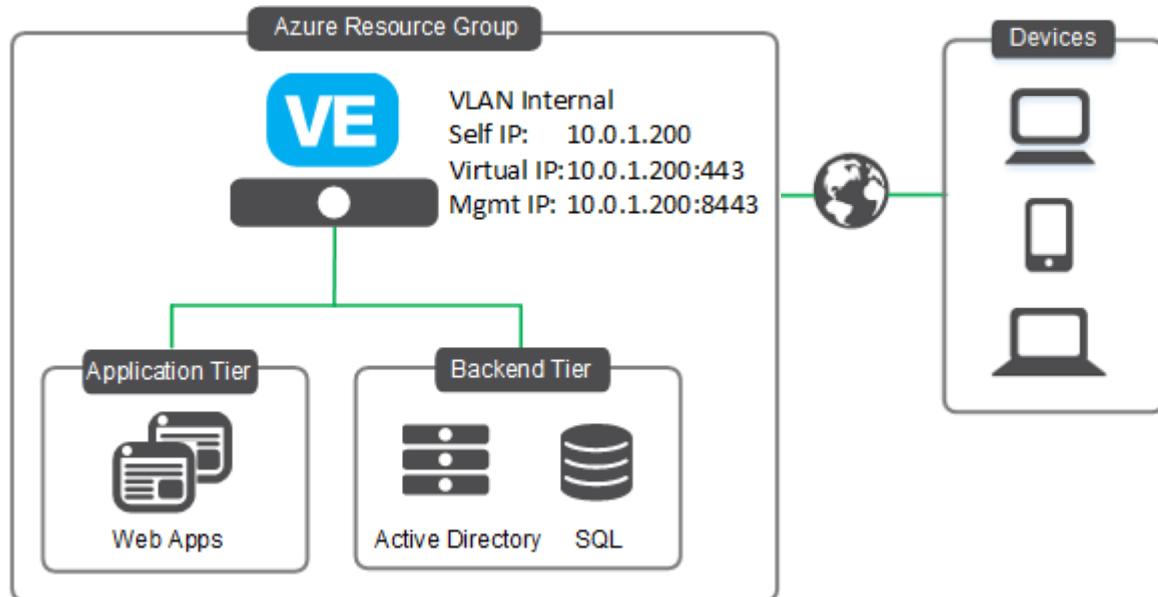
Pre-requisites to this CFT can be found [here](#)

Manual Deployment ~ 8+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

# 1-NIC BIG-IP VE Deployment in Azure/Azure Stack

For deploying a single, standalone BIG-IP device with one network interface



Deploys a standalone BIG-IP VE in a new or pre-existing Azure virtual network, where traffic automatically flows via the VE to the application servers. The BIG-IP instance operates with 1 network interface, processing both management and data plane traffic from the internet. This is the set-up most cloud native developers are accustom to and is best for single tenant or 'per app' services.

- BYOL and PAYG templates available

Pre-requisites to this template can be found [here](#)

Manual Deployment ~ 3+ hours  
Templated Deployment ~ 40 mins

[Link to GitHub](#)

