

SP// VIRTUAL MACHINES

STACKPATH™

Deploy workloads closer to end-users than ever before.

Latency isn't just inconvenient—it's expensive, costing you money and customers. And the physical distance between hyper-scale cloud data centers and your end-users might not seem that big, but every mile matters to workloads that measure performance in units smaller than milliseconds.

SP// Virtual Machines have the edge that latency-sensitive workloads need. Enjoy all of the scalability, efficiency, access and control benefits expected from a cloud VM. Compound it with the advantage of being in StackPath edge locations worldwide, all connected by a private network backbone, getting data from end-users to the workload faster than if the VM was in a legacy cloud data center.

Take your workloads farther. SP// Virtual Machines put them virtually in your end-users' backyards.

Use Cases

-  **Low-latency App Servers**
Configure and completely control a full computing environment to run multiple applications and make it exactly the web server, game server, database node or other low-latency solution you require.
-  **Software-Defined Appliances**
Build and deploy your appliances on StackPath OS Images at the edge, such as firewalls, gateways, load balancers or storage devices.
-  **Private Edge Applications**
Create, use, or even sell your own edge application, such as a content delivery network, virtual desktops, DNS resolvers, and more.

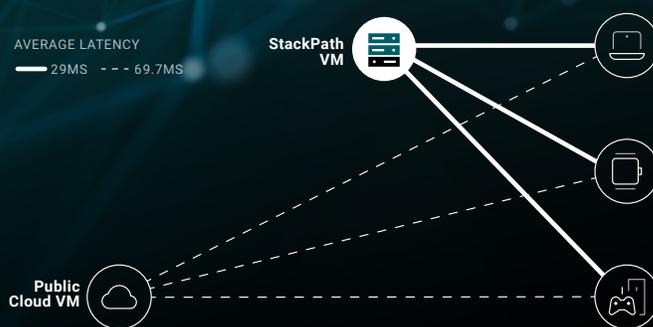
Benefits

-  **Ultra-low Latency**
Deploy VMs in any of 22 edge locations, part of our global platform of 50+ geographically diverse locations connected by a private network backbone. End-user data can reach our VMs up to 2.6x faster than public cloud VMs, and data can move between edge locations 21% faster than if routed over the public Internet.
-  **Multi-cloud Support**
StackPath VMs are designed to become a seamless part of your multi-cloud strategy. Familiar controls, open source operating systems, and robust APIs make it easy to integrate and manage StackPath VMs in manual operations, automated workflows, and CI/CD pipelines, to complement third-party services with new levels of optimization and speed.
-  **High Scalability and Flexibility**
Leverage Anycast IP addresses and autoscaling to meet demand spikes, route traffic to the fastest-responding VMs, and establish other sophisticated methods to ensure instances are not overloaded, all requests are served promptly, and your operations run efficiently.
-  **More Control and Cost-effectiveness**
Simplify operations by deploying to a fully managed environment with instant deployment, no clusters to deal with, a robust and open RESTful API, support for CI/CD environments and existing DevOps tools like Terraform and direct control over CPU, memory, disk resources and location.

What is edge computing?

Like with any emerging technology, the term “edge computing” gets used in a lot of different ways. At StackPath, we believe edge computing is cloud computing and applications that are as physically close to the end user or device as possible—far fewer network hops away, on average, than a public cloud data center.

This gives modern workloads and applications lower latency, higher resiliency, reduced bandwidth costs, and higher security.



Features

- CentOS, Ubuntu or Debian Installed**
Deploy VMs with the latest certified CentOS, Ubuntu, or Debian distributions of Linux installed, configured by StackPath using best security and performance practices.
- Image Capture & Storage**
Capture and store images of existing VMs to enable autoscaling, rapid deployment, or convenient rollbacks for version control or backward compatibility.
- Instant Deployment**
Have VMs running in any or all StackPath edge locations in seconds with a single click or API call.
- Anycast IP Addresses**
Add Anycast IPs to automatically distribute end-user/client traffic to your fastest-responding VM, with traffic being routed more efficiently over our edge network’s private backbone.
- Auto-scaling**
Seamlessly scale up and out during periods of high demand to ensure workload availability without any service degradation.
- Persistent Storage**
Add up to 1TB of persistent storage to each instance to expand overall storage space for logs or any other data needed or used by your workload.
- Liveness and Readiness Probes**
Automate removing unresponsive or incorrectly responding instances from your Anycast routing, optimizing accessibility, accelerating workload response times and reducing operational costs.
- Remote Management**
Log in to any of your VMs using SSH or Control Portal to install software, configure the OS to your exact needs, and manage it on your terms with automation tools like Terraform, Ansible, Puppet or Chef.
- Management API**
Leverage our robust and open RESTful API to automate any aspect of deploying and managing your workload.
- CI/CD Support**
Push changes to VMs with CLI tools that integrate with your existing continuous integration and continuous delivery (CI/CD) pipeline, reducing the risk of code changes to mission-critical workloads.
- Network Policy Control**
Define policies that control IP and Port access to your VMs for fine-grained control of all network traffic before it reaches your VMs, protecting workloads from malicious activity.
- Built-in Metrics**
Measure the performance of your VMs with built-in analytics, reports and dashboards, available through a web UI and API. Use the detailed usage information to make smarter data-driven decisions for your business needs.
- Identity and Access Management (IAM)**
Manage user identities and access privileges to all of your workloads to easily establish and manage higher security levels.