STRATUS® CLOUD SOLUTIONS

Availability and efficient workload management for cloud applications

Count on Stratus, the availability experts, for reliability in the cloud. With Stratus' Cloud Solutions, you can enhance your solutions with the availability level they need, including stateful continuous availability, and efficient workload management for cloud applications.

This private and hybrid OpenStack based cloud solution provides multiple availability levels and intelligently and dynamically matches availability levels and infrastructure resources to applications transparently; using only what you need when you need it. Now, you can maximize ROI with one cloud solution for all applications. Automated deployment and management saves time and money reducing new deployments from days to minutes.

Deployed on commodity servers with no special skills required, the modular and flexible architecture preserves existing investments. With fast compute processing of continuous availability; you can better utilize your VMs and servers.

How it Works

This unique solution is made possible with Software Defined Availability (SDA), the next generation of availability. Software Defined Availability moves downtime prevention and recovery from the hardware or operating system to an automated software layer. SDA is applied to the workloads and their resources to keep them up and running. If failure occurs, a 2nd paired virtual machine is brought back up instantaneously. This significantly changes not only what applications can be run in the cloud but how they run in the cloud—further increasing cloud benefits. With SDA—any application with any availability need can be run in the cloud with application transparency. Stratus' Software Defined Availability provides availability at every layer for true continuous availability in the cloud without the performance overhead associated with other fault-tolerant approaches.

Key Benefits

- Minimizes CAPEX and OPEX with:

  - Increased resource utilization from sub 50% in traditional fault-tolerant architectures to more than 80% with the same stateful fault-tolerance

  - Commercial-Off-The-Shelf (COTS) hardware and software (KVM and OpenStack)

  - Automated deployment and management that reduces human errors and complexity

  - Business self-service that reduces deployment time from days to minutes

- Meets customer expectations and SLAs by providing stateful continuous availability with application transparency for carrier class reliability without performance overhead

- Optimizes ROI with one cloud solution that supports the deployment and management of all applications with multiple availability levels

- Integrates with other 3rd party software through open APIs

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Stratus' Cloud Solutions consist of two products; **Availability Services** and **Workload Services**.

Key Features

Availability Services enables you to achieve stateful continuous availability for mission critical workloads as well as other availability level options for less critical workloads.

Workload Services Achieve SLAs with no downtime, data loss or business interruptions with stateful continuous availability

Delivers stateful continuous availability with geographic redundancy and application transparency for virtualized and cloud environments for mission critical workloads.

Optimize ROI with one solution for all applications with multiple availability levels

With multiple availability levels to choose from—stateful continuous availability, high availability and general purpose availability—you can utilize one cloud solution for all applications.

Increase efficiencies with higher resource utilization

Increase resource utilization from the typical 33% -50% to 80% - 90% while providing uncompromised reliability at a fraction of the resource cost with our unique Statepoint™ Technology.

Use what you have with APIs

Integrates with existing private clouds and cloud management platforms.

Workload Services enables fast, easy and efficient deployments and management for all workload types in OpenStack based clouds.

Reduce complexity, cost and human errors with Resource Tagging

Ensures the right underlying infrastructure resources are reserved and provisioned by tagging resources with service level definitions for availability, performance, location and even compliance regulations (PCI, HIPAA).

Gain efficiencies and standardization with Template Authoring

IT defines and creates templates for line of business consumption.

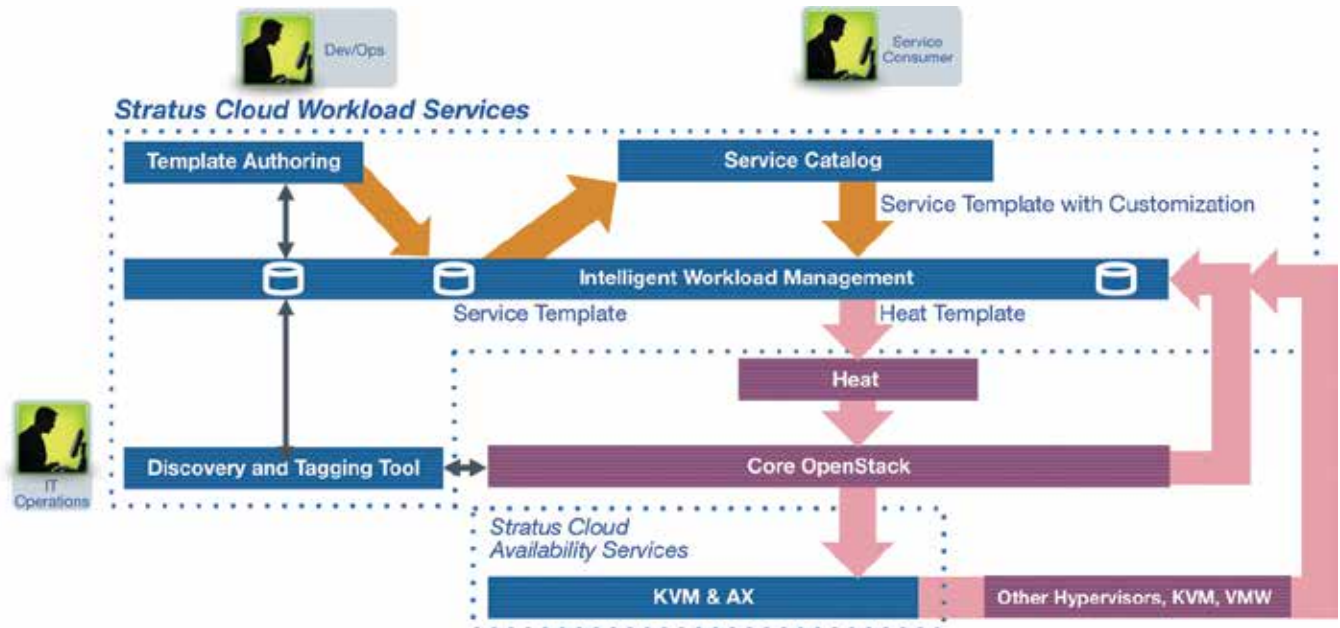**Speed up deployments from days to minutes with the Service Catalog**

Our workload centric approach provides a holistic view of the deployment packages instead of individual instances. This greatly simplifies the user experience and automates the common and complex human processes in deploying workloads.

Reduce operational cost by using only what you need when you need it with Intelligent Workload Management

Automates workload placement and matches the application to the workload to deliver everything the application needs. If the needs of the application change, the workload also changes.
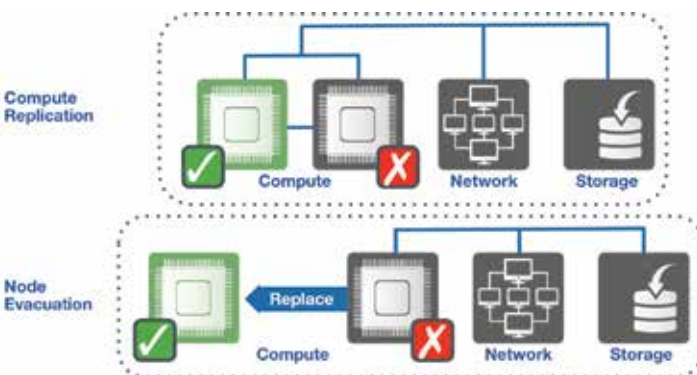
For over 30 years, Stratus has delivered unparalleled availability to companies in every industry of every size. Count on us to deliver that same reliability in the cloud.

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For an **Always-On** World

Stratus Cloud Solutions Workflow

Availability Services

Transactions and quality of cloud service is protected by replicating compute resources. If there's a failure on one compute resource, the 2nd compute resource continues to run. Another way we achieve quality of service is with node evacuation. When a compute instance fails, it's replaced with a healthy compute resource.

Workload Services

Intelligent orchestration matches the right resources to workload needs.

Mission Critical – Your highest priority workloads with instantaneous recovery

Business Critical – Your high priority workloads with prioritized failover

Compliance – Your compliant workloads that must meet regulations

General Purpose – Your non-critical workloads with a restart

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Specifications:

Availability Service Specifications	
Compute Node Infrastructure	
Servers	1-2 Socket Intel Ivy Bridge, Sandy Bridge and Haswell Intel based x86 server
RAM	Up to 384 GB
Node Operating System	CentOS v6.5 (Kernel Version 4.31)
OpenStack Nova	Support for Icehouse 2014.1.3
Failure Protection	
Guest FT Mode	Support for continuous availability (no restart) for Paired Virtual Machines
Paired Virtual Machines	Up to 4 per compute node
Supported Operating Systems	
Microsoft®	Windows Server® 2008R2, 2012R2
Linux®	CentOS v6.5Suse 12 Ubuntu 14.04Fedora 20

Workload Service Specification	
OpenStack Infrastructure	
Version	Support for Icehouse 2014.1.3
Supported Core Services	Nova, Neutron, Cinder, Glance, Heat, Keystone
Storage	Hypervisor shared storage for instances
Maximum Nodes Managed	20
Stratus SW Appliance	
Guest OS	CentOS v6.5
vCPU	4
Memory	8 GB
Storage	160 GB
Browser Support	
Internet Explorer	Version 11
Mozilla Firefox	Linux Version 33.1
Google Chrome	Tech Preview
Safari	Tech Preview

About Stratus

Stratus Technologies is the leading provider of infrastructure-based solutions that keep applications running continuously in today's always-on world. Stratus enables rapid deployment of always-on infrastructures—from enterprise servers to clouds—without any changes to applications. Stratus' flexible solutions—software, platform and services—prevent downtime before it occurs and ensure uninterrupted performance of essential business operations.

To learn more, visit **stratus.com**

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