



AppScale ATS for Data Center Providers

Solution Brief

Companies are embracing a **hybrid cloud strategy** to align application requirements with the optimal deployment platform. Performance, cost, latency, compliance, security, and geographic location must be considered to ensure the right platform, at the right time, and at the right cost. Given the dynamic nature of today's businesses, these variables may change over time and an application – be it cloud-native or datacenter-native – may run in a variety of deployment scenarios during its lifecycle:

- staying **on premise** in a traditional virtual datacenter or private cloud,
- staying in or migrating to a dedicated service provider **managed environment**,
- staying in or migrating to a **public cloud**,
- **migrating away** from a public cloud to a dedicated service provider environment or customer data center

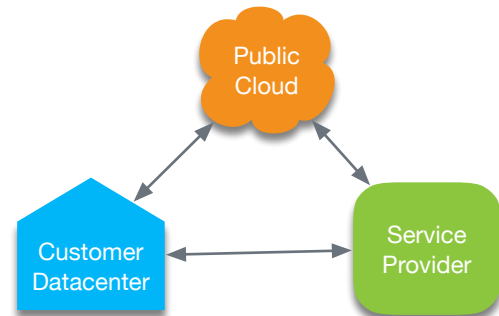
In this hybrid world, many companies are looking to embrace a single development and deployment paradigm to accelerate application time-to-service, enhance effectiveness, and improve compliance. This would allow them to develop once and deploy to the right platform initially -- and if conditions change, migrate applications off of the original deployment platform.

Given the demands of these increasingly complex environments, many companies are relying on service providers (SPs) to assess, migrate, host, and manage their applications and infrastructure across the variety of deployment platforms. SPs have an enormous opportunity to deliver hybrid expertise and help companies with their IT transformation efforts.

In this context, many SPs have partnered with **Amazon Web Services (AWS)** to offer managed services around the public cloud aspect of the hybrid environment. This partnership has been fruitful for many SPs, but with the accelerating adoption of hybrid cloud and Amazon's announcement of Outposts, an on-premises offering, SPs may find themselves competing with AWS for business they've traditionally owned. This means:

- Revenue opportunities may decrease as Outposts will be managed by AWS
- Account control will diminish
- Security and compliance will be impacted with hybrid management centrally controlled from the public cloud.

With these challenges, there is a need for an alternative AWS-compatible on-premises offering (end-customer or external data center) that enables SPs to maintain account control, ensures compliance, offers companies differentiating services, and drives top line growth. **Appscale's ATS** offering delivers an innovative and cost effective AWS compatible solution in an easy to deploy and cost effective manner.



"92 percent of enterprises have a multi-cloud strategy; 82 percent have a hybrid cloud strategy."¹

By 2022, 25% of all enterprises will have hybrid AWS environments.²

Benefits of ATS

- **Top line growth:** offer your customers an AWS on-premises solution that covers a broad set of use cases
- **Security and compliance:** leverage advantages of dedicated and on-premise environments.
- **Time to service:** offer an AWS compatible hybrid cloud now, taking advantage of rapidly increasing market demand.
- **Easy migration:** applications or workloads currently on AWS EC2 can be migrated to the Appscale ATS platform with little effort.
- **Reduced cost:** get started quickly with an introductory licensing and pricing package.

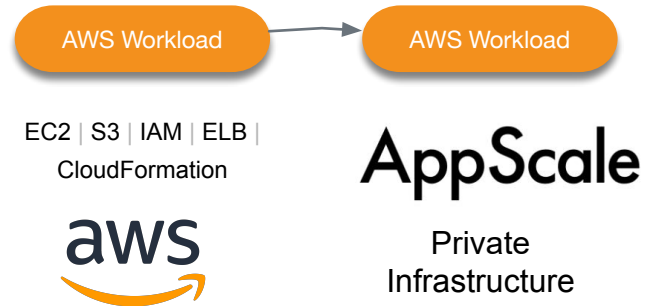
1. Rightscale's "2020 State of the Cloud" report

2. Gartner's "Prepare for AWS Outposts to Disrupt Your Hybrid Cloud Strategy" by David Wright, Jeffrey Hewitt, Henrique Cecci, February 2019

AppScale ATS implements AWS-compatible clouds over bare-metal infrastructure. Those familiar with AWS can view it as another region, with one or more availability zones. Collections of virtual machines, their network topology, and storage can be managed using command-line tools, a Web console, or programmatically through an API. AWS-style load balancing, auto-scaling, and user identity management, with a rich set of access controls, are included.

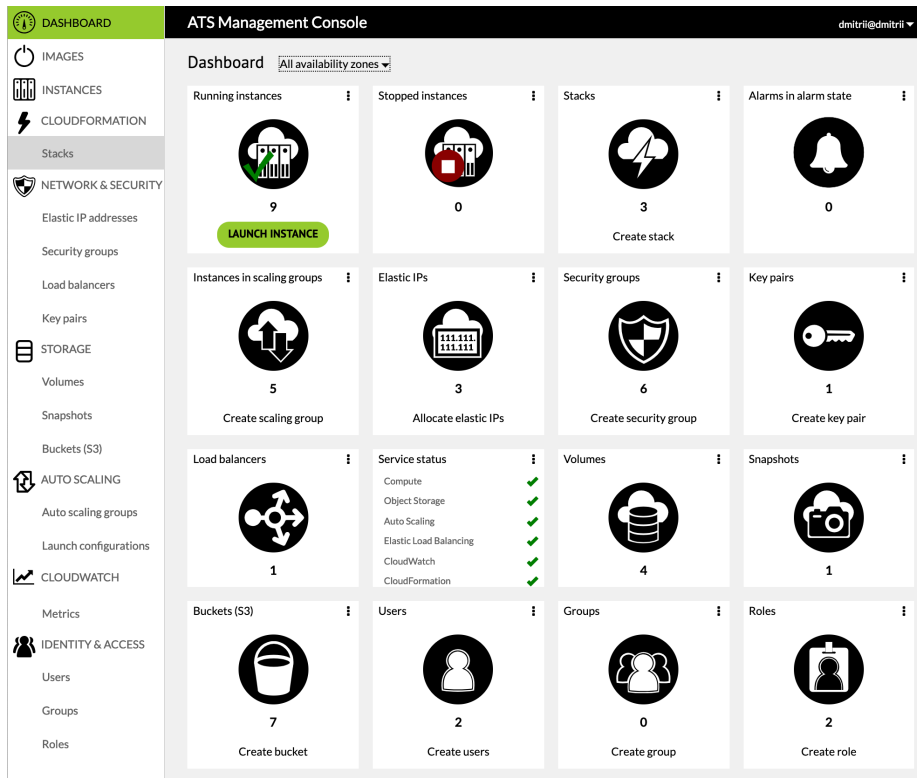
ATS is fully compatible with AWS APIs, providing endpoints for **EC2, EBS, S3, IAM, ELB, CloudWatch, CloudFormation**, and other services. The large variety of tools for managing EC2 workloads and software stacks designed to run on top of EC2 can be used on ATS with little or no modification. This enables easy migration to or from AWS, as well as hybrid deployments, without the need for extra abstraction layers.

ATS was designed to be easy to install, operate, and keep updated. It runs on standard CentOS or RedHat installations, relying on KVM for virtualization. The vast majority of bare-metal configurations, from a handful of servers to many racks, can run ATS. Built using open source software and fully open source itself, ATS will not lock you into an expensive proprietary solution. ATS is enterprise proven with deployments of over 200,000 cores..



ATS elegantly serves most hybrid and multi-cloud **use cases**:

- **hybrid** workloads spanning public clouds and dedicated environments, to satisfy compliance or latency requirements
- **on-ramps** for on-prem workloads bound for AWS
- **off-ramps** for EC2 workloads leaving AWS
- **test/dev** on premise with production in public cloud
- **offload** steady-state, predictable workloads from AWS for cost savings



Features

- Virtual machine management
- Scalable software-defined object and block storage
- Software-defined networking
- Built-in load balancer
- Instance auto-scaling
- Identity and access management
- LDAP / Active Directory integration
- Security Token Service
- Web console ATS and AWS
- Federation of multiple ATS clouds