

## ATS for AWS hybrid clouds



### Market Dynamics & Hybrid Cloud

Accelerating digital transformation and rapidly changing customer requirements compel enterprises to continuously improve the way they develop, deploy and manage applications – leading to accelerated time to service, greater agility, and simplified operations. To support these goals, companies are leveraging hybrid cloud environments where they align unique application requirements to the right platform, at the right time, at the right cost. This results in a thoughtful mix of traditional data centers, private clouds on premises, hosted private clouds, and public cloud deployments.

With AWS being the leading public cloud provider, many organizations would like to leverage their existing investment and expertise in AWS technologies and extend it on premises to create an AWS hybrid cloud.

### AWS Hybrid Cloud Challenges

But pursuing an AWS hybrid cloud comes with challenges. Current solutions are not able to fulfill all three critical enterprise business and technical requirements:

- **Compatibility:** an AWS hybrid cloud should deliver a consistent developer and deployment experience across public cloud and on premises.
- **Cost:** AWS public cloud is expensive when used for predictable workloads. Applying the public cloud pricing model to on-premises deployments prevents organizations from realizing the tremendous cost savings of an effective hybrid model.
- **Control:** an AWS hybrid cloud should allow choice of on-premises platform, avoid single vendor lock-in, and allow seamless workload placement.

### Solution

AppScale enables companies to create a cost-effective, flexible AWS hybrid cloud environment utilizing an enterprise-proven on-premises AWS compatible platform.

This allows enterprises to create a seamless developer experience on and off-premises with a granular set of AWS compatible APIs, offer customers considerably lower costs for on-premises workload deployment and allow the enterprise to manage their AWS hybrid cloud environment from their on-premises AppScale platform; ensuring this always remains in the control of the customer while at the same time guaranteeing choice as business requirements constantly change.

"84% of enterprises have a multi-cloud strategy [today]. Enterprises with a hybrid strategy... grows to 58% in 2019 from 51% in 2018." <sup>1</sup>

By 2022, 20% of all enterprises will have hybrid AWS environments. <sup>2</sup>

### Why Appscale ATS

- Only independent and compatible AWS hybrid solution
- Workload placement flexibility – no need for translation, adaptation, retraining, or changes in IT personnel or policies
- Enterprise-proven at scale (200k nodes) in a global, self-service cloud deployment
- No vendor lock-in
- Reduced costs

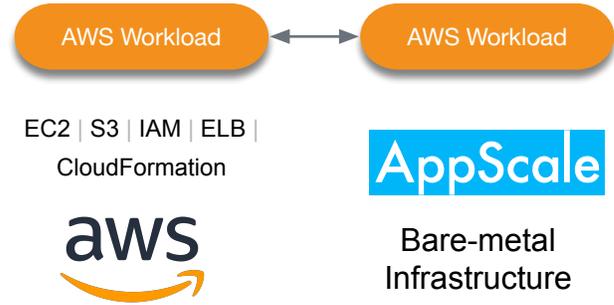
1. Rightscale's "2019 State of the Cloud" report

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 AWS command-line tools, a Web console, or programmatically through the AWS-compatible API. AWS-style load balancing, auto-scaling, storage volume management, and user identity management, with a rich set of access controls, are included.

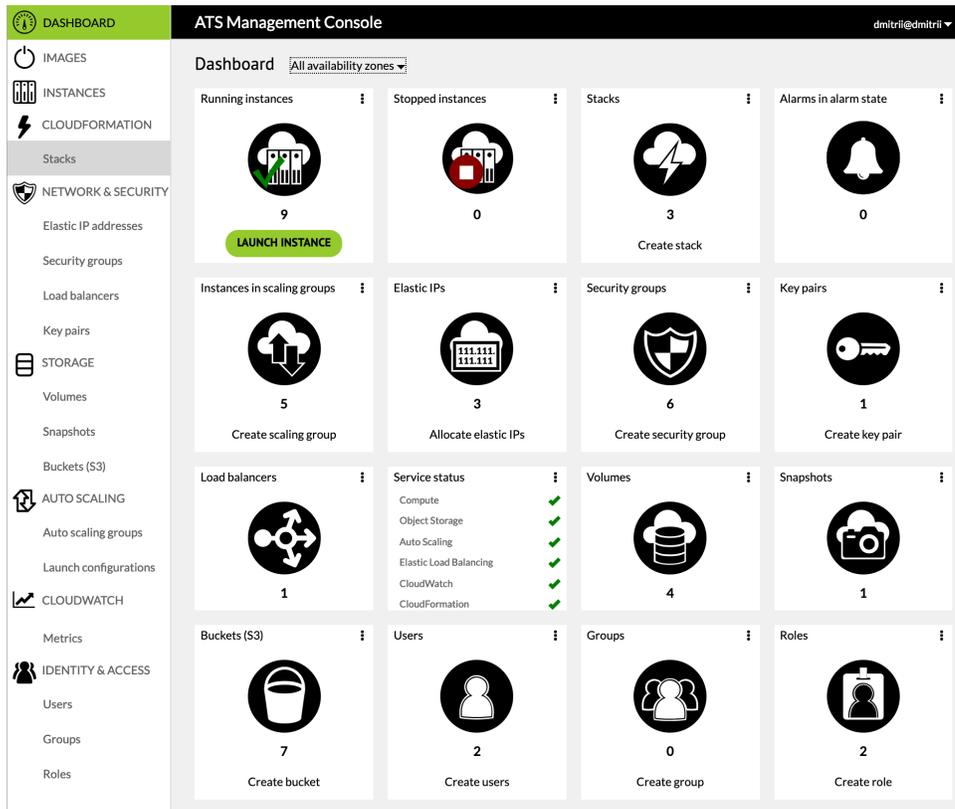
ATS is fully compatible with AWS APIs, providing endpoints for **EC2, EBS, S3, IAM, ELB, CloudWatch, CloudFormation**, and other services. The large variety of tools for managing EC2 workloads and software stacks designed to run on top of EC2 can be used on ATS with little or no modification. This enables 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-premises workloads bound for AWS
- **off-ramps** for EC2 workloads leaving AWS
- **test/dev** on premises 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