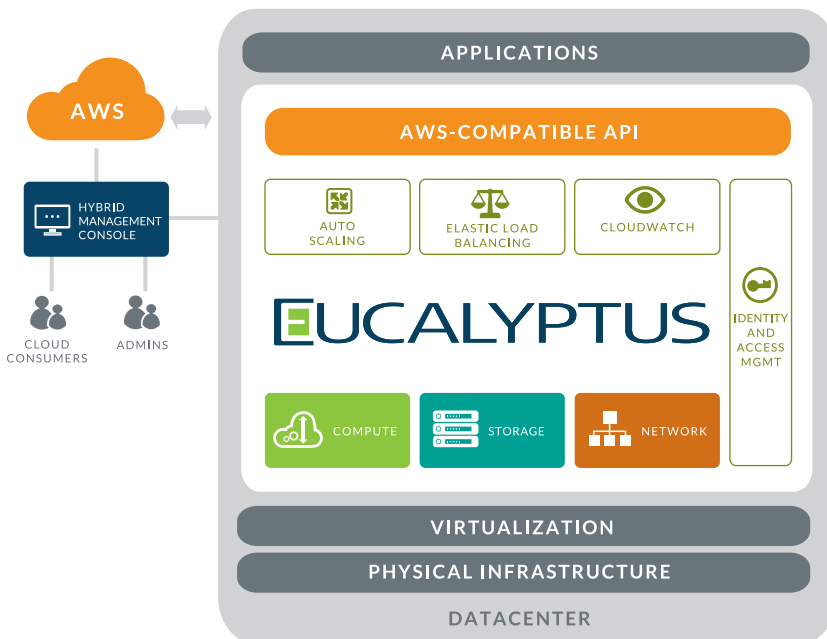# EUCALYPTUS Datasheet

Eucalyptus is open source software for building AWS-compatible private and hybrid clouds. It leverages your existing IT infrastructure to create a self-service private cloud behind your firewall. Infrastructure as a Service (IaaS) is enabled with the private cloud by abstracting the available heterogeneous compute, network, and storage resources. Eucalyptus creates an elastic resource pool that can dynamically scale up or down depending on application workload demands. Through a partnership with Amazon Web Services™ (AWS), Eucalyptus maintains the strongest API compatibility, empowering users to shift workloads between AWS and Eucalyptus environments. The benefits are dramatically lower public cloud spend, increased organizational agility, and increased cloud security and control for IT.
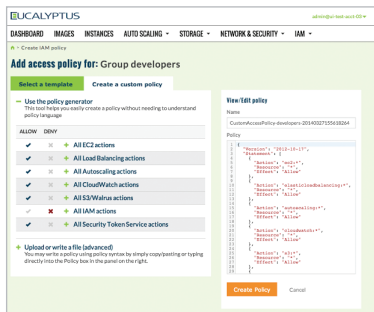

KEY BENEFITS

> **Reduce Public Cloud Spend:** Significantly reduce monthly cloud bills by moving development and test workloads in-house.

> **Organizational Agility:** Reduce delays and accelerate time-to-market with self-service resource provisioning

> **Operational Efficiency:** Leverage existing AWS ecosystem and management tools with Eucalyptus

> **Improved Performance:** Gain precise control of cloud resources and performance on your own hardware

> **Cloud Reliability:** Support high availability clouds for business-critical cloud deployments

> **Security and Control:** Maintain sensitive data in-house and comply with government and industry regulations

> **Infrastructure Flexibility:** Build private clouds using your existing IT infrastructure

> **Dynamic Scalability:** Built-in elasticity allows scaling up and down of resources based on demand

> **Hybrid Capability:** Build hybrid clouds between Eucalyptus private cloud and AWS public cloud

AWS COMPATIBILITY

Eucalyptus is the only solution that can transform your IT infrastructure into a private cloud that works like Amazon Web Services (AWS). Eucalyptus is compatible with AWS APIs like EC2, EBS, S3, IAM, ELB, CloudWatch, and Auto Scaling. With Eucalyptus, you can leverage the common API across both public and private clouds to shorten delivery cycles and accelerate time to market.

SCALABLE OBJECT STORAGE

The Eucalyptus Scalable Object Storage service gives cloud administrators the flexibility to implement scale-out storage on top of commodity resources using open source and commercial solutions that implement the S3 interface. Similarly for block storage, administrators have the freedom to use commodity storage or supported SAN solutions.

NETWORK OPTIONS FOR GROWTH

Eucalyptus is designed to operate and scale within existing environments and supports multiple networking modes to meet customer-specific needs. With the new Edge Networking mode, cloud infrastructure administrators can reduce bottlenecks and provide a more direct connection between cloud applications and their users.

GET STARTED

eucalyptus.com/get-started

CONTACT SALES

sales@eucalyptus.com
+1 (855) 845-9599

HYBRID CLOUD MANAGEMENT

Eucalyptus includes a web-based interface to manage both Eucalyptus and AWS cloud resources. The interface uses responsive design to make it easy to use on any computer or mobile device. For command line or scripting needs, euca2ools are an ideal set of hybrid cloud management utilities.

CLOUD ACCOUNT ADMINISTRATION

The Eucalyptus Management Console provides cloud administrators a graphical console for managing cloud users, groups, security, quotas, and policies. The integrated policy editor helps administrators easily create and validate complex policies with just a few clicks.

MULTIPLE MACHINE IMAGE SUPPORT

Organizations can run multiple versions of Windows and Linux virtual machine images on Eucalyptus. Likewise, Amazon Machine Images (AMIs) are also compatible with Eucalyptus. VMware Images and vApps can be converted to run on Eucalyptus. You can build a library of Eucalyptus Machine Images (EMIs) with application metadata that are decoupled from infrastructure details to allow them to run on Eucalyptus clouds as well as on the AWS public cloud.

HETEROGENEOUS HYPERVISOR MANAGEMENT

You can build and manage mixed hypervisor cluster environments in an IaaS cloud, and manage existing vSphere™, ESXi™, and KVM as AWS-compatible Eucalyptus hybrid clouds.

POWERFUL IDENTITY MANAGEMENT

User identity management is supported within Eucalyptus with capabilities to control virtual resource pools using fine-grained Role-Based Access Control mechanisms for each resource pool. Eucalyptus user identity management can be integrated with existing Microsoft Active Directory or LDAP systems. Eucalyptus identity management interfaces are also compatible with the Amazon Web Services IAM API.

CLOUD USAGE REPORTING

Leverage Eucalyptus resource accounting to analyze your cloud usage patterns. Compute and storage usage data are available in various formats for visualization, Reporting, and analysis by business systems for both enterprises and for integration with chargeback and billing platforms.

HIGH AVAILABILITY FOR CLOUD COMPONENTS

Eucalyptus can be configured as a High Availability (HA) deployment to maximize the reliability of your cloud using hot failover and repair mechanisms. In an HA deployment, each cloud component is replicated and deployed as an active-passive service, including the Cloud Controller, Cluster Controller, Walrus, and Storage Controller. In the event of a failure of an active cloud component that manages the resource pools, the passive service component will take over the management control seamlessly to allow continuous operation.

KEY FEATURES

- AWS API Compatibility with EC2, EBS, S3, IAM, Auto Scaling, Elastic Load Balancing, and CloudWatch
- Supports AWS Ecosystem
- Scalable Object Storage
- Management Console
- Role-Based Access Management
- Quota Management and Accounting
- Resource Tagging
- Customizable Instance Types
- Maintenance Mode
- High Availability
- Network Management, Security Groups, Traffic Isolation
- KVM Hypervisor Support
- Microsoft Windows and Linux Guest OS support
- VMware Hypervisor Support*
- Virtual-to-Virtual Image Conversion for VMware*
- Robust SAN Integration*

*Available with a Eucalyptus subscription

ABOUT EUCALYPTUS SYSTEMS

Eucalyptus Systems provides the only solution that transforms a customer's IT infrastructure into a private cloud that works like Amazon Web Services (AWS). Eucalyptus is open source software that provides access to the scalability of the AWS public cloud while allowing for customization and control of internal cloud resources. By creating a hybrid cloud bridge between Eucalyptus and AWS, customers gain the flexibility to choose where to run workloads. With Eucalyptus, IT can now create an agile, affordable, and AWS-compatible environment for continuous integration (CI) and self-service IT. Empower innovation with a Eucalyptus clouds.