

Solution Brief

Archiving to Public Cloud IaaS

Public cloud platforms are an increasingly popular option for organisations looking to reduce overheads and streamline their IT operation. The flexibility of the pay-as-you-go model allows them to avoid up front investments in infrastructure, as well as minimising ongoing maintenance and support costs.

The ease and speed of provisioning in the cloud enables them to get operations up and running quickly, with the ability to scale resources up or down as needed to match demand. Adopting public cloud services also provides access to enterprise-grade hardware and service-level agreements (SLAs), as well as fault-tolerant features that would otherwise be unaffordable for smaller organisations.

Deployment options for the Barracuda Message Archiver include public cloud Infrastructure-as-a-Service (IaaS) platforms as well as on-premises physical and virtual appliances. This gives customers the flexibility to choose the most appropriate solution for their particular environment, and will support their migration to a cloud based infrastructure.

Introduction to Public Cloud IaaS

Public cloud platforms such as Amazon Web Services and VMware vCloud Air all provide IaaS capabilities. From their central data centers they can deliver all the hardware and other infrastructure components such as servers, networking, bandwidth, and load balancers that an organisation would otherwise have to purchase and manage in their own data center. The customer can then install their own operating system and software on the infrastructure provided to them.

IaaS is usually provided as a shared environment and so most of the components such as servers and databases are virtualised, however this is transparent to the end customer. Individual infrastructure components can be added or removed on demand as needed to enable organisations to quickly deploy and scale resources to match their current and future requirements.

As it is a virtual environment, setting up and managing servers and other components is accomplished using a web browser interface or APIs provided as part of the service. Public cloud services are usually accessed via a public network, although most platforms now offer customers an additional-cost option to use a secure direct connection.

The major public cloud IaaS providers have data centers networked across the globe, so most businesses will be able to provision their infrastructure in a local geography.

This can be important if they need to keep their data in the same country or region for legal or compliance reasons.

In this solution brief we look at deploying Barracuda Message Archiver on the public cloud IaaS platforms provided by Amazon and VMware.

The Benefits of Public Cloud IaaS

Moving to an IaaS service with a public cloud provider enables organisations to eliminate their complex local infrastructure where they have to manage a physical hardware environment, replacing this with a much simpler network-based environment where they can manage everything online via a web browser.

Operational benefits that organisations can realize include a reduction in time and cost spent managing hardware and infrastructure, together with a guaranteed high level of uptime from their public cloud provider.

There are significant economic benefits to IaaS. It eliminates upfront capital expense for hardware, which provides an ongoing cost elasticity as organisations only pay for what they are actually using at that time. Public cloud providers are also able to leverage massive economies of scale, which allows them to provide resources at a cost that individual businesses are unlikely to be able to match.

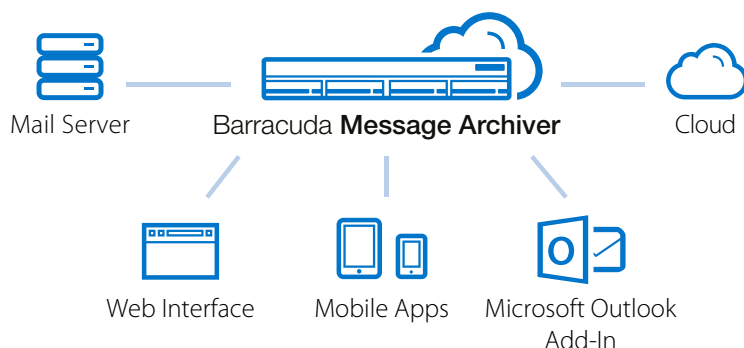
The global reach of cloud providers can benefit organizations with distributed operations. Local data centers and network access points will provide lower latencies and therefore better experiences for both their staff and their customers.

Message Archiver in the Cloud

The Barracuda Message Archiver is an all-in-one, cloud-connected email archiving solution that improves user access and productivity, reduces email storage costs, and eliminates the need for PST files.

As with many other Barracuda products, a range of flexible deployment options are provided by the Barracuda Message Archiver. It can be deployed on-premises in an organisation's data center as either a physical appliance or as a virtual appliance, and it can be deployed on public cloud platforms as an IaaS solution. The IaaS deployment is what we are covering in this solution brief.

The public cloud platforms supported are Amazon Web Services and VMware vCloud Air. Barracuda Networks works closely with all these organisations to make it easier for customers to run the Barracuda Message Archiver in the cloud securely and efficiently and to make the transition from on-premises to their chosen cloud provider.



All the functionality available when running the Barracuda Message Archiver on-premises is also provided when running it in a public cloud. This includes the optional Barracuda Cloud subscription which moves information to an additional Barracuda-managed cloud platform as a secondary copy for disaster recovery or as a secondary tier of storage.

The Barracuda Message Archiver running on a cloud IaaS platform provides an easy and secure way to archive mail from a variety of mail servers. Those mail servers can be running on-premises or in the public cloud, as well as from cloud-based SaaS email services such as Office 365.

Why Archive to the Public Cloud?

The Barracuda Message Archiver provides an ideal email archiving solution for organisations who have moved some or all of their operational services offsite onto a public cloud platform. Running the Barracuda Message Archiver as a virtual appliance means they have a solution that is quick to deploy, and can be easily upgraded in line with changing business requirements as their storage needs increase.

Integration in the cloud

If an organisation is running their email server on AWS or vCloud Air then they can benefit from co locating the Barracuda Message Archiver in the same public cloud service. Ideally this is in the same data center or geographic region. This configuration allows tight integration between email and archiving operations, with a protected and completely cloud-based direct route from email server to email archiver. It will deliver improved performance, as well as saving on bandwidth and network utilisation.

Migrating to the cloud

For those organisations who are in the process of migrating their on-premises infrastructure and applications to cloud platforms, or for those who have already made a significant investment in IaaS, deploying a Barracuda Message Archiver physical or virtual appliance on-premises does not provide a good long term direction. The Barracuda Message Archiver can instead be deployed on the same public cloud platform as the rest of their infrastructure, and this will include the capability to interact with any on-premises mail servers not yet migrated.

How does it work in the Cloud?

Deployment on a public cloud IaaS platform is just like deploying the Barracuda Message Archiver in an on-premises data center. It operates in the same way as the traditional physical appliance and provides all the same capabilities, but delivers these within a virtual environment.

The Barracuda Message Archiver is delivered as a complete all in one virtual appliance that includes all application and operating system components. It is ready to install and activate immediately on any of the supported public cloud platforms. We currently support AWS and vCloud Air.

Deployment

Prior to deploying Barracuda Message Archiver on any of the public cloud platforms, all customers need to set up a subscription with their chosen cloud service provider. This will cover the recommended virtual machine instance and all other required services, such as storage and bandwidth.

Full step by step deployment instructions for the following public cloud platforms can be found in Barracuda's TechLibrary, or by clicking the links below.

- [Amazon Web Services](#)

The Barracuda Message Archiver is provided as an AMI (Amazon Machine Image) in the AWS marketplace.

- [VMware vCloud Air](#)

The Barracuda Message Archiver Vx is a virtual appliance obtained from the Barracuda Download Portal. It can be deployed both on-premises with VMware or in the public cloud with vCloud Air. Existing customers who are currently running the Barracuda Message Archiver Vx on VMware locally can migrate their existing VMs directly to vCloud Air using the vSphere management console.

Barracuda Cloud Storage

While these public cloud platforms do provide a high level of reliability and uptime, some organisations may be concerned about the availability of their archived data, or may recognise the need to have a secondary copy elsewhere. In this case they have the option to replicate all of their archived data to Barracuda's Cloud Storage, just as they would if the Barracuda Message Archiver were running locally as a physical or virtual appliance.

Deploying the Barracuda Message Archiver on a public cloud platform will provide many of the same benefits as a SaaS cloud archiving solution, such as reducing management time and costs, eliminating on-premises hardware, and allowing IT resources to be treated as an operating expenditure rather than a capital expenditure.

Additionally, it has the benefit of enabling organisations to retain control over their IT operations and their data if that is important to them. Deploying the Barracuda Message Archiver in AWS or vCloud Air can also work out to be more cost-effective than most SaaS email archiving solutions.

Licensing

The Barracuda Message Archiver is licensed using the Bring-Your-Own-License (BYOL) model, so each customer will need to obtain a license token from Barracuda in order to activate their virtual appliance, either by purchasing a full product license or by requesting an evaluation license.

The Barracuda Message Archiver license does not include any computational, storage, or data transfer fees associated with using the product in the public cloud. These are ongoing costs that the customer will need to purchase directly from their chosen public cloud provider on an hourly or annual basis to reflect their actual usage of these components.

Existing customers

Current Barracuda customers with a physical Message Archiver appliance running on-premises can easily migrate across to one of the public cloud versions. As the software is the same, their existing data and configurations can move straight over, and the user interface remains the same so no retraining will be required.

Conclusion

Public cloud services such as Amazon Web Services and VMware vCloud Air provide a cost effective way to meet current and future IT infrastructure requirements. They avoid up front investment costs and allow organisations to get their applications up and running faster with improved manageability and less maintenance. They also are able to adjust resources to meet fluctuating and unpredictable business demand.

The Barracuda Message Archiver can be deployed in the public cloud as a virtual appliance, and provides all the same capabilities as the on-premises version. Together with Barracuda's other cloud enabled storage and security products, the Barracuda Message Archiver will enable organisations to migrate and run their business applications in the cloud securely and efficiently.