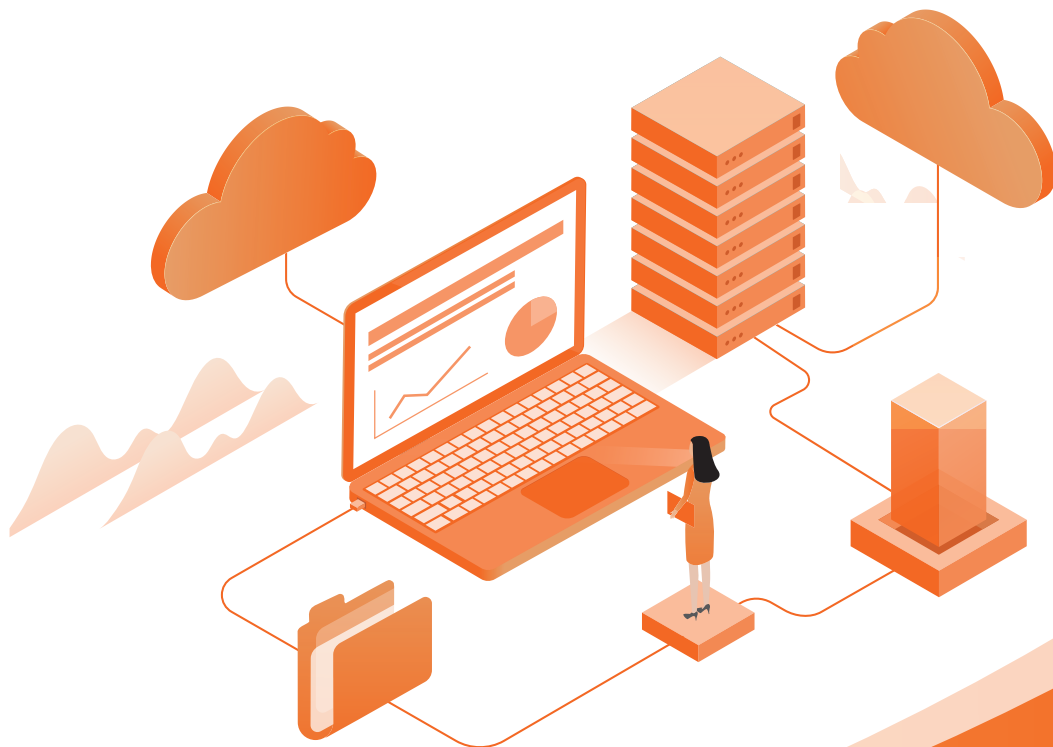


Alibaba Cloud

Hybrid Backup & Recovery

HBR Appliance

All-in-one data protection solution supporting both backup and disaster recovery scenarios



Key Advantages



Highly Efficient

Using HBR unique data deduplication and compression, customers can achieve a data reduction ratio of up to 30:1. This is able to save storage space and cloud traffic, and improves data storage and transmission efficiency.



Secure

The HBR appliance is AES256 encrypted, and the transmission channel uses HTTPS encrypted transmission to realize the double security guarantee of the data itself and the transmission channel.



Reliable

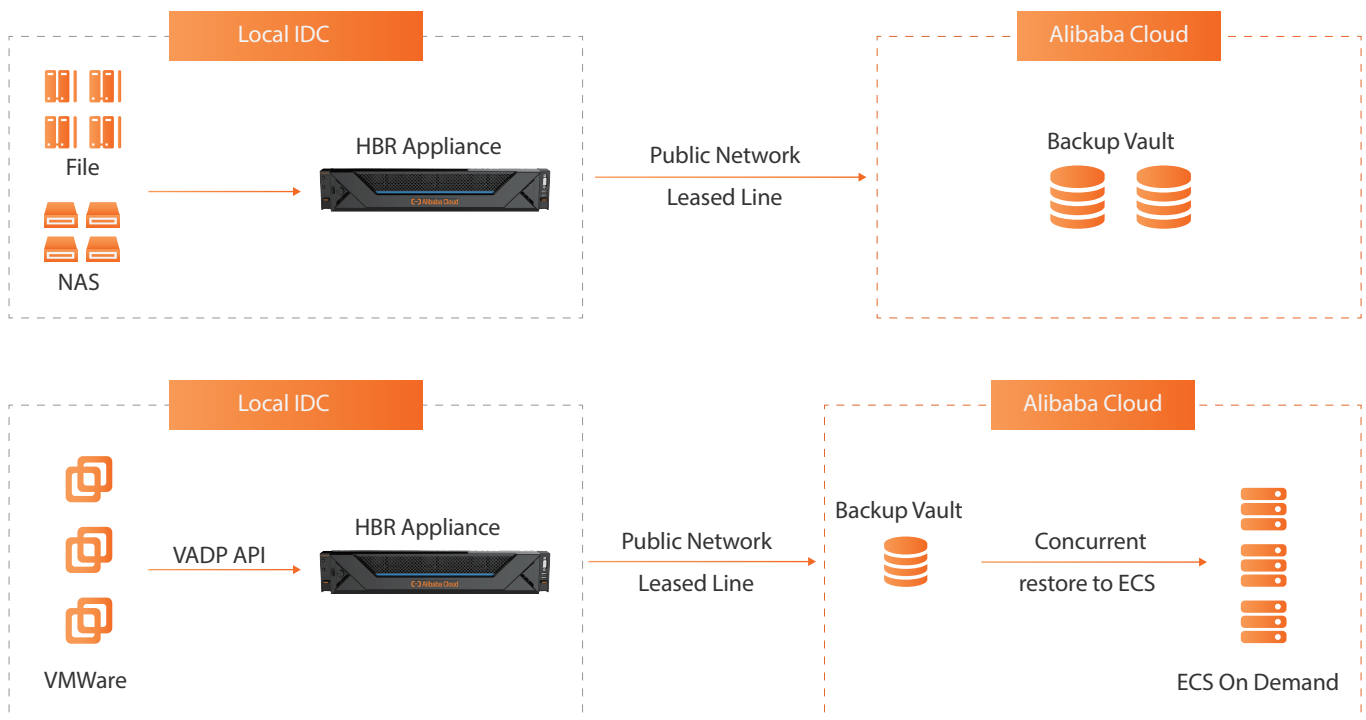
The HBR appliance is designed to achieve high-reliability. The disaster recovery environment in Alibaba Cloud provides "16 9's" reliability guarantee.



Cost Effective

All the data is deduplicated and compressed before being uploaded to the cloud, which saves bandwidth and consumes less cloud storage space. The cost is up to 70% lower than traditional backup solutions. In disaster recovery scenarios, only storage resources are usually consumed, and only servers on the cloud are pulled up as needed when disaster recovery takes over. This is 90% lower than traditional disaster recovery solutions.






Alibaba Cloud HBR Appliance Architecture



Alibaba Cloud HBR appliance supports the mainstream operating systems

Infrastructure: VMware, physical server (file backup)

OS: Windows 7/8/10, Win Server 2008 and above, Centos, RHEL, SUSE, Ubuntu

Challenges of Traditional Backup Solutions	Alibaba Cloud Backup & Recovery Service
 High cost: Traditional backup solutions usually require separate software and hardware, with backup storage at least 2-3 times larger than the original data, making the TCO very high.	 Alibaba Cloud has secure and reliable data centers all over the world and is a natural remote disaster recovery center for enterprise users.
 Hard to provide cross-region backup capability: More and more industries are requiring cross region backup capability. With the traditional backup solution, customers have to setup their own cross region backup data centre which is a huge investment.	 Using Alibaba Cloud as a disaster recovery center can save the construction and planning cycle of the disaster recovery server room. This can save more than 80% of the one-time disaster recovery system construction costs and software and hardware operation and maintenance costs.
 Difficult operation and maintenance: Traditional backup solutions require professional individuals to operate and maintain the system, who must operate and integrate multiple systems and go through complex processes. It is also very hard to monitor the whole solution.	 At the same time, using the flexible expansion of the public cloud, resources are used on demand and paid according to the amount, meaning you can try it first, optimize, and then increase the amount, greatly reducing the difficulty of planning and implementation.
 Difficult deployment: Traditional backup solutions require accurate overall planning and complete design, making scalability very hard to support. The difficulty of deployment is even higher if cross-region backup is required.	

Alibaba Cloud Hybrid Backup & Recovery Appliance

With pre-loaded file and VMWare backup clients, Alibaba Cloud Hybrid Backup & Recovery (HBR) Appliance integrates with Alibaba Cloud Backup & Recovery Service seamlessly. All the backup effort is performed in the appliance without consuming extra resources. It implements a backup and recovery solution easily, and acts as a bridge between customer's 'on-premise' servers and the public cloud. The HBR Appliance has dual power source, dual network ports, and hot-backup disks etc, providing a safe and stable backup operating environment. After obtaining the backup data automatically, the HBR appliance encrypts, deduplicates and uploads it to the cloud. In this way it perfectly balances the security and the network efficiency during the backup and protects critical data of the enterprises. Each HBR appliance has a one-year software license for file and virtual machine backup. The time period starts after the activation of the license. After license expires, the customer can renew it online in the Alibaba Cloud console.

Scenarios Supported



File and VM Backup

Users can use the Alibaba Cloud HBR appliance to automatically back up key data to the cloud such as VMWare virtual machines, NAS files and local files on the server. This is backed up according to a pre-set strategy to achieve safe and reliable off-site backup. At the same time, the encryption and deduplication capabilities ensure data security and save network costs.



Disaster Recovery

Users can back up VMWare virtual machines to Alibaba Cloud and restore them to ECS when necessary, with high recovery performance and extremely low-cost application-level disaster recovery within the virtual environment.

HBR Appliance Specification



Category	Configuration	DR208INTL
Data Source	Max. Files	200 M
	Max. VMs	200
Cloud	Cloud Backup Storage	300 TB
	Max. Upload Speed	1TB / Hour
	Cloud Monitoring	Yes
Computing	CPU	Xeon 6130 * 2
	Memory	256 GB
Storage	RAW Disk Space	configurable, 2 TB-96 TB
	Disks Quantity	configurable, 4 -12
	Disk Type & Capacity	SATA HDD, 4 TB-8 TB
		SSD, 960 GB
	RAID Protection	RAID 5
Network	On Board: 10GbE	configurable, 0 - 2
	On Board: 1 GbE	configurable, 0 - 2
	16Gb HBA	configurable, 0 - 2

About Alibaba Cloud

Alibaba Cloud, founded in 2009, is a global leader in cloud computing and artificial intelligence, providing services to thousands of enterprises, developers, and governments organizations in more than 200 countries and regions. Committed to the success of its customers, Alibaba Cloud provides reliable and secure cloud computing and data processing capabilities as a part of its online solutions. In January 2017, Alibaba Cloud became the official cloud services partner of the Olympics. According to IDC and Gartner, Alibaba Cloud is solidly positioned as the No. 1 cloud computing service provider in China and in Asia Pacific, and ranks 3rd among cloud service providers in terms of market share in the world.

Alibaba Cloud Storage provides safe, reliable, low-cost, and flexible storage services.

Widely used in disaster recovery backup, mobile applications, online education, audio and video, image and material download, security monitoring, file storage and other fields. Effectively help you solve many business problems such as massive data archiving and online backup, data processing, accelerated content distribution, business data mining analysis, and illegal data monitoring.