

NetApp ONTAP Select on IBM Cloud



A hybrid cloud solution that extends the data management capabilities on ONTAP software to IBM Cloud.

The challenge

In today's IT ecosystems, the cloud is synonymous with flexibility and efficiency. When you deploy new services or run applications with different usage needs, the cloud offers a level of flexibility in your infrastructure that lets you use what you need, when you need it. Cloud computing has become a go-to deployment model, enabling you to spin up or spin down applications on demand and to support applications with scalable workloads.

However, concerns over data sovereignty and mobility can make it difficult to fully realize the ease and agility of the cloud. Data has gravity; it's difficult to pick up and move to a new location quickly. To take advantage of the flexibility and efficiency of the cloud, you need a simple, controlled solution that enables you to govern your data with the functionality that you expect in your own private environment.

Building a Data Fabric on the IBM Cloud

IBM Cloud with NetApp ONTAP Select helps you take full advantage of the hybrid cloud through a Data Fabric—NetApp’s vision for the future of data management. A Data Fabric enables you to seamlessly move data to where it’s needed, so you can respond and innovate more quickly to meet the needs of your business.

With the introduction of NetApp ONTAP Select on IBM Cloud, you can unlock NetApp’s Data Fabric capabilities to create a seamless link between on-premises IT and your IBM cloud.

Managing data in IBM Cloud

The IBM Cloud platform brings together DevOps, hybrid integration, and cognitive solutions to help you solve your business problems in the cloud. IBM Cloud dedicated infrastructure as a service (IaaS) provides physically isolated hardware in an IBM data center.

With NetApp ONTAP Select, a software-defined storage virtual appliance, you can extend your existing data management capabilities by implementing NetApp ONTAP on IBM Cloud dedicated bare-metal servers. Your users can provision storage resources with agility and flexibility while protecting their data with NetApp’s advanced data management functions, such as fast and efficient NetApp Snapshot™ copies, FlexClone® volumes, and SnapMirror® replication. ONTAP Select enables acceleration of application DevOps while reducing the complexity and overhead that are associated with physical storage systems.

NetApp ONTAP Select on IBM Cloud is available in 60+ IBM Cloud data centers around the world. With IBM’s global reach, you can keep your data local and put your compute and services where they best serve your users.

NetApp ONTAP Select on IBM Cloud includes robust integrated data protection features, including NetApp Snapshot, SnapMirror, and SnapVault® software. You can quickly and efficiently replicate your valuable

Key benefits

- Respond more quickly to the needs of your business by seamlessly moving data to where it’s needed
- Extend existing data management capabilities by implementing NetApp® ONTAP® software on IBM dedicated, bare-metal servers
- Accelerate application DevOps while reducing complexity and overhead
- Recover entire file systems or data volumes in seconds, regardless of capacity or number of files
- Leverage BYOL to fit your applications’ needs
- Fully integrate with VMware environments deployed on premises

data to an IBM Cloud data center. And if you must recover data quickly, NetApp SnapRestore® data recovery software can use local Snapshot copies to recover entire file systems or data volumes in seconds, regardless of capacity or number of files.

VMware integration

IBM Cloud for VMware helps you improve productivity and efficiency, reduce IT overhead costs, and gain agility by offloading IT resources and management complexity to the cloud. You can accelerate hybrid cloud adoption by harnessing NetApp integrated ONTAP capabilities with VMware, running on IBM Cloud bare-metal servers. The service enables easier, security-rich, and near-seamless extension of existing workloads from on-premises data centers to one of IBM Cloud’s 60+ data centers around the world.

IBM provides full access to the native VMware stack to manage resources as you would on premises with simple and predictable pricing. IBM Cloud for VMware enables your IT department to transform static server and network infrastructures into dynamic resource pools, which can be provisioned on demand based on changing business objectives.

With your NetApp ONTAP Select software-defined storage, you can extend your existing NetApp data management capabilities by implementing NetApp ONTAP software as a service on IBM Cloud servers. You can provision storage resources with agility and granularity while protecting your data with integrated Snapshot copies, remote backup, and disaster recovery.

Flexible consumption models

NetApp ONTAP Select on IBM Cloud currently offers a bring-your-own-license (BYOL) model for consuming storage, in which capacity is licensed on a per-node basis in increments as small as 1TB. You can start with a few terabytes and dynamically add capacity as your needs grow. BYOL is optimal for customers with deterministic applications or applications that will be used for longer periods of time.

VMware vSphere Enterprise or Enterprise Plus	<p>Create a virtualization layer that abstracts server hardware resources and makes them shareable by multiple virtual machines:</p> <ul style="list-style-type: none"> • Migrate compute with vMotion • Includes vCenter for management • Supports high availability
VMware vCenter	<p>Get simple deployment with centralized visibility and management for VMware vSphere environments from a single console.</p>
NetApp ONTAP Select storage	<p>This software-defined storage solution runs on the IBM Cloud to create, provision, and manage storage for your virtual data center:</p> <ul style="list-style-type: none"> • Flexible options to support various workloads • Industry-leading storage data protection and efficiencies • Integration with existing on-premises ONTAP storage • Full support by the NetApp OnCommand® management suite
NetApp VMware plug-ins	<ul style="list-style-type: none"> • Virtual Storage Console for VMware vSphere • VASA Provider (vSphere APIs for Storage Awareness) • NetApp SANtricity® Storage Replication Adapter (SRA) for VMware vCenter Site Recovery Manager • VAAI (vStorage APIs – Array Integration)

Table 1) IBM Cloud for VMware solutions with NetApp ONTAP Select.




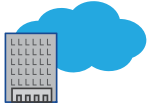
 <p>Disaster Recovery</p> <ul style="list-style-type: none"> • Enterprises in nearly every industry face huge challenges in managing their DR infrastructure and processes. • Enable economical DR in the cloud by leveraging NetApp® ONTAP® and SnapMirror® capabilities to seamlessly replicate your production environment to the IBM Cloud. • Meet stringent RTO and RPO by leveraging enterprise-class data management capabilities for VMware environments, including VMware SRM. 	 <p>Storage File Services</p> <ul style="list-style-type: none"> • Enterprises gain significant value through increased productivity and collaboration by implementing file-sharing capabilities. • ONTAP Select, with built-in data protection, includes both CIFS and NFS protocols, supporting both Linux and Windows users and applications. • Example workloads include home directories, file shares, development, web apps, and other unstructured data.
 <p>Dev/Test & DevOps</p> <ul style="list-style-type: none"> • Get the agility, scalability, and security you need to support rapid application development and testing cycles with VMware on the IBM Cloud. • Leveraging NetApp FlexClone® cloning technology, development teams will be more productive by creating copies in seconds without significant impact on storage usage or cost. • Enable agile development and testing processes by providing developers with quick updates to production data. 	 <p>Data Center Consolidation & Capacity Expansion</p> <ul style="list-style-type: none"> • Consolidate legacy infrastructure onto an automated and centrally managed, software-defined data center. • Run and protect enterprise workloads supported through high-availability, multinode configurations with NetApp Snapshot™, SnapMirror, and SnapVault® technologies. • Lower operational cost and improve infrastructure efficiencies through NetApp native deduplication and compression capabilities.

Figure 1) Enterprise use cases.

About IBM Cloud

IBM Cloud ensures seamless integration into public and private cloud environments. The infrastructure is secure, scalable and flexible, providing customized enterprise solutions that have made IBM Cloud the hybrid cloud market leader. Products and services include bare metal and virtual servers, networking, turnkey big data solutions, private cloud solutions, and more. Our unique advantages include the industry's first Network-Within-a-Network topology for true out-of-band access, and an easy-to-use customer portal and robust API for full remote-access of all product and service management options. For more information, visit www.ibm.com/cloud.

For more information, contact us:

Ng-ibmcloudsales@netapp.com

Additional resources:

www.ibm.com/cloud/netapp

About NetApp

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services and applications to the right people—anytime, anywhere. www.netapp.com

