Why the Need for Data Protection in the Cloud?
A common misconception about workloads hosted in the cloud is that they are automatically safeguarded by the cloud provider against disruption from causes such as data corruption, inadvertent deletions and unforeseen system failures. VMware takes extraordinary precautions to ensure maximum uptime availability and recoverability of the vCloud Hybrid Service environment. But customer workloads are still subject to risks and potential data loss that are not covered by the routine safety measures that VMware deploys. This introduces the need for customer application data to be protected by robust and reliable means that is fully integrated with the vCloud Hybrid Service operating environment—without added dependencies on complex and costly third-party party backup software.

AT A GLANCE
VMware vCloud® Hybrid Service™—Data Protection is a simple yet secure policy-based backup and recovery solution for virtual-machine data and content that is hosted exclusively on VMware vCloud Hybrid Service. Available for both Dedicated Cloud and Virtual Private Cloud service options, Data Protection includes the following feature highlights:
• Daily/24-hour backup schedule
• Synthetic-full and encrypted backup images
• Standard 30-day local retention
• Per-virtual-machine service registration
• No artificial limits on the number or size of registered virtual machines
• Unlimited restore-operation requests

KEY BENEFITS
• Business continuity in the cloud with compliance for enterprise workloads – To address growing concerns about enterprise application workload uptime and availability in the cloud, Data Protection provides a foundational layer for business continuity that builds on existing resilient, fault-tolerant architectures that support vCloud Hybrid Service to minimize service interruptions.
• Agentless backup support in a fully OS- and application-agnostic vCloud Hybrid Service – Data Protection leverages a combination of vStorage APIs and underlying VMware vSphere® snapshot capabilities to fully protect your virtual machines regardless of the installed OS and applications, with no dependency on in-guest agents.
• Simplified manageability that reduces backup policy administration and complexity – Focus on the more critical aspects of your IT operations environment in the cloud by capitalizing on the built-in policy settings that Data Protection includes. Simple per-virtual-machine registration workflows eliminate the need to schedule backup intervals, adjust retention settings and set up file-exclusion lists.

What Is VMware vCloud Hybrid Service—Data Protection?
Enterprise-Ready Data Protection for Production Workloads Hosted in the Cloud
Data Protection is an optional data backup and recovery feature for VMware vCloud Hybrid Service, which is a secure infrastructure-as-a-service cloud that VMware owns and operates. Data Protection enables self-service, policy-based protection of business-critical data by backing up registered virtual-machine images and their associated vSphere vApp metadata within Dedicated or Virtual Private Cloud service types.
Unlike traditional file-based backup and recovery solutions, Data Protection uses image-level backups to ensure that all OS, file system and application data residing within a virtual machine is captured as a snapshot image before it is committed to backup media.

### Comprehensive Policy Protection for Secure Backup and Recovery

Like private enterprise backup and recovery operations environments, Data Protection offers default policy attributes that support a guaranteed service level for backup and recovery objectives—without imposing additional administrative burden on IT operations staff:

- 24-hour recovery point objective (RPO)
- Image-level restore granularity objective (RGO) per virtual machine
- Fixed 30-day retention (onsite)
- Industry standard AES-256 image-level encryption
- Off-peak backup schedule (0000-0600 UTC-8)

These objectives are uniformly consistent across both Dedicated and Virtual Private Cloud service tiers. They are reinforced by the use of synthetic-full backup images, which guarantee the integrity of each backup image regardless of when the backup occurs.

### Nonintrusive Protection for Any Operating System and Application

By leveraging vStorage APIs for Data Protection in vSphere, Data Protection can use a combination of inline I/O quiescing and snapshot utilities at the virtualization layer to capture a crash-consistent image replica of any virtual machine, regardless of the OS or applications installed. These nondisruptive recoverable point-in-time replicas do not require installation of third-party software agents, which often result in resource contention and potential performance degradation during an active backup window. Use of change block tracking (CBT) in Data Protection ensures that only disk blocks that have changed since the most recent backup are transmitted and committed to media. CBT maximizes efficiency and reduces Data Protection storage-capacity requirements.

### Simplified Restore Workflow Requests and Premium Support

By leveraging VMware Technical Support and vCloud Hybrid Service Operations, restore requests for individual or multiple virtual machines can be submitted directly to VMware. VMware guarantees the initiation of a restore request within 4 hours of the time the request is submitted and provides the necessary assistance to fully recover the virtual machine(s) and associated vSphere vApp topology and metadata.

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<thead>
<tr>
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<th>DEDICATED CLOUD</th>
<th>VIRTUAL PRIVATE CLOUD</th>
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<tbody>
<tr>
<td>Data Protection Capacity Units</td>
<td>1TB front end protected storage</td>
<td>1TB front end protected storage</td>
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<tr>
<td>Unlimited Backups</td>
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<tr>
<td>Unlimited Restores</td>
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<tr>
<td>Backup Operations (Concurrent)</td>
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<td>Restore Operations (Concurrent)</td>
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<td>Production Support</td>
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### How to Buy

You can request a subscription to Data Protection through My VMware™. After your subscription is activated, you can register and unregister virtual machines with Data Protection through the vCloud Hybrid Service console.

### Support

Subscription services support is available to all vCloud Hybrid Service customers. Support includes access to specialists who assist with onboarding activities and with ongoing service. For customers requiring additional services, VMware also offers professional services engagements for best practices and getting started with your deployment—both directly and through an extensive network of certified professionals. For more information visit [http://www.vmware.com/services](http://www.vmware.com/services).

### Find Out More

For more information about Data Protection or to purchase VMware products, call 1-877-4VMWARE (outside North America, +1-650-427-5000) or visit the VMware vCloud Hybrid Service Web page at [http://vcloud.vmware.com](http://vcloud.vmware.com).