Hybrid Cloud Checklist

Operationalizing Your Hybrid Cloud

Key Items to Consider as You Evolve Your Cloud Services Delivery

The move to hybrid cloud is now a priority in the enterprise. Hybrid cloud models offer the cost and scale benefits of public clouds, with the greater security and control of private clouds. Plus, hybrid clouds can help IT balance capital and operational expenses, make optimal use of in-house resources, and improve responsiveness to changing business requirements. The balance of on-premises and outsourced infrastructure resources will be different for each business, and no single hybrid solution will fit all organizations.

Intel recommends these basic steps to help you evolve your private cloud into a hybrid model that works for your business.

Step 1: Start with a High-Performance Private Cloud

This first step depends on your organization’s current level of cloud maturity and assumes that your on-premises cloud is based on a highly virtualized foundation. Before you expand to a hybrid cloud, develop these capabilities in your private cloud environment to pave the way:

- Broad access to services
- Full automation
- Elastic scaling
- Integrated cloud management platform for virtualized and cloud environments
- Monitoring and orchestration to respond automatically to dynamic conditions
- Infrastructure as a service (IaaS)
- Rich platform-as-a-service (PaaS) development environment
- Self-service catalog
- Chargeback, metering, and analytics
- Security at the hardware level and every layer of the cloud (IaaS, PaaS, and software as a service [SaaS])

Find out more about how to develop private cloud services and the importance of PaaS in your cloud environment.
Step 2: Select Your Public Cloud Provider

The cloud service provider (CSP) you select should offer the capabilities that are essential to delivering services to your business users. While this may seem obvious, the Intel® Cloud Finder online tool helps you organize capabilities you need, prioritize their importance, and identify the right CSP. Detailed criteria are organized under major areas, including security, usability, quality, availability, technology, and the business characteristics of the CSP.

CSPs participate in the Intel Cloud Finder program. To choose your CSP:

- Compile your IT requirements.
- Use Intel Cloud Finder to help you find a public cloud provider that meets your organization’s needs.

Read more about Intel Cloud Finder Brief, or use the online tool.

Step 3: Make Your Hybrid Cloud Operational

Once you’ve paved the way for your hybrid cloud by developing the capabilities listed in Step 1 in your private cloud environment and you’ve identified a CSP using the guidance in Step 2, you are ready to operationalize your hybrid cloud. You probably already know that this involves more than the simple flip of a switch. Work with your CSP to create the interface and portability you will need for your virtual machines (VMs), applications, and data. Be sure to consider:

- Your purpose for moving to a hybrid model.
  - Do you plan to deliver business processes as complete applications through SaaS?
  - Do you need cloud bursting to help manage unpredictable peaks in demand?
  - Do you plan to make services available for short-term projects, or to meet new business opportunities?

- The most suitable workloads to move. (For example, consumer-facing web services, customer relationship management [CRM], and human resources applications are typical workloads to move first.)

Ideally the infrastructure, platform, and application environments are mirrored in both your data center and at the CSP. To make sure, pay particular attention to the technology used by your provider and the policies for application services and security in place in the CSP’s data center. Consider how they will impact the following:

- Portability for infrastructure and applications
- Interconnectivity for communication between cloud environments
- Consistent enforcement of security policies across multiple domains
- Monitoring and manageability throughout the hybrid cloud ecosystem

Learn more about the path to hybrid cloud. Find out how Intel IT is making a hybrid cloud work.

For more resources on private and hybrid clouds, visit the Intel IT Center at intel.com/cloud.

Share with Colleagues

Legal

This paper is for informational purposes only. THIS DOCUMENT IS PROVIDED “AS IS” WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION, OR SAMPLE. Intel disclaims all liability, including liability for infringement of any property rights, relating to use of this information. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted herein.

Copyright ©2013 Intel Corporation. All rights reserved. Intel, the Intel logo, and the Look Inside. logo are trademarks of Intel Corporation in the U.S. and other countries.