

Private Cloud Platform

A Practical Approach to Modernizing IT Resource Delivery in the Enterprise

EFFICIENCY: Self-service portal offers on-demand access to resources when users need them

FLEXIBILITY: Architecture enables seamless management of multiple clouds and technologies

CONTROL: Central point of access ensures users cannot exceed resource usage beyond

SECURITY: Multi-tenancy design enables strict separation by business groups

SIMPLICITY: Single pane of glass allows all cloud resources to be managed from one console

COST: Financial engine provides costs reporting on resource consumption and ability to recover cost

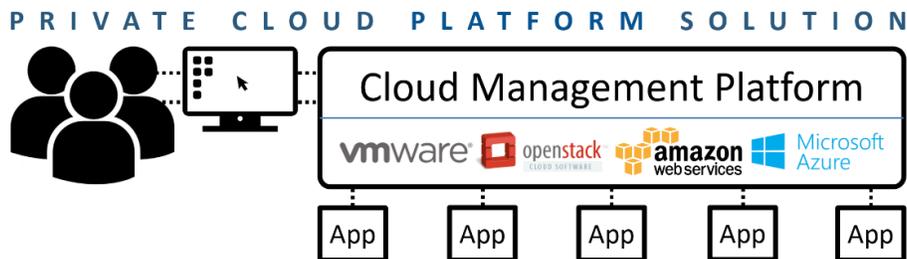


Enabling Agile Infrastructure with Private Cloud

The benefits of the cloud service delivery model and its consumerization of IT resources are well-established and proven. Web portal-based service catalogs provide self-service, on-demand access to infrastructure has enabled IT efficiency and productivity as never seen before. Resource pooling and sharing of IT infrastructure at scale with multi-tenancy control reduces cost by improving overall utilization and thus extracting more value from the infrastructure.

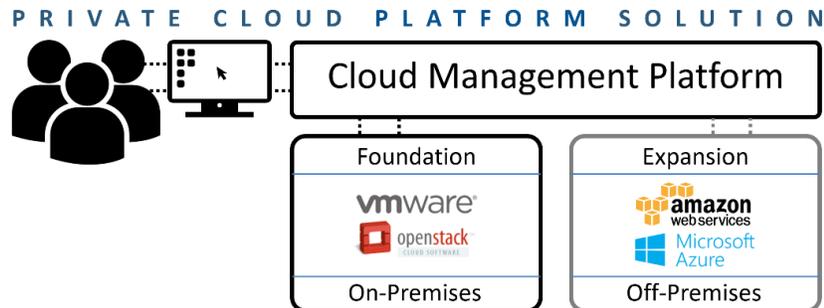
InterVision offers a practical approach to realizing the benefits of this service delivery model with the Private Cloud Platform solution. Our approach to cloud enablement is based on an 'on-premises first' philosophy whereby the path to your cloud starts with a strong, stable, foundation built on infrastructure hardware located in your datacenter and enhanced over time through sprint-like iterations to enable the specific features and functions your business needs.

Whether you start with a large or small private cloud platform, your on-premises cloud can be seamlessly extended to include public cloud services allowing single point of control capability for all cloud services, internal or external.



Why the 'On-Premises First' Approach Matters

The ease of access and consumption of public cloud resources is a phenomena in modern IT. Startups and more nimble companies able to break with traditional IT delivery models are taking a 'public cloud first' posture where services are built almost entirely in the public cloud or are being migrated there. In other cases, we see shadow IT becoming more common in established companies where users, most notably in application groups, are circumventing internal IT and instead leveraging public cloud resources to meet their time-sensitive deadlines and productivity demands. So why would InterVision promote the 'on-premises first' approach to cloud?



At the core of the InterVision Private Cloud Platform solution is the Cloud Management Platform (CMP) technology. The CMP turns ordinary virtual infrastructure into a cloud of resources. Just as virtualization abstracts hardware resources into pools, the CMP can abstract virtual pools of resources into a cloud providing a single pane of glass through which all resources are provided, accessed, and managed regardless of underlying technology or location.

The CMP can manage public and/or private cloud resources, creating one common cloud, while the tools provided by the public cloud providers are limited to managing only the resources they provide. Exposing internal IT users to the public cloud provider's interface limits your ability to integrate local, on-premises resources into a common cloud without introducing a second user portal, which introduces complexity and can cause confusion. By starting with an 'on-premises first' approach to cloud, users are exposed to a portal that can manage both internal and external resources. This approach allows your company to seamlessly expand to the public cloud when the time is right while introducing the cloud delivery model quickly using resources already present in your environment today.

Cloud Deployment Model for Rapid Time to Value

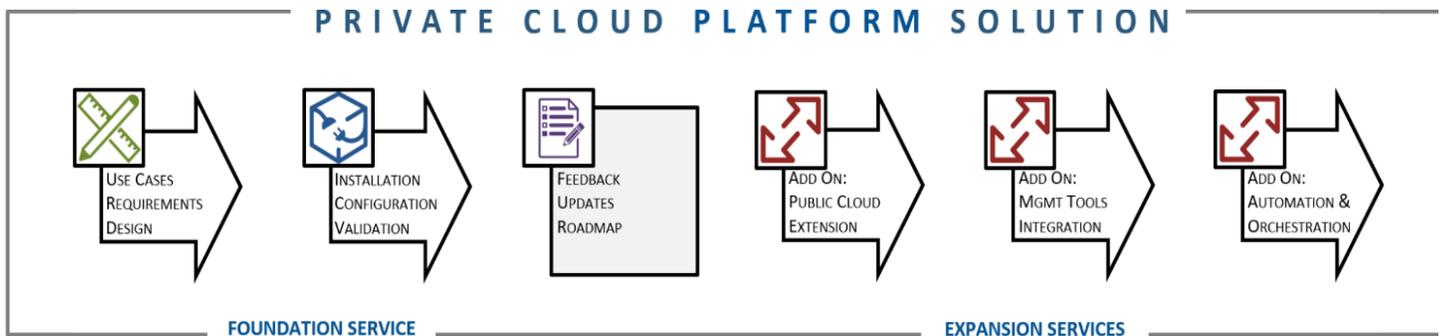
The key to InterVision's Private Cloud Platform solution is its deployment model that focuses on:

- A foundation for providing basic cloud services & benefits quickly
- Expansion units to enhance cloud services over time as needs evolve

This deployment model overcomes many of the issues encountered with traditional private cloud initiatives. Traditional deployments are often stuck in design mode for extended periods attempting to account for as many future requirements up front. InterVision takes a more agile approach that focuses on delivering a basic cloud as quickly as possible while longer-term needs are outlined after early adopter feedback is received to create a more focused roadmap that defines the features the users want, not what the business thinks they want. These enhancements are prioritized and broken into smaller work units which are delivered iteratively over time. The cloud grows as the business grows through ongoing, sprint-oriented feature releases.

Starting with a Strong Foundation

The Private Cloud Platform solution starts with our [Private Cloud Foundation](#) service, an engagement that delivers a basic infrastructure-as-a-service cloud that rapidly enabling basic, on-demand, catalog-based compute resources thus allowing realization of business value in rapid time. At the core of the foundation service is the implementation and configuration of the Cloud Management Platform technology tailored to the basic needs of your organization while applying best-practices architecture. The CMP is layered on top of the virtual infrastructure you already own, which reduces new investments and provides the ability to realize the benefits of cloud-enabled services in a short time period.



This approach ensures a relevant platform is available for immediate use while a longer-term roadmap is created and executed over time. The foundation service delivers an open, flexible base CMP implementation that can be seamlessly expanded to deliver additional IT services and automation as the business' cloud needs evolve.

Customers can quickly enhance the foundation to progress from the foundation service's basic Infrastructure-as-a-Service cloud to one that delivers fully configured environments (Platform-as-a-Service) or any number of others functions, such as storage or backups, as a service (Anything-as-a-Service).

Iterative Enhancement

Clouds, whether private or public, mature over time through capability enhancements to meet the demands of the business and the pace of IT. With the Private Cloud Foundation in place, the capabilities of that cloud can be expanded through iterative development.

InterVision's deployment methodology includes the creation of a capability roadmap where desired enhancements can be defined and the enhancement work pipeline created. With the roadmap in place, InterVision can help expand your cloud's capabilities through our [Private Cloud Expansion](#) services, a suite of standard, modular service offerings.

These modular 'add-ons' accelerate the growth of your private cloud by integrating with common IT management tools and systems (i.e. IPAM, CMDB, etc.) and connecting to public cloud providers such as Amazon Web Services and Microsoft Azure. Orchestration add-on services can be leveraged to provide additional cloud services to, for instance, protect cloud servers (backup-as-a-service), grant additional storage to a machine instance (storage-as-a-services), or provision virtual firewalls as part of a multi-machine environment deployment (firewall-as-a-service). InterVision offers standard services to meet the most common cloud services demands.

Automation Through APIs and Orchestration

The value of the cloud lies in its ability to deliver IT efficiency to the business. The web portal and service catalog allows on-demand access to IT resources, which leads to increased user productivity. But the right CMP can also deliver operational efficiency through its orchestration capabilities and API support. The Private Cloud Platform solution is built on CMP technology that includes a robust orchestration engine that allows for seamless extensibility and integration with 3rd party tools, technologies, and systems.

The orchestration engine of the CMP allows cloud administrators to develop workflows (steps that make up a repeatable task) to satisfy various use cases. The orchestration engine allows the private cloud to provide Anything-as-a-Service capability (e.g. storage-as-a-service) and automate common tasks, both simple and complex. For example, it is common for provisioned servers to have a series of steps performed on them before they are considered ready for use. This may include DNS and CMDB record creation, applying security settings, or even installing an entire software stack. Workflows can be created that triggers the orchestration engine to automatically perform these routines and because they are executed programmatically, the cloud operator knows they are done consistently and error-free.

Infrastructure Requirements

Using a modular approach, InterVision can assemble a cloud technology stack using different best-of-breed options that take advantage of existing technologies in your environment. Customers may choose to create their private cloud on VMware vSphere virtual infrastructure and leading OpenStack distributions.

Proven Methodology Ensures Success

Enabling cloud delivery of IT services can be a complex journey, especially without a solid methodology. InterVision breaks down each iteration of your cloud into simple steps to ensure success along the way.

From understanding your objectives and requirements to building and expanding your environment, allow InterVision to accelerate your journey to cloud enablement.



Next Steps

To learn more about how InterVision can help you successfully deploy and manage your Private Cloud Platform, visit <http://www.intervision.com> or contact your InterVision sales representative.

InterVision helps customers optimize IT infrastructure, better manage risk, & gain a competitive advantage with IT integration and broad capabilities.