

**Cloud Computing Infrastructure**

**FREQUENTLY ASKED QUESTIONS ON THE DYNAMIC DATA CENTER TOOLKIT FOR ENTERPRISES**

**Q: What is the Dynamic Data Center Toolkit for Enterprises?**

**A:** The Dynamic Data Center Toolkit for Enterprises is a free, partner-extensible toolkit that will enable data centers to dynamically pool, allocate, and manage resources to enable IT as a service. Whether you’re an enterprise customer, a systems integrator, or an independent software vendor, the toolkit will help you to create agile, virtualized IT infrastructures. You’ll get:

* An architectural roadmap, deployment guidance and best practices.
* Familiar tools that are compatible with existing applications.
* Interoperability with hosted and public clouds.

**Q: When will the Dynamic Data Center Toolkit for Enterprises be available?**

**A:** The availability of the toolkit is scheduled in the first half of 2010.

**Q: Who is the customer for the toolkit?**

**A:** An Enterprise Customer in an IT role (Strategic IT Manager, Tactical IT Manager, or LOB and Infra Specialist) operating any of the following software environments: Windows Server® 2008 – Datacenter or Enterprise Edition, Running Hyper-V™ and PowerShell, Managing VM’s with Microsoft System Center Virtual Machine Manager (SCVMM), SCOM (optional).

**Q: What are the customer benefits of the toolkit?**

**A:** The Dynamic Data Center Toolkit for Enterprises plans to deliver the following value to customers: Operational Efficiency + Capital Efficiency + End User Flexibility + Managing Existing Applications.

* **Operational Efficiency** 
  + Increased ease and speed of provisioning
  + Reduced planning for managing infrastructure resources
  + Reduced human intervention, resulting in reduced risk
  + Potential energy savings
  + Reduced need for extensive IT staff, and reduced cost of outsourcing
* **Capital Efficiency**
  + Server consolidation and optimization
  + Lower floor space needs
* **End-User Flexibility**
  + Self Service Portal

**Q: What are the components of the Dynamic Data Center Toolkit for Enterprises?**

**A:** The toolkit has the following phases or operational components:

* **ON BOARDING**
* This component allows IT Admins to capture the service requirements from the IT service manager (customer).  These service characteristics are then presented in the self-service portal where the customer can manage his service from deployment to decommissioning.
* Some of the features of on-boarding might include:
  + Capture of IT service requirement
  + Establishment of VM options
  + Creation of user groups
  + Selection of patch options
* **SELF SERVICE/ADMIN PORTAL**
* This component allows the IT service manager to interact with his/her service from deployment to decommissioning. Service managers also have the option to access VM and charge-back reports.
* Some of the features of the self-service portal might include:
  + Start/stop VMs
  + Decommission VMs
  + Access reporting functions
* VM uptime
* Chargeback reports
* **PROVISION**
* These components are foundational to the enablement of the IT service.
* Batch creation of the VMs enables the simultaneous or sequenced deployment of multiple VMs into a service environment.
* Bare Metal provisioning of Windows Hyper-V host is enabled through Microsoft Deployment Toolkit (MDT)
  + Bare metal provisioning through MDT guidance and tools
  + Configuration of Windows Hyper-V Host
* **OPERATE**
* The Dynamic Data Center Toolkit  for Enterprises will leverage System Center family of products (e.g. SCVMM, SCOM, etc) to provide management capabilities such as:
  + Monitoring VM uptimes and host capacity
  + Archival and decommissioning of VMs
  + Patching and Software Updates
  + Backup/restore (no mention of SC Data Protection Manager)

**Q: How can Microsoft partners leverage the Dynamic Data Center Toolkit for Enterprises?**

**A:** The Dynamic Data Center Toolkit for Enterprises and its compute fabric leverage multiple Microsoft technologies for extensibility purposes such as:

* + PowerShell
    - Microsoft’s command shell for scripting and development.
    - Expose task oriented actions as PowerShell cmdlets.
    - Admin configures PowerShell script to include specific cmdlets.
  + SCOM Connector
    - A custom service or program that allows System Center Operations Manager to communicate with external systems.
    - Partners can develop a custom connector by using the Operations Manager Connector Framework (OMCF), which provides methods and types that can be used to initialize and manage a connector.
  + PRO and Management Packs
    - For Eventing – Reporting of Status, failures and action triggers
    - PRO allows customers to tie specific Operations Manager alerts to actionable remediation actions in VMM.

**Q: What can Microsoft partners do to get ready for the Dynamic Data Center Toolkit for Enterprises?**

**A:** Ramp up on Windows Server® and Microsoft System Center products.

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