Ask the Experts: Design Advice for SMB

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• This overview of new technology represents no commitment from VMware to deliver these features in any generally available product.
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• Technical feasibility and market demand will affect final delivery.
• Pricing and packaging for any new technologies or features discussed or presented have not been determined.
What is SMB?

Some Vendors Classify SMB based on:
- Employee count
- IT budgets
- Annual purchases

Some Organizations classify themselves based on:
- Current size or Future
- Headcount or Profitability
SMB Generalizations

- They have tiny budgets
- Everything is fine the way it is
- They do/don’t …. 
  - require ‘enterprise class’ features or redundancy
  - need ‘the cloud’
- They don’t need a plan or strategy
- No Need for Virtualization/too small

The SMB target segment has the most vast set of needs and varied use cases of any target segment
Who are You?

- SMB administrators tend to have many other hats to wear other than their speciality
- SMB IT organizations often don’t have the luxury of teams dedicated for every IT function

*SMB IT has the ability to have a quick and direct impact on the financial success of the business*
A Variety of Solutions to a Variety of Business Problems

**Server Consolidation**
Consolidate your apps on far fewer physical servers to optimize resource utilization and deliver up to 50 percent savings in capital and operating costs.

**Operations Management**
Simplify your IT and save money with solutions that help you manage your infrastructure, so you can stay focused on your business rather than IT.

**Hybrid Cloud**
Acquire infrastructure and move application workloads to the cloud with confidence on a trusted, high performance cloud platform.

**Business Continuity**
Protect your business with proven solutions that increase availability and security while simplifying business continuity and disaster recovery.

**Desktop Management**
Empower your employees by delivering flexible, anywhere any device access to applications and data.
It’s Your Turn

What is a challenge you are facing today or anticipate facing in your organization?

- Backup and Recovery
- Desktop Virtualization
- Disaster Recovery
- Management
- Storage
- Something else?
Reference Slides From Here on Out

Will add several architectural reference slides to pull up to aid conversation if attendees need better visual representations of the discussion
Virtual Desktop (VDI)

- Handle peak performance requirements (boot, login, read/write storms)
- Granularly scale from POC to production without huge upfront investments
- Supports high VDI density

Tier 2 Production

- Simple to deploy and manage for any vSphere admin through integration with VMware stack
- High performance and consolidation ratios
- VM level SLA management via policy
- Ideal for workloads that require replication RPOs > 15 min and 2/3 daily snapshots

Disaster Recovery Target

- Integrated with vSphere Replication and VMware SRM
- Reduces cost of storage
- Minimizes data center footprint

Staging & Test/Dev

- Rapid storage provisioning and complete automation
- Reduces cost of storage for non-mission critical workloads
- Enables Cloud Architect to easily provision storage

Virtual SAN Use Cases
vCenter Site Recovery Manager Ensures Simple, Reliable DR

Site Recovery Manager Complements vSphere to provide the simplest and most reliable disaster protection and site migration for all applications

- Provide cost-efficient replication of applications to failover site
  - Built-in vSphere Replication
  - Broad support for storage-based replication

- Simplify management of recovery and migration plans
  - Replace manual runbooks with centralized recovery plans
  - From weeks to minutes to set up new plan

- Automate failover and migration processes for reliable recovery
  - Enable frequent non-disruptive testing
  - Ensure fast, automated failover
  - Automate failback processes
VDP Configure – Install Mode

Welcome

Network settings
Time zone
VDP credentials
vCenter registration
Create Storage
Device Allocation
Ready to complete
Complete

Welcome

Welcome to the vSphere Data Protection (VDP) Initial Configuration Wizard. Use this wizard to configure the network settings and time zone for your VDP Appliance. You also use this wizard to register your VDP Appliance with a vCenter, create new storage or attach existing storage, and optionally run the performance analysis tool on new storage.
VDP Configure vCenter Registration

vCenter registration
Identify the hostname or IP address of your vCenter server. Also provide a username and password for a user that has rights to register objects with the vCenter server.

- vCenter username: vdadmin
- vCenter password: ********
- vCenter FQDN or IP: 10.20.181.225
- vCenter port: 443

- Use vCenter for SSO authentication

Test Connection
Storage Provisioning

- A few options…
  - Create new storage
  - Attach existing VDP backup data partition

Note: It is highly recommended that you back up all the VDP storage which you intend on attaching to this appliance.
Storage Provisioning

- A few options…
  - Store backup data partition with appliance
  - Select other datastores for backup data partition

<table>
<thead>
<tr>
<th>Datastores</th>
<th>Capacity</th>
<th>Provisioned</th>
<th>Free</th>
<th>Disks</th>
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</thead>
<tbody>
<tr>
<td>p02_esx-02a_local</td>
<td>63.2 GiB</td>
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</tbody>
</table>
## Storage Performance Test

- **Check** Run performance analysis on storage configuration

  Note: Depending on your storage configuration, performance analysis can take from 30 minutes to several hours.

- **Uncheck** Restart the appliance if successful

### Storage Performance Results

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal write throughput (MB/s)</td>
<td>83.3172</td>
<td>30.0</td>
</tr>
<tr>
<td>Minimal read throughput (MB/s)</td>
<td>124.7739</td>
<td>60.0</td>
</tr>
<tr>
<td>Minimal seek throughput (seeks/s)</td>
<td>7651.26</td>
<td>320.0</td>
</tr>
<tr>
<td>Total write throughput (MB/s)</td>
<td>84.284904</td>
<td>30.0</td>
</tr>
<tr>
<td>Total read throughput (MB/s)</td>
<td>126.9989</td>
<td>60.0</td>
</tr>
<tr>
<td>Total seek throughput (seeks/s)</td>
<td>7708.217</td>
<td>400.0</td>
</tr>
</tbody>
</table>

VDP: Storage passed minimal performance recommendations.

VDP: Completed storage performance test.
VDP Configure – Maintenance Mode

![VDP Configure Interface](image.png)

Last updated: 09/20/2013 05:02 PM

- **Core services**: Running
- **Management services**: Running
- **File system services**: Running
- **File level restore services**: Running
- **Maintenance services**: Running
- **Backup scheduler**: Running

**Note:** The VDP Configure interface shows the current status of various services and allows the user to stop and resume these services as needed.
VDP Configure – Maintenance Mode

Log collector

The log collector aggregates log files from all VDP related services to assist in troubleshooting. Click ‘Collect logs’ below and you will be prompted to download a zip file containing all system service logs:

- Core VDP service logs
- Management service logs
- File system service logs
- File level restore service logs

Collect logs
## Additional Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMware Community</td>
<td><a href="https://communities.vmware.com/">https://communities.vmware.com/</a></td>
</tr>
<tr>
<td>VIP Tool</td>
<td><a href="http://featurewalkthrough.vmware.com">http://featurewalkthrough.vmware.com</a></td>
</tr>
</tbody>
</table>
Thanks for Attending!

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Thank You
Fill out a survey

Every completed survey is entered into a draw for a €40 VMware company store gift certificate