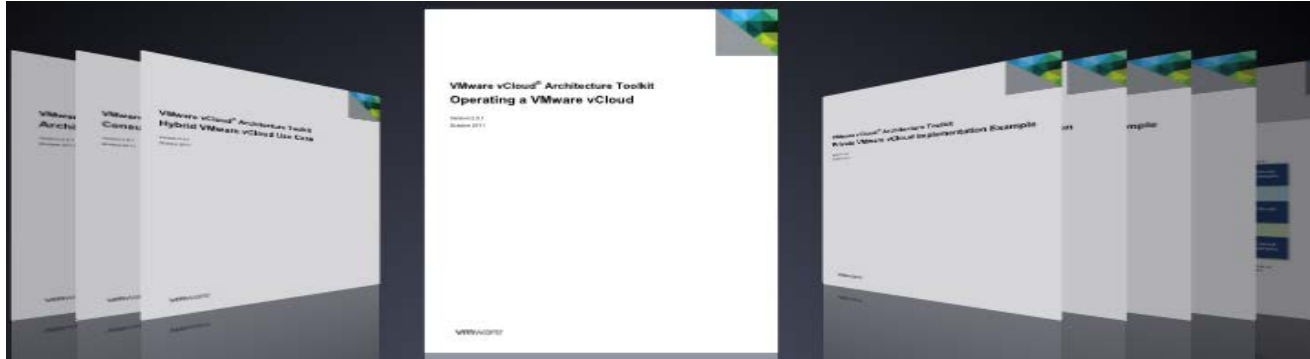


vCAT 3.0 - Architecture to Implementation

Ben Lin, Global vCloud Specialist, VMware, Inc.

What is vCAT ?

- Intended for technical architects with a solid foundation of vSphere and infrastructure knowledge.
- Provides design guidance and examples to build, operate, and consume a VMware based cloud
- Targeted solution intended to help technical architects to get the information they need quickly and efficiently.



vCloud Architecture Toolkit

What is vCAT?

What does my vCloud offer?

What should be considered when designing a vCloud?

Are there existing examples?

Introduction

VMware vCloud
Service Definition

Architecture documents

Architecting a
VMware vCloud

Operating a
VMware vCloud

Consuming a
VMware vCloud

VMware vCloud
Implementation
Examples

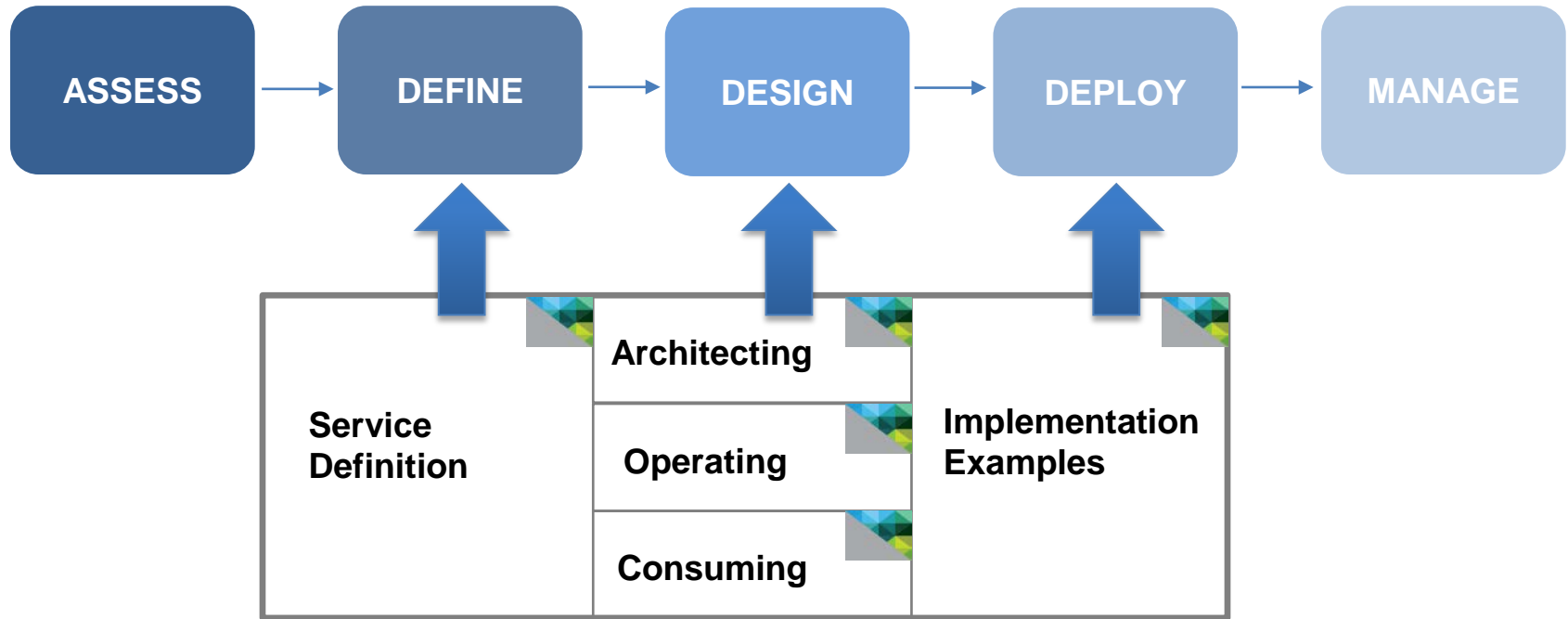
Additional Tools

Workflow
Examples

Software
Tools

Cloud
Bursting

Five Steps



Storage Design Pattern

You have been hired to design a VMware based private cloud for a software development company.

The customer is currently in discussions with their storage vendor on pricing and protocols for a new storage array to accommodate the cloud workloads.

Provide the initial storage requirements and logical design.

Current State

- Average storage capacity for typical workloads?
- What are the application I/O profiles?
- Are multiple tiers of storage needed?
- Are there existing SLAs for storage performance?
- Project budget?
- Preferred storage vendor?
- Preferred storage protocol?
- Can existing storage be used?

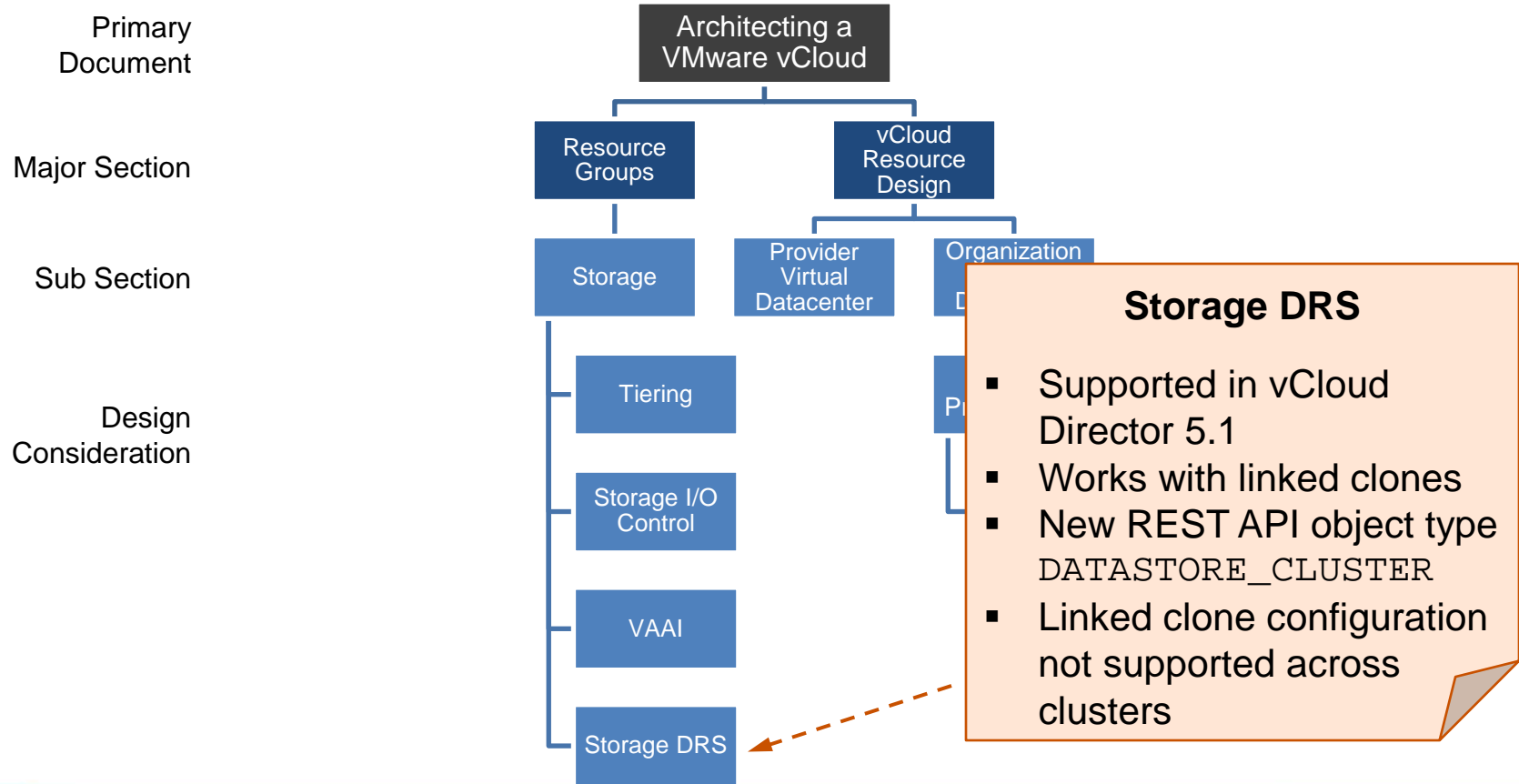
Service Requirements

- Single tier of service for storage and compute
 - Accommodate up to 500 virtual machines averaging 60GB Guest OS and Data Storage.
 - Flexible way to control or ensure storage performance.
 - Expected concurrent powered on VM's is 50%
 - Minimize the capacity and cost of storage
-
- **Constraints**
 - Existing storage vendor
 - NFS preference
 - Minimal vCloud experience



VMware vCloud Architecture Toolkit
Service Definition

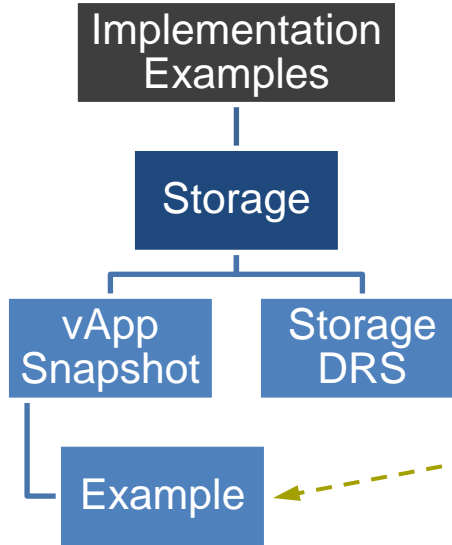
Step 3: Design



Primary Document

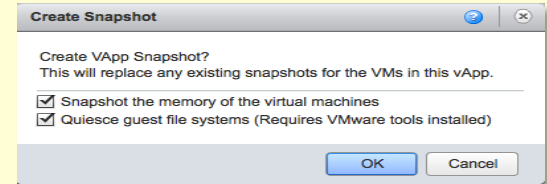
Major Section

Implementation Example



Snapshot Example

- vCenter representation
- Snapshot flow
- Snapshot options
- Implications



Consider processes needed to support the entire cloud service lifecycle

Reference additional vCAT documents

- Operating a VMware vCloud
Consuming a VMware vCloud
- Workflow Examples
- Software Tools

VMware vCloud Architecture Toolkit
Operating a VMware vCloud

Consuming a VMware vCloud

Workflow Examples

Software Tools

Version 3.0
August 2012

Questions



<http://vmware.com/go/vcat>