



Managing and Operating a Microsoft Private Cloud—How to Apply the Microsoft Operations Framework (MOF)

Presented by Kathleen Wilson, Program Manager at Microsoft

This is a new publication for MOF and this webcast will demonstrate how to manage and operate a Microsoft private cloud using the service management processes of the Microsoft Operations Framework (MOF). Kathleen Wilson will be presenting how this guide applies MOF's IT service management principles to that conceptual architecture and technology stack. Learn how to maximize the potential of MOF's people, process, and technical capabilities to manage and operate a Microsoft private cloud.

Key Learnings:

- Free downloadable guide “Managing and Operating a Microsoft Private Cloud—How to Apply the Microsoft Operations Framework”
- Learn how to manage and operate a Microsoft private cloud
- Learn how to maximize the potential of MOF's people, process, and technical capabilities to manage and operate a Microsoft private cloud



Kathleen Wilson
Program Manager,
Microsoft

Agenda

- Microsoft Private Cloud
- What is MOF?
- Managing and Operating a Microsoft Private Cloud
- Where to get the guide?

Microsoft Private Cloud

Our Private Cloud story is about System Center
2012

MOF provides the process

Cloud-centric service model

SERVICE & REQUEST OFFERINGS

Standardize offerings into a Service Catalog

Provide on-demand self-service

Automate end-to-end request fulfillment

SERVICE LEVEL AGREEMENTS

Drive a consistent service delivery experience

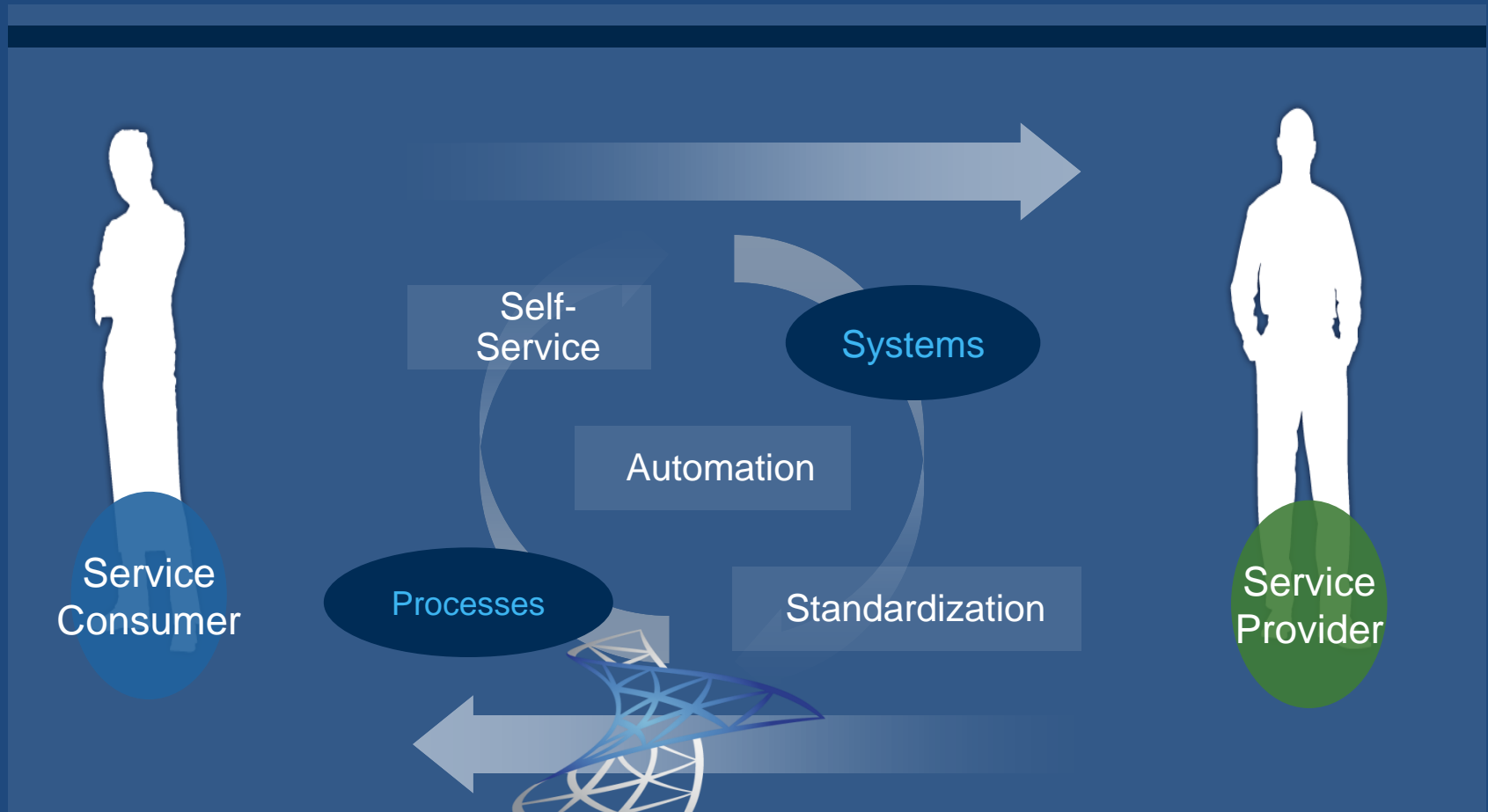
Embed support rules and measurements into the workflow and activities for Work Items

PROACTIVE & REACTIVE OPERATIONS

Streamline IT operational processes and activities

- Consistent delivery
- Greater Productivity
- Support Compliance

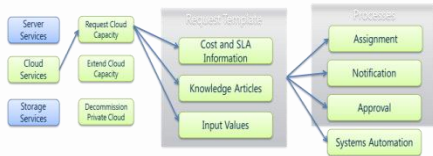
Private Cloud - Delivering IT Services Consistently



Microsoft®
System Center 2012

Private Cloud Elements

STANDARDIZATION



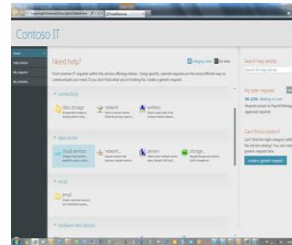
Standardize the services provided by IT to consumers.

Define the services to be offered

Define the request offerings that will be contained within a Service Offering

Identify who needs to be involved (approvals, notifications, fulfillment)

SELF SERVICE



Give consumers of IT services the ability to identify, access and request services as needed.

Controlled Empowerment

Request offerings displayed based on user role

Intuitive easy to navigate portal

AUTOMATION



Automate the service processes and systems necessary to the fulfillment of consumer requests

Automate routing of requests for approval and notification.

Automate provisioning of the service request

What Is MOF?

- Microsoft Operations Framework
- Born in 1999 and it is free @
<http://www.microsoft.com/mof>
- Practical guidance providing comprehensive guidelines for achieving reliability for IT solutions and services

MOF High-Level Goals

Provide guidance to IT organizations

- To help them create, operate, and support IT services
- To ensure investment in IT delivers expected business value at an acceptable level of risk

Create an environment where business and IT work together toward operational maturity

The IT Service Lifecycle: Phases and a Layer

The IT Service Lifecycle describes the life of an IT service:



- ◆ From planning and optimizing the IT service to align with the business strategy: **Plan Phase**
 - ◆ Through the design and delivery of the IT service: **Deliver Phase**
 - ◆ To its ongoing operation and support: **Operate Phase**
 - ◆ Underlying all of this is a foundation of IT governance, risk management, compliance, team organization, and change management: **Management Layer**
- Each phase has SMFs and management reviews associated with it

Goals of the Lifecycle Phases and Manage Layer

Plan:

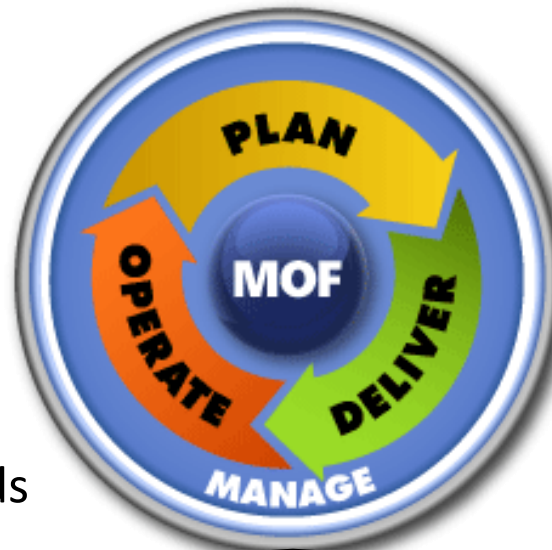
Optimize and align IT service strategy to support the business

Operate:

Ensure IT services

- Operated
- Maintained
- Supported

...to meet business needs



Deliver:

Ensure IT services

- Developed effectively
- Deployed successfully
- Ready for Operations

Manage Layer:

Provide operating principles and best practice guidance to ensure IT investment delivers expected business value... at acceptable risk

Activities Articulated in SMFs and MRs

Service
Management
Functions
(SMF)

Management
Reviews (MR)



MOF Management Reviews

- Management reviews (MR)
- MRs are internal controls that provide management validation checks
- They ensure business objectives are met and IT services are on track to deliver expected value



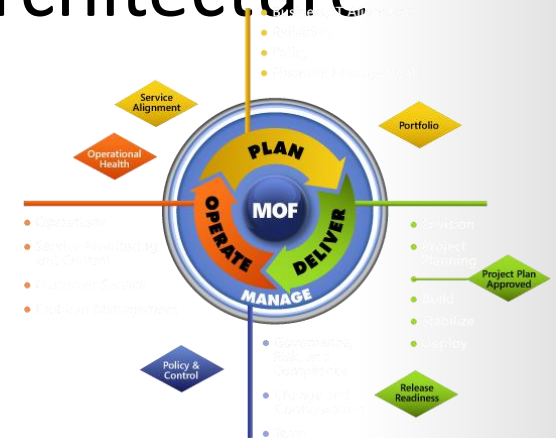
Managing & Operating a Microsoft Private Cloud

Guide describes how to manage and operate a Microsoft private cloud using MOF

Assumption is that it is a Microsoft based cloud

Applies MOF's IT service management principles to the private cloud conceptual architecture and technology stack

Along with System Center



MOF in the MS Private Cloud

Uses 7 of the SMFs in the Manage & Operate layers

- map each SMF to a cloud architecture component

Then include the technologies

Heavy focus on the Management reviews

- CSI is a must in the cloud

“Ruthless standardization, leads to more opportunities for automation” K. Wilson MMS2012

The Guide

Microsoft | Solution Accelerators

Managing and Operating a Microsoft® Private Cloud

How to Apply the Microsoft Operations
Framework (MOF)

Version 1.0

Published: May 2012

For the latest information, please see www.microsoft.com/mof

Private Cloud Architectural Layers



Virtual Machine Manager

Self Service



Service Manager

Orchestration



Orchestrator



Operations Manager

Management



Virtual Machine Manager



Service Manager

Automation



Powershell

Virtualization



Virtual Machine Manager

What's inside the Guide

- MOF Manage Layer
 - Team, GRC, Change & Configuration
 - *Service Alignment, Policy & Control Management Reviews*
- Applied to the Architecture Layers
 - Self Service Layer
 - Orchestration
 - Management
 - Automation
 - Virtualization



MOF Operate Phase

- Operating, Monitoring, Servicing Customers, Managing Private Cloud Problems

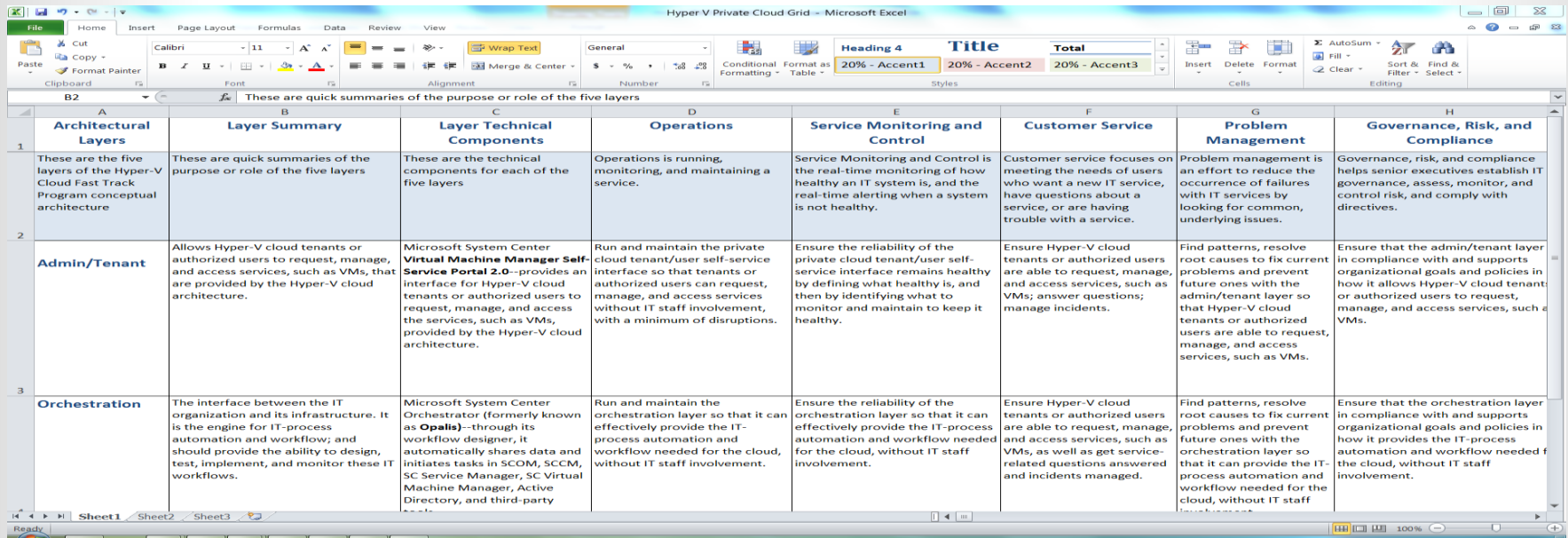


Operational Health Management Review

- Applied to the Architecture Layers
 - Self Service Layer
 - Orchestration
 - Management
 - Automation
 - Virtualization

Excel Guide

Intersection of the Technologies & SMFs



The screenshot shows a Microsoft Excel spreadsheet titled "Hyper-V Private Cloud Grid". The spreadsheet contains a table with 8 columns and 3 rows of data. The columns are: Architectural Layers, Layer Summary, Layer Technical Components, Operations, Service Monitoring and Control, Customer Service, Problem Management, and Governance, Risk, and Compliance. The rows are: 1. These are the five layers of the Hyper-V Cloud Fast Track Program conceptual architecture, 2. Admin/Tenant, and 3. Orchestration.

	A	B	C	D	E	F	G	H
	Architectural Layers	Layer Summary	Layer Technical Components	Operations	Service Monitoring and Control	Customer Service	Problem Management	Governance, Risk, and Compliance
1	These are the five layers of the Hyper-V Cloud Fast Track Program conceptual architecture	These are quick summaries of the purpose or role of the five layers	These are the technical components for each of the five layers	Operations is running, monitoring, and maintaining a service.	Service Monitoring and Control is the real-time monitoring of how healthy an IT system is, and the real-time alerting when a system is not healthy.	Customer service focuses on meeting the needs of users who want a new IT service, have questions about a service, or are having trouble with a service.	Problem management is an effort to reduce the occurrence of failures with IT services by looking for common, underlying issues.	Governance, risk, and compliance helps senior executives establish IT governance, assess, monitor, and control risk, and comply with directives.
2	Admin/Tenant	Allows Hyper-V cloud tenants or authorized users to request, manage, and access services, such as VMs, that are provided by the Hyper-V cloud architecture.	Microsoft System Center Virtual Machine Manager Self-Service Portal 2.0 —provides an interface for Hyper-V cloud tenants or authorized users to request, manage, and access the services, such as VMs, provided by the Hyper-V cloud architecture.	Run and maintain the private cloud tenant/user self-service interface so that tenants or authorized users can request, manage, and access services without IT staff involvement, with a minimum of disruptions.	Ensure the reliability of the private cloud tenant/user self-service interface remains healthy by defining what healthy is, and then by identifying what to monitor and maintain to keep it healthy.	Ensure Hyper-V cloud tenants or authorized users are able to request, manage, and access services, such as VMs; answer questions; manage incidents.	Find patterns, resolve root causes to fix current problems and prevent future ones with the admin/tenant layer so that Hyper-V cloud tenants or authorized users are able to request, manage, and access services, such as VMs.	Ensure that the admin/tenant layer in compliance with and supports organizational goals and policies in how it allows Hyper-V cloud tenant or authorized users to request, manage, and access services, such as VMs.
3	Orchestration	The interface between the IT organization and its infrastructure. It is the engine for IT-process automation and workflow; and should provide the ability to design, test, implement, and monitor these IT workflows.	Microsoft System Center Orchestrator (formerly known as Opalis)—through its workflow designer, it automatically shares data and initiates tasks in SCOM, SCCM, SC Service Manager, SC Virtual Machine Manager, Active Directory, and third-party tools.	Run and maintain the orchestration layer so that it can effectively provide the IT-process automation and workflow needed for the cloud, without IT staff involvement.	Ensure the reliability of the orchestration layer so that it can effectively provide the IT-process automation and workflow needed for the cloud, without IT staff involvement.	Ensure Hyper-V cloud tenants or authorized users are able to request, manage, and access services, such as VMs, as well as get service-related questions answered and incidents managed.	Find patterns, resolve root causes to fix current problems and prevent future ones with the orchestration layer so that it can provide the IT-process automation and workflow needed for the cloud, without IT staff involvement.	Ensure that the orchestration layer in compliance with and supports organizational goals and policies in how it provides the IT-process automation and workflow needed for the cloud, without IT staff involvement.

What's Next

- Guide is in Beta at the moment
- 900+ downloads
- Feedback in progress
- Final version ships in July

How to get it

<https://connect.microsoft.com/site14/InvitationUse.aspx?ProgramID=1880&InvitationID=MOFN-M6H9-PV3X>

Need a Windows Live ID

scroll down to Microsoft Operations Framework,
and click the link to join the MOF beta program.

Questions? Comments?

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We'd Love To Hear From You!

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