



VELEUČILIŠTE VELIKA GORICA
UNIVERSITY OF APPLIED SCIENCES VELIKA GORICA



Sustav cjelovitog nadzora i upravljanja IT infrastrukturom (System Center 2012 tehnologija)

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Cjelovito upravljanje IT sustavom

Upravljanje računalima u oblaku

Upravljanje računalima u podatkovnim centrima i *on-premises* okruženjima

Upravljanje klijentskim računalima i sigurnost

Upravljanje
infrastrukturom

Upravljanje
aplikacijama

Isporuka
servisa

Automatizacija
procesa

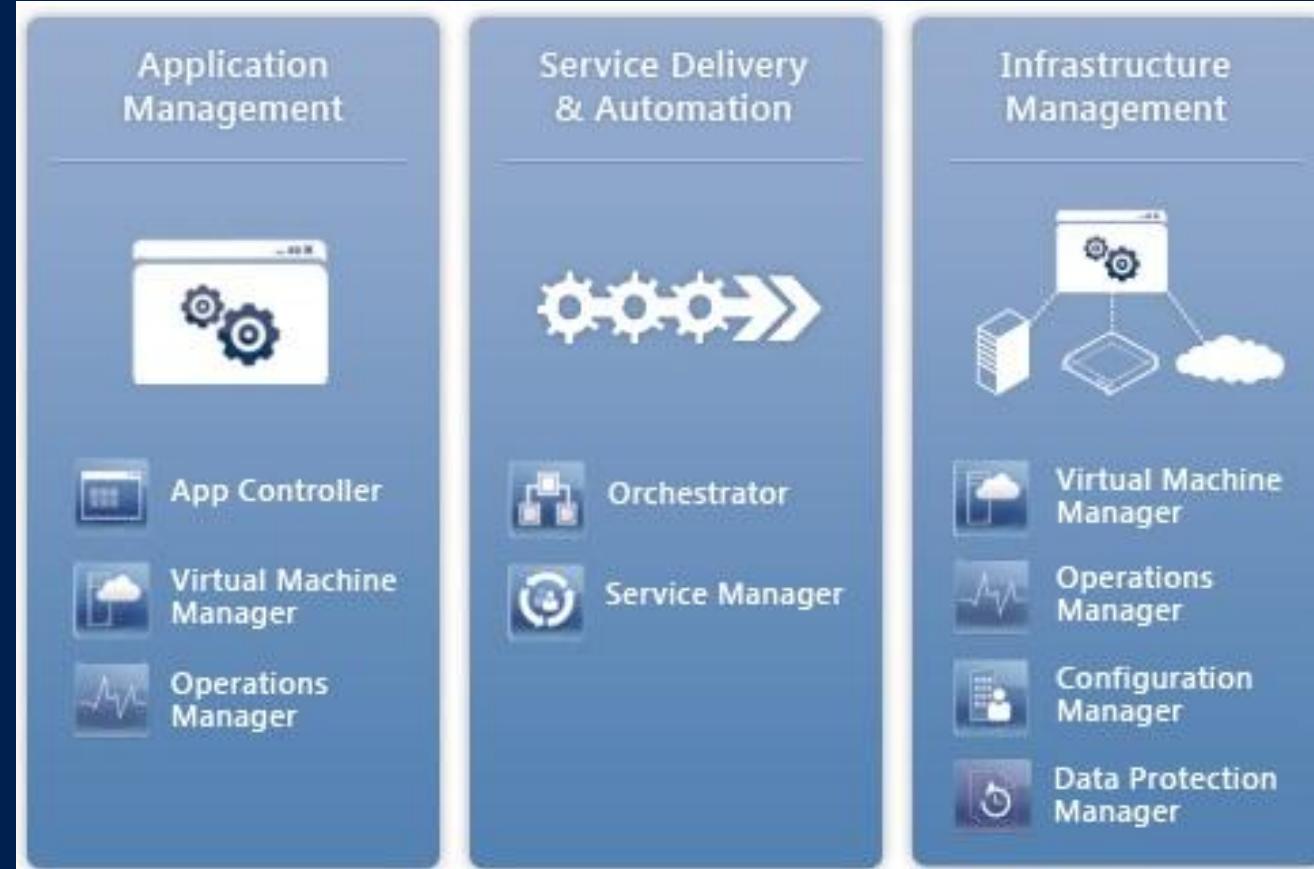
Upravljanje poslužiteljima

- kreiranje jedinstvenog upravljivog automatiziranog sustava
- isporuka predvidljivih aplikativnih servisa s integriranim nadzorom i operacijama razvoja
- optimizacija infrastrukturnih servisa i aplikacija
- smanjenje administrativnih zadataka na najmanju moguću mjeru
- pravodobno otkrivanje poremećaja u performansama sustava u cjelini
- prevencija incidenata
- maksimalna pouzdanost
- fokus na uslugu u cjelini, umjesto pojedinačnih servisa

Upravljanje klijentskim računalima

- veća produktivnost korisnika sustava bez obzira gdje se nalaze ili koji uređaj koriste
- centraliziran sustav upravljanja i zaštite
- podizanje razine sigurnosti klijentskih računala
- jednostavnost administracije klijentskih računala
- zadržavanje uniformnosti računala
- mogućnost integracije sa Windows Intune sustavom (upravljanje računalima i mobilnim uređajima) u oblaku ili on-premise sustavu korištenjem jedinstvenog administrativnog sučelja

Komponente System Center 2012 rješenja



Nekad...

i danas...



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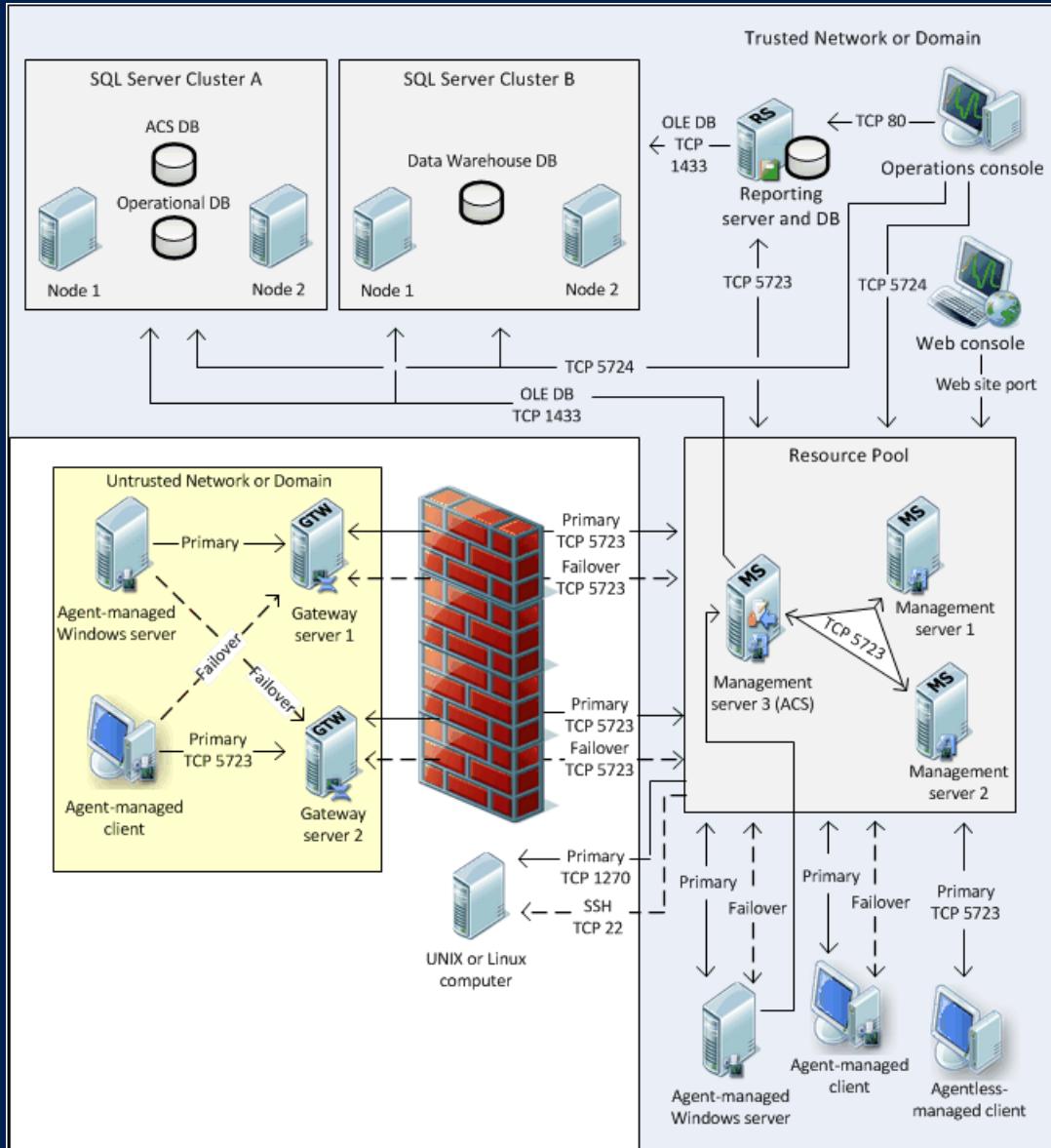
SCOM 2012

- upravljanje i nadzor infrastrukturnih servisa (*Active Directory, IIS, DNS, DHCP, Group Policy, Clustering, DFS ...*)
- upravljanje i nadzor ostalih Microsoft rješenja (*Exchange, Lync, MS SQL, SharePoint, Data Protection Manager, TFS, ...*)
- nadzor mrežnih uređaja
- nadzor aplikacija (*.Net, Java, SharePoint...*)
- nadzor ostalih operativnih sustava (*Linux, Unix, AIX ...*)
- nadzor hardvera
- nadzor događaja vezanih uz sigurnost sustava (ACS - Audit Collection Server)

SCOM 2012

- upravljački paketi i procesna pravila (*alert - event - performance*)
- administrativni zadaci, izvještaji
- mogućnost izrade distribuiranih aplikacija
- monitori, odgovori na određeni događaj
- sustav upozorenja, notifikacijski kanali
- SLA (*Service Level Agreement*) prikazi distribuiranih aplikacija

SCOM 2012 - Arhitektura



SCOM 2012 - operativna konzola

Microsoft System Center 2012
Release Candidate

Welcome, OM2012DOM\Administrator | Sign Out

Operations Manager

Monitoring

Active Alerts (15)

Severity	Source	Name
Critical	Management Configuration Service	Management Configuration Service failed to complete bootstrap procedure
Critical	AD Assignment Resource Pool	Mom AD Admin Not Run
Critical	System Center Management Service Group	Management Configuration Service group failed to perform Configuration Store groo
Critical	System Center Management Service Group	Management Configuration Service group failed to perform Configuration Store index
Critical	System Center Management Service Group	Management Configuration Service group failed to perform agent pool management w
Critical	System Center Management Service Group	Management Configuration Service group failed to perform delta synchronization wor
Critical	System Center Management Service Group	Management Configuration Service group failed to perform agent assignment work i
Critical	System Center Management Service Group	Management Configuration Service group failed to perform Configuration Store statist
Critical	System Center Management Service Group	Management Configuration Service group failed to perform site assignment work item
Critical	System Center Management Service Group	Management Configuration Service group failed to perform dirty notification work ite
Critical	All Management Servers Resource Pool	Alert subscription data source module encountered errors while running
Critical	Alert Notification Subscription Server	Alert subscription data source module encountered errors while running.
Critical	All Management Servers Resource Pool	Alert subscription data source module encountered errors while running
Critical	ad92a915-bfab-4900-8a07-c536fe469955	Data Warehouse failed to request a list of management packs from SQL RS server
Warning	OM2012.OM2012dom.local	Power Shell Script failed to run

Filter (None): Tasks

Alert Actions

- Close Alert
- Alert Properties
- Health Explorer

Start Maintenance Mode...

Edit Maintenance Mode...

Stop Maintenance Mode

Management Configuration Service Tasks

- Check Dependent NT Services
- Request Snapshot Synchronization
- Start NT Service
- Stop NT Service

Resources

- Operations Manager Online
- Operations Guide

Help

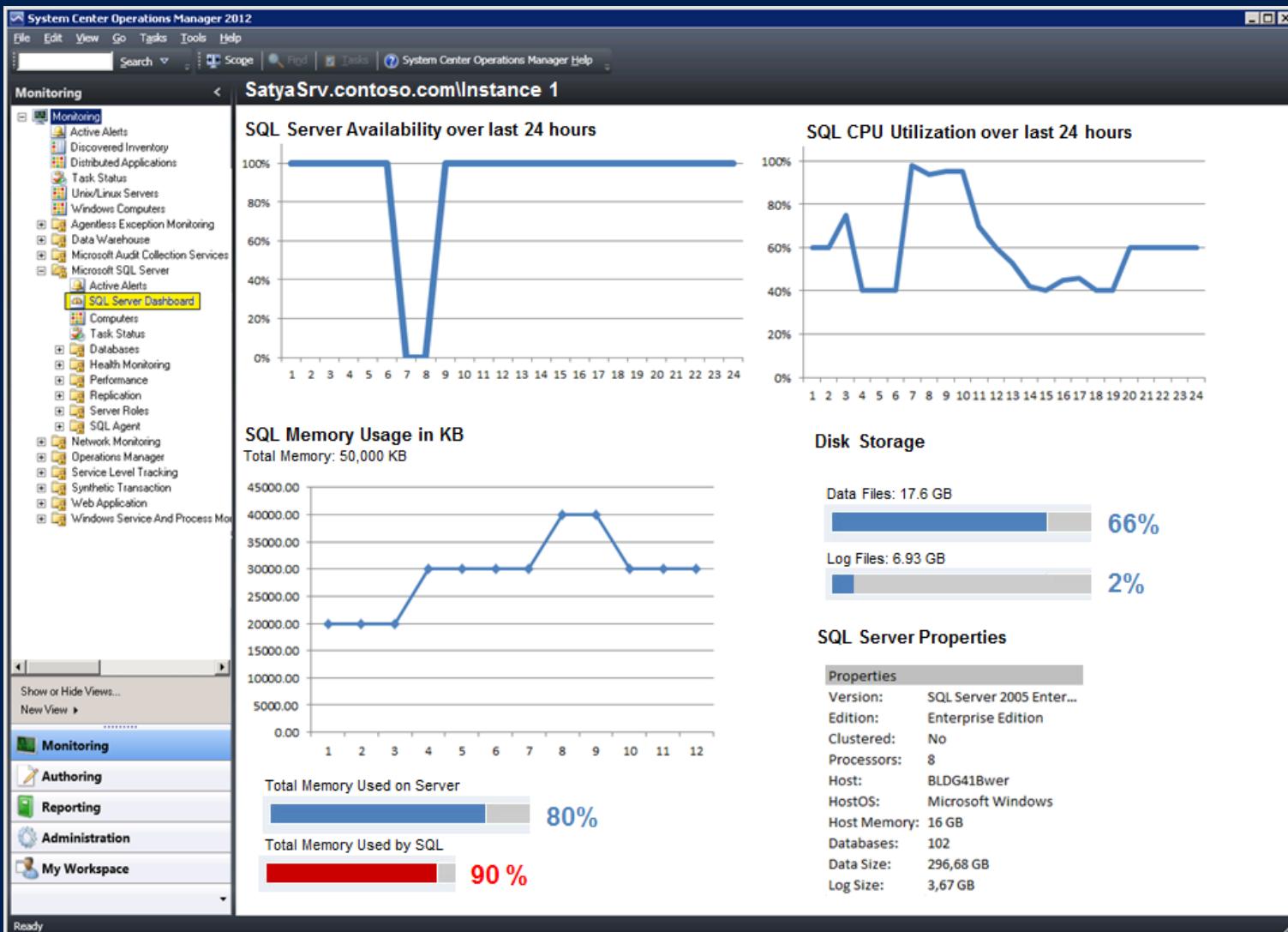
- Finding Data and Objects in the Operations Console
- Creating Views
- Standard Views
- Tuning Monitoring by Using Targeting and Overrides
- Managing Alerts
- How to Suspend Monitoring Temporarily by Using Maintenance Mode
- Running Tasks
- Using Health Explorer

Create Dashboard View...
Delete
Refresh View List

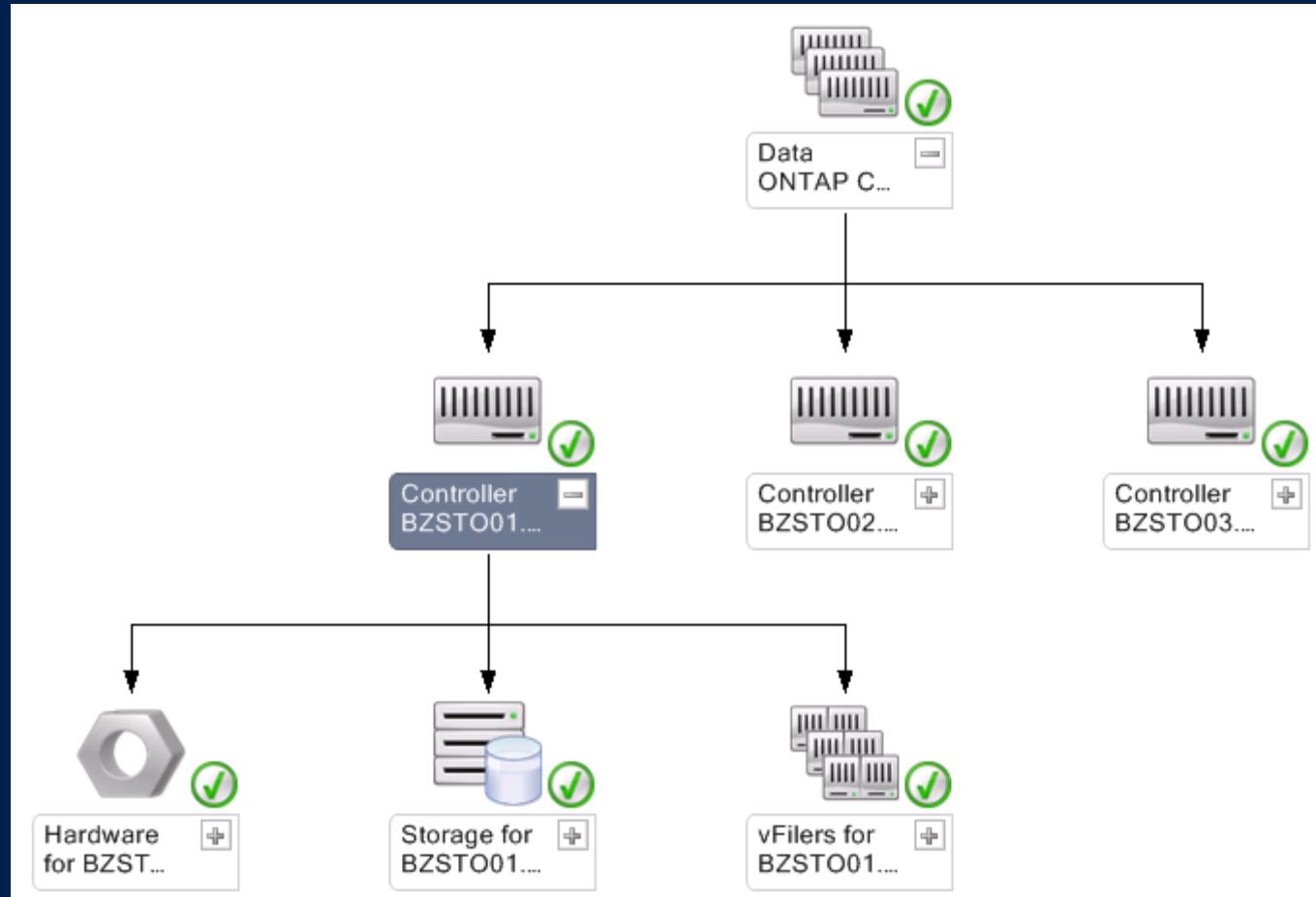
Monitoring
My Workspace

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SCOM 2012 - database monitoring



SCOM 2012 - storage / hardware monitoring



SCOM 2012 - network monitoring

Network Summary Dashboard

Nodes with Slowest Response (Previous 24 hours)

Node State	Node Name	Average Response Time (ms)
Green checkmark	cmc.odyssey.com	7.5
Green checkmark	switch4.odyssey.com	2.6
Green checkmark	Library1.odyssey.com	1.9
Green checkmark	172.16.231.51	1.6
Green checkmark	cpli1921	1.6
Green checkmark	172.16.231.101	0.7

Nodes with Highest CPU Usage

Node State	Node Name	CPU Usage
Green checkmark	2621xm.odyssey.com	0%

Interfaces with Highest Utilization (Previous 24 hours)

Node State	Node Name	Interface State	Interface Name	Interface Usage
Green checkmark	switch1.odyssey.com	Green checkmark	PORT-18	0%
Green checkmark	switch4.odyssey.com	Green checkmark	PORT-1	0%
Green checkmark	switch4.odyssey.com	Green checkmark	PORT-2	0%
Green checkmark	2621xm.odyssey.com	Green checkmark	IF-1	0%
Green checkmark	switch1.odyssey.com	Green checkmark	PORT-23	0%

Interfaces with Most Receive Errors (Previous 24 hours)

Node State	Node Name	Interface State	Interface Name	Receive Errors/sec	Receive Discards/sec
Green checkmark	switch4.odyssey.com	Green checkmark	PORT-1	0	0

SCOM 2012 - SLA dashboard

Active Directory SLA Dashboard - SCOMGROUP - Operations Manager

File Edit View Go Tasks Tools Help

Search Scope Find Tasks

Active Directory SLA Dashboard

Service Levels

Name: MomUIGeneratedSlad9cec3cb40bd4

Active Directory Topology Root

Service Level Objectives

State	Name	Target Class	Instances
Green	Management...	Active Directory Topology Root	1

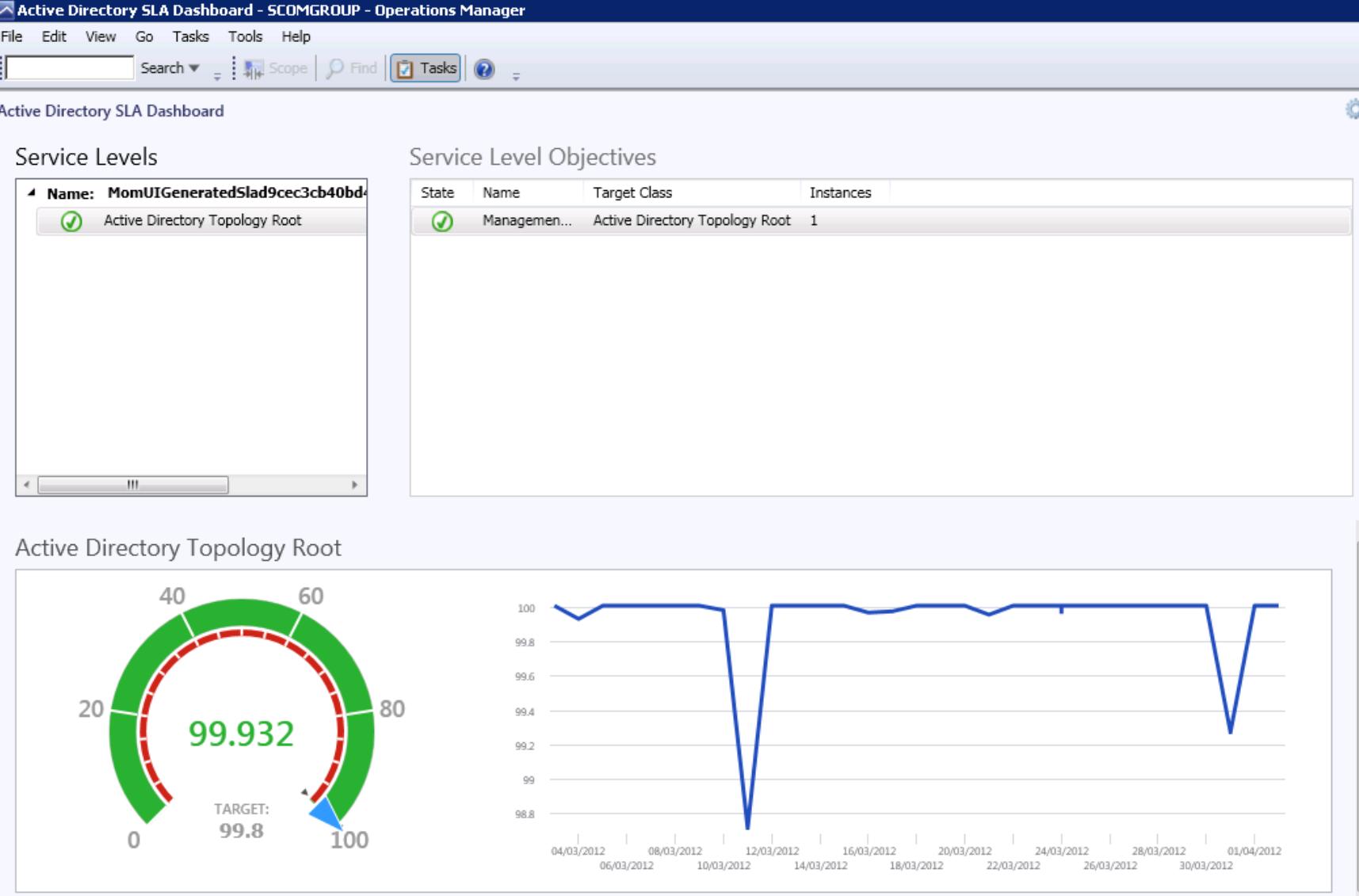
Active Directory Topology Root

99.932

TARGET: 99.8

0 20 40 60 80 100

04/03/2012 06/03/2012 08/03/2012 10/03/2012 12/03/2012 14/03/2012 16/03/2012 18/03/2012 20/03/2012 22/03/2012 24/03/2012 26/03/2012 28/03/2012 30/03/2012 01/04/2012



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SCOM 2012

Značajna poboljšanja u odnosu na prethodne verzije

- Fokus na monitoring usluge u cjelini (distribuirane aplikacije)
- korisnička perspektiva
- .Net i Java app monitoring do razine koda
- cjelovit nadzor mreže
- Integracija sa Team Foundation Serverom i drugim *service desk* i *autoticketing* sustavima

SCCM 2012

- isporuka aplikacija i softverskih komponenti s jednog mesta na sva računala
- upravljanje različitim vrstama uređaja
- upravljanje virtualnim desktop računalima
- centralizirana zaštita klijentskih računala
- kreiranje konfiguracijskih predložaka i primjena na sva računala
- upravljanje instalacijom sigurnosnih zakrpi i nadogradnji
- upravljanje napajanjem klijentskih računala
- "zdravlje" računala i monitoring
- dohvata karakteristika klijentskih računala (inventura)

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SCCM 2012

System Center 2012 Configuration Manager (Connected to JCA - Phyllis SCCM Site) (Evaluation, 180 days left)

Home

Import User Device Affinity Import Computer Information Saved Searches Add Selected Items Install Client Start Approve Block Unblock Manage Out of Band Edit Primary Users Refresh Clear Required PXE Deployments Delete Properties Properties

Create Search Device

Assets and Compliance Overview Devices

Devices 7 items

Icon	Name	Client	Site Code	Client Activity
DC-TEST-1	Yes	JCA	Active	
ITSUPPORT-PC	No			
PHYLLIS-PCGP	Yes	JCA	Active	
SCCM-TEST-1	No			
x64 Unknown Computer (...)	No	JCA		
x86 Unknown Computer (...)	No	JCA		
XP1TEST	Yes	JCA	Active	

DC-TEST-1

General Information		Client Check Information		Related Objects
Name:	DC-TEST-1	Client Check Result:	Passed	Primary User
Client Type:	Comp	Remediation:		

Assets and Compliance Software Library Monitoring Administration

SCCM 2012

System Center 2012 Configuration Manager (Connected to 001 - Norway)

Home

Saved Searches View Status Run Summarization Properties

Search Deployment Properties

Monitoring Overview Deployments

Deployments 11 items

Icon	Software	Collection	Purpose	Action	Feature Type	Compliance %
Adobe Reader X (10.1.0)	All Users	Available	Install	Application	100,0	
Adobe Reader X (10.1.0) (Per-syste...	All Users	Available	Install	Program	0,0	
Automatic Deployment Rule for End...	All Systems	Required	Install	Software Update	50,0	
Build and Capture Windows 7 Enter...	All Windows 7 Computers	Available	Install	Task Sequence	0,0	
Configuration Manager Client Upgra...	All Systems	Required	Install	Program	0,0	
Definition Update for Microsoft Fore...	All Systems	Required	Install	Software Update	50,0	
Office 2010	Office 2010	Available	Install	Application	100,0	
Office 2010	All Windows 7 Computers	Simulate	Install	Application	100,0	
Office 2010	All Users	Available	Install	Application	0,0	
Software Update Group - 2011-11-2...	All Windows 7 Computers	Required	Install	Software Update	100,0	

Adobe Reader X (10.1.0) Status to All Users

General Completion Statistics Related Objects

Software: Adobe Reader X (10.1.0)
Collection: All Users
Feature Type: Application
Purpose: Available
Date Created: 23.11.2011 16:03
Last Date Modified: 23.11.2011

Completion Statistics: Success: 2, In Progress: 0, Error: 0, Requirements Not Met: 0

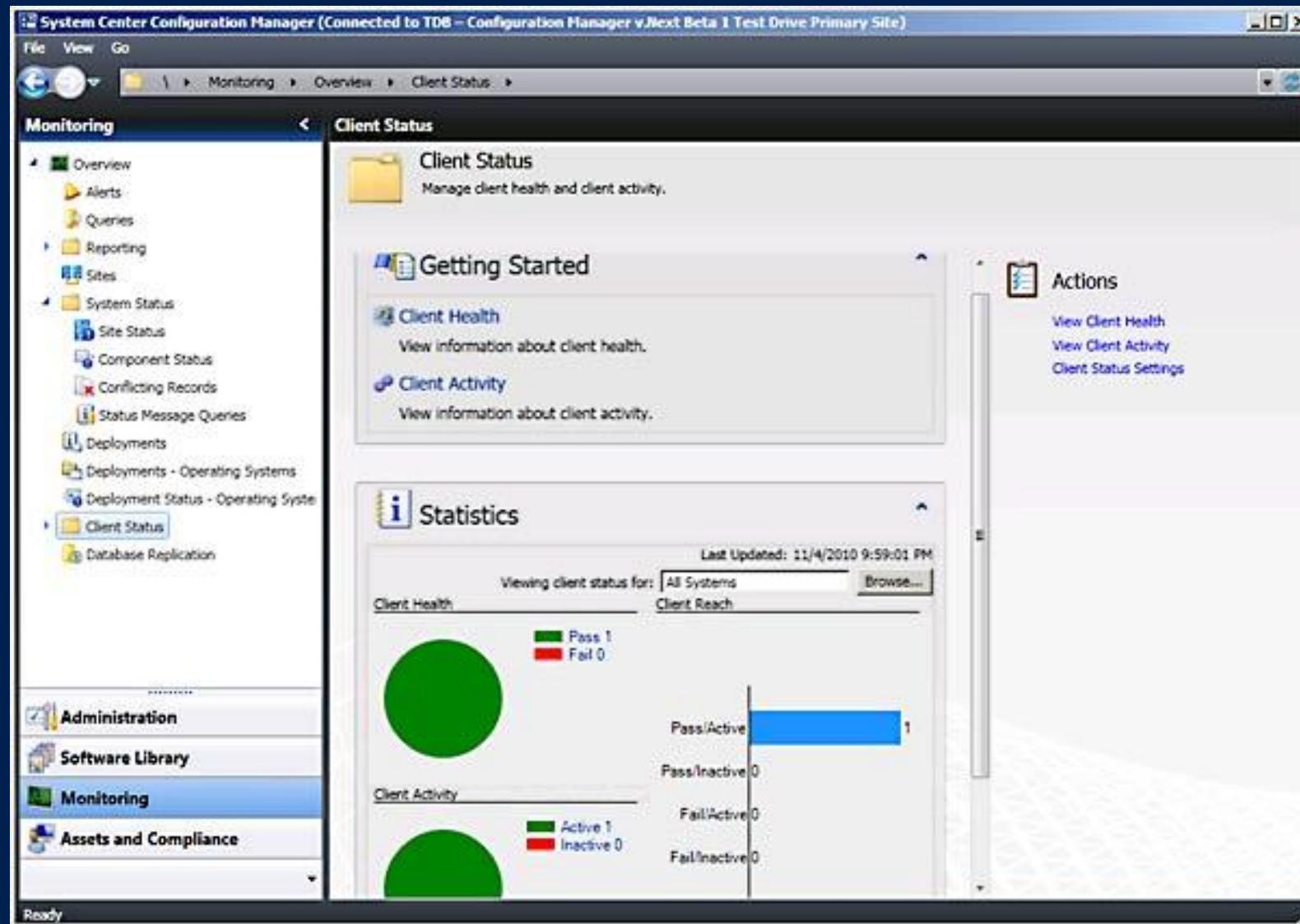
Related Objects: Collection, Applications, Content Status

2 Requested (Last Update: 05.01.2012 20:06:00) [View Status](#)

Summary Deployment Types

Ready

SCCM 2012



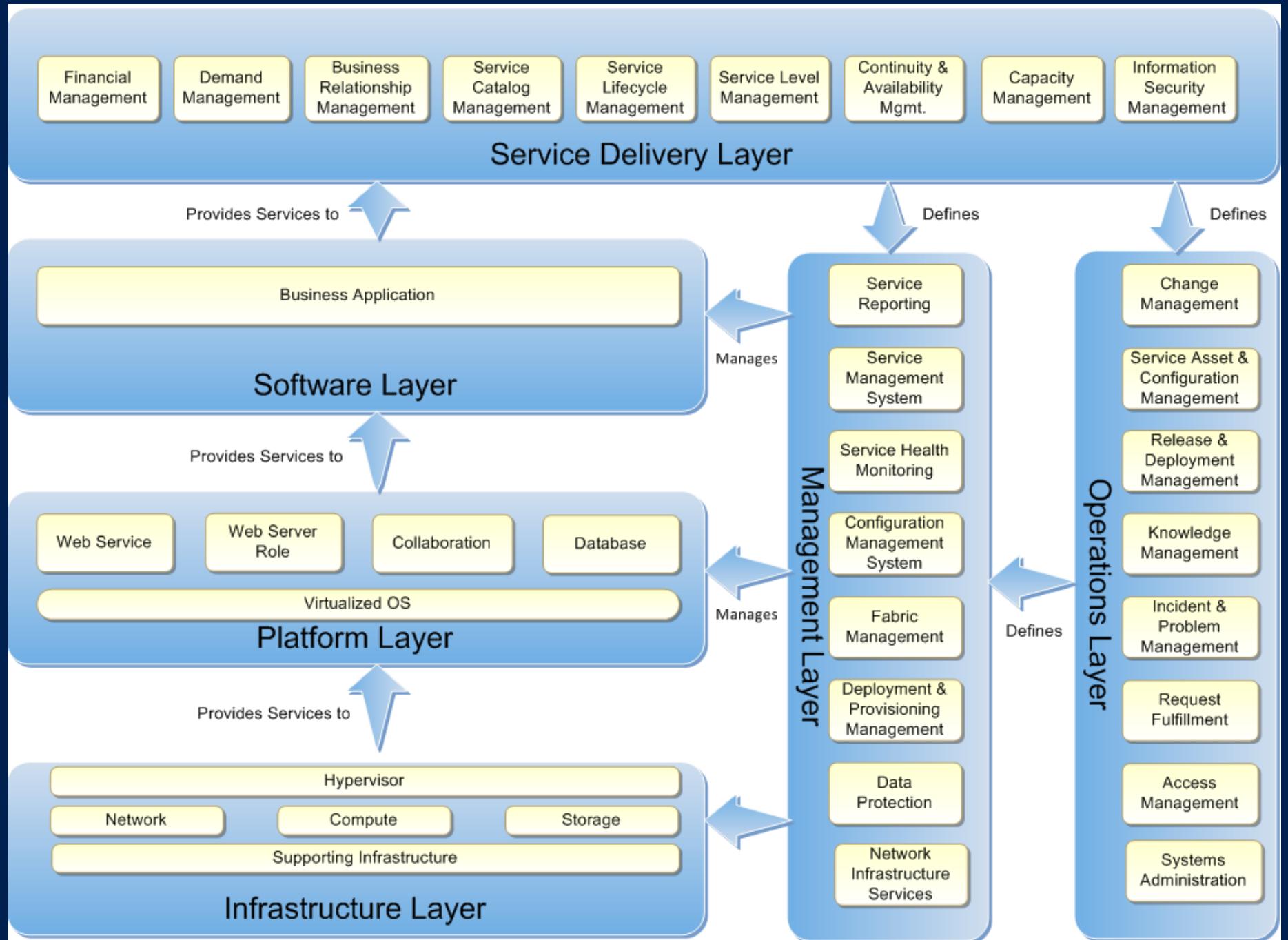
Cloud / Datacenter primjena

Referentni model

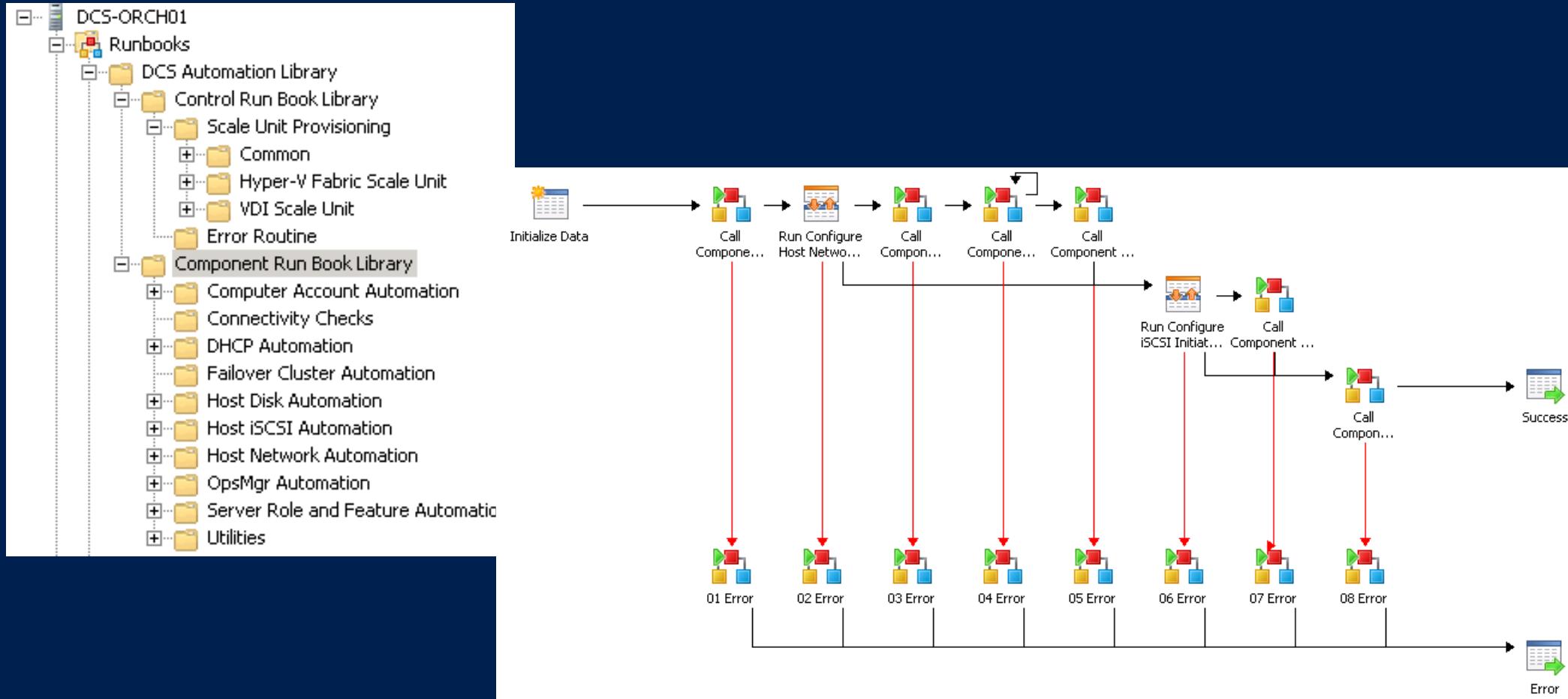
Automatizacija i
orkestracija



Private Cloud / Datacenter Reference Model



Orchestrator - Runbook Library Concept



Thank you



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