Campus Days 14.-16. januar 2010



# System Center Service Manager 2010

## Lasse Carthberg

Product Technology Specialist
Microsoft Danmark

Session: M-01 Level: 300

Microsoft TechNet

## Agenda

- System Center
- Data kilder til Service Manager
- Service Manager
- Service Manager Other Stuff
- Roadmap



## System Center



## Open Standards 1/3

## System Center builds on open industry-standards

#### **WS-MAN**

### **Web Services for Management:**

Standard in 2006 by DMTF

Introduced in WinSrv 2003 R2

#### DMTF workgroup:

Cisco, Dell, EMC, Fujitsu, HP, IBM, Intel, Novell, Sun, Symantec, Microsoft, AMD, BMC, CA etc.

#### SML

### **Service Modeling Language:**

The foundation in System Center

Defines syntax and semantics

Workgroup:

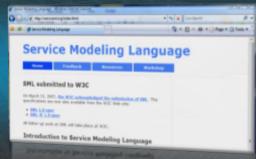
BEA, BMC, Cisco, Dell, EMC, HP, IBM, Intel, Microsoft, Sun etc.

Service Modeling Language

### www.ServiceML.org



Distributed Management Task Force, Inc. www.DMTF.org





http://www.w3.org

## Open Standards 2/3

System Center builds on open industry-standards



"The ability to exchange data between the various CMDBs implemented within the industry is important in ensuring that customers with heterogeneous environments have the ability to effectively manage across them to reduce complexity and costs," said Larry Orecklin, general manager, system center and virtualization at Microsoft. "Microsoft is pleased to have worked with the DMTF and the participating companies during the standardization process for CMDBf and to see the release of the standard."

## Open Standards 3/3

## System Center builds on open industry-standards

#### **Open Pegasus**

In July 2008, Microsoft joined the OpenPegasus steering committee. Members: HP, IBM, EMC, SUN, Symantec among others.

- Pegasus is an open-source implementation of the DMTF CIM and WBEM standards.
- Pegasus is designed to be inherently portable and builds and runs today on most versionsof UNIX(R), Linux, OpenVMS, and Microsoft Windows.

www.openpegasus.org



#### **OpenPegasus**

"C++ CIM/WBEM Manageability Services Broker"

Making standards work

"C++ CIM/WBEM Manageability Services Broker

www.opengroup.org

### Datacenter & Enterprise Suite



System Center
Operations Manager



System Center Configuration Manager



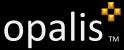
System Center
Service Manager



System Center
Data Protection Manager



System Center Virtual Machine Manager





System Center
Essentials



System Center
Online Desktop Manager



System Center
Mobile Device Manager 2008

Licensed Individually



Asset Inventory Service Desktop Optimization Pack For Software Assurance



System Center

Capacity Planner 2007



Advanced Group Policy Management



Application Virtualization

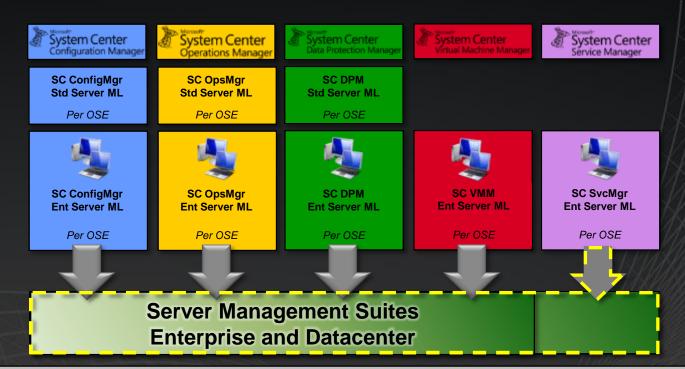


System Center Desktop Error Monitoring



Diagnostics and Recovery Toolset

## Planned System Center Datacenter Licensing



#### **Standard and Enterprise Server Standalone Management Licenses**

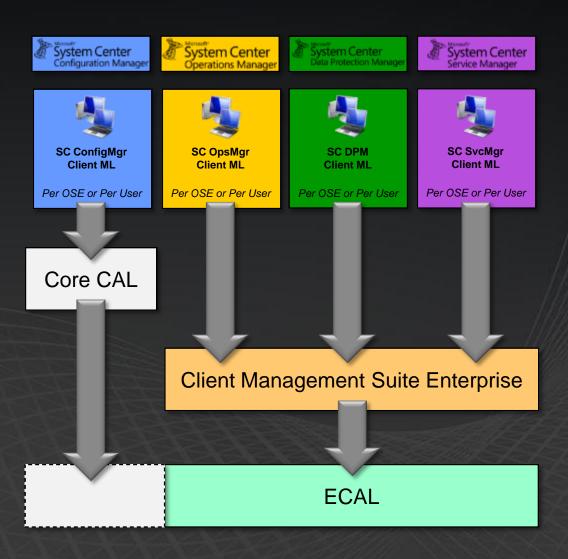
- All sold on a per OSE basis (except VMM which is sold per server)
- Available with and without SA

#### **Server Management Suites**

- · Discounted compared to standalone product licensing
- Only available with SA
- Server Management Suite Enterprise (SMSE) 4 OSEs
- Server Management Suite Datacenter (SMSD) unlimited OSEs 2 processor minimum

#### Microsoft Confidential

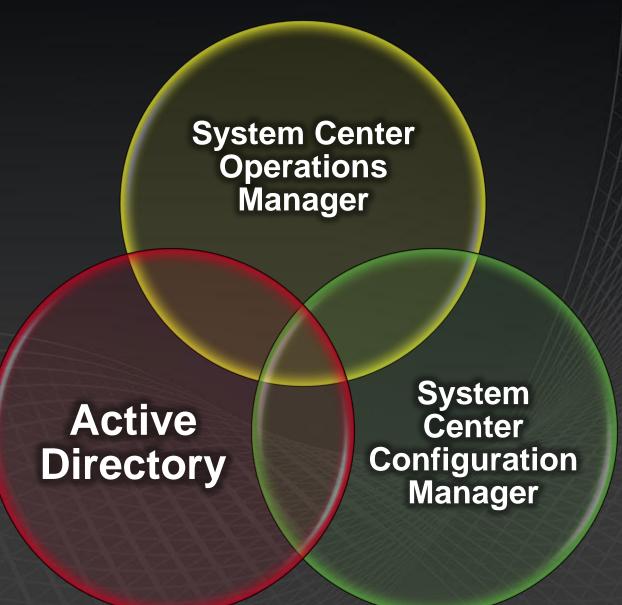
## Planned System Center Client Licensing



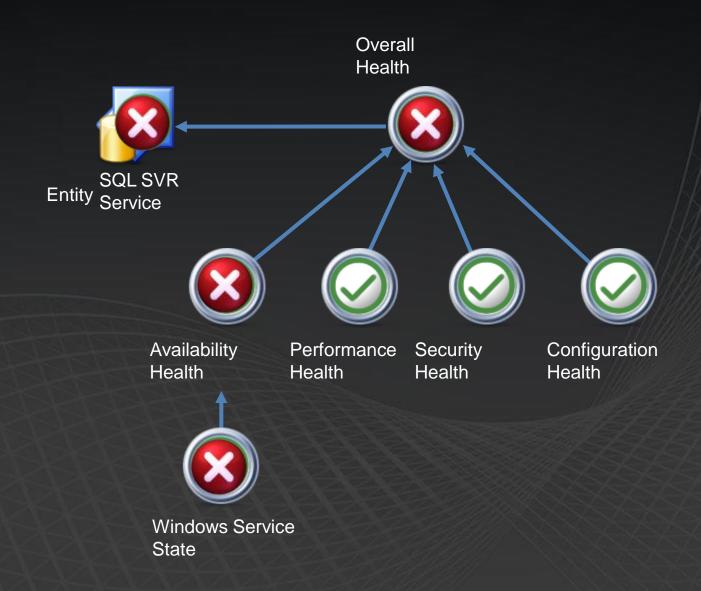
Microsoft Confidential

## Datakilder til Service Manager

## 3 data kilder til Service Manager



## Basic Health Model Of An Entity



## Basic Model - Distributed Application Structure

"Messaging" **Health Models** Messaging Clients 64 Messaging Components **Directory Services** Storage Physical Network

## Released MPs for Operations Manager 2007

•	Dynamics AX 2009 (NEW!)	•
•	Biztalk Server 2006, 2009	
•	Exchange Server 2003 / 2007 (NEW for R2)	•
•	Microsoft Windows Server 2003 / 2008 Cluster	
•	SQL Server 2000 / 2005 / 2008	•
•	Windows Server 2000 / 2003 / 2008 Active Directory	•
•	Windows System Resource Manager 2003 / 2008	•
•	System Center Configuration Manager 2007	•
•	Windows Server Update Services 3.0 / 3.1	•
•	Commerce Server 2007	•
•	Data Protection Manager 2006 / 2007	-
•	Password Change Notification Service 2003 / 2008	•
•	Rights Management Services 2003 / 2008	•
•	Server Performance Advisor 2003 / 2008	•
•	Windows Server 2000 / 2003 / 2008 Operating System	•
•	Windows Print Server 2003 / 2008	•
•	Windows DHCP Server 2003 / 2008	•
•	Server Virtualization 2005	•
•	Windows Server Hyper-V 2008	•
•	System Center Virtual Machine Manager 2007/2008/R2	•
•	OpsMgr 2007 MOM 2005 Backward Compatibility	
•	Live Communications Server 2005 / 2007	-
•	<b>Active Directory Federation Services 2003 / 2008</b>	•
•	Compute Cluster Server 2003 / 2008	•
•	Windows Distributed File Systems 2003 / 2008	
•	Windows DNS Server 2003 / 2008	•
•	Internet Security and Acceleration (ISA) Server 2004, and 2006	•

**AEM (Agent-less Exception Monitoring)** 

- Windows Distributed Transaction Coordinator (MSDTC) 2003, 2008
- Windows Routing and Remote Access Service (RRAS) 2003 / 2008
  - Windows Internet Naming Service (WINS) 2003, 2008
- Microsoft Server Network Load Balancing
- Forefront Server Security for Exchange 2007
  - Forefront Server Security for SharePoint 10
  - **Identity Integration Server 2003**
  - **Office Project Server 2007**
  - Systems Management Server (SMS) 2003
  - Windows Group Policy 2003 / 2008
  - Windows File Replication Service 2003/2008 (FRS)
  - **Windows Vista Client Monitoring**
  - Windows Server 2000/2003 Terminal Services
  - SharePoint Portal Server (SPS) 2003
  - Windows SharePoint Services (WSS) 2003 / 2008
  - Microsoft Information Worker
  - Windows Client XP / Vista / W7 Operating System
  - Windows Server Internet Information Services (IIS) 2000/2003/2008/2008 R2

#### **Upcomming:**

- AppV og MedV (Softgrid og Kidaro)
- Win7 / Server 2008 R2: Branch Cache, AppServer, Direct Access, m.fl. (30 i alt til release 2010)
- Office 14: CRM, FAST, MOSS m.fl. (20 i alt til release 2010/11)
- ForeFront UAG, TMG, FIM m.m.

## Management Packs 3. Part

### **Applications**

Citrix, Citrix XEN Server (Hermes) \* Tidal(Cisco) / Realtech / OZ-Soft: SAP

Quest: DB2, Websphere, Oracle, Lotus Notes,

McAfee, TrendMicro, Symantec,

Chekpoint FW1, BEA Weblogic/Tuxedo

Websphere, Apache

### **Platforms**

EMC: Linux, UNIX

Novell: Novell SLES 10

Quest: Linux, Unix

IBM AS400, IBM

z/OS, Unix, Linux, Mac OS X

Metilinx: Linux / Unix

NetIQ: RedHat, Novell

Appmind / Nworks / Quest / EMC / Xandros:

**VMware** 

## X-Platform Supported MP's

Xandros: Apache, Jboss, MySQL, Oracle,

Oracle Applications \*

Novell: BIND/DNS, DHCP, SAMBA, NFS, LDAP, CUPS, FW

### Integration

Maranti Storage Networks, SMARTS,

Amberpoint, Veritas Backup Exec,

Quest Spotlight + Foglight

#### **Devices**

JalaSOFT: Cisco Routers, Switches, PIX & VPN

Dell Open Manage

HP (BladeSystem, Proliant, Integrity, Storageworks, SIM)

IBM HW (HW + Netcool integration) \*

Fujitsu-Siemens ServerView

**Quest Software:** 

Firewalls, Power switches

Network: Cisco, Nortel, 3Com, Netapp

Storage: Hitachi, ESS, EMC, Equalogic,

Storageworks, NetApp, Clarion (+270)

F5

Cisco Unified Computing Device

SolarWinds / Orion

## Microsoft Cross-Platform Extensions





WS-Man





**CIMOM (OpenPegasus)** 

**OpsMgr Providers** 



**red**hat





#### **Platform**

#### **IBM AIX**

5.3 & 6.1 (Power)

#### **HP-UX**

11iv2 & 11iv3 (PA-RISC/IA64)

#### Red Hat Enterprise Linux

4 & 5 (x86/x64)

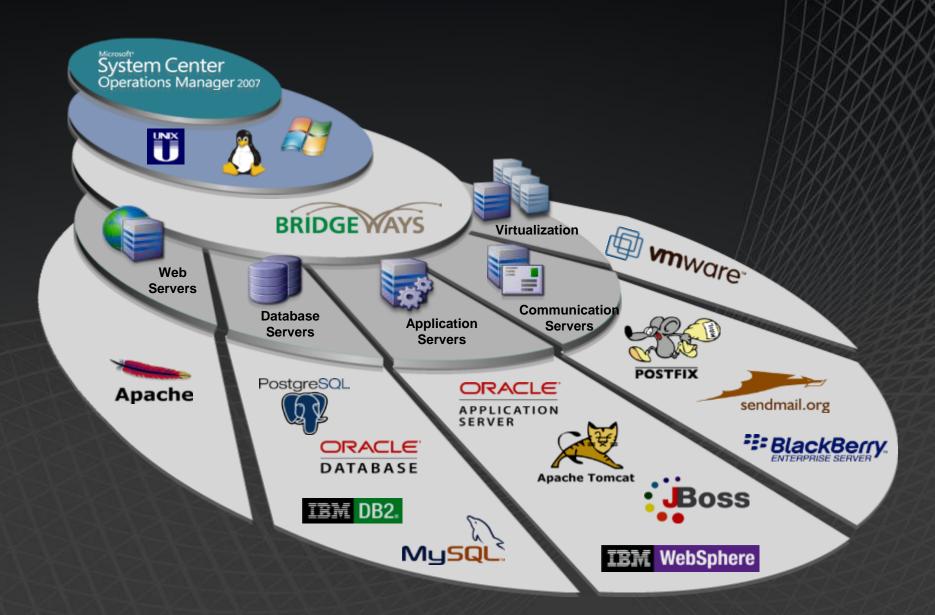
#### **Sun Solaris**

8, 9 (SPARC) &10 (SPARC/x86)

#### **SUSE Linux Enterprise Server**

9, 10 SP1(x86/x64)

## Xandros MP's using the X-Plat



## Connector Framework

Integrate System Center with third-party management frameworks

## Operations Manager

Interoperate with other Enterprise Management and Ticketing systems

HP OVO/OM
HP Service Manager
IBM TEC
IBM OMNIBus/Netcool
BMC Remedy ARS
Universal Connector

## Configuration Manager

Interoperate with other CMDB's and Ticketing systems

HP Service Manager BMC Remedy ARS MS Project MS Dynamics MS Visual Studio TFS

#### Service Manager

Interoperate with other CMDB's and Ticketing systems

System
Center
Interop
Connectors

EMC Smarts
CA Unicenter & Spectrum
BMC Patrol & Event Mgr
IBM OMNIBus
HP Service Desk
HP Service Center

HP CMDB
CA CMDB
BMC Atrium CMDB

Partner
Connectors:
CA, EMC, IBM
iWave, Quest,
Opalis &
Seamless

## Service Level Dashboard 2.0 Solution Accelerator for Operations Manager 2007 R2

- Easy to customize for LOB Applications
- Near-Real-Time Service Level Dashboard
  - Additional Metrics MTTR & MTBF and Service Level trends
- Leverage Windows SharePoint Services 3.0's
  - SharePoint Site based Dashboard
  - SharePoint based authentication (Role Based Views)



Application		Group 😩	Availability		Performance	
			Measured (%)	Service Level Goal (%)	Measured (%)	Service Level Goal (%)
⊞	SLA -	Platinum Service	99.77 % 💇	98.00 %	99.77 % 💇	98.00 %
⊞	SLA - Exchange	Silver Service	78.84 %	95.00 %	78.84 %	92.00 %
⊞	SLA - SAP	Gold Service	100.00 %	95.00 %	100.00 %	95.00 %
⊞	OLA - Siebel	Gold Service	100.00 %	95.00 %	100.00 %	95.00 %

## IT Systems Configuration Lifecycle

Software Distribution

OS Deployment Standardization

Asset Management Consolidation, License Compliance SW and HW Updates

Desired
Configuration
Management

Out of Band Management, Remote Control

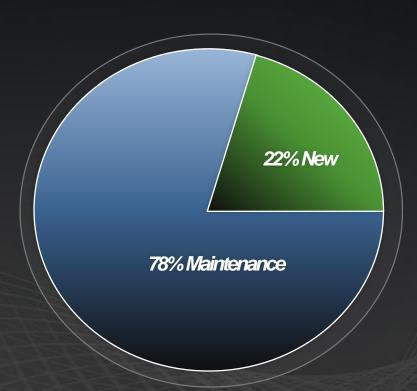


System Center
Configuration Manager 2007 R2

## System Center Service Manager

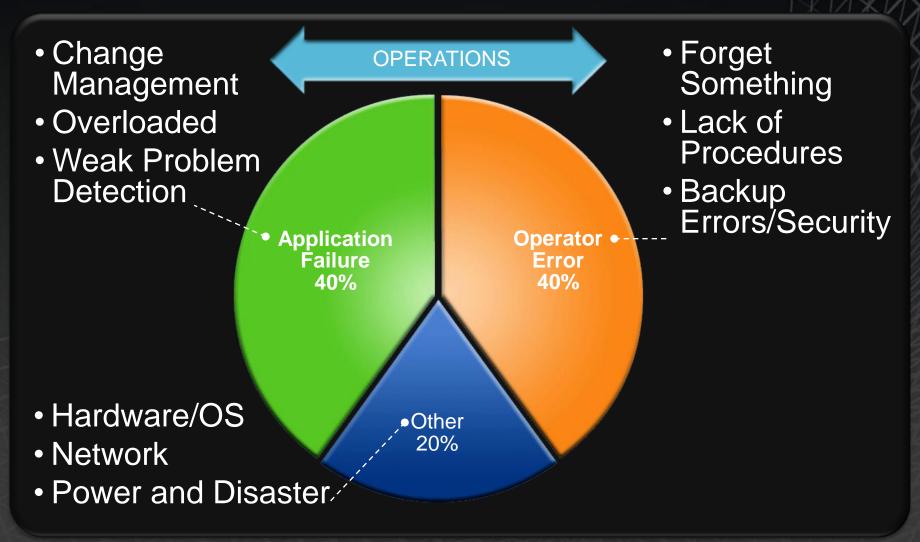


## Objective: Drive Cost of Management



Issue: 78% of IT budgets spent on maintenance activities, trends increase pressure

## Source of Operational Problems



Gartner Security Conference presentation "Operation Zero Downtime," D. Scott, May 2002

## What makes a good Service Desk Tool

- Workflow Engine
- Short Implementation time
- Easy to modify Forms
- Good integration to tools
- Generic CMDB (Easy to extend and maintain)
- Good reporting capabilities

## Service Manager: The Power Is Integration

Self-service Portal

Reporting



Problem Management



**Asset Management** 



Change Management



Incident Management



System Center
Configuration Manager 2007

System Center
Operations Manager 2007

## System Center Service Manager

Integrated Platform for Orchestrating People, Process, and Technology

#### **INTEGRATED**

**CMDB** 

IT Process and workflow Automation

Service Maps



#### **EFFICIENT**

Self Service Portal

Automated Notifications

Knowledge Base



#### **BUSINESS ALIGNED**

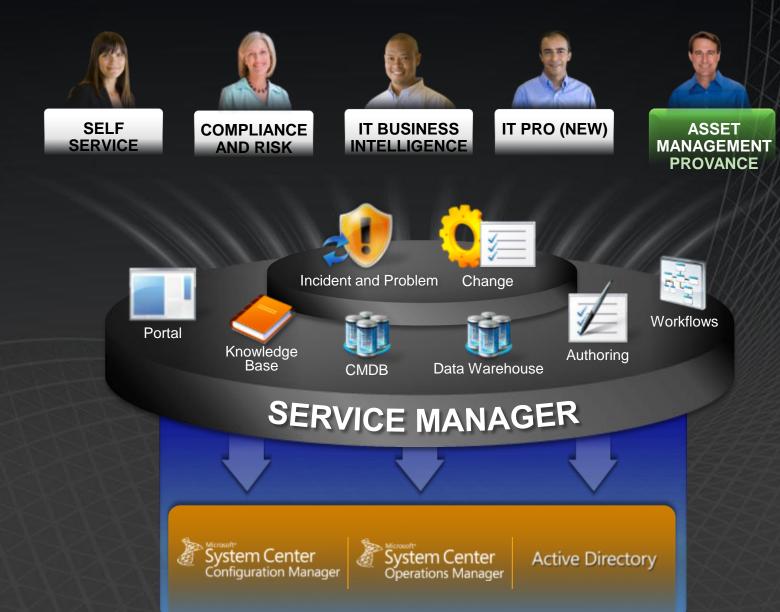
**Asset Management** 

Compliance and Risk Management

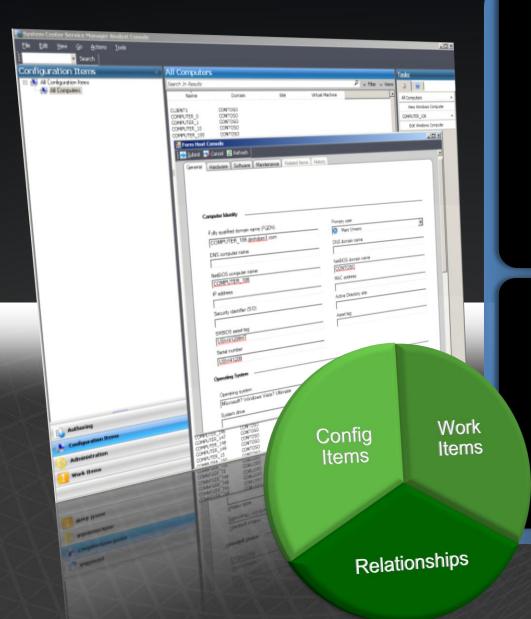
Informed Decision Making



## Service Manager: The Power is in the Integration



## Integrated System Center CMDB



#### System Center common schema

- Common schema across
   System Center
- Object model is based on Operations Manager
- IT assets are represented as configuration items (CIs)
- Incidents, change requests, and problems are represented as work items (WIs)

## Configuration Management Database (CMDB) features

- Create, update, and view CIs
- Create relationships among Cls, Wls, IT staff, and Active Directory® Domain Services (AD DS) users
- Automatically track CI change history
- Service definition and mapping

Incident Management

Keep users and data center services up and running, and restore service quickly

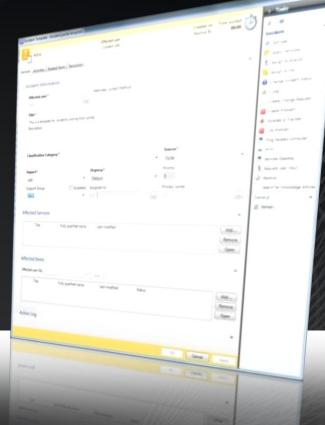
#### **Embed standard process**

- Define escalations
- Define categories

Predefined templates ensure accurate and efficient recording

History and knowledge base supports fast diagnosis

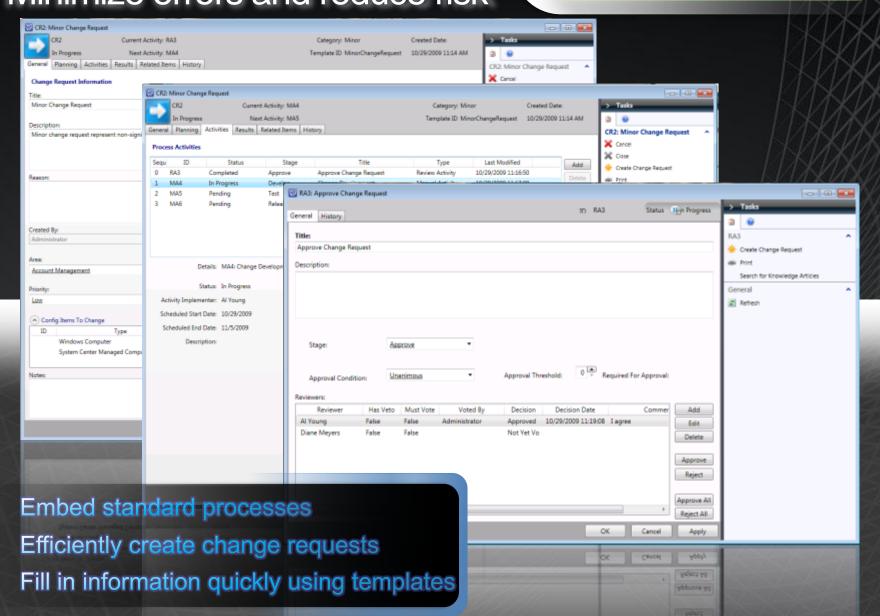
Automatic incident creation with Desired Configuration Monitor (DCM) errors and Operations Manager alerts



75 to 80% of all incidents are caused by poor change management

## Change Management Minimize errors and reduce risk

33% of customers plan to automate change over the next three years



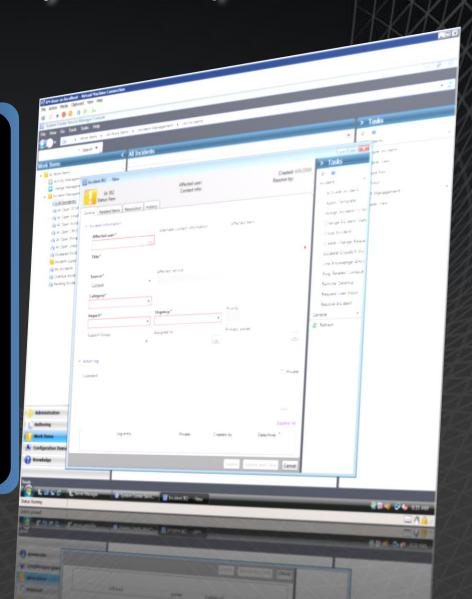
## Problem Management

Enables organizations to identify and track problems

Problem creation from similar incidents

Link Incidents and Change requests to problem

Auto resolution of Incidents linked to the Problem



## Knowledge Management Reducing time to resolution

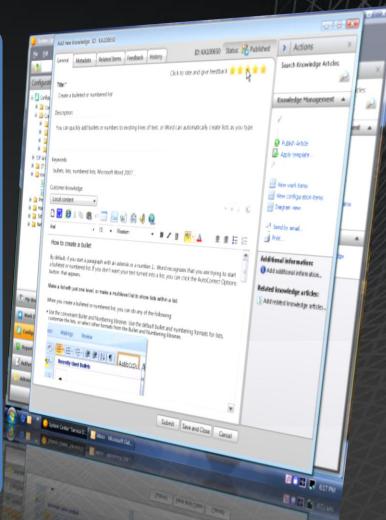
## Knowledge articles

- Customer, Partner, and Analyst authored content
- Local content and links to external content
- End User and Analyst Sections
- Ratings

## **Knowledge Search**

- Full text, keywords, categories
- Related incidents, change requests, problems

Console and Web interfaces



## Business Intelligence for IT



#### Integrated across System Center

- Demonstrate Maturity
- Supports Configuration Manager, Operations Manager, and Active Directory integration knowledge

## Data Warehouse repository database

- Store large amounts of dimension and fact data
- Provide a historical record
- SQL Reporting Services
- Model-driven: MP extends DW schema

## Empowering the End User

User self-service portal

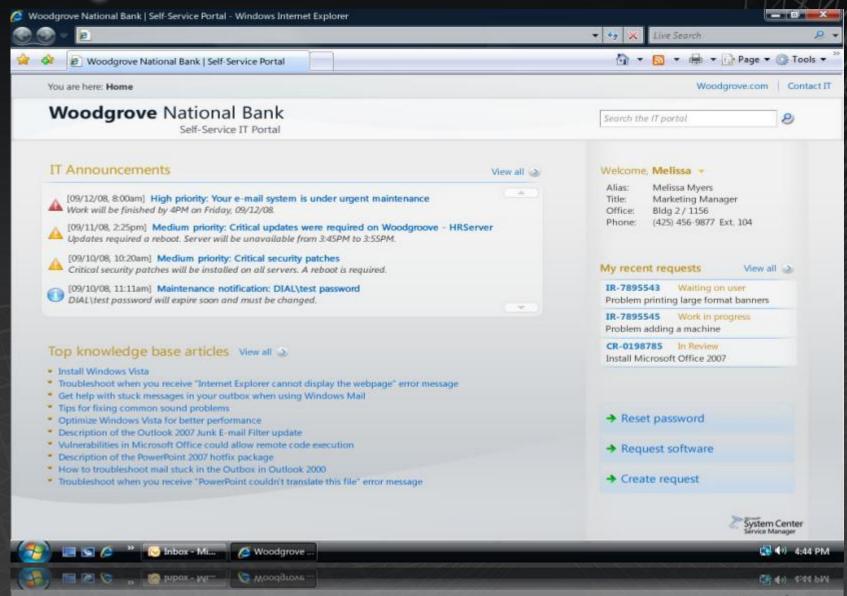


The average cost of a single call is \$25 to \$30

Self Service Portals reduce calls by 30%



## Self-Service Portal Enabling the end-user



## Password Reset Registration

- Under the People, Profiles, and Password Section on the home page
- Click the Register for Password Reset link

#### Home

#### **Distribution Groups**

- My DGs
- My DG Memberships

#### Users

My Profile

#### Requests & Approvals

- Manage My Requests
- Approve Requests (1)



#### Distribution Groups

Distribution Groups (DGs) provide an easy way to send email to a group of people. When you send email to a DG, the email will get delivered to all members of the DG.

- Create a new DG
- Manage my DGs

- See my DG memberships
- □ Join a DG



#### People, Profiles, and Passwords

Profiles allow you to see data about people in your organization. You can also update certain data in your profile, such as your cellphone number, or register to reset your password.

■ Edit my profile

Register for Password Reset



#### Requests

See requests you've made, or approve requests that others have made to you.

Approve requests

See requests I've made

## Operations Manager Integration

#### Alert -> Incidents

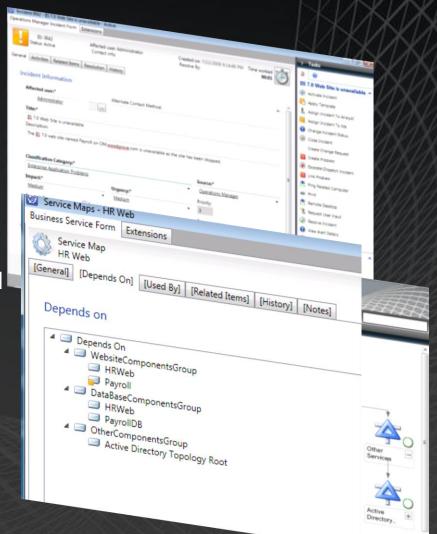
- Create incident from Alert
- Sync and resolve OM alerts
- View Alert details from SM

#### CMDB

- Creation of CIs from OM discovered objects
- OM Health Explorer for CI

#### Services

 Sync Distributed Applications as Services



## Governance, Risk & Compliance

#### PROBLEM / OPPORTUNITY

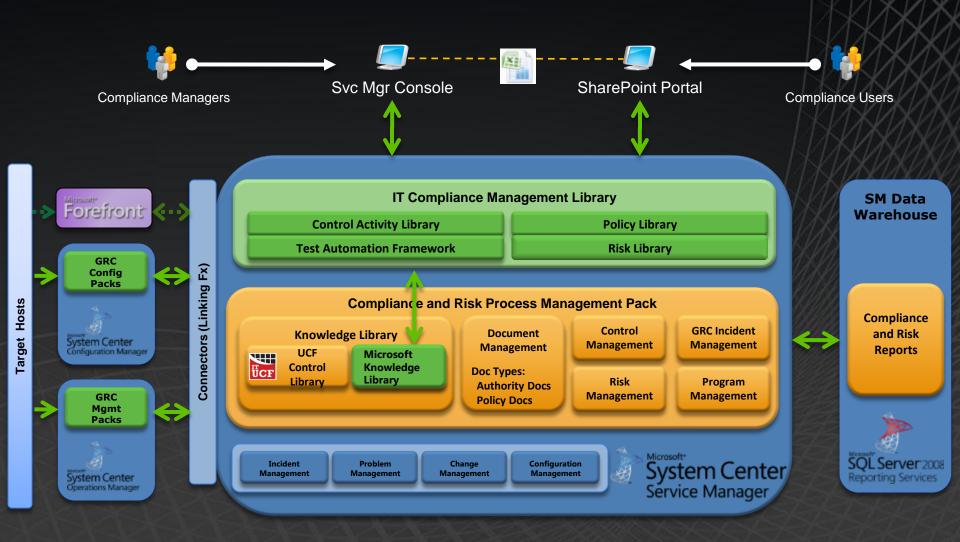
GRC= 8% of US GDP (\$1 Trillion)

Adds \$7000 in cost / Employee



By automating the creation, monitoring, validation, and reporting of the control objectives and activities required by compliance requirements such as SOX, PCI and others, companies can increase the efficiency of managing compliance and their confidence levels.

#### GRC Management Suite Architecture



**C&R PMP** 

**System Center** 

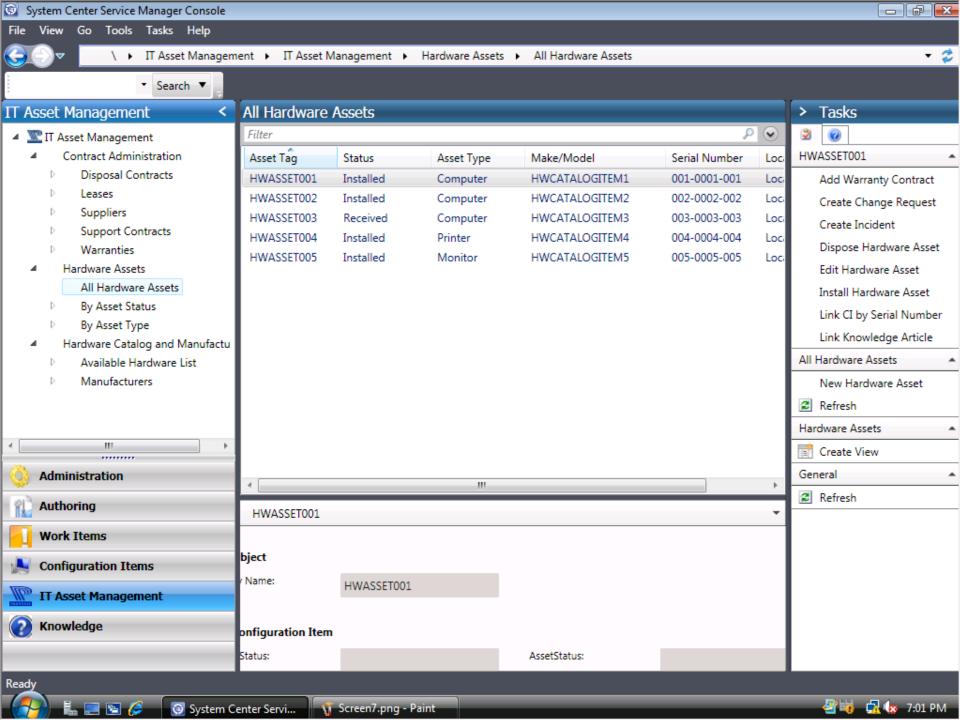
**IT Library** 

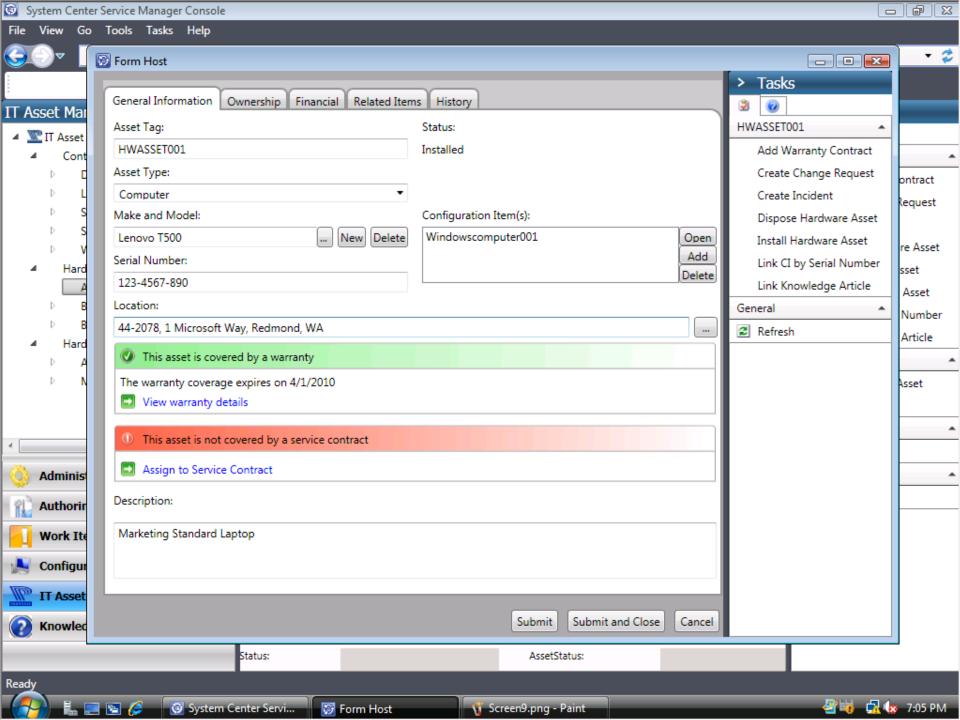
## Provance and Service Manager



Provance IT Asset Management Pack for Microsoft System Center Service Manager

- Process Management Pack extension that provides IT asset lifecycle management and software asset management capabilities within Service Manager
- CTP May 2009; Beta August 2009; RTM Spring 2010



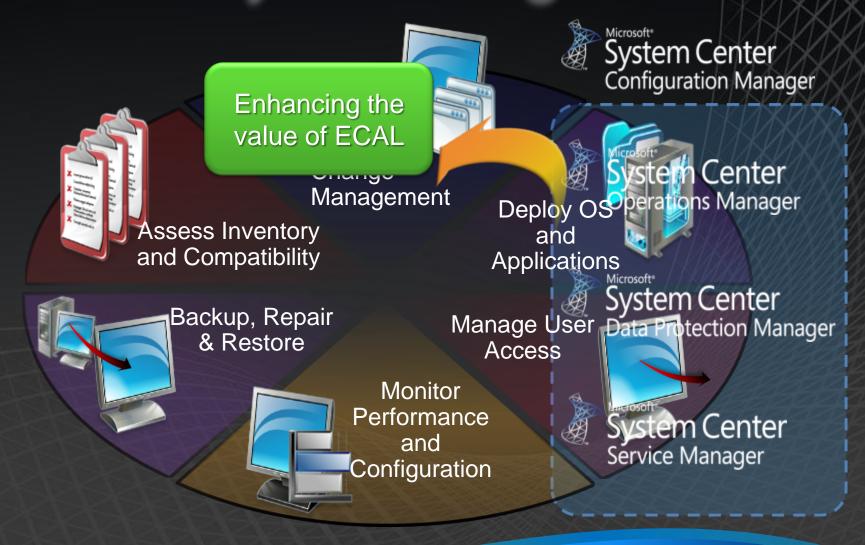


## Service Manager Authoring Tool

- First look in Beta 2, ships with SM Console
- Drag and drop designers no code or XML required!
- Forms customization
  - Add/remove/move controls, change formatting, validation rules
- Extend CMDB model
  - Add new classes, relationships, and properties
- Workflow authoring
  - Compose workflows
  - System workflows for other process automations

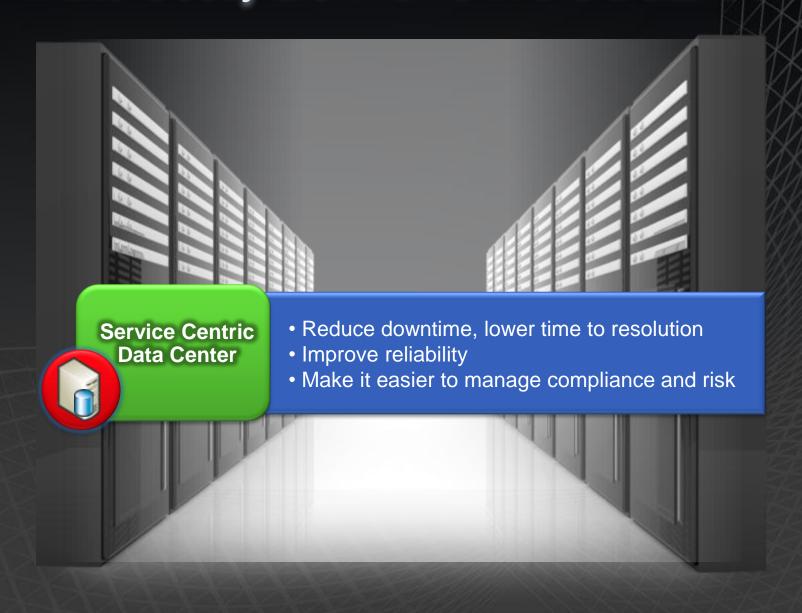


## Client Lifecycle Management



#### Orchestration

### Eliminate Costly Downtime in the Data Center



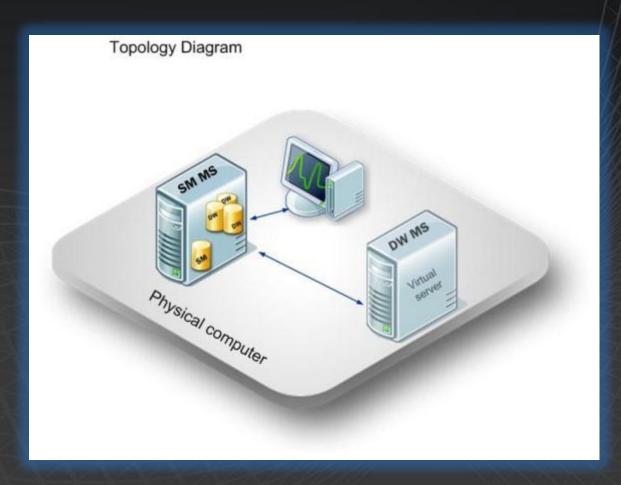
# Service Manager Other Stuff

## Scalability Goals

- Up to 20,000 users with up to 40 50 IT analysts providing concurrent support
- Up to 20,000 supported computers, assuming up to 10 - 12 configuration items (installed software, software updates, hardware components) per computer
- 5,000 incidents per week with 3 months of retention for a total of 60,000 incidents in the Service Manager database
- 1,000 change requests a week with 3 months of retention for a total 12,000 change requests in the Service Manager database

## Sizing: Test Lab, 100-500 users

Supported Users	100-500
Computers in the Service Manager database	500
New Incidents per Month for each computer	1
New Change Requests per Month	20
Concurrent Consoles	2



## Sizing: 501-2000 users

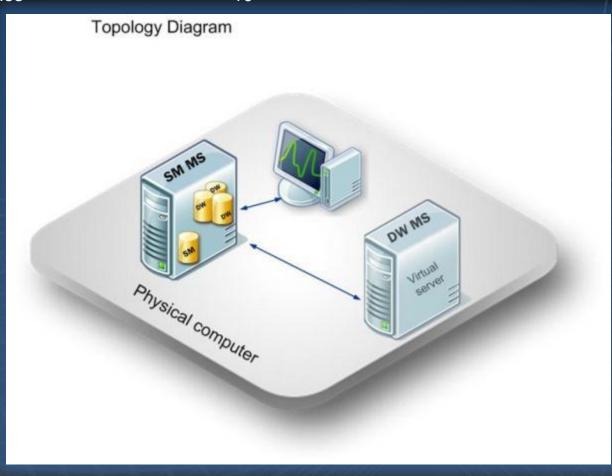
Supported Users 501-2000

Computers in the Service Manager database 2000

New Incidents per Month for each computer

New Change Requests per Month 100

Concurrent Consoles 10



## Sizing: 2K-5K users

Supported Users:

Computers in the Service Manager database
New Incidents per Month for each computer
New Change Requests per Month
Concurrent Consoles

2001-5000

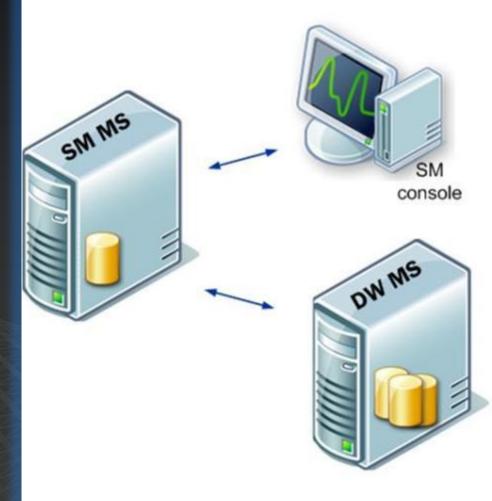
3000

1

150

15

#### **Topology Diagram**



## Sizing: 5K-10K users

Supported Users:

Computers in the Service Manager database New Incidents per Month for each computer New Change Requests per Month

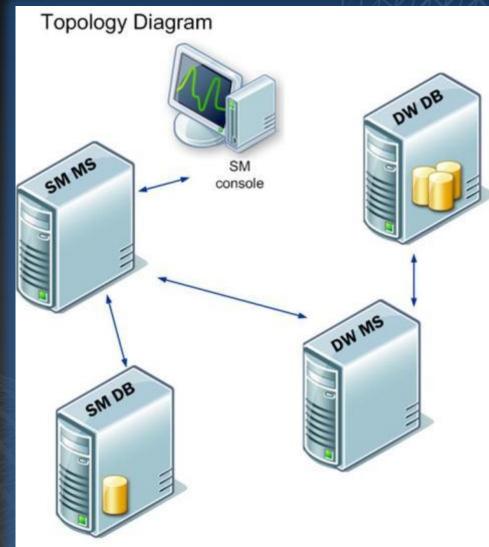
**Concurrent Consoles** 

5001-10000

6000

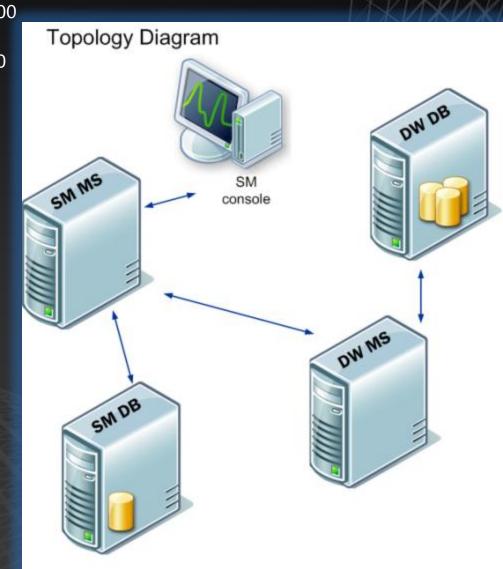
1 1000

40



## Sizing: 10K users

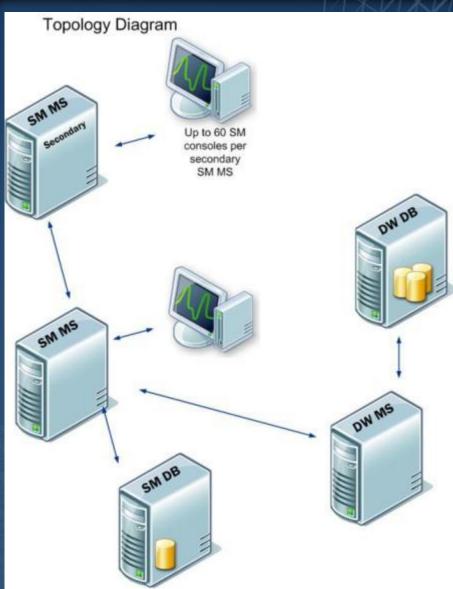
Supported Users 10000
Computers in the Service Manager database 10000
New Incidents per Month for each computer 1
New Change Requests per Month 2000
Concurrent Consoles 40



## Sizing: 10K – 50K users

Supported Users Computers in the Service Manager database New Incidents per Month for each computer New Change Requests per Month **Concurrent Consoles** 60

10000+ 50000 2000



## Service Manager – Aligning IT to Business

#### **Service Management**

- Manage change across teams informed by business policy
- Measure service performance improve and remediate

Diagnose and Restore Service



Automate & Integrate IT change

#### **Data Center Management**



Monitor the Service

Restore the Service

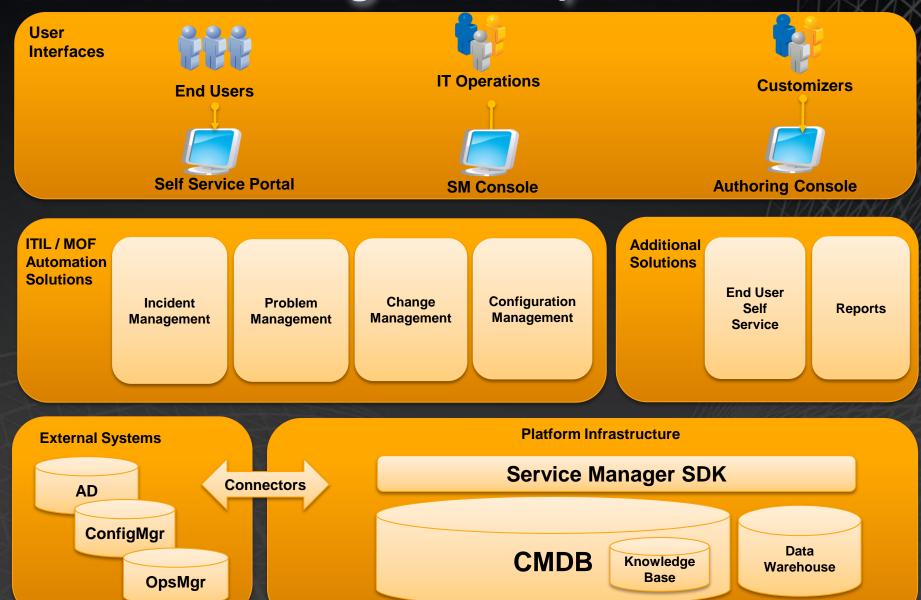
#### **Client Management**

Self-Service Application Deployment

Self – Service Assistance and

Knowledge

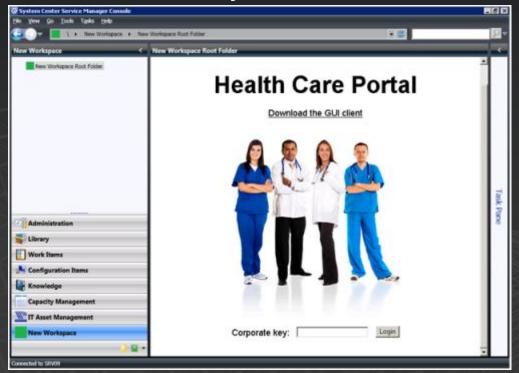
## Service Manager Components

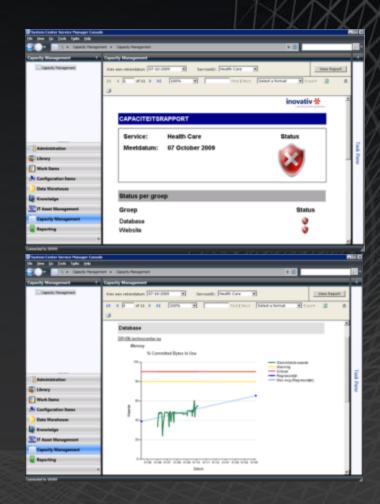


## Web-based content in Service Manager

Workspaces aka. "Wunderbars"

- Mulighed for at lave egne Management Packs.
- Inkludere indhold direkte fra andre Systemer





#### Se mere her:

http://blogs.technet.com/servicemanager/archive/2009/11/24/showing-web-based-content-in-a-custom-view.aspx

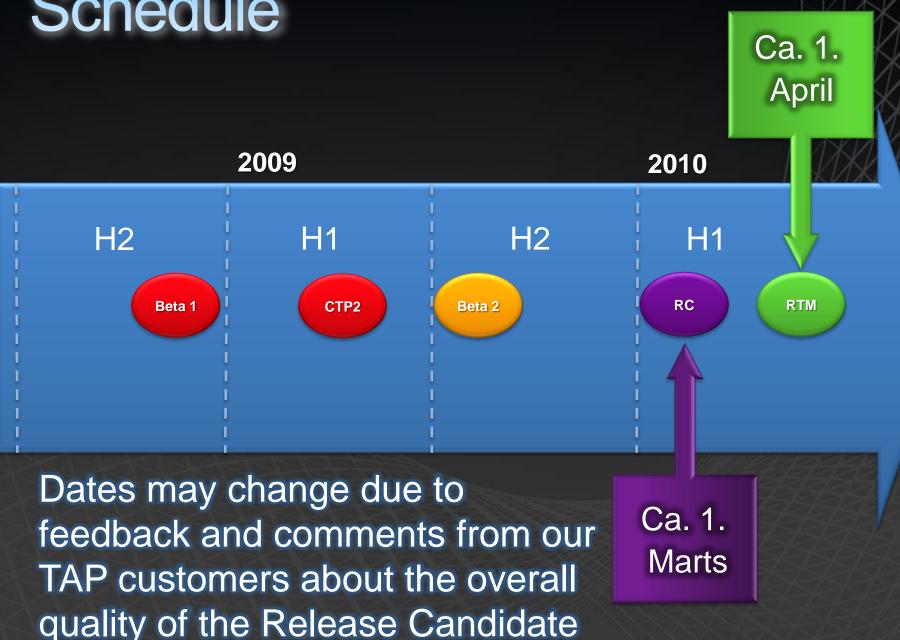
Creating Workspace (aka "Wunderbars") in System Center Service Manager

# System Center Roadmap

## Service Manager v.Next

- Hvornår: 2011
- Hvad tilføjes:
  - SLM, Service Level Maps
  - RM, Release Management

## Schedule





© 2009 Microsoft Corporation. All rights reserved. Microsoft, Windows, Windows Vista and other product names are or may be registered trademarks and/or trademarks in the U.S. and/or other countries. The information herein is for informational purposes only and represents the current view of Microsoft Corporation as of the date of this presentation. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information provided after the date of this presentation.

MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS PRESENTATION.

## Microsoft®

Your potential. Our passion.™

© 2009 Microsoft Corporation. All rights reserved. Microsoft, Windows, Windows Vista and other product names are or may be registered trademarks and/or trademarks in the U.S. and/or other countries. The information herein is for informational purposes only and represents the current view of Microsoft Corporation as of the date of this presentation. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information provided after the date of this presentation.

MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS PRESENTATION.

