



System Center Configuration Manager 2007

Service Pack 2 and R3 Technical Overview

Kevin Sullivan
Datacenter TSP, US Education
Kevin.sullivan@microsoft.com
System Center
Microsoft Corporation

Agenda

- Configuration Manager 2007 Overview
 - Architecture
 - Features
- Demos
- Futures and Roadmap
- Resources

Configuration Manager 2007

- Product Timeline
 - Configuration Manager RTM
 - Released September 2007
 - Significant update to SMS 2003
 - Service Pack 1
 - Released April 2008
 - Platform support for Windows Server 2008/Vista SP1
 - Asset Intelligence update
 - Intel vPro integration
 - R2
 - Released August 2008
 - Application Virtualization Management
 - SQL Reporting integration
 - Client Status Reporting
 - Forefront Client Security Reporting
 - Service Pack 2
 - Released same day as Windows 7 GA
 - Windows 7 Support
 - Intel vPro Enhancements



Supported Client Numbers

Site Role	Maximum # of Client Systems
Hierarchy (Central Site Server)	200,000*
Primary Site Server	100,000
System Health Validator	200,000
Management Point	25,000
Distribution Point (Non OSD)	4,000
Distribution Point (OSD)	Limited by Network & Disk I/O
State Migration Point	Limited by Network & Disk I/O
Software Update Point (WSUS)	25,000
Fallback Status Point	100,000
Branch Distribution Point	Limited by OS License, Network & Disk I/O

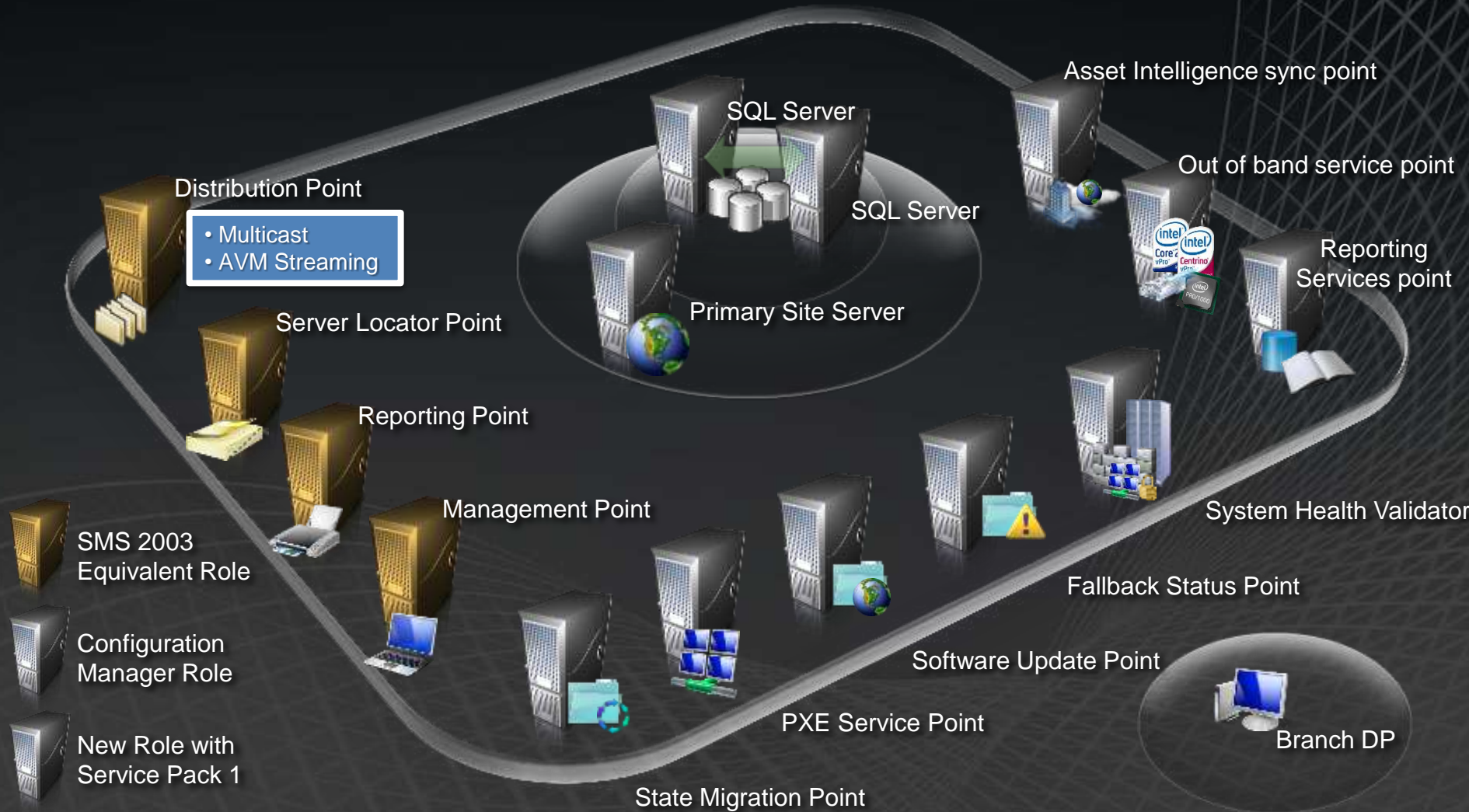
* ConfigMgr 2007 R3 will move this to 300,000

Platform Support

Feature/Platform	HW/SW Inventory	OS Deployment	Software Distribution	Software Update Mgmt	Desired Config Mgmt
Windows '7'					
Vista					
Vista SP1					
XP SP2					
Windows 2000					
Server 2008/R2					
Server 2003					
Server 2000					
WFLOP					
WePOS					
XP Embedded					
Windows CE					
Windows Mobile					

 Supported
  Supported with SP1
  ConfigMgr SP2
  Not supported

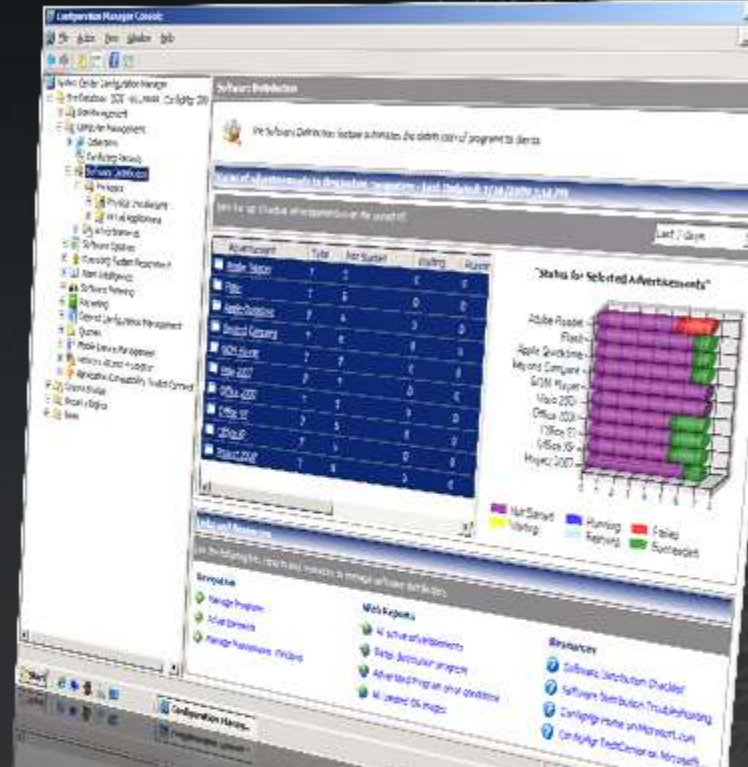
Configuration Manager Site Systems



New R2
Capability

Traditional Software Distribution with System Center

- Enhancements to a core feature, and new levels of control for package delivery
- New Features:
 - Copy Package Wizard for package replication
 - Control when change happens with Maintenance Windows
 - Reduce your infrastructure with Branch Distribution Points
- Improvements:
 - Efficient troubleshooting with improved Package Cache control
 - Lower network traffic with Binary delta replication
 - Client Branding for User Experience
 - Wake on LAN support guarantees delivery



Name	Package	Program	Collection
Office 2007 - Office 2007 to All Windows XP Systems	Office 2007	Office 2007	All Windows XP S
Office 2007	Office 2007	Office 2007	Demo Client
Forefront - Forefront Client to All Windows XP Systems	Forefront	Forefront Client	All Windows XP S
Adobe Flash Player	Adobe Flash Player	[Virtual application]	All Systems
Gom Player	GomPlayer	[Virtual application]	All Systems
Microsoft Project	Project 2007	[Virtual application]	All Systems
GOM	Gom Player TechReady	[Virtual application]	All Systems
Apple Quicktime	Apple QuickTime	[Virtual application]	All Systems

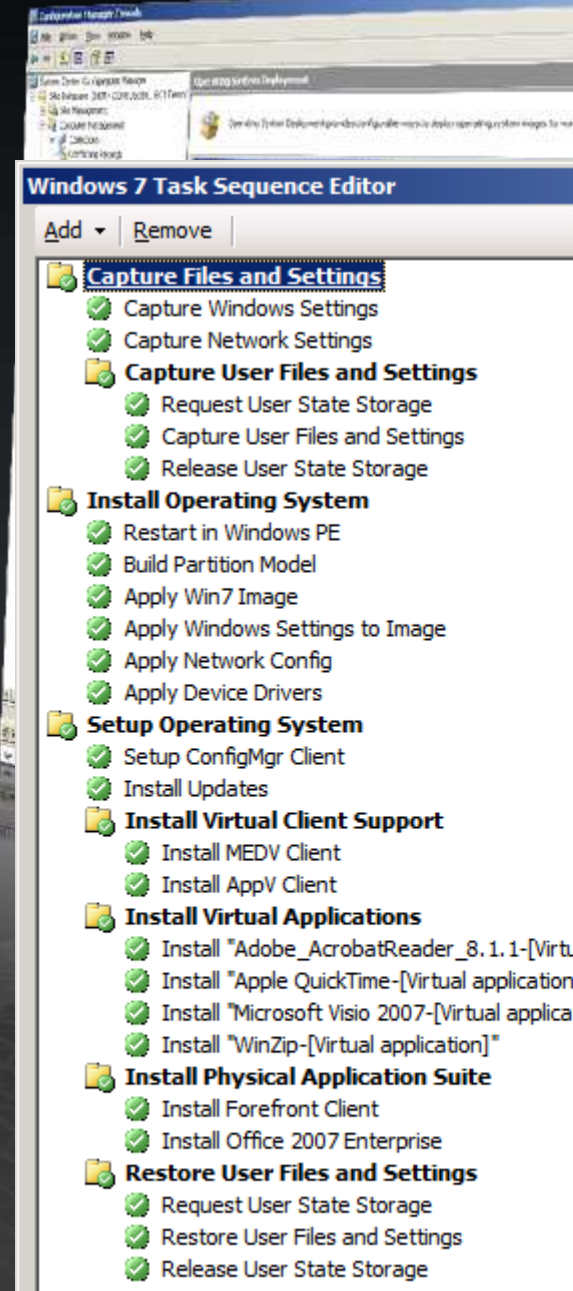
Application Virtualization Management

- Create application packages from sequenced applications
- Deliver virtual applications based on advertisements just like traditional apps
- Stream from Distribution Points for on-demand availability (online scenario)
- Load locally on the client for offline availability and reliable delivery (offline)
- Inventory virtual applications and report on the data
- All aspects of the dynamic nature of Application virtualization are supported
 - Version checking, user-based targeting, streaming



Operating System Deployment

- Highly automated solution for assessing, migrating and deploying windows server and client operating systems
- End-to-end deployment automation support
- Assess migration readiness for Windows Server 2008, Vista and Office 2007
- Built in reports for minimum and recommended settings
- Enable dynamic deployment of drivers at runtime
- Organize, replicate and deploy packages
- Utilize Windows PnP detection Unknown computer support for bare metal deployments
- Multicast support for Bare Metal



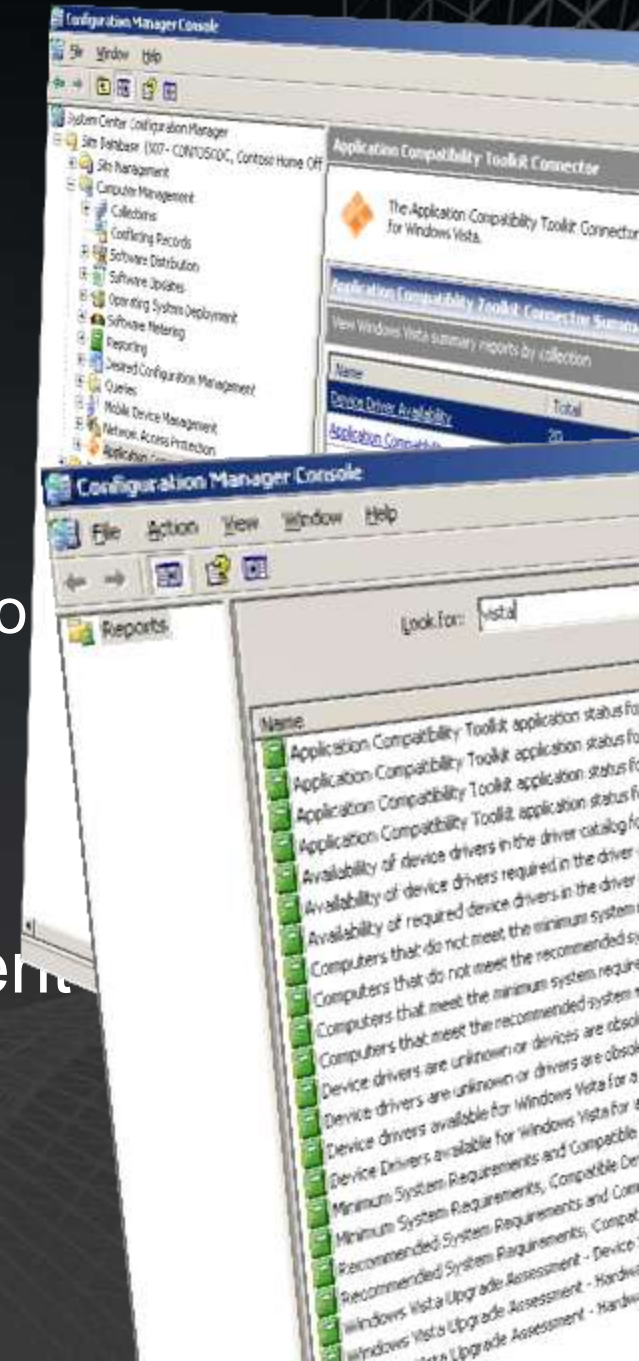
Software Updates

- Built on WSUS 3.0 architecture
- Included as Managed Server role in site hierarchy
- Full benefits of site management, Binary Delta Replication
- Provides:
 - Compliance assessment
 - Security updates / vulnerability assessment
 - Application updates
- All Microsoft software updates categories plus:
 - OEMs and software vendors (ISVs)
 - Internally-developed applications (LOB)
- Full integration into other areas of Configuration Manager:
 - OS Deployment
 - Internet Based Client Management
 - Windows Server 2008 NAP
 - System Center Update Publisher
 - Desired Configuration Management



Reporting

- Enhanced report capabilities for:
 - Application Compatibility
 - Application Compatibility Toolkit integration
 - Asset Intelligence
 - Software category, family usage reports
 - OS Deployment
- Granular process tracking, deep insight into OS Deployment steps
- Desired Configuration Management
- Compliancy adherence
- Vulnerability Assessment



SQL Reporting Services Integration

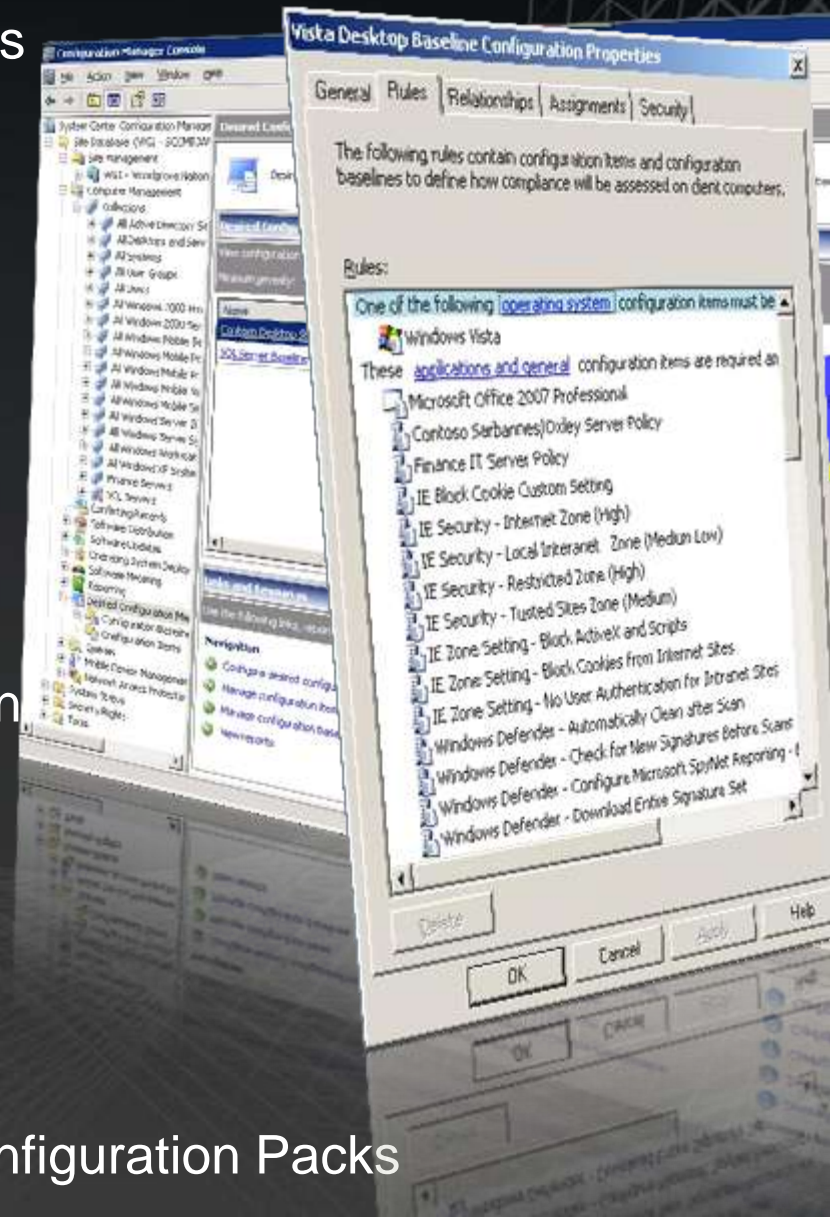
- New server role called the “Reporting Services Point”
- Ability to convert/copy classic SMS reports to Report Definition Language format and publish them to a Reporting Services Point (report server)
- New node under “Computer Management -> Reporting” for accessing the SRS ConfigMgr reports
- Ability to manage, browse and run SRS ConfigMgr reports from the ConfigMgr Console

Asset Intelligence

- New UI
 - New interface in Configuration Manager Admin Console
 - New Catalog and License management UI tools
 - Enhanced UI for all Asset Intelligence WMI Classes
- System Center Online Connection
 - Keep software asset categorization up-to-date
 - On-demand or scheduled catalog synchronization w/On-line Service
 - New Configuration Manager site role: The Asset Intelligence Synchronization Point
 - Upload requests for software categorization to On-line Service
- Basic replication to distribute AI content to other Configuration Manager sites
- Ability to import licensing data and compare to inventory
- Local edit support allows customers to categorize software assets

Desired Configuration Management

- Identify required and prohibited configurations
- Report on compliance of configurations
- Improve systems availability, security, and performance
- Reduce “configuration drift”
- Improve help-desk troubleshooting
- Remediate non-compliance by:
 - Deploying software
 - Scripts
 - Updates
 - Task-sequences
- Dashboards provide status of compliance
- Define configuration baselines across physical and virtual environments for:
 - Business
 - Workload
 - Role
 - Other
- Leverage Microsoft and third party Configuration Packs



Intel AMT Integration

Intel® Core™ 2 Duo Processor

Intel® Q35
Express
Chipset
with ICH9-DO

Intel®
82566DM
Gigabit
Network
Connection

Intel Key
Platform
Technologies

Intel® Active
Management
Technology

Intel®
Virtualization
Technology

Intel vPro
Components

Intel Platform
Software
Ecosystem
Solutions

- Intel® Active Management Technology (AMT) is a function of the chipset & network controller
- Hardware-based management for clients
- Desktop: Intel® vPro™ Processor Technology



ConfigMgr 2007 Features for Intel vPro integration

Provisioning

- Secure Setup & Configure AMT
- Zero Touch – Certificate Hash
- Zero Touch – In band via agent
- Ties to OSD w/targeting

Discovery/Inventory

- Discover On Demand
 - per machine / per collection
- Scheduled Discovery
- In band Discovery via agent

Remote Console

- Helpdesk / Interactive session
 - Serial over LAN
 - IDE Redirection
 - BIOS password bypass
 - Manual power control

Power Control

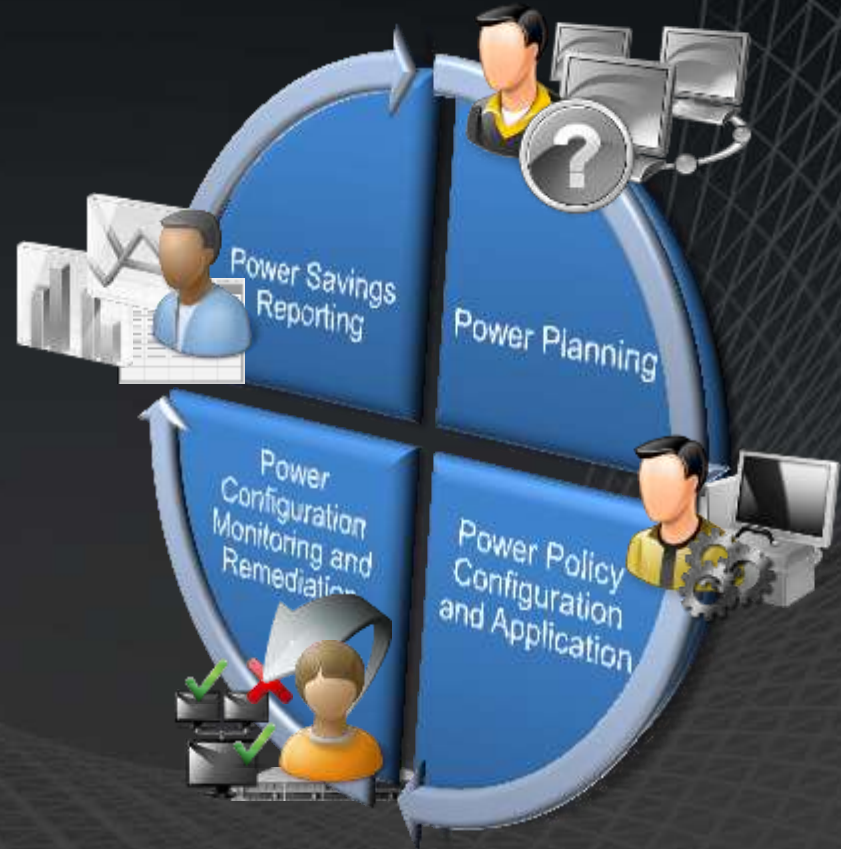
- Scheduled Power On
 - SWDist, SUM, OSD
- On Demand Power Control
 - Wake, Restart, Shutdown
- Interactive via OOB Console



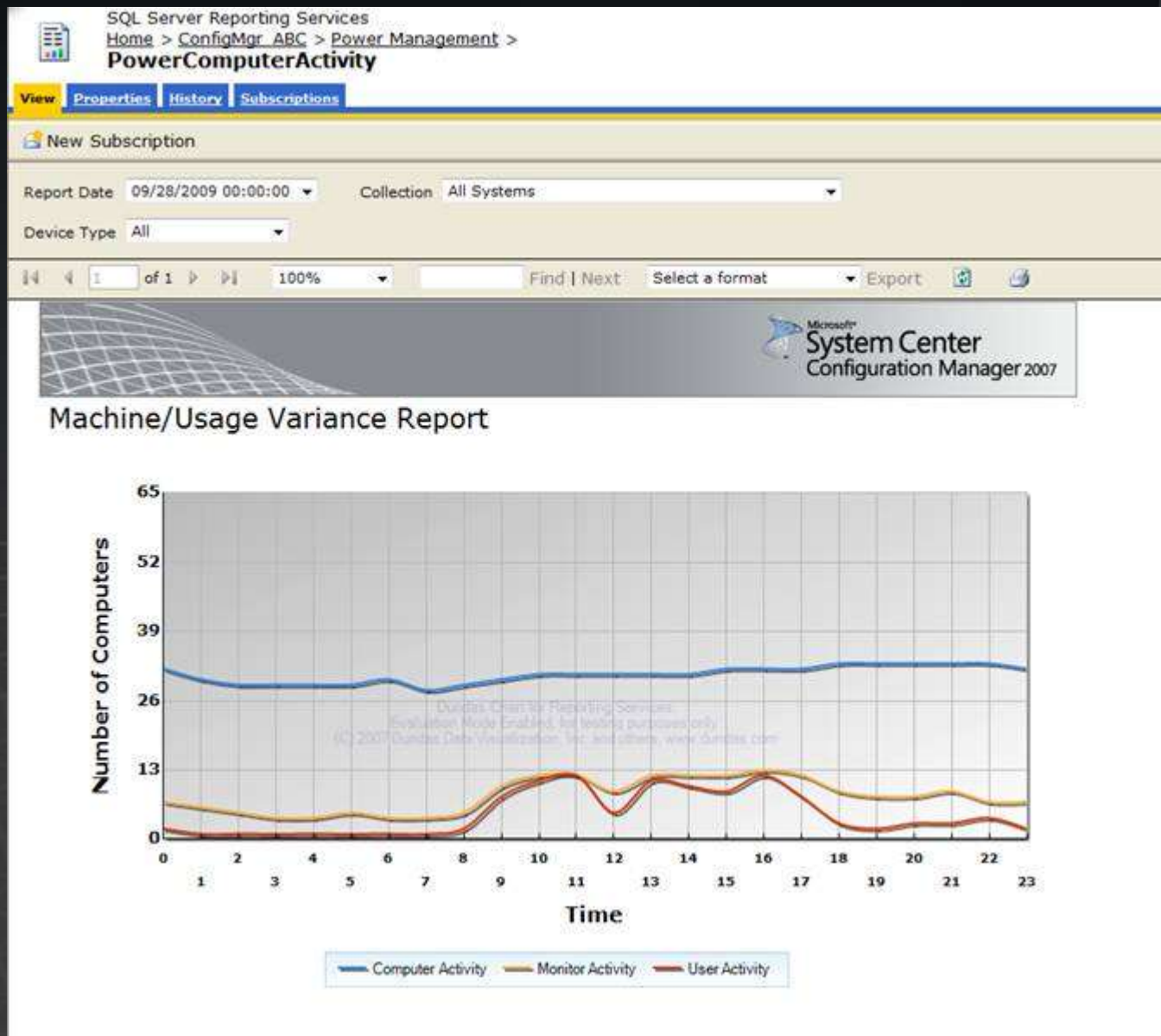
R3

System Center Power Management

- **Monitor** current power state and consumptions
- **Plan** and create a power management policy, check for exceptions
- **Apply** power management policy
- **Check** compliance and remediate non-compliance.
- **Report** saving in power consumption and costs and environmental impact.



Machine and User Activity Report



Power capability report

SQL Server Reporting Services
Home > ConfigMgr_ABC > Power Management >
PowerCapabilities

View Properties History Subscriptions

New Subscription

Collection All Systems Display Filter Show All

1 of 1 100% Find | Next Select a format Export

Microsoft System Center Configuration Manager 2007

Power Capabilities Report

Computers Name	OS	Sleep (S3)	Hibernate (S4)	Wake
ATC-QIANI01	Microsoft(R) Windows(R) Server 2003, Standard Edition	✗	✓	✗
ATC-QIANI05	Microsoft Windows Server 2008 R2 Enterprise	✗	✓	✗
CHUANBO61	Microsoft Windows 7 Enterprise	✓	✓	✓
CLAIRE0864	Microsoft Windows 7 Enterprise	✓	✓	✓
CXU-DESK	Microsoft Windows 7 Enterprise	✓	✓	✓
ERIC-WALLNUT	Microsoft Windows 7 Enterprise	✓	✓	✓
EVANC2	Microsoft® Windows Server® 2008 Enterprise	✗	✗	✗
GORDON-DESKTOP	Microsoft(R) Windows(R) Server 2003, Enterprise Edition	✓	✗	✓
haol1	Microsoft Windows 7 Enterprise	✓	✓	✓
HAOL2	Microsoft® Windows Server® 2008 Enterprise	✗	✗	✗

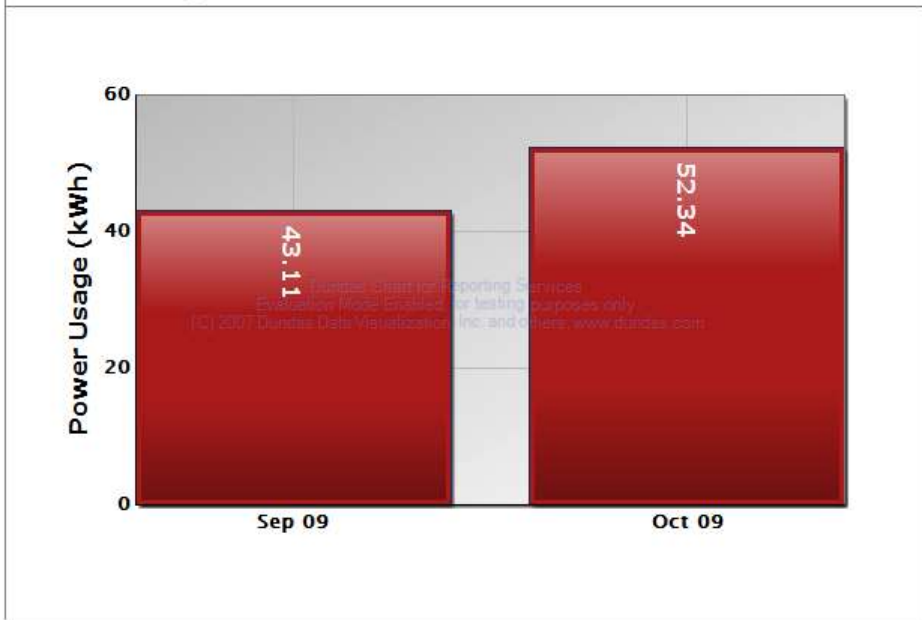
New Subscription

Start Date: 09/01/2009 00:00:00 End Date: 11/01/2009 00:00:00 View Report

Collection: All Systems Device Type: All



Power Usage



Parameters:

Report Start Date:	9/1/2009
Report End Date:	11/1/2009
Collection Name:	All Systems
Device Type:	0

Power Consumption Constants (kWh):

Desktop Computer On:	0.064
Laptop Computer On:	0.21
Desktop Computer Sleep:	0.003
Laptop Computer Sleep:	0.001
Desktop Computer Off:	0.001
Laptop Computer Off:	0
Desktop Monitor On:	0.02
Laptop Monitor On:	0.03

Report Manager - Windows Internet Explorer

http://nkrilovsms2/Reports/Pages/Report.aspx?ItemPath=%2fConfigMgr_ABC%2fPower+M... IT founder of Infrastructure Maturity Model

File Edit View Favorites Tools Help

Favorites Suggested Sites Get More Add-ons

Report Manager

SQL Server Reporting Services Home | My Subscriptions | Site Settings | Help

Home > ConfigMgr_ABC > Power Management > **EnvironmentalImpact**

Search for: Go

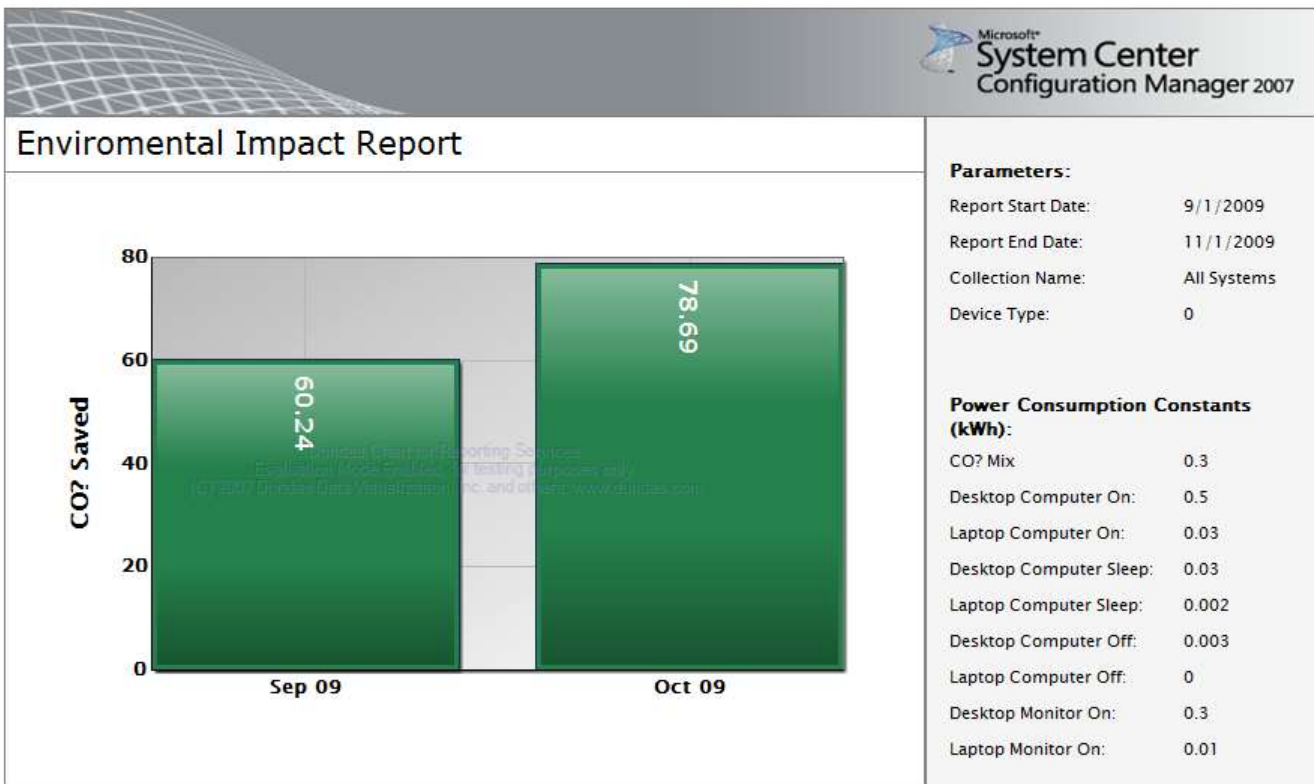
View Properties History Subscriptions

New Subscription

Start Date: 09/01/2009 00:00:00 End Date: 11/01/2009 00:00:00 View Report

Collection: All Systems Device Type: All

1 of 1 100% Find | Next Select a format Export



New Subscription

Collection All Systems

1 of 6 100% Find | Next Select a format Export



Power Settings Inventory Report

Setting	Power Mode	Value	Units	Computers
Turn off display after	0	1200	Seconds	2
		300	Seconds	1
		720	Seconds	1
	1	600	Seconds	2
		120	Seconds	1
		300	Seconds	1
Sleep after	0	0	Seconds	1
		60	Seconds	1
		1800	Seconds	1
	1	900	Seconds	1
		0	Seconds	1
		60	Seconds	1
Require a password on wakeup	0	600	Seconds	1
		900	Seconds	1
		Yes		4
	1	Yes		4

Report Manager - Windows Internet Explorer

http://nkrilovsms2/Reports/Pages/Report.aspx?ItemPath=%2fConfigMgr_ABC%2fPower+Manage

File Edit View Favorites Tools Help

Report Manager

SQL Server Reporting Services Home | My Subscriptions |

Home > ConfigMgr_ABC > Power Management > PowerSettingsMachineDrillDown

Search for:

View Properties History Subscriptions

New Subscription

Collection	All Systems	Power Setting Name	<Select a Value>
PowerMode	<Select a Value>	SettingIndex	

- <Select a Value>
- Adaptive display
- Allow Away Mode Policy
- Allow display required policy
- Allow hybrid sleep
- Allow sleep with remote opens
- Allow Standby States
- Allow system required policy
- Allow Throttle States
- Allow wake timers
- Critical battery action
- Critical battery level
- Device idle policy
- Dim display after
- Dimmed display brightness
- Display brightness
- Enable adaptive brightness
- Enable forced button/lid shutdown
- Hard disk burst ignore time
- Hibernate after
- Increase adaptive timeout by
- Lid close action
- Link State Power Management
- Low battery action
- Low battery level
- Low battery notification
- Maximum processor state
- Minimum processor state
- Power button action
- Power plan type

Done Local intranet | Protected Mode: Off 100%

System Center Roadmap

	2008	2009	2010	2011
 Microsoft System Center Operations Manager	2007 SP1	2007 R2		vNext
 Microsoft System Center Virtual Machine Manager 2008	2008	2008 R2		vNext
 Microsoft System Center Configuration Manager	2007 R2	2007 SP2	R3	vNext
 Microsoft System Center Data Protection Manager	2007 SP1		2010	
 Microsoft System Center Service Manager			2010	vNext
 Microsoft Desktop Optimization Pack for Software Assurance	2008	2009 & R2	2010 & R2	2011 & R2
 Microsoft System Center Online Desktop Manager			V1	V2 and V3
 Microsoft System Center Essentials	2007 SP1		2010	

Links and Resources

- System Center Nexus Team Blog - [link](#)
- What's new SP2 TechNet Documentation Library- [link](#)
- Configuration Manager [download](#)
- ConfigMgr Product Homepage – [link](#)
- Configuration Manager Product Team Blog – [link](#)
- Windows MDOP – [link](#)
- Windows Server 2008 R2 Branch Cache overview – [link](#)
- Branch Cache ConfigMgr Deployment Guidance – [link](#)

The image features the Microsoft logo and slogan centered on a dark background. The background is a dark gray with a subtle, light gray grid pattern that is more prominent on the right side. The logo is in a bold, white, sans-serif font, and the slogan is in a white, italicized, sans-serif font.

Microsoft[®]

Your potential. Our passion.[™]

Configuration Manager Feature Summary: RTM

Admin UI Improvements

- Richer knowledge presented, less mouse clicks, stronger wizard guidance, deeper pre-req checks and deployment assistance

Asset Intelligence

- Attach meaningful business terminology to inventory

HW/SW Inventory

- Advancements in upgrade reports, virtual support and more

OS Deployment

- Significant update, server support, multicast and unknown system support

Software Update Management

- Broad integration across ConfigMgr features, built on WSUS, branch, internet based, OSD, DCM

Network Access Protection

- Integration scenario support for Windows Server 2008

Software Distribution

- Improvements to a core feature, new virtualization support

Desired Configuration Management

- Model based, baseline definitions and regulatory support for system management

Device Management

- Powerful support for CE, PPC, Windows Mobile devices

SDK

- Now available, strong extension to core product

Configuration Manager Feature Summary: Service Pack 1

Windows Server 2008 Support

- Platform Support for planning, deployment and management of Windows Server 2008
- Support for Site Role infrastructure deployment to Windows Server

Vista SP1 Support

- Platform Support for planning, deployment and management of Windows Vista Service Pack 1

Asset Intelligence 1.5

- Major capability update
- Significant Admin Console Upgrades
- New Catalog and License support
- System Center Online synchronization support

Intel AMT Integration

- Feature Integration with Intel vPro Technology

Customer DCR

- Small Collection of Customer Design Change Requests

Infrastructure to support R2 features

- Service Pack 1 download includes codebase for R2

Hotfix Rollup

- Small Collection of hotfix and updates to rtm codebase

Configuration Manager Feature Summary: R2

Application Virtualization Management

- Seamless integration to Microsoft Application Virtualization

New OSD capability

- Additions of Multicast and Unknown Computer Support

Client Status Reporting

- Client summary rollup of key performance indicators

SQL Reporting Services Integration

- Migration of ConfigMgr reports to robust reporting platform

Forefront Client security integration

- Configuration Pack knowledge of the Forefront client status

Configuration Manager 2007 Feature Summary: SP2

Operating System Updates

- Windows 7
- Windows Server 2008 R2
- Windows Vista Sp2
- Windows Server 2008 SP2

Improved Client Policy Evaluation

- Faster local policy processing through the removal of 2 minute hard coded delay
- More efficient software distribution configured to run at user logon through removal of 10 minute hard coded delay at User Logon.

BranchCache Support

- Support for Windows Server 2008 R2 enabled infrastructure

64-bit Architecture Development

- X64 support for OpsMgr '07 Client Agent
- Update to OpsMgr MP for x64 OS
- x64 performance counters (the management pack is a separate release)
- Remote control support added for x64 Windows XP and x64 Windows Server 2003
- App-V x64 Client support

Asset Intelligence Certificate Requirement Removal

- The requirement to have a certificate to configure online sync of software catalog has been removed

Intel vPro enhancements

- OOB Wireless Management: Wireless Profile Management
- End Point Access Control: 802.1x support
- Persistent Data Storage: Non Volatile Memory or Third Party Data Store (3PDS)
- Access Monitor: Audit Log
- Remote Power Management: Power State Configuration from ConfigMgr Console

Other areas

- Multi-select and delete driver catalog drivers from the console
- Task sequence UI now displays package names as in the console
- Better feedback on AD extension success / failure