

WinAdmin Meeting 2013-10-11  
Beata Pruski, moderator  
J. Balvanz, recording

Steve Kunz is now on 60% time, so he has Fridays off and probably won't be here much. Beata will moderate this meeting for the foreseeable future. Notes will be taken by Jeff Balvanz today, others may be asked to in the future.

1. Affiliate Account information

We've been talking about getting more info about affiliate accounts into the Active Directory. Sponsorship will be added to the description field in parenthesis showing "(sponsor *SponsorNetID*)". This is being proposed here, but we're not expecting any argument (complain now if you don't like it) and will be implemented soon.

2. Three additional user object attributes

Three of the attributes for user object in Active Directory will soon be centrally managed: Company, Division and Department Number. There are applications that need to use these, so they will be managed centrally, placed in LDAP and propagated into the AD by Kunz's transfer mechanism.

Company	Iowa State University (for everyone)
Division	Major operating unit based on university records
Department Number	set by University code (not being used by anyone, it's not in ADUC)

The Department field is already populated; 40 people are using Department, but 3 have something other than Iowa State University in this field. The other fields are usually empty (they're not in Active Directory Users and Computers so it's hard to set manually.) You may actually benefit from this as you'll be able to search based on these fields. Unless we hear otherwise this will be done by the end of October.

Q: What about visiting people? A: They will be listed under the department that they are sponsored from as affiliate accounts.

Q: Is there more information about expiration problems at the beginning of the month? A: For some reason the e-mail notifications didn't go out, but it should not happen again. We apologize to everyone. "You would not believe how complicated this became."

3. Windows 8.1, Server 2012 R2

Windows 8.1 and Server 2012 R2 have been released by Microsoft but not to us yet; this is not yet available to volume license customers. (The trade magazines are full of complaints about this, so it's not just us.) We have not received the ISOs or KMS keys necessary to use the new versions. They were supposed to appear the first week of October.

Q: will this appear as a service pack? A: no, it looks like it requires a manual update.

Q: Is there a list of what subnets are able to use the KMS servers? A: It's a dynamic list and changes a lot, so it would be hard to maintain a web page. Research Park, student subnets and the guest subnets are excluded. Microsoft doesn't give you any tools to manage this very effectively. There is nothing in the request that comes to the KMS server that indicates where the requesting machine is.

4. SCCM 2012 Quick Overview & SCCM 2007 Migration Q&A - Darrin Fischer and Jeff Balvanz

[Since Jeff was presenting here the notes will be better in some respects and worse in others – jlb]

## Topics:

- What is System Center Configuration Manager (SCCM)? (Darrin)
- SCCM 2012 Infrastructure Overview (Darrin)
- Reporting (Jeff)
- Software Deployment (Jeff)
- System Center Endpoint Protection (SCEP) (Jeff)
- Operating System Deployment (OSD) (Darrin)
- Getting Access (Darrin & Jeff)
- Migrating from SCCM 2007 to 2012 (Darrin & Jeff)

## What is System Center Configuration Manager (SCCM)?

- Service provided by by IT Services at no charge to Colleges/Departments.
- Core Functions
  - Get Inventory Data on Hardware & Software
  - Deploy Software
  - Deploy Operating Systems
  - Compliance
  - System Center Endpoint Protection (SCEP)
  - Many other things

## SCCM 2012 Infrastructure Overview

- SCCM Runs on Three Virtual VMware Servers
- CY0 = Central Administration Site (CAS)
- CY1 = Primary Site Server
  - Core Processing happens here
    - Distribution Point (DP)
    - Management Point (MP)
    - Other Roles
  - Server Name = itsscsm12
- Itsscsm12db = SQL Database Server
- Secondary Site Server
- Remote Distribution Point

## Reporting

Reports can be generated either from the SCCM console or from a web browser (neither of which were cooperating thanks to the lousy Wifi on Darrin's laptop). Reports, as a general rule, are restricted to your collections of machines/users.

- Hardware Inventory
  - Includes RAM, free hard disk space, processor, etc.
- Software Inventory
  - OS version, items in Add/Remove Programs, machines with a specific file
- Endpoint Protection
  - Infected machines in a collection, details of a particular machine's infection
- Software Distribution Status
  - Progress of software and OS deployments
- Much More

## Software Deployment

SCCM 2012 has two different ways to look at installing software on a computer: applications and packages.

- Application
  - Deploy to a person rather than a machine  
An app can be deployed to a user and be installed to any machine they log in to or just their primary machine.
  - Have different application deployment types  
Can install different package sets depending on the type of device (high performance, low RAM, mobile device) the deployment goes to.  
Deployments include running the application as a virtual app on an App/V server.
  - Supersedence for automatic updates  
A new version of an application can automatically update installations of a previous version.
  - Use when you have an MSI (usually)  
When you create an application, you must specify how the client can determine if this application is installed. For an EXE or script installer this has to be done manually, but the app creation wizard can read all the necessary information from an MSI file and do it for you.
- Packages  
Those using SCCM 2007 will be familiar with this, and the creation process looks almost exactly the same. There are cases where you'll want to use packages rather than applications:
  - Complex Installs (Adobe)
  - More control on scheduling  
Applications can be scheduled to occur after a particular time/date, but packages can be scheduled to install on logoff or logon (again, after a specific time). Applications can be set to install only during maintenance windows, however, to get some of this effect.
  - Migrate Packages from 2007 to 2012  
The package migration wizard can move packages from SCCM 2007 to the SCCM 2012 environment automatically, but it doesn't convert them to applications.
  - Different Programs vs. Deployment Types  
Applications must install silently. A package can have both silent and verbose installs, and packages can interact with the user. You can also use special programs to apply custom options (like leaving older versions of Access installed when installing Office).
- Task Sequence  
Task sequences are usually used for operating system deployment, but they can also be used for complicated installations:
  - Uninstalling a program before installing its replacement
  - Running commands
  - Restarting the machine
- Structure  
To make it possible to keep your applications/packages separate from others and to make free and sitelicensed packages available to everyone, we've created a structure in both the Applications and Packages directories:
  - Department  
These are areas for each of the using departments/colleges that are private to your security group.
  - Free  
These encompass open source and other free programs and utilities that have wide usage (Flash Player, Adobe Reader, Java, etc.) that can be used by everyone.
  - Sitelicensed  
Apps available to all University-owned machines
  - Special Licenses  
Apps available to particular departments (like Adobe Creative Cloud); those security groups will have access to these directories.

## System Center Endpoint Protection (SCEP)

- Built into SCCM Client  
You don't have to install FEP anymore, it's now part of the SCCM client and is installed automatically.
- Managed from SCCM Console

You can change antimalware settings for groups of machines in the SCCM console. Create a new

- Specify settings by collection
- Reporting/Alerts

### Operating System Deployment (OSD)

- Components
  - Boot Images
  - Driver Packages
  - OS Images vs. OS Installers
  - WinPE
  - Task Sequence
  - BM vs. OS Refresh
  - Direct or Query Based
  - USMT
  - Microsoft Deployment Toolkit (MDT)
  - WoL
  - PXE
- Warnings & Caveats

### Getting Access

- Send email to [isusccm@iastate.edu](mailto:isusccm@iastate.edu) with the following information:
  - AD netid or group that should have access
  - Root Collections based off of OUs
    - Devices
    - Users
  - Building Subnets (so we can properly set boundaries)
- Install SCCM Console
  - Reference SCCM 2012 Admins Handbook
  - Console Software
  - Both available at `\\software.iastate.edu\scm`

### Migrating from SCCM 2007 to 2012

When ITS migrated we decided to have a fresh start, so we created all our collections and applications from scratch. You can create apps and packages using your old file shares (just make sure that the machine object ITSSCCM12\$ can read them).

- Install 2012 SCCM Console
- SCCM 2012 Client Install Methods
  - Push from SCCM console (be sure to start the console as an administrative user on your workstations)
  - GPO
  - Use SCCM 2012 Client Package in SCCM 2007
  - Manual installation
- Applications
  - Packages can be converted using a migration wizard, but it won't convert them to applications.
- Collections