

Integrating SCCM into AD Structure

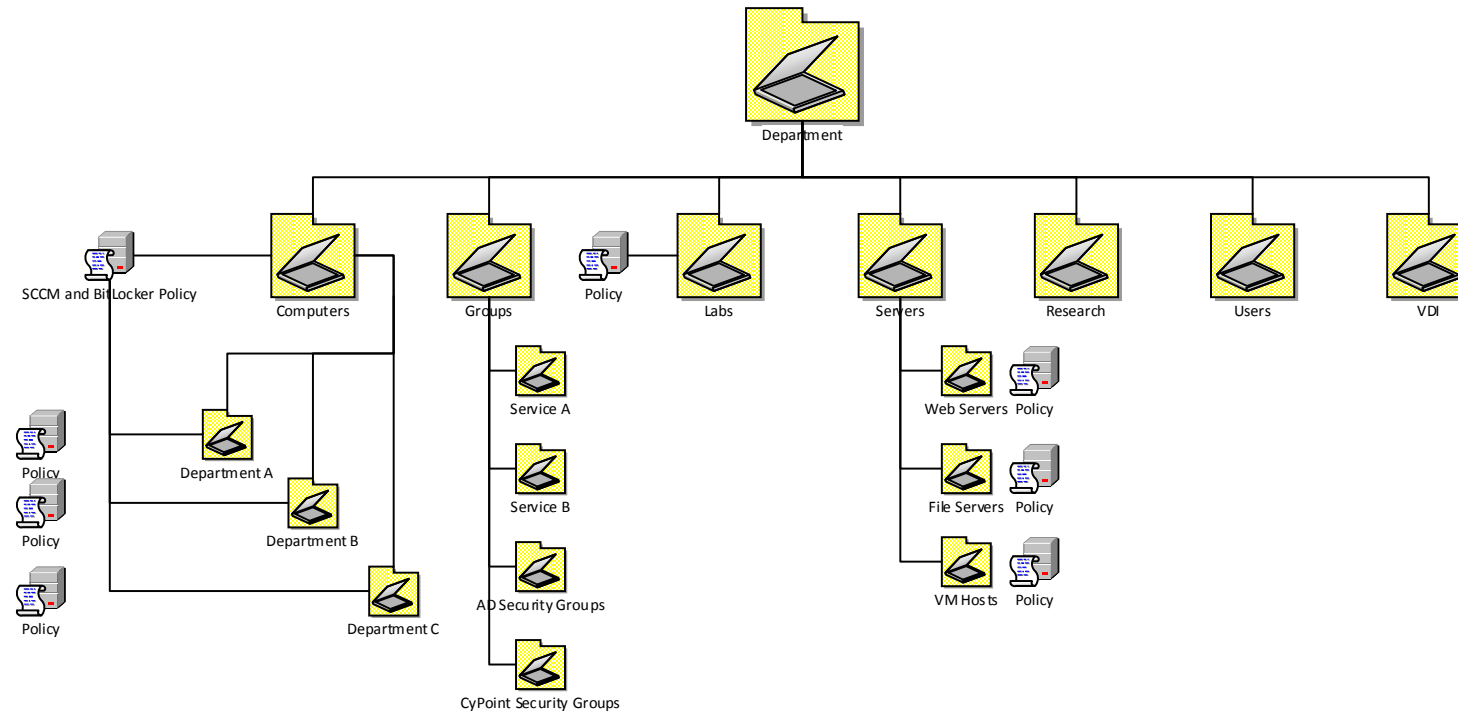
Goals

- ▶ Allow SCCM to function **safely** with a complex environment
- ▶ Allow units to share common resources (software, operating system deployments, drivers)
- ▶ Simplify day to day client management
- ▶ Simplify operating system deployment for bulk purchase

AD Structure

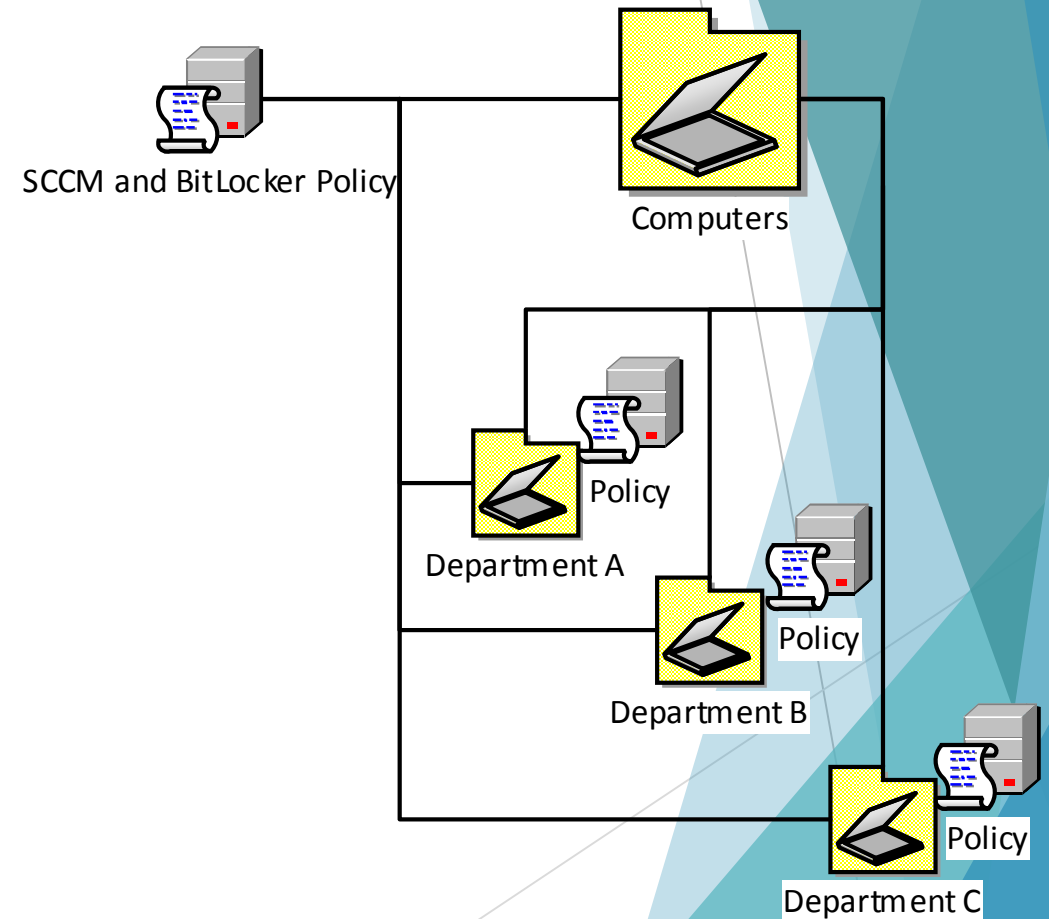
Design and Implementation

Department Top Level Structure



Department - Computers

- ▶ SCCM Collection [LAS]-%dept%-Computers
 - ▶ Security Scopes
 - ▶ LAS-%dept%
 - ▶ LAS - reporting and common software deployment purposes
- ▶ Client settings set las-%dept%-it-admins to the remote control groups.
- ▶ SCCM Policy configures firewall rules and ensures the SCCM client is installed
- ▶ Sub OUs provides support for primary dns suffix to match DNS records.
- ▶ Designed to be a departments normal limiting collection for software deployment groups.
- ▶ Has no deployments deployed to it.
- ▶ MDT UDI Value %deptshortname%-Computers
- ▶ BitLocker configures BitLocker and MBAM settings.



Department – Groups (SCCM Related)

- ▶ SCCM software deployment groups
 - ▶ College: grp-las-sccm-%vendor%-%title%-%version%-%modifier%
 - ▶ Department: grp-las-%dept%-sccm-%vendor%-%title%-%version%-%modifier%
 - ▶ grp-las-engl-sccm-brackets-brackets4_5
 - ▶ grp-las-engl-labs-sccm-brackets-brackets4_3
 - ▶ All SCCM groups in the department level should be in LAS\%Department%\Groups\SCCM
 - ▶ Allows for automatic software deployment to systems limited by [LAS]-Department-Computers collection (superset of [LAS]-%dept%-computers.)

Department - Labs

- ▶ SCCM Collection [LAS]-%dept%-Labs.
 - ▶ Top level collection, does not include any other computer types in the department.
- ▶ Group designed for department student computing labs.
 - ▶ Example includes GSJC-Labs but not GSJC Computers.
- ▶ Designed to isolate more complex task sequence deployments.

Departments - Servers

- ▶ SCCM Collection [LAS]-%dept%-Servers
 - ▶ Isolated from other SCCM collections for the department
 - ▶ Can have a unique SCCM security scope to limit access rights

Department – Research

- ▶ SCCM Collection [LAS]-%dept%-Research
- ▶ Designed for research related systems that are not servers.
 - ▶ Faculty and staff research labs
 - ▶ Specialized equipment with need for access control rights (Group Policy inheritance, works with SCCM)
- ▶ Reduces the need to block group policy inheritance

Department - Users

- ▶ Holds the users that are assigned to the department.
- ▶ SCCM User collections pulls this information.

Departments - VDI

- ▶ Systems that are not easily managed with SCCM, such as non persistent VDI sessions.
- ▶ Not for VM machines that would otherwise be a normal desktop (parallels/VMFusion or similar)

SCCM Device Collections per Unit

Top Level Limiting Collections

- ▶ [LAS]-%dept%-Computers
 - ▶ Corresponds to OU=Computers,OU=%dept%,OU=LAS,DC=iastate,DC=edu
 - ▶ Security scoped to LAS-%dept%
- ▶ [LAS]-%dept%-Labs
 - ▶ Corresponds to OU=Labs,OU=%dept%,OU=LAS,DC=iastate,DC=edu
 - ▶ Security scope can be set to limited users
- ▶ [LAS]-%dept%-Research
 - ▶ Corresponds to OU=Research,OU=%dept%,OU=LAS,DC=iastate,DC=edu
- ▶ [LAS]-%dept%-Servers
 - ▶ Corresponds to OU=Servers,OU=%dept%,OU=LAS,DC=iastated,DC=edu
 - ▶ Security scope can be set to limited users.

Special Collections - Not for servers, labs, and research systems.

- ▶ [LAS*]-%dept%-OSD*
 - ▶ Limited to Unassigned Systems (new systems)
 - ▶ Manual add of clients only
- ▶ [LAS]-%dept%-OSDRD*
 - ▶ Limited to [LAS]-%dept%-Computers
 - ▶ Manual add of clients only


SCCM User Collections per Unit

- ▶ [LAS]-%dept%-Users
- ▶ Potential future use, currently not heavily used

SCCM Deployment for Bulk Order Dells

Stage: NEWCOMPUTER

[Preview](#)



1

Welcome
WelcomePage



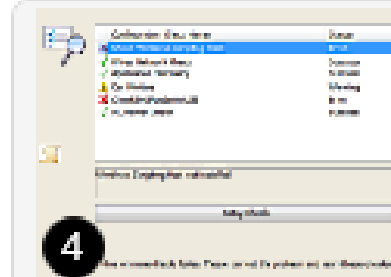
2

BitLocker
BitLocker



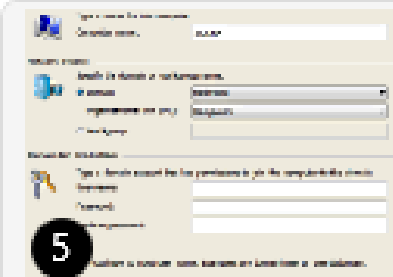
3

Volume
VolumePage



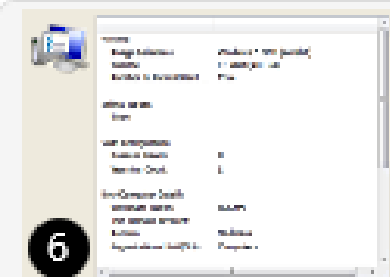
4

Deployment Readiness
ConfigScanBareMetal



5

New Computer Details
ComputerPage

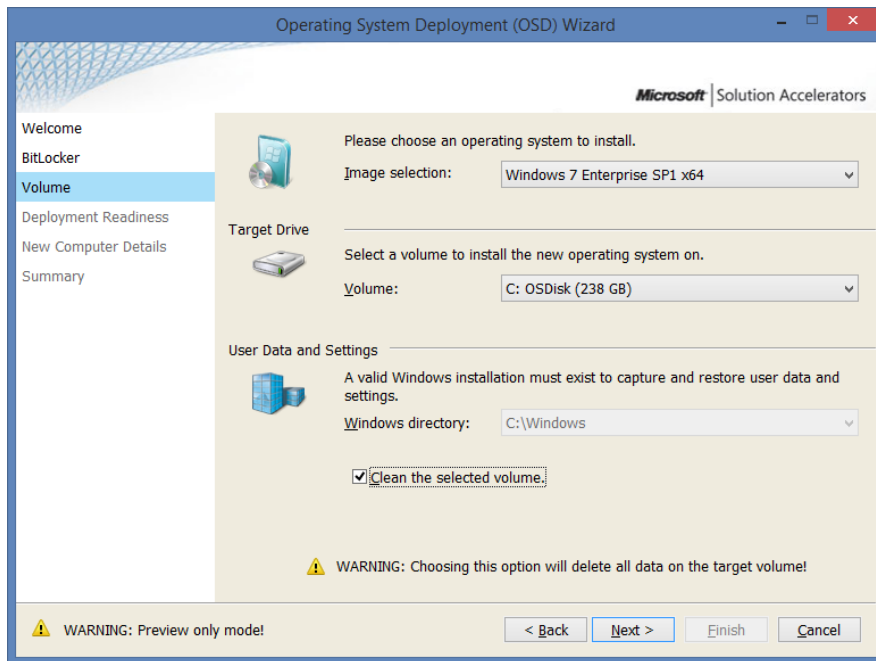


6

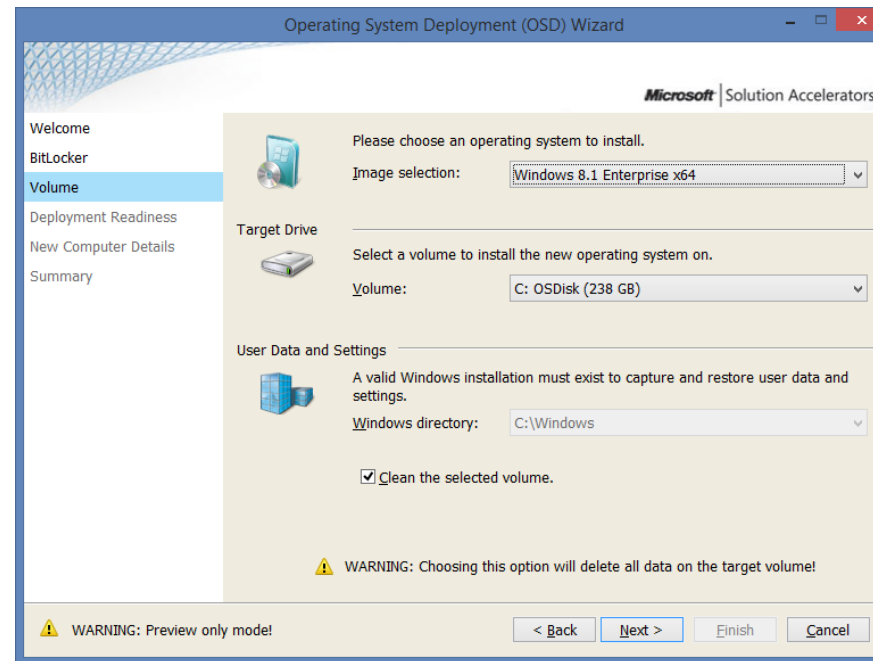
Summary
SummaryPage

Selecting OS to Deploy

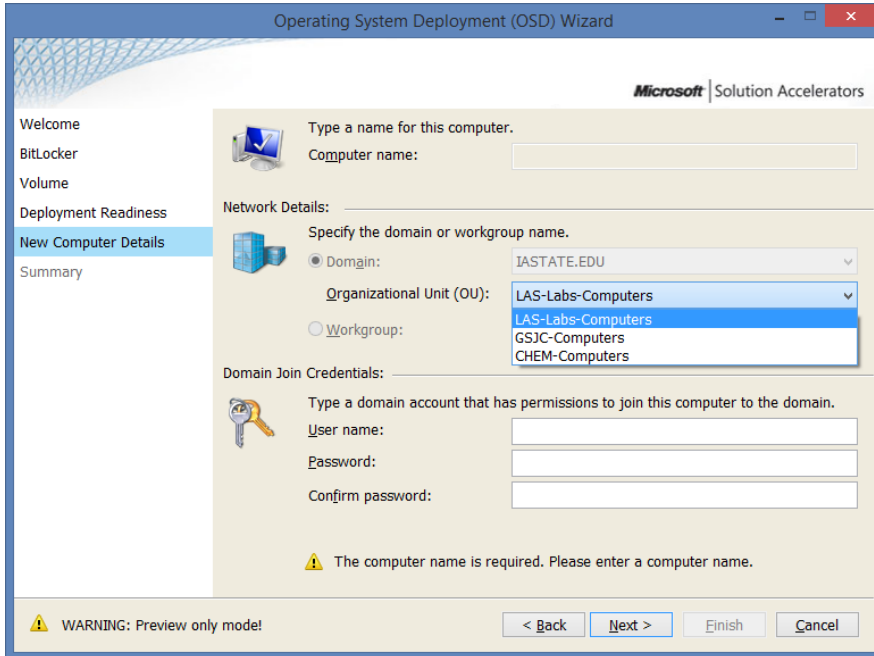
Windows 7 Enterprise SP1
x64



Windows 8.1 Enterprise x64



Select OU to Place Computer Object



The screenshot shows the 'New Computer Details' step of the Operating System Deployment (OSD) Wizard. The left sidebar lists the steps: Welcome, BitLocker, Volume, Deployment Readiness, New Computer Details (selected), and Summary. The main area is titled 'Type a name for this computer.' and 'Computer name:'. Below this, the 'Network Details' section is active, showing 'Specify the domain or workgroup name.' with radio buttons for 'Domain' (selected) and 'Workgroup'. The 'Domain' dropdown is set to 'IASTATE.EDU'. The 'Organizational Unit (OU):' dropdown is open, showing a list of OUs: 'LAS-Labs-Computers' (selected), 'LAS-Labs-Computers', 'GSJC-Computers', and 'CHEM-Computers'. Below this, the 'Domain Join Credentials' section is visible, with fields for 'User name:', 'Password:', and 'Confirm password:'. A warning icon and message at the bottom state: 'WARNING: Preview only mode!'. Navigation buttons at the bottom include '< Back', 'Next >', 'Finish', and 'Cancel'.

- ▶ Allows a single base deployment to add computer objects into a landing OU.
- ▶ System does not need to be added to AD in advance.
- ▶ System computer name is pulled from SCCM.

SCCM Deployment Advantages

- ▶ No image to maintain - OS installation media is updated offline with new updates about once per month, shortly after patch Tuesday.
 - ▶ Hardware model/vendor independent*
- ▶ SCCM client, System Center Endpoint Protection, Encryption part of deployment process.
- ▶ Lite Touch Install (LTI) requires minimal technician interaction and automates deployment.
- ▶ SCCM collections backed by AD security groups means software can be easily made available to or installed for users.
 - ▶ Need Firefox - > Add computer to grp-las-%dept%-Mozilla-Firefox and the software will be installed on the end users computer.
 - ▶ No appointment needed.
 - ▶ SCCM takes care of special settings.
- ▶ SCCM software deployment verifies hardware and software requirements prior to deployment
 - ▶ Need .NetFramework 3.5 on Windows 8.1 or Server 2012 - its automated!