

Mobile Enheter med SCCM 2012 og Windows Intune

En presentasjon av
Kristian Bendiksen

Introduksjon

Kort hensikt og beskrivelse av oppgaven:

Kartlegg og vis alle muligheter med klienthåndtering av Windows Phone 8, Windows 8 og Windows 8 Pro. Oppgaven skal løses ved bruk av Microsoft System Center Configuration Manager 2012 og Windows Intune.

Mulig utvidelse: Kartlegg og vis hvordan den ekstra funksjonaliteten i Windows 8 Enterprise fungerer.

Kundens problemer

- Ingen system på hvilke programvare som skal brukes
- Ingen restriksjoner på bruken av mobile enheter
- Mange maskiner har ulike operativsystem

Kundens behov og ønsker

- Rulle ut operativsystem med samme programvare på flere maskiner.
- Rulle ut programvare til mobile enheter og maskiner.
- Finne en løsning som gjør at programmer må godkjennes før installasjon.
- Lage pakkeløsninger for maskiner og mobile enheter.

Effektmål

- Øke produktiviteten med mellom 80-90 %
- Bedre arbeidsmiljøet og arbeidsmoralen hos de ansatte med 65 %
- Økning av inntjening med 30-40 %
- Øke sjefens arbeidsprosess økes med 100 %, og de andre ansatte med 90 %

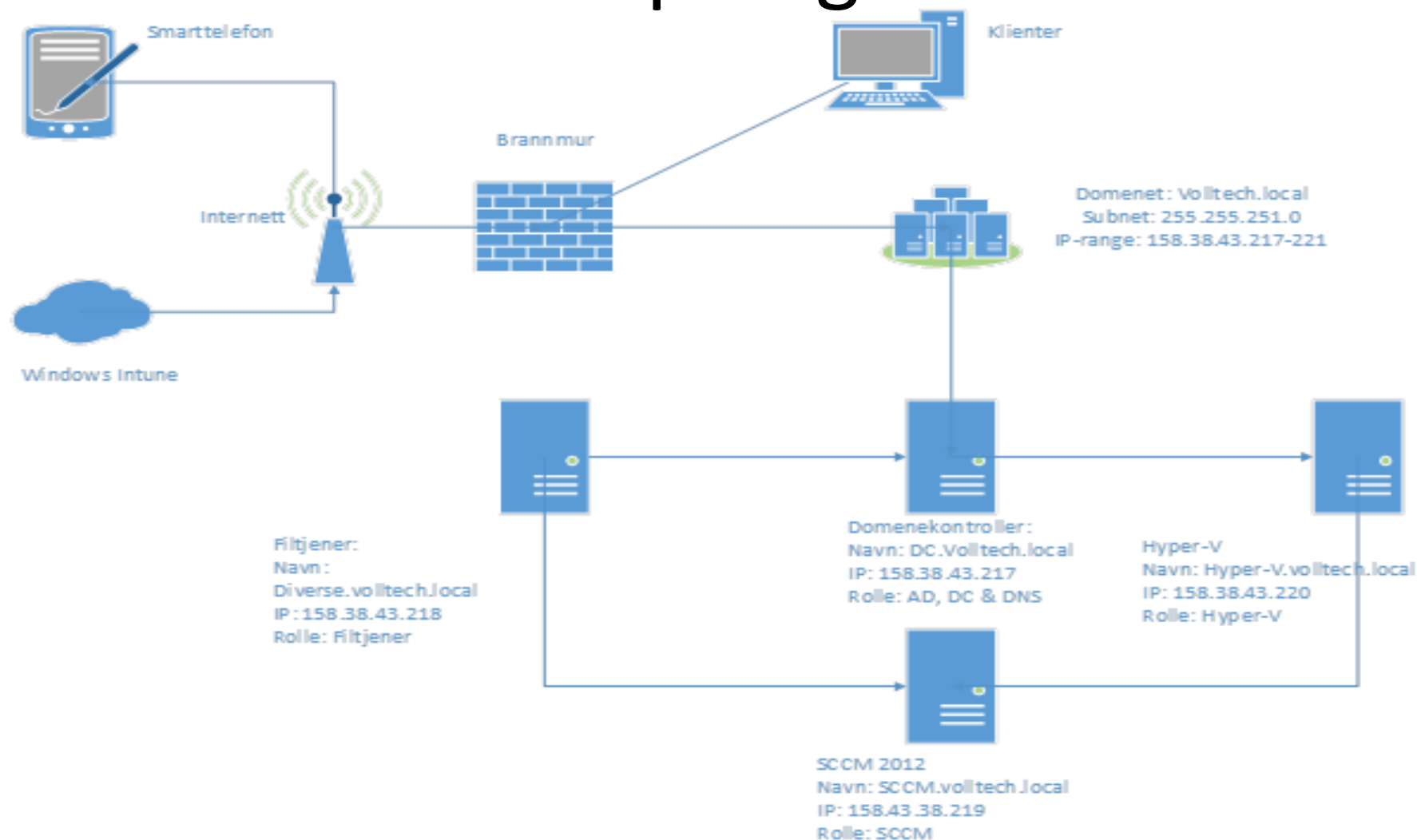
Prosjektets omfang

- Varighet på 450 timer + - 5%
- Utarbeide et driftsdokument som dekker kundens behov
- Utarbeide et driftsdokument, systemkravdokument, forstudierapport og sluttrapport.

SCCM, Windows Intune og Samarbeidet

Den praktiske delen

Topologi



Maskiner og Mobile enheter

- 1 Domenekontroller – Windows Server 2012
- 1 SCCM-maskin – Windows Server 2012
- 2 Andre servermaskiner - Windows Server 2012
- 3 Mobile enheter
- 2 Klientmaskiner - Windows 8
- 1 Windows Phone 8
- 1 iPhone 4S
- 1 Sony Xperia Tipo

SCCM 2012

Før mobile enheter

Kort om SCCM

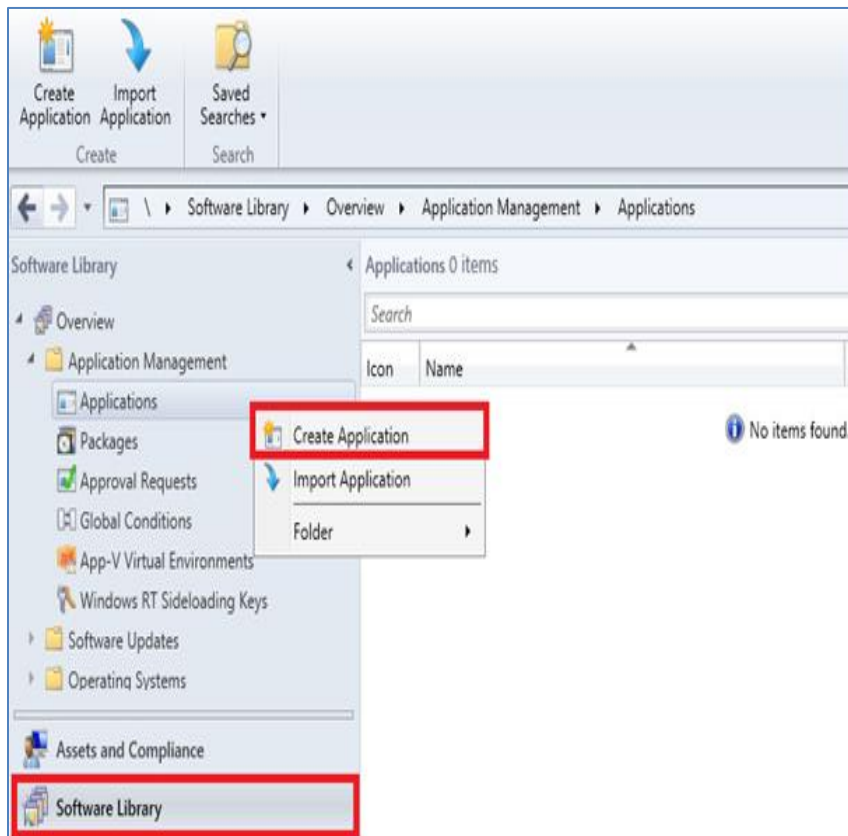
- SCCM 2012 er en del av System Center 2012
- Kom ny Service Pack i desember 2012 som tillater drift av mobile enheter

Hva har jeg gjort?

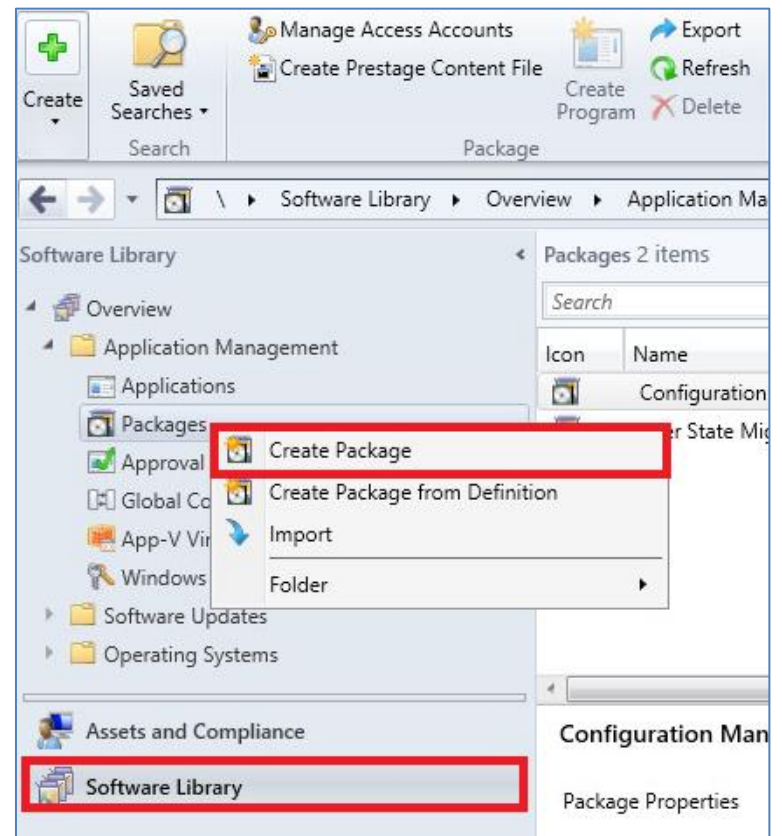
- Har satt opp et grunnleggende system, med brukere, maskiner, software update point, distribution points, boundaries og SCEP.
- <Kjør en liten visning av det som er gjort>

MSI vs EXE

MSI

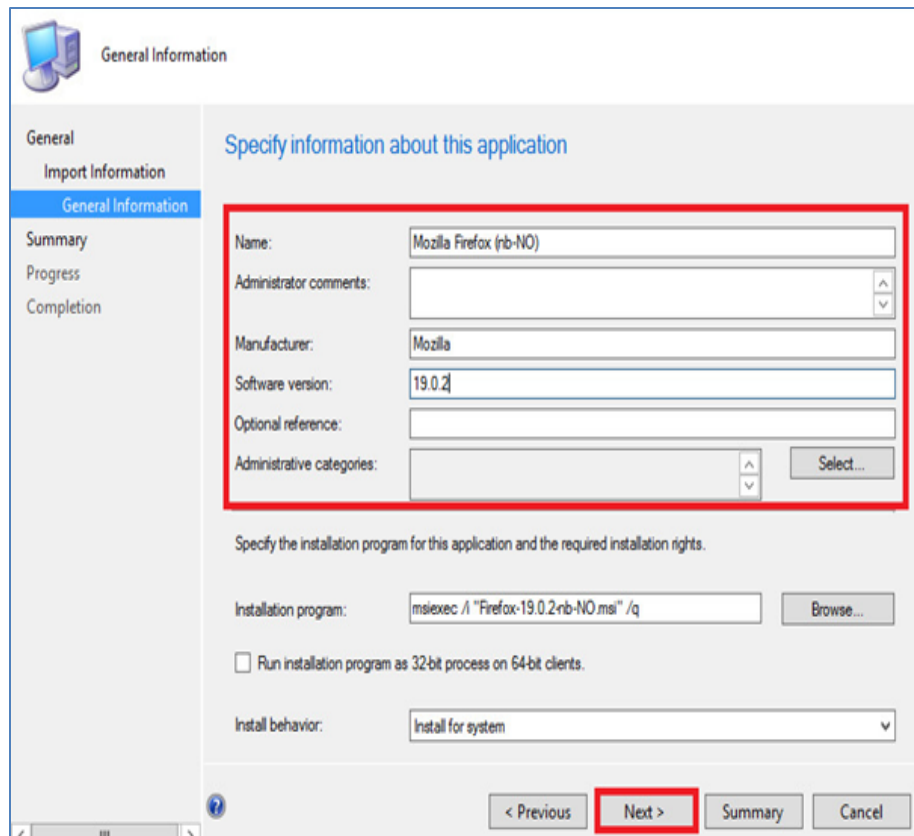


EXE



MSI vs EXE

- MSI



The screenshot shows the 'General Information' dialog box for an MSI package. The 'General' tab is selected. The 'Specify information about this application' section is highlighted with a red box. It contains the following fields: Name (Mozilla Firefox (nb-NO)), Administrator comments (empty), Manufacturer (Mozilla), Software version (19.0.2), Optional reference (empty), and Administrative categories (empty with a 'Select...' button). Below this, the 'Specify the installation program for this application and the required installation rights' section contains the 'Installation program' field (msiexec /i "Firefox-19.0.2-nb-NO.msi" /q) with a 'Browse...' button, a checkbox for 'Run installation program as 32-bit process on 64-bit clients' (unchecked), and an 'Install behavior' dropdown (set to 'Install for system'). At the bottom, the 'Next >' button is highlighted with a red box.

General Information

General
Import Information
General Information
Summary
Progress
Completion

Specify information about this application

Name: Mozilla Firefox (nb-NO)

Administrator comments:

Manufacturer: Mozilla

Software version: 19.0.2

Optional reference:

Administrative categories: Select...

Specify the installation program for this application and the required installation rights.

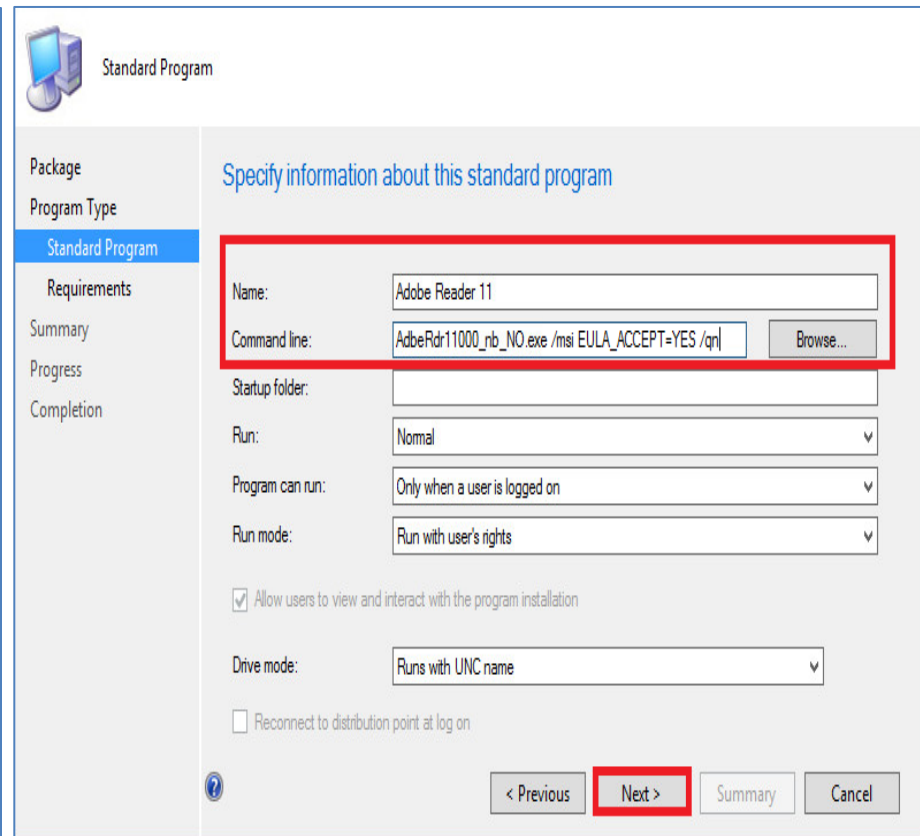
Installation program: msiexec /i "Firefox-19.0.2-nb-NO.msi" /q Browse...

☐ Run installation program as 32-bit process on 64-bit clients.

Install behavior: Install for system

< Previous **Next >** Summary Cancel

- EXE



The screenshot shows the 'Standard Program' dialog box for an EXE package. The 'Standard Program' tab is selected. The 'Specify information about this standard program' section is highlighted with a red box. It contains the following fields: Name (Adobe Reader 11), Command line (AdbeRdr11000_nb_NO.exe /msi EULA_ACCEPT=YES /qn) with a 'Browse...' button, Startup folder (empty), Run (Normal), Program can run (Only when a user is logged on), and Run mode (Run with user's rights). Below this, there is a checkbox for 'Allow users to view and interact with the program installation' (checked), a 'Drive mode' dropdown (set to 'Runs with UNC name'), and a checkbox for 'Reconnect to distribution point at log on' (unchecked). At the bottom, the 'Next >' button is highlighted with a red box.

Standard Program

Package
Program Type
Standard Program
Requirements
Summary
Progress
Completion

Specify information about this standard program

Name: Adobe Reader 11

Command line: AdbeRdr11000_nb_NO.exe /msi EULA_ACCEPT=YES /qn Browse...

Startup folder:

Run: Normal

Program can run: Only when a user is logged on

Run mode: Run with user's rights

☒ Allow users to view and interact with the program installation

Drive mode: Runs with UNC name

☐ Reconnect to distribution point at log on

< Previous **Next >** Summary Cancel

Deployment

The screenshot displays the 'Software Library' application window. The top ribbon contains various action buttons: 'Create', 'Saved Searches', 'Manage Access Accounts', 'Create Prestage Content File', 'Create Program', 'Export', 'Refresh', 'Delete', 'Deploy', 'Distribute Content', 'Update Distribution Points', 'Move', 'Set Security Scopes', and 'Properties'. The main area shows a list of packages under the 'Packages' tab. A context menu is open over the 'Adobe Reader' package, with the 'Deploy' option highlighted by a red rectangle.

Software Library

Application Management

Packages

Packages 3 items

Icon	Name	Programs	Manufacturer	Version
	Adobe Reader	1	Adobe	11
	Configurat		Microsoft Corpo...	
	User State		Microsoft Corpo...	6.2.9200.16384

Context Menu:

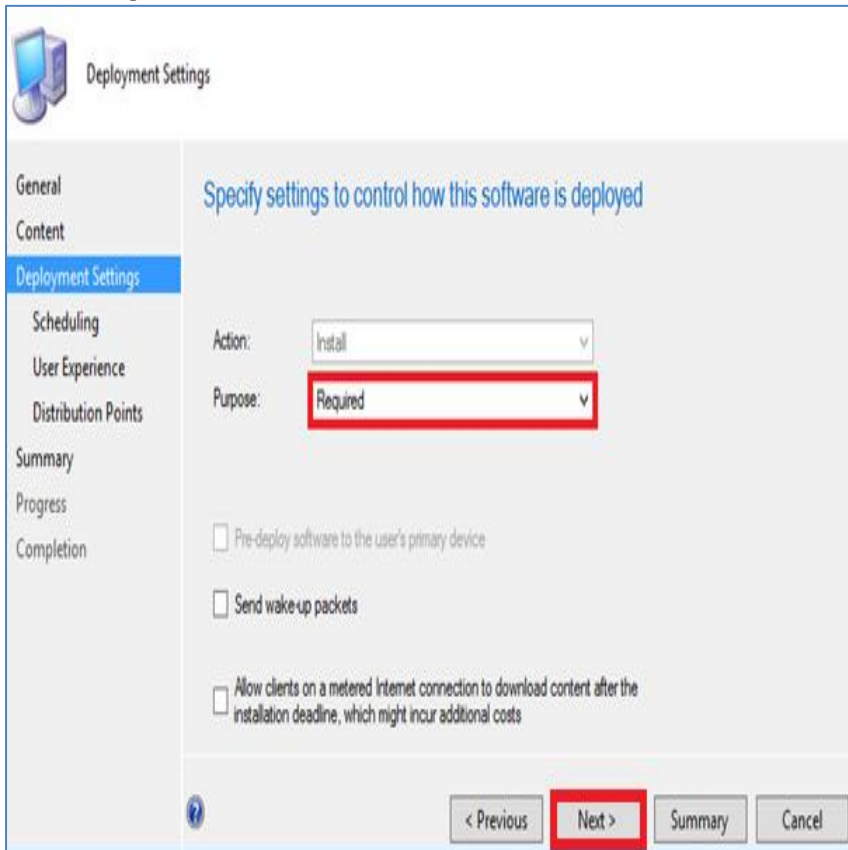
- Manage Access Accounts
- Create Prestage Content File
- Create Program
- Export
- Refresh
- Delete
- Deploy**
- Distribute Content
- Update Distribution Points
- Move
- Set Security Scopes
- Properties

Adobe Reader

Package Properties Content Status Related Objects

Required / Available

Required



The screenshot shows the 'Deployment Settings' window for a 'Required' deployment. The left sidebar lists 'General', 'Content', 'Deployment Settings' (selected), 'Scheduling', 'User Experience', 'Distribution Points', 'Summary', 'Progress', and 'Completion'. The main area is titled 'Specify settings to control how this software is deployed'. It features two dropdown menus: 'Action' set to 'Install' and 'Purpose' set to 'Required' (highlighted with a red box). Below these are three unchecked checkboxes: 'Pre-deploy software to the user's primary device', 'Send wake-up packets', and 'Allow clients on a metered Internet connection to download content after the installation deadline, which might incur additional costs'. At the bottom, there are four buttons: '< Previous' (disabled), 'Next >' (highlighted with a red box), 'Summary' (disabled), and 'Cancel' (disabled).

Deployment Settings

General
Content
Deployment Settings
Scheduling
User Experience
Distribution Points
Summary
Progress
Completion

Specify settings to control how this software is deployed

Action: Install

Purpose: Required

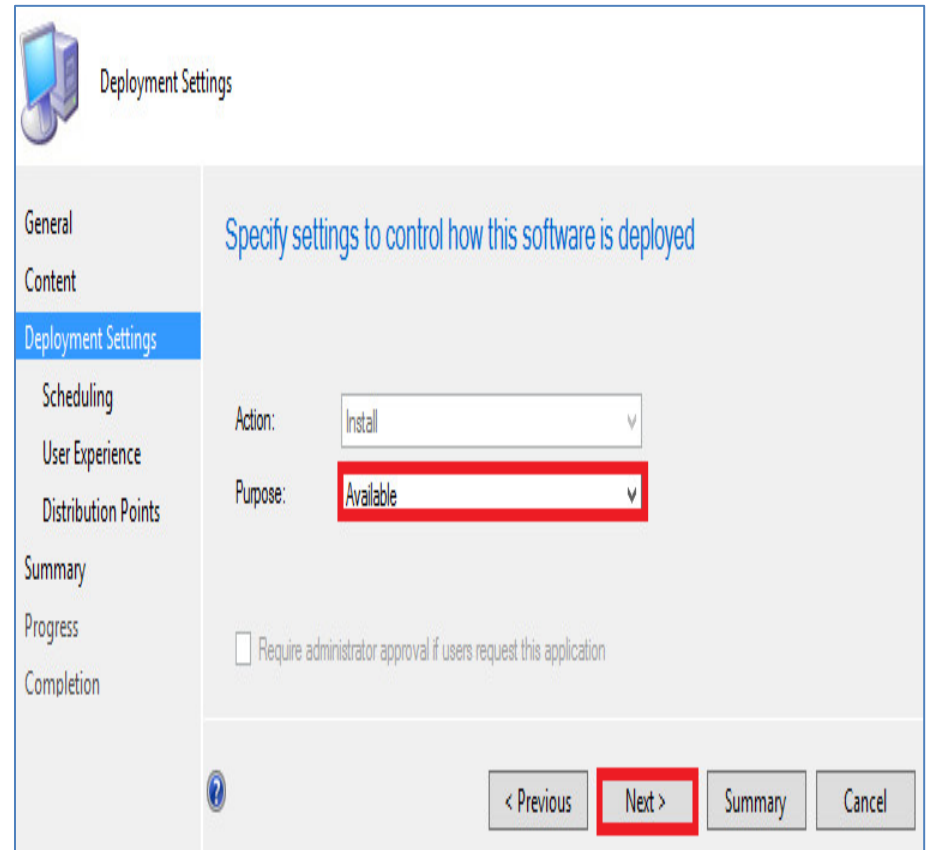
☐ Pre-deploy software to the user's primary device

☐ Send wake-up packets

☐ Allow clients on a metered Internet connection to download content after the installation deadline, which might incur additional costs

< Previous Next > Summary Cancel

Available



The screenshot shows the 'Deployment Settings' window for an 'Available' deployment. The left sidebar lists 'General', 'Content', 'Deployment Settings' (selected), 'Scheduling', 'User Experience', 'Distribution Points', 'Summary', 'Progress', and 'Completion'. The main area is titled 'Specify settings to control how this software is deployed'. It features two dropdown menus: 'Action' set to 'Install' and 'Purpose' set to 'Available' (highlighted with a red box). Below these is one unchecked checkbox: 'Require administrator approval if users request this application'. At the bottom, there are four buttons: '< Previous' (disabled), 'Next >' (highlighted with a red box), 'Summary' (disabled), and 'Cancel' (disabled).

Deployment Settings

General
Content
Deployment Settings
Scheduling
User Experience
Distribution Points
Summary
Progress
Completion

Specify settings to control how this software is deployed

Action: Install

Purpose: Available

☐ Require administrator approval if users request this application

< Previous Next > Summary Cancel

Request



Deployment Settings

General
Content
Deployment Settings
Scheduling
User Experience
Alerts
Summary
Progress
Completion

Specify settings to control how this software is deployed

Action:

Purpose:

☒ Require administrator approval if users request this application



Request

Application Catalog

My Application Requests

My Devices

Welcome, VOLLTECH\svevee

BROWSE BY
Category Publisher

All

Showing 1 - 1 of 1 results

NAME	VERSION	PUBLISHER	CATEGORY	REQUIRES APPROVAL
 Mozilla Firefox (nb-NO)	19.0.2	Mozilla		Yes

 Mozilla Mozilla Firefox (nb-NO)
No description available

More Details

REQUEST

Application Catalog

My Application Requests

My Devices

Welcome, VOLLTECH\svevee

Search Application Catalog

BROWSE BY
Category Publisher

All

Back to Application Catalog

 Mozilla Mozilla Firefox (nb-NO)

REQUEST APPROVAL

Reason for application request (required):

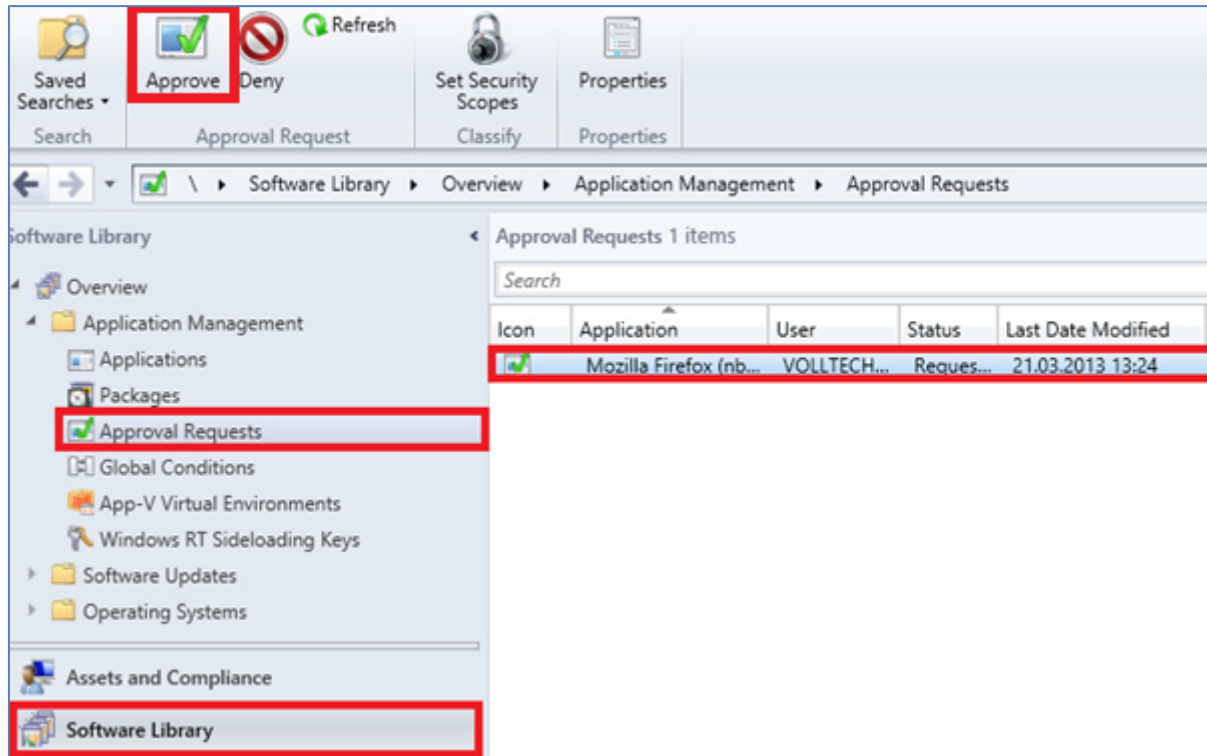
Er det greit om jeg laster ned Firefox?

Characters remaining: 1961

SUBMIT

CANCEL

Approve



Windows Intune

Skybasert løsning for mobile enheter

Kort om Windows Intune

- Skybasert løsning – Kan brukes overalt
- Delt inn i tre deler, Account Manager, Admin Console og Company Portal
- Egnet for Maskiner og Mobile enheter
- Veldig enkelt å bruke

Hva har jeg gjort?

- Software Deployment – Maskiner og Mobile enheter
- Oppsett av automatiske oppdateringer
- Policy (regler)
- Oppsett av iOS-enheter
- Teori om Windows Phone og Android
- Company Portal / Firmaportal

iOS-oppsett

Set MDM Aut

The screenshot displays the Windows Intune management console. The top navigation bar includes the 'Windows Intune' logo and links for 'Help', 'Sign Out', and 'Welcome Volltech'. The left sidebar contains a tree view of administrative tasks, with 'Mobile Device Management' expanded to show options for Windows RT, Windows Phone 8, iOS, Microsoft Exchange, and Company Portal. The main content area is titled 'Mobile Device Management' and provides instructions on setting up mobile device management channels. It includes a yellow informational banner stating that device owners must be defined as managed users before enrollment. Below this, sections for 'Mobile Device Management Authority', 'Windows RT Management', 'Windows Phone 8', 'iOS', and 'Microsoft Exchange' are listed, each with a brief description of the setup process. On the right side, a 'Tasks' section highlights 'Set Mobile Device Management Authority' with a red border, and a 'Learn About' section provides links to further documentation for various device types and connectors.

Windows Intune Help Sign Out Welcome Volltech

Administration
Overview
Updates
Alerts and Notifications
Alert Types
Recipients
Notification Rules
Administrator Management
Service Administrators
Tenant Administrators
Client Software Download
Storage Use
Mobile Device Management
Windows RT
Windows Phone 8
iOS
Microsoft Exchange
Company Portal

Mobile Device Management

Set up mobile device management channels to enable mobile device management in Windows Intune.
[Learn more about mobile device management](#)

You must define device owners as managed users before they can enroll their mobile devices. [Learn more about user management](#)

Mobile Device Management Authority

Mobile device management authority: Set to Windows Intune

Windows RT Management

Follow these steps to enroll and manage Windows RT devices using Windows Intune.

Windows Phone 8

Follow these steps to enroll and manage Windows Phone 8 devices using Windows Intune.

iOS

Follow these steps to upload an Apple Push Notification service (APNs) certificate to Windows Intune to enroll and manage iOS devices using Windows Intune.

Microsoft Exchange

Follow these steps that set up a connection with your Exchange environment to enroll and manage mobile devices that are connected to Exchange.

Tasks

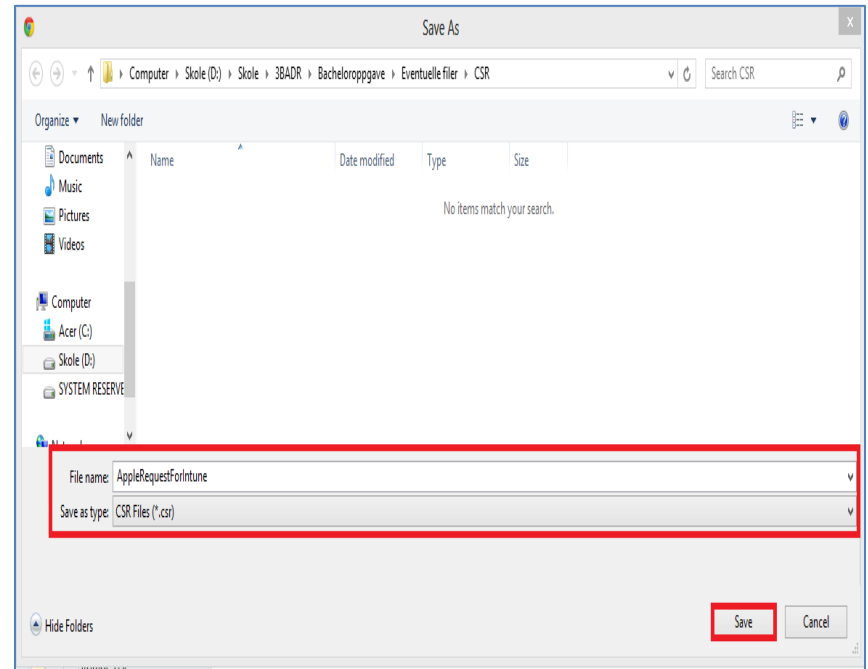
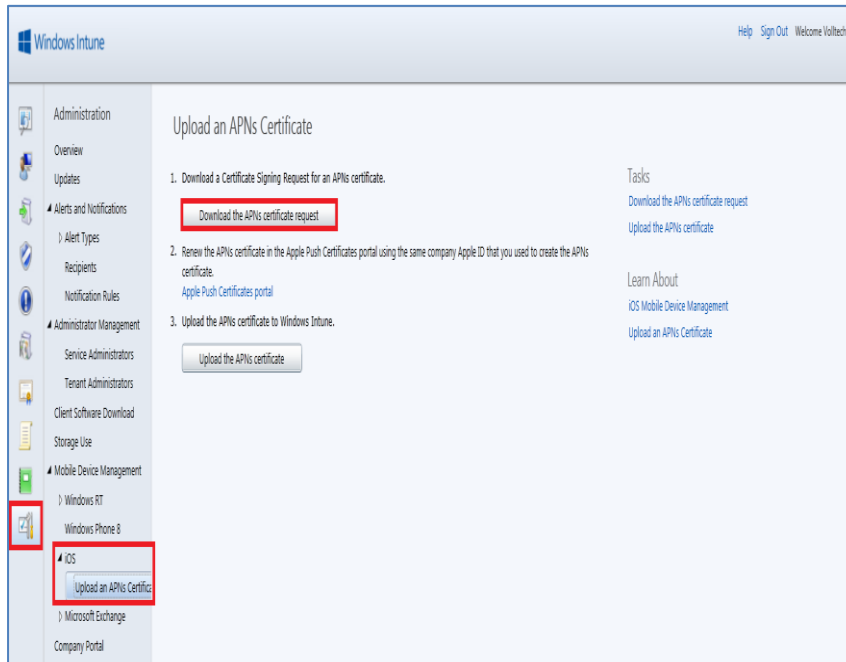
Set Mobile Device Management Authority

Learn About

- [Setting Mobile Device Management Authority](#)
- [Setting up Management for Windows RT Mobile Devices](#)
- [Windows Phone 8 Setup](#)
- [iOS Mobile Device Setup](#)
- [Exchange Connector Setup](#)

iOS-oppsett

Download the APNs Certificate Request



iOS-oppsett

Apple Push Certificate Portal

[Store](#) [Mac](#) [iPod](#) [iPhone](#) [iPad](#) [iTunes](#) [Support](#)

Apple Push Certificates Portal

[Sign out](#)

Get Started

Create a push certificate that enables your third-party server to work with the Apple Push Notification Service and your Apple devices.

[Create a Certificate](#)

FAQ

[Learn more about Mobile Device Management](#)
[What about OS X Server?](#)

Shop the [Apple Online Store](#) (1-800-MY-APPLE), visit an [Apple Retail Store](#), or find a [reseller](#). [Apple Info](#) | [Site Map](#) | [Hot News](#) | [RSS Feeds](#) | [Contact Us](#)

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Apple Push Certificates Portal

[kr.bendiksen@gmail.com](#) [Sign out](#)

Create a New Push Certificate

Upload your Certificate Signing Request signed by your third-party server vendor to create a new push certificate.

[Velg fil](#) | [AppleRequestFortune.csr](#)

[Cancel](#) [Upload](#)

Shop the [Apple Online Store](#) (1-800-MY-APPLE), visit an [Apple Retail Store](#), or find a [reseller](#). [Apple Info](#) | [Site Map](#) | [Hot News](#) | [RSS Feeds](#) | [Contact Us](#)

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[Store](#) [Mac](#) [iPod](#) [iPhone](#) [iPad](#) [iTunes](#) [Support](#)

Apple Push Certificates Portal

[Sign out](#)

Confirmation

You have successfully created a new push certificate with the following information:

Service	Mobile Device Management
Vendor	Microsoft Corporation
Expiration Date	Apr 11, 2014

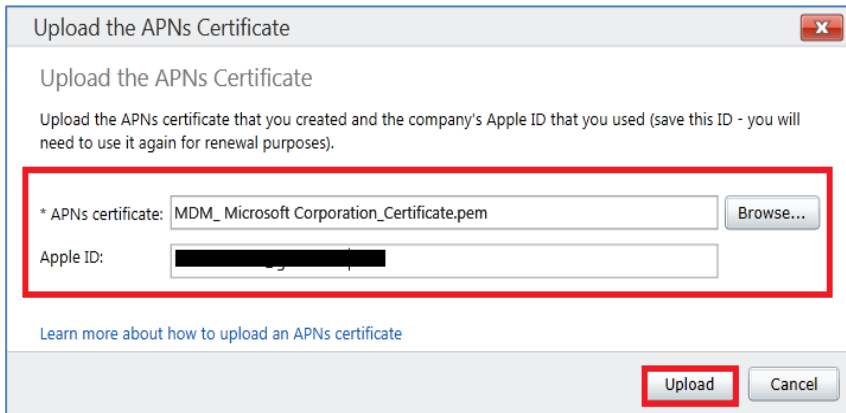
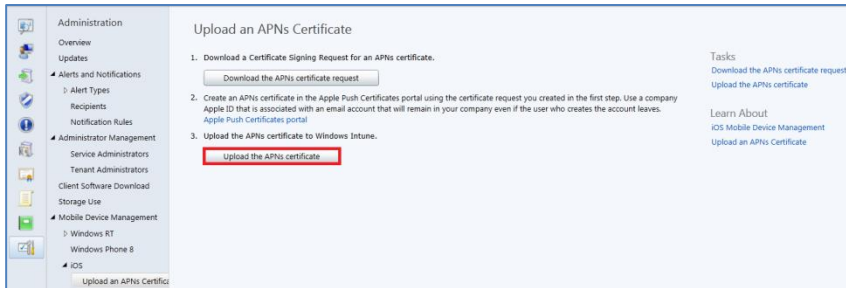
[Manage Certificates](#) [Download](#)

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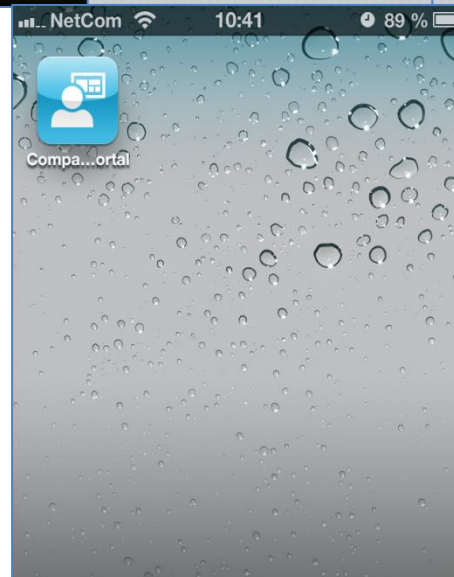
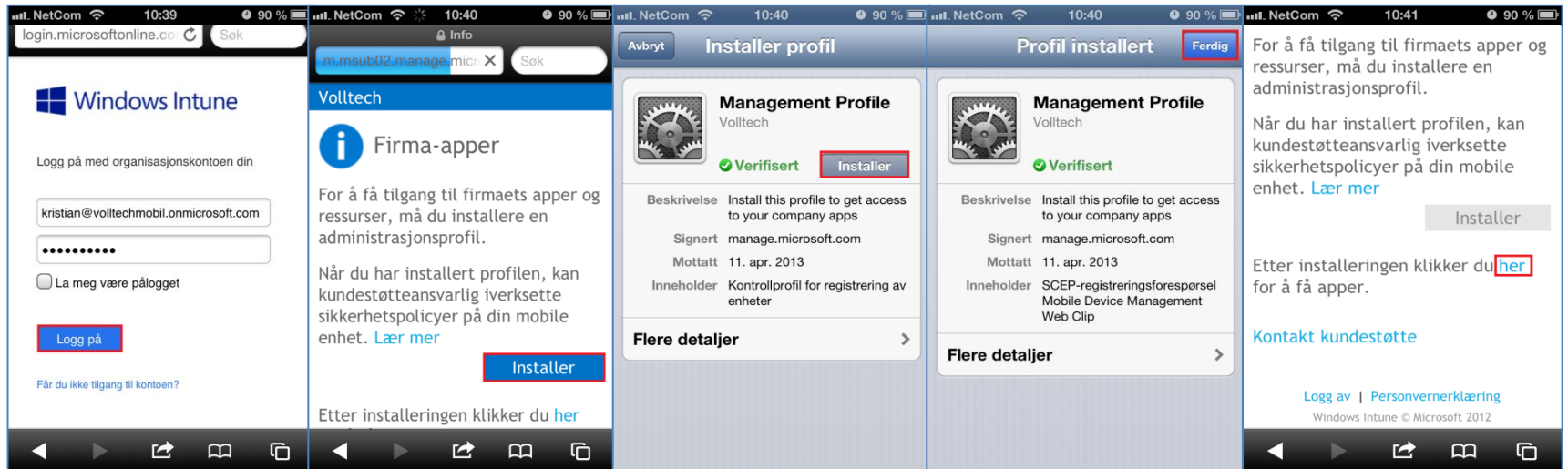
iOS-oppsett

Upload request



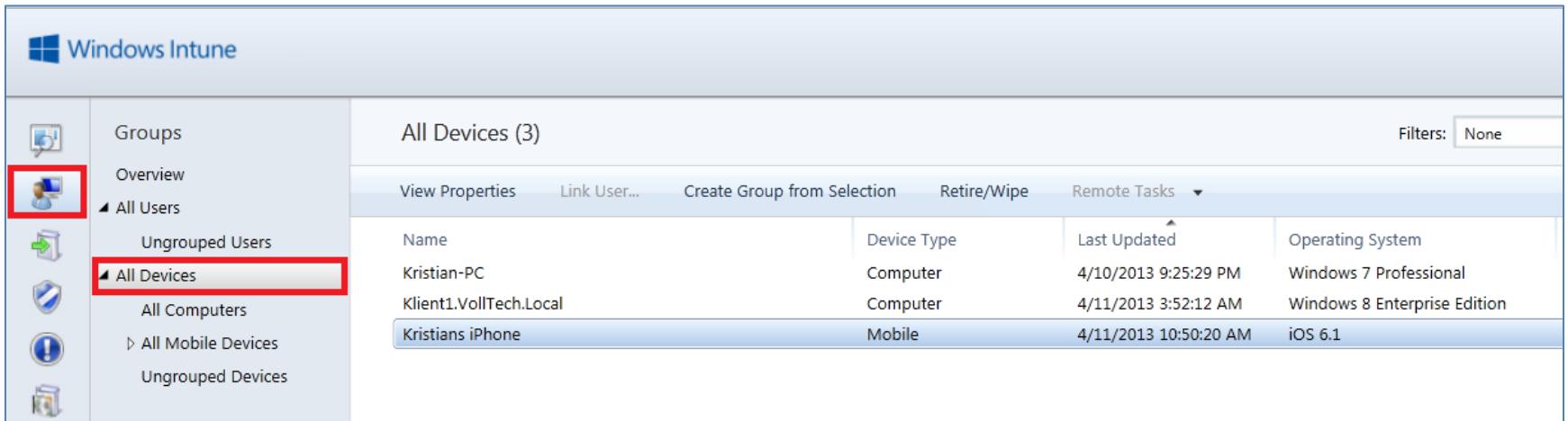
iOS-oppsett

Apple iPhone



iOS-oppsett

Ferdig



The screenshot shows the Windows Intune management console. The left-hand navigation pane is expanded, showing the 'Groups' section. Within 'Groups', the 'All Devices' link is highlighted with a red rectangle. The main content area displays the 'All Devices (3)' group. At the top right of this area, it says 'Filters: None'. Below this, there is a toolbar with buttons for 'View Properties', 'Link User...', 'Create Group from Selection', 'Retire/Wipe', and 'Remote Tasks'. A table below the toolbar lists the devices in the group.

Name	Device Type	Last Updated	Operating System
Kristian-PC	Computer	4/10/2013 9:25:29 PM	Windows 7 Professional
Klient1.VollTech.Local	Computer	4/11/2013 3:52:12 AM	Windows 8 Enterprise Edition
Kristians iPhone	Mobile	4/11/2013 10:50:20 AM	iOS 6.1

Samarbeidet

Introduksjon

- 22. Desember 2012 – SP1 og Windows Intune Wave D.
- Tillot samarbeid mellom partene
- SCCM tar over driften av mobile enheter

Samarbeidet

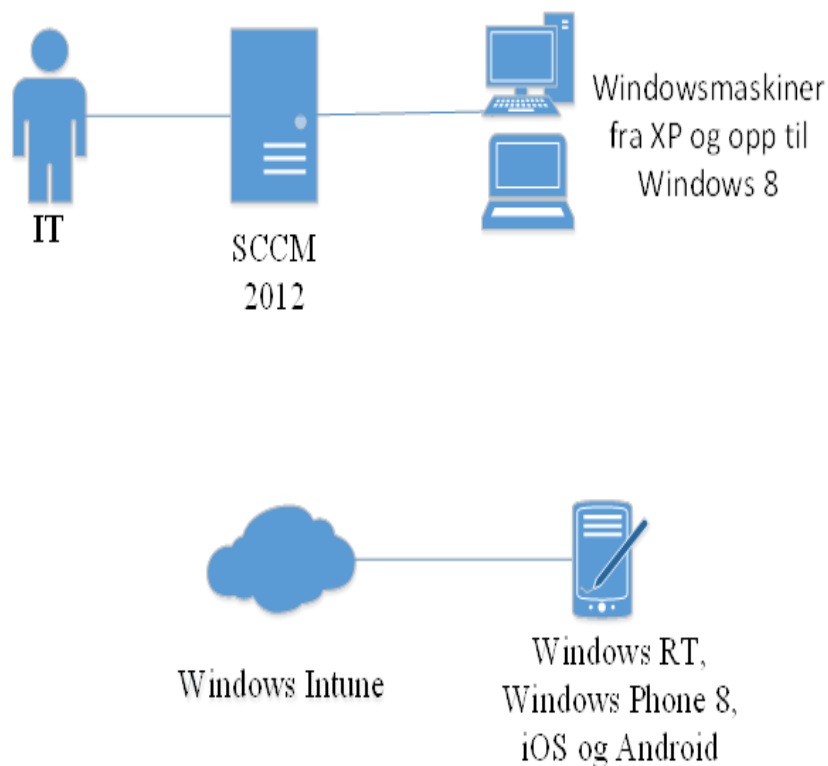
Hva har jeg gjort?

- Satt opp en Windows Azure-konto for Active Directory Sync
- Koblet sammen SCCM og Intune
- Satt opp iOS-enhet i SCCM
- Rullet ut applikasjoner via external links i SCCM
- Satt opp regler til mobilbruk

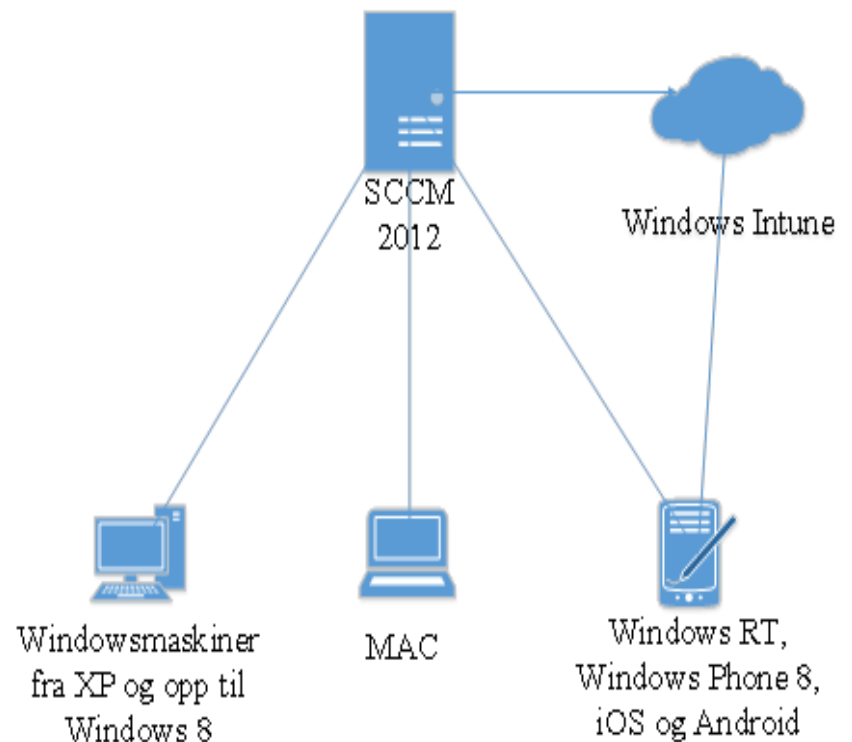
Samarbeidet

Sammenslåing

Før

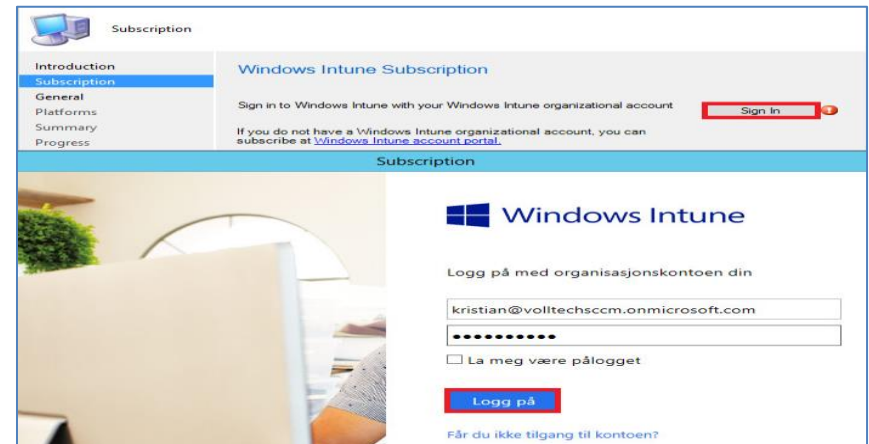
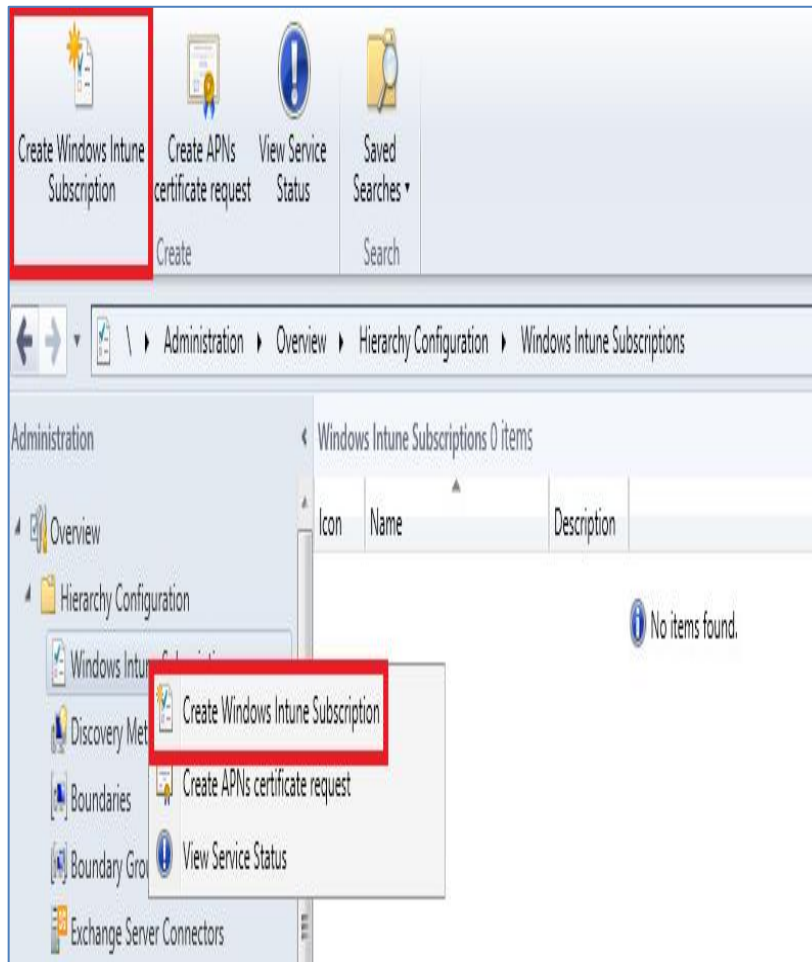


Etter



Samarbeidet

Koble sammen SCCM og Intune



To proceed to the next step of the wizard, you must confirm that you want to manage mobile devices through Windows Intune using the Configuration Manager console. Once selected, this setting cannot be changed.

☒ Allow the Configuration Manager console to manage this subscription

[Read the Windows Intune privacy statement online.](#)

[Read the Configuration Manager privacy statement online.](#)



< Previous

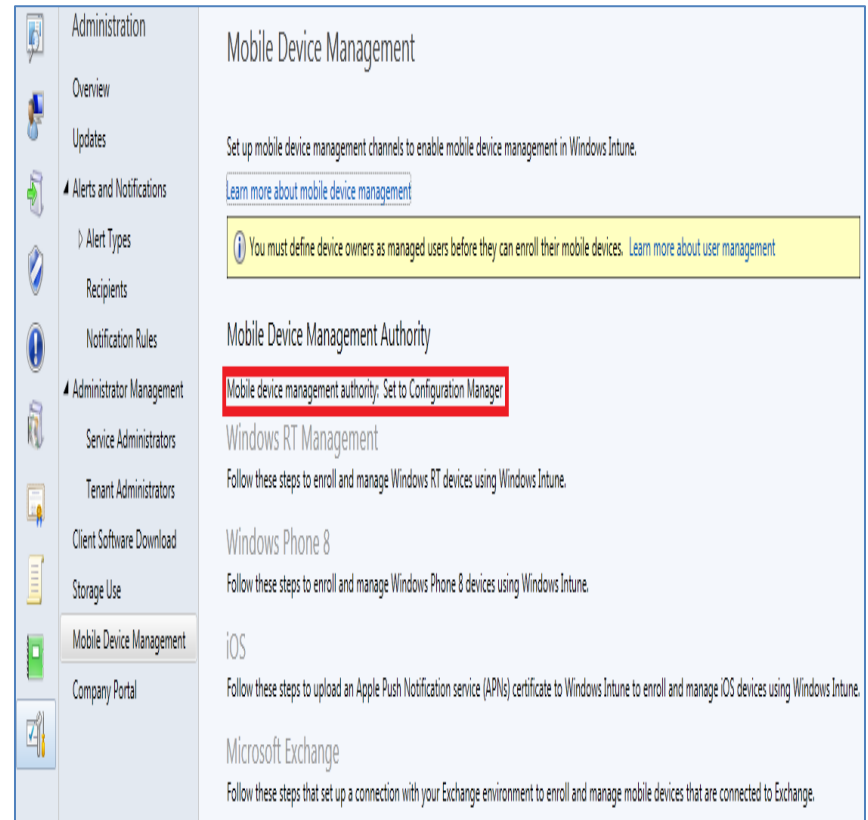
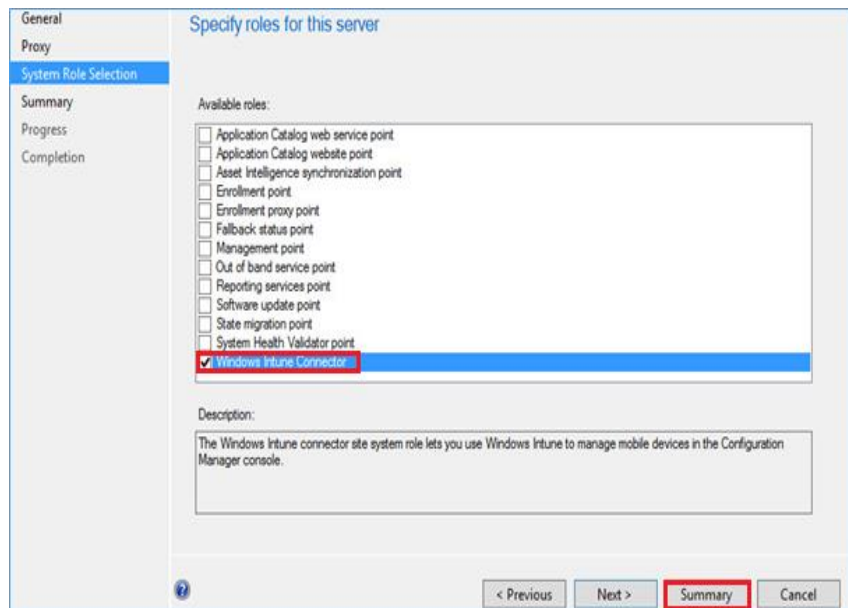
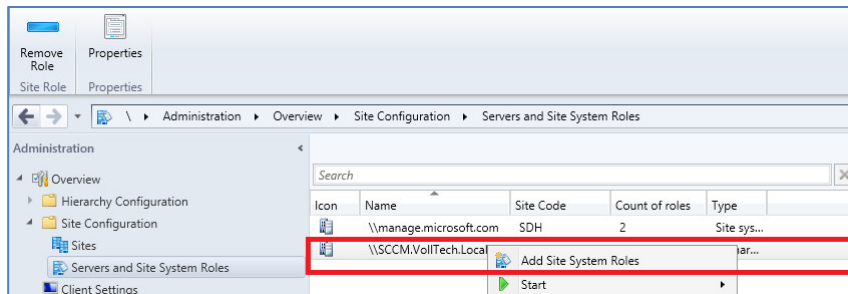
Next >

Summary

Cancel

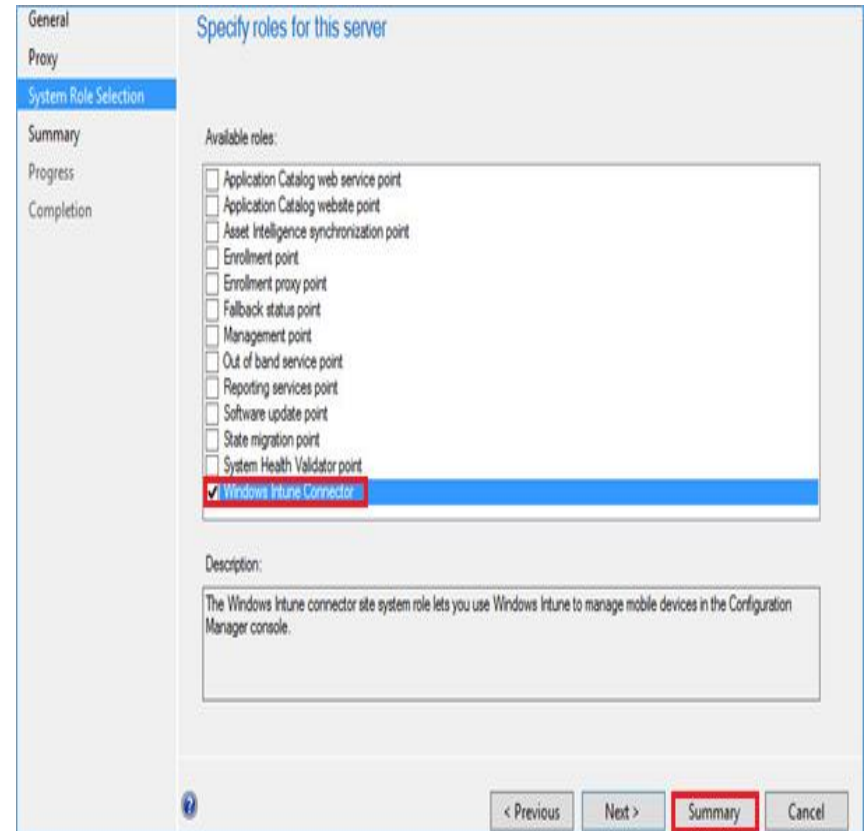
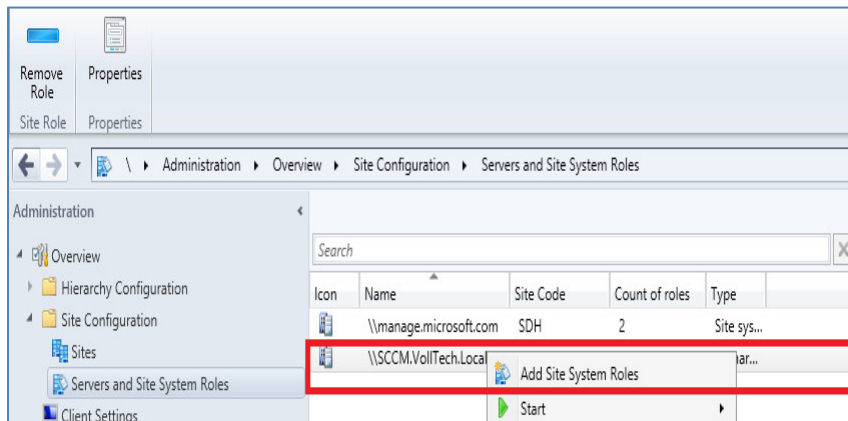
Samarbeidet

Site system roles



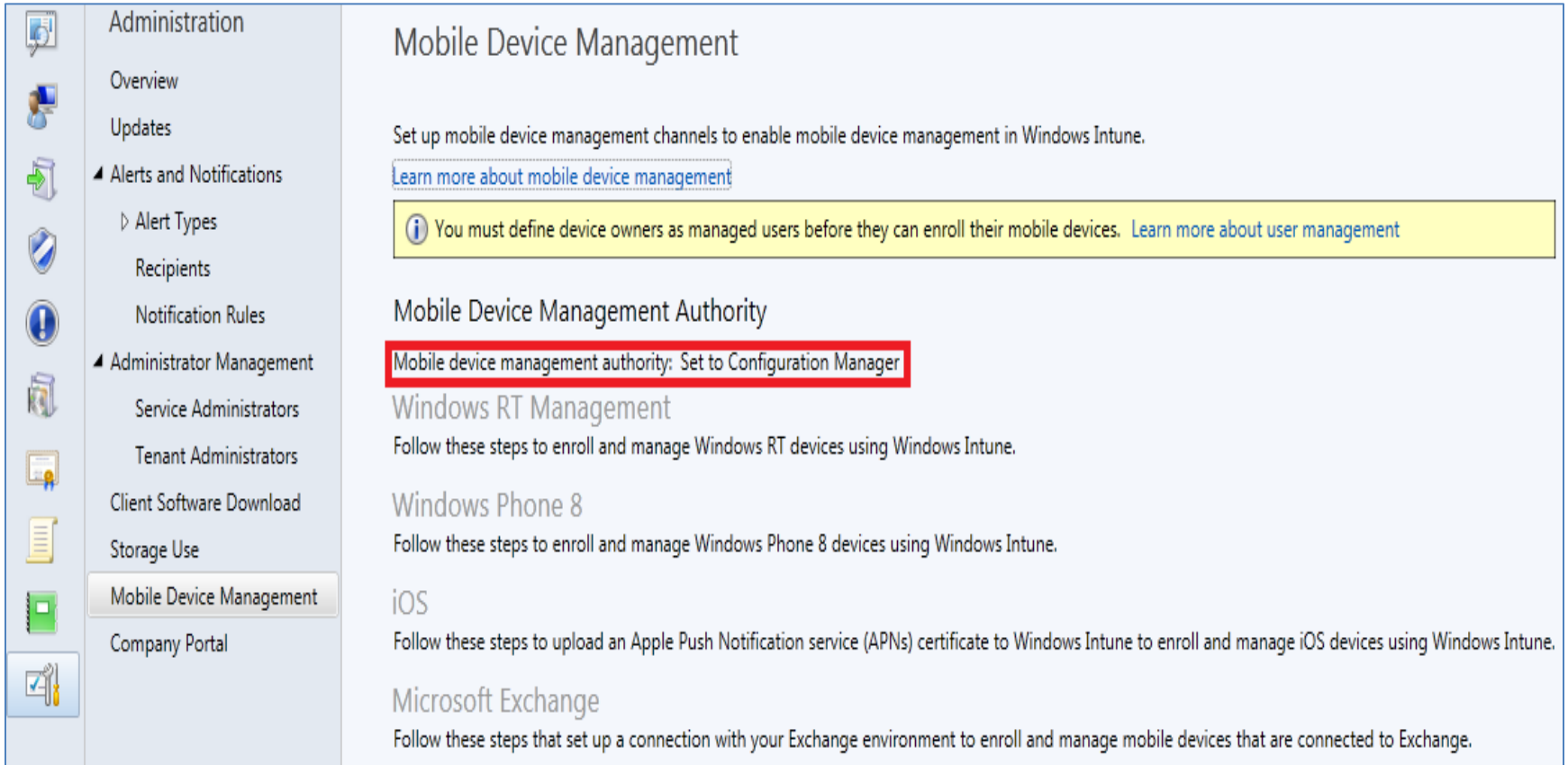
Samarbeidet

Site System Roles



Samarbeidet

Siste System Roles



The screenshot displays the Windows Intune management console. On the left is a navigation pane with icons and labels for various administrative tasks. The 'Mobile Device Management' option is highlighted with a grey background. The main content area on the right is titled 'Mobile Device Management' and contains several sections: a general overview, a yellow warning box, and links to 'Mobile Device Management Authority', 'Windows RT Management', 'Windows Phone 8', 'iOS', and 'Microsoft Exchange'.

Administration

- Overview
- Updates
- Alerts and Notifications
 - Alert Types
 - Recipients
 - Notification Rules
- Administrator Management
 - Service Administrators
 - Tenant Administrators
- Client Software Download
- Storage Use
- Mobile Device Management**
- Company Portal

Mobile Device Management

Set up mobile device management channels to enable mobile device management in Windows Intune.

[Learn more about mobile device management](#)

Information: You must define device owners as managed users before they can enroll their mobile devices. [Learn more about user management](#)

Mobile Device Management Authority

Mobile device management authority: Set to Configuration Manager

Windows RT Management

Follow these steps to enroll and manage Windows RT devices using Windows Intune.

Windows Phone 8

Follow these steps to enroll and manage Windows Phone 8 devices using Windows Intune.

iOS

Follow these steps to upload an Apple Push Notification service (APNs) certificate to Windows Intune to enroll and manage iOS devices using Windows Intune.

Microsoft Exchange

Follow these steps that set up a connection with your Exchange environment to enroll and manage mobile devices that are connected to Exchange.

Fordeler og Ulemper

Fordeler

SCCM

- Allsidighet – Støtter alle operativsystem nyere enn Windows XP
- Kan knyttes til flere System Center deler
- Enkelt å bruke, til tross for at det er et stort program
- Mye funksjonalitet

Windows Intune

- Skyløsning – Kan brukes overalt.
- Brukervennlig
- Mulig å drifte mobile enheter uten mellomledd

Fordeler og Ulemper

Ulemper

SCCM

- Kun On-premise
- Nødt å koble opp mot Intune for drift av mobile enheter
- Litt tidkrevende og vanskelig installasjon

Windows Intune

- Mangler noe av funksjonaliteten til SCCM, men ikke vesentlig savn
- Ment for middels bedrifter, ulempe for store bedrifter mtp mobile enheter
- Nettleserproblematikk

SCCM & Windows Intune

Funksjon	Windows Intune	SCCM
Utrulling av Operativsystem	Nei	Ja
Full støtte av Group Policy	Nei	Ja
Mulighet for drift av mobile enheter	Ja	Ja (dersom den er koblet mot Intune)
Active Directory Federation	Ja	Ja
Utrulling av programvare	Ja	Ja
Varsler og overvåking	Ja	Ja
Fjernhjelp	Ja	Ja
Oversikt over maskin- og programvare og lisenser	Ja	Ja
Malware-sikring	Ja	Ja
Drift av oppdateringer	Ja	Ja
Skyløsning	Ja	Nei
On-premise	Ja	Ja

Fordeler og Ulemper

Samarbeidet

Fordeler

- Mer sentralisert drift
- Letter tilknytning til AD

Ulemper

- Tar bort mobildriften fra Windows Intune

Problemer

- Implementering av Windows Phone 8 kostet penger
- Opplasting av apper til iOS og Windows Intune
- Problemer med Hyper-V virtuelt mot SCCM-serveren min

Hva har jeg lært?

- Å dokumentere forstudie, systemkrav og driftsdokument.
- Sette opp og konfigurere SCCM og Intune
- Sett på samarbeidet mellom disse partene
- Lært meg og sette opp iOS-enheter praktisk og Windows Phone og Android teoretisk

Takk til

- Atle Nes, ved Hist, for god veiledning
- Atea Bergen ved Christoffer Lokrheim og André Vollan

Takk for meg

The End