



# Roger Zander

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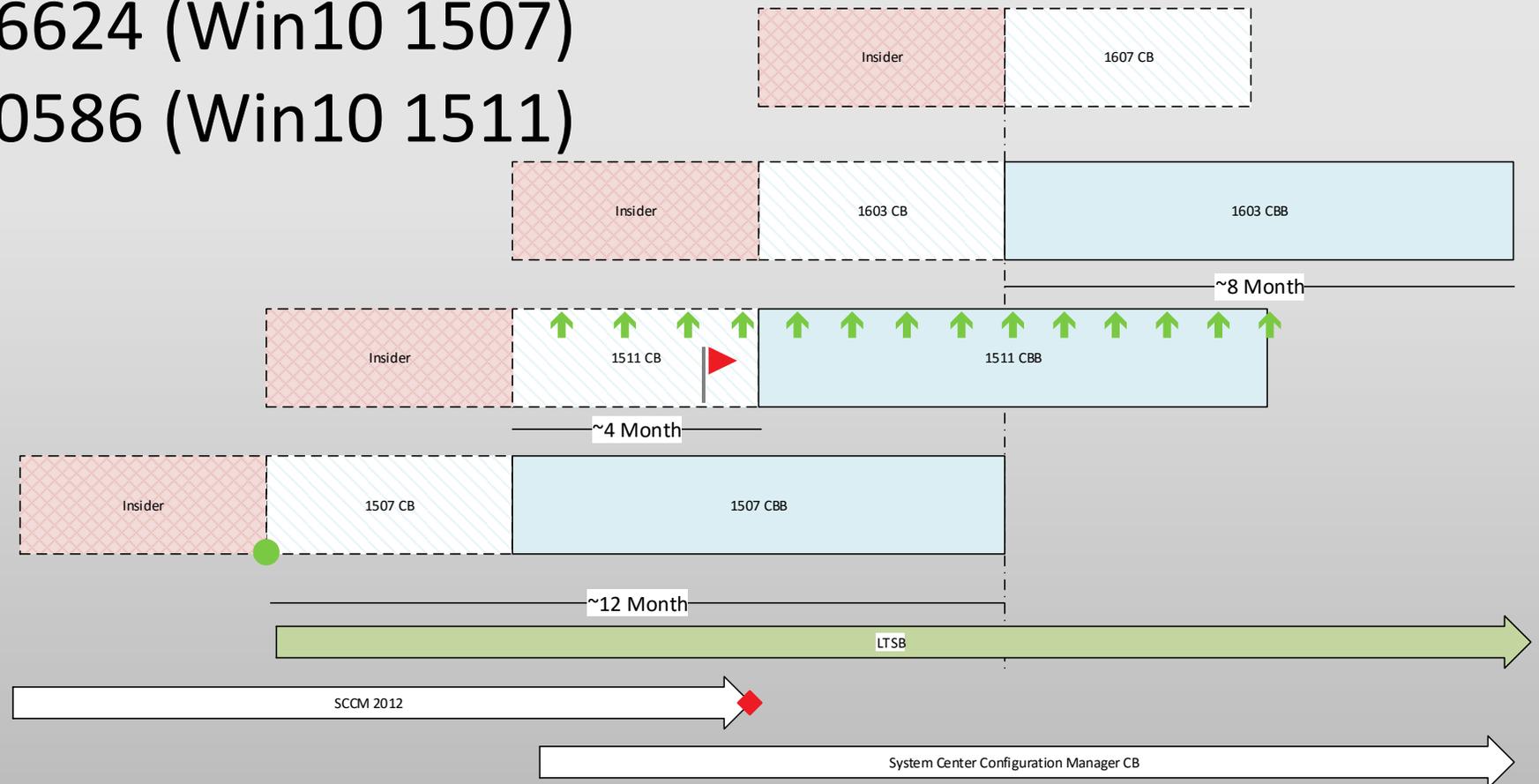
## Imaging and Configuration Designer (ICD)

# ICD



- Imaging and Configuration Designer (ICD) is Part of

- ADK 10.0.26624 (Win10 1507)
- ADK 10.1.10586 (Win10 1511)
- ... 1603 ?

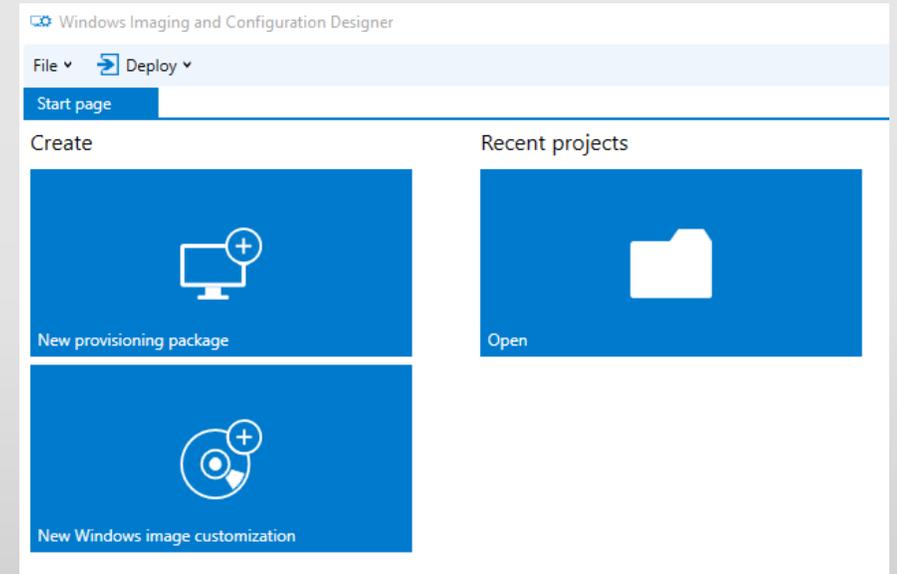


# ICD



## Features:

- Provisioning Packages
  - Integrate Updates, Driver and Applications
  - Customize Settings
  - Domain Join
  - Windows10 Edition Upgrades
  - ...
- Windows image customization
  - Create custom installation medias



# Provisioning Package



- Quickly configure a new device without going through the process of installing a new image.
- Save time by configuring multiple devices using one provisioning package.
- Quickly configure employee-owned devices in an organization without a mobile device management (MDM) infrastructure.
- Set up a device without the device having network connectivity.

# Provisioning Package



## What you can configure

- Applications
- Bulk enrollment into MDM
- Certificates
- Connectivity profiles
- Enterprise policies
- Data assets
- Start menu customization
- ...

# Provisioning Package



DEMO

Provisiong Package

# Provisioning Package



- Domain Join
- VPN Profiles
- WiFi Profiles
  - Export all known WLAN profiles:  
`netsh wlan export profile key=clear`
- Universal App installation

# Edition Upgrade



- Upgrade to Enterprise:

```
Changepk.exe /ProductKey NPPR9-FWDCX-D2C8J-H872K-2YT43
```

\*)The Key above requires a KMS Server

# Windows ICD command-line interface



Usage: `icd.exe <command> <parameters>`

`/Build-ProvisioningPackage`: Command to create provisioning package.

`/Build-ImageFromWIM`: Command to create Windows deployment media.

`/Build-ImageFromPackages`: Command to create Windows deployment media.

- `icd.exe /Build-ProvisioningPackage`  
`/CustomizationXML:<path to xml> /PackagePath:<path_to_ppkg>`  
`[/StoreFile:<path to storefile>]`  
`[/MSPackageRoot:<path to mspackage directory>]`  
`[/OEMInputXML:<path to xml>] [/ProductName:<product_name>]`  
`[/Variables:<name>:<value>] [[+|-]Encrypted] [[+|-]`  
`]Overwrite] [/?]`

# ICD

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# DEMO

Image Customization

# Remove Universal Apps



Note: A build upgrade will restore the Default Apps!

```
$apps=@ (
    "9E2F88E3.Twitter"
    "ClearChannelRadioDigital.iHeartRadio"
    "Flipboard.Flipboard"
    "king.com.CandyCrushSodaSaga"
    "Microsoft.3DBuilder"
    "Microsoft.BingFinance"
    "Microsoft.BingNews"
    "Microsoft.BingSports"
    "Microsoft.BingWeather"
    "Microsoft.BingFoodAndDrink"
    "Microsoft.BingHealthAndFitness"
    "Microsoft.BingTravel"
    "Microsoft.CommsPhone"
    "Microsoft.ConnectivityStore"
    "Microsoft.Getstarted"
    "Microsoft.Messaging"
    "Microsoft.MicrosoftOfficeHub"
    "Microsoft.MicrosoftSolitaireCollection"
    "Microsoft.People"
    "Microsoft.SkypeApp"
    "Microsoft.WindowsPhone"
    "Microsoft.XboxApp"
    "Microsoft.ZuneMusic"
    "Microsoft.ZuneVideo"
    "microsoft.windowscommunicationsapps"
    "Microsoft.MinecraftUWP"
    "ShazamEntertainmentLtd.Shazam"
)

foreach ($app in $apps) {
Get-AppxPackage -Name $app | Remove-AppxPackage
Get-AppxPackage -Name $app -AllUsers | Remove-AppxPackage
Get-AppxProvisionedPackage -Online | where
    DisplayName -EQ $app | Remove-AppxProvisionedPackage
    -Online

$appPath="$Env:LOCALAPPDATA\Packages\$app*"
#Remove-Item $appPath -Recurse -Force -ErrorAction 0
}
```

# Start-Layout



- Export (same Language and Build as target Image):

```
Export-StartLayout -Path <.XML Path>
```

- Import (only to the default user profile !):

```
Import-StartLayout
```

```
"$($PSScriptRoot)\startlayout.xml" -
```

```
MountPath $env:SystemDrive -ea
```

```
SilentlyContinue
```

# Windows Store



## “Removing” Windows Store ?!

- Windows Store is required to install and update Universal Windows Applications.
- Built-in Apps (e.g. Calculator) receive updates through the store (or with next Build)
- Store comes back with build Upgrade (except LTSC)
- What happens when Business-Apps are only available as Universal Apps...

# Create ISO for BIOS & UEFI



- "C:\Program Files (x86)\Windows Kits\10\Assessment and Deployment Kit\Deployment Tools\amd64\Oscdimg\**oscdimg.exe**" -m -o -u2 -udfver102 -bootdata:2#p0,e,b"%~dp0boot\**etfsboot.com**"#pEF,e,b"%~dp0efi\microsoft\boot\**efisys.bin**" G:\W10 G:\disc.iso

# Unified Write Filter (UWF)



Unified Write Filter (UWF) protects the contents of a volume by redirecting all write operations on that volume to the overlay, which is a virtual representation of the changes to the volume.

- Internet PC's
- Software Testing
- ...

```
UWFMGR.exe overlay set-type disk
UWFMGR.exe overlay set-size 4096
UWFMGR.exe volume protect C:
UWFMGR.exe filter enable
UWFMGR.exe filter restart
```

# Share your ideas



- Share your voice / ideas!
  - <http://microsoftintune.uservoice.com/>
  - <http://configurationmanager.uservoice.com/>



# Weitere Infos

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## Digicomp Kurse

<https://www.microsoft.com/learning/en-us/course.aspx?ID=20695A&Locale=en-us>

<https://www.microsoft.com/learning/en-us/course.aspx?ID=20696A&Locale=en-us>

# Danke



## Herzlichen Dank

Mirko Colemberg @mirkocolemberg @configmgr\_ch #cmce\_ch  
blog.colemberg.ch

Bewertung der Session: [Configmgr.ch](http://www.configmgr.ch)

- Xing: <https://www.xing.com/net/cmce>
- Facebook: <https://www.facebook.com/groups/411231535670608/>
- LinkedIn: <http://www.linkedin.com>
- Twitter: [https://twitter.com/configmgr\\_ch](https://twitter.com/configmgr_ch)

Nächster Event: Freitag 17. Juni Digicomp Bern  
(begrenzte Anzahl Teilnehmer möglich)