



# Microsoft Product Licensing

## **ONE Focus** SOFTWARE LICENSING

|                  |  |
|------------------|--|
| Last Update      | 2013-05-03   |
| Previous Version | 2013-04-25   |
| Modifications    | Online Services<br>Project/Visio for O365<br>Bridge CAL Win Intuen |

# Copyrights & Warranties

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# Software Licensing Copyright

With licensing a software you are NOT the “owner” of the software.

As holder of a software license you are only permitted to USE the software.

How you can USE the software defines the owner of the software (Owner of the Copyright)

The use right of Microsoft software is defined in the ...

- Volume License Agreement , including:
  - **PUR (Product Use Rights)**
  - **PL (Product List)**
- MSLT (Microsoft Software License Terms – former EULA)



*“Copyright has two main purposes, namely the protection of the author’s right to obtain commercial benefit from valuable work, and more recently the protection of the author’s general right to control how a work is used.”*



# Options for purchasing Microsoft Software and Services

## Software On Premise

### Volume License



Enterprise

- **Select Plus**
- **Enterprise Agreement**
  - EA
  - EAS
  - ECI
  - EAP



SMB

- **Open License**
- **Open Value**
- **Open Value Company-Wide**
- **Open Value Subscription**

### Single License



- **OEM**
- **System Builder**
- **FPP**
- **PKC**

## Cloud Services

### Microsoft Datacenter



- **Enterprise Agreement**
  - EA
  - EAS
- **MOSA**  
(Microsoft Online Subscription Agreement)

### Third Party Datacenter

- **SPLA**  
(Service Provider License Agreement)



# Volume License vs. Single License

## Software On Premise

### Volume License



- Product availability = All Business Products
- “Extended” Product Use Rights
  - Downgrade Right
  - Remote Access for Client Applications
  - Roaming Use Right through SA
  - License Transfer to new machine\*
  - Secondary Use Right (only Applications)\*\*
  - ...
- Re-Imaging
- Volume Activation

### Single License



- Limited Product availability
- Limited Product Use Rights
  - No Downgrade Right for FPP
  - Limited Downgrade Right for OS OEM
  - Only local usage for Applications
  - No License Transfer
  - No Secondary Use Right
  - ...
- No Re-Imaging with Single License Medias
- Single Activation

\* *Note: No reassignment right for Windows Client OS Upgrade Licenses unless active Software Assurance exists.*

\*\* *Note: In an EA, secondary Use Right only applicable for “Additional Products” (e.g. Project, Visio). They are not applicable for “Enterprise Products” (Office Pro Plus)*

# Different Types of Single License



## Single License with Pre-Installation



### OEM

### Office Single Image

Distribution with Pre-Installation on a Computer

License Agreement between OEM and Microsoft

OEM = Original Equipment Manufacturer

- Microsoft Partner installs the Single Image with the OPK Tools (OPK = OEM Pre-Installation Kit)
- Customer is purchasing Office PKC (Product Key Card) or FPP (Full Package Product) for unlocking the Image

#### Products:

- Windows Client OS Full version
- Windows Server OS Full version

#### Products:

- Office Home and Student
- Office Home and Business
- Office Professional
- Office Starter

# Different Types of Single License

## Single License without Pre-Installation



**FPP**

**System Builder**

Distribution without Pre-Installation through Retail

FPP = Full Package Product  
Media, Documentation in a Box

Media in a Cover

Products:

- Office Suite, Visio, Project
- Windows Client OS (Full and Upgrade)
- Server Products
- ...

Products:

- Windows Client OS Full version
- Windows Server OS

# Product Use Rights

## FPP

(Full Package Product)

- "Agreement" with Microsoft
- Product Use Rights ("Agreement") documented in the *Microsoft Retail Software License Terms (RSLT)*
- Documentation (RSLT) = Online (Download)

## OEM

(Original Equipment Manufacturer)

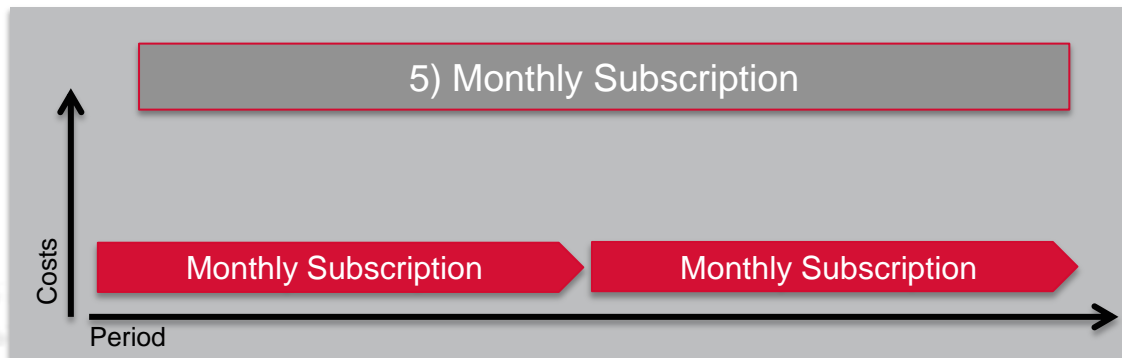
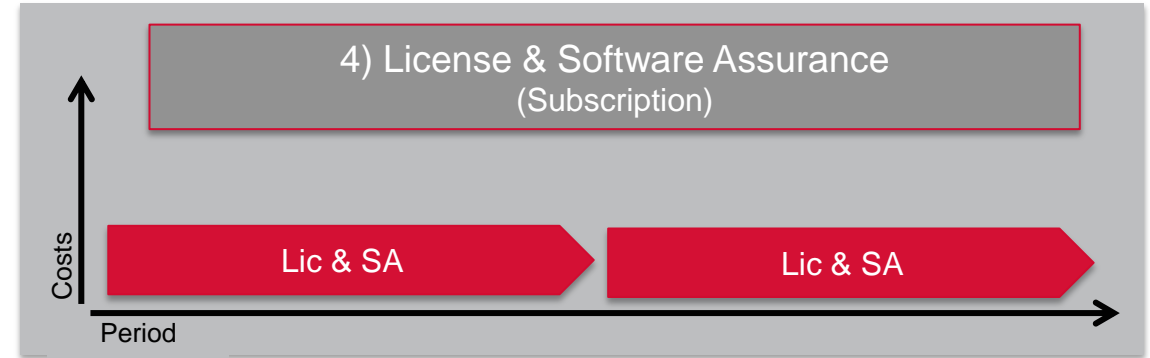
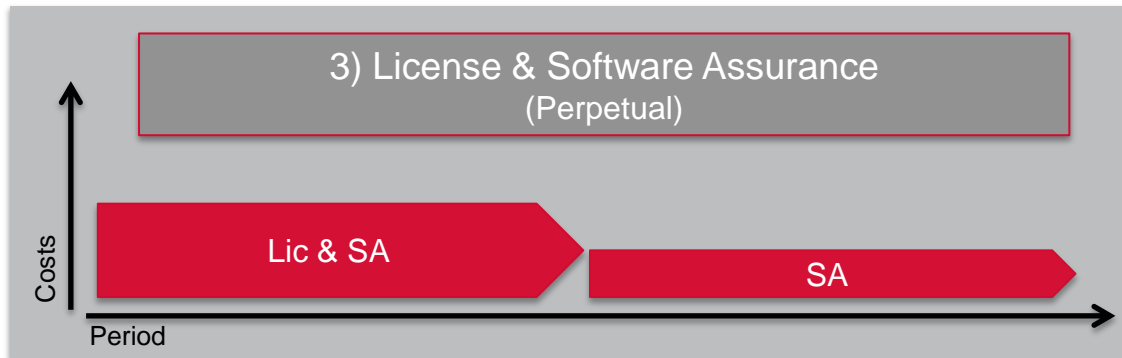
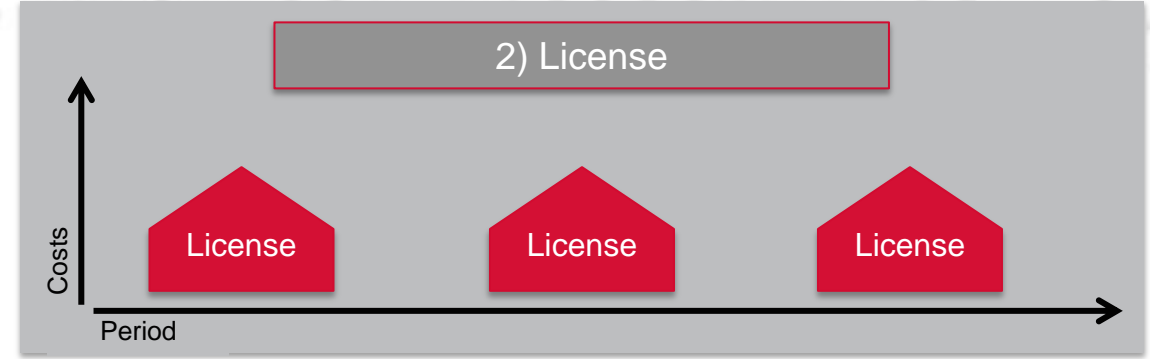
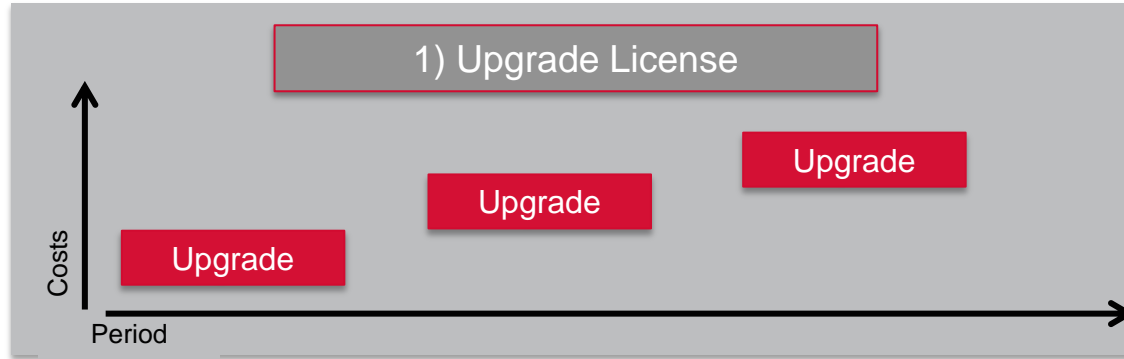
- "Agreement" with OEM or System Builder
- Product Use Rights documented in RSLT
- Documentation = usually received from OEM/System Builder as a soft copy on the hard drive

## VL

(Volume Licensing)

- "Agreement" with Microsoft
- Use Rights documented in the PURs in combination with the Volume License Agreement

# Different Types of Volume License



## Notes:

- 1) Only Windows Client OS
- 2) Some products are only available with SA
- 3) Some products are only available as Monthly Subscription

# Types of license



License

Usage right for the current version (+ downgrade)



Software Assurance

Usage right for future versions (upgrade coverage)  
+ additional benefits (e.g. home use right, support, etc.)  
+ step-up possibility

*Note: Some products are only available WITH Software Assurance or as a Monthly Subscription.*

*With SA: i.e. Core CAL, System Center, Windows 7 Enterprise*

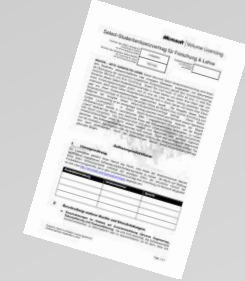
*Monthly Subscription: i.e. MDOP, Office 365, Windows Intune*



# Structure of the Microsoft Volume License

## Agreements

- Microsoft Business and Services Agreement (MBSA)
  - License Agreement (e.g. EA, Select Plus)
  - License Enrollment (e.g. EA, ECI, EAP)



## Product List

- Current product offerings
- Country exceptions
- Transition/Migration availability
- SLAs

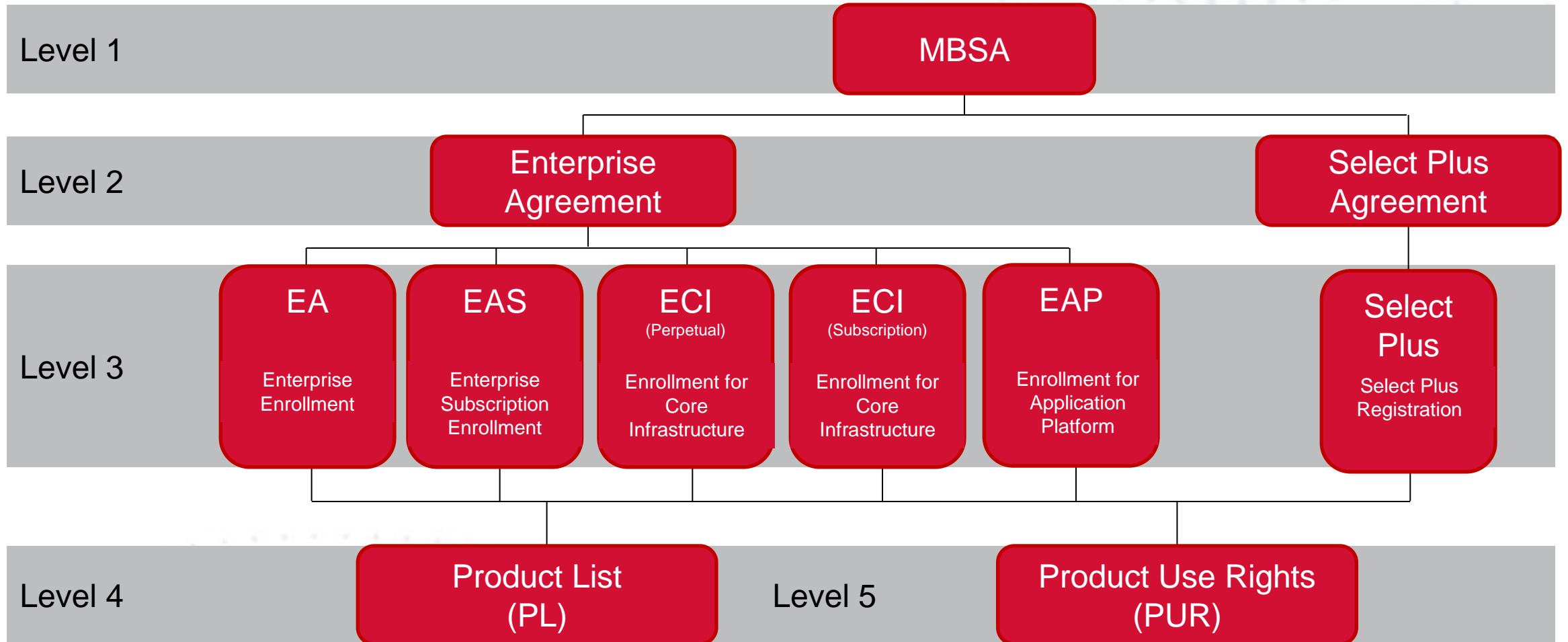


## Product Use Rights

- Universal License Terms
  - General License Terms
    - Product-Specific License Terms

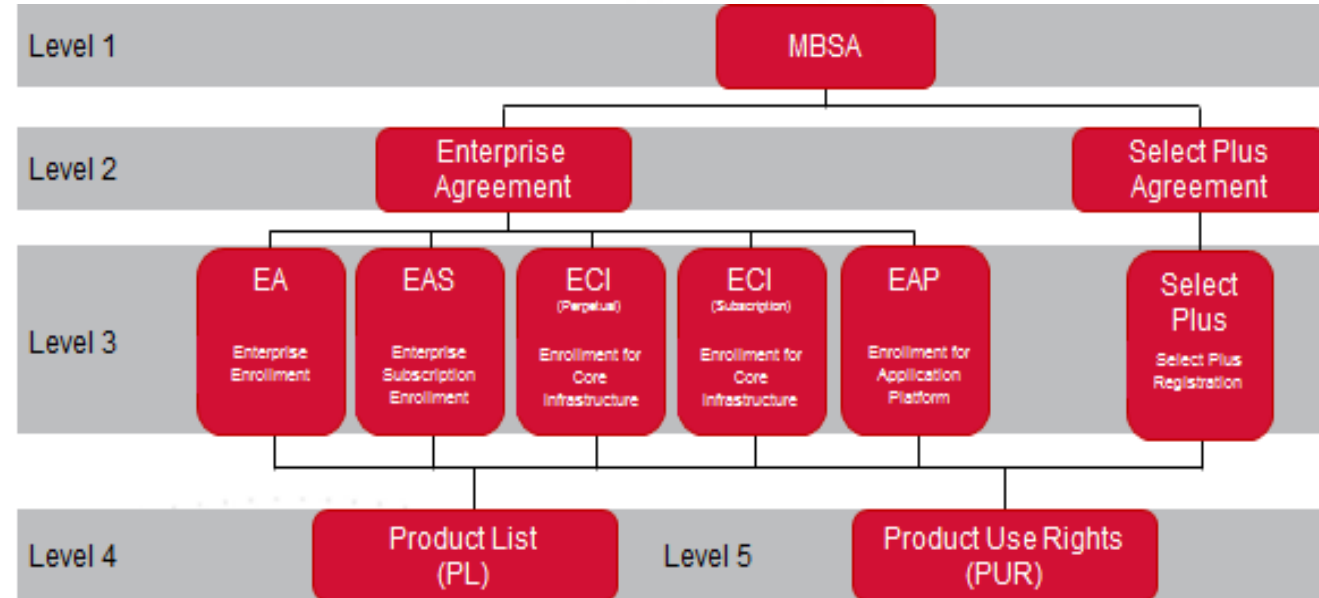


# Agreement Hierarchy














# Agreement Hierarchy

- Level 1 –Microsoft Business and Service Agreement (MBSA)
  - Master Policy
  - No specific runtime
- Level 2 – License Agreement
  - Definition of Processes, General License Terms
  - No specific runtime
- Level 3 – Enrollment/Registration
  - Order
  - EA = 36 Month Runtime
  - Select Plus Registration = Unlimited in time
- Level 4 – Product List
  - Product-specific terms (i.e. Transition, offerings, exceptions)
- Level 5 – Product Use Rights
  - Universal, General and Additional License Terms split into different license models (product groups)



# 10 different Licensing Models

|   |   |
|---|---|
|  <b>Desktop Applications</b> – per Device<br>e.g. Office                       |  <b>Management Servers</b> – per Mgmt. Lic<br>System Center              |
|  <b>Desktop Operating System</b> – per Device<br>Windows Pro                   |  <b>Specialty Servers</b> – per Server<br>e.g. Windows Server Essentials |
|  <b>Server Operating System</b> – Srv Proc & CAL<br>Windows Srv                |  <b>Developer Tools</b> – per User<br>e.g. Visual Studio                 |
|  <b>Server Applications</b> – Server & CAL<br>e.g. Exchange Srv                |  <b>Online Services</b> – per User/Device<br>e.g. Office 365             |
|  <del><b>Server Applications</b> – per Processor*<br/>e.g. BizTalk Srv</del> |  <b>Combined Models</b> – Suites<br>e.g. CIS Suite                     |
|  <b>Server Applications</b> – per Core<br>SQL Srv                            |   |

\* Per Processor Model is not anymore available since April 2013  
BizTalk Server got moved to the Core-based Model

# 10 different Licensing Models

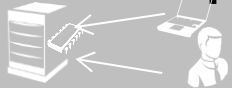
**Desktop Applications** – per Device  
e.g. Office



**Desktop Operating System** – per Device  
Windows Pro



**Server Operating System** – Srv Proc & CAL  
Windows Srv



**Server Applications** – Server & CAL  
e.g. Exchange Srv



**Server Applications** – per Core  
e.g. SQL/BizTalk



**Management Servers** – per Mgmt. Lic  
System Center



**Specialty Servers** – per Server  
e.g. Windows Server Essentials



**Developer Tools** – per User  
e.g. Visual Studio



**Online Services** – per User/Device  
e.g. Office 365



**Combined Models** – Suites  
e.g. CIS Suite



# Desktop Applications - Volume License Use Rights



**Desktop Applications** – per Device  
e.g. Office



**Desktop Operating System** – per Device  
Windows Pro



**Server Operating System** – Srv Proc & CAL  
Windows Srv



**Server Applications** – Server & CAL  
e.g. Exchange Srv



**Server Applications** – per Core  
e.g. SQL/BizTalk



**Management Servers** – per Mgmt. Lic  
System Center



**Specialty Servers** – per Server  
e.g. Windows Server Essentials



**Developer Tools** – per User  
e.g. Visual Studio



**Online Services** – per User/Device  
e.g. Office 365



**Combined Models** – Suites  
e.g. CIS Suite



- ✓ Office Suite
- ✓ Project
- ✓ Visio
- ✓ Excel, Word, PPT,
- ...



# How to license Microsoft Desktop Applications

## 1) Assign the License



License



You must **assign** the license to **one device**. That device is the licensed device.

## 2) Use of the Software



Licensed Device with virtual OSEs

You may **install and use any number** of copies of the software **on the licensed device**. ...

(Note: only permitted with Volume License)

## 3) Downgrade Right



Downgrade to any prior version of the same edition

You may use **a prior version** of the software **on the licensed device**.

(Note: only permitted with Volume License)

# Definitions

## What is a “Licensed Device”?

A Licensed Device is the single physical hardware system to which a license is assigned.

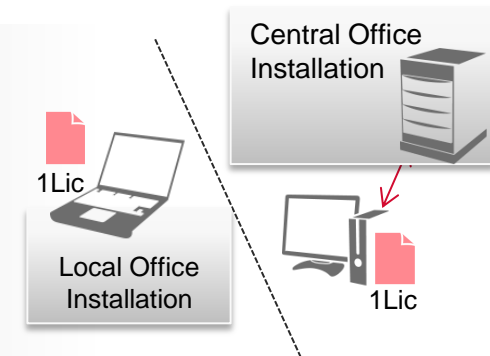
- PC
- Notebook
- Thin Client
- Tablet
- Smartphone ...



## What is the meaning of “Use”?

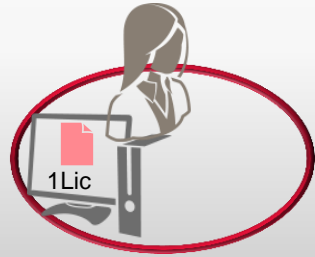
Using means every kind of interaction with the application.

- Installing of the Hard disc
- Streaming (i.e. RDS, Citrix)
- Access over VDI ...



# How to license Microsoft Desktop Applications

## Portable Device

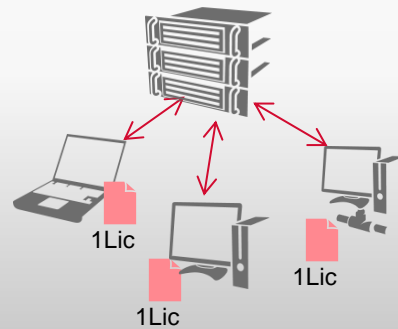


n copies on the licensed device  
+ 1 copy on the portable device

You may install a copy on a portable device for use by the single primary user of the licensed device.

Note: In an EA, only applicable for “Additional Products” (e.g. Project, Visio), NOT applicable for “Enterprise Products” (Office Pro Plus)

## Network Device



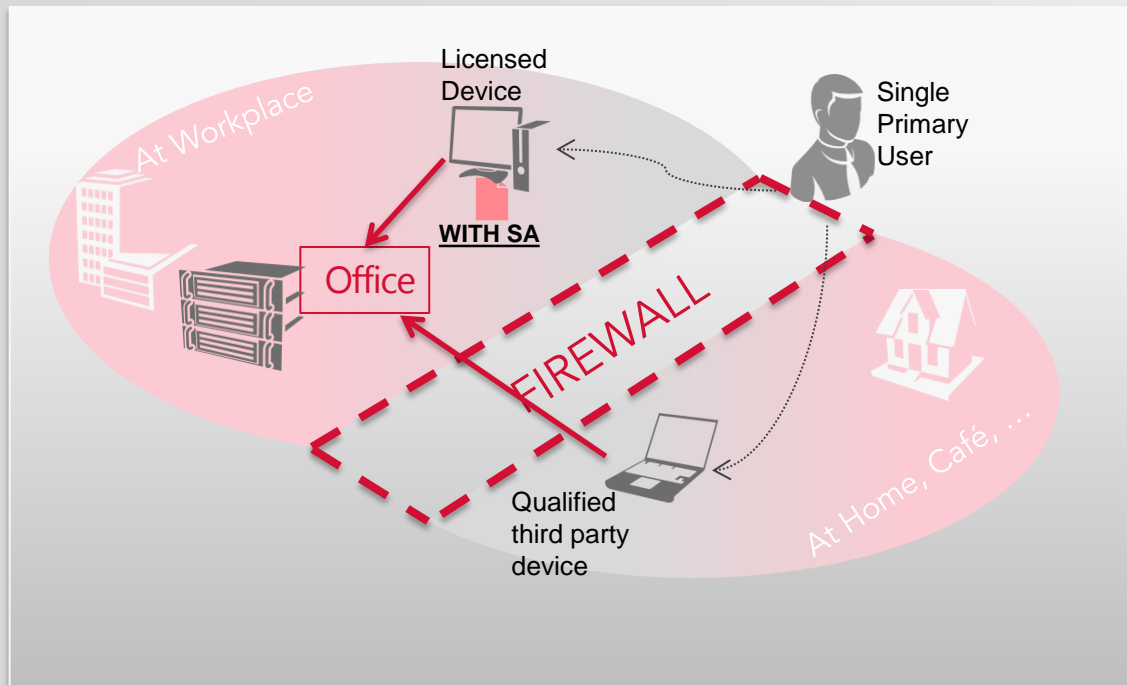
Technology: e.g. RDS, TS, VDI

You may install copies on a network device. You may access copies of the software installed on a network device **only from a device that has a license for the software.**

# How to license Microsoft Desktop Applications

## Roaming Use Right

only for Office, Project and Visio licenses  
**with active Software Assurance coverage**



The single primary user of the licensed device may:

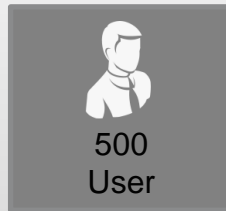
- remotely access the software running on your servers (e.g. in your datacenter) from a qualifying third party device, and
- run the software in a virtual OSE on a qualifying third party device.

**“Qualifying third party device“** is a device that is owned and controlled by an entity other than you or your affiliates.

# License per Device

The Company has 500 Notebooks and 500 Employees.

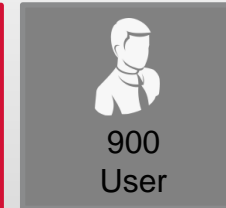
Every Employee is working on one Notebook with the Office Suite.



500 Office Licenses are necessary.  
= 1 License per Device

The Company has 500 Desktops and 900 Employees.

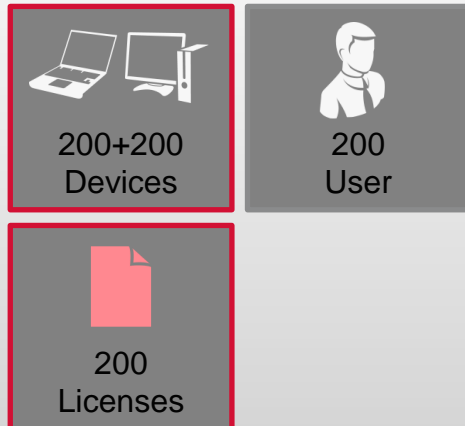
The Employees are working in shifts on the 500 Desktops.



500 Office Licenses are necessary.  
= 1 License per Device

# Portable Device

The Company has 200 Employees. Every Employee is the single main user of an Office-licensed Desktop and also has a Notebook.



200 Office Licenses are necessary.

Note: No Portable Device User Right are available for

- OEM- & PKC-Licenses
- If the Application is licensed under an agreement with Standardization-Model (i.e. Office under an EA, EAS, OV CW, OVS)

The Company has 400 Desktops and 100 Notebooks for a total of 500 Employees. The Office Suite may be used on every device.

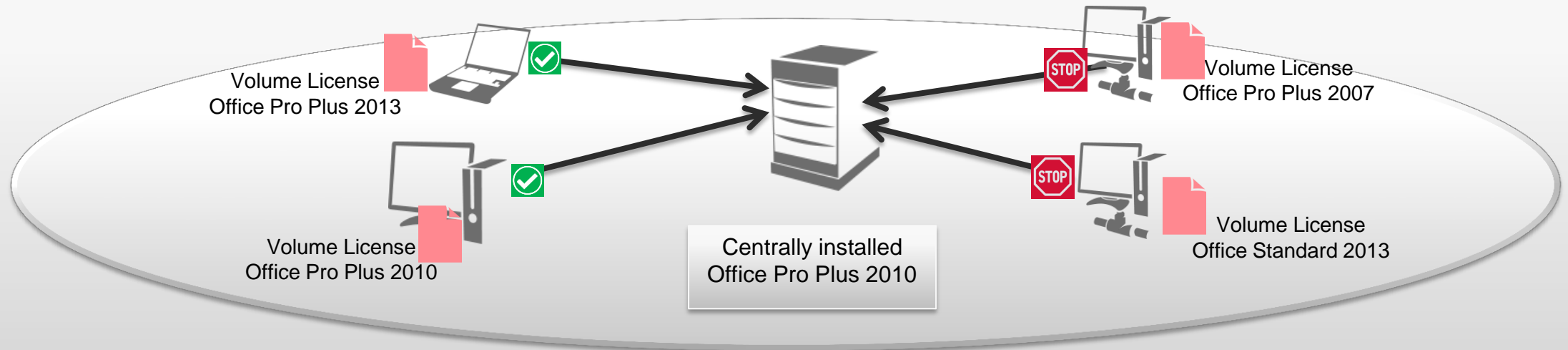


500 Office Licenses are necessary.








# Remote Access

The Office Suite is installed centrally on the Server (i.e. RDS, VDI)












For every device that can access the centrally installed Office Suite, 1 Volume License is necessary. The Volume License must be for the same or a newer version of the installed application. Single licenses (OEM, PKC, FPP) do not qualify for accessing remotely. A separate Office license for the server is not necessary.

# Office 2013 – Suite Overview

|   | FPP / OEM   |   |   | Volume Licensing  |  |
|---|---|---|---|---|--|
| Components  | Office 2013 Home & Student  | Office 2013 Business  | Office 2013 Professional  | Office 2013 Standard  | Office 2013 Professional Plus  |
| <b>Application</b> <ul style="list-style-type: none"> <li>○ Word</li> <li>○ Excel</li> <li>○ PowerPoint</li> <li>○ OneNote</li> <li>○ Outlook</li> <li>○ Publisher</li> <li>○ Access</li> <li>○ Lync</li> <li>○ InfoPath</li> </ul>         |  |  |  |  |                         |
| <b>Enterprise Value</b> <ul style="list-style-type: none"> <li>○ Group Policy</li> <li>○ Terminal Service</li> <li>○ App Telemetry</li> <li>○ Compliance, Archiving</li> <li>○ Business Intelligence</li> <li>○ Enterprise Voice</li> </ul> |   |   |   | <ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> </ul>           | <ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul> |

# Office 2013 – Professional Plus vs Standard

|  |  |   |
|--|--|---|
| Office 2013 Professional Plus                                | Access      |   |
|  | InfoPath    | Lync       |
| Office 2013 Standard<br><small>Incl. Office Web Apps</small> | PowerPoint  | Publisher  |
|  | Excel       | OneNote    |
|  | Word        | Outlook    |
|  |  |   |

**New Component:**

➤ **Commercial Use**

- Windows 8 Apps
- Office Home
- Student 2013 RT

**Enterprise Value:**



- Compliance & Archiving
- Business Intelligence
- Enterprise Voice

**Enterprise Value:**

- Group Policy
- Volume Activation
- Virtualization Rights
- App Telemetry

➤ All components of Office 2013 Standard are as well included in Office 2013 Professional Plus.

## Discontinued Components (compared to version 2010):

- |  |   |
|--|---|
| SharePoint Workspace              | SharePoint Workspace (component of Office Pro Plus 2010) will be discontinued. Skydrive Pro offering the same functionality, will be available as a free download |
| Outlook Business Contact Manager  | Outlook Business Contact Manager will be available as a free download going forward   |












# Project 2013 - Features

|                           | Capability  | Enterprise Value  |
|---------------------------|---|---|
| Project Standard 2013     | <ul style="list-style-type: none"><li>• Project scheduling &amp; costing</li></ul>  | <ul style="list-style-type: none"><li>• Group Policy</li><li>• Volume Activation</li><li>• Terminal Service</li></ul> |
| Project Professional 2013 | <ul style="list-style-type: none"><li>• Project scheduling &amp; costing</li><li>• SharePoint task sync</li><li>• Lync presence</li><li>• Project Server sync</li></ul> | <ul style="list-style-type: none"><li>• Group Policy</li><li>• Volume Activation</li><li>• Terminal Service</li></ul> |

# Visio 2013 - Features

|                         | Capability   | Enterprise Value  |
|-------------------------|--|---|
| Visio Standard 2013     | <ul style="list-style-type: none"><li>• Create professional and engaging diagrams</li><li>• Publish to Visio Services</li></ul>  | <ul style="list-style-type: none"><li>• Group Policy</li><li>• Volume Activation</li><li>• Terminal Service</li></ul> |
| Visio Professional 2013 | <ul style="list-style-type: none"><li>• Create professional and engaging diagrams</li><li>• Publish to Visio Services</li><li>• Diagram co-authoring</li><li>• Dynamic, Data driven Shapes</li><li>• High value stencils</li></ul> | <ul style="list-style-type: none"><li>• Group Policy</li><li>• Volume Activation</li><li>• Terminal Service</li></ul> |

# Desktop Operating System - Volume License Use Rights

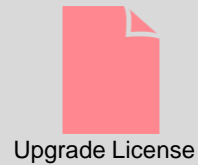
|   |  |
|---|--|
| <br><b>Desktop Applications</b> – per Device<br>e.g. Office  | <br><b>Management Servers</b> – per Mgmt. Lic<br>System Center              |
| <br><br><b>Desktop Operating System</b> – per Device<br>Windows Pro | <br><b>Specialty Servers</b> – per Server<br>e.g. Windows Server Essentials |
| <br><b>Server Operating System</b> – Srv Proc & CAL<br>Windows Srv   | <br><b>Developer Tools</b> – per User<br>e.g. Visual Studio                 |
| <br><b>Server Applications</b> – Server & CAL<br>e.g. Exchange Srv   | <br><b>Online Services</b> – per User/Device<br>e.g. Office 365             |
| <br><b>Server Applications</b> – per Core<br>e.g. SQL/BizTalk  | <br><b>Combined Models</b> – Suites<br>e.g. CIS Suite                       |

✓ Windows Professional



# How to license Microsoft Desktop Operating System

## 1) Assign the License



with qualified  
OEM License

You must **assign** the license to **one device**. That device is the licensed device.

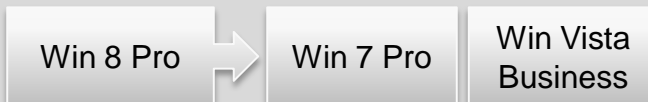
## 2) Use of the Software



You may install one copy of the software **on the licensed device**

(Note: expended use rights with Software Assurance  
=> **Windows Virtualization Use Right**  
=> **Virtual Desktop Access**)

## 3) Downgrade Right



Downgrade  
to any prior  
version of the  
same edition

You may use **a prior version** of the software **on the licensed device**.

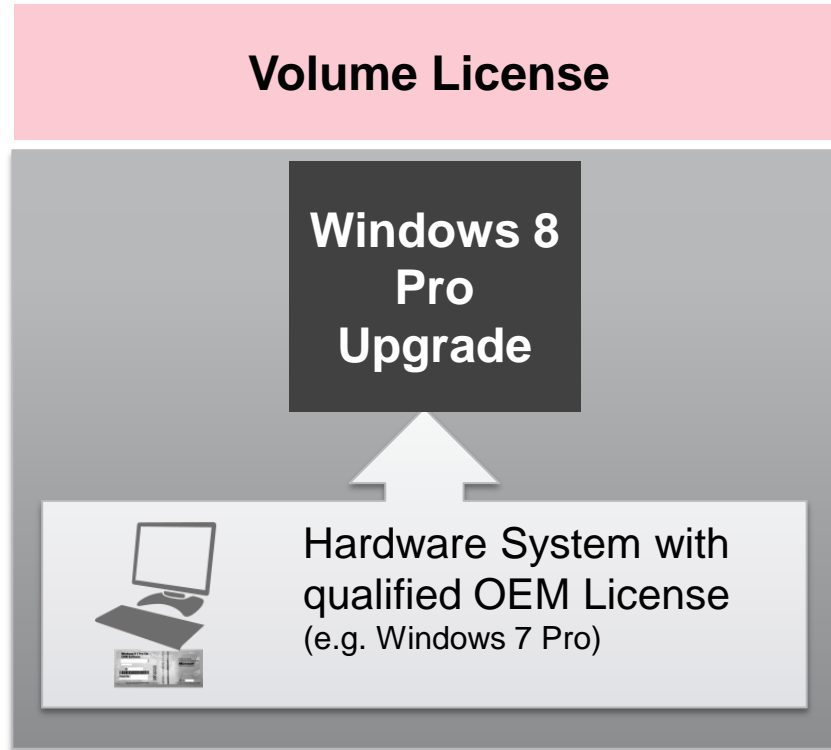
(Note: limited Downgrade Right with OEM/FPP)

# Windows 8 – Edition by License Type

|                                      |                   |                  |                              |  |
|--------------------------------------|-------------------|------------------|------------------------------|--|
| <b>Volume License</b>                |                   |                  | <b>Windows 8 Pro Upgrade</b> | <b>Windows 8 Enterprise</b> <sup>*</sup> |
| <b>FPP</b><br>(Full Package Product) |                   | <b>Windows 8</b> | <b>Windows 8 Pro</b>         |  |
| <b>OEM</b><br>(Pre-Installed on PC)  | <b>Windows RT</b> | <b>Windows 8</b> | <b>Windows 8 Pro</b>         |  |

<sup>\*</sup>Available only WITH Software Assurance

# Windows Volume License = Upgrade License



- PCs must already be licensed with a qualified business OS
- A Windows Volume License is not a replacement for buying full Windows license from OEM
- A "Full License" under Volume Licensing is NOT available.

# Qualifying OS required to purchase Volume License Upgrade License

| Qualifying Operating Systems              | New EA/<br>OV-CW | Existing EA/OV-<br>CW | Select (All except<br>academic) | Open (All except academic &<br>charity & OV-CW) | Academic & charity |
|---|------------------|-----------------------|---------------------------------|---|--------------------|
| <b>Windows 8 (32-bit or 64-bit)</b>       |                  |                       |                                 |   |                    |
| Enterprise (N, K, KN)                     | x                | x                     | x                               | x   | x                  |
| Pro (N, K, KN)                            | x                | x                     | x                               | x   | x                  |
| Windows 8                                 |                  |                       |                                 |   | x                  |
| Windows 8 Single Language                 |                  |                       |                                 |   | x                  |
| <b>Windows 7 (32-bit or 64-bit)</b>       |                  |                       |                                 |   |                    |
| Enterprise (N, K, KN)                     | x                | x                     | x                               | x   | x                  |
| Professional (N, K, KN, diskless)         | x                | x                     | x                               | x   | x                  |
| Ultimate                                  | x                | x                     | x                               | x   | x                  |
| Home Premium                              |                  |                       |                                 |   | x                  |
| Home Basic                                |                  |                       |                                 |   | x                  |
| Starter Edition                           |                  |                       |                                 |   | x                  |
| <b>Windows Vista (32-bit or 64-bit)</b>   |                  |                       |                                 |   |                    |
| Enterprise (N, K, KN)                     | x                |                       | x                               | x   | x                  |
| Business (N, K, KN, Blade)                | x                |                       | x                               | x   | x                  |
| Ultimate                                  | x                |                       | x                               | x   | x                  |
| Home Premium                              |                  |                       |                                 |   | x                  |
| Home Basic                                |                  |                       |                                 |   | x                  |
| Starter Edition                           |                  |                       |                                 |   | x                  |
| <b>Windows XP (32-bit or 64-bit)</b>      |                  |                       |                                 |   |                    |
| Professional (N, K, KN, Blade)            | x                |                       | x                               | x   | x                  |
| Tablet Edition (N, K, KN, Blade)          | x                |                       | x                               | x   | x                  |
| XP Pro N                                  | x                |                       | x                               | x   | x                  |
| XP Pro Blade PC                           | x                |                       | x                               | x   | x                  |
| Home & Starter Edition                    |                  |                       |                                 |   | x                  |
| <b>Windows 2000 Professional</b>          | x                |                       | x                               | x   | x                  |
| <b>Windows NT Workstation 4.0</b>         | x                |                       | x                               | x   | x                  |
| <b>Windows 98 (including 2nd Edition)</b> | x                |                       | x                               | x   | x                  |
| <b>Apple Macintosh</b>                    | x                |                       | x                               | x   | x                  |

# Downgrade Right

| Downgrade to             | OEM           | Volume License                     |                                |
|--------------------------|---------------|------------------------------------|--------------------------------|
|                          | Windows 8 Pro | Windows 8 Pro Upgrade (without SA) | Windows 8 Enterprise (with SA) |
| Windows 7 Enterprise     |               |                                    | X                              |
| Windows Vista Enterprise |               |                                    | X                              |
| Windows 7 Pro            | X             | X                                  | X                              |
| Windows Vista Business   | X             | X                                  | X                              |
| Windows XP Pro           |               | X                                  | X                              |
| Windows 2000 Pro         |               | X                                  | X                              |
| Windows NT               |               | X                                  | X                              |
| Windows 98               |               | X                                  | X                              |
| Windows 95               |               | X                                  | X                              |

# Windows 8 – Comparison Professional & Enterprise

|                                     |                                  |  |
|-------------------------------------|----------------------------------|--|
| <b>Optional Subscription Add-On</b> | Desktop Optimization Pack (MDOP) | Windows Companion Subscription License (CSL) |
|-------------------------------------|----------------------------------|--|

|                             |                  |   |   |   |
|-----------------------------|------------------|---|---|---|
| <b>Windows 8 Enterprise</b> | Direct Access    | <b>Extended Use Rights &amp; Benefits</b> | Windows 8 Enterprise Sideloading <b>NEW</b> | Windows Thin PC                         |
|                             | AppLocker        |   | Windows to Go <b>NEW</b>                    | Windows RT Companion VDA <b>NEW</b>     |
|                             | BranchCache      |   | Virtual Desktop Access (VDA)                | Roaming Use Right                       |
|                             | VDI enhancements |   | Local Virtualization (4 Instances)          | + other SA Benefits (Support, Training) |

**Software Assurance => Premium Features & Extended Use Rights**

|                               |              |                          |                                    |                             |
|-------------------------------|--------------|--------------------------|------------------------------------|-----------------------------|
| <b>Windows 8 Professional</b> | Domain Join  | Local Using (1 Instance) | * NEW                              | * NEW                       |
|                               | Group Policy |                          | Multilanguage User Interface (MUI) | BitLocker<br>BitLocker ToGo |

\* Under Windows 7 was MUI and BitLocker part of the Enterprise Edition

# Windows Software Assurance – Windows 8 Enterprise Premium Features

| Windows 8 Enterprise – Premium Features |  |
|---|--|
| Direct Access                           | Allows remote users to seamlessly access resources inside a corporate network without having to launch a separate VPN  |
| Branch Cache                            | Allows users' PCs to cache files, websites and other content from central servers, so content is not repeatedly downloaded across the wide area network (WAN).   |
| App Locker                              | Enables IT to specify what software is allowed to run on a user's PCs through centrally managed but flexible Group Policies.   |
| VDI enhancements                        | Enhancements in Microsoft RemoteFX and Windows Server 2012 provide users with a rich desktop experience with the ability to play 3D graphics, use USB peripherals and use touch-enabled devices across any type of network (LAN or WAN) for VDI scenarios. |



# Windows Software Assurance - Extended Use Rights

## Windows 8 Enterprise – Extended Use Rights

|   |   |
|---|---|
| <b>Windows Virtual Desktop Access (VDA)</b>     | Access Windows in a variety of ways across devices.<br>Windows VDA Rights enable users to access virtual instances of Windows in a variety of user scenarios.   |
| <b>Windows To Go</b>                            | Travel light without sacrificing productivity using Windows To Go.<br>Windows To Go is a fully manageable corporate desktop running Windows 8 Enterprise edition on a bootable USB stick. This use right allows Windows To Go to be run on any licensed device.   |
| <b>Roaming Use Right</b>                        | Enable work from home and on the road scenarios through Roaming Use Rights.<br>Roaming Use Rights allow any licensed device of the primary user to access a virtual instance of Windows running in the datacenter (VDI) or Windows To Go from non-corporate devices such as personally-owned or hotel business center PCs while away from the office. |
| <b>Windows RT Companion VDA</b>                 | Extend productivity to Windows RT tablets with Virtual Desktop Access.<br>Windows RT Companion VDA Rights allow the primary user of a licensed device, rights to access a corporate desktop through a VDI from a corporate-owned companion Windows RT device with no additional Windows license required.   |
| <b>Enterprise Sideloading of Windows 8 Apps</b> | Deploy custom Windows 8 apps directly to corporate devices without using the Windows Store.<br>Receive the necessary use rights required to enable deployment of touch-centric Windows 8 apps directly to devices within an organization as opposed to being installed through the public Windows Store.  |
| <b>Windows Thin PC</b>                          | Windows Thin PC is a smaller footprint Windows-based OS solution designed for customers that would like to repurpose their existing Windows 8 capable PCs to connect to a centralized desktop without having to buy new thin client hardware  |

# Windows Software Assurance – Optional Subscription Add-On

## Optional Subscription Add-On

### Desktop Optimization Pack (MDOP)

MDOP is a suite of technologies that helps enterprise customers take advantage of desktop virtualization, better manage Windows devices, and deliver advanced system restore capabilities.

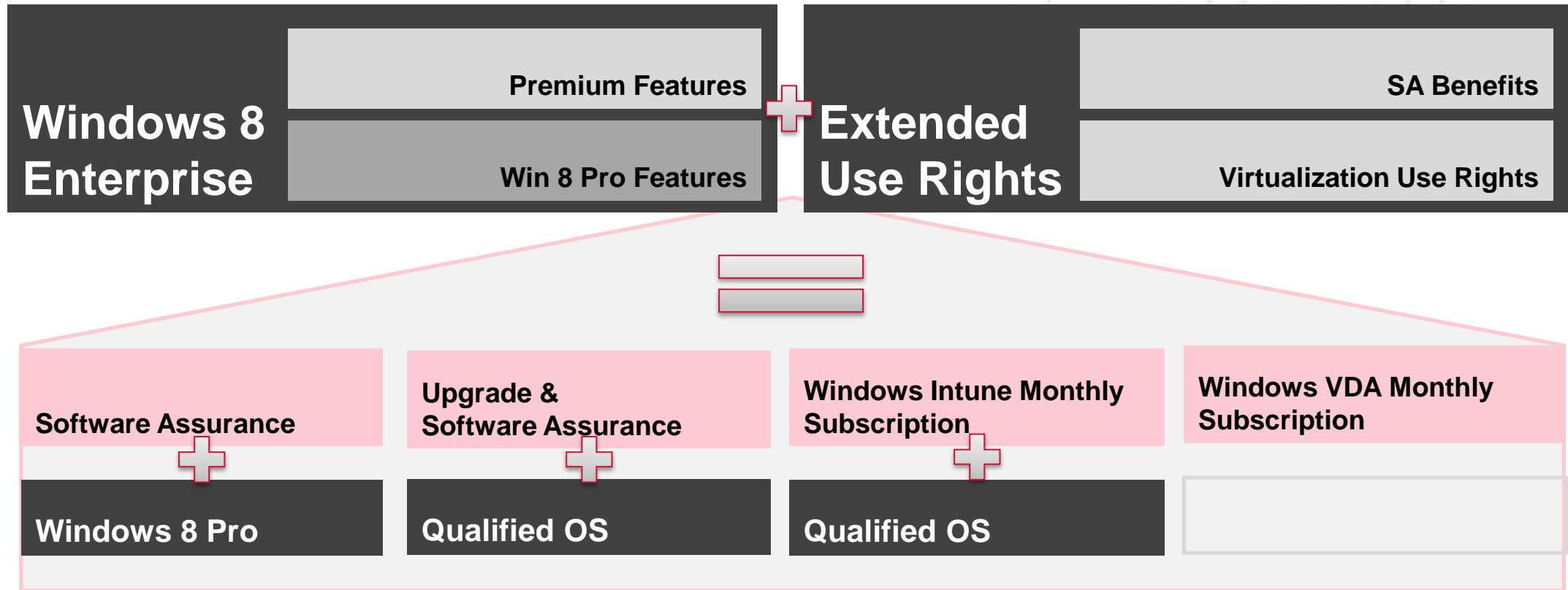
- Microsoft User Experience Virtualization (UE-V)
- Microsoft Application Virtualization (App-V)
- Microsoft Enterprise Desktop Virtualization (MED-V)
- Microsoft Advanced Group Policy Management (AGPM)
- Microsoft BitLocker Administration and Monitoring (MBAM)
- Microsoft Diagnostics and Recovery Toolset (DaRT)

### Windows Companion Subscription License (CSL)

Enable bring your own device (BYOD) scenarios with flexibility for running corporate desktops using personally owned companion devices at work.

The Windows CSL is an optional subscription add-on which grants the primary user of a licensed device the rights to access a corporate desktop through either a VDI or Windows To Go on up to four devices capable of leveraging these technologies. Devices eligible for licensed use include any type of personally owned device as well as corporate owned non-x86 devices.

# How to get Windows 8 Enterprise



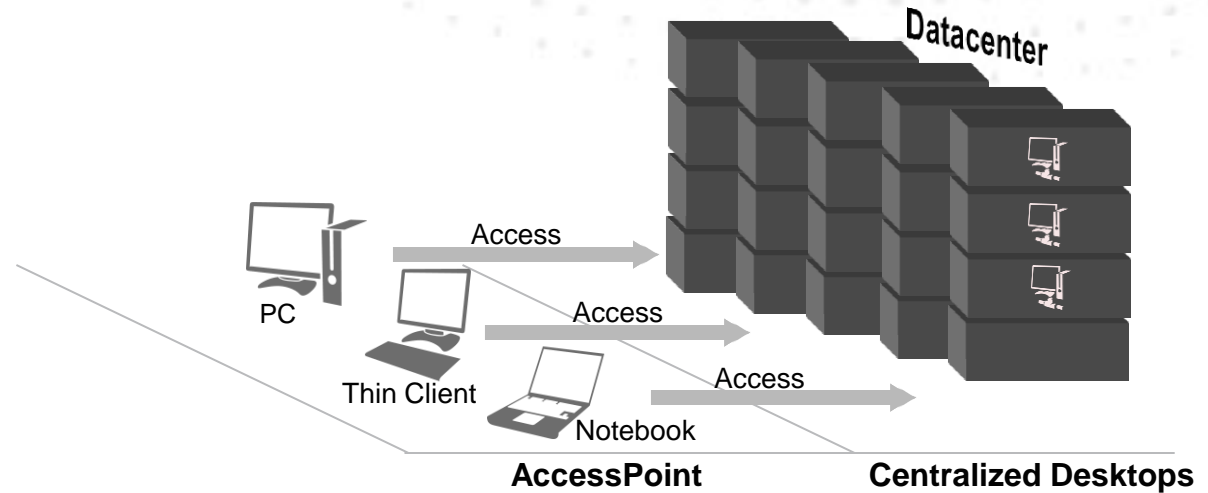
# Centralized Desktops with Windows Virtual Desktop Access (VDA)

## 1) Centralized Desktops

Windows OS installed and running central on Datacenter

## 2) Access Point

Access from your “Working-Device“ to your centralized Desktop  
e.g. PC, ThinClient, Notebook



This Environment needs to be licensed in a special way

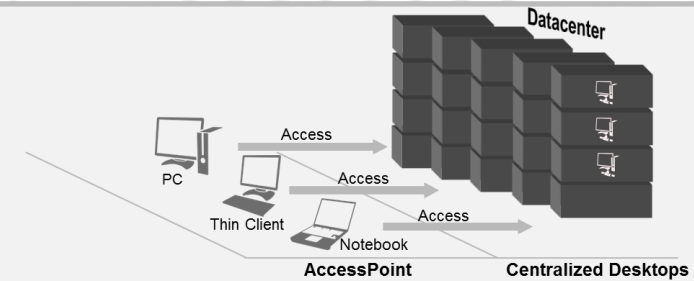
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**Windows Virtual Desktop Access VDA**

# Windows Virtual Desktop Access

## VDA includes the following benefits:

- Ability to **run a copy** of Windows in a datacenter
- Rights to **move** virtual machines **between servers** for increased reliability
- Unlimited **backup** of virtual machines
- Ability to access up to **four running VM instances** per device
- Roaming Use Right
- Availability to **volume licensing keys**, such as Key Management Service (KMS) and Multiple Activation Keys (MAK)

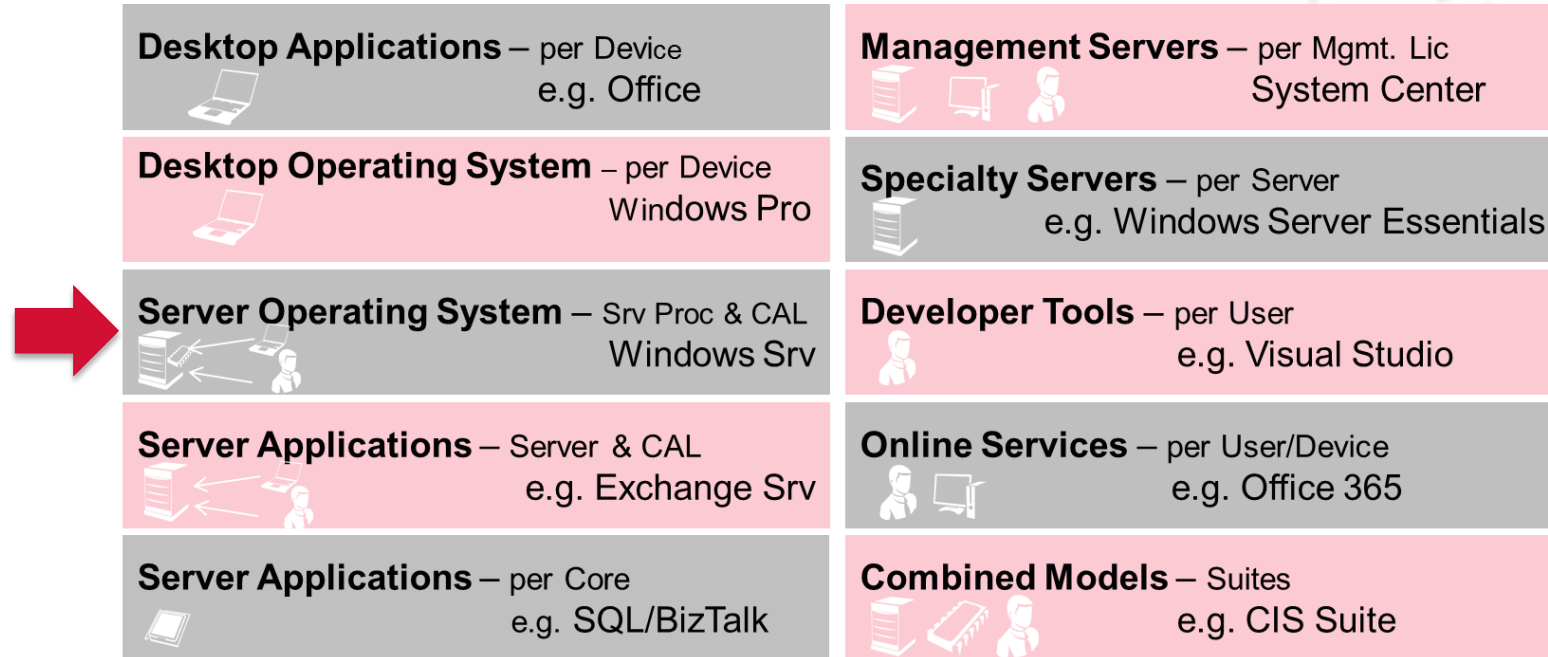


# Use Right Comparison

| Use Rights / Benefits                                     | OEM License<br>Windows 8<br>Professional | Volume License<br>Windows 8<br>Professional | Volume License<br>Windows 8<br>Enterprise | Windows<br>VDA                                |
|---|--|---|---|---|
| License Type  | Full version                             | Upgrade                                     | Software Assurance                        | Software Assurance or<br>Monthly Subscription |
| License Model   | Per Device                               |   |   |   |
| Number of Instances per License<br>on the licensed Device | 1  | 1   | 1+4                                       | -   |
| Remote Access to Windows<br>Client OS running on Servers  | -  | -   | yes                                       | yes   |
| Downgrade Right   | yes (n-2)                                | yes   | yes                                       | yes   |
| Roaming Use Rights  | -  | -   | yes                                       | yes   |
| Additional Features                                       | -  | -   | i.e. AppLocker, Direct<br>Access          | -   |
| Product Activation  | Single Activation                        | MAK or KMS                                  |   |   |



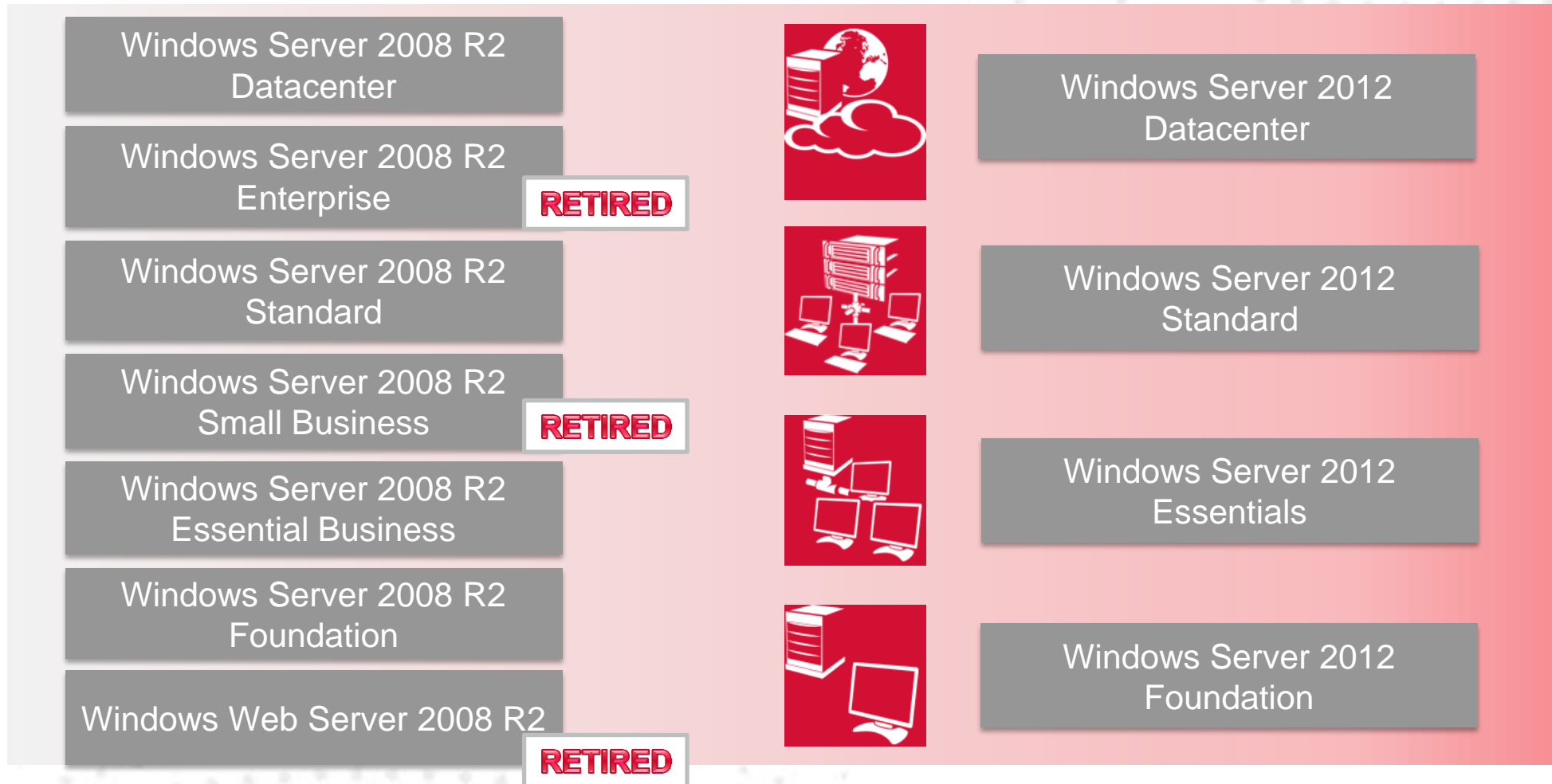
# Server Operating System - Processor/CAL Model



- ✓ Windows Server Standard
- ✓ Windows Server Datacenter



# Windows Server 2008 R2 - Windows Server 2012



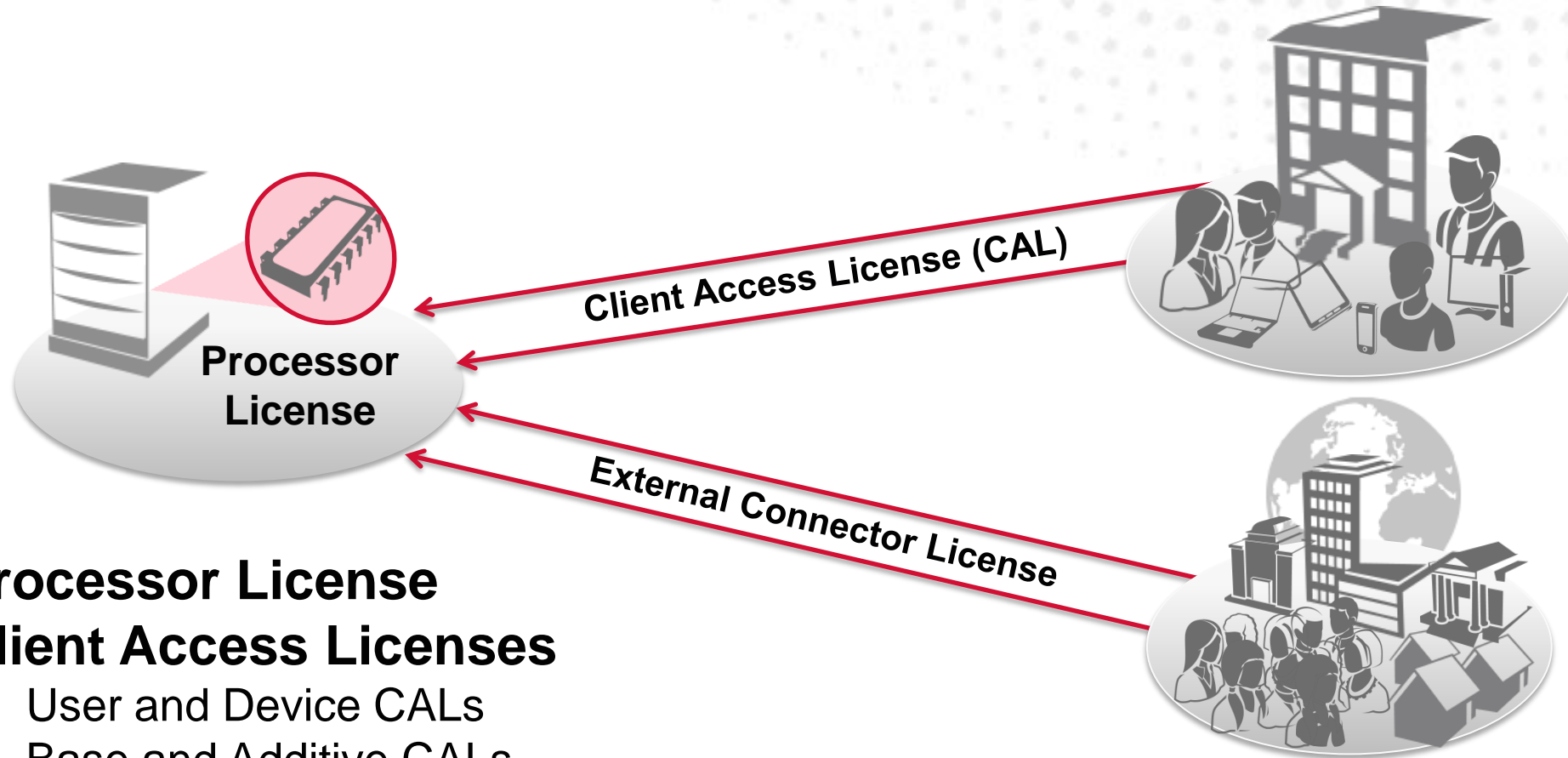
# Windows Server 2012 Edition Comparison

| Edition           | Feature                                     | Licensing Model           |
|-------------------|---|---------------------------|
| <b>Datacenter</b> | All features<br>Unlimited virtual instances | <b>Processor + CAL</b>    |
| <b>Standard</b>   | All features<br>Two virtual instances       | <b>Processor + CAL</b>    |
| Essentials        | Limited features<br>2 processor             | Server with 25 user limit |
| Foundation        | Limited features<br>1 processor             | Server with 15 user limit |



More details regarding feature differences can be found [here](#).

# Server Operating System – Processor/CAL Model



## Processor License

## Client Access Licenses

- User and Device CALs
- Base and Additive CALs

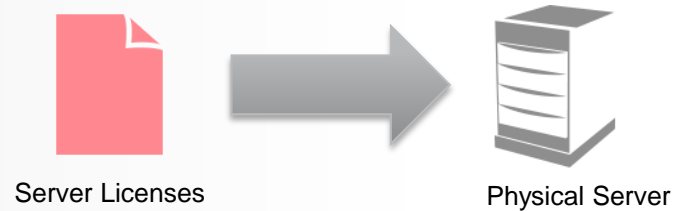
## External Connector License

Note: In this section, you will find the use rights regarding the Server Processor License. For details regarding CALs and External Connector, move to the section about Server Applications.

# Processor/CAL Model – Server Processor License

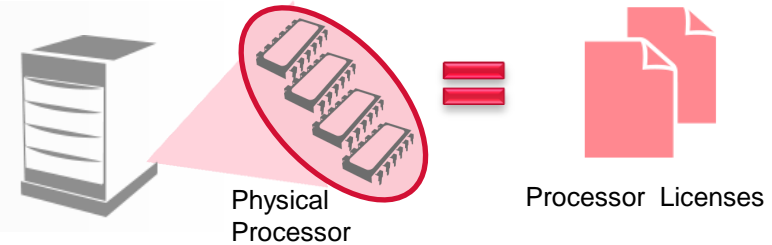
## 1) Assign the license

You must assign each license to a single server



## 2) Determining the number of Licenses

For every two physical processors on the server one license is needed



## 3) Run the Software

### Standard Edition\*

For every License you assigned you may run up to two VMs on the licensed server



### Datacenter Edition

You may run an unlimited number of virtual instances and in addition 1 physical OSE.

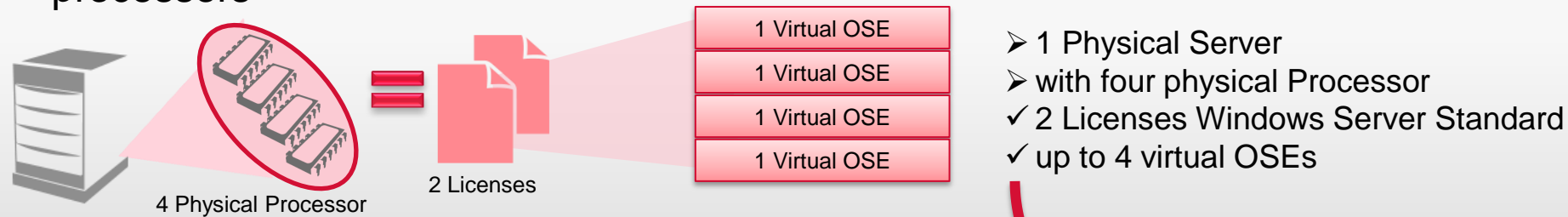


\*For more detailed information, move on to the next slide

# Processor/CAL Model – Server Processor License

## 3) Running Instances – Standard Edition

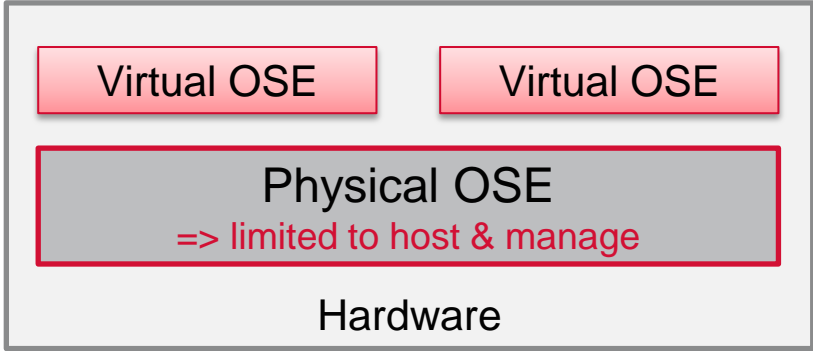
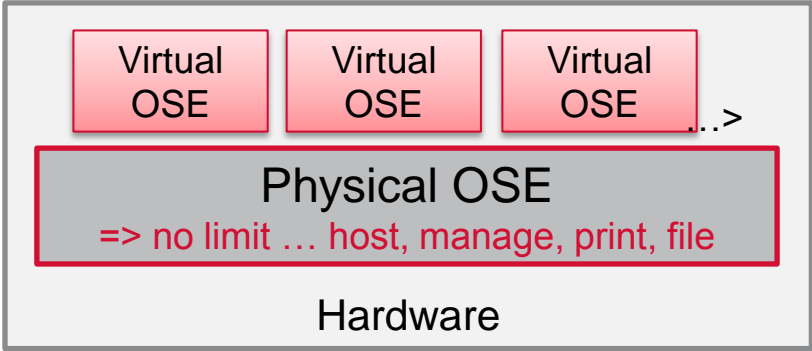
- ❑ The minimum number of licenses required for each server is determined by the number of physical processors



- ❑ By assigning additional licenses to the server you can add more virtual instances. (Per license two incremental virtual instances are added.)



# Processor/CAL Model – Server Processor License

| Edition comparison by running instances |   |  |
|---|---|--|
| Edition                                 | Standard  | Datacenter   |
| Virtual                                 | 2   | Unlimited  |
| Physical                                | 1<br><i>(with limitation)</i>   | 1<br><i>(without limitation)</i>   |
| Explanation                             | <p>Server with 1 Standard License</p>  <p>If both permitted virtual OSE instances are used, you may use the instance in the physical OSE only to host and manage the virtual OSEs.</p> | <p>Server with 1 Standard License</p>  <p>The number of virtual OSEs is unlimited, and use in the Physical OSE is not limited to hosting and management.</p> |



# Processor/CAL Model – Server Processor Licenses

## Additional Definitions/Explanations:

### Licensed Server

Licensed Server means the single physical hardware system to which a license is assigned.

A hardware partition or blade is considered to be a separate device.

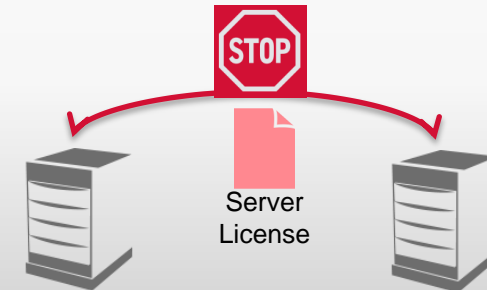


### Assign the License / License Mobility / Peak Licensing

You must assign each license to a single server.

The License Mobility Right is NOT available for Windows Server.

You may reassign Windows Server licenses but not on a short-term basis (not within 90 days of the last assignment)



➤ **Peak Licensing:** You need to consider what the peak capacity for the server will be.



# Windows Server 2012 Transitioning to the New Server Licensing Model

- Did you have Software Assurance coverage on your Windows Server licenses at the time of Windows Server 2012 General Availability?
- You will receive the following Windows Server 2012:

| “Old” License Model |                          | Conversion Ratio | New License(s) |            |
|---------------------|--------------------------|------------------|----------------|------------|
| 2                   | Datacenter *             | 2 : 1            | 1              | Datacenter |
| 1                   | Enterprise               | 1 : 2            | 2              | Standard   |
| 1                   | Standard                 | 1 : 1            | 1              | Standard   |
| 1                   | SBS Essentials           | 1 : 1            | 1              | Essentials |
| 2                   | Web Server **            | 2 : 1            | 1              | Standard   |
| 1                   | Windows HPC Server Suite | 1 : 1            | 1              | Standard   |

\* Windows Server 2012 Datacenter covers up to 2 processors per License

\*\* Round up to the nearest whole number

\*\*\* Win Server HPC Edition and HPC Pack Enterprise will receive a 2:1 ratio of Standard

# Windows Server 2012 - Downgrade and Down-Edition Rights

## Datacenter Edition

You may run an instance of Windows Server Datacenter, Enterprise, Standard or Essentials (the same or any earlier version) in place of Windows Server 2012 Datacenter in any of the OSEs on your licensed server.



| Licensed Version/ Edition | Windows Server 2012 Datacenter |                            |
|---------------------------|--------------------------------|----------------------------|
| Running Instance          | Standard Edition 2012          | Enterprise Edition 2008 R2 |
|                           | Standard Edition 2008 R2       | Enterprise Edition 2008    |
|                           | Windows Web Server 2008 R2     | Windows HPC Server 2008 R2 |












## Standard Edition

You may run an instance of Windows Server Enterprise, Standard or Essentials (the same or any earlier version) in place of Windows Server 2012 Standard in any of the OSEs on your licensed server.



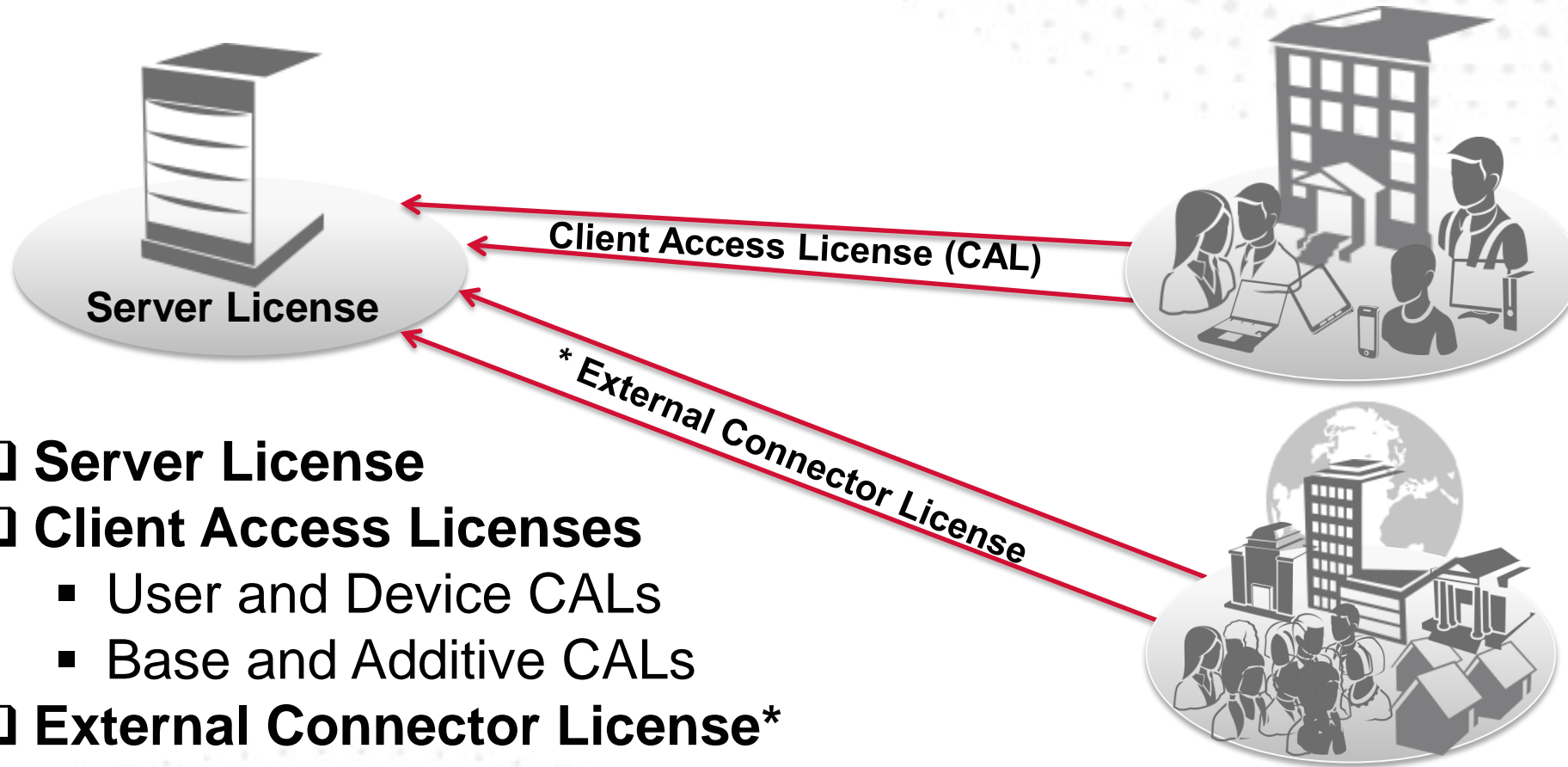
| Licensed Version/ Edition | Windows Server 2012 Standard |                            |
|---------------------------|------------------------------|----------------------------|
| Running Instance          | Standard Edition 2008 R2     | Enterprise Edition 2008 R2 |
|                           | Standard Edition 2008        | Enterprise Edition 2008    |
|                           | Windows Web Server 2008 R2   | Windows HPC Server 2008 R2 |

# Server Applications – Server/CAL Model

|  |   |
|--|---|
|  <b>Desktop Applications</b> – per Device<br>e.g. Office  |  <b>Management Servers</b> – per Mgmt. Lic<br>System Center              |
|  <b>Desktop Operating System</b> – per Device<br>Windows Pro  |  <b>Specialty Servers</b> – per Server<br>e.g. Windows Server Essentials |
|  <b>Server Operating System</b> – Srv Proc & CAL<br>Windows Srv   |  <b>Developer Tools</b> – per User<br>e.g. Visual Studio                 |
|   <b>Server Applications</b> – Server & CAL<br>e.g. Exchange Srv |  <b>Online Services</b> – per User/Device<br>e.g. Office 365             |
|  <b>Server Applications</b> – per Core<br>e.g. SQL/BizTalk  |  <b>Combined Models</b> – Suites<br>e.g. CIS Suite                       |

- ✓ Exchange Server
- ✓ SharePoint Server
- ✓ Lync Server
- ✓ ...

# Server Applications – Server/CAL Model



- Server License**
- Client Access Licenses**
  - User and Device CALs
  - Base and Additive CALs
- External Connector License\***

\* Depending on the product and the functionality being accessed, External User access is permitted under CALs, External Connector Licenses or the software license assigned to the Server.

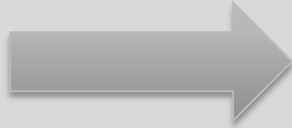
# Server Applications – General Terms

## □ Server License

### 1) Assign the License



Server License



Physical Server

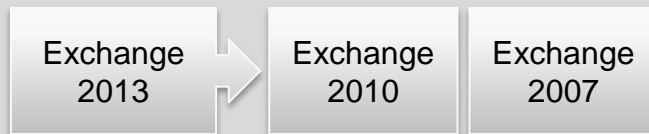
You must **assign** the license **to one server**. That server is the licensed server. You may not assign the same license to more than one server.

### 2) Use of the Software



For each license, you may use **one** Running Instance of server software on the Licensed Server in either **a Physical** or **Virtual** OSE.

### 3) Downgrade Right



Downgrade to any prior version of the same edition

Instead of using the licensed version, you may use a **prior version** of the software **on the licensed device**.

Note: Depending on the product, you may have additional use rights.  
i.e. Number of running instances or License Mobility  
=> Refer to the next few slides and/or the PUR

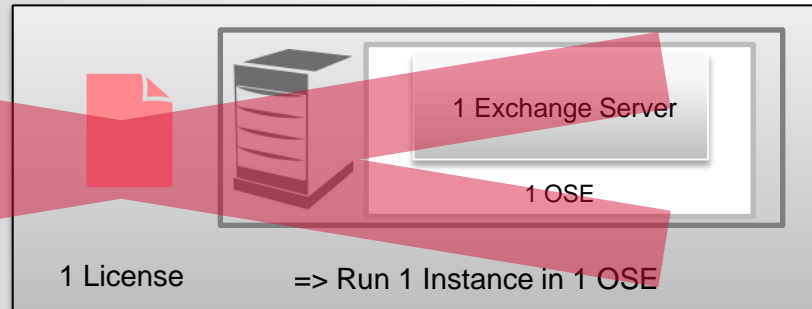
# Server Applications – Additional Terms for SQL Server

## Running Instances of the SQL Server Software

### General Terms for Server Applications

i.e. Exchange, SharePoint, ...

- 1 Server License
- Assign to a physical Server
- Run 1 Instance in 1 OSE

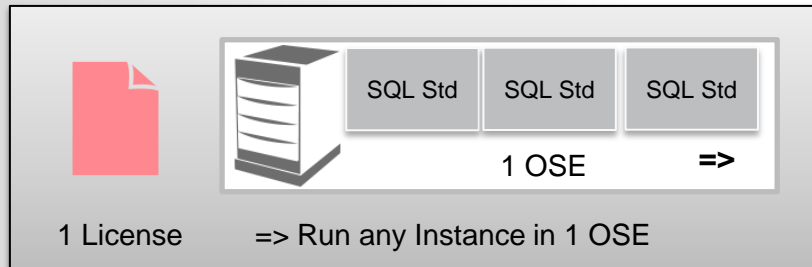


The right to run one instance of the server software as described on the slide above does not apply to SQL Server 2012 Licenses.

### Additional Terms for SQL Server (Srv/CAL Model)

**SQL Server Standard & BI**

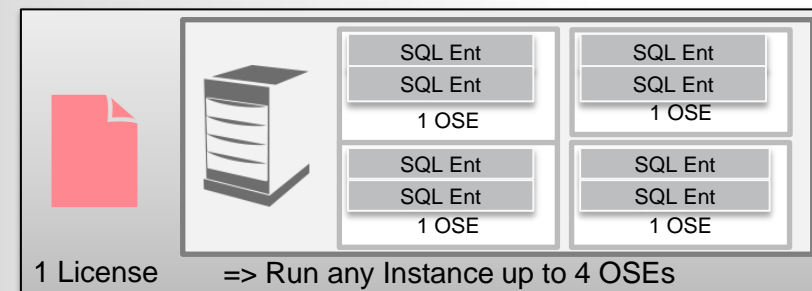
- 1 Server License
- Assign to a physical Server
- Run any Instances in 1 OSE



Instead, for each SQL Server Standard and BI license you assign, you may run any number of instances in one OSE on the licensed server...

### SQL Server Enterprise

- 1 Server License
- Assign to a physical Server
- Run any Instances in up to 4 OSE



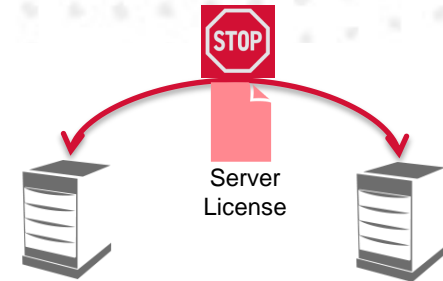
Or, for each SQL Server Enterprise license you assign, you may run any number of instances in up to four OSE at a time on the licensed server.



# Server Applications – Additional Terms: License Mobility

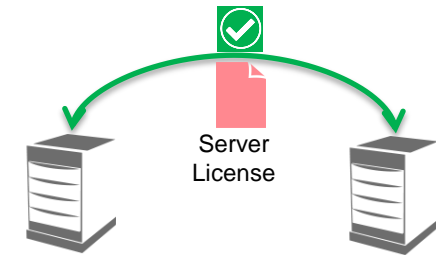
## 1) *Universal Terms: License Reassignment*

Generally, you may **not reassign** Server Application licenses on a short-term basis = **not within 90 days** of the last assignment



## 2) *General Terms: License Mobility within Server Farms*

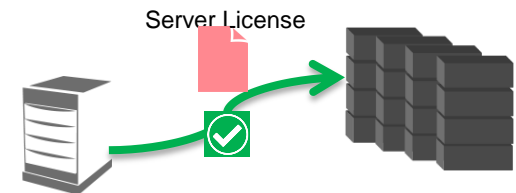
You may **reassign certain server licenses sooner** under «License Mobility within your Server Farms»  
i.e. Exchange, SharePoint, Lync Server ... (**SQL only with SA**)



## 3) *Software Assurance Benefit: License Mobility through SA*

You may move your licensed software from your servers **to a third party's shared servers.**

i.e. Exchange, SharePoint, Lync, SQL Server with active SA





# Server Applications – Additional Terms: License Mobility

## License Mobility within Server Farms (General Terms)

You may **reassign certain server licenses** (and external connector licenses) **to any of your servers located within the same server farm as often as needed.**

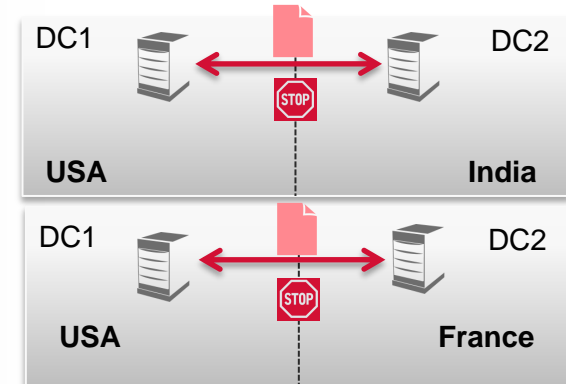
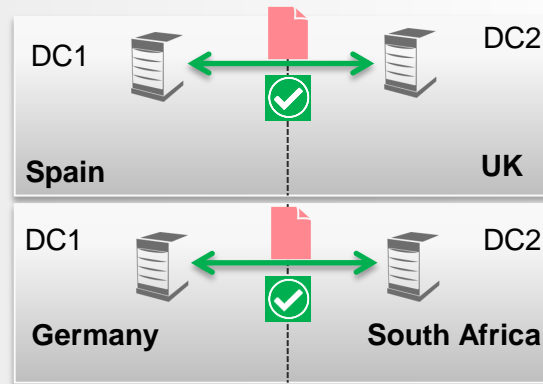
### Definition of Server Farm:

- ✓ A single datacenter or two datacenters
- ✓ each physically located not more than **4 time zones** away of the other and/or
- ✓ within the EU/EFTA

### Designated Products:

License Mobility applies only to products designated as having License Mobility in the PURs.

**And most of them only with active SA**



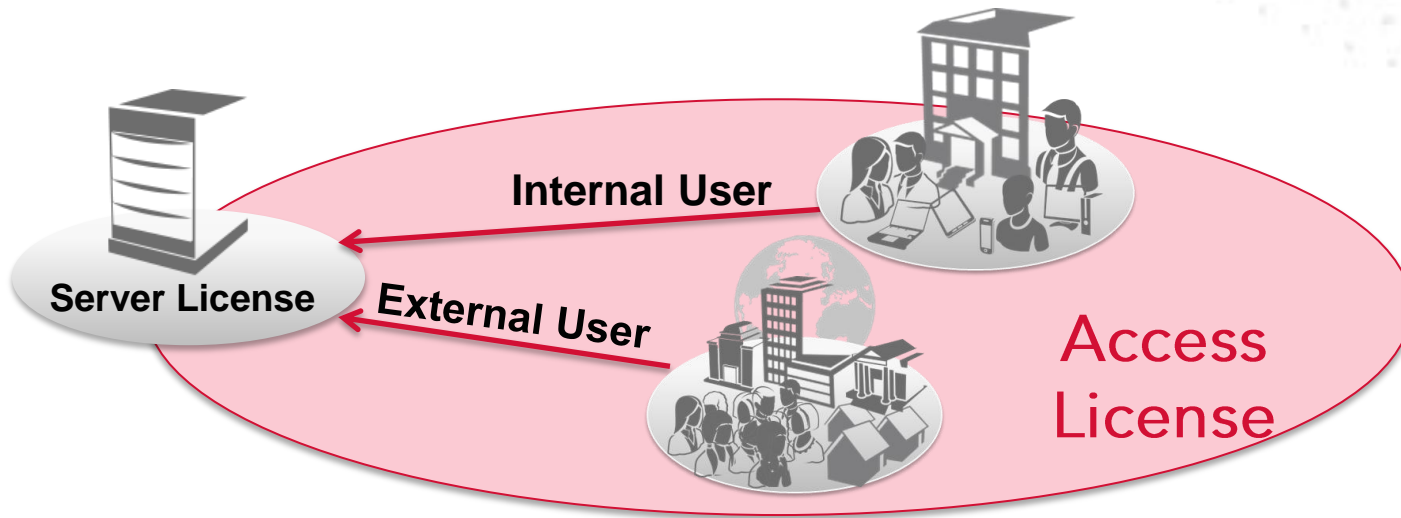
# Server Applications – License Mobility

| Product  | License Mobility             |
|--|------------------------------|
| Bing Maps Server                                 | Yes                          |
| Bing Maps Server with Enhanced Content Pack      | Yes                          |
| Business Intelligence Appliance 2012             | No                           |
| Exchange Server 2007 Standard for Small Business | Yes                          |
| Exchange Server 2013 Enterprise                  | Yes<br>(only with active SA) |
| Exchange Server 2013 Standard                    | Yes<br>(only with active SA) |
| Forefront Identity Manager 2010 R2               | Yes                          |
| Forefront Unified Access Gateway 2010            | Yes                          |
| Lync Server 2013                                 | Yes<br>(only with active SA) |
| Microsoft Dynamics AX 2012 R2                    | Yes<br>(only with active SA) |
| Microsoft Dynamics CRM 2011 Server               | Yes                          |

| Product   | License Mobility             |
|---|------------------------------|
| Microsoft Office Audit and Control Mgmt Server 2013 | Yes<br>(only with active SA) |
| Project Server 2013                                 | Yes<br>(only with active SA) |
| SharePoint Server 2013                              | Yes<br>(only with active SA) |
| SQL Server 2008 R2 Small Business                   | No                           |
| SQL Server 2012 Business Intelligence               | Yes<br>(only with active SA) |
| SQL Server 2012 Standard                            | Yes<br>(only with active SA) |
| VS Team Foundation Server 2012 with SQL 2012 Tech   | Yes<br>(only with active SA) |
| Windows MultiPoint Server 2012 Premium              | No                           |
| Windows MultiPoint Server 2012 Standard             | No                           |
| Windows Small Business Server (SBS) 2011 Standard   | No                           |
| Win Small Business Server (SBS) 2011 Premium Add-on | No                           |

List is based on PUR January 2013

# Server Applications – Access Licenses



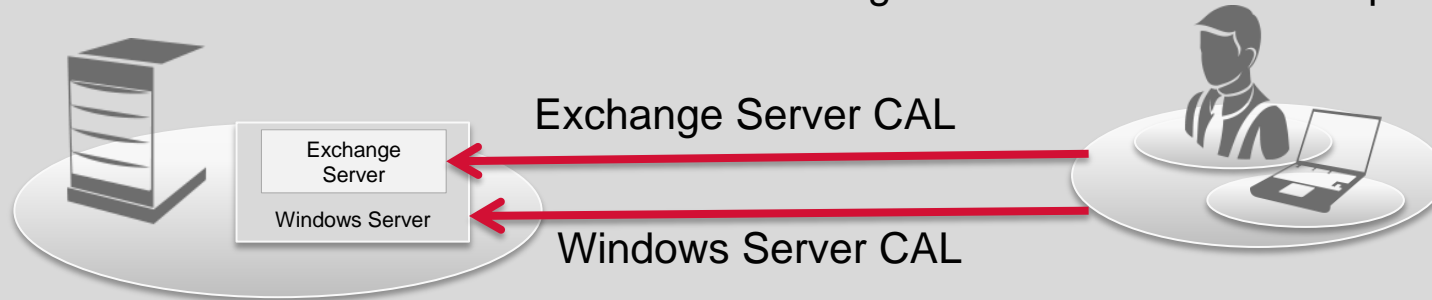
*“An Access License gives a physical User or physical Device the right to access and use a Microsoft Server product for which you have a license. An Access License is not a physical piece of software installed on the user’s machine, it is instead a grant to access the server.”*

|                            |              |
|----------------------------|--------------|
| CAL                        | User CAL     |
|                            | Device CAL   |
| Client Access License      | Base CAL     |
|                            | Additive CAL |
| Types of Access Licenses   | Base EC      |
|                            | Additive EC  |
| External Connector License |              |

# Server Applications – Client Access License (CAL)

## Client Access License

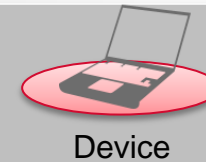
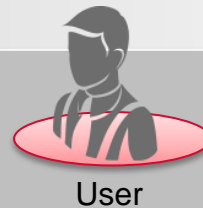
- Right to access to the corresponding Server Software



You must acquire and assign a CAL to each device or user that accesses your instances of the server software (**directly or indirectly**)

## Types of CALs

- User and Device CALs



- Base and Additive CALs

2) Additive CAL => additional functions

Lync Enterprise CAL

Lync Plus CAL

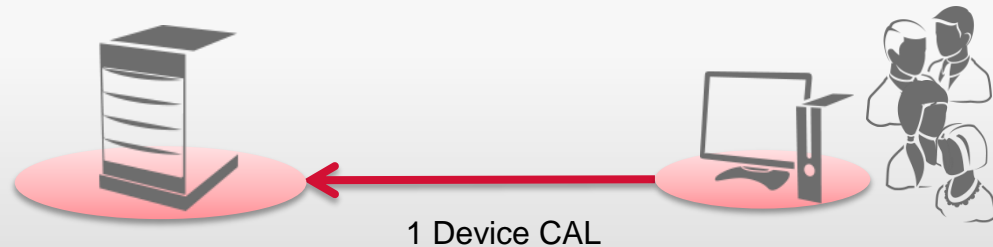
1) Base CAL => base functions

Lync Standard CAL

# Server Applications – Client Access License (CAL)

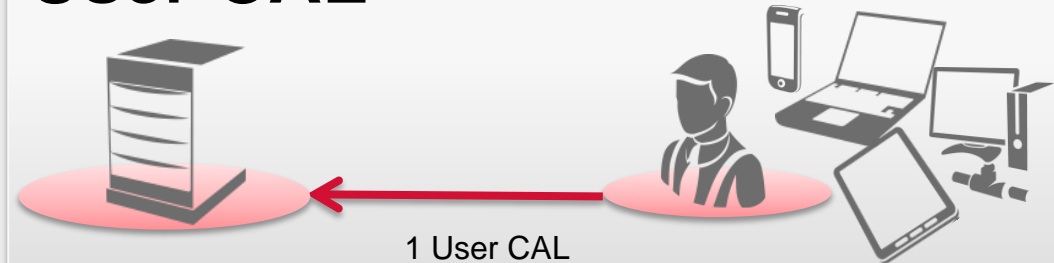
## User and Device CALs

### Device CAL



A **Device CAL** permits one device, used by any user, to access instances of the server software

### User CAL



A **User CAL** permits one user, using any device, to access instances of the server software

Note: You may use a combination of User and Device CALs

# Server Applications – Client Access License (CAL)

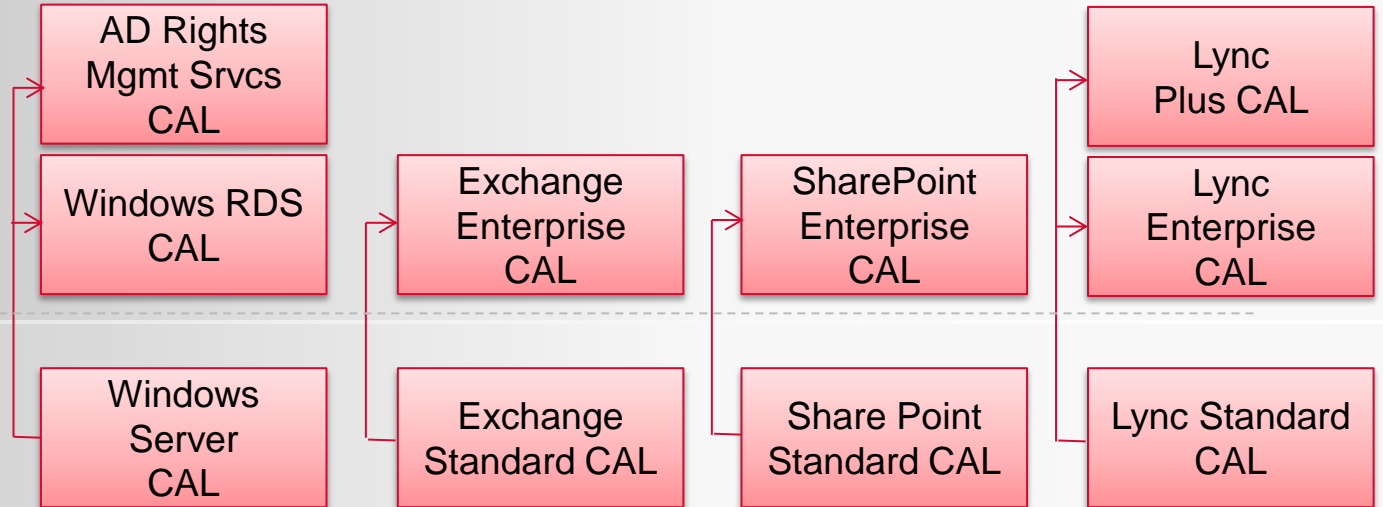
## Base and Additive CALs

### Additive CAL

Some Server software functionality also requires additive CALs.

### Base CAL

All server software access requires base CALs.





# Exchange Server 2010 – Base & Additive CAL

| Exchange Server Functions   | Base CAL<br>Standard CAL | Additive CAL<br>Enterprise CAL |
|---|--------------------------|--------------------------------|
| E-mail, Calendar, Contacts, and Tasks                               | Yes                      |                                |
| Outlook Web App (IE, Firefox, and Safari support)                   | Yes                      |                                |
| Exchange ActiveSync Mobile Access                                   | Yes                      |                                |
| Rich Outlook inbox experience, including enhanced Conversation View | Yes                      |                                |
| Role Based Administration Control capabilities                      | Yes                      |                                |
| Integration of IM, SMS, and RSS                                     | Yes                      |                                |
| Federated Calendar Sharing  | Yes                      |                                |
| Multi-Mailbox Search  | Yes                      |                                |
| Exchange ActiveSync Mobile Management Policies                      | Standard                 | Advanced                       |
| Journaling  | Per Database             | Per User/Distribution List     |
| Retention Policies  | Default                  | Custom                         |
| Voicemail with Unified Messaging                                    |                          | Yes                            |
| Legal Hold  |                          | Yes                            |
| Information Protection & Control (IPC)                              |                          | Yes                            |
| Integrated Archive  |                          | Requires Office 2010 Pro Plus  |
| Exchange Data Loss Prevention (2013)                                |                          | Requires active SA             |
| Exchange Online Protection (2013)                                   |                          | Requires active SA             |

Note: You may buy the Standard CAL standalone, but if you want to acquire any Enterprise features, you must purchase both the Standard and the Enterprise CALs.



# SharePoint Server 2010 – Base & Additive CAL

| Functions SharePoint | Base CAL<br>Standard CAL | Additive CAL<br>Enterprise CAL   |
|----------------------|--------------------------|--|
| Sites                | Yes                      |  |
| Communities          | Yes                      |  |
| Content              | Yes                      |  |
| Composites           | Limited                  | Yes (includes Access Services and InfoPath Services)                         |
| Search (FAST)        | Basic (without FAST)     | Advanced (includes client access rights for FAST Search Server 2010)         |
| Insights             |                          | Yes (includes PerformancePoint Services, Excel Services, and Visio Services) |

Note: You may buy the Standard CAL standalone, but if you want to acquire any Enterprise features, you must purchase both the Standard and the Enterprise CALs.

# Lync Server 2010 – Base & Additive CAL

| Functions Lync Server                                 | Base CAL Standard CAL | Additive CAL Enterprise CAL | Additive CAL Plus CAL |
|---|-----------------------|-----------------------------|-----------------------|
| PC-to-PC IM, File Transfer, Audio, Video              | Yes                   |                             |                       |
| IM/Presence from Office Applications                  | Yes                   |                             |                       |
| Rich Presence, Persistent Group Chat, Skill Search    | Yes                   |                             |                       |
| Conference Attendee&Presenter Experience              | Yes                   |                             |                       |
| Schedule Web conferences                              |                       | Yes                         |                       |
| Initiate ad-hoc multi-party video conference          |                       | Yes                         |                       |
| Initiate ad-hoc application Sharing/ white boarding   |                       | Yes                         |                       |
| Initiate/Schedule ad-hoc multi-party audio conference |                       | Yes                         | Yes                   |
| UC and PBX Call Control                               |                       |                             | Yes                   |
| Visual access to voicemail                            |                       |                             | Yes                   |
| Routing Rules, Delegation                             |                       |                             | Yes                   |
| Dial out to and receive calls from PSTN               |                       |                             | Yes                   |
| E911 capabilities                                     |                       |                             | Yes                   |
| Additional telephony features                         |                       |                             | Yes                   |

Note: You may buy the Standard CAL standalone, but if you want to acquire any Enterprise or Plus features ,you must purchase both the Standard and the Enterprise or/and Plus CALs.

# Core CAL vs Enterprise CAL Suite

## Microsoft® Enterprise CAL Suite

Windows Rights Mgmt. Server CAL

Lync Enterprise CAL

SharePoint Enterprise CAL

Exchange Enterprise CAL

SC Service Manager CML

SC Data Protection Manager CML

SC Operation Manager CML

Exchange Online Archiving

## Microsoft® Core CAL Suite

Windows Server CAL

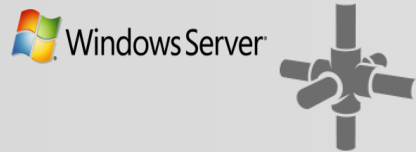
Lync Standard CAL

SharePoint Standard CAL

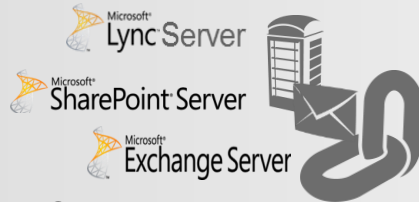
Exchange Standard CAL

SC Configuration Manager CML

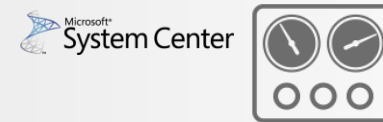
SC Endpoint Protection



**Infrastructure**



**Collaboration**



**Management**



**Security**

software**ONE**  
The Software Licensing Experts™

# Server Applications – External User Access

## Requirements for External User access vary by product.

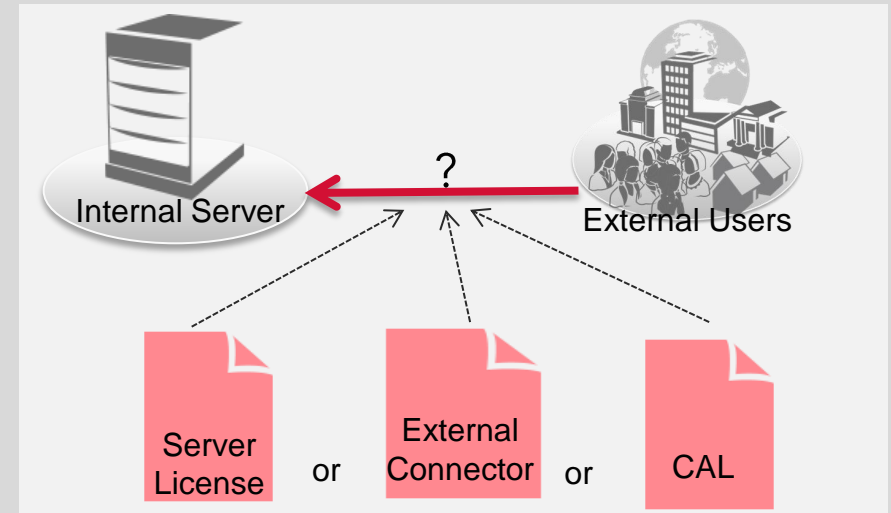
Depending on the product and the functionality being accessed, External User access is permitted under

- **CALs,**
- **External Connector Licenses, or**
- **the software license assigned to the Server.**

For example:

SharePoint or Lync Server = licensed with Server License

Dynamics CRM = licensed with CAL or External Connector License



# Server Applications – External Connector Availability

| Product   | External User Access   |
|---|--|
| Bing Maps Server  | CALs   |
| Bing Maps Server with Enhanced Content Pack               | CALs   |
| Business Intelligence Appliance 2012                      | CALs   |
| Exchange Server 2007 Standard for Small Business          | CALs   |
| Exchange Server 2013 Enterprise                           | Licensed with Server (Access to Additional Functionality requires both Base and Additive CALs) |
| Exchange Server 2013 Standard                             | Licensed with Server (Access to Additional Functionality requires both Base and Additive CALs) |
| Forefront Identity Manager 2010 R2                        | CALs or External Connector License   |
| Forefront Unified Access Gateway 2010                     | CALs or External Connector License   |
| Lync Server 2013  | Licensed with Server   |
| Microsoft Dynamics AX 2012                                | Licensed with Server   |
| Microsoft Dynamics CRM 2011 Server                        | CALs or External Connector License   |
| Microsoft Office Audit and Control Management Server 2013 | Licensed with Server   |

List based on PUR April 2013

| Product   | External User Access |
|---|----------------------|
| Project Server 2013   | CALs                 |
| SharePoint Server 2013  | Licensed with Server |
| SQL Server 2008 R2 Small Business   | CALs                 |
| SQL Server 2012 Business Intelligence*                                    | CALs                 |
| SQL Server 2012 Standard*   | CALs                 |
| Visual Studio Team Foundation Server 2012 with SQL Server 2012 Technology | CALs**               |
| Windows MultiPoint Server 2012 Premium                                    | CALs                 |
| Windows MultiPoint Server 2012 Standard                                   | CALs                 |
| Windows Small Business Server (SBS) 2011 Standard                         | CALs                 |
| Windows Small Business Server (SBS) 2011 Premium Add-on                   | CALs                 |

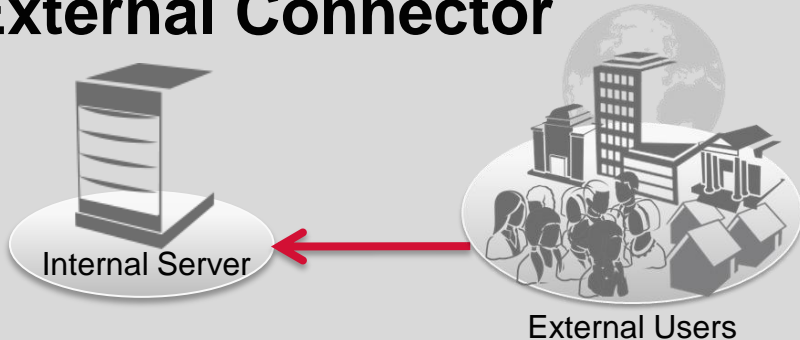
\*or switch to Core-Based License Model

\*\*The External Connector License was discontinued for Visual Studio Team Foundation Server 2012 with release of PURs April 2013.



# Server Applications – External Connector

## External Connector



- An External Connector grants access to the server by an unlimited number of external users, such as business partners, suppliers, customers, retirees and alumni. It is licensed per server.

### External User:

- A person who is not an employee or similar personnel of the company, such as a business partner, suppliers, customers, retirees, alumni or customer. With this license you do not need to buy individual CALs.

## Types of External Connectors (EC)

### ➤ **Base and Additive External Connector (EC)**

2) Additive EC => additional functions

Forefront Identity Manager 2010 R2  
EC Enterprise

Forefront Identity Manager 2010 R2  
EC Plus

1) Base EC => base functions

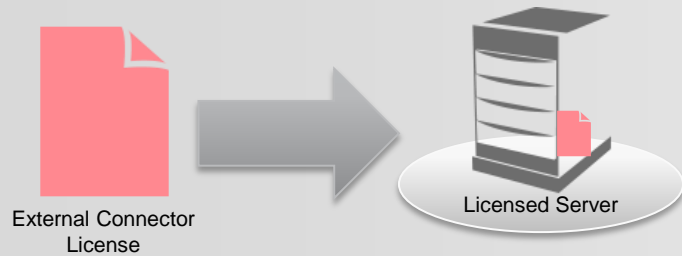
Forefront Identity Manager 2010 R2  
External Connector Standard

All server software access under this license type requires base licenses. Some server software functionality also requires additive licenses.



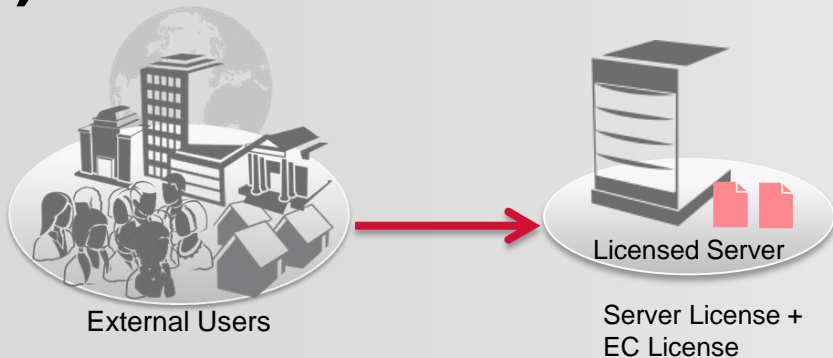
# Server/CAL Model – External Connector License

## 1) Assign the License



You must **assign** each external connector license to a server that is licensed to run the server software.

## 2) Access the Server















Each EC license assigned to a server permits **any number of external users to access** instances of the server software on that licensed server.

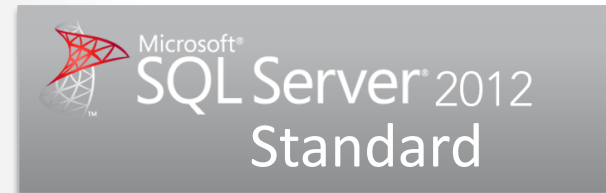
(You do not need CALs for those users)

Note: Instead of licensing the access for external User with the EC license you could license this with CALs.  
(depending what option is less expensive)

# SQL Server 2012 - Server/CAL & Core-Based

|  |   |
|--|---|
|  <b>Desktop Applications</b> – per Device<br>e.g. Office  |  <b>Management Servers</b> – per Mgmt. Lic<br>System Center              |
|  <b>Desktop Operating System</b> – per Device<br>Windows Pro  |  <b>Specialty Servers</b> – per Server<br>e.g. Windows Server Essentials |
|  <b>Server Operating System</b> – Srv Proc & CAL<br>Windows Srv   |  <b>Developer Tools</b> – per User<br>e.g. Visual Studio                 |
|   <b>Server Applications</b> – Server & CAL<br>e.g. Exchange Srv |  <b>Online Services</b> – per User/Device<br>e.g. Office 365             |
|   <b>Server Applications</b> – per Core<br>e.g. SQL/BizTalk      |  <b>Combined Models</b> – Suites<br>e.g. CIS Suite                       |

# Main Editions – Comparison SQL 2008 R2 vs 2012



# Overview – Editions



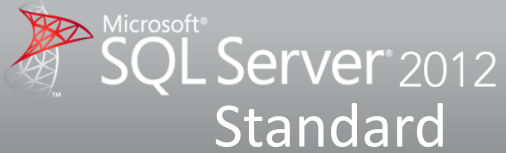
! Next to the three main editions, SQL Server 2012 will continue to be available in ...

- **Developer Edition**
- **Express Edition**
- **Compact Edition**
- **Web Edition** (offered in SPLA model only)

! ▪ **Datacenter Edition** is being **retired** with all capabilities now available in Enterprise

! ▪ **Workgroup** and **Small Business Editions** are also being **retired**.

# Overview – Main Editions



Microsoft®  
SQL Server® 2012  
Standard

**Standard** continues to offer basic database, reporting and analytics capabilities



Microsoft®  
SQL Server® 2012  
Business Intelligence

**Business Intelligence** for Premium Self-Service and Corporate Business Intelligence

- Rapid data discovery with **Power View**
- Corporate and scalable reporting and analytics
- **Data Quality Services** and **Master Data Services**
- Includes Standard edition's capabilities



Microsoft®  
SQL Server® 2012  
Enterprise

**Enterprise** for Mission Critical & Applications Data Warehousing

- Advanced high availability with **Always On**
- High performance data warehousing with **ColumnStore**
- Maximum virtualization (with Software Assurance)
- Includes Business Intelligence edition's capabilities



# Main Editions - Feature comparison

| SQL Server 2012   | Enterprise          | BI                                       | Standard |
|---|---------------------|--|----------|
| Maximum Number of Cores   | OS Max <sup>1</sup> | 16 Cores-DB<br>OS Max-AS&RS <sup>2</sup> | 16 Cores |
| Basic OLTP  | ✓                   | ✓  | ✓        |
| Programmability (T-SQL, Data Types, File Table)   | ✓                   | ✓  | ✓        |
| Manageability (SQL Server Management Studio, Policy-based Management)   | ✓                   | ✓  | ✓        |
| Basic High Availability <sup>3</sup>  | ✓                   | ✓  | ✓        |
| Basic Corporate BI (Reporting, Analytics, Multidimensional Semantic Model, Data Mining)                         | ✓                   | ✓  | ✓        |
| Basic Data Integration (Built-in Data Connectors, Designer Transforms)  | ✓                   | ✓  | ✓        |
| Self-Service Business Intelligence (Alerting, Power View, PowerPivot for SharePoint Server) <sup>4</sup>        | ✓                   | ✓  |          |
| Advanced Corporate BI (Tabular BI Semantic Model, Advanced Analytics and Reporting, VertiPaq™ In-Memory Engine) | ✓                   | ✓  |          |
| Advanced Data Integration (Fuzzy Grouping and Lookup, Change Data Capture, Advanced Data Mining)                | ✓                   | ✓  |          |
| Enterprise Data Management (Data Quality Services, Master Data Services)  | ✓                   | ✓  |          |
| Advanced Security (SQL Server Audit, Transparent Data Encryption)   | ✓                   |  |          |
| Data Warehousing (ColumnStore Index, Compression, Partitioning)   | ✓                   |  |          |
| Advanced High Availability (Multiple, Active Secondaries; Multi-site, Geo-Clustering) <sup>3</sup>              | ✓                   |  |          |

1) Existing SQL Srv Enterprise licenses in the Server + CAL model upgraded to SQL 2012 will be limited to server deployment with 20 cores or less

2) Analysis Services & Reporting Services

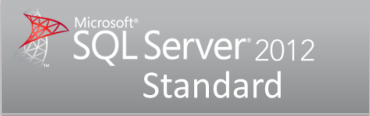








3) includes log shipping, database mirroring, server core support and two-node Failover Clustering



# Key capacity limits across SQL Server 2012 Editions

| SQL Server 2012 Edition        | Database Engine (DBE) Capacity Limits |                              |             | Analysis Services (AS) and Reporting Services (RS) Capacity Limits |                             |                                  |
|--------------------------------|---------------------------------------|------------------------------|-------------|--|-----------------------------|----------------------------------|
|                                | Max Commute Capacity                  | Max Memory Utilization - DBE | Max DB Size | Max Compute Capacity   | Max Memory Utilization - AS | Max Memory Utilization - RS      |
| <b>Enterprise Per Core</b>     | OS Max                                | OS Max                       | 524 PB      | OS Max   | OS Max                      | OS Max                           |
| <b>Enterprise Server + CAL</b> | 20 Core Limit                         | OS Max                       | 524 PB      | 20 Core Limit  | OS Max                      | OS Max                           |
| <b>Business Intelligence</b>   | Lesser of 4 sockets or 16 cores       | 64 GB                        | 524 PB      | OS Max   | OS Max                      | OS Max                           |
| <b>Standard</b>                | Lesser of 4 sockets or 16 cores       | 64 GB                        | 524 PB      | Lesser of 4 sockets or 16 cores                                    | 64 GB                       | 64 GB                            |
| <b>Web</b>                     | Lesser of 4 sockets or 16 cores       | 64 GB                        | 524 PB      | Lesser of 4 sockets or 16 cores                                    | N/A                         | 64 GB                            |
| <b>Express</b>                 | Lesser of 1 socket or 4cores          | 1 GB                         | 10 GB       | Lesser of 1 socket or 4 cores                                      | N/A                         | 4 GB (Advanced Services Edition) |

# SQL Server 2012 - Two Licensing Models

| Main Editions  | Server + CAL  | Core-based  |
|--|---|---|
| Description  | Based on number of Users or Devices   | Based on computing power  |
|   |    |  |
|   |    |   |
|  | «Legacy» SQL Server EE<br>  |  |



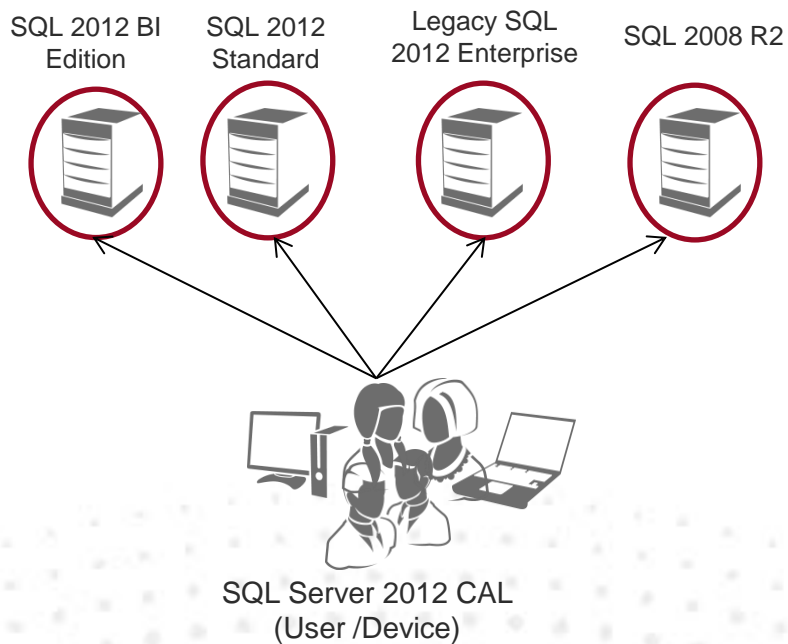
**Legacy SQL EE Server 2012:** Restricted to server with no more than 20 cores, New purchases (Lic /SA, Lic) not anymore available since 1 July 2012 or after expiration of EA/EAP with EE Server post 30 June 2012.

# SQL 2012 in Physical Environment – Server/CAL Model

## How to license SQL Server in a Physical Environment?

### Available Editions Server CAL Model

- SQL 2012 Business Intelligence Edition (BI)
- SQL 2012 Standard Edition (SE)
- Legacy SQL 2012 Enterprise Edition (EE)



### Server CAL Model

**Server**    License each individual server with a SQL Server License

**CAL**    License each user or device accessing a SQL server with a SQL CAL. SQL Server 2012 CALs can be used to access any SQL Server database licensed per server, regardless of platform or edition.

The SQL Server 2012 CAL price will increase by about 27%.



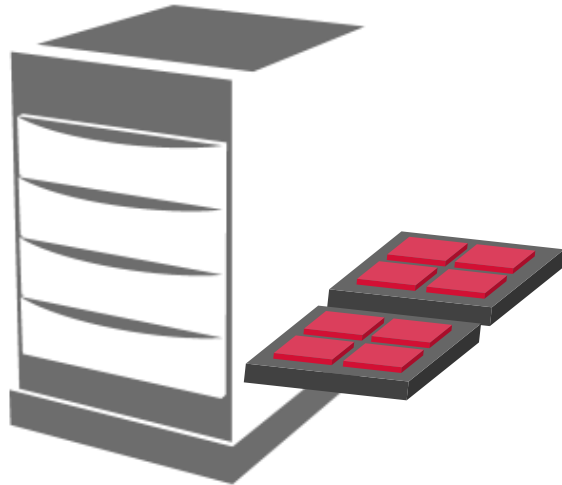
**Legacy SQL EE Server 2012:** Restricted to server with no more than 20 cores, New purchases (Lic/SA & Lic) not anymore available since 01 July 2012 or expiration of EA/EAP with EE Server post 30 June 2012.

# SQL 2012 in Physical Environment – Core-based Model

## How to license SQL Server in a Physical Environment?

Available Editions Core-based Model




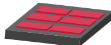
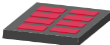
- SQL 2012 Standard Edition (SE)
- SQL 2012 Enterprise Edition (EE)



2 Quad-Core Processors  
= 8 Core licenses required

### Core-based Model

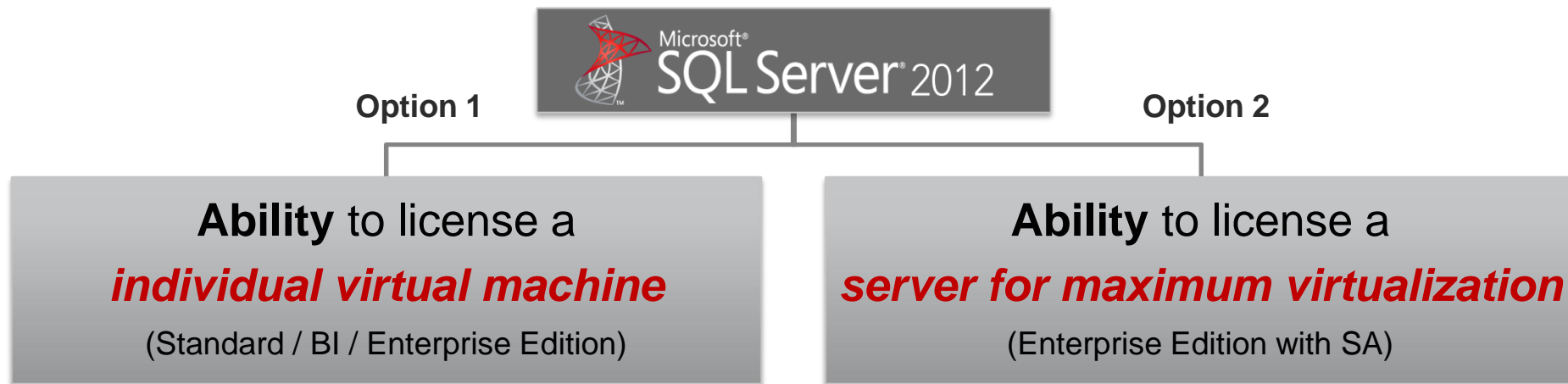
- Core
- License all of the physical cores on the hardware.
  - A minimum of 4 core licenses are required per physical processor

|                                 |  |  |  |  |  |
|---------------------------------|---|---|---|---|---|
| Physical Cores in the Processor | 1   | 2   | 4   | 6   | 8   |
| Core License required           | 4   | 4   | 4   | 6   | 8   |

# Licensing – Options for Licensing in Virtual Environments

## «Cloud-optimized licensing»

The licensing options for **SQL 2012** provide more **flexibility** by using in **virtual environments**



**Flexibility with License Mobility** to move the licensed VMs from server to server or to hosters or the cloud by covering with **Software Assurance**

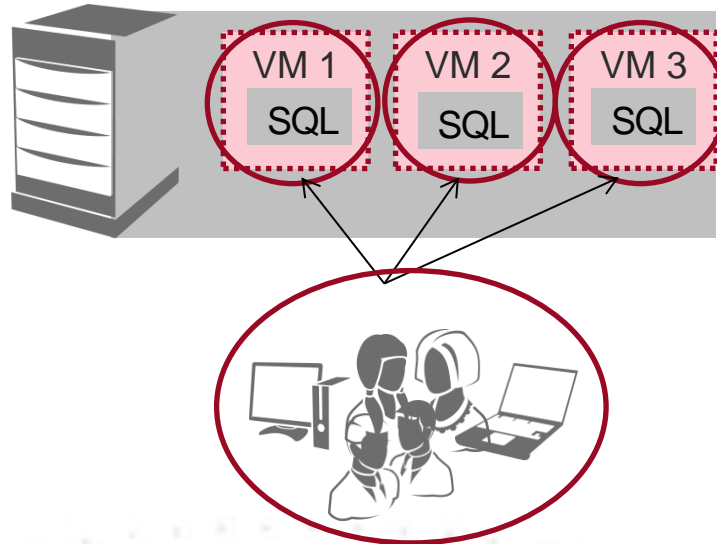
# SQL Server 2012 in Virtual Environment – Server/CAL Model

## How to license SQL Server in a Virtual Environment?

Available Editions Server CAL Model

1) Individual Virtual Machine

- SQL 2012 Business Intelligence Edition (BI)
- SQL 2012 Standard Edition (SE)
- Legacy SQL 2012 Enterprise Edition (EE) !



SQL Server 2012 CAL (User /Device)

### Server CAL Model

Server BI – 1 License = 1 VM  
SE – 1 License = 1 VM  
Legacy EE – 1 License = 4 VM

! Each licensed VM that is covered with Software Assurance can be moved frequently within a server farm or to a third party hoster or cloud services provider

CAL License each user or device accessing a SQL server with a SQL CAL.



**Legacy SQL EE Server 2012:** Restricted to server with no more than 20 cores, New purchases (Lic/SA & Lic) not anymore available since 01 July 2012 or expiration of EA/EAP with EE Server post 30 June 2012.

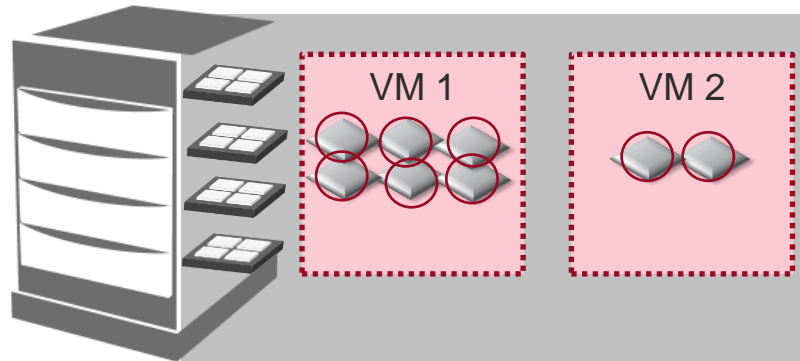


# SQL Server 2012 in Virtual Environment – Core-based Model

## How to license SQL Server in a Virtual Environment?

Available Editions Core-based Model  
1) Individual Virtual Machine

- SQL 2012 Standard Edition (SE)
- SQL 2012 Enterprise Edition (EE)



VM1 = 6 virtual cores = 6 Core licenses required  
VM2 = 2 virtual cores = 4 Core licenses required

### Core-based Model

- Core
- License the virtual cores in each virtual machine
  - There is a minimum of 4 core licenses required for each virtual machine

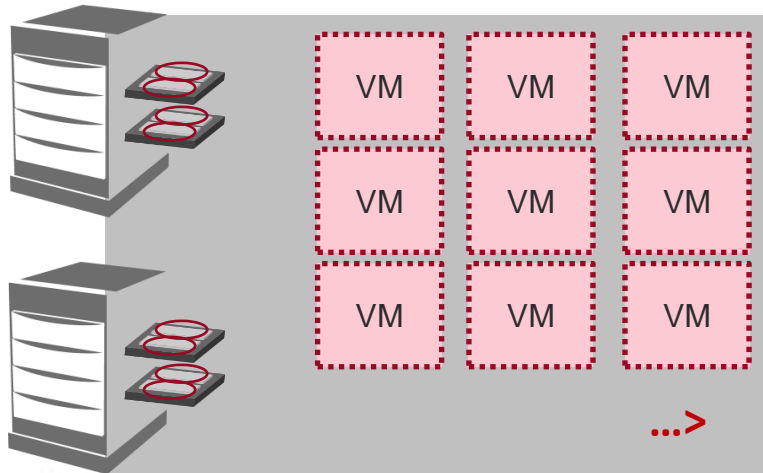
Each licensed VM that is covered with Software Assurance can be moved frequently within a server farm or to a third party hoster or cloud services provider without buying additional SQL Server licenses

# SQL Server 2012 in Virtual Environment – Core-based Model

## How to license SQL Server in a Virtual Environment?

Available Editions Core-based Model  
2) High Density Virtualization

- SQL 2012 Enterprise Edition (EE) with Software Assurance



4 Dual-Core-Processors = 8 Cores  
= Unlimited number of VMs if licensed with SA

### Server CAL Model

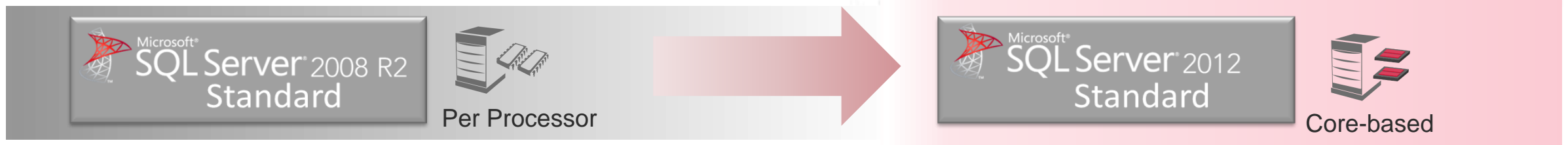
- Core
- License all the physical cores on the server (or server farm) with Enterprise Edition core licenses and Software Assurance
  - Deploy an unlimited number of VMs

# Transition to the New Licensing Models





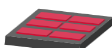





! **Legacy SQL EE Server 2012:** Restricted to server with no more than 20 cores, New purchases (Lic/SA & Lic) not anymore available since 01 July 2012 or expiration of EA/EAP with EE Server post 30 June 2012.

# Transition: Standard per Processor to Standard Core-based



## SQL Standard Processor licenses under SA will be exchanged ...

- For a minimum of 4 core licenses per processor or
- For the actual number of cores in use

| Exchange                        |  |      |      |       |  |
|---------------------------------|---|---|---|---|---|
| Physical cores in the processor | 2   | 4   | 6   | 8   | 10  |
| Cores Granted                   | 4   | 4  | 6  | 8  | 10  |

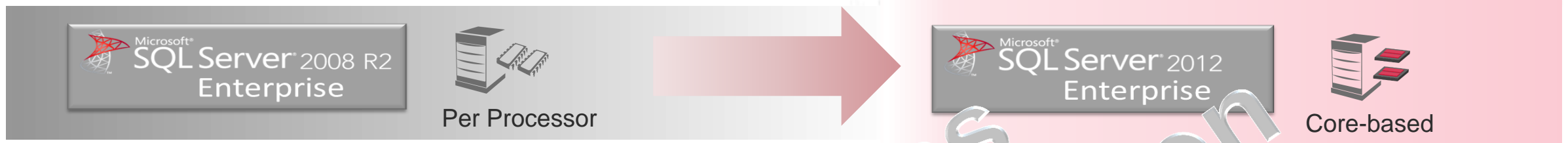


You should do a **self-inventory** of systems currently running SQL Server and **document** the number of cores to receive the appropriate number of core licenses.



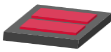
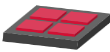
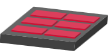
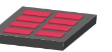




If you do not perform the self-inventory, you will receive **4 core** licenses for each Standard processor license.

# Transition: Enterprise per Proc to Enterprise Core-based



## SQL Enterprise Processor licenses under SA will be exchanged ...

- For a minimum of 4 core licenses per processor
- For the actual number of cores in use

| Exchange                        |  |      |      |      |  |
|---------------------------------|---|---|---|---|---|
| Physical cores in the processor | 2   | 4   | 6   | 8   | 10  |
| Cores granted                   | 4   |  4 |  4 |  8 | 10  |

You should do a **self-inventory** of systems currently running SQL Server and **document** the number of cores to receive the appropriate number of core licenses.

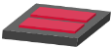
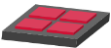



If you do not perform the self-inventory, you will receive **4 core** licenses for each Standard processor license.

# Transition: Datacenter per Processor to Enterprise Core-based



## SQL Datacenter Processor licenses under SA will be exchanged to the Enterprise Edition ...

- For a minimum of 8 core licenses per processor or
- For the actual number of cores in use

| Exchange                        |  |  |  |  |  |
|---------------------------------|---|---|---|--|---|
| Physical cores in the processor | 2   | 4   | 6   | 8  | 10  |
| Cores granted                   | 8   | 8   | 8   | 8  | 10!   |



You should do a **self-inventory** of systems currently running SQL Server and **document** the number of cores to receive the appropriate number of core licenses.

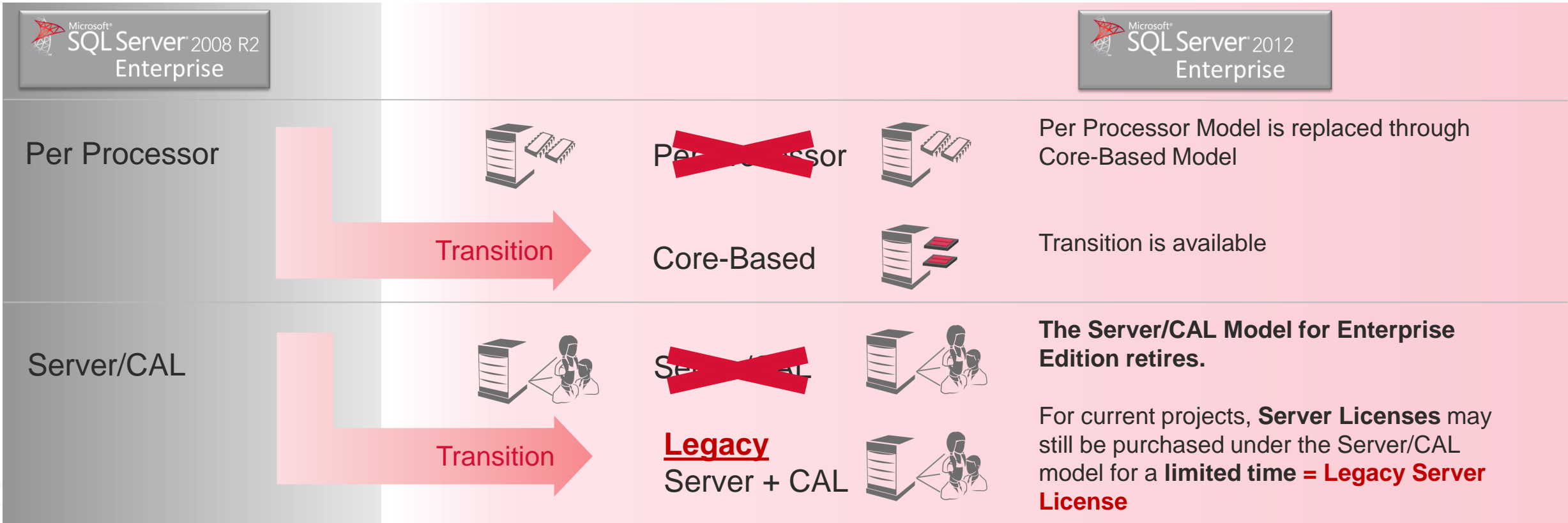


If you do not perform the self-inventory, you will receive 8 **core** licenses for each Standard processor license.



# «Legacy» SQL Enterprise Server License (Server/CAL model)

What is a «**Legacy**» SQL Server 2012 Enterprise Edition License?»



# «Legacy» SQL Enterprise Server License (Server/CAL model)

**Legacy** SQL Server 2012 Enterprise Server License



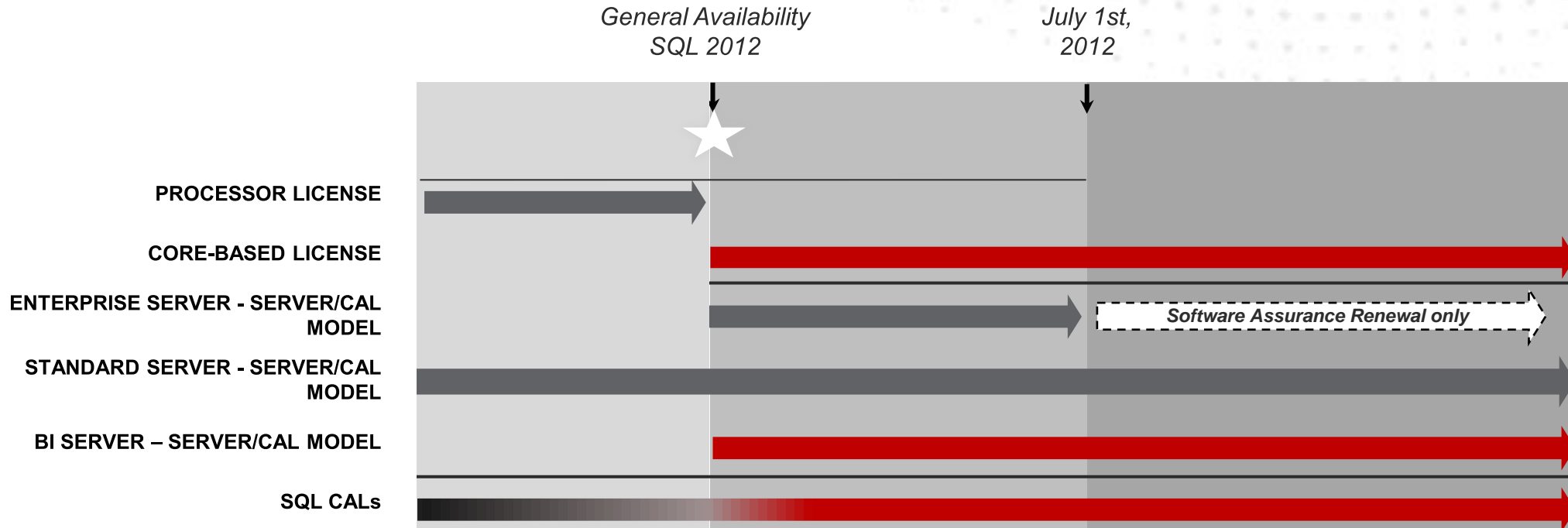
Server License for SQL Server 2012 **Enterprise Edition in the Server+CAL model** (with restrictions)

- New Licenses (Lic/SA) are **not available as of July 1<sup>st</sup> 2012** or after expiration of EA/EAP post-June 30th.



- **After June 30th 2012**, no new Licenses (Lic or Lic/SA) are available, but **SA can be maintained** (renewed) to provide access to future software updates.
- Needs of **new Enterprise Edition Licenses after June 2012** (respectively after EA/EAP renewal) require **switching to Core-based licenses or to BI Server licenses** for business intelligence functions.
- Legacy SQL Server 2012 Enterprise Edition Server deployments are **restricted to a 20-core** per server license maximum

# Timeline/Summary for Select/Select Plus



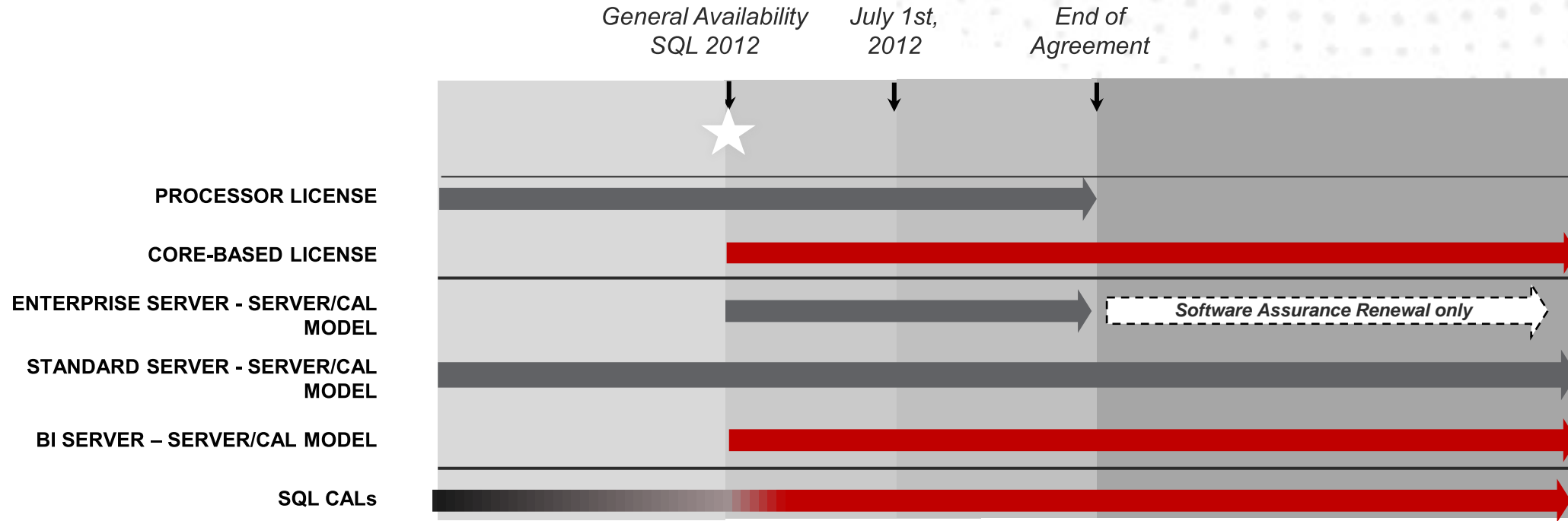
EE Server (Server/CAL model) removed from the price list

Processor licenses get transfer to Core-based licenses

SQL CAL price increase

20 Core limit for EE Server (Server/CAL model)

# Timeline/Summary for current EA/EAPs



EE Server (Server/CAL model) removed from the price list  
Processor licenses transfer to Core-based licenses  
SQL CAL price increase

20-Core limit for EE Server (Server/CAL model)

# System Center 2012 - Volume License Use Rights

**Desktop Applications** – per Device  
e.g. Office



**Desktop Operating System** – per Device  
Windows Pro



**Server Operating System** – Srv Proc & CAL  
Windows Srv



**Server Applications** – Server & CAL  
e.g. Exchange Srv



**Server Applications** – per Core  
e.g. SQL/BizTalk



**Management Servers** – per Mgmt. Lic  
System Center



**Specialty Servers** – per Server  
e.g. Windows Server Essentials



**Developer Tools** – per User  
e.g. Visual Studio



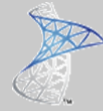
**Online Services** – per User/Device  
e.g. Office 365



**Combined Models** – Suites  
e.g. CIS Suite



# System Center 2012 – Product Overview



## Microsoft System Center 2012

### Capabilities

### Component

|                               |       |                         |
|-------------------------------|-------|-------------------------|
| Security                      | (NEW) | Endpoint Protection     |
| Application Insight           | NEW   | App Controller          |
| Service Management            |       | Service Manager         |
| IT Process Automation         |       | Orchestrator            |
| Virtual Workload Provisioning |       | Virtual Machine Manager |
| Backup&Recovery               |       | Data Protection Manager |
| Monitoring                    |       | Operations Manager      |
| Configuration                 |       | Configuration Manager   |

**System Center 2012** offers solutions for **managing** datacenter resources, private clouds and client devices



# Product Overview



## Description

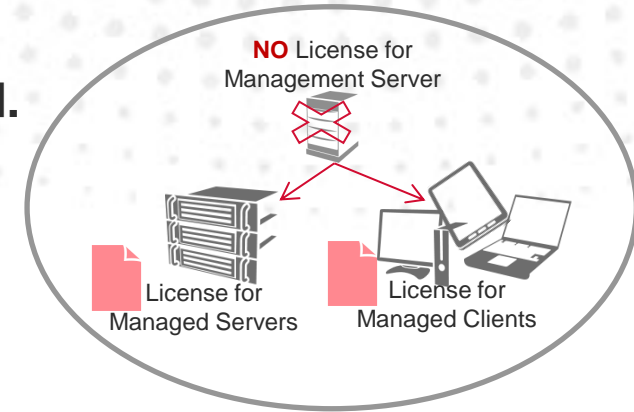
## Benefits

|                                |   |   |
|--------------------------------|---|---|
| <b>Configuration Manager</b>   | Comprehensive configuration management for the Microsoft platform   | Empower users with the devices and applications they need to be productive while maintaining corporate compliance and control |
| <b>Endpoint Protection</b>     | Industry-leading threat detection of malware and exploits as part of a unified infrastructure for managing client security and compliance | Simplify and improve endpoint protection.   |
| <b>Operations Manager</b>      | Deep application diagnostics and infrastructure monitoring with comprehensive view of your datacenter, private and public clouds          | Ensure the predictable performance and availability of vital applications   |
| <b>Data Protection Manager</b> | Unified data protection for Windows servers and clients   | Deliver scalable, manageable and cost-effective protection and restore scenarios from disk, tape and off-premise              |
| <b>Orchestrator</b>            | Orchestration, integration and automation of IT processes through the creation of runbooks  | Define and standardize best practices and improve operational efficiency  |
| <b>Virtual Machine Manager</b> | Virtual machine management and services deployment with support for multi-hypervisor environments   | Deliver a flexible and cost effective private cloud environment   |
| <b>AppController</b>           | Common self-service experience across private and public clouds   | Empower application owners to easily build, configure, deploy and manage new services   |
| <b>Service Manager</b>         | Flexible self-service experiences and standardized datacenter processes   | Integrate people, workflows and knowledge across enterprise infrastructure and applications                                   |

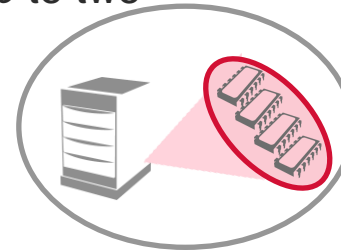
# Licensing –What's new? «Simplified Licensing»



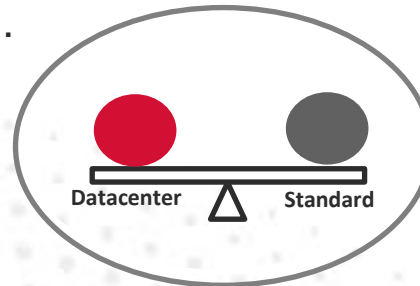
- ✓ **License required **only for endpoints** being managed.**  
No additional licenses needed for management server or SQL Server technology.



- ✓ **Consistent licensing model across editions.**  
Processor based license for Servers, covering up to two processors targeted at most common hardware configuration.



- ✓ **Same capabilities across editions differentiated by virtualization rights.**  
All server management licenses include the same components and the ability to manage any private cloud workload.



# Licensing – What's new? «Less Flexibility»



- **Server Management Licenses are no longer available.**

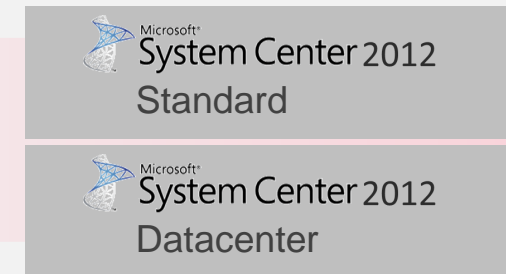
The single components can no longer be purchased separately and are only available as part of the System Center 2012 Management License Suites Standard and Datacenter.

## System Center Product Family (former Versions)



Single Server Management Licenses (ML)  
were available

## System Center 2012



Two Editions with all Components  
included

- **Software Assurance coverage is required on System Center products**

System Center MLs (Server and Clients) are only available with Software Assurance

Available License Types = License & Software Assurance, Software Assurance

# Licensing Overview



## Managed Server



Server Management Licenses (SML) are required for managed devices that run server Operation System Environments (OSEs) and are processor-based licenses.

### Available Edition:

- Datacenter SML
- Standard SML

## Managed Clients



Client Management Licenses (MLs) are required for managed devices that run non-server OSEs.

### Available Edition:

- Configuration Manager Client ML
- Endpoint Protection Subscription
- Client Management Suite ML

# Licensing Managed Servers

## Licensing Managed Servers



**Necessary Licenses = Server Management License (SML)**

# System Center – Two Editions are available



| Component               | Microsoft® System Center Datacenter | Microsoft® System Center Standard |
|-------------------------|-------------------------------------|-----------------------------------|
| Operations Manager      | ✓                                   | ✓                                 |
| Configuration Manager   | ✓                                   | ✓                                 |
| Data Protection Manager | ✓                                   | ✓                                 |
| Service Manager         | ✓                                   | ✓                                 |
| Virtual Machine Manager | ✓                                   | ✓                                 |
| Endpoint Protection     | ✓                                   | ✓                                 |
| Orchestrator            | ✓                                   | ✓                                 |
| App Controller          | ✓                                   | ✓                                 |

! Both SMLs include the same components

! Components are not available separately



# System Center – Different Virtualization Rights

| Use Rights  |  Microsoft®<br>System Center<br>Datacenter |  Microsoft®<br>System Center<br>Standard |
|---|---|---|
| Capability / Workload                             | All components with no workload restrictions  |   |
| Management Server                                 | Included  |   |
| SQL Server Technology                             | Included  |   |
| Number of physical processors covered per license | 2   | 2   |
| <b>Number of Managed OSEs per license</b>         | <b>Unlimited*</b>   | <b>2</b>  |

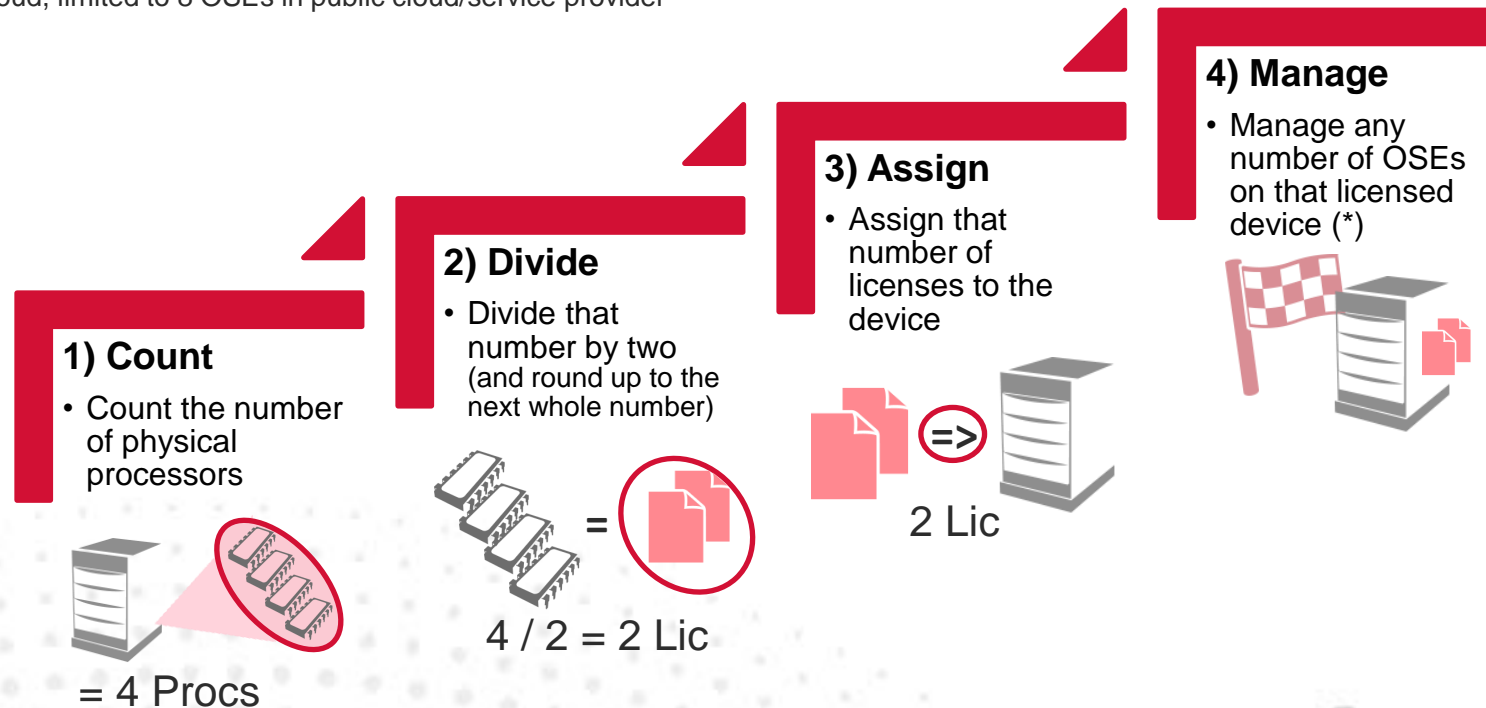
 \* Unlimited in private cloud, limited to 8 OSEs in public cloud/service provider

# System Center – Datacenter Edition

## Determining the Number of Licenses Needed: Datacenter Edition

| Microsoft System Center Datacenter        |            |
|---|------------|
| Number of Physical Processors per License | 2          |
| Number of Managed OSEs per License        | *Unlimited |

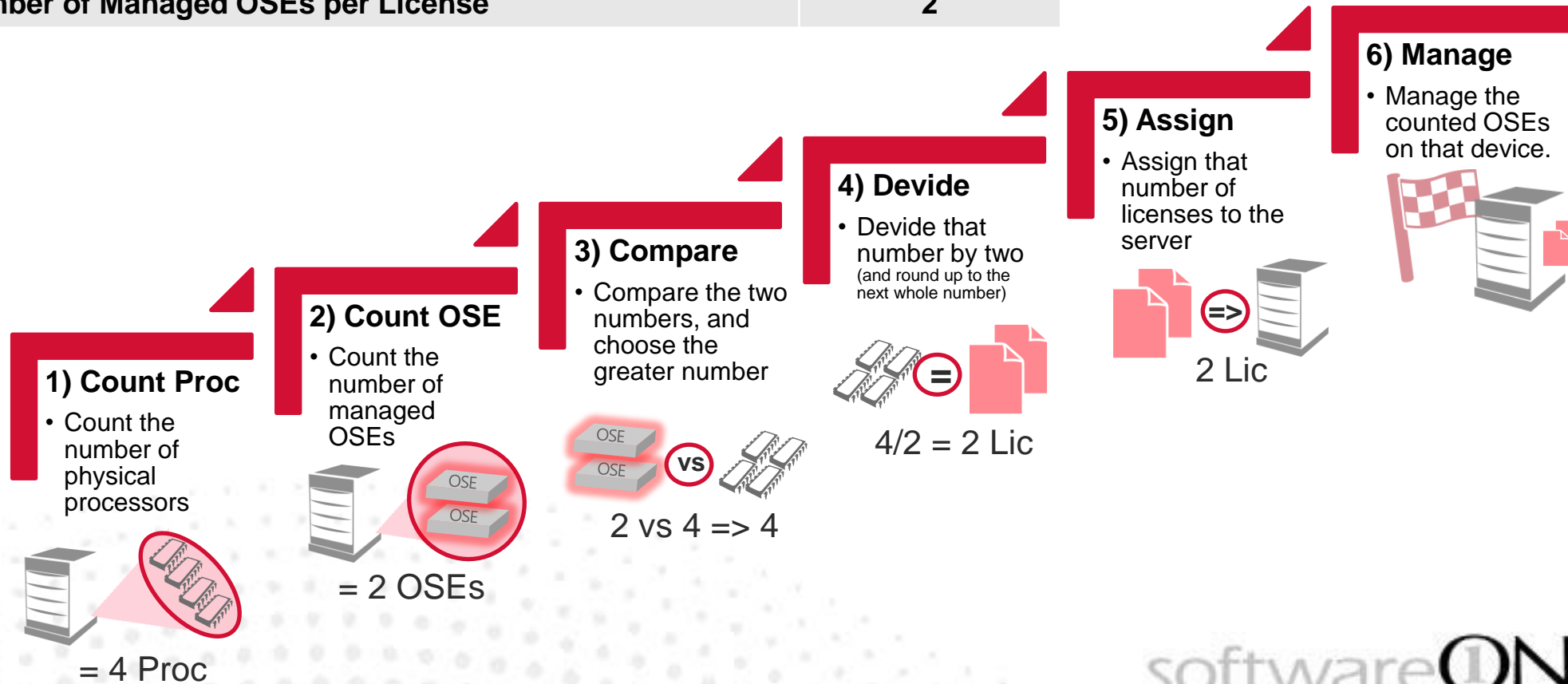
\* Unlimited in private cloud, limited to 8 OSEs in public cloud/service provider



# System Center – Standard Edition





## Determining the Number of Licenses Needed: Standard Edition

| Microsoft System Center Standard          |   |
|---|---|
| Number of Physical Processors per License | 2 |
| Number of Managed OSEs per License        | 2 |



# System Center – Number of Licenses

## Examples:

| Number of Processors  | Number of OSE Instances  | Datacenter SML Required   | Standard SML Required   |
|---|--|---|---|
|  |  |  |  |
| 1   | 1  | = 1   | = 1   |
| 4   | 1  | = 2   | = 2   |
| 2   | 3  | = 1   | = 2   |
| 4   | 8  | = 2   | = 4   |

Datacenter => Number of physical Processors divided 2

Standard => Greater Number of physical Processors & Managed OSE Instances divided 2

# Transitioning to the New Server Licensing Model

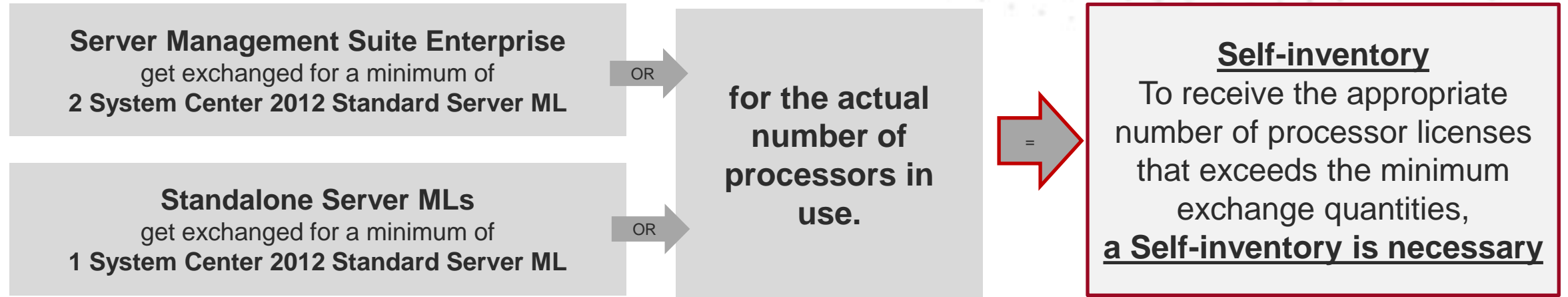
If an organization has SA coverage on its current System Center licenses at the time of System Center 2012 general availability, it will receive the following System Center 2012 SML grants at the ratios listed below:

| CURRENT LICENSE   | CONVERSION RATIO | NEW LICENSE(S)                        |
|---|------------------|---------------------------------------|
| Server Management Suite Datacenter (SMSD)   | 2:1*             | One System Center 2012 Datacenter SML |
| Server Management Suite Enterprise (SMSE)   | 1:2              | Two System Center 2012 Standard SMLs  |
| Any single Enterprise SML   | 1:1              | One System Center 2012 Standard SML   |
| Any single Standard SML   | 1:1              | One System Center 2012 Standard SML   |
| Any single Management Server license (with or without Microsoft SQL Server® technology) | 1:1              | One System Center 2012 Standard SML   |
| System Center Virtual Machine Manager   | 1:1              | One System Center 2012 Datacenter SML |

\*System Center 2012 Datacenter covers up to 2 processors per license whereas SMSD only covers 1 processor per license.

# System Center – Transition Rules

## Transitioning = Moving to Processor-based Licensing



### Self-inventory

- Documenting the affected environment at the end of the current agreement term.
- You should use an inventory tool and processes to accurately archive a time/date stamped inventory.

! If you do not perform the self-inventory, you will receive two Standard SMLs for each SMSE and one for each standalone Server ML.



# Management Servers – Additional Terms: License Mobility

| Product   | License Mobility |
|---|------------------|
| System Center 2012 Client Management Suite                    | No               |
| System Center 2012 Configuration Manager                      | No               |
| System Center 2012 Datacenter                                 | No               |
| System Center 2012 Standard                                   | No               |
| System Center Essentials 2010                                 | Yes              |
| System Center Essentials 2010 with SQL Server 2008 Technology | Yes              |

List is based on PUR April 2012

# Licensing Managed Clients



**Necessary Licenses = Client Management Licenses (MLs)**

# Licensing Managed Clients




Client Management Licenses (MLs) are required for managed devices that run non-server OSEs. There are three System Center 2012 Client ML offerings:

|  | <b>CONFIGURATION<br/>MANAGER<br/>CLIENT ML</b>  | <b>ENDPOINT<br/>PROTECTION<br/>SUBSCRIPTION</b>                       | <b>CLIENT<br/>MANAGEMENT<br/>SUITE CLIENT ML</b>  |
|--|---|---|---|
| Components Included                                | <ul style="list-style-type: none"><li>• Configuration Manager</li><li>• Virtual Machine Manager</li></ul> | <ul style="list-style-type: none"><li>• Endpoint Protection</li></ul> | <ul style="list-style-type: none"><li>• Service Manager</li><li>• Operations Manager</li><li>• Data Protection Manager</li><li>• Orchestrator</li></ul> |
| Included in Core Client Access License (CAL) Suite | ✓   | ✓   |   |
| Included in Enterprise CAL Suite                   | ✓   | ✓   | ✓   |

Client MLs are available on a per-OSE or per-user basis. Components included in the Client MLs are not available separately.

# Transitioning to New Client Licensing Model

If an organization has SA coverage on its current System Center licenses at the time of System Center 2012 general availability, it will receive the following System Center 2012 Server SML grants at the ratios listed below:

| CURRENT LICENSE                                       |  | NEW LICENSE   |
|---|--|---|
| System Center Operations Manager Client ML            |   | System Center 2012 Client Management Suite Client ML license for each individual qualifying product Client ML |
| System Center Data Protection Manager Client ML       |  |   |
| System Center Service Manager Client ML               |  |   |
| System Center Configuration Manager 2007 R3 Client ML |   | System Center 2012 Configuration Manager Client ML license  |
| System Center Virtual Machine Manager                 |  |   |
| Forefront® Endpoint Protection 2010 Subscription      |  | System Center 2012 Endpoint Protection Subscription   |

Note: There are no step-up paths for Client MLs.

# Online Services – Office 365 / Windows Intune

**Desktop Applications** – per Device  
e.g. Office



**Desktop Operating System** – per Device  
Windows Pro



**Server Operating System** – Srv Proc & CAL  
Windows Srv



**Server Applications** – Server & CAL  
e.g. Exchange Srv



**Server Applications** – per Core  
e.g. SQL/BizTalk



**Management Servers** – per Mgmt. Lic  
System Center



**Specialty Servers** – per Server  
e.g. Windows Server Essentials



**Developer Tools** – per User  
e.g. Visual Studio



**Online Services** – per User/Device  
e.g. Office 365



**Combined Models** – Suites  
e.g. CIS Suite



- ✓ Office 365
- ✓ Windows Intune
- ✓ ...



# Microsoft License Offerings

On Premise



Cloud Service



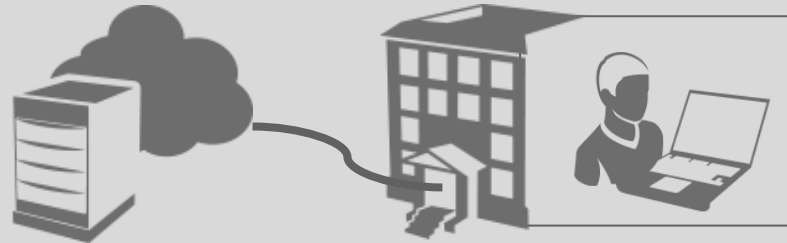
Software

Service

End user is licensing the software and has the right to use the software in his network.



Microsoft (MOSP) or 3<sup>rd</sup> party provider (SPLA) is providing the software as a service to the end user





# Microsoft License Offerings

## On Premise



## Service



|                         |   |   |                            |
|-------------------------|---|---|----------------------------|
| Product/Service Example | Client Applications, Client OS, Server OS, Server Applications, Access Licenses | Office 365<br>Windows Intune<br>Win/SQL Azure | Client App/OS, Server, ... |
| License Model           | EA, Select Plus<br>OB, OV, OVS<br>FPP, OEM                                      | EA,<br>OB, OV, OVS<br>MOSA*                   | SPLA*                      |
| License Holder          | End user  | End user                                      | Provider                   |
| Place of Installation   | Infrastructure/Network of end user  | Microsoft Datacenter                          | Provider Datacenter        |

MOSA: MS Online Subscription Agreement  
SPLA: Service Provider License Agreement

# Office 365 Service Offerings



Exchange Online



SharePoint Online



Lync Online



Office 365 Pro Plus



Project Online



Project Pro for O365



Visio Pro for O365

## Online Subscription Services

- Email
- Share calendars
- Create and edit documents online
- Instant messaging
- Web conferencing
- Public website
- Internal team sites
- Office 365 Pro Plus (Office Professional Plus)
- Project Portfolio Management
- Project Professional
- Visio Professional

# Office 365 – Single Services



## Exchange Online - Available Single SKUs

|                          |  |
|--------------------------|--|
| <b>Kiosk</b>             | 1GB email and calendar   |
| <b>Plan 1</b>            | 25 GB email and calendar, personal archive, eDiscovery, AV/AS, team mailboxes      |
| <b>Plan 2</b>            | Unlimited storage, voicemail, advanced archiving, data loss prevention, encryption |
| <b>Online Protection</b> | Protection from spam, viruses, phishing and policy violations                      |
| <b>Online Archiving</b>  | Legal hold and compliance  |



## SharePoint Online - Available Single SKUs

|                |   |
|----------------|---|
| <b>Plan 1</b>  | Collaboration with sites, drag and drop, team mailboxes                                   |
| <b>Plan 2</b>  | Forms, Data visualization, Access/Excel/Visio Services, eDiscovery, Compliance, PowerView |
| <b>Storage</b> | Additional 1GB of storage   |

# Office 365 – Single Services



## Lync Online - Available Single SKUs

|               |   |
|---------------|---|
| <b>Plan 1</b> | Presence, instant messaging, and peer-to-peer voice and video |
| <b>Plan 2</b> | Lync Meetings   |
| <b>Plan 3</b> | PSTN access   |



## Office - Available Single SKUs

|                           |  |
|---------------------------|--|
| <b>Office 365 ProPlus</b> | Office subscription, PC or Mac, roaming, mobile rights |
|---------------------------|--|

# Project for Office 365

|                                 | Project Pro for Office 365 | Project Online | Project Online with Project Pro for Office 365 |
|---------------------------------|----------------------------|----------------|--|
| <b>Capability</b>               |                            |                |  |
| Project scheduling & costing    | ✓                          |                | ✓  |
| SharePoint task sync            | ✓                          |                | ✓  |
| Lync presence                   | ✓                          |                | ✓  |
| Project Server sync             | ✓                          |                | ✓  |
| Enterprise project management   |                            | ✓              | ✓  |
| Enterprise program management   |                            | ✓              | ✓  |
| Enterprise portfolio management |                            | ✓              | ✓  |
| <b>Enterprise Value</b>         |                            |                |  |
| Group Policy                    | ✓                          |                | ✓  |
| Volume Activation               | ✓                          |                | ✓  |
| Terminal Service                | ✓                          |                | ✓  |
| <b>Subscription Value</b>       |                            |                |  |
| Click to Run Deployment         | ✓                          |                | ✓  |
| Version Upgrades                | ✓                          |                | ✓  |
| Roaming Apps                    | ✓                          |                | ✓  |

*Project Pro for Office 365 client Click to Run subscription will be available in Office 365 EA, Advisor & Direct channels later in the year.*

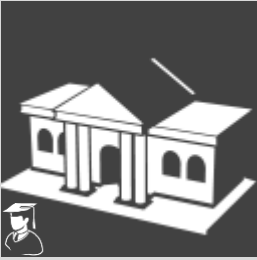
# Visio Pro Office 365

|   | Visio Pro for Office 365 |
|---|--------------------------|
| <b>Capability</b>                         |                          |
| Create professional and engaging diagrams | ✓                        |
| Publish to Visio Services                 | ✓                        |
| Diagram co-authoring                      | ✓                        |
| Dynamic, Data driven Shapes               | ✓                        |
| High value stencils                       | ✓                        |
| <b>Enterprise Value</b>                   |                          |
| Group Policy                              | ✓                        |
| Volume Activation                         | ✓                        |
| Terminal Service                          | ✓                        |
| <b>Subscription Value</b>                 |                          |
| Click to Run Deployment                   | ✓                        |
| Version Upgrades                          | ✓                        |
| Roaming Apps                              | ✓                        |

*Visio Pro for Office 365 client Click to Run subscription will be available in Office 365 EA, Advisor & Direct channels later in the year.*




# Office 365 Suites



Office 365  
University

Student


No IT




Office 365  
Home  
Premium

Families  
Households

No IT




|                                   |                                 |
|-----------------------------------|---------------------------------|
| Office 365<br>Business<br>Premium | Office 365<br>Small<br>Business |
| 1-10 User                         | 1-10 User                       |
| No IT                             | No IT                           |



Office 365  
Midsize  
Business

11-250 User

IT Generalist



Office 365  
Enterprise

250+ Users

IT Specialist/  
IT Partner

# Office 365 Suites – How to Buy

| Channel \ Suite | Office 365 University | Office 365 Home Premium | Office 365 Small Business | Office 365 Small Business Premium | Office 365 Midsize Business | Office 365 Enterprise |
|-----------------|-----------------------|-------------------------|---------------------------|-----------------------------------|-----------------------------|-----------------------|
| FPP             | •                     | •                       |                           | •                                 |                             |                       |
| Syndication*    |                       |                         | •                         | •                                 | •                           | •                     |
| Direct*         |                       | •                       | •                         | •                                 | •                           | •                     |
| Open            |                       |                         |                           |                                   | •                           |                       |
| Select          |                       |                         |                           |                                   |                             |                       |
| EA              |                       |                         |                           |                                   |                             | •                     |

Available under Volume Licensing (Open and EA)

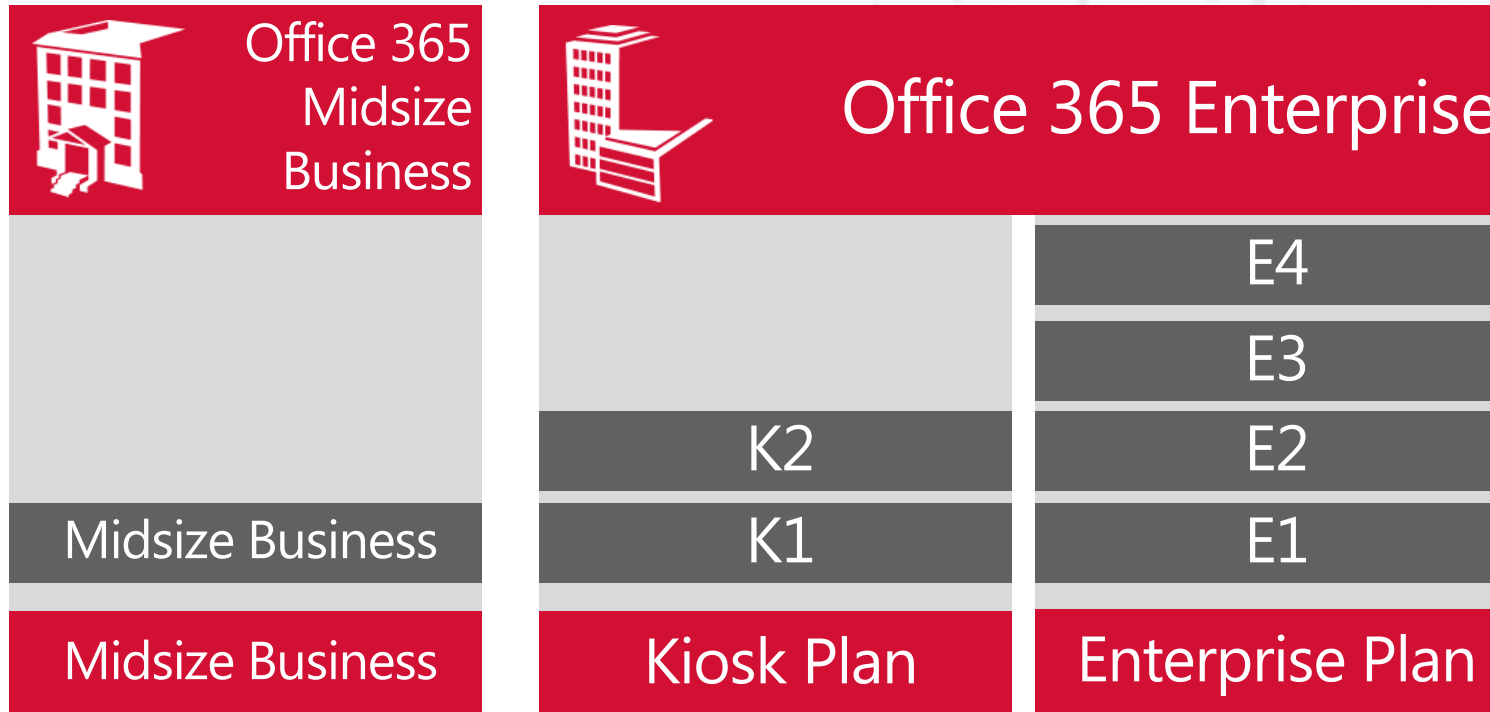
## \*Direct

Customer buys from MOSP (Microsoft Online Service Portal). No channel involved. This option is mostly used by smaller customers. The customer have no service, no contact person and has to administrate and deploy Microsoft Cloud service by themselves.

## \*Syndication

Microsoft has spent the past year or so trying to advance this so-called syndication strategy. The idea is for Microsoft to host Office 365, while telecom companies, broadband providers and mobile providers wrap additional services around the suite.

# Office 365 – Different Plans under Volume Licensing



## Volume Licensing

Office 365 Midsize Business => Open (OB, OV, OVS)  
Office 365 Enterprise => Enterprise Agreement (EA, EAS)

# Comparison: Office 365 Enterprise and Midsize Business (1/2)

|                       |   | Office 365<br>Midsize<br>Business | Office 365<br>E1 | Office 365<br>E2 | Office 365<br>E3 | Office 365<br>E4 |
|-----------------------|---|-----------------------------------|------------------|------------------|------------------|------------------|
| Exchange<br>Online    | Plan 1: Email (25 GB per user), sharing calendars and contacts  | ✓                                 | ✓                | ✓                | ✓                | ✓                |
|                       | Plan 2: Email archiving with unlimited messaging storage, hosted voice mail with auto attendants          |                                   |                  |                  | ✓                | ✓                |
| SharePoint<br>Online  | Plan 1: Intranet site for the team, Web site hosted   | ✓                                 | ✓                | ✓                | ✓                | ✓                |
|                       | Plan 2: Excel und Visio Services, InfoPath Forms  |                                   |                  |                  | ✓                | ✓                |
| Lync<br>Online        | Plan 1: IM, PC-to-PC calls, video conferencing  | ✓                                 | ✓                | ✓                | ✓                | ✓                |
|                       | Plan 2: scheduling or conducting a web conference   | ✓                                 | ✓                | ✓                | ✓                | ✓                |
|                       | Plan 3: voice calls over the PSTN (only available in U.S. and UK)   |                                   |                  |                  |                  | ✓                |
| Office Web<br>Apps    | External users who were invited to the Share-by-mail feature to site collections do not require User SLs. | ✓                                 | ✓                | ✓                | ✓                | ✓                |
| Office 365<br>ProPlus | Up to 5 concurrent activations for local or remote use  | ✓                                 |                  |                  | ✓                | ✓                |

# Comparison: Office 365 Enterprise and Midsize Business (2/2)

|                           |   | Office 365<br>Midsize<br>Business | Office 365<br>E1 | Office 365<br>E2 | Office 365<br>E3 | Office 365<br>E4 |
|---------------------------|---|-----------------------------------|------------------|------------------|------------------|------------------|
| Dual<br>Access-<br>Rights | Access to standard functionality of Exchange Server 2013 on-premises  |                                   | ✓                | ✓                | ✓                | ✓                |
|                           | Accessing enterprise functionality Exchange Server 2013 on-premises   |                                   |                  |                  | ✓                | ✓                |
|                           | Access to standard functionality of SharePoint Server 2013 on premise |                                   | ✓                | ✓                | ✓                | ✓                |
|                           | Accessing enterprise functionality SharePoint Server 2013 on premise  |                                   |                  |                  | ✓                | ✓                |
|                           | Access to standard functionality of Lync Server 2013 on-premises      |                                   | ✓                | ✓                | ✓                | ✓                |
|                           | Access to enterprise functionality of Lync Server 2013 on-premises    |                                   | ✓                | ✓                | ✓                | ✓                |

# Office 365 Services Availability

|   | Office 365 E2           | Office 365 E3                   | Office 365 E4                               | Office 365 K2 | Exchange Online Plan 1  | Exchange Online Plan 2      | Lync Online Plan 1 | Lync Online Plan 2   | Lync Online Plan 3               | SharePoint Online Plan 1 | SharePoint Online Plan 2 | Web Apps w/SharePoint Online Plan 1 |
|---|-------------------------|---------------------------------|---|---------------|-------------------------|-----------------------------|--------------------|----------------------|----------------------------------|--------------------------|--------------------------|-------------------------------------|
| Office Web Apps                                     | Authoring               | Authoring                       | Authoring                                   | Authoring     | View                    | View                        | View               | View                 | View                             | View                     | View                     | Authoring                           |
| Email, Calendar                                     | 25 GB, Personal Archive | 25 GB, Personal Archive         | 25 GB, Personal Archive                     | 1 GB          | 25 GB, Personal Archive | 25 GB, Personal Archive     |                    |                      |                                  |                          |                          |                                     |
| Communication / Presence                            | IM, Virtual Meetings    | IM, Virtual Meetings, Voicemail | IM, Virtual Meetings, Voicemail, STN Access |               |                         | Voicemail                   | IM                 | IM, Virtual Meetings | IM, Virtual Meetings, STN Access |                          |                          |                                     |
| Collaboration (Team Sites / Social)                 | •                       | •                               | •   | Team sites    |                         |                             |                    |                      |                                  | •                        | •                        | •                                   |
| Compliance  | Legal hold (sites only) | eDiscovery, Legal hold, DLP     | eDiscovery, Legal hold, DLP                 |               |                         | eDiscovery, Legal hold, DLP |                    |                      |                                  | Legal hold               | eDiscovery, Legal hold   | Legal hold                          |
| Business Services (Excel / Access / Visio Services) |                         | •                               | •   |               |                         |                             |                    |                      |                                  |                          | •                        |                                     |
| Rights Management                                   |                         | •                               | •   |               |                         |                             |                    |                      |                                  |                          |                          |                                     |
| Office 365 ProPlus                                  |                         | •                               | •   |               |                         |                             |                    |                      |                                  |                          |                          |                                     |
| Enterprise Voice                                    |                         |                                 | •   |               |                         |                             |                    |                      |                                  |                          |                          |                                     |



# General Licensing Terms Online Services (O365, Intune)

## 1) Assign the License



License



You must assign the Subscription License (SL) to a single user.

O365 Plans, O365 Single Components and Win Intune are User Subscription License (USL)

## 2) Use of the Software



Licensed User



After assigning the USL, the user can access and use the online service.

See product-specific License Terms for O365 and Windows Intune available on the next few slides

## 3) Some differences from On Premise



**License Terms Updates** may apply immediately\*\*

Changes Microsoft introduces to the Online Services license terms may apply immediately.



**No Downgrade rights**

Microsoft generally offers only the latest version of the service at a time (without Downgrade Rights).

\*\*PUR Jan 2013: MS may update these license terms from time to time. Changes to the license terms that MS introduces, are required by law to make, or do not materially affect your use of the online services will apply immediately.

# Additional Terms – Office 365 Pro Plus

Product-Specific Use Rights for...

**Office 365 Pro Plus**

Activate the Software on up to 5 concurrent OSEs

## Options of Installation Rights



**Local**

5 activations



**RDS**

1 activation on RDS  
4 activations locally



**Windows to Go**

1 activation on USB  
4 activations locally

# Additional Terms – Project Pro for O365 / Visio Pro for O365

## Product-Specific Use Rights for..

Project Pro  
for Office 365

Visio Pro  
for Office 365

Activate the Software on up to 5 concurrent OSEs

## Options of Installation Rights



Local

5 activations



RDS

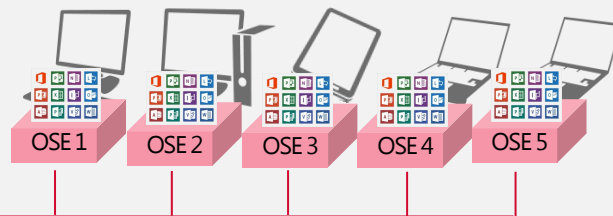
1 activation on RDS  
4 activations locally

# Product-Specific Use Rights – Options of Installation Rights

## Activate the Software on up to 5 concurrent OSEs



Licensed User

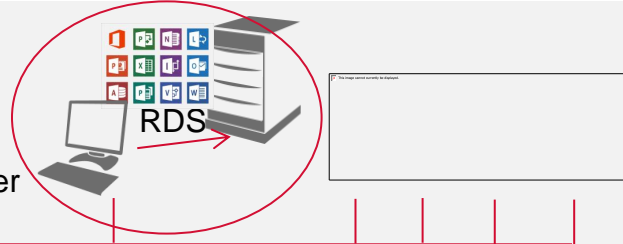


Office 365 Pro Plus  
&  
Project Pro for O365  
&  
Visio Pro for O365

Each user to whom you assign a User SL may activate the software for local or remote use on **up to five concurrent OSEs**.



Licensed User

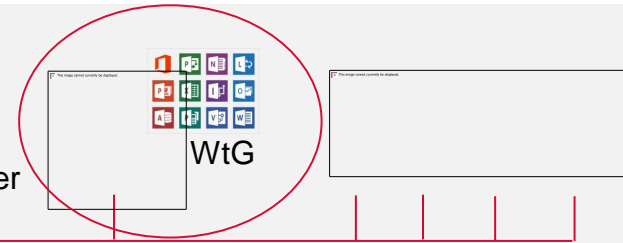


Office 365 Pro Plus  
&  
Project Pro for O365  
&  
Visio Pro for O365

Each licensed user may also use **one of the five** activations on a network server **with the Remote Desktop Services (RDS)** role enabled.



Licensed User



Office 365 Pro Plus

As part of the introduction of Windows To Go Rights, each licensed user may also use **one of the five** activations to install one copy on the USB drive used **for Windows to Go** and use the Office Pro Plus on that USB drive on any device

# Product-Specific Use Right - Windows Intune (per user)

Product-Specific Use Rights for ...

Windows Intune

Manage up to 5 device at a time



Each user to whom you assign a User SL may access and use the online service and related software (including System Center Configuration and Endpoint Protection) to **manage up to five devices at a time.**

# How to License Online Services in a EA?

## Basic Concept of an EA: Standardization or Online Services

Option 1: On Premise

### Standardization

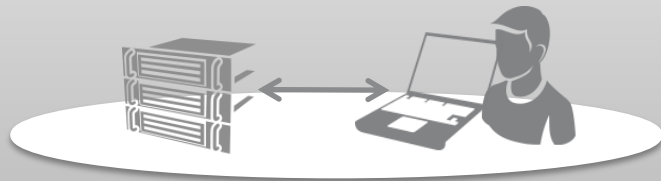
for all qualified Devices/Users (min. 250)

for the **Enterprise Products** or

**Enterprise Products + Enterprise OLS**



End user is licensing the software for using in his network



Option 2: Online Services

### Services

Purchasing of minimum 250

**Enterprise Online Services (OLS)**



Microsoft (MOSP) is providing the software as a service to the end user





# How to License Online Services in an EA?



## Option 3: Hybrid Strategy = Standardization & Online Services

Option 1: On Premise

### Standardization

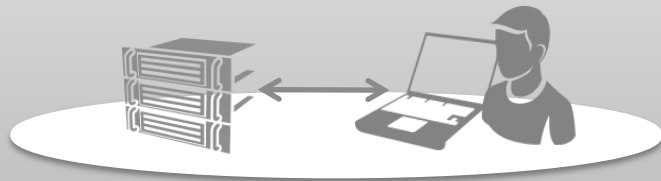
for all qualified Devices/Users (min. 250)

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**Enterprise Products + Enterprise OLS**



End user is licensing the software for using in his network



Option 2: Online Services

### Services

Purchasing of minimum 250

**Enterprise Online Services (OLS)**

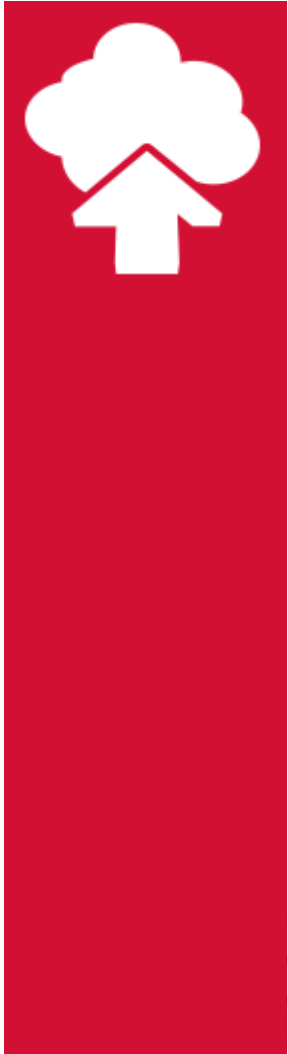


Microsoft (MOSP) is providing the software as a service to the end user



combine both ways = **Hybrid-Strategy**

# Hybrid-Strategy: Transition On Premise to Online Services



On Premise



Online Services



License Type: L&SA or SA

License Type: Monthly Subscription

Office Professional Plus  
(Licensed per Device)

Office 365 (Licensed per User)

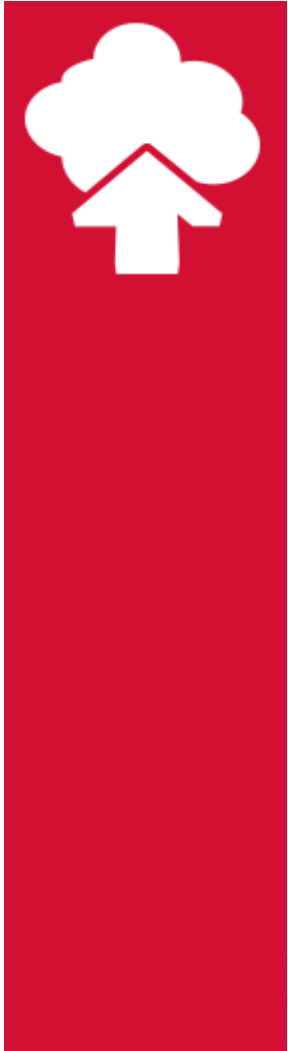
Core CAL / Enterprise CAL Suite  
(Licensed per Device or per User)

Windows Intune (Licensed per User)

Windows Client OS  
(Licensed per Device)

“Transition” means the conversion of a License with Software Assurance to a subscription license.


# Hybrid Strategy: Transition On Premise to Online Services



**On Premise** 

License Type: L&SA or SA



**Online Services** 

License Type: Monthly Subscription


Office Professional Plus





Office 365

Core CAL / Enterprise CAL Suite

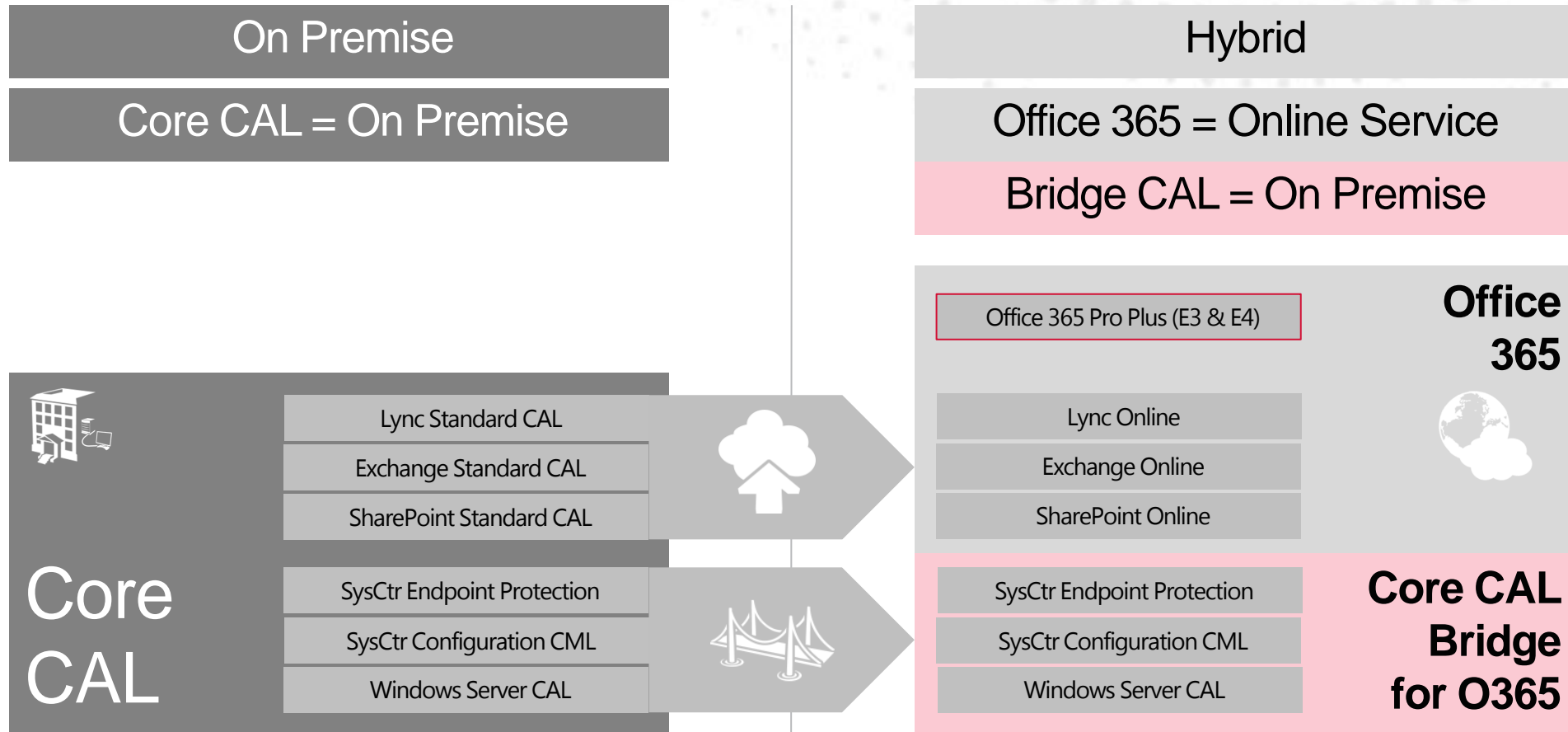
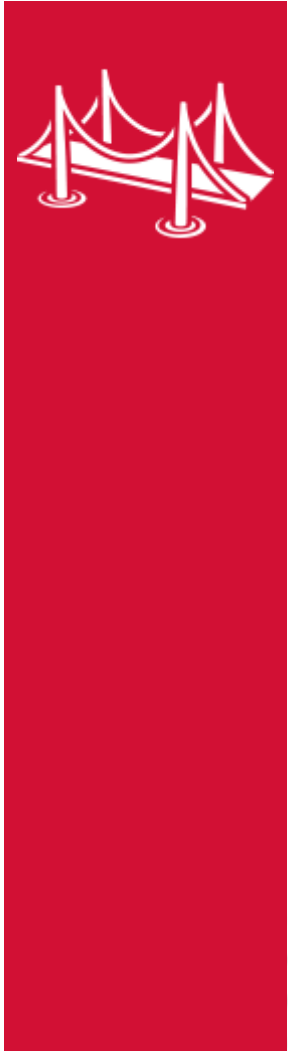


 Core CAL / ECAL Bridge  
Windows Intune

Windows Client OS

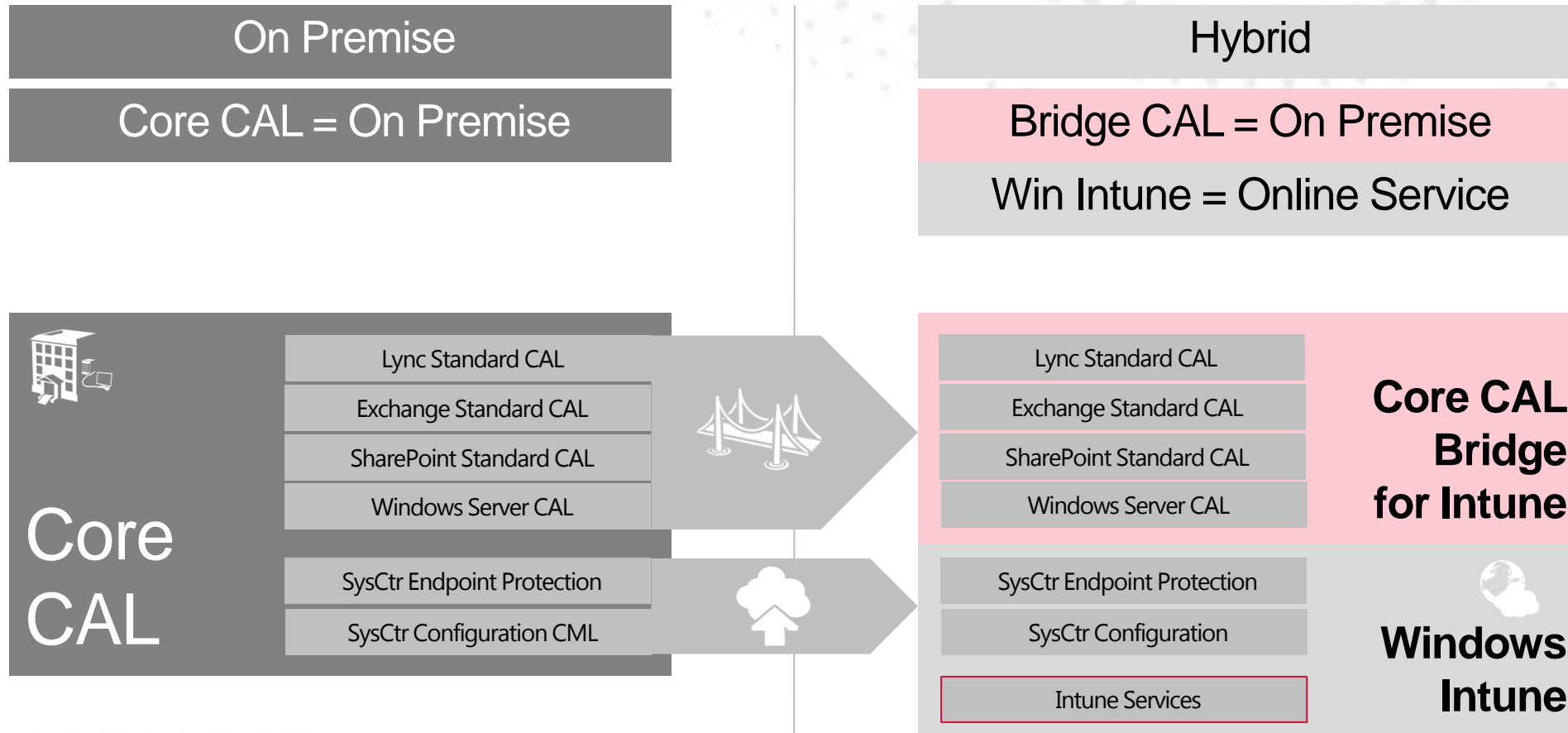
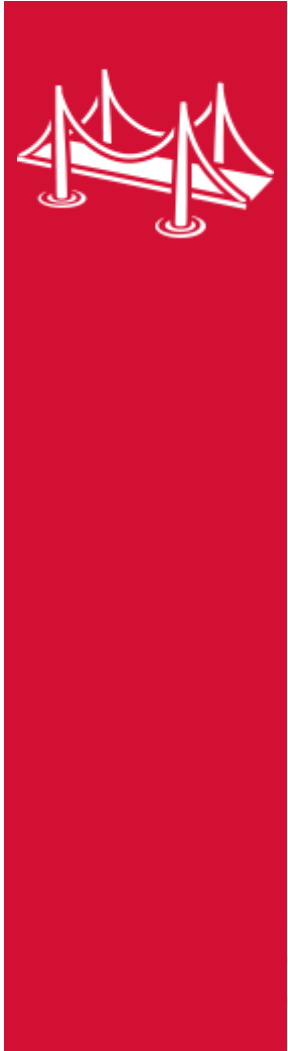
-  Office Pro Plus = No special requirements for Transition.
-  When Transitioning from a CAL Suite to O365 and/or Intune a **CAL Suite Bridge** is may be required.

# Hybrid Strategy: CAL Suite Bridge for O365



A **CAL Suite Bridge** may be required when Transitioning from a **CAL Suite** to a comparable Product and Online Service combination

# Hybrid Strategy: CAL Suite Bridge for Windows Intune

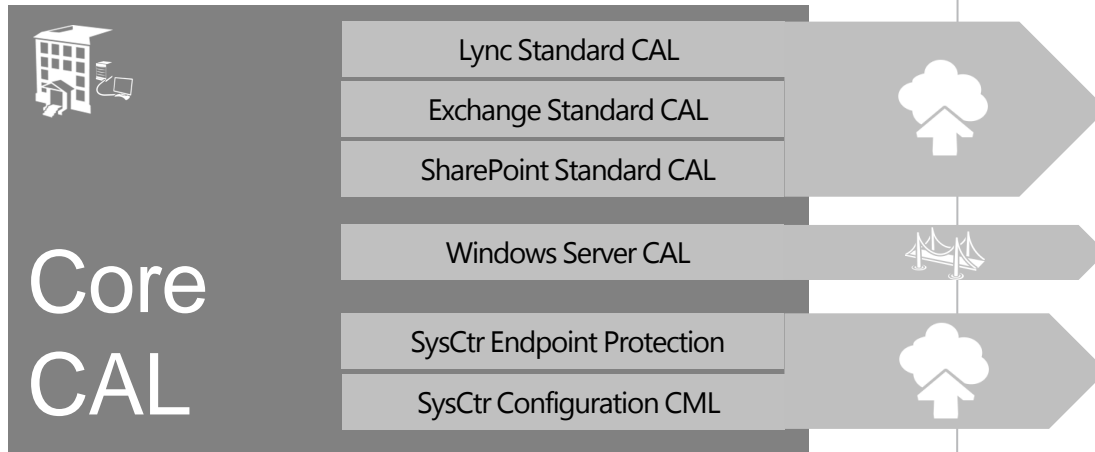


A **CAL Suite Bridge** may be required when Transitioning from a **CAL Suite** to a comparable Product and Online Service combination

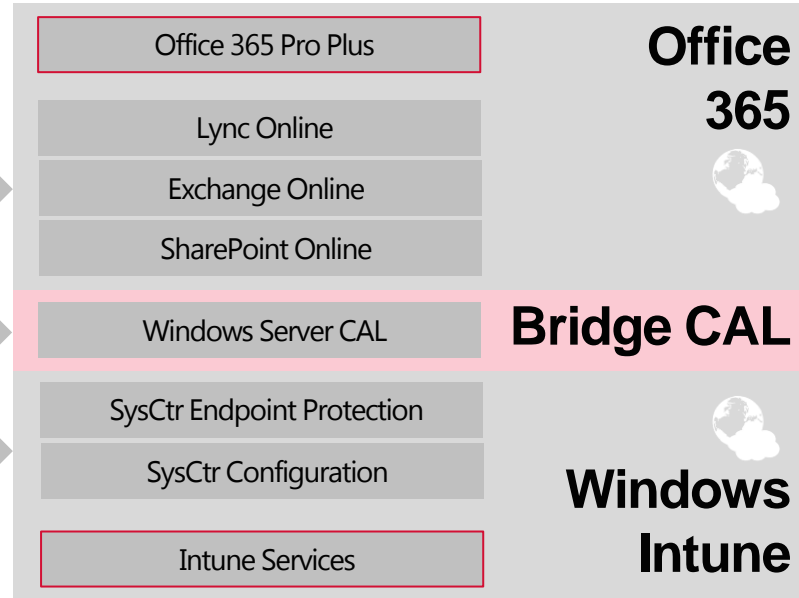
# Hybrid-Strategy: CAL Suite Bridge for O365 & Win Intune



On Premise  
Core CAL = On Premise



Hybrid  
Bridge CAL = On Premise  
O365&Intune = Online Service





# Hybrid-Strategy: CAL Suite Bridge



| Parent CAL Suite     | CAL Suite Bridge  | Online Services   |
|----------------------|---|---|
| Core CAL Suite       | Core CAL Suite Bridge for Office 365                    | Office 365 E1, E2, E3, or E4                                    |
| Core CAL Suite       | Core CAL Suite Bridge for Windows Intune                | Windows Intune  |
| Core CAL Suite       | Core CAL Suite Bridge for Office 365 & Win Intune       | Office 365 E1, E2, E3, or E4 in combination with Windows Intune |
| Enterprise CAL Suite | Enterprise CAL Suite Bridge for Office 365              | Office 365 E3 or E4   |
| Enterprise CAL Suite | Enterprise CAL Suite Bridge for Windows Intune          | Windows Intune  |
| Enterprise CAL Suite | Enterprise CAL Suite Bridge for Office 365 & Win Intune | Office 365 E3 or E4 in combination with Windows Intune          |

A **CAL Suite Bridge** is an **Enterprise Product**, and may only be licensed in conjunction with its qualifying Online Service to **satisfy the company-wide requirement** of either that CAL Suite Bridge or its parent CAL Suite.

# Developer Tools - Volume License Use Rights

**Desktop Applications** – per Device  
e.g. Office



**Desktop Operating System** – per Device  
Windows Pro



**Server Operating System** – Srv Proc & CAL  
Windows Srv



**Server Applications** – Server & CAL  
e.g. Exchange Srv



**Server Applications** – per Core  
e.g. SQL/BizTalk



**Management Servers** – per Mgmt. Lic  
System Center



**Specialty Servers** – per Server  
e.g. Windows Server Essentials



**Developer Tools** – per User  
e.g. Visual Studio



**Online Services** – per User/Device  
e.g. Office 365



**Combined Models** – Suites  
e.g. CIS Suite



- ✓ Visual Studio
- ✓ Expressions
- ✓ ...



# Developer Tools – General Terms

## 1) Assign the License



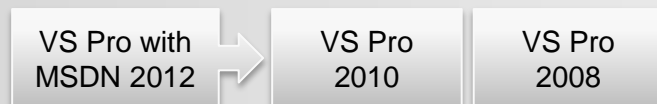
You must **assign** the license to **one user**. That user is the licensed user.

## 2) Use the software



The **licensed user** may install and use the software **on any number of devices to design, develop, test, demonstrate.**  
\*Note: You may not use the software in a production environment.


## 3) Downgrade Right



You may run the licensed version and **any prior versions** of the software.

\*Note: see the following slide for additional terms.


# Visual Studio – Edition Comparison (1/3)

| Subscription Level  Visual Studio | Professional with MSDN     | Test Professional with MSDN     | Premium with MSDN     | Ultimate with MSDN     |
|--|----------------------------|---------------------------------|-----------------------|------------------------|
| <b>Software and Services for Production Use</b>  |                            |                                 |                       |                        |
| Primary Development Tool   | Visual Studio Professional | Visual Studio Test Professional | Visual Studio Premium | Visual Studio Ultimate |
| Visual Studio Team Foundation Server 2012 + CAL  | Yes                        | Yes                             | Yes                   | Yes                    |
| Visual Studio Feature Packs  |                            |                                 |                       | Yes                    |
| Expression Studio Ultimate   |                            |                                 |                       | Yes                    |
| Office Pro Plus, Project Pro, Visio Premium *  |                            |                                 | Yes                   | Yes                    |
| Windows Azure Platform *   |                            |                                 | Yes                   | Yes                    |


\* Note: Additionally, to use the listed Office Applications for development and testing, they can be used on one device for production use as well.

[MSDN subscription comparison](#)

# Visual Studio – Edition Comparison (2/3)

| Subscription Level  Visual Studio | Professional with MSDN | Test Professional with MSDN | Premium with MSDN | Ultimate with MSDN |
|--|------------------------|-----------------------------|-------------------|--------------------|
| <b>Software and Services for Development and Testing</b>   |                        |                             |                   |                    |
| Windows, Windows Server  | Yes                    | Yes                         | Yes               | Yes                |
| SQL Server   | Yes                    | Yes                         | Yes               | Yes                |
| Toolkits, Software Development Kits, Driver Development Kits   | Yes                    | Yes                         | Yes               | Yes                |
| Office   |                        |                             | Yes               | Yes                |
| Dynamics   |                        |                             | Yes               | Yes                |
| All other Servers (SharePoint, Exchange, etc.)   |                        |                             | Yes               | Yes                |
| Windows Embedded   | Yes                    | Yes                         | Yes               | Yes                |

# Visual Studio – Edition Comparison (3/3)

| Subscription Level  Visual Studio | Professional with MSDN | Test Professional with MSDN | Premium with MSDN | Ultimate with MSDN |
|--|------------------------|-----------------------------|-------------------|--------------------|
| <b>Additional Benefits</b>   |                        |                             |                   |                    |
| Technical Support Incidents  | 2                      | 2                           | 4                 | 4                  |
| Windows Store developer account  | Yes                    | Yes                         | Yes               | Yes                |
| Windows Phone developer account  | Yes                    | Yes                         | Yes               | Yes                |
| Priority support in MSDN Forums  | Yes                    | Yes                         | Yes               | Yes                |
| E-Learning course collections (typically 20h per year)   | 1                      | 1                           | 2                 | 2                  |
| MSDN Magazine  | Yes                    | Yes                         | Yes               | Yes                |
| MSDN Flash newsletter  | Yes                    | Yes                         | Yes               | Yes                |
| MSDN Online Chat   | Yes                    | Yes                         | Yes               | Yes                |
| Special Offers from Microsoft and partners   | Yes                    | Yes                         | Yes               | Yes                |



THANK  
YOU