# 59 ways to publish an application

IT is all about making the right choices...

Marcel Venema v1.0, January 2014

#### Who is Marcel Venema?



Architect, consultant and trainer

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### 59 ways to publish an application

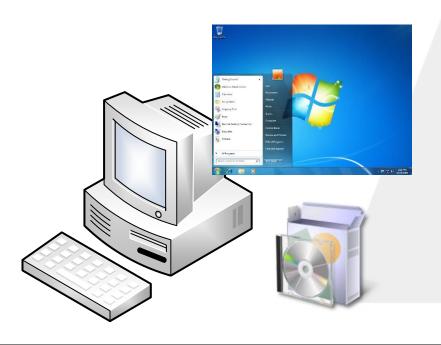
There are 59 different options to publish an application in an enterprise infrastructure.

IT is all about making the right choices.

#### Traditional installation of applications

#1 User has traditional workstation, 32bit application will be delivered / installed with traditional software deployment tools (MSI).

#2 Same workstation, same application, 64bit.

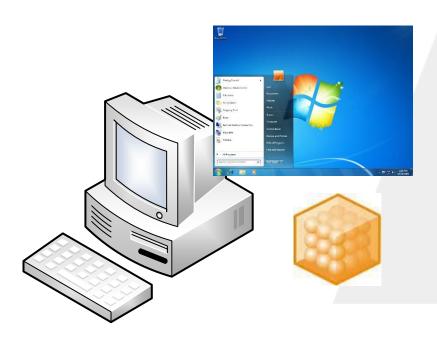


Least preferred choice. Use only when application cannot be virtualized.

#### **Application Virtualization**

#3 User has traditional workstation, 32bit application will be delivered with application virtualization techniques.

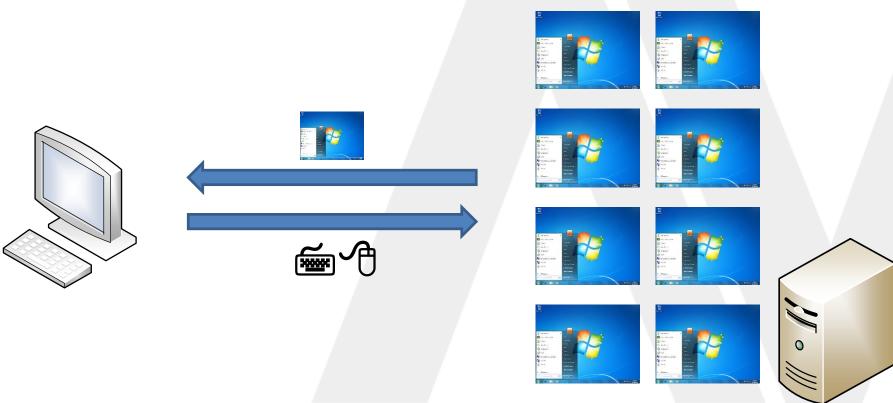
#4 Same workstation, same application, operating system is 64bit.



Preferred option when not using VDI or Remote Desktop. Use this option when application has performance issues on VDI or Remote Desktop.

#### Virtual Desktop Infrastructure

Virtual Desktop Infrastructure: Hosting an operating system within a virtual machine (VM) running on a centralized server.



Products: Citrix XenDesktop, VMWare View

#### Virtual Desktop Infrastructure

With VDI there are persistent and non-persistent desktops.

Non-persistent desktop, also called stateless desktops, do not retain personal desktop information. At the end of each session the desktop reverts back to it's original state. User settings are maintaind with additional tooling.

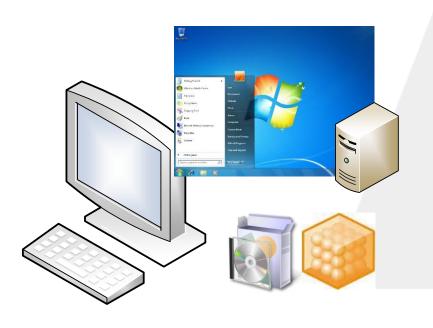
Persistent desktop: user settings, data and software installations are maintained. Mostly used for development and research.

#### Virtual Desktop Infrastructure

#5/#6 User connects to 32bit or 64bit Virtual Desktop. Application traditionally delivered/installed on virtual desktop.

#7/#8 Same Virtual Desktop, application delivery via Application Virtualization.

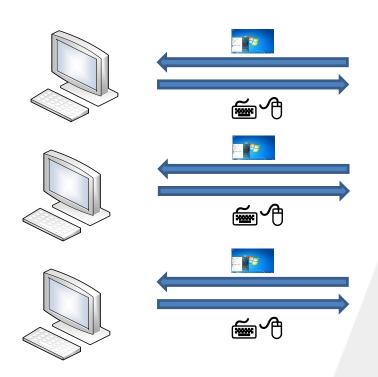
#9 to #13 User connects to non-persistent desktop.



When using VDI, preferred option for software delivery is application virtualization. If application cannot be virtualized, use traditional software deployment.

#### Remote Desktop

Remote Desktop: Hosting a multi-user operating system on a centralized server.





Products: Citrix XenApp, Microsoft Remote Desktop Services

#### Remote Desktop

#14/#15 User Connects to 32bit or 64bit Remote Desktop. Application traditionally delivered/installed on Remote Desktop Server.
#16/#17 Same Remote Desktop, Application delivery via application virtualization.



When using Remote Desktop, preferred option for software delivery is application virtualization. If application cannot be virtualized, use traditional software deployment.

#### Remote Desktop to Remote Desktop

Now the fun starts. Some applications conflicts with each other and/or cannot be virtualized. Examples are applications which are using IE8 or IE9.

#18/#19 Remote Desktop to Remote Desktop, application virtualization.

#20/#21 Remote Desktop to Remote Desktop, traditional application installation.

#22/#23 VDI to VDI, application virtualization.

#24/#25 VDI to VDI, traditional application installation.

#26/#30, VDI to VDI, non-persistent desktop choices.



#### Remote Desktop to VDI

Some applications cannot be used on Remote Desktop, due to CPU, memory or graphics performance. Examples are AutoCAD, Visual Studio, SPSS.

- #31/#32 Remote Desktop to VDI, application virtualization.
  #33/#34 Remote Desktop to VDI, traditional application installation.
- #35/#36 VDI to Remote Desktop, application virtualization.
- #37/#38 VDI to Remote Desktop, traditional application installation.
- #39/#47, VDI non-persistent desktop choices.



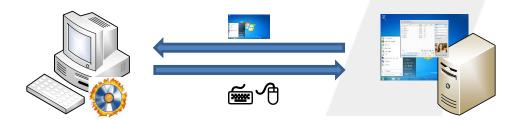
#### Virtual Desktop Extender

Now it is getting complex. With VDX or reverse seamless applications, an application runs on a client while appearing on a Remote Desktop. This can be useful for special applications like CD/DVD burning, special hardware, CPU or graphic performance.

#48/#49 VDX application to Remote Desktop, application virtualization or traditional application installation.

#50/#51 VDX application to VDI.

#52/#53 VDX application to VDI with non-persistent desktop.



#### **Web Applications**

A web application does not need any installation or software deployment.

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#54 User connects from traditional workstation.
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- #55 User connects from VDI.
- #56 User connects from VDI non-persistent desktop.
- #57 User connects from Remote Desktop.
- #58 User connects from thin client with VDX.

## **Client Hypervisor**

Some applications runs on older operating systems but must be maintained. An example is an aircraft maintenance application which runs on Windows 95.

#59 Application runs on client hypervisor.

Products: Microsoft Med-V, VMWare Workstation