

Why would you choose RDSH over VDI?

Benny Tritsch
<http://drtritsch.com>
Twitter: @DrTritsch

Sinisa Sokolic
<http://www.RISConsulting.de>
Twitter: @SinisaSokolic

Benny Tritsch

Microsoft Regional Director
Microsoft Most Valuable Professional
Citrix Technology Professional
VMware vExpert



Microsoft
Regional Director



Sinisa Sokolic

CTO@RISC



A Journey into the

Past...



Let's get
physical . . .



The First Ever Hybrid Cloud Prototype



2015 is the Year of VDI!!!

Like the year before...

And that year before...

And the year before the year before.

2013

XenApp is only a feature of XenDesktop

2015

It's the other way round

RELATIONSHIP

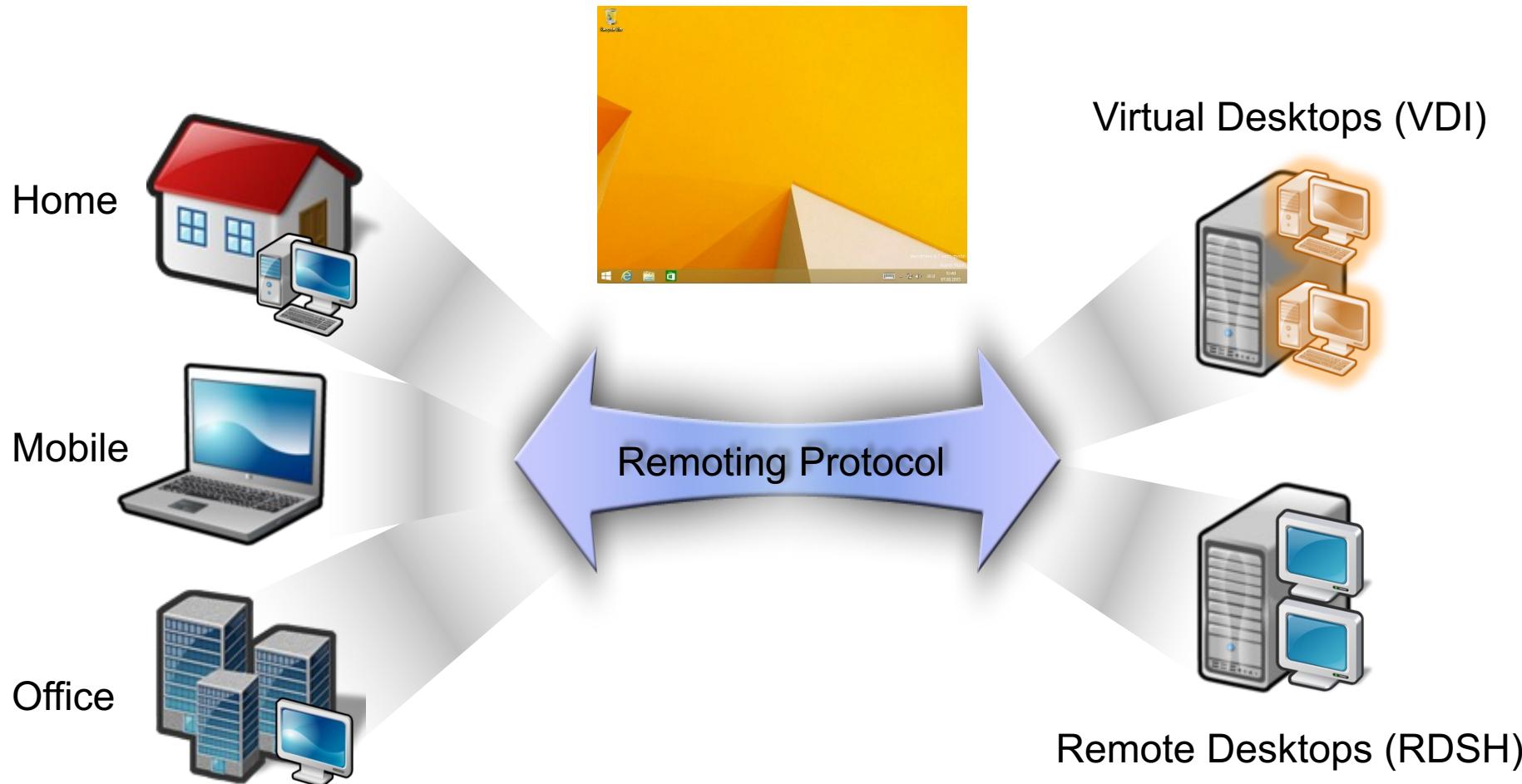
In a relationship
Enganged
Married
Complicated
In love with RDSH
Divorced





Remoting

Suite of Virtual Desktops



Today's Challenges (1 of n)

- Cross-product system management
- Access to desktops and applications (Publishing)
- Web and portal integration
- Access control for desktops and applications (Policies)
- Integration of local applications into virtual desktops
- Integrated client components
- Load-balancing and availability
- Desktop templates and persistence
- Encryption of the network (SSL)
- Printers and print servers
- Heterogeneous devices (Thin Clients)

Today's Challenges (2 of n)

- Single sign-on and smartcards
- Assignment of users, groups, directory services and devices
- Application assignment and self provisioning
- Management of individual user settings (Profiles)
- Central control of graphical elements of the user environment
- Individual workspace protection
- Application and license management
- Resource and performance management (CPU, RAM, HD, I/O)
- Support of multi-monitor solutions and high graphic resolutions
- Management of USB devices and special periphery
- Virtual IP addresses and time zones

More Challenges according to ProjectVRC

- User Experience and Performance in WAN and high latency environments
- Complexity reduction of the technology stack
- Rich media with Audio, Video and 3D Graphics
- Streamline management and user experience
- Lifecycle management (things got faster ... a LOT faster)
- Simplify licensing

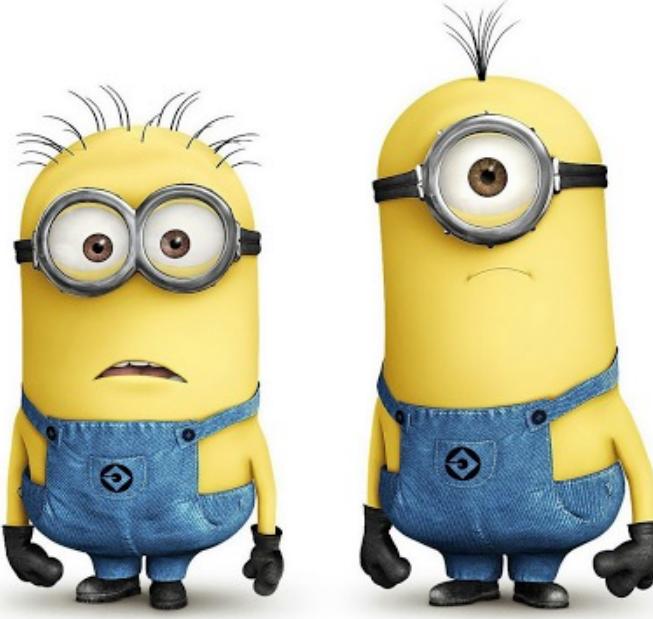


Why People Choose VDI



VDI because of...

- Each user has a dedicated machine
- Isolated environment per user
- Full or partial admin rights
- Can install or uninstall applications
- Manageability and control (when in datacenter)
- Access to multiple desktops (in security scenarios)
- GPU acceleration
- Heavyweight applications
- **Because it's cheaper**
- People don't even know what RDSH exactly is

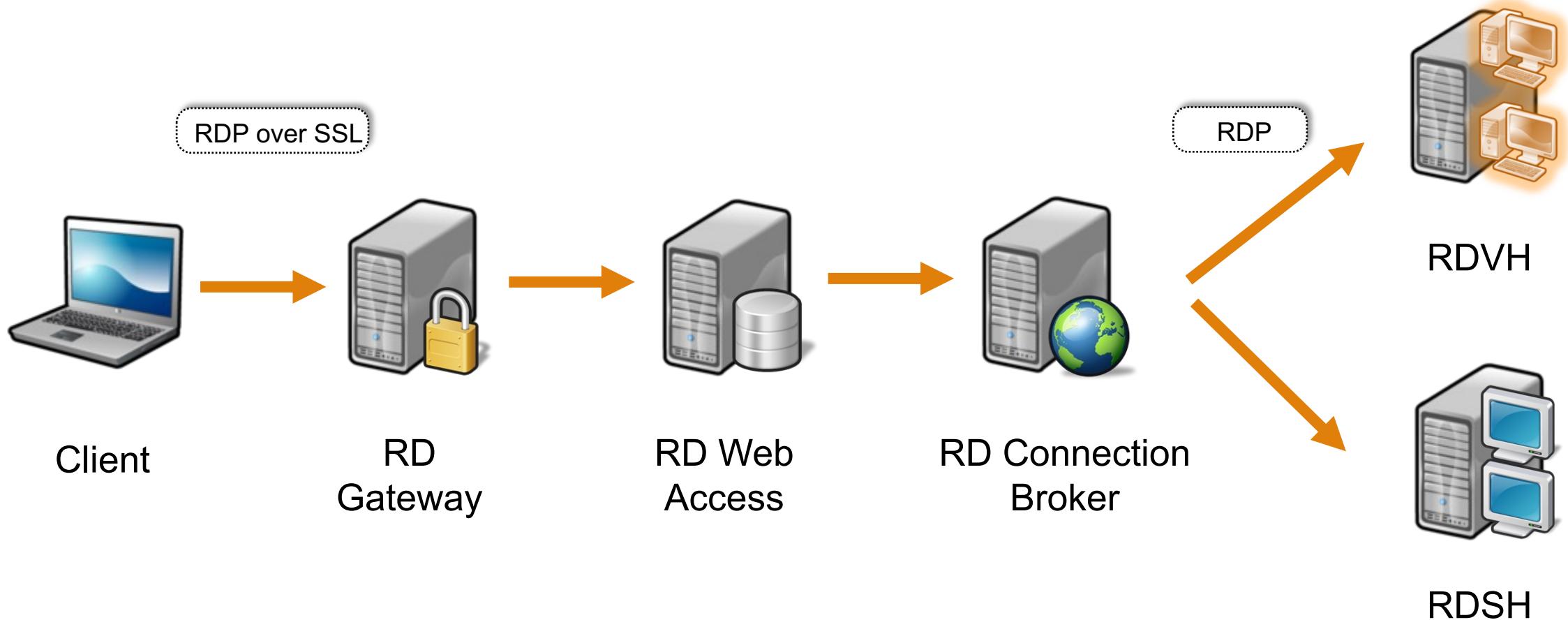


Why People Choose RDSH

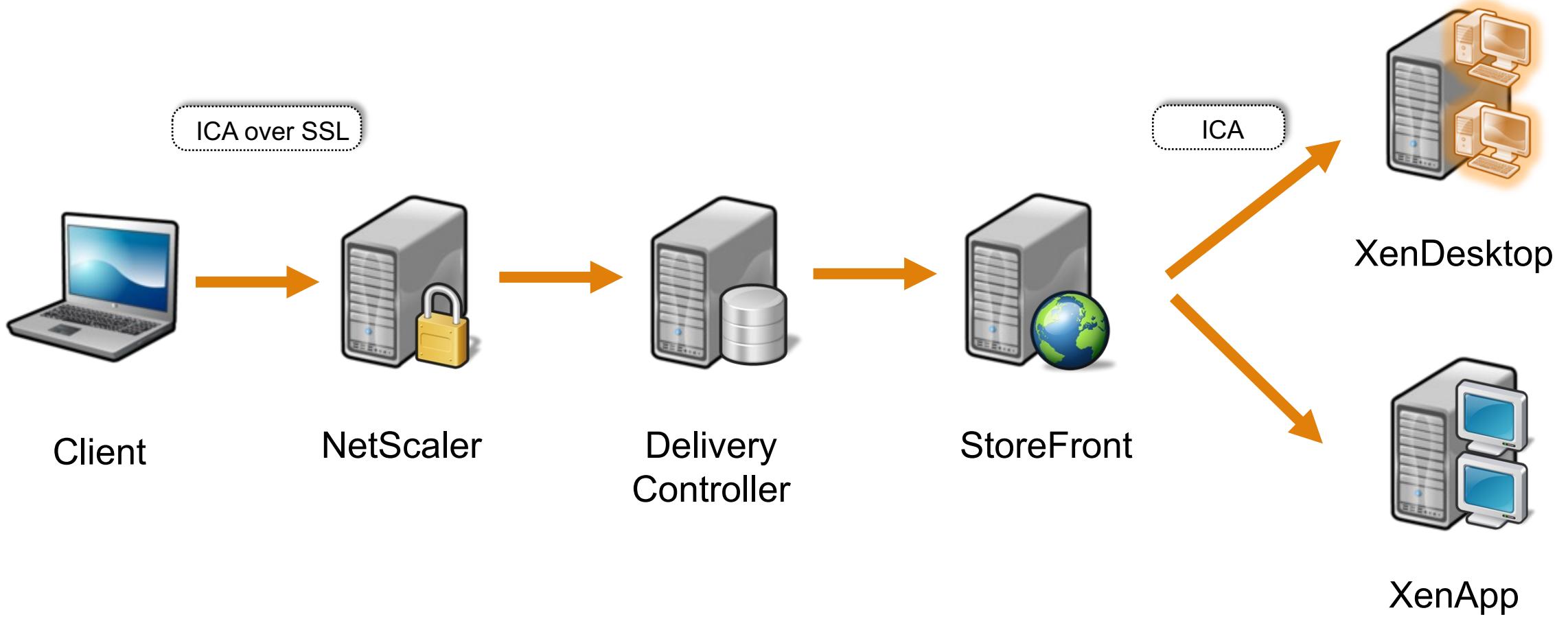
RDSH because of...

- Standardization of Environment
- Fewer OS instances to manage
- Datacenter Hosted Apps and Desktops
- Higher user density
- Higher availability of services
- Cheaper and less complex
- Multi device usage
- Known technology

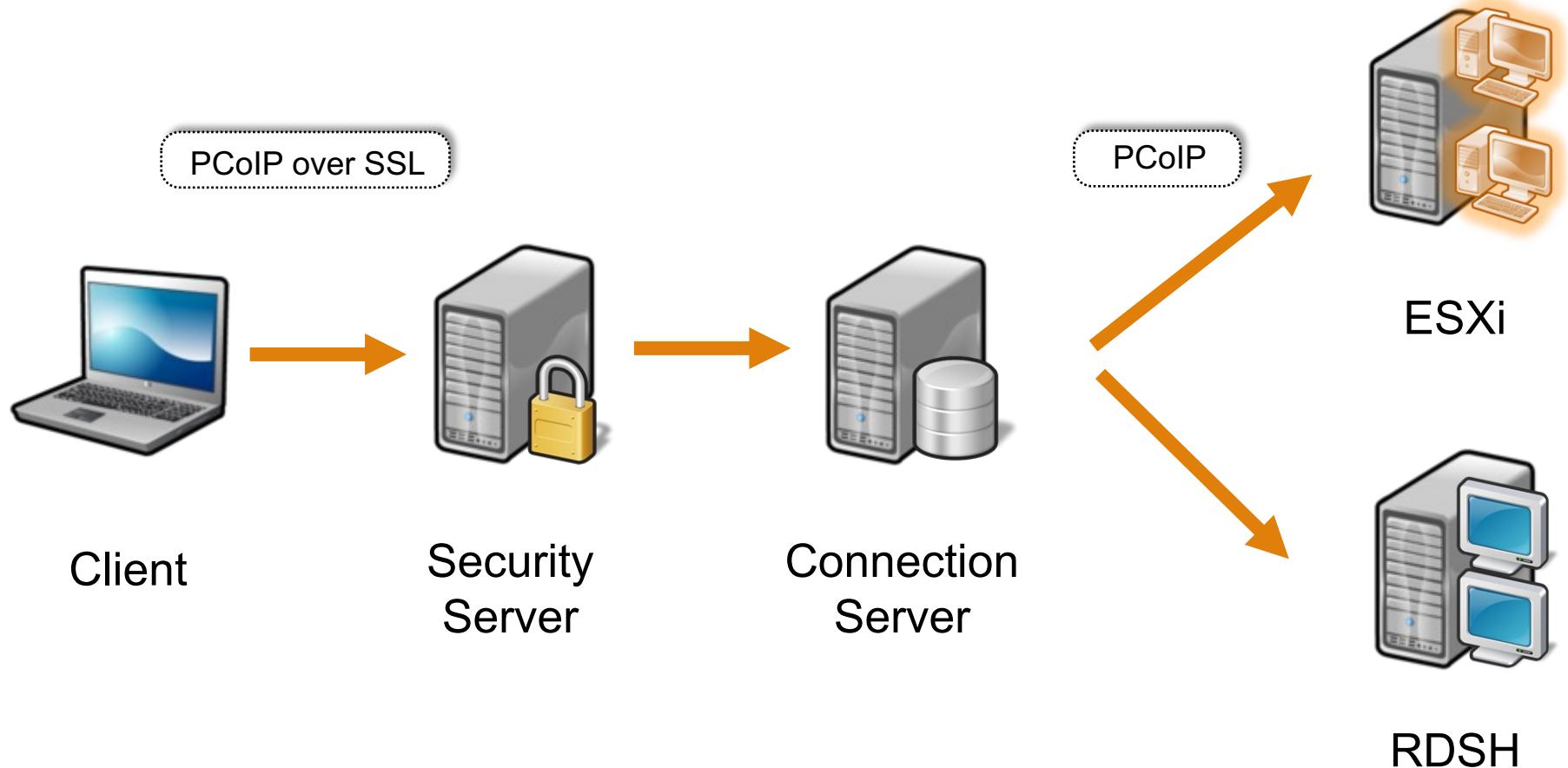
Microsoft Remote Desktop Services



Citrix XenApp/XenDesktop



VMware Horizon View 6

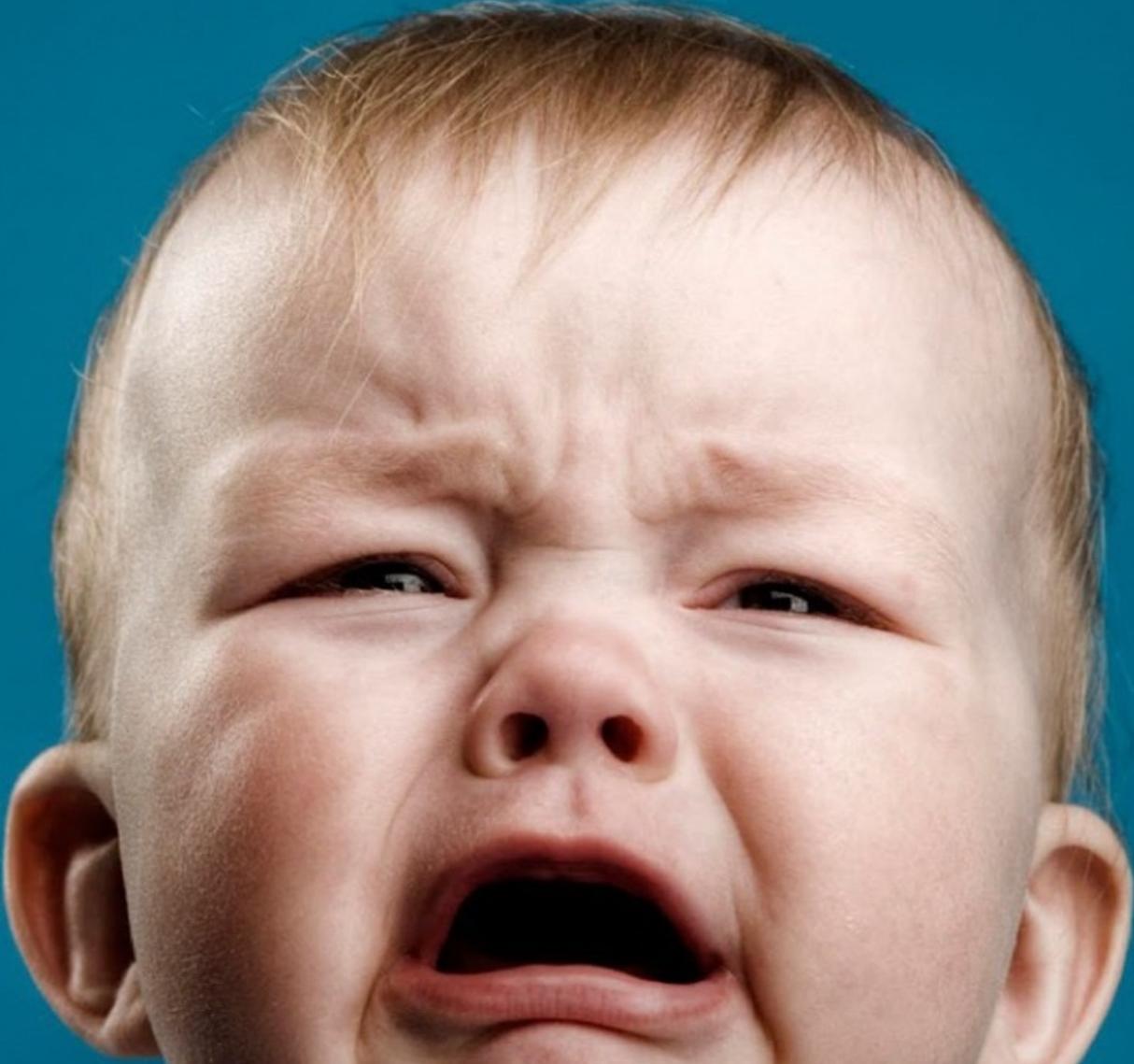


RDSH vs VDI



Reasons to use RDSH or VDI

	RDSH	VDI
Centralize Management	33,6 %	28,9 %
Provide DaaS	10,7 %	13 %
Support Flex Working	11,6 %	12,3 %
Cost reduction	11,3 %	5,7 %
Support specific applications	7,3%	3,9%
Support high-end graphics	-	3,3 %
Support Developers	1,1 %	11,1 %



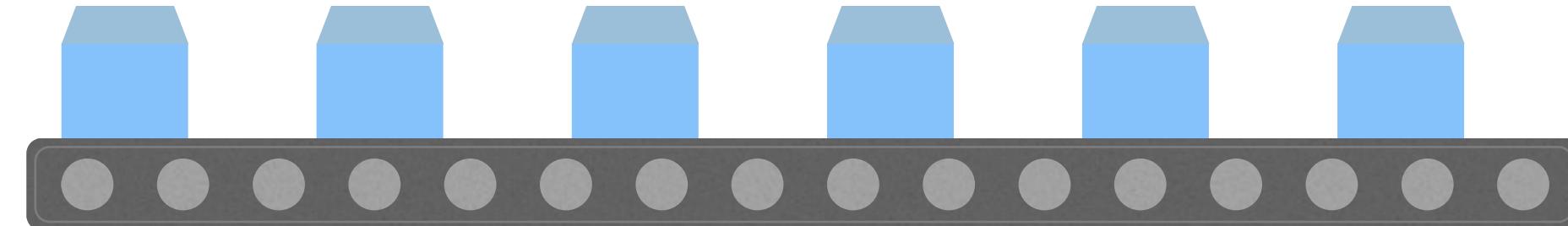
RDSH is too complicated

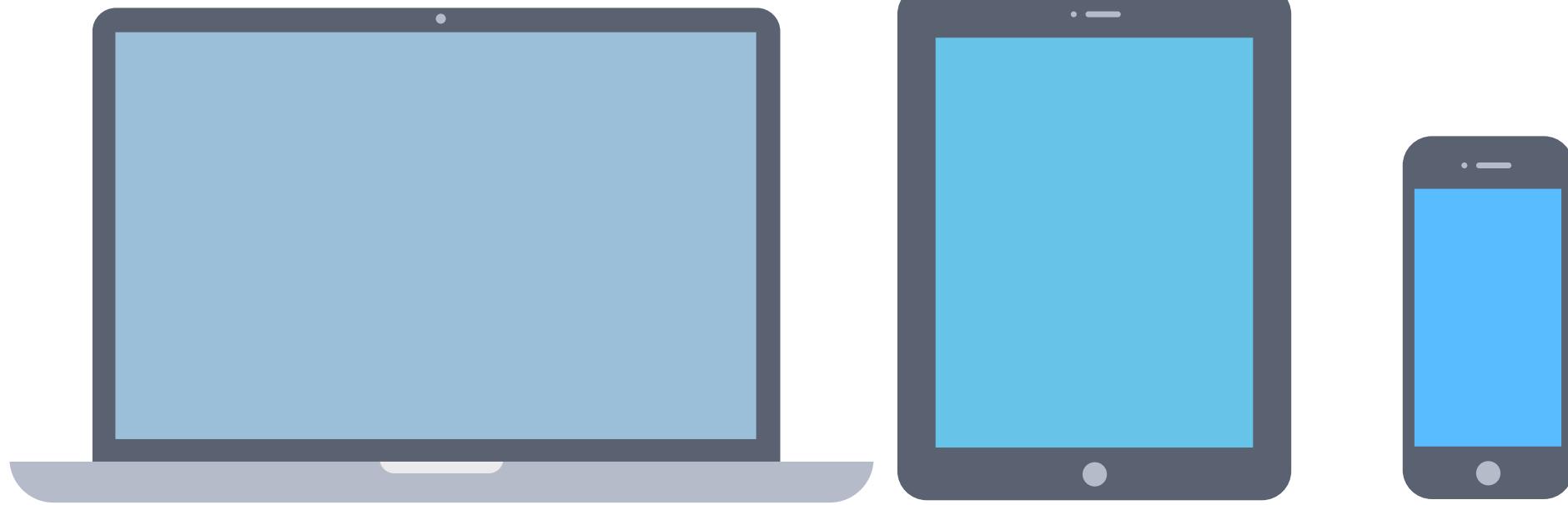
App Delivery Platform Selection

When to use RDSH, App-V or VDI?

	RDSH Sessions	App-V for RDSH Servers	VDI
Density	High	High	Low
User-Mode Isolation Context	Weak	Stronger	Strong
Kernel-Mode Isolation Context	None	None	Strong

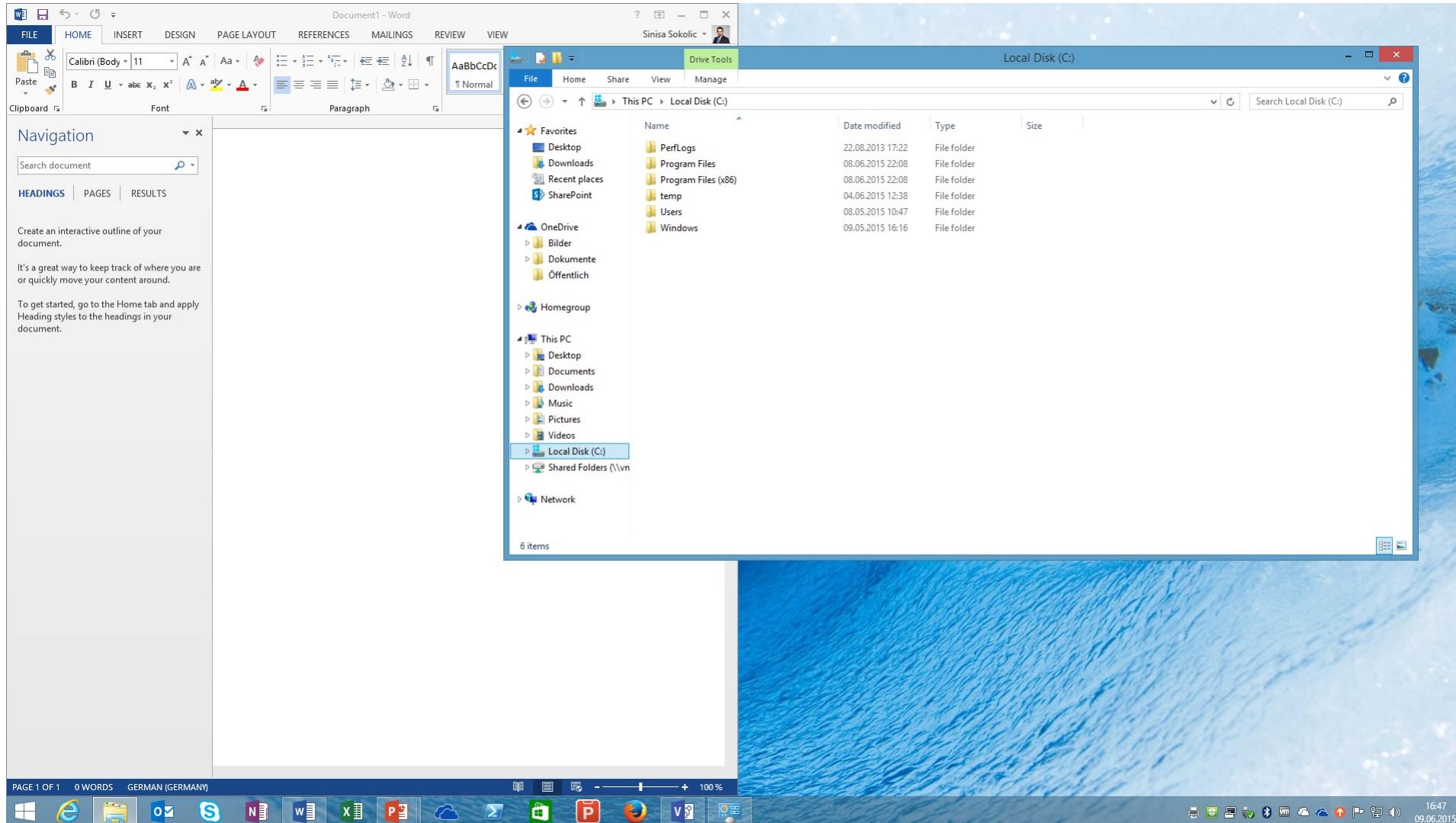
Is RDSH vs VDI the real Problem?



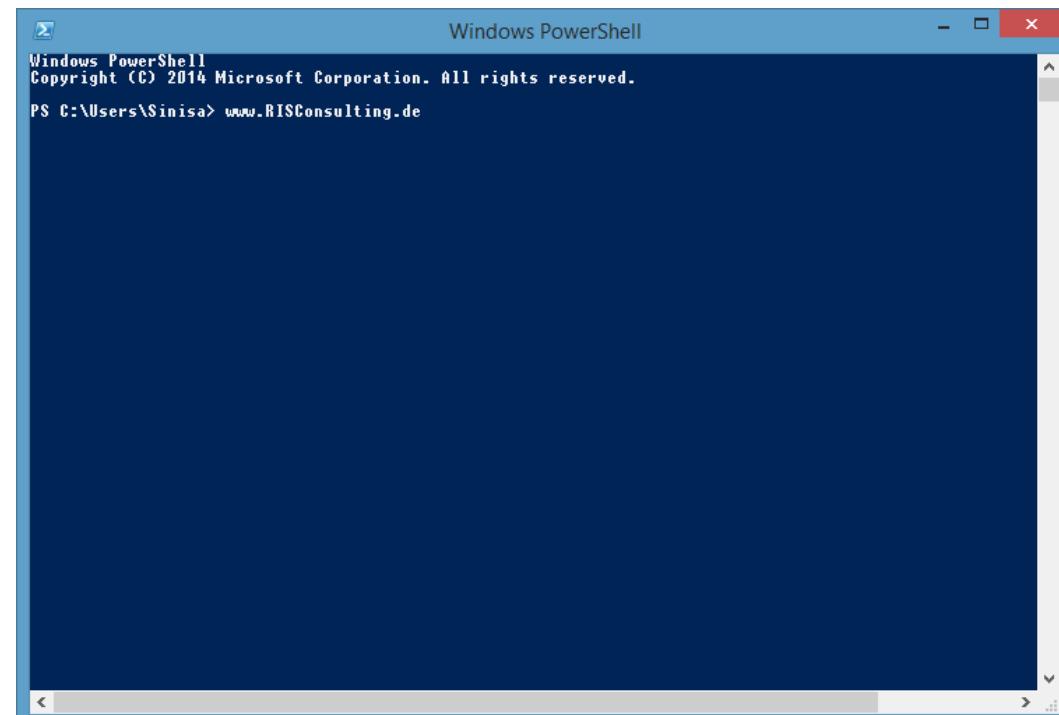
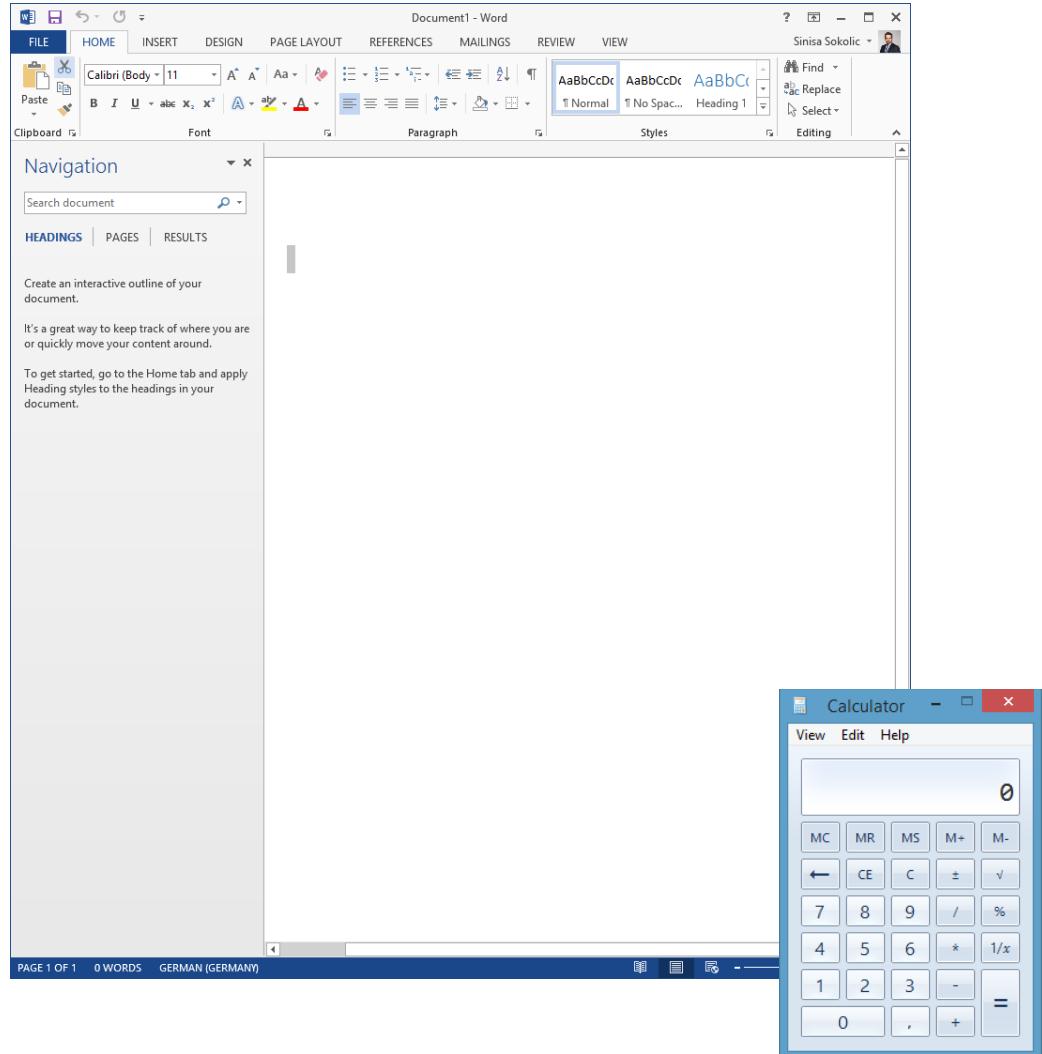


It's all about the apps

Do YOU need this...



Or that...



VMs/RDSH

2000 ~~Desktops~~ in 20 Minutes ?

Applications

Automation

Layering

Security

Silos

Enterprise IT

WHAT YOU SHOULD DO...

- Migrate all your manual processes to automated processes
- Use application virtualization or layering where possible
- Simplify technology components
- Check latency on your networks
- Classify your data
- Do not forget printing
- Check your user's multimedia requirements
- Think about the change cycles you need to support

Legofy your infrastructure

Future RDS Improvements WS 2016

- **OpenGL (up to 4.4), OpenCL (up to 1.1) and DirectX 12**
- 1GB dedicated VRAM configurable and decoupled from resolution
- 4k resolution and H.264/AVC hardware offload support on clients
- **Server VM support (= GPU-accelerated single user RDSH VM)**
- **RDSH desktop experience pack**
- Gen2 VM support on Hyper-V
- RDGW web sockets simplifies load balancing (no IP affinity required)
- Improved performance, higher render FPS and lower jitter
- Pen remoting for tablets, such as Surface Pro 3

We



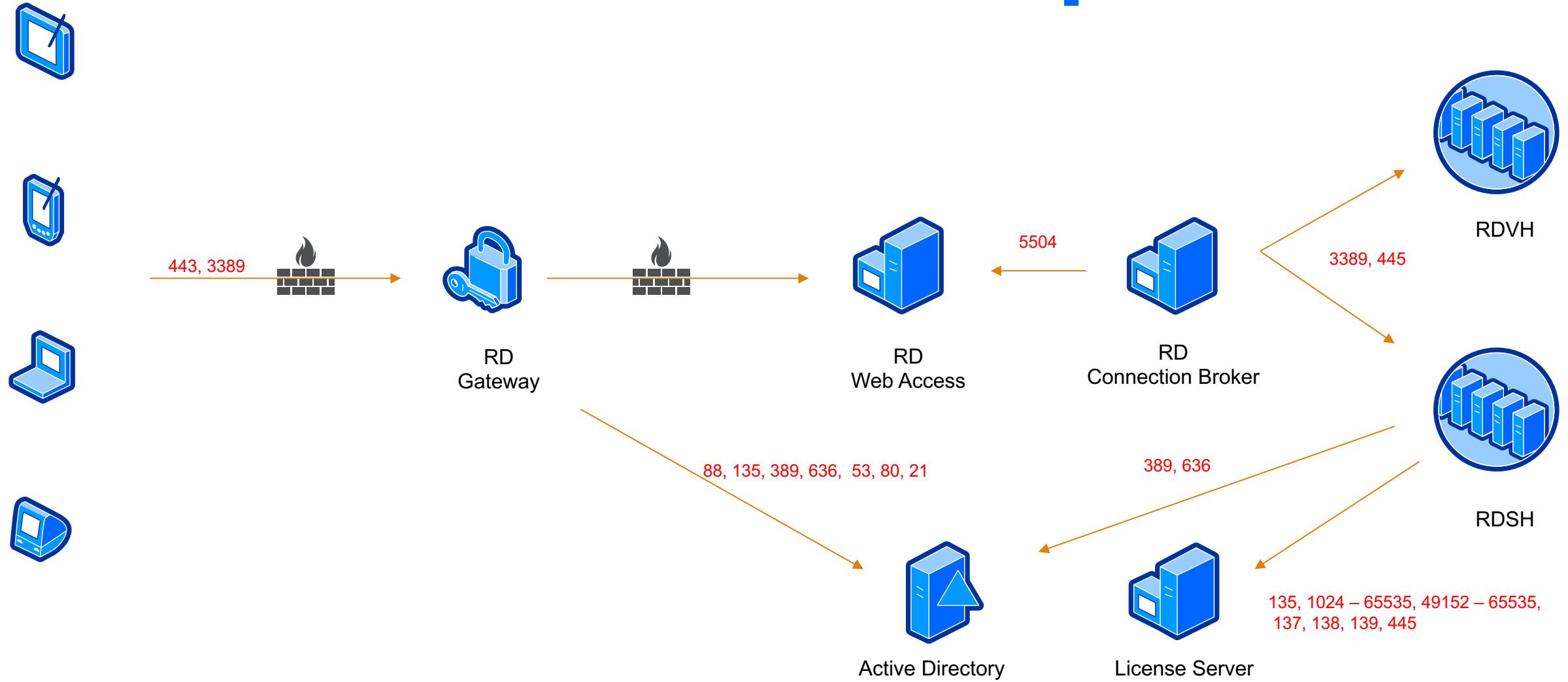
RDSH

Thank You

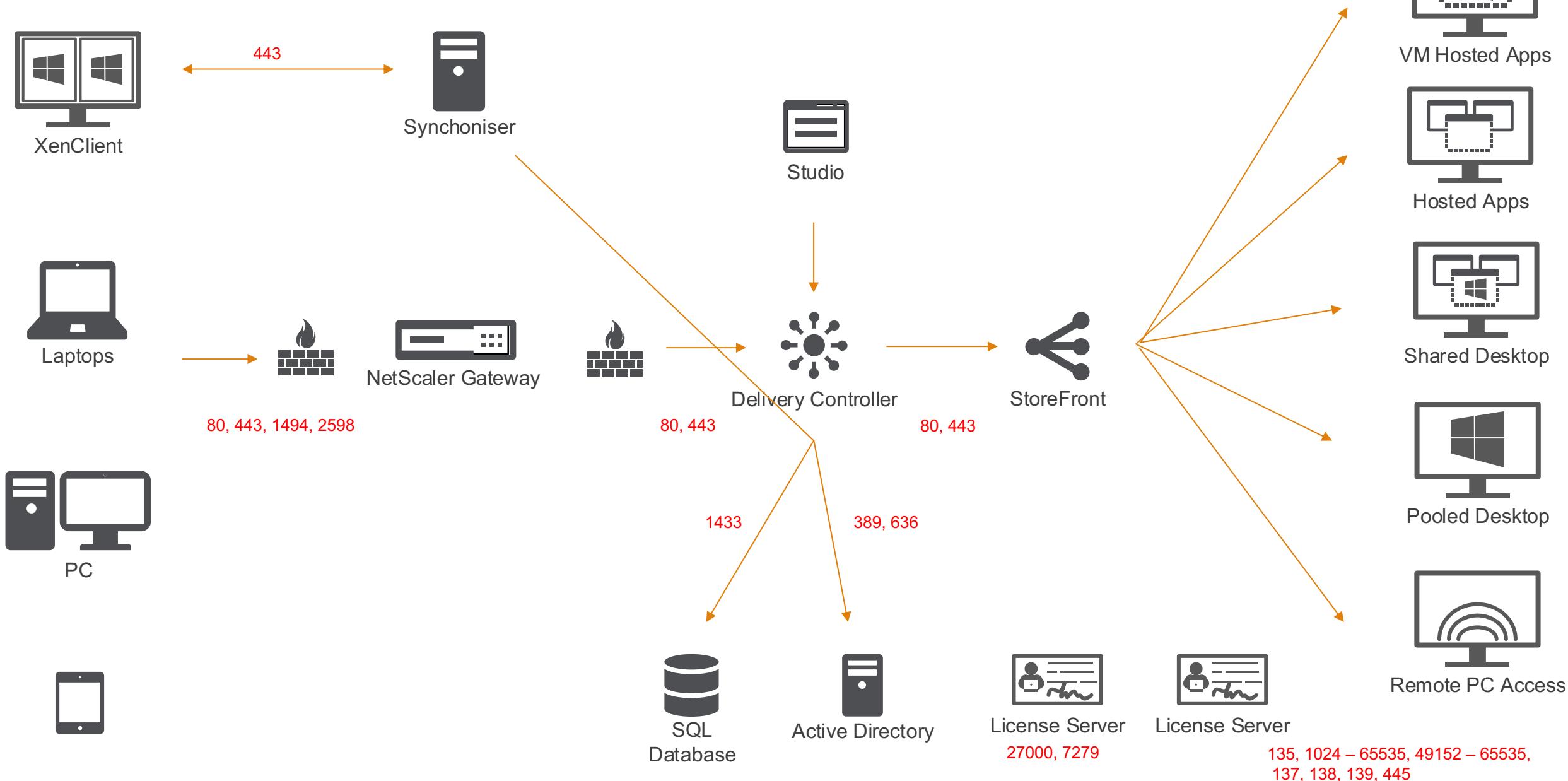
Benny Tritsch
<http://www.drtritsch.com>
Twitter: @drtritsch

Sinisa Sokolic
<http://www.sinisasokolic.com>
Twitter: @sinisasokolic

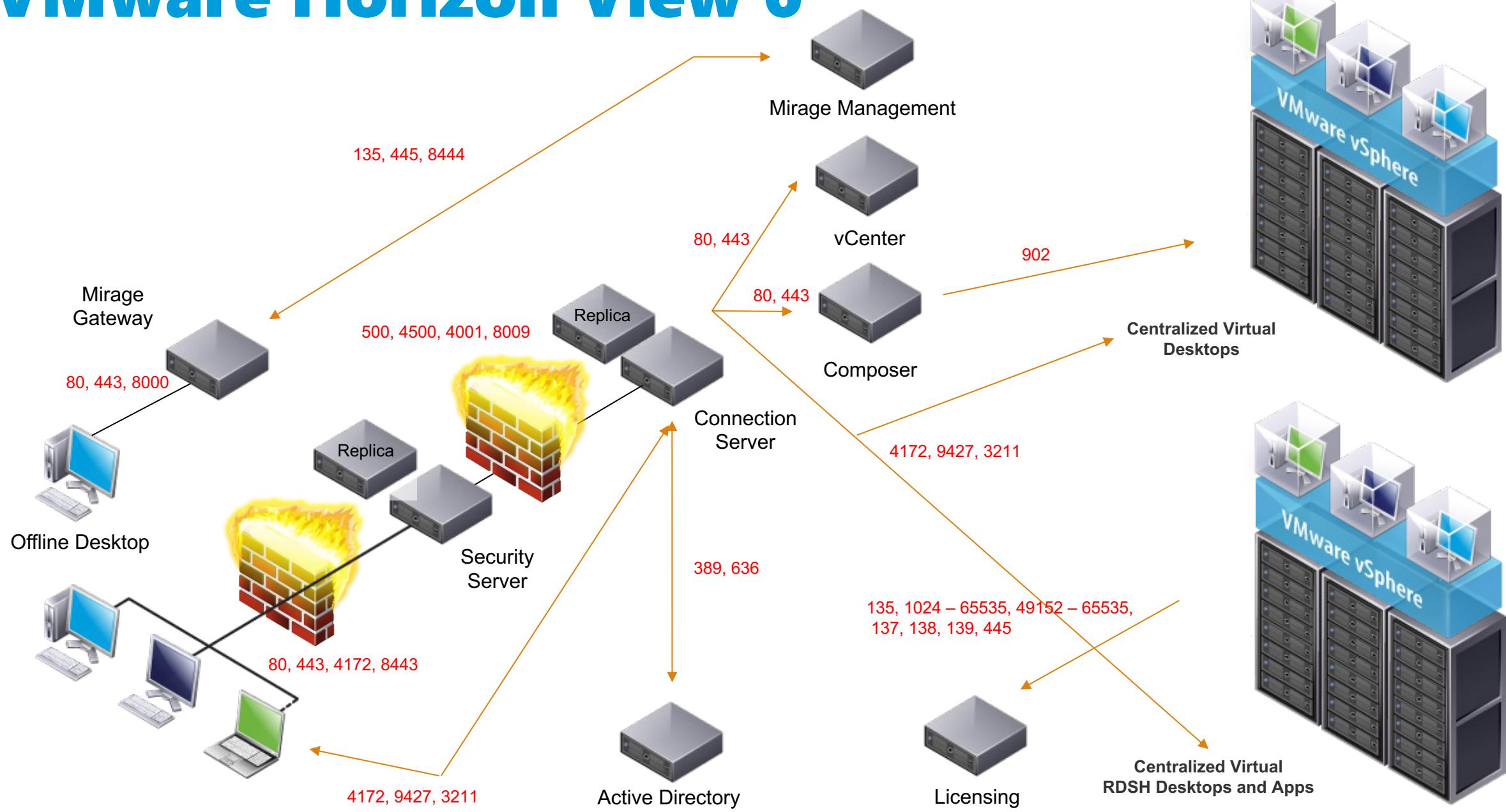
Microsoft Remote Desktop Services



Citrix XenApp/XenDesktop



VMware Horizon View 6



Comparing RDS & VDI

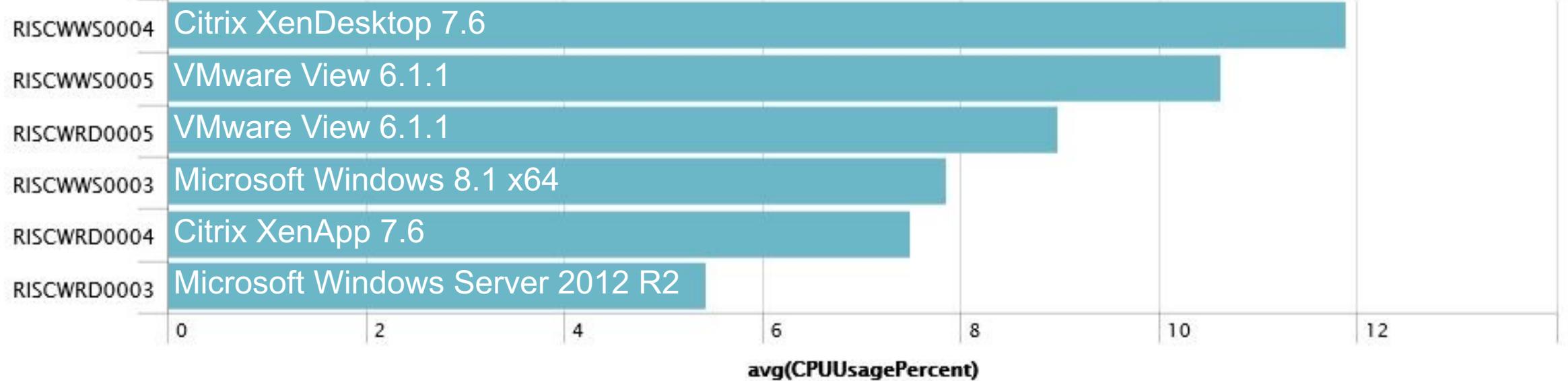
- 3 Windows 8.1 x64 machines
 - 1 GB RAM
 - 1 vCPU
- 3 Windows Server 2012 R2 machines
 - 1 GB RAM
 - 1 vCPU
- Fully patched, no further customizations
 - 3 reboot cycles
 - 3 Logon Cycles (RDP)

CPU usage (%) per machine (top 10)

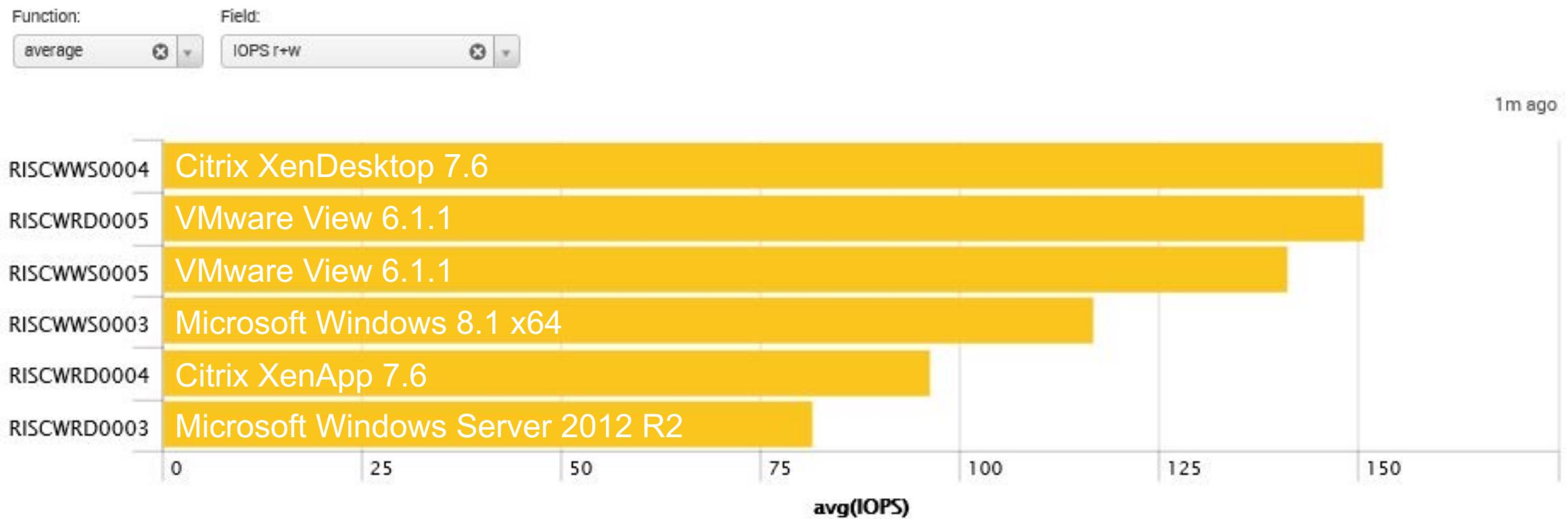
Function:

average X ▼

2m ago



Disk IO per machine (top 10)

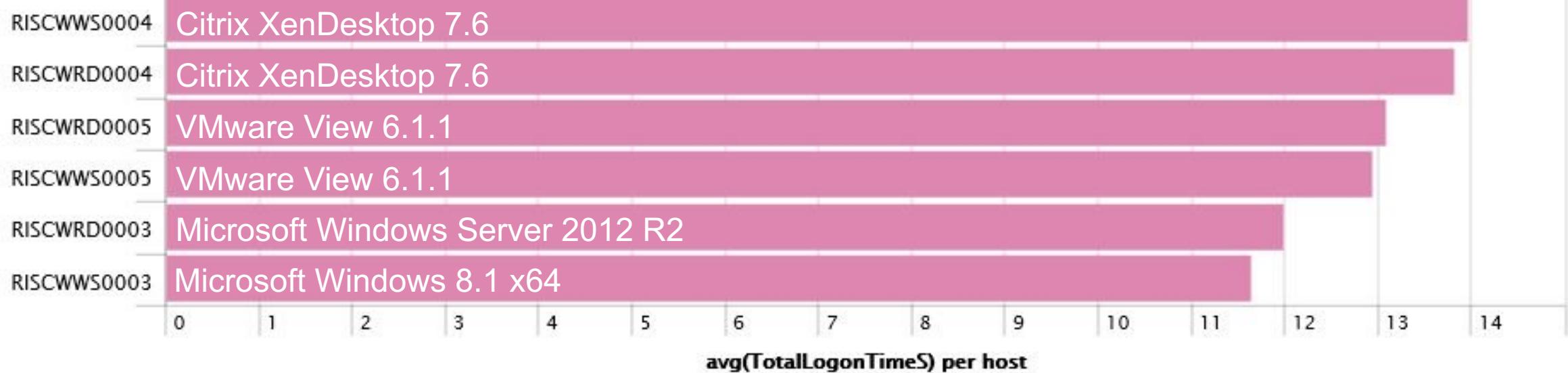


Logon duration per host (top 10)

Function:

average X

<1m ago



RAM usage (%) per machine (top 10)

