

# The Business Value of VDI

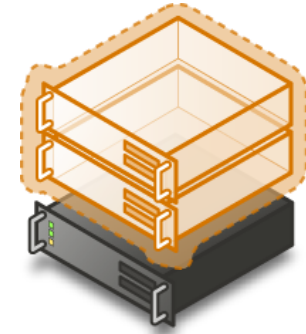
Jeroen van de Kamp  
CTO Login Consultants

# Everything is Virtual



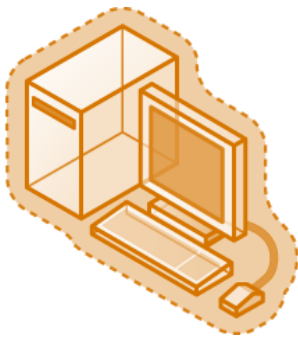
Presentation  
Virtualization

Server  
Virtualization

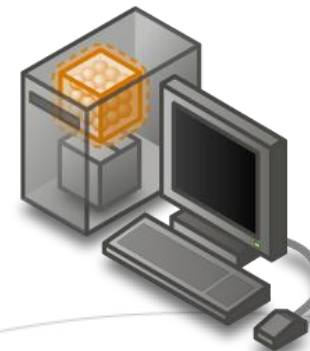


Profile  
Virtualization

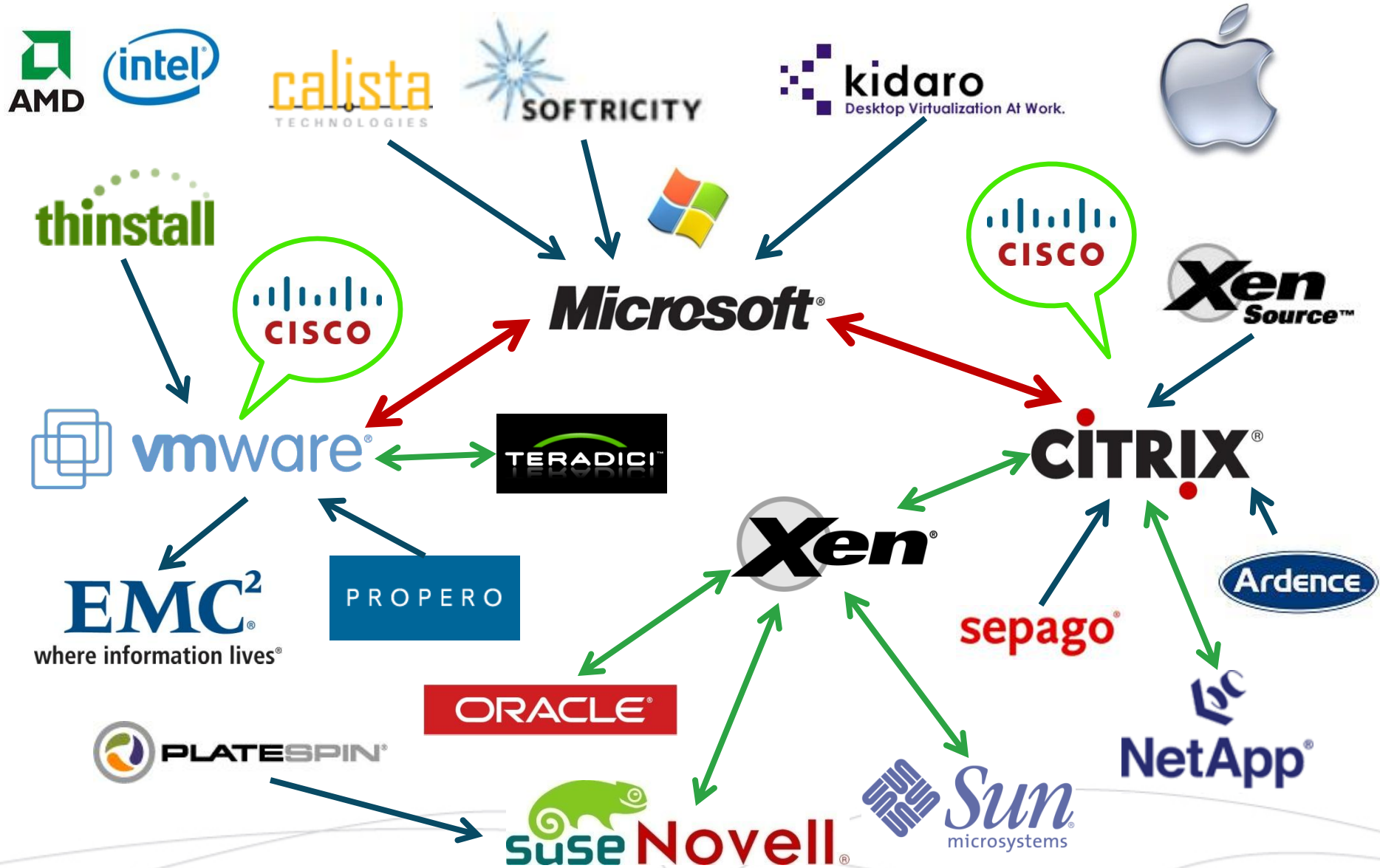
Application  
Virtualization



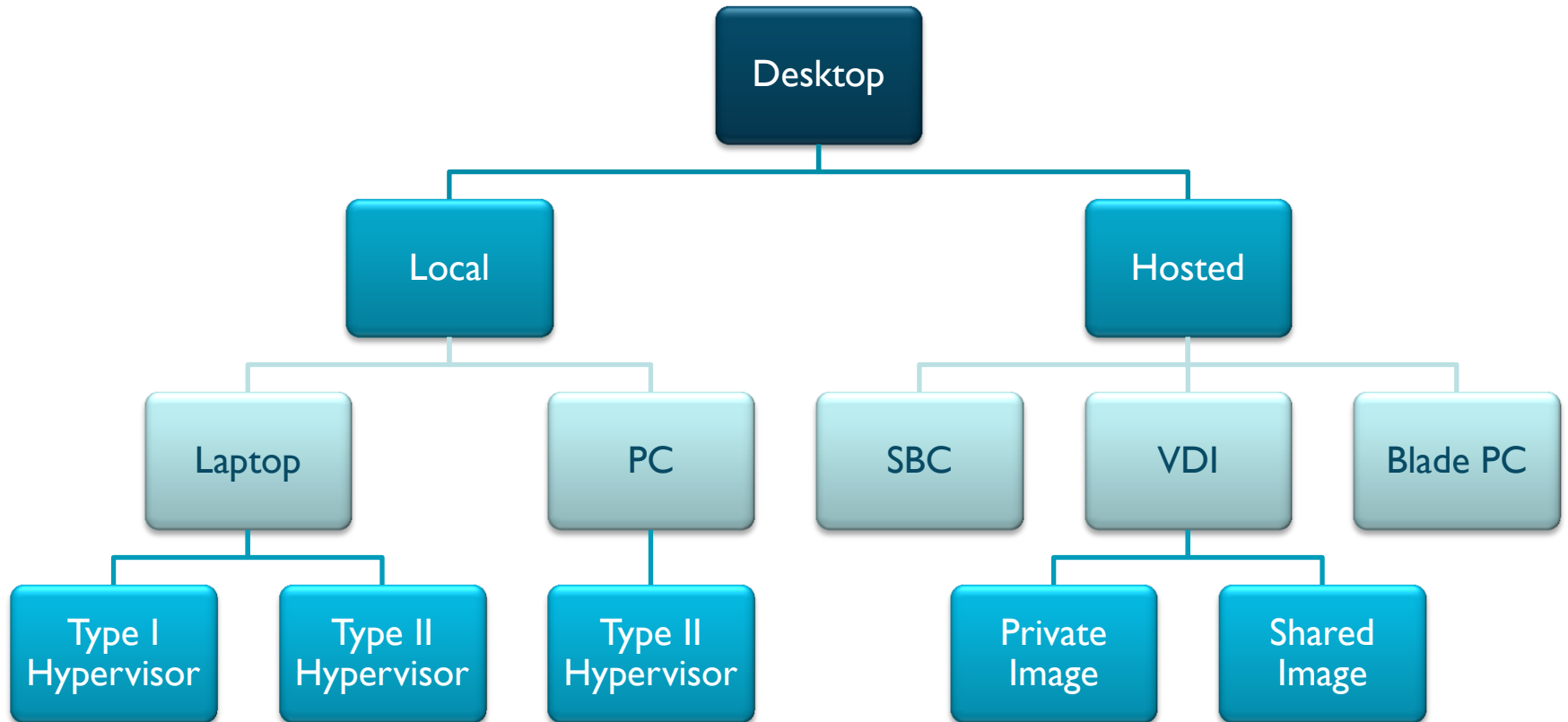
Desktop  
Virtualization



# The Virtualization Market Space



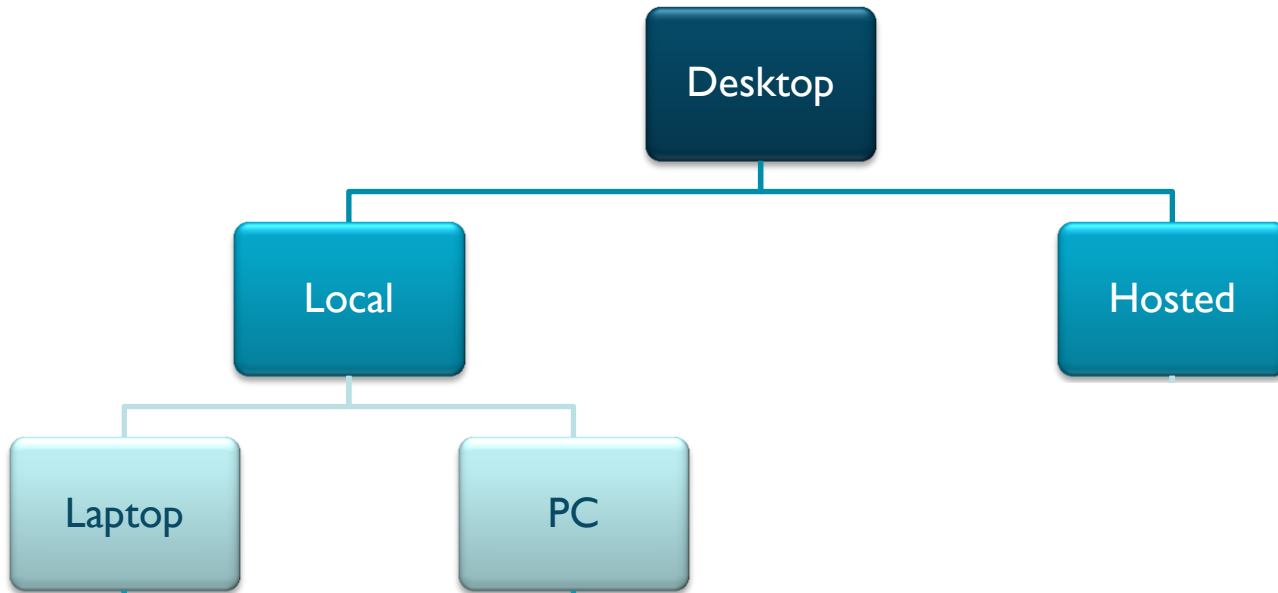
# Desktop 2.0



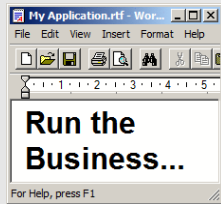
# Desktop 2.0



# Desktop 2.0



# Classic Desktop Infrastructure



**Application Front-end**



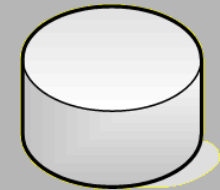
**Desktop**



**Application Data**



**Deployment Data**



**Application Back-end**



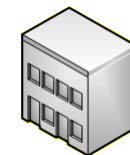
**Management Server**



**PC / Laptop**

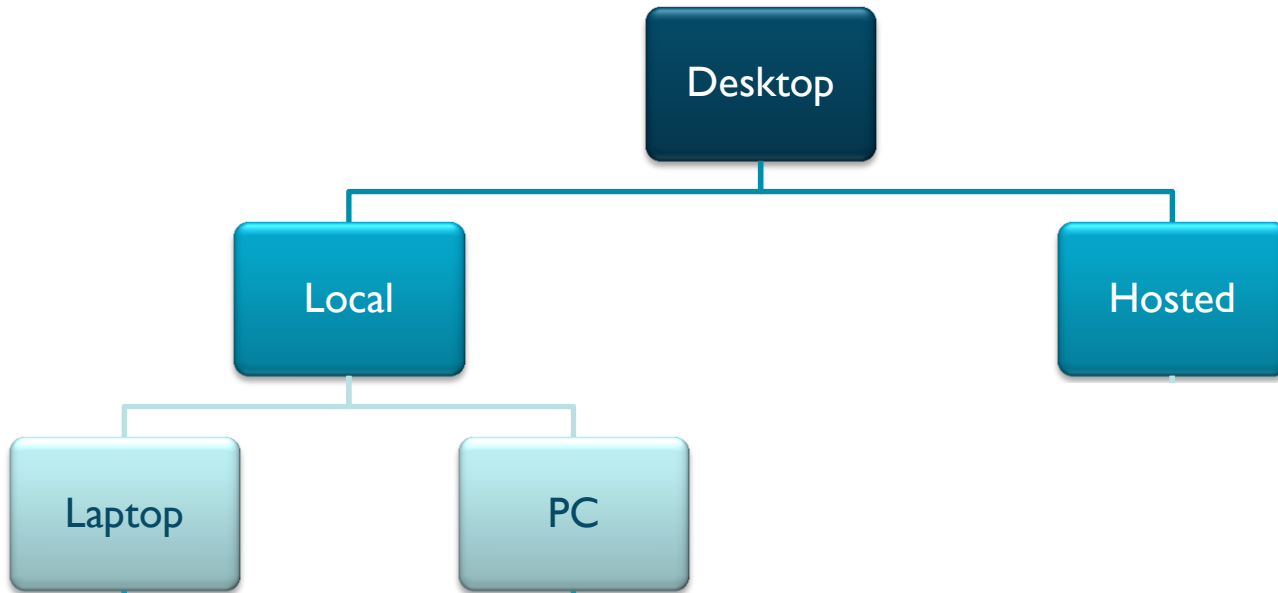


**Network**



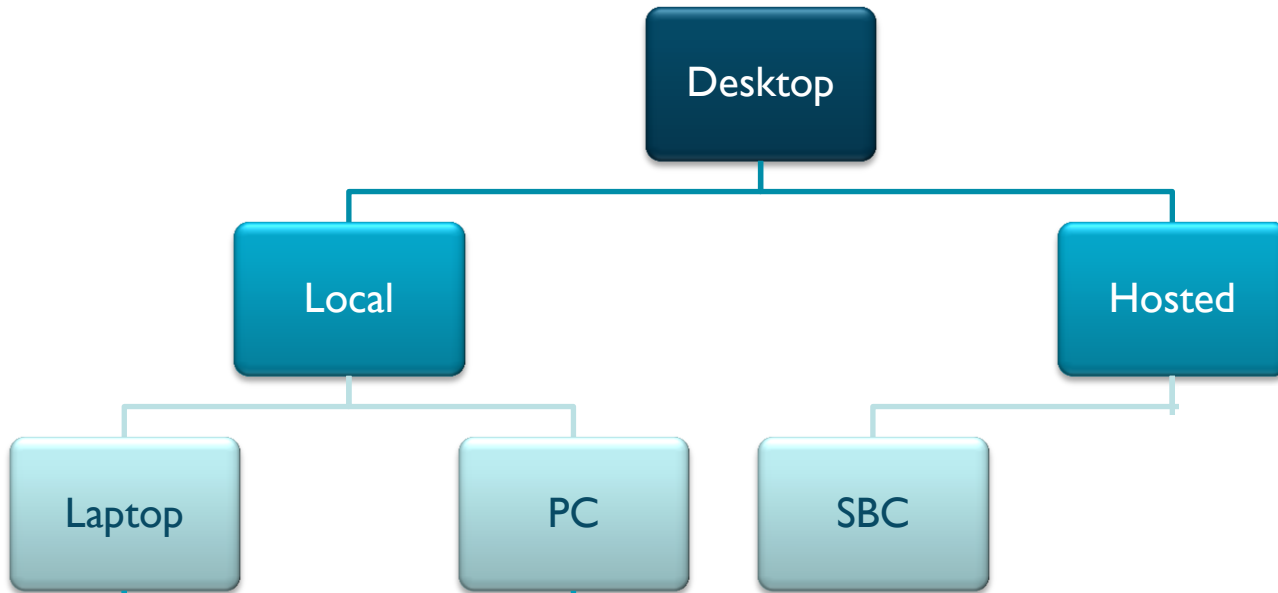
**Data Center**

# Desktop 2.0

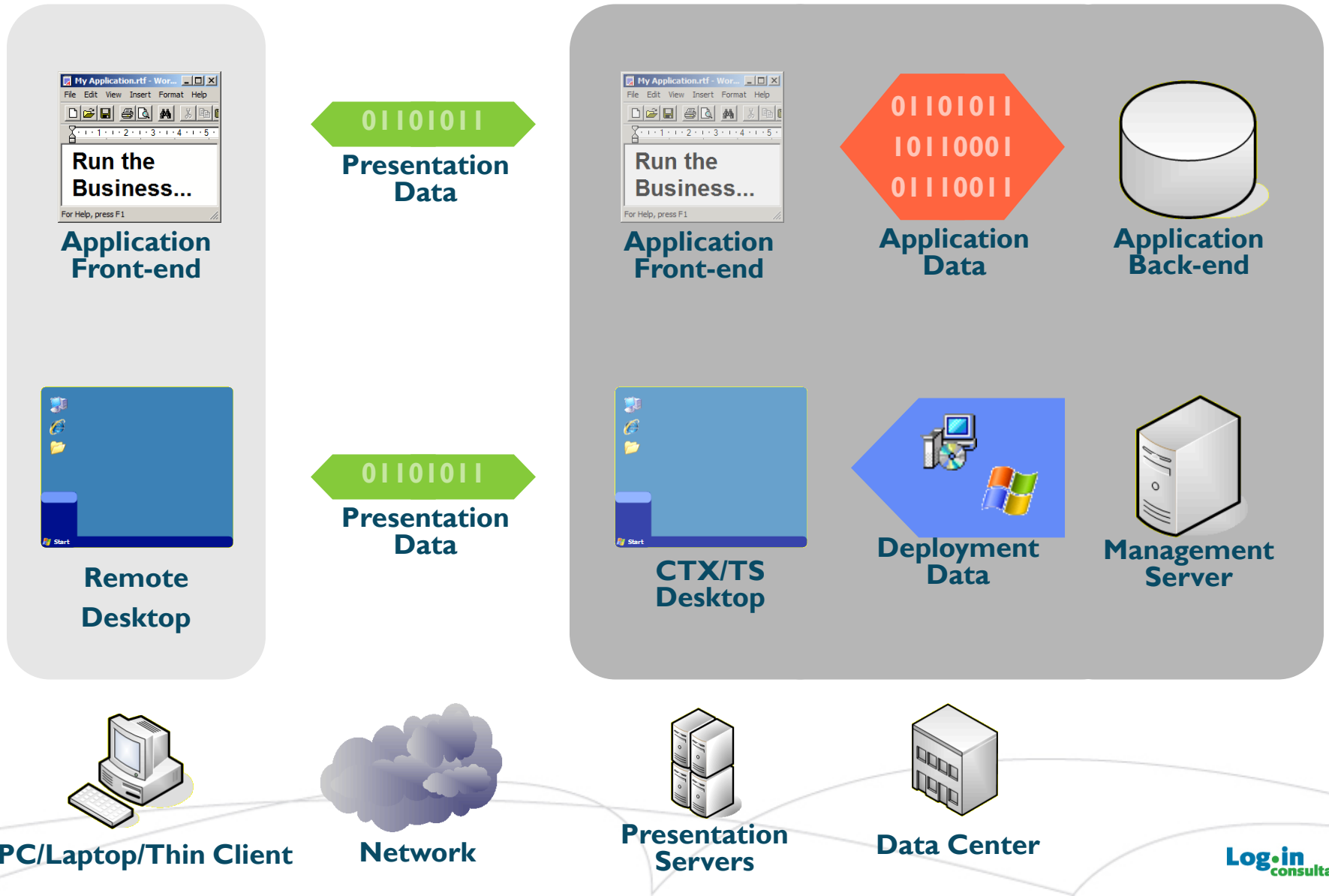




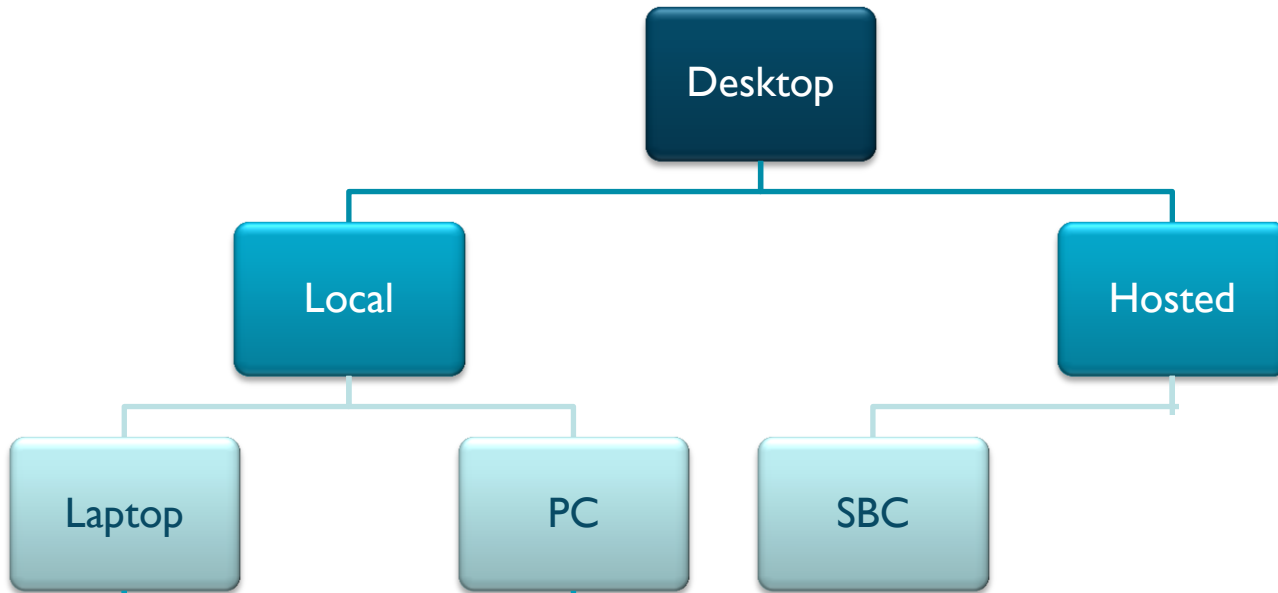
# Desktop 2.0



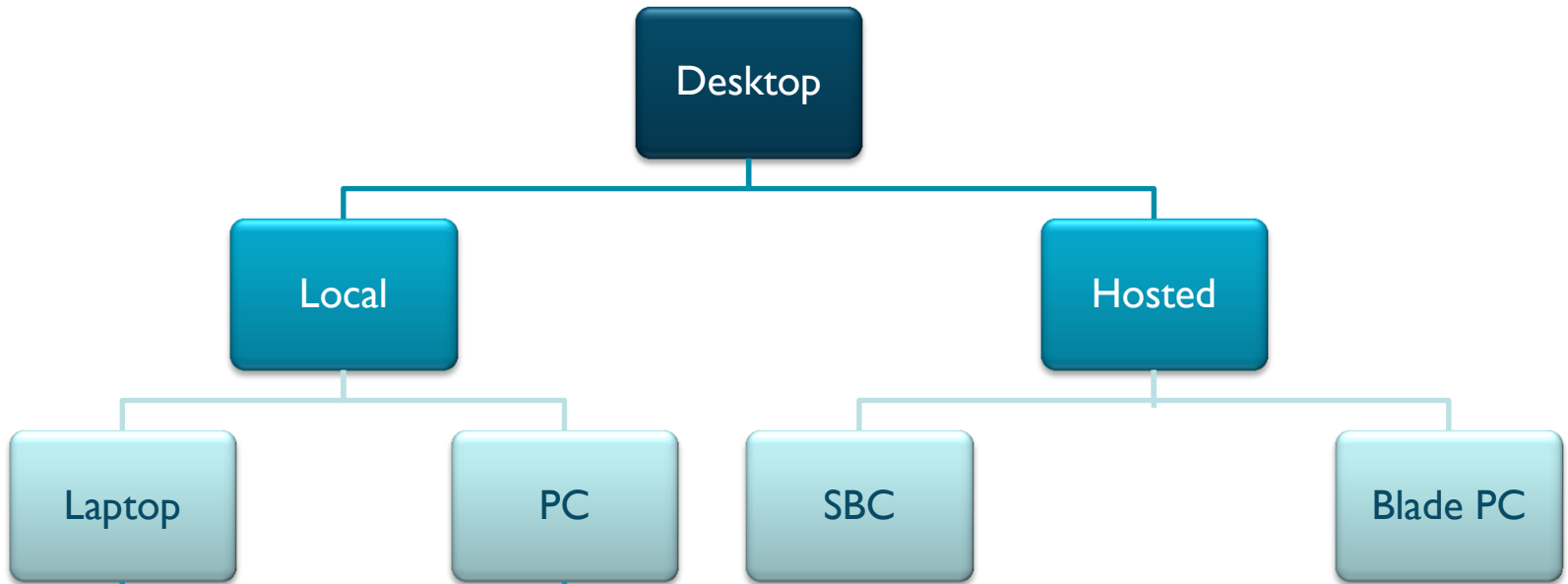
# Presentation Virtualization (SBC)



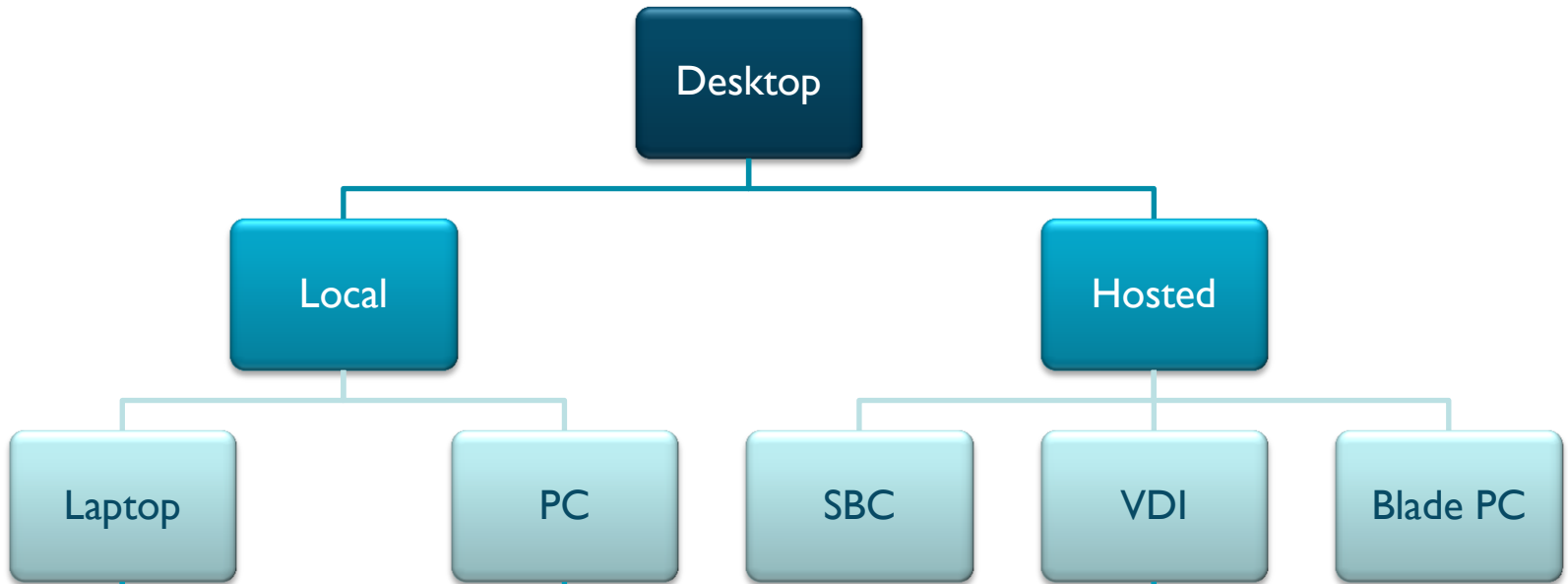
# Desktop 2.0



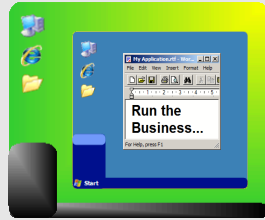
# Desktop 2.0



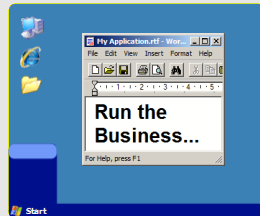
# Desktop 2.0



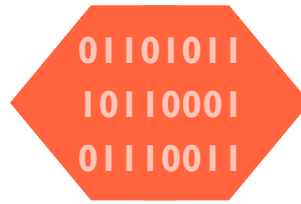
# Client side vs Hosted Virtual Desktop



**Client side  
Virtual Desktop**



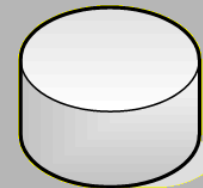
**Hosted Virtual  
Desktop**



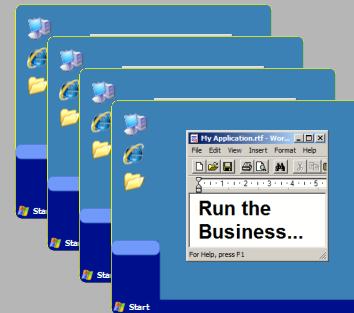
**Data**



**Presentation  
Protocol**



**Application**



**Hosted  
Desktops**



**Client**

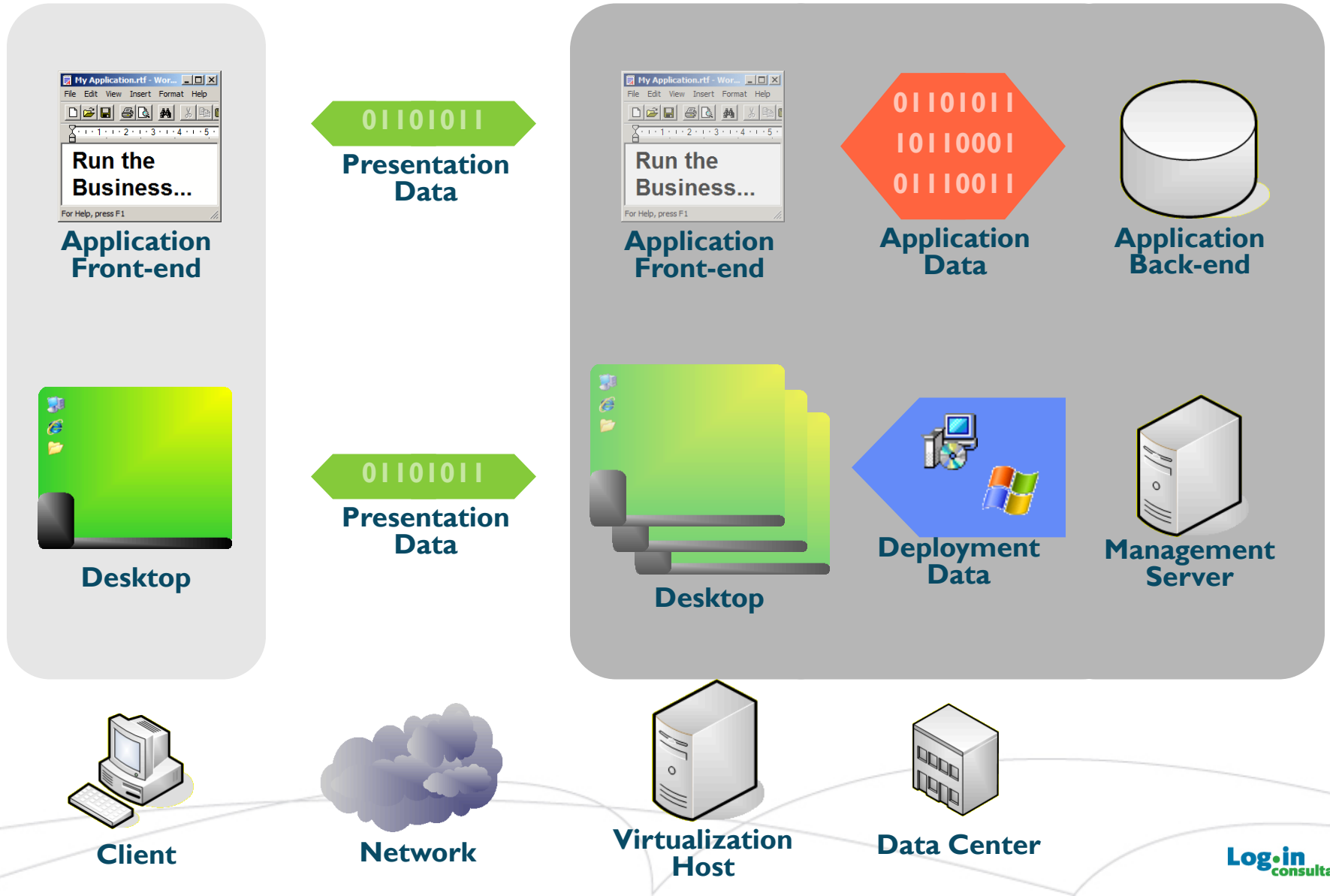


**Network**

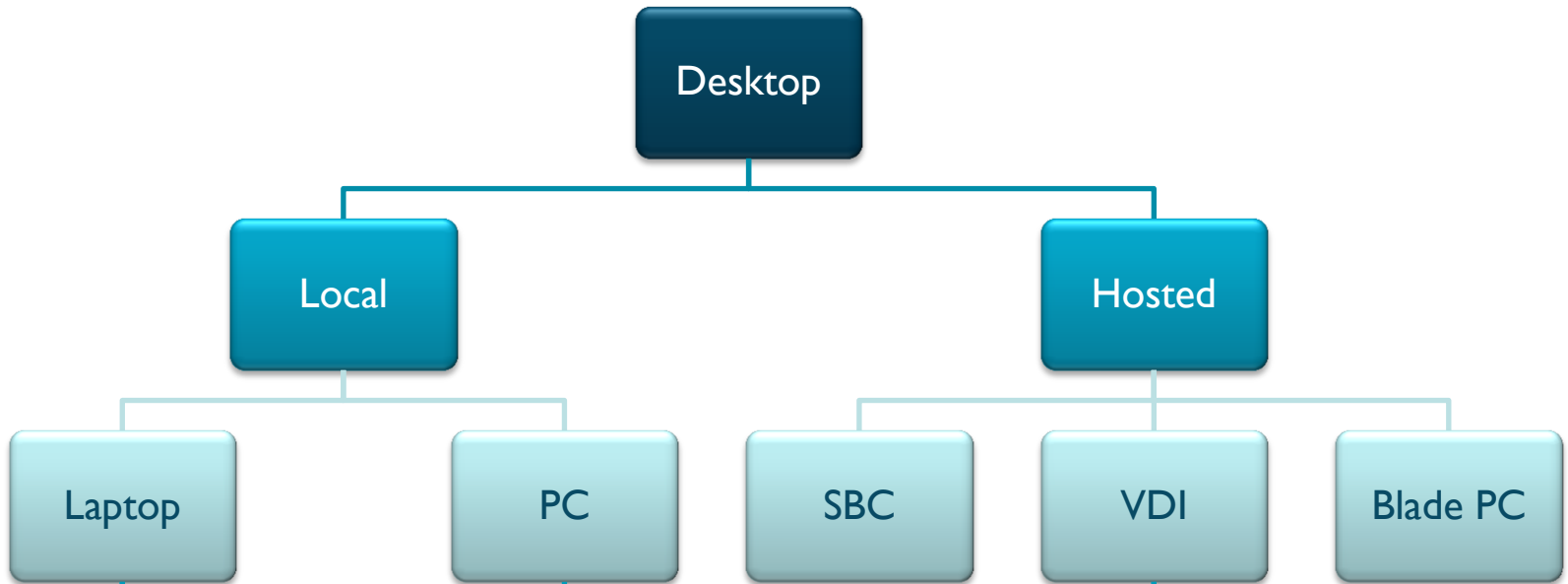


**Data Center**

# Hosted virtual Desktops

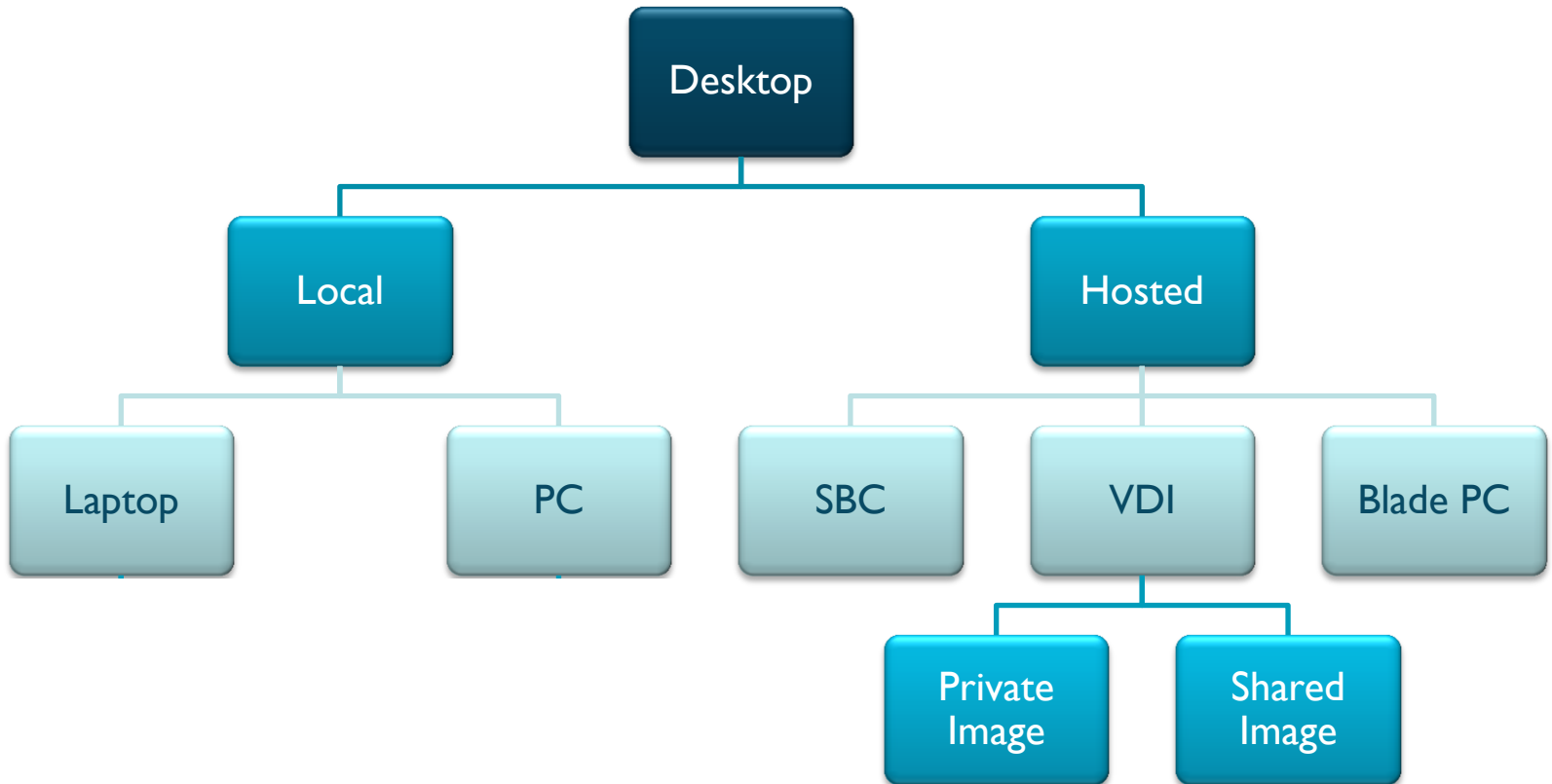


# Desktop 2.0

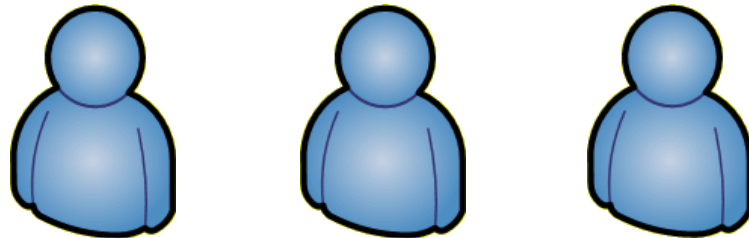




# Desktop 2.0

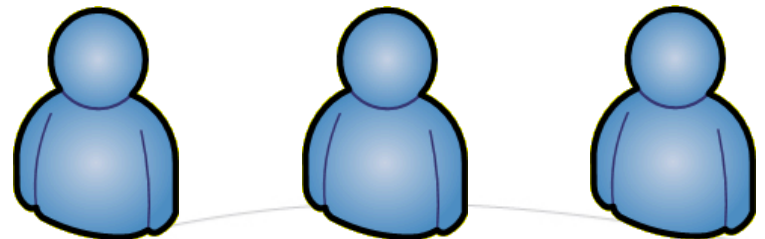
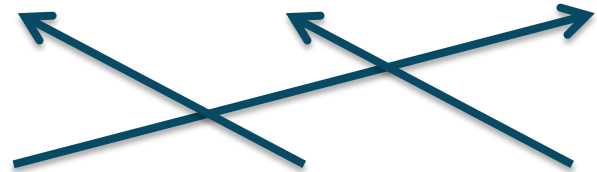


# Shared vs Private VDI

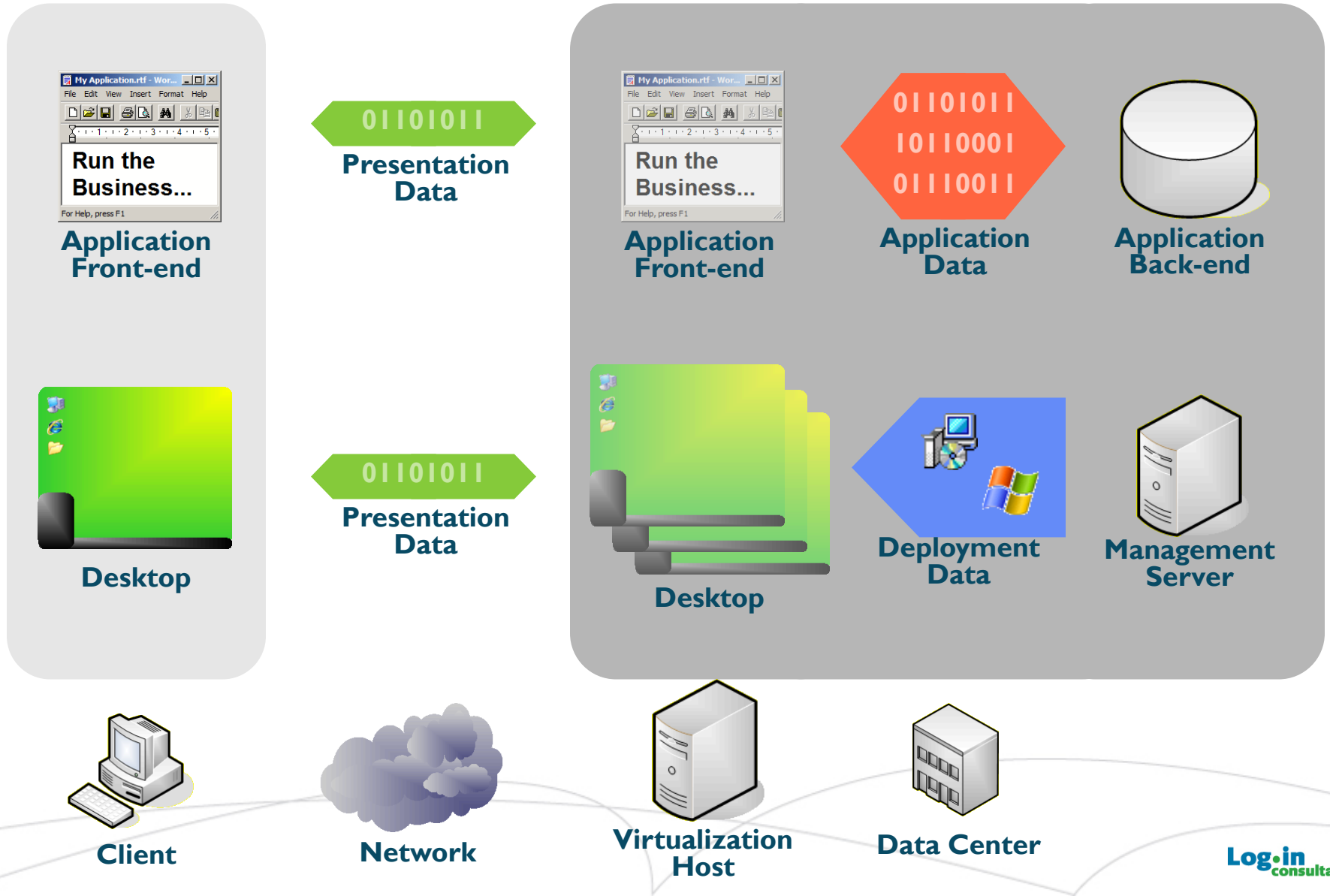


Persistent  
Private  
Statefull  
Assigned

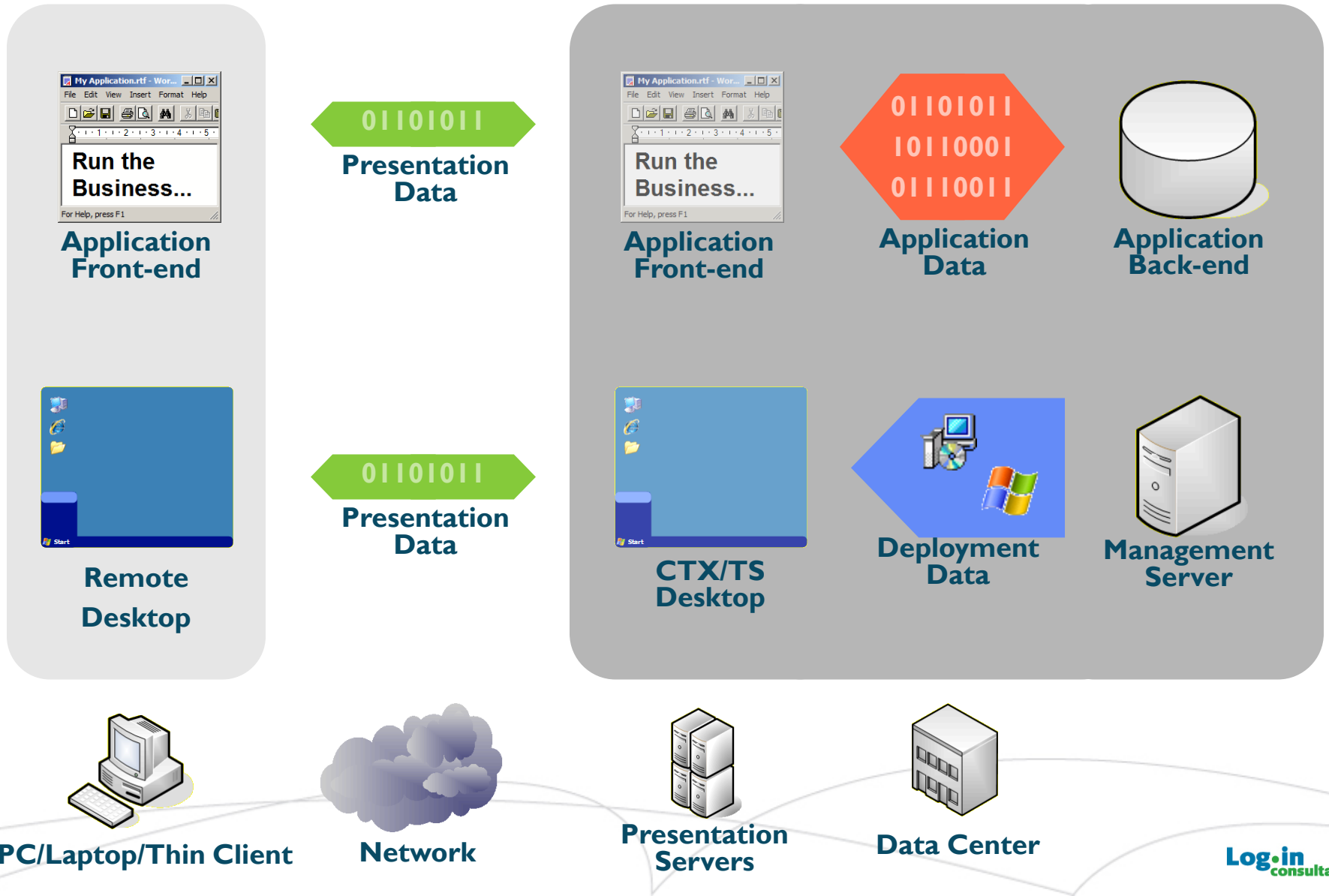
Non-Persistent  
Shared  
Stateless  
Pooled



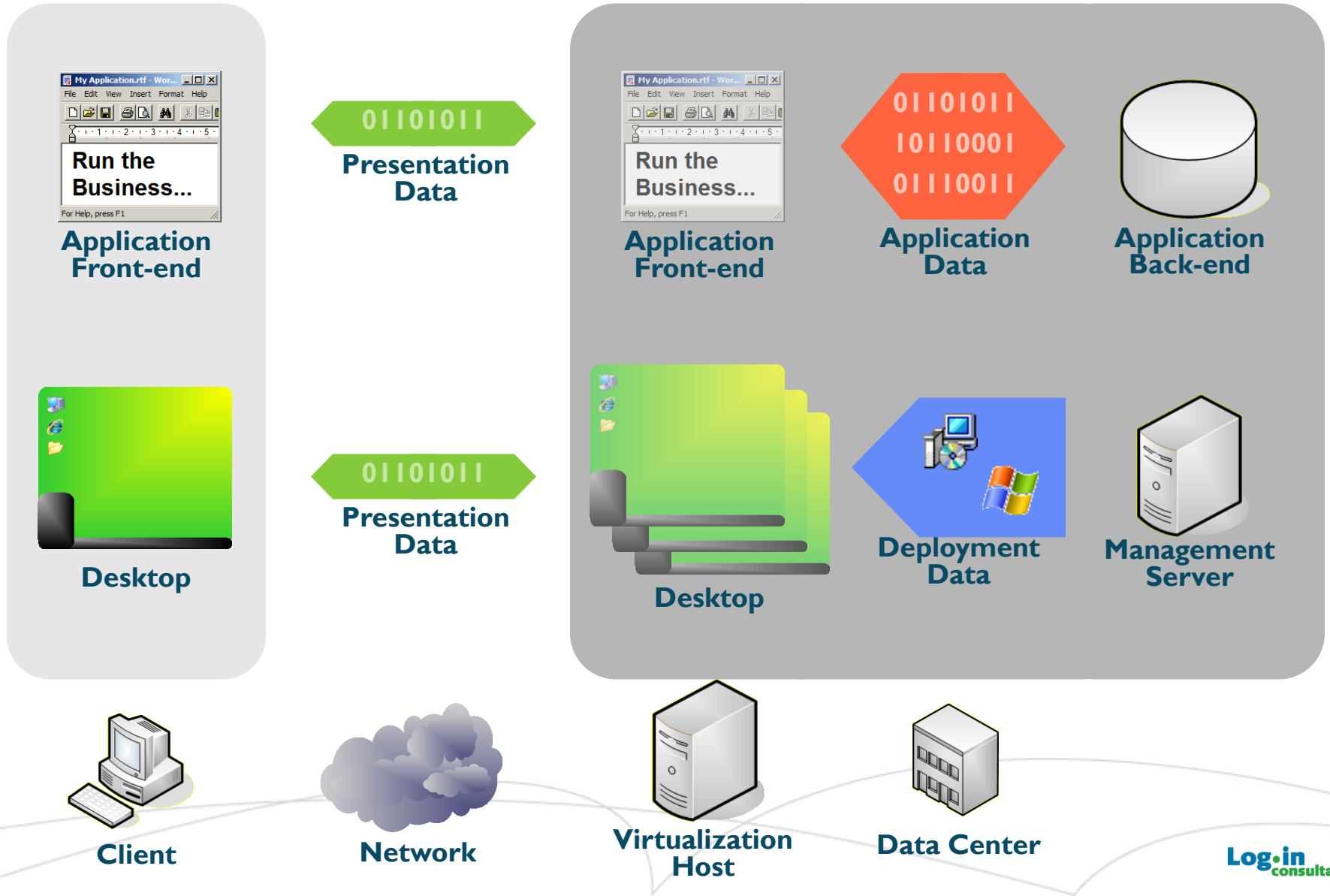
# Hosted virtual Desktops



# Presentation Virtualization (SBC)



# Hosted virtual Desktops

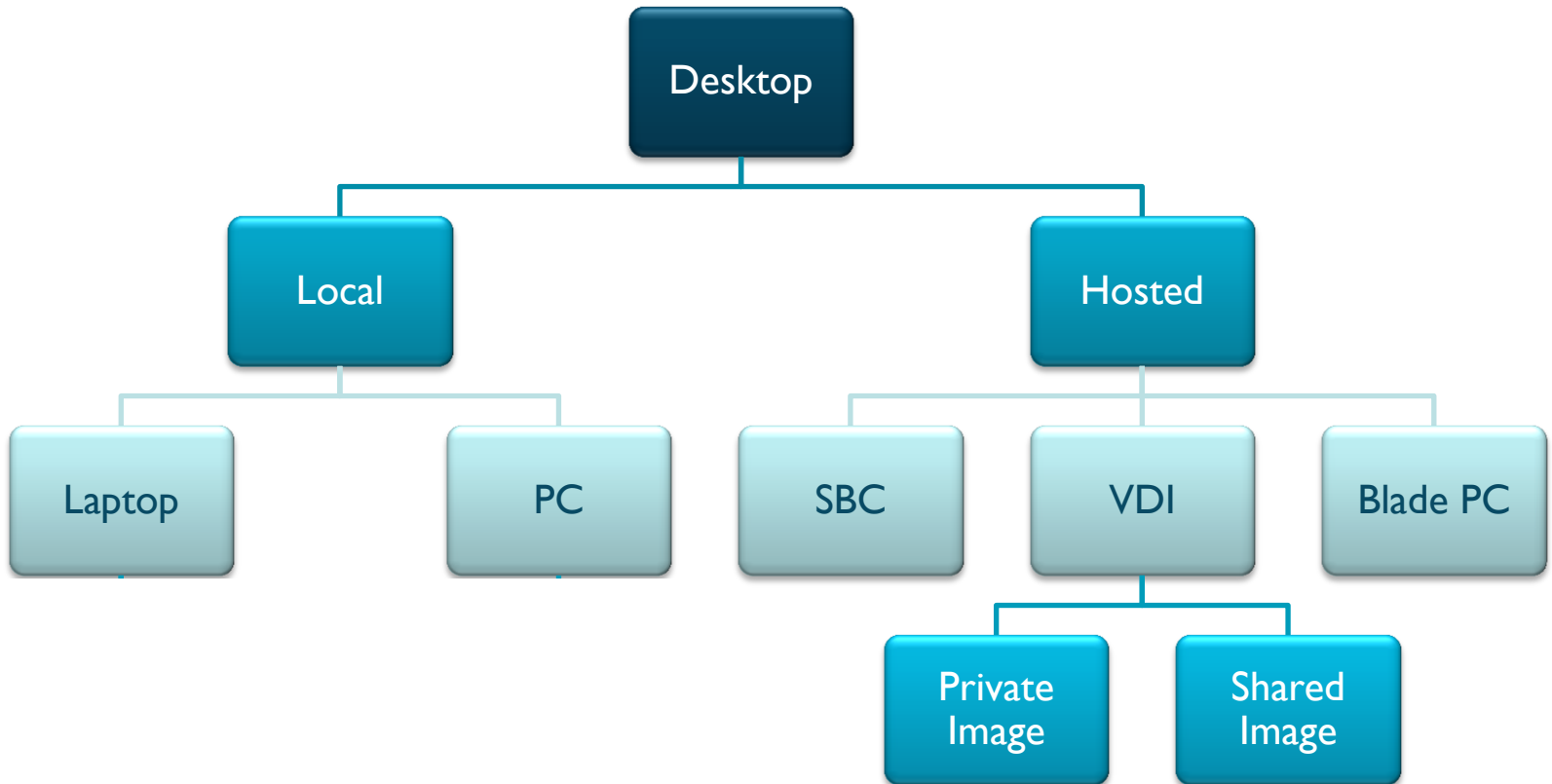


# SBC vs VDI



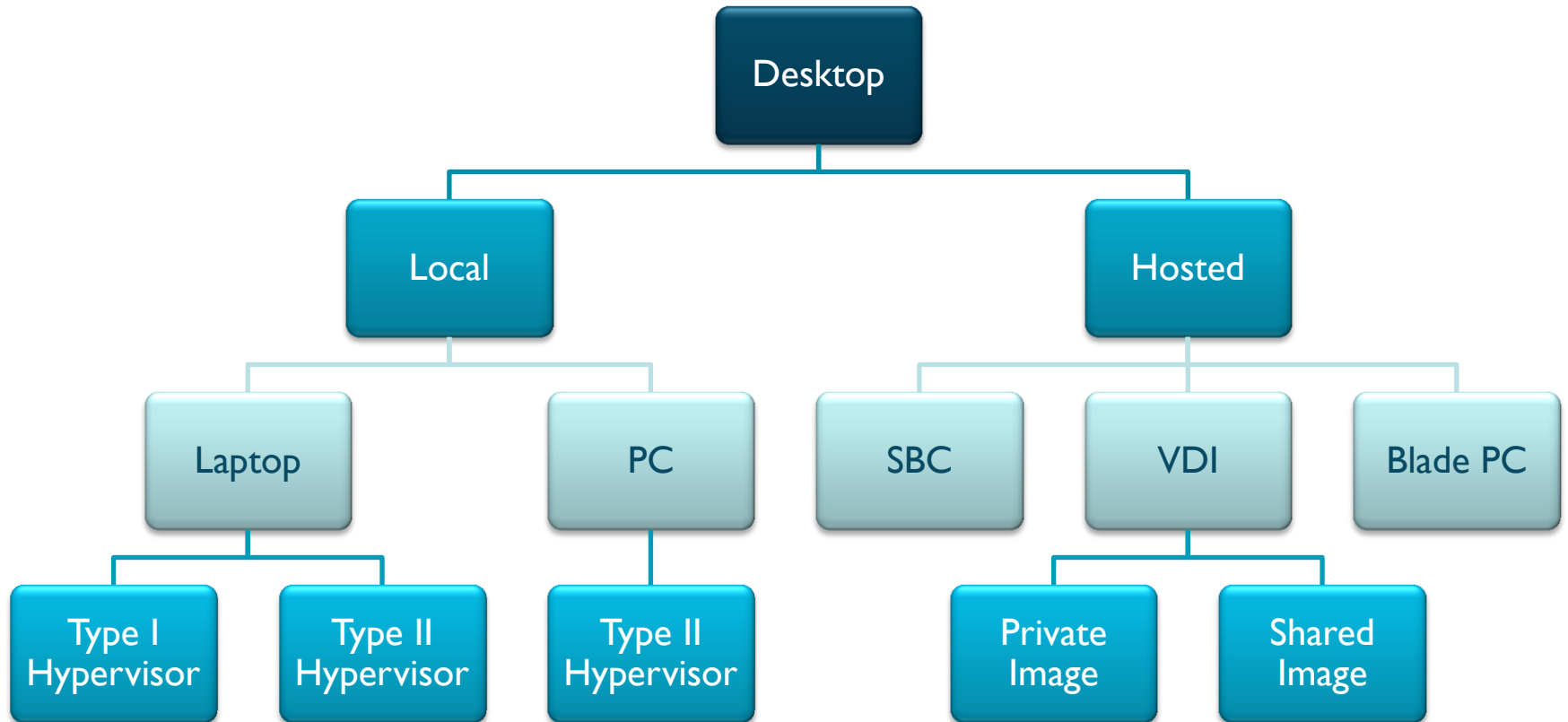


# Desktop 2.0

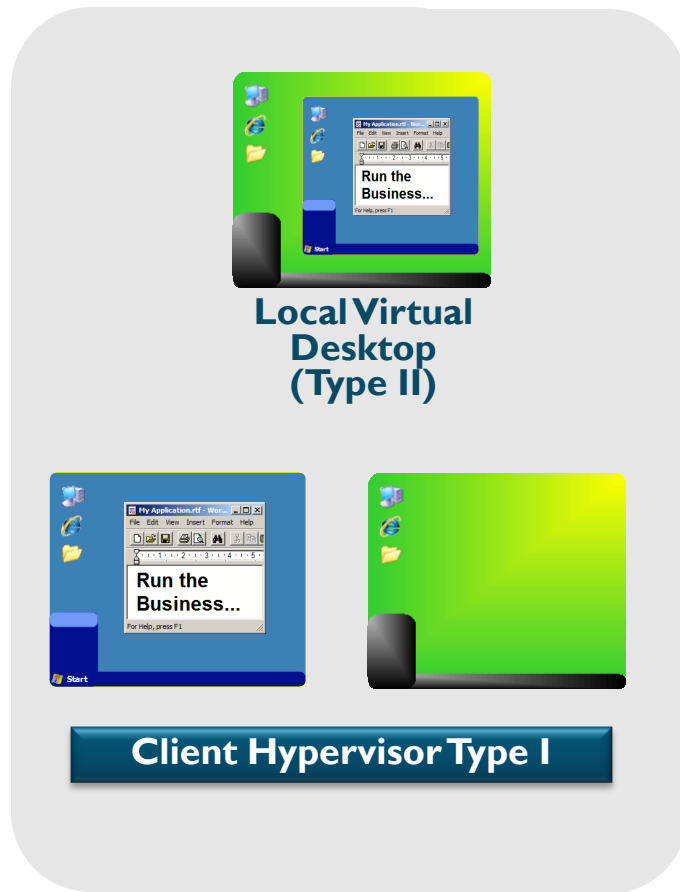




# Desktop 2.0



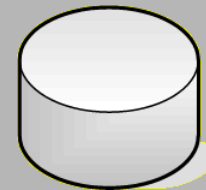
# Client side VDI: Type I vs Type II



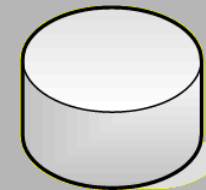
**Data**



**Data**



**Application**



**Application**



**PC / Laptop**



**Network**



**Data Center**

# VDI?

# Developers



08





# Centralization







# Green IT





# Windows Upgrade



TM

# 'Het Nieuwe Werken'









# Disaster Recovery













Vandaag acties in openbaar  
vervoer. Geen treinen. Meer  
informatie op [www.ns.nl](http://www.ns.nl)

1/2

4

# BYOC



**Nerd.**

**Pretty Boy.**













# Cost Savings?



# Desktops as a Service

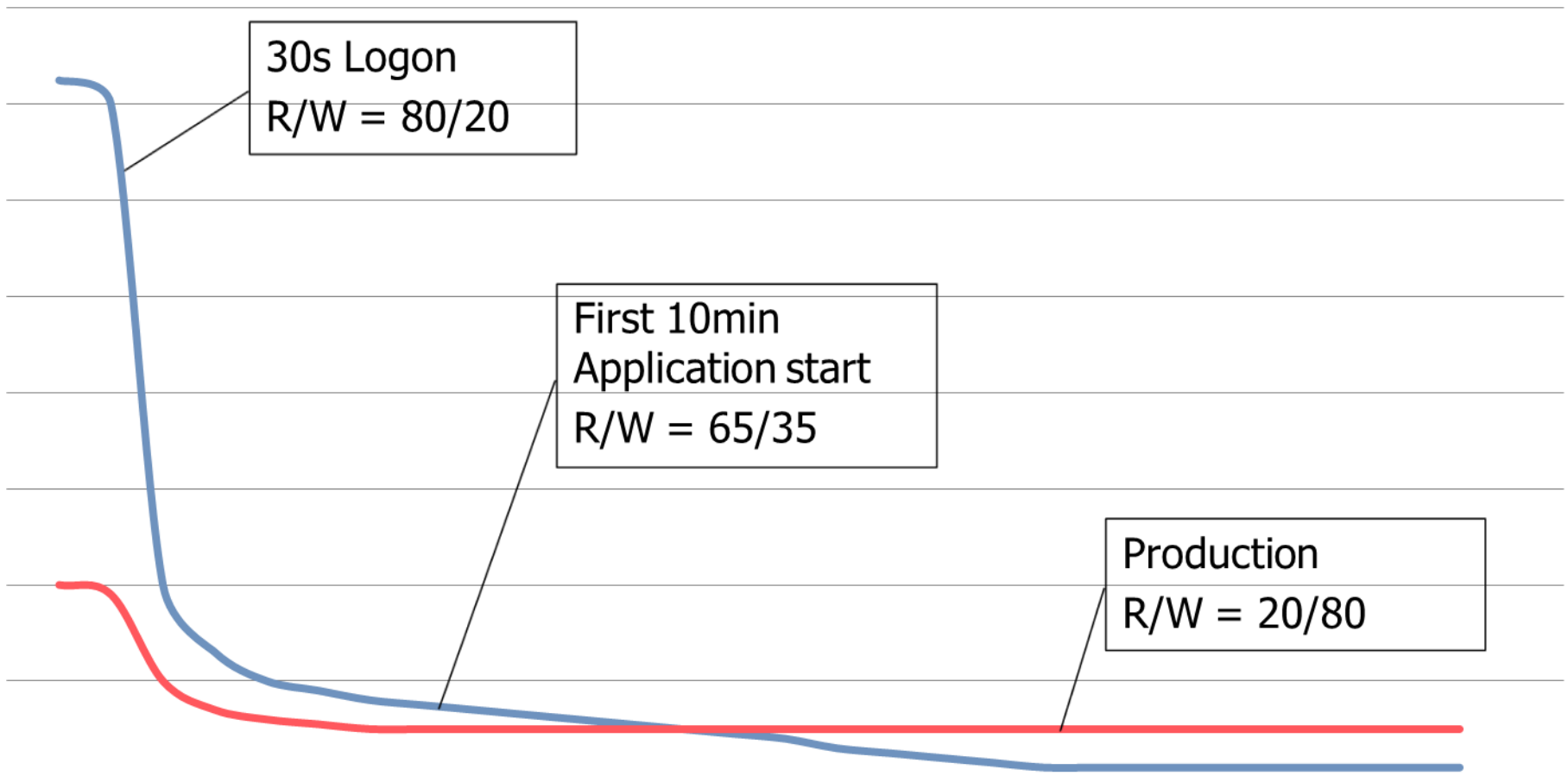


# VDI!

# Storage



# Read vs Write I/O's



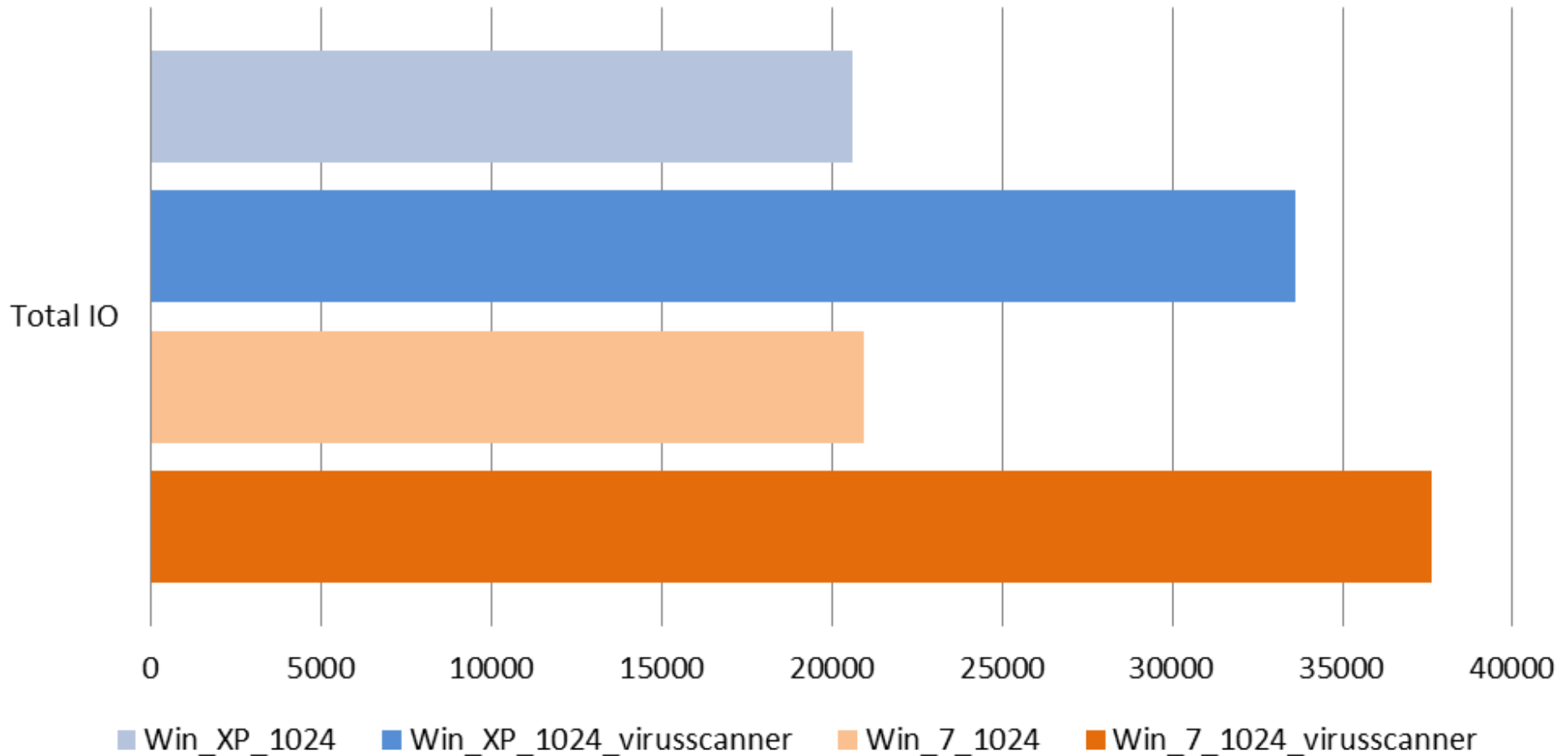
# IOPS per Desktop VM

- Light User 3-5 IOPS
- Normal User 7-12 IOPS
- Heavy User 15-30 IOPS

● **DEPENDS ON APPLICATIONS!** (of course)



# VIRUSSCANNER: TOTAL I/O's



# VDI Technologies

## Connection Protocol

**Microsoft**  
RDP

**VMware**  
PCoIP

**Citrix**  
HDX

## Connection Broker

**Microsoft**  
RDS  
2008 (R2)

**VMware**  
View

**Citrix**  
XenDesktop

**Quest**  
vWorkspace

## Hypervisor Platform and Management

**Microsoft**  
Hyper-V &  
SCVMM

**VMware**  
vSphere &  
vCenter

**Citrix**  
XenServer &  
XenCenter

## Thin Storage Management

SAN Disk  
Deduplication

**VMware**  
Composer &  
Linked Clones

**Citrix**  
Provisioning  
Server

## Personality and Profile Management

**Immidio**  
Flex Profiles

**AppSense**  
Environment  
Manager

**RTO Software**  
Virtual Profiles

**Citrix**  
Profile Manager

## Virtual and Streaming Applications

**Microsoft**  
Terminal Services

**Microsoft**  
App-V

**VMware**  
ThinApp

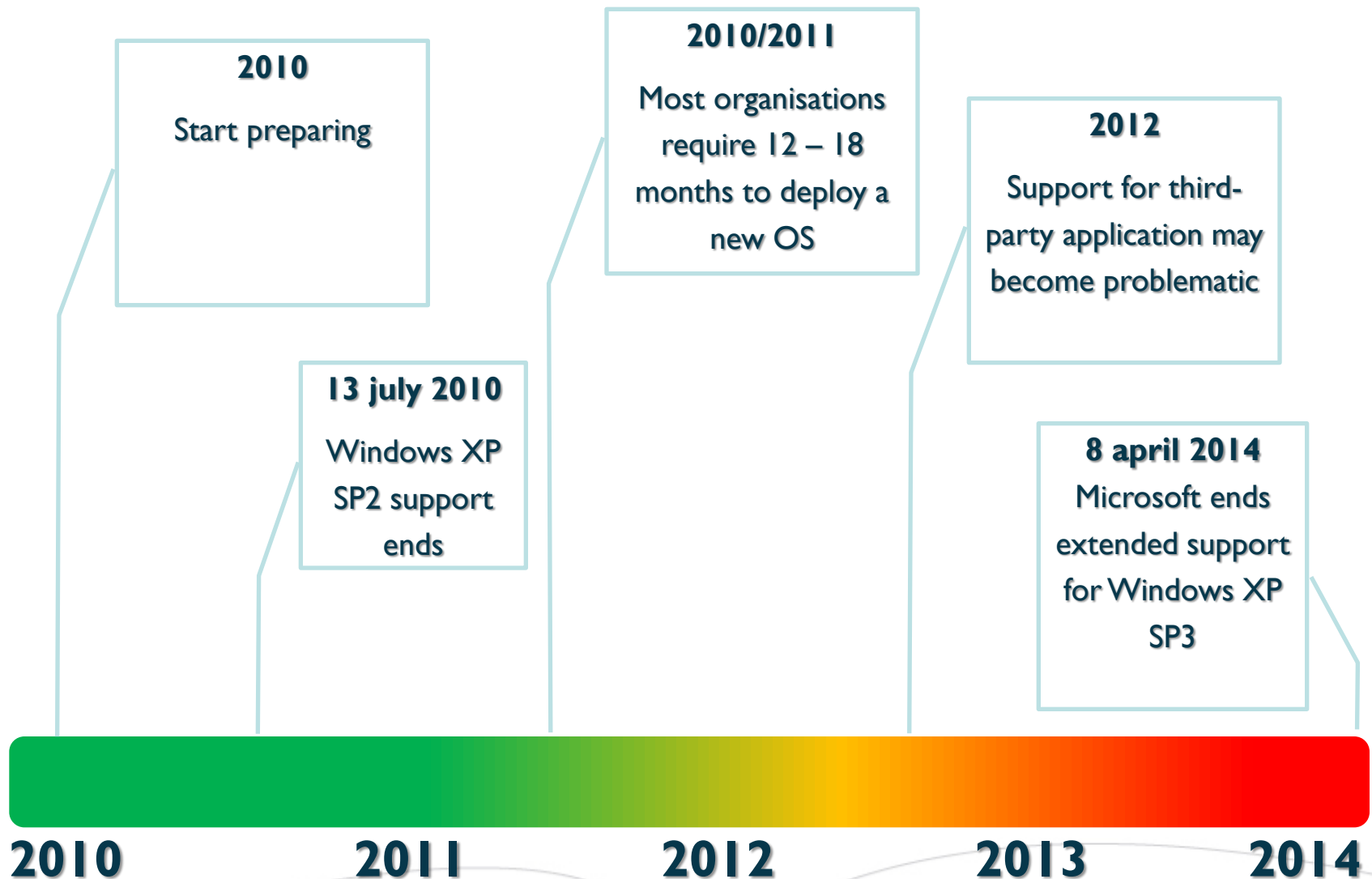
**Citrix**  
XenApp TS

**Citrix**  
XenApp Streaming

# Windows 7



# Windows XP Support



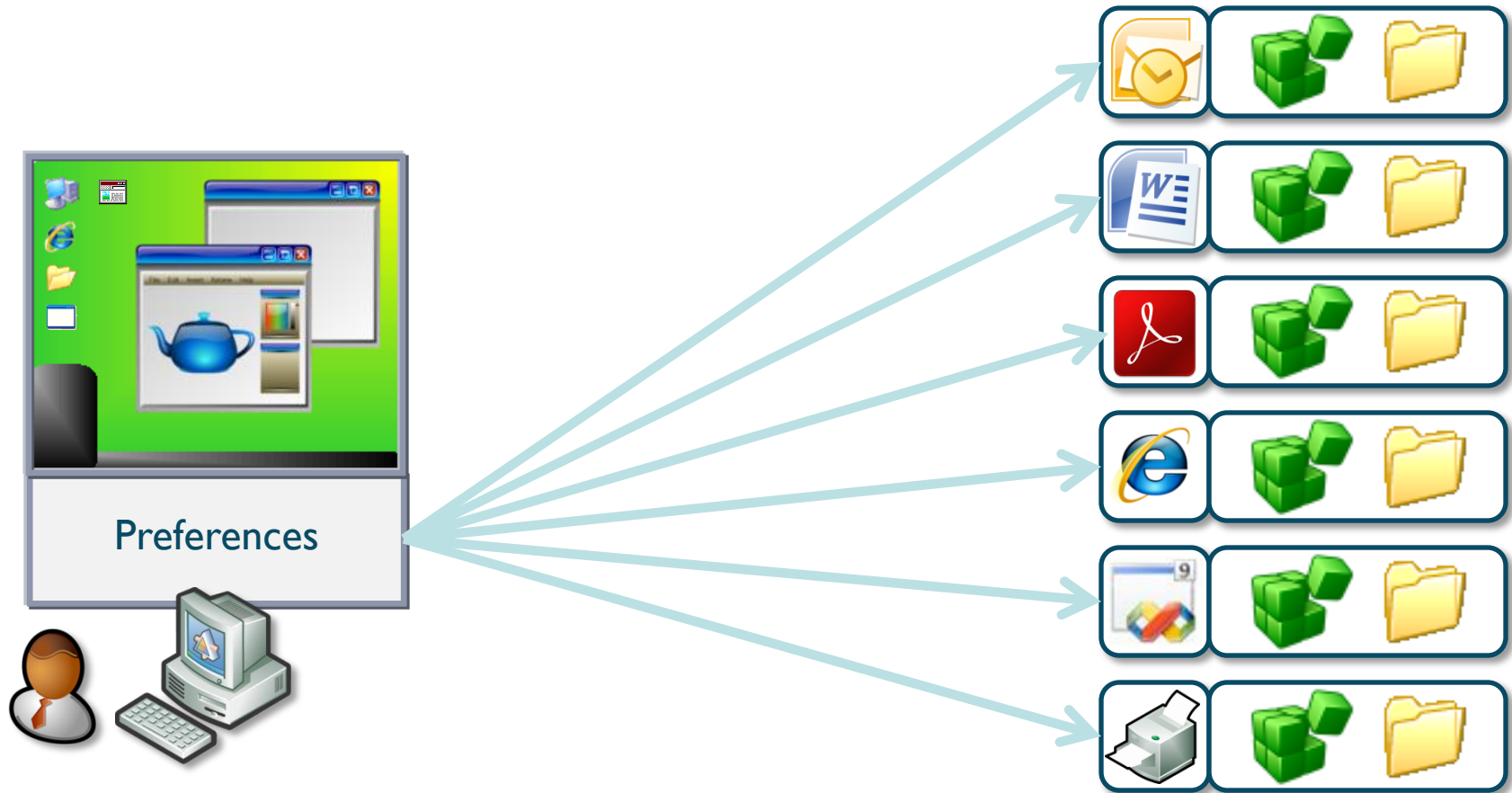
# User Profile



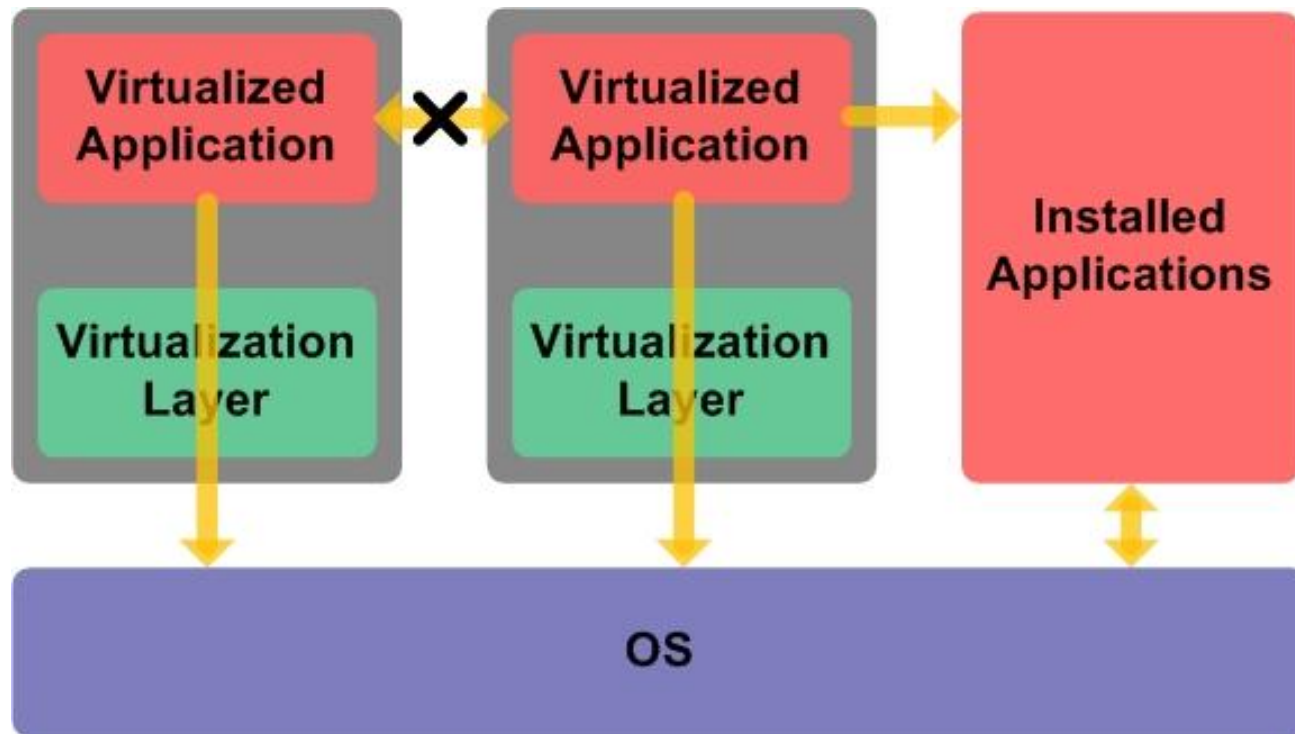
VS



# Profile virtualization



# Application Virtualization



# Do not forget your audience!



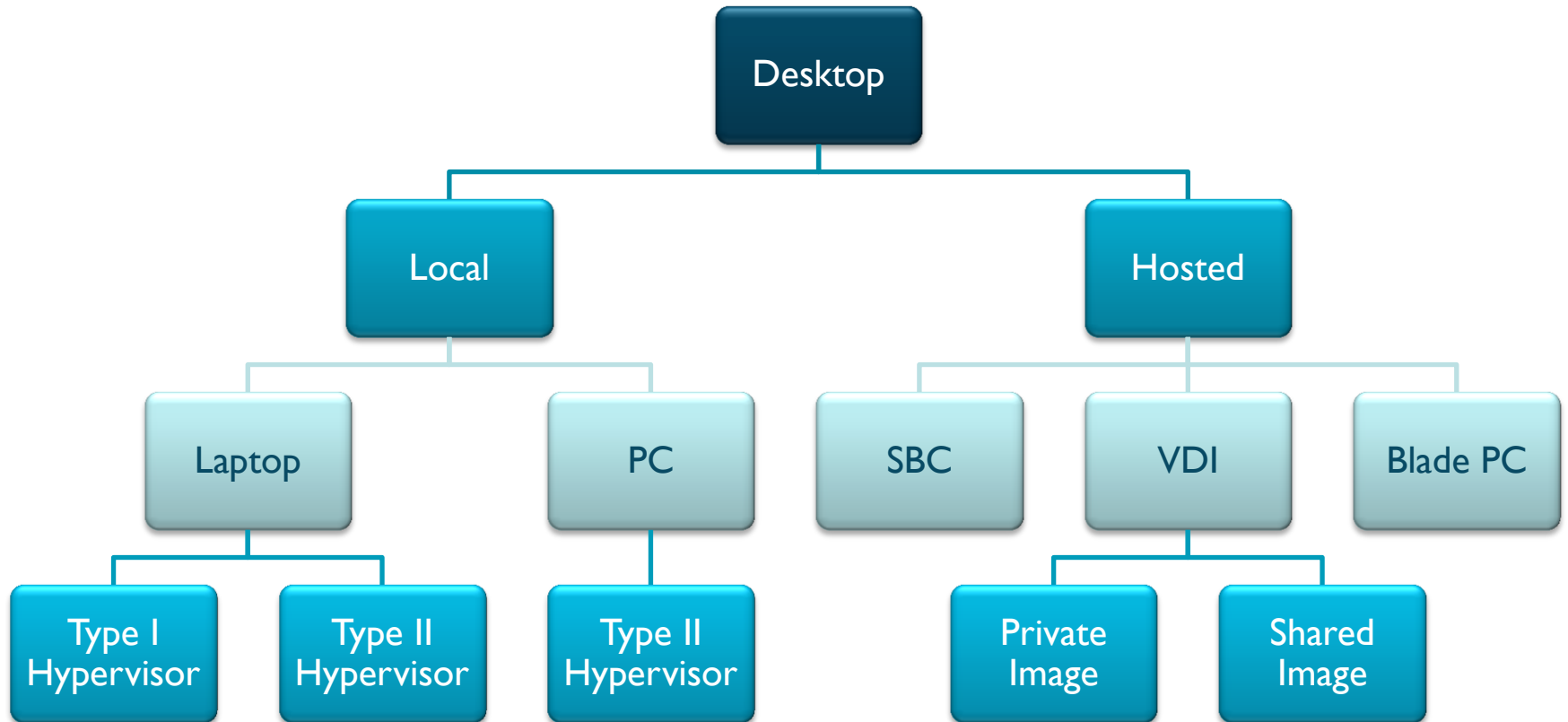


# Proof of Concept: User Experience



# Conclusion

# Desktop 2.0



**CITRIX**<sup>®</sup>

  
**NetApp**<sup>®</sup>

  
**CISCO**

**EMC**<sup>2</sup>  
where information lives<sup>®</sup>

 **vmware**<sup>®</sup>