

VIRTUALIZZAZIONE MASSIVA DEI SISTEMI DESKTOP: L'ESPERIENZA UNISA

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Agenda

Contesto

Motivazioni

Differenze

Architettura

Conclusioni



UniSa



**2 CAMPUS
16 DIPARTIMENTI**

1.500 UNITÀ DI PERSONALE

600 UNITÀ ABITATIVE

35.000 STUDENTI



UniSa VDI

450 postazioni utente entro giugno 600

80 postazioni unattended

100 stampanti

20 scanner usb

50 stampanti etichette

2 bilanciatori

6 server fisici

N server virtuali *con N grande a piacere



Motivazioni

Riduzione dei costi

Riduzione dei consumi energetici

Semplificazione della gestione

Riduzione tempi manutenzione

Incremento della sicurezza senza sacrificio per la flessibilità

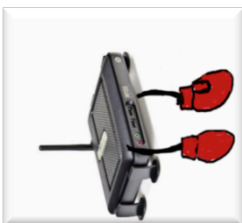
Centralizzazione delle risorse

Applicazioni hardenizzate per tipologia



VIRTUALE vs FISICO

Desktop virtuale



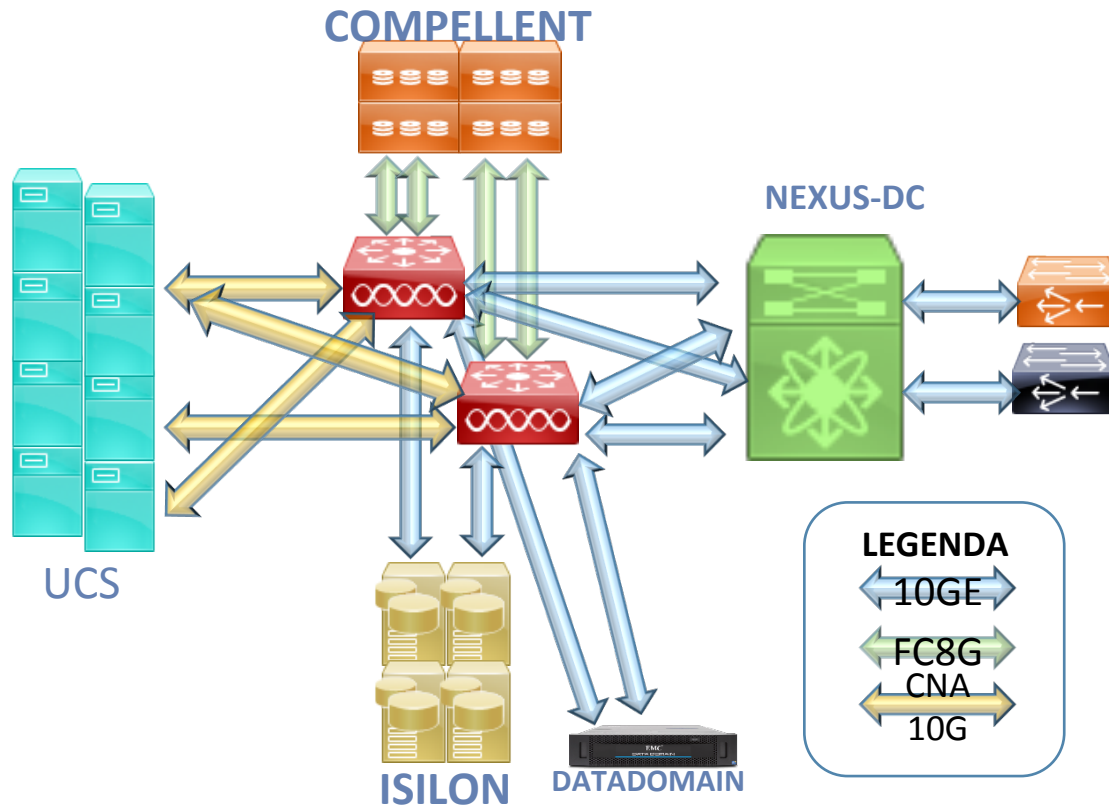
- Ambiente centralizzato
- Dati aziendali al sicuro (Backup Centralizzato)
- Gestione remota
- Riduzione dei consumi energetici (20 Watt)
- Riduzione dei costi di gestione delle applicazioni del 90%
- Riduzione dei tempi di messa in esercizio dei desktop per i nuovi
- Miglioramento delle prestazioni per applicazioni Web based e Client Server
- Accessibilità dovunque da qualsiasi dispositivo

Desktop fisico

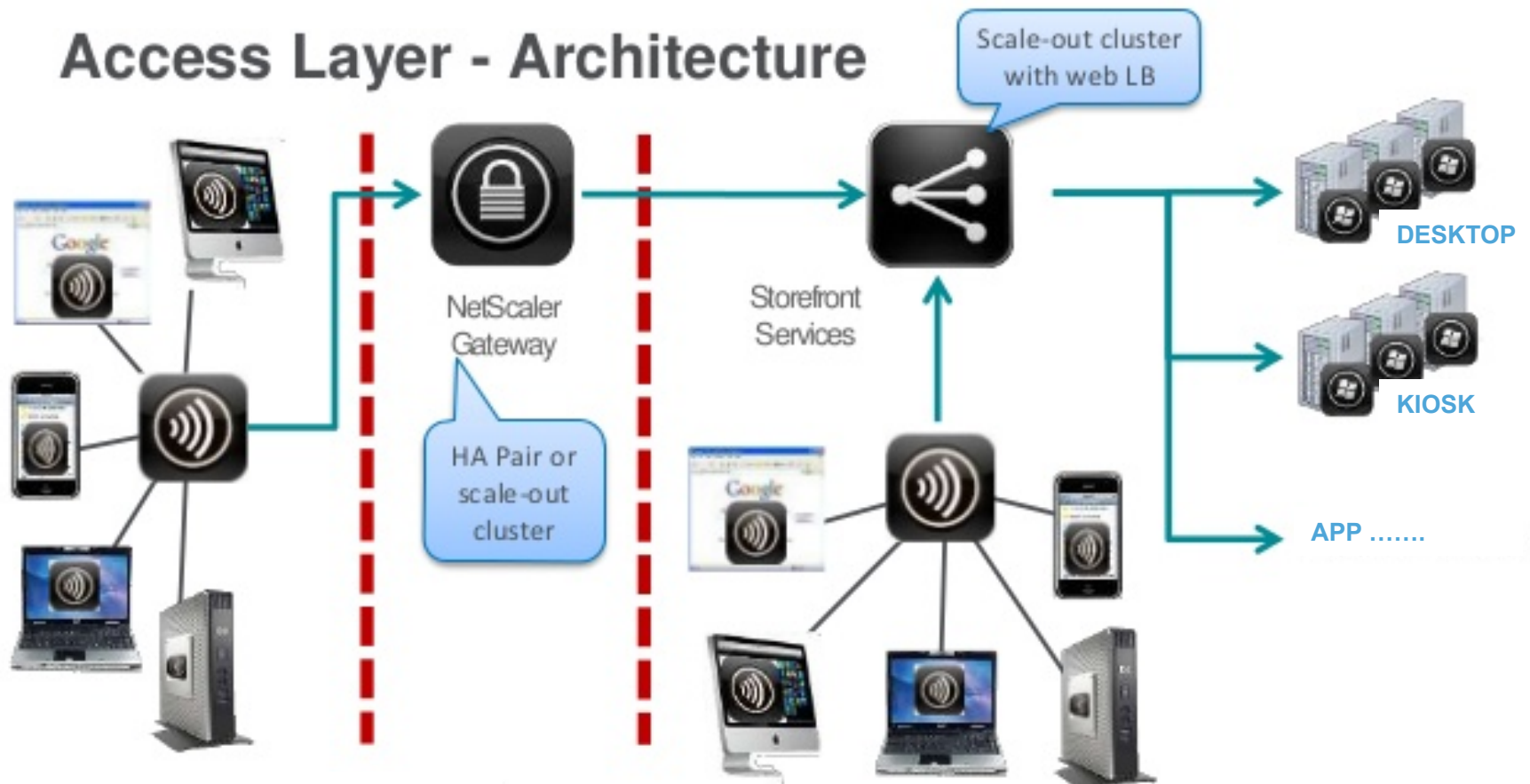


- Ambiente decentralizzato, dati sparsi su n dispositivi
- Elevati costi di gestione
- Elevati consumi energetici (200 W per singolo PC)
- Tutte le applicazioni vanno installate, configurate e testate sul dispositivo
- Ogni PC va gestito singolarmente sia per il patching
- In caso di problemi alla postazione , l'intervento va effettuato in loco
- Nel caso di messa in esercizio di nuove postazione, i tempi di messa in produzione dipendono dalla relativa installazione e configurazione dei software.

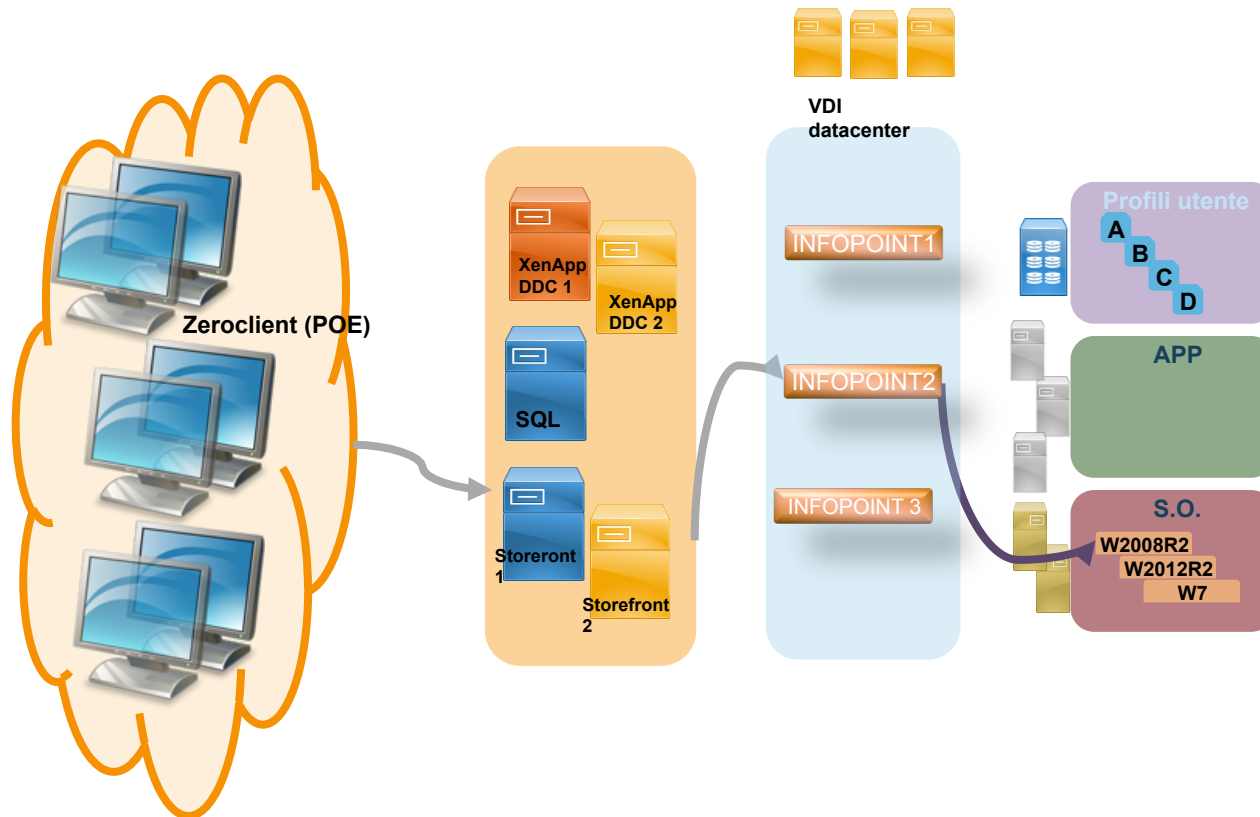
Infrastruttura Esistente



Access Layer - Architecture

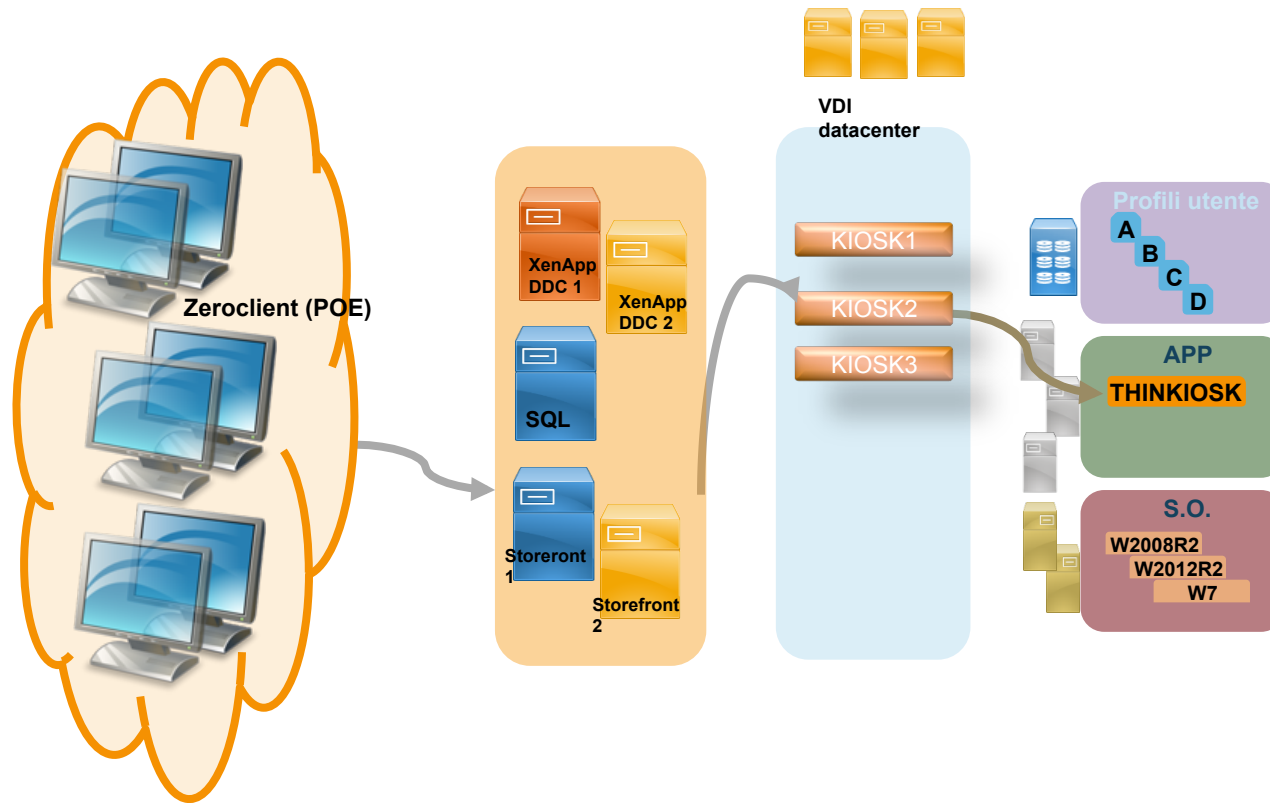


Scenario 1: INTERNET POINT



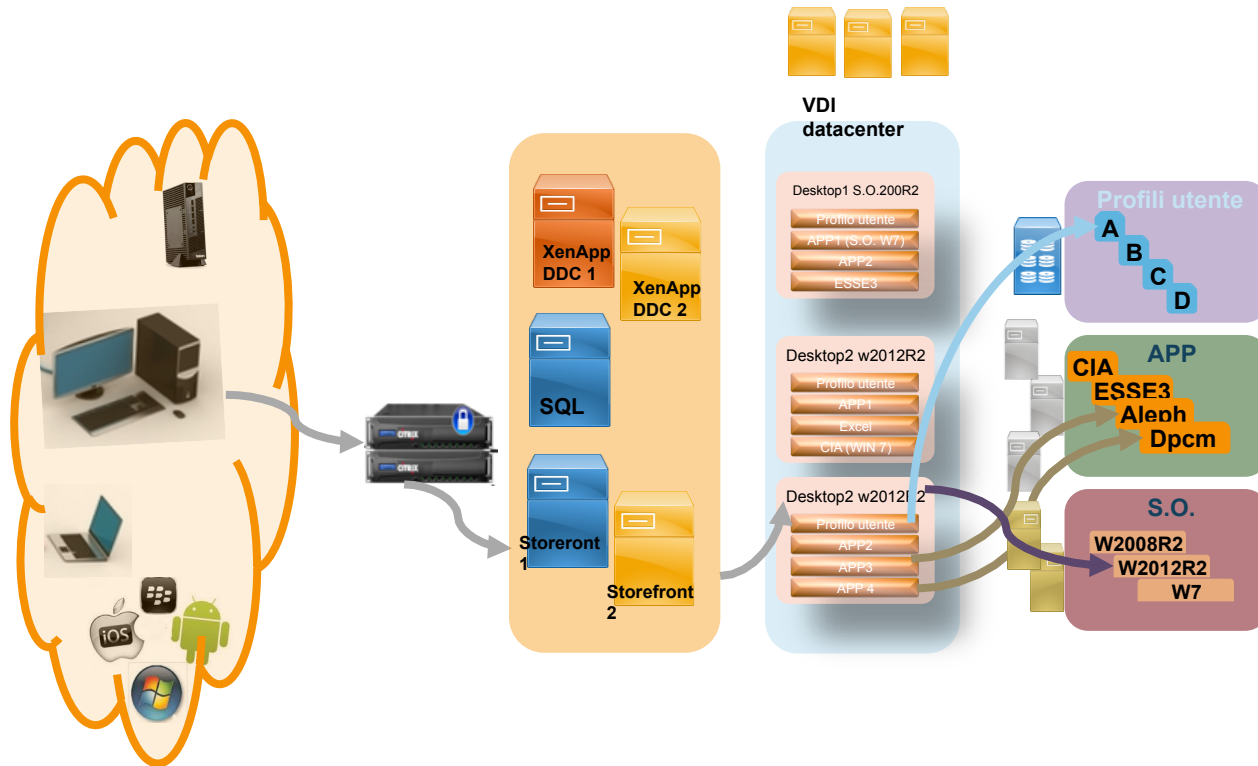
Scenario 2:

KIOSK BIBLIOTECA



Scenario 3:

UFFICI



Director★ Upgrade

UNISA

Dashboard

Trends

Filters

Search

ADM Roberto Chiumiento

User Connection Failures 0

Failed Desktop OS Machines 0

Failed Server OS Machines 0

Licensing Status 0

Data updated every minute

0

Failed Server OS Machines

As of 4/11/2016 12:45 PM

Total Failed Server OS Machines 0

Failed to Start 0

Stuck on Boot 0

Unregistered 0

Maximum Load 0

Delivery Groups

Desktop Ufficio 0

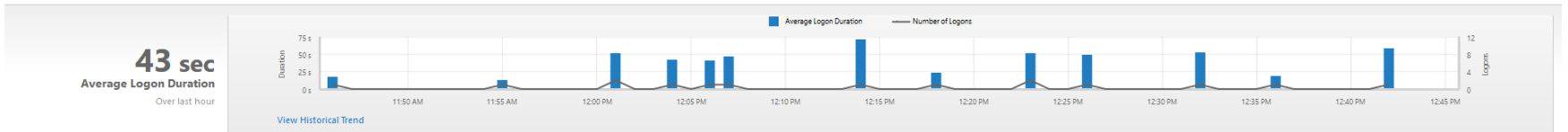
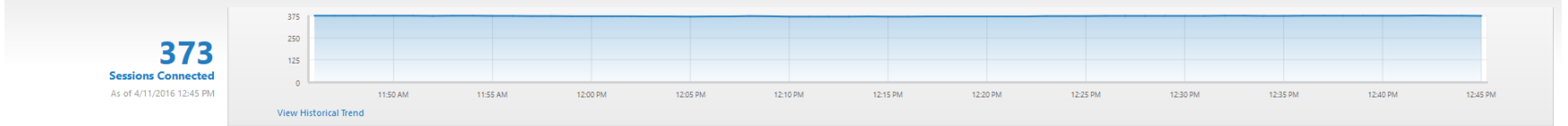
Desktop Ufficio 0

Desktop uso uffic... 0

Golden Image Desk... 0

Total Failed Server OS Machines

View Historical Trend



Infrastructure								
Host	Status	Delivery Controller	Status	Services	Site Database	License Server	Configuration Logging Database	Monitoring Database
vSphere VDI	✔ No Alerts	ctx-xendesk01.amm.unisa.it	✔ Online	✔ No Alerts	✔ Connected	✔ Connected	✔ Connected	✔ Connected
		ctx-xendesk02.amm.unisa.it	✔ Online	✔ No Alerts	✔ Connected	✔ Connected	✔ Connected	✔ Connected



Activity Manager

Applications Processes

End Application

Application Name ▲	Status
FAX ASL	Running
Rubrica Persone - Mozilla Firefox	Running
Time&Work - \\Remote [hosted]	Running

Machine Details

Power Control Manage Users Maintenance mode

Machine name	AMM\\vs-12-xa-014
Display name	My Desktop
Delivery Group	Desktop Ufficio
Machine Catalog	Desktop Ufficio
Remote PC access	No
Site name	UNISA
Windows Connection Setting	Logon Enabled
Registration state	Registered
OS type	Windows 2012 R2
Allocation type	Random
Machine IP	172.16.148.45
Organizational unit	CN=vs-12-xa-01-C=unisa,DC=it
VDA version	7.6.0.5026
Host	vSphere VDI
Server	esx-vm6.unisa.it
VM name	vs-12-xa-014
vCPU	8
Memory	24576 MB
Hard disk	70 GB
Avg. disk sec/transfer	0.002
Current disk queue length	0
Load evaluator index	7%
VDA hotfixes	HDXWMIPROV220WX64001 ICATS760WX64006

Session Details

Session Control Shadow Send Message

ID	8
Session State	Active
Application State	Desktop
Anonymous	No
Time in state	2 hours 45 minutes
Endpoint name	PTA_TRAT_ACC06
Endpoint IP	10.167.9.150
Connection type	HDX
Receiver version	13.1.0.285639
ICA RTT	13 ms
Latency	2 ms
Launched via	172.16.147.11
Connected via	172.16.147.11

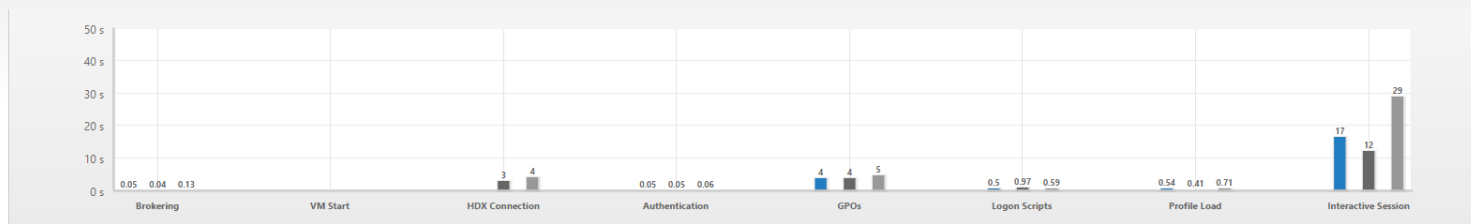
Policies Hosted Applications SmartAccess Filters

Stampanti in Produzione
Disabling Session idle Timer
USB Redirect
Resource and Media
User Roaming Profile deUNIFICATA
User Roaming Profile UNIFICATA

■ Current session: 41 s ■ User average (past 7 days): 31 s ■ Delivery Group average (past 7 days): 57 s

41 sec
Logon Duration

Session logon time: 4/8/2016 8:38 AM



Personalization

HDX



Citrix Studio (UNISA)

File Action View Help

Citrix Studio (UNISA)

Search

Machine Catalogs

Delivery Groups

Policies

Logging

Configuration

Administrators

Controllers

Hosting

Licensing

StoreFront

App-V Publishing

CITRIX

Search

Saved searches

Delivery Groups

Applications (35)

Show all

Applications

Name	Description	Location	Folder	State
Aleph Acquisizioni	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Aleph Catalogazione	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Aleph Circolazione	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Certificazione Massiva	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
CIA	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Clients	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Compilazione Spesometro	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Comunicazione Dichiarazioni di intento 2010	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Comunicazione IVA 2	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Comunicazione IVA nei paesi di Black List 2010	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
CSA TEST	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
DASMINET	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Dichiarazione Intra 12 2010	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
DiKe	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
DPCM	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
DPCMold	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Disabled
Entratel	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Esse3	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Esse3 test	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
F24 EP	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
F24 On Line	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Firefox	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
HelpDesk Advanced	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
INPS uniEMens Integrato	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Intraweb	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Modello di Comunicazione Polivalente	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Notepad	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Oracle VM VirtualBox	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Task7	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Taskmgr	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
Taskmgr APPS 01	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
ThinKiosk	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
TimeLesson	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
TWCClient	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled
UniModClient4_5_0	KEYWORDS:HiddenFromStoreUnisa Featured	Master Image	Applications	Enabled

Details - Acquisizioni

Details Sessions Administrators

Application

Actions

Delivery Groups

Create Application

View

Refresh

Help

Acquisizioni

Properties

Duplicate Application

Disable

Rename

Edit Tags

Delete

Move Application

Help



CRITICITÀ



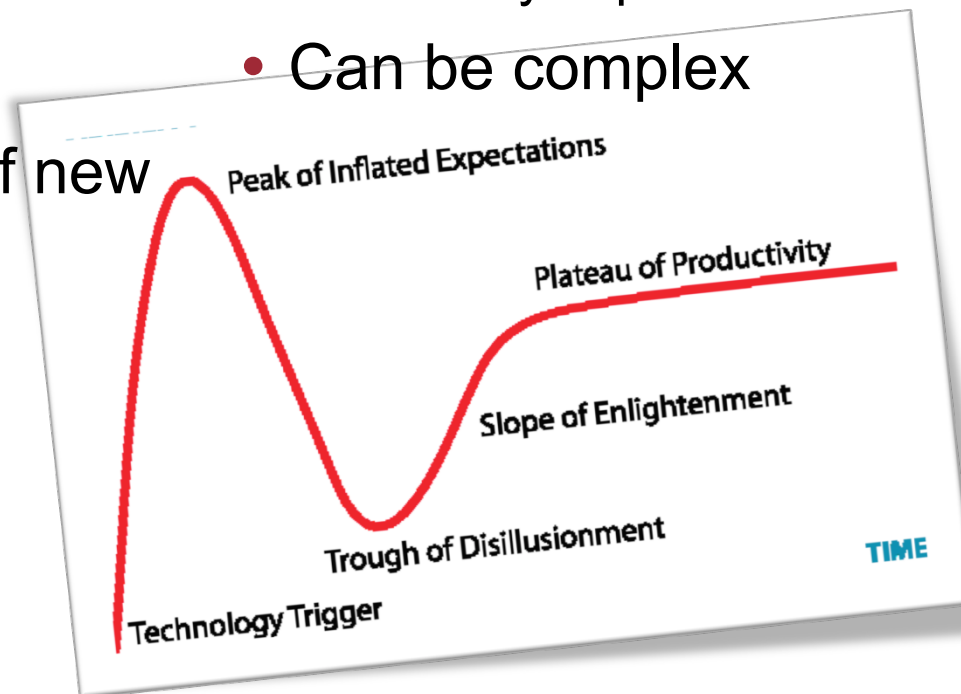
VDI-is that THE solution ?

Some Pros

- Best of both world
 - Virtualization benefits
 - A PC for each user
- Data Security
- Instant provisioning of new desktops
- Mobility
- Multiple Desktops

Some Cons

- Network dependency
 - Availability
 - Latency impacts
- Can be complex





GRAZIE

