CLOUDPAGING APPLICATION DELIVERY

ISAC IT CONFERENCE

TAINAN, TAIWAN MARCH 2016

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CLOUDPAGING DELIVERS

NUMECENT: COMPANY OVERVIEW 公司簡介

- Software and Cloud Services Company founded in 2012
- Venture Capital Invested: Deutsche Telekom T-Venture lead investor
- 32 Granted Patents revolving around application virtualization and streaming
- Millions of users worldwide using Numecent key technology, Cloudpaging
- Headquarters in Irvine, California: Local presence in US, Asia and Europe
- Delivering through ISV's and Cloud partners
- Channel offering for enterprise customer select verticals started in Q4 2015
- Rebrand and awareness campaign starting in Q2 2016

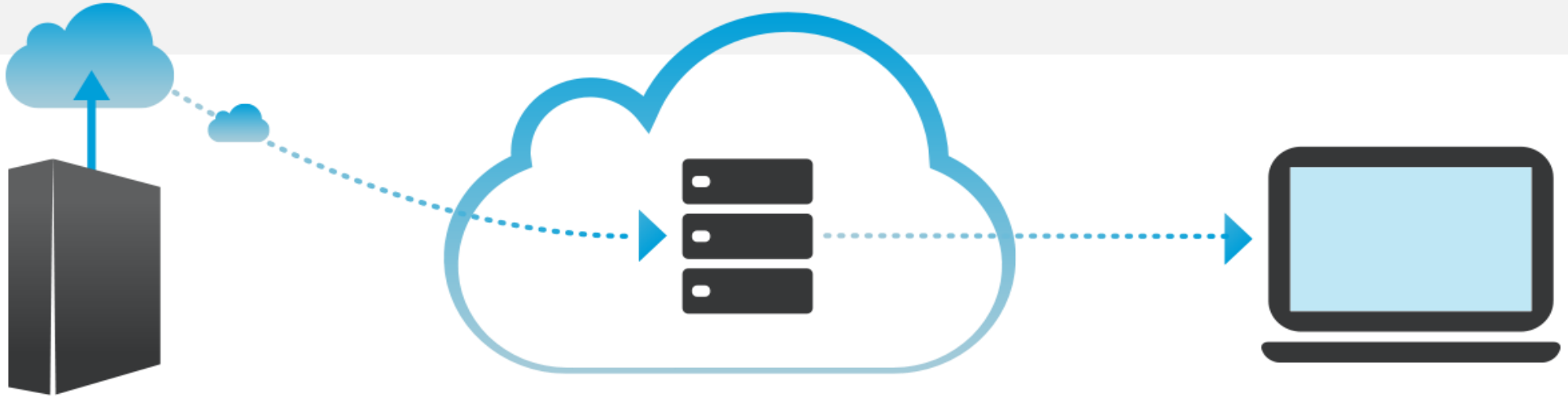
CLOUDPAGING™

Delivering Containerized Application Memory Pages from the Cloud

What Do We Do?

- We have created a technology call Cloudpaging - delivering Windows applications in a unique and proven way 這個創新的技術叫Cloudpaging, 是用特別的方式傳送 Windows 應用程式
- Applications are “cloudified” (packaged) and placed in a secure container 應用程式被雲端化(也稱打包), 然後放在一個安全的隔離空間裡
- Container delivered to user upon invocation – additional instructions are delivered on demand as user runs the application natively on the client 當使用者需要軟體時, 應用程式會從隔離空間傳送到使用者電腦, 當使用者使用越多軟體功能, 應用程式的指令會傳送越多
- Scalable – servers only used to cloudpage (deliver) instructions on demand from client – single server supports 10,000 users 伺服器只需依據使用者需要的功能傳送需要的軟體指令, 大幅減少伺服器運作時間及所需的運用, 所以基本上一個伺服器可支援1萬個使用者
- Container is persistent and reflects the users behavior in the application 所謂的隔離空間是可一直保留指令並且反應使用者對該軟體的使用習慣

CLOUDPAGING™ IN 3 STEPS



CREATE/PUBLISH
建立/部署

Create the application container with Cloudpaging Studio, supporting 99.9% of Windows applications for the highest compatibility
可支援99.9%可在 Windows 上使用的應用程式

DELIVER
傳遞

Deliver the application container with Cloudpaging Server and Enterprise Portal typically <10% of the application is needed to launch 基本上只需傳送10%體指令及可開啟並使用該軟體

EXECUTE
執行

Run application at native speeds on VDI or Physical devices, without installation with Cloudpaging Player, including offline while monitoring real-time usage for ISV licensing 無需安裝, 直接在使用者端執行式, 執行速度與安裝或VDI 的效能一樣

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CLOUDPAGING™ DEPLOYMENT OVERVIEW
部署的概況

DATACENTER INFRASTRUCTURE

APPLICATION CONTAINERS

CLOUDPAGING SERVER

ADMIN | LICENSE | PAGING

WEB INTERFACE

使用者/授權者/頁面化

透過網路介面

Run Server + Portal on same VM or Physical Server

CORP AD SERVER - - -

AD CONNECT

CONTROL

WEB INTERFACE

與AD做結合

ENTERPRISE PORTAL

企業入口

USER DESKTOP OR VIRTUAL MACHINE
使用者電腦或虛擬機器

End User Physical Device, BYOD Device or VDI Endpoint (connected to VDI VM) running Cloudpaging Player

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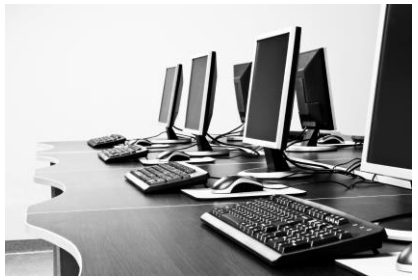
NUMECENT AND CLOUDPAGING

- Cloudpaging developed to deliver applications more efficiently to user devices. 可更有效的傳遞應用程式到使用者端
- Cloudpaging lowers application deployment costs 44% by simplifying how native Windows applications are deployed and maintained. 可大幅減少應用程式部署成本44%(左右) 並可有效管理
- With typically <10% of the application payload needed to run, this gives end users instant access to applications and limits IT interaction and costs. 因只需10%應用程式指令即可使用該軟體, 效能速度上相對減少很多IT 維運成本
- Highly compatible, 99.9% of applications supported 可支援99.9% Windows 應用程式
- Provides real time application monitoring for audit purposes and real time usage information for ISV licensing, all supported on either physical, VDI or RDS environments. 可提供對應用程式的即時監控及使用狀況, 實體機, VDI, RDS 環境皆可
- Cloudpaging is secure – apps reside in encrypted containers, data resides on user's client 安全性性高, 應用程式暫存在加密的隔離空間裡, 資料也可存在使用者端

CLOUDPAGING™ MARKET FOCUS

WHAT MARKETS ARE WE ENGAGED IN?

ENTERPRISE/EDUCATION
Enabling Cloudpaging technology for Windows Application Delivery



OEM/CSP's
Licensing or delivery of Cloudpaging technology for service offerings

ISV's
Service level and software solutions for ISV content delivery and subscriptions

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CLOUDPAGING™ SUCCESS FACTORS

10 Million+ Sessions Rolled out to Worldwide 全球超過**10**萬個用戶及課程在使用

- Removes pain points, giving instant application delivery – Freeing up IT resources
  可解決最辛苦的安裝或拷貝部署的問題, 大幅提升IT效能
- Supports 99.9% of Applications - High Compatibility
- Reduces the $600+ (minimum) per desktop lifecycle IT costs for Application Delivery 減少$600 /每一台電腦 IT成本對應用程式部署
- Immediate productivity gains:
  - Workflow matches what the user needs when they need - Cycle staff between projects quickly
  - No End User reconfiguration downtime = More engineers and staff on projects instantly
  - Deeper understanding of real application usage, real-time

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Cost Effective Application Delivery

- Instant deployment of apps – no traditional installation – typically <10% of the app required to launch 無需傳統的安裝部署
- Lower IT administrative costs and time needed to deploy applications 大幅減少管理者成本及時間
- Deploy MORE applications than other solutions: 99.9% of applications 可部署更多的應用程式
- Increases the number of applications over AppVolumes alone and provides a self service catalog option
- One application deployment technology for both physical device users and any VDI users 實體機及VDI皆可使用
- Highly scalable delivery allowing for high number of users per server 伺服器可服務更多的使用者
- License Control of applications to ensure only authorized users have access to applications + real time monitoring of app usage to help rein in license costs 可監控應用程式授權數及可有效管理授權

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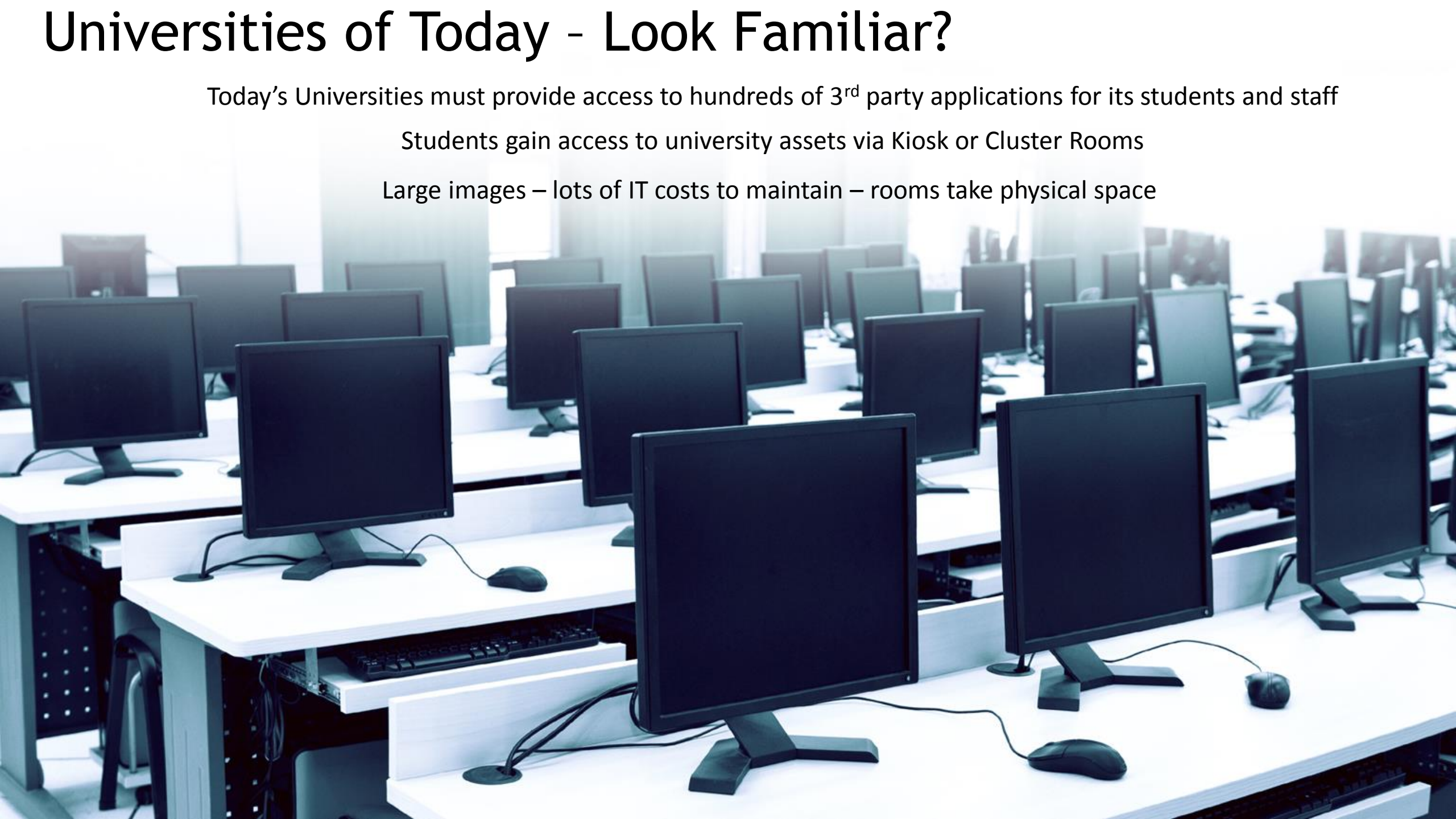
Universities of Today – Look Familiar?

Today's Universities must provide access to hundreds of 3rd party applications for its students and staff

Students gain access to university assets via Kiosk or Cluster Rooms

Large images – lots of IT costs to maintain – rooms take physical space



Universities of Tomorrow – BYOD 未來的趨勢-自己帶電腦

Students bring or are given Windows machines and a personal login portal

Students can access assets anytime anywhere

Kiosk rooms can be repurposed to save real NT$ for Universities

Currently serving 75 Universities in EU and US (100 more in PoC) ~ 1.5M users

歐美學校為了節省電腦教室建置費用, 近年來推行學生自己帶電腦上學,

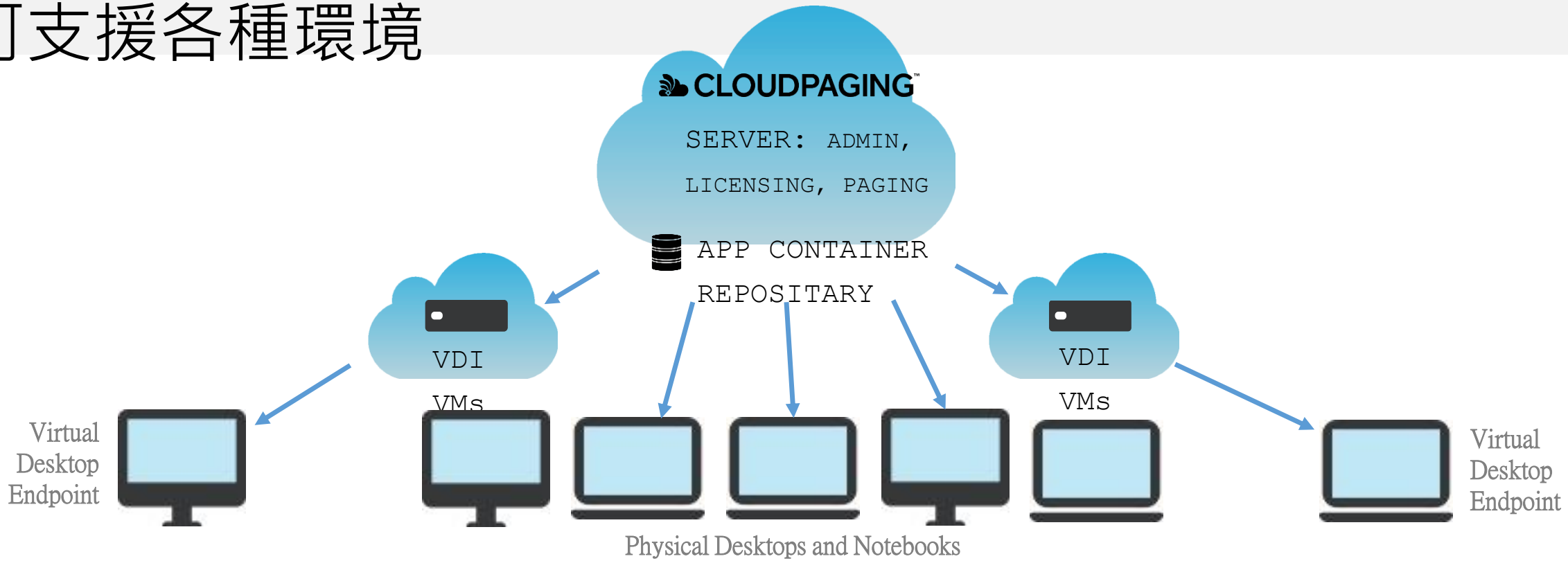
因此學生可在任何地方, 任何地點上網即可使用應用程式, 落實真正雲端管理

APPLICATION DELIVERY VS VDI

Does VDI Solve Application Delivery?

- VDI solves Operating System Image delivery – it does NOT solve Application Delivery
- Applications added to VDI Pool Image give same complexity as native install – just scaled to more users VDI有著複雜的image 建立其實跟實際安裝一樣的情況, 只是可以提供更多使用者使用
- VDI add on tools that do Application Delivery packaging may NOT support a wide range of applications like Digital Content Creation, CAD, Graphic Editing and applications including native drivers (e.g. Adobe Apps that include PDF drivers) VDI 對於有些複雜的繪圖建置軟體比較無法充分發揮, 尤其是本地的驅動程式也無法打包
- Updates to applications need to roll out to all VDI users – across all VDI user pools – this can be a timely exercise and complicated even further if persistent VDI desktops are used 更新軟體時需要再一次的建置給所有的使用者
- Best Practice: Whether or not VDI is used a proper Application Delivery technology should be used
- Today with a large number of machines still physical, hybrid environments must be considered 現今實體機及混和式的環境還是大部分學生需要的

SUPPORTING THE HYBRID ENVIRONMENT
可支援各種環境



CLOUDPAGING SUPPORTS VIRTUAL(VDI) AND PHYSICAL

可同時支援虛擬及實體機

- No need to locate app repository in the same data center as VDI servers (demand-paged)
- One license control for both Virtual and Physical of which users get access to applications
- Roll out applications by user role (using AD Groups and Users) to support what users truly need

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In Summary

- Cloudpaging lowers IT costs for deploying end user applications 對於軟體部署可大幅減少IT成本及時間
- Cloudpaging provides the most compatible application delivery – 99.9% of apps 應用程式99.9%皆可打包
- One common application delivery solution for both VDI and physical devices 唯一的一個技術可同時與虛擬及實體機相配合
- Provide end users with near instant access to applications to increase productivity 提供使用者快速的使用軟體
- Cloudpaging can save University cost with elimination of Kiosk Rooms 可節省電腦教室建置費用
- Cloudpaging is here today – millions of user sessions each year 超過百萬使用者及課程已經在使用

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QUESTIONS?
COMMENTS?
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questions
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