

運用虛擬化技術於校園節能： 臺大區網雲端服務之佈建與經營管理

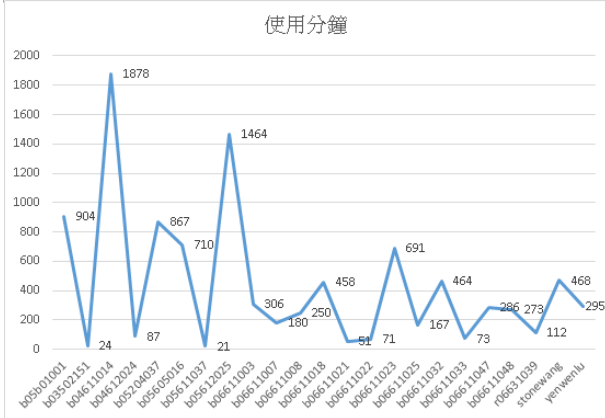
執行單位

臺灣大學計資中心

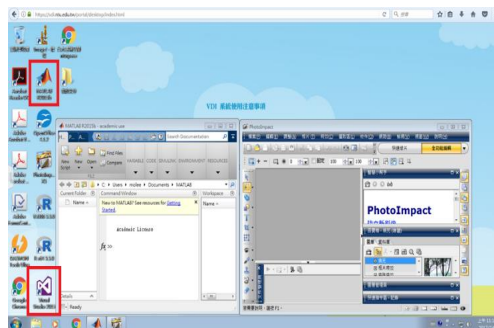
計畫主持人

顏嗣鈞 主任

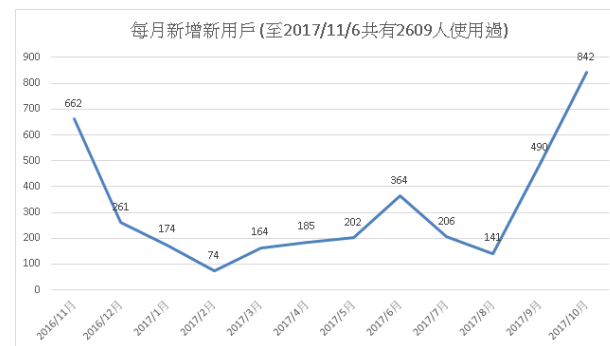
- 雲端電腦桌面(VDI首頁網址<https://vdi.ntu.edu.tw>)與台大帳號認證伺服器single sign on 整合，管理上更為方便。
- 使用VDI建置公文系統，結合自然人憑證，使線上簽核公文更為安全與便利。



Solidworks 總使用分鐘數



VDI 桌面



VDI 每月新增使用人數

- 推廣臺大雲端服務的成功經驗，支持與推廣科技部、教育部資訊資源集中、實現國家各項節能科技計畫。
- 計畫成果：550個VDI、293台VM、節電1,479,564度。
- 資訊資源集中，節省各項資訊硬體、軟體與維護人力支出成本，更可節省用電量，實現節能理想。
- 支持科技部、教育部資訊資源集中與國家各項節能科技計畫，創辦台北區網雲端應用服務。
- 客製化VDI桌面與使用VSAN管理介面：可幫助增加使用滿意度與續用意願，促進資訊教育資源集中化，節省資訊資源成本，學生亦可通過行動裝置學習、下降端點設備能源消耗。
- VDI建置遠端簽署公文系統，並結合自然人憑證認證，增加系統安全性與提升行動辦公效率。
- 將系上授權軟體 (Solidwork) 放入計中VDI，並為教授、助教及修課學生設定專用VDI桌面。

Saving Energy on Campus via Virtualization: Deployment and Management of Cloud Services through NTU Network Regional Center

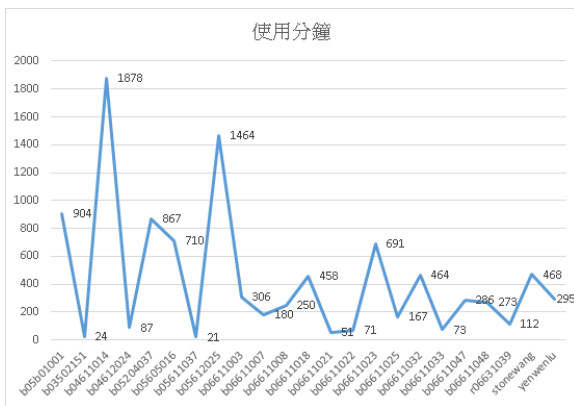
Execution Unit

NTU Computer and Information Networking Center

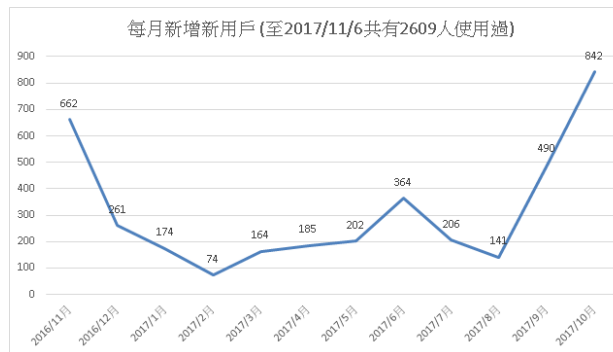
Project Director

Director Hsu-Chun Yen

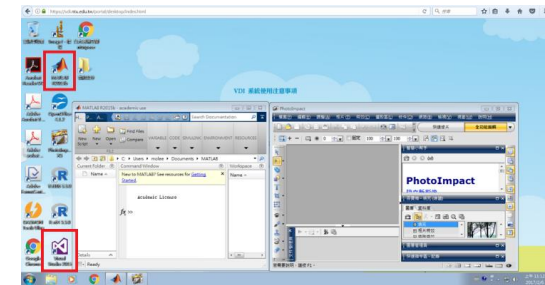
- Virtual Desktop Infrastructure (VDI) integrate with NTU single sign on. It is easy for manage and data control.
- Use VDI system to build a desktop for official document sign system. The system can use MOICA to sign a document. It makes the process more convenience and safer.



Solidworks Usage (mins)



VDI new users



VDI Desktop

- Sharing the successful experiences to other school. Support energy save projects.
- Build 550 VDIs and 293 VMs, save 1,539,701 kW / hr a year in total.
- Put Informatics sources in the same place in order to save hardware, software and manpower. Therefore, it could save energy.
- Customized the VDI desktop and manage from VSAN interface. It helps to increase the will of use, promote the centralized information and education resources and save the cost of information resources. Consumption of end-point equipment.
- VDI establishes a remote signed official document system, combined with MOICA, increases system security and improves operational office efficiency.
- Install the Authorized software (Solidwork) at the VDI and set up dedicated VDI desktops for professors, teaching assistants and students.