

# 私有雲實驗方案



Cloud Appliance Kernel Environment



Personal Cloud Computer

# 系統師與教學

- 修電腦還是必要(你累了嗎?)
- 角色多元化(不讓你睡!)
- 技術本職還在(不能靠!)
- 如何融入教學(人呢?)
- **BYOD**相關因應(環境、安全、方便?)

# 測試實驗方案

lbn x3250 m2



lbn x3250 m2



2TBX3 software  
raid 5  
(iscsi for cake+pc2)  
2TBX1 nas  
(for mis)

# 利用免費的nexenta community版本作iscsi

The screenshot displays the Nexenta Community Edition web interface. The top navigation bar includes links for About, Support, Register, Convert To Enterprise, and Help. The user is logged in as 'jahau'. The main menu is divided into Status, Settings, Data Management, and Analytics. The left sidebar shows the 'Disks' section with a dropdown menu for 'iSCSI Initiator' which is currently 'online'. The main content area is titled 'SUMMARY INFORMATION: DISKS AND VIRTUAL LUNS' and shows a table of 'All Disks'. Below this is a 'Live Disks Statistics' table.

**Disks**

- Disks
- Summary Information

**iSCSI Initiator online**

- Initiator  
Configure iSCSI Initiator defaults
- Discovery  
Discover Targets and Attach Disks
- Targets  
Edit settings for discovered iSCSI targets
- Disable  
Service is currently enabled. Click to disable it.

**SUMMARY INFORMATION: DISKS AND VIRTUAL LUNS**

All Disks

Disk	Device	Type	Size	Volume	Attach	Model	Blink
c1d0	cmdk0	disk	232.89 GB	syspool	ata	Unknown	💡
c2t600144F00019DBB244D650D57D270001d0	sd6	disk	1.66 TB		mpxio	NEXENTA, Rev. 1.0	💡
c6t2d0	sd1	disk	1.82 TB	iscsi	ahci	Hitachi, Rev. MX40AAB0	💡
c6t3d0	sd2	disk	1.82 TB	iscsi	ahci	Hitachi, Rev. MX40AAB0	💡
c6t4d0	sd3	disk	1.82 TB	share	ahci	Hitachi, Rev. MN60A5C0	💡
c6t5d0	sd4	disk	1.82 TB	iscsi	ahci	Hitachi, Rev. MX40AAB0	💡

Refresh...

**Live Disks Statistics**

Disk	r/s	w/s	kr/s	kw/s	wait	actv	wsvc_t	asvc_t	%w	%b
c1d0	0.8	12.2	0.4	37.7	0.0	0.0	0.2	0.6	0	1
c2t600144F00019DBB244D650D57D270001d0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
c6t2d0	0.2	17.0	0.1	314.8	0.0	0.0	0.0	0.5	0	0
c6t3d0	0.2	17.2	0.1	314.8	0.0	0.0	0.0	0.5	0	0
c6t4d0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0	0
c6t5d0	0.2	17.2	0.1	314.8	0.0	0.0	0.0	0.6	0	0

# 利用免費的nexenta community版本作iscsi

The screenshot shows the Nexenta Community web interface. The top navigation bar includes links for About, Support, Register, Convert To Enterprise, and Help. The user is logged in as 'jahau'. The main menu has tabs for Status, Settings, Data Management, and Analytics. The left sidebar contains sections for SCSSI Target, Zvols, and iSCSI. The main content area is titled 'MANAGE ISCSI TARGETS' and contains a table with the following data:

<input type="checkbox"/>	#	Target	Alias	Target Portal Groups
<input type="checkbox"/>	1	iqn.1986-03.com.sun:01:0019dbb244d6.50a13211		0

Below the table are 'Delete' and 'Create' buttons. A yellow circle highlights the target ID '1' and the iqn 'iqn.1986-03.com.sun:01:0019dbb244d6.50a13211'. An arrow points from this circle to the text 'iqn方式連接走TCP port 3260'.

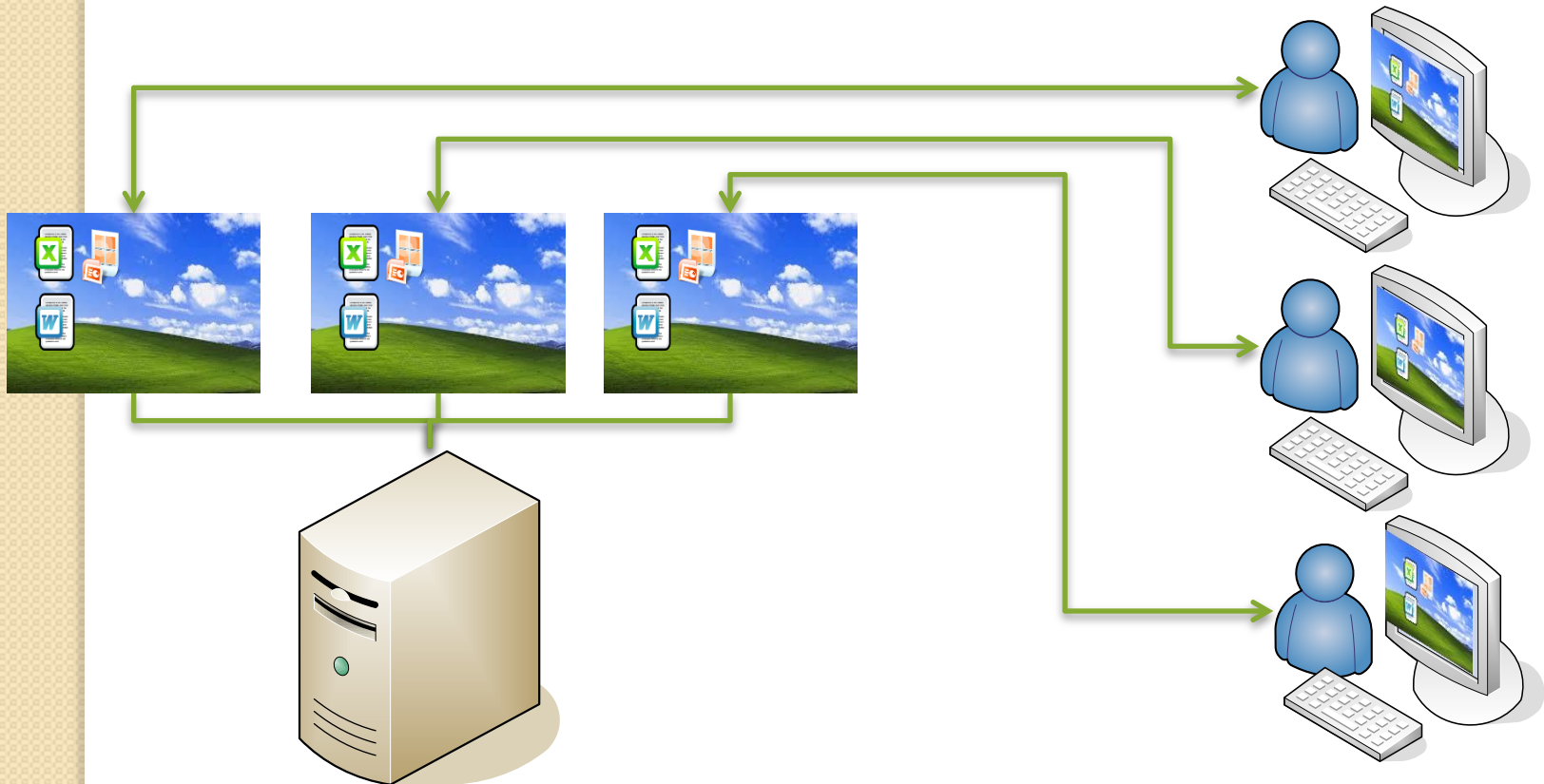
iqn方式連接走TCP port 3260

# VDI Technology Comparison

VDI協定	PCoIP	RDP	ICA	SPICE
全名	PC-Over-IP	Remote Desktop Protocol	Independent Computing Architecture	Simple Protocol for Independent Computing Environments
開發者	初期：由加拿大的Teradici公司所開發 後期：與VMWare共同開發	Microsoft RDP 的設計建構於國際電信聯盟T.share協定 ( 又稱為 T.128 )	Citrix	RedHat收購Qumranet後獲得的虛擬技術
使用產品	VMWare View	Windows Server 2008 R2 / Windows 7	Citrix XenDesktop	Red Hat Enterprise Linux / Fedora 14
傳輸協定	UDP	TCP	TCP	TCP
多顯示器支援	4	2	2	4
最高解析度	2560 x 1600	4096 x 2048	1600 x 1200	2560 x 1600
加密演算法	超強性能多核心運算引擎的特殊加密演算法	128位元加密，使用RC4加密演算法	RC5 128 位元	SSL加密
Thin Client 架構支援				
影像多媒體支援	V	V	V	V
音訊傳輸支援				
傳輸質量動態調整 (依網路頻寬)	V	V	預先設置(不靈活)	X
32位元色彩支援	V	V	V (僅XenDesktop5)	V
特點	<ul style="list-style-type: none"> <li>一種高效能顯示協定，專為實現虛擬桌面而建置。</li> </ul>	<ul style="list-style-type: none"> <li>支援 TLS ( Transport Layer Security，前身為SSL)</li> <li>支援IPv6協議，可以工作在純IPv6的TCP/IP網路環境中。</li> <li>無縫隙視窗：在用戶端電腦上可以直接執行在遠端電腦上的應用程式。(不用先連上整個遠端電腦的桌面)</li> <li>經由 WMI ( Windows Management Instrumentation )，所有終端服務都可以configure，都可scriptable。</li> </ul>	<ul style="list-style-type: none"> <li>SpeedScreen預載機制技術-降低傳送時所需的頻寬大小</li> <li>Citrix HDX 技術均衡性能和頻寬為任何桌面、應用程式、設備或網路提供高畫質使用者體驗</li> </ul>	<ul style="list-style-type: none"> <li>SPICE Driver : SPICE驅動程式，存在於每個虛擬桌面中的套件。</li> <li>SPICE Device : SPICE設備，存在於RedHat企業虛擬化Hypervisor內的套件。</li> <li>SPICE Client : SPICE客戶端，存在於終端設備上，可以是Thin Client或PC，用於介接每個虛擬桌面。</li> </ul>

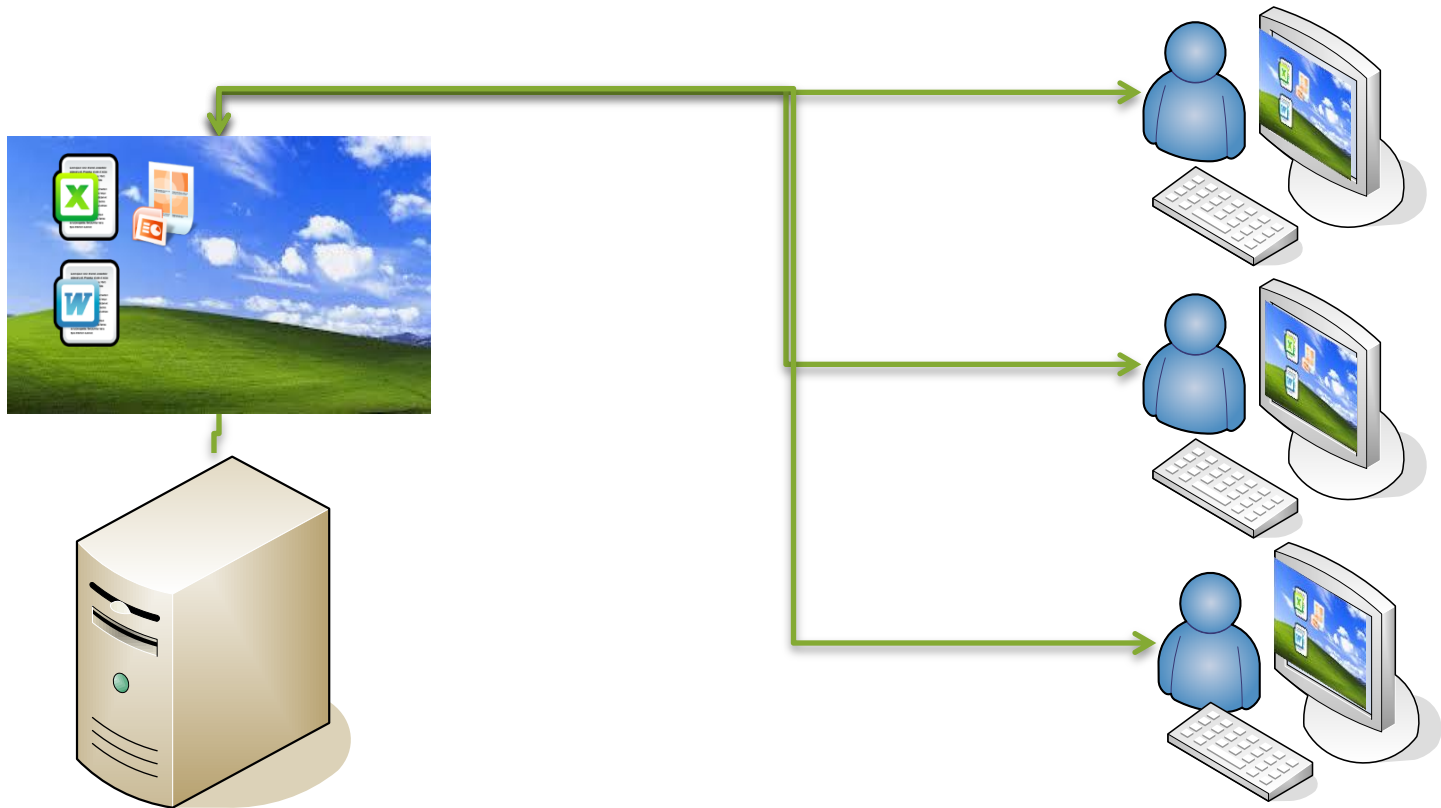
- **Full Virtual Desktop**

- With a full virtual desktop, the user will be given the same experience, if not a more efficient experience, as a standard desktop computer. Full virtualization is the recommended path to take, since you will have complete control on the number of privileges that can be granted to each user, and each will be given their own custom environment to use.



- **Multi-user Desktops**

- These are complete virtual desktops, only multiple people utilize the same desktop. Through access from a terminal device, users access one of the many remote desktops for use. Most won't be capable of telling they are sharing an environment, but this will lead to limitations in the number of privileges that can be granted to each user.



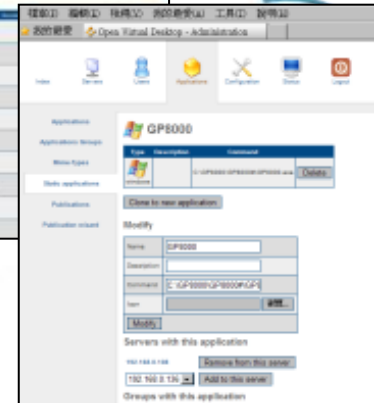
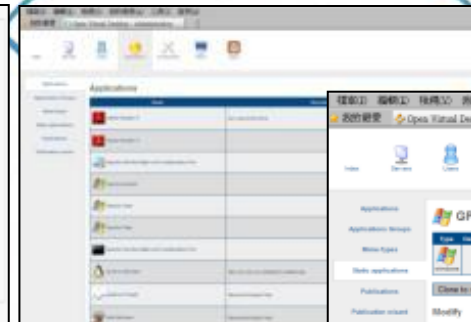
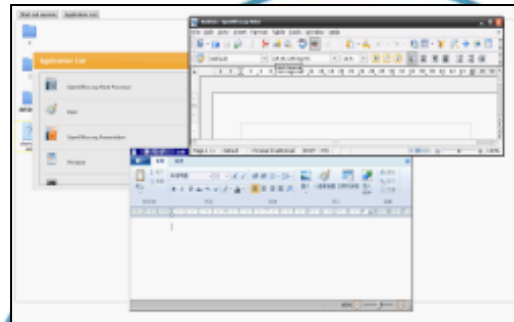


# Quick view of PC2 usage

Virtual Desktop  
In Browser

Apps Management

CAFÉ-PC2



Application  
Server  
On VM

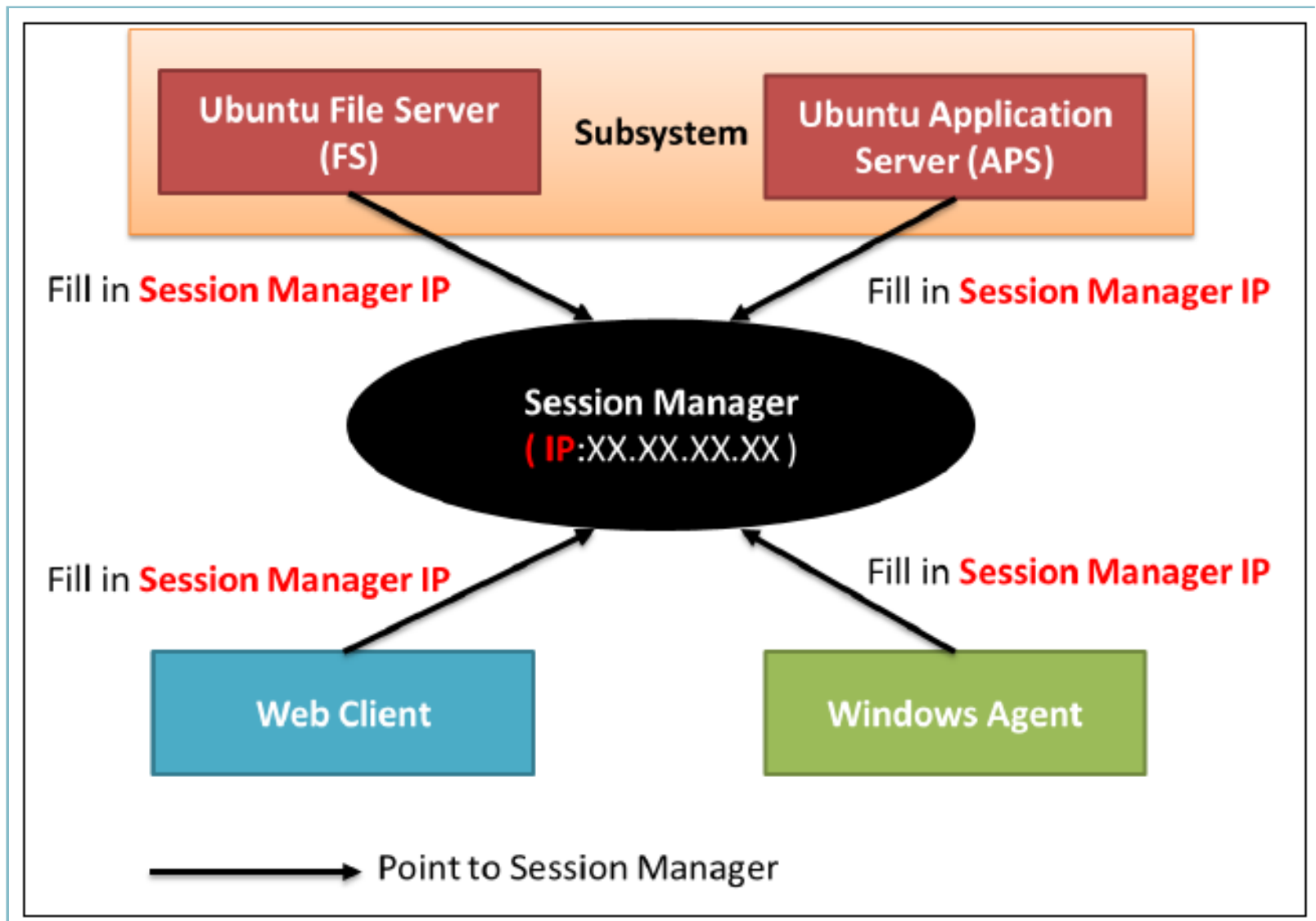
Administrator

Windows/Linux/Web  
Application



End User

# PC2 Role settings



# PC2 Login Page

Language



Personal Cloud Computer

使用者介面 PC2 v1.0.35

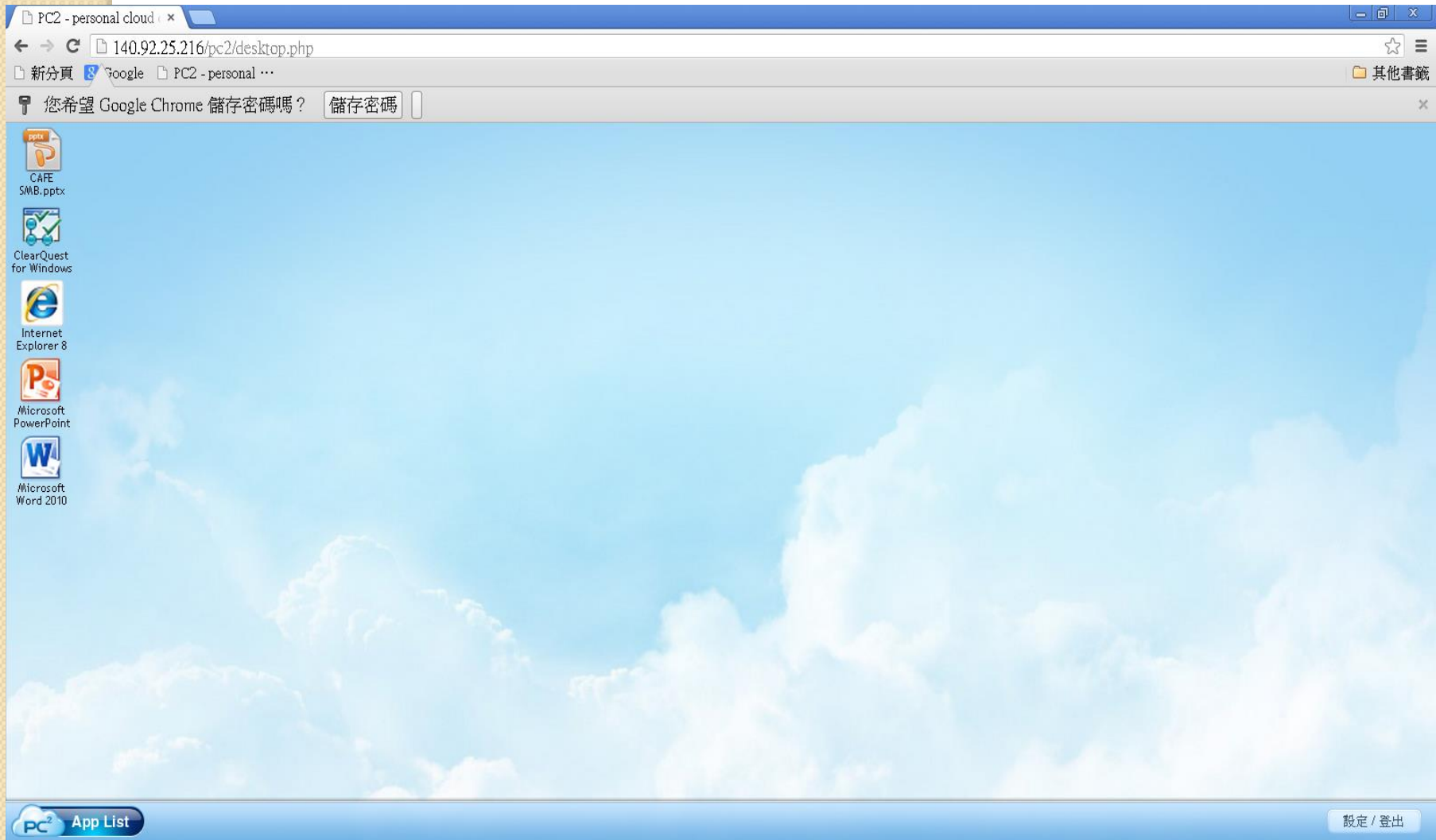
帳號

密碼

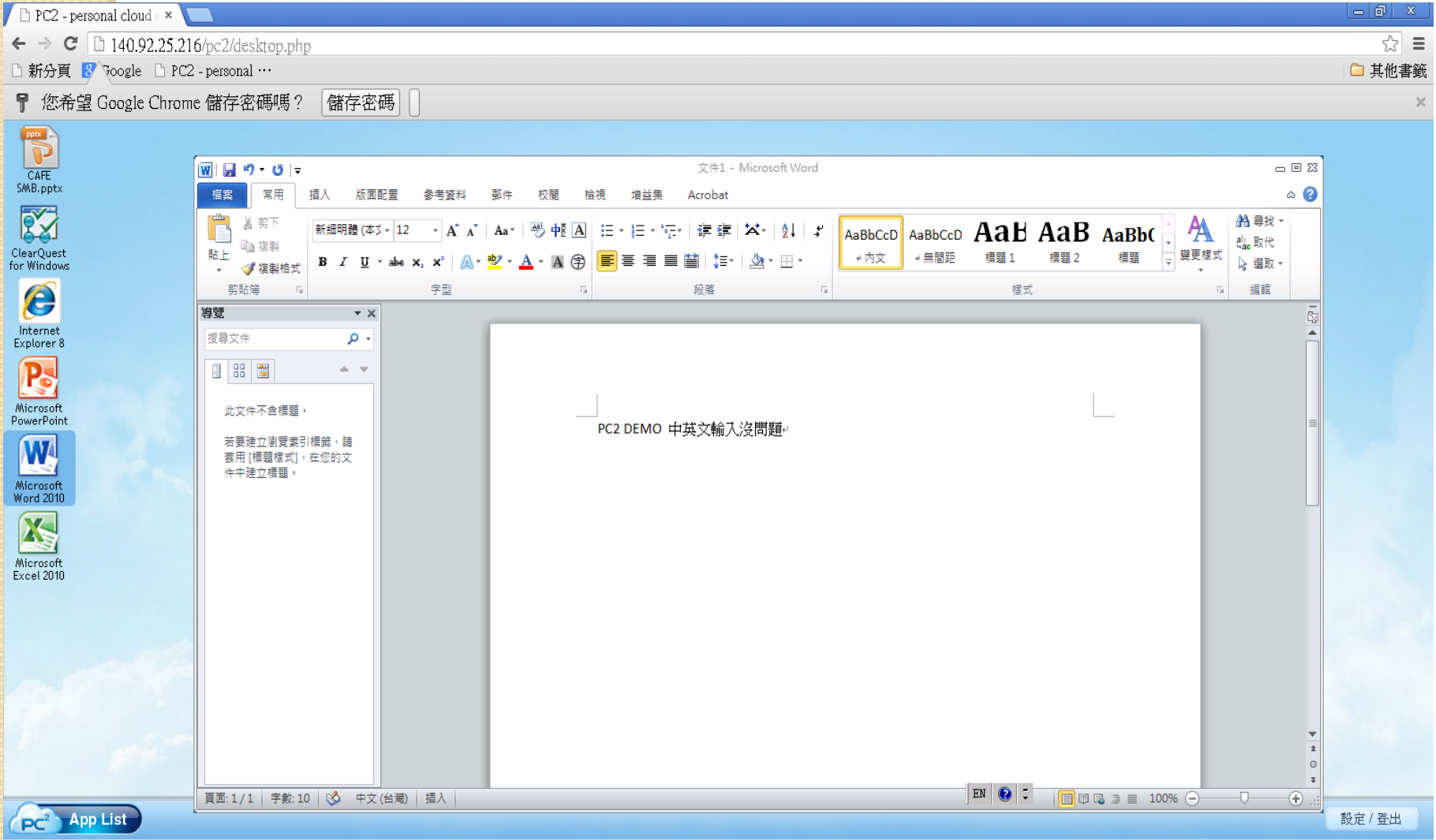
登入

Copyright © 財團法人資訊工業策進會

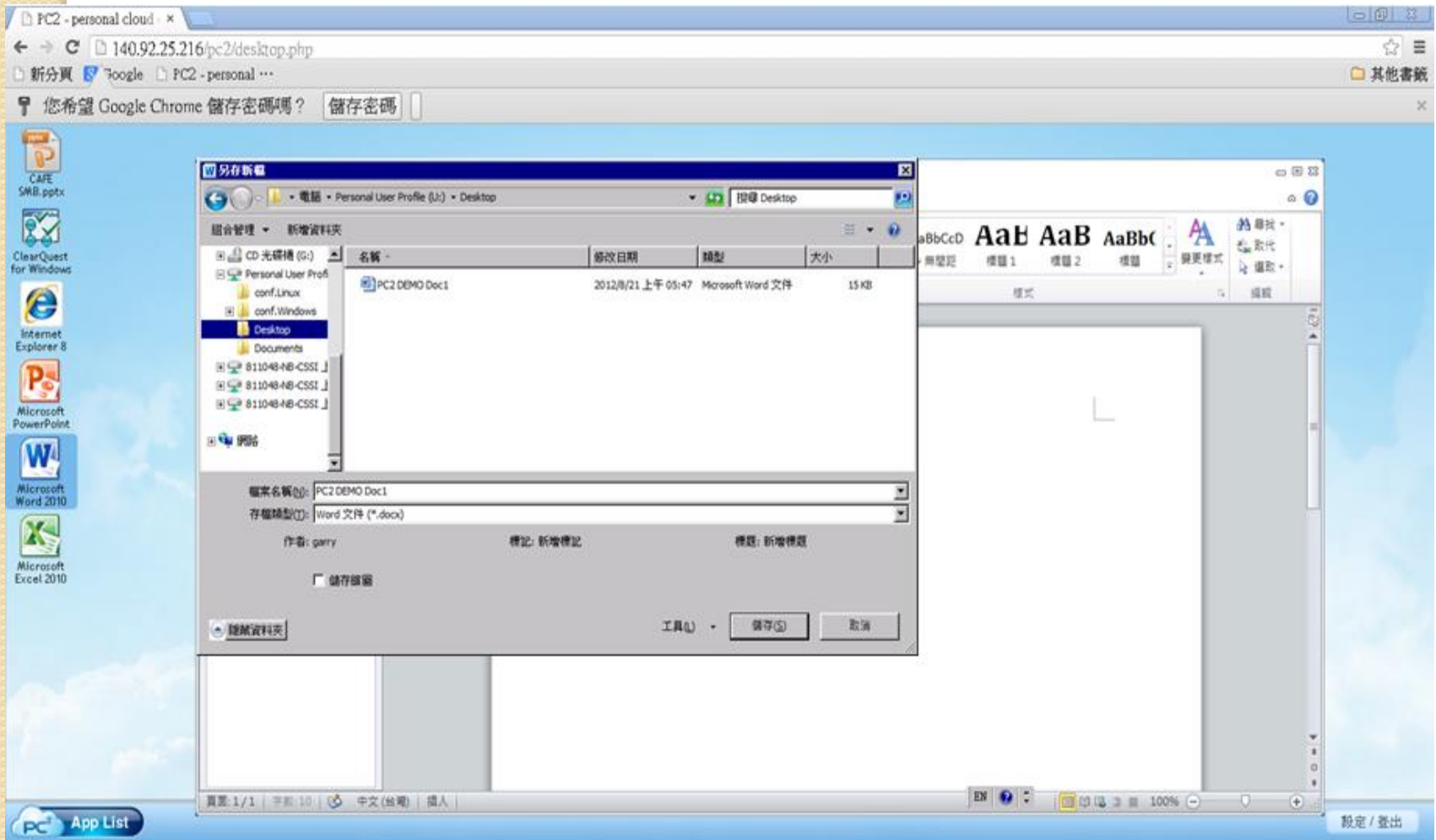
# Browser-based(JRE plug-in) Virtual Desktop



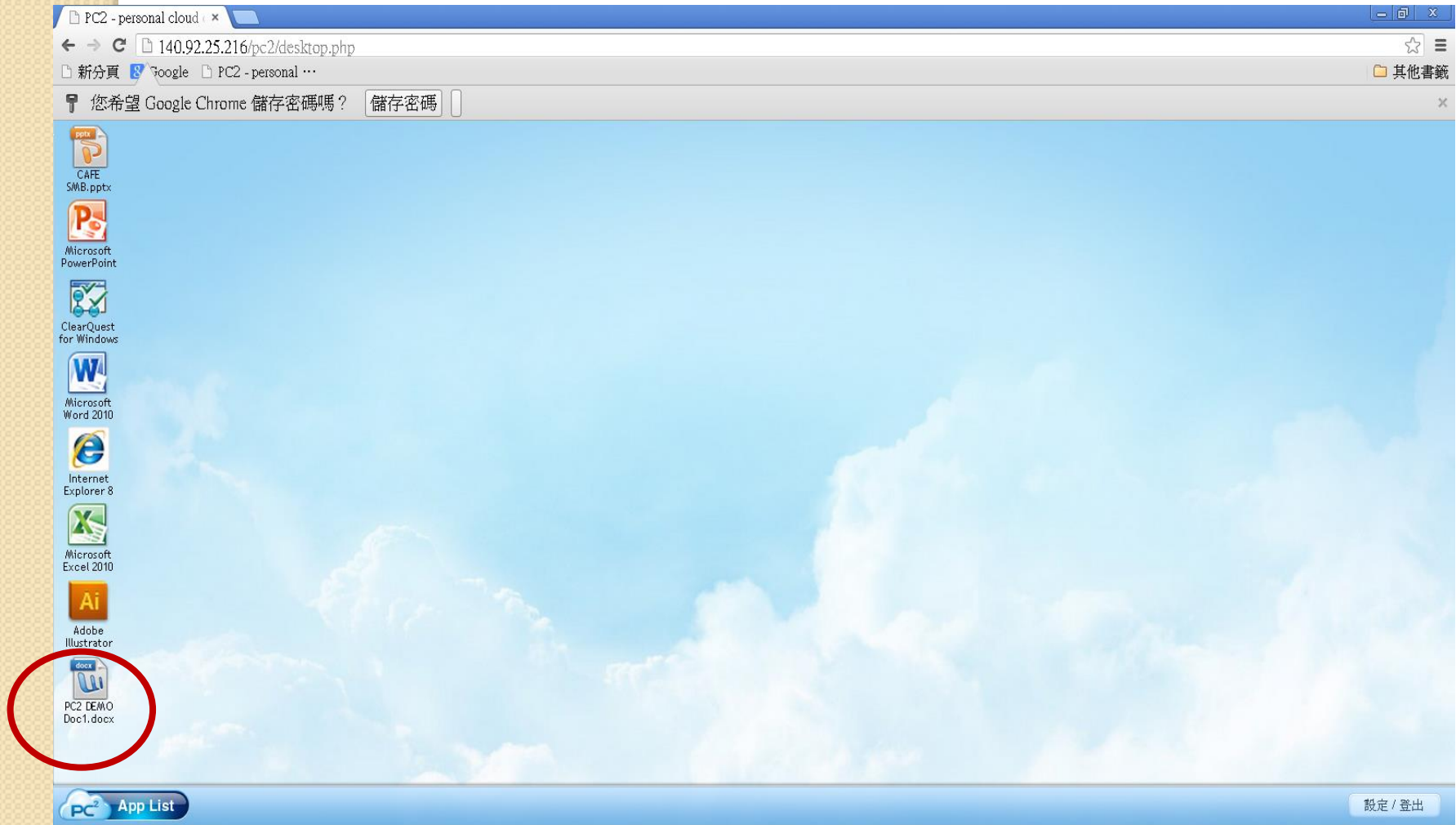
# Microsoft Word



# Microsoft Word(save to personal file folder)



# A New File Object ICON Shown on Virtual Desktop



# Microsoft PowerPoint

The screenshot shows a web browser window with the address bar at 140.92.25.216/pc2/desktop.php. The browser's address bar also shows a prompt: "您希望 Google Chrome 儲存密碼嗎? 儲存密碼". The browser's desktop background is a blue sky with clouds. On the left side of the desktop, there are several application icons: CAPE SMB.pptx, ClearQuest for Windows, Internet Explorer 8, Microsoft Excel 2010, Microsoft PowerPoint 2010, and Microsoft Word 2010. The main content of the browser is a Microsoft PowerPoint presentation titled "簡報1 - Microsoft PowerPoint". The presentation is displayed in a slide view. The slide has a white background with a dashed border. The text on the slide reads "PC2 DEMO" in a large font, followed by "按一下以新增副標題" in a smaller font. The status bar at the bottom of the PowerPoint window shows "投影片 1/1", "Office 佈景主題", "英文 (美國)", and "52%". At the bottom of the browser window, there is an "App List" button on the left and a "設定 / 登出" button on the right.



# Authorized Application List for End User

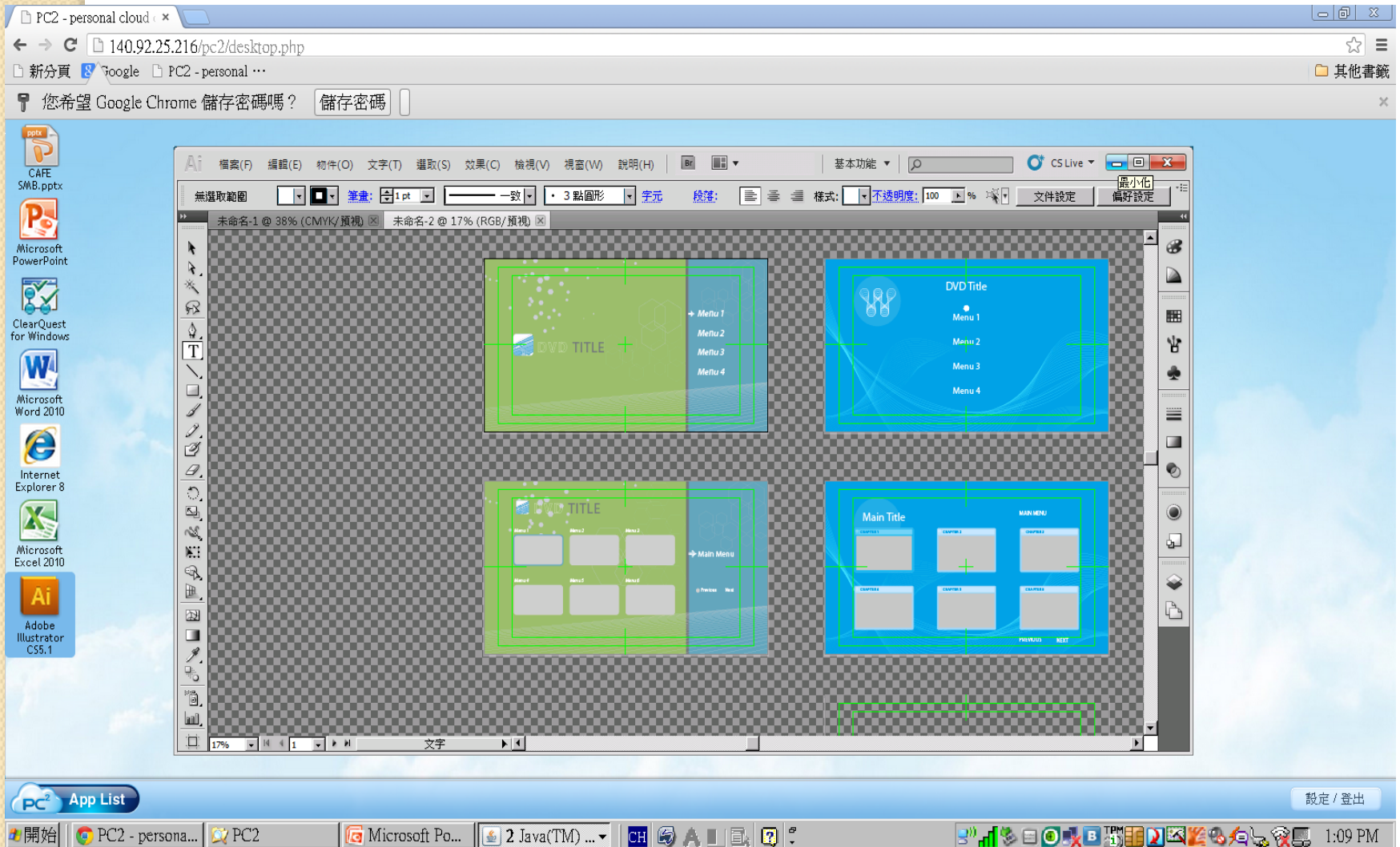
The image shows a Windows desktop environment with a blue sky and clouds background. A Google Chrome browser window is open at the top, displaying the URL `140.92.25.216/pc2/desktop.php`. The desktop has several icons on the left side, including CAFE SMB.pptx, ClearQuest for Windows, Internet Explorer 8, Microsoft PowerPoint, and Microsoft Word 2010. A taskbar at the bottom contains a 'PC App List' button and a '設定 / 登出' button. A small window titled '應用程式列表' (Application List) is open in the center, displaying a list of authorized applications with '新增' (Add) buttons next to each:

Application Name	Action
Mousepad	新增
Windows Media Player	新增
Microsoft Excel 2010	新增
Adobe Photoshop CS5.1	新增

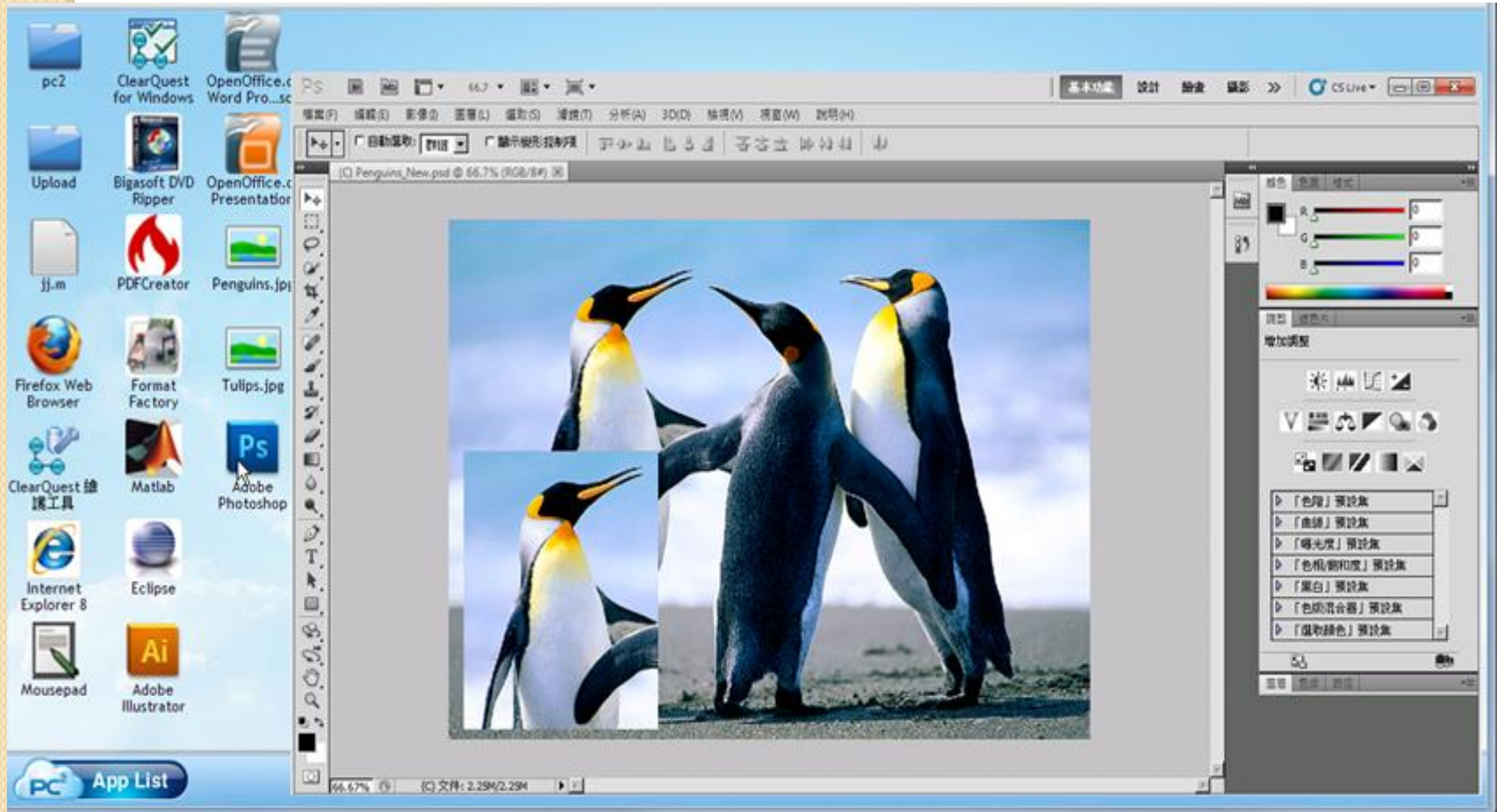
# Microsoft Excel (new added)

The screenshot displays a PC desktop environment. At the top, a web browser window is open, showing the address bar with the URL `140.92.25.216/pc2/desktop.php`. Below the browser, the desktop background is a light blue sky with clouds. On the left side, there is a vertical taskbar with several application icons: CAFE SMB.pptx, ClearQuest for Windows, Internet Explorer 8, Microsoft Excel 2010, Microsoft PowerPoint, and Microsoft Word 2010. The main focus is a Microsoft Excel window titled "活頁簿1 - Microsoft Excel". The Excel ribbon is visible, showing tabs for "常用", "插入", "版面配置", "公式", "資料", "校閱", "檢視", "增進集", and "Acrobat". The "常用" (Home) tab is active, displaying various formatting options like font face (新細明體), size (12), bold, italic, underline, text color, background color, and alignment. The spreadsheet area shows a grid with columns labeled A through P and rows numbered 1 through 18. Cell A1 is selected and contains the text "PC2 DEMO". The status bar at the bottom of the Excel window shows "工作表1 / 工作表2 / 工作表3" and a zoom level of 100%. In the bottom right corner of the desktop, there is a button labeled "設定 / 登出".

# Adobe Illustrator(new added)



# Adobe PhotoShop



# IBM Rational CC/CQ(Client/Server Application)



# IBM Rational CC/CQ(Client/Server Application)

The screenshot shows a Windows desktop environment with a web browser window displaying the IBM Rational ClearQuest application. The browser address bar shows the URL `140.92.25.216/pc2/desktop.php`. The application window title is "IBM Rational ClearQuest - [CSSIR: 成果文件審查系統 (1.已申請明細 (成果交付審查單))]".

The application interface includes a menu bar (File, Edit, View, Actions, Query, Window, Help) and a toolbar with icons for various actions. A left-hand pane shows a tree view of the workspace, including "Personal Queries" and "Public Queries" with sub-items like "1.已申請明細", "2.待審核清單", "3.待簽入清單", "4.待文管簽出", "5.未結案申請明細", and "6.已結案清單".

The main area is a form titled "Query editor / Display editor /". It contains several input fields and buttons:

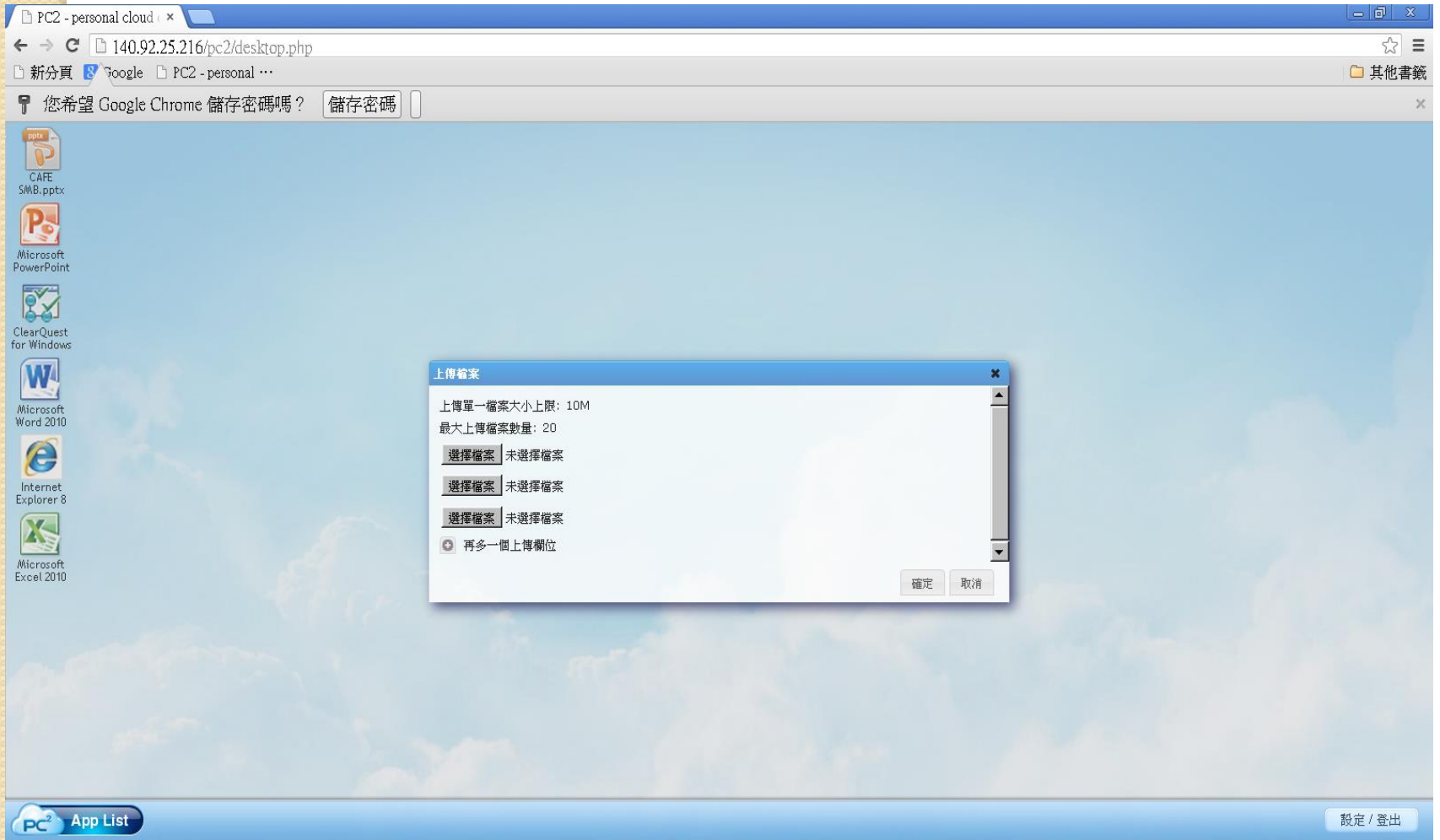
- Fields: 撰稿人 (Author), 填表日期 (Form Date), 紀錄編號 (Record ID), 計畫名稱 (Project Name), 成果編號 (Result ID), 成果名稱 (Result Name), 版次 (Version).
- Buttons: Apply, Revert, Print Record, Actions.
- Text: "產生成果交付審查單" (Generate Result Delivery Review Form).
- Instructions: "【成果名稱需與計畫書、成果文件(紙本或電子檔)相符，如發現不符合，請洽計畫文管進行更正。】"
- Radio button groups for "成果類別(A)" and "成果類別(B)" with various options like "技術分析報告", "系統發展文件", "調查研究報告", "規畫報告", "論文", "期刊", "研討會", "專著", "訓練報告", "訓練心得報告", "訓練教材", "資訊服務", "研討會", "展示會", "刊物", "書籍", "期刊", "軟體成品", "原始程式碼", "測試程式碼", "可執行系統", "磁盤", "可轉移技術", "硬盤", "軟體", "課程".

The bottom of the application window shows "Record:" and "Count:" fields. The desktop taskbar includes icons for "App List" and "設定 / 登出" (Settings / Logout).

# Remote Browser – Microsoft IE 8

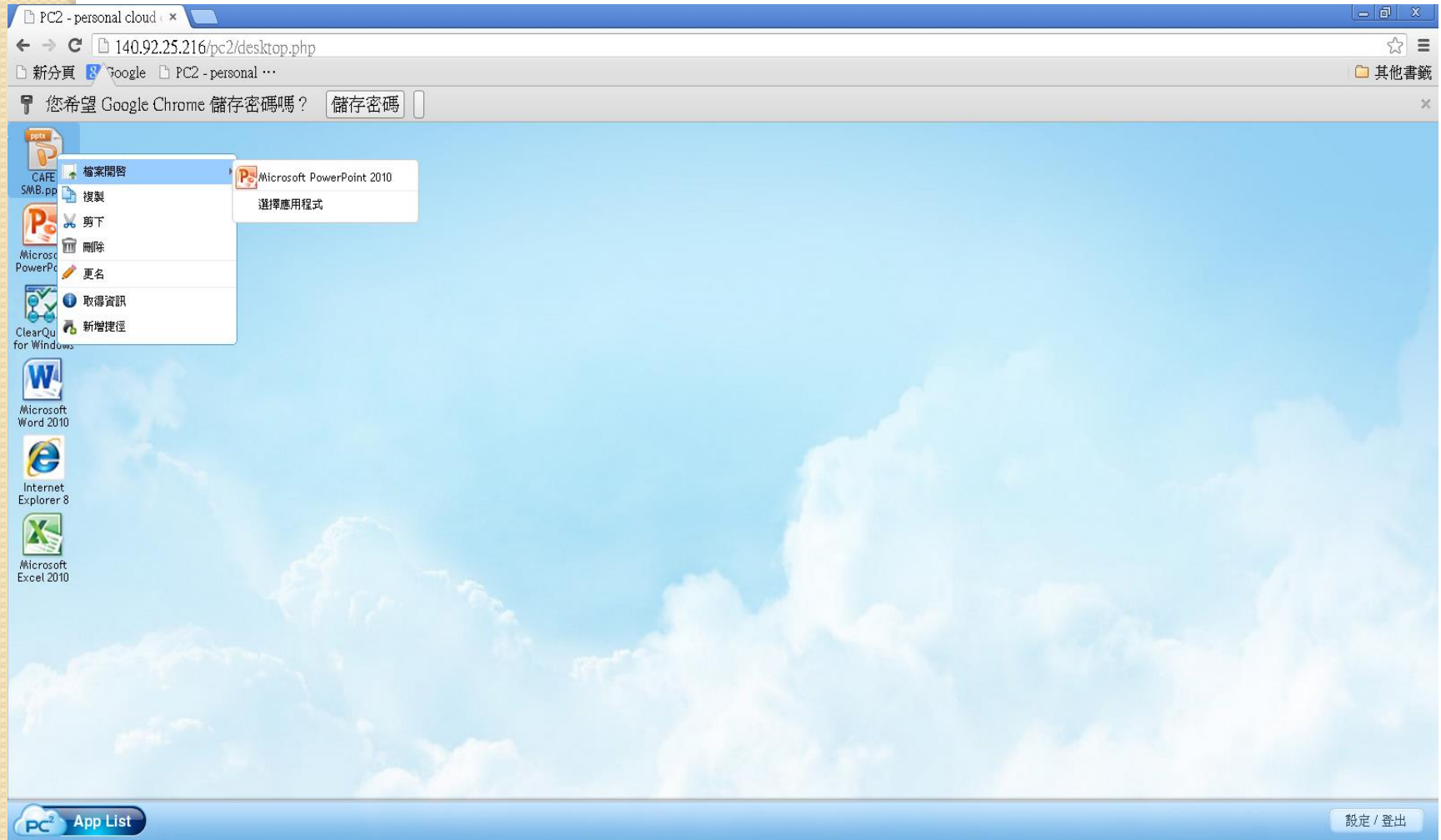
The screenshot displays a remote browser session within a PC2 environment. The browser window is titled "2012台北國際發明暨技術交易展 - 資策會 - 智慧科技生活 - YouTube - Windows Internet Explorer". The address bar shows the URL "http://www.youtube.com/watch?v=yr3qyVsl1cw". The page content features a video player with the title "2012台北國際發明暨技術交易展 - 資策會 - 智慧科技生活" and a video thumbnail showing a view of Earth from space. To the right of the video player, there is a promotional banner for a game titled "快看不一樣的三國" (Watch a different Three Kingdoms) with a "前往Youtube觀看" (Go to Youtube to watch) button. Below the banner, there are two video recommendations: "超酷概念視頻：美妙的未來科技.flv future" and "林凡一個人生活(2012幸福變版) (官方完整版)". The Windows taskbar at the bottom shows the "App List" and "設定 / 登出" (Settings / Log out) buttons. The system tray includes icons for network, volume, and power, along with the system clock showing "11:02 AM 1/10/2010".

# Upload File to Virtual Desktop





# Default Application Setting for Unknown File Object(1/3)



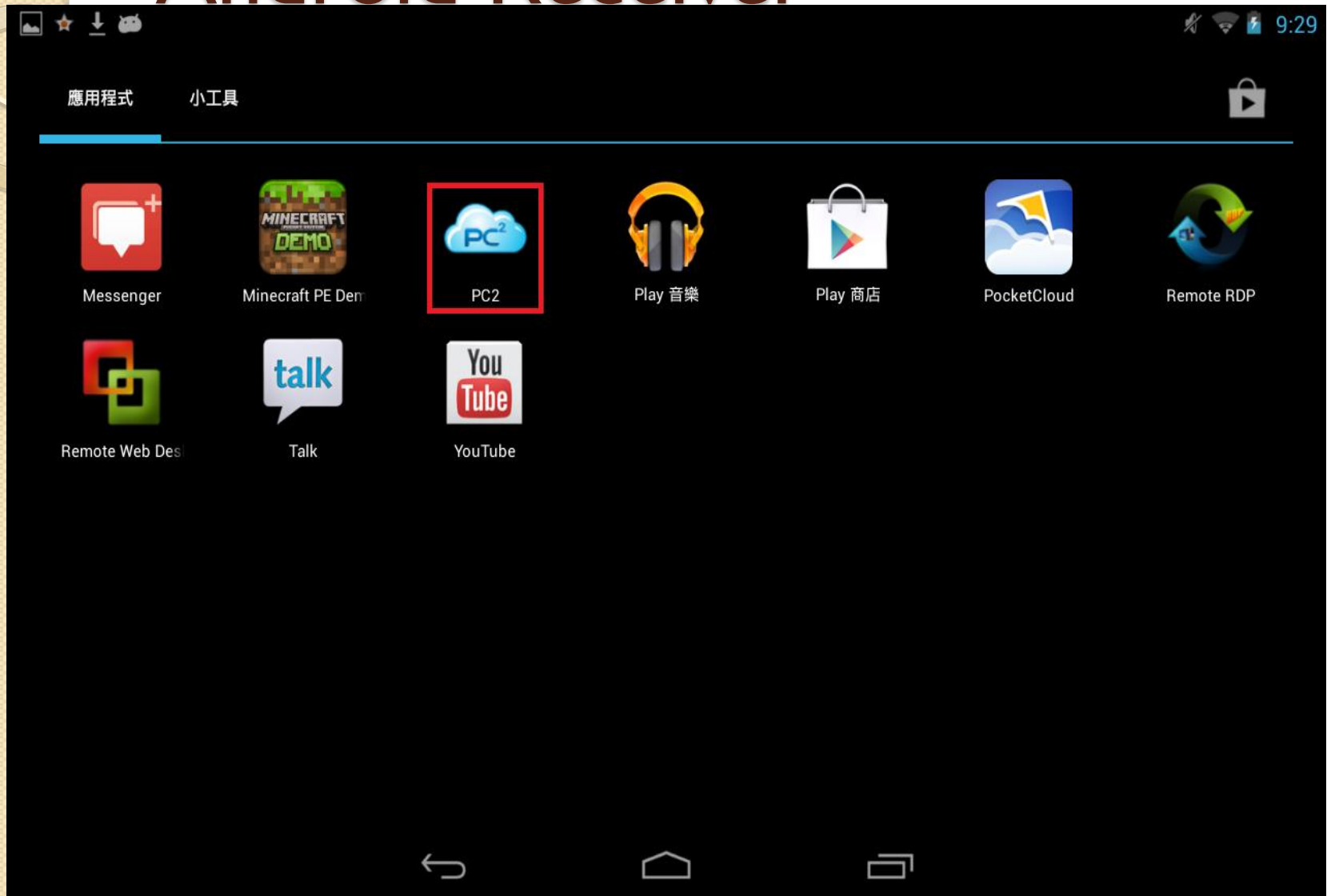
# Default Application Setting for Unknown File Object(2/3)



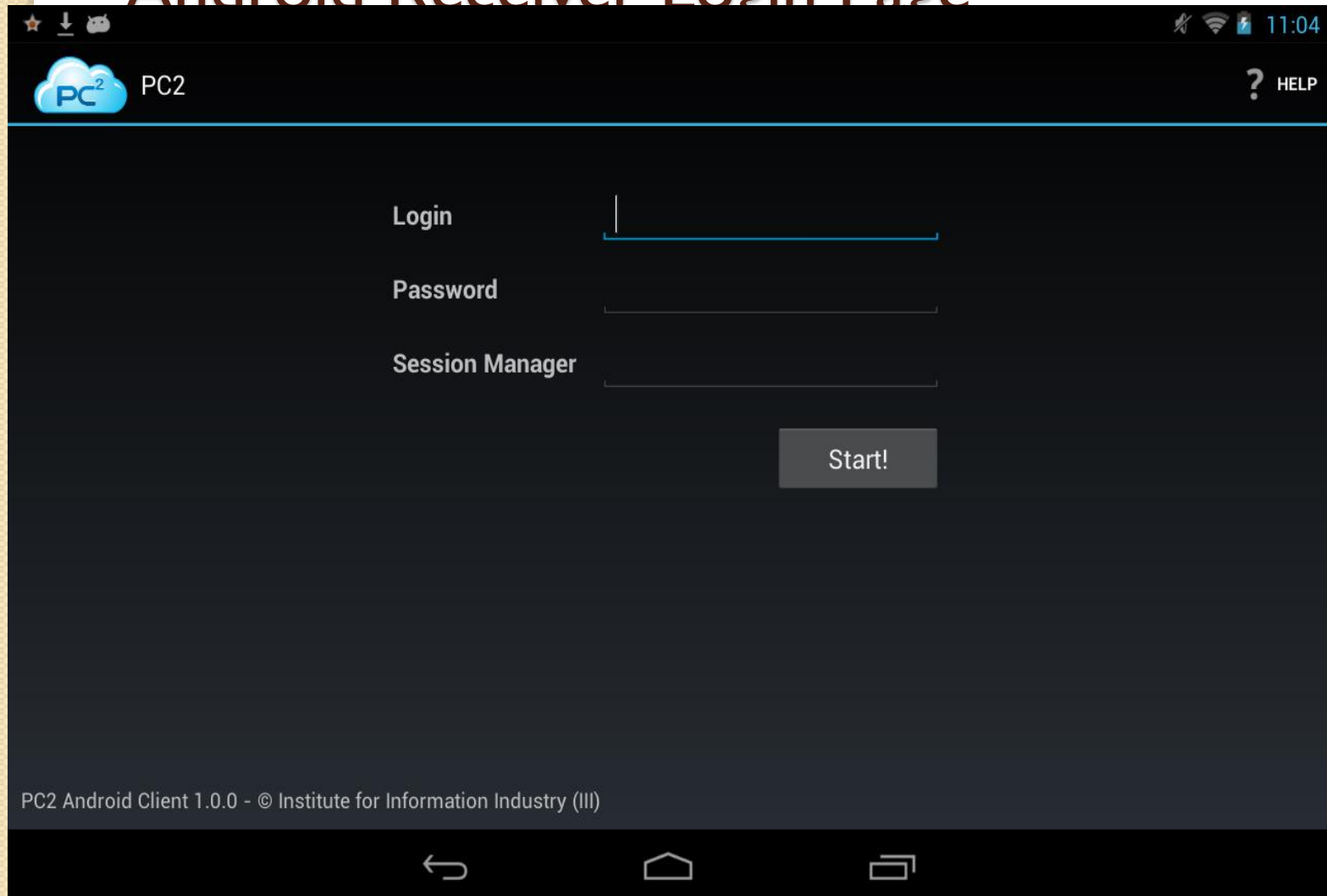
# Default Application Setting for Unknown File Object(3/3)



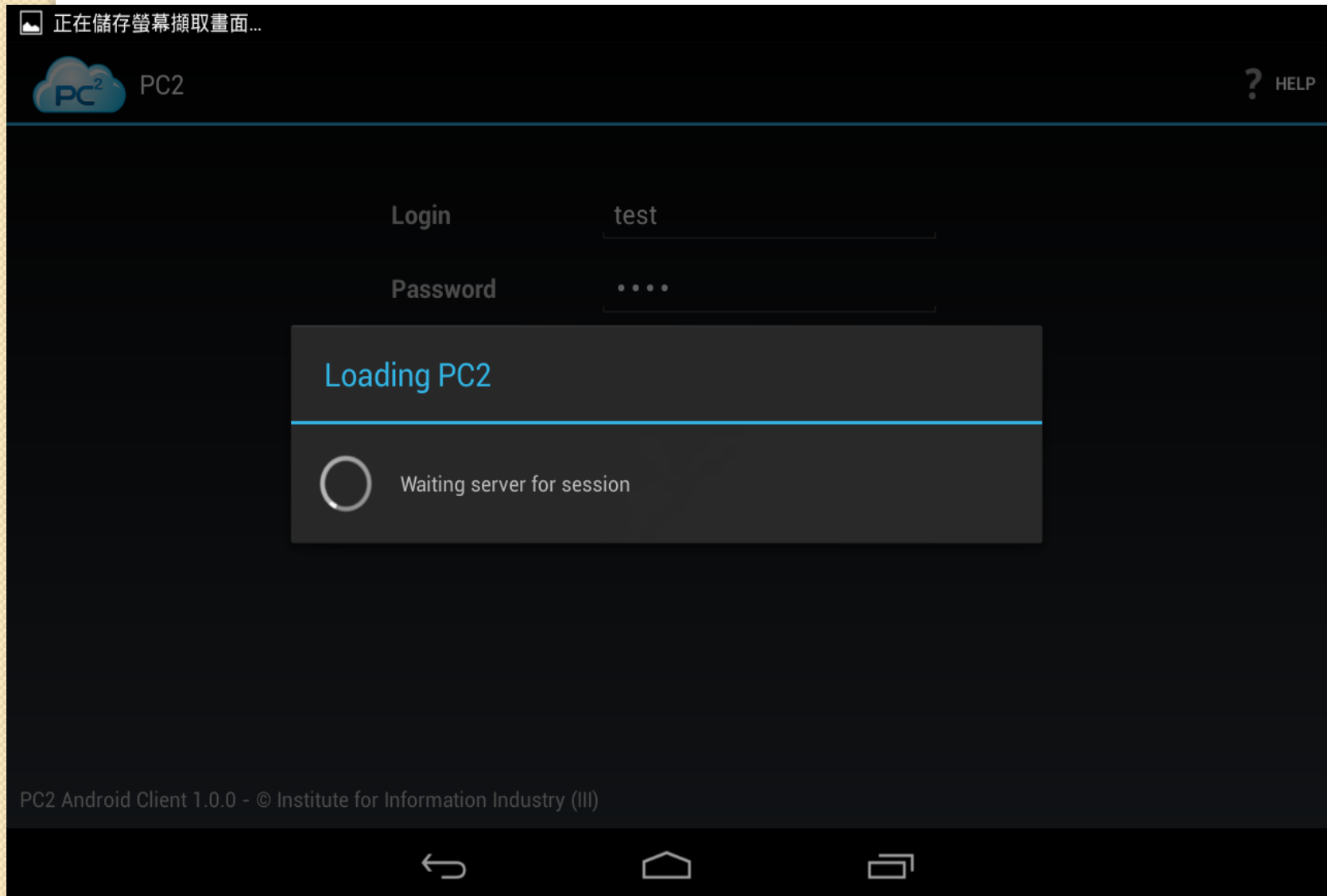
# Android Receiver



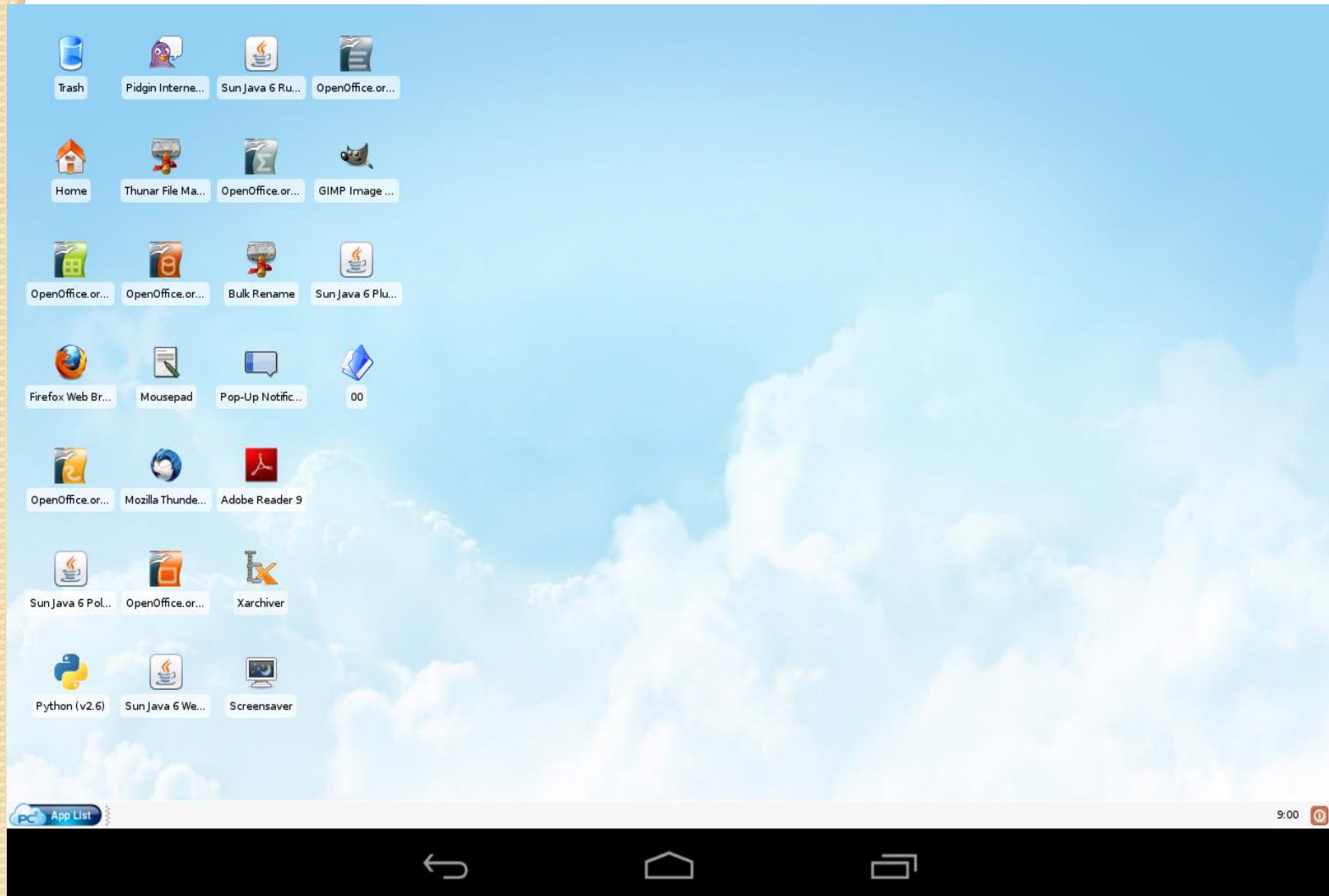
# Android Receiver Login Page



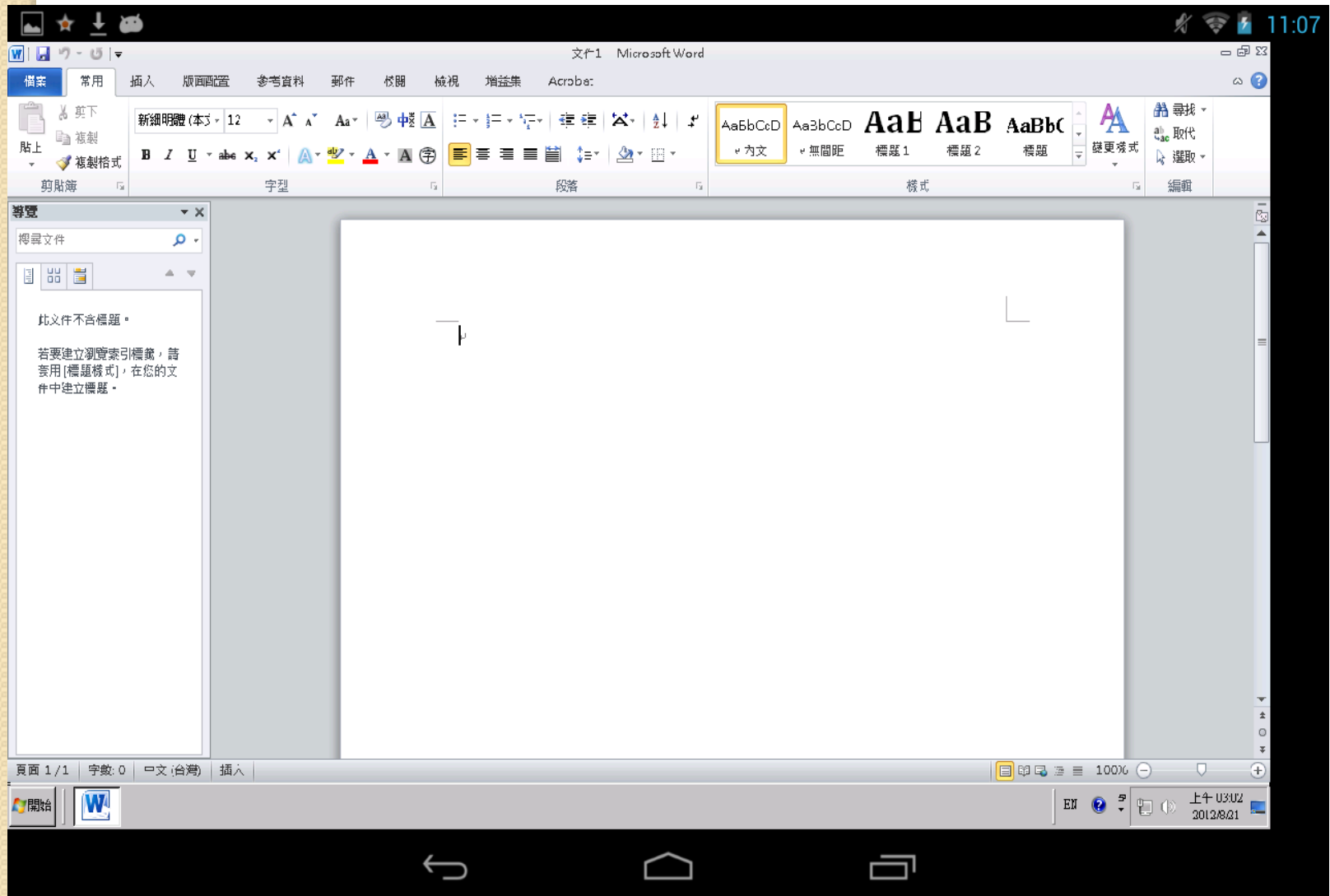
# Android Receiver Login Page



# PC2 Android Desktop Mode

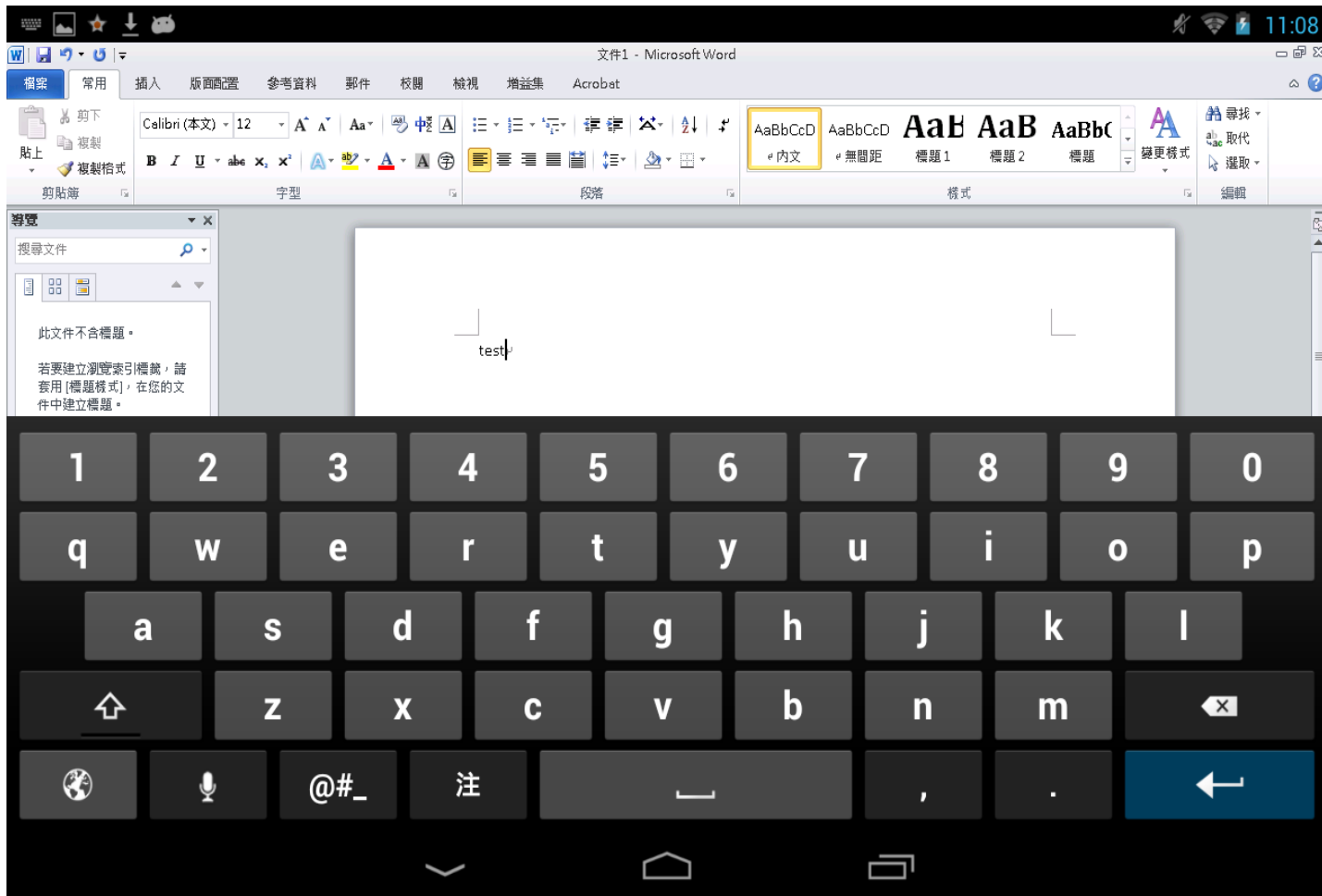


# PC2 Android Run Windows Application



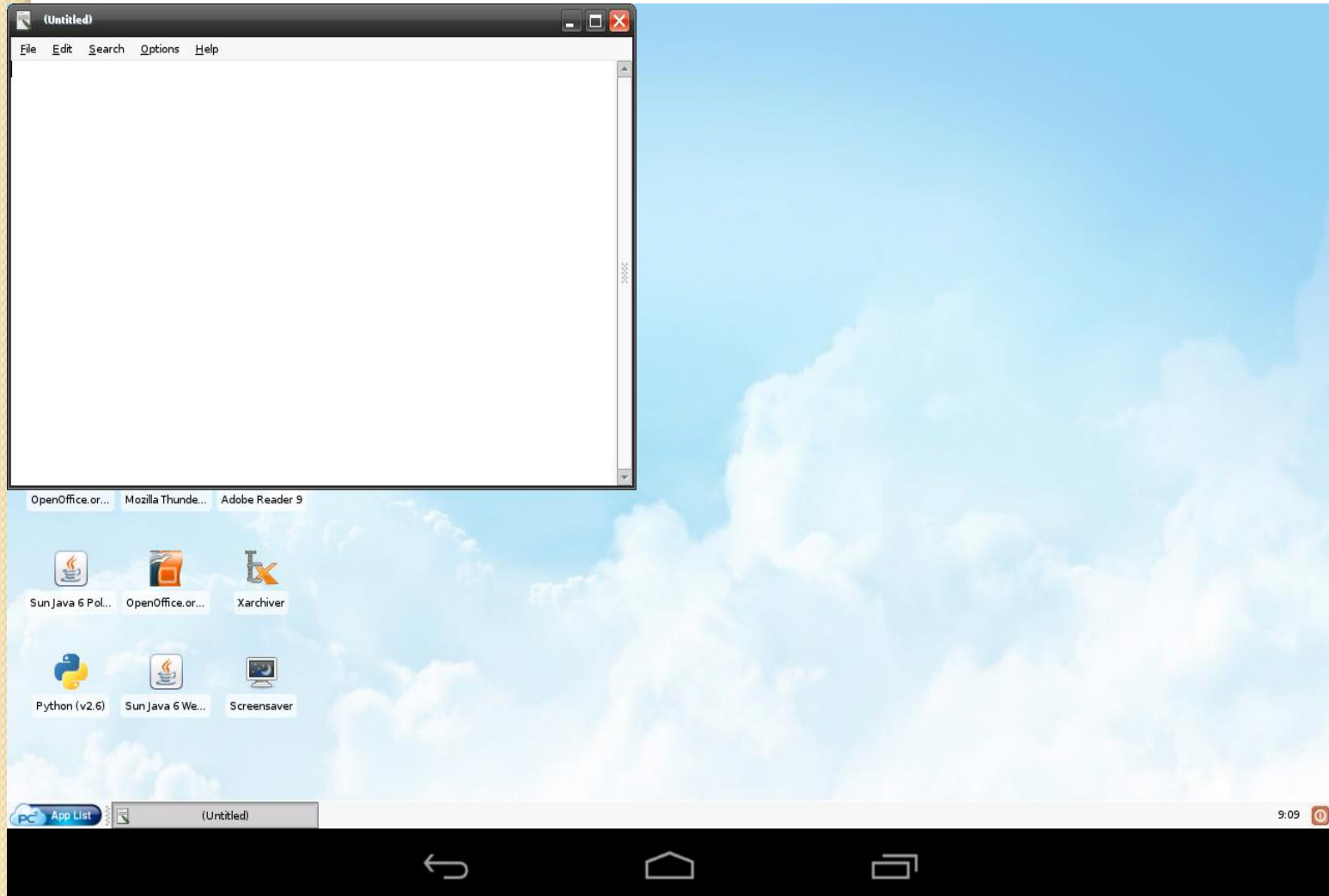


# PC2 Android Run Windows Application

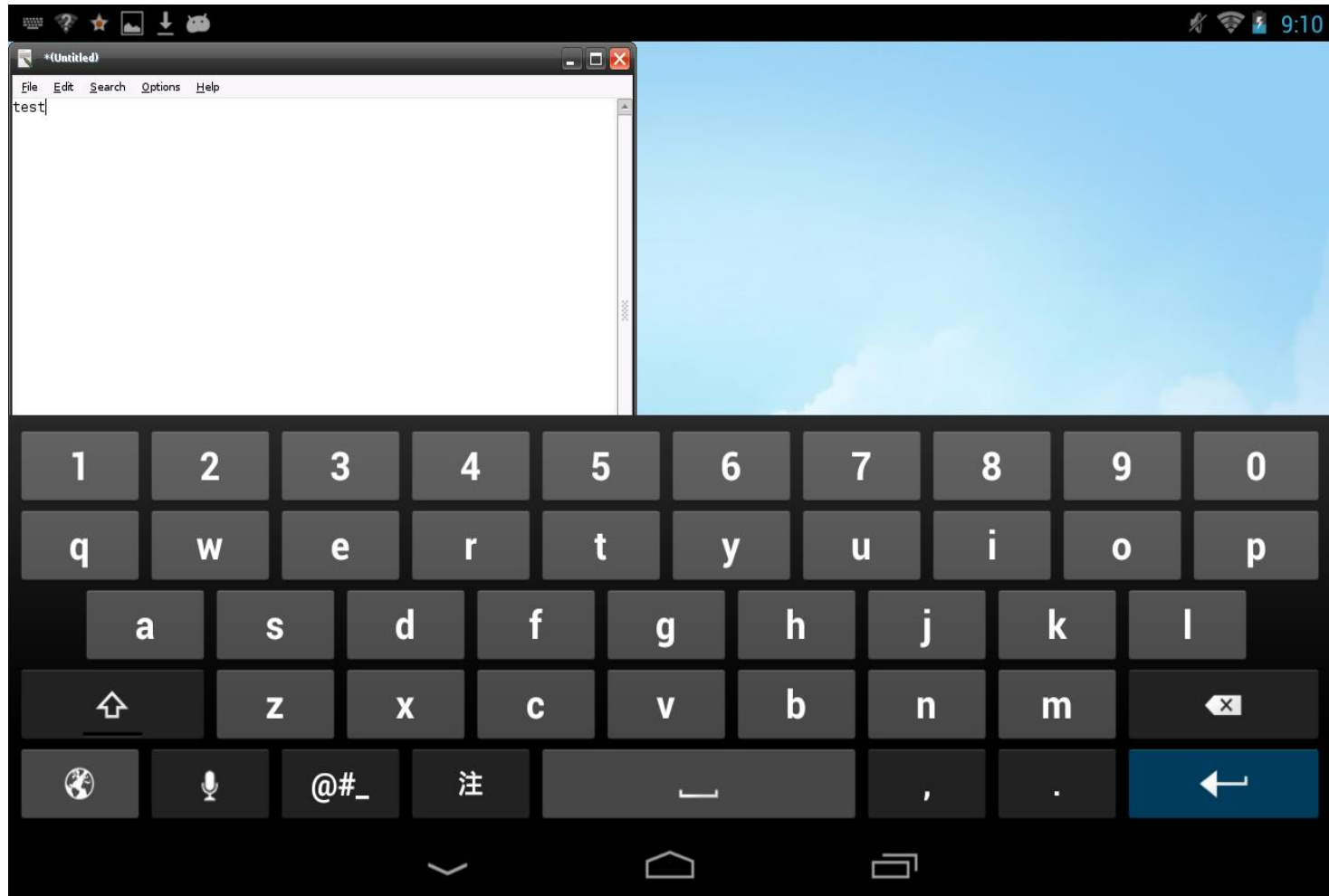


Use two fingers to click the typing area to call the keyboard

# PC2 Android Run Linux Application



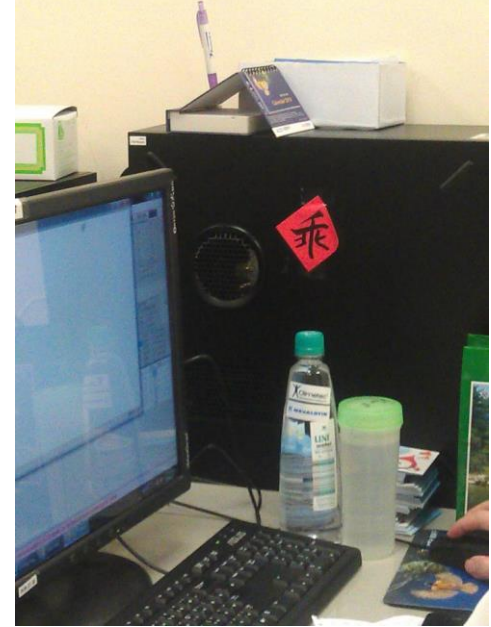
# PC2 Android Run Linux Application



Use two fingers to click the typing area to call the keyboard

# 窘境出現

- 記憶體不足(有怪獸!)
  - 往後採購像是天災地變(你感受很深吧!)
  - 自知之明(應變!)
- 
- 長期抗戰(為了教育!)
  - 你的熱枕還在嗎
  - 練好體能再出發!



# 探索總是有趣的



# 流通消息早點辦理

facebook

台北市資訊組長的秘密花園

關於 活動 相片 檔案

110 位成員 · 以電子郵件邀請

新增成員到社團

最新貼文

寫了... 文來了, 之前被擱節的電腦及周邊設備費又說要補助到校... 檢具相關證明報局核銷。這是怎樣....又要重新寫一份購買清單了

讚 · 留言 · 追蹤貼文 · 19 小時前

Dawn Chiang、Andrew Lee 和 Amanda Wu 都說讚。 47人已看過

檢視另16則留言

「配合市長政策」, 想想之前的「未來教室」, 每間300萬... 嗎? Q 我好期待能「配合這個市長政策」

18分鐘前 · 已編輯 · 讚

A Wu 一早,我請文書給我這份公文,直到現在還沒有拿... 等待中@@)

約於 1 分鐘前 · 讚

前輩們, 想請教幾個採購問題。

- 1.周邊設備費可以買伺服器嗎?
- 2.電腦台數當中, 可以合併計算伺服器也當成一台嗎?
- 3.電腦費用、周邊設備費、軟體費可以併案支付, 一起使用嗎?

感謝各位~~~

讚 · 留言 · 追蹤貼文 · 23 小時前

Michelle Chia-Chi Kuo 說讚。 51人已看過

檢視另7則留言

就說了, 每個會計的標準不一啦... 前來自手機 · 讚

成員推薦

新增

新增

新增

新增

新增

查看所有的建議

最愛

- 動態消息
- 收件匣訊息
- 活動
- 相片

社團

- iPad 應用與教學 @ ... 5
- 台北市資訊組長的秘密... 2
- TMUE資訊人 2
- ITclub 資訊教師專... 1
- Drupal 教師學習社群 4
- 無清 Family 8
- iPad Education Dreams
- 教育嘆浪客TPET... 2
- 智慧教室 工作坊 13
- 國語實小資訊團隊
- HP ata 國際認證研習
- 成立社團.....

應用程式

- 應用程式中心 20+
- 遊戲動態 20+

粉絲專頁

- 粉絲專頁動態 20+
- 發現粉絲專頁 9
- 刊登廣告

更多