



漫步在雲端—如何正確與安全使用雲端服務
How to use Cloud Service Securely

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Powered by DRBL

WHO AM I ? 這傢伙是誰啊? JAZZ ?

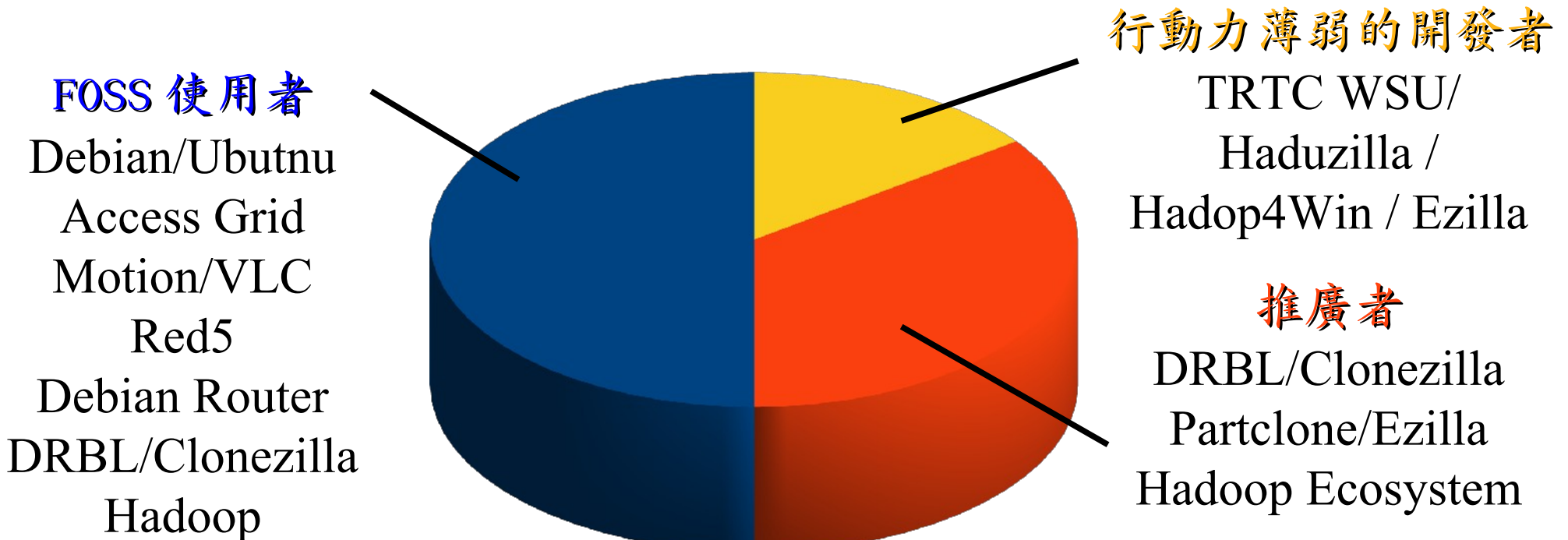
- 講者介紹 :

- 國網中心 王耀聰 副研究員 / 交大電控八九級碩士
- jazz@nchc.org.tw



- 所有投影片、參考資料與操作步驟均在網路上

- <http://trac.nchc.org.tw/cloud>
- 由於雲端資訊變動太快，愛護地球，請減少不必要之列印。



TRENDS

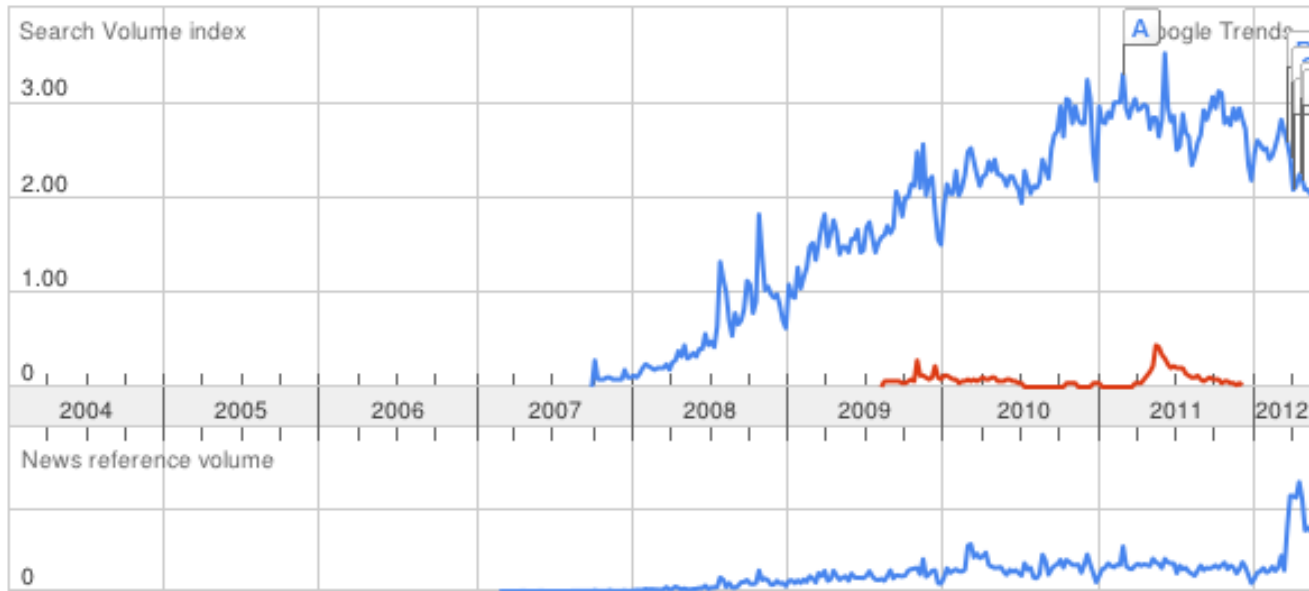
趨勢

The Trends of Cloud Computing

雲端運算的趨勢觀察：搜尋關鍵字熱門度

cloud computing

1.00 雲端運算 0.02



Rank by cloud computing

Regions

1. [India](#)
2. [Singapore](#)
3. [Hong Kong](#)
4. [Ireland](#)
5. [South Africa](#)
6. [South Korea](#)
7. [Philippines](#)
8. [Malaysia](#)
9. [Taiwan](#)
10. [United States](#)

Cities

1. Hyderabad, India
2. Bangalore, India
3. Pune, India
4. Chennai, India
5. Mumbai, India
6. New Delhi, India
7. Singapore, Singapore
8. Hong Kong, Hong Kong
9. Dublin, Ireland
10. San Francisco, CA, USA

Google Trends

觀察全球對雲端運算
這個字眼的熱門搜尋
趨勢～

約莫 2007 年開始炒
2011 年到達頂峰
2012 年開始退燒

<http://www.google.com/trends>

The Trends of Cloud Computing

雲端運算的趨勢觀察：企業重視度

CIO technologies	Ranking of technologies CIOs selected as one of their top 3 priorities in 2012			
	2012	2011	2010	2009
Analytics and business intelligence	1	5	5	1
Mobile technologies	2	3	6	12
Cloud computing (SaaS, IaaS, PaaS)	3	1	2	16
Collaboration technologies (workflow)	4	8	11	5
Virtualization	5	2	1	3
Legacy modernization	6	7	15	4
IT management	7	4	10	*
Customer relationship management	8	18	*	*
ERP applications	9	13	14	2
Security	10	12	9	8
Social media/Web 2.0	11	10	3	15

*Not an option that year

參考來源：<http://www.gartner.com/DisplayDocument?id=1524714>

Gartner CIO Agenda 2012

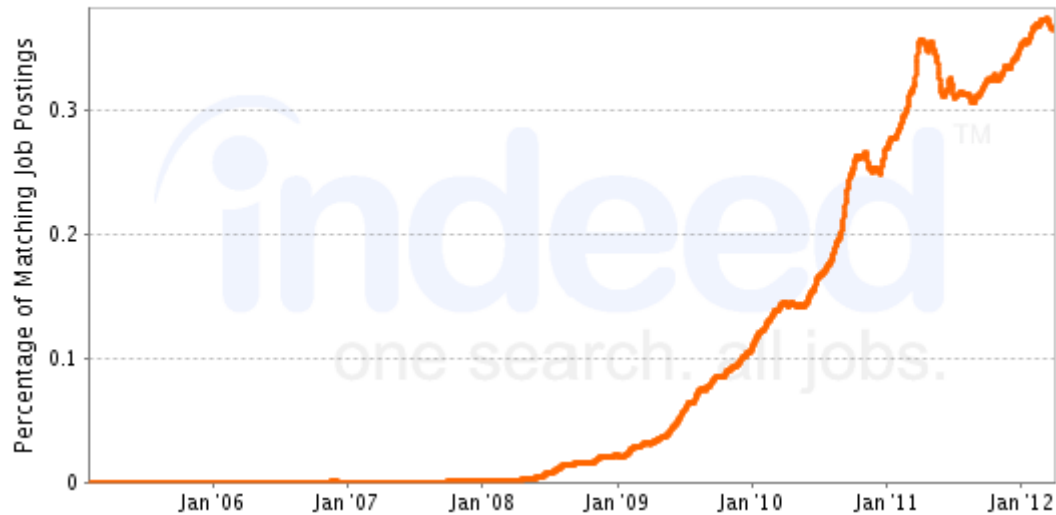
觀察全球資訊長對雲端運算的重視程度

The Trends of Cloud Computing

雲端運算的趨勢觀察：就業市場需求

Job Trends from Indeed.com

— cloud computing



indeed 與 simplyhired

觀察全美對雲端運算一詞的
職缺需求趨勢～

橫軸 = 時間

縱軸 = 佔全部職缺的百分比



約莫 2008 年開始變多

2011 年到達頂峰

2012 年開始退燒

<http://www.indeed.com/jobtrends>

<http://www.simplyhired.com/a/jobtrends>

WHAT

定義



什麼是雲端運算啊？

What is Cloud Computing ?

雲端概念

雲端運算不是一項全新技術，
而是一項概念。
雲端的意義不在技術，
而在商業模式的改變。

Paradigm Shift of Cloud Business Model !!

雲端商業模式的典範轉移

軟體從買斷變成租賃

Office 2007 →
Google Docs / Office 365

硬體從買斷變成租賃

PC / Server →
Hosting / Colocation →
Amazon EC2 / S3

軟體從單機變成行動

Outlook → Webmail →
Mail Web Apps →
Mail Mobile Apps

硬體從固定變成行動

PC / Server →
NB / Tablet →
Pad / Mobile

National Definition of Cloud Computing

美國國家標準局 NIST 給雲端運算所下的定義

5 Characteristics

五大基礎特徵

4 Deployment Models

四個佈署模型

3 Service Models

三個服務模式

1. On-demand self-service.

隨需自助服務

2. Broad network access

隨時隨地用任何網路裝置存取

3. Resource pooling

多人共享資源池

4. Rapid elasticity

快速重新佈署靈活度

5. Measured Service

可被監控與量測的服務

4 Deployment Models of Cloud Computing

雲端運算的四種佈署模型

Public Cloud
公用雲端



Target Market
is **S.M.B.**
主要客戶為
中小企業

**Dynamic Resource Provisioning
between public and private cloud**

私有雲端動態根據計算需求
調用公用雲端的資源

Hybrid
Cloud

以大型企業
為主要客戶
**Enterprise is
key market**

Community Cloud
社群雲端

Academia 學術為主



私有雲端
Private Cloud

3 Service Models of Cloud Computing

雲端運算的三種服務模式（市場區隔）

IaaS

Infrastructure as a Service

架構即服務

PaaS

Platform as a Service

平台即服務

SaaS

Software as a Service

軟體即服務



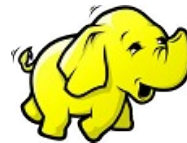
2 perspectives : Services vs Technologies

您想聽的是「雲端服務」還是「雲端技術」？



雲端服務

Microsoft



雲端技術



Cloud computing hype spurs confusion, Gartner says

<http://www.computerworld.com/s/article/print/9115904>

淺談雲端運算 (Cloud Computing)

http://www.cc.ntu.edu.tw/chinese/epaper/0008/20090320_8008.htm



雲端服務應用範例

Part 1 : Cloud Computing Services and its Applications

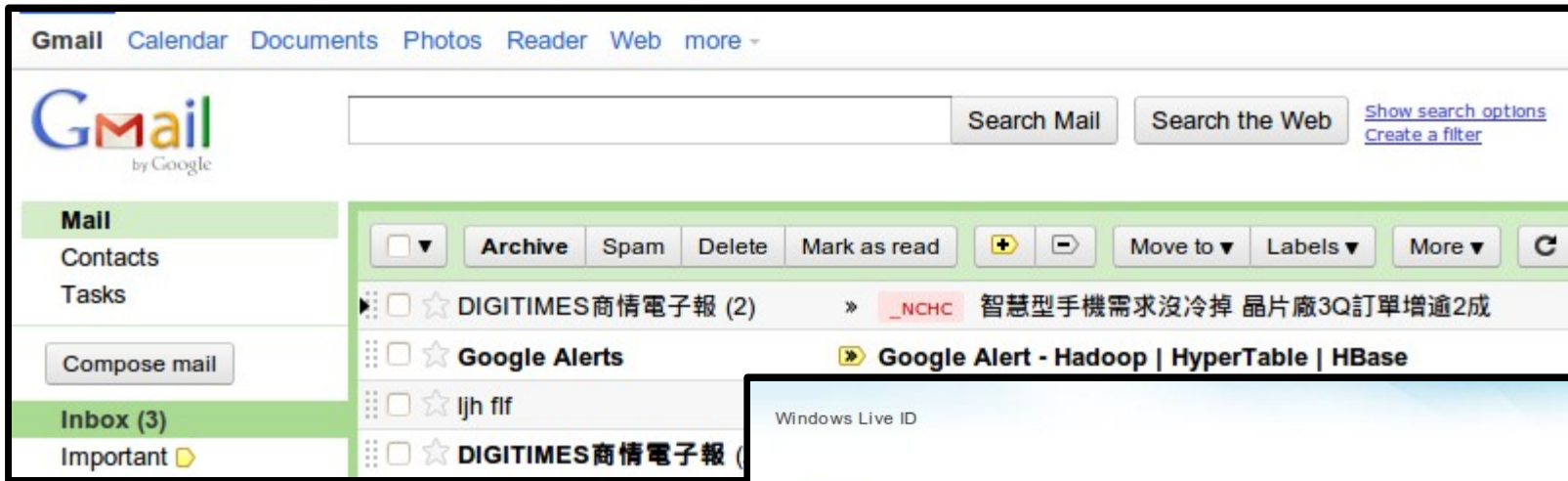
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Demo #1: Webmail

收發郵件



網址：<http://mail.google.com>
<http://mail.live.com>

Demo #2: Calendar, ToDo List

行事曆、待辦事項

<https://www.google.com/calendar>



收件匣 工作 私人 寄件匣 所有任務

完成 延期 更多動作...

選擇: 全部, 今日到期, 明天到期, 逾期, 無

新增一個待辦

在此清單中, 您沒有未完成的工作。真是太棒了!

NEW pro Has RTM made you more organized and productive? [Upgrade to Pro](#) and support RTM.

[關於](#) | [部落格](#) | [Apps](#) | [討論區](#) | [幫助](#) | [使用條款](#) | [隱私權政策](#)

<https://www.rememberthemilk.com>

The screenshot shows the Google Calendar interface for August 2012. At the top, there are navigation links for +Yao-Tsung, Search, Images, Maps, Play, YouTube, News, Gmail, Drive, and Calendar. Below this is the Google logo and a search bar for the calendar. The main calendar view is in 'Month' mode, showing dates from 30 to 19. A 'CREATE' button is visible on the left. Below the calendar, there are sections for 'My calendars' (Jazz Yao-Tsung Wang, Tasks, 貝貝班表) and a 'Tasks' list. The tasks list includes '收件匣' (Inbox) and '工作' (Work). A notification box at the bottom right says '收件匣 和您的電子郵件收件匣極為相似, 收到信件即可建立工作。了解更多關於收件匣。' (Inbox is very similar to your email inbox, receive letters can create work. Learn more about inbox.)

收件匣 和您的電子郵件收件匣極為相似, 收到信件即可建立工作。了解更多關於收件匣。

提示
優先順序:
1 2 3 無

Demo #3: Office Online

文書處理

Google docs

透過「Google 文件」建立與共用文件。

- 從電腦上載檔案：輕鬆上手，完全免費！
- 隨時隨地存取：透過電腦或智慧型手機編輯及檢視您的文件。
- 共用文件：即時協作功能可讓您更加快速地完成工作。



文件



試算表



簡報



繪圖

立即試用「Google 文件」

[新功能](#)

©2011 Google - [條款](#)

Google 帳戶

電子郵件:

Zoho Work. Online

Forums Blogs Pricing FAQ Support Contact Us

Home Collaboration Apps Business Apps Productivity Apps Developers & Partners

More Than 4 Million Users Work Online With

Zoho Support Demo

Welcome superdemo at Zoho Support Demo

Pending Requests	Pending Requests for you	This Month Average Response Time
41	35	10:44 hrs

Requests by time left

Request ID	Request Description	Requester	Status	Due Date
113	Test request for jax	superdemo	Overdue	late by 6 days 17 hours
163	test mail from mail	superdemo	Overdue	late by 6 days 17 hours
164	We are looking forward to demonstrate our personalized pr...	superdemo	Overdue	late by 6 days 17 hours
165	Testing for a request from email	superdemo	Overdue	late by 6 days 17 hours

Your Tasks for the day

Task	Due Date	Status
Schedule a call	14/10/2010 11:00 PM	late by 60 Days Overdue
Emergency Demo	19/10/2010 12:45 PM	late by 56 Days Overdue
Emergency Demo	19/10/2010 08:56 PM	late by 55 Days Overdue
Emergency Demo	20/10/2010 08:26 PM	late by 54 Days Overdue
Emergency Demo	21/10/2010 04:45 PM	late by 53 Days Overdue
Emergency Demo	22/10/2010 10:37 PM	late by 52 Days Overdue
Emergency Demo	27/10/2010 11:11 PM	late by 47 Days Overdue
Schedule a Call for this request	28/10/2010 05:30 PM	late by 46 Days Overdue
Call the customer	11/10/2010 12:00 PM	late by 44 Days Overdue

Sign Up Now!

Zoho Mail Zoho Support Zoho CRM

網址：<https://docs.google.com>
<http://www.zoho.com>

Demo #4: Drawing Diagram

繪圖工具 (取代 Visio)

CACOO

開始

圖表繪覽

設定

返回

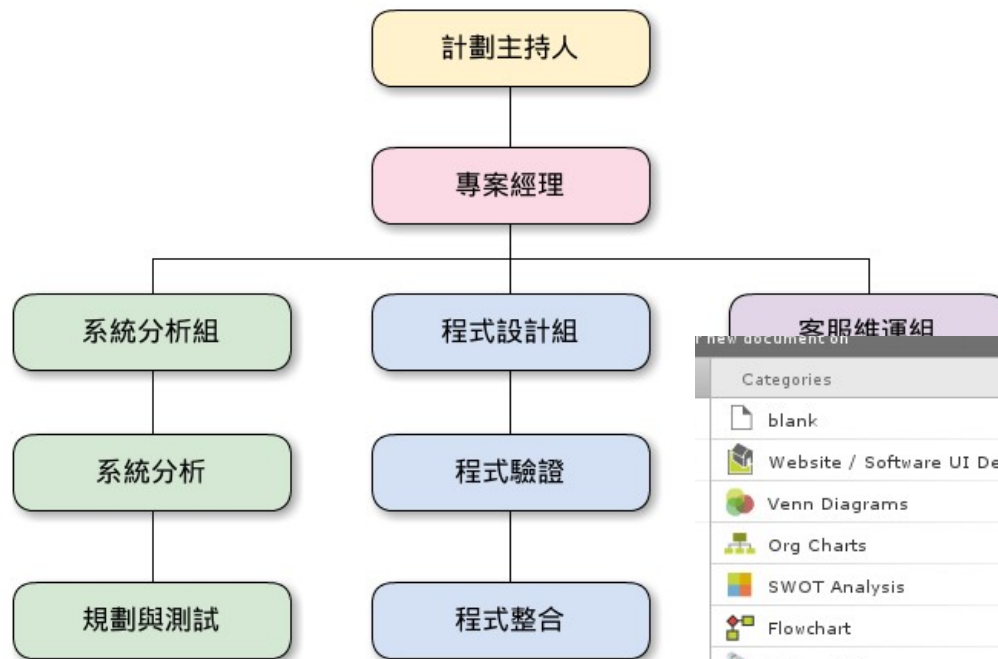
國教司專案團隊架構圖

編輯

擴至整個螢幕

連結

Untitled



<http://www.gliffy.com>

Categories	Templates
blank	
Website / Software UI Design	
Venn Diagrams	
Org Charts	
SWOT Analysis	
Flowchart	
Network Diagrams	
Software Design/UML	
Floor Plan	
Business Process	<ul style="list-style-type: none">Reimbursement ProcessBPMN Contractor Process

<https://cacoo.com/diagrams/>

Demo #5: Image Processing

圖片處理工具 (取代小畫家、Photoshop)



<http://pixlr.com/editor/>

Demo #6: Sharing Photos

多人同步即時分享相片及資訊

flickr® 來自 YAHOO!

首頁 開始瀏覽 註冊 發掘 上載

Taiwan

群組分享區 | 討論 | 9,100 會員 | 地圖 | 加入此群組

群組分享區 222,175 張相片 | 僅會員才可以新增內容至分享區。

作者 KUEN-CHERNG 作者 KUEN-CHERNG 作者 s▲nj

作者 foxisaac2001 作者 foxisaac2001 作者 foxisaac

Picasa™ 網路相簿

與親朋好友分享相片！

...或探索公開相片

進一步瞭解 Picasa 網路相簿 »

也請試試 Picasa 3
新一代的 Picasa：可用來整理、編輯與列印相片的免費軟體。

下載 Picasa 3

照片分享：
<http://www.flickr.com/groups/tw>
<https://picasaweb.google.com>

Demo #7: Create Multimedia Film @ YouTube

製作多媒體影片


網址：http://www.youtube.com/create_detail/Xtranormal
透過玩偶來做一些動作

The screenshot shows the YouTube page for Xtranormal. At the top, the YouTube logo is on the left, and search, upload, and account options are on the right. Below the logo, the text '建立 > Xtranormal Movie Maker' is visible. There are social media share buttons for Buzz (717), Tweet (659), and Facebook Share. The main content area features the Xtranormal logo and a description: 'Xtranormal lets you to turn anything you type into a fully-animated CG movie. Set up your scene, type in your script, and animate it instantly. Easily share something funny with friends, or create the next viral sensation. If you can type, you can make YouTube movies!' Below this is a '製作影片' button. To the right, a section titled '使用 Xtranormal Movie Maker 製作的影片' lists several videos with their titles, uploaders, and view counts. At the bottom, a '教學課程' section shows three video thumbnails for 'Xtranormal Movie Maker for YouTube', each with a 'Includes FREE Set & Actors!' callout. The thumbnails are for 'LUCHUZ', 'LUCHADORZ', and 'STARZ'.

You Tube 搜尋 | 瀏覽 | 上傳 | 建立帳戶 | 登入

建立 > Xtranormal Movie Maker

Buzz 717 | Tweet 659 | Share

 Xtranormal lets you to turn anything you type into a fully-animated CG movie. Set up your scene, type in your script, and animate it instantly. Easily share something funny with friends, or create the next viral sensation. If you can type, you can make YouTube movies!

製作影片

教學課程

Xtranormal Movie Maker for YouTube

LUCHUZ

LUCHADORZ

STARZ

Includes FREE Set & Actors!

Includes FREE Set & Actors!

使用 Xtranormal Movie Maker 製作的影片

- iPhone4 vs HTC Evo**
上傳者: tinywatchproductions
觀看次數: 13,537,936
- Quantitative Easing Explained**
上傳者: malekanoms
觀看次數: 4,686,538
- HTC EVO vs iPhone4**
上傳者: tinywatchproductions
觀看次數: 2,325,648
- The Joy of a Salesman - Ep. 1**
上傳者: mrsalesguy01
觀看次數: 1,708,477
- Hi, I'm a Tea-Partier**
上傳者: ndintenfass
觀看次數: 1,444,537
- So You Want to Go to Law School**
上傳者: dwkazzie
觀看次數: 1,349,939
- I'm Training for an Ironman**

Demo #8: Music, TV & Movie

欣賞音樂、電視、電影

<http://www.jazzradio.com/smoothjazz>

<http://www.sky.fm/play/smoothjazz>

The image shows a browser window with two overlapping web pages. The background page is Jazzradio.com, displaying a 'now playing' section with 'Steve Oliver - Tradewinds' and a 'recent tracks' list including Brian Simpson, Gregg Karukas, and The Jazzmasters. The foreground page is IM.TV, featuring a navigation menu, a search bar, and a '編輯特選' (Editor's Choice) section with video thumbnails for 'Ocean girls - Ride Now', '2NE1 - i am the best', and 'Lady Gaga - The Edge Of Glory'. A '分類推荐榜' (Category Recommendation) section is also visible at the bottom of the IM.TV page.

網址：<http://im.tv/>

<http://www.youtube.com>

Demo #9: Social Network

日常社交活動

全國 台北 桃園 新竹 苗栗 台中 彰化 南投 雲林 嘉義 台南 高雄 屏東 台東 花蓮 宜蘭 基隆

今日團購 一起旅行 精選店家 客服中心 JUL 06

喜上加喜 現在買GOMAJI即享HAPPY GO紅利點數3倍送 週週再抽萬點紅利回饋!

台北 大熱天穿得少，露出的蝴蝶袖怎麼辦？【夏里亞SPA館】窈窕纖體護理課程，讓肌膚更緊實，衝向夏日的沙灘！買就送特力屋500元網路折價券+50元麻吉券。
1.9折！只要699元，即可享用原價3500元【夏里亞SPA館】窈窕纖體護理課程
(含沖澡10分鐘+手技魔力體雕課程20分鐘+震動推脂儀20分鐘+...)

2011-07-06 7

團購特價 \$699 購買詳情

原價 \$3500 | 節省 \$2801 | 2人已購買 |

一起旅行 森呼吸
【立德溪頭飯店-紅樓】
2011/07/07(四)
限量開賣!

地圖日記

<http://www.atlaspost.com>

團購：<http://www.groupon.com.tw>

<http://www.gomaji.com>

美食：<http://www.ipeen.com>

社交：<http://www.facebook.com>

<http://www.plurk.com>

地圖日記 分享·交友·好玩

好康 瘋搶！東海岸渡假飯店貴族套房 唯心說：如果選

地圖日記 GO

第一次來到這裡？
看看什麼是地圖日記!

Facebook帳號登入

YAHOO!帳號登入

日記

地圖日記

交友

Q:你幾天洗一次頭?

開始玩

開始玩

- 地圖日記
- 人氣相簿
- 特色地標
- 火熱話題
- 美女地圖

- Meet!看照片交友
- Quiz!問答交友
- 找你認識的人
- 找以前的同學
- 加入群組討論

Demo #10: Offline Google Map

手機離線地圖



Android Market > 旅遊與地方資訊 > RMaps

RMaps

Robert.Developer



★★★★★ (4,643)

安裝

RMaps 0.7.5.0



RMaps 是一套好用的 Android 離線地圖程式，功能齊全且地圖操作流暢，可以至作者 robert 的 Google Code 網頁下載或直接從 Android Market 下載。

RMaps 0.7.5.0 重要功能條列如下：

- 瀏覽離線地圖：需要先從 PC 下載地圖並儲存進資料庫後，放置於 SD 卡，然後到 RMaps 的設定裡啟用新增加的資料庫 (*.sqllitedb)。

新版離線地圖製作軟體 Mobile Atlas Creator 1.7



[離線地圖製作軟體]

專業的離線地圖製作軟體 **TrekBuddy Atlas Creator (TAC)** 從 2010 年起釋出全新版本，重要更新條列如下：

- 改名為 Mobile Atlas Creator (MOBAC)，以反映該程式能下載各種線上地圖，並儲存為不同格式的離線檔，讓不同的手機程式與 GPS 裝置使用的特性。
- 下載的離線圖檔 (tiles) 不再暫存於硬碟中，而是儲存於資料庫 (BerkelyDB)，節省了相當多的硬碟空間。(註)
- 舊版 tilestore 目錄內的圖檔 (tiles) 無法直接存入新的資料庫，故請將 Mobile Atlas Creator 解壓

離線地圖：<https://market.android.com/details?id=com.robert.maps>
<http://trekbuddyatlas.sourceforge.net/>

參考：<http://android-map.blogspot.com/2010/02/rmaps-0750.html>



幫您的雲端服務加把鎖

Part 2 : Secure Your Cloud Service

Jazz Wang
Yao-Tsung Wang
jazz@nchc.org.tw



Powered by **DRBL**

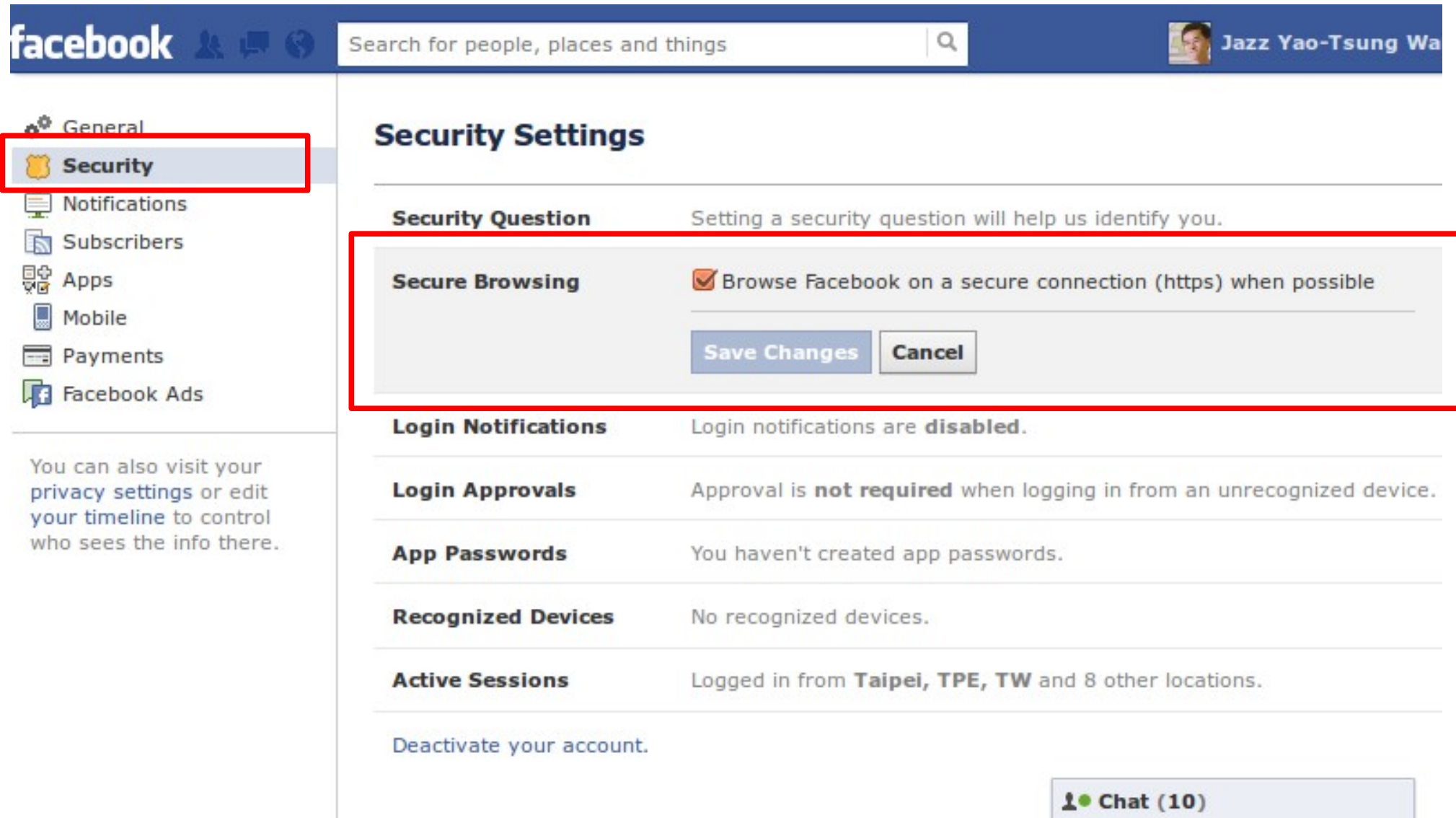
Action #1: Look into your OpenID permission

管理您的 OpenID 存取權限




The screenshot shows the Google Account settings page in Chinese. The left sidebar contains navigation options: 帳戶, 安全性 (highlighted with a red box), 個人資料與隱私權, Google+, 產品, 語言, and 資料備份. The main content area is titled 'Google 帳戶' and '可存取您 Google 帳戶的服務'. It lists '已連結的網站、應用程式和服務' with a sub-header '您已授權下列服務存取您的 Google 帳戶:'. The list includes: sfg.google.com — Google 日曆, Google 日曆 (撤銷存取權限); Tasks Extension — 工作表 (撤銷存取權限); Google Chrome — 完整帳戶存取權 (撤銷存取權限); about.me — YouTube (撤銷存取權限); www.google.com — Google 日曆 (撤銷存取權限); about.me — Google+ 您 (撤銷存取權限); captiontube.appspot.com — YouTube (撤銷存取權限); and googlecodesamples.com — Google 文件, Google 文件 (撤銷存取權限). At the bottom, there is a section '授權應用程式和網站' (highlighted with a red box) with a question mark icon and an '編輯' button. A red arrow points from the '安全性' menu item to the '授權應用程式和網站' section, and another red arrow points from the '編輯' button to the list of services.

Action #2: Always Enable HTTPS / SSL

儘量採用 HTTPS 或 SSL 連線



The screenshot shows the Facebook interface with the 'Security Settings' page open. The 'Security' menu item in the left sidebar is highlighted with a red box. The 'Secure Browsing' setting is also highlighted with a red box, showing it is checked. Below it, 'Save Changes' and 'Cancel' buttons are visible. Other settings like 'Login Notifications', 'Login Approvals', 'App Passwords', 'Recognized Devices', and 'Active Sessions' are listed below.

facebook  Search for people, places and things   Jazz Yao-Tsung Wa

General
Security
Notifications
Subscribers
Apps
Mobile
Payments
Facebook Ads

You can also visit your [privacy settings](#) or edit your timeline to control who sees the info there.

Security Settings

Security Question Setting a security question will help us identify you.

Secure Browsing Browse Facebook on a secure connection (https) when possible

[Save Changes](#) [Cancel](#)

Login Notifications Login notifications are **disabled**.


Login Approvals Approval is **not required** when logging in from an unrecognized device.

App Passwords You haven't created app passwords.

Recognized Devices No recognized devices.

Active Sessions Logged in from **Taipei, TPE, TW** and 8 other locations.

[Deactivate your account.](#)

 Chat (10)



Questions?

Slides - <http://trac.nchc.org.tw/cloud>

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