



SSBox Website

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Introduction

SSBox website provides a convenient way to use SSBox service. You can use browser to use SSBox service anywhere, anytime. Within the browser, you can manipulate all your files and folders including downloading, uploading, creating folders, deleting files and folders, and so on. And there is one important feature about SSBox website: sharing data with your friends! We provide shared folder mechanism for you and your friends/colleagues. It is very useful for sharing and collaboration. All the files and folders in the shared folder will be synced automatically between all the members in the shared folder. A user can create several shared folders and share them with several groups. All the transmissions between browser and server are secure through HTTPS.

雲端儲存與IoT物聯網解決方案

SSBox是一個提供企業、家庭、個人使用的雲端儲存方案。針對多使用者多裝置的存取需求,將後臺的 管理介面簡易化,讓使用者可更簡單的安裝、設定、部署系統。除了雲端儲存、同步及分享功能外,也 加上企業等級的存取稽核、檔案版本管理等功能。讓雲端儲存功能更完備、也可更貼近協同作業用戶的 需求。SSBox的核心技術主要是建構在儲存、同步、分享、稽核這四個大功能模組上。圖1為SSBox的系 統架構圖,包含伺服器端(server-side)應用程式及儲存池(storage pool)。用戶端(client-side)使用者透過瀏 灠器(browser)或是用戶端應用程式(APP)存取NebulaBox服務。在server-side方面,提供了RESTful API以供 操作後端的儲存池,這樣簡單的設計模型提供了極大的彈性以及擴充性,也讓使用者可以輕易地部署於 雲端環境中。







SSBox四大核心技術簡介:

(1) 儲存功能

SSBox針對儲存提供簡易的存取方式。將資料存放在雲端空間,可以隨時隨地利用多重裝置來存取資料(電腦、平板、手機),以便利的雲端備份及回復功能,讓使用者不必擔心電腦資料損毀。

而對於程式開發者,SSBox提供RESTful API以供開發者介接存取儲存池,對於一般使用者,SSBox提供了用 戶端應用程式來操作檔案、資料。伺服器端也包含一個資料庫來記錄使用者檔案的中繼資料(metadata)以 及一個快取機制(cache)以提升系統操作效能。將中繼資料與實體檔案系統分開的設計,讓儲存池本身更 具彈性及擴充性。儲存池可以是一般的檔案系統、分散式系統,或是網路存放裝置(NAS)等。SSBox也可 根據需求擴充容量。系統後端整合了去重複(deduplication)功能,可以大幅減低相同檔案造成的儲存空間 及傳輸的浪費。

(2) 同步功能

雲端儲存必須能支援多設備 (multiple devices) 的同步需求,然而在多設備同步過程中,會產生同步衝突 (conflict),而本系統能自動偵測衝突發生 (conflict detection)並自行解決 (conflict auto-solving)。 SSBox可以讓資料在所有的電腦、平板、手機上同步,支援包括 Android, iOS, Windows 等作業系統的智慧 型手機。而版本控制可以管理及保留修改過的檔案版本,並可將誤刪的檔案救回

(3) 分享功能

在雲端儲存中,除了針對個人的資料同步外,使用者可以將自有的資料進行分享。這種簡易地分享是屬於使用者對使用者(user-to-user)的分享,而非傳統的管理者對使用者(administrator-to-user)的分享(如同傳統的FTP),大幅提升了資源使用的方便性。SSBox分享功能是以資料夾分享為主,擁有相同分享資料夾的使用者,會看到一樣的內容;任何對於資料夾中的檔案操作,會立即反應回饋給其他使用者。分享功能包含了兩種角色,資料夾擁有者以及參與成員,對於這個分享資料夾有簡單的存取管理(shared folder user

management)。 (4) 稽核功能

企業級的存取稽核記錄檔案的操作包括新增、刪除、修改等,稽核可以檢視資料(檔案及資料夾)的存取變動情況,對於分享資料夾,也可能看到其他的使用者的存取情況。包含了日期時間,檔案版本與回復(versioning and restoring),反刪除 (undelete)功能等。對於企業使用者,更可以提供查詢介面或是報表,可以依照需求來客制化這些功能。

SSBox 的同步、自動解決同步衝突、分享、檔案版本控管、稽核、去除重複等功能,讓雲端協同作業更為 便利。



Login

Use the following URL to connect to SSBox website.

https://ssbox.unicloud.org.tw







Input your account information and click 'Sign in' button to sign in.

● ○ ○ Ø SSBox ← → C Attps://ssbox.unicl	×	¶ ≊ ≡ ⊑ Ω
SSBox Home API		
	Please sign in	
	test@test.com	
	Password	
	Sign in	





SSBox Website UI

After you sign in successfully, you will see your personal files and folders in the browser.







In the following screenshot, we show the features of SSBox website.

> (C Attps://ssbox.u	nicloud.org.tw/home				☆ 🚍
SSBo>	Home API			User	Settings	test@test.com 💠 🗸
	☆ Home /	Navigation	Bar	Fund	ction Bar	▲ □前
	Docs				12/10/2013 2:29	:59 PM
	Papers		File B	Browser	12/10/2013 2:33	:51 PM
	Source	Codes			12/10/2013 2:33	:51 PM

Navigation Bar

Navigation bar shows the path of current folder in SSBox.

File Browser

You can see your personal files and folders in the file browser. The icon in front of the name indicates it is a file or a folder.

Function Bar

Function bar provides the operations for files and folders. Sharing feature is included in the function bar, too.

User Settings

The user settings area provides user's information and settings.





Features

Browsing

You can click the folder name to enter the folder. Or you can double--click the whole line (gray area in the following screenshot) to enter the folder.

← → C Attps://ssbox.unicloud.org.tw/home/	☆ 📮
SSBox Home API	test@test.com 🔅 💌
A Home /	🔂 🗅 🗇 🚰
Docs	12/10/2013 2:29:59 PM
Papers	12/10/2013 2:33:51 PM
Source Codes	12/10/2013 2:33:51 PM

Navigation bar is another convenient way to browse the SSBox. You can go to the parent folders easily and quickly by clicking the name of the folder in the path.







Downloading

By clicking the file name or double--clicking the whole line (gray area), you can download the file.







Uploading

You can click the 'Upload' button in the function bar. It will bring you the window to upload file.



+ -> C 🔒 https://ssbo	x.unicloud.org.tw/home/Source%20Codes		☆ 🏹 🖬
SSBox Home API			test@test.com
di Liama / Oa	Choose file to upload	>	
A Home / So			
	File	Browse	
BaseC			PM
Based	A	Close Upload	РМ
C Word	Countinue	12/10/2013 2:35:	
	Journe.java	12/10/2013 2.35.	





SSBox website provides another convenient way to upload file. Just drag-and-drop the file to the browser. You will find that there is a green rectangle shown in the browser. SSBox will upload the file to the current folder.







Creating Folders

To create a folder in the current folder, click the 'Create folder' button in the function bar. It will bring you a window to enter the folder name. Click 'Create' button to create it.







Deleting

When you click the folder or file, you can delete it with the 'Delete' button in function bar.

Docs	12/10/2013 2:29:59 PM
Papers	12/10/2013 2:33:51 PM
Source Codes	12/10/2013 2:33:51 PM
Home / Source Codes	公 □ 前
A Home / Source Codes	ش 🗅 🏠 ایک
A Home / Source Codes	12/11/2013 3:57:55 PM
A Home / Source Codes	▲ ► ₪ ■ 12/11/2013 3:57:55 PM 12/10/2013 2:36:17 PM
 Home / Source Codes data BaseClass.h BaseClass.m 	€ 12/11/2013 3:57:55 PM 12/10/2013 2:36:17 PM 12/10/2013 2:35:52 PM

Or you can right-click the folder or file. It will show you a 'Delete' button for deleting.

Source Codes	i Delete	12/10/2013 2:33:51 PM
Mard Count invo		12/10/2013 2-35-22 DM





Sharing

Sharing is an important feature for users to collaborate. SSBox provides shared folder mechanism to share data between users. To create a shared folder, click the 'Share' button in the function bar.







After clicking the 'Share' button, it will bring you to the setting page. Input the email you want to invite in this shared folder.

SSBox Home API		test@test.com 🔹 👻
	Share 'Source Codes'	
	This is an unshared folder	
	Email	
	Message	
		b
	Cancel Send Invitati	ions

After sending the invitation, there is a green bar shown in the browser. Meanwhile, the system will send an invitation email to the user.

A Home /	▲ □ 前
Docs	12/10/2013 2:29:59 PM
Papers	12/10/2013 2:33:51 PM
Source Codes	12/10/2013 2:33:51 PM





You can click the 'Share' button again to see the sharing status. In the following screenshot, you can find that the sharing status is 'Invited' now.

SSBox Home API		test@test.com
	Share 'Source Codes'	
	2 members	
	å test@test.com Owner	
	sslab.cs.nthu.edu.tw Invited Invite more friends	
	Email	
	Message	
		16
	Cancel	Send Invitations





If the user accepts your invitation, the sharing status will change from 'Invited' to 'Joined'. And you can find that there is a button for settings appearing on the right of the user. You can make the selected user the owner of the shared folder. Or you can remove the user from the shared folder.

- → C 🔒 https://	/ssbox.unicloud.org.tw/sharing/22039			•	2 📬
SSBox Home	API			test@test.com	¢ •
	Share 'Source C	odes'			
	2 members				
	▲ test@test.com ▲sslab.cs.nthu.edu.tw	Owner Joined	٥		
	Invite more friends				
	Email				
	Message				
		Canc	Send Invitations		







Changing Password

You can change your password in the user settings area. It will bring a page to change password.



ew Password		
lew password		
lew password confirmation		
	Save changes	