

Microsoft System Center

Windows Azure Pack 終極建置指南 –

使用 Windows Server 2012 R2 & System Center 2012 R2





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🗩 前言: Windows Azure Pack 簡介

今日的企業希望享有雲端環境所提供的彈性和低廉成本,而服務提供商則致力於贏取並輕鬆導入更多企業客戶。Windows Azure Pack 以 Windows Server 和 System Center 的強大功能為根基,能夠為自助式、多用戶的雲端基礎架構和應用程式服務提供企業級、具成本效益的解決方案。

您資料中心內的 Windows Azure 技術

雲端運算的出現為資料中心帶來變革,促使越來越多的企業將開發、測試和生產環境移向代管及公用雲,以 實現取得更多彈性並降低成本的目的。同樣地,對服務提供商而言,雲端運算也代表著巨大的成長契機。然 而,若要吸引企業客戶,服務提供商就需要提供熟悉的技術組合,而這不僅要能贏得企業信賴,還必須和他 們的內部部署資料中心相互整合。

Windows Azure Pack 提供了多用戶、自助式的雲端,可和您現有的軟體及硬體投資相輔相成。Windows Azure Pack 是以熟悉的 Windows Server 和 System Center 為基礎,您的企業能利用它靈活且熟悉的解決 方案提供基礎架構的自助式佈建和管理 (基礎架構即服務 (IaaS)) 以及應用程式服務 (平台即服務 (PaaS)),例 如網站和虛擬機器等。



→ 前言: Windows Azure Pack 簡介

提供一致的 Windows Azure 自助式管理體驗

Windows Azure Pack 中的管理入口網站可讓您控制自身為租戶提供 IT 服務的方式,同時讓租戶得以在佈建 和管理資源上享有豐富且自助式的使用者體驗。為了實現這項功能,Windows Azure Pack 提供了下列管理 入口網站:

- 租戶專用的管理入口網站:這個入口網站和 Windows Azure 中的 Windows Azure 開發人員入口網站體驗如出一轍,可為租戶提供自助式的佈建和管理功能。此外,它也運用了包含 Active Directory Federation Services 在內的多個驗證技術。
- 管理員專用的管理入口網站:這個入口網站可讓管理員設定和管理提供給租戶的服務和資源雲端。

提供高密度的 Web 應用程式代管

網站服務簡化了多租戶、高密度網站代管服務的部署和管理。Web App Gallery 可讓租戶存取熱門 Web 應 用程式,而 Windows Azure Pack 則會同時提供支援的 SQL 和 MySQL 資料庫功能。此外,網站服務也支 援許多應用程式架構,包括 ASP.NET、傳統 ASP、PHP 和 Node.js,更針對原始程式碼控制提供了完整的 GitHub、BitBucket、DropBox 和 Team Foundation Server 整合。

提供彈性的基礎架構服務

Windows Azure Pack 的虛擬機器服務是以 System Center 2012 所提供的 Service Provider Foundation (SPF) API 為基礎,可實現自助式的 IaaS。這項功能可讓租戶從預先定義的映像庫自行佈建可擴充的 Windows Server 和 Linux 虛擬機器。虛擬網路可從租戶的現有網路設定和 IP 架構進行簡單的移轉,而虛擬 機器角色則能協助建立虛擬機器的動態擴充層,以提供負載平衡或彈性。另外,租戶也可以從他們的入口網 站連接虛擬主控台,以進行簡化的管理和設定。

協助 IT 使用者整合其應用程式元件

Windows Azure Pack 中的服務匯流排服務可在無法進行同步遞交,但寄件者需要確保訊息最終能抵達收 件者手中時,讓應用程式相互傳遞訊息。而應用程式可位於相同的雲端、跨越不同雲端,分別位於雲端和裝 置,或是其他多種支援案例。以下是服務匯流排隨附的兩個解決方案:

- **佇列:**服務匯流排佇列會提供非同步的緩衝處理,進而讓訊息收件者依據自身的步調處理訊息。因此,您 可以更有效率地向外延展應用程式,並賦予您的架構更多彈性。
- 主題:服務匯流排主題和訂閱提供了豐富的發佈訂閱功能,讓多個訂閱者能在同一時間獨立擷取已發佈訊 息資料流的已篩選或未篩選檢視。服務匯流排的主題和訂閱能協助您進行延展,以處理跨多個使用者和應 用程式的大量訊息。

安裝 System Center 2012 R2 Virtual Machine Manager

目前的 System Center 2012 R2 Virtual Machine Manager (SC2012 R2 VMM) 可以安裝在 Windows 2012 以及 R2 的版本,再配合 Windows ADK 8.1 來進行安裝。 安裝步驟如下:

1. 首先,打開 ADK 安裝程式,指定安裝路徑,並點選 2. 選擇加入改進計畫與否,再點選 "Next" "Next"

3. 選擇 "Accept"

튫	Windows Assessment and Deplo	oyment Kit for Windows 8.1 Preview	v 🗕 🗆 🗙	뤓	Windows Assessment and Deployment Kit for Windows 8.1 Preview
	Specify Location				Join the Customer Experience Improvement Program (CEIP)
	Install Path: C\Program Files (x86)\Windows Kits\8.1\		Browse		The Customer Experience Improvement Program (CEIP) collects and sends anonymous usage data to Microsoft about how our customers use Microsoft programs and about some of the problems they encounter. Microsoft uses this information to improve the products and features. Participation in the program is voluntary, and the end results are software improvements to better meet the needs of our customers. No code or software produced by you will be collected.
	Estimated disk space required: Disk space available:	5.0 GB 180.6 GB			Tell me more about the program O Yes © No
					Privacy Statement
		٩	lext Cancel		Back Next Cancel

4. 選擇所需元件,點選 "Install" 即可。

뷶	Windows Assessment and Deployment Kit for Windows 8.1 Preview	뷶	Windows Assessment and Deplo	yment Kit for Windows 8.1 Preview
	License Agreement		Select the features you want to in	stall
	You must accept the terms of this agreement to continue. If you do not accept the Microsoft Software License Terms, click Decline.		Click a feature name for more information. Application Compatibility Toolkit (ACT)	Microsoft SQL Server 2012 Express
	MICROSOFT PRE-RELEASE SOFTWARE LICENSE TERMS FOR WINDOWS MATERIALS		 Deployment Tools 	Size: 233.3 MB
	MICROSOFT WINDOWS KITS PRE-RELEASE		Windows Preinstallation Environment (Windows PE)	Database to develop and deploy desktop, web, and small
			User State Migration Tool (USMT)	server applications.
	Below are separate sets of License Terms for each separate kit of Windows Materials included in your download. To determine which License Terms apply to your use of a		Volume Activation Management Tool (VAMT)	
	particular kit, scroll down to the particular kit name. The License Terms are listed in the following order:		Windows Performance Toolkit	
	Microsoft Windows Assessment and Deployment Kit		Windows Assessment Services	
	Microsoft Windows Driver Kit		Microsoft SQL Server 2012 Express	
	Microsoft Windows Hardware Certification Kit			
	Microsoft Windows Software Development Kit			
	The License Terms for each individual kit apply to your use of that specific kit.			

	MICROSOFT PRE-RELEASE SOFTWARE LICENSE TERMS			Estimated disk space required: 2.4 GB
	MICROSOFT WINDOWS ASSESSMENT AND DEPLOYMENT KIT RELEASE CANDIDATE			Disk space available: 180.6 GB
	Back Accept Decline			Back Install Cancel

→ 安裝 System Center 2012 R2 Virtual Machine Manager

5. 等待安裝完成

	Windows Assessment and Deployment Kit for Windows 8.1 Preview	_ 🗆 X
Insta	lling features	
Overall p	progress: 99% complete	
Updatin	g settings.	
		Cancel

6. 安裝完成後 · 開啟 SCVMM 2012 R2 安裝程式 · 點選 "Install"

Virtual Machine Manager	
➡ Install	0
Restart may be required	Release Notes
Before you begin	Installation Guide
VMM Privacy Statement	Browse the CD
	System Center Online
	VMM Configuration Analyzer
Optional Installations	
Local Agent	
Installs agent on local machine.	

7. 選擇所需的安裝項目,選完後點選 "Next"



8. 選擇更新與否,再按 "Next"



9. 勾選同意,再點選 "Next"



10. 可選擇加入改進計畫與否,再選擇 "Next"

Microsoft System Center 2012 Virtual Machine Manager Setup Wizard	d 📕	x
Getting started	<u>R</u> eport a problem	n
Customer Experience Improvement Program (CEIP)		
If you choose to participate:		
Microsoft will Collect information about your software and hardware configurations. Collect information about how you use our software and services to identify trends and usage pattern	ns	
Microsoft will not		
Collect your name or address.		
Ask you to take surveys; nor will you be contacted by a sales representative.		
Prompt you with additional messages that might interrupt your work.		
Yes, I am willing to participate in the Customer Experience Improvement Program		
No, I am not willing to participate		
You can stop participating at any time by changing a setting in Customer Experience Improvement Prog found in Settings workspace of the VMM console.	gram Settings,	
More about the Customer Experience Improvement Program		
Privacy Statement for the Microsoft Customer Experience Improvement Program VMM Privacy Statement		
Previous Next	t > Cancel]

) 安裝 System Center 2012 R2 Virtual Machine Manager

11. 選擇更新與否,再按 "Next"



12. 選擇安裝路徑後,點選 "Next"

Ξ	Microsoft System Center 2012 Virtual Machine Manager Setup Wizard	
Getting started		<u>R</u> eport a problem
Instal	lation location	
The recon	nmended location for program files is displayed.	
Location:	C:\Program Files\Microsoft System Center 2012 R2\Virtual Machine Manager	Browse
	Previous Next	Cancel

13. 選擇安裝的執行個體,並創建資料庫後,點選 "Next"

E M	icrosoft System Center 2012 R2 Virtual Machine Manager Setup Wizard	×
Configuration		Report a problem
Database co Provide information a	nfiguration	
Server name: VM-SC	CVMM2012	Browse
Port:		
Use the following	credentials in: ALSU/administrator	
	Format: Domain\UserName	
Password:		
Instance name:	MSSQLSERVER	•
Select an existing dat	abase or create a new database.	
New database:	VirtualManagerDB	
 Existing database 	:	-
	Previous Next >	Cancel

14. 設定服務帳戶,點選 "Next"

Microsoft System Center 2012 R2 Virtual Machine Manager Setup Wizard				
Configuration		Report a problem		
Configure service account and dist	tributed key managemen	it		
Virtual Machine Manager Service Account				
Select the account to be used by the VMM service. Highly ava Which type of account should I use?	ailable VMM installations require the use of	a domain account.		
 Local System account 				
Domain account				
User name and domain:	Password:			
ALSU\administrator	•••••	Select		
Distributed Key Management				
Select whether to store encryption keys in Active Directory in require the keys be stored in Active Directory.	stead of on the local machine. Highly availa	ble VMM installations		
Store my keys in Active Directory				
Provide the location in Active Directory. For example, CN=	DKM,DC=contoso,DC=com.			
How do I configure distributed key management?				
	Previous	Next > Cancel		



16. 設定程式庫路徑 · 點選 "Next"

		Tobard here
Library conf	iguration	
Specify a share fo	or the Virtual Machine Manager library	
• <u>C</u> reate a new libra	ary share	
Share n <u>a</u> me:	MSSCVMMLibrary	
Share location:	E:\MSSCVMMLibrary	Select
Share description	VMM Library Share	
 <u>U</u>se an existing lil 	orary share	
Share name:	MSSCVMMLibrary	
Share location:		
Share description		

) 安裝 System Center 2012 R2 Virtual Machine Manager

18. 等待安裝完成

17. 安裝摘要提示,如無問題即點選 "Install"



Microsoft System Center 2012 Virtual Machine Manager Setup W	/izard 🗙
Processing	<u>R</u> eport a problem
Installing features	
Web Deployment Tool	
 VMM management server VMM console 	
Previous	Next > Cancel

19. 大約經過10-15分即可完成安裝·點選 "Close"



21. SCVMM 主控台畫面



20. 此時會自動帶出 VMM 主控台·點選 "Connect" 即可 進入主控台

8	Connect to Server	_ □	x
Mi	crosoft [.] System Center 2012	R2	
Virt	ual Machine Manager		
Server name:	ocalhost:8100 Example: vmmserver.contoso.com:8100		
 Use current 	Microsoft Windows session identity		
O Specify cred	entials		
User name:	Example: contoso\domainuser		
Password:			
Automatically	connect with these settings Connect	Canc	el

安裝 System Center 2012 R2 Operations Manager

1. 首先 · 執行 Operations Manager 安裝程式 · 點擊安裝

	Ope	rations wanager	
Microso	ft [.] System Cente	r 2012 R2	
Operation	ns Manager		
安裝([) □ 下載安裝程	式的最新更新(W)		
選擇性安裝		其他資源	
本機代理程式(L)	版本資訊(N)	
稽核收集服務(9	安裝指南(D)	
闌道管理伺服器	\$G)	支援的設定①	
適用於 UNDX/L	.inux 的稽核收集服務(A)	產品文件(U)	
		Operations Manager 社群(O)	
Copyright © 2013 Microsoft. ݞ	作權所有,並保留一切權利。		結束(2)

Getting Started Select features to install If the operating system on this computer is not supported for one of the features, the feature cannot be installed. Expand all 😡 Management <u>s</u>erver \odot Operations <u>c</u>onsole \bigtriangledown <u>W</u>eb console \odot <u>Reporting server</u> \bigcirc Supported Configuration Previous Next > Cancel х Getting Started Select features to install uter is not supported for one of the features, the feature cannot be installed. If the operating syste Expand all 🕑 Management <u>s</u>erver \odot ✓ Operations <u>c</u>onsole \bigcirc Web console \odot Reporting server \bigcirc

3. 選擇安裝位置後點選 "Next"



4. 確認軟硬體安裝需求



Previous Next > Cancel

2. 執行安裝,選取全部,點選 "Next"

6. 勾選接受授權,點選 "Next"

安裝 System Center 2012 R2 Operations Manager

5. 指定管理群組名稱,點選 "Next"



Configuration Configuration Configuration Configuration Please read the license terms Please read the license terms MICROSOFT EVALUATION SOFTWARE LICENSE TERMS MICROSOFT SYSTEM CENTER 2012 R2 STANDARD The license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the evaluation software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft U updates, U

7. 設定操作資料庫 · 輸入執行個體名稱後 · 按 "Tab" 鍵 · 會自動檢查是否正確 · 然後點選 "Next"

Operations Manager Setup		×
Configuration		
Configure the operational database		
Before you click Next, verify the database name, the instance name, and the permissions on the database instance.	port. Ensure that you have sufficient	
Server name and instance name:	SQL Server port:	
SCOMR2	1433	
Format: server name\instance name		
Database name:	Database size (MB):	
OperationsManager	1000	
Data <u>fi</u> le folder:		
C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL	DATA\ Browse	
Log file folder:		
C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL	DATA\ Browse	
Pr	revious Next > Canc	el

8. 設定資料倉儲資料庫,輸入完執行個體名稱後,按 "Tab" 鍵,會自動檢查是否正確,然後點選 "Next"

Operations Manager Setup	X
Configuration	
Configure the data warehouse database	
Before you click Next , verify the database name, the instance name, and the permissions on the database instance.	port. Ensure that you have sufficient
Server name and instance name:	SQL Server port:
SCOMR2	1433
Format: server name\instance name	
 Create a new data warehouse database Use an existing data warehouse from a different management gro 	up
Database n <u>a</u> me:	Database size (MB):
OperationsManagerDW	1000
Data file folder:	
C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL	\DATA\ <u>B</u> rowse
Log file folder:	
C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL	DATA Browse
<u> </u>	revious <u>N</u> ext > Cancel

10. 選擇站台,預設即可,點選 "Next"

9. 選擇 Reporting Services 執行個體,點選 "Next"

Operations Manager Setup Image: Configuration Configuration Select the SQL Server instance on which you want to host SQL Server Reporting Services (SSRS). This installation of a SQL Server instance on which you want to host SQL Server instance on the web state on the local IS server. SQL Server instance Image: SQL Server instance on the server tarefor of credential and authentiation data between the howser and the web ranks SQL Server instance on the server tarefor of recent tarefor of credential and authentiation data between the howser and the web ranks SQL Server instance may how want to host SQL Server instance S

安裝 System Center 2012 R2 Operations Manager

11. 選擇驗證方式,點選 "Next"



Operations Manager Setur x Configuration Configure Operations Manager accounts If you want to use a single account for all services, verify that the account has all the required rights. For more information, see the Operations Manager deployment documentation. Account Name Local System Domain Account Domain\User Name Password Management server action O mylab\administrator System Center Configuration service and System Center Data Access service \bigcirc mylab\administrator •••••• 🐷 Data <u>R</u>eader account ۲ mylab\administrator ••••••• 😡 Data Writer account ۲ Installation Guide Previous Next > Cancel

12. 設定管理帳戶的帳號密碼, 輸入完成後, 點選 "Next"

13. 選擇是否加入各項改進計畫,接下來大部分都是按 "Next"即可



14. 選擇更新與否,點選 "Next"

Operations Manager Setup	×
Configuration	
Microsoft Update	
Microsoft Update offers security updates and other important updates for Windows and other Microsoft software including Operations Manager. Updates can be delivered using Automatic Updates, or you can visit the Microsoft Update web site.	
O On (recommended)	
Use Microsoft Update to check for updates.	
● off	
Do not automatically check for updates.	
Update Services privacy statement	
Previous Next > Ca	ncel

→ 安裝 System Center 2012 R2 Operations Manager

15. 安裝摘要提示,點選 "Install",到了此步驟基本上大概 就接近完成安裝了



16. 完成安裝,此時會有一個警告,提醒您,現在是試用版,如何塞入授權等,點選 "Close"

Operations Manager Setup		
Complete		
Setup is complete Please review the installation results. You can repair or add features by restartin	ig Setu	o.
Initial configuration	^	
Operational database configuration		R <u>e</u> lease Notes
▲ Management server		Installation <u>G</u> uide
Management server warning: An evaluation version of Operations Manager was successfully installed. To properly license Operations Manager, use the Set-SCOMLicense cmdlet. More information on this cmdlet is available in the Operations Manager Cmdlet Reference in the TechNet library. For more information, wise the Setup log.	Ξ	Read Doc <u>u</u> mentation System Center <u>O</u> nline
Oata warehouse configuration		
Operations console		
Web console	~	
☐ Launch Microsoft Update when the wizard closes ☑ Start the Operations console when the wizard closes		
		Close

17. 完成安裝開啟 Operation Manager 主控台



Reporting

My Workspac

整合之前要做兩件事情

- A. 在 SCVMM 伺服器上安裝 SCOM 的主控台
- B. 在 SCOM 中匯入 IIS 及 SQL 的管理組件

1. 首先開啟 Operations Manager 主控台



figure Active Directory (AD) Inte ve Directory (AD) integration allow stment in AD by enabling you to in writer to Management Group

> nitoring enables you vis for errors and pa

Learn About:

2. 點擊系統管理標籤, 再選擇右側匯入管理組件 ▲ AISUMG - Operation: Manage



3. 匯入管理組件精靈·點選增加



4. 搜尋 IIS 相關及 SQL 以及 VMM 管理套件,選擇開啟

整合 Virtual Machine Manager 和 Operations Manager \rightarrow

5. 確認後點選 "Install"



6. 等待導入完成 _ 6 X R Stop Cana

7. 完成後 · 點選 "Close"



8. 完成後,點選左側的探索精靈,將代理程式佈署到





-	ALSUMG - Operations Manager	- 6 >
File Edit View Go	👔 Computer and Device Management Wizard	
Sec.	What would you like to manage?	
Administration		
Administration	Discovery Type	
S Connected Mana	Auto or Advanced?	
 Device Manageri Apert Manageri 	Discovery Method	
Agentiess Man	Adultation for a set	
Management S	Windows computers	ons:
📑 Pending Manag	environment and install agents on the ones you want to	ire computers and de
UNIX/Linux Cor	Summary manage.	management packs
S Management Pa		anagement Pack Cat
 Network Manage 	10079 (Linux computers	inagement agents fo
Discovery kules	This enables you to discover UNIX and Linux computers in	nnectors for other ma
Network Devic	your environment and install agents on the ones you want to manage.	
a 🖂 Notifications		Concepts:
Channels		ministration Workspa
Subscribers	Network devices	tring Network Device
Subscriptions	Discover and monitor network devices using Simple Network Management Protocol (SNMP).	Accounts and Profiles
< Product Connect		Accounts and Profile
Discovery Wizard		ement Packs
		ery and Agents
Monitoring	Select a discovery type and click Next to continue.	tion Management Pa
Authoring		n About:
Reporting		g Targets and Group
Administration		g a Resource Pool
🔣 My Workspace	Charles Mark Down	
	C Hevrous Next > Discover Cancel	
Ready		





SCVMM 伺服器上

11. 輸入伺服器名稱,點選 "Next"



12. 勾選所要部署代理程式的伺服器,點選 "Next"

-		AC SUMCE CONSTANTIAL	
File Edit View Go		Computer and Device Management Wizard	<u> </u>
Sec	E.L.		
Idministration			
Administration	Discovery Type		
4 Ba Device Manager	Auto or Advanced?	Discovery Results	
Agent Manage	Discovery Method		
Agentiess Man	Administration Associate	The discovery process found the following un-managed devices.	
Management S	Administrator Account	Select the devices you want to manage: Select All Deselect All	ons:
🙀 Pending Manag	Select Objects to Manage		re computers and o
UNIX/Linux Cor	Summary	VM-SCVMM2012.ALSU.CDM	management parks
🏘 Management Pa			anagement Pack Ca
4 🧾 Network Manage			enagement agents f
Discovery Rules			nnectors for other m
Network Device			
Network Devic			Concepts:
A Motifications			
A Subscribers			ministration worksp
Subscriptions			Arroute and Broth
A Discourt Connect			Accounts and Profile
		Note: If you do not see all of the computers you expect to see, you can obtain	ement Parks
Discovery Wizard		information on troubleshooting discovery issues at http://go.microsoft.com/twink/? LinkID=128940.	ry and Agents
		Management Conver	tion Management P
monitoring		VA 60040012 A 61 004	
Authoring		Management Moder	n About:
The second second		acent v	
Reporting			ng Targets and Grou
🚳 Administration			g a Kesource Pool
No.Wedness			
my workspace		< Previous Next > Finish Cancel	

13. 待部署完成後·選擇 "Close" 即可



接下來要在 SCVMM 伺服器上安裝 SCOM 主控台

1. 首先開啟 SCOM 安裝程式點選 "Install"

Opera	ations Manager	_ 		Operations Manager Setup	
Microsoft System Center	2012 R2		Getting Started Select features to in If the operating system on this co	stall	nstalled.
					Exp
Operations Manager			Management server		
			 Operations console 		
			Web console		
Install			Reporting server		
Download the latest updates to the setup	program				
Optional Installations	Additional Resources				
Local agent	Release <u>N</u> otes				
Audit collection services	Installation Guidance				
Gateway management server	Supported Contigurations		Supported Configurations		
Audit Collection Services for UNIX/Linux	Product Documentation				
	Operations Manager Community				
vright @ 2013 Microsoft All rights reserved		Exit		Previous Next >	

2. 選擇安裝主控台,點選 "Next"

Windows Azure Pack 終極建置指南 - 使用 Windows Server 2012 R2 & System Center 2012 R2

3. 選擇安裝位置,點選 "Next"



4. 此時會檢測環境是否符合需求,完成後點選 "Next"

	Operations Manager Setup	x
Prerequisites		
Proceed with Setup All prerequisites have passed.		
Review full system requirements	Previous Next > Cancel	

5. 勾選接受授權·點選 "Next"



6. 選擇是否加入改進計畫·點選 "Next"



7. 安裝摘要提示,確認後點選 "Install"

Configuration Installation Summary Review your selections for the features that you are installing. To continue, click Install. To change your selections, click Previous. Installation location: CAProgram Files/Microsoft System Center 2012 R2/Operations Manager Previous Install Cancel

8. 等待安裝完成

2	Operations Manager Setup	
Processing		
Installation progress		
Initial configuration		1
Operations console		Release Notes
Final configuration		Installation Guide
		Read Documentation
		System Center Unline
		'
	Previous	Next > Cancel

9. 安裝完成,點選 "Close"

)。安裝完成·點選 "Close"		10. 完成後,	打開 SCVMM 主控台·點擊 "Connect"
Operations Manager Setup	×		Connect to Server 📃 🗕 🗖 🗙
Complete			
Setup is complete Please review the installation results. You can repair or add features by restarting Setup.		Mi	crosoft ⁻ System Center 2012 R2
Initial configuration			
Operations console	Release Notes		
Final configuration	Installation Guide	–	
	Read Documentation	Vir	tual Machine Manager
	System Center Online		
		Server name:	vm-scvmm2012.alsu.com;8100
			Example: vmmserver.contoso.com:8100
Launch Microsoft Update when the wizard closes		Use current	t Microsoft Windows session identity
Start the Operations console when the wizard closes		 Specify cred 	dentials
	Close		
		User name:	
			Example: contoso\domainuser
		Password:	
		Automatically	connect with these settings Connect Cancel

右鍵內容



11. 選取設定標籤,選擇 System Center Settings 後,按 12. 出現新增 Operations Manager 精靈,選擇 "Next"

Create Create Rur User Role As Account		Add Operations Manager	^ W
Crea	Introducti	on	
General Security Console Add-ine Console Add-ine	Introduction Connection to Connection to VMM Summary	Introduction To instant all adaptions through the snoose of configuring integration with System Center Operations Takegoes, Plase role the following prerequisite:Credentiat Credentiat CredentiatCre	
 WMs and Servic Fabric Library Jobs 		Protos Net Casel	

13. 設定 VMM 到 SCOM 的連線,輸入 SCOM 伺服器 名稱,點選 "Next"



14. 設定 SCOM 到 VMM 的連線帳戶·選擇 "Next"

18 🕵 _		PowerShell 🦳 🚃	
reate Create Run		Add Operations Manager	
Crea			
ings	Connectio	n to vmm	
General	Introduction	Configure connection from Operations Manager to VMM	
Security	Connection to	Specify credentials for Operations Manager to use to connect to the VMM server. The account will be	
Servicing Windo	Connection to VMM	assigned Administrator rights on the VMM server.	
Configuration Pi	Summary	User name: ALSI Natministrator	
🧃 System Center S		Example: contoso\domainuser	
🖗 Console Add-ins		Password: ••••••	
VMs and Servic			
Fabric			
Library			
, 1 Jaka		Previous Next Cancel	
1 1005			
Settings			

15. 確認設定,點選 "Finish"

Administrator - VM-SCVMM2012.ALSU.COM - Virtual Machine Manager (Evaluation Version - 179 days remaining)	- 6 X
Home Home	^ 😯
👯 🚉 🥅 🔜 😭 🖉 PowerShell 🕥 👝 🚍	
Create Create Rur Add Operations Manager	
Creat Comments of	
Settings	
General Introduction Confirm the settings	٩
Security Consection to	
Servicing Windo	
Configuration P Operations Manager credentials: ALSU/administrator	
VMM credentials: ALSUNadministrator	
Console Add-ing Maintenance mode integration: Yes	
By VMs and Servic	
42 Fabric	
🖬 Ubrary	
Jobs	
C Settinos	

16. 開始建立連線

Administrator - VN	4-SCVMM20	12.ALSU.COM - V	irtual Machine	e Manager (Ev	aluation Ver	sion - 179 day	s remainin	g)		- 6	x
Home Home											^ @
🚷 🕵	<u> </u>	1	1 📑 🚆	PowerShell	Q =						
Create Create Run User Role As Account				Jo	bs				×		
Create	Recent Jobs (1)									
Settings									٩		
🔚 General	Name	Sta	tus	* Start Time	-	Result Name	c	wner	*		ρ
Security	🔮 New Op	erations Manag Com	pleted	11/5/2013	1:14:54 AM	vm-scom2012.a	lsu.com A	LSU\administr	ator		
Servicing Windows											
🕂 Configuration Prov	🕑 New Op	erations Manager con	nection						~		
a System Center Set	Status	Completed	Property		Previour Valu		Naw Value				
🕂 Console Add-ins	Command:	New- SCOpsMgrConnecti on	riopeny		1101003 1010		new root				
	Result name	scom2012.alsu.com									
	Started:	11/5/2013 1:14:54 AM									
	Duration:	00:01:22									
	Owner:	ALSU\administrator									
WMs and Services	Summary D	etails Change Trackir	ng						_		
1. Fabric	Show this	s window when new of	bjects are created				Re	start C	ancel		
🗮 Library											
Jobs											
Settings											
		-									

17. 完成後即可看到與 SCOM 的連線狀態



→ 安裝 System Center 2012 R2 Orchestrator

System Center Orchestrator 讓您將 IT 作業自動化,並且將最佳作法標準化,以提升橫跨多種系統的作業 效率。

安裝步驟:

	lali	
System Center 201	2 R2 Orchestrator Setup	
Microsoft ⁻ System Center	2012 R2	
Orchestrator		
Install		
🕕 Restart may be required		
🔞 Before you begin		
Standalone installations	Additional Resources	
Runbook Designer	Release <u>N</u> otes	
Orchestration Console and $\underline{W}eb$ Service	Deployment <u>G</u> uide	
Runbook Server	System Center <u>O</u> nline	
	Obtain Installation Assistance	
Service Management		
Automation	Standalone installations	
Web Service	Service Provider Foundation	
Runbook Worker	Service Reporting	
D		

2. 輸入安裝資訊·點選 "Next"

Getting started Product registration information. Name: Alex Su Organization: Microsoft Product Key: 	System Center 2012 R2 Orchestrator Setup	×
Product registration information. Name: Alex Su Organization: Microsoft Product Key: - If you don't provide a Product Key during setup. Orchestrator will install as an evaluation edition.	Getting started	
Product registration information. Name: Alex Su Organization: Microsoft Product Key: • • • <t< td=""><td></td><td></td></t<>		
Enter your registration information. Name: Alex Su Organization: Microsoft Product Key: - If you don't provide a Product Key during setup, Orchestrator will install as an evaluation edition.	Product registration	
Name: Alex Su Organization: Microsoft Product Key: - - If you don't provide a Product Key during setup, Orchestrator will install as an evaluation edition.	Enter your registration information.	
Organization: Microsoft Product Key: - If you don't provide a Product Key during setup, Orchestrator will install as an evaluation edition.	Name: Alex Su	
Product Key:	Organization: Microsoft	
If you don't provide a Product Key during setup, Orchestrator will install as an evaluation edition. Previous Next Cancel	Product Key:	
Previous Next Cancel	If you don't provide a Product Key during satur. Orchestrator will install as an evaluation adjition	
PreviousCancel	The second provide a module key during setup, or instance with instances an evaluation canon.	
PreviousCancel		
Previous Cancel		
Previous Next Cancel		
Previous Cancel		
Previous Cancel		
Previous Next Cancel		
	Previous Next Ca	ncel

3. 接受授權·點選 "Next"

	System Center 2012 R2 Orchestrator Setup
etting st	arted
Please	e read this License Terms
You must installatio	accept the license terms before you can install or use the software. If you do not accept the license terms, in will not proceed. After installation, the license terms are available in the Orchestrator License Terms folder.
МІ	CROSOFT EVALUATION SOFTWARE LICENSE TERMS
71	
Thes of its inclu	ie license terms are an agreement between Microsoft Corporation (or based on where you live, one a adfliates) and you. Please read them. They apply to the evaluation software named above, which des the media on which you received it, if any. The terms also apply to any Microsoft
Thes of its inclu	te license terms are an agreement between Microsoft Corporation (or based on where you live, one a effiliates) and you. Please read them. They apply to the evaluation software named above, which des the media on which you received it, if any. The terms also apply to any Microsoft
Thes of its inclu C I do	te license terms are an agreement between Microsoft Corporation (or based on where you live, one affiliates) and you. Please read them. They apply to the evaluation software named above, which des the media on which you received it, if any. The terms also apply to any Microsoft apply the license terms.
C I acc Read of	te license terms are an agreement between Microsoft Corporation (or based on where you live, one arfiliates) and you. Please read them. They apply to the evaluation software named above, which des the media on which you received it, if any. The terms also apply to any Microsoft institute license terms. not accept the license terms. hur privacy statement
Thes of its inclu C I acc C I do Read o	te lecense terms are an agreement between Microsoft Corporation (or based on where you live, one s affiliates) and you. Please read them. They apply to the evaluation software named above, which des the media on which you received it, if any. The terms also apply to any Microsoft " " " " " " " " " " " " " " " " " " "

4. 選擇欲安裝的功能,點選 "Next"

	System Center 2012 R2 Orchestrator Setup	
etting started		
Select features to in	stall Expand all	
Management Server		\odot
Runbook Server		\odot
✓ Orchestration Console and We	eb Service	\odot
₩ Runbook Designer		9
	Previous Next Car	ncel

→ 安裝 System Center 2012 R2 Orchestrator

5. 確認軟硬體安裝需求

2	System Center 2012 R2 Orchestrator Setup		×
Prerequisites			
			-
Checking	for required hardware and software		
	Previous	lext Cancel	

Configuration Configuration Configuration Configure the service account Service "rights enabled. Orchestrator will enable this right if it is not already enabled. As a security best practice, do not use a domain administrator account. To learn more about security best practices and how this access orchestrator database, see the Orchestrator deployment guide. Username (you may enter domain/username): administrator Password: Test Cordentials accepted

7. 點擊測試帳號密碼,確認是否通過,完成後點選 "Next"



8. 設定資料庫個體及帳號密碼驗證,點擊測試連線,完成 後點選 "Next"

	System Center 2012 R2 Orchestrator Setup	x
Cor	figuration	
	Configure the database server	
	emissions on the database instance. Io learn more about the database permissions, see the Uncessitator deployment guide. Severe (you may enter server/instance): Port: VM-SCORC2012 Browse [1433]	
	Authentication Credentials © Windows Authentication © SQL Authentication Username: Password:	
	Test Database Connection Database connection succeeded.	
_	Previous Next Cancel	

10. 設定使用者群組·點選 "Next"

9. 設定資料庫,預設即可,點選 "Next"

System Center 2012 R2 Orchestrator Setup	System Center 2012 R2 Orchestrator Setup
Configuration	Configuration
Configure the database. Specify a new or existing database. You must have sufficient permissions on the database instance. Hyou select bixing database option, only the SQL server databases compatible with Orchestrator are available for selection. To learn about Orchestrator are available for selection. To learn a for a selection of the selection. To learn a for a selection of the selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection of the selection. To learn a for a selection. To learn a for selection. To learn a for a selection. To learn a for	Configue Occhestrator users group Stet a group whose members will have access to the Nurbock Designer and Deployment Manager. This can be a local group breated and the current user account added to 1. Members of this group have administrative access to Orchestrator and have access to all configuration and data stored in the current user account added to 1. Orchestrator users group:
Previous Cancel	Previous Cancel

6. 設定服務帳戶帳號密碼,點選 "Next"

12. 選擇安裝路徑,點選 "Next"

→ 安裝 System Center 2012 R2 Orchestrator

11. 設定服務通訊埠,可自訂埠號,點選 "Next"



System Center 2012 R2 Orchestrator Setup
Configuration
Select the installation location
The recommended location for program files is displayed.
Location: CAProgram Files (x86)/Microsoft System Center 2012 R2(Orchestrator Browse
Previous Next Cancel

13. 選擇是否加入改進計畫,點選 "Next"



14. 安裝摘要提示,確認後點選 "Install"

1	System Center 2012 R2 Orchestrator Setup	x
Configu	uration	
Inst	tallation summary	
Revie appro	w the selections for the components you are installing. To continue, click Install. To change these selections, click th ppriate Change link or Previous.	e
	Installation location (change)	-
	C:\Program Files (x86)\Microsoft System Center 2012 R2\Orchestrator	
	Features selected (change)	
	Management Server	
	Runbook Designer	
	Orchestration Console and Web Service	
	Configure the service account (change)	
	ALSU\administrator	
	Configure the database server (change)	
	VM-SCORC2012	
	Configure the database (change)	
	Orchestrator	•
	PreviousInstallCa	ncel

15. 等待安裝完成



16. 完成安裝 · 點選 "Close"



→ 安裝 Service Provider Foundation

在將 Azure Pack 連接 SCVMM 之前,需在 SCVMM 上安裝 Service Provider Foundation (SPF) 在 System Center Orchestrator 的安裝程式。

前置作業

需先安裝 Management OData IIS 擴充功能、WCF Data Services for OData V3 及 ASP.NET MVC 4。

- 🗆 X - 🗆 X 目的地伺服器 VMMR2.mvlah.com 目的地伺服器 選取功能 確認安裝選項 選取一或多個要安裝在選取之何服器上的功能 若要在選取的伺服器上安裝下列角色、角色服務或功能,請按一下 [安裝]。 在您開始前 在您開始前 安裝類型 Thes 描述 安裝類型 □ 必要時自動重新設動目的她伺服器 指44 管理 OData IIS 撤充功能是一項除 構・可透過を IIS 下執行的 ODATA 型Web 服務・範範公開 Windows PowerShell Cmdet。我用此功能之 後、使用者必須提供拉維措超近偏棄 (其中包含量必難之質違的定意) 和回 時介面的責任。才能讓 Web 服務發 伺服器選取項目 何服器選取項目 堪用功能 (例如。朱統管理工具) 可能會顯示於此頁面上。因為朱統已經自動爆取它們。如果您不想要安 裝值些選用功能 《語波 (上一步) 以清除它們的核取方塊。 ▶ ■ 使用者介面與基礎結構 (2 / 3 ピ安裝)
 ▶ ■ 容易智慧型傳送服務 (BITS) 1服器角角 伺服器角色 管理 OData IIS 擴充功能 筆跡和手寫服務 ● 筆評和手稿账務
 ● 詳細原則管理
 ● 資料中心構接
 ● 對考名編解析通訊協定
 ✓ 管理 OData IIS 議務功時
 ● 網路負載平衡
 ● 網路負載平衡
 ● 調修用部列印用戶購 遺端伺服器管理工具 (2 / 40 已安装) 匯出組態設定 指定替代來源路徑 < 上一步(P) 下一步(N) > 安装(D) 取消 < 上一步(P) 下一步(N) > 安装(D) 取消 新增角色及功能 - • × 目的地伺服器 VMM82 mylah.com 安裝進度 檢視安裝進度 1 功能安裝 在 VMMR2.mvlab.com 上安装成功 管理 OData IIS 擁充功能 您可以願聞此講藝而不中斷執行中的工作。檢視工作違度或再次開設此頁面,方法是按一下命令 副 列中的[通知],然後按一下[工作詳細資料]。 匯出組幣設定 < 上一步(P) 下一步(N) > 開開 取消
- Management OData IIS 擴充功能:

- WCF Data Services for OData V3 下載連結: http://www.microsoft.com/zh-tw/download/details.aspx?id=29306
- ASP.NET MVC 4 下載連結: http://www.microsoft.com/web/downloads/platform.aspx

🔿 安裝 Service Provider Foundation

• WCF Data Services for OData V3 安裝:

■ WCF Data Services 5.0 (OData v3) 安裝程式 – □ ×	■ WCF Data Services 5.0 (OData v3) 安裝程式 – □ ×
₩ WCF Data Services 5.0 (OData ∨3)	₩ WCF Data Services 5.0 (OData v3)
MICROSOFT 軟體授權條款	安裝程式進度
MICROSOFT WCF DATA SERVICES 5.0	正在處理: WCF Data Services 5.0 (for OData v3) Primary Components
本授權條款係一份由 實用戶與 Microsoft 公司 (或其關係企業,視 實用戶所居住的 地點而定) 之間所成立之協議。請仔細閱讀這些授權條款。這些授權條款適用於上述軟 體,包括 實用戶所收受的媒體 (如果有的話)。這些條款亦適用於任何Microsoft 就該 軟體之	
• 更新程式	
✓ 我內夏技權除款與除什(A)	
選項(<u>O</u>) 安裝(I) 開閉(<u>C</u>)	取消(C)
WCE Data Services 5.0 (OData v3) 安奘程式 - ロ X	
NET WCF Data Services 5.0 (OData v3)	
安裝成功	
關閉(<u>C</u>)	

→ 安裝 Service Provider Foundation

• ASP.NET MVC 4 安裝:

1. 開啟 Platform 安裝程式



2. 搜尋 ASP.NET MVC

4. 點選安裝

		名稱	已發行	安裝
全部		Visual Studio Express 2012 for Web (最新版)	2012/10/22	新増
	×	SQL Server Express 2008 R2	2013/2/5	新増
□ 資料庫 (): 工具	*	Microsoft® SQL Server® Compact 最新版	2012/10/1	新増
Windows Azure	e.	IIS 建罐的股定	2010/11/10	已安裝
	8	IIS 7.5 Express	2011/9/14	新増
	i	Web Deploy 3.5	2013/6/11	新増
	19	PHP 5.4.9 (Chinese)	2012/3/9	新増
	٩.	URL Rewrite 2.0	2010/6/30	新増
	<u>_</u>	搜尋引擎最佳化工具組 (Chinese)	2010/1/28	新増
	•	IIS : FTP Publishing Service 7.5	2009/8/3	新増
		Visual Studio 2010 的 Silverlight 4 Tools (Chinese)	2010/5/17	新増
	224	1014 P. C. 1 44	2012/6/2	8046

3. 選擇新增

0	Web Platform Installer 4.	6	_ _ ×		
🔾 мус	O MVC 的搜尋結果				
	名稱	已發行	安頓 ^		
NET NET	包含語言套件的 ASP.NET MVC 4 (2012 年 8 月)	2012/8/15	移除		
NET NET	ASP.NET MVC 3 (Visual Studio 2010)	2011/4/11	新畑		
123	N2 CMS 2.1 MVC 版本 (Chinese)	2011/2/2	新増 ≡		
N	ASP.NET MVC 2 (Chinese)	2010/3/11	新埔		
NET NET	ASP.NET MVC 3 Tools Update 額言寄件	2011/5/10	新増		
MVCF@RUM	MVC Forum (Chinese)	2013/12/3	新油		
N	ASP.NET MVC 1.0 (Chinese)	2009/3/17	新増		
NET NET	ASP.NET MVC 3 Tools Update 語言寄件安裝程式	2011/5/10	新増		
~	ASP.NET and Web Tools 2013.1 for Visual Studio 2012	2013/10/17	新埔		
⊘O WiatRate	Visual Web Developer Express 2010 SP1 with Azure SDK - 2.0	2013/4/29	新埔		
⊘O WialRado	Visual Web Developer Express 2010 SP1 with Azure SDK - 2.1	2013/7/31	新油		
1 要安裝的	面目到	選項(0) 安裝()	結束(E)		

5. 安裝完成





安裝 Service Provider Foundation

• 開始安裝 Service Provider Foundation:

1. 開啟 System Center Orchestrator 的安裝程式,選取 下方的 SPF 安裝

oystern center zor	E ne oreneonator octap	
Microsoft ⁻ System Center 2	2012 R2	
Orchestrator		
Install		
 Restart may be required Before you begin 		
Standalone installations	Additional Resources	
Runbook <u>D</u> esigner	Release <u>N</u> otes	
Orchestration Console and Web Service	Installation <u>G</u> uide	
Runbook Server	System Center <u>O</u> nline	
	Obtain Installation Assistance	
Service Management		
Automation	Standalone installations	
Web Service	Service Provider Foundation	
Runbook Worker	Service <u>R</u> eporting	
PowerShell Module		

2. 在 Service Provider Foundation 的安裝程式精靈中, 點選 "Install"

System Center 2012 R2 Service Provider Foundation	
	Microso
Microsoft System Center 2012 R2	
Service Provider Foundation	
Install	
Additional Resources	
Release Notes	
Deployment Guide	
Read Documentation	
Obtain Installation Assistance	
System Center Online	
Preview	
© 2013 Microsoft Corporation. All rights reserved.	
	Cancel

3. 勾選同意授權後,點選 "Next"



5. 設定 SPF 的資料庫,點選 "Next"



4. 環境檢查確認後 · 點選 "Next"

Ø	System Center 2012 R2 Service Provider Foundation	X
	Prerequisites	
	Please review the results of the prerequisite checks Any missing prerequisites are marked with a red X icon. System Center 2012 R2 Service Provider Four cannot continue until all prerequisites are installed (and listed with a green checkmark icon).	ndation Setup
		Expand <u>A</u> ll \land
	Common prerequisites Passed	(>
	Operating System - Windows Server 2012 R2 Available	
	IIS Version 7.5 or greater Available	
	IIS Management Scripts and Tools role service Available	Ξ
	IIS Security Basic Authentication Available	
	IIS Security Windows Authentication Available	
	IIS Application Development ASP.NET 4.5 Available	
	WCF Data Services 5.0 for OData V3 Available	
	.NET Features 4.5 WCF Services HTTP Activation Available	
	ASP.NET MVC 4 RC Available	
	Management OData IIS Extension Available	
	Svstem Center 2012 Virtual Machine Manager Web Service Passed	(∧) ∨ <u>C</u> ancel

6. 設定站台存放路徑並選取伺服器認證方式,點選 "Next"

Web service files		
Install in folder:	C:\inetpub	Change Folder
Website name:	SPF	
Port number:	8090	
Generate self-signed certificate Use existing certificate:	Personal v	
Certificate Store:		VIEWm

→ 安裝 Service Provider Foundation

7. 設定 Admin Web service · 輸入適當帳號 · 點選 "Next"



8. 設定 Provider Web service · 輸入適當帳號 · 點選 "Next"

🕫 Sy	stem Center 2012 R2 Service Pr	ovider Foundation	
Configuration			
Configure the Provider web	o service		
Configure the Internet Information S	Services (IIS) settings for the System Ce	nter Provider web service.	
Virtual directory:	Provider		
Domain security groups or users: Separate names with a semicolon	ALSU\administrator	For example: CONTOSO\JohnDoe; CONTOSO\TestGroup	
Application pool			
Application pool name:	Provider		
Application pool credentials:	Network Service Service Account		
	User name: *		
	ALSU\administrator	For example: CONTOSO\JohnDoe	
	Password: •		
		< Previous Next > Canc	el

9. 設定 VMM Web service · 輸入適當帳號 · 點選 "Next"

🕅 Sy	stem Center 2012 R2 Service	Provider Foundation	x
Configuration			
Configure the VMM web se	ervice		
Configure the Internet Information	Services (IIS) settings for the System	Center Virtual Machine Manager web service.	
Virtual directory:	VMM		
Domain security groups or users: Separate names with a semicolon	ALSU\administrator	For example: CONTOSO\JohnDoe; CONTOSO\TestGroup	
Application pool			
Application pool name:	VMM		
Application pool credentials:	Network Service Service Account User name: * ALSU\administrator	For example: CONTOSO\ JohnDoe	
	Password: *		
		< Previous Next > Cancel	

10. 設定 Usage Web 服務,輸入適當帳號,點選 "Next"

Ē	Syst	tem Center 2012 R2 Service Provider	Foundation	x
	Configuration			
	Configure the Usage web se	rvice		
	Configure the Internet Information Se	ervices (IIS) settings for the System Center Usa	ge web service.	
	Virtual directory:	Usage		
	Domain security groups or users: Separate names with a semicolon	ALSU\administrator	For example: CONTOSO\JohnDoe; CONTOSO\TestGroup	
	Application pool			_
	Application pool name:	Usage		
	Application pool credentials:	Network Service Service Account User name: *		
		ALSU\administrator	For example: CONTOSO\JohnDoe	
		Password: *		
		< Pr	evious Next > Cancel	

11. 是否加入使用者體驗及選擇更新設定,點選 "Next"



12. 安裝摘要提示,確認後即可點選 "Install"

Ē	System Center 2012 R2 Service Provider Foundation	x
Γ	Install	
	Installation summary	
	Review your selections. To change these selections, click Previous.	
	Web service file location: C:\inetpub	
	Website name: SPF	
	Port number: 8090	
	Web services selected:	
	System Center 2012 Virtual Machine Manager Web Services	
	URL: https://localhost:8090/SC2012R2/VMM/Microsoft.Management.Odata.svc	
	Virtual directory name: VMM	
	Domain security groups or users:	
	ALSU\administrator	
	Application pool name: VMM	
	Application pool credentials: Network Service	
	< Previous Install Cancel	

安裝 Service Provider Foundation $(\rightarrow$

13. 等待安裝完成

3. 等待安裝完成	14. 安裝完成後即可點選 "Close"
System Center 2012 R2 Service Provider Foundation	System Center 2012 R2 Service Provider Foundation

→ 安裝 Automation Web Service

Automation Web Service 也在 System Center Orchestrator 的安裝程式中。

開啟 System Center Orchestrator 的安裝程式,選取左下方的 Automation 項目中的 Web Service

Microsoft System Center 2012 R2 Orchestrator Install Restart may be required Before you begin Standalone installations Runbook Designer Orchestration Console and Web Service Runbook Server System Center Qnline Objain Installation Assistance Service Management Automation Standalone installations		
Microsoft System Center 2012 R2 Orchestrator Install Restart may be required Before you begin Standalone installations Runbook Designer Orchestration Console and Web Service Installation Guide Runbook Server System Center Online Objain Installation Assistance Service Management Automation Standalone installations		
Orchestrator Install Image: Standalone installations Additional Resources Runbook Designer Release Notes Orchestration Console and Web Service Installation Suide Runbook Server System Center Online Objain Installation Assistance Service Management Automation Standalone installations	tem Center 2012 R2	
Orchestrator Install Restart may be required Before you begin Standalone installations Additional Resources Runbook Designer Release Notes Orchestration Console and Web Service Installation Quide Runbook Server Obtain Installation Assistance Service Management Automation Standalone installations		
Install Install Restart may be required Before you begin Standalone installations Runbook Designer Orchestration Console and Web Service Installation Guide Runbook Server System Center Online Obtain Installation Assistance		
Install Restart may be required Before you begin Standalone installations Additional Resources Runbook Designer Release Notes Orchestration Console and Web Service Installation Quide Runbook Server Obtain Installation Assistance Service Management Automation Standalone installations		
Restart may be required Before you begin Standalone installations Additional Resources Runbook Designer Release Notes Orchestration Console and Web Service Installation Guide Runbook Server System Center Online Obtain Installation Assistance Service Management Automation Standalone installations		
Standalone installations Additional Resources Runbook Designer Release Notes Orchestration Console and Web Service Installation Guide Runbook Server System Center Online Obtain Installation Assistance Obtain Installation Assistance	ired	
Runbook Designer Release Notes Orchestration Console and Web Service Installation Quide Runbook Server System Center Online Objain Installation Assistance	is Additional Resources	
Orchestration Console and Web Service Installation Quide Runbook Server System Center Quline Obtain Installation Assistance Service Management Automation Standalone installations	Release <u>N</u> otes	
Runbook Server System Center Online Obtain Installation Assistance Service Management Automation Standalone installations	and Web Service Installation Guide	
Obtain Installation Assistance Service Management Automation Standalone installations	System Center <u>O</u> nline	
Service Management Automation Standalone installations	Ob <u>t</u> ain Installation Assistance	
Automation Standalone installations	ment	
	Standalone installations	
Web Service Provider Foundation	Service Provider Foundation	
R <u>u</u> nbook Worker Service <u>R</u> eporting	Service <u>R</u> eporting	
PowerShell Module		

1. 在 Service Management Automation Web Service 安裝精靈中·點選 "Install"



2. 輸入產品註冊資訊,點選 "Next"



> 安裝 Automation Web Service

3. 勾選接受授權·點選 "Next"



4. 選取安裝 Automation Web Service,點選 "Next"



5. 安裝環境確認 · 點選 "Next"



6. 設定資料庫相關資訊 · 點選 "Next"

🕫 System C	Center 2012 R2 Service Management Automation Web Service Setup	x
Configuration	abase server	
Specify the database serv	erver and port number for the database.	
Server		
Server:	localnost	
Port number:	1455	
Database name:	SMA	
Authentication Credentia	tials:	
Windows Authenticat SOL Server Authenticat	ation	- //2
User Name:	cation	- 183
Password:		
		1 ANK
		111110
	< <u>P</u> revious <u>N</u> ext > <u>C</u> a	incel
Server: Port number: Database name: Authentication Credentia O VVindows Authenticat O SQL Server Authentic User Name: Password:	localhost 1433 SMA tals: ation ication < <u>Previous</u> Next >	Incel

7. 設定 Web Service 使用的帳號及密碼,點選 "Next"



8. 設定站台憑證·點選 "Next"



10. 選取是否加入改進計畫及更新,點選 "Next"

安裝 Automation Web Service

9. 設定安裝路徑,點選 "Next"



- Help improve Microsoft System Center 2012 R2 Service Management Automation Customer Experience Improvement Program The Customer Experience Improvement Program collects data about your use of Microsoft applications to identify possible improvements for Microsoft products. (Tell me more about the program) Yes, I am willing to participate anonymously in the Customer Experience Improvement Program O No, I am not willing to participate Microsoft Update Microsoft Update offers security updates and other important updates for Windows and other Microsoft software, including System Center 2012 R2 Service Management Automation. Updates can be delivered using Automatic Updates, or you can visit the Microsoft Update Web site. On (recommended) Use Microsoft Update to check for updates \odot off Do not automatically check for updates Read Microsoft Update FAQ Read Microsoft Update privacy statemen < Previous Next > Cancel
- 11. 確認安裝摘要,確認後即可點選 "Install"

Installation summary Review your selections. To change these selections, click Previous.

Domain security groups or users:

Application pool name:

Application pool user name:

Web service file location: C:\inetpub\Service Management Automation System Center 2012 R2 Service Management Automation Web Service

Install

Port number: 9090

12. 等待安裝完成



13. 安裝完成後,點選 "Close"



ALSU\administrator

ALSU\administrator

SMA

Windows Azure Pack 終極建置指南 - 使用 Windows Server 2012 R2 & System Center 2012 R2



Windows Azure Pack 安裝的作業系統可以是 Windows Server 2012 或 2012 R2。若尚未安裝的使用者可以至微軟網站下載體驗,下載連結為: http://www.microsoft.com/web/downloads/platform.aspx

安裝步驟

1. 首先下載 Microsoft Web Platform Installer 安裝程式 · 並進行安裝



 下載完成後,執行程式,選擇 Products 之下的 Windows Azure,新增右方的 Windows Azure Pack Portal and API Express,點選 "Install"

	Name	Released	Install
All Server	Windows Azure SDK for PHP	10/21/2013	Add
Frameworks	Windows Azure SDK for Ruby	10/21/2013	Add
Database	Windows Azure SDK for Python - June 2012	6/7/2012	Add
Windows Azure	Windows Azure SDK for Python (Core) - June 2012	6/7/2012	Add
	Windows Azure SDK for Python - October 2012	10/31/2012	Add
	Windows Azure SDK for Python (Core) - October 2012	10/31/2012	Add
	Windows Azure PowerShell	10/21/2013	Add
	Windows Azure Cross-platform Command Line Tools	10/21/2013	Add
	WFastCGI Gateway for IIS and Python 2.7	10/31/2012	Add
	WFastCGI 2.0 Gateway for IIS and Python 2.7	5/17/2013	Add
	Windows Azure Pack: Portal and API Express	9/16/2013	Remove

3. 此時會有一些相關的必要元件需要安裝·點選 "I Accept" 後繼續



4. 圈選 Windows Update 選項並點選 "Continue" 後 · 即 開始進行安裝



→ 安裝 Windows Azure Pack

5. 經過一段時間後·便安裝完成



0		Web Pla	tform Installer 4.6		- 0	<u>^</u>					
Spotlight	Products Application	ns				Q					
		Web Platform Installer 4.6									
All Server	PREREQUISITES	INSTALL	CONFIGURE	FINISH	Add						
Framewo	The following product	(s) have additional	work to complete. Clicking the	Continue button	Add	=					
1 Tools	will continue the instal Product	lation.	Additional Actions		Add						
Windows	Windows Azure Pack Platform	Component(s)	Launching the Windows Azure Pa configure the Windows Azure Pac	ck Configuration Site will k features installed in	Add						
			this release for first time use.		Add						
					Add						
					Add						
					Add						
					Add						
				Castinus	Add						
				Continue	Remove						
_				A4440000		×					
4 Items to be	installed		Options	Install	Exit						

6. 點選 "Continue" 執行 Configure

7. 此時會帶起網頁設定服務管理首頁做相關設定



8. 輸入相關設定及密碼,點選向右箭頭

unoons zune hacksetup winoons zune hacksetup Database Server Setup	×
windows azune pack serup Database Server Setup	×
Database Server Setup	
Database Server	
Please specify the SQL Server that you would like to use for the Windows Azure Pack databases. Please use the same SQL Server instance for config Windows Azure Pack Admin, Tenant and Tenant Public APIs, Admin Site and Tenant Site.	guring the
SERVER NAME	
VM-SCORC2012	
AUTHENTICATION TYPE	
Windows Authentication	
USERNAME	
ALSU\administrator	
Configuration Store	
Please provide a passphrase below that will be used to store and retrieve secrets from the configuration store. The same passphrase needs to be ur machines on this deployment. Note that if the configuration store does not exist yet, the passphrase is always valid.	sed in all
PASSPHRASE	

9. 再次確認密碼後·點選向右箭頭



10. 選擇是否加入改進計畫,並點選向右箭頭



→ 安裝 Windows Azure Pack

11. 列出相關設置 · 點選打勾標示後即可完成設定



12. 此時便開始自動設定



13. 完成所有設定後,關閉網頁



14. 開啟網頁 https://XXXX:30091



→ 安裝 Windows Azure Pack

15. 需要做一些環境設定的動作基本上都是 Step by Step 即可



16. 完成後,可以看到跟 Azure 的操作介面幾乎一模一樣



前置作業

由於 Azure Pack 主要的功用是用來連結雲端服務的,所以使用前必須要在 SCVMM 上建立一個雲端服務。 以下步驟將介紹如何在 SCVMM 上產生一個新的雲端服務:

1	L. 首先開啟 S(CVMM 2	2012 R2 主控	始		2. 選取 Crea	nte Cloud					
	Administrator - VM-SCVMM2012A	LSUCOM - Vertual Mail Create With Case Overview Cloud summa Cloud summa Services Urtual machines	chine Manager (Cvaluation Ver where the service of	sion - 152 Power Jobs TPRO Windo	Souri Que construinte de la co	Administrator VM-SCVMM2 Torn Internation Administrator Administrato	122.4LSUCOM - Virtual Max Total Careford Carefo	chine Manageri (t We envirous We services Stetus Running Running Running	Vitus	n - 152 day PowerShell Jobs PRO Window A Host SCHV06 SCHV06	s remaining) Coud job Selvia ALU Poodcator. C. Completed ALU Poodcator. C. Completed ALU Poodcator. C. Completed	- 0 a. a. 0 a. a. 0 t. t. 0
	Whs and Services					VMs and Services						
	🚽 Fabric					Jibrary						
	Jobs					Jobs					Activate Win Go to System in G activate Window	dows Control Panel to s.
							*					

3. 跳出 Create Cloud 精靈



4. 輸入 Cloud 的名稱 · 並點選 "Next"



5. 選取您的 Cloud 資源後,點選 "Next"



- 8 X 🖬 Admi on - 152 days remaining) Create Create Vir Service Machine 🥵 Tenants General Select the logical ne Clouds 📕 VM Net a... a... 0. a... a... 0. a... a... 0. t... t... 0. Logical Ne All Hasts All Hasts All Hasts ALSU Proc SCHV01 SCHV02 SCHV03 SCHV05 SCHV06 Why and S Pabric 📕 Library Previous Next Cancel Jobs Setting

6. 選取欲提供給私有雲使用的邏輯網路後,點選 "Next"

7. 選取負載平衡的網卡 · 點選 "Next"

			anager (eranaaren r.			
Home Home	Folder					^ 🔞
*	🏝 📑 🏦		1 1 A	PowerShell		
Create Create Virtua		C	reate Cloud Wizard			
Service Machine •						
VMr and Sarvicer	Load Balan					
Tananta Scittaco						ام
C renarios	General	Add load balancers	for this cloud			* * * C S. O.
Clouds	Resources	Load balancers:				a a 0. 6
📥 VM Networks	Logical Networks	Name	Address	Manufacturer	Model	a a 0. 6
🥃 Storage	Load Balancers	 Microsoft Network L 	Microsoft Network Loa	Microsoft	Network Load Balancin	a a 0. 6
4 🧮 All Hosts	VIP Templates					t., t., 0, 6,,
 ALSU Producti 	Part Classifications					
SCHV01	Fort classifications					
# SCHV03	Storage					
SCHV05	Library					
SCHV06	Capacity					
	Capability Profiles					
	Summary					
눩 VMs and Servic						
Pabric Fabric						
📕 Library				0.1		
E labe				Previous	Activate Min	al ws
Settings					activate Windows	k -
	*					~

8. 選取所需要的 Port 後,點選 "Next"

Home Folder	
🐝 🐲 📥 I	🛉 丸 👝 💽 💏 🏡 🔐 PowerShell
ceate Create Virtua	Create Cloud Wizard
ervice Machine *	
P	ort Classifications
As and Services	
Tenants General	Select the port classifications for this cloud
Clouds	
NM Naturala	The selected classifications will be available to use for VMs deployed to this cloud. a a 0.
Logical Ne	orks Name Description aa 0.
G Storage Load Balan	Guest Dynamic IP Port classification to be used for virtual machines that require guest dynami a a 0.
All Hosts	High bandwidth Port classification to be used for virtual machines that require high bandwid t., t. 0.
ALSU Producti	s Host cluster Workloa Port classification for host cluster workloads.
SCHV01 Port Classic	ations I nost management Port classification to be used for nost management traffic.
SCHV02 Storage	✓ ISCSI WORKDOOD Port classification for nost ISCSI WorkDoads.
SCHV03	Ore highborn now port destination to be used for hist me imgration workloads.
all SCHV05	Medium bandwidth Port classification to be used for virtual machines that require on bandwidth
@ SCHV06 Capacity	Network load balance Port classification to be used for virtual machines that use Microsoft Network
Capability	offies SR-IDV Port classification to be used for virtual machines that use SR-IDV
Summany	
o o o o o o o o o o o o o o o o o o o	
WMs and Servic	
Pabric	
Eibrary	Previous Next Cancel
Jobs	Activate Minde ws
	Go to System in Control Panel to
Settings	activate Windows.

9. 選取儲存空間,點選 "Next" 🖪 Admi Home Create Create Vir Service Machine 🤯 Tenants eneral Select the storage classifications for this cloud 📕 VM Netz 🧿 Storage Load Balancers All Hosts ALSU Produ SCHV01 SCHV02 SCHV03 SCHV03 SCHV05 SCHV06 VID Template Storage Capacity 🔯 VMs 1. Fabric 📕 Library Previous Next Cancel 📋 Jobs Settings

10. 加入 VMM Library, 點選 "Next"



) Windows Azure Pack 連接 Virtual Machine Manager (\rightarrow)

. Adr

11. 選取欲使用的平台 Profile · 點選 "Next"



12. 確認設定摘要,點選 "Finish" trator - VM-SCVMM2012.ALSU.COM - Virtual Machine Manager (Evalu

reate Create Virtua			Create Cloud Wizard	x
Is and Services	Summary			
Clouds Resor	rai urces	Confirm the sett	View Scr	ipt Y Y C S.
\UNINetworks Logic Storage Logic AltSU Products VP T \$ SCHV02 \$ SCHV03 \$ SCHV03 \$ SCHV05 Cape Cape	al Networks Balancers emplates Classifications ige 17 rý city bility Profiles	Name: Resources: Logical networks: Load balancers: VIP templates: Port classifications: Storage: Library:	ASUP Productions Chard ASUP Inductions Vitrual Internot-LAN Microsoft Hermon Land Balancing (NLB) High handwidth, SCSI worklaud, Live migration worklaud, Network laud Microsoft Chard Strange Clauself Linkow Johnson Library Jahres MSSCYMMUbiney	an an 0. an an 0. an an 0. to to 0.
Sumr	nary	Capacity: Capability profiles:	Virtual CPUs: Unlimited, Memory: Unlimited, Storage: Unlimited, Custom quota: Unlimited, VMs: Unlimited Hyper-V	
Library			Previous Finish Cancel	ws
Z Sattingr				in Control Panel to

- 8 X

- 152 days remaining)

13. 完成後,可以看到 VMM 管理畫面上已出現產生的 ALSU Production Cloud



整合功能

新增完 SCVMM 的 Cloud 之後,接下來就要來跟 Azure Pack 整合,首先在安裝 Azure Pack 的伺服器上做 設定,點選 Azure Pack 管理頁面上的 VM CLOUDS,第一步先註冊 SFP 的服務



1. 輸入 SPF 的 URL、帳號及密碼後,點選右下方的打勾 圖示



2. 註冊完成後 · 接下來點選 Register Service Management Automation for VM Clouds



 輸入 Service Management Automation 的 URL 後,點選右下方打勾



4. 註冊完成的訊息



5. 接下來連接已存在的 VM Cloud Provider · 以提供 provision 服務



6. 跳出連接精靈,輸入 FQDN 名稱,點選 "REGISTER"



7. 完成後,可以看到 VMM 上的 ALSU Production Cloud

Service management Fortai				ALSUVadministrator
ALL ITEMS	vm clouds			
WEB SITE CLOUDS	CLOUDS VIRTUAL MACHINES	NETWORKS AUTOMA	ATION GALLERY	
WM CLOUDS	NAME	STATUS	VIRTUAL MACHINES	CORES
V 1	4 vm-scvmm2012.alsu.com	V Ready	4 of unlimited	4 of unlimited
SERVICE BUS CLOUDS	ALSU Production Cloud	-> 🗸 Ready	4 of unlimited	4 of unlimited
SQL SERVERS				
MySQL SERVERS				
27 27				
27 = PLANS 2				
27 E PLANS 2 USER ACCOUNTS 3				
PLANS 2 USER ACCOUNTS 3 USER COSTS				

8. 也可以看到 Cloud 中的虛擬機狀態

_											l	-	6	x
))	https://vm-azurepack.a	su.co	n :30091/#Worksj.	ρ.	😮 Certificate er	ror 🖒 醋 VM Cli	uds - Windows Az	ur × 🔣 Servis	e Management - A	uthen			
le	Edit	View Favorites Tools	Help											
	Servi	e Management Portal								🌐 ALSU	\administra	tor	Q	~
				vm cloud	ds									
	0			CLOUDS	VIF	TUAL MACHINES	NETWORKS	AUTOMATION	GALLERY					
L	0	VM CLOUDS 1		NAME CONTA	NS			USER ACCOUNT	EQUALS					
	¢			Showing res	uits f	rom Mon Nov 04 20	13 13:55:32 GMT+08	00 (Taipei Standard 1	lime)		\checkmark			
	4													
	Mu			NAME	Ť	STATUS	USER ACCOUNT	VMM SERVER	CLOUD	SUBSCRIPTION	TYPE	ρ		
	sh.			VM-ALEXSVR001		🗸 Running	alexsu@alsu.com	vm-scvmm2012	ALSU Productio	431fa0d4-64c1	Standalo	ne		
	ц <u>у</u> г			VM-ALEXSVR002		🗸 Running	alexsu@alsu.com	vm-scvmm2012	ALSU Productio	431fa0d4-64c1	Standalo	ne		
				VM-ALEXSVR003		🗸 Running	alexsu@alsu.com	vm-scvmm2012	ALSU Productio	431fa0d4-64c1	Standalo	ne		
				VM-TESTSVR001		🗸 Running	thomas@alsu.com	vm-scvmm2012	ALSU Productio	5e8be207-1dcb	Standalo	ne		
	2													
	IO													
										Activate Wi So to System in	ndows Control	Pany	otto	
I	+	NEW												~

9. 接下來回到 Azure 管理站台,選取 Automation, 並註冊 Service Management Automation,輸入 Automation URL、帳號及密碼,點選下方打勾圖示



10. 註冊完成,回到主畫面



11. 此時可以看到 "Automation" 頁籤中的相關資訊



恭喜您,到此 Windows Azure Pack 已安裝設定完成。後續使用操作請參考下一頁參考資源中提到的 Windows Azure Pack 白皮書或是 TechNet 上的資訊,謝謝。



參考資源

- 参訪 Windows Azure Pack 產品網頁 http://www.microsoft.com/zh-tw/server-cloud/products/windows-azure-pack/default.aspx
- 下載 Windows Azure Pack 白皮書 http://download.microsoft.com/download/0/1/C/01C728DF-B1DD-4A9E-AC5A-2C565AA37730/ Windows_Azure_Pack_White_Paper.pdf
- 下載 Windows Azure Pack http://www.microsoft.com/web/downloads/platform.aspx
- Windows Azure Pack TechNet 文件 http://technet.microsoft.com/zh-tw/library/dn296435.aspx?cr_cc=200142594
- 台灣微軟 System Center 部落格
 http://blogs.technet.com/b/systemcentertw/

其他相關技術文件

- Virtual Machine Manager
 http://technet.microsoft.com/zh-tw/library/gg610610.aspx
- Operations Manager
 http://technet.microsoft.com/zh-tw/library/hh205987.aspx
- Orchestrator
 http://technet.microsoft.com/library/hh237242.aspx
- Service Provider Foundation
 http://technet.microsoft.com/zh-tw/library/jj642895.aspx