Gladinet Cloud Enterprise

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Table of Contents

Overview of Gladinet Cloud Enterprise	4
Deployment Diagram	6
Step 1: Prepare the File Storage	7
Step 2: Prepare the Active Directory (Optional)	7
Step 3: Prepare the Database Server	8
Step 4: Prepare the Worker Nodes	
Step 5: Start Installation	
Step 6: Initial Configuration	
Step 7: Check Out Web Portal	20
Step 8: Check out the Management Console	20
Step 9: Enable SSL – Install SSL Certificate	22
Step 10: Set up Worker Node properties	26
Step 11: Verify External URL, Internal URL and Node Name	29
Verify External URL	29
Verify Internal URL	29
Verify Node Name	29
Step 12: Add the node to the Load Balancer	
Step 13: Setup the Second Node (Worker Node #2)	
Option 1 – GUI Setup	
Option 2 – Command Line Script Setup	
13.1 – Preparation on the Worker Node #1	
13.2 - Clone Program Files	
13.3 – Clone the Registry	34
13.4 – Command Line Setup the IIS ASP.NET and WCF applications	35
13.5 - Import SSL Certificate	
13.6 - Sanity Check Worker Node #2	
13.7 – Add the worker node to the cluster	
13.8 – Add the worker node #2 to the Load Balancer	
13.9 Pre-Compile ASP.NET Pages	41

Gladinet Cloud Enterprise Installation Guide Setup Worker Node #3	Copyright 2014 Gladinet 41
Branding	43
Self-Service Branding	43
Full-Branding Service	43
Upgrade	44
Step 1 – Unzip the Folder	44
Step 2 – Copy files over to the Program Files	45

Overview of Gladinet Cloud Enterprise

Gladinet Cloud provides value-added services on top of cloud storage services or local storage services. Cloud Storage services include those from OpenStack Swift, Amazon S3 and its compatibles, Google Cloud Storage, HP Cloud Storage and many others. Local Storage Services include file server Storage, SAN or NAS storage. Gladinet Cloud value-added services can be summarized as <u>B</u>ackup, <u>A</u>ccess, <u>S</u>ync and Share, <u>I</u>dentity, <u>C</u>ontrol and Collaboration (<u>BASIC</u>).

Gladinet Cloud Enterprise is a cluster of web services built on top of the Microsoft Web Platform. It provides the **<u>BASIC</u>** value-added services that facilitate online storage access for PCs, Macs, File Servers, Web Browsers, and Mobile Devices.

The services can be deployed in flexible combinations to meet different needs. For example, you can deploy it on-premise as a private cloud or you can deploy it off-premise in a data center, managed by your managed service provider (MSP) or you can deploy it in Amazon EC2-like environment as virtual-private deployment.



There are three different types of machines (or Virtual Machines). In the smallest deployment unit, the three different logical nodes can co-exist in one single machine (all-in-one deployment).

➢ Web Node

(If you have hardware load balancer or other kind of load balancing, you do not need web node, instead, worker node has web node functionality by default). The Web Node has functionalities such as Account Management, Sign-in and Load-balancing services. Depending on the load, you may need 1 to N such nodes. Normally we recommend for every 1 web front node, you can have 10+ worker nodes. When you have small deployments, you can skip web front nodes and combine them into worker nodes. All the installation work is the same. If you do not need the Web Node, you do not need to assign them in the cluster manager web portal.

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Example: ACME Corporation deploys two web front nodes 'node1.acme.com' and 'node2.acme.com'. Each node is running a copy of Gladinet Cloud Enterprise, connecting to the same SQL database.

ACME Corporation acquires a domain name (DNS) of cloud.acme.com which can be load balance to 'node1.acme.com' and 'node2.acme.com'.

When User points their browser to <u>https://cloud.acme.com</u>, it is directed to one of the node for login page.

NOTE1: If you have hardware load balancing available, you do not need to use web nodes at all.

NOTE2: Windows 2012 comes with Network Load Balancing (NLB). If you use NLB, you do not need web nodes at all.

➢ WorkerNode

This node contains services like Web Browser Based File Manager, Storage Service Connectors, and more. Again, additional nodes can be added as the load increases. Because there is cache information located on each node, users will have an affinity to a single node once it is assigned.

> Database Node

The database contains persistent information for the system. In general, once a user is logged in, database access is no-longer needed for normal operations. If the database is down, most end user operations can continue with cached information (However, users need to access the database at least once to login and cache information).



Interaction from user browser, PC client, File Server, Mobile Device

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NOTE: If you have hardware load balancer or other kind of load balancer, you don't need web front nodes from the above picture.

Deployment Diagram

In this installation guide, we will deploy the solution based on the diagram shown below. If this is the very first time you install Gladinet Cloud Enterprise, it is recommend you try the All-In-One Deployment on a single machine first. Once you are more familiar with Gladinet Cloud Enterprise components and its functionality, you can start setting up a production environment similar to the deployment diagram shown below.

In this guide, we use Windows DFS Network File Share as the backend storage. If you are using OpenStack Swift, Amazon S3-Compatible or EMC Atmos storage, they will work as well. The Storage Configuration page will be different for different storage options.

In this installation guide, we will be using Windows Server 2012 R2, which is the recommended Server Operating System for Gladinet Cloud Enterprise solution. (Other supported Operating Systems are Windows 2008 R2 and Windows 2012)



From a different perspective, including the clients and the ports, the diagram may look like this:

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Step 1: Prepare the File Storage

Gladinet Cloud Enterprise is a middleware built on top of your file storage. So first question is where you will have the file storage for the solution?

Your file storage can be a Windows File Server network share; it can also be a container inside a private instance of OpenStack Swift, Amazon S3 compatible storage or EMC Atmos storage service. You will need the basic access information ready. For example, if it is a Windows File Server, you will need the UNC path to the network share and the user credential for accessing the folder. If it is OpenStack Swift, you will need the authentication URL and credentials.

Step 2: Prepare the Active Directory (Optional)

If you need Active Directory integration, you will need Active Directory information such as the Active Directory location (DNS name), a service account that can access the Active Directory and the Active Directory's friendly Domain Name.

If you don't need Active Directory integration, you can skip this step. In the diagram below, the tsys.gladinet.com is the Active Directory's friendly domain name.

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Active Directory Users and Computers								
File Action View Help	File Action View Help							
	7 🔎 🐍							
Active Directory Users and Computers [WIN-I	Name	Туре	Description					
 Saved Queries Itsys.gladinet.com Builtin Computers Domain Controllers ForeignSecurityPrincipals Managed Service Accounts Tenant1 Tenant2 Tenant4 Users 	Saved Queries	Domain	Folder to store your favo					

Step 3: Prepare the Database Server

There are two places that store persistent information. The first place is the File Storage mentioned in Step 1. The second place is the SQL Server database. There is configuration information such as user name, team folder, shared folder, login token in the database. There is also runtime information such as audit trace and file change log in the database.

You can use any SQL Server Editions, such as the SQL Express, SQL Server Web Edition, SQL Server Standard Edition or SQL Server Enterprise Edition.

The primary decision factor is whether you want to setup High Availability for SQL Server, such as database mirror, database replication, Always-On Cluster or Always-On Fail Over Group. Different SQL Server editions offer different high availability features. In the case of SQL Express, it doesn't have any built-in high-availability features; while SQL Server Enterprise Edition offers many high-availability features.

When preparing the SQL Server, ensure the SQL Server Authentication is enabled. During the setup of the first worker node, the installer will need to create a database, create tables inside the database and create stored procedures in the database. So it requires a SQL security account that has enough privileges for the installation.

SQL Server 2012 Setup								
Database Engine Configuration Specify Database Engine authentication security mode, administrators and data directories.								
Setup Support Rules Setup Role Feature Selection Installation Rules Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error Reporting Installation Configuration Rules Ready to Install Installation Progress Complete	Server Configuration Data Directories FILESTREAM Specify the authentication mode and administrators for the Database Engine. Authentication Mode Windows authentication mode Mixed Mode (SQL Server authentication and Windows authentication) Specify the password for the SQL Server system administrator (sa) account. Enter password: Cgnfirm password: Specify SQL Server administrators Specify SQL Server administrators System of (Administrator) SQL Server administrators Add Current User Add Current User							
< <u>B</u> ack <u>N</u> ext > Cancel Help								

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Make sure TCP protocol is enabled and firewall is opened to accept SQL connections. Default TCP port is 1433 and that port needs to be open on firewall. If you have SQL Server listening on a different port, that port will need to be open as well.

	Sql S	Server Configuration	n Manager	L	 x
File Action ⊻iew Help ← ⇒ 2 □ □					
 SQL Server Configuration Manager (Local) SQL Server Services SQL Server Network Configuration (32bit) SQL Native Client 11.0 Configuration (32l) SQL Server Network Configuration SQL Server Network Configuration Protocols for MSSQLSERVER SQL Native Client 11.0 Configuration 	Protocol Name Shared Memory Named Pipes TCP/IP	Status Enabled Disabled Enabled			

Gladinet Cloud Enterprise | Installation Guide Step 4: Prepare the Worker Nodes

The easiest way to prepare the worker node is to install from scratch a clean Windows Server 2012 R2 OS with English locale and make sure the worker nodes are all in the same time zone.

We recommend Windows server 2012 R2 running on Virtual Machine environment.

Component	Requirement	Notes
Operating System	 Windows Server 2008 R2 with Service Pack 1, Standard or Enterprise Edition Windows Server 2012 Windows Server 2012 R2 	
CPU	 32 or 64-bit architecture with Intel Pentium (x86/x64) AMD Opteron family AMD Athlon 64 family 	
Memory	8GB RAM	
Disk space	100 GB (SSD if available)	

Step 5: Start Installation

Login to the first worker node console (RDP or physical console are fine) with administrator rights. Start the installer by double click on it.



You will see the welcome screen.

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Click Next>

And accept the EULA

3	Gladinet Cloud Enterprise Installation	x
6	License Agreement	
Last M	iodified: August 1st, 2012	^
Gladin	et Terms of Service	
Please and Gla provide images Gladine availab By usi Service promisi	read these terms of service (these " Terms ") carefully as they form a contract between you adjust (We or Our) that governs your access and use of: (i) the hosted storage solution d by Gladinet for online storage, sharing and processing of files, data, text, audio, video, or other content (collectively, " Content "); (ii) software provided or made available by et (the " Software "); and, (iii) any written or electronic documentation provided or made le by Gladinet (the " Documentation ") (collectively the " Service(s) "). Ing any of the Services you agree to be bound by these Terms . If you are using the es on behalf of an organization, you are agreeing to these Terms for that organization and ng to Gladinet that you have the authority to bind that organization to these Terms. In that	>
	< <u>B</u> ack <u>N</u> ext > Cancel	

If you are installing for single Enterprise, select the "Enterprise" option, otherwise, select the "Service Provider Edition – Multi-tenants" option.

Sladinet Cloud Enterprise Installation
Select Edition
Enterprise Edition (Single Tenant) Install on-premise, or inside a DMZ to have full control and security protection, with optional native Active Directory integration. This product is a good fit for a single enterprise.
O Service Provider Edition (Multi-tenants)
Functionality wise the same as the above selection, with the exception of supporting multiple tenants and integration with multiple Active Directory domains. This is a good fit for a service provider supporting multiple businesses.
< <u>B</u> ack <u>N</u> ext > Cancel

For the next screen, we will select the second entry for it to connect to the existing database.

3		Gladinet Cloud Enterprise Installation	x				
8	Chose installation	n type					
 All-in-one installation (will install default SQL Server Express) All-in-one installation will have database, web node and worker node all together. It will install SQL Server Express as necessary. 							
⊚ I You	am going to use an existing have existing SQL Server or	SQL Server or SQL Server Express SQL Server Express that you would like to use, instead of creating a new SQLExpress.					
	Database Info	192, 168, 2, 10					
	Database Name:	user					
	Liser Name	sa					
	User Name:						
	Password						
		< <u>B</u> ack <u>N</u> ext > Cancel					

For the Database Server, if it is the default MSSQLSERVER instance, you can just type the IP Address or DNS name. You can verify this by going to the database server and look under the Services.

For example, the following Services screenshot was taken from the database server and the database instance is indeed called MSSQLSERVER.

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The Database Server entry can also take on other forms. For example, if you have SQLEXPRESS on server *dbserver* the entry could look like dbserver\SQLEXPRESS.

If your SQLSERVER is on another port, the Database Server entry can also be db.mydomain.com, 2048 (if the port is on 2048)

Click 'Next>'

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3	Gladinet Cloud Enterprise Installation	x
install now		
TaskName	Status	
Install .Net 4.5		
Check and install IIS Web Serve	۲.	
Install Gladinet Cloud Service Pr	ovider Package	
Configure Web Applications		
Initialize Database		
Finalize the installation		
Please click the 'Install' button to :	start installation.	
If you have a proxy server to acc	tess the Internet, please click <u>here</u> to setup proxy	
	< <u>B</u> ack Install Cancel	

And Click Install.

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Recycle Bin		
	wgladinet.com/p/GCE_InstallGUI.htm 🔎 - C 🖉 GLADINET - Download Gladine 🥜 GLADINET - Download Glad X	
	Gladinet Cloud Enterprise Installation	<u>^</u>
	install now	_
	Tasklame Status Size Instal. Net 4.5 ✓	_
	Check and ristal IIS Web Server Install Gadnet Cloud Service Provider Package Configure Web Applications V	
	Initialize Database Finalize the installation 13.33% (Installing)	_
	Reboot Reboot is needed to complete the installation, reboot now?	
	Please dick the 'Install' button to start installation. Yes No If you have a proxy server to access the Internet, please dick there to setup proxy	
	< Bock Install Close	
	1 item	_
	Please read these terms of service (these " Terms ") carefully as they form a contract between you and Gladinet (We or Our) that governs your access and use of (i) the hosted storage solution provided by Gladinet for online storage, sharing and processing of files, data, text, audio, video,	~
	🥑 👙 🖺 🤗 🍮	▲ 😼 😳 👍 3:50 PM

Once installation is completed, a reboot is required. Reboot now.

Step 6: Initial Configuration Configuration page will be displayed after the reboot.

			_ 0 ×
C) (*) (*) http://localhott/management/AdminAccount.aspu	P ~ C		Gladinet
		Create Default Admin Account	
	×	Email (Your Login Id)	
		Password	
		Continue	
		By signing up for Gladinet Cloud you agree to the Gladinet TERMS OF SERVICE	
	©2008-2014 GLADINE	T, INC. ALL RIGHTS RESERVED.	X
ENLOL110101010			
			▲ 🔀 😳 🕼 3:59 PM 7/18/2014

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(+) () () () () () () () () () () () () ()	,		- □ × ↑★ ®
			Gladinet
		Create Default Admin Account	7
		L joe@gladinet.com	
		â	a testa
		A	
• .		Continue	
	• •	TERMS OF SERVICE	
	©2008-2014 GLADINET,	INC. ALL RIGHTS RESERVED.	Tr.
······································			
			▲ 🔀 🐏 4:03 PM 7/18/2014

Here, you will setup the master administrator's account first.

Next screen is to setup the storage location for the default admin. You will use a service account (can't change password, account never expire) to connect to your file storage. Since most companies have password policy to expire password in 90 days, you will use a service account here so it doesn't expire in 90 days.

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				A ★ B
			4	Gladinet
		Chose Your	Storage	
		Use an existing file server or lo storage	ocal disk as enterprise	
		Local Storage Location (C:\myfold	er or \\myfileserver\share):	
		\\tsys.gladinet.com\Storage		
		User Name (for local storage acces	ss):	
		gladsvc@tsys.gladinet.com		
		Password (for local storage access)):	
		The share is from a Linux/U	nix/ZFS Server	
		OUse cloud storage as enterprise	e storage	
		Back	Continue	
	©2008-2014 GLADI	NET, INC. ALL RIGHTS RESERVED.	× /	Tr
EN1011101010				
				▲ 🔀 😳 👍 4:21 PM 7/18/2014

After that, the default admin's account is ready. And the page shows up is the "Cluster Manager"

http://lo	ocalhost/manage	ement/ClusterMgr.asp	px ,	오 - Ċ 🅜 Gladine	t Cloud - Default Cl.	×									ŵ
Gladir	net Clo	oud (For Evaluation - U				Cluster lo	d: B/YQuZlygfY/U	rsTNWCI8gEFmy	SONT1wMD	WGDBreu2	6x4eJFcd	sKj9Tol	/Mq7jnjr	
Tenants	Manager	Cluster Ad	min Ap	plication Manage	er Email	Service	Cluster Brandi	ng Gues	st Users (Cluster Wo	orker Node	5	Cluste	r Web No	ies 🗌
					User	Line: 20 User Li	ne Used: 3								1
									All Tenants					Search	
l of l tenan	te found								All	Tenants wit	th storage u	sage larg	er than	0	GB
Tenant	t List														
F	Full Name	Email	Expiration	Storage Plan	Storage Type	Used	User Plan	Users	Organization	Active	Portal				
1 D					Land Otara	<u></u>			D (117		0			a (.	
	efault Cl	joe@gladin		Unlimited	Local Stora	0 bytes	3	1	Default Te		Open	⊴ ≧	× 7	3. * 7	
	lefault Cl	joe@gladin		Unlimited	Local Stora	U bytes	3	1	Default I e		<u>Upen</u>	(N 77 -	3.77	
	efault Cl	joe@gladin		Unlimited	Local Stora	U bytes	3	1	Default re		Upen		7	ð. "	

Step 7: Check Out Web Portal

Click the Portal – "Open" Link for the default master admin to view his files/folders over the web portal.

Organization	Active	Portal	
Default Te		<u>Open</u>	

Here is the files and folder view.

				_ 0 ×
	,으 ▾ ở 🥜 Gladinet Cloud - Default Clust	🥜 Gladinet Cloud - Default Cl 🛛		
🥑 Gladínet Cloud	(For Evaluation- Unlicensed)			Default Cluster Admin (joe@gladinet.com) V
E € C	Create Version Folder			Gladinet Cloud
Name		Size	Last Modified	
	(Folder is empty)	······		A team folder is a shared workspace to collaborate with team members. You can assign team members, with read/write permissions.
	Drop Files Here			O Shared Item(s) Manage Securely send links of files and folders to share with people.
)		The browser-based file explorer provides most of the basic functionality. For a richer, native experience, you can download native clients.
				This is a collapsible information panel. You can resize the width of this panel by clicking on the handle to the panel's left.

Now do some simple file/folder operations to sanity check the storage connection.

Step 8: Check out the Management Console

To access to the Management Console, click on the top right username entry.

	S Default Cluster Admin (joe@gladinet.com) ▼
-	属 English 🗸
	🔟 Management Console
	Feedback
_	Migration Wizards
team fol	📸 🏞 📹 🗖
embers.	
rmissio	
ව ව	R Change Password

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Here is the management console.



Step 9: Enable SSL - Install SSL Certificate

You will install the SSL certificate by using the IIS Manager. Look for "Server Certificates" and double click on it.



Click on "Import" to import a SSL Certificate. Leave the Certificate Store as "Personal" or "Web Hosting", either way is fine.

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e		Internet Information Services	(IIS) Manager		
€ 💿 <a>€ NODE1 >					2
<u>F</u> ile <u>V</u> iew <u>H</u> elp					
Connections	Server Certific	cates			Actions Import
 Start Page NODE1 (TSYS\administrator) Application Pools Sites 	Use this feature to request an Filter:	Import Certifica Certificate file (.pfx):	te ? ×	ured for SSL. Expiration Date Ce	Create Certifi Complete Ce Create Doma
Þ 👽 Default Web Site Þ 🝚 local8080 Þ 💮 quota8081		Password: Select Certificate Store: Personal ✓ Allow this certificate to be exported	····	12/31/2039 6:59:59 EE	Create Self-Si Enable Auton Renewed Cer Help
	< Eestures View Content View	III /iew	Cancel	>	
	Import Certificat	e ? ×			
<u>C</u> ertificate file (.pfx)	:				
C:\cert\wildcard_ex	port_1_20_14.pfx				
<u>P</u> assword:					
•••••					
Select Certificate St	ore:				
Web Hosting		×			
☑ <u>A</u> llow this certified	cate to be exported				
	ОК	Cancel			

Verify that the certificate is available:

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	Internet Information Services (IIS) Manager								
<u>F</u> ile <u>V</u> iew <u>H</u> elp									
Connections Image Image Image Image	Server C Use this feature to requ	ertificates uest and manage certificates that the • T Go - Show All Gr	Web server can use with websites co	onfigured for SSL.					
 ▲ - Sites ▶ - Default Web Site ▶ - Point Iocal8080 ▶ - Point Iocal8081 	Name Stargladinet	Issued To Iocalhost *.gladinet.com	Issued By Iocalhost COMODO SSL CA	Expiration Date C ε 12/31/2039 6:59:59 EE 3/18/2016 7:59:59 E8					

You can also verify the SSL certificate from the MMC/Certificates snap-in (Local Computer)

Console1 - [Console Root\Certificates (Local Computer)\Web Hosting\Certificates]								
🚟 <u>F</u> ile <u>A</u> ction <u>V</u> iew Fav <u>o</u> rites <u>W</u> indow <u>H</u> elp								
🗢 🍬 🖄 📰 📋 🗟 🗟	2017 1							
📔 Console Root	Issued To	Issued By	Expira	Actions				
Certificates (Local Computer)	🛱 *.gladinet.com	COMODO SSL CA	3/18/2	Certificates	^			
⊿ Personal Certificates				More Actions	•			
Trusted Root Certification Auth								
Enterprise Trust								
Intermediate Certification Auth								
Trusted Publishers								
Untrusted Certificates								
Third-Party Root Certification A								
Irusted People Client Authentication Issuers								
Bemote Desktop								
Smart Card Trusted Roots								
Trusted Devices								
⊿ 🚞 Web Hosting								
Certificates								
< III >	< III		>					
Web Hosting store contains 1 certificate.								

Now you can bind the "Default Web Site" to the SSL certificate for https. Right click on the "Default Web Site" and select "Edit Binding"

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8]		I
🕞 💽 📲 🕨 NO	DDE1 🕨	
<u>F</u> ile <u>V</u> iew <u>H</u> elp		
Connections		Server Certificates
■ Start Page ■ Start Page ■ NODE1 (TSYS\additional start Page)	ministrator)	Use this feature to request and manag
Application P	ools	Filter: - ▼ <u>G</u> o
⊿ i Sites	-h Cha	Name Iss
	Explore	loc
p 😔 quota	Edit Perm	issions *.g
e? 2	Add Appli Add Virtu	ication al Directory
	Edit Bindi	ngs
	Manage V	Nebsite 🕨
6 2	<u>R</u> efresh	
×	Remove	
	Rename	
	Switch to	Content View

At the binding dialog, edit the https binding.

Gla	adinet	Copyright 2014 Gladinet				
			? X			
	Type http https	Host Name	Port 80 443	IP Address * *	Binding Informa	<u>A</u> dd <u>E</u> dit <u>R</u> emove <u>B</u> rowse
						Close

Now change the SSL Certificate binding dropdown to the imported SSL certificate.

	Edit Site Binding		? X
Type: https	IP address: V All Unassigned	Port:	
Host name:			
Require Server	Name Indication		
CCI			
stargladinet	~	Select	View
	[ОК	Cancel

Step 10: Set up Worker Node properties

Log in to the Web Portal as the master administrator, and click on the "Cluster Worker Node" page.

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Wersion Management UI Node Name Version Management UI Image: Colspan="2">Colspan="2" Management UI Management UI Image: Colspan="2">Colspan="2" Image: Colspan="2"	Tena Worker	ants Manager Cluster Admin Application	Manager Email Service Cluster Branding	Guest Users Cluster Worker Nodes	Cluster Web Nodes
Node Name Version Management UI Management UI 1 node1 5.7.910.29781 Yes Image: Image	Work	ker Node			
1ode16.7.9.0.29781Yes<		Node Name	Version	Management UI	
Always force SSL on Login When checked, users visiting the login page through external DNS name will be redirected to SSL (HTTPS) if the connection comes in over HTTP. After login, the worker node's external URL will be used to communicate with the client. Always force SSL for Native Clients When checked, the native client will always access the cluster using https. Disable worker-node load balancing (Use this setting when load balancing has already been implemented (eg. at the DNS leve)). All user interaction will stay at the same incoming worker-node.) Per-tenant loadbalancing: Always load balance users from the same tenant to the same node. This works best if you have many tenants. Per-user loadbalancing: Load balance users to different nodes regardless of tenant membership. This works best if you have a few large tenants.	1	node1	5.7.910.29781	Yes	2 🖬 🗟
 When checked, users visiting the login page through external DNS name will be redirected to SSL (HTTPS) if the connection comes in over HTTP. After login, the worker node's external URL will be used to communicate with the client. Always force SSL for Native Clients When checked, the native client will always access the cluster using https. Disable worker-node load balancing (Use this setting when load balancing has already been implemented (eg. at the DNS level). All user interaction will stay at the same incoming worker-node.) Per-tenant loadbalancing: Always load balance users from the same tenant to the same node. This works best if you have many tenants. Per-user loadbalancing: Load balance users to different nodes regardless of tenant membership. This works best if you have a few large tenants. 	Alway	s force SSL on Login			
	e w	hen checked, the native client will always access the cluster using	https.		
	ູ wi Disabl	hen checked, the native client will always access the cluster using le worker-node load balancing (Use this setting when load balanci Per-tenant loadbalancing: Always load balance users from the sa Per-user loadbalancing: Load balance users to different nodes re	https. ng has already been implemented (eg. at the DNS level). All user interact une tenant to the same node. This works best if you have many tenants. sgardless of tenant membership. This works best if you have a few large	on will stay at the same incoming worker-node.) ienants.	
		hen checked, the native client will always access the cluster using le worker-node load balancing (Use this setting when load balanci € Per-tenant loadbalancing: Always load balance users from the sa ⊃ Per-user loadbalancing: Load balance users to different nodes re	https. ng has already been implemented (eg. at the DNS level). All user interact une tenant to the same node. This works best if you have many tenants. gardless of tenant membership. This works best if you have a few large	on will stay at the same incoming worker-node.)	
	<pre> wi Disable</pre>	hen checked, the native client will always access the cluster using le worker-node load balancing (Use this setting when load balanci ₽ Per-tenant loadbalancing: Always load balance users from the se > Per-user loadbalancing: Load balance users to different nodes re	https. ng has already been implemented (eg. at the DNS level). All user interact une tenant to the same node. This works best if you have many tenants. gardless of tenant membership. This works best if you have a few large	on will stay at the same incoming worker-node.) enants.	

Now check the "Always force SSL on Login" and "Always force SSL for Native Clients".

NOTES: If you use self-signed SSL certificate, the web portal is the only client that allows you to login after some SSL certificate warning. All other native clients such as Windows, mobile, and Mac clients will reject the connection.

- (<u> </u>											
7	Gla	Gladínet Cloud (For Evaluation - Unicensed)										
<	Ten	nants Manager	Cluster Admin	Application M	anager Email Service	Cluster Branding	Guest Users	Cluster Worker Nodes	Cluster Web Node	es 📄 >		
	1 Worke	er Node(s)						Add New Worl	ker Node Ret	iresh		
	Wor	rker Node										
		Node Name			Version		Management U	I				
	1 node1 5.7.910.29781 Yes								2 🖬 🗟			
	Aways force SSL on Login											
	😔 v	When checked, user	s visiting the login page th	rough external DNS nam	e will be redirected to SSL (HTTPS)	if the connection comes in over HT	TP. After login, the wor	ker node's external URL will be used	d to communicate with the cl	ient.		
	Always force SSL for Native Clients											
	🧿 v	When checked, the r	native client will always acc	ess the cluster using http:	35 .							
		ble worker-node lo	d balancing (Ire this sett	ing when load balancing	har already been implemented (eg	at the DNS level). All user interact	ion will stay at the same	incoming worker-node)				
	Disable worker-node load balancing (Use this setting when load balancing has already been implemented (eg. at the DNS level). All user interaction will stay at the same incoming worker-node.) Per-tenant loadbalancing: Always load balance users from the same tenant to the same node. This works best if you have many tenants. Per-user loadbalancing: Load balance users to different nodes regardless of tenant membership. This works best if you have a few large tenants.											
H	-	Σ		🐑 🔚					- 18 19 (4:50 PM		

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You will also modify the node property for the node. The Node Name needs to match the hostname of the node.

1 Worke	r Node(s)			
				•
	Node Name	Edit Worker Node	8	ement UI
1	node1	Γ	1	
🗹 Alwa	ys force SSL on Login	Node Name (Computer Name)		
- v	When checked, users visiting the login page through external DNS name w	node1	i	n, the worker node's external URL will be used to communicate with the client.
🗹 Alwa	ys force SSL for Native Clients	Euternal IIPI (https://mudamain.com)		
9 v	When checked, the native client will always access the cluster using https.	https://file.tsys.gladinet.com		
Disa	ble worker-node load balancing (Use this setting when load balancing has		81	t the same incoming worker-node.)
	Per-tenant loadbalancing: Always load balance users from the same ter Per-user loadbalancing: Load balance users to different nodes regardle	Internal URL (https://mydomain.com)@		
		Usable management funcationality on this node		
		Apply		

Edit Worker Node 😵	lem	Administrat
		Microsoft Windows [Version 6.3.9600] (c) 2013 Microsoft Corporation. All r
Node Name (Computer Name)		C:\Users\administrator>hostname node1
node1	in, t	C:\Users\administrator>
External URL (https://mydomain.com)		
https://file.tsys.gladinet.com		
	at th	
Internal URL (https://mydomain.com)		
http://node1		

The external URL shall match the external URL for HTTPS. (If you do not have SSL certificate installed yet, this can be HTTP for now).

The internal URL will be the internal IP address or private DNS name.

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W	٠k	er		e	

	Node Name		Edit Worker Node	8	jement Ul
1	node1	ſ			
🗹 Alwa	ys force SSL on Login		Node Name (Computer Name) 🥹		
9 v	/hen checked, users visiting the login page through external DNS name w	u	node1		in, the worker node's exterr
🗹 Alwa	ys force SSL for Native Clients		External IIRI (https://mwdomain.com)		
💡 v	/hen checked, the native client will always access the cluster using https.		https://file.tsys.gladinet.com		
🗌 Disal	le worker-node load balancing (Use this setting when load balancing has	s			at the same incoming worke
			Internal URL (https://mydomain.com)		
	Per-tenant loadbalancing: Always load balance users from the same ter Per-user loadbalancing: Load balance users to different nodes regardle		http://192.168.2.10		
			Disable management funcationality on this node		
			Apply		

Step 11: Verify External URL, Internal URL and Node Name

Verify External URL

It is very straight forward to verify external URL is set correctly. You just need to point your web browser to the external URL and verify that the Login Page shows up and there is no SSL warning.

Verify Internal URL

For the verification of Internal URL, you can use the Node Performance page to make sure the node performance information shows up.



Verify Node Name

To verify node name is correct, you will do a folder share and verify the email received is correctly pointing to external URL.

Gladinet Cloud Enterprise Installation	n Guide		Copyright 2014 Gladinet
	lust 🥜 Gladinet Cloud - Default Clust.	. 🥜 Gladinet Cloud - Default Cl 🗙	Perfault Cluster Admin (joe@gladinet.com) •
Upload V Create Folder			Gladinet Cloud
Name Image: Test Folder Image: Delete Image: Publish as team folder - Test Folder Image: Share Test Folder Image: Copy Image: Copy	Size	Last Modified less than 1 minute ago	Image New A bann folder is a shared workspace to collaborate with heam members. You can assign team members, with read/write permissions. Image New Image New O Shared Item(s) Manage New Securely send links of files and folders to share with people. Image New Image New Clears Image New Clears Image New Clears Image New Image New </td
http://icalhot/webui/epipret/inde-mtsteal.html5			▲ 🕞 😳 👍 5:27 PM

If you just need one single worker node, you can stop here. It is all set and ready.

Step 12: Add the node to the Load Balancer

This step depends on the type of Load Balancer you have.

The following will use Windows Server 2012 Network Load Balancer as an example. In the active directory (tsys.gladinet.com), we create a file.tsys.gladinet.com NLB cluster with virtual IP = 192.168.2.30.

NOTE: Network Load Balancer is a standard Windows Server 2012 feature.

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1	Network Load Balancing Manager											×			
<u>F</u> ile <u>C</u> luster	r H <u>o</u> st C	ptions <u>H</u> el	р												
🖃 🤹 Netwo	ork Load Ba	lancing Clust	ers		Port n	ules configured on N	VODE1 (Ethernet(D)							
🖻 💱 file	e (192.168.2	.30)			Cluste	er IP address	Status	Start	End	Protocol	Mode	Priority	Load	Affinity	Timeo
	NODE1(Et	hernet0)			A		Enabled	0	65535	Both	Multiple	-	Equal	Single	N/A
Log En D)ate	Time	Cluster	Host		Description									
0001 //	/18/2014	6:37:20 PM				NLB Manager sess	sion started								
0002 //	/18/2014	6:37:27 PIVI				Loading locally bo	ound instances	on from hort	"node1 tovs als	adinet.com" for	r cluster 102.16	0			
0005 //	/ 10/ 2014	0.37:29 PW				Loading configure		in nom nöst	nouencsysigh	samet.com fo	Guster 192.10				

We can verify that the 192.168.2.30 virtual IP is loading in web browser:

C المعادي ا معادي المعادي المع معادي المعادي معادي معادي المعادي معادي معا معادي معادي المعادي المعادي معادي م	□ × ☆ ☆
	Gladinet
	<u> </u>
	Sign In
1 Y	Forgot your password?
©2008-2014 GLADINET, INC. ALL RIGHTS	RESERVED. (Build 5.7.910.29781)

Step 13: Setup the Second Node (Worker Node #2)

There are two options to setup the second node.

Option 1 – GUI Setup

The first way is to repeat the exact same steps for setting up the first worker node. If it is possible to sit in front of the console or the Remote Desktop Console and click through the installation wizard, this is very straight forward to install worker nodes.

If GUI installer is all you need, you can skip the Options 2 section.

Option 2 – Command Line Script Setup

There is also a second option to clone the first node to the second node. The second option is completely scriptable. In case you need to prepare 10+ worker nodes, the second option may be easier compared to sitting in front of the Graphic User Interface and clicking through the UI keys and buttons.

To explain scripting, we will break up the script into steps. Once you understand what each step does, you can put all the command lines together into a single script file.

For scripting we use PowerShell, so all the commands below will be executed inside PowerShell.

13.1 - Preparation on the Worker Node #1

We will clone the program files and the registry entry. This step will export the registry and save them as registry files first. Also, we will save the SSL certificate here as well. This is a one-time preparation step.

(The bold text with character shading indicate script commands to run.)

On worker node #1, first we will make a directory to store the registry file

mkdirc:\depot

After that, we will change directory into the folder

cd c:\depot

We will export the 64-bit of the registry key

reg export HKEY_LOCAL_MACHINE\SOFTWARE\Gladinet gladinet64.reg /reg:64

The operation completed successfully.

We will export the 32-bit of the registry key

reg export HKEY_LOCAL_MACHINE\SOFTWARE\Gladinet gladinet32.reg/reg:32

The operation completed successfully.

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Now, we will verify the two registry files exported into our depot directory.

C:\depot>dir

Directory of C:\depot 07/19/2014 12:20 AM

762 gladinet32.reg

07/19/2014 12:20 AM

546 gladinet64.reg



Now copy the SSL certificate file into this folder as well.

After copying in the SSL certificate in the depot directory, the directory structure will look like this:

NOTE: When you export the SSL certificate, also import the private key.



We will also need to get the SSL certificate's Thumbprint for later use by using a PowerShell Command. The thumbprint string will be used in script to import SSL certificate to IIS automatically. For example, the thumbprint below will be used later.

E88BC131D403B9EF5AA44DC520D3BABDB93E5886

PS C:\> Get-ChildItem -path cert:\LocalMachine\My

Directory: Microsoft.PowerShell.Security\Certificate::LocalMachine\My
Thumbprint Subject
E88BC131D403B9EF5AA44DC520D3BABDB93E5886 CN=*.gladinet.com, OU=COMODO SSL Wildcard,
OU=Domain Control Validated

E50A764700D92D717E8CE21DCF99CAB5F5280198 CN=localhost

13.2 - Clone Program Files

Now, on worker node #2, we will copy c:\Program Files (x86)\Gladinet Cloud Enterprise from worker node #1 to worker node #2

We will go to the worker node2's administrative command prompt with PowerShell.

First change directory to the c:\Program Files (x86)\ directory.

cd "C:\Program Files (x86)"

Second, we will map a network drive to the worker node #1.

net use z: \\node1.tsys.gladinet.com\c\$

Third, we will copy over the "Gladinet Cloud Enterprise" folder.

robocopy "z:\Program Files (x86)\Gladinet Cloud Enterprise" "Gladinet Cloud Enterprise" /s

When it is done, the PowerShell Window looks like this:

		Administrato	r: Windows Pow	erShell	_ D X
100% New Fi 100% New Fi	e 198 e 113 e 197 e 198 e 198 e 198 e 198 e 198 e 126 e 126 e 126 e 127 e 125 e 113 e 127 e 70	window-he window-he window-he window-he window-he window-he window-he window-he window-he window-he window-he window-he window-he window-he	ader-default-cc ader-default-cc ader-default-cc ader-default-cc ader-default-cc ader-default-cc ader-default-le ader-default-le ader-default-le ader-default-ri ader-default-ri ader-default-ri ader-default-ri ader-default-ri ader-default-ri	<pre>bllapsed-left-corners.gif bllapsed-left-sides.gif bllapsed-right-corners.gif bllapsed-right-corners.gif bllapsed-top-corners.gif bllapsed-top-corners.gif bllapsed-top-sides.gif blt-corners.gif ft-corners.gif ght-corners.gif ght-sides.gif ght-sides.gif bp-corners.gif bp-sides.gif bp-sid</pre>	^
Tot Dirs : 15 Files : 196 Bytes : 392.74 Times : 0:02: Speed : Speed : Ended : Saturda PS C:\Program File	<pre>Copied Skipped T 1577 0 T 19697 0 m 392.74 m 0 S 0:01:59 3447518 Bytes/sec. 197.268 MegaBytes/ r, July 19, 2014 12:02: s (x86)></pre>	Mismatch FA] 0 0 0:00 0:00 0:00	LED Extras 0 0 0 0 :00 0:00:55		~

13.3 - Clone the Registry

Now we will copy over the registry file from worker node #1.

On worker node #2, first we will create a folder to receive the files

C:\>mkdir c:\depot

After that, we will change directory into the folder

C:\>cd c:\depot

Now, we will copy over the registry files (the z: drive is already mapped to worker node #1's c\$ share)

C:\depot>copy z:\depot*.*

z:\depot\gladinet32.reg

z:\depot\gladinet64.reg

2 file(s) copied.

Now, import the registry files. 32-bit first

C:\depot>reg import gladinet32.reg /reg:32

The operation completed successfully.

Now import the registry file. 64-bit second

C:\depot>reg import gladinet64.reg /reg:64

The operation completed successfully.

Car.	Administrator: Command Prompt	_ D X
C:∖depot>reg import The operation comple	gladinet32.reg /reg:32 ted successfully.	<u>^</u>
C:∖depot≻reg import The operation comple	gladinet64.reg /reg:64 ted successfully.	
C:\depot>cd "\Progra	m Files (x86)"	
C:\Program Files (x8	6>>cd "Gladinet Cloud Enterprise"	· · · · · · · · · · · · · · · · · · ·

13.4 - Command Line Setup for the IIS ASP.NET and WCF applications.

Next, we need to make sure IIS WebServer role is enabled, WCF is activated and so on.

Enable IIS-WebServer first

dism /online /enable-feature /featurename: IIS-WebServer /all



Enable IIS Management Console

dism /online /enable-feature /featurename: IIS-ManagementConsole /all

61	Administrator: Command Prompt	_	x
C:\> C:\> C:\> C:\>dism /online /enable-feature /featurename	e:IIS-ManagementConsole /all		^
Deployment Image Servicing and Management too Version: 6.3.9600.17031	1		
Image Version: 6.3.9600.17031			
Enabling feature(s) [99.8% The operation completed successfully.]		
<u>C:\></u>			~

Enable ASP.NET45

dism /online /enable-feature /featurename:IIS-ASPNET45 /all



Enable WCF

dism /online /enable-feature / feature name: WCF-HTTP-Activation 45 /all



Setup Web Applications

Run the following command to set it up.

& "c:\Program Files (x86)\Gladinet Cloud Enterprise\AppConfigCmd.exe" configapp

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13.5 - Import SSL Certificate

First we copy over the SSL certificate from node1

cd c:\depot

copy /y z:\depot*.pfx

Then we import the certificate, replace the <password> with the real password of the PFX file.

certutil -p <password> -importPFX wildcard_export_1_20_14.pfx

After that, we will use PowerShell command to set it up in IIS. First we need to import the WebAdministration module.

PS C: > Import-Module WebAdministration

After that, we will go to the SslBindings

PS C:\>cd IIS:\SslBindings

PS IIS:\SslBindings> del *

Now, we use the certificate and apply it to IIS. In the example below, the E88...886 thumbprint part matches the thumbprint string we had earlier on worker node #1

PS IIS:\SslBindings> get-item cert:\LocalMachine\My\E88BC131D403B9EF5AA44DC520D3BABDB93E5886 | New-Item 0.00.0!443

		Administrator: Windows PowerShell				
IP Address 0.0.0.0	Port Host Name 443	Store My	Sites Default Web Site	<u>^</u>		
PS IIS:\SslBindings	> dir					
IP Address	Port Host Name	Store	Sites			
0.0.0.0	443	My	Default Web Site			
PS IIS:\SslBindings PS IIS:\SslBindings PS IIS:\SslBindings PS IIS:\SslBindings PS IIS:\SslBindings	> de] * > dir > get-item cert:\LocalM; >	achine\My\E88BC131	D403B9EF5AA44DC520D3BABDB93E5886 New-Item 0.0	0.0!443 🗸		

Now, Worker Node #2 will be ready after a reboot. Reboot now.

13.6 - Sanity Check Worker Node #2

After worker node #2 is up, you can use the <u>http://localhost</u> on worker node to check that the worker node #2 is running.



13.7 - Add the worker node 2 to the cluster

While we are doing sanity check for worker node #2, we can also register it to the cluster by log in as the Master Administrator. Go to the "Cluster Worker Nodes" page and do "Add New Worker Node".

The Node Name will match the Host Name. The external URL will match the virtual IP or the DNS name for the load balanced DNS name. The internal URL will match the internal IP address or internal DNS name.

You can also repeat the same validation methods for the setup as we have done for worker node #1.

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1 Worker Node(s)		Add New Wo	rker Node Refresh	
Worker Node	Add New Worker Node	×		
Node Name	Node Name (Computer Name) 🥹	111		
1 node1	node2		R 11 R	
✓ Always force SSL on Login				
When checked, users visiting the login page throu	External URL (https://mydomain.com)	in over HTTP. After log	jin, the worker node's external URL	
will be used to communicate with the client.	http://192.168.2.30			
Always force SSL for Native Clients				
When checked, the native client will always access	t Internal URL (https://mydomain.com)			
Disable worker-node load balancing (Use this setting	http://192.168.2.21	r interaction will stay	at the same incoming worker-	
node.)	Disable management funcationality on this node			
Per-tenant loadbalancing: Always load balance	u l	r tenants.		
✓ ○ Per-user loadbalancing: Load balance users to	d	few large tenants.		
	Арріу			

After it is added.

2 Worl	ker Node(s)		Add New Worker No	ode <u>Refresh</u>
W	orker Node			
	Node Name	Version	Management UI	
1	node1	5.7.910.29781	Yes	2 💷 🗟
2	node2	5.7.910.29781	Yes	2 🖬 🙀
	ways force SSL on Login When checked, users visiting the login page through will be used to communicate with the client.	external DNS name will be redirected to SSL (HTTPS) i	f the connection comes in over HTTP. After login, the	worker node's external URL
✓ Alv	ways force SSL for Native Clients			
A	When checked, the native client will always access th	e cluster using https.		
		en load balancing has already been implemented (eg	at the DNS level). All user interaction will stay at the s	ame incoming worker-

13.8 - Add the worker node #2 to the Load Balancer.

This step depends on the kind of load balancer you have.

Skip this if you are not using Windows 2012 NLB.

In the case of Windows 2012 R2 Network Load Balancer, You will add it in the "Network Load Balancing Management".

1		Server Manager	_ 0 X
R	Construction Server M Server All Server All Server File and Storage Services If S	Server Manager > Dashboard • • • • • • • • • • • • • • • • • • •	Manage Tools View Help Cluster-Aware Updating Computer Management Defagment and Optimize Drives Event Viewer Failover Cluster Manager Internet Information Services (IIS) Manager SCSI Initiator Local Security Policy Network Load Balancing Manager ODBC Data Sources (84-bit) OBC Cata Sources (84-bit) OBC Data Sources (84-bit) Windows Prievall With Advanced Security Windows PowerShell Windows PowerShell SE Windows PowerShell SE Windows Server Backup
		All Servers 1	- िि 22 de 11:58 AM 7/19/2014

After adding the Node2, it looks like this.

٨					Network L	oad Balancin	g Manager				- 5	x I		
<u>File</u> <u>C</u> lus	ster H <u>o</u> st	O <u>p</u> tions <u>H</u> el	р											
Betwork Load Balancing Clusters					Host configuration information for h	Host configuration information for hosts in cluster file (192.168.2.30)								
ian and a second secon					Host (Interface)	Status	Dedicated IP address	Dedicated IP subnet mask	Host priority	Initial host st	ate			
	NODE2(E	Ethernet0)			NODE2(Ethemet0)	Converged	192.168.2.21	255.255.255.0	2	started				
L	NODE1(E	Ethernet0)			NODE1(Ethemet0)	Converged	192.168.2.20	255.255.255.0	1	started				
LogEn	Data	Time	Cluster	Hort	Description									
0001	7/10/2014	11.50.20 A	Cluster	HUSE	NI P Manager session star	tod								
0001	7/19/2014	11:09:50 A			NLD Wanager session star	teu								
0002	7/19/2014	11:09:56 A			Loading locally bound ins	lances								
0003	7/19/2014	11:59:40 A			Loading configuration inf	ormation from h	ost "node i tsys.gladinet.co	om" for cluster 192.108						
0004	//19/2014	11:59:43 A			Loading configuration inf	ormation from h	ost "node2.tsys.gladinet.co	om" for cluster 192.168						

13.9 Pre-Compile ASP.NET Pages

It is not required to pre-compile ASP.NET pages because ASP.NET does just-in-time compile so the first user hitting a specific ASP.NET page will get the page compiled.

However, for best performance, we can precompile the ASP.NET pages.

PS C:\Windows\Microsoft.NET\framework64\v4.0.30319>.\aspnet_compiler.exe /v portal | Out-Null

PS C:\Windows\Microsoft.NET\framework64\v4.0.30319> .\aspnet_compiler.exe /v management | Out-Null

Step 14: Setup Worker Node #3

The step to setup worker node #3 is exactly the same as setup for worker node #2.

You can continue to use the GUI installer to setup worker node #3.

If you are using the script option, now it is a good time to put-it-all-together of the scripts we used setting up worker node #2.

Here is an example of the put-it-all-together script to run inside PowerShell window on Worker node #3.

Example Script running from beginning to end.

```
Windows PowerShell
Copyright (C) 2013 Microsoft Corporation. All rights reserved.
```

```
PS C:\Users\administrator> cd "C:\Program Files (x86)"
PS C:\Program Files (x86)> net use z: \\nodel.tsys.gladinet.com\c$
The command completed successfully.
```

```
PS C:\Program Files (x86) > robocopy "z:\Program Files (x86) \Gladinet Cloud Enterprise" "Gladinet
Cloud Enterprise" /s > copy.log
PS C:\Program Files (x86) > mkdir c:\depot
```

Directory: C:\

Mode	Last	WriteT	ime	Length	Name
d	7/19/2014	12:14	PM		depot

```
PS C:\Program Files (x86)> cd c:\depot
PS C:\depot> copy z:\depot\*.*
PS C:\depot> reg import gladinet32.reg /reg:32
The operation completed successfully.
PS C:\depot> reg import gladinet64.reg /reg:64
The operation completed successfully.
PS C:\depot> dism /online /enable-feature /featurename:IIS-WebServer /all
```

```
Deployment Image Servicing and Management tool Version: 6.3.9600.17031
```

Image Version: 6.3.9600.17031

Enabling feature(s) The operation completed successfully. PS C:\depot> dism /online /enable-feature /featurename:IIS-ManagementConsole /all Deployment Image Servicing and Management tool Version: 6.3.9600.17031 Image Version: 6.3.9600.17031 Enabling feature(s) The operation completed successfully. PS C:\depot> dism /online /enable-feature /featurename:IIS-ASPNET45 /all Deployment Image Servicing and Management tool Version: 6.3.9600.17031 Image Version: 6.3.9600.17031 Enabling feature(s) The operation completed successfully. PS C:\depot> dism /online /enable-feature /featurename:WCF-HTTP-Activation45 /all Deployment Image Servicing and Management tool Version: 6.3.9600.17031 Image Version: 6.3.9600.17031 Enabling feature(s) The operation completed successfully. PS C:\depot> & 'C:\Program Files (x86)\Gladinet Cloud Enterprise\AppConfigCmd.exe' configapp PS C:\depot> certutil -p 2pwd12Apass -importPFX wildcard export 1 20 14.pfx Certificate "stargladinet" added to store. CertUtil: -importPFX command completed successfully. PS C:\depot> Import-Module WebAdministration PS C:\depot> cd IIS:\SslBindings PS IIS:\SslBindings> del * PS IIS:\SslBindings> get-item cert:\LocalMachine\My\E88BC131D403B9EF5AA44DC520D3BABDB93E5886 | New-Item 0.00.0!443

Now reboot Worker Node #3 and it is ready. Now you can follow the same step as in worker node #1 and worker node #2 to add them to cluster and add them to load balancer.

After reboot, you can also optionally pre-compile the ASP.NET pages.

ΡS

```
C:\Windows\Microsoft.NET\framework64\v4.0.30319> .\aspnet_compiler.exe
```

/v portal | Out-Null

PS IIS:\SslBindings>

PS

```
C:\Windows\Microsoft.NET\framework64\v4.0.30319> .\aspnet_compiler.exe
/v management | Out-Null
```

Branding

Branding has two components. The first component is the self-service branding. The second component is Gladinet provided full-service branding.

Self-Service Branding

The self-service branding starts with the "Cluster Manager". In order to start the branding, you will login to the web portal as the Master Administrator.

_ 0 🗲 😔 🥜 http://localhost/management/Cluster/Mgr.aspx 🛛 🔎 👻 🕝 Gladinet Cloud - Default Cl... 🗴 ☆ ☆ **Gladinet** Cloud Cluster Id: B/YQuZlygfY/UrsTNWCl8gEFmySONT1wMDWGDBreu26x4eJFcdsKj9ToMMq7jnjr ሪ Tenants Manager Cluster Admin Email Service Cluster Branding Guest Users Cluster Worker No Web Portal Windows Client General Mac Client Emails Export/Import Product Name What you want to call the product Blue $\mathbf{\sim}$ Web-UI Theme (takes effect after next login): Don't allow user change theme 'Contact Us' URL The URL of your contact us page 'Feedback' Email The Email account that will receive user feedback 'Home Page' URL The URL of your 'Home' page 'Term of Use' URL The LIRL of your 'Term of Lise' nage

After you login to the web portal, click to the "Cluster Branding" Pages.

Best Practice to store self-service images. It is best to store the images under c:\program files (x86)\Gladinet Cloud Enterprise\root\images. This folder is not part of the Gladinet Cloud Enterprise install so you can create the folder and store images there. As this folder is not part of Gladinet Install, the folder will not be replaced during upgrade.

After that, you can reference the images using relative path such as /images/pic.jpg

If you use relative path, you can finish the branding first on worker node #1. After that, you can copy the branding artworks to worker node #2 and worker node #3.

Full-Branding Service

If you have full-branding service arrangement with Gladinet, you will also receive the Windows/Mac/Mobile client packages with full-branding artworks and access points built-in.

Upgrade

There are also two options to upgrade to a later build.

The first option is the same as the GUI installer. You can always run the GUI installer and the installer will detect the existing installation and perform an upgrade.

The second option is also the script way of performing upgrade.

You will receive a zip file from Gladinet, which contains updated binaries for c:\program files (x86)\Gladinet Cloud Enterprise folder.

You can also download the windows client and replace it on your current installation, without ungrading the whole GCE package.							
13% of upgrade910.zip downloaded	1 min 36 sec remaining	Pause	Cancel	View downloads	×		

Step 1 – Unzip the Folder

Unzip the folder to a location, such as on node1 under c:\upgradeNNN\

	x
💿 🎍 Extract Compressed (Zipped) Folders	
Select a Destination and Extract Files	
Files will be extracted to this <u>f</u> older:	
C:\upgrade910 Browse	
✓ Show extracted files when complete	
<u>E</u> xtract Cano	:el

After unzipping, it looks like this:

Copyright 2014 Gladinet

		upgrade910				L		x	
E Home SI	hare View							~ (E
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Step 2 – Copy files over to the Program Files.

When you compare the folder structure of the zipped folder, you will see it mirrors the existing folder structure for c:\program files (x86)\Gladinet Cloud Enterprise. We will copy it over.

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	퉬 monitor	7/20/2014 12:30 PM F	ile folder		👝 SQL LOG (L:)	퉬 monitor	7/18/2014 11:54 AM	File folder	
	퉬 namespace	7/20/2014 12:30 PM F	ile folder		👝 SQL DATA (M:)	퉬 namespace	7/18/2014 11:54 AM	File folder	
	퉬 portal	7/20/2014 12:30 PM F	ile folder		igen SSAS (O:)	퉬 portal	7/18/2014 11:54 AM	File folder	
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	퉬 root	7/20/2014 12:30 PM F	ile folder		📬 Network	鷆 root	7/20/2014 1:19 AM	File folder	
	퉬 UploadDownloadProxy	7/20/2014 12:30 PM F	ile folder			퉬 UploadDownloadProxy	7/18/2014 11:54 AM	File folder	
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	퉬 webui	7/20/2014 12:30 PM F	ile folder			鷆 webui	7/18/2014 11:55 AM	File folder	
	AppConfigCmd	7/20/2014 12:30 PM A	Application	259		AppConfigCmd	1/17/2014 3:27 AM	Application	259
	🛃 banner_bgonly	7/20/2014 12:30 PM B	litmap image	137		banner_bgonly	6/10/2014 10:33 PM	Bitmap image	137
	🧼 brand	7/20/2014 12:30 PM Id	con	185		Ø brand	6/10/2014 10:33 PM	lcon	185
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	💩 installEntGUI	7/20/2014 12:30 PM A	Application	6,859		총 installEntGUI	7/11/2014 3:08 PM	Application	6,859
	launchent	7/20/2014 12:30 PM A	Application	89		launchent	5/29/2014 6:34 AM	Application	89
	makecert	7/20/2014 12:30 PM A	Application	55		💷 makecert	6/10/2014 10:34 PM	Application	55
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32 items					32 items				800
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Before you copy it over, we need to stop two services.

sc stop gcmon

iisreset /stop

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C4	Administrator: Command Prompt	C
07/19/2014 11:49 PM <d 07/18/2014 03:54 PM <d 07/18/2014 04:23 PM <d 07/18/2014 11:48 AM <d 07/19/2014 11:53 PM <d 0 File(s) 10 Dir(s) 7</d </d </d </d </d 	IR> Program Files IR> Program Files (x86) IR> SearchRoot IR> Users IR> Windows Ø bytes 3,624,662,016 bytes free	^
C:∖>sc stop gcmon		
SERVICE_NAME: gcmon TYPE STATE WIN32_EXIT_CODE SERVICE_EXIT_CODE CHECKPOINT WAIT_HINT C:\>iisreset /stop Attempting stop	: 10 WIN32_OWN_PROCESS : 3 STOP_PENDING	Ξ
Internet Services Successf	ally stopped	
C:\>_		_

Now you can copy the files over, over writing existing binary files.

After you are done copying, you can re-start the services.





iisreset/start