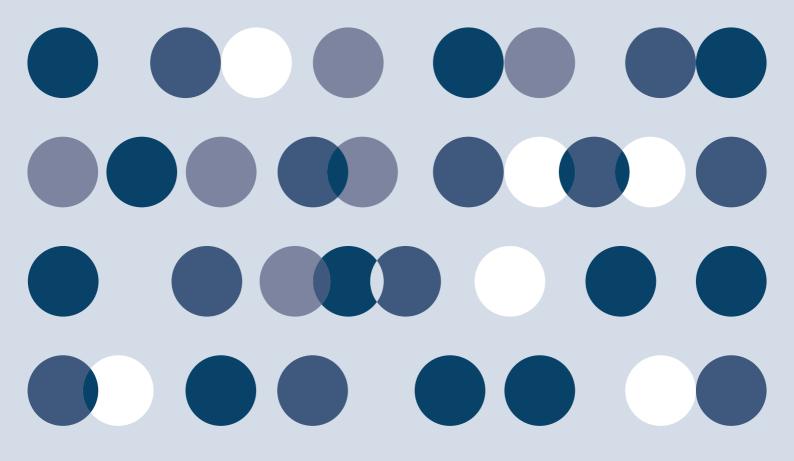
January 2017



# OTC CLEARING HONG KONG LIMITED

# OTC ACCOUNT SERVICES INFORMATION SYSTEM ("OASIS") CONFIGURATION GUIDE



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# Introduction

This document provides the Clearing Members of OTC Clear the installation procedures to configure their own PCs for accessing OASIS (also known as Web Portal).

The installation mainly comprises of the following 4 steps:

- 1. Hardware Setup
- 2. Communication Line Setup
- 3. Window IP Address and Configuration Setup
- 4. Additional configuration for Internet Explorer 9



# Step 1: Hardware Setup

The recommended OASIS user PC configurations are as follows:

Items	Descriptions		
Hardware	For MS Windows 7 Professional		
Configuration	Processor: Intel Core i5 2400 /3.1GHz		
	Memory: 4GB		
	Local Hard Disk: 500GB		
Software	Operating System (OS): MS Windows 7 Professional		
Configuration	Browser: Best viewed by Internet Explorer 9.0 (IE 9.0)		
	• Java Runtime Environment : JRE 6.0		

# **Step 2: Communication Line Setup**

# Step 2.1

# Connect the PC to SDNet/2 Routers

Step 2.1.1:

Ensure the Metro Ethernet communication lines and routers are installed and configured properly by the SDNet/2 service vendor

Step 2.1.2:

Connect the SDNet/2 routers to the LAN switch(es) with LAN cables. The LAN interface of the SDNet/2 router supports up to Gigabit Ethernet and it is configured as "Auto Negotiation" (i.e. both speed and duplex mode are auto). The LAN switch ports (connecting the SDNet/2 routers) should have similar "auto" configuration settings and must provide a single VLAN (Layer2) for connecting SDNet/2 router and the PC.

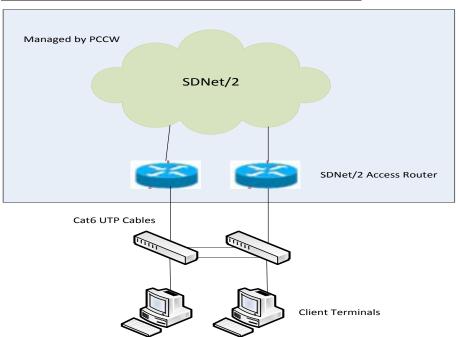
Step 2.1.3:

HSRP/VRRP group number on SDNet/2 router for OASIS will be assigned by the SDNet/2 service vendor. Clearing members should avoid using the same HSRP/VRRP group number in their network for applications other than OASIS.



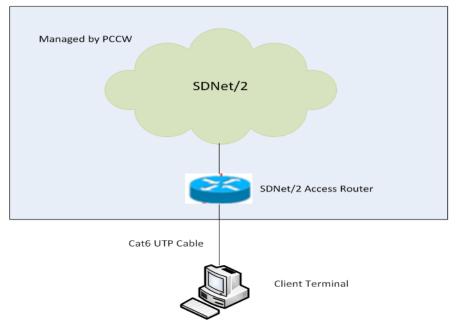
Step 2.1.4:

Connect the PC to the routers and LAN switch with LAN cables. There are two possible options to establish the connection:











#### Step 2.2 Firewall Setup

Open protocols are used to access OASIS, i.e. TCP/IP, HTTPS, DNS. Clearing Members may use Firewall to protect OASIS user PC which may resides in their internal network.

This section provides the necessary firewall setup information between OASIS user PC and the SDNet/2 routers.

The followings are the IP addresses of the production OASIS servers connecting the OASIS user PC:

Server	Production IP Address
HTTPS (Web Server – OASIS	10.154.11.22 (Primary)
Collateral Management Portal)	10.153.11.22 (Secondary)
HTTPS (Web Server – OASIS	10.154.11.22 (Primary)
Settlement Limit Enquiry Portal)	10.153.11.22 (Secondary)
HTTPS (Web Server – OASIS	10.154.11.23 (Primary)
Margin Simulator Portal)	10.153.11.23 (Secondary)
DNG Commen	10.154.11.21 (Preferred)
DNS Server	10.153.11.21 (Alternate)
OTC Secure File Transfer	10.154.11.71 (Primary)
(sFTP) for OASIS Reports	10.153.11.71 (Secondary)
Download Services	

The following services should be granted in the firewall.

	Port No.	Protocol	Direction	Descriptions
DNS	53	UDP	From OASIS user PC to DNS Server	Domain Name Service
HTTPS	443	ТСР	From OASIS user PC to Web Server	Online Traffic
SFTP	10022	ТСР	From OASIS user PC to OTC Secure File Transfer (sFTP) for OASIS Reports Download Services	SFTP report download services



### Access to development OASIS web portal

Clearing member is required to apply for development SDNet/2 link when there is a need to access development environment of OASIS web portal. As the IP addresses of one of the development environment (Production-like testing environment) will be the same as production, it is highly recommended to setup a dedicated network segment for testing OASIS user PC.

The development environment of OTC Secure File Transfer (sFTP) for OASIS reports download Services:-

Server	Development IP Address
OTC Secure File Transfer (sFTP) for OASIS Reports Download Services	10.154.11. <b>171</b> (Development)



### Source IP Address

Each Clearing Member is assigned with a pre-defined range of IP addresses. The Clearing Member should ensure that each OASIS user PC should appear with the same IP address as original in each connection. If there is any Network Address Translation (NAT) being performed, the Clearing member's firewall should translate it back to the original IP address range (assigned by network vendor) otherwise the terminal login authentication will fail. In addition, the NAT should be a one-to-one mapping to the terminal. In another words, the IP address of each OASIS user PC should be translated to a unique value within the original IP address range.



# Step 3: Windows IP Address and Configuration Setup - TCP/IP for SDNet/2 Router & Ethernet Card Connection

## Step 3.1

Login in as an *administrator* to perform the following procedures.

#### Step 3.2

Click "Start", go to the "Control Panel", then select "Network and Sharing Center"

~		
Control Panel 🕨 All Cont	trol Panel Items 🕨 👻 🚽	Search Control Panel
Adjust your computer's settings		View by: Small icons 🔻
🏲 Action Center	n Administrative Tools	📑 AutoPlay
🐌 Backup and Restore	💶 Color Management	Credential Manager
🐣 Date and Time	🗑 Default Programs	📑 Desktop Gadgets
🚔 Device Manager	national end Printers	🧧 Display
Ease of Access Center	📕 Flash Player (32-bit)	F Folder Options
💦 Fonts	📳 Getting Started	🤞 HomeGroup
🔏 Indexing Options	👺 Intel(R) 圖形和媒體	🔂 Internet Options
🛓 Java	📖 Keyboard	🖾 Location and Other Sensors
<li>Mail (32-bit)</li>	Ø Mouse	Network and Sharing Center
🔜 Notification Area Icons	Performance Information and Tools	Personal Network and Sharing Center
📰 Phone and Modem	Power Options	Program Check network status, change network settings and set preferen
🔊 Realtek HD Audio Manager	Precovery	Region a for sharing files and printers.
🐻 RemoteApp and Desktop Connections	🛋 Sound	Speech Recognition
😨 Symantec LiveUpdate (32-bit)	🔞 Sync Center	🕎 System
📃 Taskbar and Start Menu	📧 Troubleshooting	🍇 User Accounts
📑 Windows CardSpace	🕍 Windows Defender	🔗 Windows Firewall
Windows Update		

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# Step 3.3

Click "Local Area Connection" under "View you active networks"

	and there are been an		
🔆 🗢 🖳 🕈 Control Panel 🕨	All Control Panel Items   Network and Sharing Center	✓ ✓ Search Control Panel	م
Control Panel Home	View your basic network information and set up connections		
Change adapter settings Change advanced sharing settings	WOAF3421 CORP.HKEX 2 (Unauthenticat Internet (This computer)		
	View your active networks Connect or disconnect		
	CORP.HKEX 2 (Unauthenticated) Access type: Internet Public network Connections: U Local Area Connection		
	Change your networking settings  Set up a new connection or network Set up a wireless, broadband, dial-up, ad hoc, or VPN connection; or set up a router or access point.		
	Connect to a network Connect or reconnect to a wireless, wired, dial-up, or VPN network connection.		
	Choose homegroup and sharing options Access files and printers located on other network computers, or change sharing settings.		
	Troubleshoot problems Diagnose and repair network problems, or get troubleshooting information.		
See also			
HomeGroup			
Internet Options Windows Firewall			

# Step 3.4

# Click "Properties".

🃮 Local Area Connection State	is 💌
General	
Connection	
IPv4 Connectivity:	Local
IPv6 Connectivity:	Limited
Media State:	Enabled
Duration:	42 days 20:09:29
Speed:	100.0 Mbps
Details	
Activity	
Sent —	— 👽 — Received
Bytes: 1,238,975,6	670,115,394
Properties Disabl	e Diagnose
	Glose

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# Step 3.5

Check the box of "Internet Protocol Version 4 (TCP/IP)" and click then "Properties".

🃮 Local Area Connection Properties 🛛 💽
Networking
Connect using:
🔮 Broadcom NetXtreme Gigabit Ethernet
<u>C</u> onfigure
This connection uses the following items:
✓       Client for Microsoft Networks         ✓       ✓
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel



### Step 3.6

Select "Use the following IP address" radio button and enter the "IP address" and "Default gateway" assigned by your SDNet/2 service vendor (PCCW/WTT).

The service vendor will assign a set of unique "IP address" and "Default gateway" for **each** OASIS user PC.

Enter "255.255.255.0" for "Subnet mask".

Select "Use the following DNS server addresses" radio button and enter the "Preferred DNS server" and "Alternate DNS server" (if available) set out in Step 2.2 above. Enter "10.154.11.21" for "Preferred DNS" and "10.153.11.21" for "Alternate DNS Server", then click "OK".

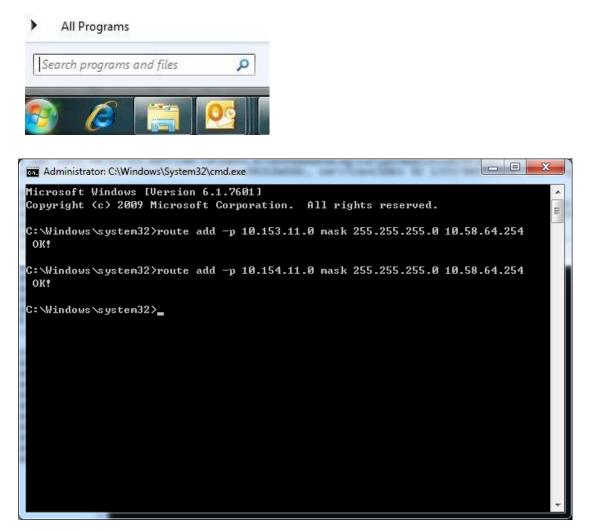
Internet Protocol Version 4 (TCP/IPv4)	Properties 🔹 😨 💌		
General			
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.			
Obtain an IP address automatical	ly		
Use the following IP address:			
IP address:			
S <u>u</u> bnet mask:	· · ·		
Default gateway:			
Obtain DNS server address auton	natically		
<ul> <li>Use the following DNS server add</li> </ul>	Iresses:		
Preferred DNS server:	· · ·		
<u>A</u> lternate DNS server:	· · ·		
	Advanced		
	OK Cancel		



## Step 3.7

Add static route in OASIS user PC/Server

Click "Start" and type "cmd.exe" in the search bar to retrieve the command window.



Input the following sample command: *route add –p 10.153.11.0 mask 255.255.255.0 x.x.x.254 route add –p 10.154.11.0 mask 255.255.255.0 x.x.x.254* 

Remarks: "x.x.x.254" represents the unique "Default gateway" assigned for each PC by the service vendor.



# Step 3.8 Restart the computer

# For Clearing Member having more than one OASIS user PC, please repeat step 3.6 to 3.8 for each PC.

# Reference information:

Range of IP address / Subnet mask (24-bit) to be assigned by the two SDNet/2 service vendors (PCCW/WTT):

- 1. PCCW 10.58.0.0/24 to 10.58.127.0/24
- 2. WTT 10.59.0.0/24 to 10.59.127.0/24

IP address range to be used by Clearing Members are x.x.x.65 ~ x.x.x.190.



# **Step 4: Configurations for Internet Explorer 9**

OASIS supports Internet Explorer 9, which can be downloaded on Microsoft's website <u>http://www.microsoft.com/windows/internet-explorer/default.aspx</u>.

## Step 4.1

Launch Internet Explorer, select Tools > Internet Options from the Menu Bar Select Security Tab, and then select the Internet zone Click "Custom level..." button

Internet Options			
General Security Privacy Content Connections Programs Advanced			
Select a zone to view or change security settings.			
Internet Local intranet Trusted sites Restricted sites			
Internet			
This zone is for Internet websites, except those listed in trusted and restricted zones.			
Security level for this zone			
Allowed levels for this zone: Medium to High			
Medium-high     Appropriate for most websites     Prompts before downloading potentially unsafe     content     Unsigned ActiveX controls will not be downloaded			
Enable Protected Mode (requires restarting Internet Explorer)      Custom level      Default level			
<u>R</u> eset all zones to default level			
OK Cancel Apply			

# Step 4.2

Select "**Enable**" for "Include local directory path when uploading files to a server", then click "OK"

Security Settings - Internet Zone	x
Settings	
Prompt	<u> </u>
Don't prompt for client certificate selection when no certificat	
<ul> <li>Disable</li> </ul>	
Enable	
Drag and drop or copy and paste files	
🔘 Disable	
Enable	
Prompt	
Include local directory path when uploading files to a server	
O Disable	
Enable	
Installation of desktop items	
Disable	
<ul> <li>Enable (not secure)</li> </ul>	
Prompt (recommended)	-
Launching applications and unsafe files	
*Takes effect after you restart Internet Explorer	
Reset custom settings	
Reset to: Medium-high (default)	
OK Canc	

# Step 4.3

It is noticed that, for intranet sites, Internet Explorer may enable Compatibility View by default. Please note that OASIS needs Compatibility View disabled for proper running.

Launch Internet Explorer, select Tools > Compatibility View Settings Uncheck the checkbox "Display intranet sites in Compatibility View" Then Close this settings window.

You can add and remove websites to be di Compatibility View.	splayed in
dd this website:	
	Add
ebsites you've added to Compatibility View:	
	Remove
Include updated website lists from Microsoft	
Display intranet sites in Compatibility View	
Display all websites in Compatibility View	

## Step 4.4

Go to OASIS Collateral Management Portal URL https://www.otcclearinghk.com/eSelfService

Go to OASIS Settlement Limit Enquiry Portal URL https://www.otcclearinghk.com/OnlineEnquiry/

or Go to OASIS Margin Simulator URL https://whatif.otcclearinghk.com/recon-services The following window will pop up, click "Close" to dismiss it.



Point to "Pop-up blocked" information bar, then right click on it and then click on "Always Allow Pop-ups from This Site..."

Pop-up blocked. To see this pop-up or additional options click here	Temporarily Allow Pop-ups		×
	Always Allow Pop-ups from This Site		*
	Settings		
	More information		

Click "Yes" to allow pop-ups from this site

Allow pop-ups from this site?	
Would you like to allow pop-ups from	
( <u>Yes</u> ) <u>N</u> o	

#