

January 2017

OTC CLEARING HONG KONG LIMITED

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

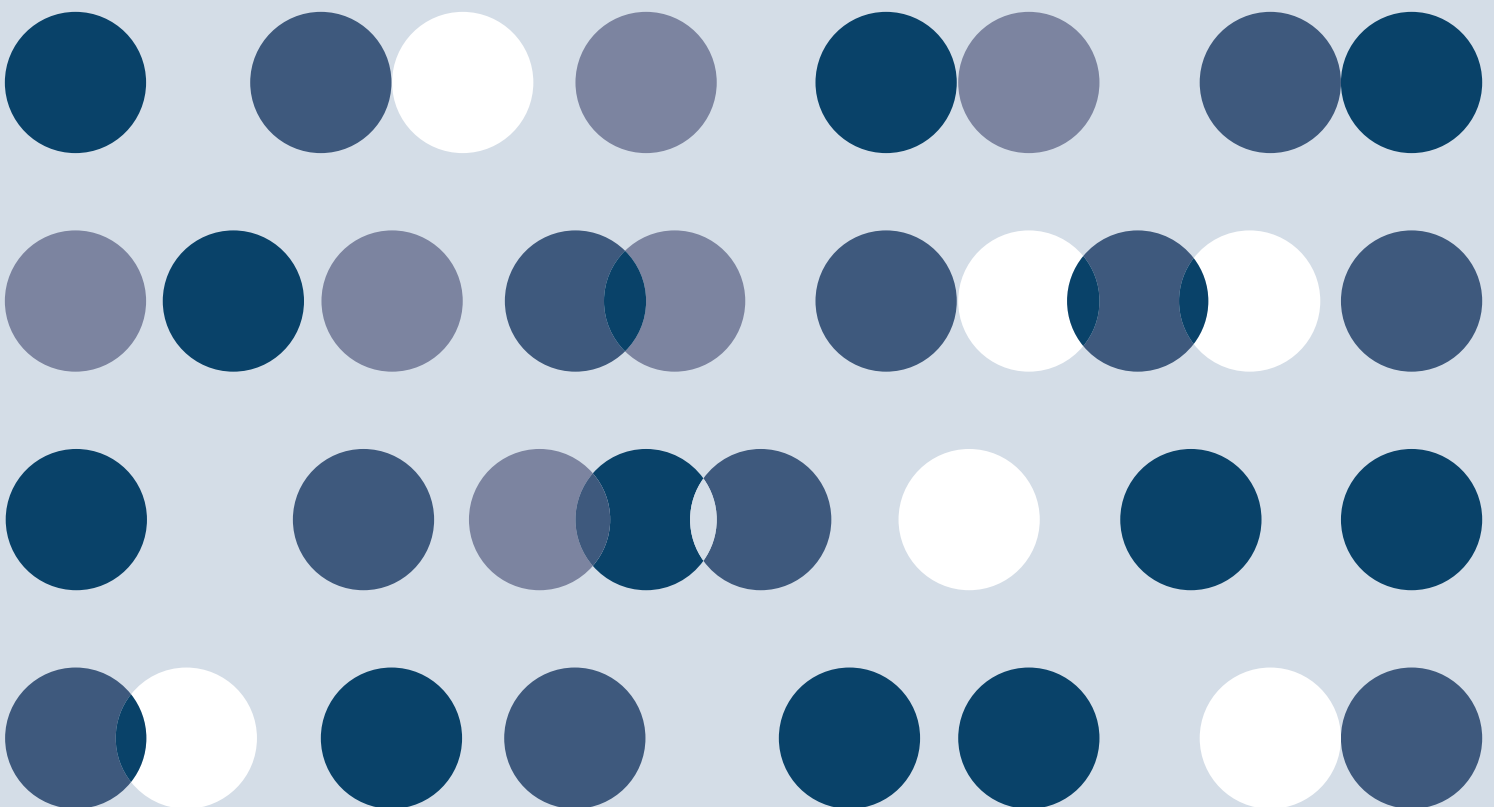


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Introduction

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 Configuration | For MS Windows 7 Professional <ul style="list-style-type: none">• Processor: Intel Core i5 2400 /3.1GHz• Memory: 4GB• Local Hard Disk: 500GB |
| Software Configuration | <ul style="list-style-type: none">• Operating System (OS): MS Windows 7 Professional• 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.

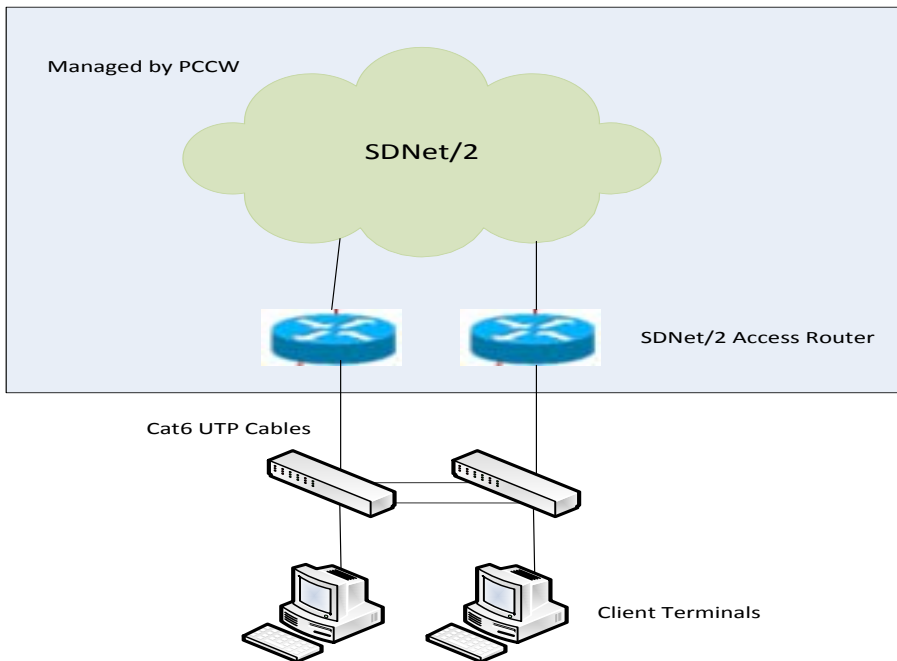
Step 2.1.3:

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.

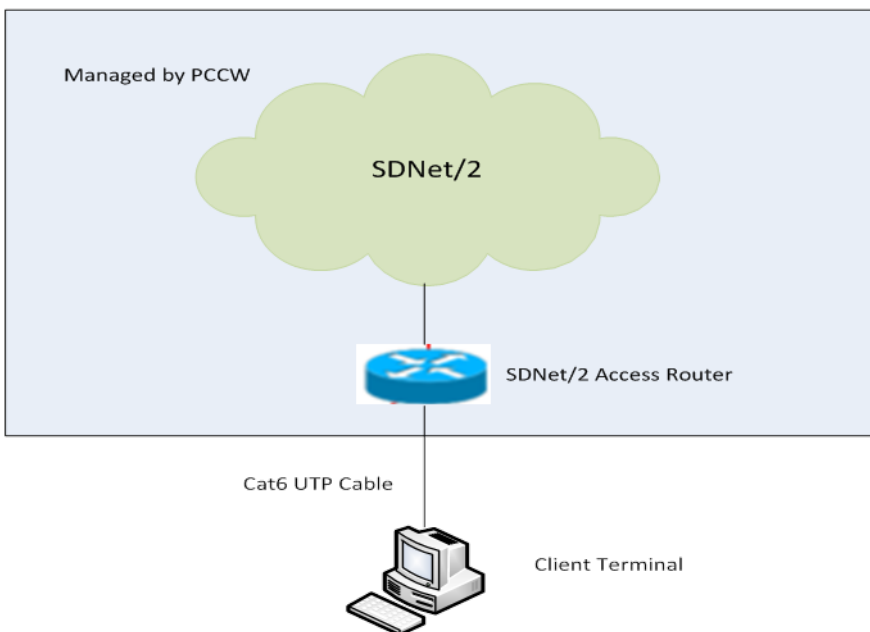
Step 2.1.4:

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

Option 1: Dual-link connection (for production site)



Option 2 : Single-link 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 reside 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 Collateral Management Portal) | 10.154.11.22 (Primary) 10.153.11.22 (Secondary) |
| HTTPS (Web Server – OASIS Settlement Limit Enquiry Portal) | 10.154.11.22 (Primary) 10.153.11.22 (Secondary) |
| HTTPS (Web Server – OASIS Margin Simulator Portal) | 10.154.11.23 (Primary) 10.153.11.23 (Secondary) |
| DNS Server | 10.154.11.21 (Preferred) 10.153.11.21 (Alternate) |
| OTC Secure File Transfer (sFTP) for OASIS Reports Download Services | 10.154.11.71 (Primary) 10.153.11.71 (Secondary) |

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 | TCP | From OASIS user PC to Web Server | Online Traffic |
| SFTP | 10022 | TCP | 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 | 10.154.11.171 (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.

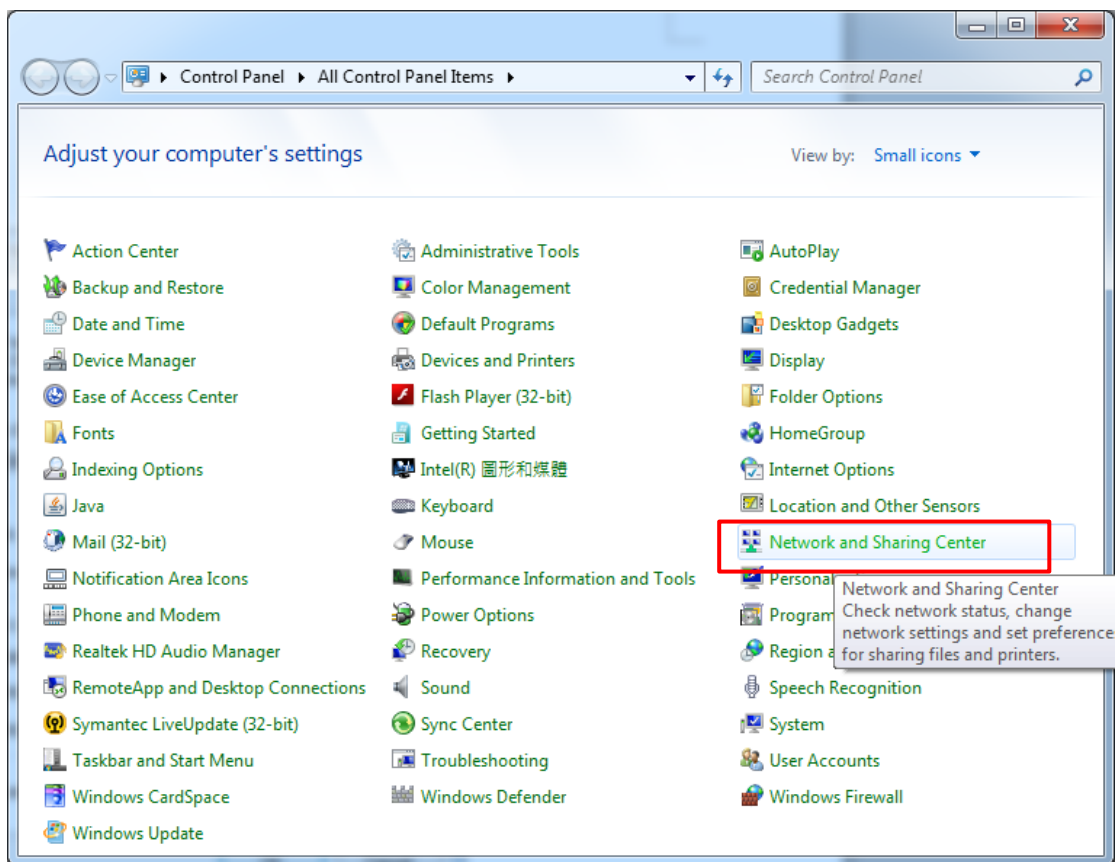
Step 3: Windows IP Address and Configuration Setup - TCP/IP for SDNet/2 Router & Ethernet Card Connection

Step 3.1

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

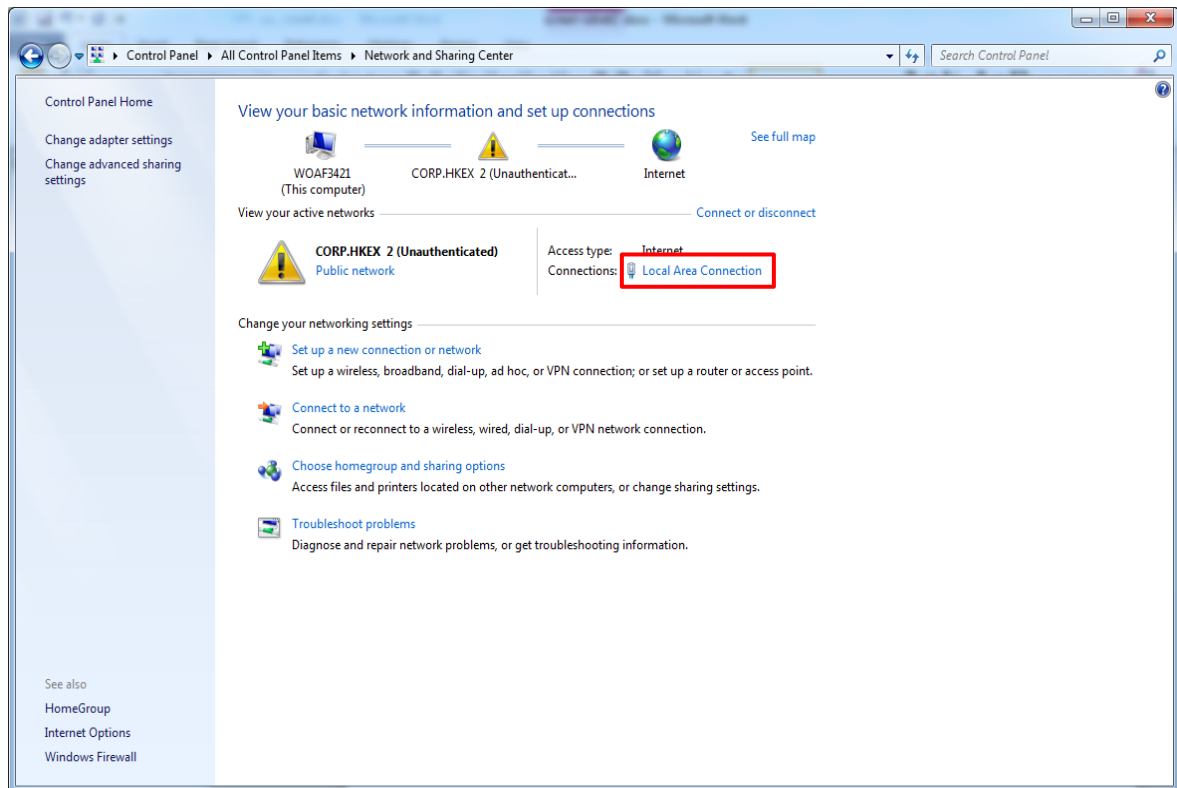
Step 3.2

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



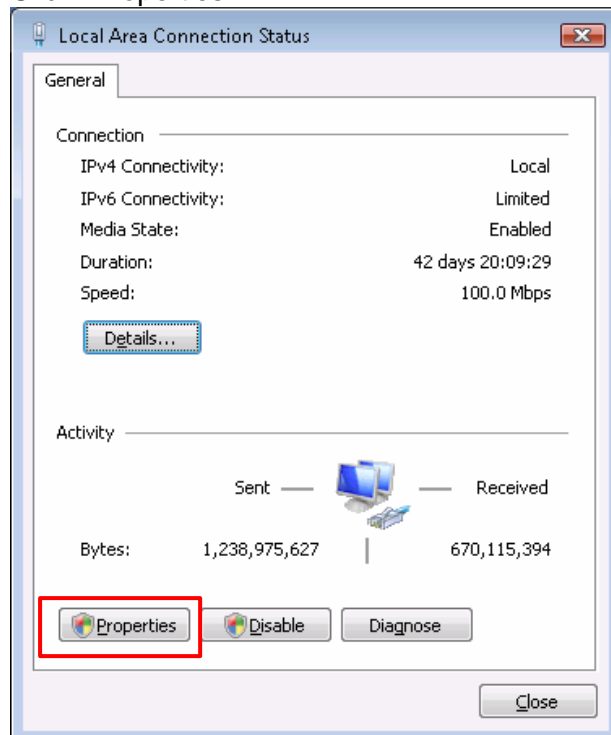
Step 3.3

Click “Local Area Connection” under “View your active networks”



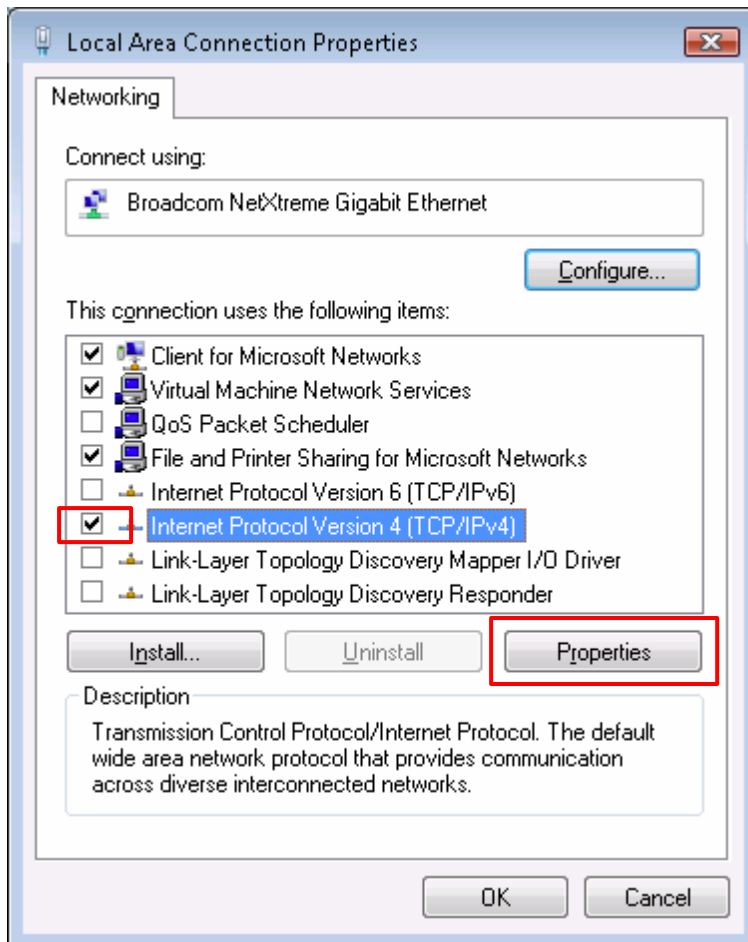
Step 3.4

Click “Properties”.



Step 3.5

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



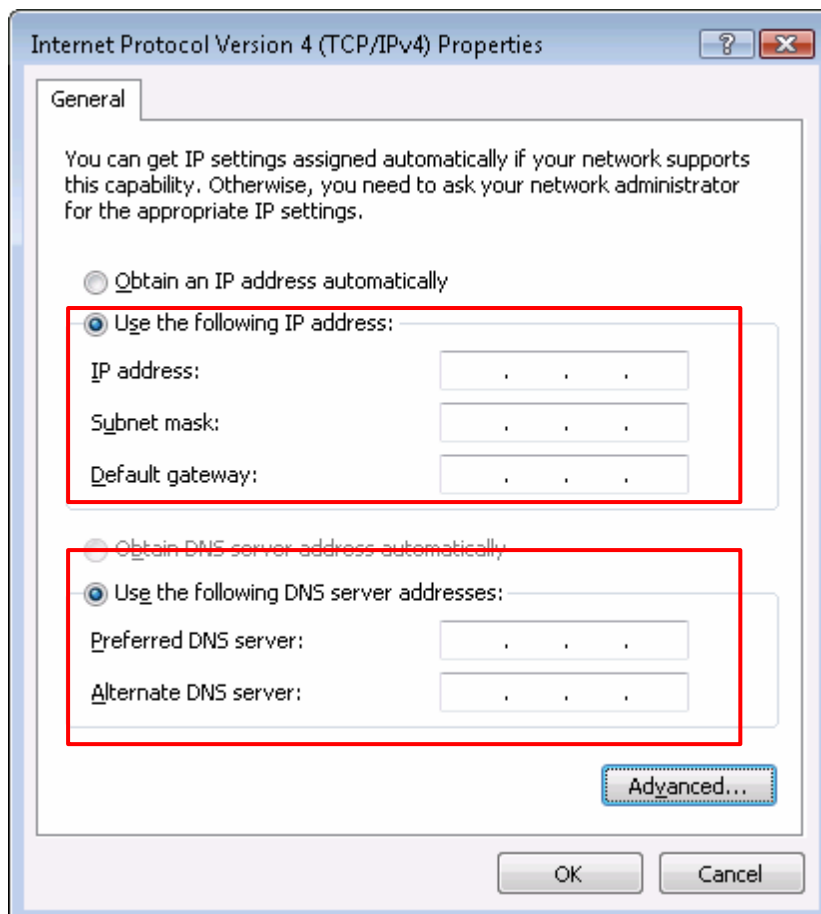
Step 3.6

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”.

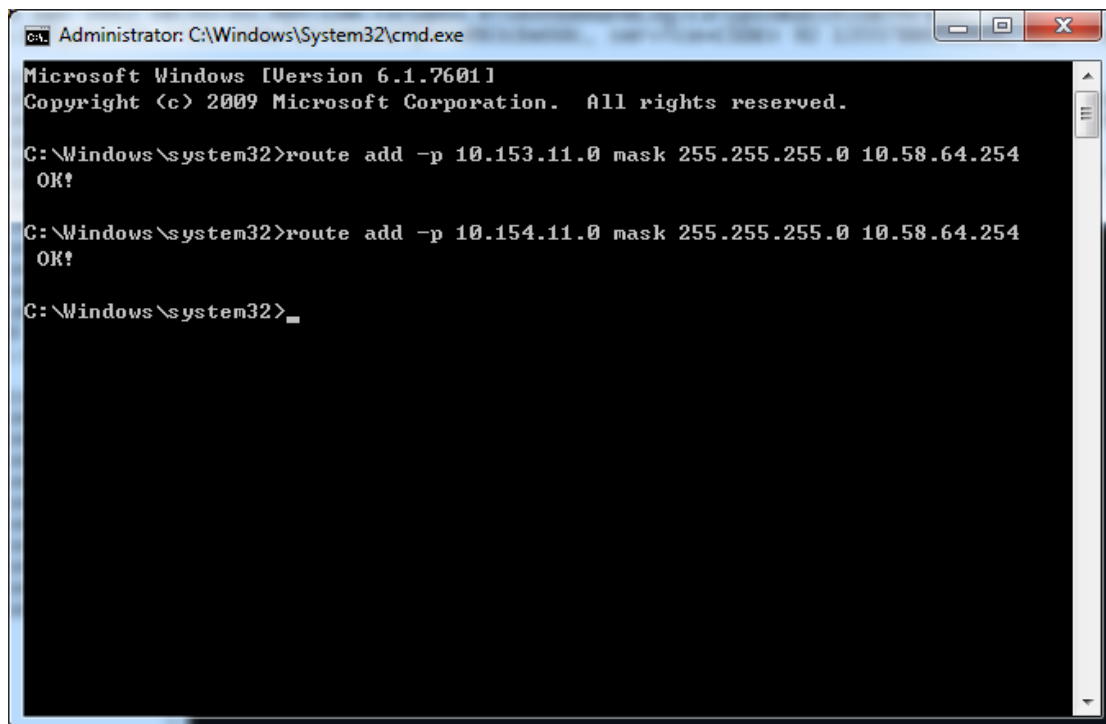
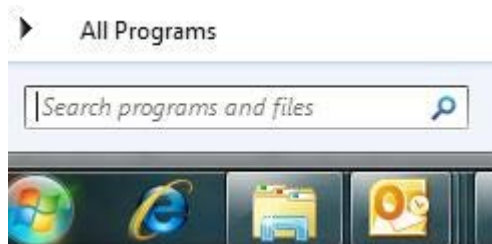
Select “Use the following DNS server addresses” radio button and enter the “Preferred DNS server” and “Alternate DNS server” (if available) set out in Step 2.2 above. Enter “10.154.11.21” for “Preferred DNS” and “10.153.11.21” for “Alternate DNS Server”, then click “OK”.



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

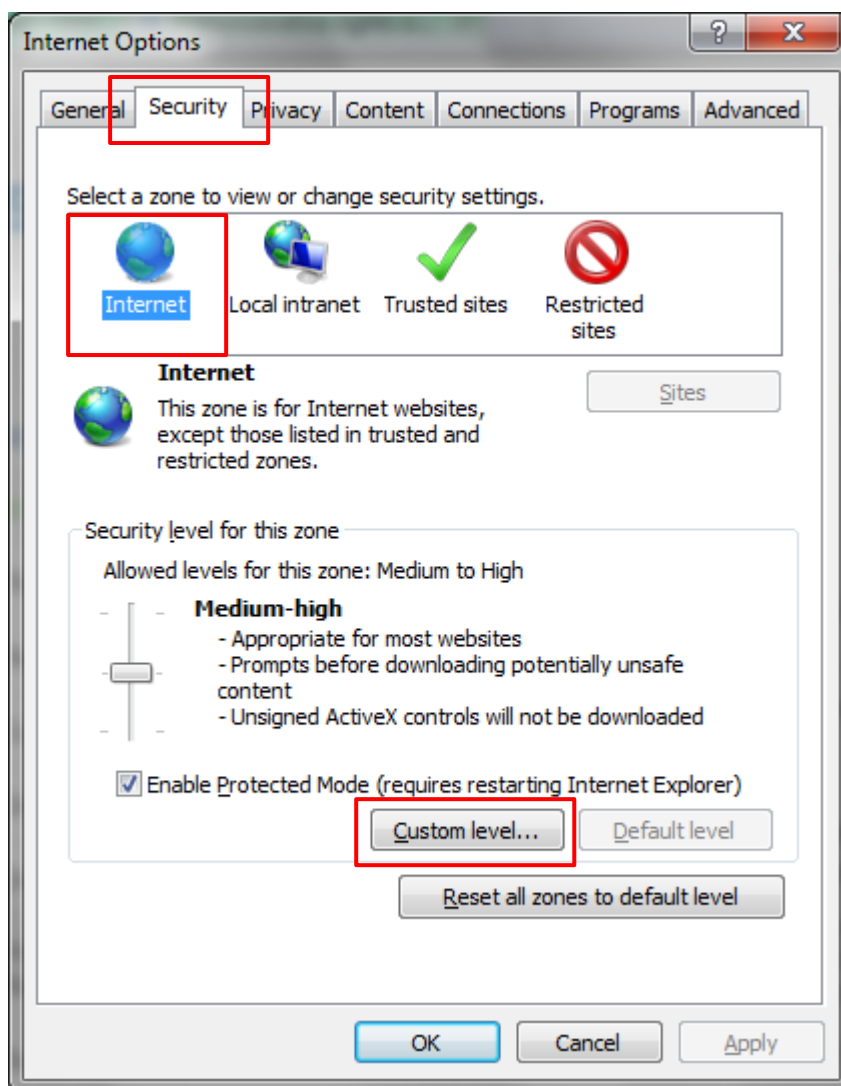
OASIS supports Internet Explorer 9, which can be downloaded on Microsoft's website <http://www.microsoft.com/windows/internet-explorer/default.aspx>.

Step 4.1

Launch Internet Explorer, select Tools > Internet Options from the Menu Bar

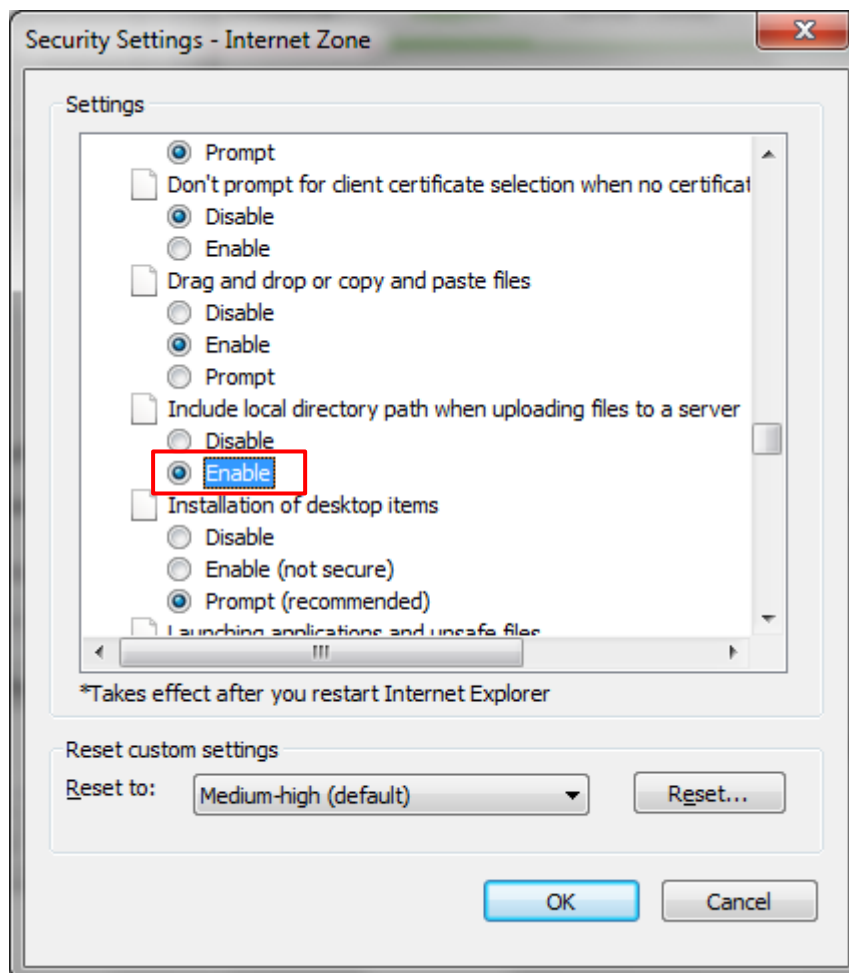
Select Security Tab, and then select the Internet zone

Click "Custom level..." button



Step 4.2

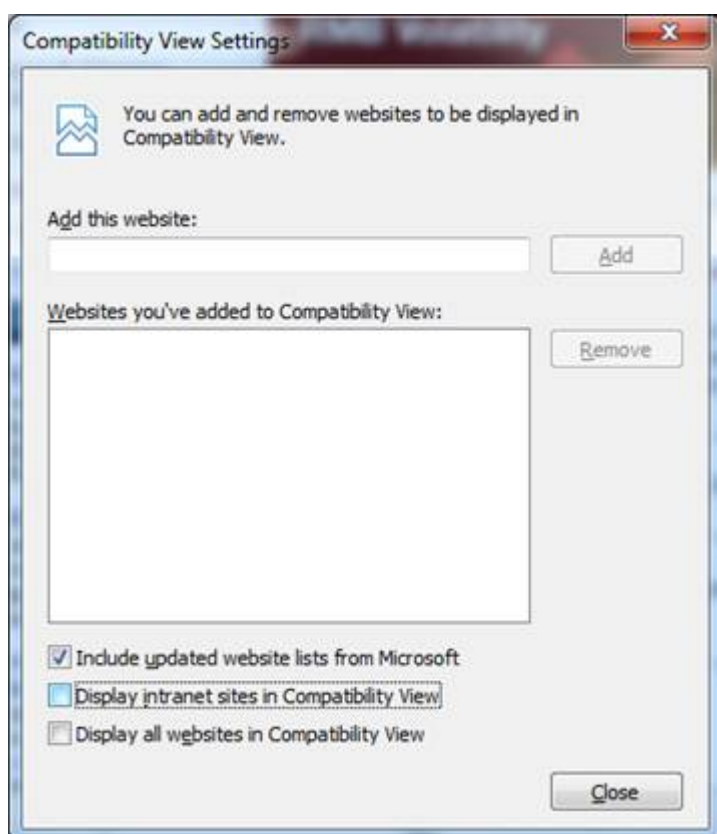
Select “**Enable**” for “Include local directory path when uploading files to a server”, then click “OK”



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.



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...”



Click “Yes” to allow pop-ups from this site

