Agilent Technologies

# Installation Guide

## 7900,7800,and 8900 ICP-MS Simulator

## Contents

**Installation Guide for ICP-MS Simulator**

## 1    System requirements

1.1    Supported MassHunter

1.1.1    ICP-MS MassHunter 4.1 (G7201C C.01.01) or MassHunter 4.3 (G7201C C.01.01).

1.2    Tested OS

1.2.1    Win7 Pro/Enterprise SP1, 64-bit, English/Chinese/Japanese for MH 4.1.

1.2.2    Win7 Pro/Enterprise SP1, 64-bit, English/Chinese/Japanese or

Win10 (Not home edition), 64-bit, English/Chinese/Japanese MH 4.3.


## 2    Supported configurations

2.1    ICP-MS

2.1.1    Agilent 7900 ICP-MS configured with x-lens for MH 4.1.

(s-lens configuration is not supported)

2.1.2    Agilent 7900,7800, or 8900 ICP-MS configured with x-lens for MH 4.3.


## 3    Get Simulator files | MH4.1 only. in case of MH4.3, simulator is included in MH.

3.1    Simulator files are available at SubscribeNet.

3.2    You should be trained and certified to support 7900 ICP-MS. Only persons to have an access to "Agilent 7900 ICP-MS Support" account should reach to the file on SubscribeNet because Simulator file is located in the account.

3.3    Download the simulator.zip from SubscribeNet.


## 4    Installing Simulator software | MH4.1 only. in case of MH4.3, simulator is included in MH.

4.1    The simulator.zip contains two (zipped) folders, Simulator and CommandExecutor.

4.1.1    The Simulator folder contains Simulator files including IcpmsSimulator.exe.

4.1.2    The CommandExecutor folder contains files for CommandExecutor which is an optional software. This will allow users to send a command to ICP-MS without MassHunter.

4.2    Unzip both folders on appropriate place for you, such as Desktop or C:\Agilent folder except under Program Files folder, on the PC that you will run Simulator software.


## 5    Authentication Setup | MH4.1 only. in case of simulator with MH4.3, itworks without this.

5.1    If your PC is not in Agilent domain (Mostly VMware or Bundle PC)

5.1.1    Tell the MAC address of your PC to Product Support. (refer to the section: 10.1 How to find MAC address (physical address))

5.1.2    Receive SimSec.bin file from Product Support.

5.1.3    Replace the original SimSec.bin file under bin folder with it.

5.2      If your PC is in Agilent domain (Mostly CLM PC)

    5.2.1   No setup is required.

# 6    Firewall Setup | MH4.1 only. in case of simulator with MH4.3, itworks without this. |

6.1      Allow Simulator to communicate through Windows Firewall. (refer to the section: <u>10.2</u> How to allow Simulator to communicate through Windows Firewall)

6.2      Or, disable Windows Firewall. (this option is insecure.)

# 7    Network Setup | MH4.1 only. in case of simulator with MH4.3, it works without this. |

    Refer to the section: <u>10.2 How to allow Simulator to communicate through Windows</u> Firewall

    7.1.1   Easiest way

        7.1.1.1   Launch Simulator and Windows Security Alert window is displayed automatically.

        7.1.1.2   Do not touch checkboxes and click "Allow access" button.

        7.1.1.3   Exit Simulator.
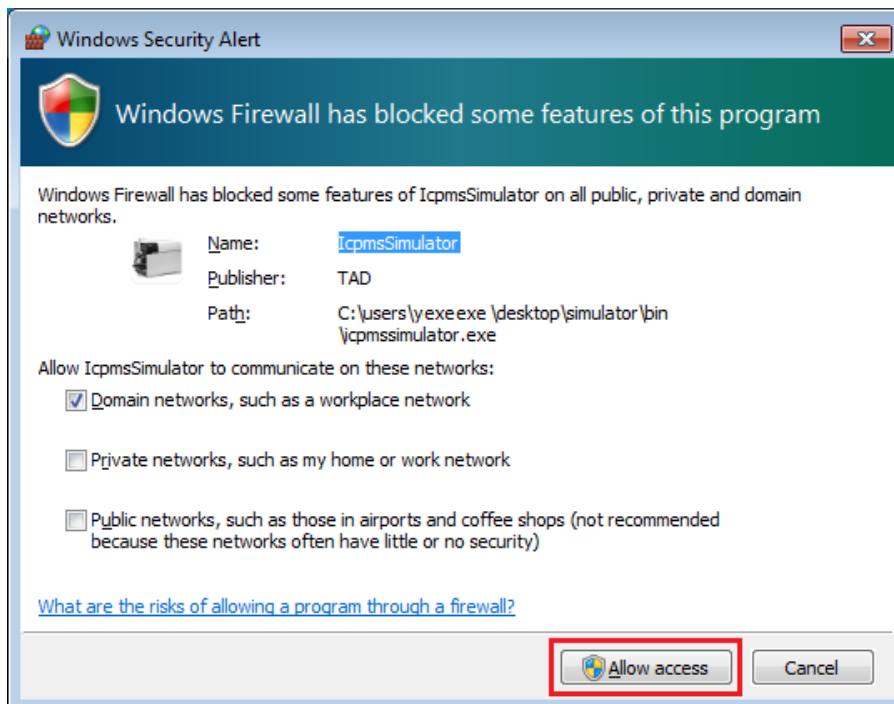


    7.1.2   Manual way

        7.1.2.1   Launch Control Panel.

        7.1.2.2   Type "Allow a program through Windows Firewall" in its search box. (The English phrase works on non-English OS.)

        7.1.2.3   Click "Allow a program through Windows Firewall" in the searched results.

## Installation Guide for ICP-MS Simulator
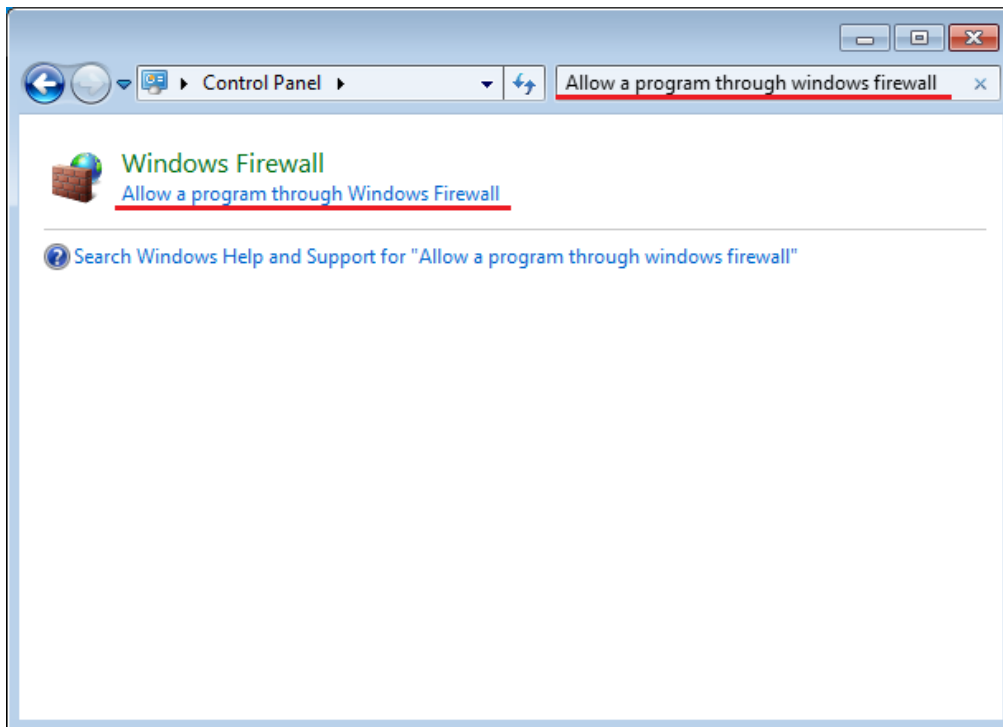


7.1.2.4 Click "Change settings" button.

7.1.2.5 Click "Allow another program…" button.

7.1.2.6 Click "Browse" button in Add a Program window.

7.1.2.7 Select the Simulator program you installed (IcpmsSimulator.exe file under bin folder).

7.1.2.8 Click "Open" button.

7.1.2.9 Click Add button in Add a Program window.

7.1.2.10 Click "OK" button in Control Panel.

## Installation Guide for ICP-MS Simulator
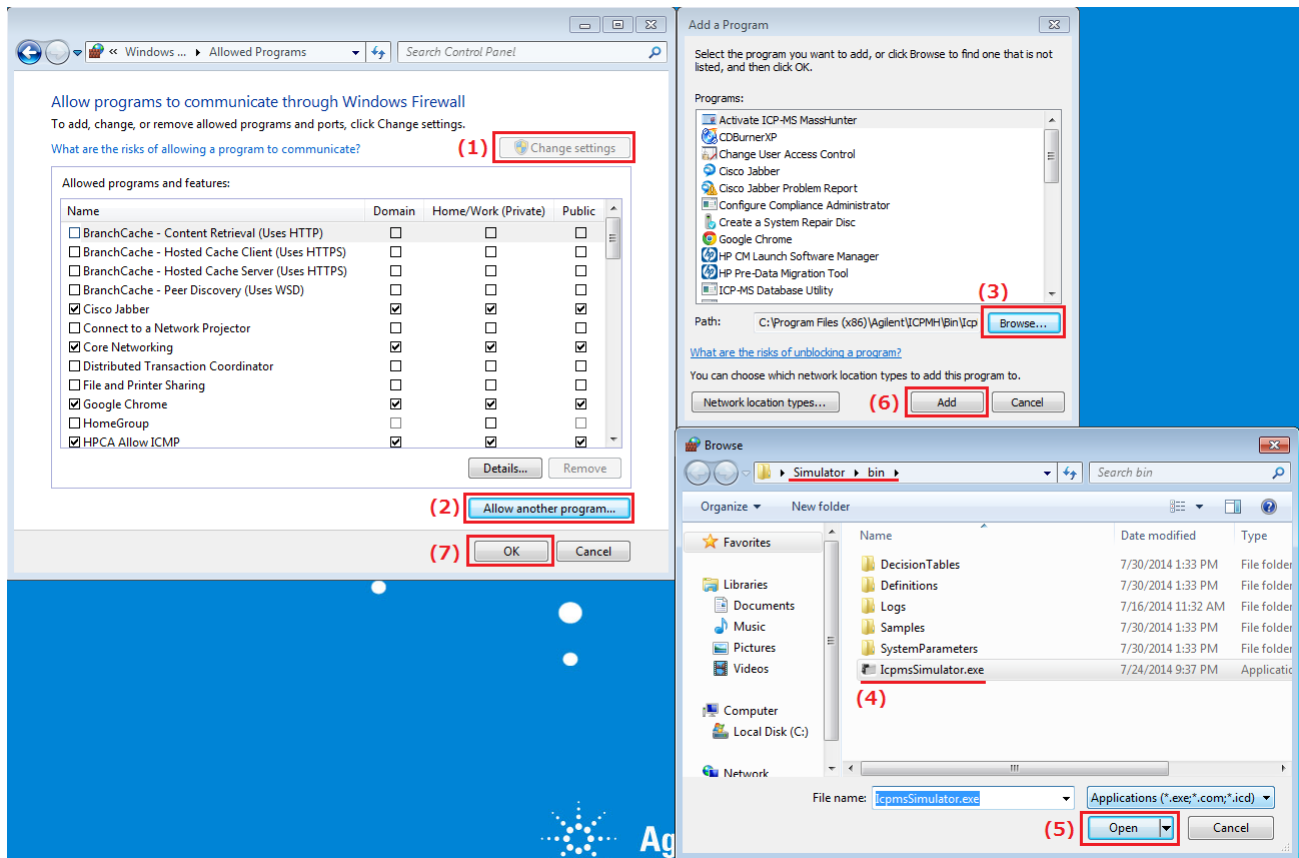


How to check the number of network adapters .

7.2    If your PC has no network adapters (Mostly VMware)

    7.2.1   Add a network adapter.

7.3    If your PC has only a network adapter (Mostly desktop PC or VMware)

    7.3.1   No setup is required.

7.4    If your PC has multiple network adapters (Mostly laptop PC or VMware)

    7.4.1   If your PC uses VPN (to connect to Agilent domain)

        7.4.1.1   Edit "hosts" file to add a pair of your PC name and IP address. (refer to the section: 10.4 How to edit "hosts" file and connect MassHunter by the specified hostname)

    7.4.2   If your PC does not use VPN

        7.4.2.1   Disable network adapters to have only a network adapter enabled. (refer to the section: 10.5 How to disable network adapters)

## 8    Connecting MassHunter to Simulator [In case MH 4.1]

8.1    If MassHunter runs on the same PC as Simulator

    8.1.1   If you edited "hosts" file.

8.1.1.1 Specify the hostname or IP address written in "hosts" file.

8.1.2 If you did not edit "hosts" file.

8.1.2.1 Specify "localhost" or "127.0.0.1".

8.2 If MassHunter runs on another PC

8.2.1 Specify the hostname or IP address of the PC where Simulator is running.


# 9 Connecting MassHunter to Simulator [In case MH 4.3]

9.1 Select "ICP-MS MassHunter Workstation (Demo Mode)" from "ICP-MS MassHunter Workstation" menu.
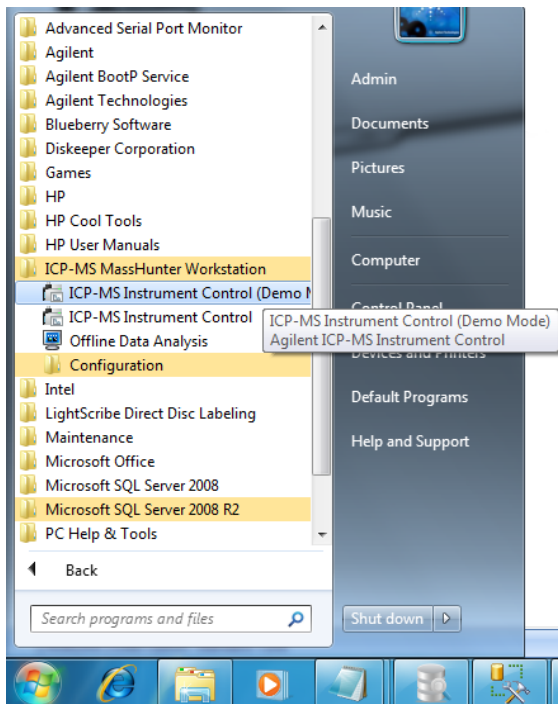
9.2 Then the software starts in demo mode. With the demo mode, software behaves as if it has connected to simulator without any special operation. You can access the built-in simulator in "Hardware" pane of the software. If you cannot find the screen you can display using "Hardware" pane -> "Mainframe" -> Right click -> "Virtual Instruemnt"
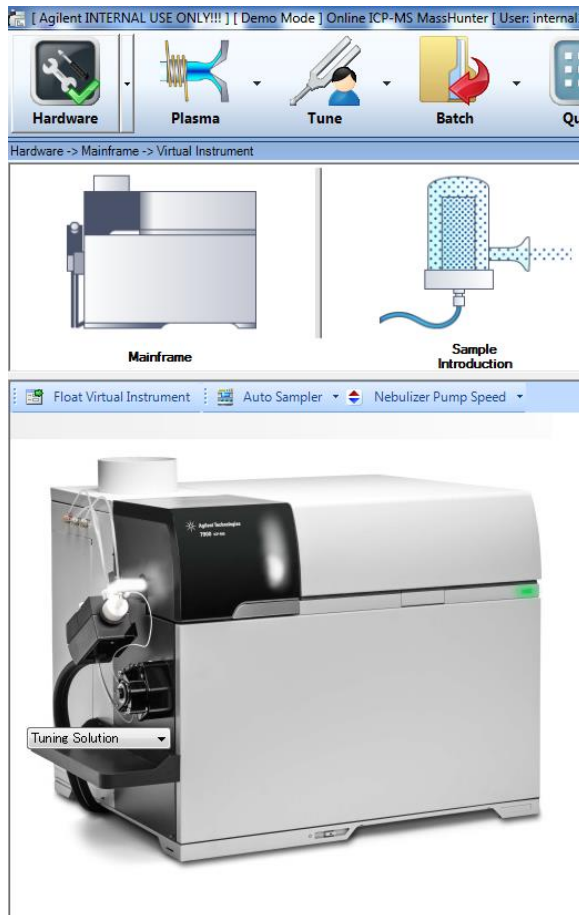


10 Misc. | MH4.1 only. in case of simulator with MH4.3, it works without this. |

10.1 How to find MAC address (physical address)

10.1.1 Launch cmd.exe (Command Prompt).

10.1.2 Enter "ipconfig /all" command.

10.1.3 Find a "Physical Address" value of either Ethernet adapter or Wireless LAN adapter.

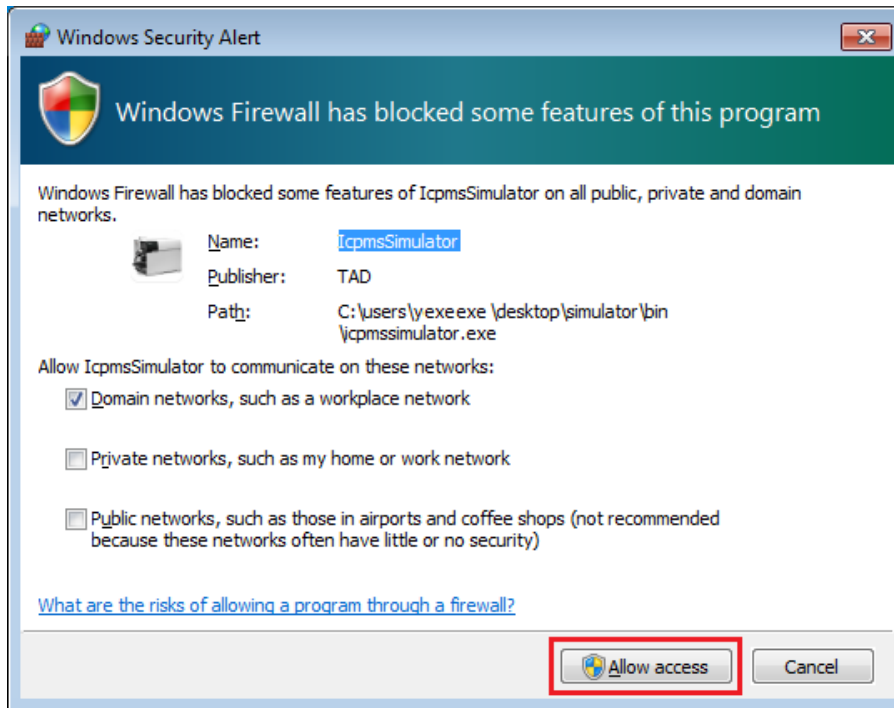## Installation Guide for ICP-MS Simulator



10.2    How to allow Simulator to communicate through Windows Firewall

     10.2.1 Easiest way

         10.2.1.1 Launch Simulator and Windows Security Alert window is displayed automatically.

         10.2.1.2 Do not touch checkboxes and click "Allow access" button.

         10.2.1.3 Exit Simulator.
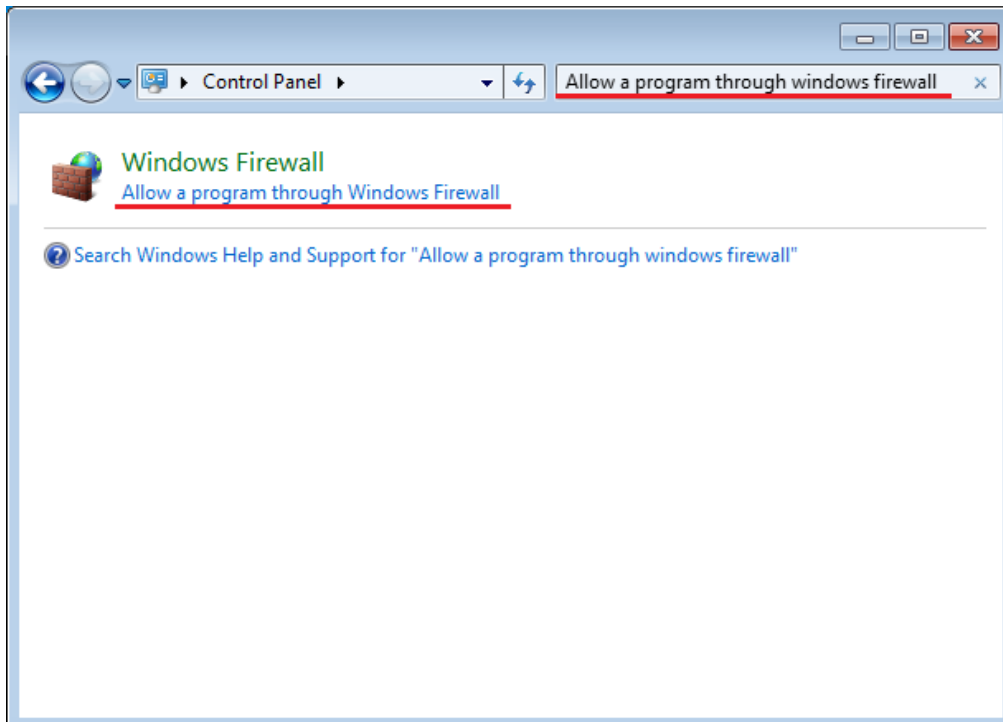
**Installation Guide for ICP-MS Simulator**



10.2.2 Manual way
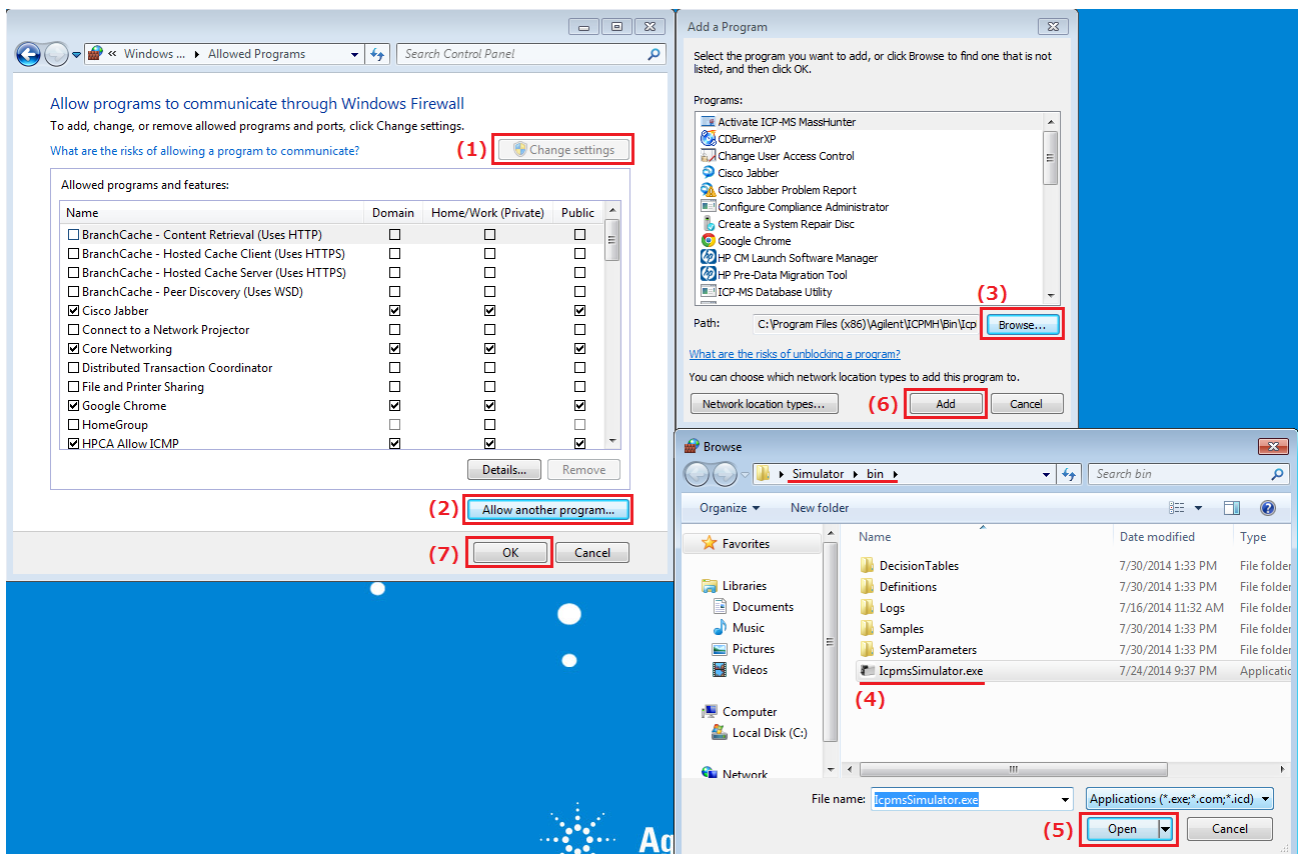
    10.2.2.1 Launch Control Panel.

    10.2.2.2 Type "Allow a program through Windows Firewall" in its search box. (The English phrase works on non-English OS.)

    10.2.2.3 Click "Allow a program through Windows Firewall" in the searched results.

10.2.2.4 Click "Change settings" button.

10.2.2.5 Click "Allow another program…" button.

10.2.2.6 Click "Browse" button in Add a Program window.

10.2.2.7 Select the Simulator program you installed (IcpmsSimulator.exe file under bin folder).

10.2.2.8 Click "Open" button.

10.2.2.9 Click Add button in Add a Program window.

10.2.2.10 Click "OK" button in Control Panel.
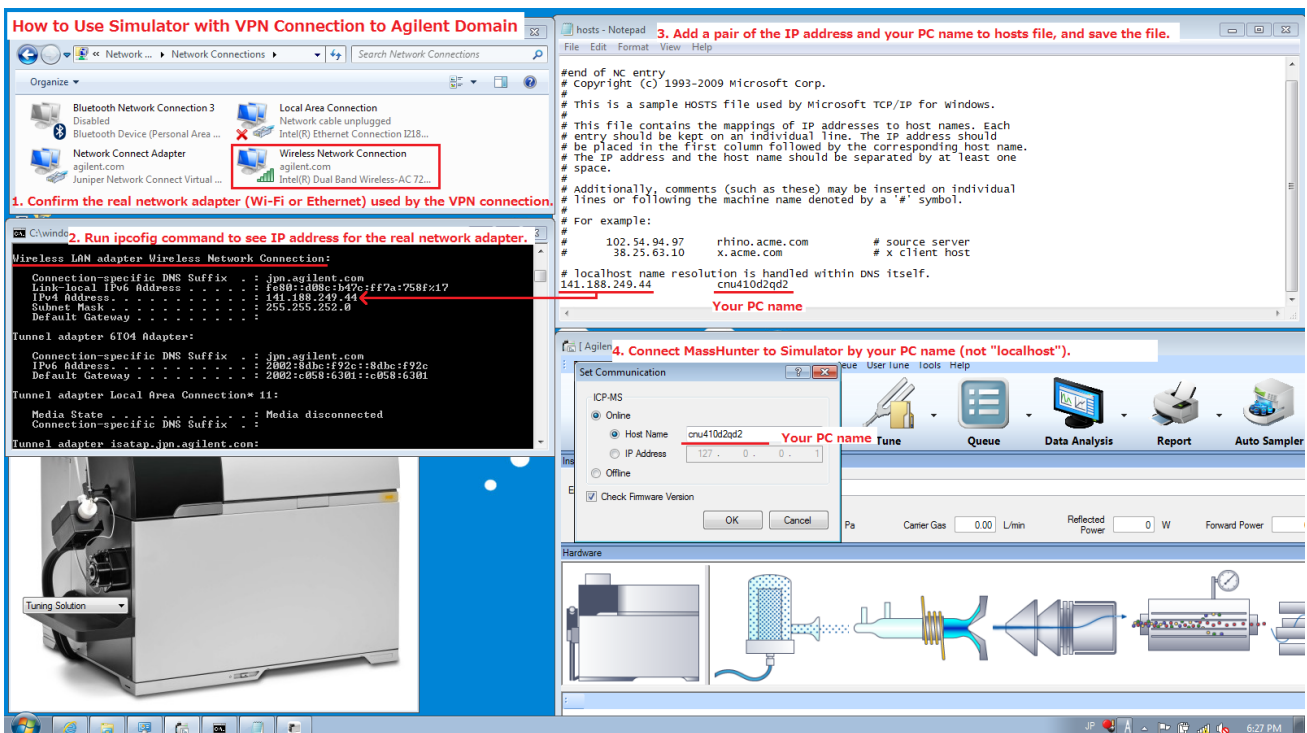


10.3 How to check the number of network adapters

10.3.1 Launch Control Panel.

10.3.2 Type "View network connections" in its search box. (The English phrase works on non-English OS.)

10.3.3 Click "View network connections" in the searched results.

10.3.4 Count the number of network adapter icons.

# Installation Guide for ICP-MS Simulator
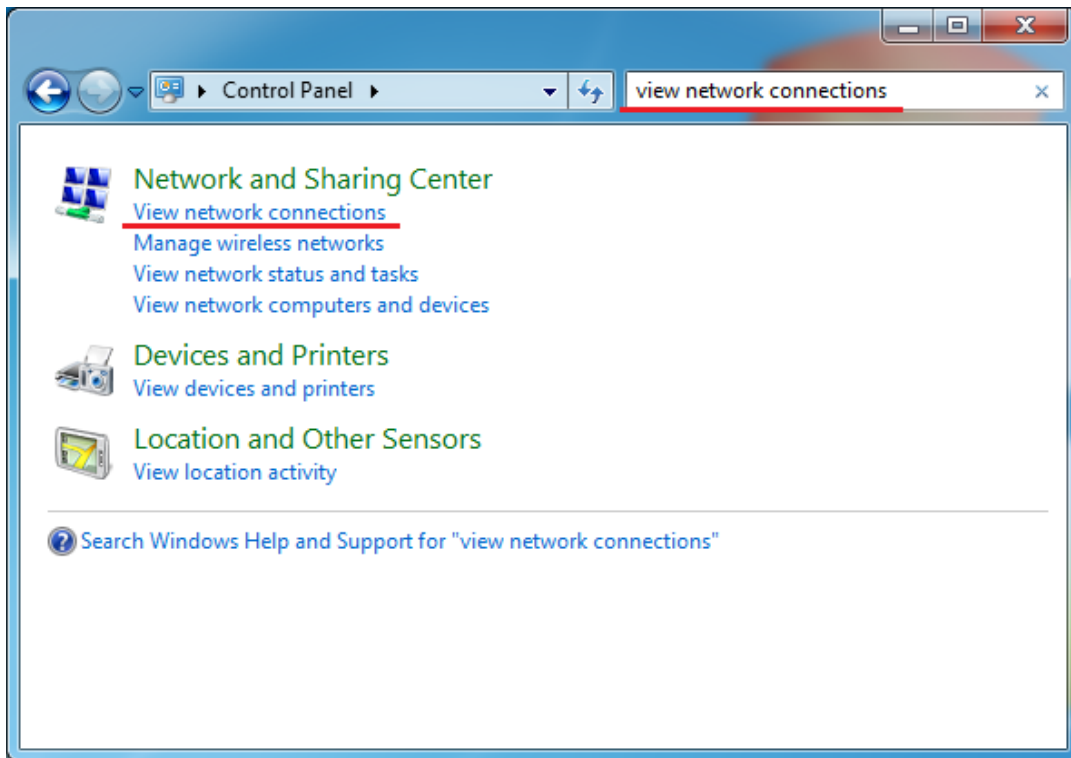


10.4    How to edit "hosts" file and connect MassHunter by the specified hostname

10.4.1 Confirm the real network adapter (Wi-Fi or Ethernet) used by VPN connection.

10.4.2 Run ipconfig command by cmd.exe to see the IP address for the real network adapter.

10.4.3 Add a pair of the IP address and your PC name to hosts file, and save the file.

10.4.4 Connect MassHunter to Simulator by your PC name instead of localhost.

10.5  How to disable network adapters

10.5.1 Physical way

10.5.1.1 Disconnect LAN cable or turn off Wi-Fi button on a laptop PC.

10.5.2 Control Panel

10.5.2.1 Show "Network connections" panel in the same way above, right-click on an adapter and select "Disable".

10.5.3 VMware

10.5.3.1 Disconnect a network adapter by VM menu

10.6  Updating "hosts" file

10.6.1 If your PC uses DHCP to get an IP address, your PC has a new IP address when you restart your PC. When a new IP address is configured, the pair of the hostname and IP address in "hosts" file must be updated.

10.7  Preferred VMware network connection

10.7.1 "Bridged" network connection is preferred. NAT connection might be ok but not tested.
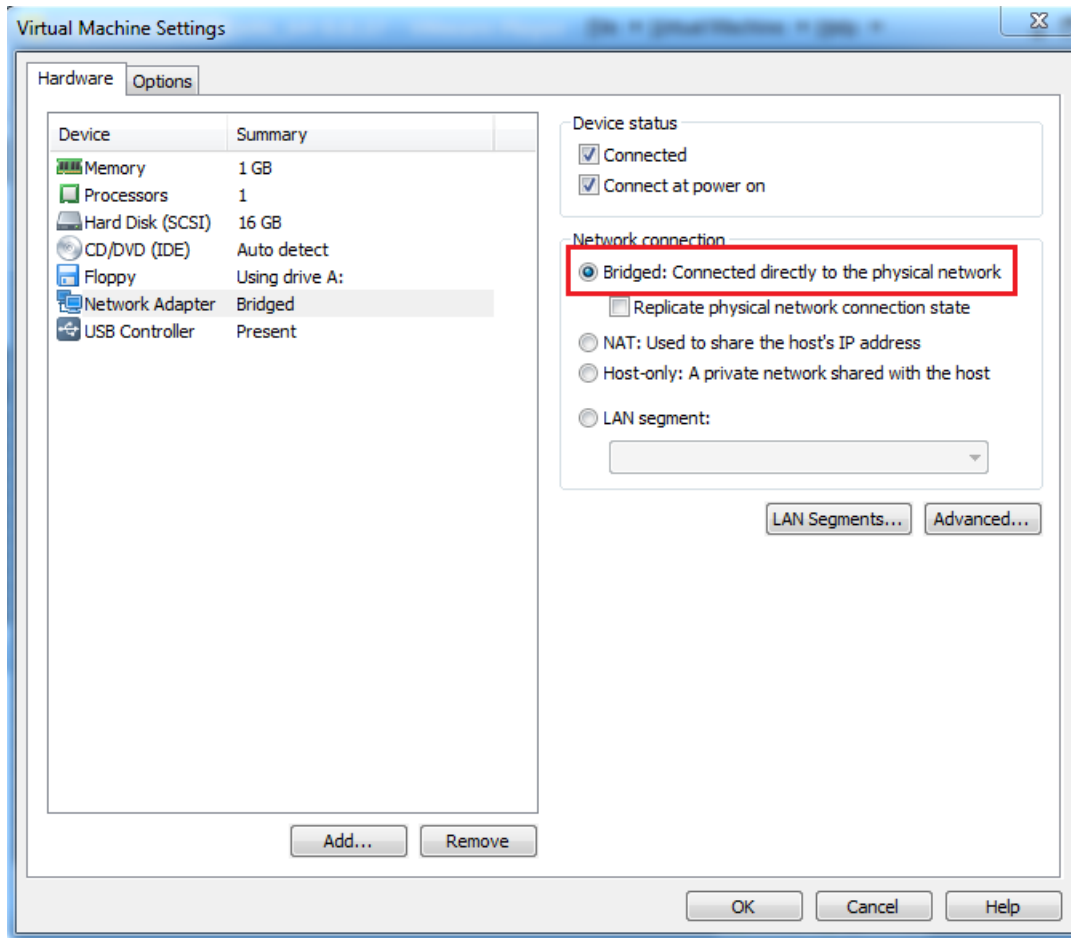
## 11 Revision History

| Rev. | Date | Revised by | Description |
|------|------|------------|-------------|
| 0.1 | 28-JUL-2014 | Takushi Nakamura | Draft revision |
| 0.2 | 30-JUL-2014 | Takushi Nakamura | Reviewed and updated by R&D |
| 0.3 | 31-JUL-2014 | Takushi Nakamura | Reviewed by R&D |
| 0.4 | 15-AUG-2014 | Takushi Nakamura | Reviewed by R&D |
| 1.0 | 18-AUG-2014 | Takushi Nakamura | Released to the field |
| 2.0 | 13-JUN-2016 | Ryuichi Uchiyama | Update for MH 4.3 |