

Connecting to an iMS over Ethernet after installing the SDK

Considerations:

(1) IP Address

By default, iMS-P Controllers are configured to acquire an IP Address from DHCP. If there is no DHCP Server on the network, the iMS-P will default to its internal IP Address which is pre-configured at Isomet to 192.168.1.10.

From SDK ver 1.5.0 onwards, this behaviour can be changed. An iMS can be configured to use a static IP address and the IP address, network mask and gateway can all be modified by user code.

To retrieve and apply an IP address makes use of ***IMSSystem::ApplySettings*** and ***IMSSystem::RetrieveSettings*** methods through which the CS_ETH object is passed with the desired IP address parameters. These will store the settings in non-volatile memory on the iMS Controller so that it will start up with the new parameters on next boot. E.g.

```
CS_ETH cs_eth;

// Get existing settings from iMS Controller
myiMS.RetrieveSettings(cs_eth);
std::cout << "Current IP Address: " << cs_eth.Address() << std::endl;

cs_eth.Address("192.168.2.100");
std::cout << "New IP Address: " << cs_eth.Address() << std::endl;

myiMS.ApplySettings(cs_eth);
```

See code documentation in ***CS_ETH.h*** for details.

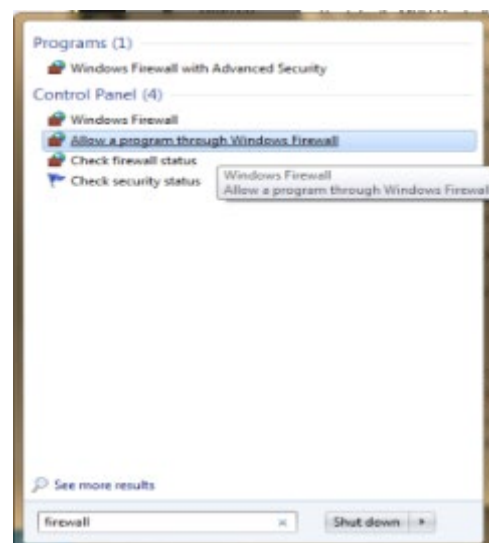
(e.g. ***C:\Program Files\Isomet\iMS_SDK\1.5.1\include\CS_ETH.h***).

(2) Firewall

The iMS Studio and its accompanying ***ims_hw_server*** process require a port open in the PC's firewall to enable the scan for iMS systems procedure to complete successfully. Normally this is done during the installation process (there is a checkbox ***"Add Firewall Exception"*** that defaults to enabled but can be disabled if required by the installer).

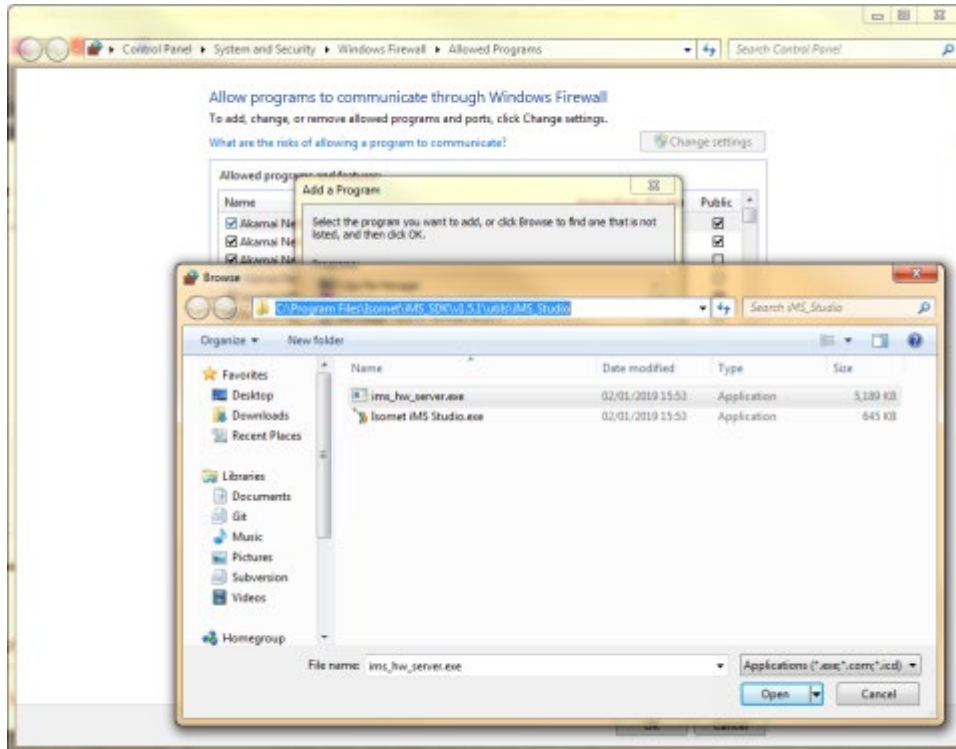
To add the firewall exception manually,
do the following for Windows 7.
(Windows10 should be similar):

From the start menu type ***"Firewall"***
to bring up a list of actions and select
"Allow a program through Windows Firewall"



Click "Allow Another Program..."
then "Browse..." and navigate to "**C:\Program Files\Isomet\iMS_SDK\v1.5.1\utils\iMS_Studio**"
(assuming default SDK install location).

Choose "**ims_hw_server.exe**"



If you receive an error message "The application is already in the list of exceptions" look for "**iMS Studio HW Server**" in the list and make sure the checkbox alongside it is checked.

<input checked="" type="checkbox"/> iMS Studio	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> iMS Studio HW Server	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> iMS Studio HW Server	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> ims_fw_upgrade	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Also, check for any third party firewall or antivirus software which may be blocking communications with the **ims_hw_server.exe** application.