

BridgeWare

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How to use Cogent DataHub

브리ջ웨어

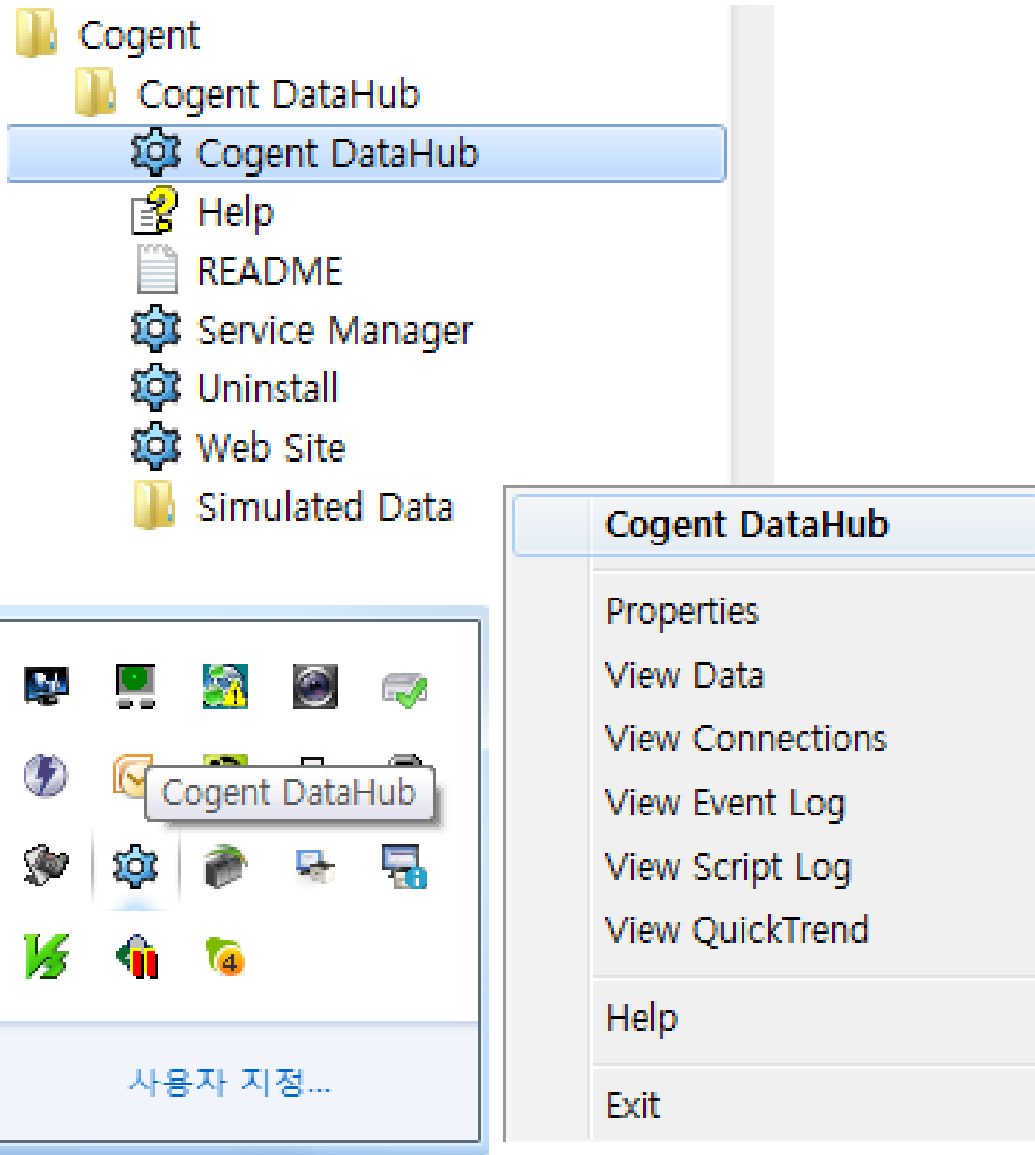
031-346-1981,2

info@opchub.com



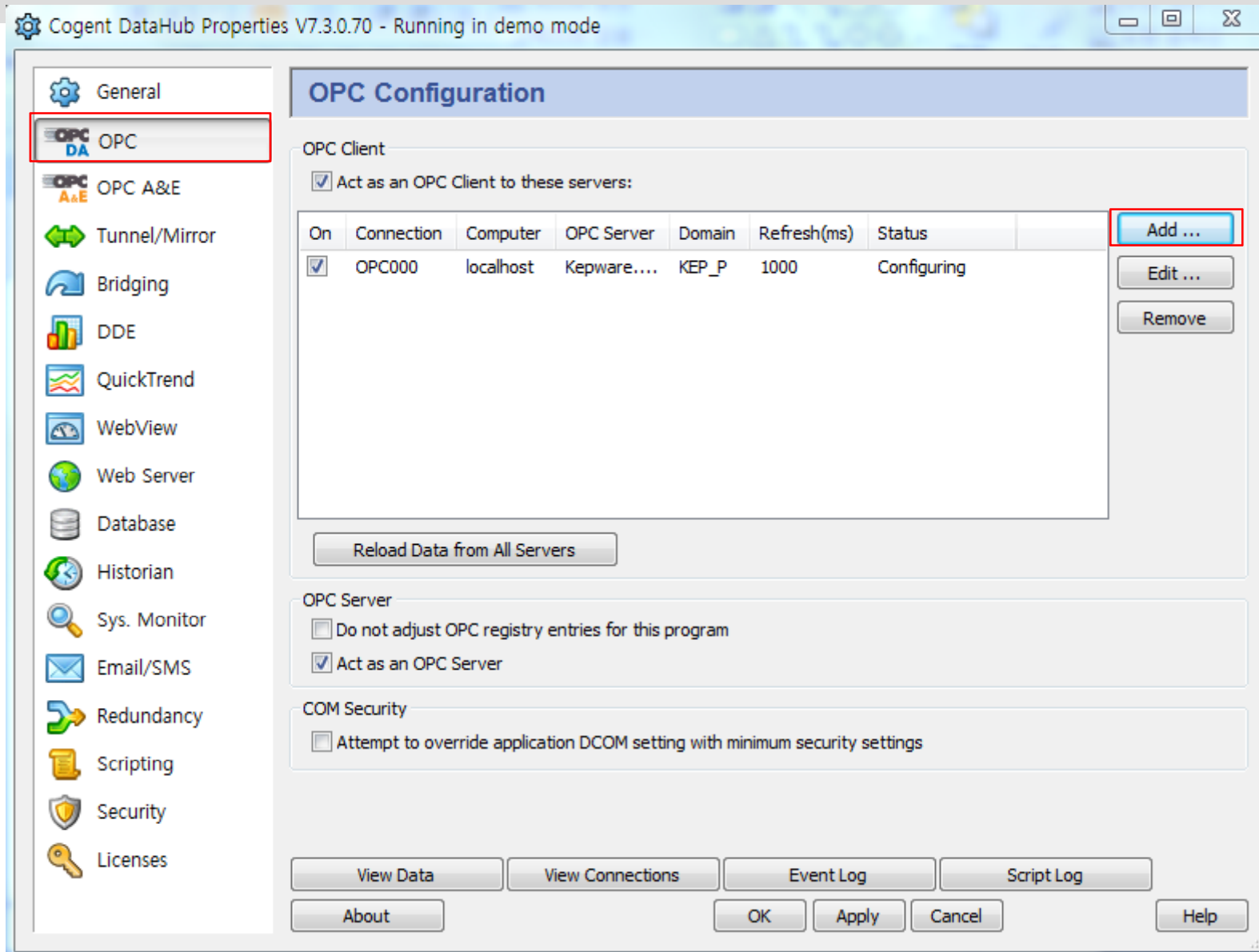
DataHub 실행

- Cogent DataHub를 실행한다.

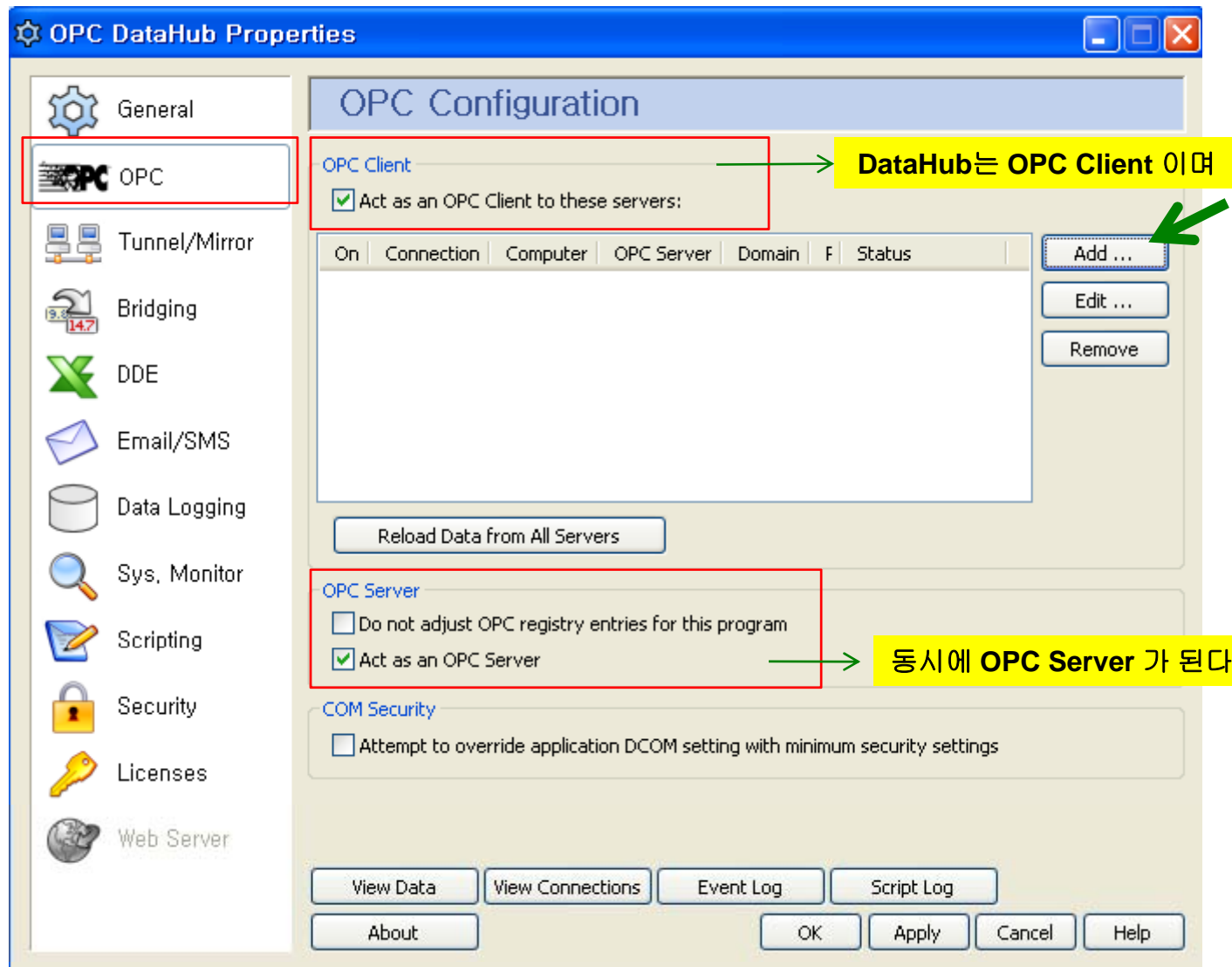


- System Tray 에서 DataHub Icon 을 Right-Click 하여 DataHub Property를 연다.

DataHub Setup for OPC Tunneling – OPC Server side



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DataHub Setup for OPC Tunneling – OPC Server side

Define OPC Server

Connection Name: OPC000

Computer Name: localhost [This Computer]

OPC Server Name: []

Data Domain Name: default

Data Transfer

Maximum update rate (milliseconds): 1000

Read Method: Asynchronous Advise

Write Method: Asynchronous Write (DA2)

Options

Treat OPC item properties as DataHub points where possible

Read-only: Mark all items as Read-Only and disable writes to this server

Replace item time stamps with local clock time

Force connection to use OPC DA 3.0

Never use OPC DA 3.0

Set failed incoming values to zero

Never use OPC DA2.0 BROWSE_TO function

Item Selection

Manually Select Items [Configure Items]

Load All Items on Server

Server specific item filters (leave empty to match all items)

Filter String [] [Add ...] [Edit ...] [Remove]

[OK] [Cancel]

• OPC Server를 그림과 같이 등록한다.



Define OPC Server

Connection Name: OPC000

Computer Name: localhost [This Computer]

OPC Server Name: Matrikon OPC Server for Simulation and Testing

Data Domain Name: default → **Server 별로 도메인명 지정**

Data Transfer

Maximum update rate (milliseconds): 1000 → **Refresh time 설정**

Read Method: Asynchronous Advise

Write Method: Asynchronous Write (DA2)

Options

Treat OPC item properties as DataHub points where possible

Read-only: Mark all items as Read-Only and disable writes to this server

Replace item time stamps with local clock time

Force connection to use OPC DA 3.0

Never use OPC DA 3.0

Set failed incoming values to zero

Never use OPC DA2.0 BROWSE_TO function

Item Selection

Manually Select Items [Configure Items]

Load All Items on Server → **OPC Item을 자동 or 수동으로 등록한다.**

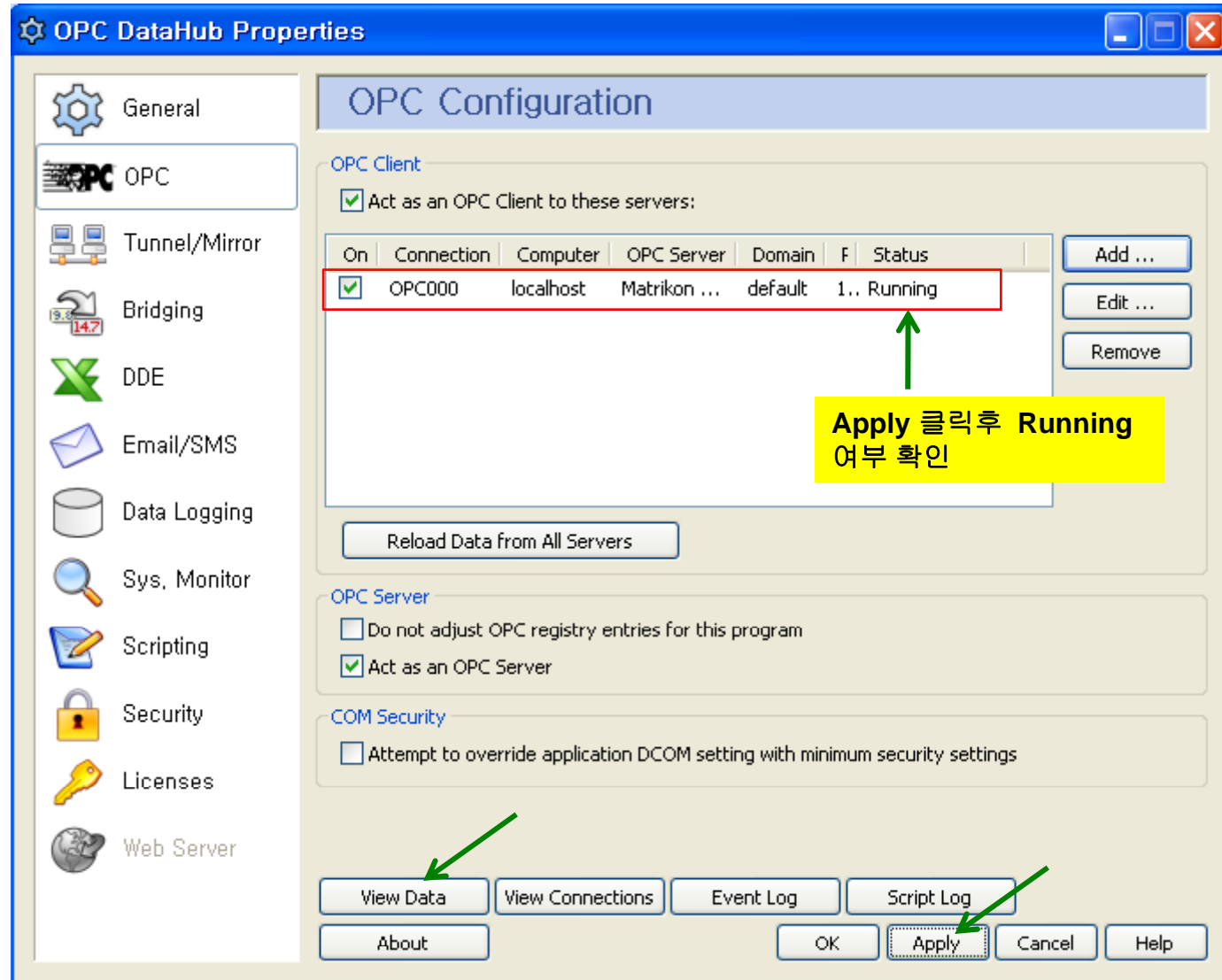
Server specific item filters (leave empty to match all items)

Filter String [] [Add ...] [Edit ...] [Remove]

[OK] [Cancel]

DataHub Setup for OPC Tunneling – OPC Server side

- OPC Server 등록이 끝나면 Apply 하여 Running을 확인한 뒤
- View Data 클릭하여 Data를 확인하여 Setup 완료



OPC Server side - ViewData 로 확인

OPC DataHub Data Browser: 15 of 78 points in default domain

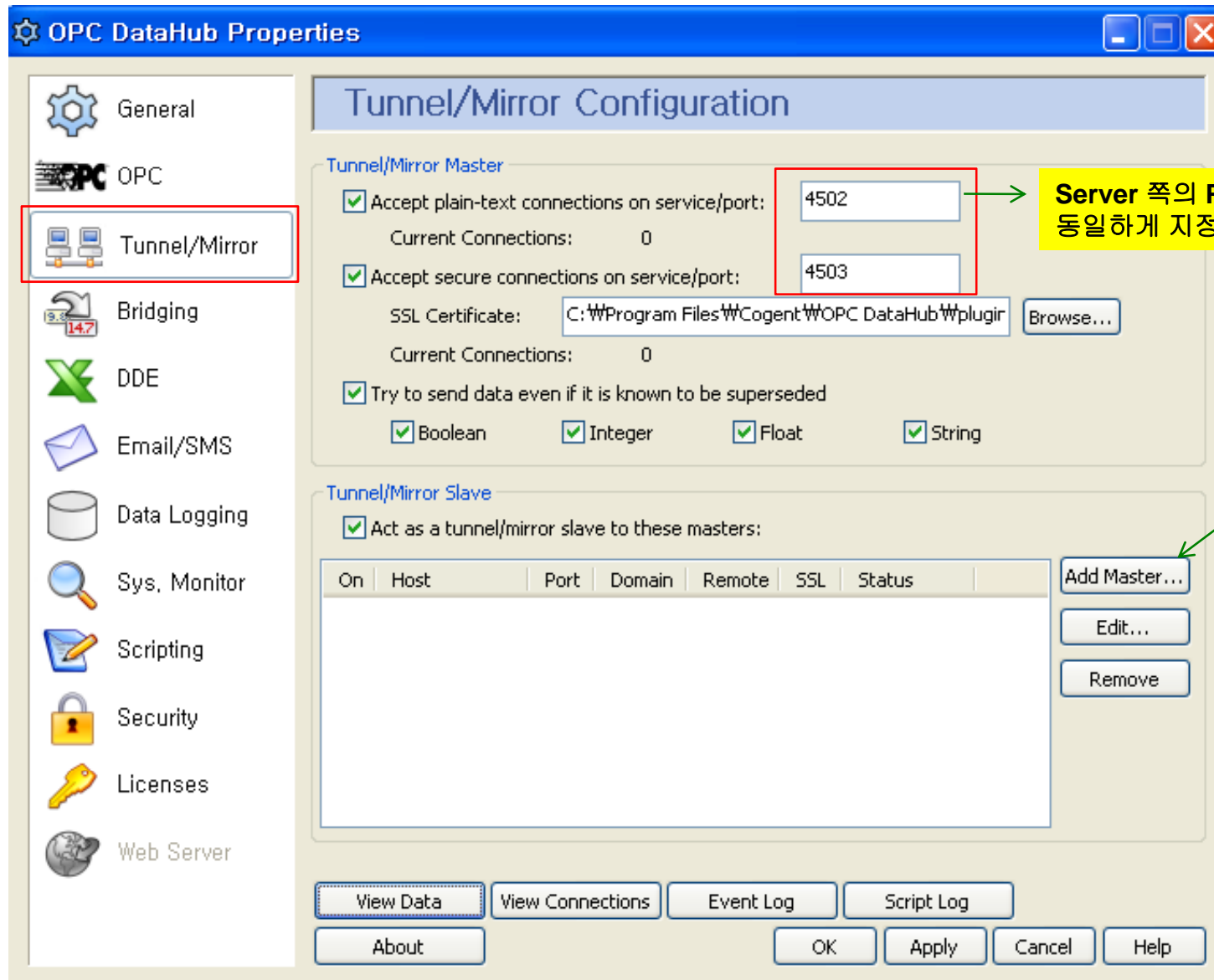
Selected Point:

Enter new value: Quality: Last Known

Point Name	Date	Quality	Type	Value
ArrayOfReal8	3 10 15:27:26.031	Good	R8 array	[12551.76095961 1232.20282299]
ArrayOfString	3 10 15:27:26.031	Good	BSTR array	["--" "Your" "data," "your" "process," "you...]
Boolean	3 10 15:27:25.014	Good	BOOL	1
Int1	3 10 15:27:26.031	Good	I1	22
Int2	3 10 15:27:26.031	Good	I2	7074
Int4	3 10 15:27:26.031	Good	I4	25812
Money	3 10 15:27:26.031	Good	CY	19875
Qualities	3 10 15:27:26.031	Bad	UI2	1458
Real4	3 10 15:27:26.031	Good	R4	6531.063
Real8	3 10 15:27:26.031	Good	R8	7677.96327033
String	3 10 15:27:26.031	Good	String	--
Time	3 10 15:27:26.031	Good	DATE	2011-03-10 오전 6:27:26
UInt1	3 10 15:27:26.031	Good	UI1	178
UInt2	3 10 15:27:26.031	Good	UI2	381
UInt4	3 10 15:27:26.031	Good	UI4	13975

Drag & Drop Style: MS Office (Excel/Word) Property: Value Close

DataHub Setup for OPC Tunneling – OPC Client side



DataHub Setup for OPC Tunneling – OPC Client side

Tunnel/Mirror Master Configuration

Primary Host:	192.168.1.10	Port:	4502	<input type="checkbox"/> Secure (SSL)
Secondary Host:	192.168.1.11	Port:	4502	
Local data domain:	default	Remote user name:		
Remote data domain:	default	Remote password:		

Data Flow Direction

- Read-write: Send and receive data to and from the Master
- Read-only: Receive data from the Master, but do not send
- Write-only: Send data to the Master, but do not receive

When the connection is initiated:

- Get all values from the Master
- Override the Master's values with my values
- Synchronize based on time stamp

When the connection is lost:

- Mark data quality here as "Not Connected"
- Mark data quality on the Master as "Not Connected"
- Do not modify the data quality here or on the Master

Connection Properties

- Replace incoming time stamp with the local current time
- Transmit point changes in binary (faster, x86 CPU only)
- Target is a Cogent Embedded Toolkit server

Heartbeat (ms):	1000	Retry Delay (ms):	2000
Timeout (ms):	2000		

OK Cancel

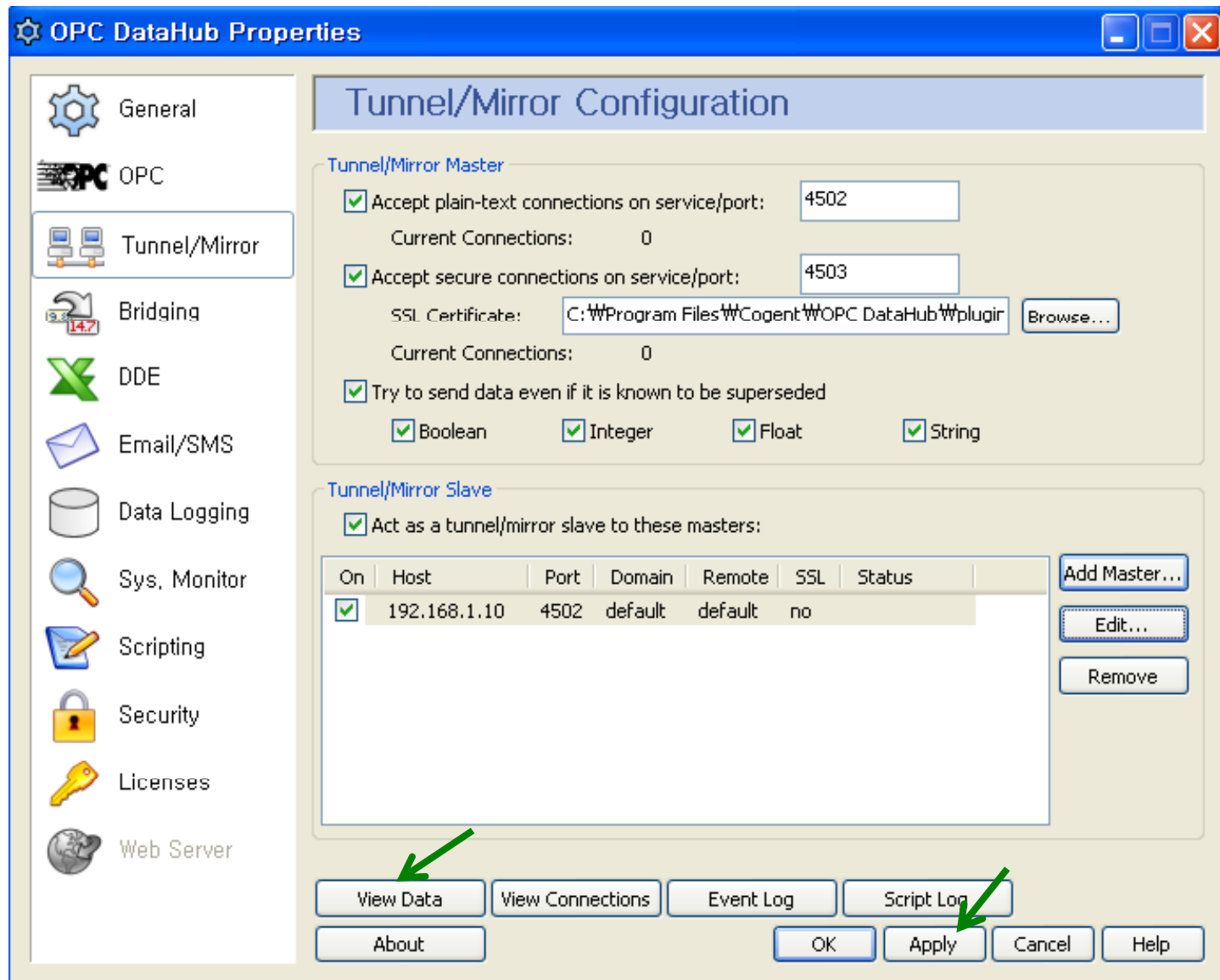
Primary and/or Secondary Server를 지정한다

Server 쪽의 Port번호와 동일하게 지정

Timeout 은 Heartbeat time 의 2배 이상

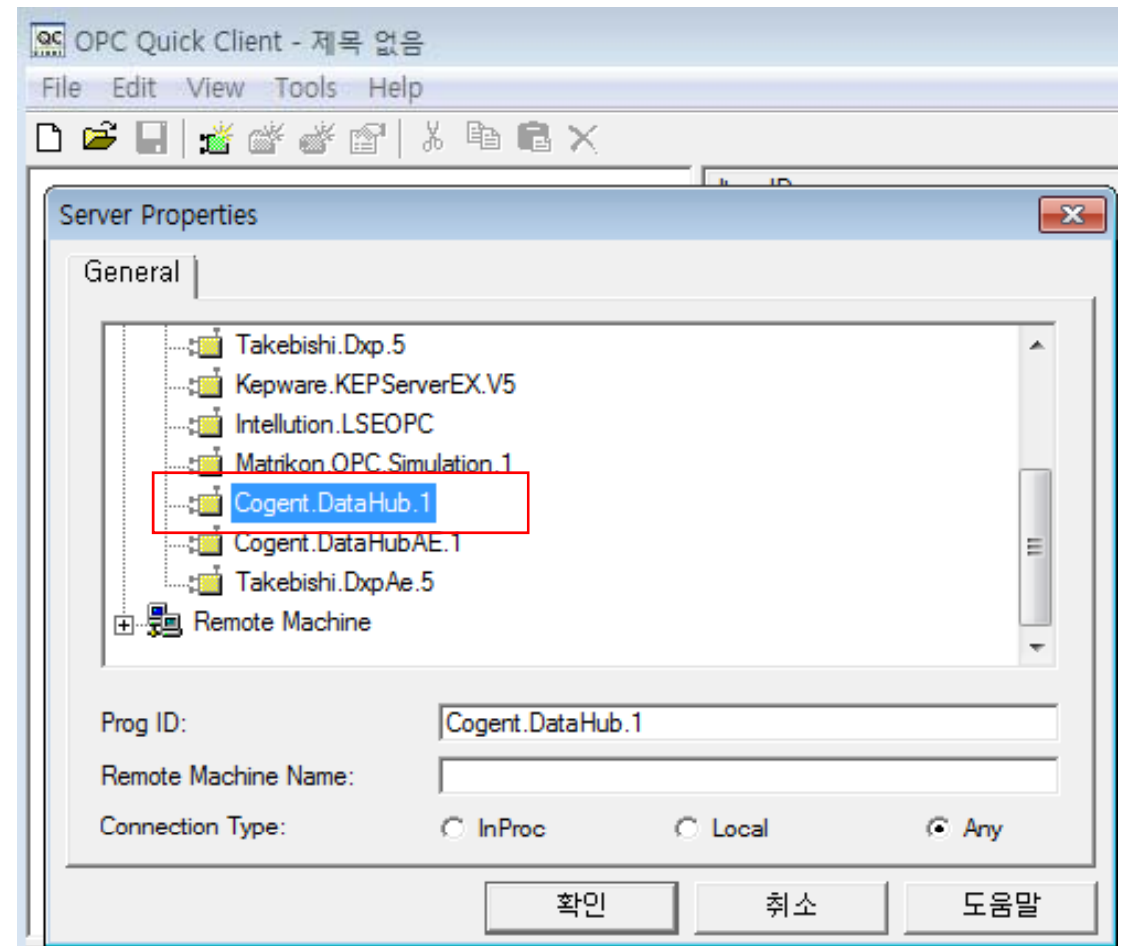
DataHub Setup for OPC Tunneling – OPC Client side

- Tunnel Master를 등록한 후에는 Apply 를 클릭하여 설정을 완료하고 ViewData를 클릭하여 Data를 확인한다.



OPC Client Setup

- OPC Server PC에 등록된 OPC Items는 OPC Client PC의 DataHub에 그대로 Mirroring이 된다.
- DataHub가 이제 새로운 OPC Server가 되었으므로, 어떤 OPC Client라도 DCOM 설정 없이 Local PC의 DataHub OPC Server에 접속하여 Data를 요청하면 된다.



Thank You!

항 철 상

Phone	031-346-1981,2
Mobile	010-5027-8967
Email	info@opchub.com
Home	www.opchub.com