Appendix C – Active Call Back Service

1. Introduction

User would like to use FatekNet OPC Server to access PLC, but the PLC workstation's IP address is acquired using dynamic IP or if it's behind a firewall and access from outside is difficult. User can achieve the application by the following steps.

Note: FatekNetOPC Server Version 1.0.4 and later support Active Call Back Service.

2. FBs-CBEH Setup

Please refer to FBs-CBEH Operation Manual chapter 8-3.

• Get Device Serial Number (S/N)

Launch Ethernet adaptor Configuration, and scan workstations in Ethernet. The last two number of Ethernet Address is device serial number (S/N). The serial number in the following figure is 1670 (0x0686H).

- SS File	Ethernet adaptor Configuratio	n					x
	Attached Media	ិ RS232					
	IP Address/Name	Ethernet Address	OP Mode		Comment	Seq.	
	192.168.0.153 <cbeh-1></cbeh-1>	4c:49:51:01:06:86	Server	Device1		1	
ļļ							
	Properties	Scan		Exit	Link Test		

• Setup the Data Maintenance Center

The Service CallBack Server Ethernet configuration of FBs-CBEH must be the same as the data maintenance center (ex:192.168.0.119) which the FatekNet OPC Server run on. It makes sure that the communication between workstation and OPC server is fine.

-Service CallBack Server								
Port:	5700	IP (URL):	192.168.0.119					

3. FatekNet OPC Configurator Setting

• Install FatekNetOPC Server

Install the FatekNetOPC Server application on PC (data maintenance center) (ex: 192.168.0.119).

• Setup FatekNetOPC Configurator

Launch FatekNetOPC Configurator to configure the device and data items.

📳 FatekNetOPC Configurato	r - [C:\FatekNetOPC_Temp.mdb]	
User Options		
New Open Save Ex	sy port Import Folder Data Conversion Item Add Item	Delete Item Item
FATEK Space FBs60MC R0 R1 Ota Conversions Simulation Signals Alarm Definitions	Name Simulate Symbol Register Address Data Type Image: R0 No R 0 UINT Image: R1 No R 1 UINT	
	•	•
	Name: FBs60MC Station No.: 1 Use Simulation: IP Setting Use Simulation: - IP Setting Use Service Call Back - S/N: 1670 - Port: 500 Timeouts - - - - Write (ms): 1000 Timeouts to suspend (#): 100 Write (ms): 1000 Suspend period (ms): 5000	Restore

Enable User Service Call Back, enter the device serial number (S/N) and Port.

IP Setting									
✓ Use Service Call Back									
S/N: 1670	-	Port: 500) 📮						
	· · · ·								

Click **Option/Active**, and click "Yes" to use the current edited database.



Click **Options/Setting**, enable "OPC server start as a Windows NT Service automatically", and set Service Call Back Port as 5700.

🔧 Setting	X
General	
-Monitor view settin	g
Update Rate:	1000 (ms)
Service	
OPC server star	ts as a Windows NT Service automatically
Service Call Back I	?ort: 5700
	OK Cancel

Reboot

Reboot the PC system.

4. Execute the Active Call Back Program

After confirming that the workstation's Service Call Back Server configuration setting is correct, you can execute the active call back function. To use the active call back function, it can be controlled using the registers D3950 and D3951; please refer to FBs-CBEH Operation Manual Chapter 2 for detailed descriptions.

The next figure is a simple control program; it uses the X0 contact to start up the active call back action. When X0 is pressed, the active call back command code register D3950 will be set to 3359H, which will execute the active call back. In addition, the status of register D3951 can be used to monitor the operation execution of the call back. In the example, when the connection is successful, Y1 will be ON. When connection failed, Y2 or Y3 will be ON. When connection is

N000	×O								10	08.MOV		
	— ↑ —							EN-	S :	13145		
		24	12	88	61	13	21	12	D :	D3950	183	- 8
								_				
			102	28		×.	*1			100000000000 - 10 0		80.981
N001									1000	17.CMP	1	MO
		<u></u>						EN-	Sa:	03951	-a=b	-()
			100	255	21	13	20	38	Sb:	5	12	1
								U/S			-a>b-	
			182	15		25	21	1000			0.000	- 2
								~~			A CONTRACTOR OF	
								1			-a <b-< td=""><td></td></b-<>	
			182	25	61	15	70	18 au	38	17. CMP		M1
								EN-	Sa:	D3951	_a=b	()
			12	25	1	1	25	1.000	Sh:	6	000000	100000
											and a state based	
								-0/5-			-a>b-	
			12	10	4	13	70				122	
											-a <b-< td=""><td></td></b-<>	
			12	10.	1	12	25	2	- 33	1000000 H		
								F 11	1000	17.CMP	The second	M2
		3.9						EN	oa.	05951	-a=0	
		24	32	125	21	13	<i>2</i> 0	98	Sb:	8		- E
								U/S-			-a>b	
8		38	10	25	1	15	21	1.000			10.00000	
								-			the state of the s	
								3				
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	1†	(2)						EN-	s :	0		
			2	25	1	15	25	10000	р:	D3950	12	— 2
	MI											
	-ITI							3 <u>6</u>				
	M2		30	128	21	13	A1	181	98	34	100	
		10										
NO02	S	52	112	32	122	(S)	929 -	201	10	17 6140	2/2	NO.
10005		22						EN	Sat	D3951	la=h	()
		1	194	33.	12	15	(2)	L.M.	che	-	-4-0	
								2018205	50:	1	810	
								-U/S-			-a>b	
			202	- 22	- 120	123	÷.	200			1.2	
											Lach-	
			52	33	12	151	20	10 A	20	18		-
								100000	107 10	17.CMP	10 10	Y1
			156	78	- 28	38	85	EN-	sa:	D3951	-a=b	-()
			1.00	12	120	121	20		Sb:	2		101,024,02
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											210	
								80 2	-	18	-a <b-< td=""><td></td></b-<>	
			100		191	121			121	17 CMP	-	¥2
								EN-	Sa:	D3951	_a=b	<u> </u>
			12	3	12	191	<i>2</i>		ch.	6		0.000
								2.22			- 10	
								-0/5-			-a>b-	
											-a <b-< td=""><td></td></b-<>	
			12	3	12	151	£1	8 - J-	20	an and a state of the	_	
								E	Car .	17.CMP	1	Y3
		2	100	18	25	(e)	23	EN-	sa:	03951	-a=b	-()-
				5 W	- 14	141			Sb:	5		10120200
								-U/S-			-a>b	
		12	12	63	12	191 -	£1				100	<mark>-</mark> 1
											1	
								80 0			a <b< td=""><td></td></b<>	
		107	-122	192	120	101	40	254 D. D		305		

terminated, D3951 must be set to 0 in order to accept the new call back request command.

5. OPC Client Test

Before executing active call back program, even if the OPC client connect with FatekNetOPC Server, it cannot access the register data from PLC. It is because the FatekNetOPC Server does not get the IP address information from FBs-CBEH.

FatekNetOPC Configurato	or - [C:\FatekNetOPC_Temp.	mdb]				
New Open Save Ex	csv csv cport Import	ice Folder Data Cor	version	Simulation Limit Alarm Digital Alarm	X Delete Item	tiply Monitor
File	Ta .	4	dd Item		Fa .	Tools 🕞
FATEK Space	Name Simulate Symbol : RO No R RI No R KI No R	Register Address Data Type D UINT 1 IIINT	III			4
	Name: FBs60h	ſĊ			Restore	
	Station No.: 1 IP Setting Use Service Call Back	Use Simulation:]		Apply	
	S/N: 167)	Port: 500	×			
Item ID	Value	Timestamp	Quality	Subquality	Limit	
FB:60MC.R0 FB:60MC.R1	777 777	2015/6/30 下午 02:56:50 2015/6/30 下午 02:56:50	Bad Bad	CommFailure CommFailure	Not Limited Not Limited	

After executing active call back program, the FatekNetOPC Server get the IP from FBs-CBEH and make connection successfully.

FatekNetOPC Configurator -	[C:\FatekNetOPC_Temp	o.mdb]				
New Open Save Expo	rt Import	Folder Data Con	version	Simulation Limit Alarm Digital Alarm	Delete Item	Monitor
FATEK Space FB:60MC R0 R1 Data Conversions Simulation Signals	Name Simulate Symbo	Symbol Register Address Data Type				
Item ID FE:60MC_P0	IP Setting Value	Timestamp 2015/6/20 天午 03:06:15	Quality	Subquality Not-specific	Limit Not Limited	-
FBs60MC.R1	0	2015/6/30 下午 03:06:15	Good	Not-specific	Not Limited	