TECHNICAL INFORMATION	TI-V-POWER CLOUD-0003v100EN
Ladder Transfer through V9 / VPN	

Type	V-Power Cloud
Software version	All versions
Required options	Not required
Use	Fuji technical staff
Date	XX/XX/XXXX
Version	1.0.0
Author	xxxxxxxxx
Revised	xxxxxxxxx
Approved	xxxxxxxxx
Languages	English

Introduction.

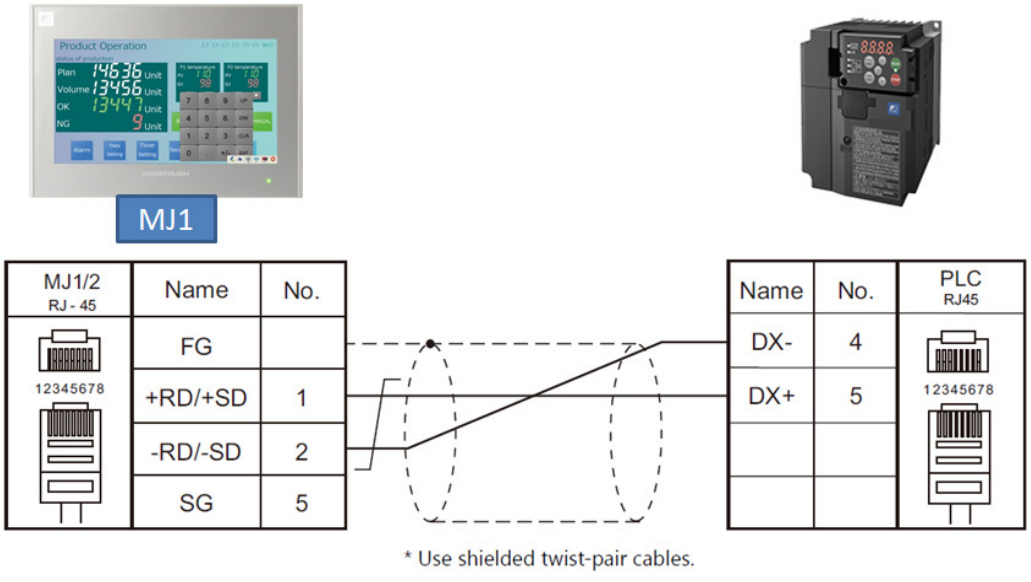
It is needed: V-Connect software, VPN license, log into the “V-Power Cloud” authentication server from the “V-Connect” management tool, settings in the V9 local menu. FRENIC Loader Software and V-SFT 6.0.15.0 or higher.

* Always log in (in V-Connect) using the administrator ID immediately after domain creation.

Procedure.

1- Connect V9 to Frenic Ace and check the communication is established.

a- Wiring diagram.

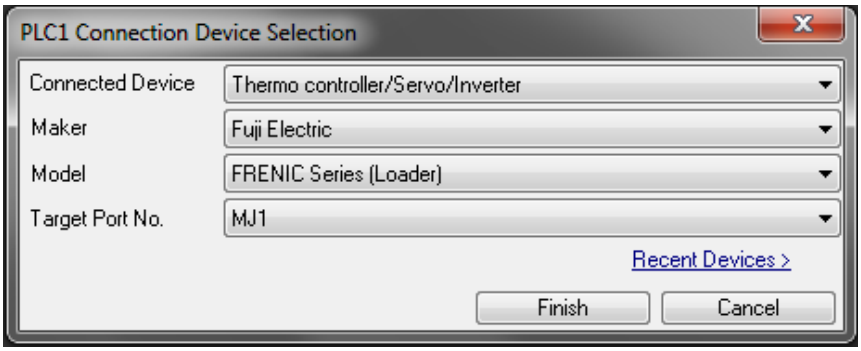


b- Settings for FRENIC ACE

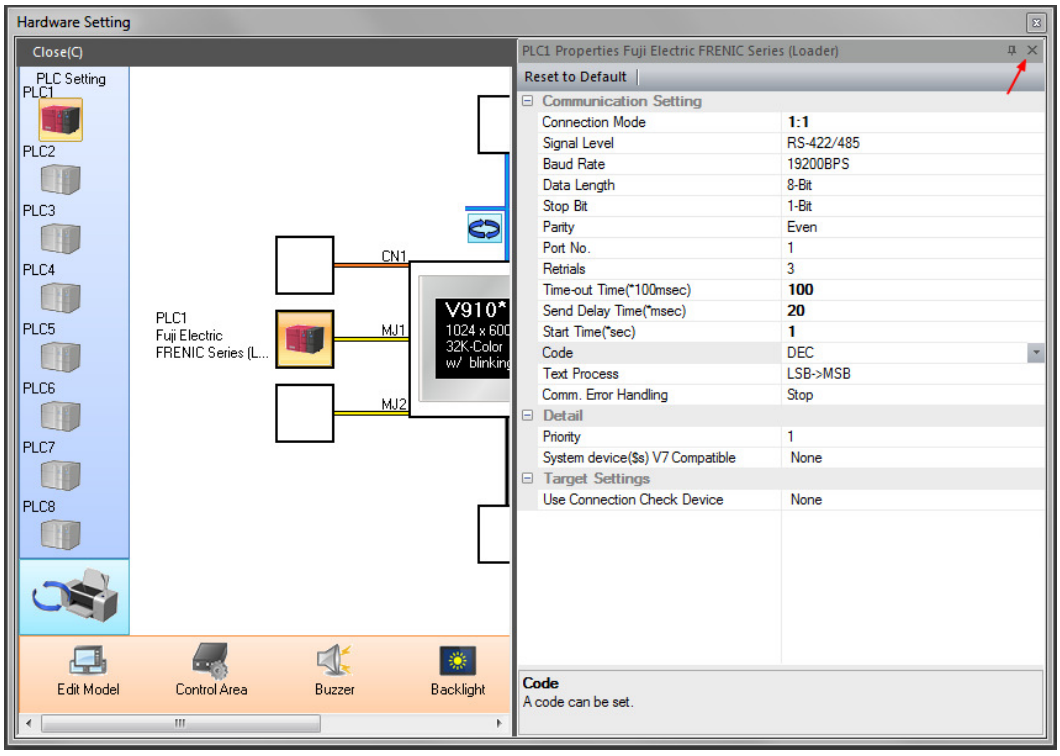
FRENIC-ACE (or y11, y14, y16, y17, y20 for Port2)
The parameter is fixed for communication by FRENIC-Loader driver.

	Function Code	Item		Setting	Example	
Port1	y01	RS-485 setting (communication port 1)	Station address	1 to 247	1	Fixed
	y04		Baud rate	1: 4800 bps 2: 9600 bps 3: 19200 bps 4: 38400 bps	3	
	y05		Data length	0: 8 bits 1: 7 bits	0	
	y06		Parity bit	0: None 1: Even parity 2: Odd 3: None	1	
	y07		Stop bit	For Modbus RTU communication, the stop bit setting is automatically made according to the parity bit setting. When "0" is specified for y06, "2 bits" is set for stop bit. When "1", "2", or "3" is specified for y06 "1 bit" is set for stop bit.	1	
	y10		Communication protocol *1	**0: Modbus RTU** 1: SX (loader) protocol	1	
Port2	y11	RS-485 setting 2 (communication port 2)	Station address	1 to 247	1	Fixed
	y14		Baud rate	1: 4800 bps 2: 9600 bps 3: 19200 bps 4: 38400 bps	3	
	y15		Data length	0: 8 bits 1: 7 bits	0	
	y16		Parity bit	0: None 1: Even 2: Odd 3: None	1	
	y17		Stop bit	For Modbus RTU communication, the stop bit setting is automatically made according to the parity bit setting. When "0" is specified for y16, "2 bits" is set for stop bit. When "1", "2", or "3" is specified for y16, "1 bit" is set for stop bit.	1	
	y20		Communication protocol *1	**0: Modbus RTU** 1: SX (loader) protocol	1	

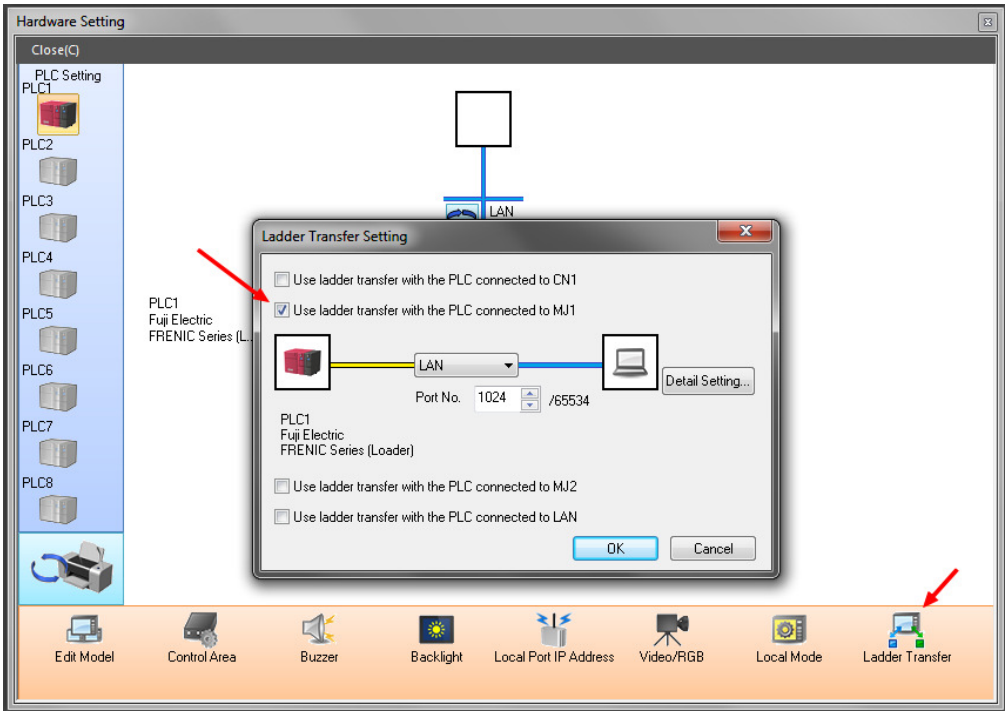
c- Communication settings on V-SFT6. Configure the communication settings like the images below.



Connected device: Thermo controller/Servo/Inverter
Maker: Fuji Electric
Model: FRENIC Series (Loader)
Target Port: MJ1
And press Finish.



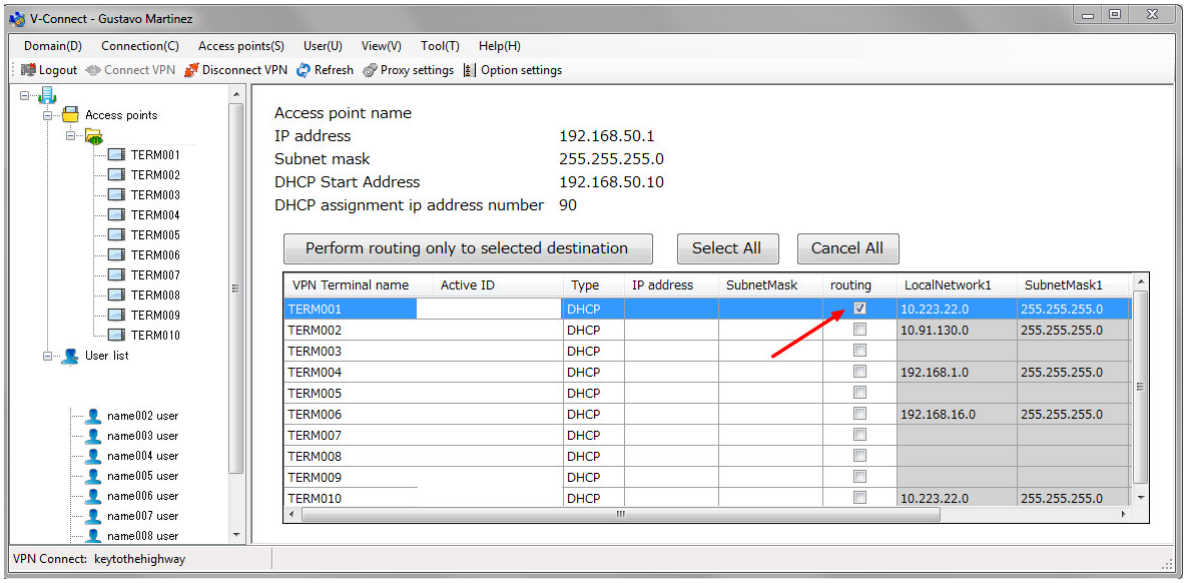
Connection mode: 1:1
Signal level: RS422/485
Baud Rate: 19200 BPS
Data Length: 8-bit
Stop Bit: 1-bit
Parity : Even
Port Number: 1
Retrials: 3
Time out: 100
Send delay: 20
Start time: 1
Click the lower X (red arrow)



Click Ladder Transfer Icon, select Use ladder for MJ1 (red arrow.

Transfer the program to the V9.

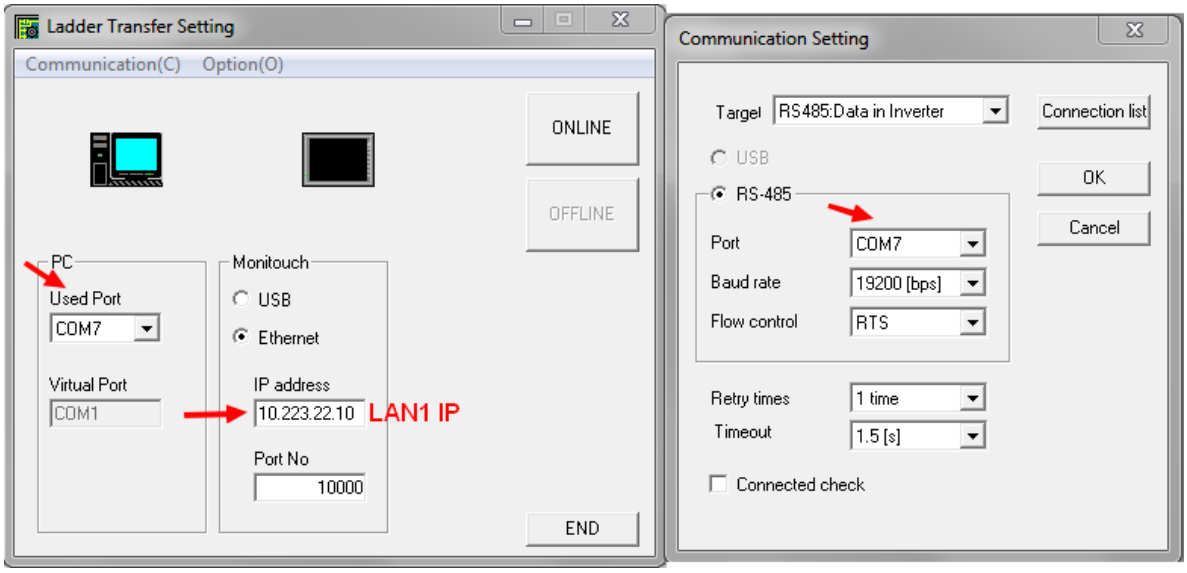
d- Tranfer Screen program to V9.
e- Connect V9 to VPN service (please follow the detailed instruccions in TI-V-Power Cloud-0001)
f- Connect PC to VPN server with V-Connect (please follow the detailed instruccions in TI-V-Power Cloud-0001)



Make sure to select the checkbox "Routing" of the panel which you want to route the VPN.

g- Check the connection with "ping" command going through LA1,LAN2 and VPN IP.

h- Set the same serial port in **FRENIC LOADER** and in **"LadderComOP",** set LAN1 IP address and establish the connection. (LAN1 because we set LAN1 for Ladder transfer)



Document history.

Version	Changes applied	Date	Written	Revised	Approved