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CENTUM VP

MAINTENANCE COURSE

Course Time

CENTUM VP COURSE

Morning session	: 09.00 ~ 12.00
Afternoon session	: 13.00 ~ 16.00
Break 1	: 10.30 ~ 10.45
Lunch	: 12.00 ~ 13.00
Break 2	: 14.30 ~ 14.45

CENTUM VP MAINTENANCE COURSE

OBJECTIVE : In this course, the participants will be introduced to the hardware and software maintenance aspects of the CENTUM VP system. By the end of this course, the participants will be able to perform front-end maintenance of CENTUM VP system.

DURATION : 2 days

PARTICIPANTS : For CENTUM VP engineers and technicians who need to perform maintenance on the CENTUM VP system.

PREREQUISITE : Participants should have attended CENTUM VP Engineering Course.

Day 1

- Centum VP system overview
- Setup Configuration
- Windows setup
- Network setup
- Software Installation
- Download project to FCS

Day 2

- *Backup & Restore*
- *Mandatory-replacement*
- *Troubleshooting*

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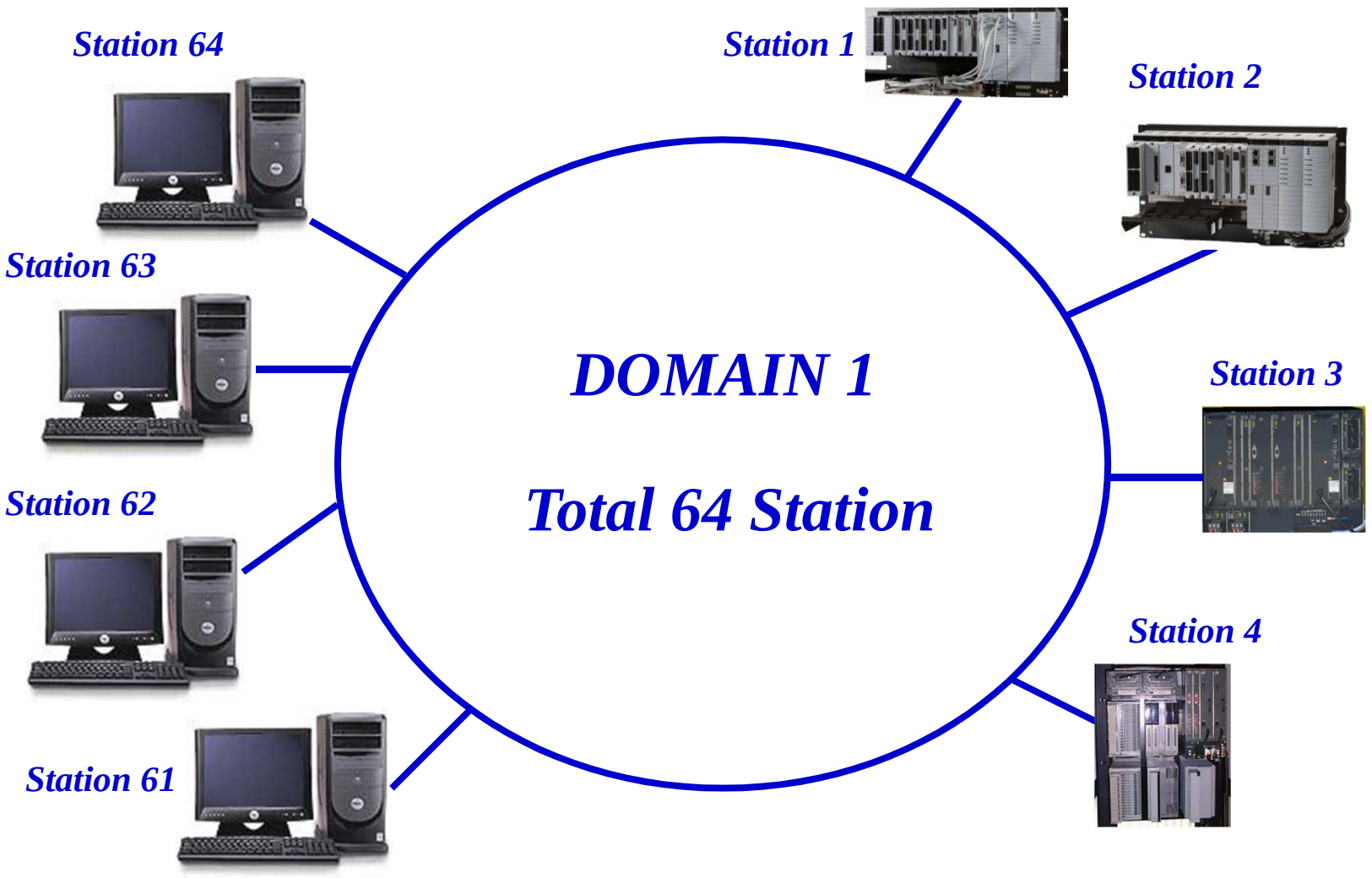
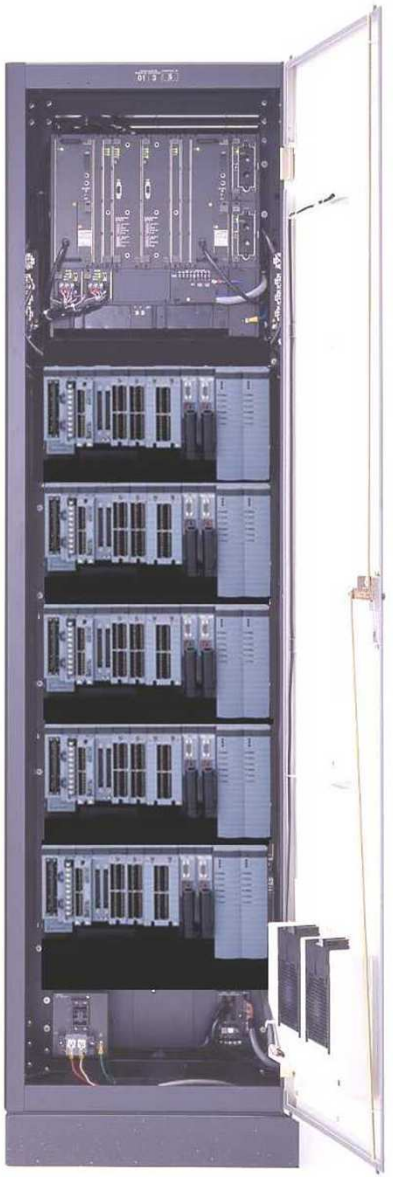
System Overview



•Field Control Station



•Human Interface Station

Desktop

Enclosed Display Console

Open Display Console

•Ethernet

•Vnet

CENTUM VP

Centum VP System Configuration - Overview

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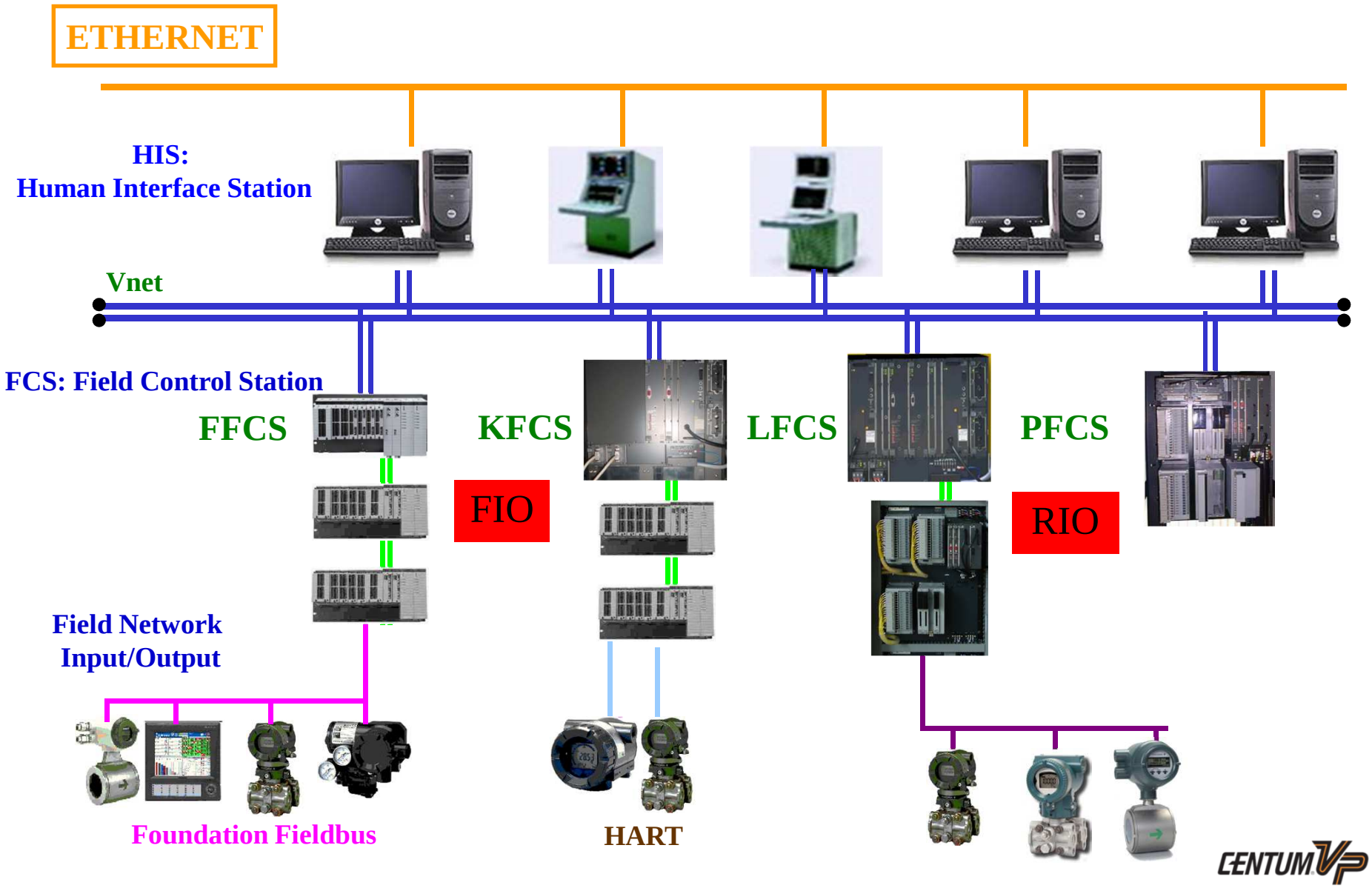

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System configuration

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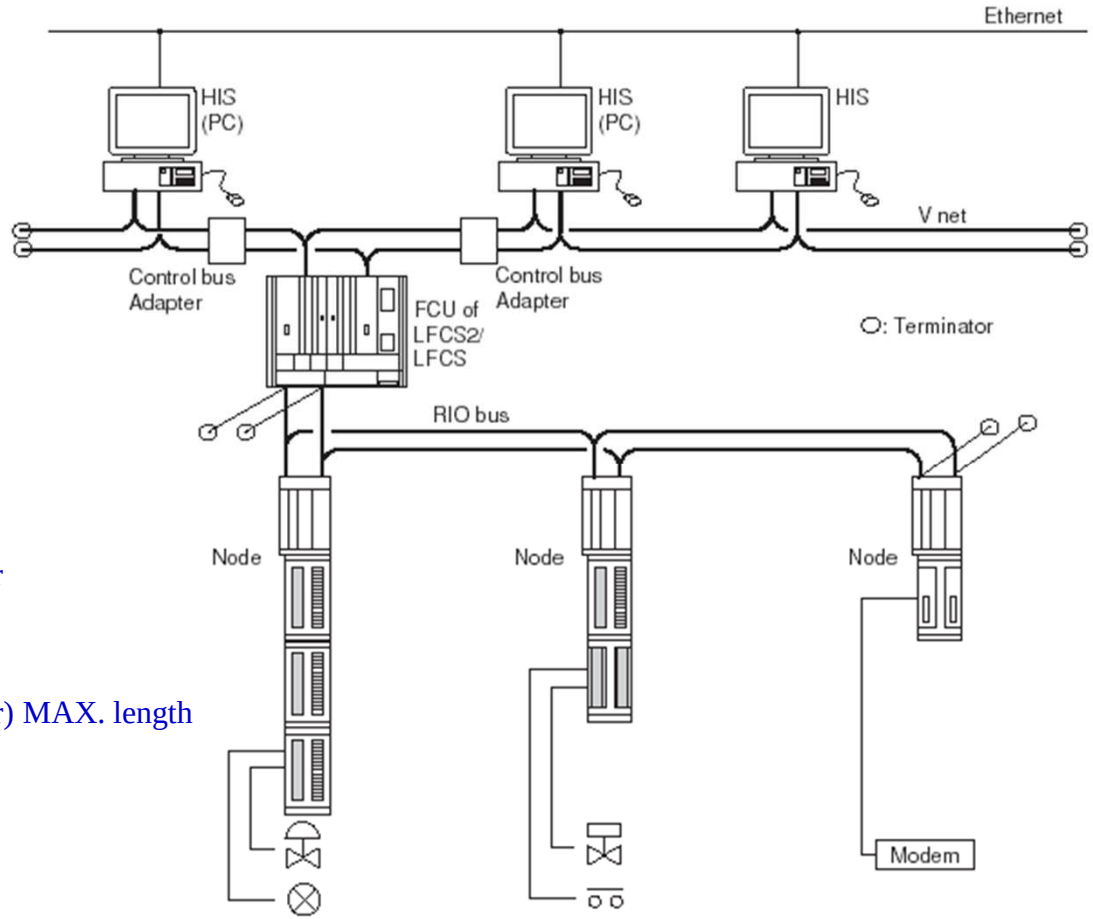
Bus cable connection :LFCS

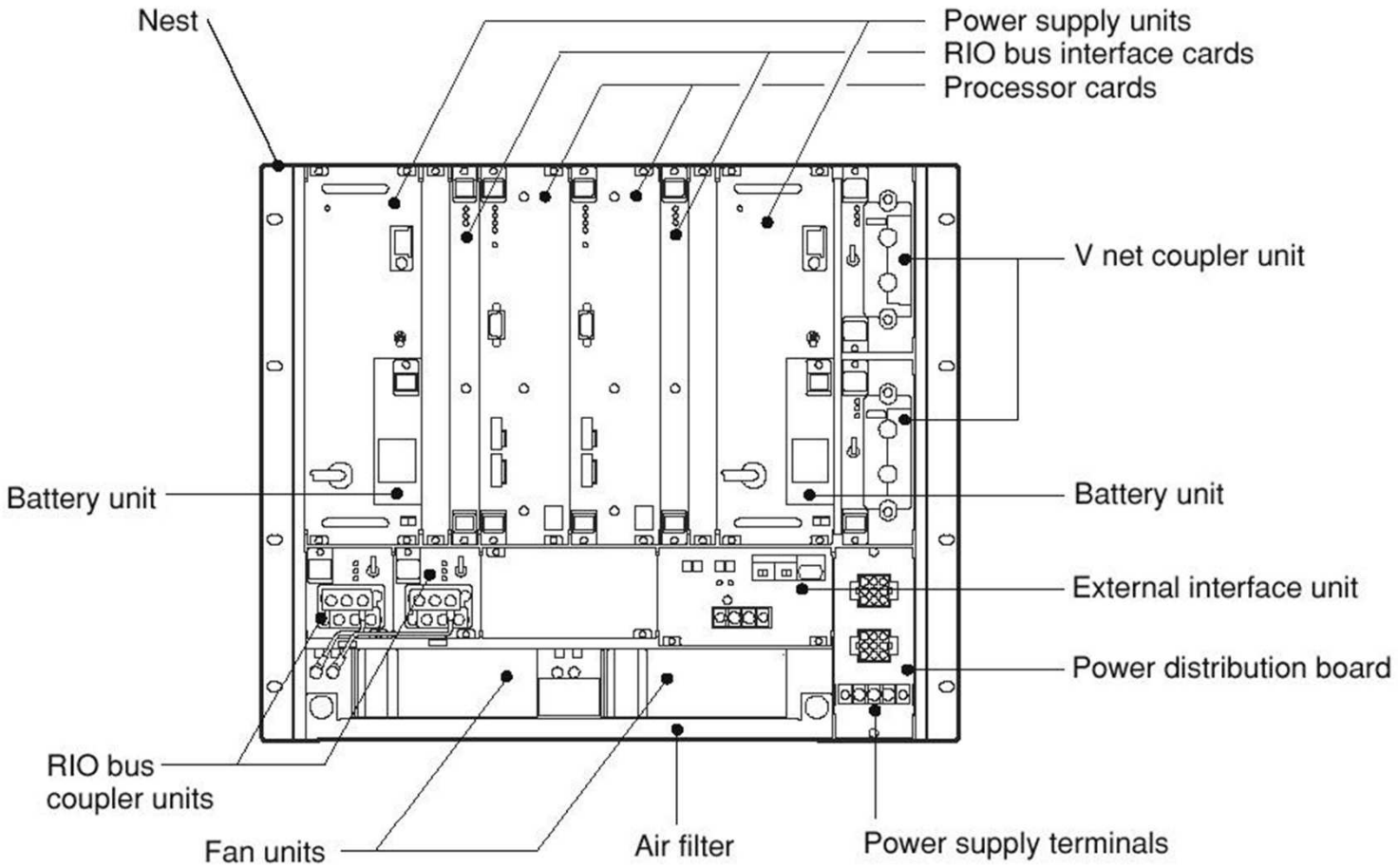
HIS Max. 16 station/domain



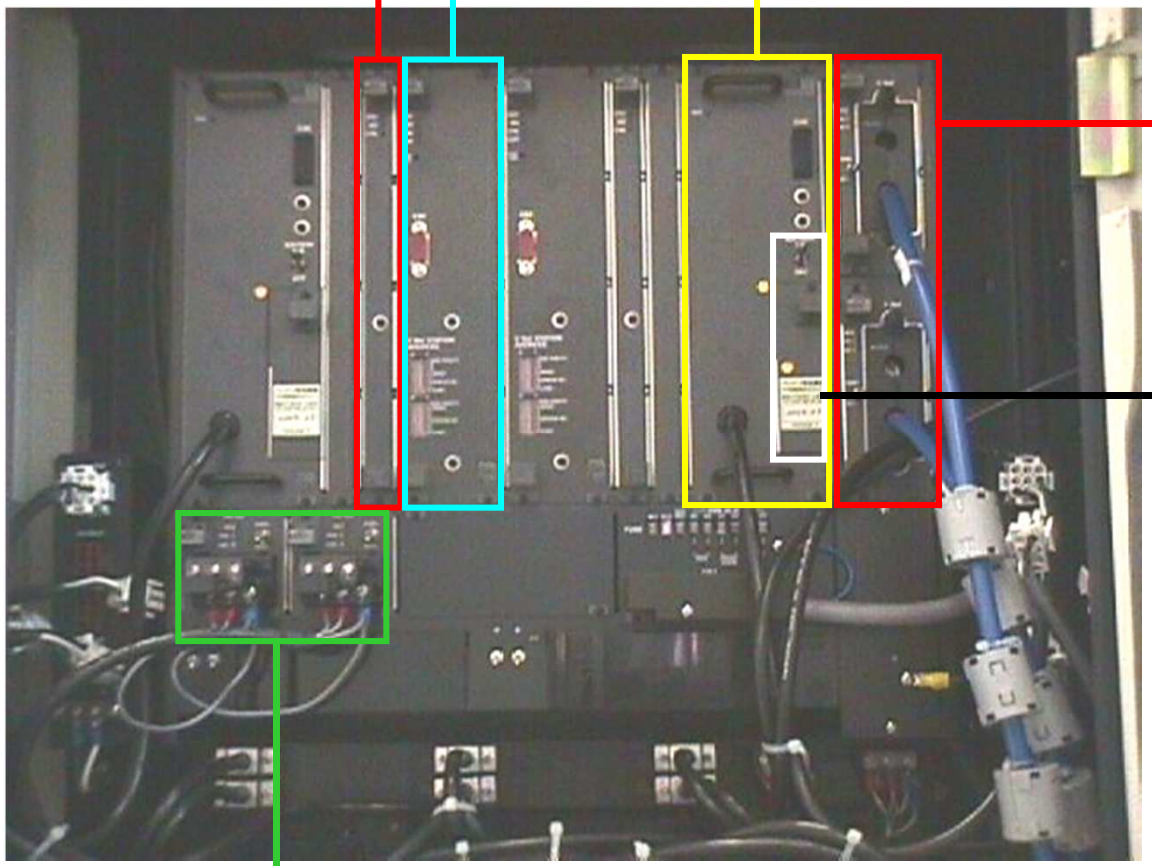
- Twisted pair cable or Optical Fiber
- Single/Duplex
- 2 MB/S , Polling
- 750 m / 20 km (Twisted pair/Fiber) MAX. length
- MAX. 1280 AI/O & 4096 DI/O
- MAX. 8 NIUs
- 5 IOUs / NIU

CENTUM VP

Field Control Unit(FCU) Overview for LFCS



Field control unit Picture : LFCS



Connection of Vnet Cables

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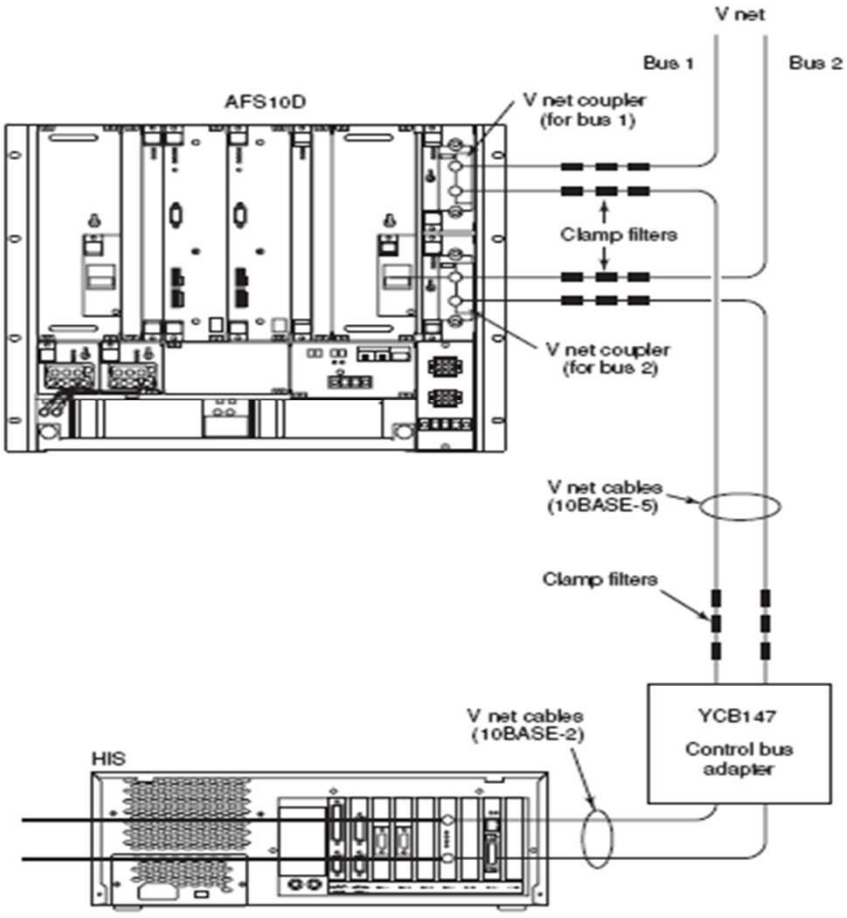
- **Example of Connection of V net Cables (10BASE-5 to 10BASE-2) : LFCS2/ LFCS** (3.05)

V net Cable Connection (10BASE-2 and 10BASE-5): LFCS2/LFCS

The following figure illustrates how to use adapter YCB147 to connect V net 10BASE-5 cable to V net 10BASE-2 cable.

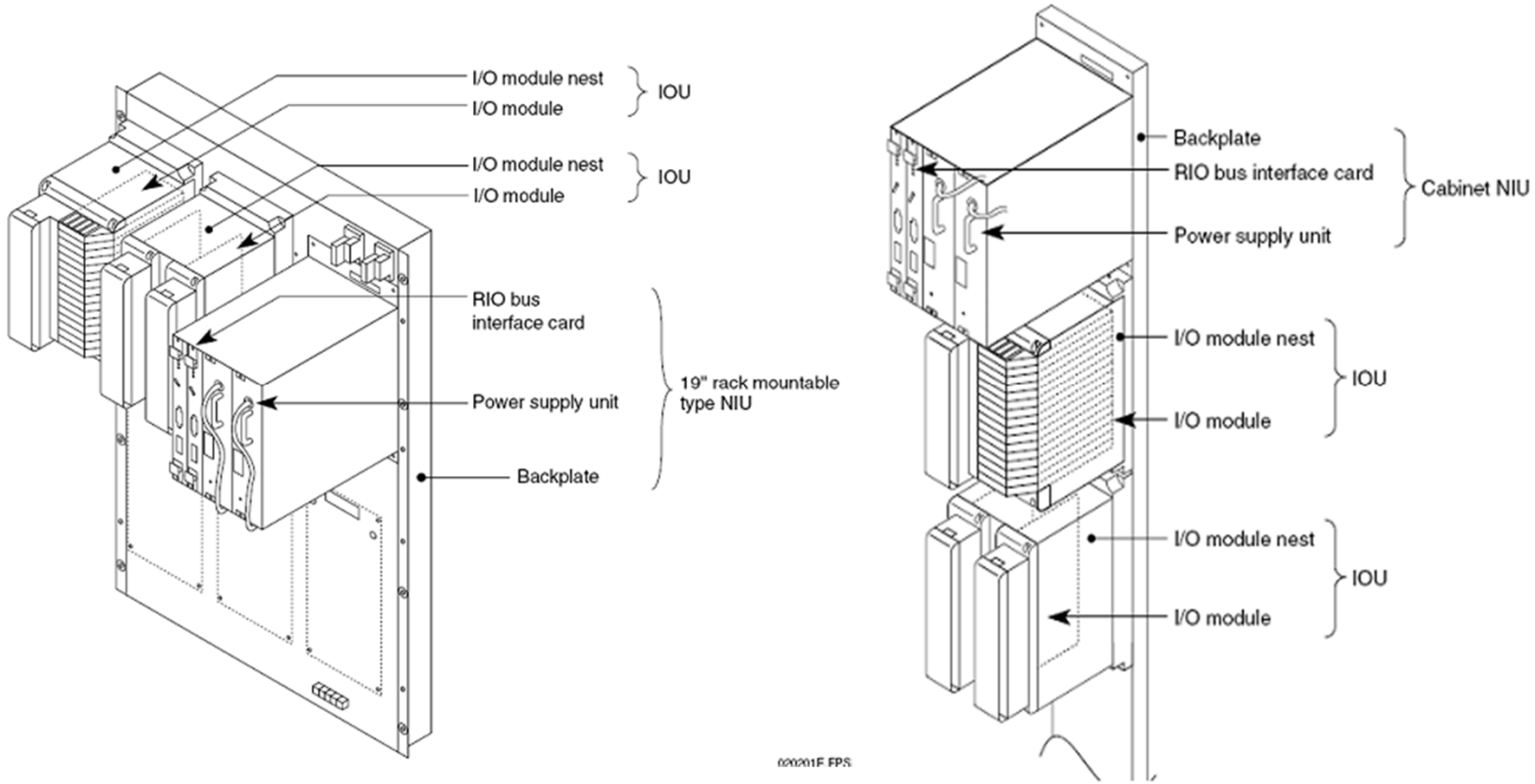


A040303E.EPS

Figure Example of Connection of V net Cables (10BASE-5 to 10BASE-2) : LFCS2/LFCS (3.05)

CENTUM VP

Connecting the RIO bus



2 Model for NIU

Connecting the RIO Bus Cables

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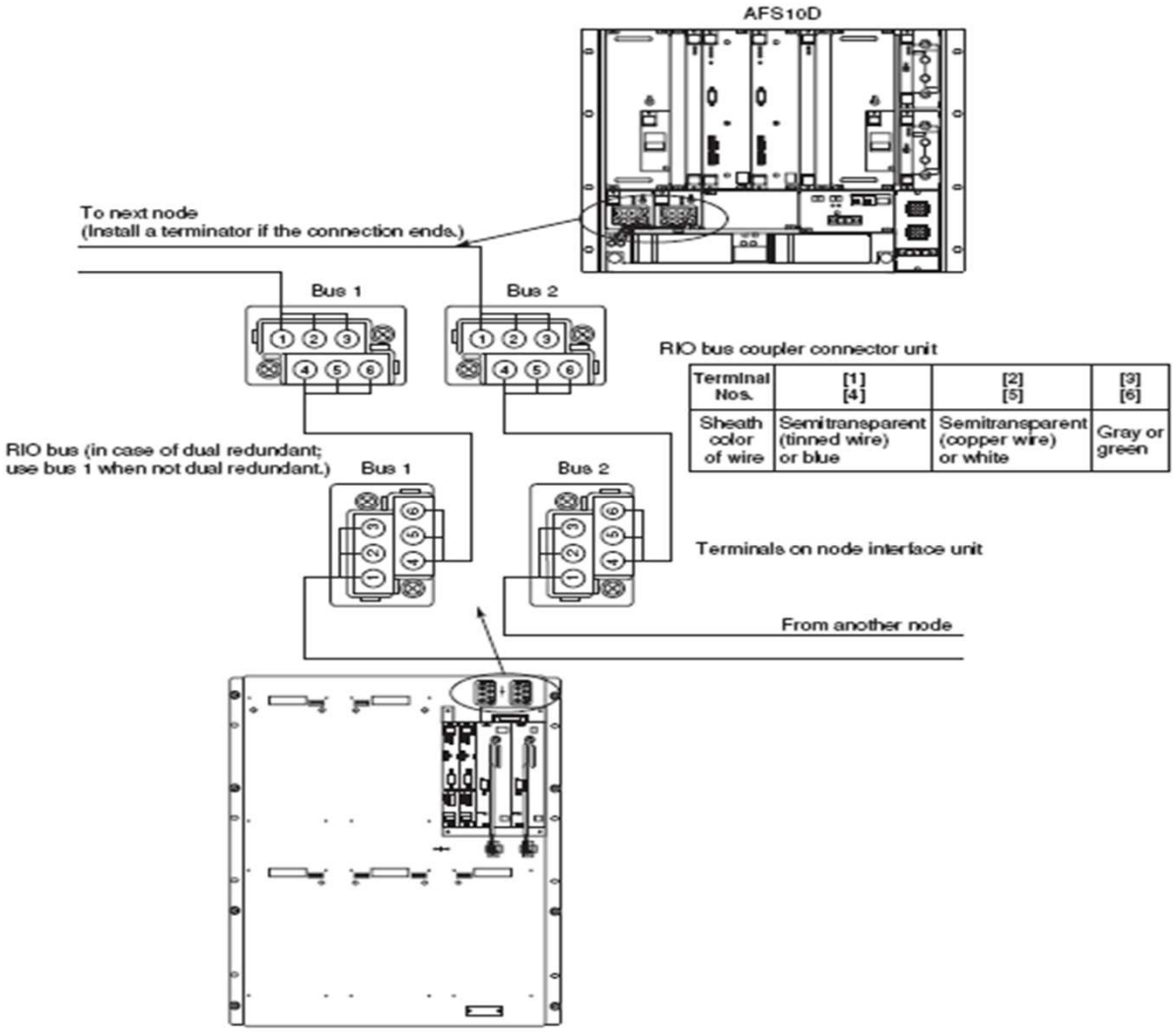
● Connecting the RIO Bus Cables to a Rack Mountable LFCS2/LFCS :
LFCS2/LFCS



Terminal Nos.	[1] [4]	[2] [5]	[3] [6]
Sheath color of wire	Semitransparent (tinned wire) or blue	Semitransparent (copper wire) or white	Gray or green

A0403198.EPS

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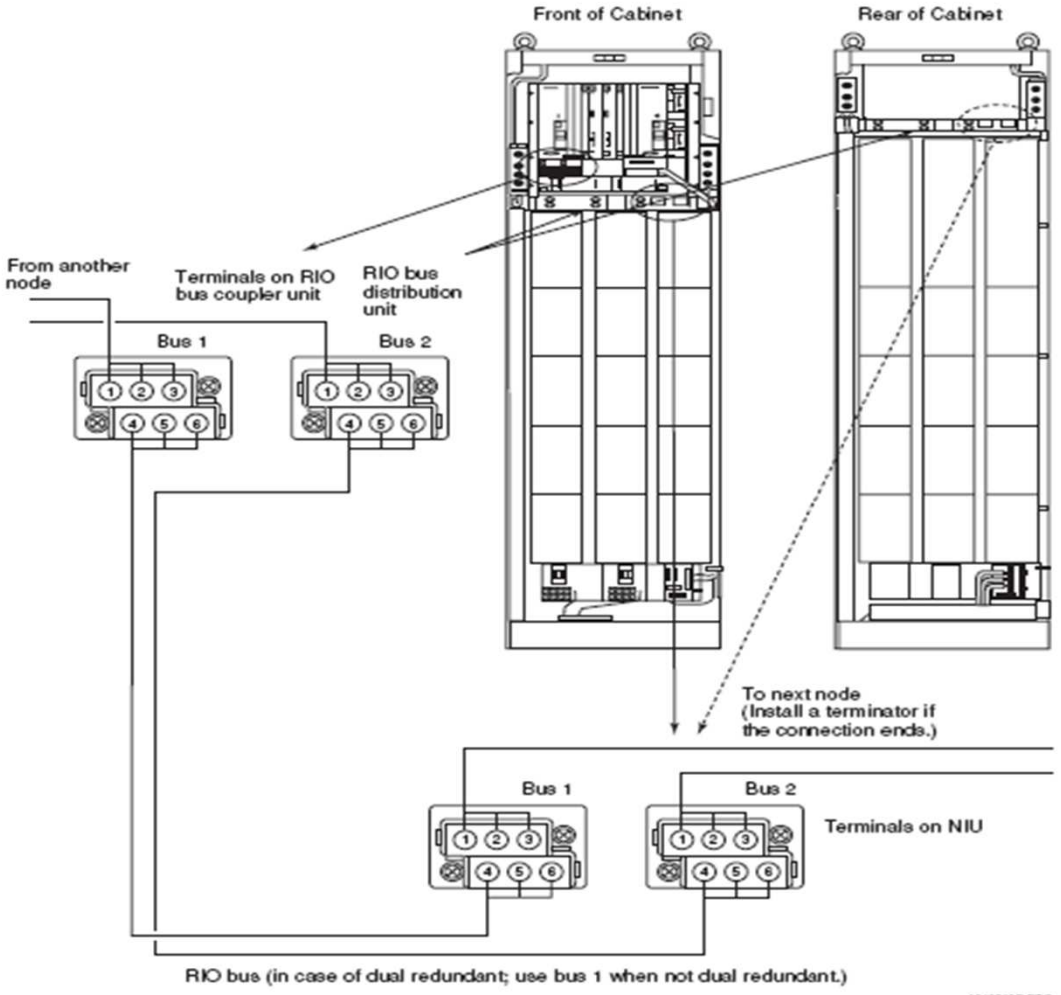
Connecting the RIO Bus Cables

● Connecting the RIO Bus Cables to an LFCS2/LFCS with Cabinet : LFCS2/LFCS



*1: Use the RIO bus unit in the rear for connection to the next node. (Install a terminator if the connection ends.)

Figure Connecting the RIO Bus Cables to an LFCS2/LFCS with Cabinet : LFCS2/LFCS

Remote Input / Output (RIO)

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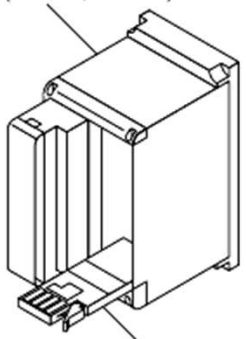
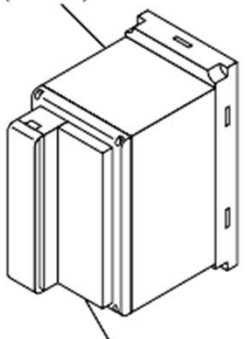
Nest for Analog I/O Modules (AMN11, AMN12)



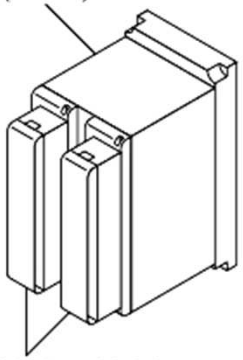
Analog I/O Module

Nest for Relay I/O Modules (AMN21)



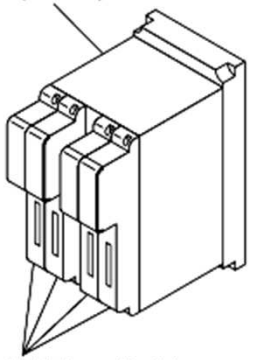
Relay I/O Module

Nest for Terminal-type I/O Modules (AMN31)



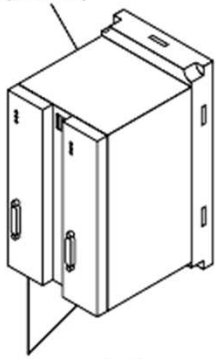
Multiplexer Modules or Digital I/O Modules (Terminal Type)

Nest for Connector-type I/O Modules (AMN32)



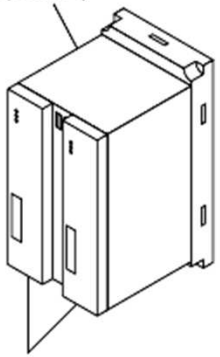
Multiplexer Modules or Digital I/O Modules (Connector Type)

Nest for Communication Modules (AMN33)



Communication Modules

Nest for Multipoint Control Analog I/O Modules (AMN34)

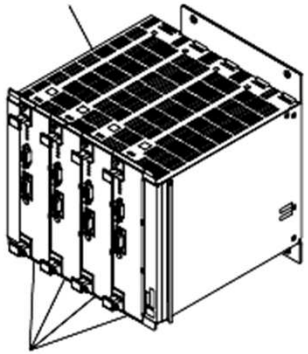


Multipoint Control Analog I/O Modules

Nest for Communication Cards and Ethernet Communication Modules (AMN51)

Communication Cards

Nest for Profibus Communication Modules (AMN52)



Profibus Communication Modules

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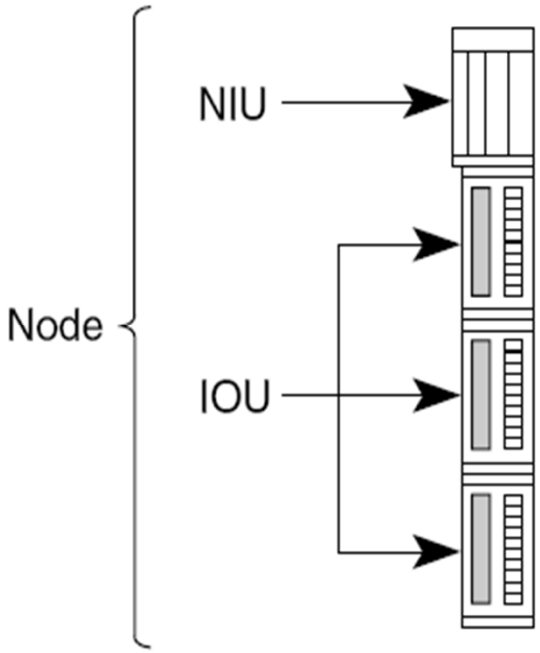
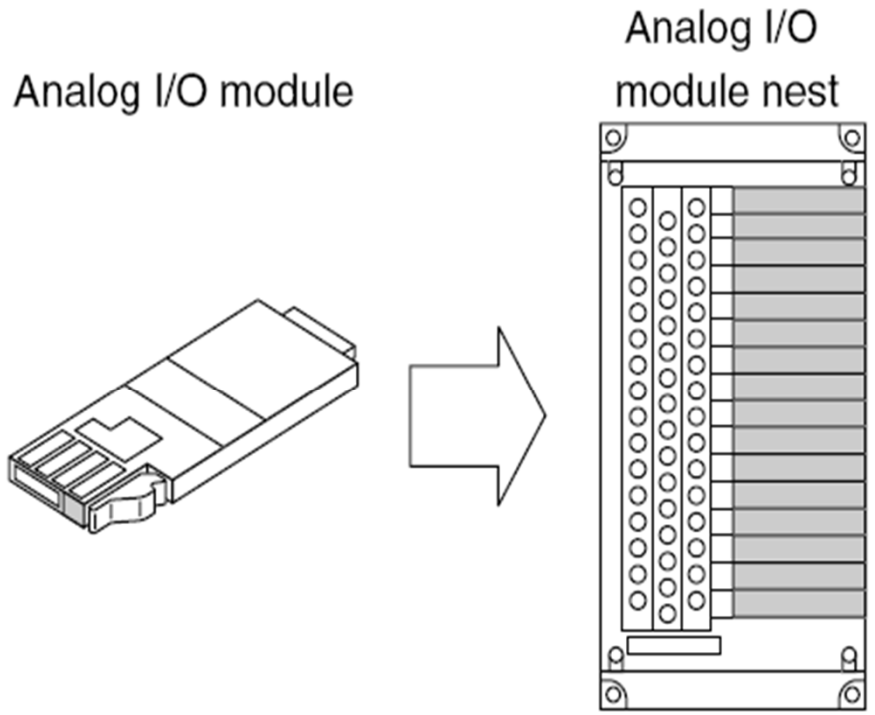
Remote I/O (RIO)

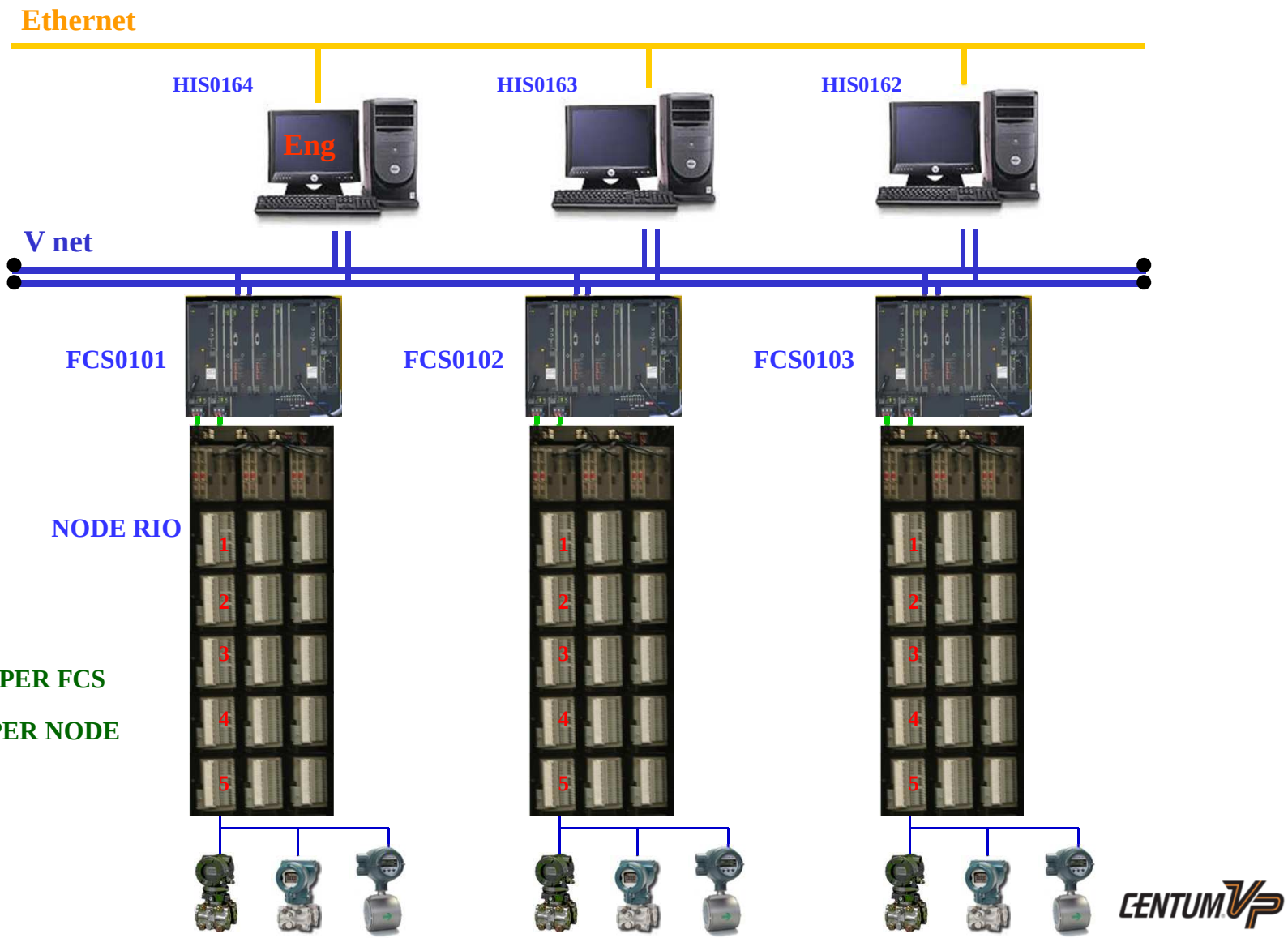
Nodes Picture of LFCS



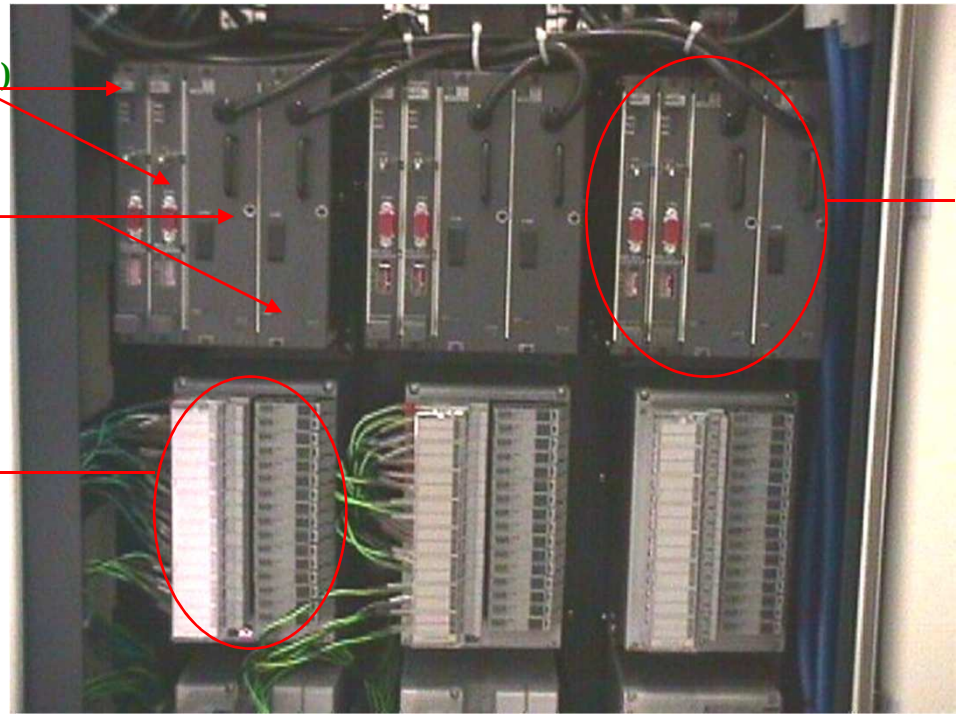


Example of analog I/O module and nest

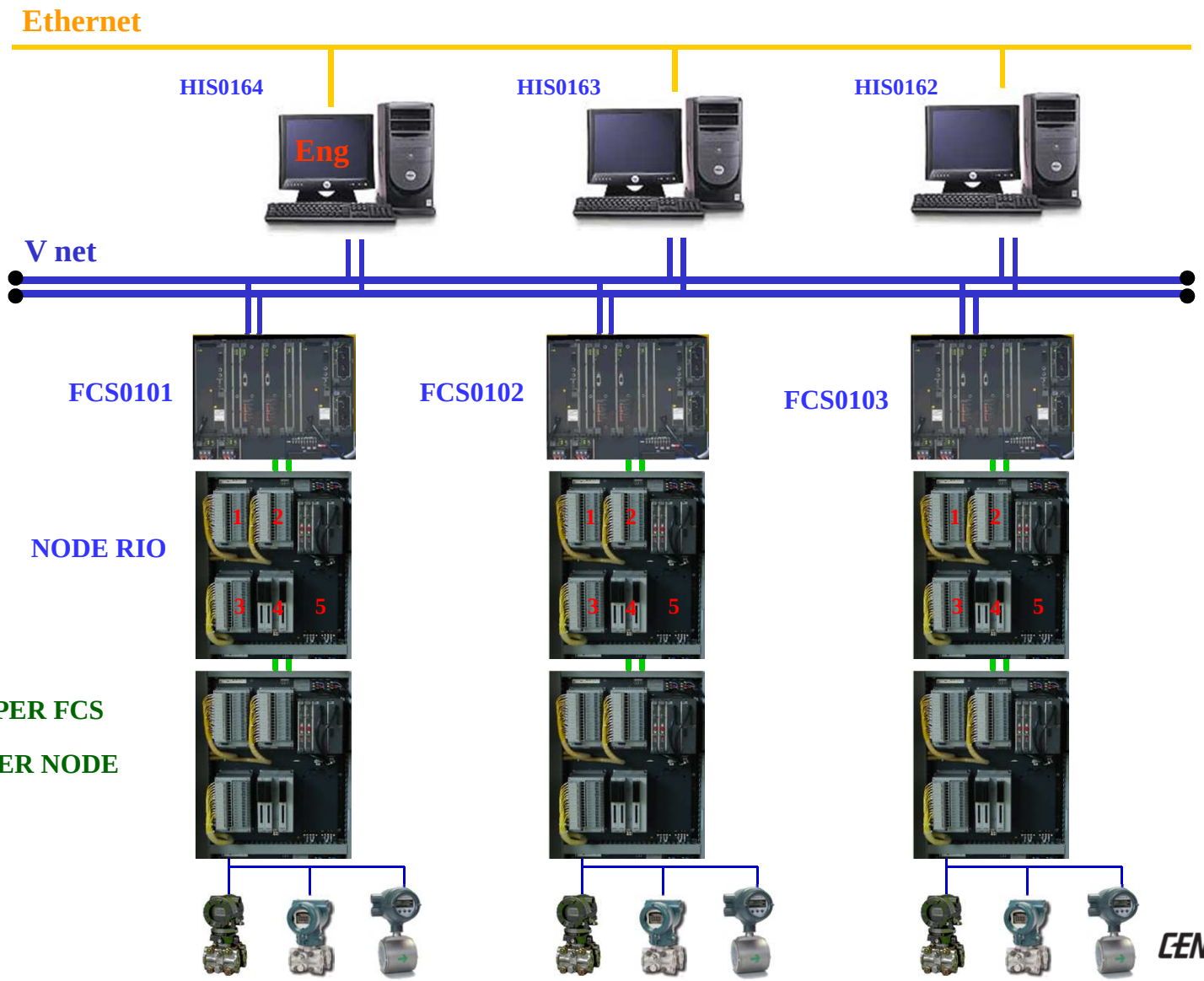
Centum VP System Configuration LFCS



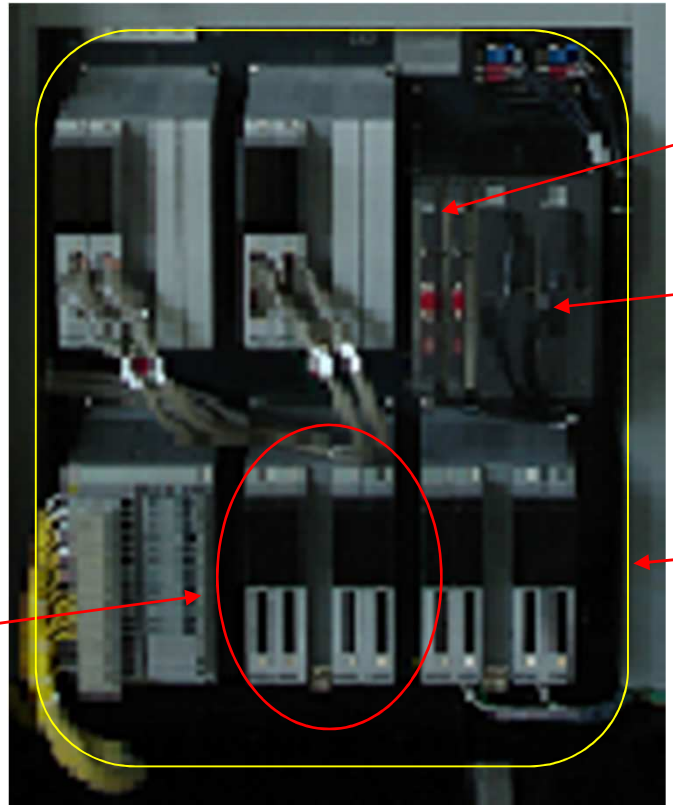
Nodes Picture of LFCS



Centum VP System Configuration LFCS



Nodes Picture of LFCS



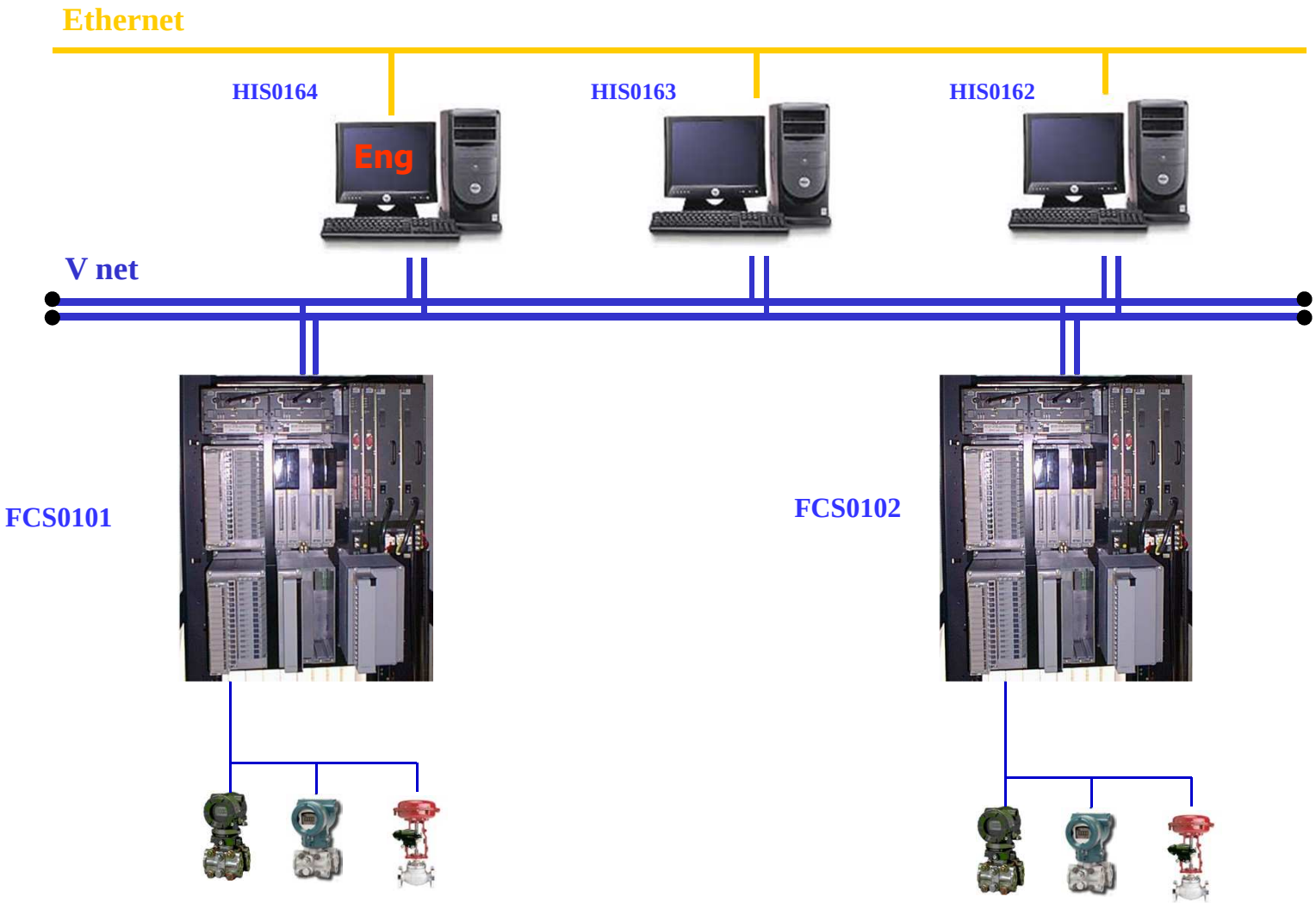
RIO Bus Slave Interface card (RB401)

Power supply

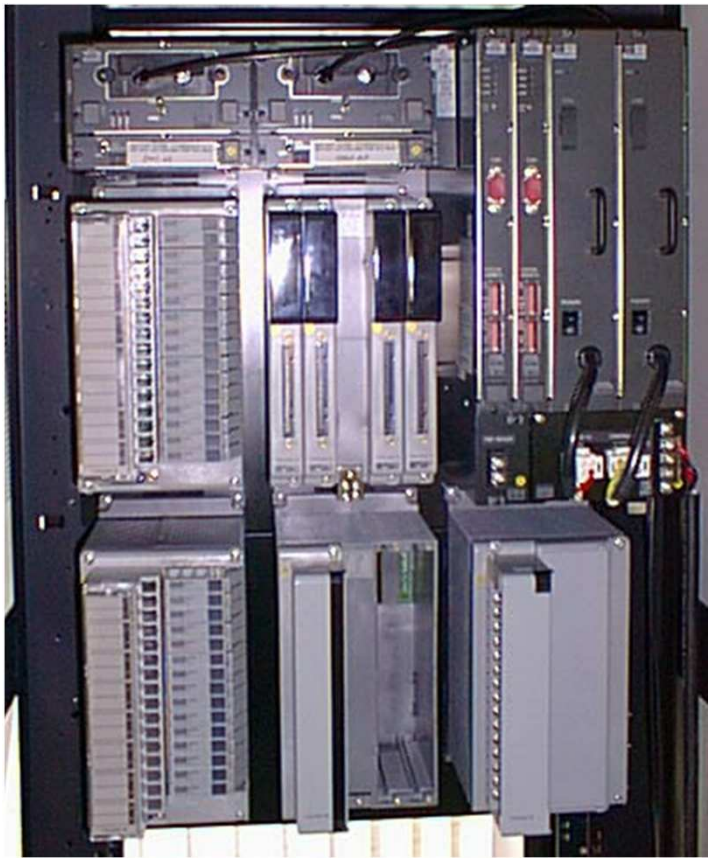
Node Interface Unit
(NIU)

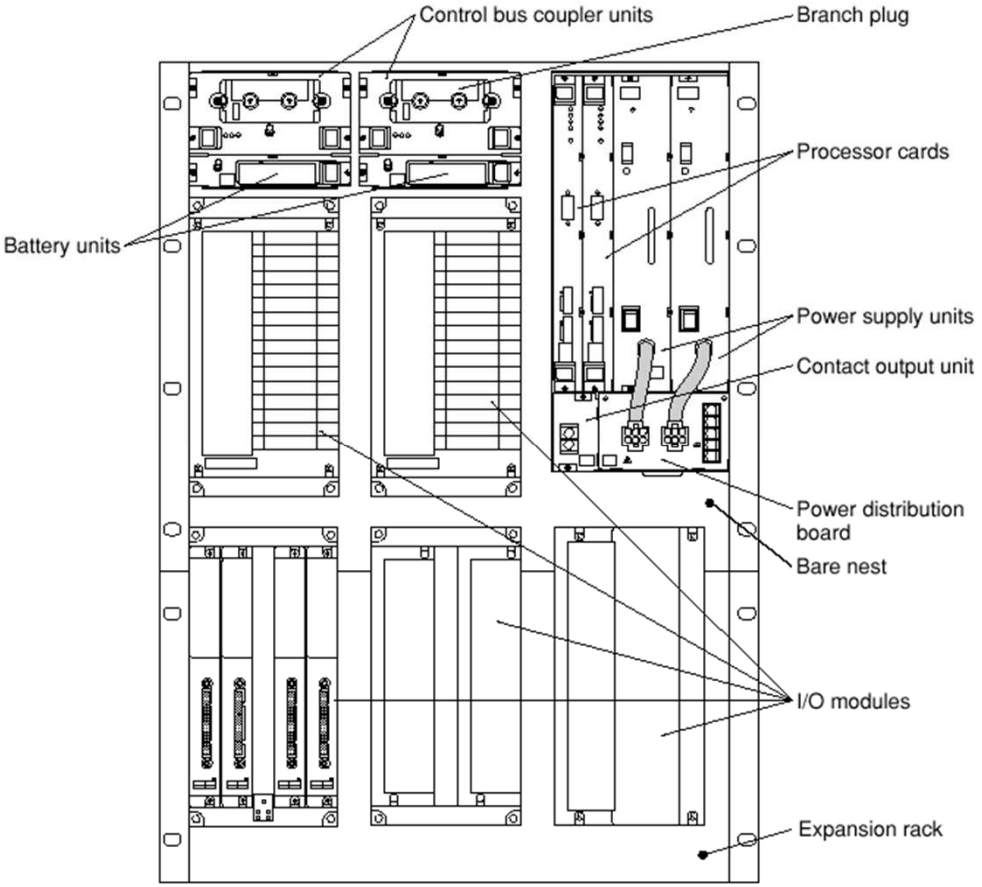
Nest For I/O

System Configuration PFCS

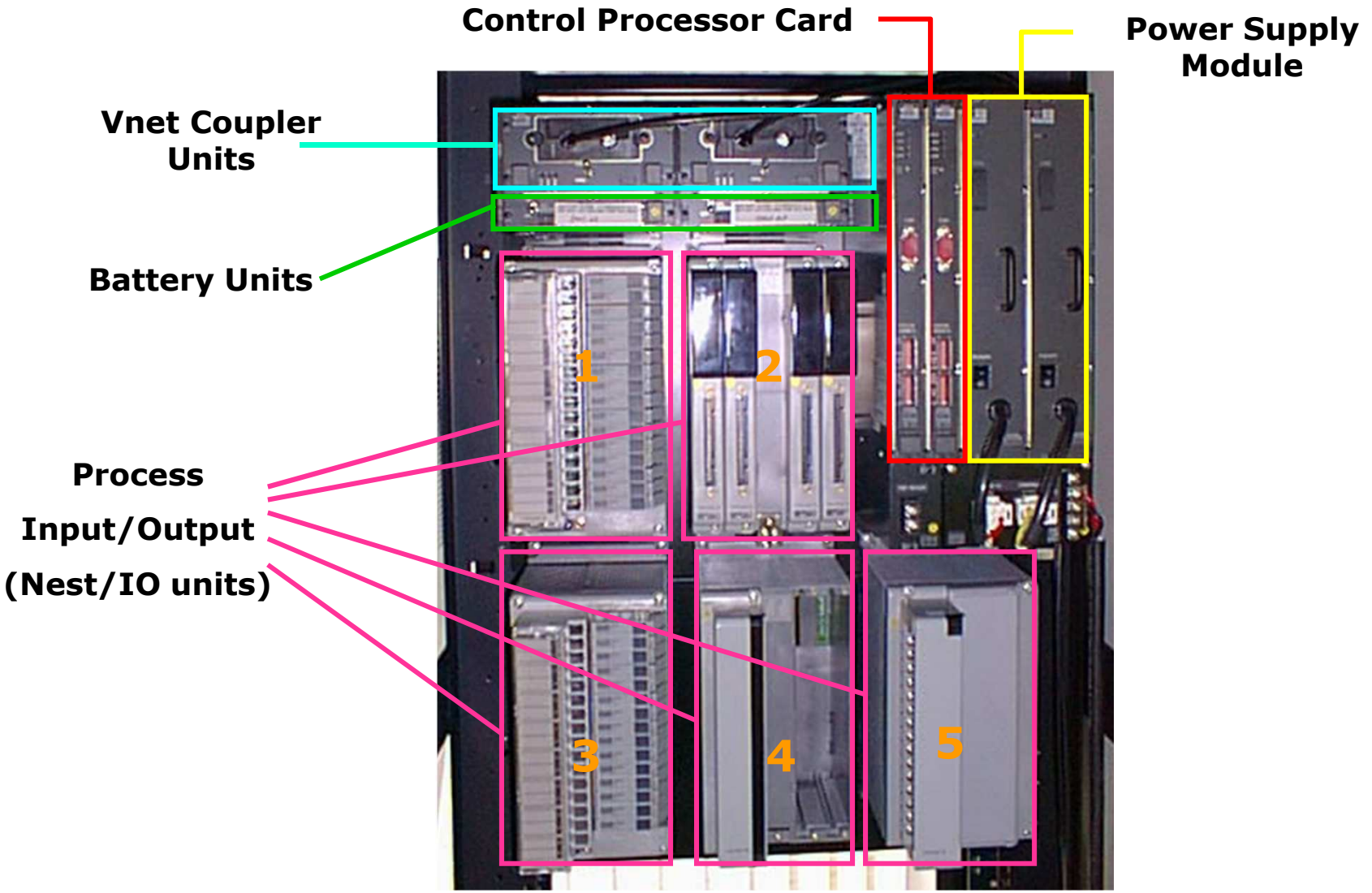


System Configuration PFCS





System Configuration PFCS



Centum VP System Configuration KFCS

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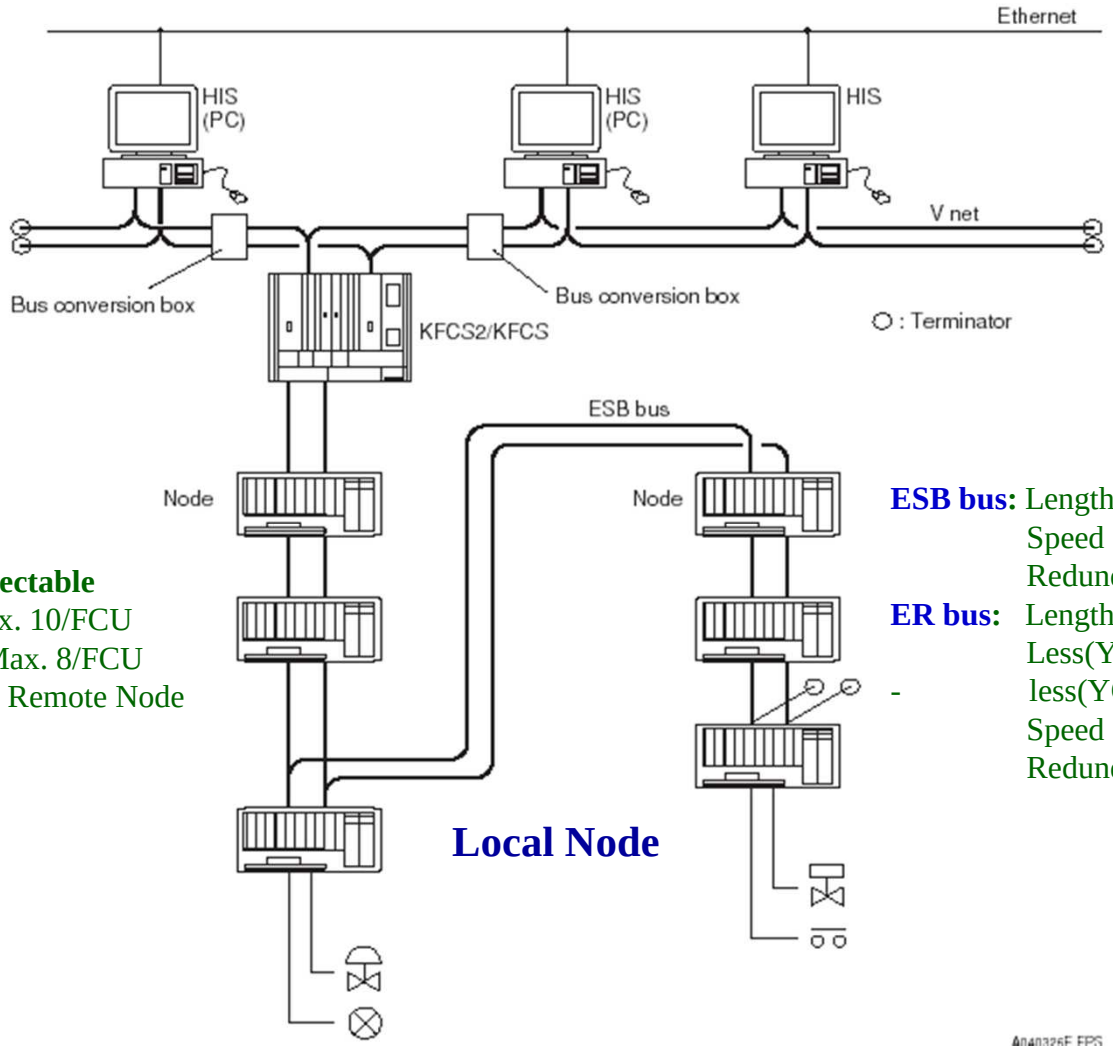
Bus cable connection :KFCS

HIS Max. 16 station/domain



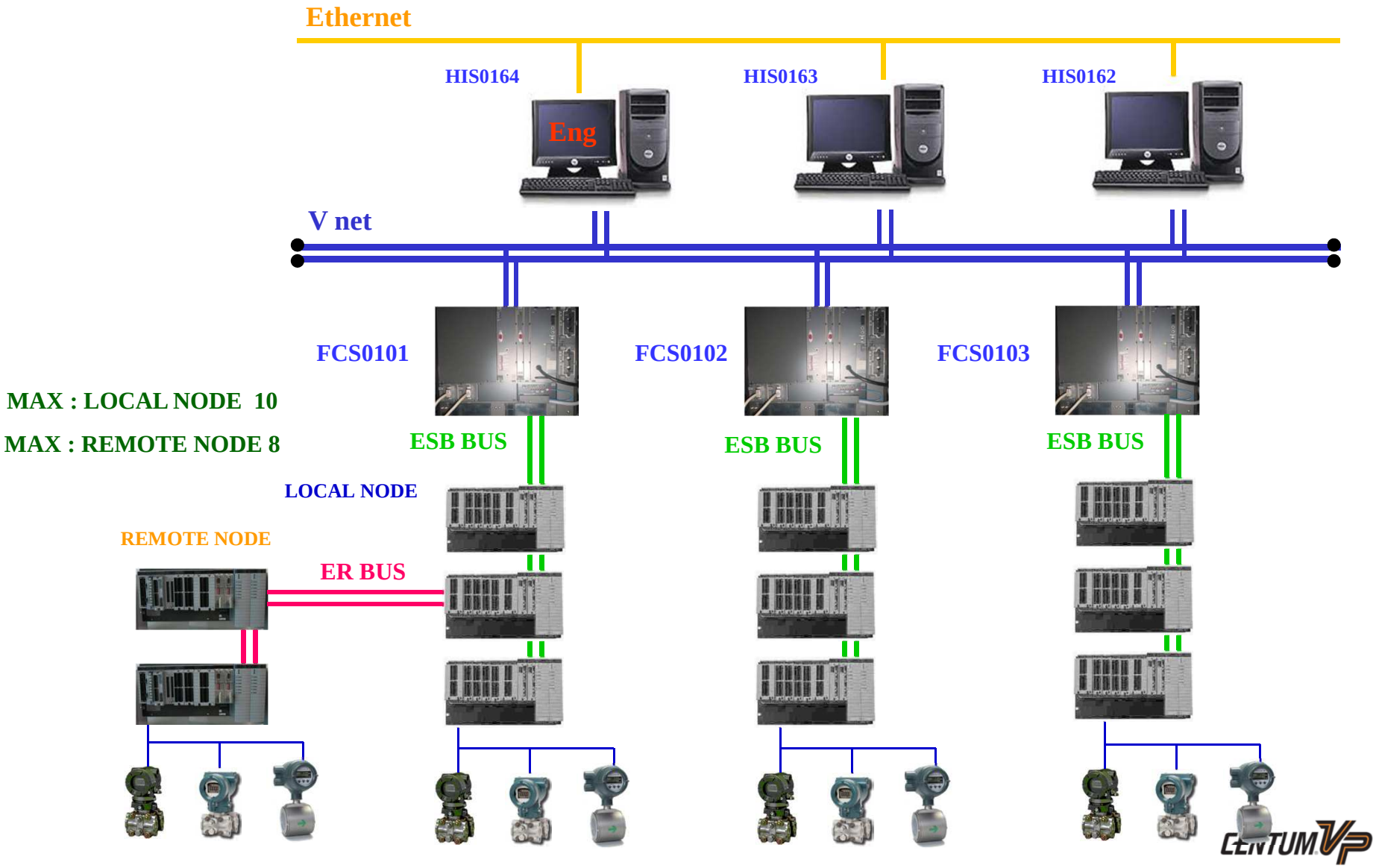
No. Node Unit Connectable
Local Node Unit: Max. 10/FCU
Remote Node Unit: Max. 8/FCU
When both Local and Remote Node Unit used:
Max. 10/FCU

ESB bus: Length 10 m. or less(YCB301)
Speed 128 megabits pre second
Redundancy : Available

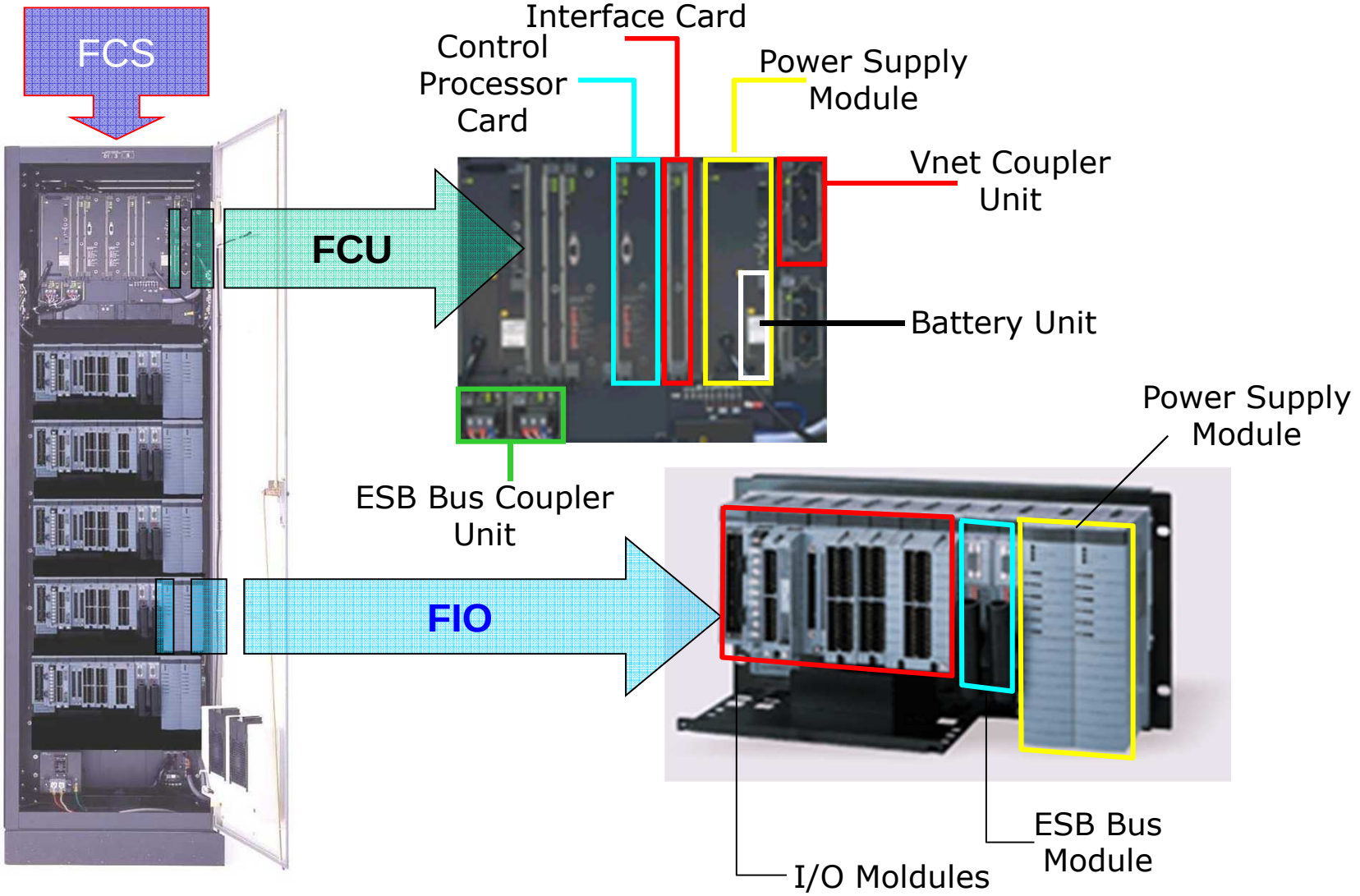
ER bus: Length 185m(Coaxial cable) or Less(YCB141), 500m(Coaxial cable) or
- less(YCB311),185m (Coaxial cable)
Speed 10 megabits pre second
Redundancy : Available

CENTUM VP

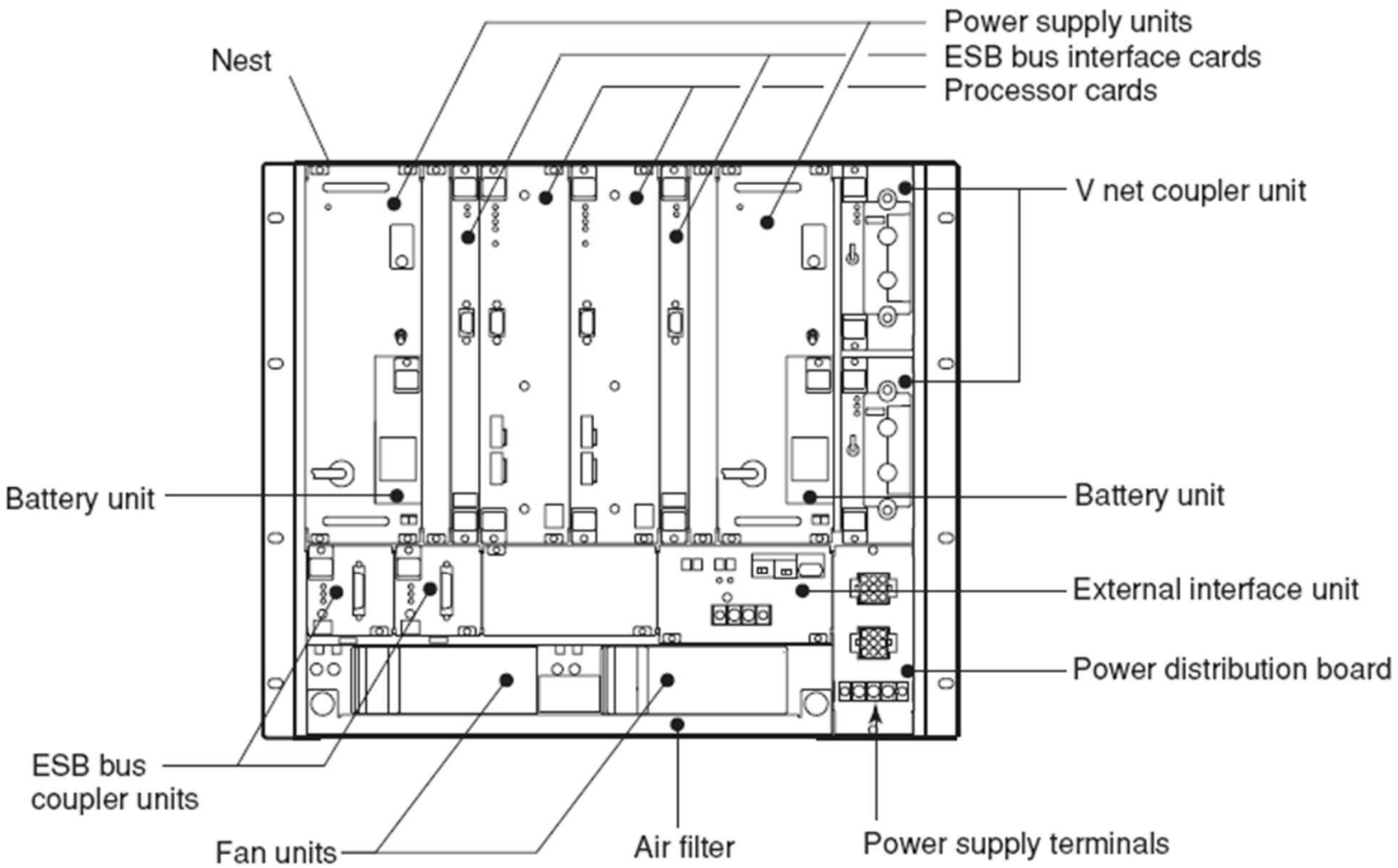
Centum VP System Configuration KFCS



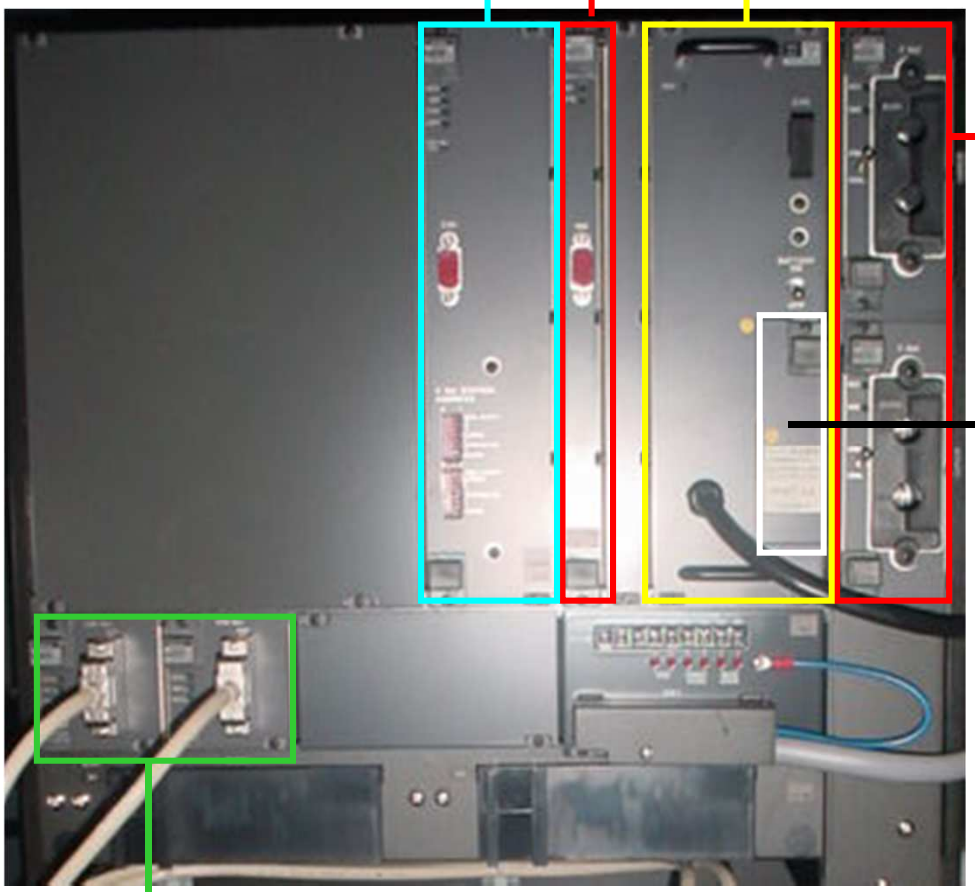
KFCS (With FIO)



Field control unit Picture : KFCS



Field control unit Picture : KFCS



Connection

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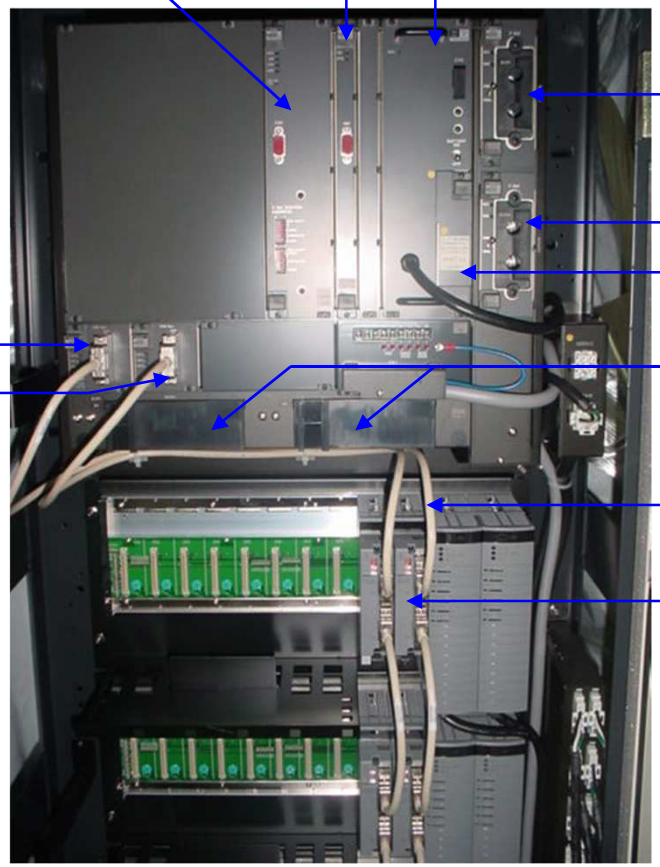
Power supply
(specify with Suffix Code)
Voltage : 100-120 Vac, Frequency : 50/60 Hz
Voltage : 220-240 Vac, Frequency : 50/60 Hz
Voltage : 24 Vdc

Processor Card

ESB bus interface master card (SB301)



V net coupler unit Bus 1

V net coupler unit Bus 2

Battery Back-up for main Memory : Max. 72 hours
Battery Recharge Time : Min. 48 hours

ESB bus 1
ESB bus 2

Fan units

ESB bus cable (YCB301)

ESB bus interface slave card (SB401)

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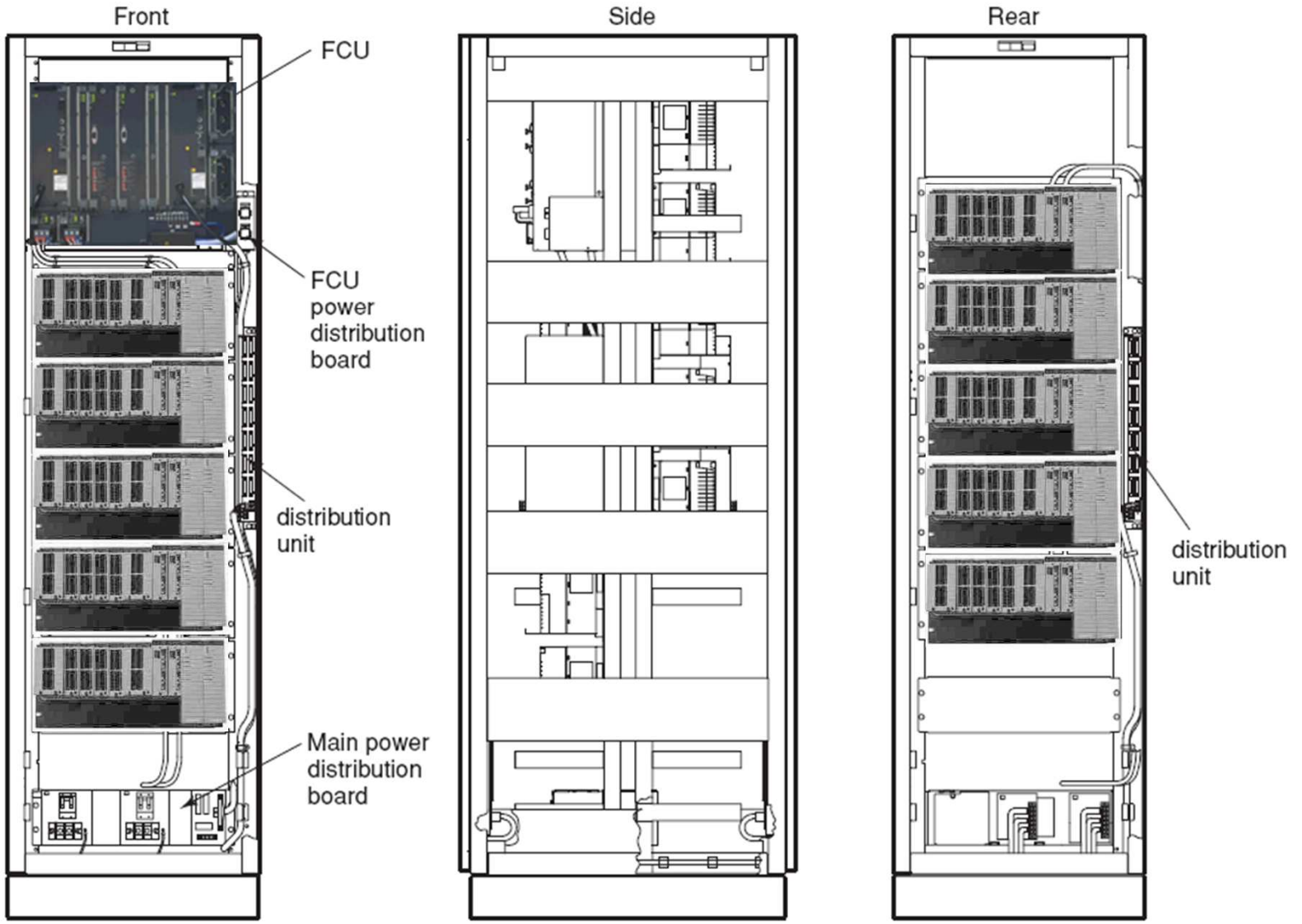
Connecting of KFCS with cabinet



Type of Node

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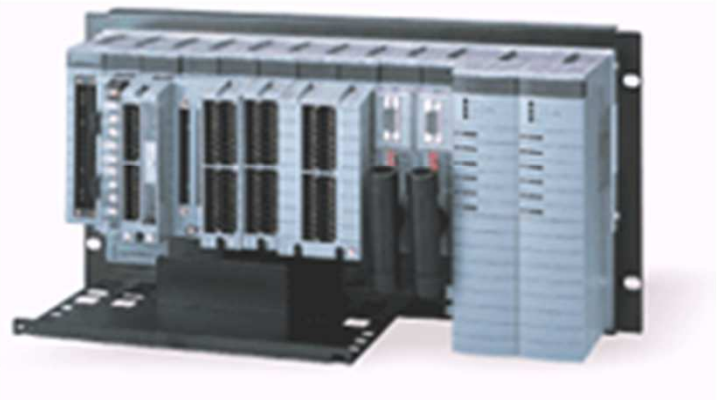
Table Node Unit

Type	Name
ANB10S	Node unit for single ESB bus
ANB10D	Node unit for dual-redundant ESB bus
ANR10S	Node unit for single ER bus
ANR10D	Node unit for dual-redundant ER bus

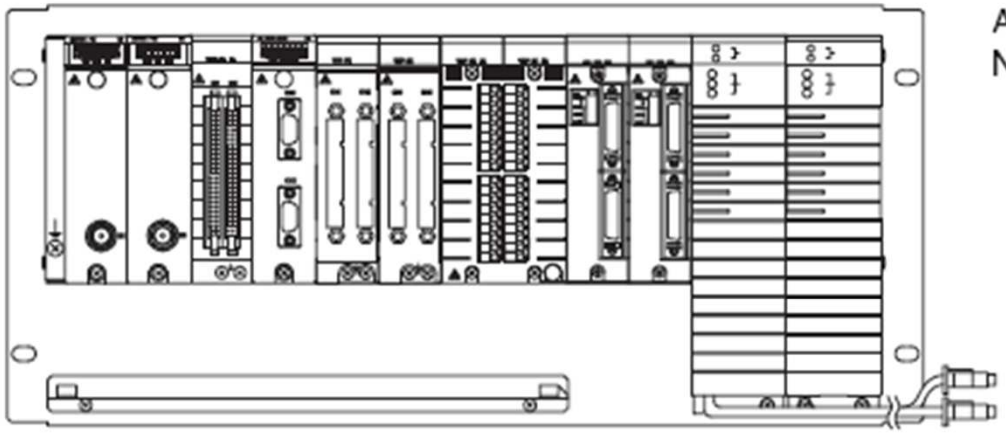


The correspondence between bus interface modules and device types are as follows.

- SB401: ESB bus slave interface module (installed in ANB10S/ANB10D)
- EB401: ER bus master interface module (installed in ANB10S/ANB10D)
- EB501: ER bus slave interface module (installed in ANR10S/ANR10D)

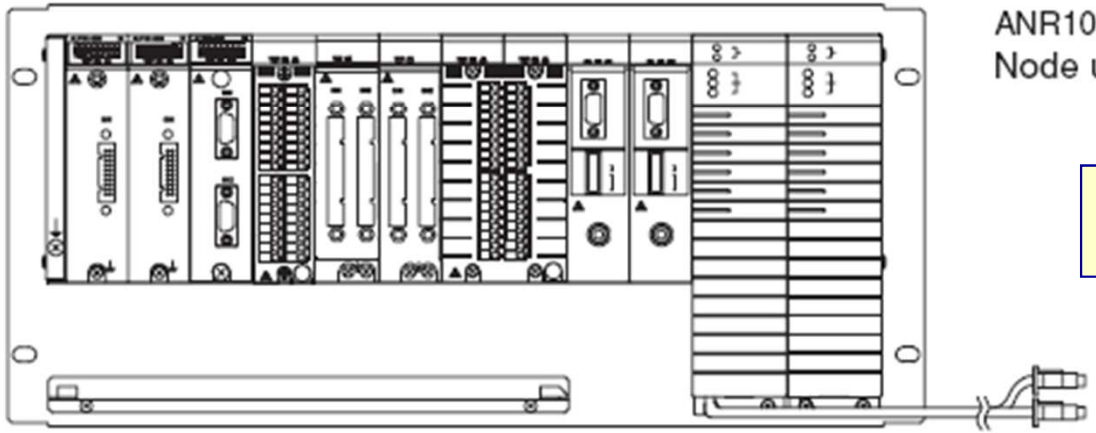
CENTUM VP

Type of Node



ANB10D
Node unit for dual-redundant ESB bus

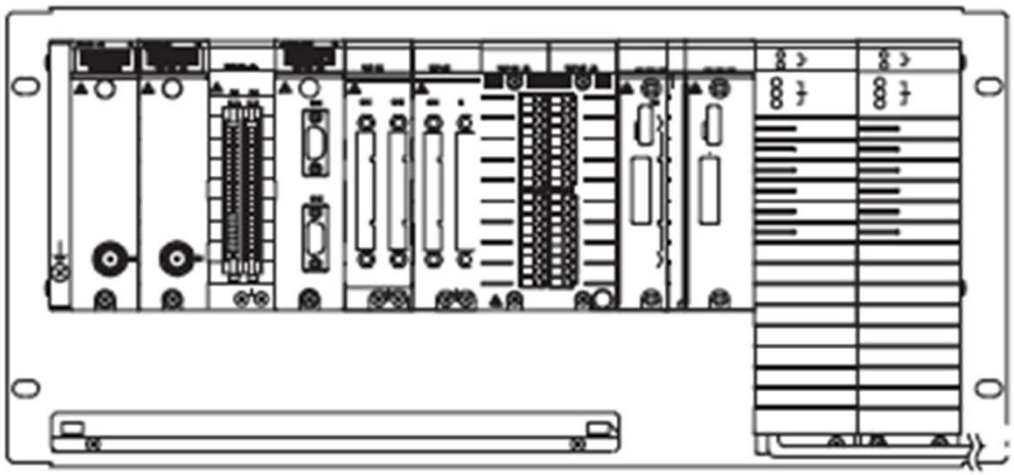
Local Node

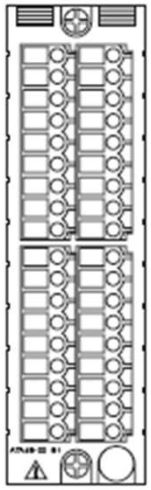


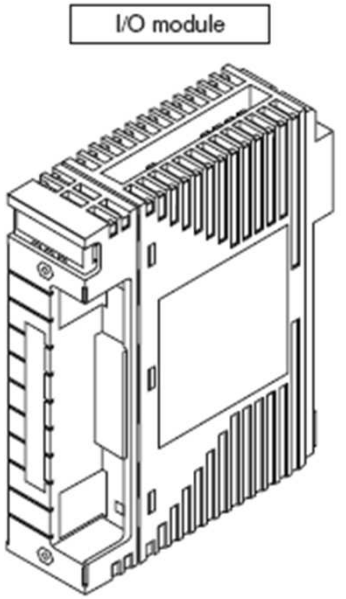
ANR10D
Node unit for dual-redundant ER bus

Remote Node

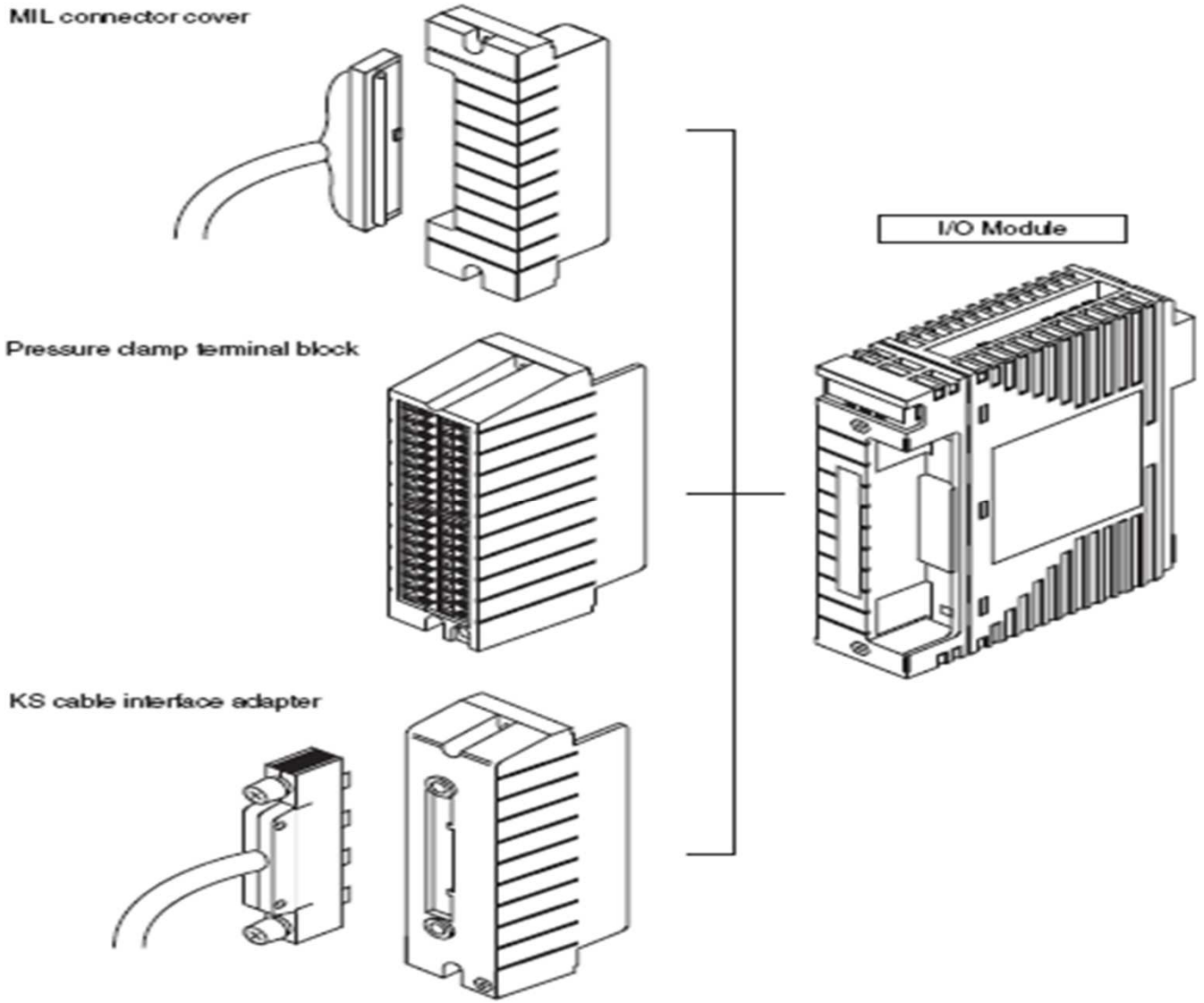
Field network I/O (FIO)





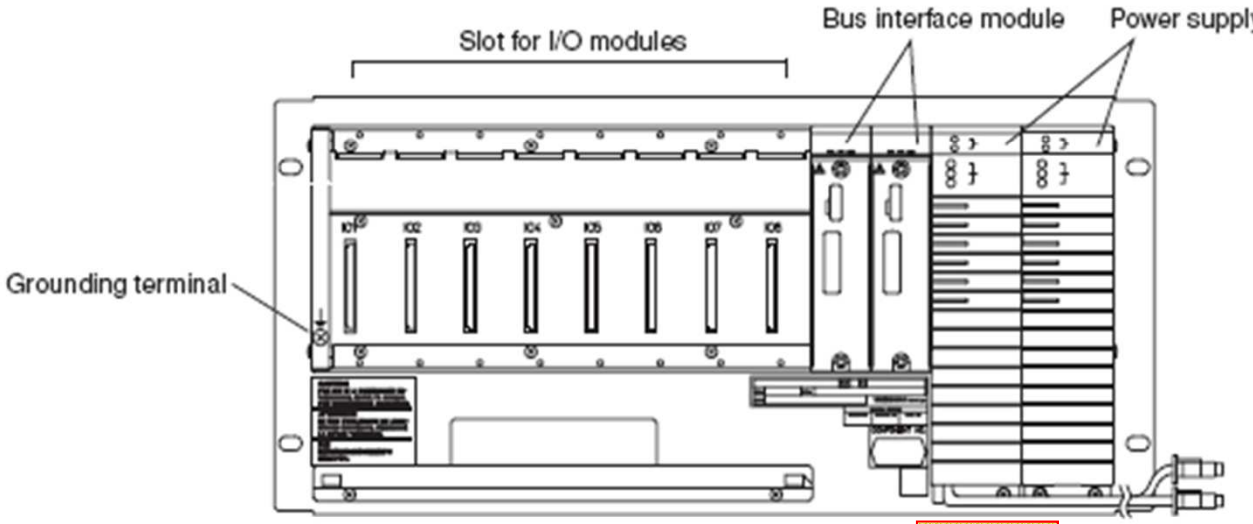


Terminal Blocks for FIO



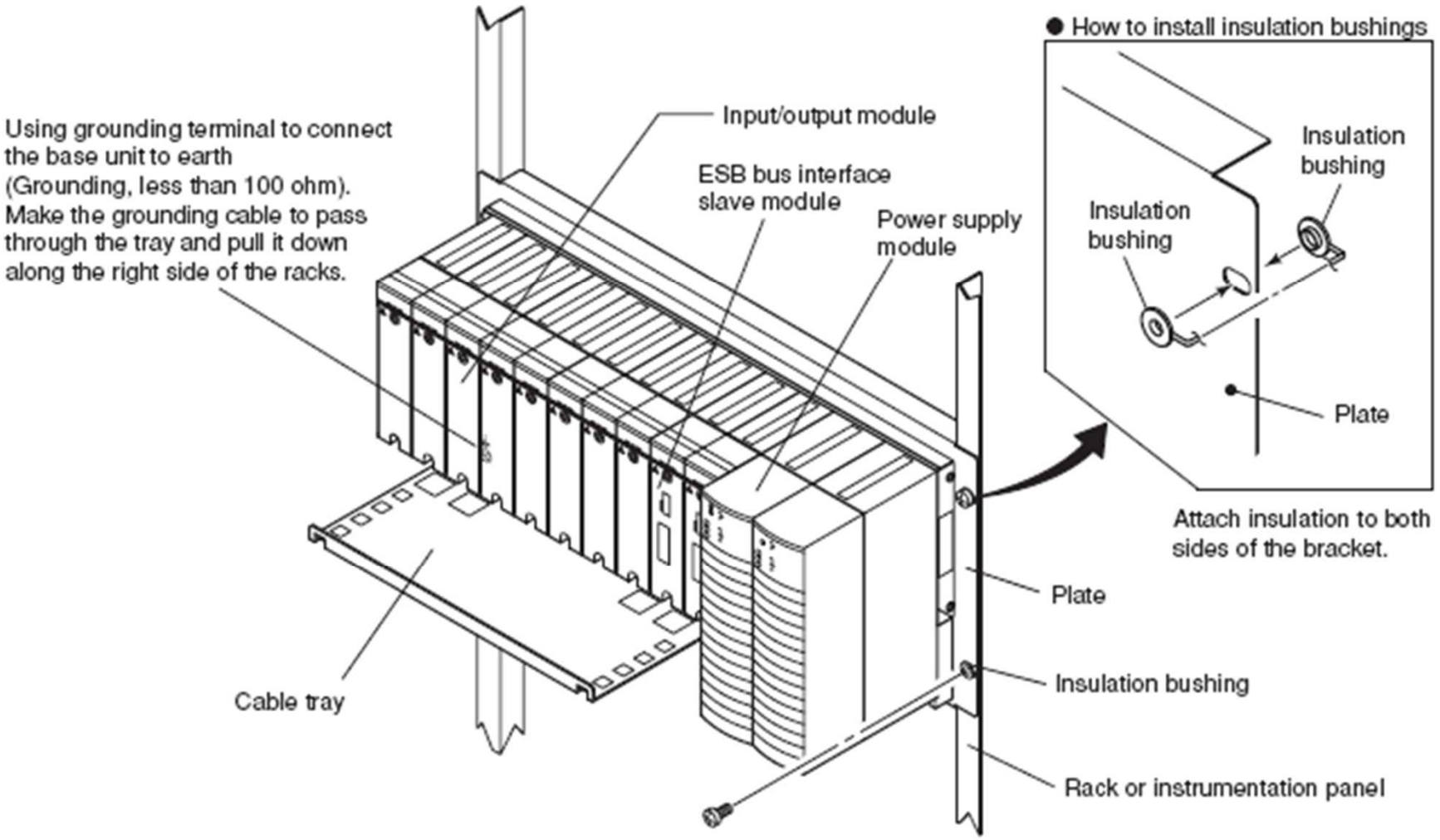
Configuration of Node units

Node units are available for both single and dual-redundant ESB buses (the figure below shows a node unit for a dual-redundant bus).



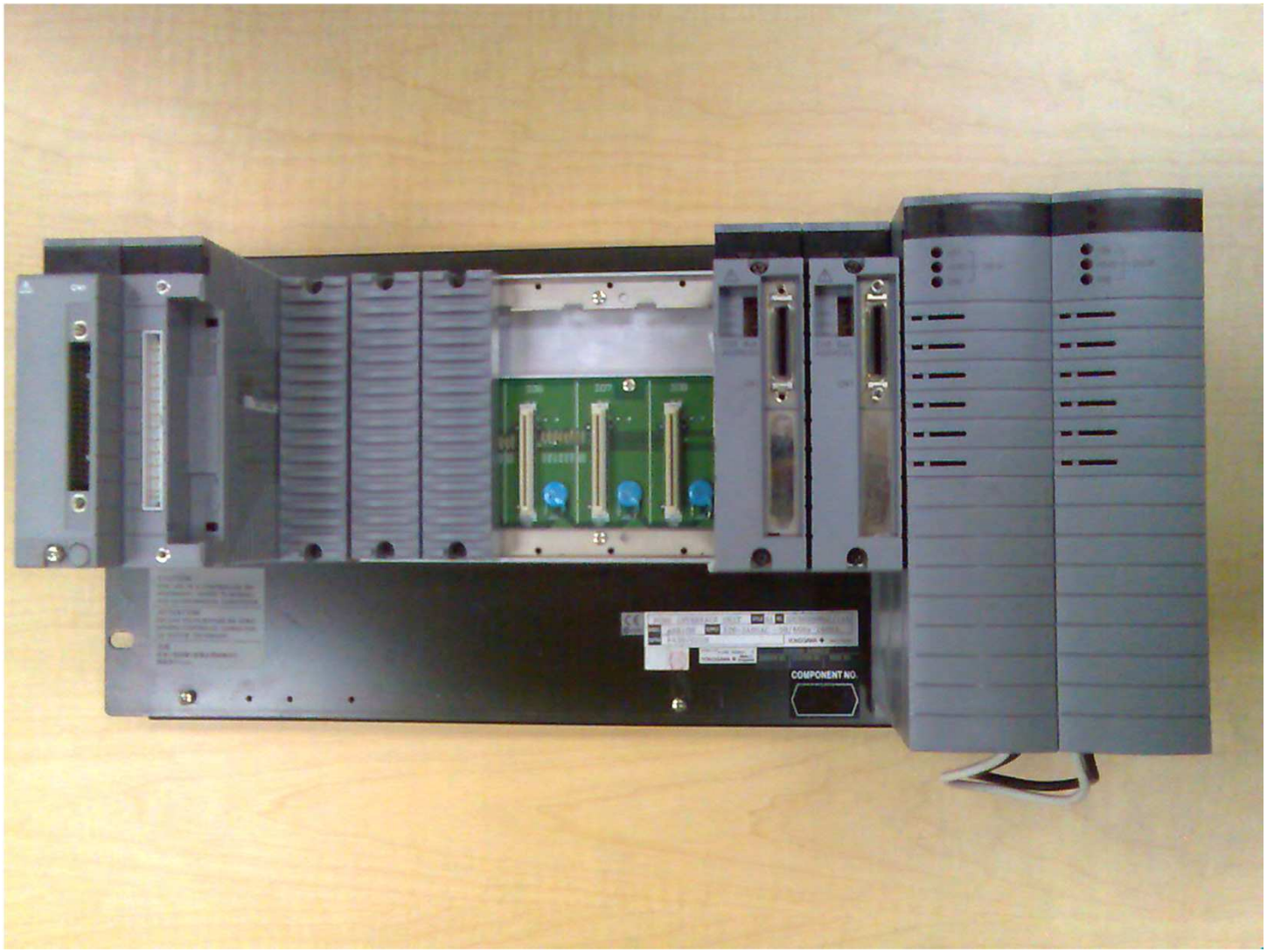
Installed in a cabinet

Installation of Node units

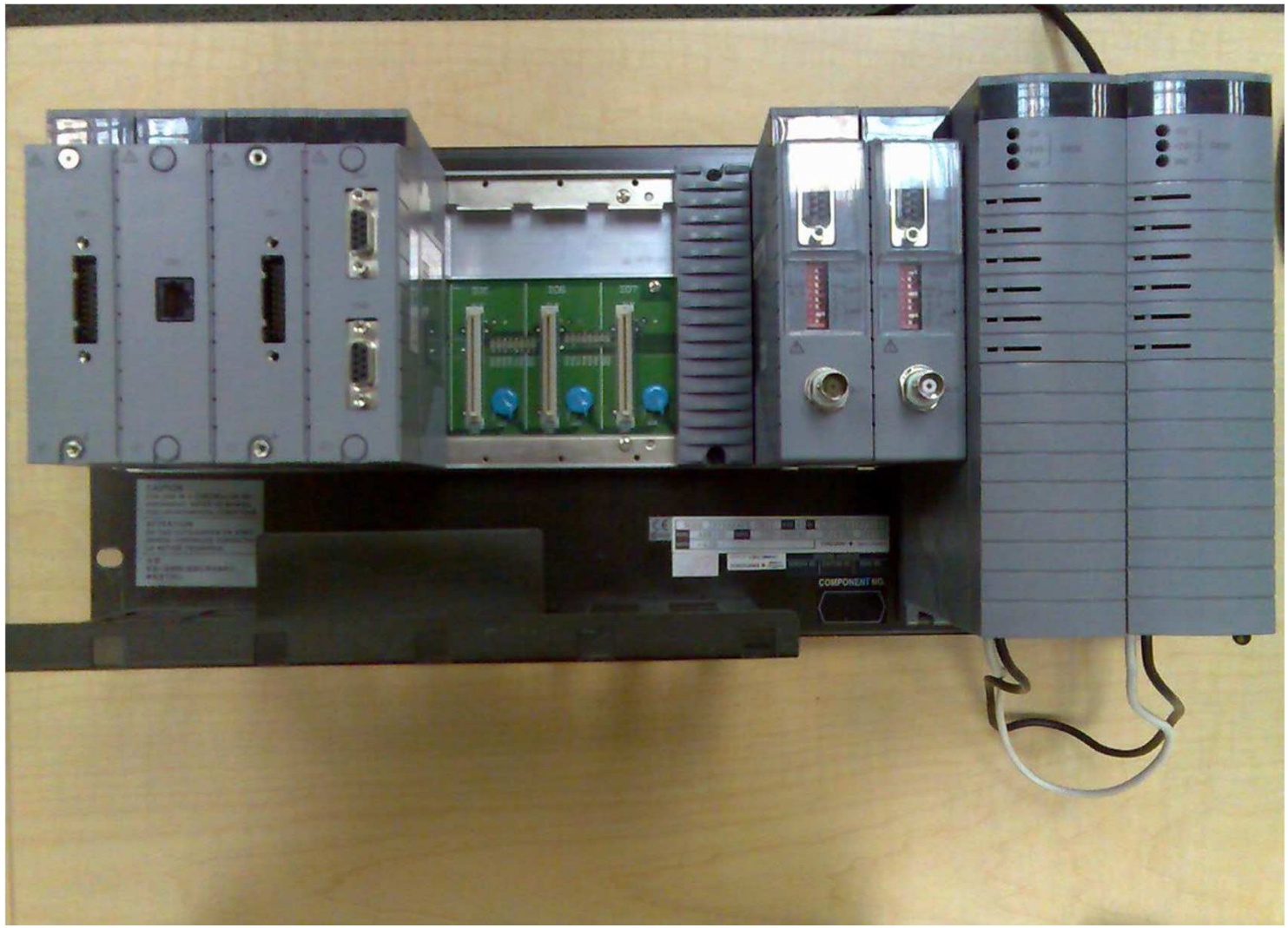


Local Node in FCS Architecture : KFCS

Local Node in FCS Architecture : KFCS

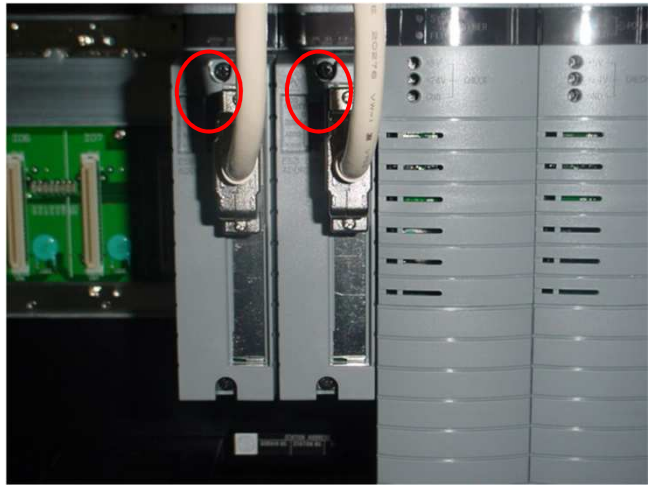


Remote Node in FCS Architecture : KFCS

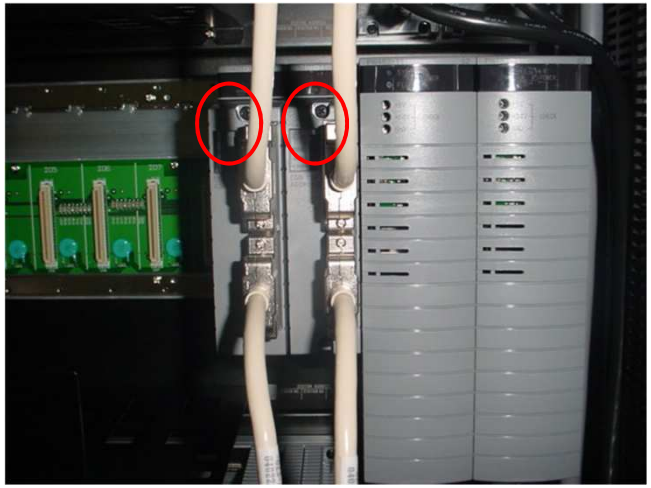


ESB Bus Interface Slave Module (SB401)

Connector unit with terminator for ESB Bus



Connector unit for ESB Bus



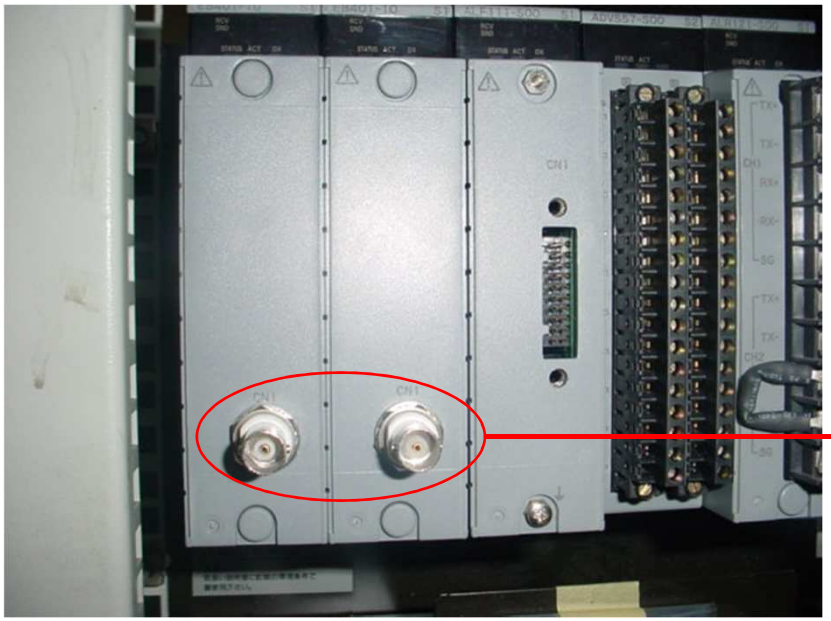
Setting node addresses

Bit 1 ------- Node address parity (1 bit, odd parity)

Bit 2
Bit 3
Bit 4
Bit 5
Bit 6

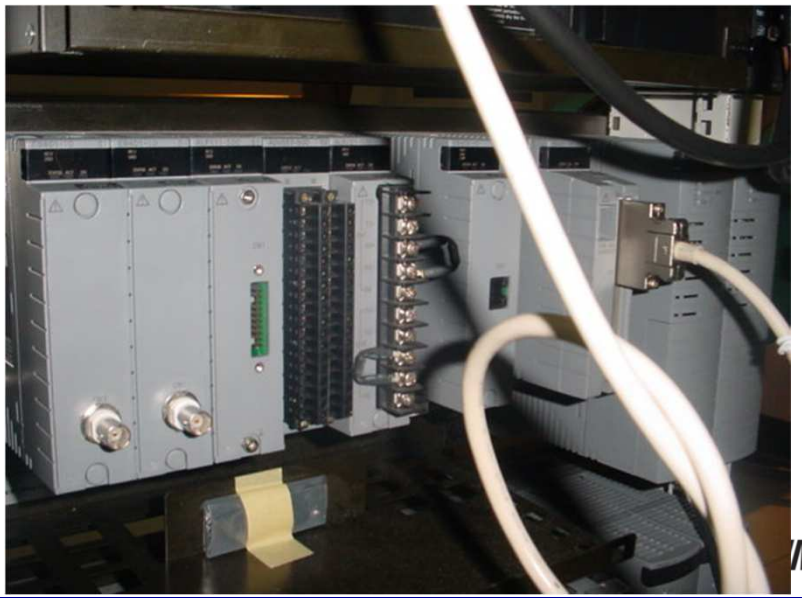
Node address

ER Bus Interface Master Module (EB401)

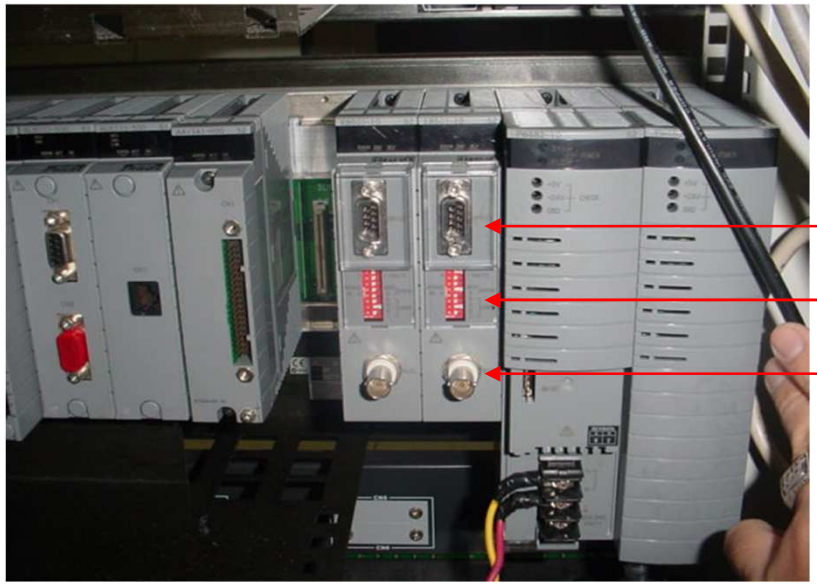


Local Node

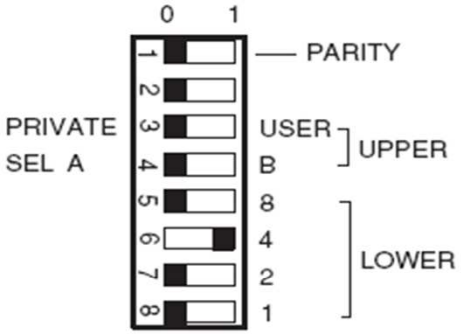
ER bus cable connector (CN1)



ER Bus Interface Slave Module (EB501)



Remote Node



Designate private address in a KFCS2/KFCS.

bit		
3	:	Fixed to 0 (private address)
4	:	Set this bit to 0 if EB501 is installed on the left side and 1 if EB501 is installed on the right side.
5 to 8	:	Use these bits to specify an individual node number.

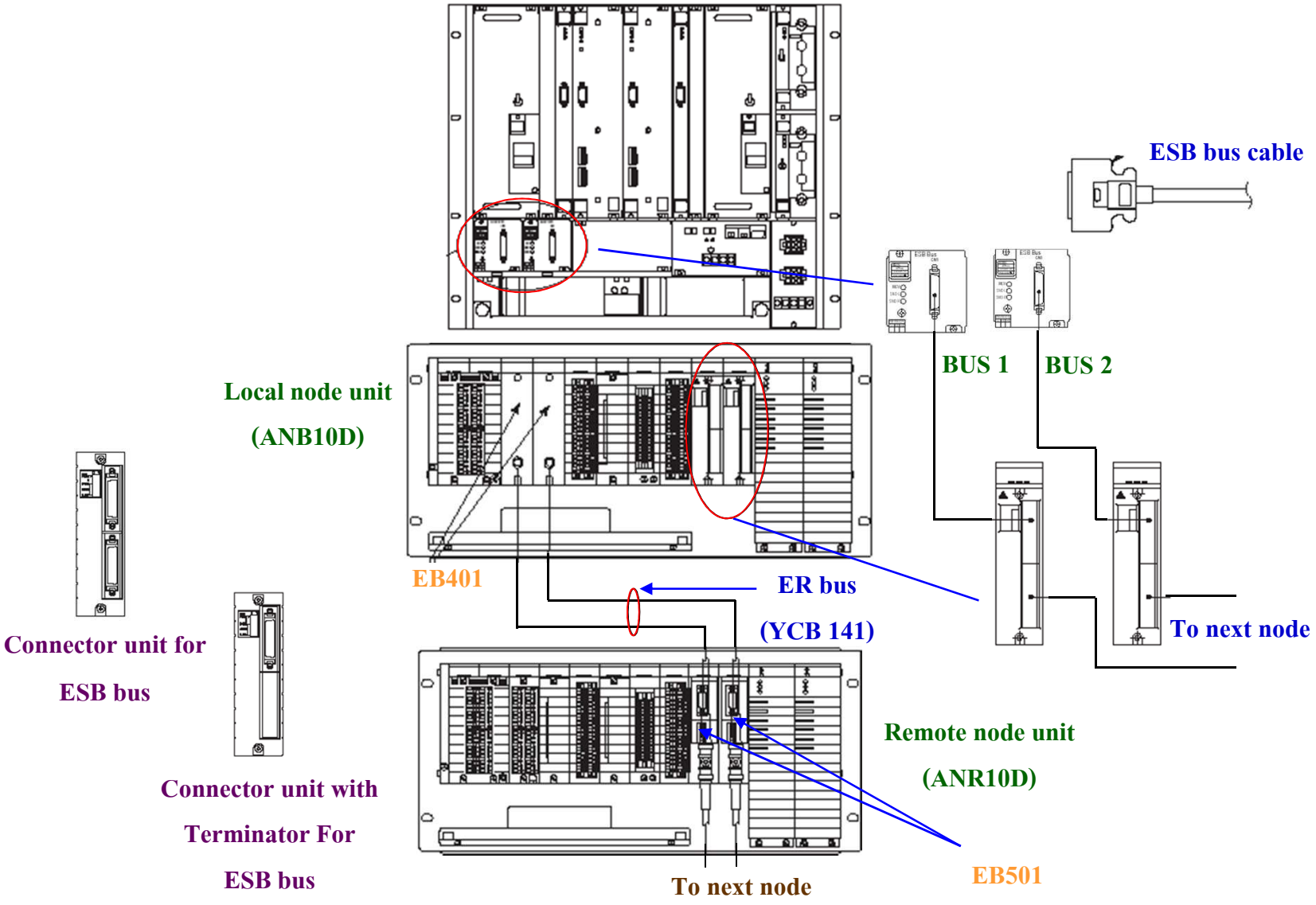
B0203I0E.EPS

Figure IP Address Setting DIP Switches (An Example Where the Address "Node Number" 4, left EB501 Is Set)

Set the address of lower 4 bits using bit numbers 5 to 8.

The settings become valid only after the Bus Interface Unit is restarted.

Connecting the FIO bus



Install the terminator if connection ends.

Node in FCS Architecture

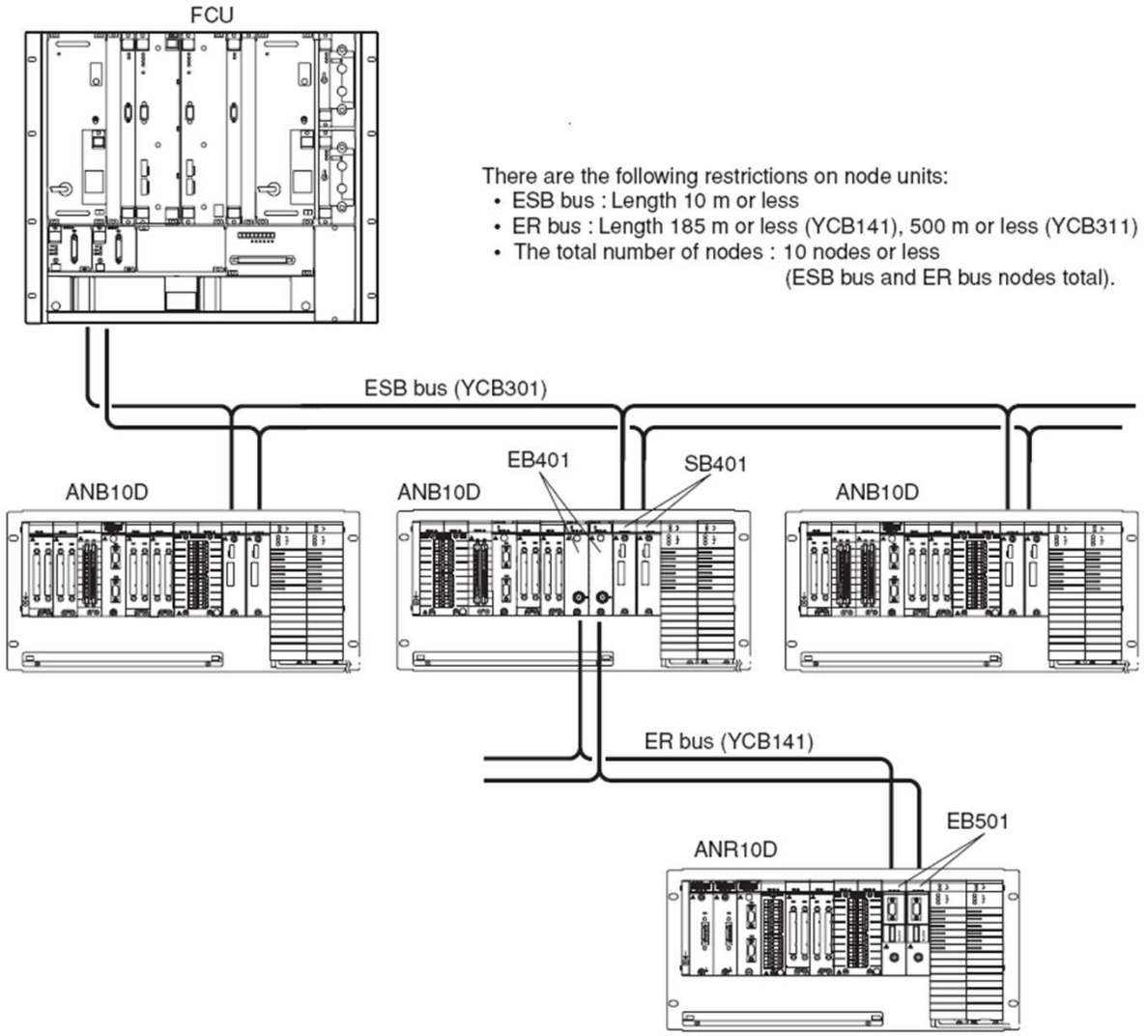


Figure FCS Hardware Configuration and Node Network Topology

Connecting of KFCS

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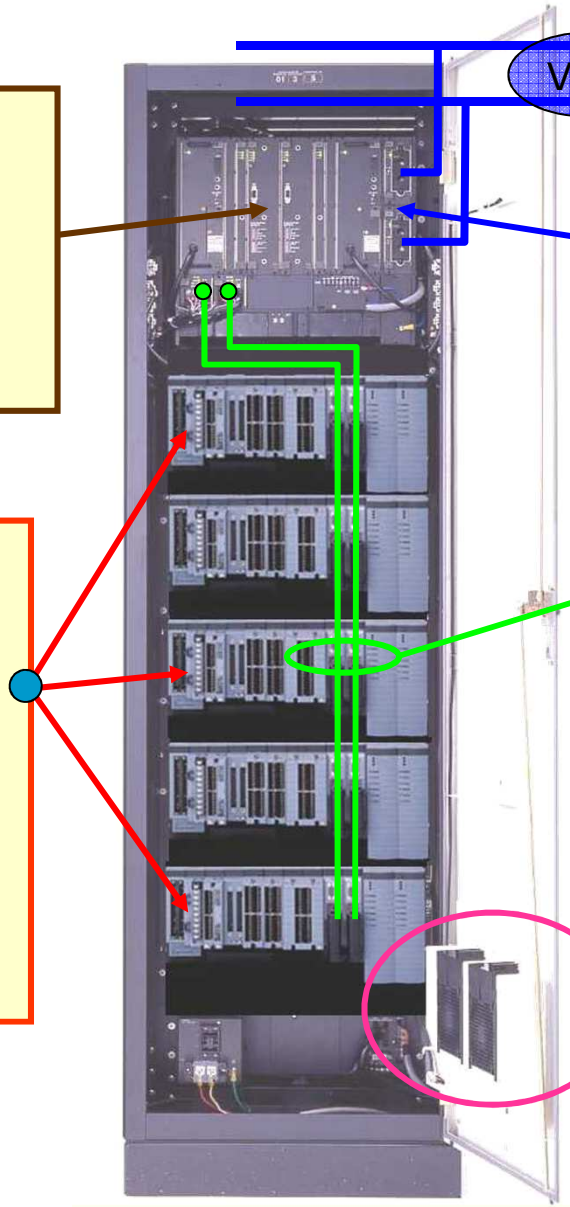
FCU / CPU

- Single or dual redundant configuration
- VR5432 Processor (133 Mhz)
- Memory: 32 MB

I/O Racks

- Single or dual redundant power supplies
- Dual redundant I/O bus
- 8 I/O slots per node/rack
- 10 nodes/racks per FCS (expandable to 15)
- 19 " standard panel



Redundant connection to Vnet

ESB Bus

- Dual redundant
- Trans. Speed: 128 Mbps
- Trans. distance :10 meter

HKU

- Air temperature
- Fans speed

CENTUM VP

Connecting the FIO bus

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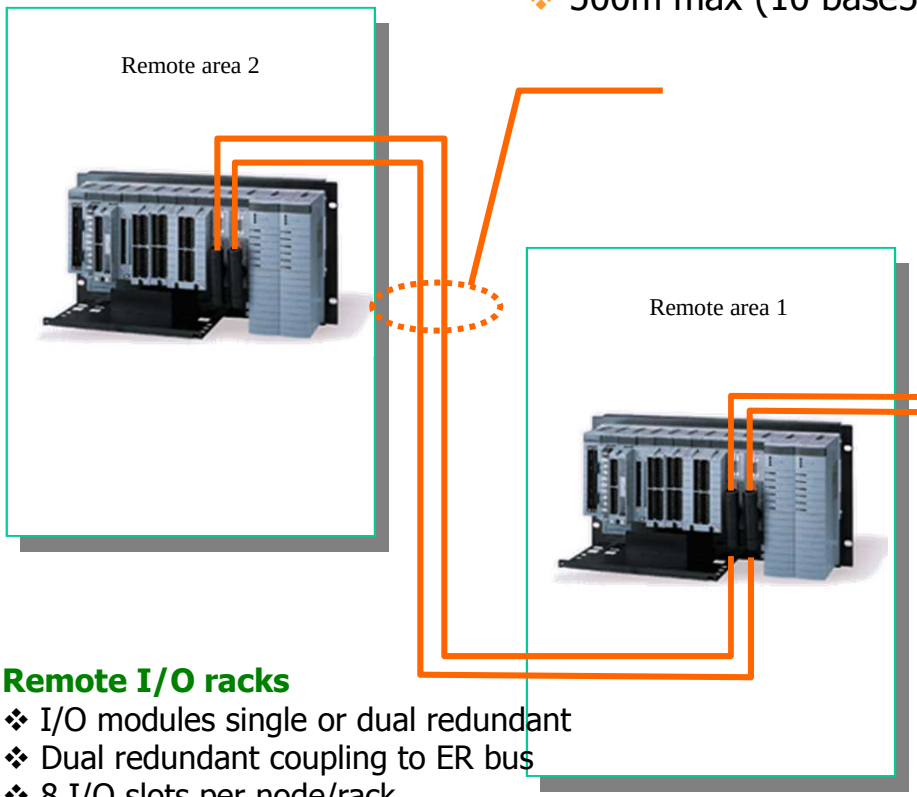
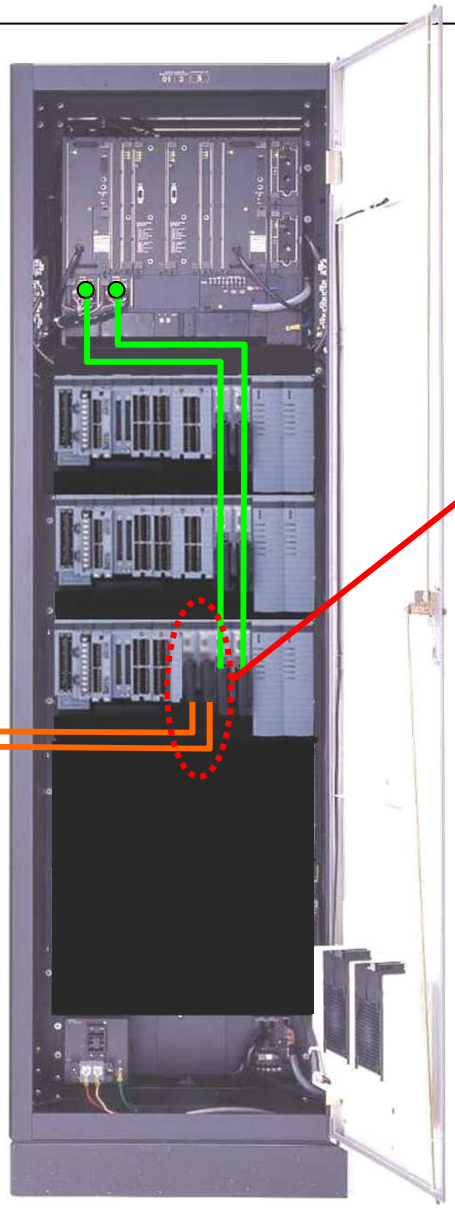
ER BUS

- Dual redundant
- 10 Mb/s
- 185m max (10 base2)
- 500m max (10 base5)





ER Bus Coupling Module

- Dual redundant

Remote I/O racks

- I/O modules single or dual redundant
- Dual redundant coupling to ER bus
- 8 I/O slots per node/rack
- 8 racks per FCS
- 19 "x 5 U (22cm)

CENTUM VP

Centum VP System Configuration FFCS

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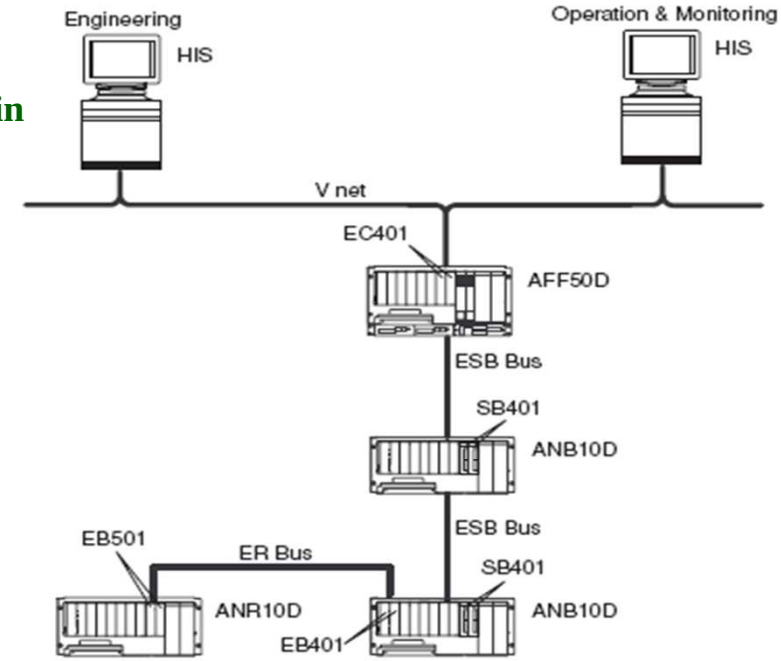
Bus cable connection :FFCS

HIS Max : 16 station/domain

■ Configuration of a Control System with FFCS : FFCS



HIS : Human Interface Station
AFF50D : Field Control Unit
ANB10D : ESB Bus Node Unit (Local Node)
ANR10D : ER Bus Node Unit (Remote Node)

Restrictions on Node Units
- ESB Bus : Total length should be less than 10 meters
- ER Bus : Total length should be less than 185 meters if via YCB141 or less than 500 meters if adapted through YCB311.
- Number of Nodes : Up to 3 (including both ESB bus nodes and ER bus nodes).

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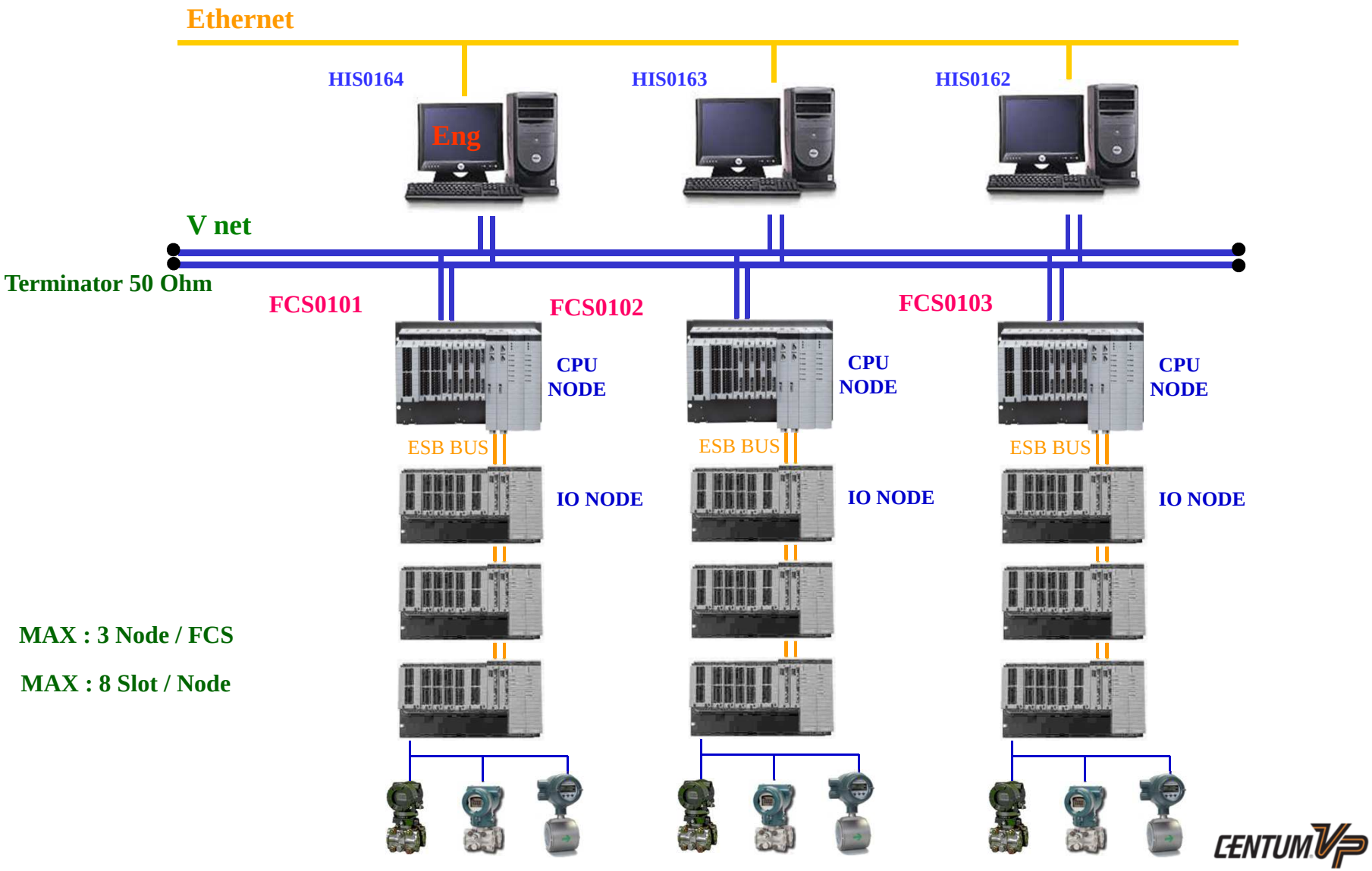
Figure Configuration of a Control System with FFCS : FFCS

CENTUM VP

Centum VP System Configuration FFCS



Nodes Picture of FFCS

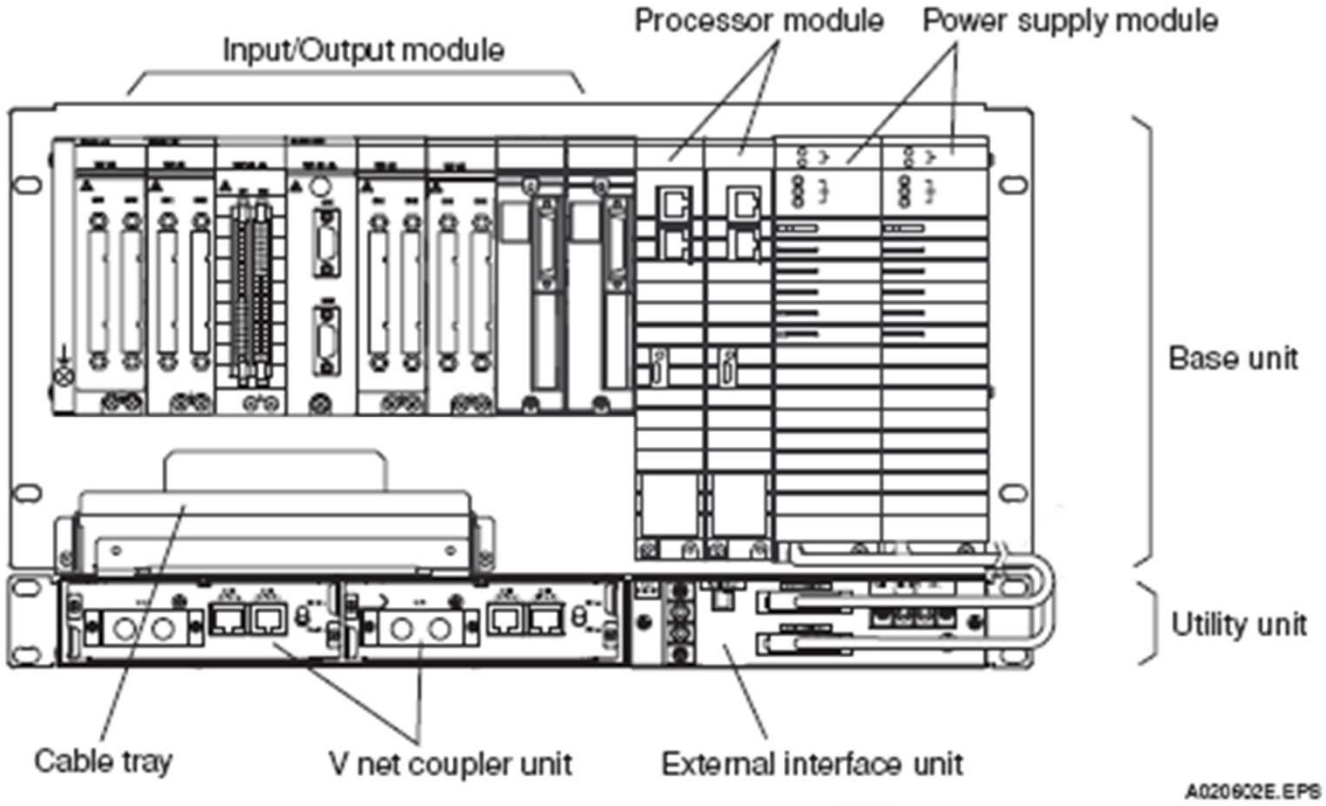
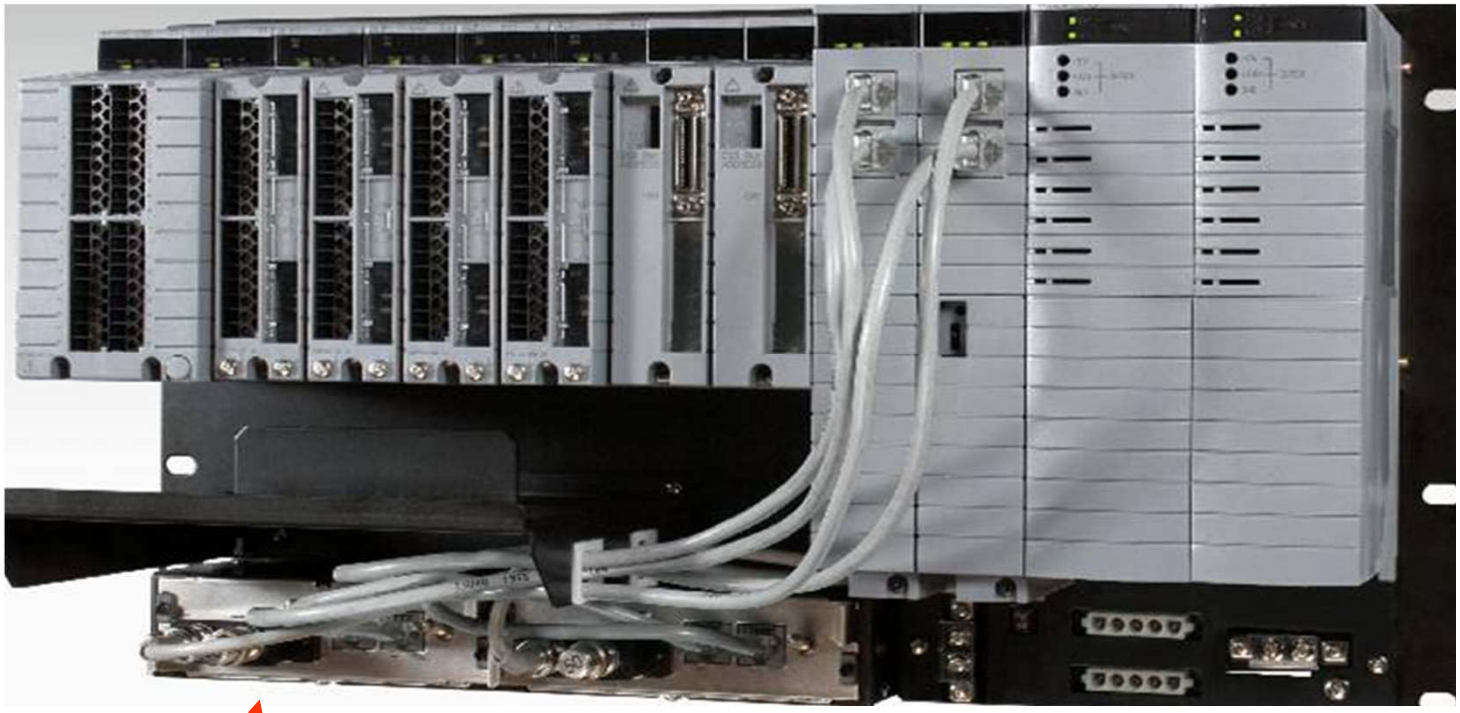


Figure Configuration of Field Control Unit : FFCS 3rd

Nodes Picture of FFCS



Node in FFCS Architecture

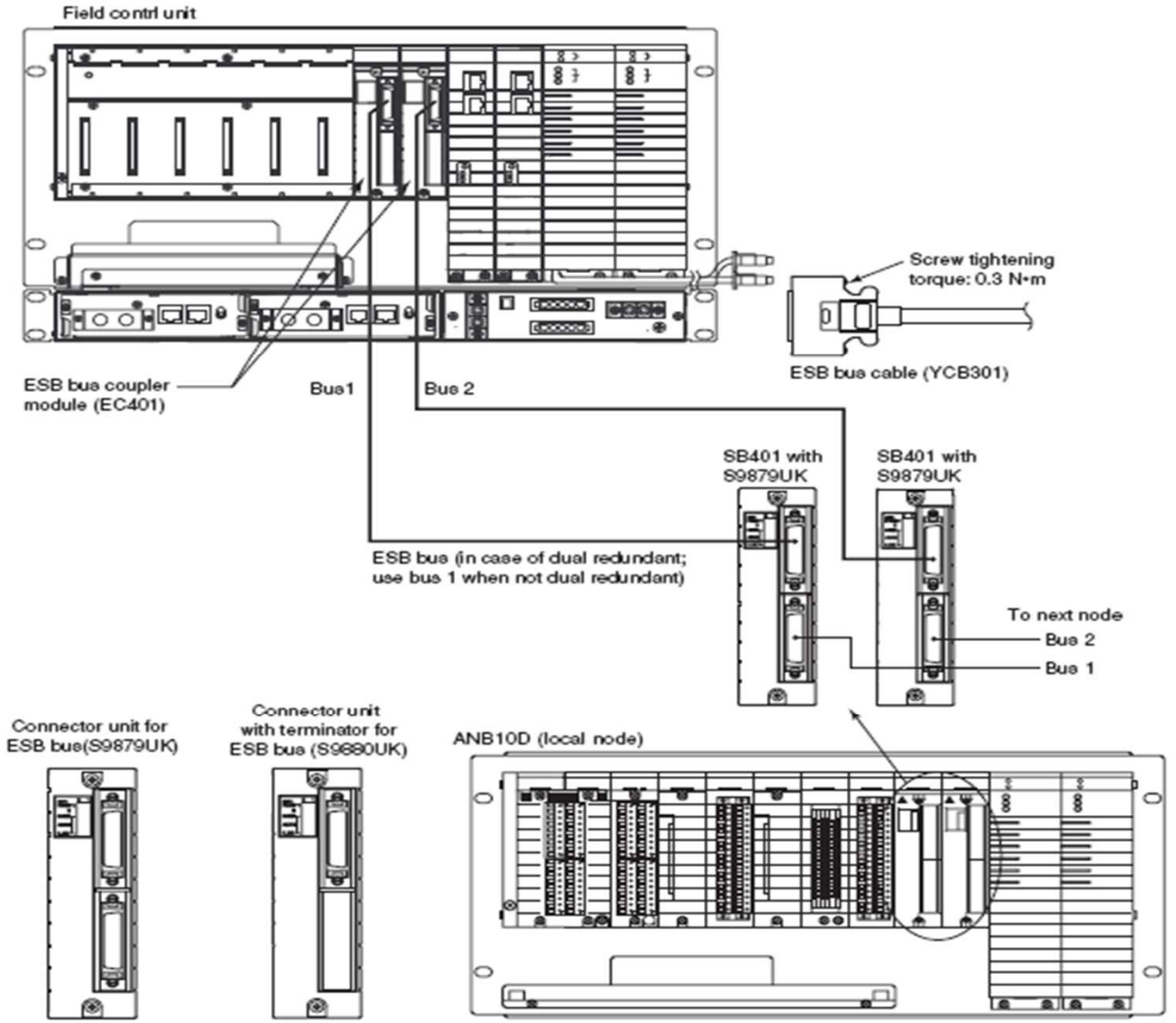


Figure ESB Bus Connection

Node in FFCS Architecture

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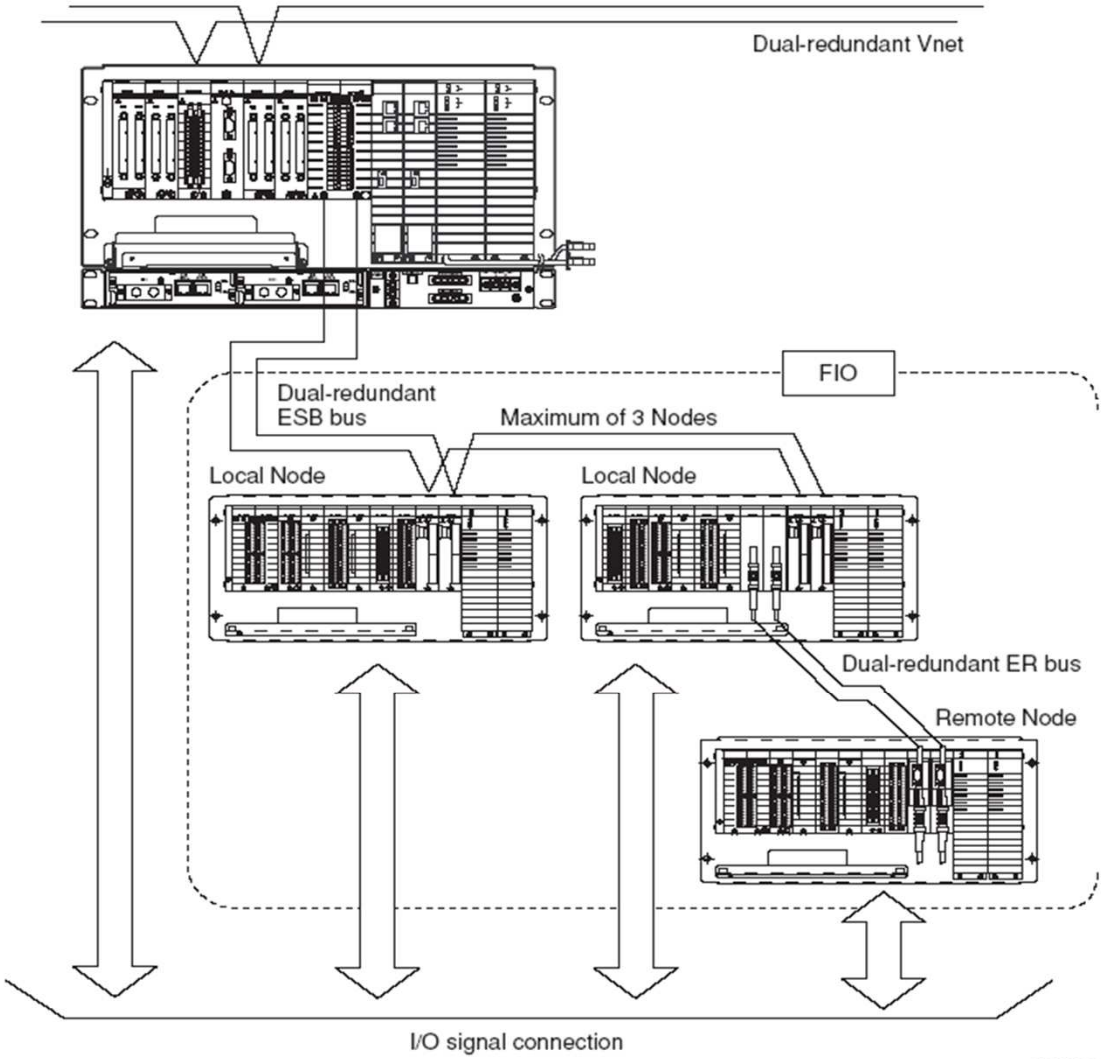
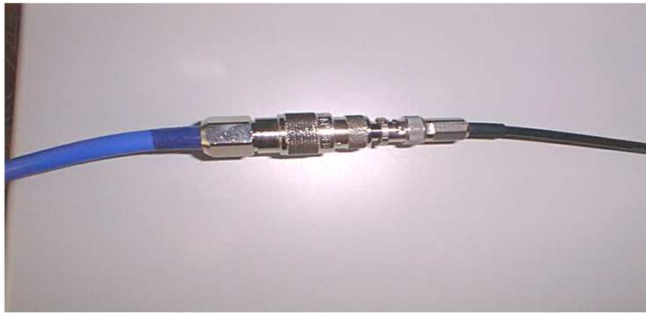
The FCS consists of the FCU and Node Units, and the ESB bus or the ER bus to connect them together.



CENTUM VP

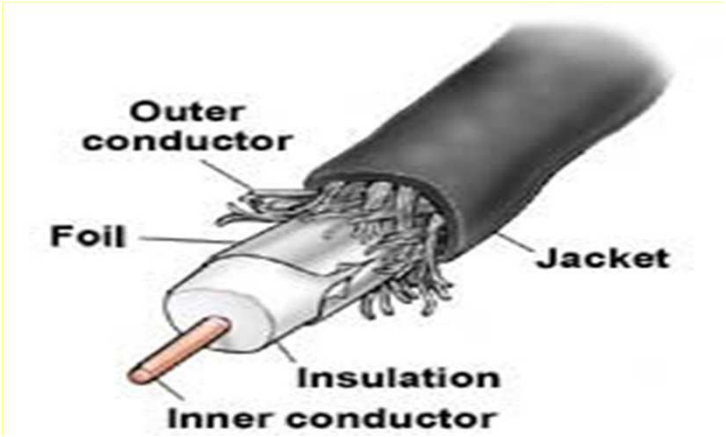
V net Cable



- Using VLnet interface card
- Cable : Thin coax. cable with BNC connector (10Base2 comp.)
  V net - 10Base5 cable up to 500 m.
  - 10Base2 cable up to 185 m.
- Communication speed : 10Mbps
- Std. max. length : (10Base2) + 0.4(10Base5) < 185 m
- 1.6 km with coax. repeater

V net Cable

- Token-passing, Deterministic, High speed (10 MBPs)
- Bus topology, coaxial or fiber optic cable
- Type of communication transmitted:
  - read/write of FCS data
  - broadcast of FCS messages
  - broadcast of HIS messages
  - time equalization
  - communication of operating status display
  - online maintenance



Medium:	Coaxial Cable
Data Rate:	10 Mbps
Segment Length:	max. 185m./500m
Termination:	50 ohm, 1 Watt
Connection:	BNC

Control Bus Interface Card (VF701) or (VI701)

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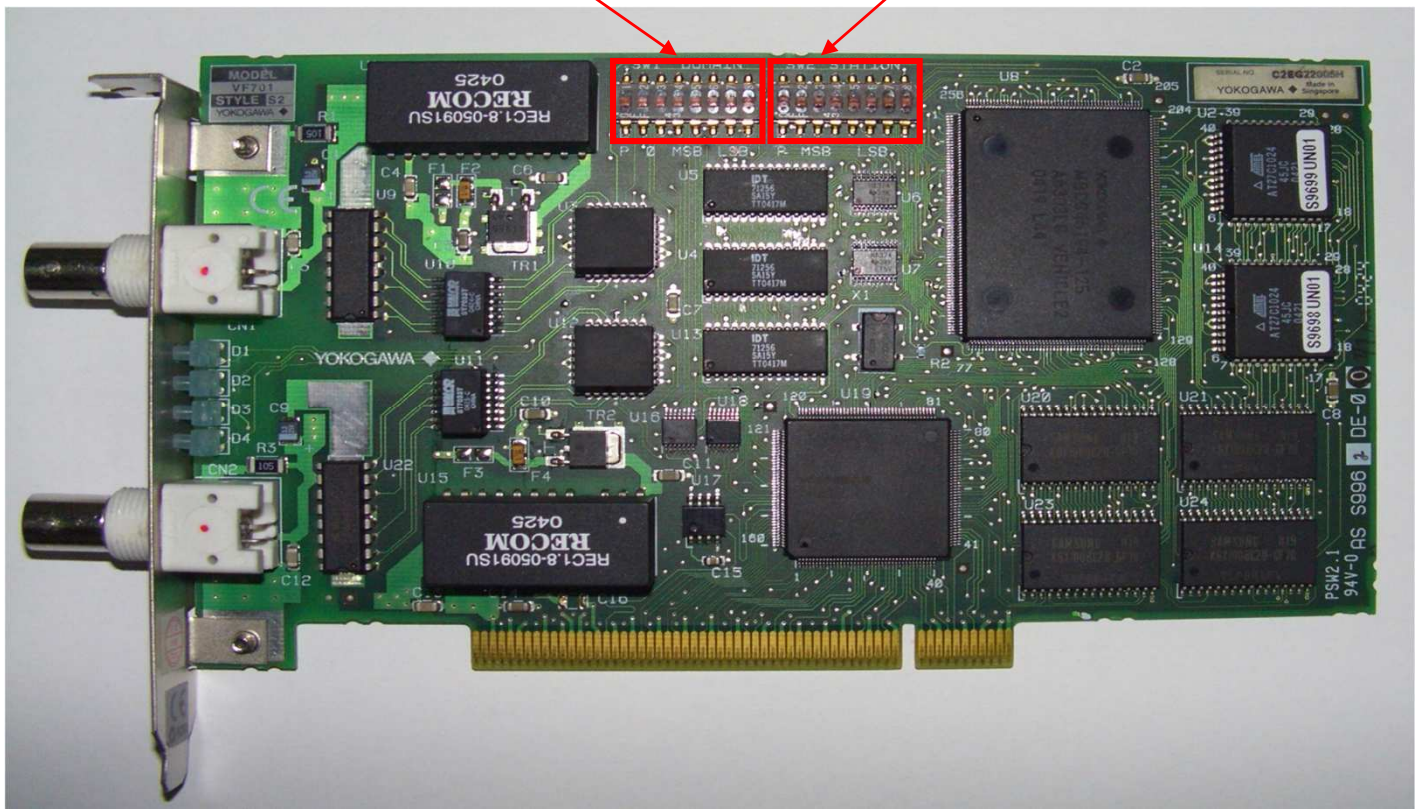
Attaching the VF701 card onto the HIS PC

Make sure the **domain number** and **station number** are correctly set



Control Bus Interface Card (VF701)

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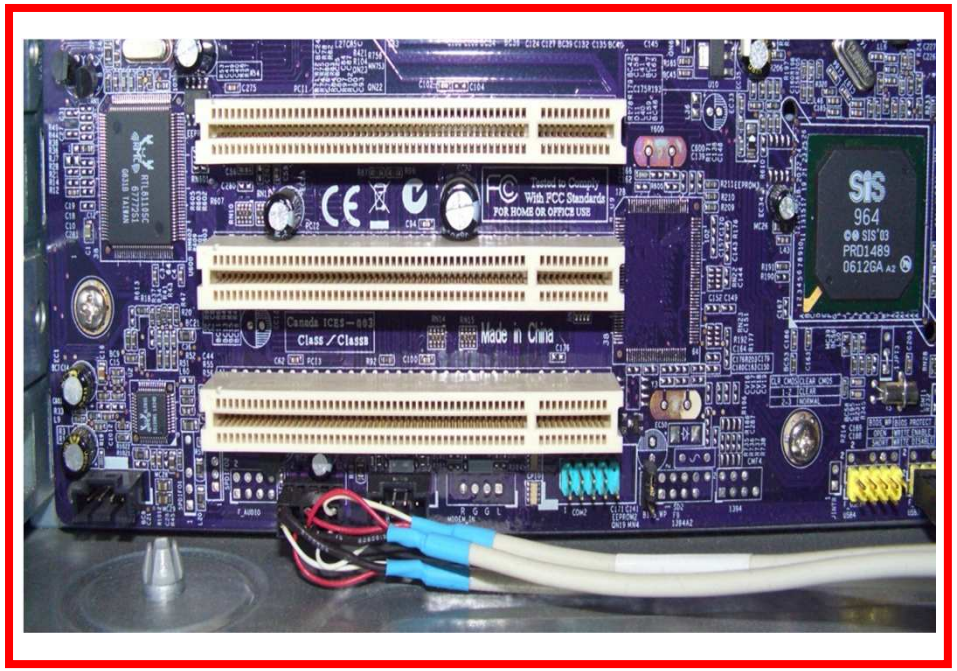
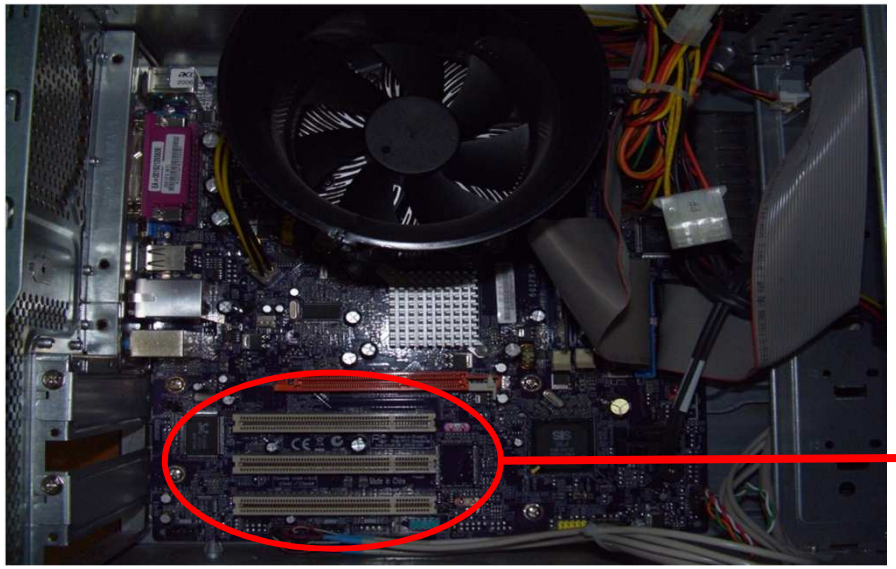
vigilance™

Attaching the VF701 card onto the HIS PC

PCI slots are usualy white colored.



VF701 card uses computer **PCI** slot.
Locate and identify the slot correctly.



CENTUM VP

Control Bus Interface Card (VF701)

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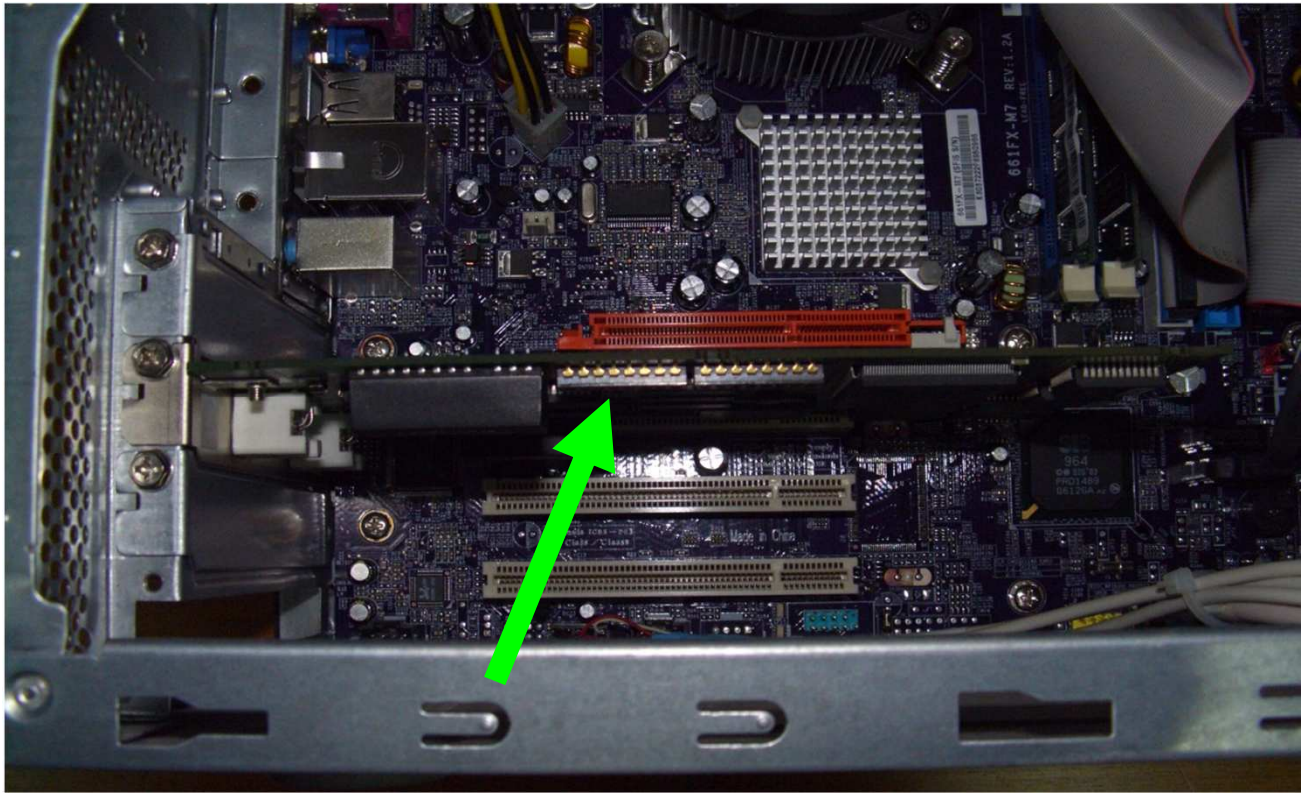
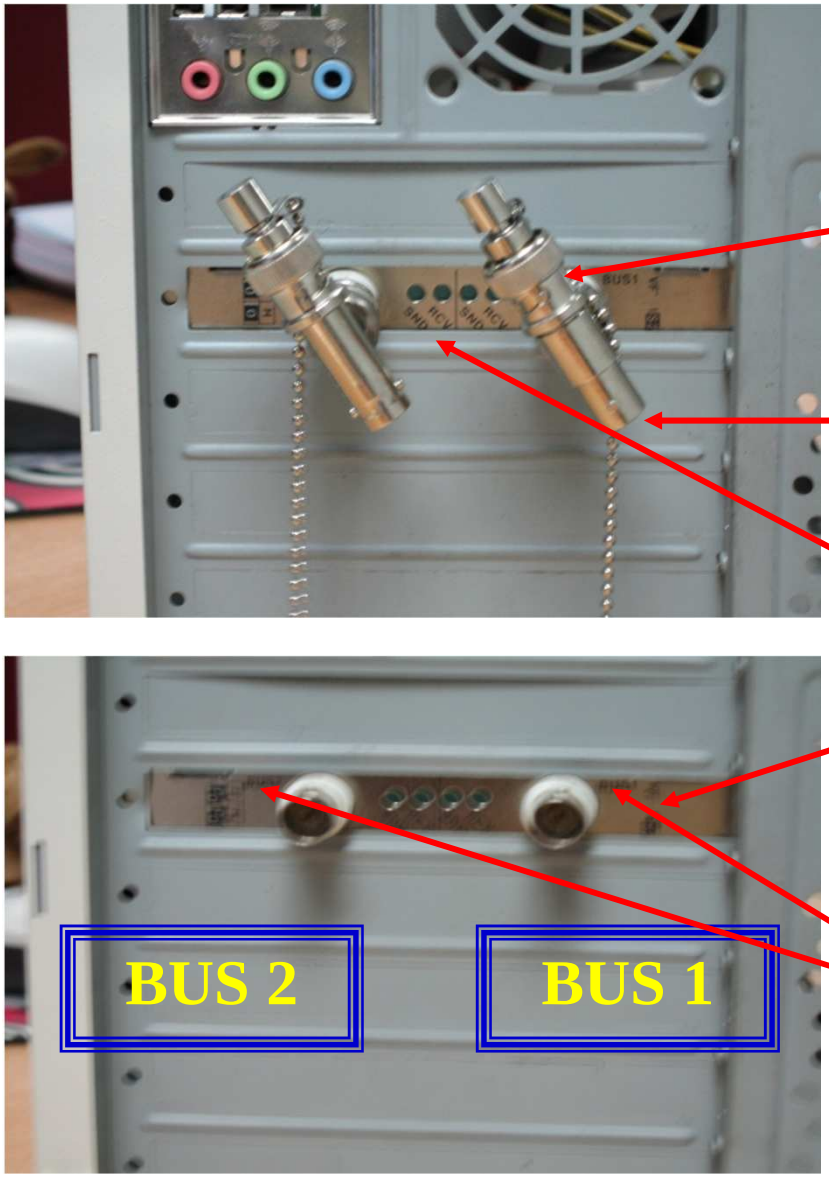
Attaching the VF701 card onto the HIS PC



DONE !

CENTUM VP

Connet Vnet (VF701)



Terminator

Three Connector

VF701 CARD

NAME PAGE

Connet Vnet Cable

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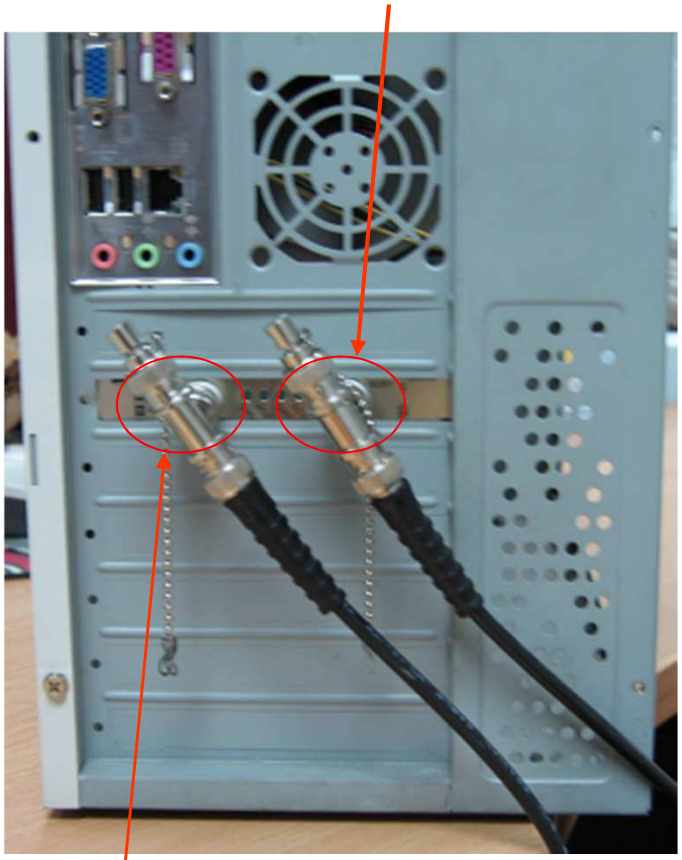
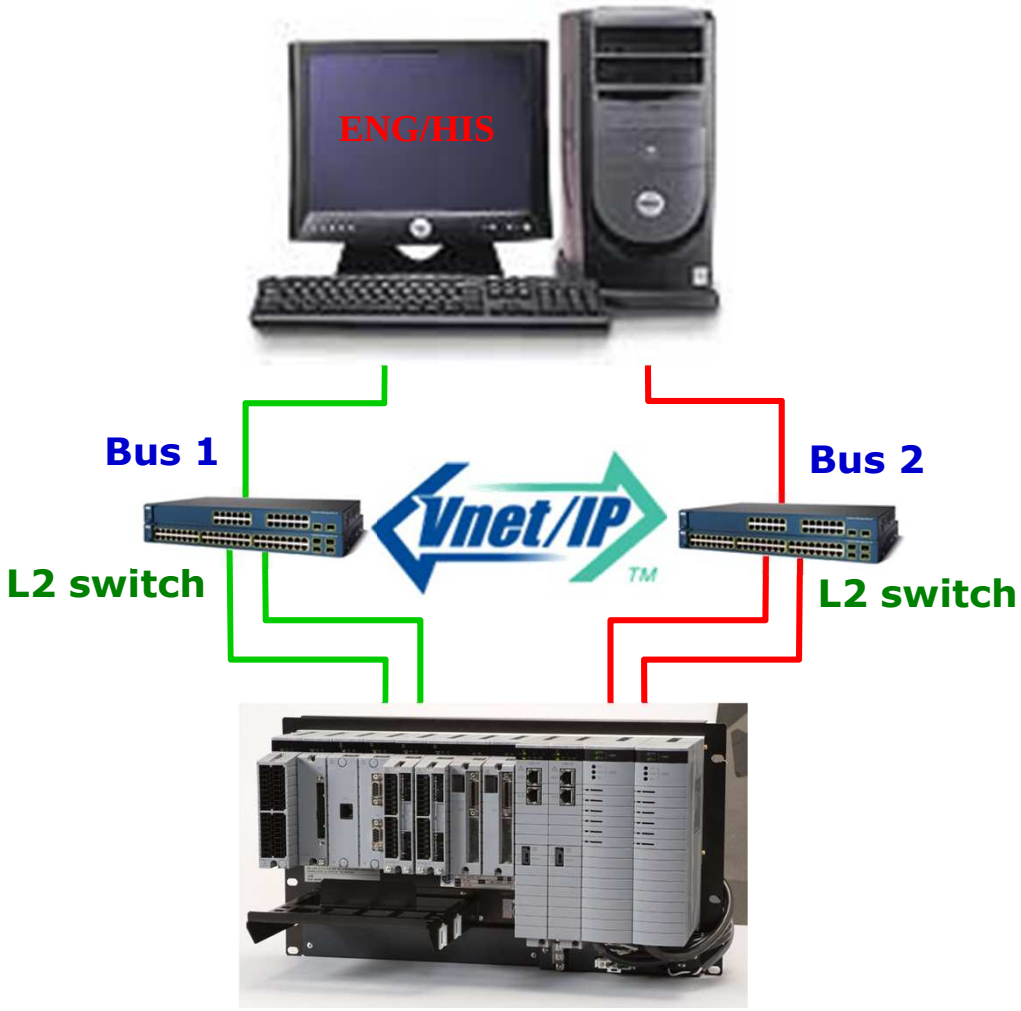
CONNECT V-NET CABLE BUS 1



CONNECT V-NET CABLE BUS 2

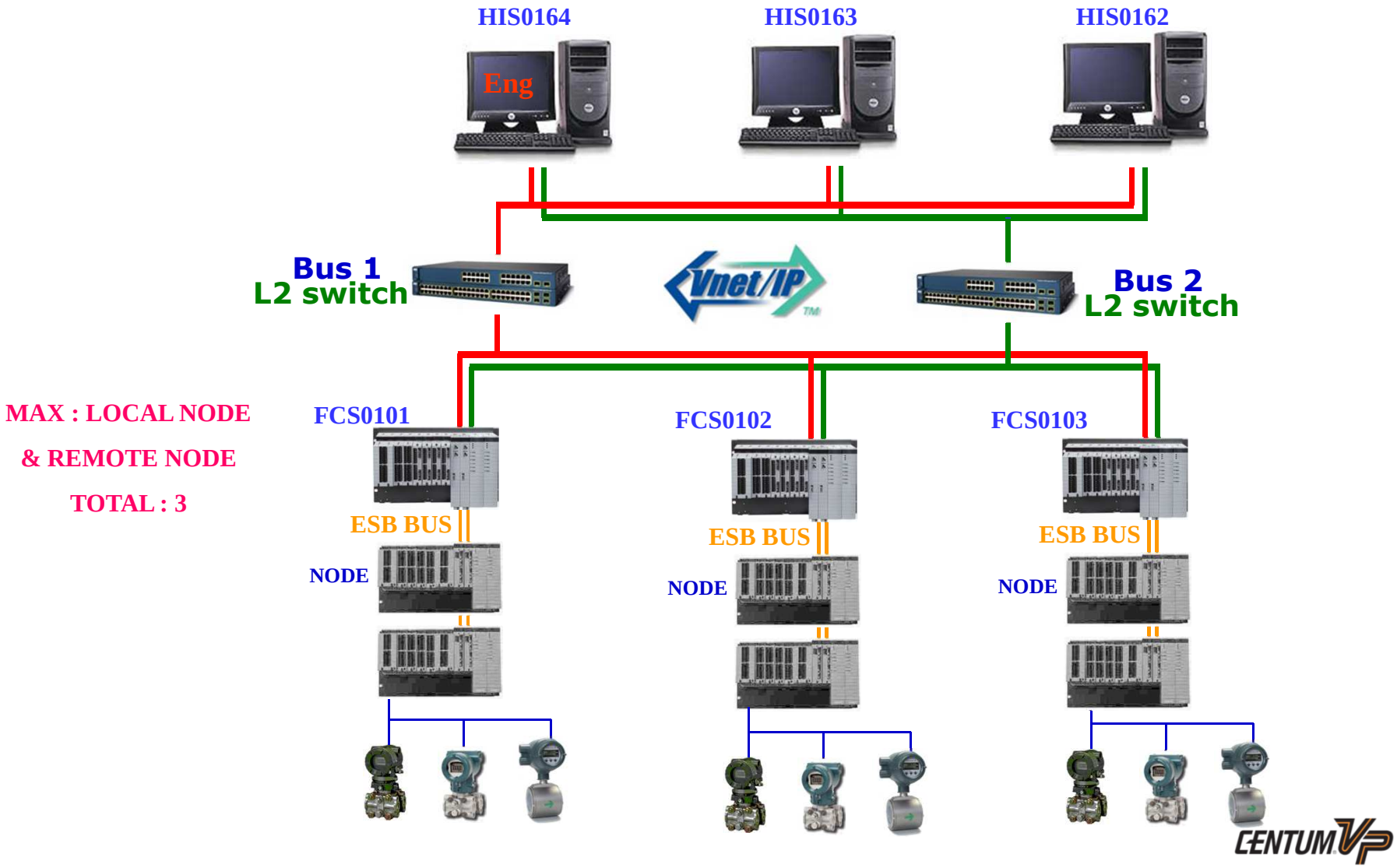
CENTUM VP

Centum VP System Configuration FFCS-L

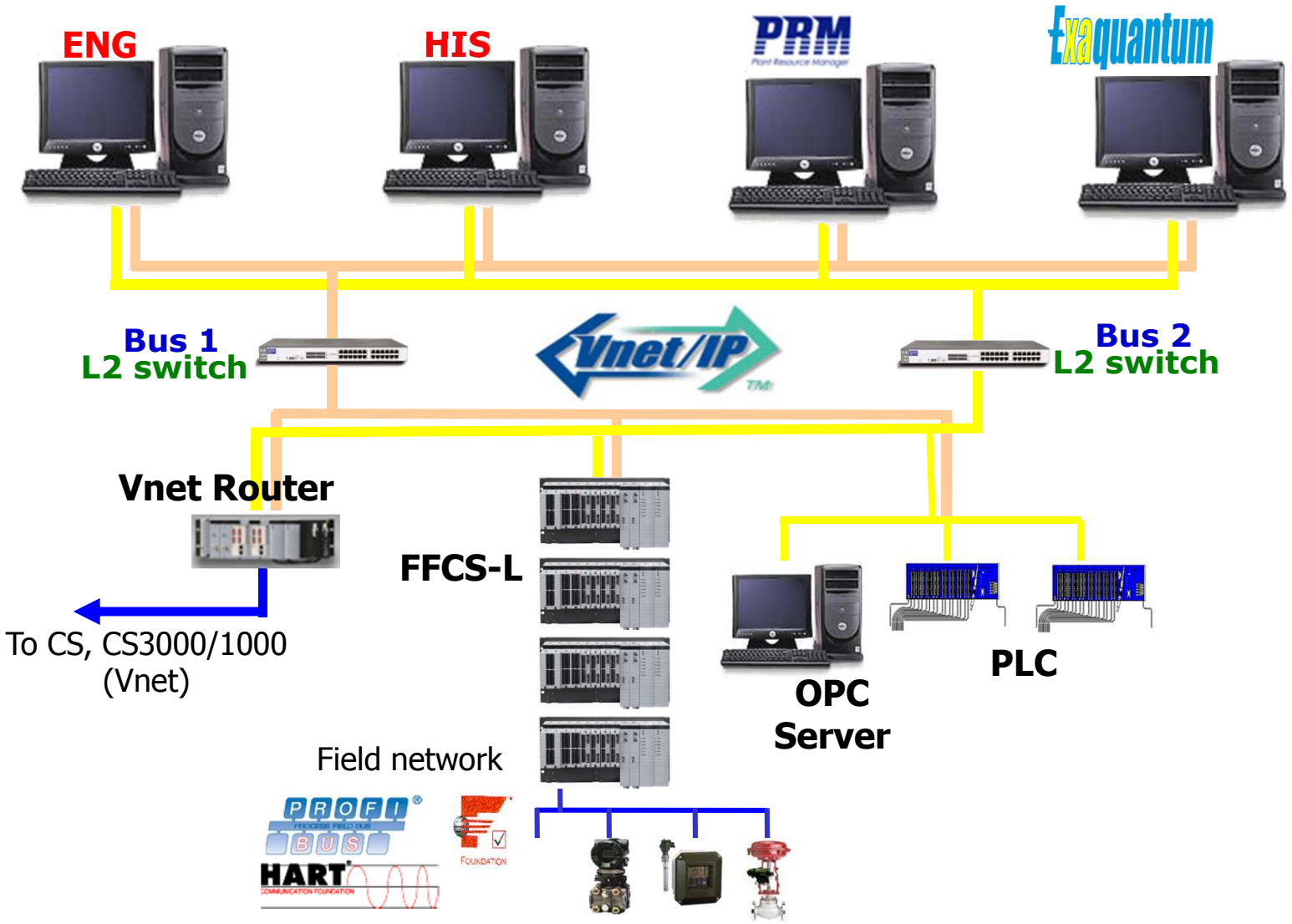


FCS (FFCS-L)

Centum VP System Configuration FFCS-L



Centum VP System Configuration FFCS-L



Centum VP System Configuration FFCS-L

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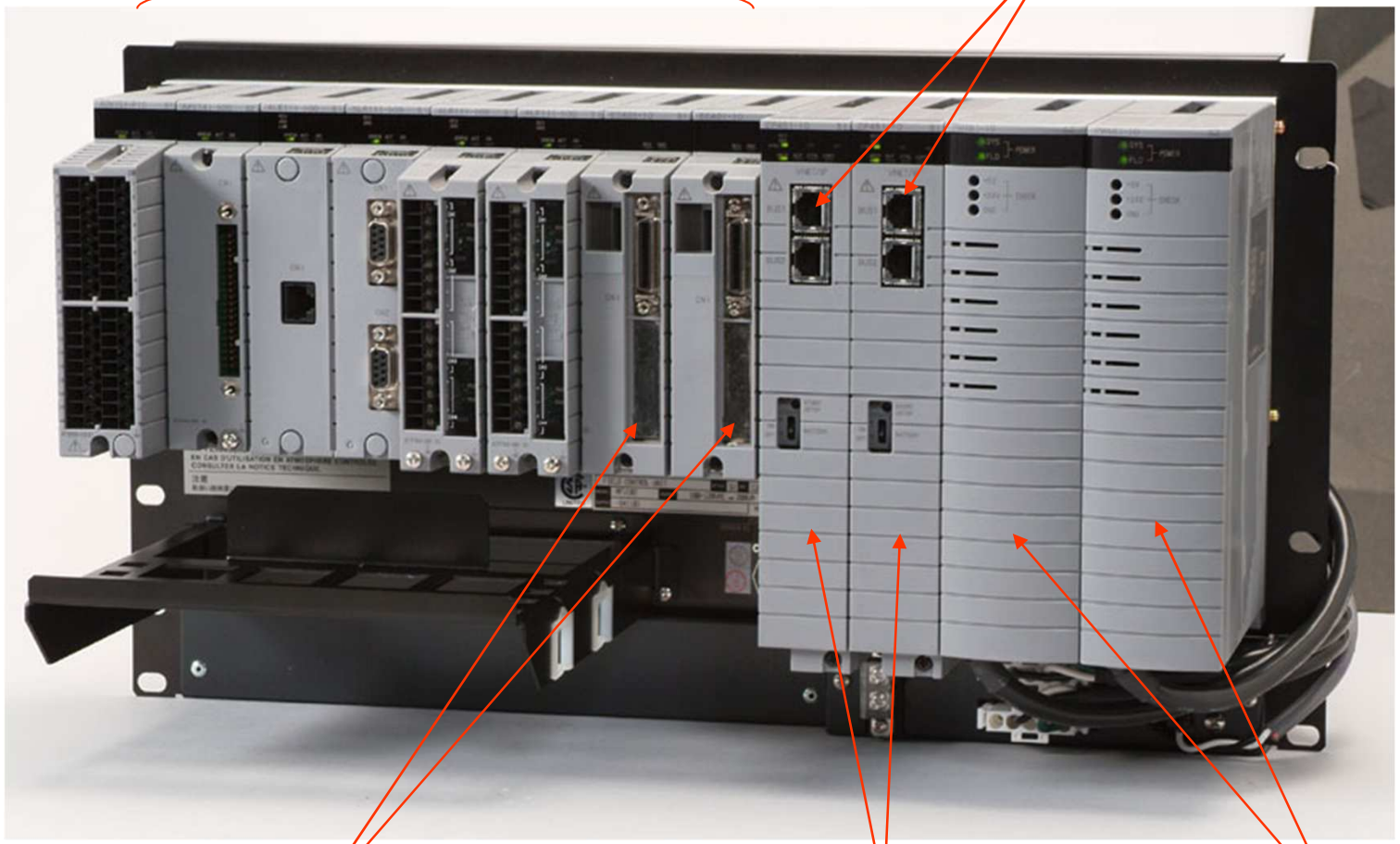
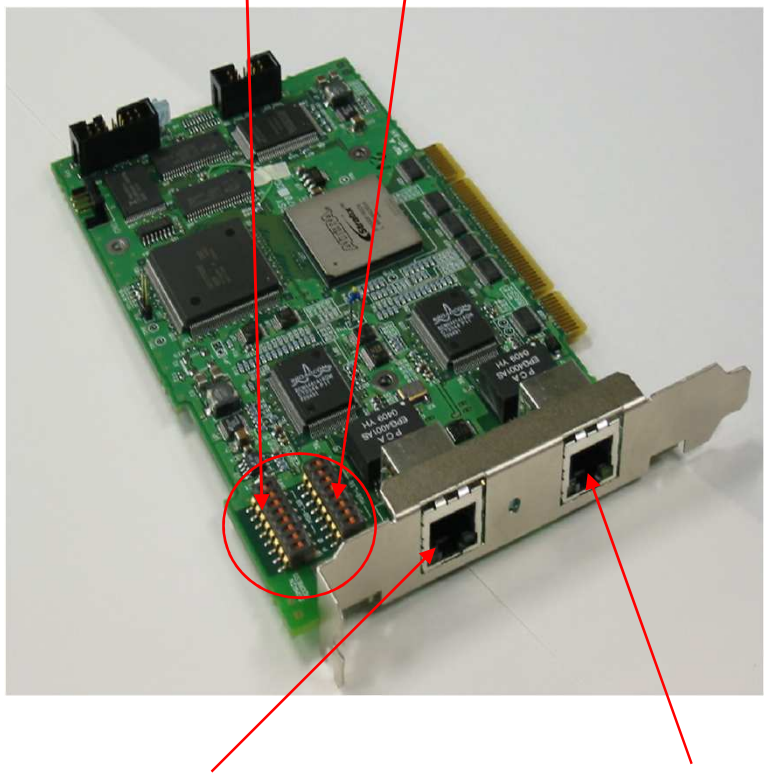


CENTUM VP

Control Bus Interface Card (VI701)



VI701 Specification

Interface:	PCI/PCI-X
	32bits
	3.3V/5.0V
Mac Address:	Vnet/IP bus1
	Vnet/IP bus2
	Vnet/IP on TCP/IP
	Ethernet (for Open)

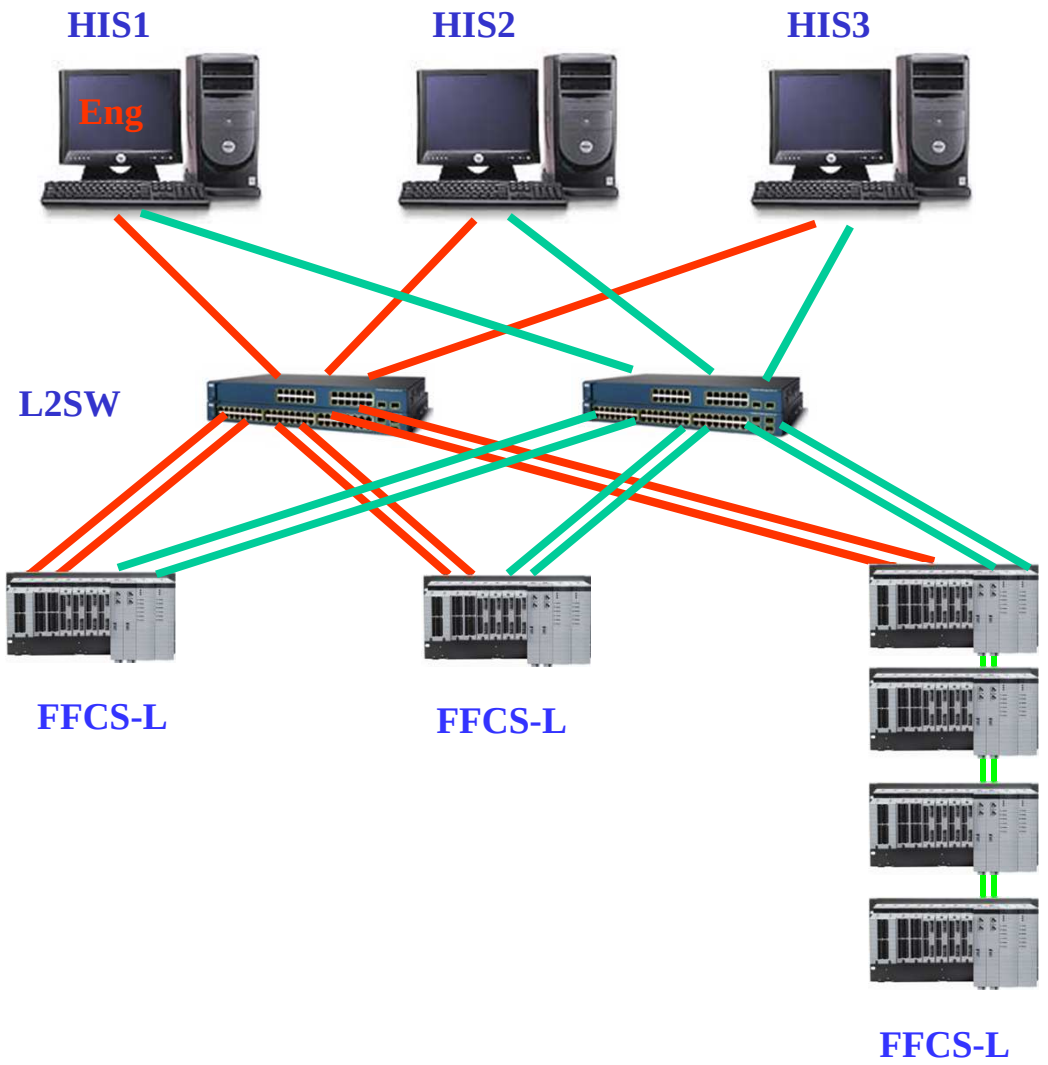
Control Bus Interface Card (VI701)

L2SW (Layer2 Switching Hub)

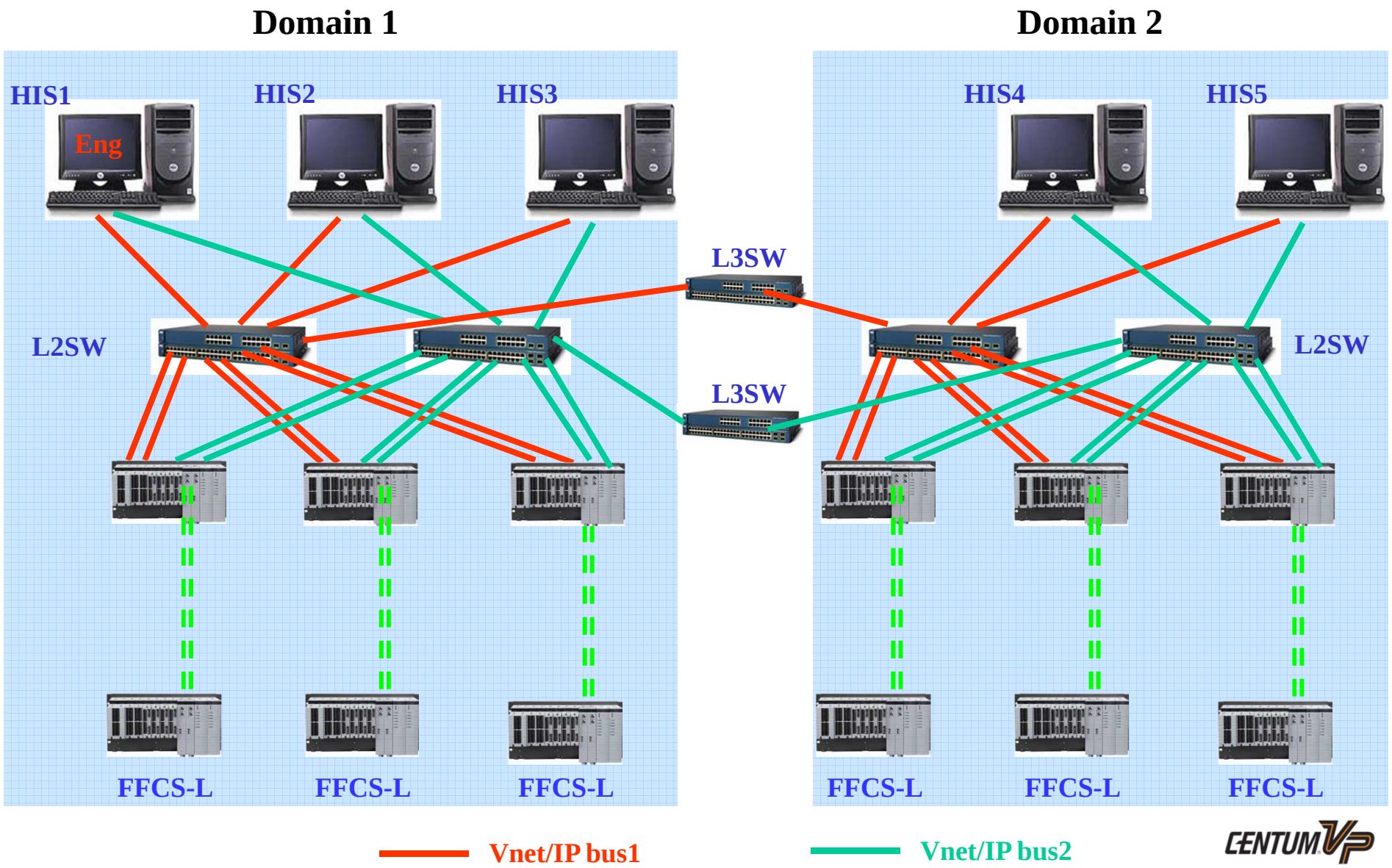
CAT5E UTP Cables

Note : L3SW* (for multi domain)

System Configuration



System Configuration



HIS : Human Interface Station

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Minimum Requirement

Processor	: Pentium 4 (2.8 GHz) or better
	: Intel Core 2 Duo (2.66GHz)
Memory	: 2GB RAM (minimum)
HDD	: 40 GB (minimum)
Monitor	: CRT or LCD 19”
Drive	: DVD-ROM/CD-ROM read
PCI slot	: Matrox card (dual-stacked)
PCI slot	: Vnet card (VF701 , VI701)
USB port	: Operation keyboard
Ethernet port	: LAN connection
Serial port	: Mouse and Keyboard
Parallel port	: Printers
Other	: Floppy Disk is required for key code.

Windows 7

Microsoft Windows xp Professional

Microsoft Windows Server 2003

Windows Vista™ Business Edition

Operator Keyboard [Optional]

CENTUM VP

HIS Type

Human Interface Stations (HIS)

The HIS is mainly used for operation and monitoring – it displays process variables, control parameters, alarm, trend windows, etc.
There are 2 types of HIS:

Desktop Type

PC

Console Type

Enclosed Display Console

Open Display Console

HIS Type

Desktop Type

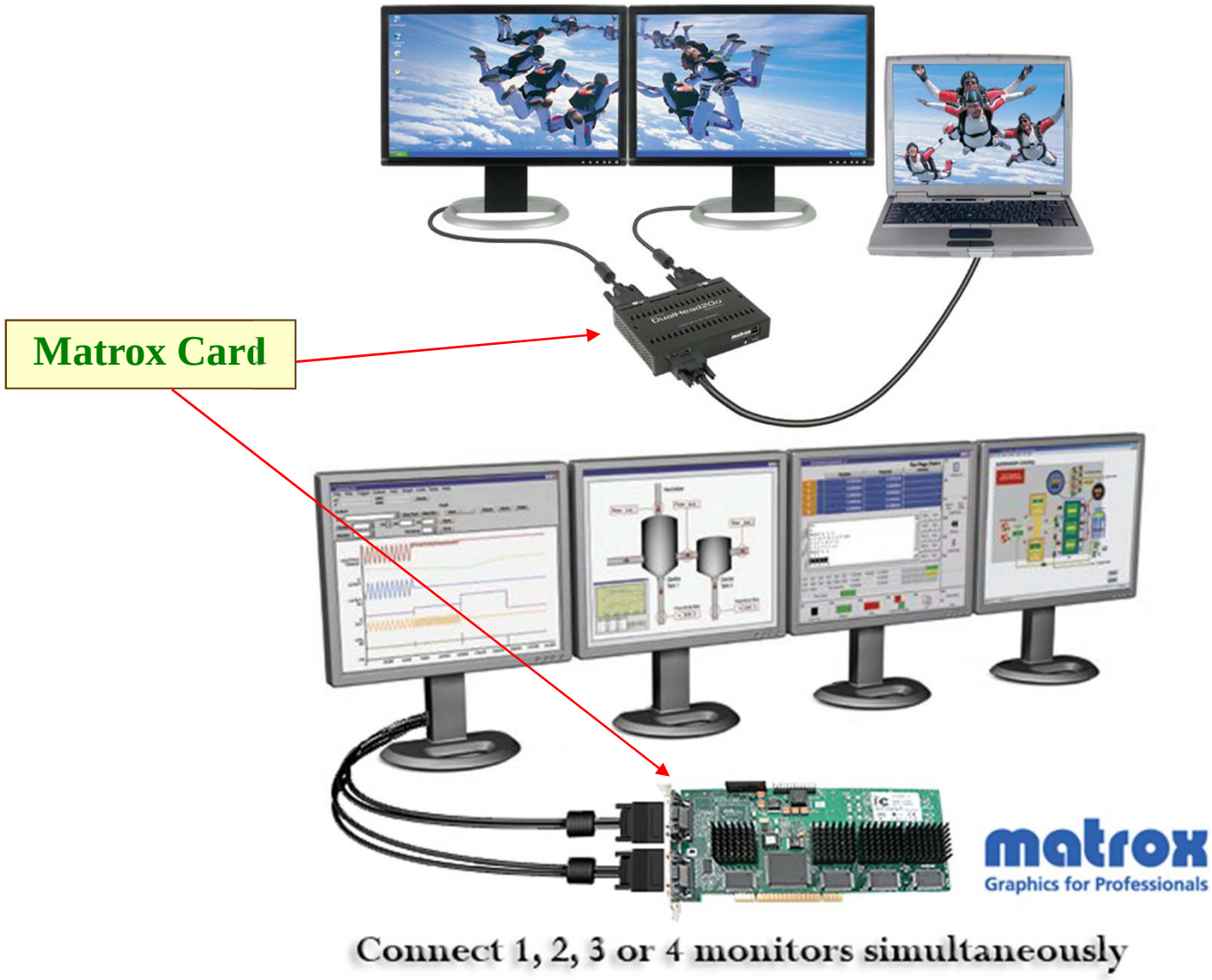
Single monitor

- 17” LCD or CRT
  Operation keyboard (optional)
- LHS1100
  Std Operation & Monitoring Function

Dual monitor

- 17” LCD or CRT
  Operation keyboard (optional)
  Matrox card
- LHS1100
  Std Operation & Monitoring Function
- LHS4600 Multiple-monitor Package

HIS Type



Connect 1, 2, 3 or 4 monitors simultaneously

HIS Type

Console Type

Enclosed Display Console

- 19” TFT LCD Touch panel
  Operation keyboard 64 keys
- LHS1100
  Std Operation & Monitoring Function
- LHS1120 Console HIS Support
  Package for Enclosed Display Style

Open Display Console

- 18” TFT LCD Touch panel
  Operation keyboard 32 keys
- LHS1100
  Std Operation & Monitoring Function
- LHS1130 Console HIS Support
  Package for Open Display Style

Ethernet

- Hub Link 10/100 Mbps or 1 Gbps
- Network Cable (RJ-45connector)
- Network Interface Card

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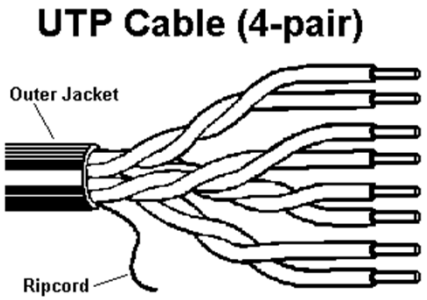
Ethernet Information Network

- Bus contention method, Non-Deterministic
- High speed (10/100 MBPs)
- Star topology, UTP or fiber-optic
- Type of communication transmitted:
  - equalization communication
  - acquisition of status display data
  - other station trend
  - download, IOM download, tuning parameter save
  - recipe equalization
  - client-server processing
  - open data interface



Medium:	4-Pair Category 5 Cable
Data Rate:	10 Mbps (10BASE-T) 100 Mbps (100BASE-TX)
Segment Length:	max. 100 m. (point-to-point)
Connection:	RJ-45 Connector

CENTUM VP

If I want to startup the Field Control Station.
How can do it ?

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CENTUM VP

Window Setup
Software Installation

Installation Procedure

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1. Installation of Windows.
2. Installation of Service Pack.
3. Windows setup.

   Set up the Windows configuration in order to run the Centum VP system on Windows:

   - Setup Computer Name and Workgroup.
   - Setup file system.
   - Virtual memory.
   - Setup display properties and power options and more.
   - Network adapter addition

     Installation of the Ethernet adapter

     Installation of the Control Bus driver.
   - Printer addition.
4. Installing USB Operation Keyboard Driver. (if in use)
5. Installation of the Centum VP software.
6. Windows configuration. (Networks, the user name, and other information need to be set up in order to run the CentumVP system on Windows.)

CENTUM VP

Software Operating Environment

Support target OS below.

- Windows 7 Service Pack 1
- Windows Vista Business Edition Service Pack 1, 2
- Windows XP Professional Service Pack 3
- Windows Server 2003 Service Pack 2
- Windows Server 2003 R2 Service Pack 2
- Windows Server 2008 Standard Edition Service Pack 2

64-bit OS is not supported.

CENTUM VP

Software Compatibility

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The CENTUM VP software is compatible with the commercial software listed below:

Table Compatible Commercial Software

Software type	Software name	Version	Remarks
Spreadsheet	Microsoft Excel (*1)	2003, 2007	Used with the report package, and Settings for FCS Data Setting/Acquisition Package (PICOT).
Word processing	Microsoft Word	2003, 2007	
Software development	Microsoft Visual C++	6.0+SP5	
	Visual Studio	2005	
Document reader	Microsoft Internet Explorer	6.0, 7.0	Used with the electronic document package.
	.NET Framework	3.0	
Uninterruptible power supply (UPS)	APC PowerChute Business Edition	7.0.5	
Anti-virus	Symantec Endpoint Protection	11.0	
	McAfee VirusScan Enterprise	8.5i	
Others	Adobe Reader	8.1.2, 7.0	
	Adobe Acrobat	8.1, 7.0	

CENTUM VP

Software Compatibility

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Prior to installation, have the following prepared:

Keycode Files / System ID License (floppy disk/s)

Centum VP Software Medium (DVD-ROM)

CENTUM VP

Software Compatibility

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Before you start installing . . . . . .

1

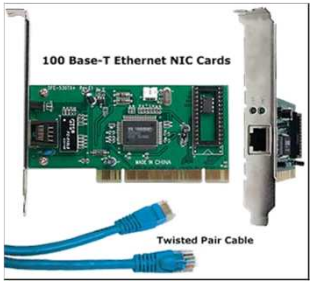
Windows Vista Business Edition
Microsoft Windows xp Professional
Microsoft Windows Server 2003

Operating system installed (Windows Vista Business Edition Service Pack 1 or Windows XP Professional Service Pack 2 or Windows Server 2003 Service Pack 2**) and service pack.**

2

Control Bus adapter (VF701) and RS-232 Serial Card (AIP261; in case of console type HIS) installed in the PCI slot.
(Ref.: IM 33Q01C10-01E page 2-2 (8/312)
(Ref.: IM 33Q01C10-01E page 6-9 (151/312)

3



Ethernet adapter and driver installed.
(Ref.: IM33Q01C10-01E page 2-16 (22/312)

4

Installation is done by using "Administrator" account (or other account that has an administrator's privilege).

CENTUM VP

Software Compatibility

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5

Computer name must be set to reflect its HIS name.

Example: HIS0158, HIS0164, etc.

6

Virtual memory is set to 3072 MB for memory size is 1GB

or set to 4096 MB for memory size is 2 GB or 4 GB.

7

Microsoft Excel installed (for report package).

8

Adobe PDF reader installed (for electronic instruction manual).

9

Any antivirus software must be disabled.

CENTUM VP

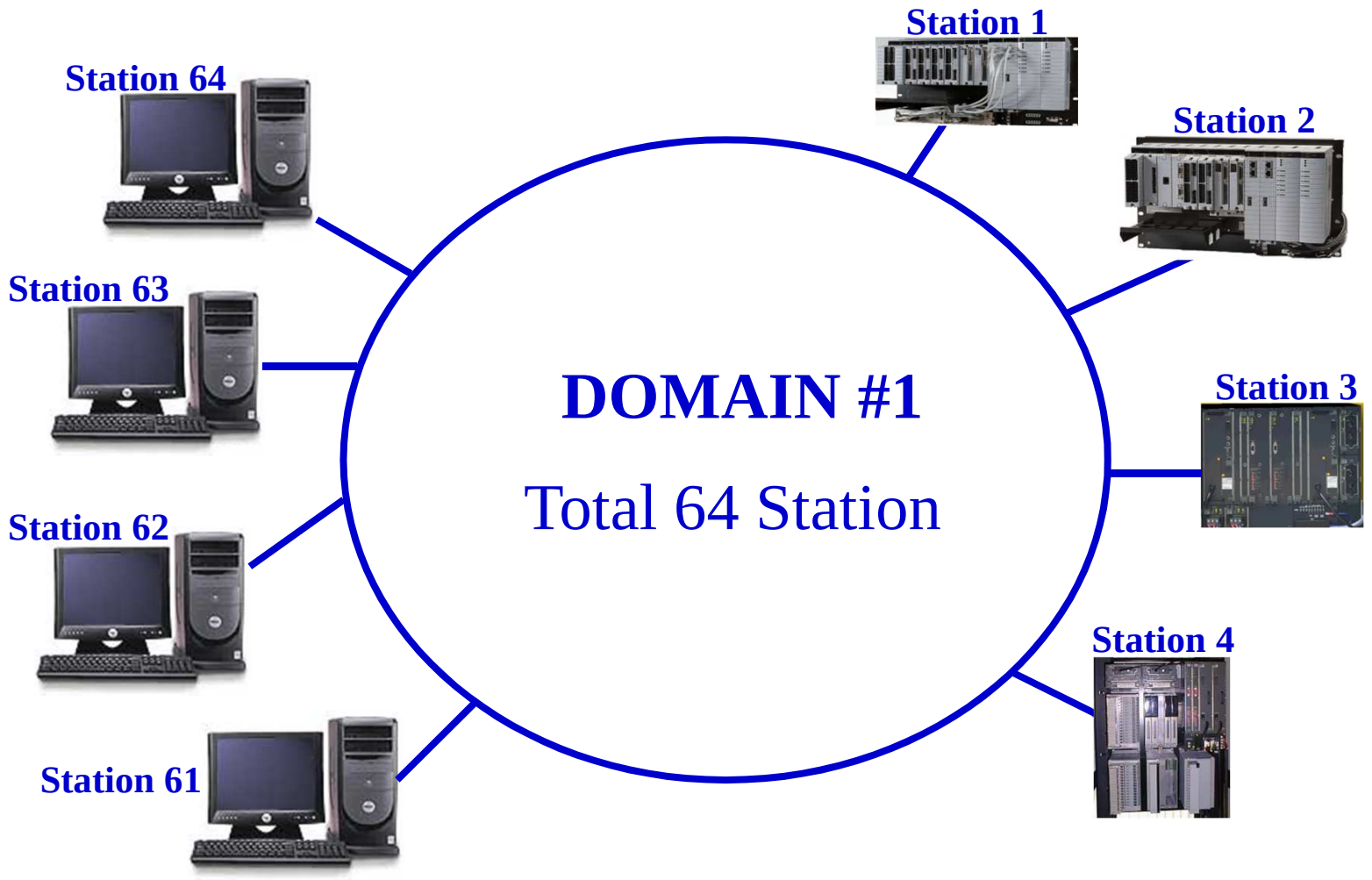
Computer Name/Station Name

A computer name is a name used to identify each computer on the Windows network.
An arbitrary computer name can be specified using the Windows Control Panel. A station name is a name uniquely specified according to the Control bus address in the CENTUM VP system.

EXAMPLE : HIS0164

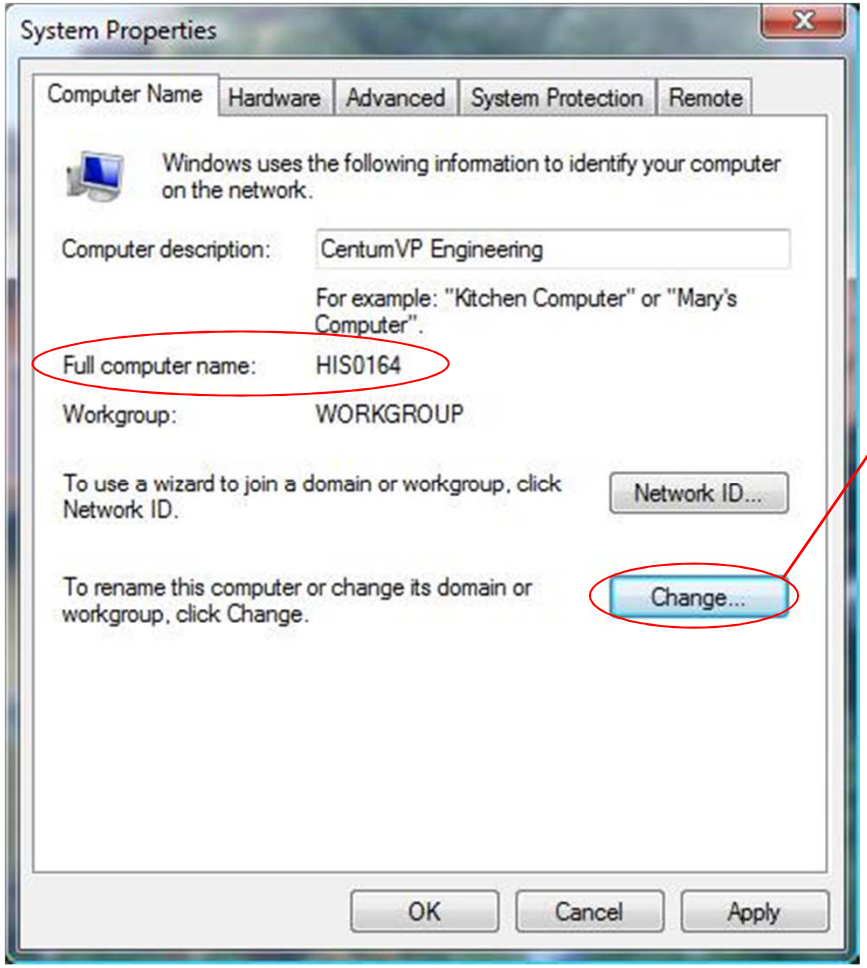
HISddss : "dd" is the domain number
"ss" is the station number

Window Setup



Computer Name (Station Name) and Workgroup

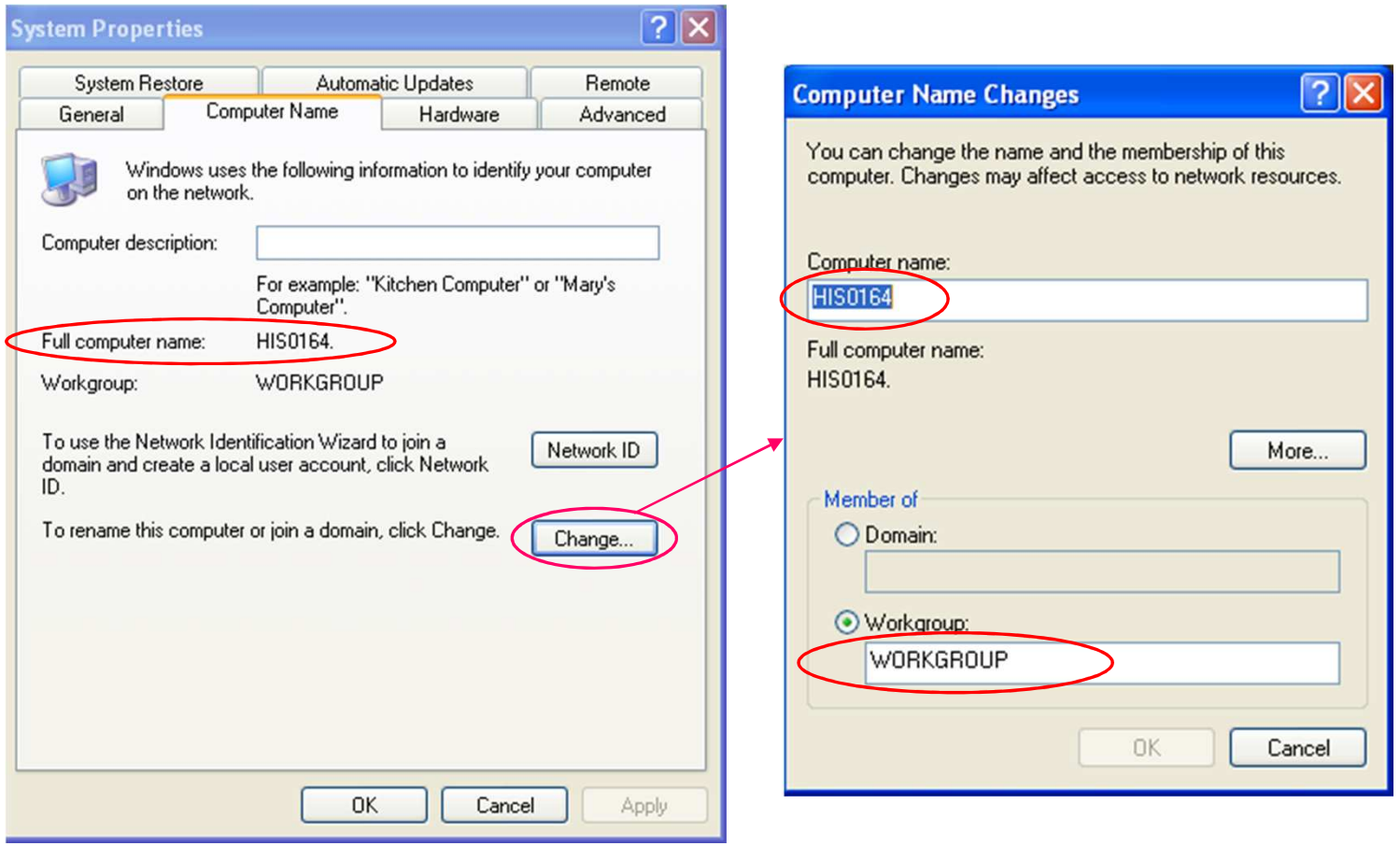
For Windows Vista



CENTUM VP

Computer Name (Station Name) and Workgroup

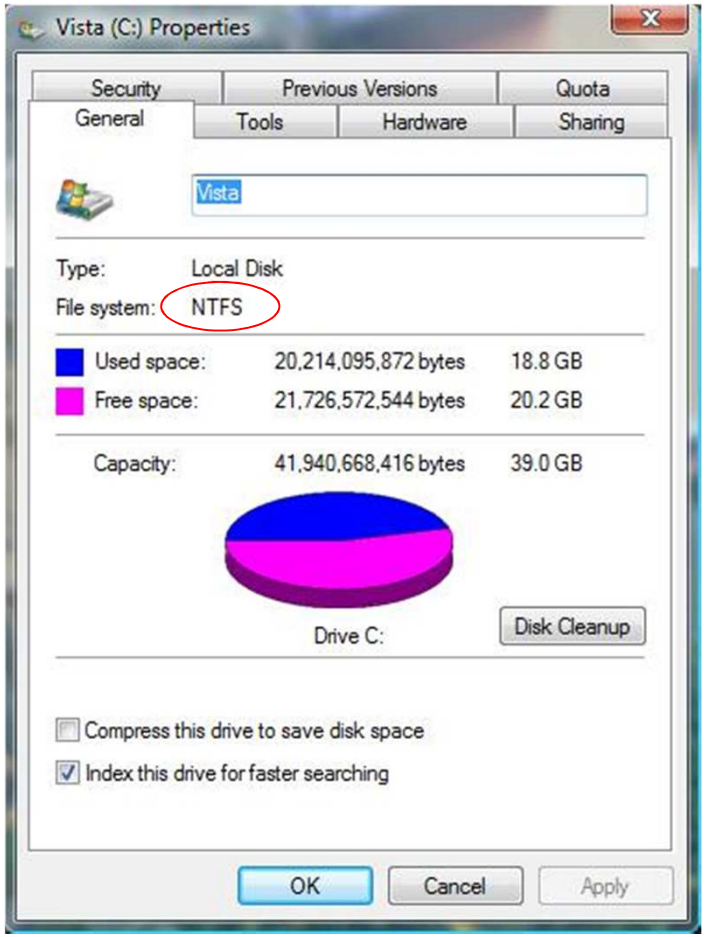
For Windows XP/Windows Server 2003



HISddss : “dd” is a domain number and “ss” is a station number

File System

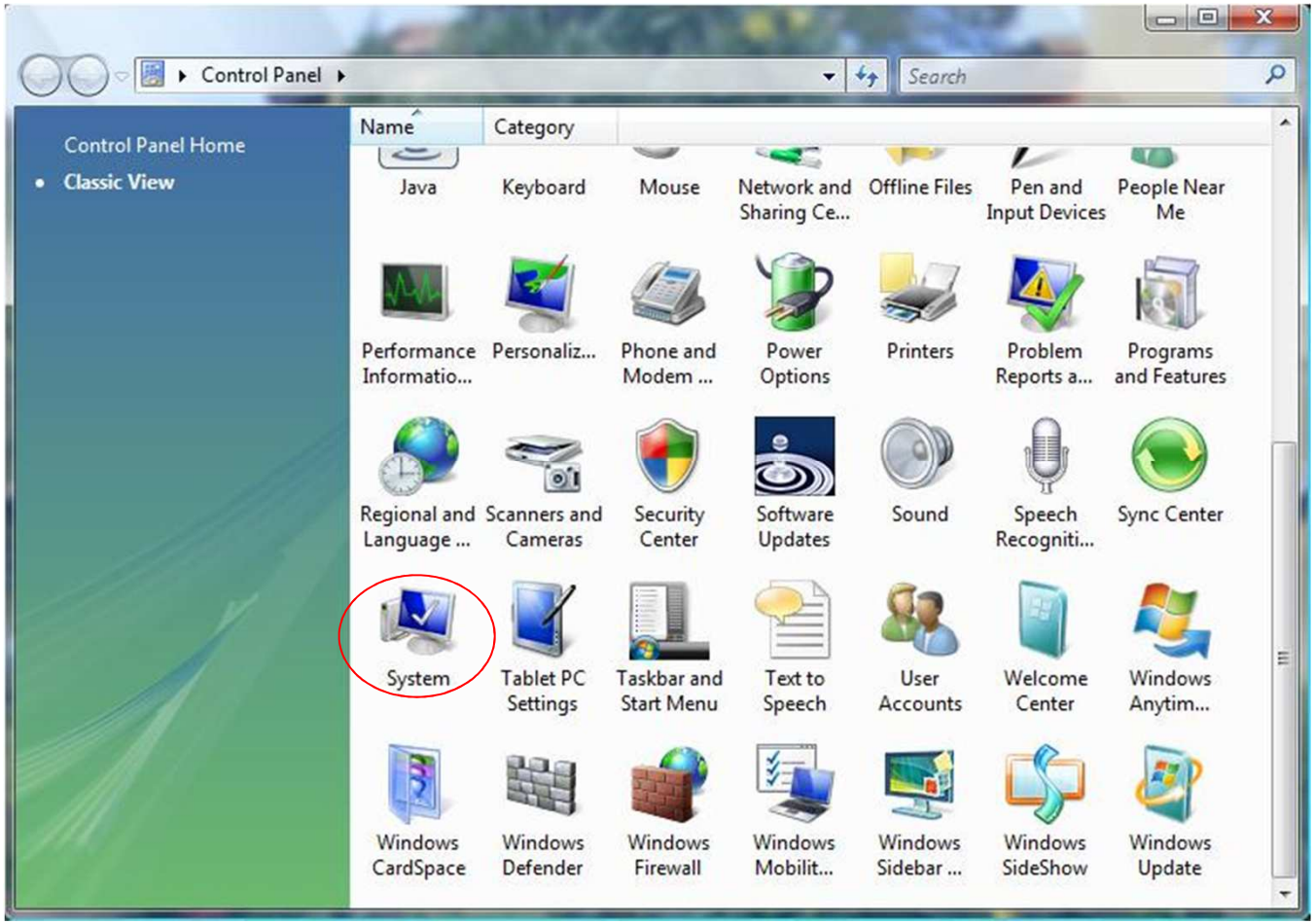
The file system of the disk partitions should be NTFS. If the partition of operating system is already formatted to FAT, it is necessary to convert it into NTFS and then reinstall the operating system. Other partitions should also be formatted into NTFS.



Setting of Virtual Memory

Set the Virtual memory by Custom size. The setting method is shown as follows.

1. Logon as an administrative user.
2. Choose [Control Panel] - [System] from [Start] menu so as to display System settings.



Setting of Virtual Memory

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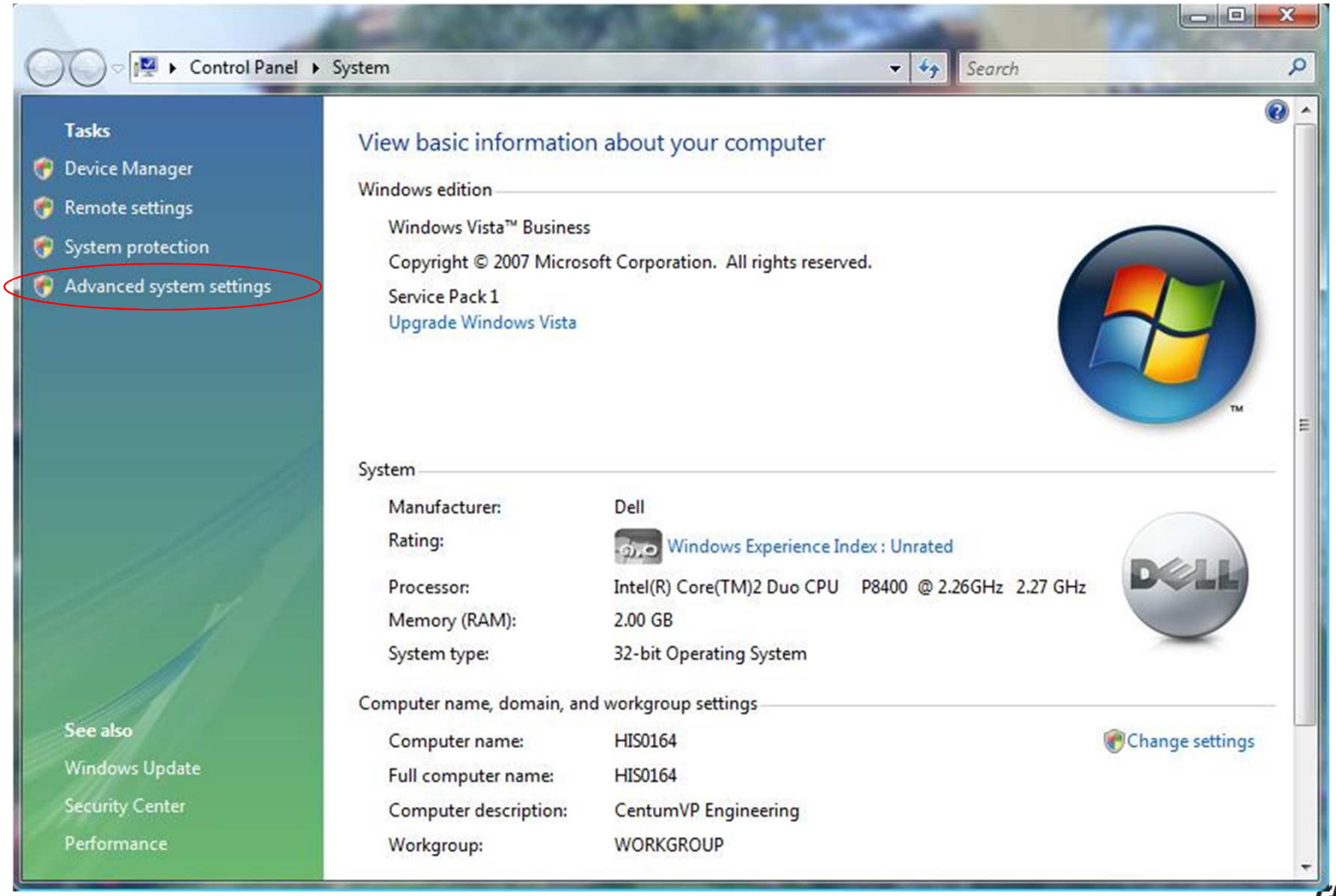
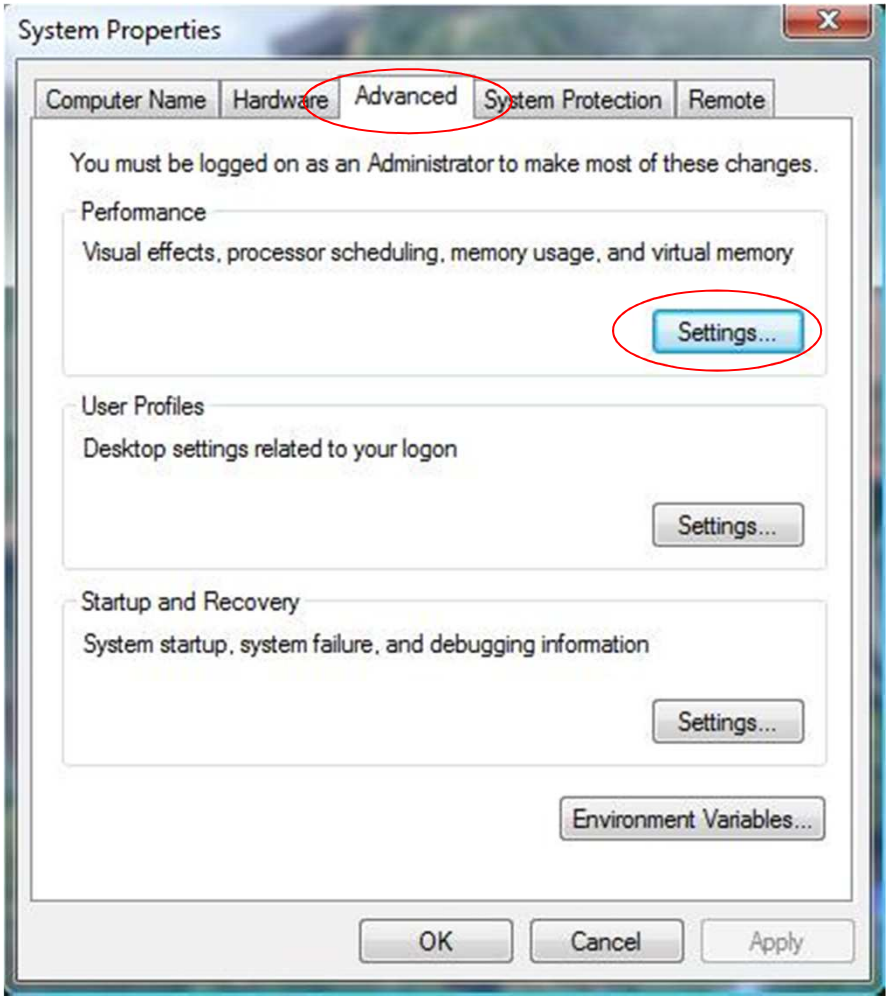
3. Choose [Advanced system settings] so as to open [System Properties].



CENTUM VP

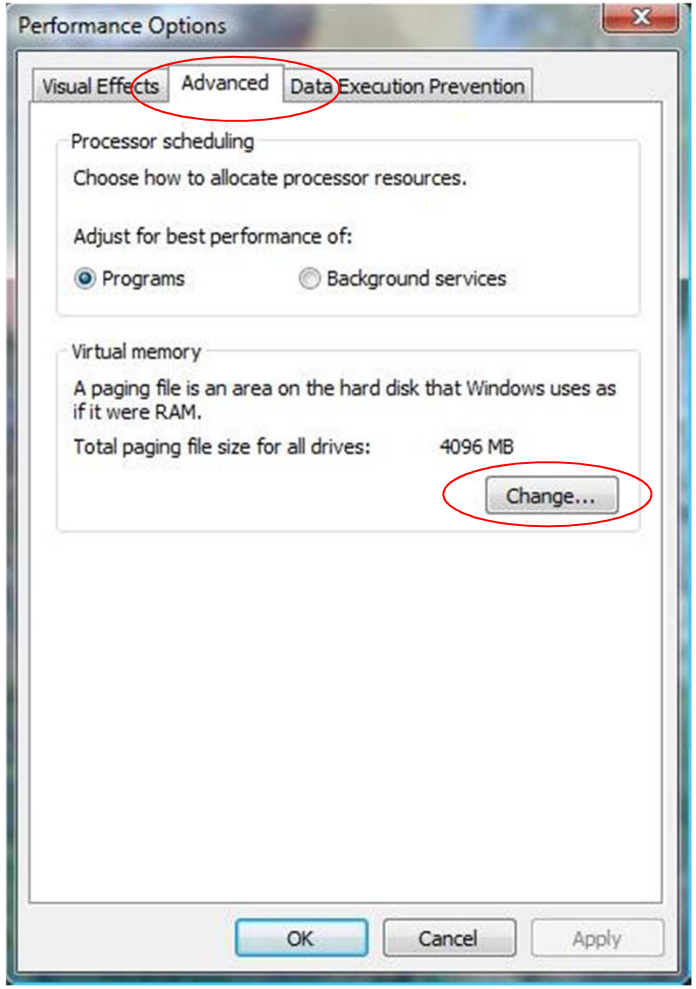
Setting of Virtual Memory

On [Advanced] tab,click [Settings] button of [Performance] so as to display [Performance Options].



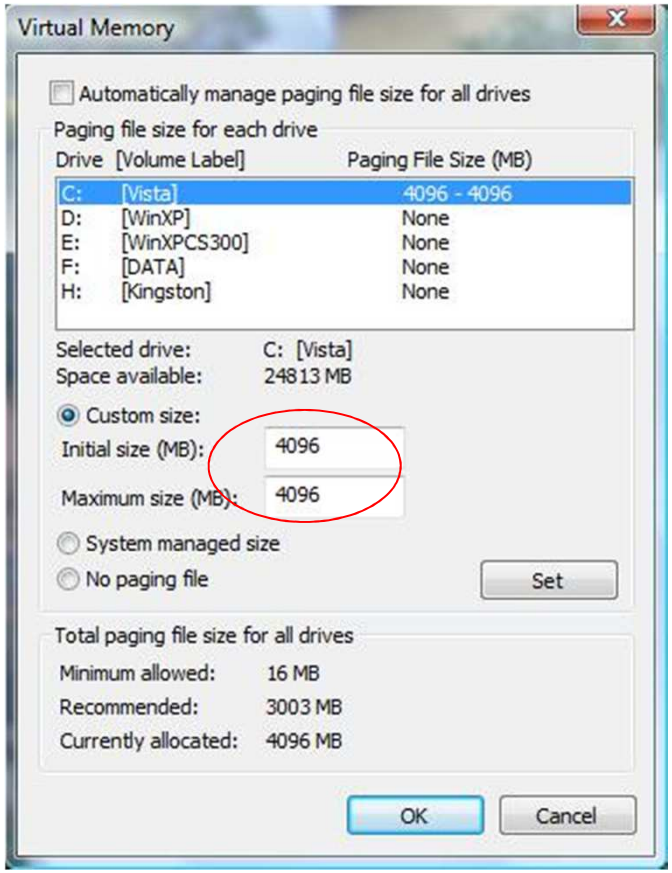
Setting of Virtual Memory

4. On [Advanced] tab of [Performance Options], click [Change] button of [Virtual memory] so as to display the [Virtual Memory] dialog box.



Setting of Virtual Memory

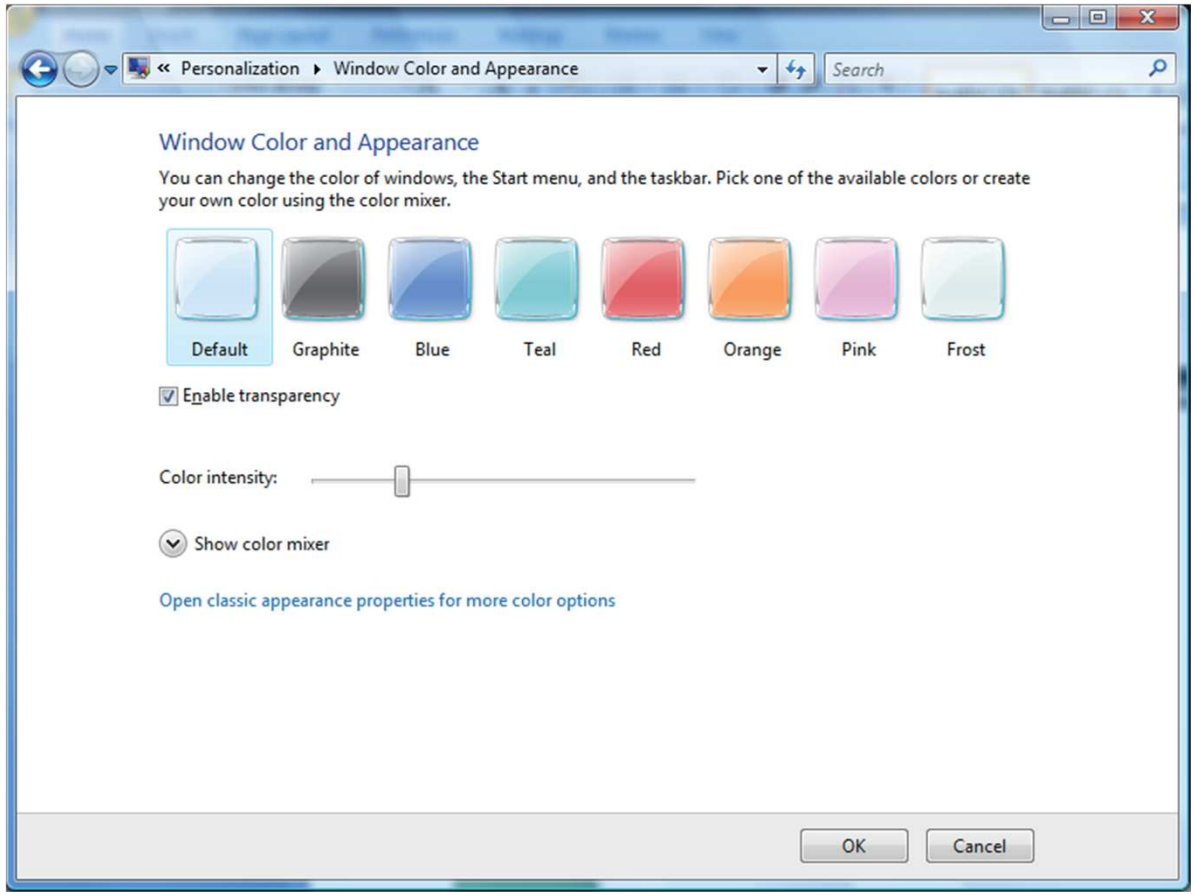
5. The paging file size of the selected drive can be defined as follows:
Choose [Custom size] and then enter the sizes for [Initial size] and [Maximum size].
A size that is three times of main memory size is recommended for the initial size.
However, 4096MB is the upper limit. For an example, if the main memory size is 1GB, the initial size can be defined with 3072MB. However, if the main memory size is 2GB or 4GB, 4096MB should be used.
6. Click [OK] button.



Set Display Properties

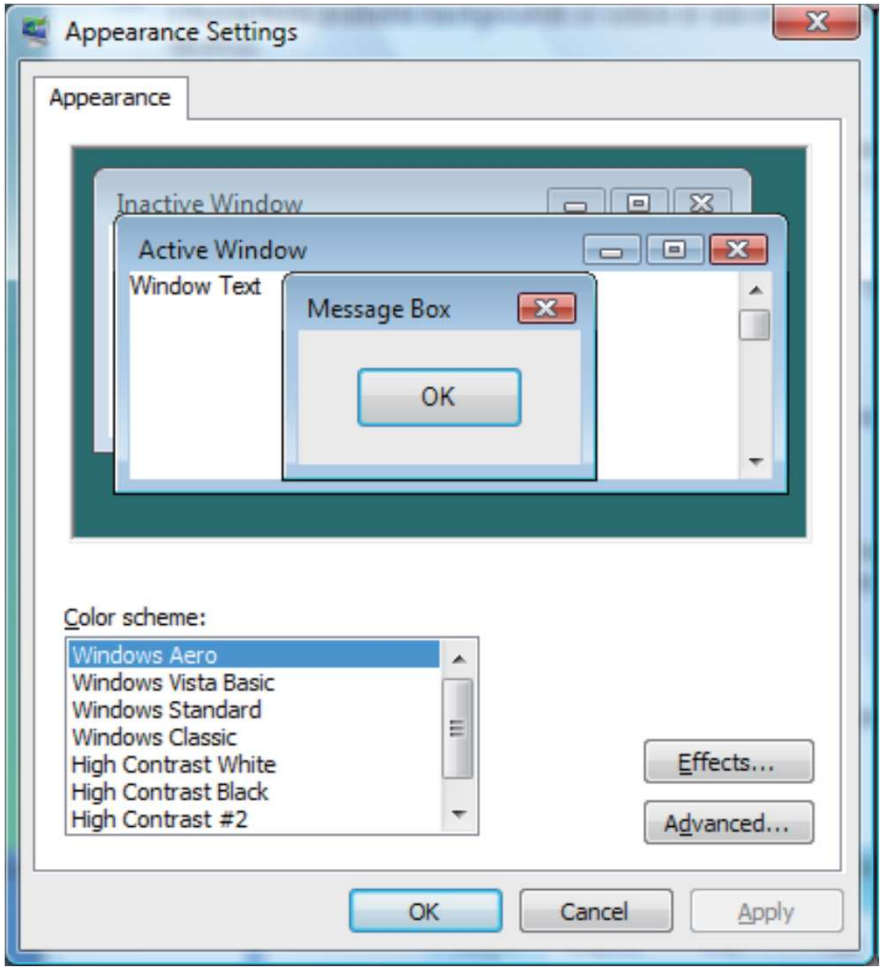
For Windows Vista

1. Logon using the administrative user account that used for installation.
2. Choose [Control Panel] - [Personalization] - [Window Color and Appearance] from [Start] menu so as to display [Window Color and Appearance].



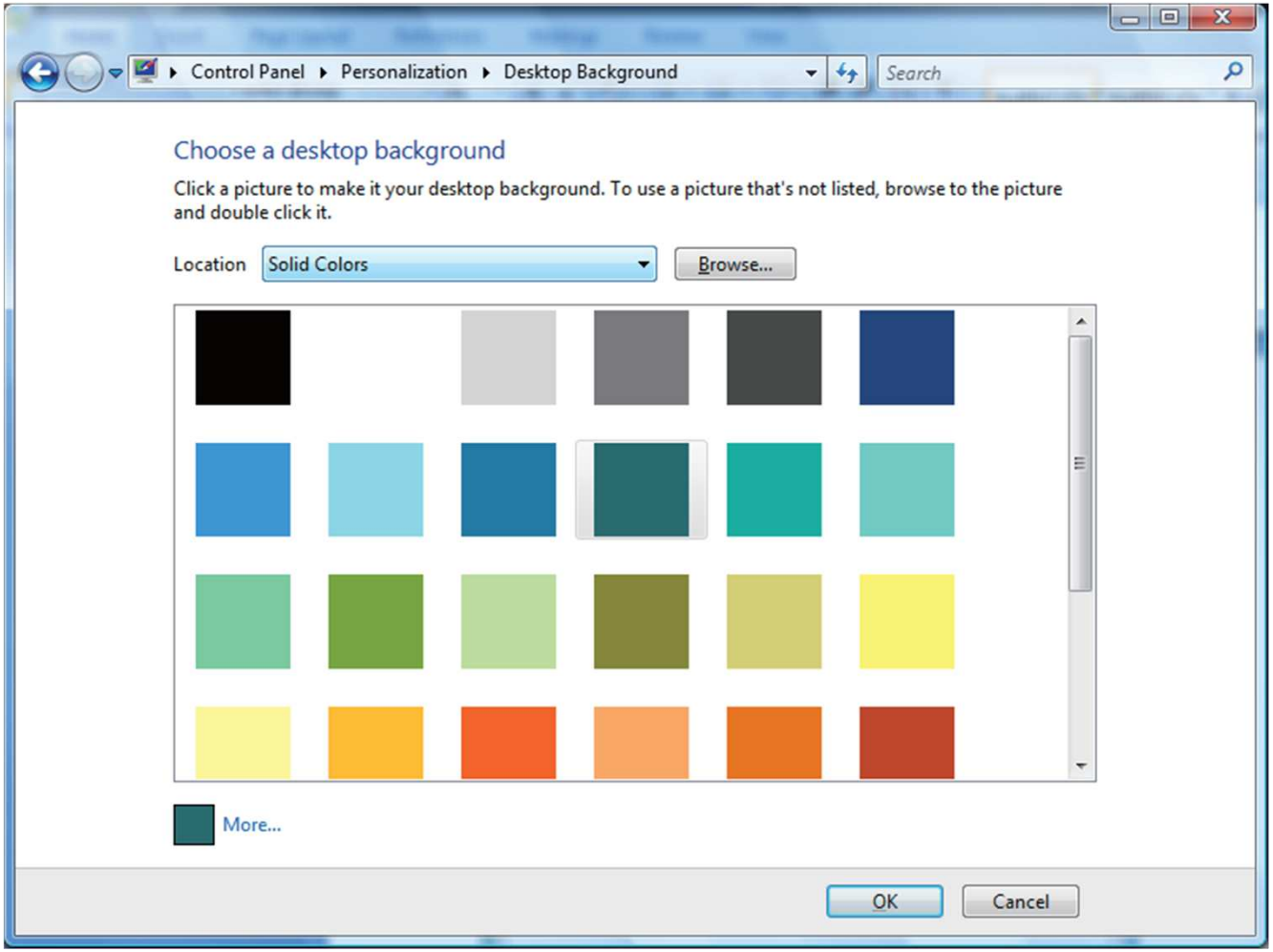
Set Display Properties

3. Choose the option of [Open classic appearance properties for more color options] at the lower part of the window so as to display [Appearance Settings] dialog box. Choose [Windows Aero] for [Color scheme] and then click [OK] button.



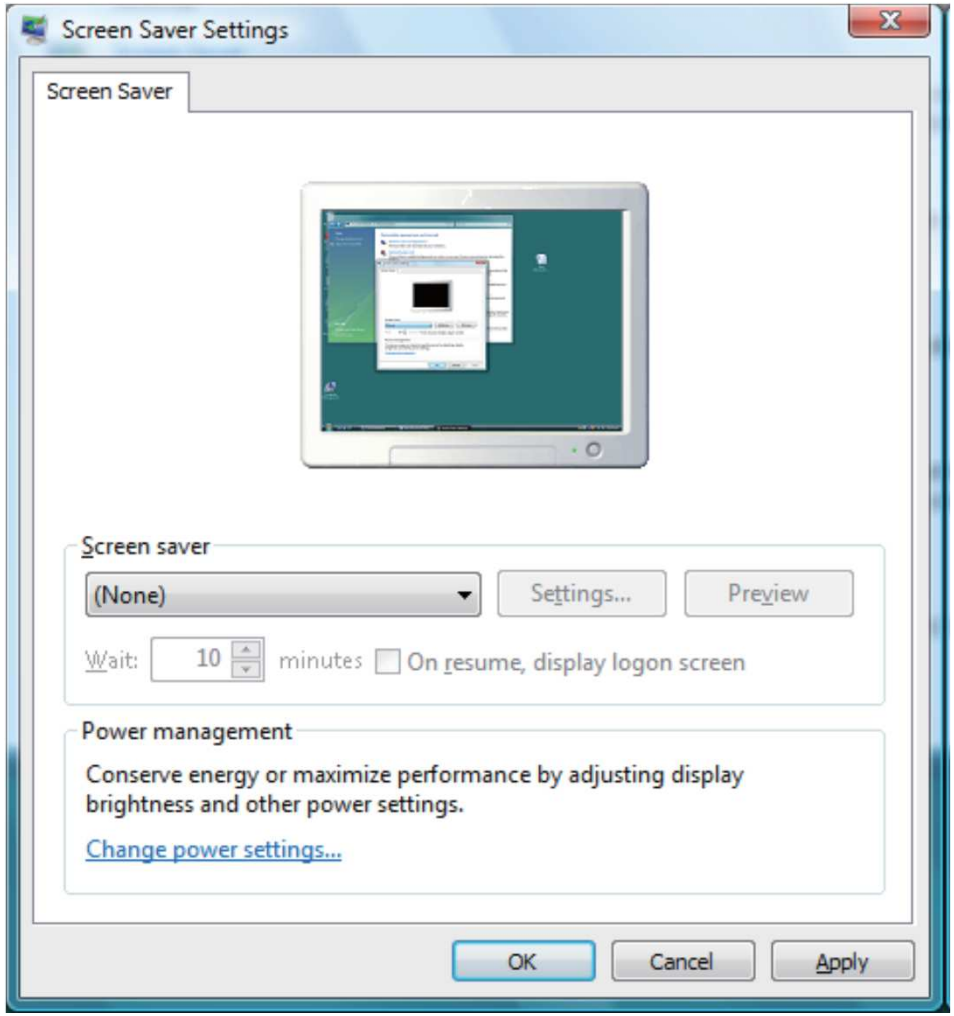
Set Display Properties

4. Choose [Control Panel] - [Personalization] - [Desktop Background] from [Start] menu so as to display a window for selecting [Desktop Background].
Choose [Solid Colors] for [Location] and then click [OK] button.



Set Display Properties

5. Choose [Personalization] - [Screen Saver] so as to display “Screen Saver Settings” dialog box. Choose (None) for [Screen saver] and then click [OK] button.

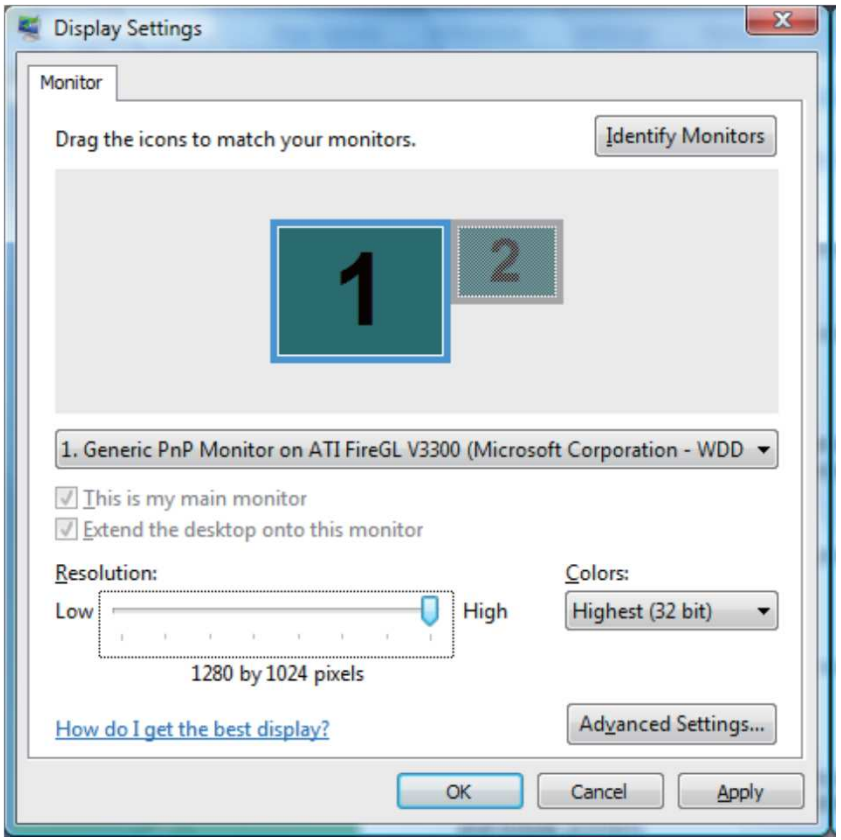


Set Display Properties

6. Choose [Personalization] - [Display Settings] so as to display "Display Settings" dialog box. Set the following settings and then click [OK] button.

- Colors : "Highest (32 bit)"
- Resolution : SXGA 1280 by 1024 pixels (Super eXtended Graphics Array)

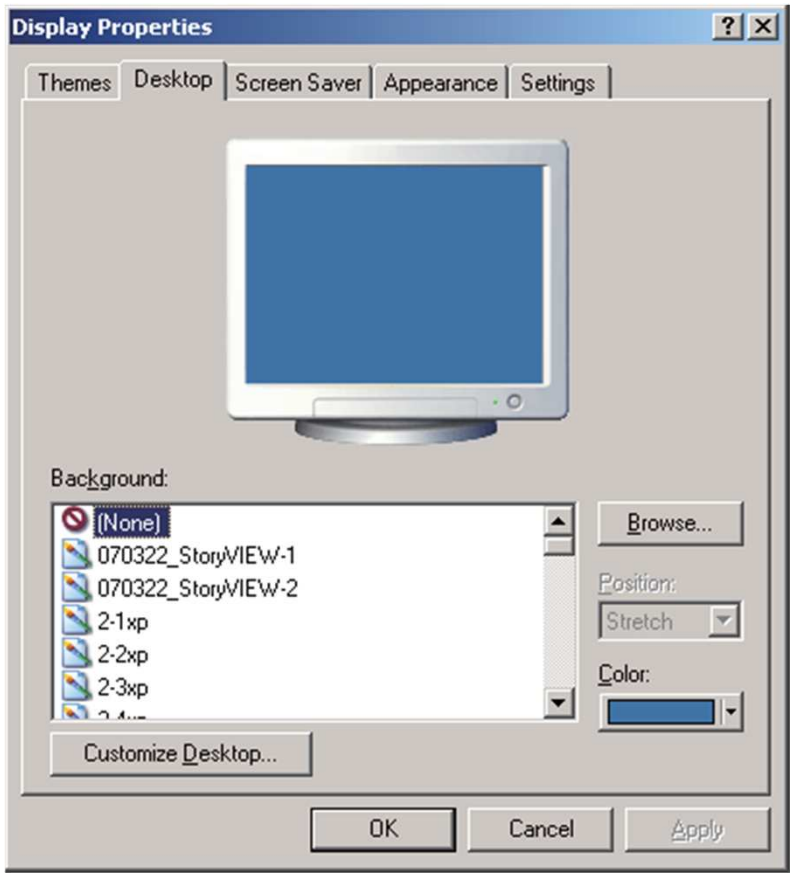
  : WXGA 1680 by 1050 pixels (**W**ide **XGA**)



Set Display Properties

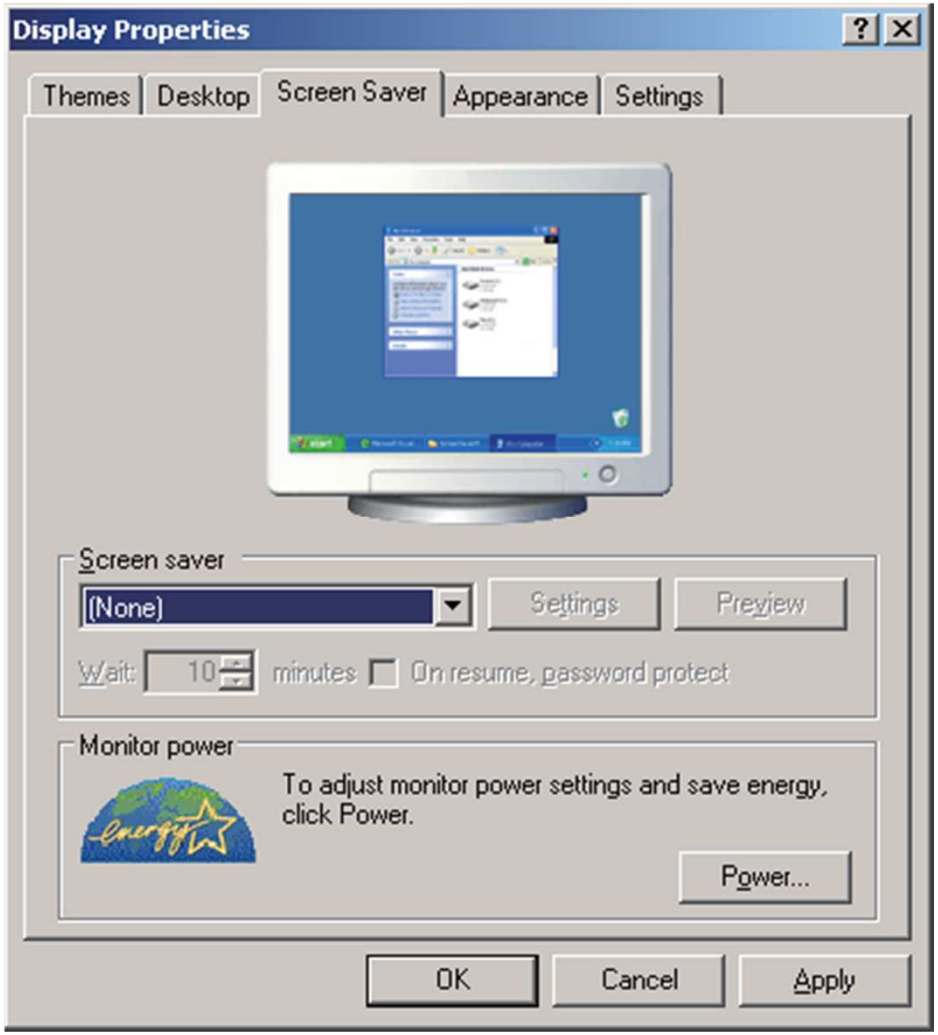
For Windows XP/Windows Server 2003

1. Logon as an administrative user.
2. Choose [Control Panel] - [Display] from [Start] menu so as to display[DisplayProperties].
3. On [Desktop] tab, choose [None] for [Background].



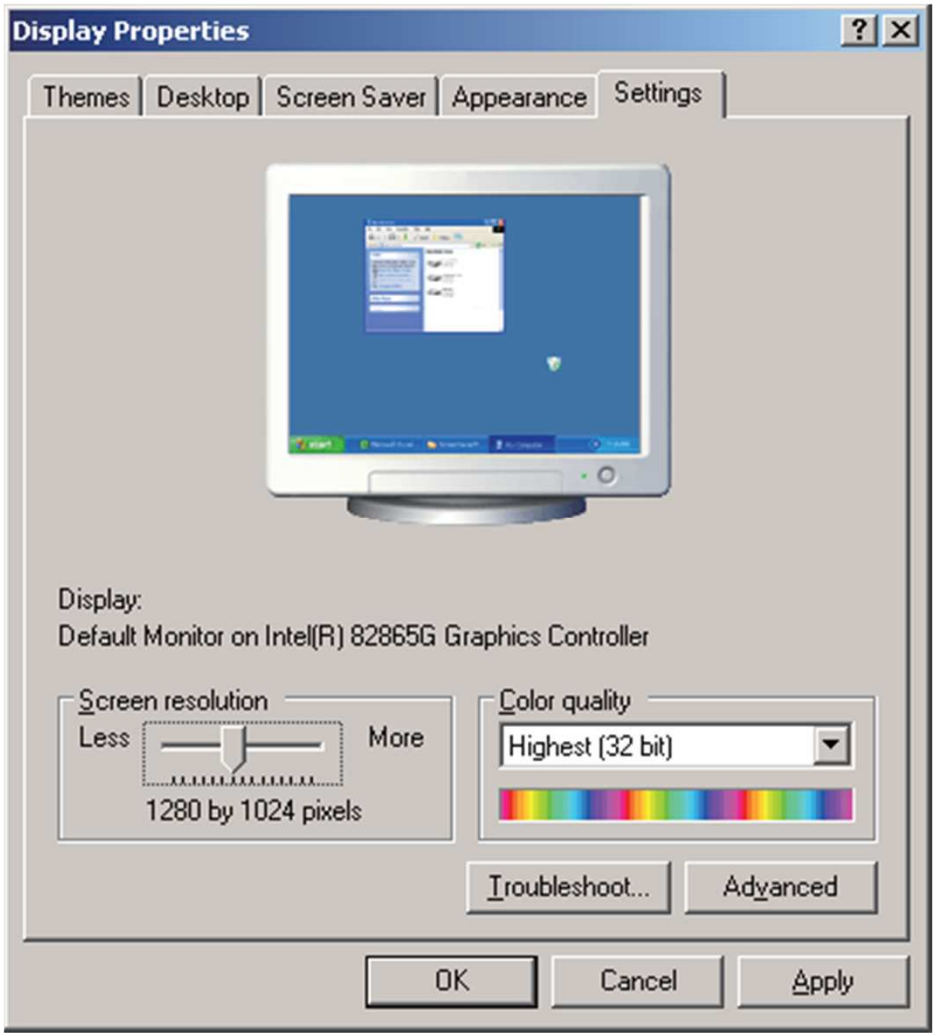
Set Display Properties

4. On [Screen Saver] tab, choose [None] for [Screen Saver].



Set Display Properties

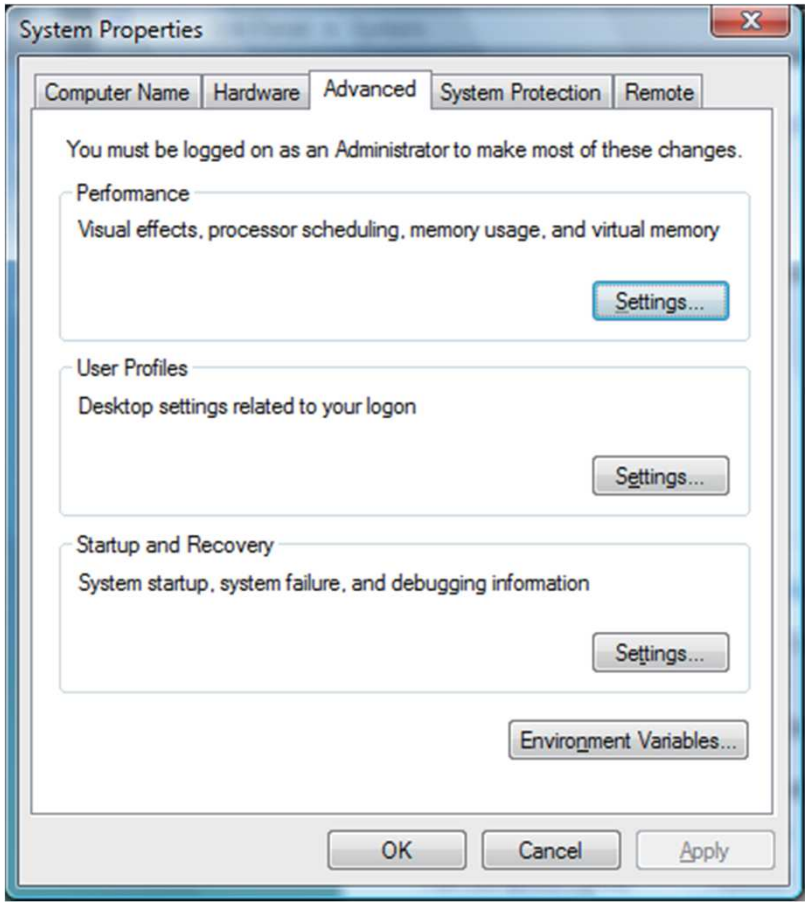
5. On [Settings] tab, choose [Highest [32 bit]] for [Color quality].



Setting of System Properties

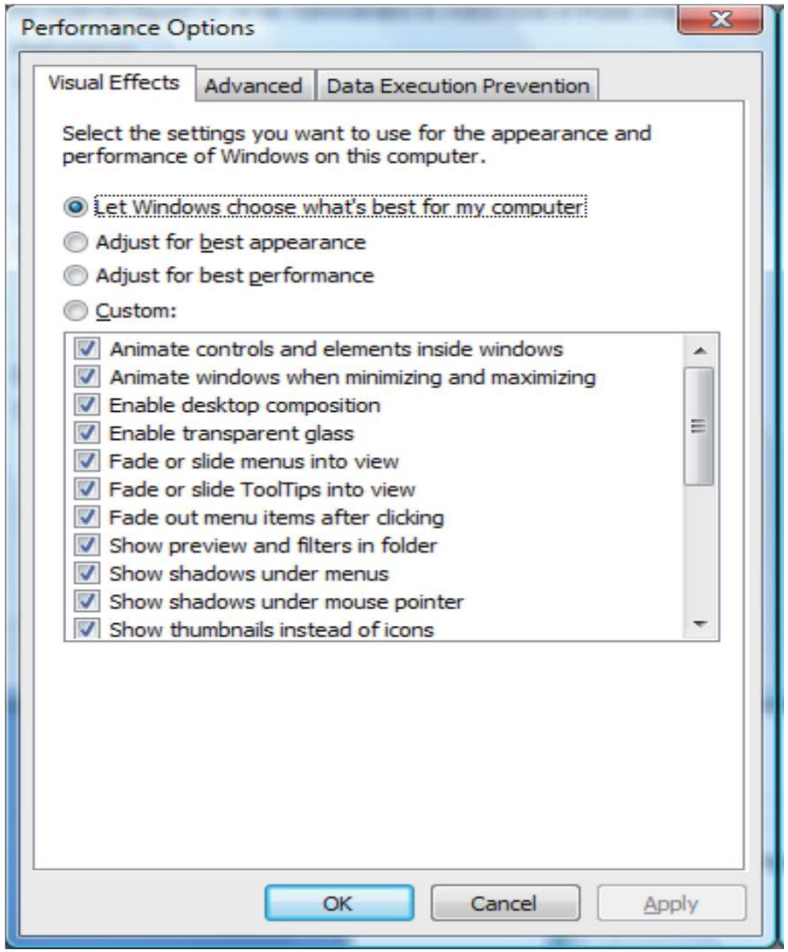
For Windows Vista

1. Logon as an administrative user.
2. Choose [Control Panel] - [System] - [Advanced system settings] from [Start] menu so as to display [System Properties].



Setting of System Properties

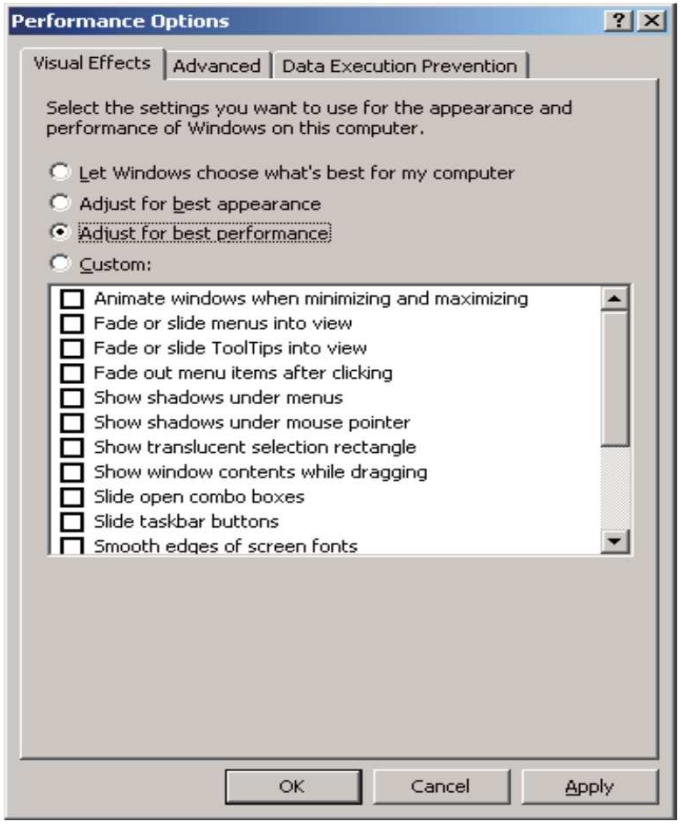
3. On [Advanced] tab, click [Settings] button of [Performance] so as to display [Performance Options].
4. On [Visual Effects], check the option of [Let Windows choose what's best for my computer].



Setting of System Properties

For Windows XP/Windows Server 2003

1. Logon as an administrative user.
2. Choose [Control Panel] - [System] from [Start] menu so as to display [System Properties].
3. On [Advanced] tab, click [Settings] button of [Performance] so as to display [Performance Options].
4. On [Visual Effects] tab, check the option of [Adjust for best performance].

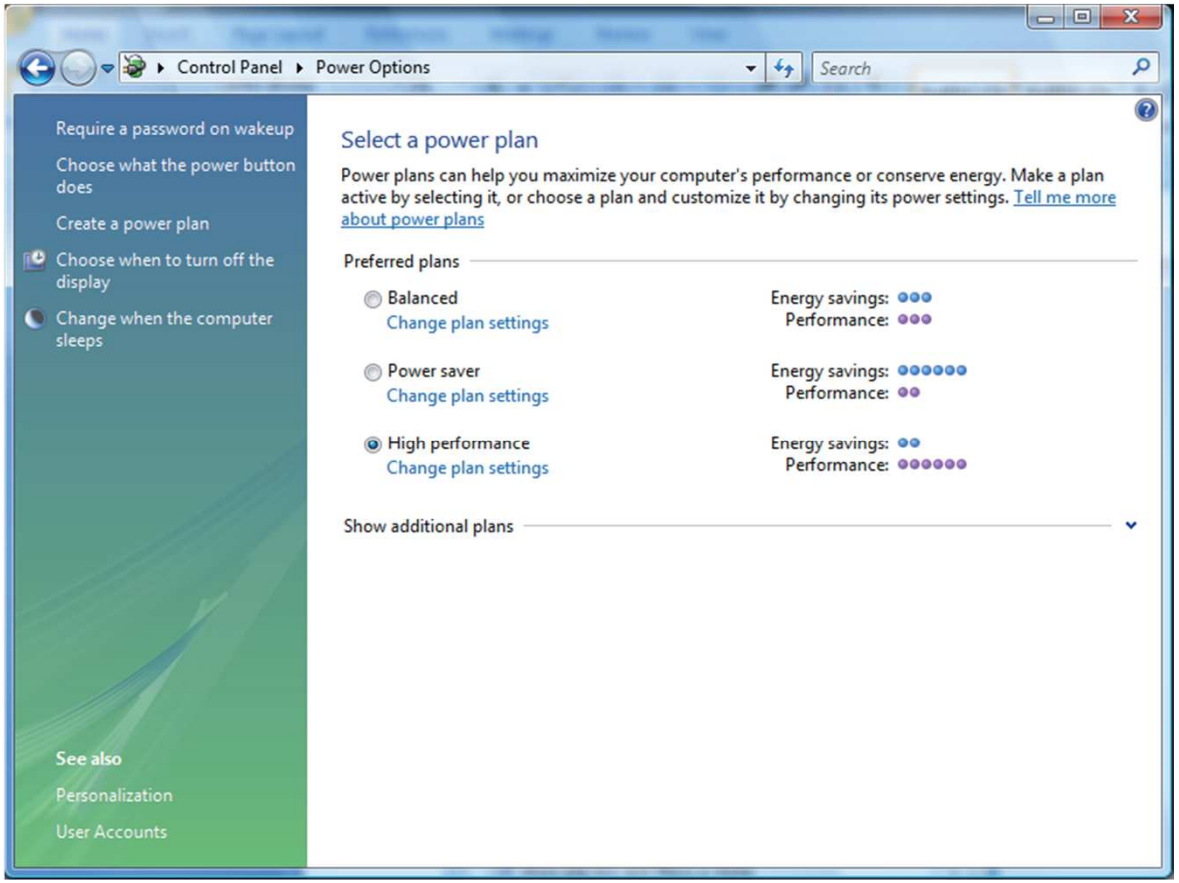


Setting a Power Options

For Windows Vista

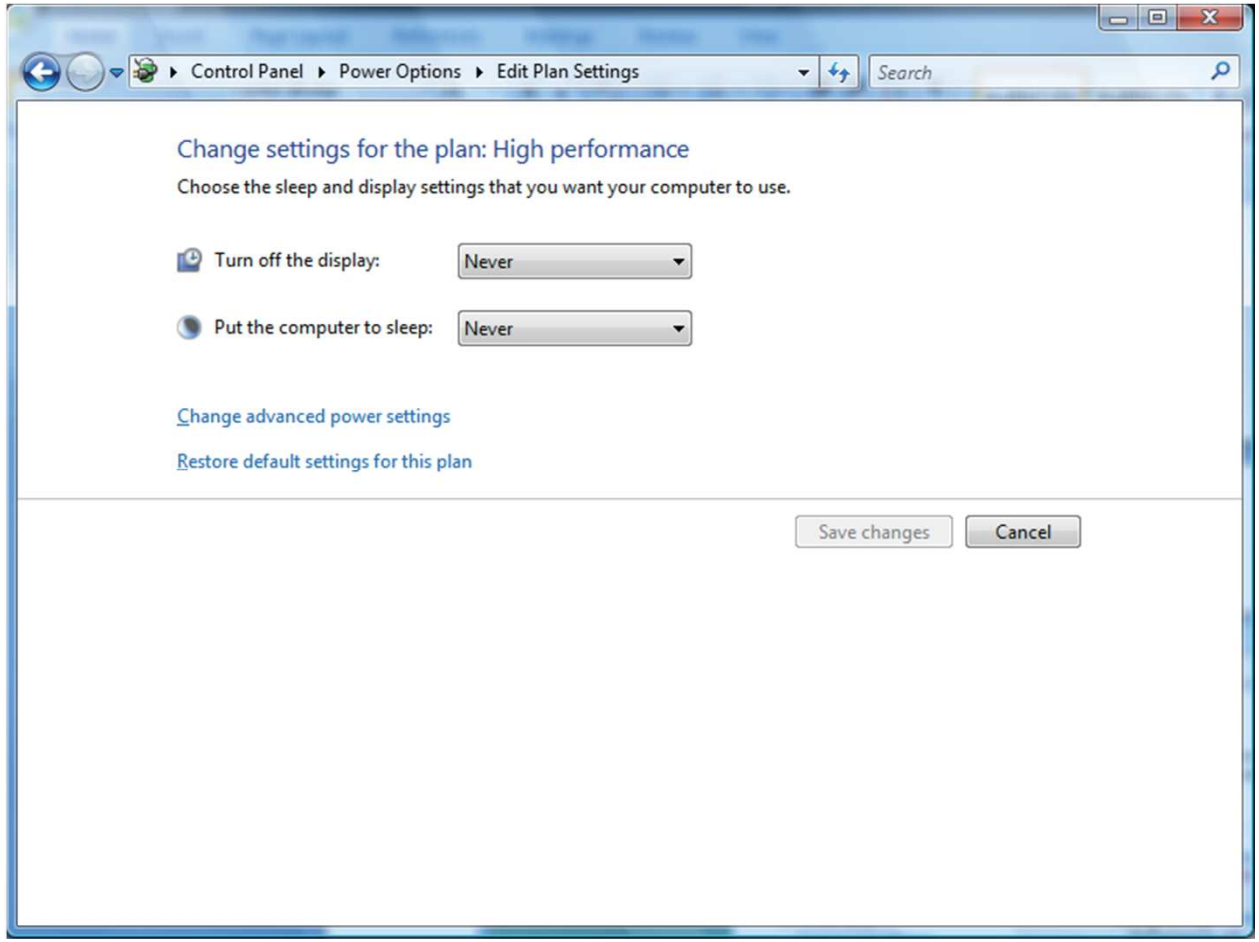
Settings of [Power Options] in Windows Vista are shown as follows:

1. Logon as an administrative user.
2. Choose [Control Panel] - [Power Options] from [Start] menu so as to display [Power Options].



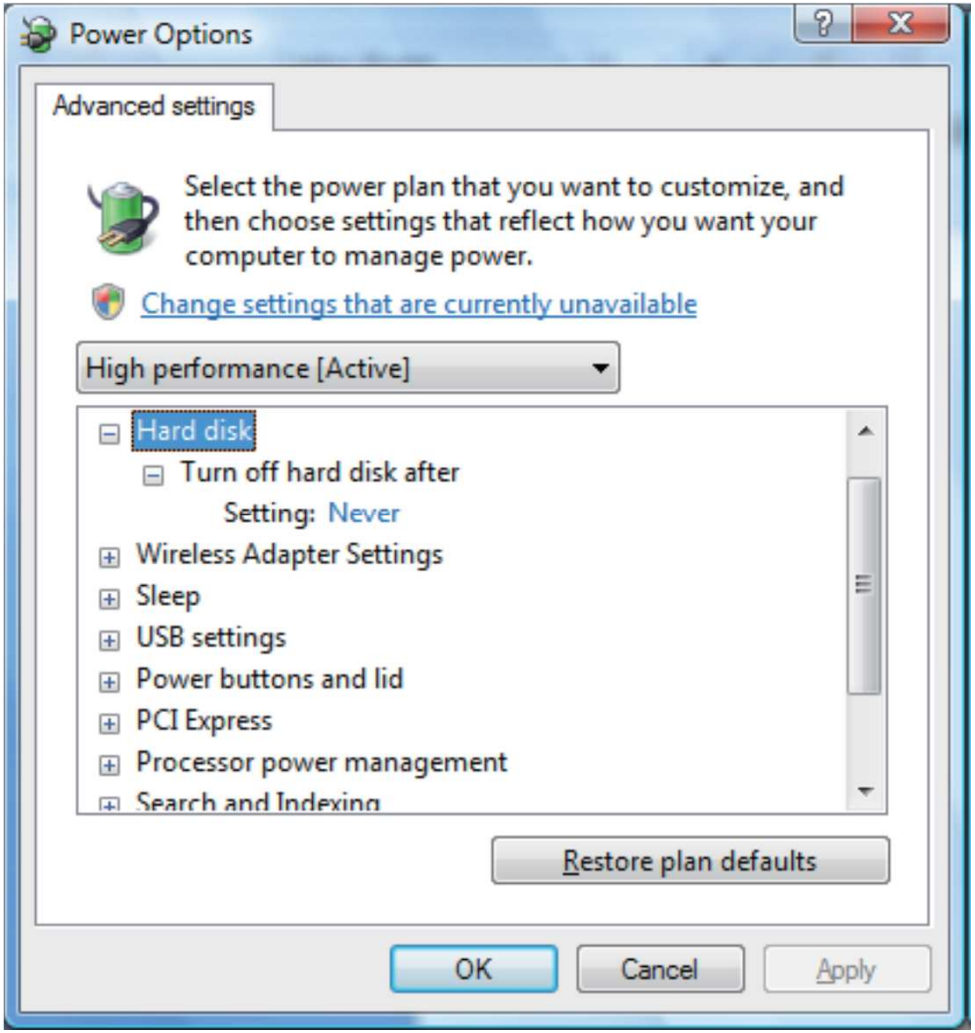
Setting a Power Options

3. Choose [High performance] from [Preferred plans]. Click [Change plan settings] at the lower part so as to display [Edit Plan Settings].
4. Click [Change advanced power settings] so as to display [Advanced settings] tab of "Power Options".



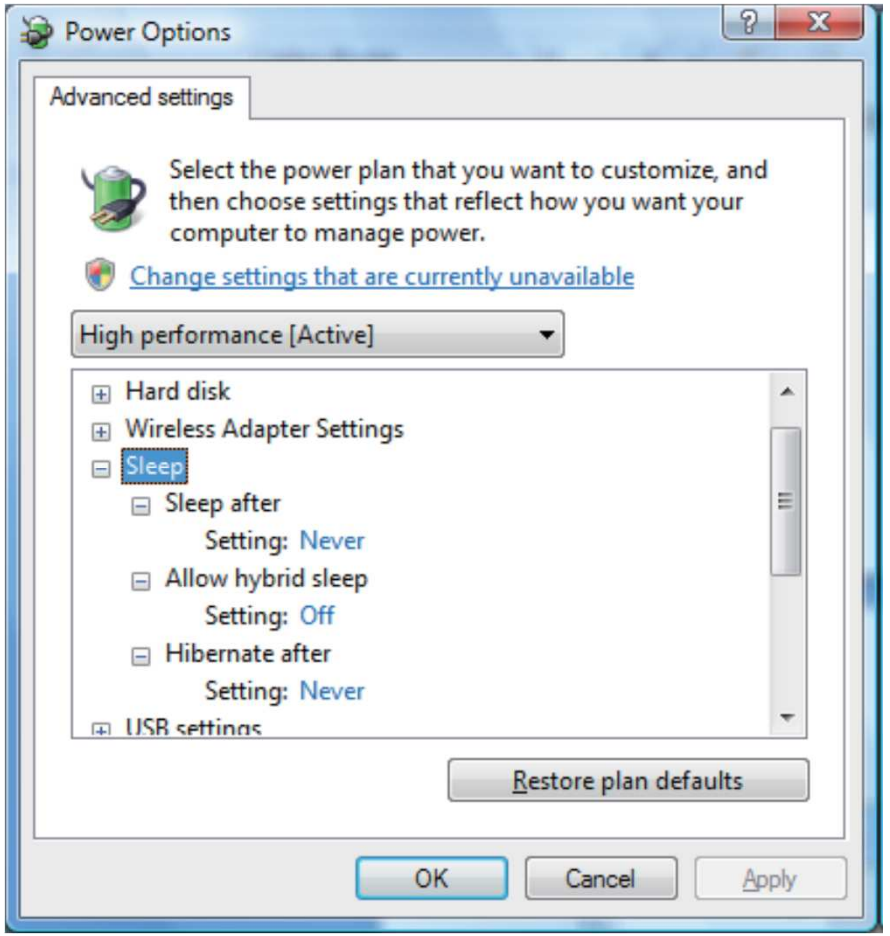
Setting a Power Options

5. Under “Hard disk”, set “Never” for [Turn off hard disk after].



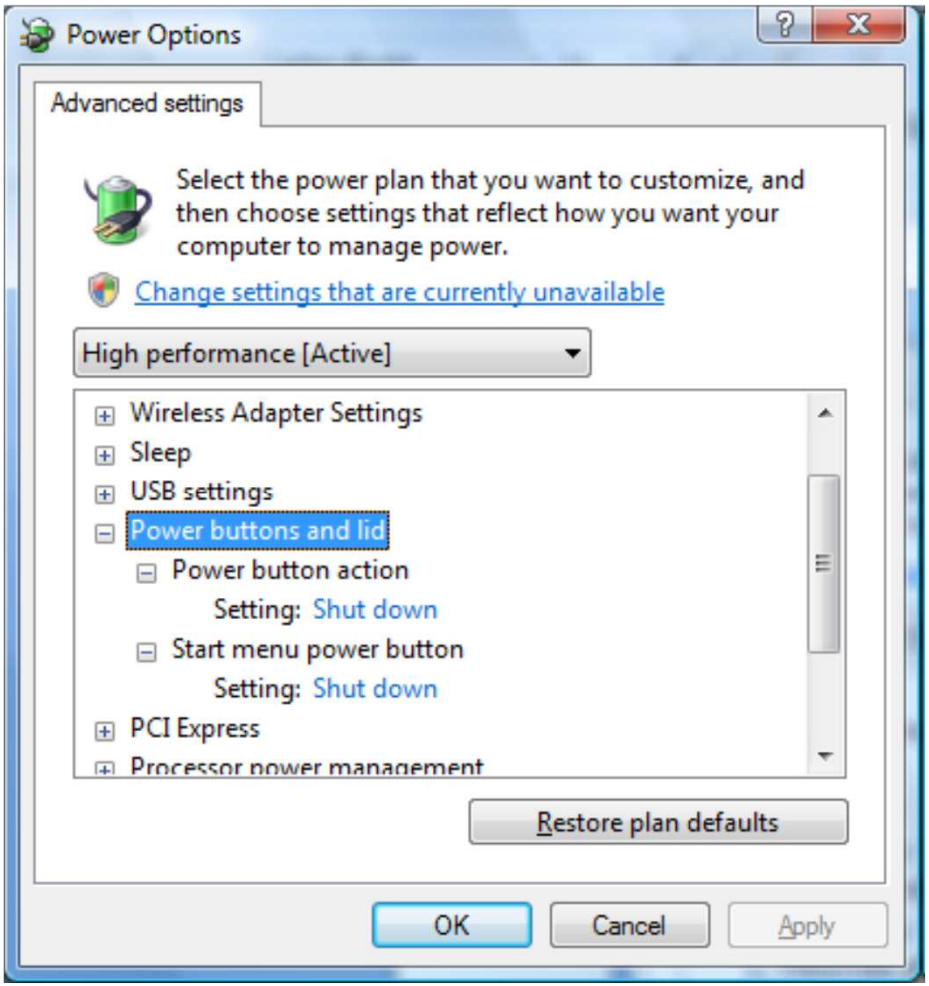
Setting a Power Options

6. Set the sleep settings to Never or Off as follows:
   - ”Sleep after” Setting : Never
   - ”Allow hybrid sleep” Setting : Off
   - ”Hibernate after” Setting : Never



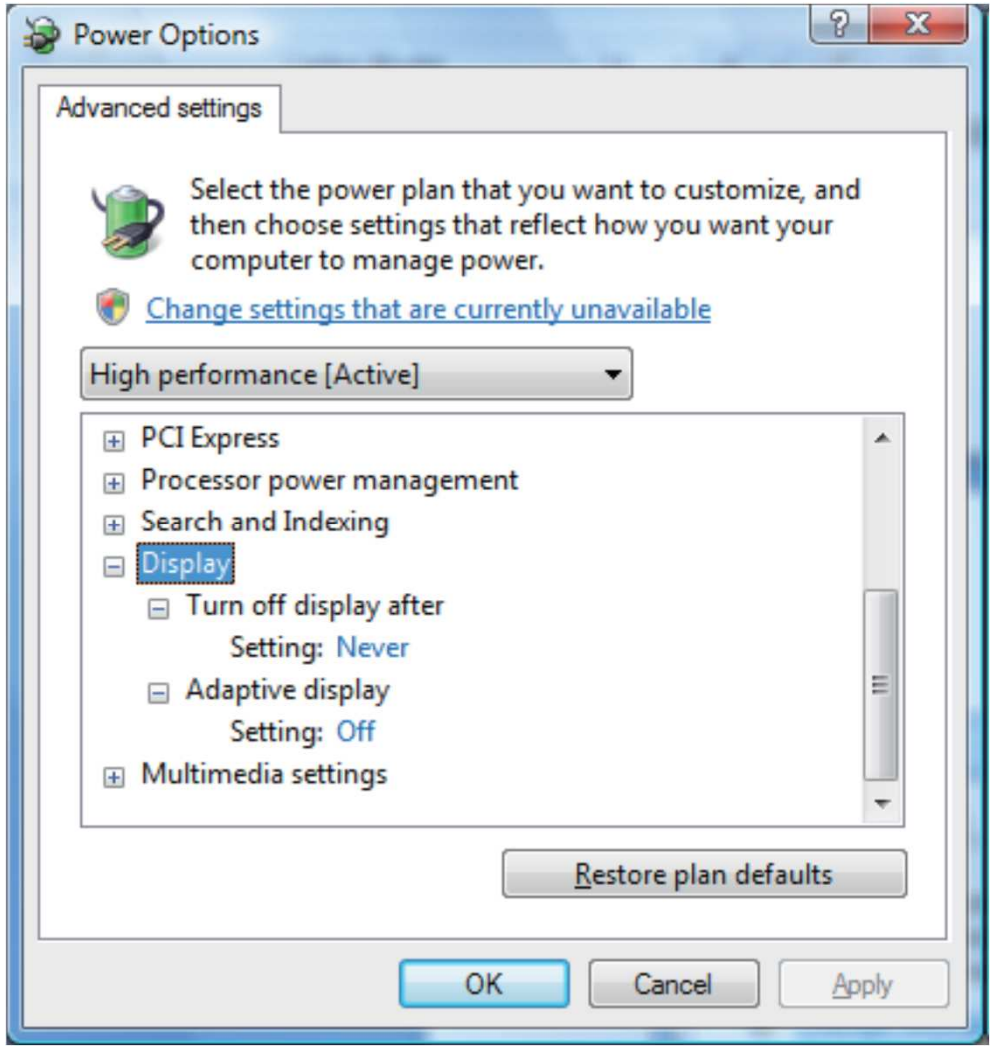
Setting a Power Options

7. Set [Shutdown] for "Power buttons and lid" settings as follows:
   - "Power button action" Setting : Shut down
   - "[Start] menu power button" Setting : Shut down



Setting a Power Options

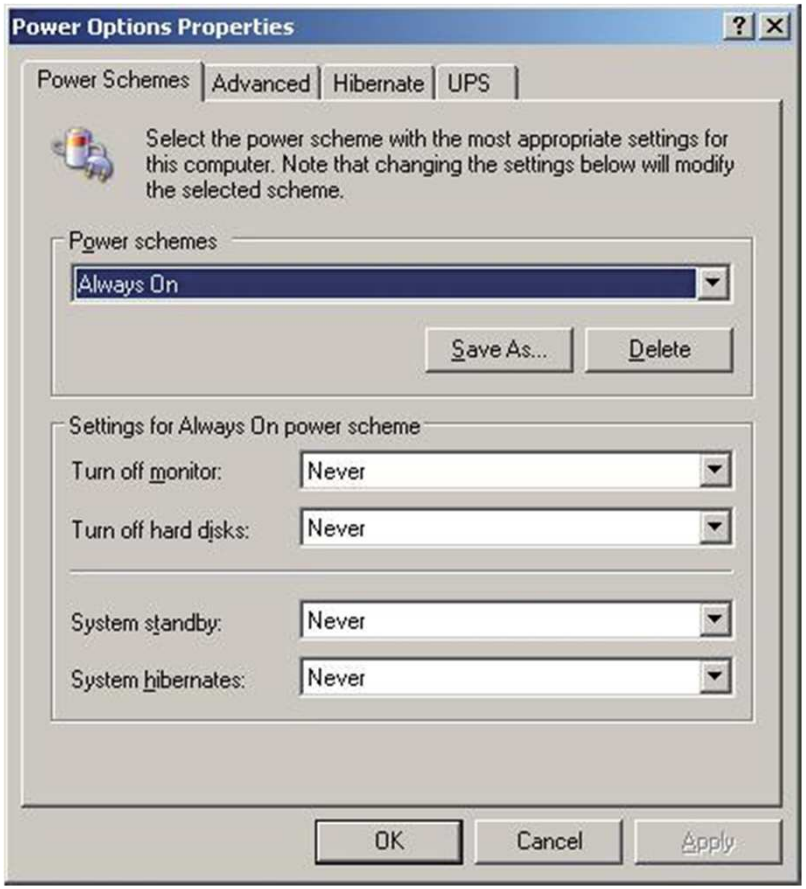
8. Under "Display", set "Never" for [Turn off display after].



Setting a Power Options

For Windows XP/Windows Server 2003

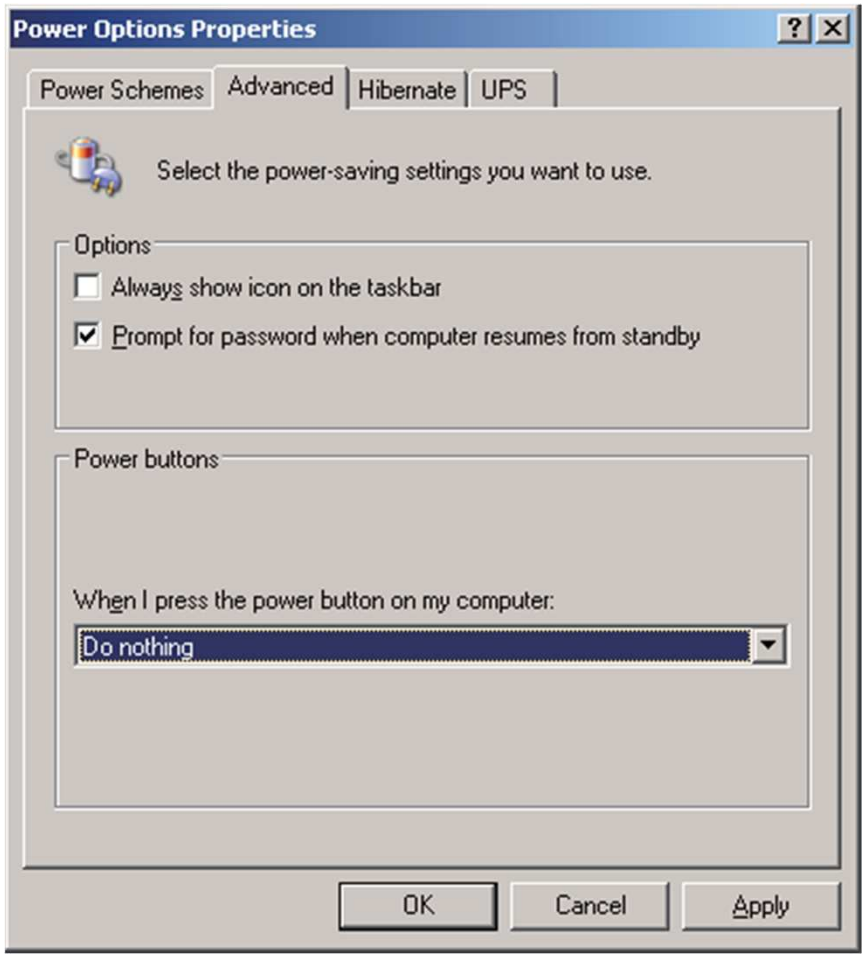
1. Logon as an administrative user.
2. From Windows [Start] menu, choose [Control Panel] - [Power Options] so as to display the [Power Options Properties].
3. On [Power Schemes] tab, set the followings :



Setting a Power Options

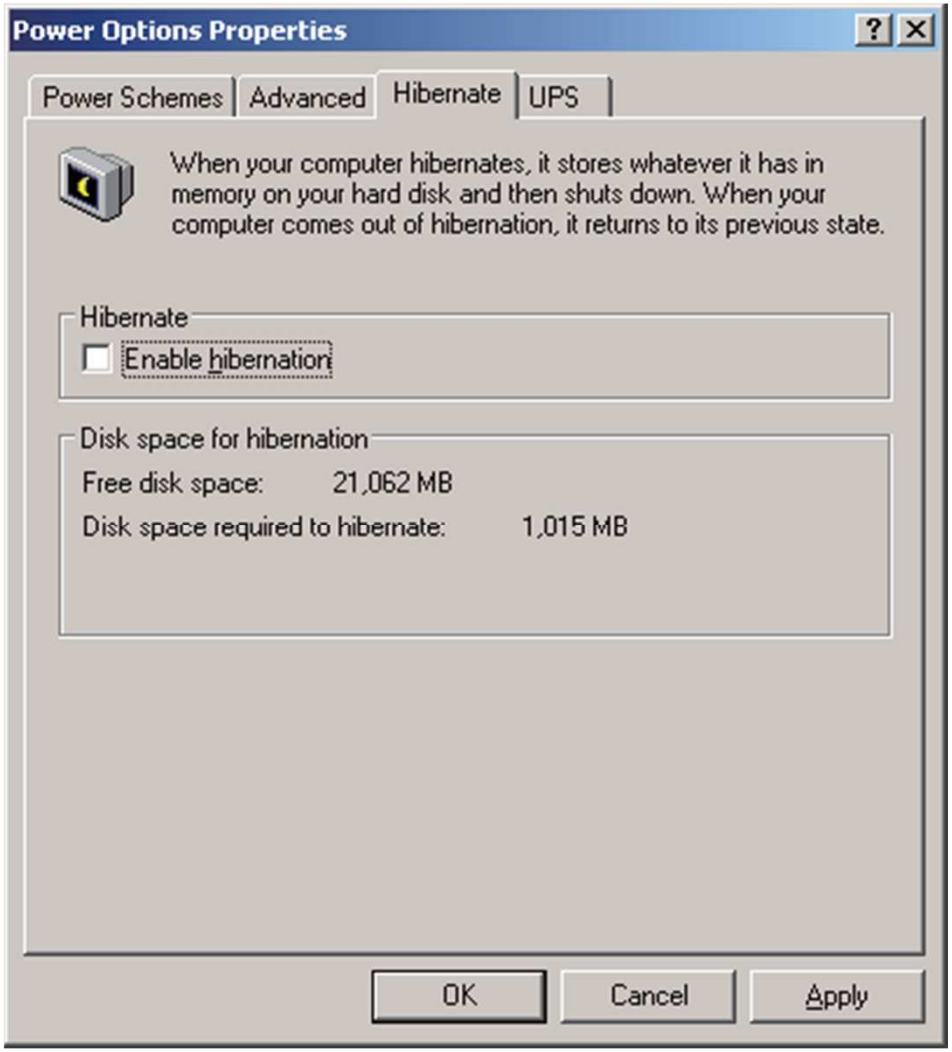
4. On [Advanced], choose [Do nothing] for [When I press the power button on my computer.].

Some PC keyboards may have a sleep button, this button should be disabled.



Setting a Power Options

5. On Hibernate tab, uncheck the option of [Enable hibernation].



Disable Windows Sidebar

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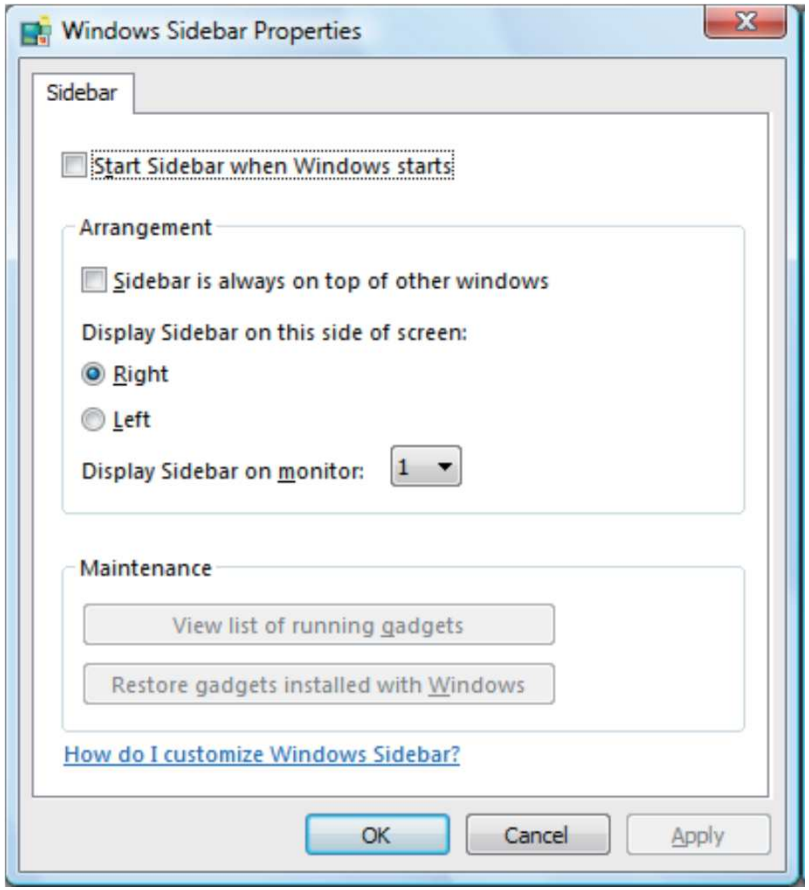
Windows sidebar is a standard component in Windows Vista environment.
However, for CENTUM VP, Windows sidebar is not be used.

CENTUM VP

Setting a Power Options

1. Logon Windows using a user account that the user environment to be changed.
2. Choose [Control Panel] - [Windows Sidebar Properties] from [Start] menu so as to display "Windows Sidebar Properties".
3. Uncheck the option of [Start Sidebar when Windows starts] and then click [OK] button.



Disable Windows Security Alerts

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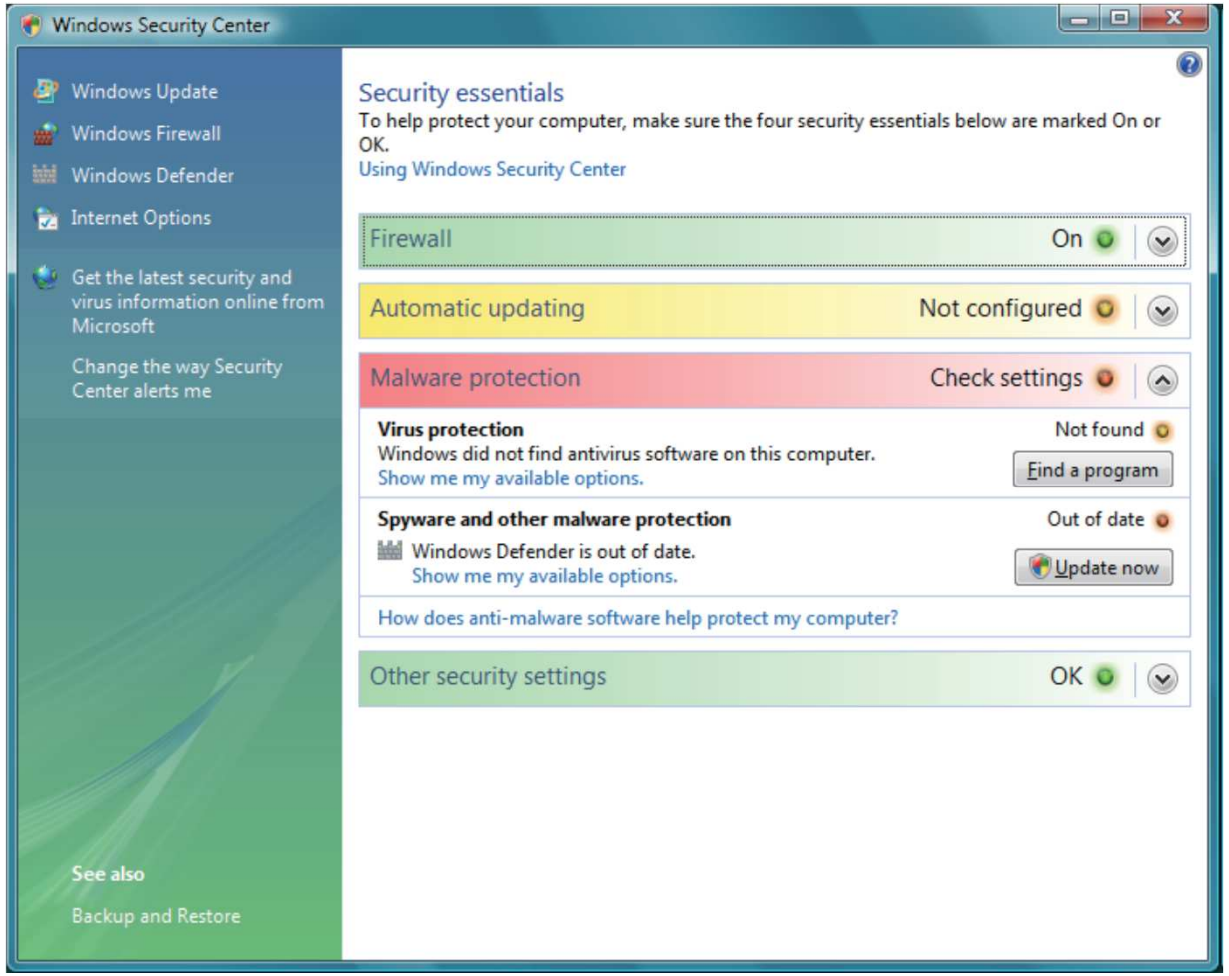
For Windows Vista

Windows securities are comprehensively managed in Windows Security Center for protecting the computer from the security risks. However, for CENTUM VP, it is recommended to disable Windows security automatic updating and disable the Windows security alerts sent from the Windows Security Center.

CENTUM VP

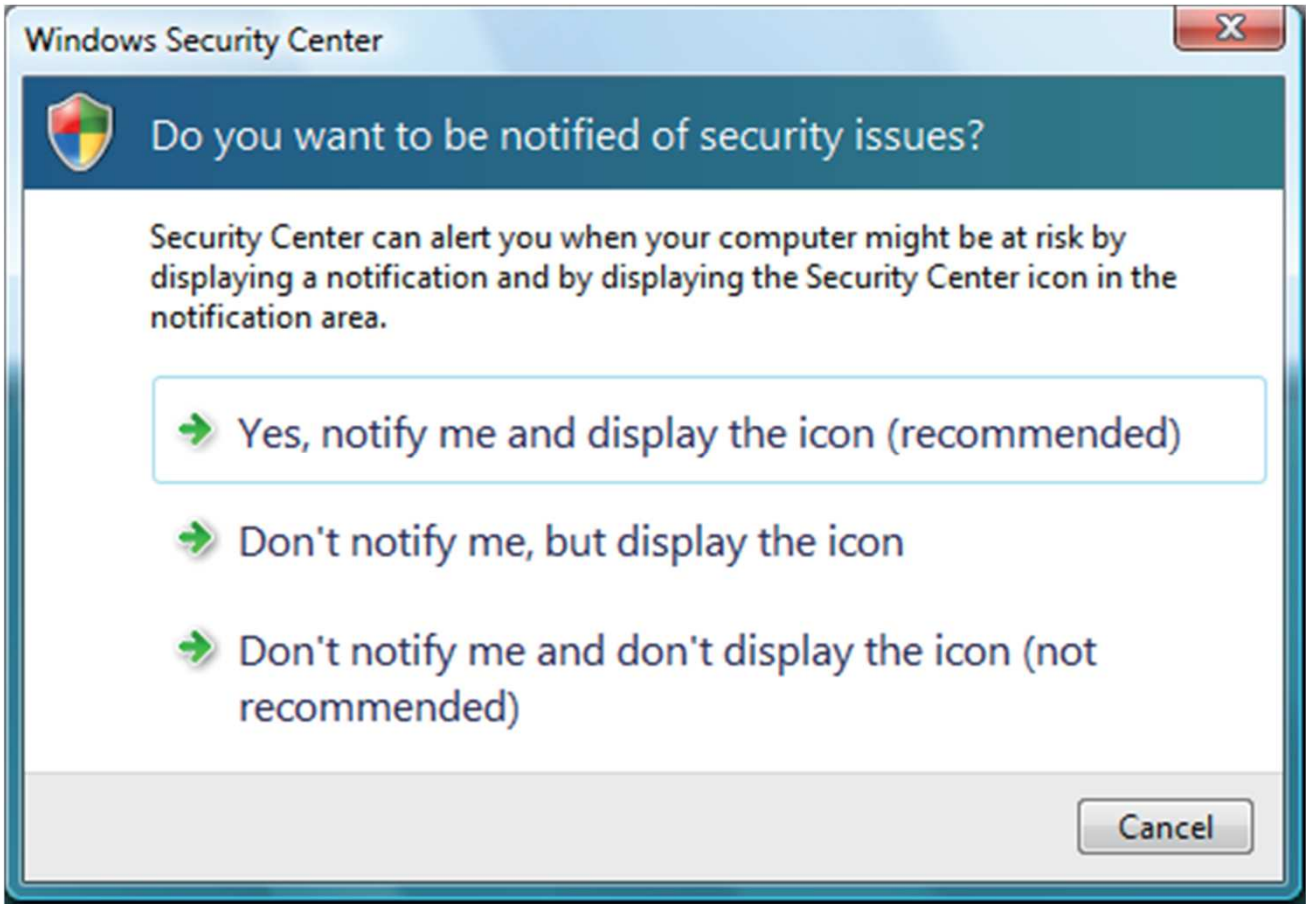
Disable Windows Security Alerts

1. Logon Windows using a user account that the user environment to be changed.
2. Choose [Control Panel] - [Security Center] from [Start] menu so as to display "Windows Security Center".



Disable Windows Security Alerts

3. Choose [Change the way Security Center alerts me] at the lower part of "Windows Security Center", and then the window for changing security alerts will be displayed.
4. Choose [Don't notify me and don't display the icon (not recommended)].



Disable Windows Security Alerts

For Windows XP/Windows Server 2003

1. Logon Windows as an administrative user.
2. Choose [Control Panel] - [Security Center] from [Start] menu so as to display "Windows Security Center".

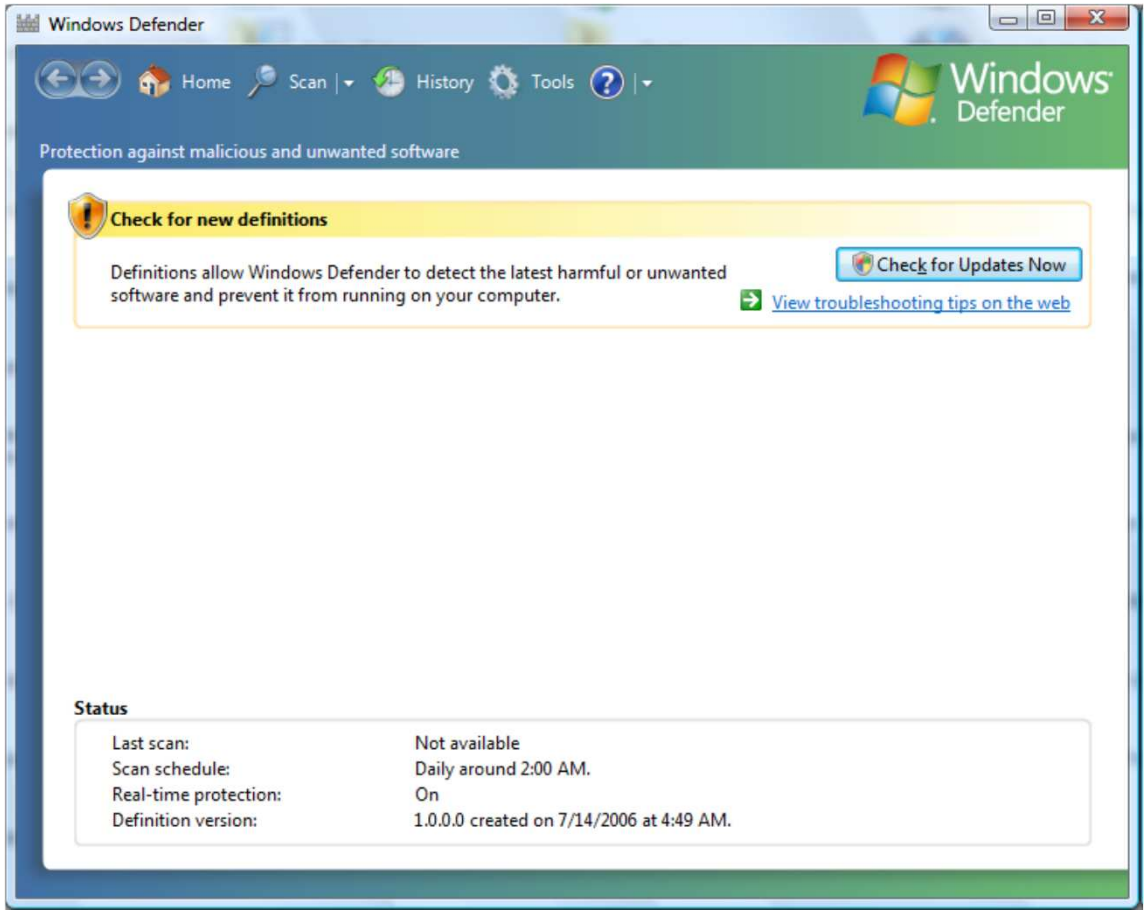
Disable Windows Security Alerts

3. On the left hand side of [Windows Security Center], choose [Change the way Security Center alerts me] so as to display "Alert Settings" dialog box.
4. Uncheck all the options, and then click [OK] button.

Disabling Windows Defender

Windows Defender is a software program capable of detecting and eliminating malware (malicious software such as spyware).

1. Logon as an administrative user.
2. From the Start menu, select [Control Panel] - [Windows Defender].
3. In the upper area, click [Tools] . The Tools and Settings window appears.

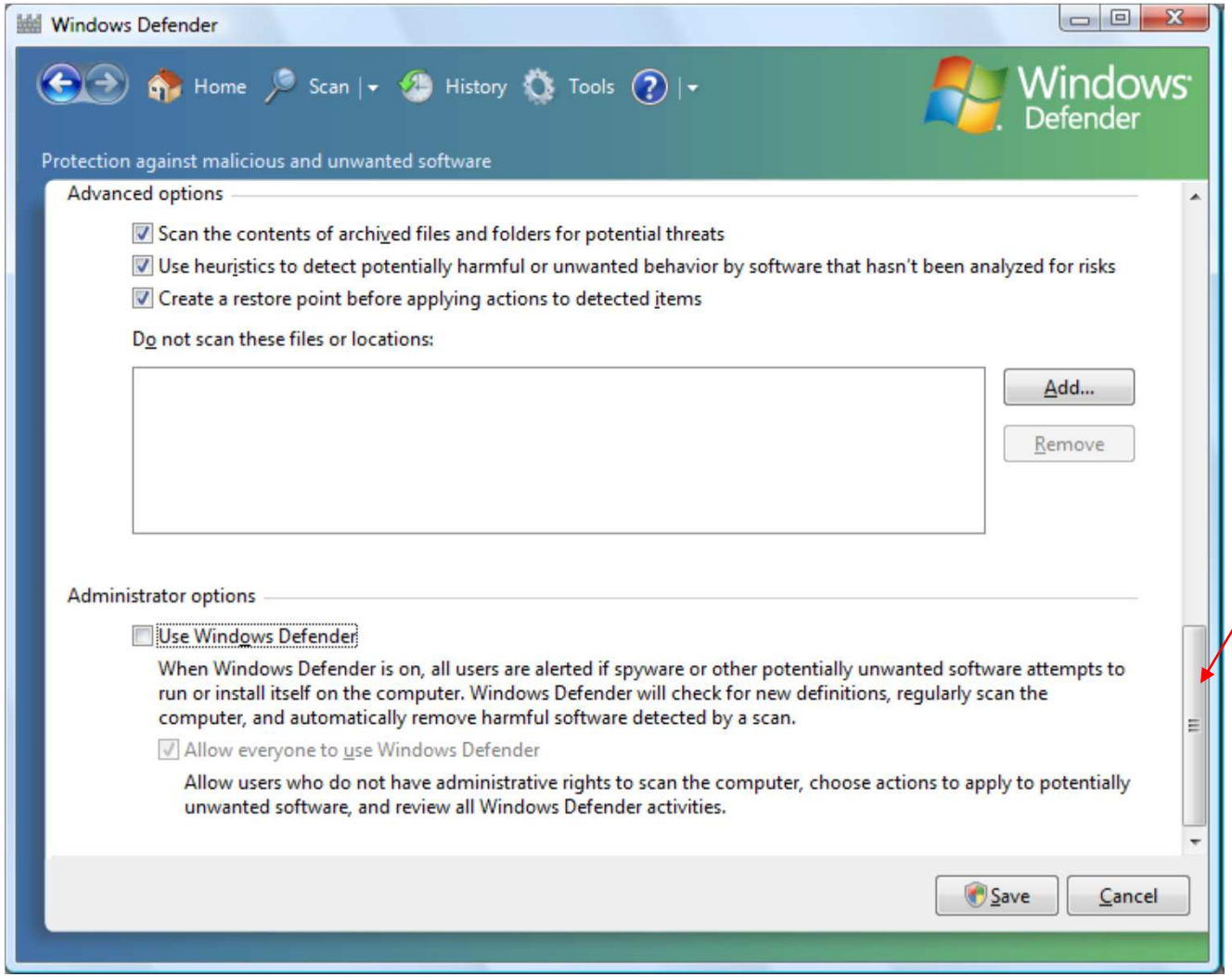


Disabling Windows Defender

4. Click [Options]. The following Options dialog box appears.

Disabling Windows Defender

5. Clear the check box [Use Windows Defender], and click [Save].



Slide down

Disabling Windows Defender

6. Click [Close].

Disable Scheduled Disk Defragmenter Tool

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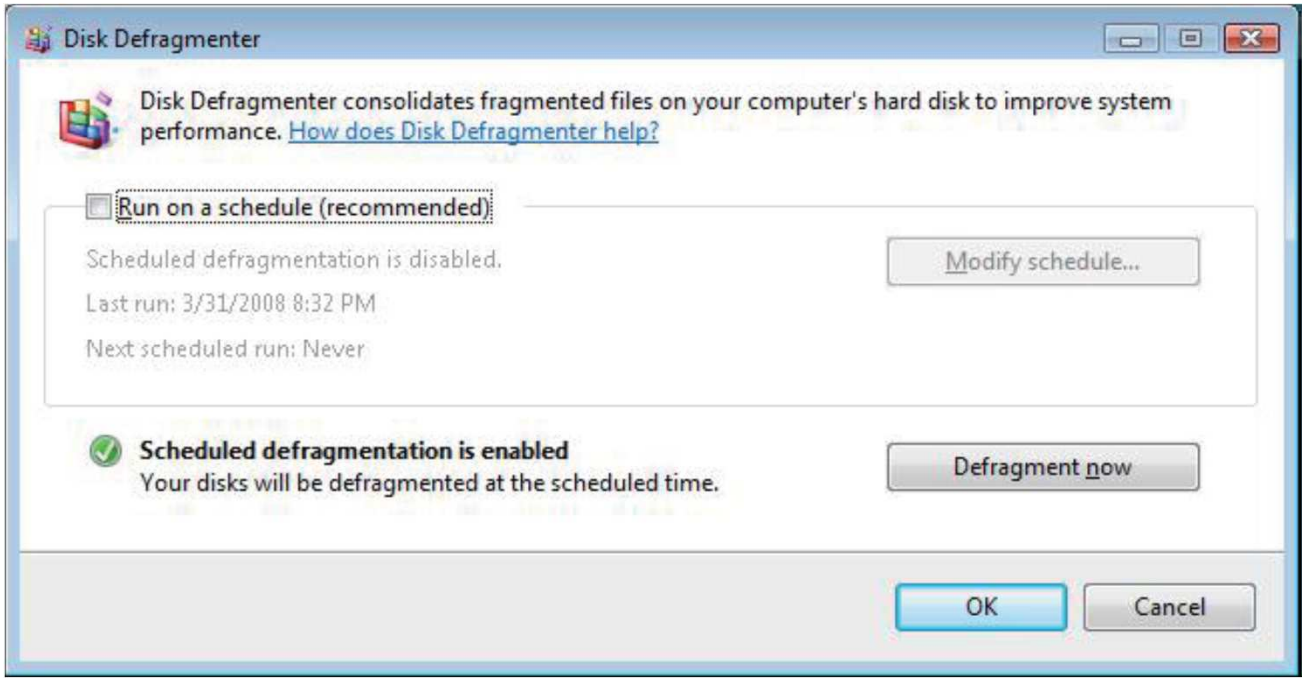
Disk Defragmenter Tool can be used to reorganize the fragmented files on computer hard disk so as to improve the computer performance. By default setting of Windows Vista, the Disk Defragmenter Tool is scheduled to start periodically on 1:00 clock of Wednesday.
Since the CENTUM VP performance may be affected when defragmenter is running, so that it is recommended to disable the schedule of the periodic disk defragmentation.

1. Logon as an administrative user.
2. Choose [Start] Menu - [All Programs] - [Accessories] - [System Tools] – [Disk Defragmenter] so as to display "Disk Defragmenter" window.

CENTUM VP

Disable Scheduled Disk Defragmenter Tool



3. Uncheck the option of [Run on a schedule (recommended)] and then click [OK] button.

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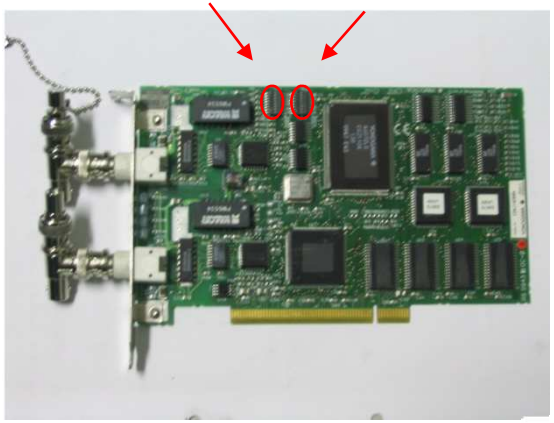
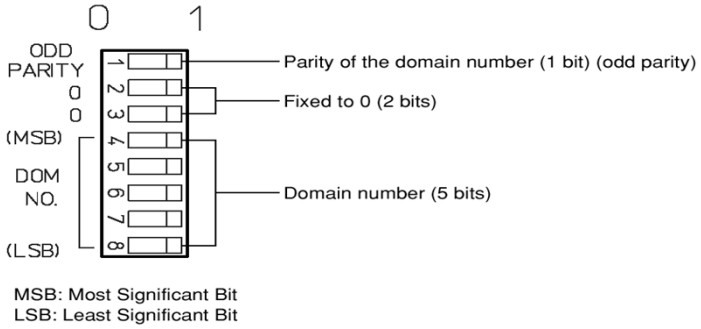
Vnet Interface card dipswitch setting.

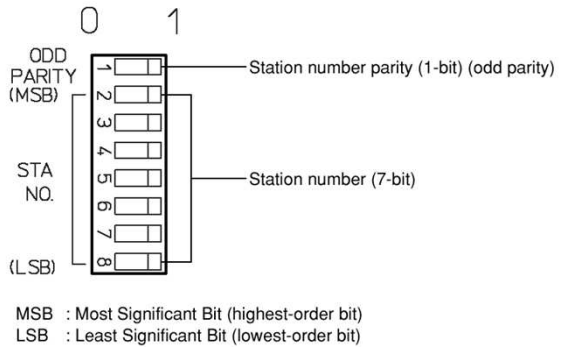
Ex.(HIS0164)



Domain Setting



Station Setting



: odd	0	0	16	8	4	2	1
Bit :	1	2	3	4	5	6	7	8
:	0	0	0	0	0	0	0	1

: odd	64	32	16	8	4	2	1
Bit :	1	2	3	4	5	6	7	8
:	0	1	0	0	0	0	0	0

CENTUM VP

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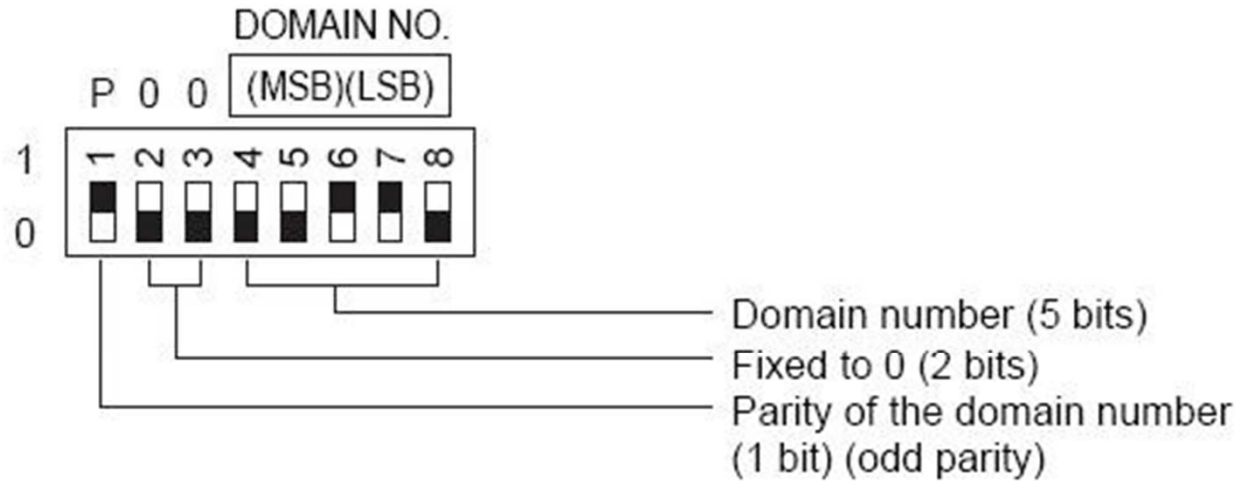
Setting the Domain Number for



P (odd parity): Set in such a way that, of the 8 dip switches, the sum of those switches set to 1 becomes an odd number.
MSB: Most Significant Bit
LSB: Least Significant Bit

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Setting the Domain Number for

Table Domain Numbers & DIP switch Bit Positions

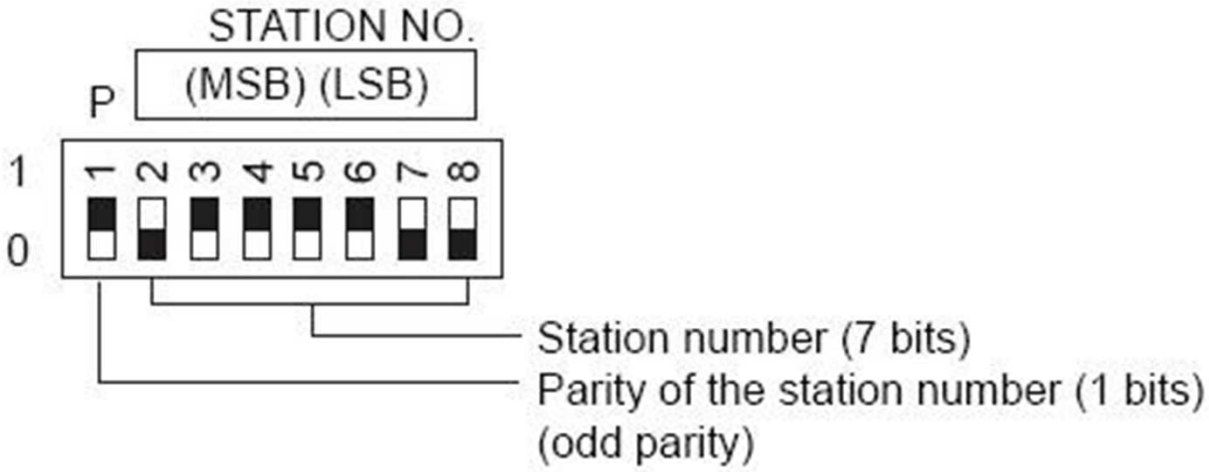
Domain number	DIP switch bit number							
	1	2	3	4	5	6	7	8
1	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	1	0
3	1	0	0	0	0	0	1	1
4	0	0	0	0	0	1	0	0
5	1	0	0	0	0	1	0	1
6	1	0	0	0	0	1	1	0
7	0	0	0	0	0	1	1	1
8	0	0	0	0	1	0	0	0
9	1	0	0	0	1	0	0	1
10	1	0	0	0	1	0	1	0
11	0	0	0	0	1	0	1	1
12	1	0	0	0	1	1	0	0
13	0	0	0	0	1	1	0	1
14	0	0	0	0	1	1	1	0
15	1	0	0	0	1	1	1	1
16	0	0	0	1	0	0	0	0

020103E.ai

Bit setting:
0: Turn the switch to the lower in the above figure.
1: Turn the switch to the upper in the above figure.

CENTUM VP

Setting the Station Number for



P (odd parity):	Set in such a way that, of the 8 dip switches, the sum of those switches set to 1 becomes an odd number.
MSB:	Most Significant Bit
LSB:	Least Significant Bit

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Setting the Station Number for

Table Station Numbers & DIP switch Bit Positions

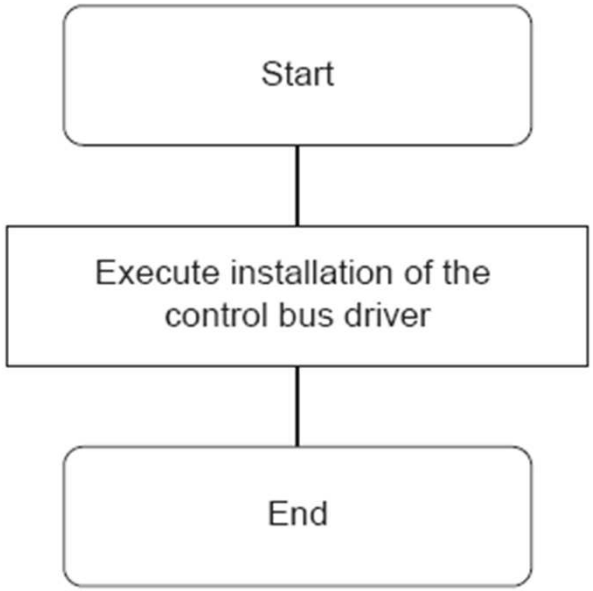
Station number	DIP switch bit number							
	1	2	3	4	5	6	7	8
1	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	1	0
3	1	0	0	0	0	0	1	1
4	0	0	0	0	0	1	0	0
5	1	0	0	0	0	1	0	1
6	1	0	0	0	0	1	1	0
7	0	0	0	0	0	1	1	1
8	0	0	0	0	1	0	0	0
9	1	0	0	0	1	0	0	1
10	1	0	0	0	1	0	1	0
11	0	0	0	0	1	0	1	1
12	1	0	0	0	1	1	0	0
13	0	0	0	0	1	1	0	1
14	0	0	0	0	1	1	1	0
15	1	0	0	0	1	1	1	1
16	0	0	0	1	0	0	0	0
17	1	0	0	1	0	0	0	1
18	1	0	0	1	0	0	1	0
19	0	0	0	1	0	0	1	1
20	1	0	0	1	0	1	0	0
21	0	0	0	1	0	1	0	1

Station number	DIP switch bit number							
	1	2	3	4	5	6	7	8
22	0	0	0	1	0	1	1	0
23	1	0	0	1	0	1	1	1
24	1	0	0	1	1	0	0	0
25	0	0	0	1	1	0	0	1
26	0	0	0	1	1	0	1	0
27	1	0	0	1	1	0	1	1
28	0	0	0	1	1	1	0	0
29	1	0	0	1	1	1	0	1
30	1	0	0	1	1	1	1	0
31	0	0	0	1	1	1	1	1
32	0	0	1	0	0	0	0	0
33	1	0	1	0	0	0	0	1
⋮								
60	1	0	1	1	1	1	0	0
61	0	0	1	1	1	1	0	1
62	0	0	1	1	1	1	1	0
63	1	0	1	1	1	1	1	1
64	0	1	0	0	0	0	0	0

Bit setting:
0: Turn the switch to the lower in the above figure.
1: Turn the switch to the upper in the above figure.

Adding Control Bus Driver Vnet Card (VF701)

The procedure for adding a driver is as follows. There is no need to restart the PC. Installation is started by clicking [Control Bus Driver] button on the CENTUM VP installation menu.



Insert DVD Rom and Choose [Control Bus Driver] on CENTUM VP Installation menu.

Procedure for Adding the Driver

1. Logon as an administrative user.
2. When Found New Hardware dialog box appears
   - In Windows Vista

   If the Found New Hardware dialog box shown as follows is displayed, click [Ask me again later]. This message box will not be displayed if the control bus card is not installed.

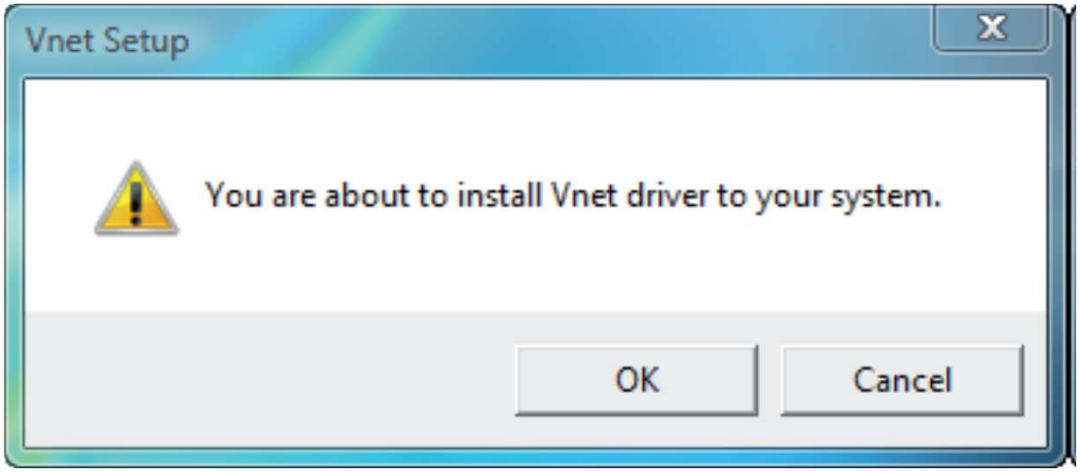
Setting of Network

- In Windows XP or Windows Server 2003

If the "Found New Hardware Wizard" shown as follows is displayed, click [Cancel].

Setting of Network

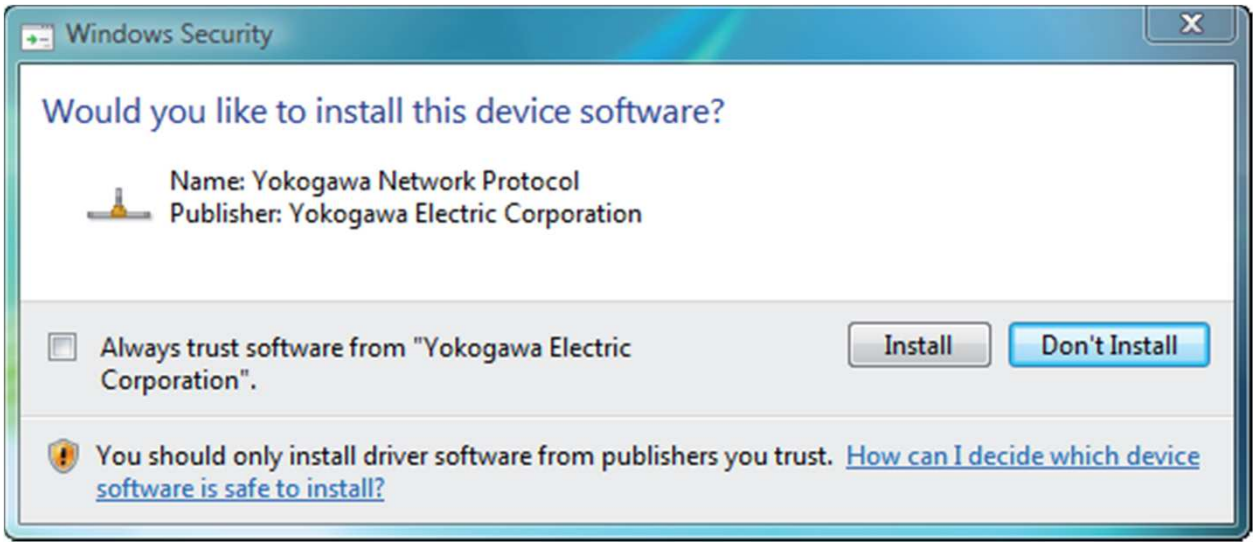
3. Set the CENTUM VP software media into the DVD drive, the CENTUM VP installation menu will be automatically started.
4. On CENTUM VP installation menu, click [Control Bus Driver] button.
5. When the Setup confirmation dialog box is displayed, click [OK].



6. Security Confirmation Dialog Box

- In Windows Vista

Windows Security dialog boxes for installing the network device software and network adapter's driver will be shown in sequence as below. Click the [Install] button in both dialog boxes.



Setting of Network

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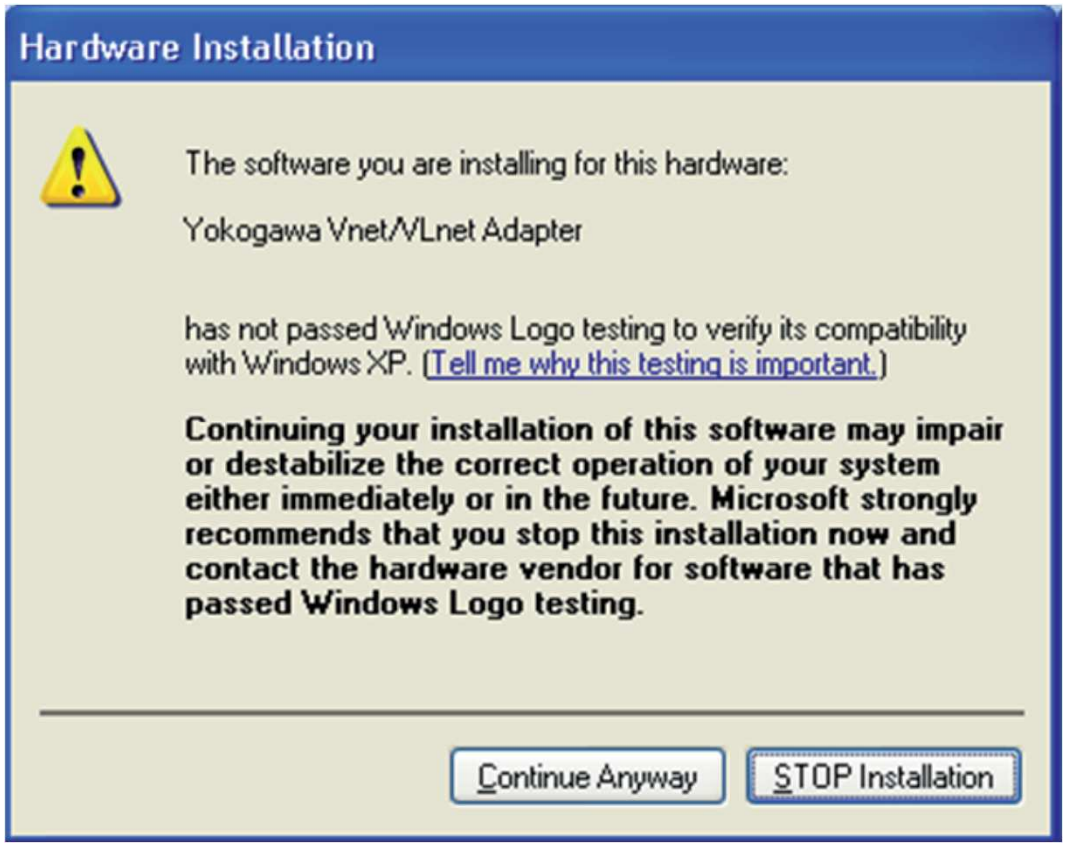
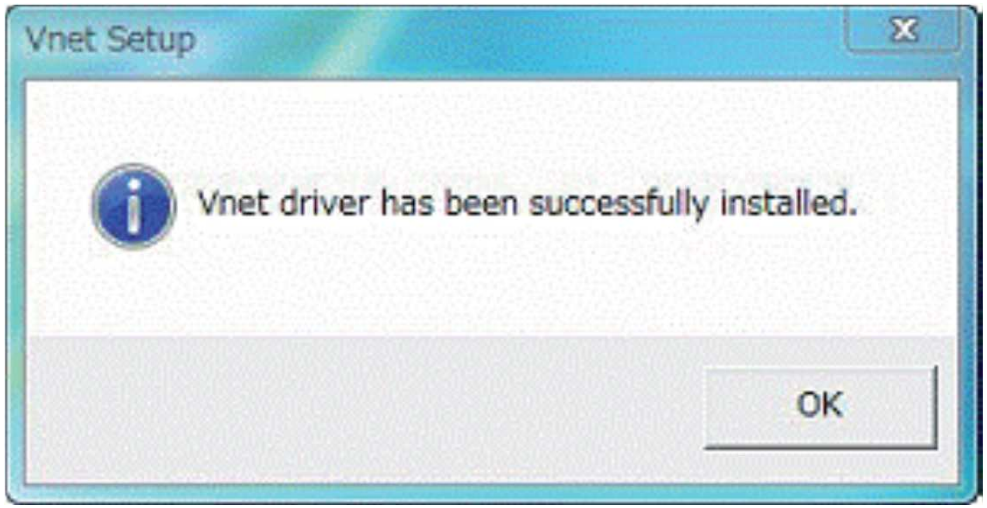
• In Windows XP or Windows Server 2003
Hardware Installation dialog box appears. Click [Continue Anyway] to install.
Do not click [STOP Installation].



CENTUM VP

Setting of Network

7. When the message telling successful installation is displayed, click [OK] to finish.

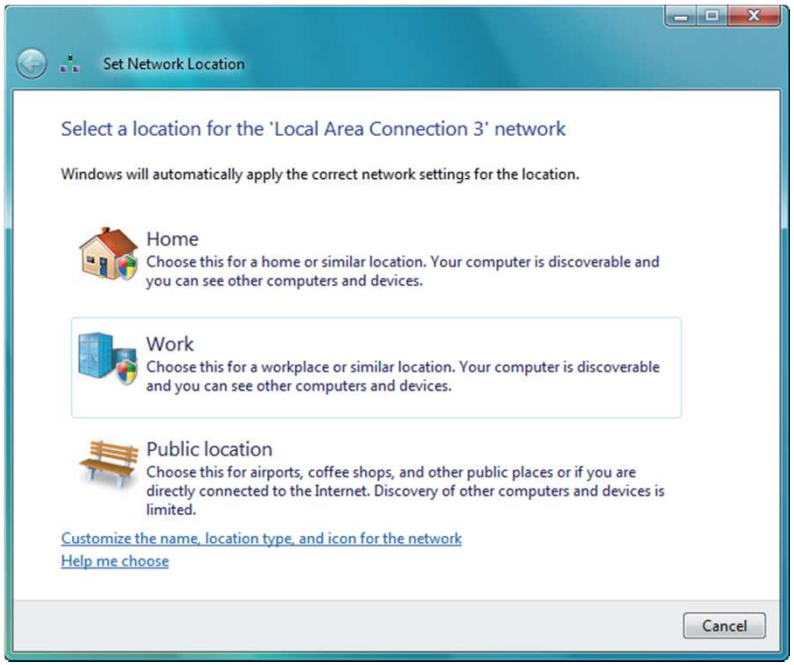


Setting of Network

8. Display of Set Network Location Dialog Box

- In Windows Vista

After installing the network driver, when the Set Network Location dialog box is displayed as follows, click [Work] on the dialog box. If User Account Control dialog box is displayed, click [Continue].



- In Windows XP and Windows Server 2003

Set Network Location dialog box is not displayed.

Confirming that the Driver has been Installed Properly

After installing the driver, [Yokogawa Vnet Adapter] should appear under Network Adapters of Device Manager.
If the adapter is not working properly, an exclamation mark (!) will be displayed next to the icon of the network adapter.

Do the following to display Device Manager:

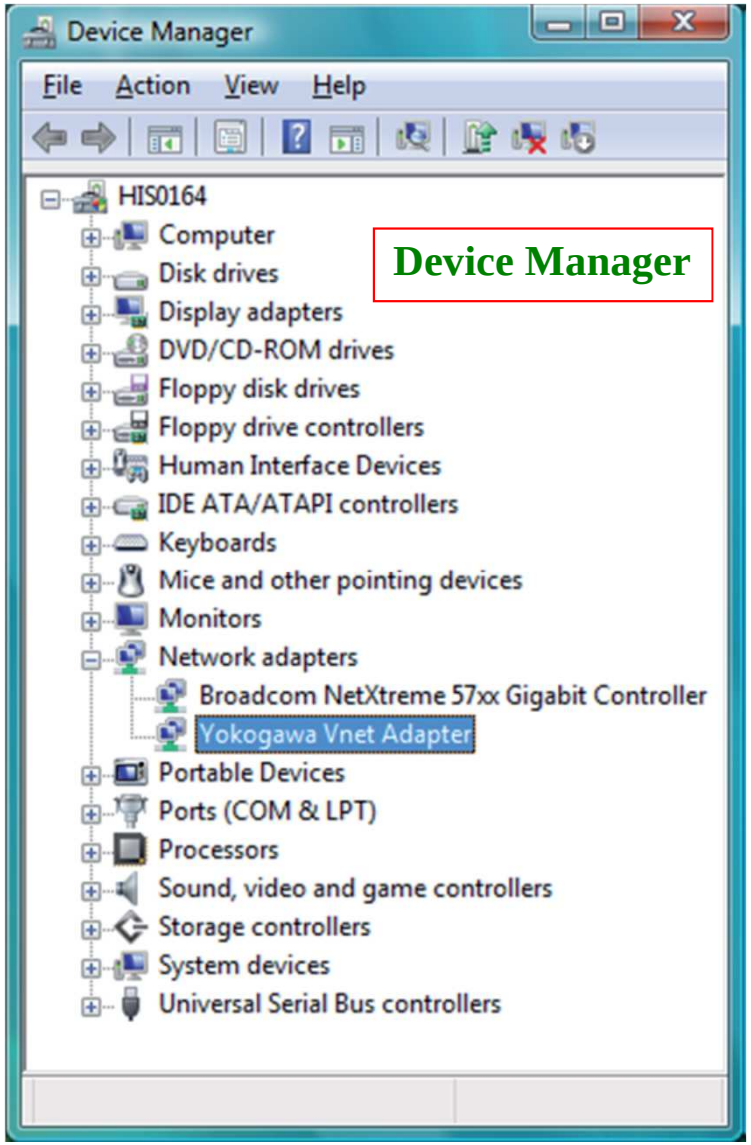
- In Windows Vista Environment

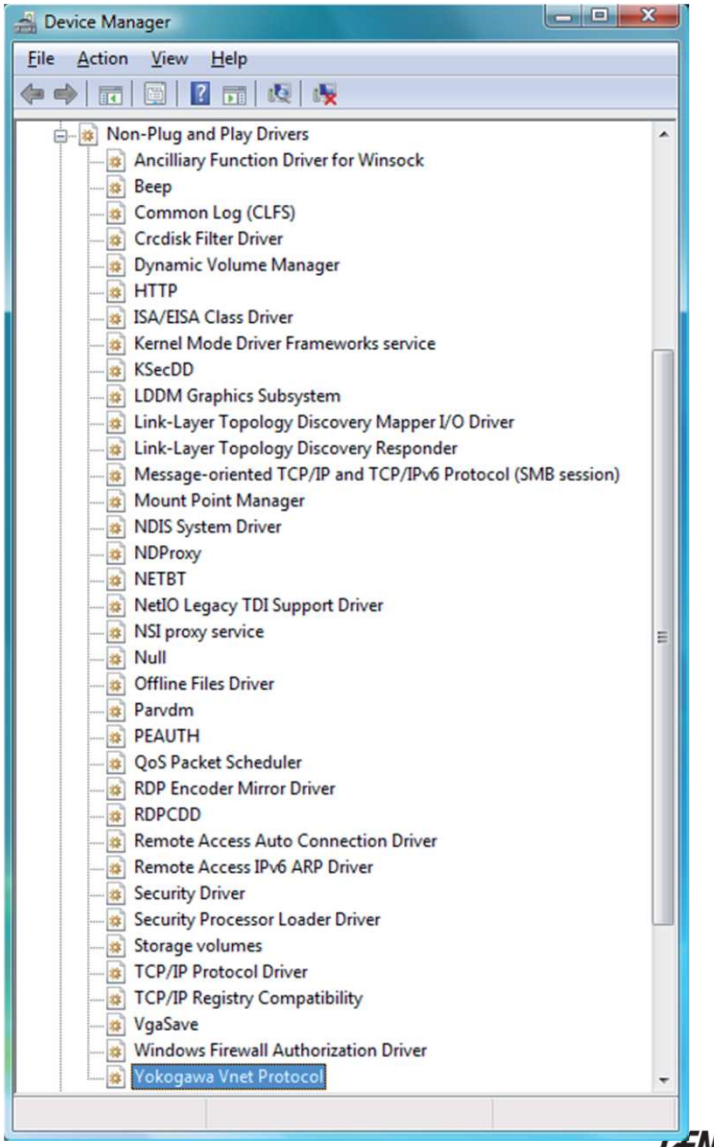
1. Logon as an administrative user.
2. From Start menu, choose [Control panel] – [System] – [Device Manger].

- In Windows XP or Windows Server 2003 Environment:

1. Logon as an administrative user.
2. From Start menu, choose [Control panel] – [Administrative Tools] – [Computer Management] - [Device Manger].

Setting of Network





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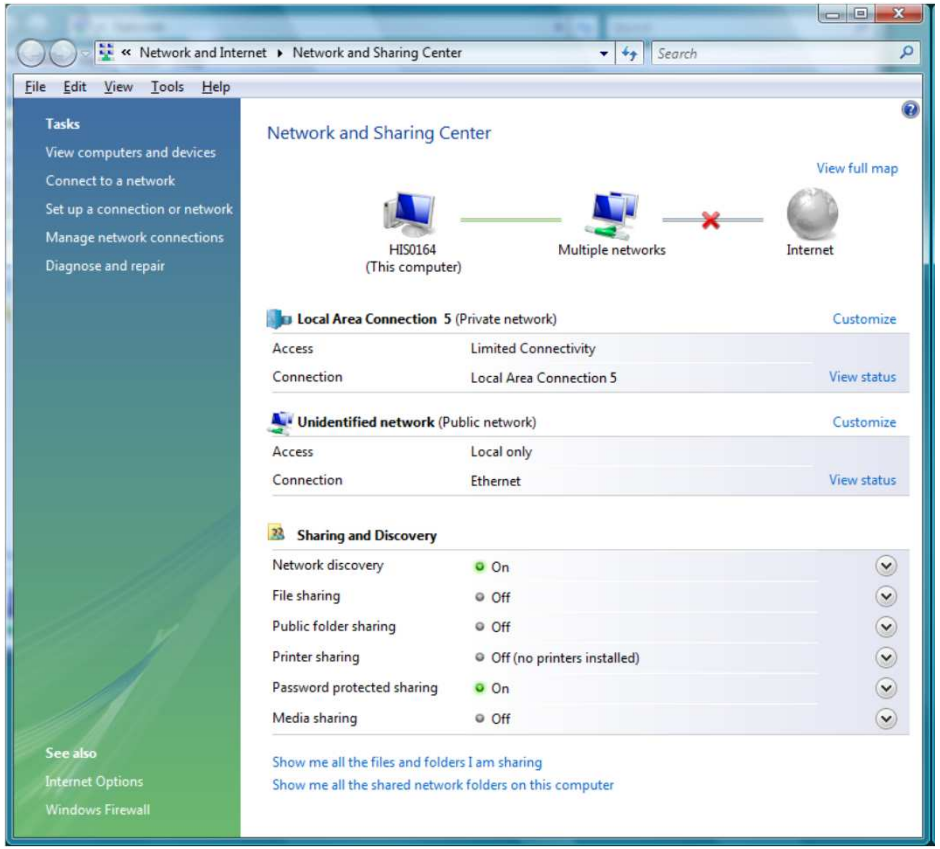
Change Local Area Connection Name

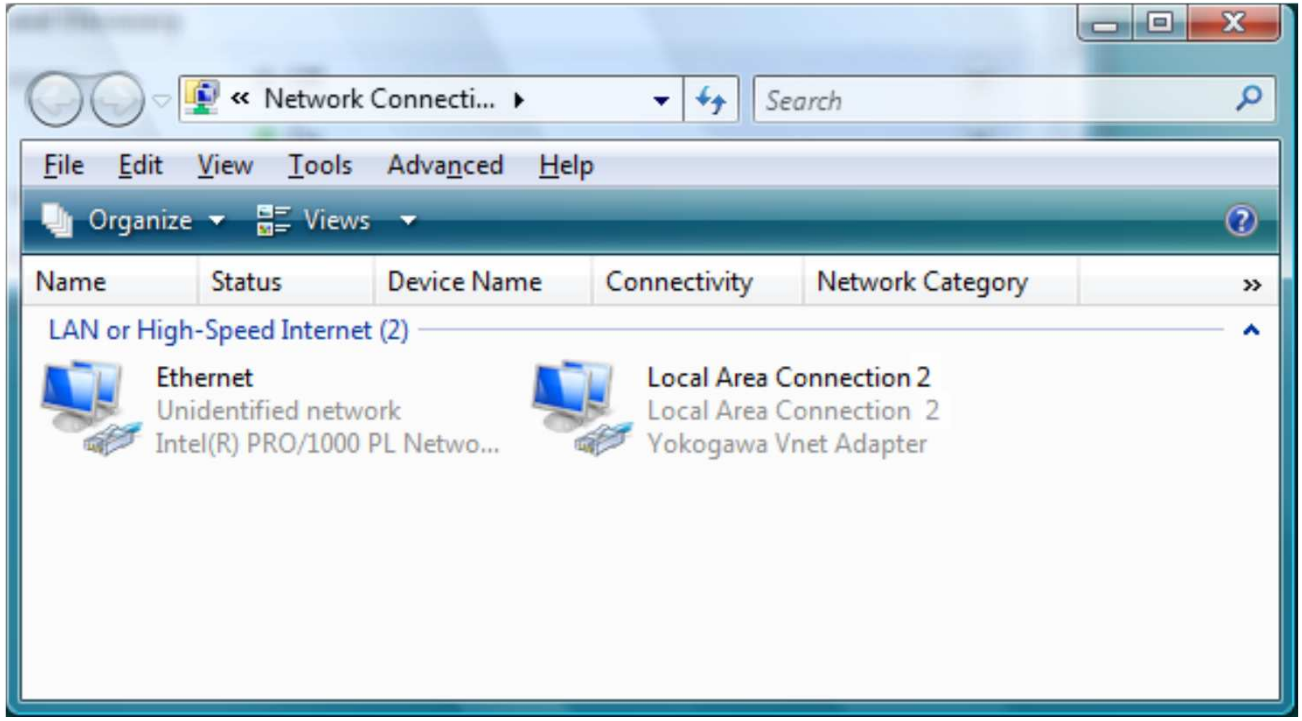
After a network driver is installed, its corresponding connection is automatically given a name "Local Area Connection".

1. From Start menu, choose [Control Panel] and then [Network and Sharing Center].



CENTUM VP

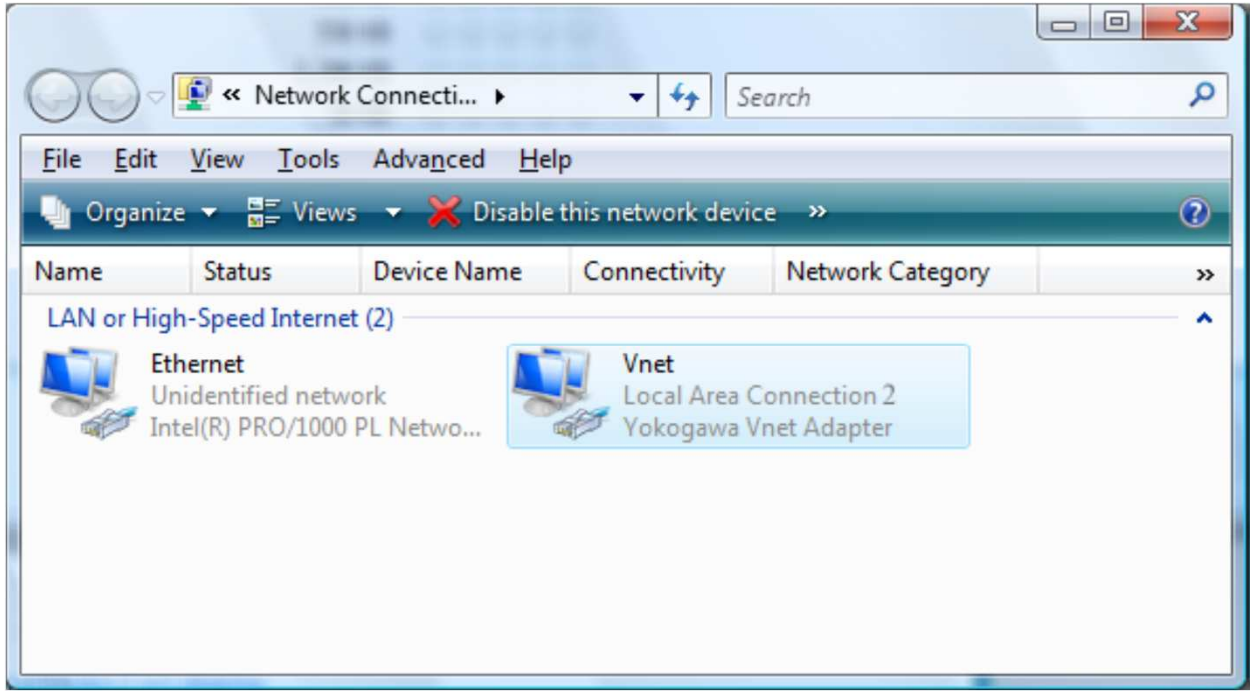
In the above window, choose [Manage network connection], and then Network Connections window will be displayed.



Network Connections (Before Renaming)

Setting of Network

After the Ethernet driver and control bus drivers have been installed in the PC, each connection will be shown as Local Area Connection and Local Area Connection 2, which are difficult to identify. Therefore, rename them to Ethernet and Vnet, respectively, as shown in the figure below.



Network Connections (After Renaming)

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Set IP Addresses

Setting Properties

Before setting the IP addresses, you need to select the items for use in the properties dialog box for each network connection.

Table Items for Use by Each Network Connection

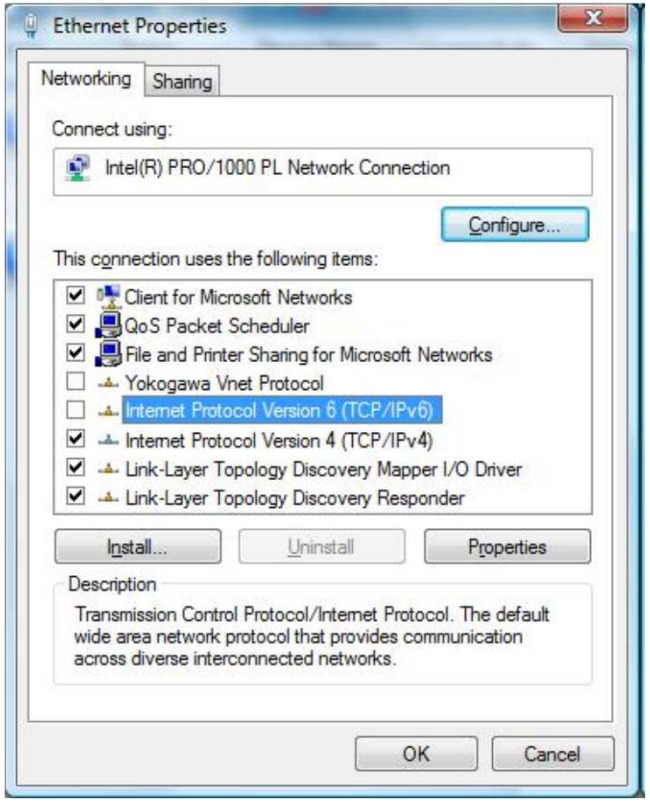
Item	Ethernet / Vnet/IP	Vnet
Client for Microsoft Networks	OK	NG
QoS Packet Scheduler	OK	–
File and Printer Sharing for Microsoft Networks	OK	NG
Yokogawa V net Protocol	NG	OK
Internet Protocol version 6 (TCP/IPv6)	NG	NG
Internet Protocol version 4 (TCP/IPv4)	OK	OK
Link-Layer Topology Discovery Mapper I/O Driver	OK	NG
Link-Layer Topology Discovery Responder	OK	NG

OK: Use, NG: Not for use, –: Not installed

CENTUM VP

Setting Properties for Ethernet

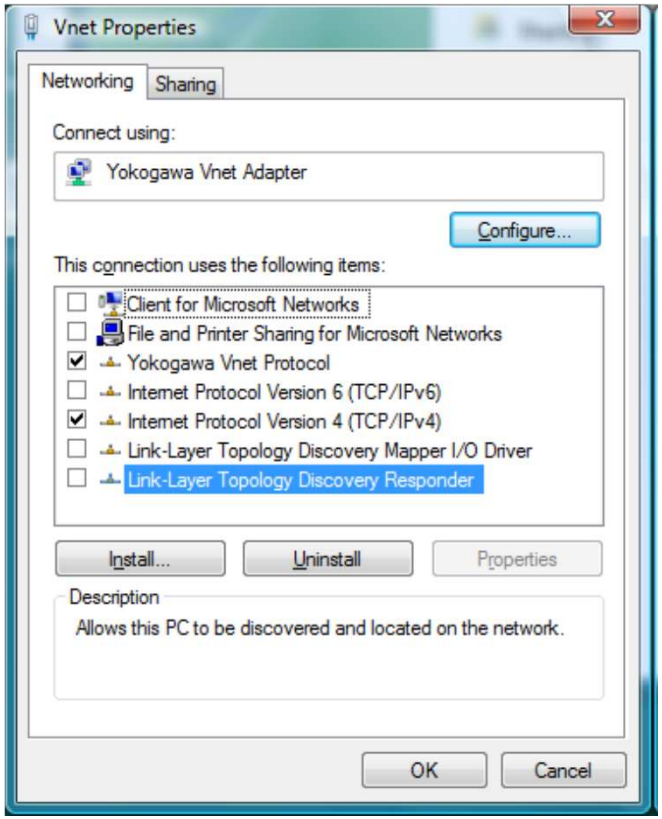
1. Select [Ethernet] from Network Connections window and open Ethernet Properties dialog box.
2. As shown in the table of "Items for Use by Each Network Connection," deselect [YokogawaVnet Protocol] and [Internet Protocol Version 6 (TCP/IPv6)].



After setting, click [OK].

Setting Properties for Vnet

1. Select [Vnet] from Network Connections window and open Vnet Properties dialog box.
2. As shown in the table of "Items for Use by Each Network Connection," deselect all the items except [Yokogawa Vnet Protocol] and [Internet Protocol version 4 (TCP/IPv4)].



After setting, click [OK].

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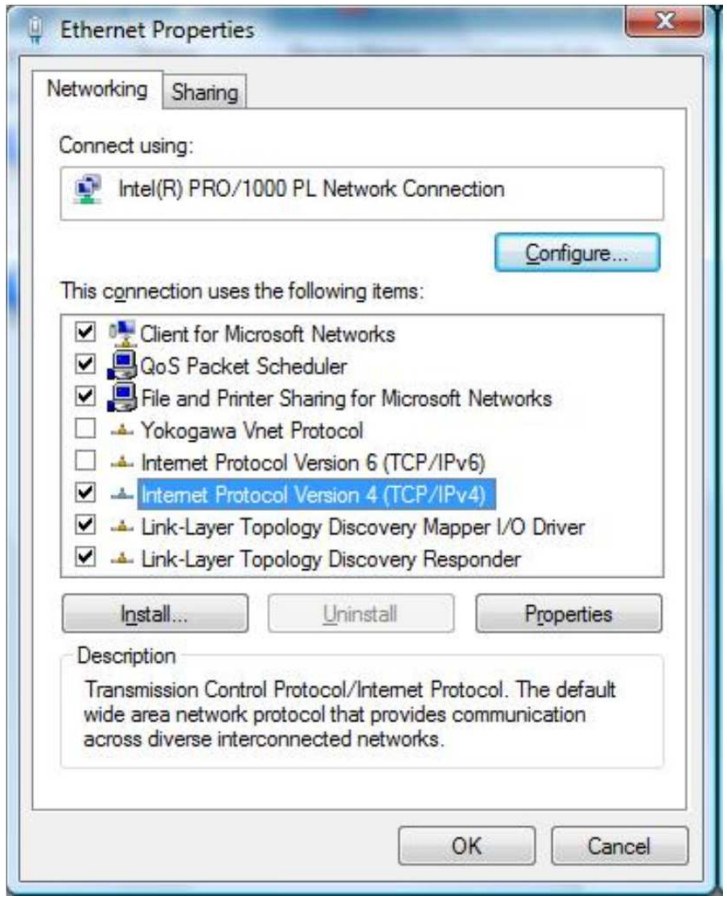
Setting IP Address for Ethernet

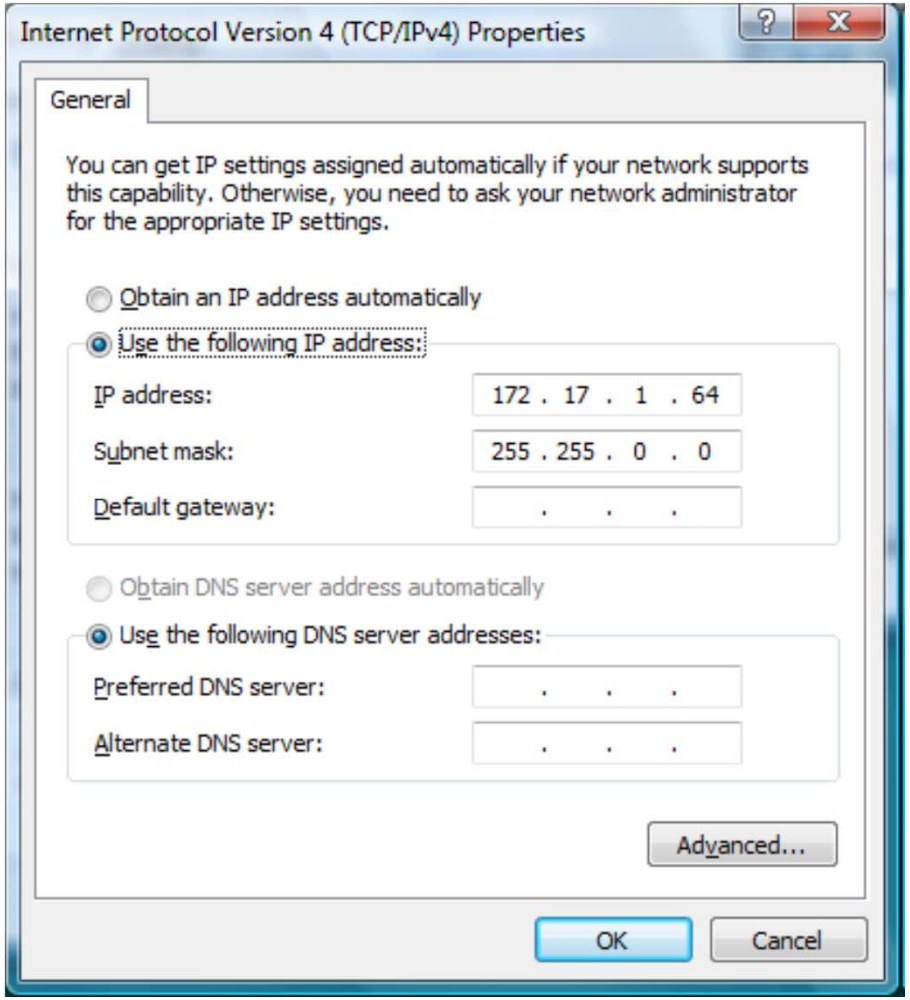
1. Select [Ethernet] from Network Connections window and open Ethernet Properties dialog box.
2. Choose [Internet Protocol Version 4(TCP/IPv4)] and then click [Properties].



CENTUM VP

Setting of Network

Internet Protocol Version 4 (TCP/IPv4) Properties dialog box appears.



Setting of Network

3. Select [Use the following IP address] and set the IP address, subnet mask, and default gateway for Ethernet as follows:

• When using the PC in the existing environment, enter the IP address currently used on the network.
• When using the PC in the new environment, set the IP address in accordance with the PC station address. The rule is as follows:

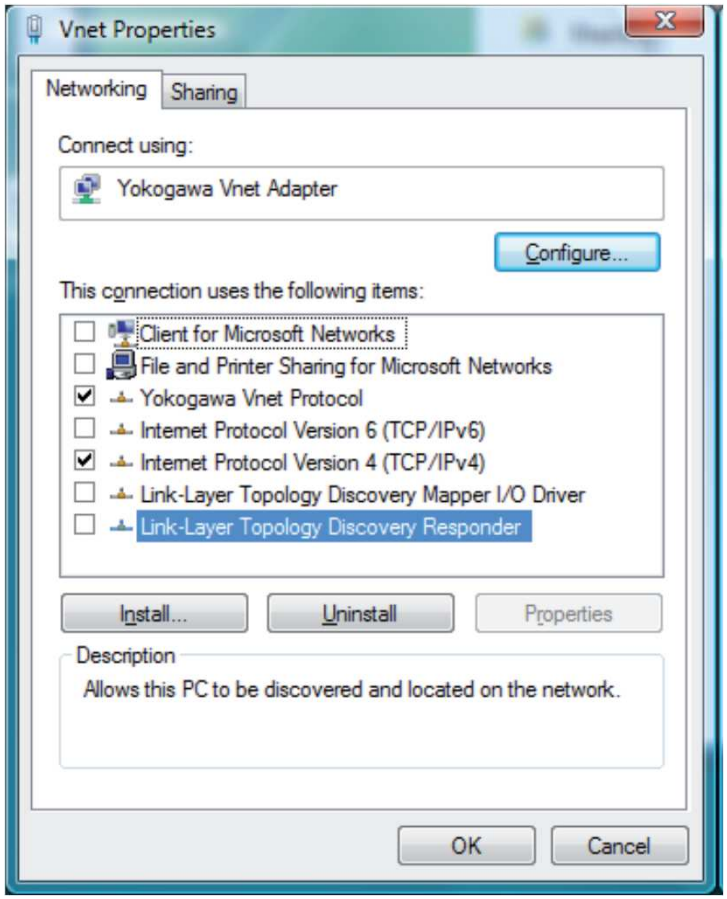
IP address : 172.17.<Domain Number>.<Station Number> (*1)
Subnet mask : 255.255.0.0
Default gateway : No setting is required

*1: Generally use this rule to set the IP address. However, other IP address can also be used.

After setting, click [OK]. There is no need to restart the PC after setting the IP address.

Setting IP Address for Control Bus

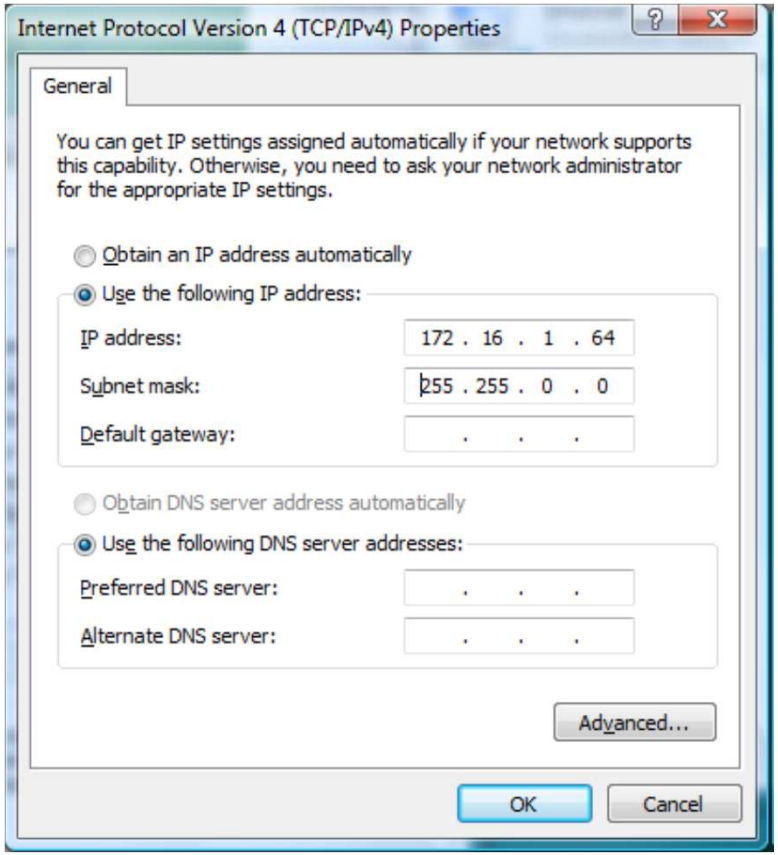
1. Select [Vnet] from Network Connections window and open Vnet Properties dialog box.
2. choose [Internet Protocol Version 4 (TCP/Ipv4)] and click [Properties].



Setting of Network

3. Select [Use the following IP address] and set the IP address, subnet mask, and default gateway for the control bus. Set the IP address in accordance with the PC station address. The rule is as follows:

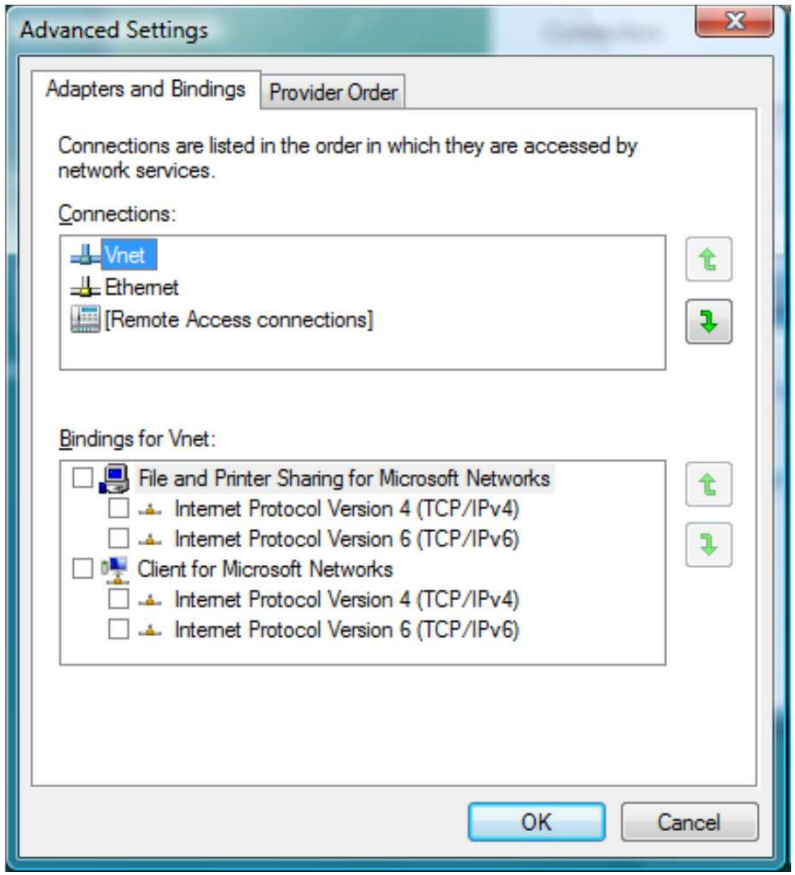
IP address : 172.16.<Domain Number>.<Station Number>
Subnet mask : 255.255.0.0
Default gateway : No setting is required



Set Bindings

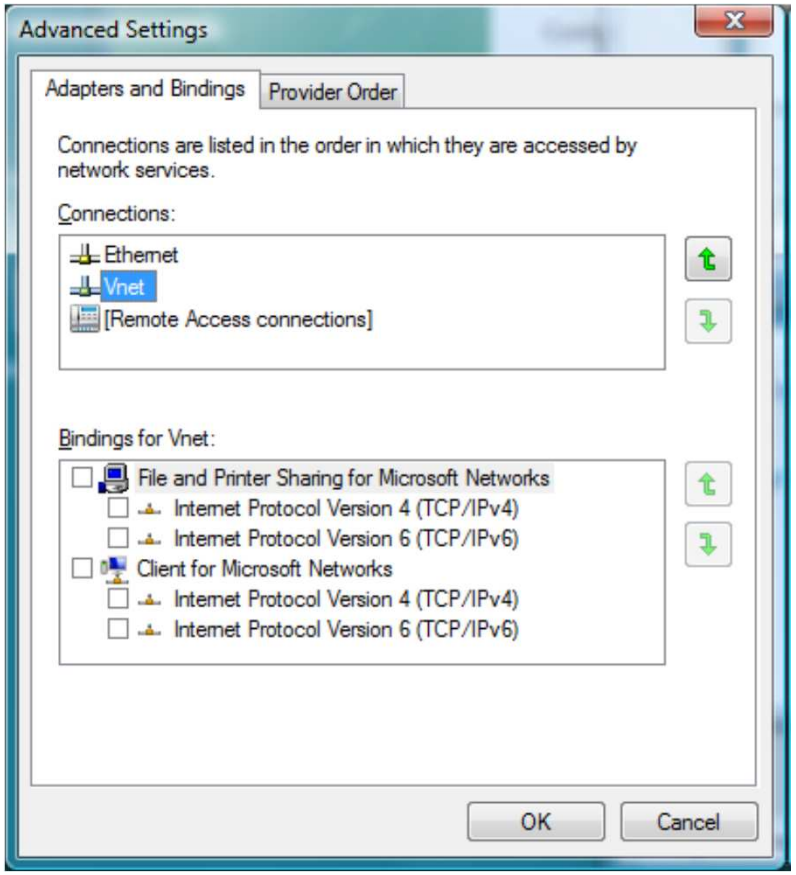
The Ethernet should be placed at a higher priority than the Control Bus (Vnet).

1. From [Advanced] menu on Network Connections window, choose [Advanced Settings] to open Advanced Settings dialog box.



Setting of Network

2. Use the upward or downward arrow next to the Connections box so as to change the Ethernet to the higher position than Control Bus(Vnet).



3. After setting the priority of Ethernet higher than the control bus, click [OK] to finish setting of bindings. After changing the bindings, there is no need to restart the PC.

Installation of Vnet/IP Open Communication Driver
Vnet/IP Card (VI701)

The procedure for adding a Vnet/IP open communication driver is as follows.

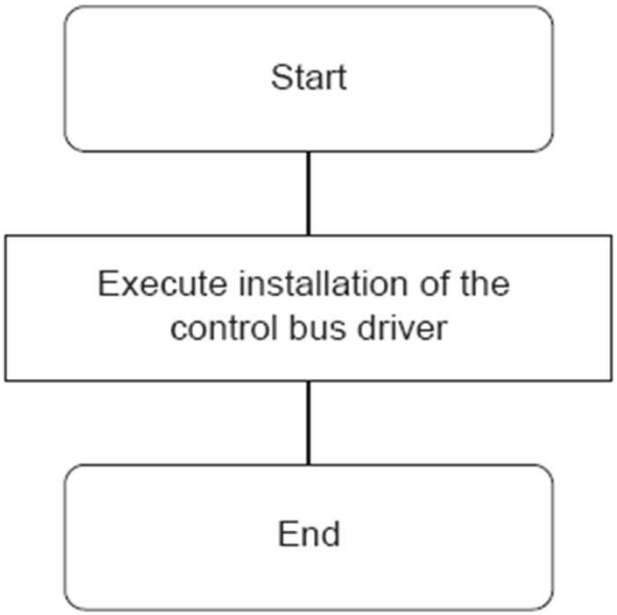


Figure Flow of Adding Driver

Choose [Vnet/IP Open Communication Driver] on CENTUM VP Installation menu.

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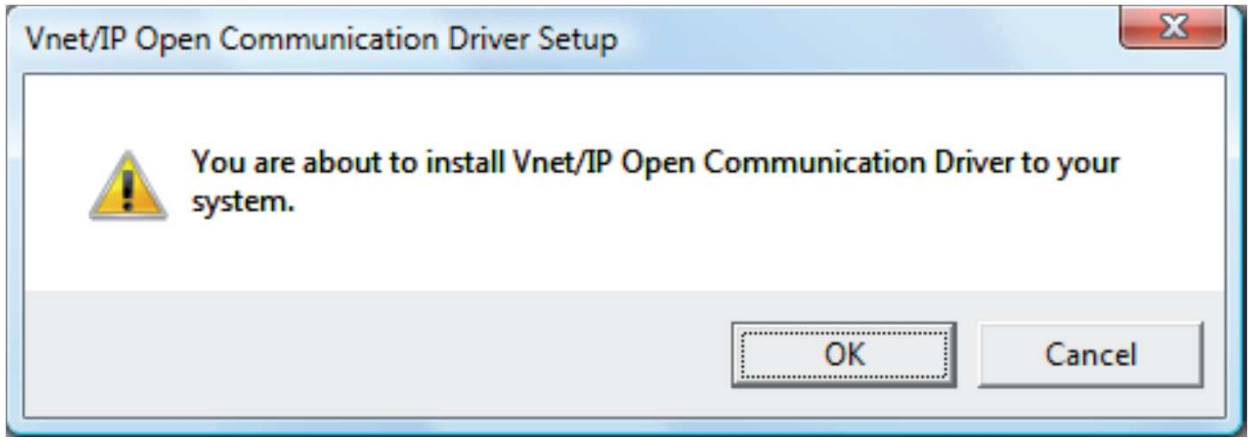
Procedure for Adding the Driver

1. Logon as an administrative user.
2. As you install the VI701 card, the Found New Hardware dialog box shown as follows may be displayed for 3 or 4 times (if the control bus driver is already installed, the message box will be displayed for 3 times.). In these cases, always click [Ask me again later].

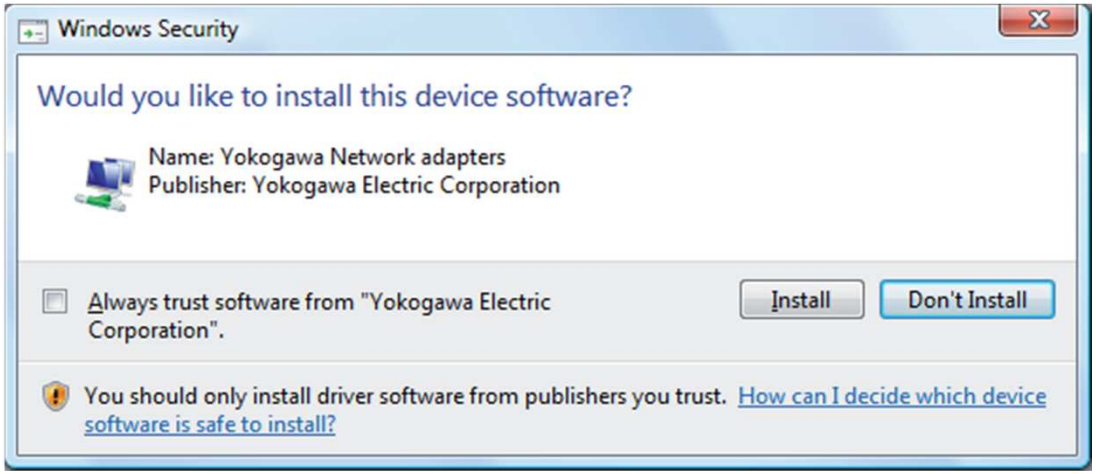
CENTUM VP

Setting of Network

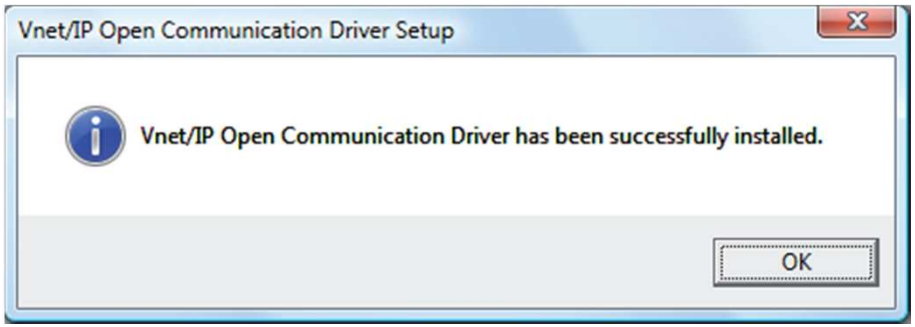
3. Set the CENTUM VP software media into the DVD drive, the CENTUM VP installation menu will be automatically started. (If the installation menu is not automatically started, use Windows Explorer to find CENTUM Setup.exe program under the top folder of the CENTUM VP software media and then double click the program to run it.)
4. On CENTUM VP installation menu, click [Vnet/IP Open com driver] button.
5. When the setup confirmation dialog box is displayed, click [OK].



6. When Windows Security dialog box is displayed, click the [Install] button.

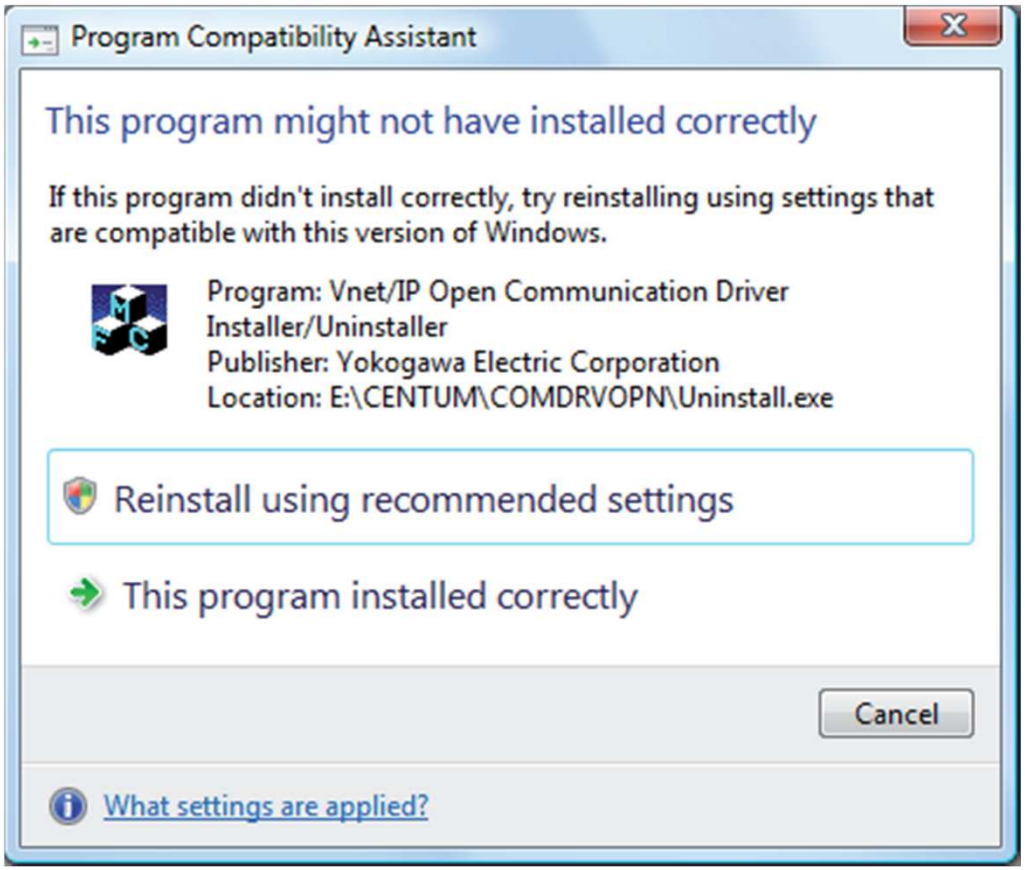


7. When the message telling successful installation is displayed, click [OK] to finish.



Setting of Network

8. When Program Compatibility Assistant dialog box is displayed (Windows Vista only), click [This program installed correctly].
The dialog box will be closed and the installationprocedure is completed.



Confirming that the Driver has been Installed Properly

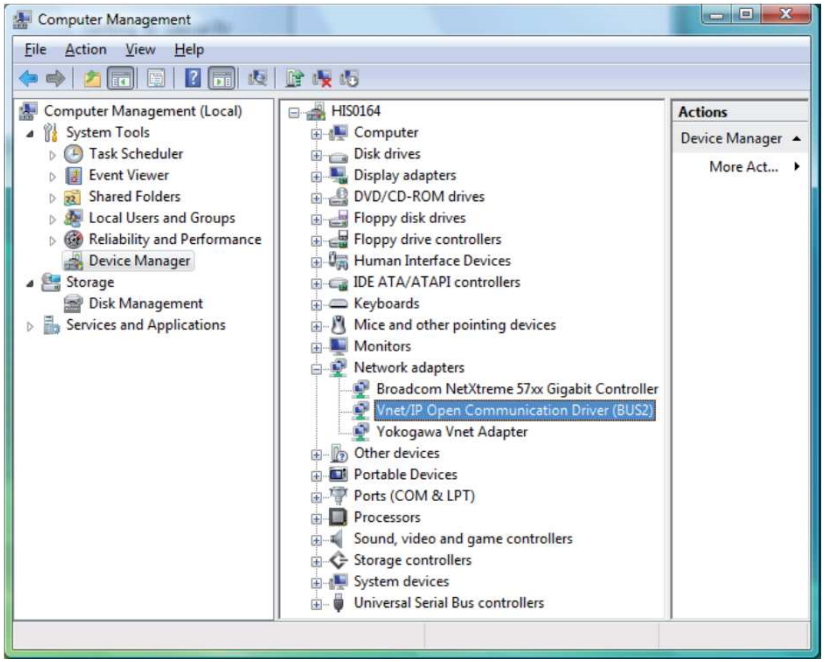
Do the following to display Device Manager:

- In Windows Vista Environment

1. Logon as an administrative user.
2. From Start menu, choose [Control panel] – [System] – [Device Manger].

- In Windows XP or Windows Server 2003 Environment:

1. Logon as an administrative user.
2. From Start menu, choose [Control panel] – [Administrative Tools] – [Computer Management] – [Device Manger].



Setting IP Address for Control Bus

1. Select [Vnet IP Open Bus2] from Network Connections window and open Vnet Properties dialog box.
2. choose [Internet Protocol Version 4 (TCP/Ipv4)] and click [Properties].
3. Select [Use the following IP address] and set the IP address, subnet mask, and default gateway for the control bus. Set the IP address in accordance with the PC station address.

The rule is as follows:

IP address	: 192.168.<128+Domain Number>.<129+Station Number>
Subnet mask	: 255.255.255.0
Default gateway	: No setting is required

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Type of installation

- **New Installation**

Initially installs CENTUM VP software in a computer.
Key code for CENTUM VP is required for this installation.

- **Version Up Installation**

Upgrades CS 3000 software on a computer to CENTUM VP.
Key code for CENTUM VP is required for this installation.

- **Revision Up Installation**

Upgrades CENTUM VP software on a computer with minor changes.
If no package is added, Key code for CENTUM VP is not required for this installation.

- **Upgrade Installation from CS 1000**

Upgrades CS 1000 software on a computer to CENTUM VP.
Key code for CENTUM VP is required for this installation.

- **Add Installation**

Adds software packages to a computer installed with CENTUM VP software.
A medium containing CENTUM VP software in the same version as the one on the PC is required.

CENTUM VP

Preparation

Keycode Files / System ID License (floppy disk/s)
Media code: **LHSCM30**

Centum VP Software Medium (DVD-ROM)
Media code: LHSKM30
And For installation driver of Vnet interace card

Installation Centum VP Software

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Preparation

Have the following items at hand for installation.
- CENTUM VP Software Medium (Medium model code: LHSKM30): 1 piece
- CENTUM VP Software key code FDC (Medium model code: LHSCM30)
- CENTUM VP Project ID License (LHSPJT1/LHMPJT1)
- External DVD-ROM drive (when there is only CD-ROM drive in the PC)
- Other necessary Software for CENTUM VP operation

Adobe Acrobat, Microsoft Office, etc

Confirm free space in disk drive

CENTUM VP software is installed in the following folder in a disk drive.
Confirm that the disk drive has enough space for installing the software.
- Folder specified by Installer (as the destination)("[system drive]\CENTUMVP" in default)
- Folder for program (Environmental variable "%ProgramFiles%")
- Folder containing application setup data(Environmental variable "%CommonApplicationData%")

CENTUM VP

Installation Centum VP Software

New Installation

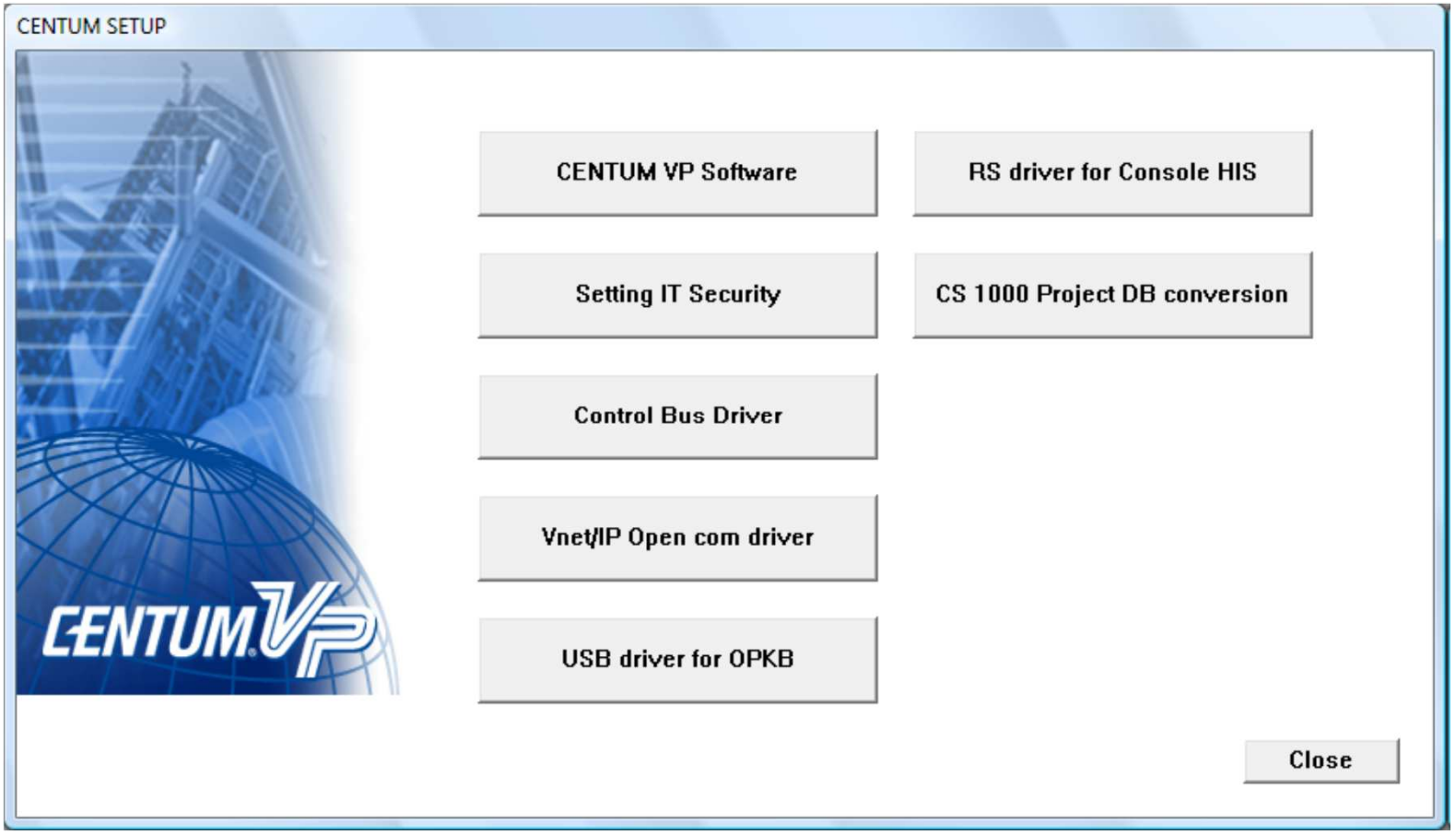
New installation means initially installing CENTUM VP software on a computer.
For this type of installation, you need CENTUM VP key code.
In a New installation, CENTUM VP system software and CENTUM VP electronic documents are installed.

New Installation procedure

1. Login as an administrative user.
2. Exit all running programs including resident programs such as anti-virus software before you start installing CENTUM VP software.
3. Insert the CENTUM VP key code FD into a floppy disk drive.
4. Insert the CENTUM VP software medium into a DVD-ROM drive.

CENTUM VP Installation Menu appears. If it does not appear, double-click "**CENTUMSetup.exe**" in the top folder in the software medium using Explorer. CENTUM VP Installation Menu appears.

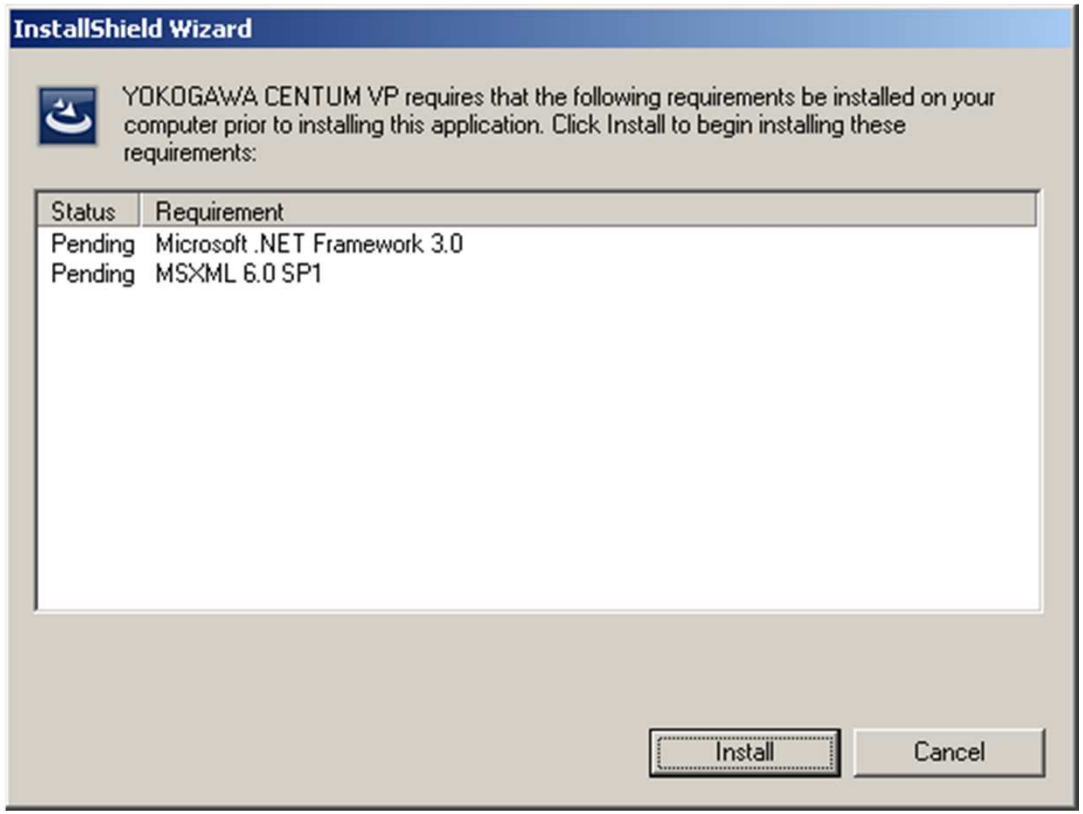
Installation Centum VP Software



5. Click [CENTUM VP Software] on the CENTUM VP Installation Menu. Installation of CENTUM VP software starts.

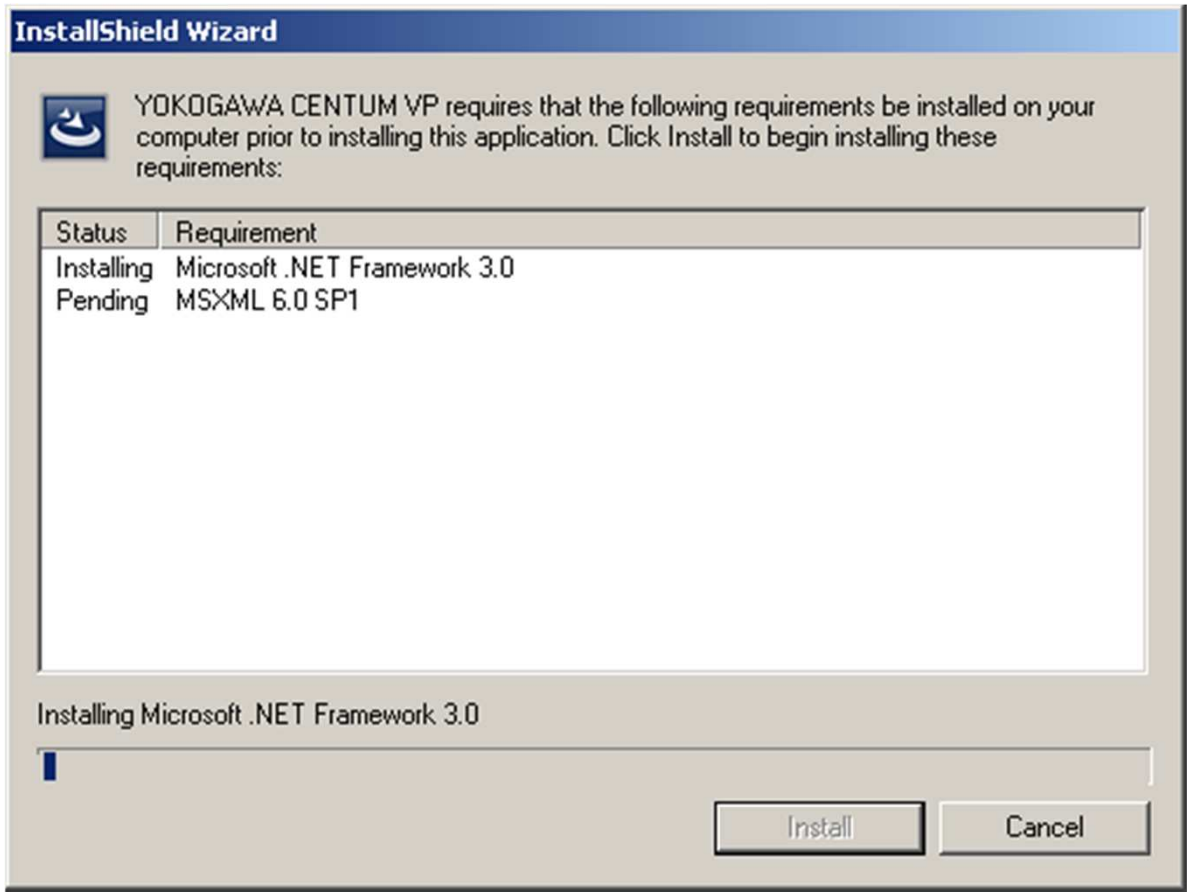
Installation Centum VP Software

6. If Microsoft .NET Framework 3.0 and MSXML 6.0 SP1 are not in your computer, a setup program for the two automatically starts with the following dialog box. Click[Install]. InstallingMicrosoft .NET Framework 3.0 and MSXML 6.0 SP1 starts. If Microsoft .NET Framework
3.0 and MSXML 6.0 SP1 are already in your computer, go to the next step.



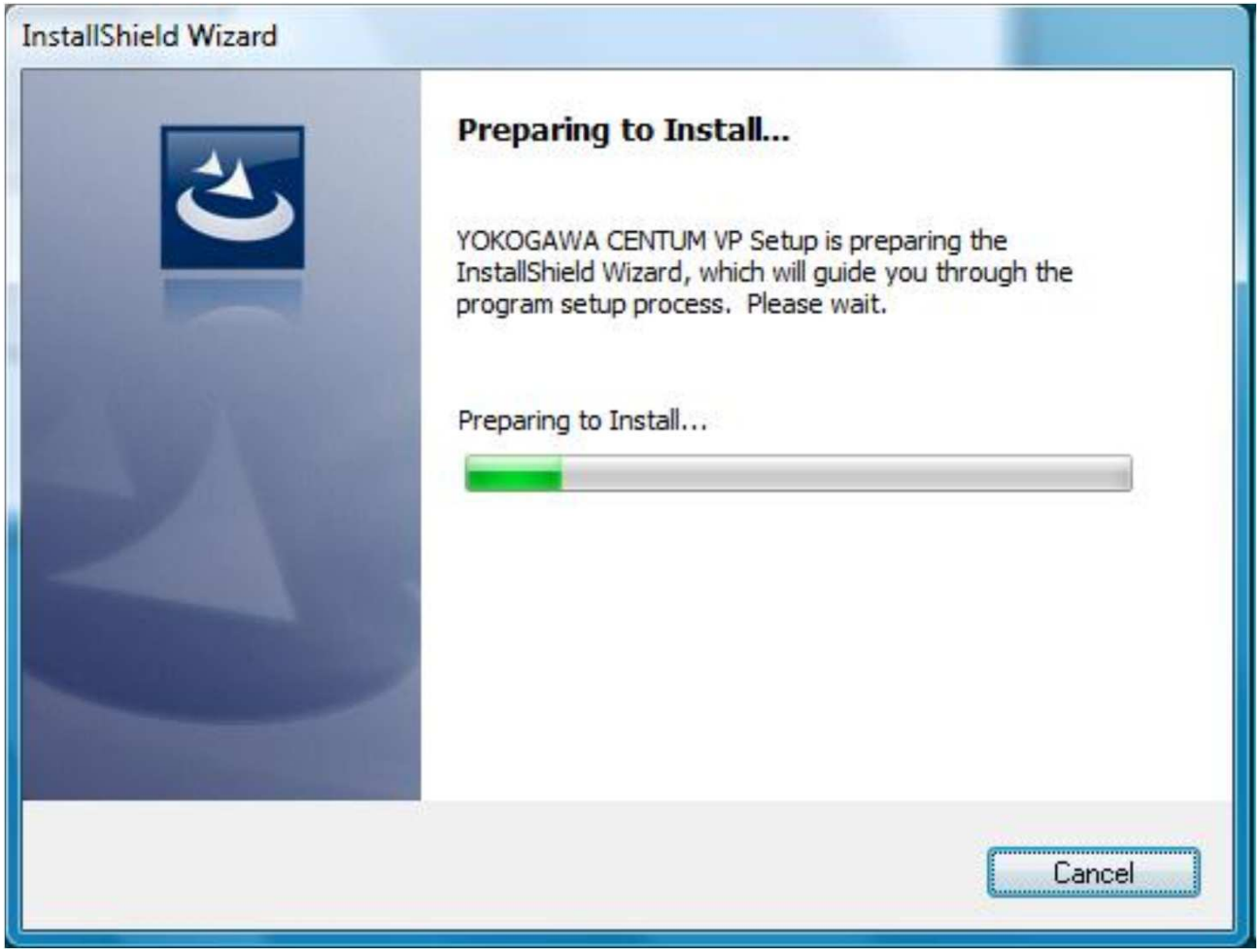
Installation Centum VP Software

The following dialog box appears showing Microsoft .NET Framework and MSXML arebeing installed.



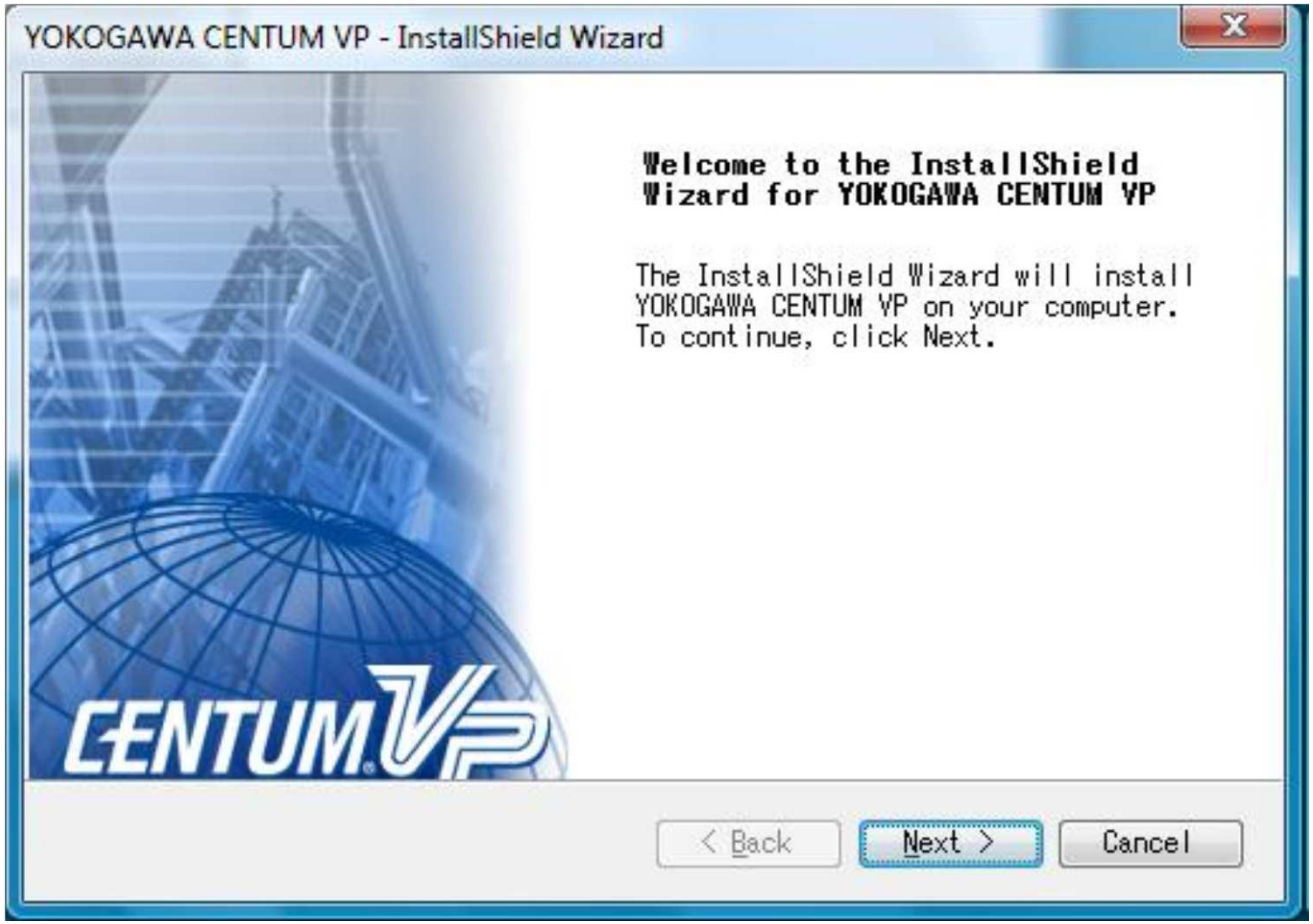
Installation Centum VP Software

Preparing to Install dialog box (for CENTUM VP) appears.



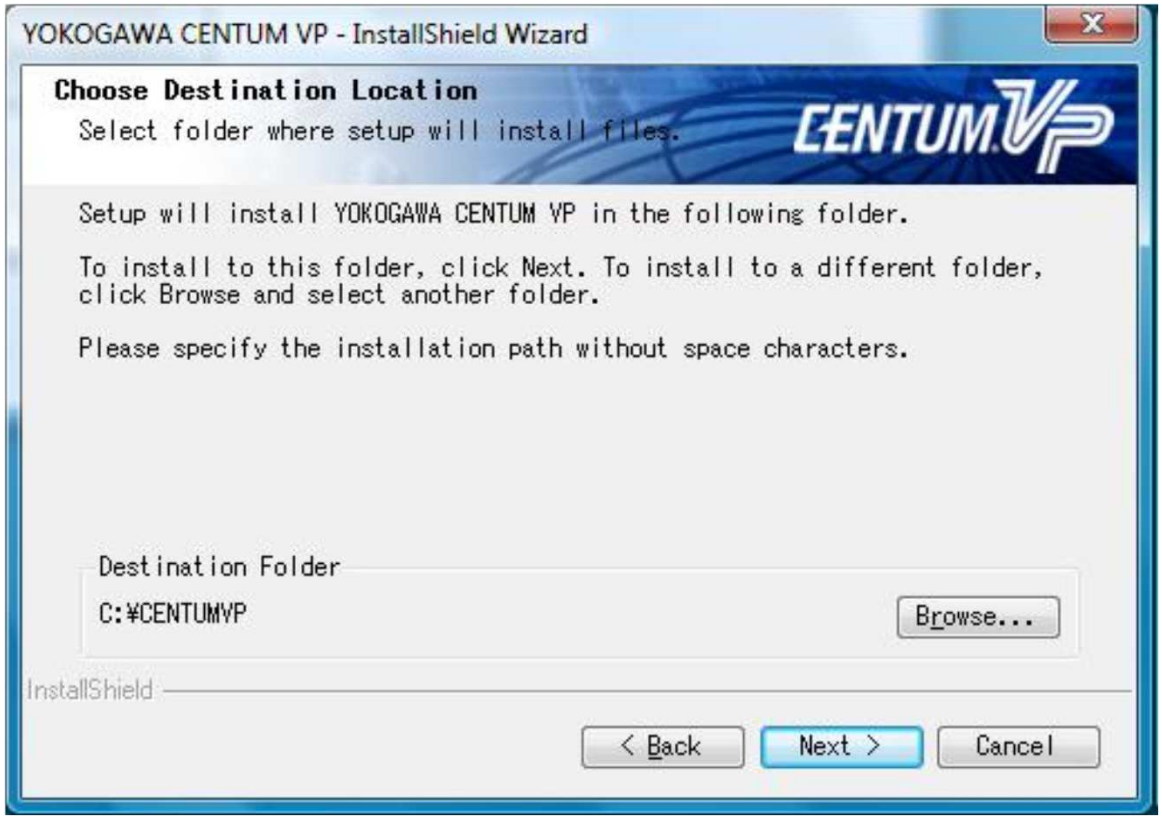
Installation Centum VP Software

7. The Welcome to the InstallShield Wizard for YOKOGAWA CENTUM VP dialog box appears. Click [Next].



Installation Centum VP Software

8. Choose Destination Location dialog box appears. Default is set to "[System drive]:\CENTUMVP".
- If you select the default destination, click [Next].
- If you want to change the destination, click the [Browse] button and select a folder. Click [Next].



Installation Centum VP Software

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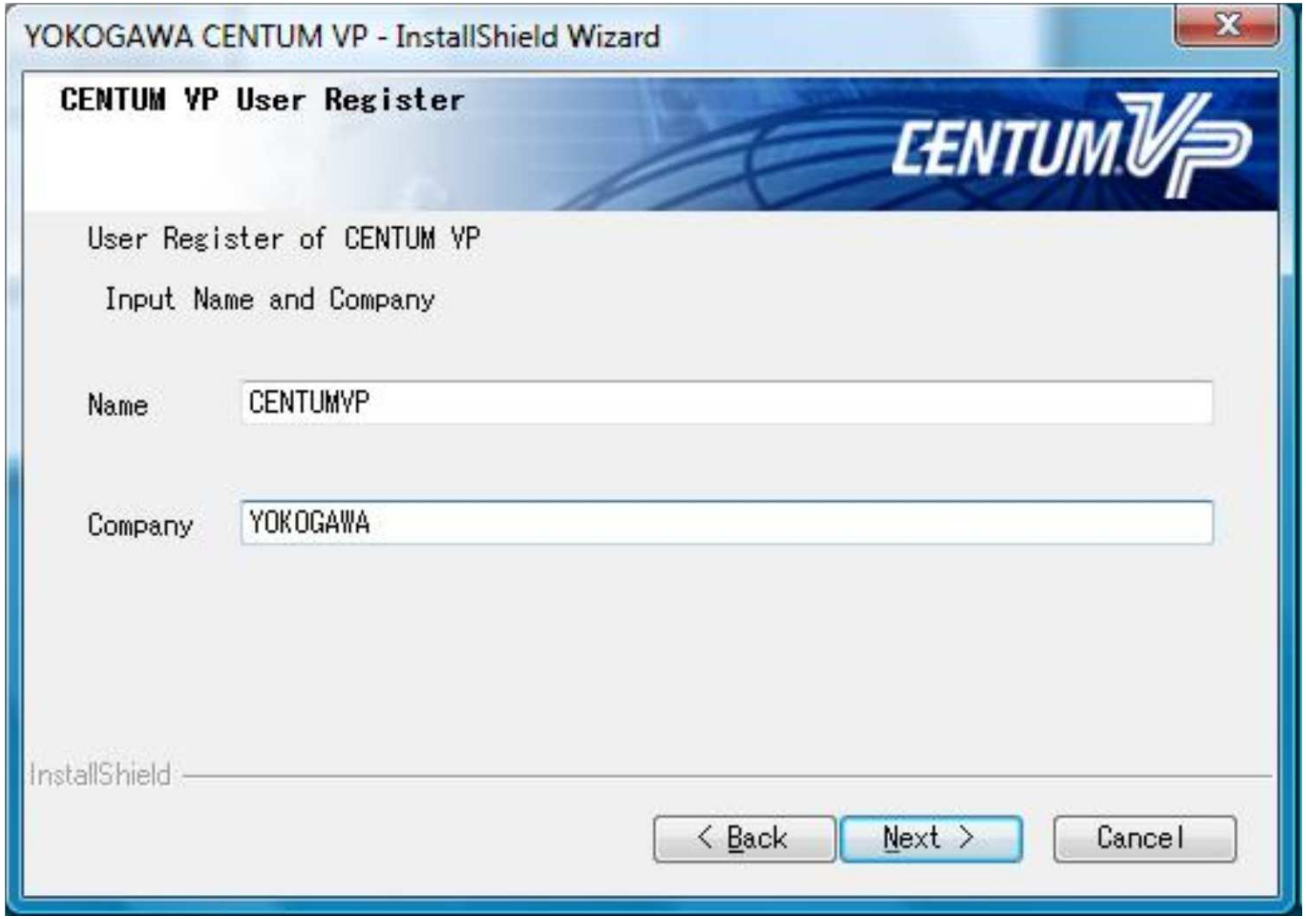
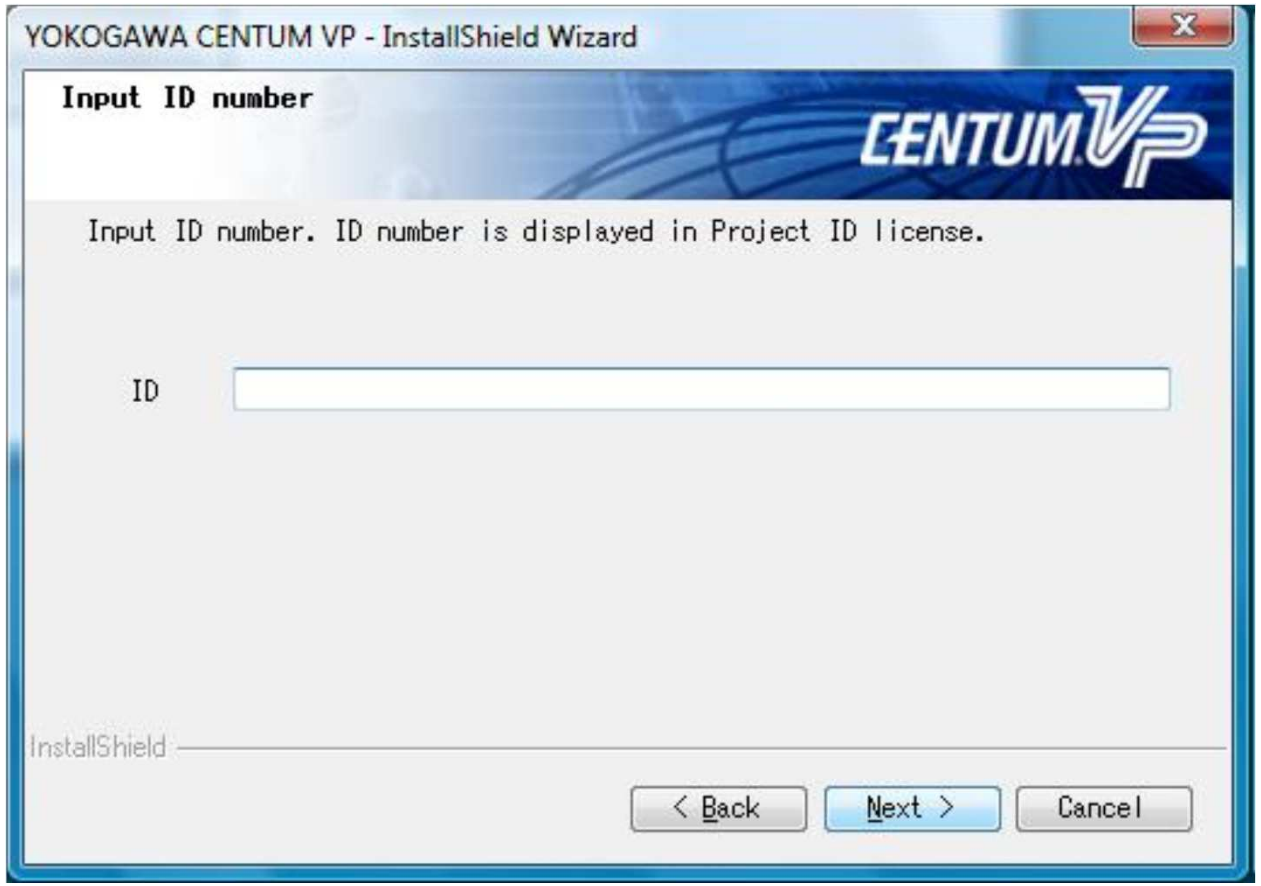
9. CENTUM VP User Register dialog box appears.
Enter user name and company name respectively. Click [Next].



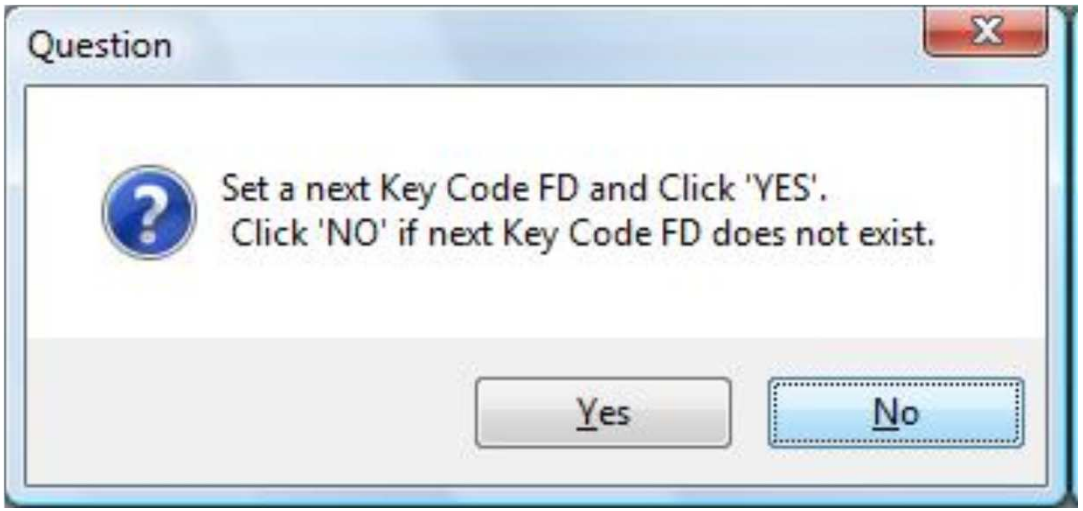
Installation Centum VP Software

10. Input ID number dialog box appears.Enter an 8-digit Project ID, and click [Next].



11. The following dialog box appears after the computer finishes loading the key code from the key code FD.

- If you have more than one key code, insert the next FD and click [Yes].
- If you have only one key code, click [No] and move on to the next step.



Installation Centum VP Software

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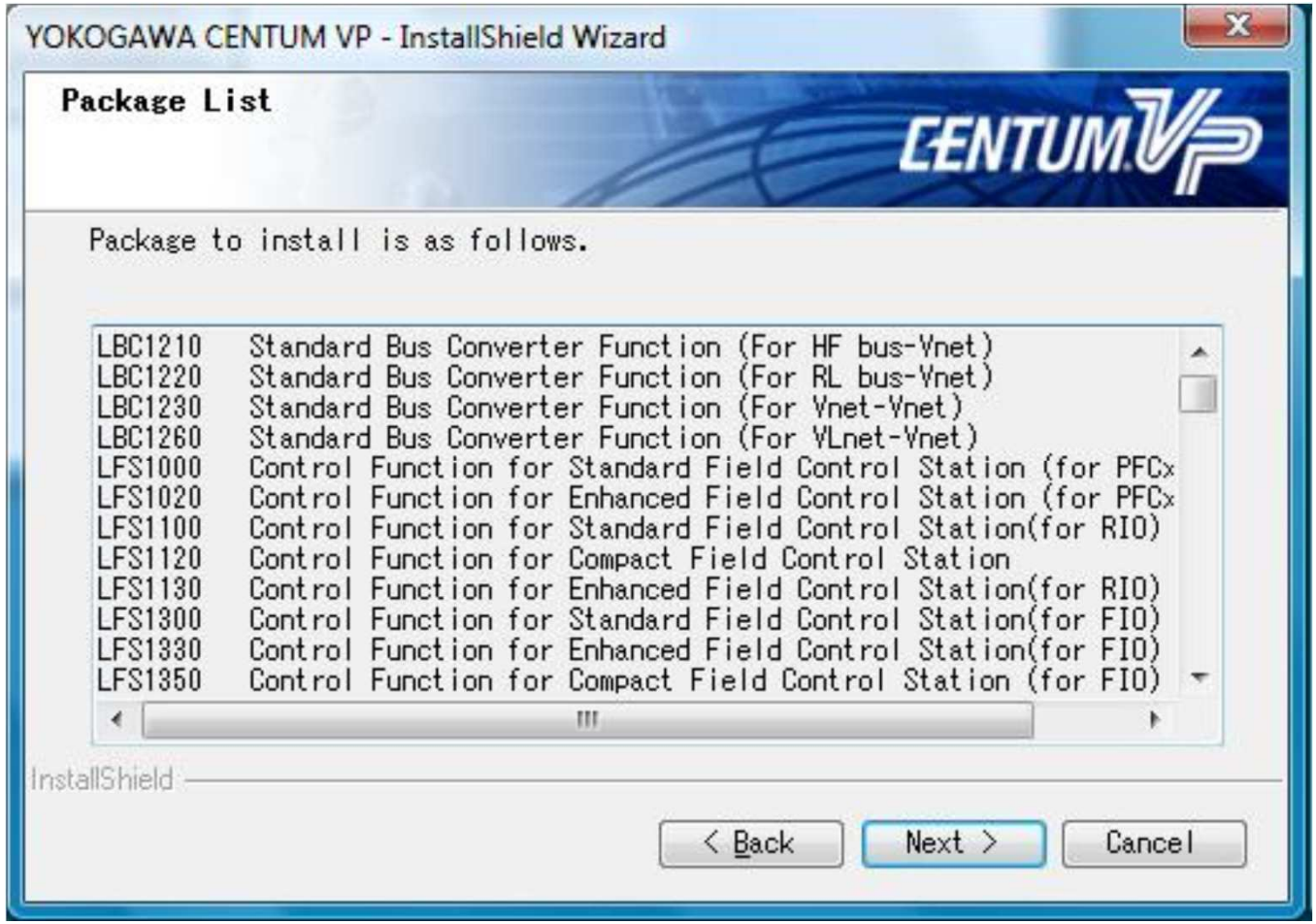
12. Package List dialog box showing a list of packages to be installed appears. Confirm the packages and click [Next].



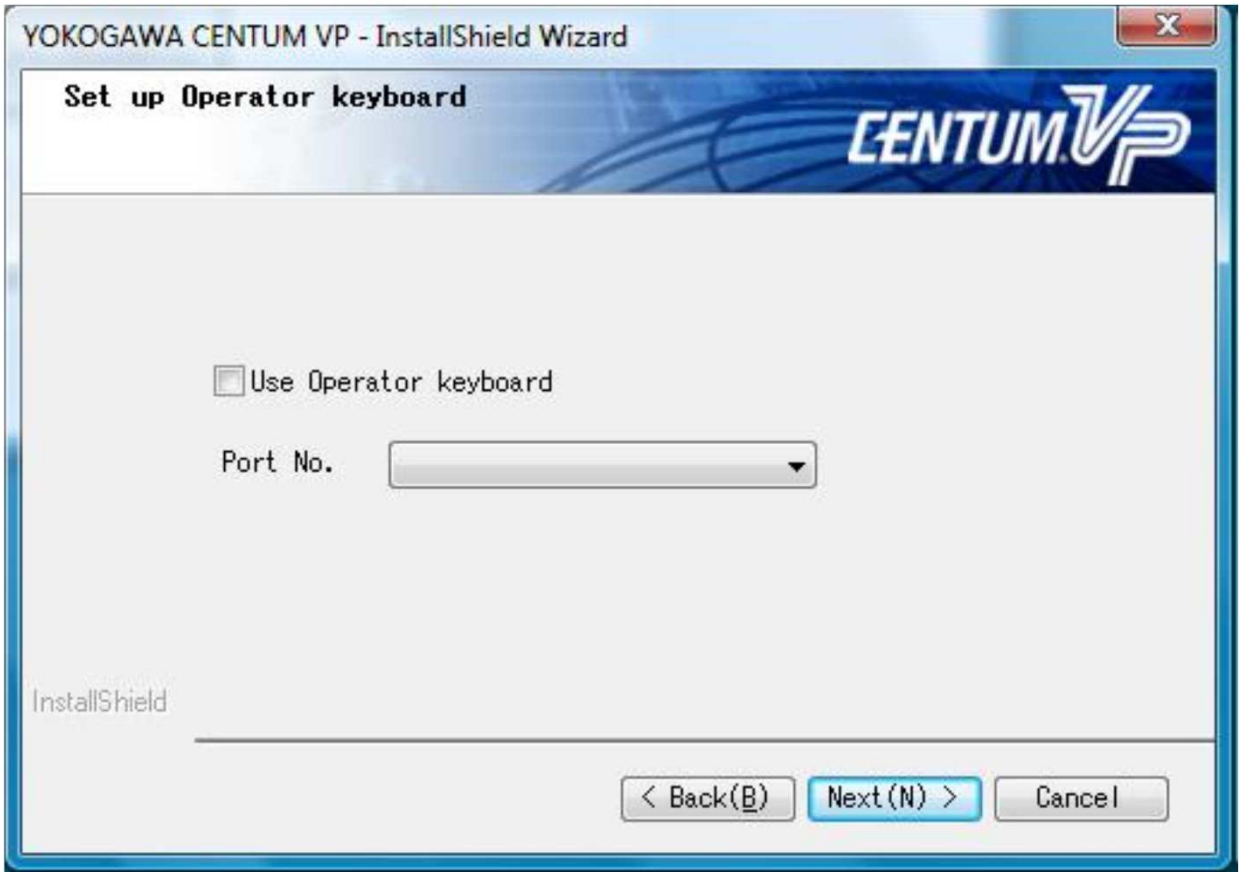
CENTUM VP

Installation Centum VP Software

13. Set up Operator keyboard dialog box appears.

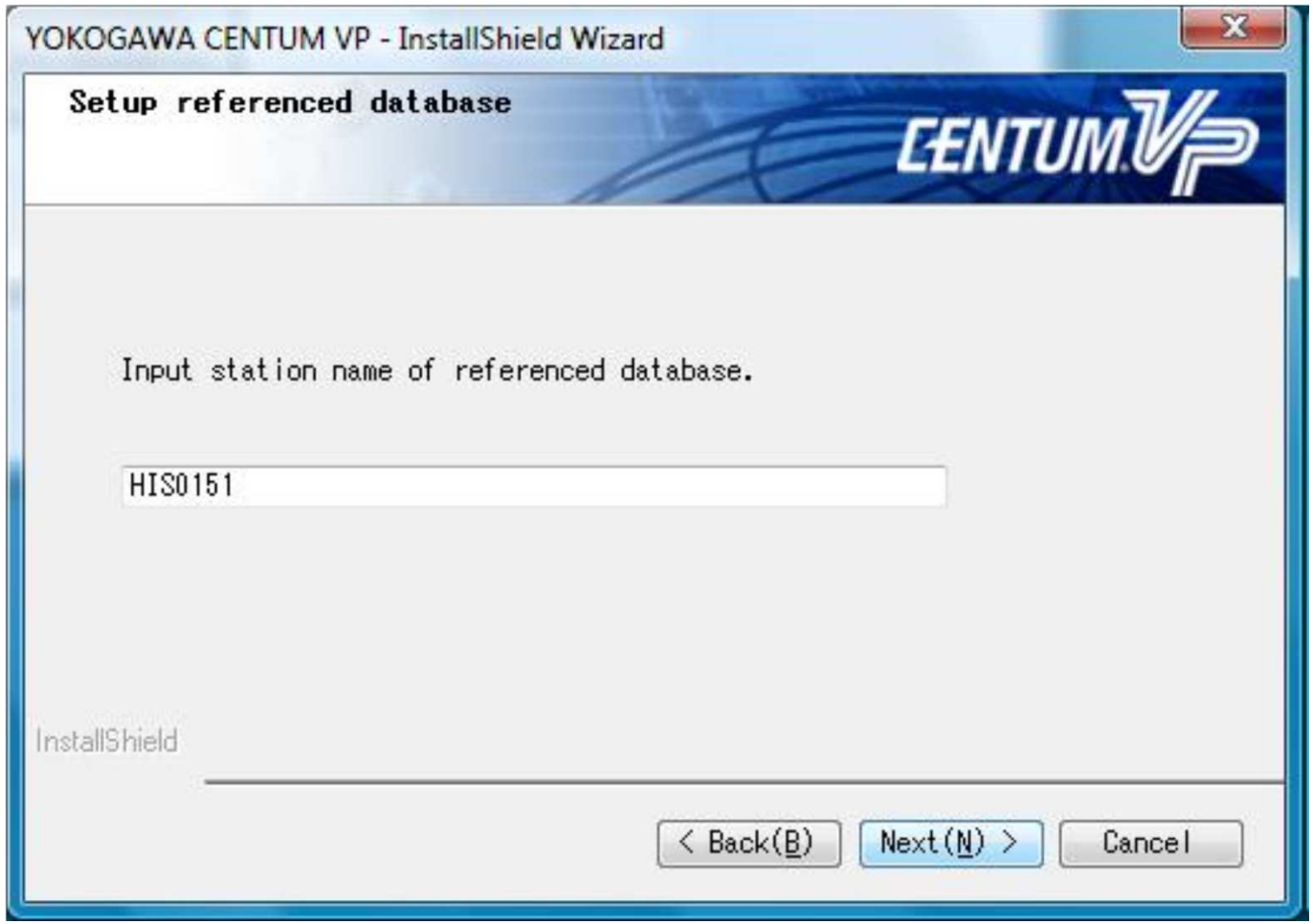
• If you use an Operator Keyboard,
select the check box [Use Operator keyboard], enter COM Port No., and click [Next].

• If you don't use an Operator Keyboard,
clear the check box [Use Operator keyboard] and click [Next].

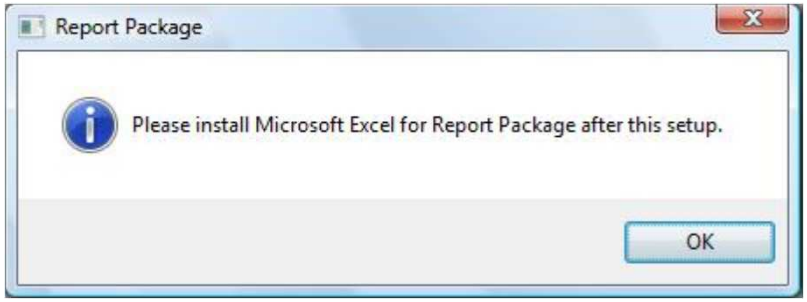


Installation Centum VP Software

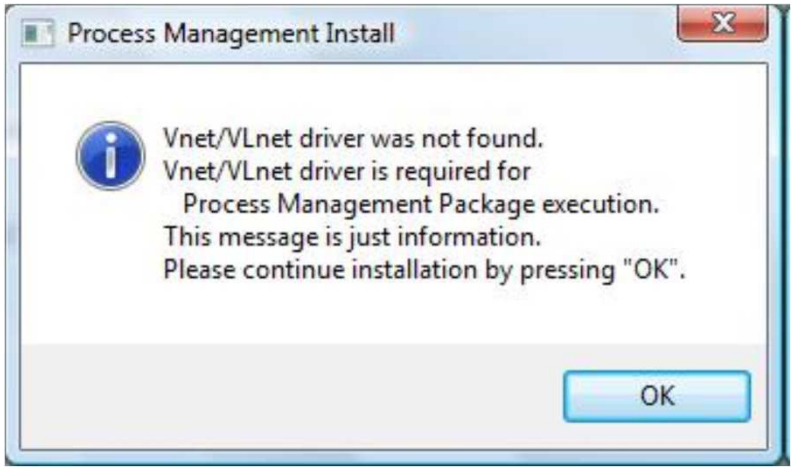
14. Setup referenced database dialog box appears.
Enter the name of a computer containing project database and click [Next].



15. If a Report package (LHS6530) is in your computer, the following dialog box appears. Click [OK].

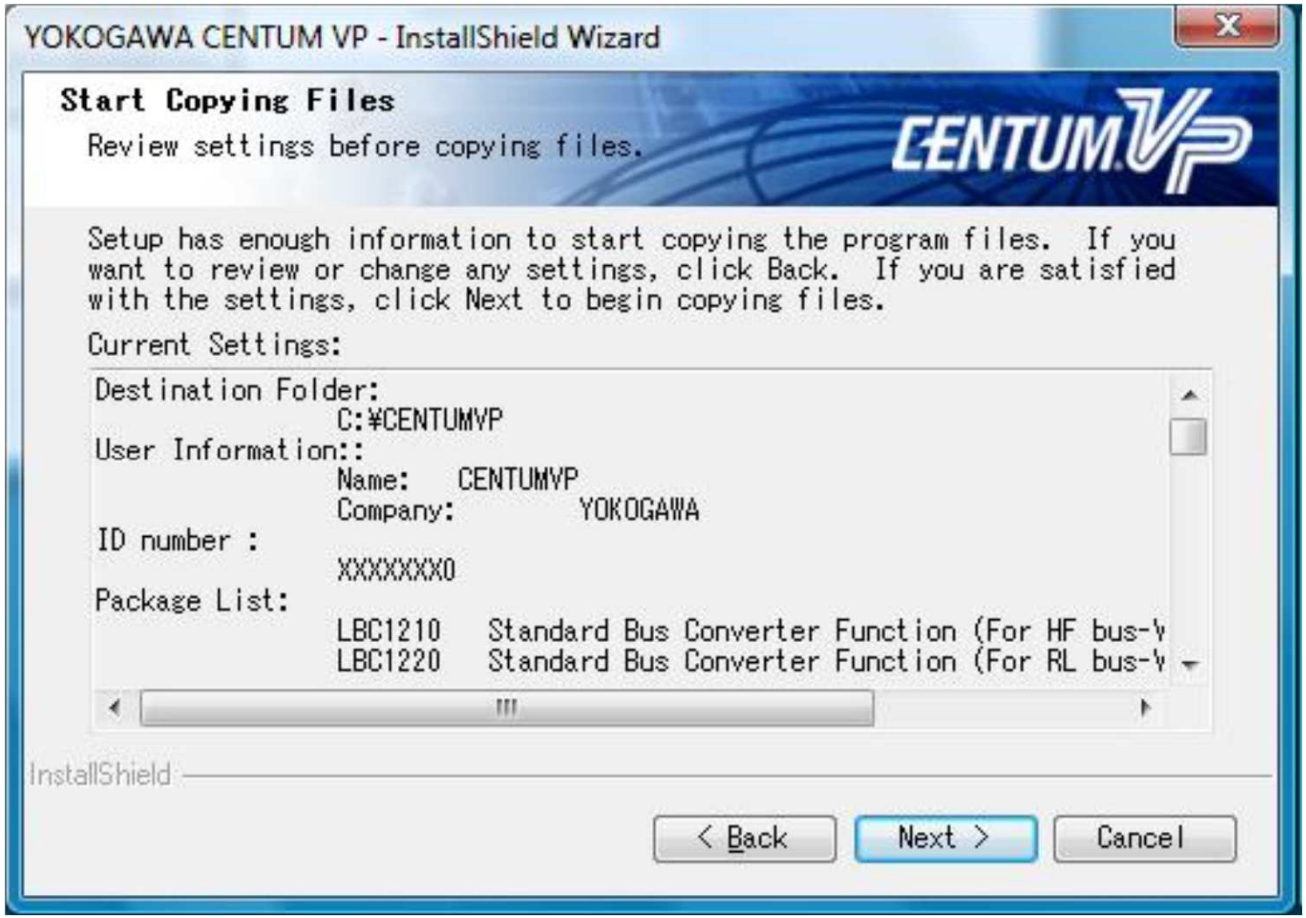


16. If control bus driver is not installed in your computer, the following dialog box appears. If you use only Test function on a stand-alone computer, no control bus driver is required. Click [OK].



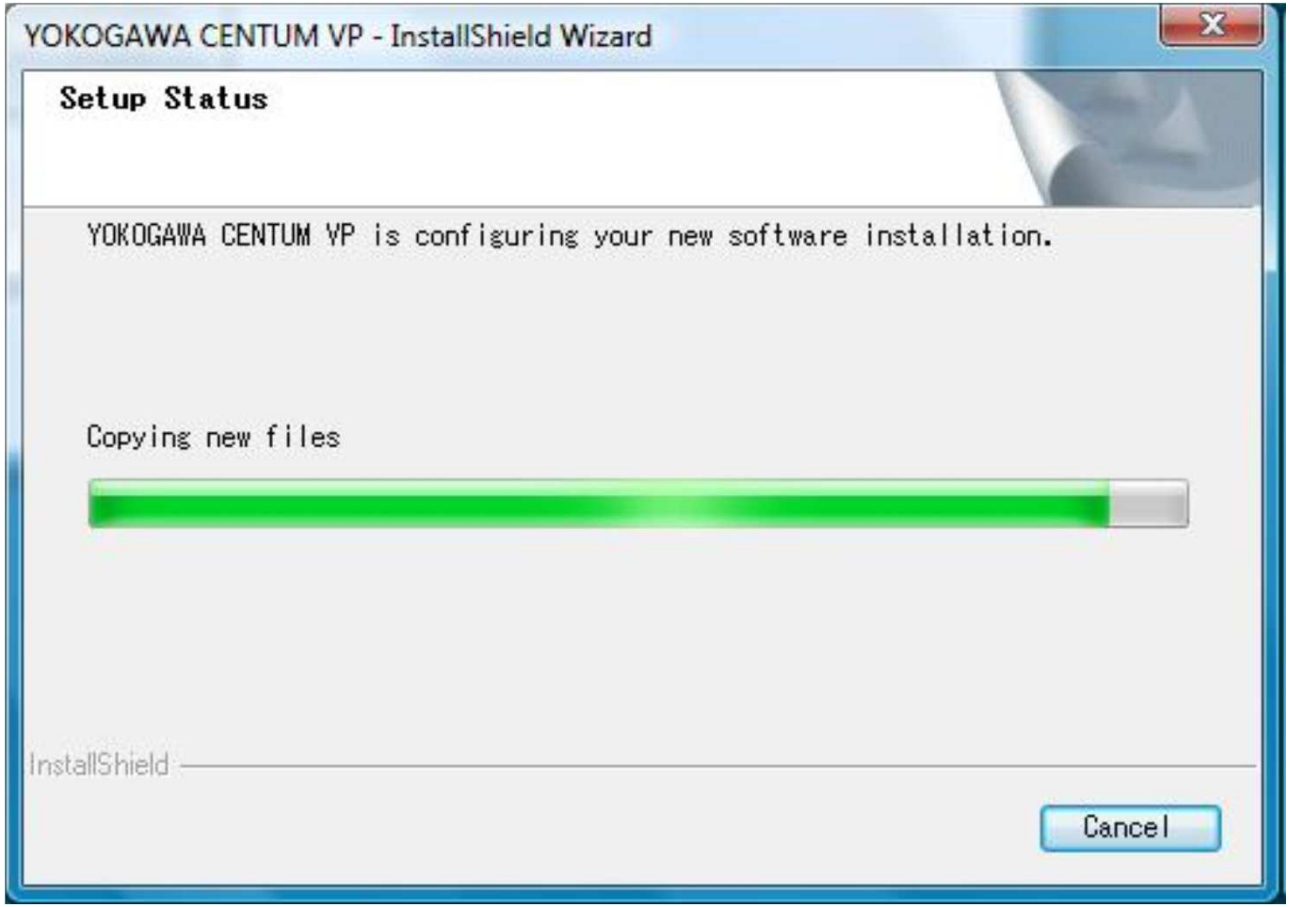
Installation Centum VP Software

17. Start Copying Files dialog box showing User Information, ID number, Package List appears for you to confirm the settings before copying files. Confirm them and click [Next]. Installation starts.



Installation Centum VP Software

CENTUM VP software is installed. Installation progress bar appears.



Installation Centum VP Software

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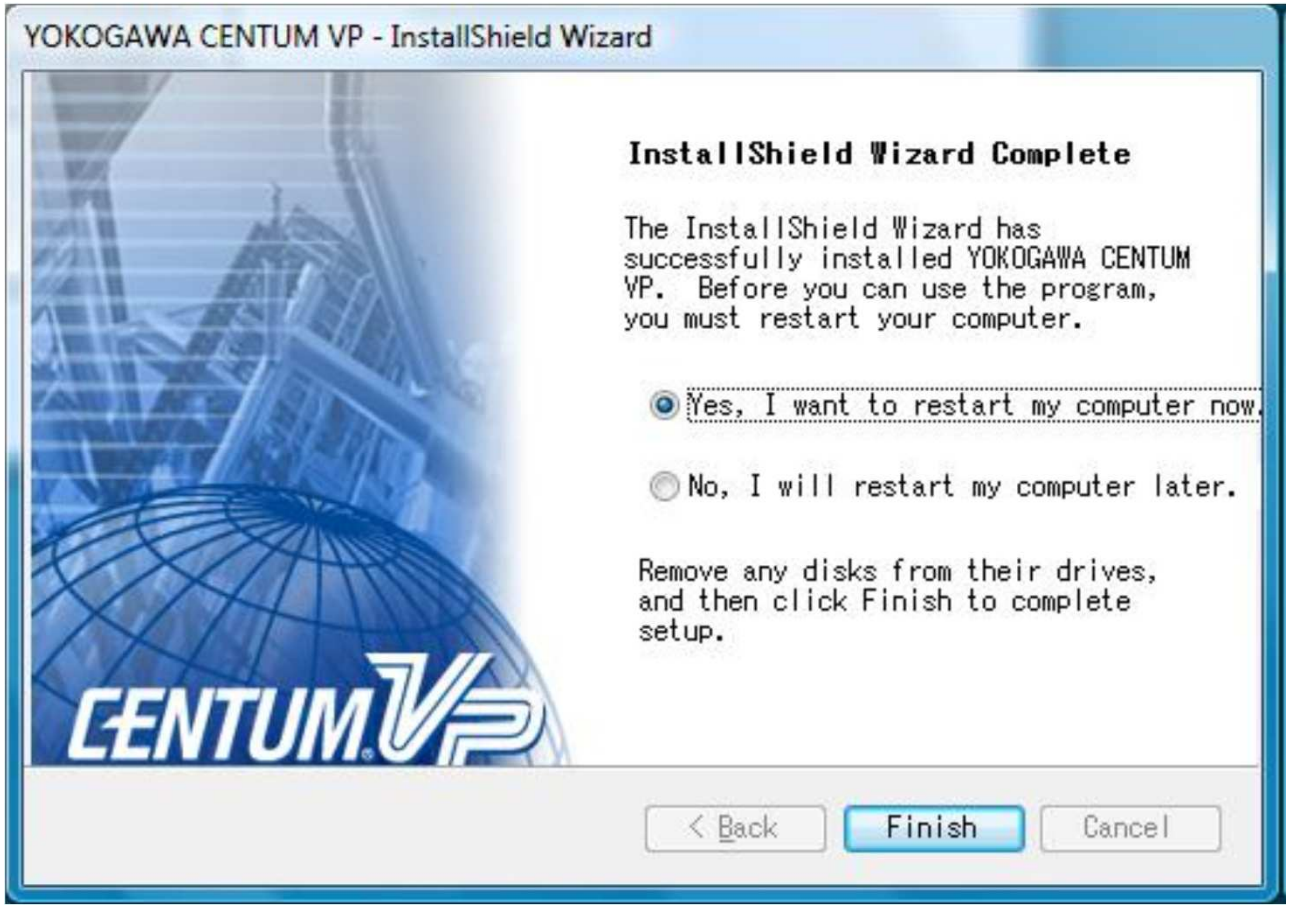
18. When the installation completes, the InstallShield Wizard Complete dialog box appears. Click [Yes, I want to restart my computer now.] and Click [Finish]. Installation completes.



CENTUM VP

IT Security Settings

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After installing the CENTUM VP software, the strengthened security settings need to be defined for the PC.
CENTUM VP IT securities can be defined on Security Setting Utility that can be started by clicking [Setting Security] on CENTUM VP installation menu.
The security settings can be automatically defined by simply following the guidance.

Security Setting Utility

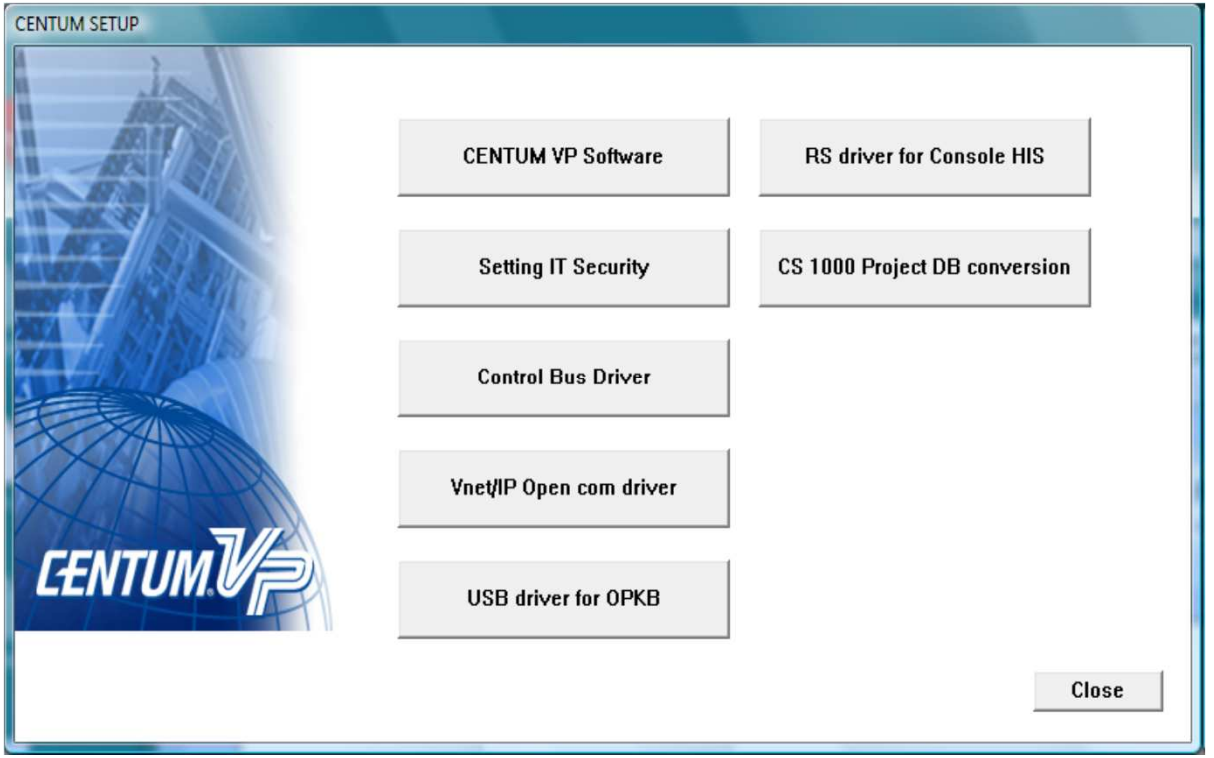
Security Setting Utility is used for setting the IT security of PC components in which the CENTUM VP software is installed.

CENTUM VP

Using Security Setting Utility

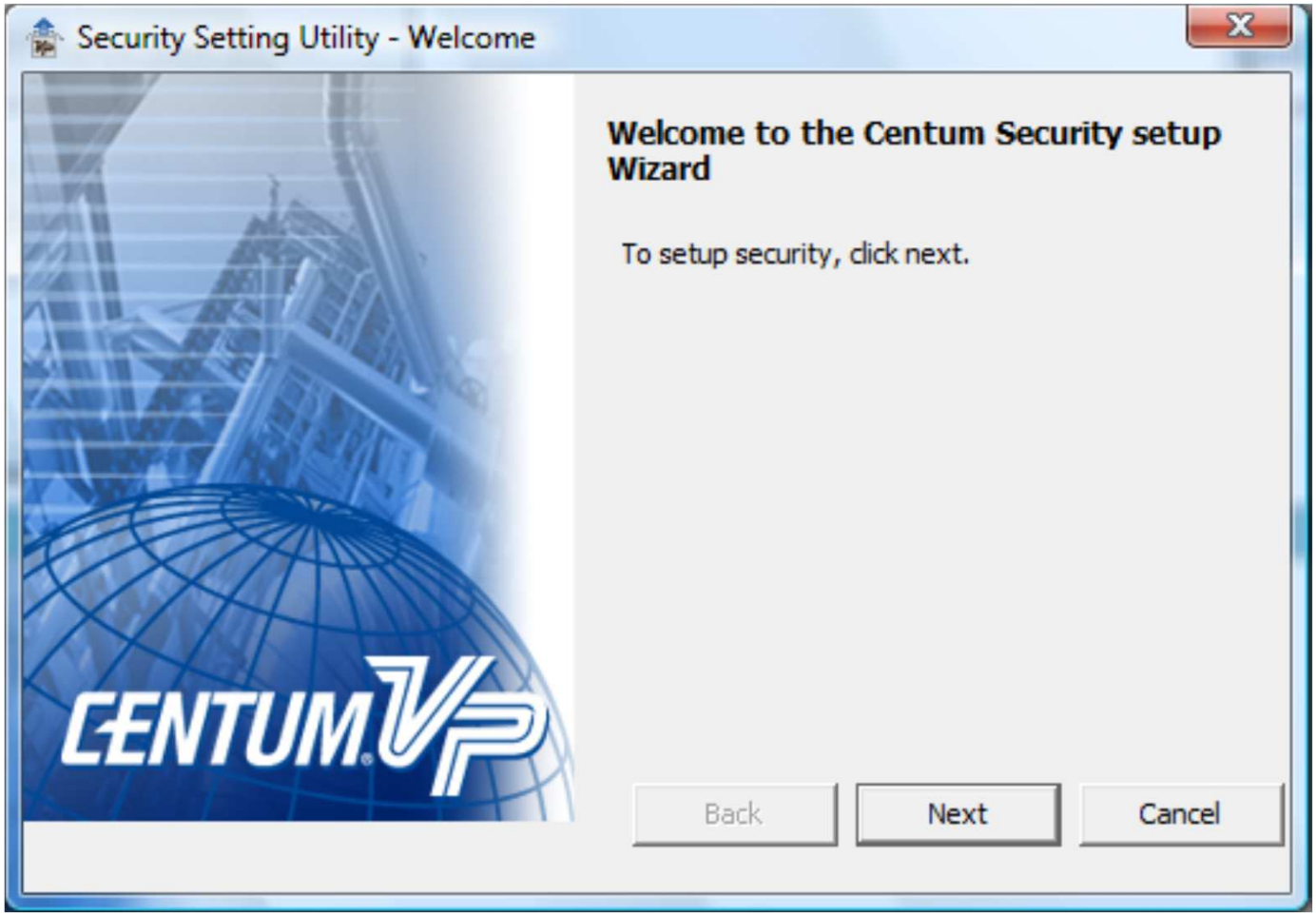
The Security Setting Utility can be started by clicking [Setting IT Security] in the CENTUM VP installer menu.

1. Insert the CENTUM VP software medium into the DVD drive.
2. Click [Setting IT Security] button to start IT security setting.



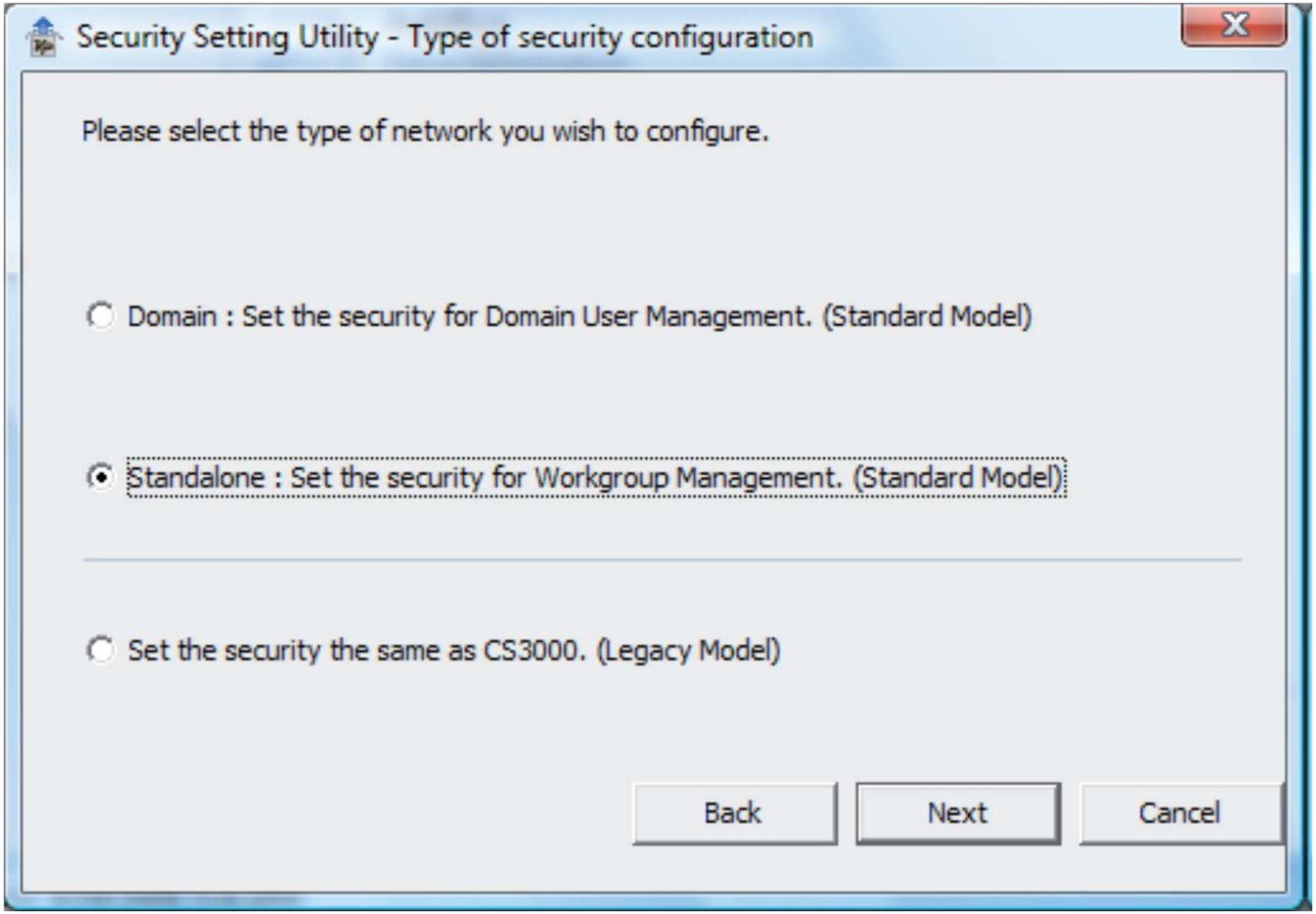
IT Security Settings

3. When Security Setting Utility starts, click [Next] to continue.



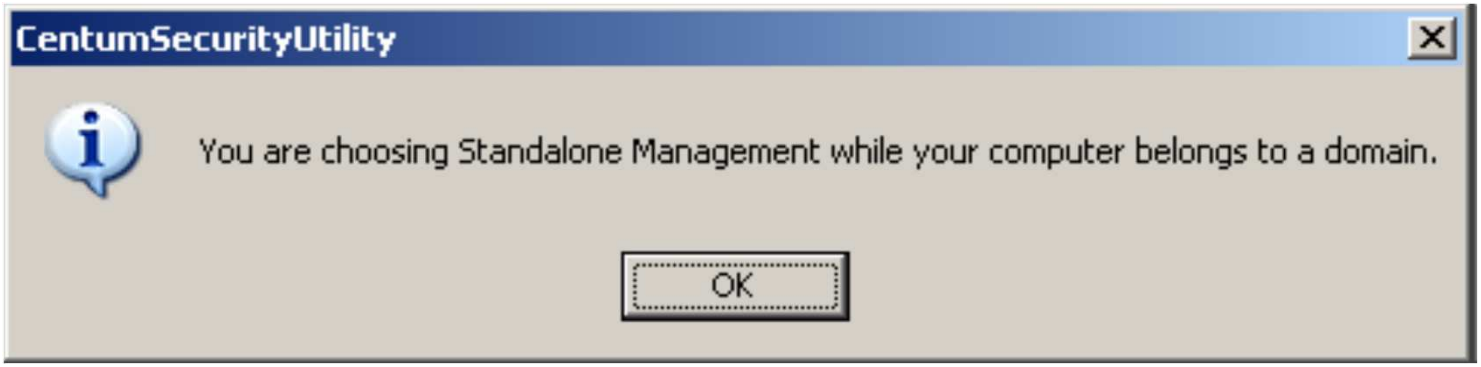
IT Security Settings

4. The dialog box for selecting the security type will be displayed.
After selecting a security type appropriate for your application,
and then click [Next] to continue.



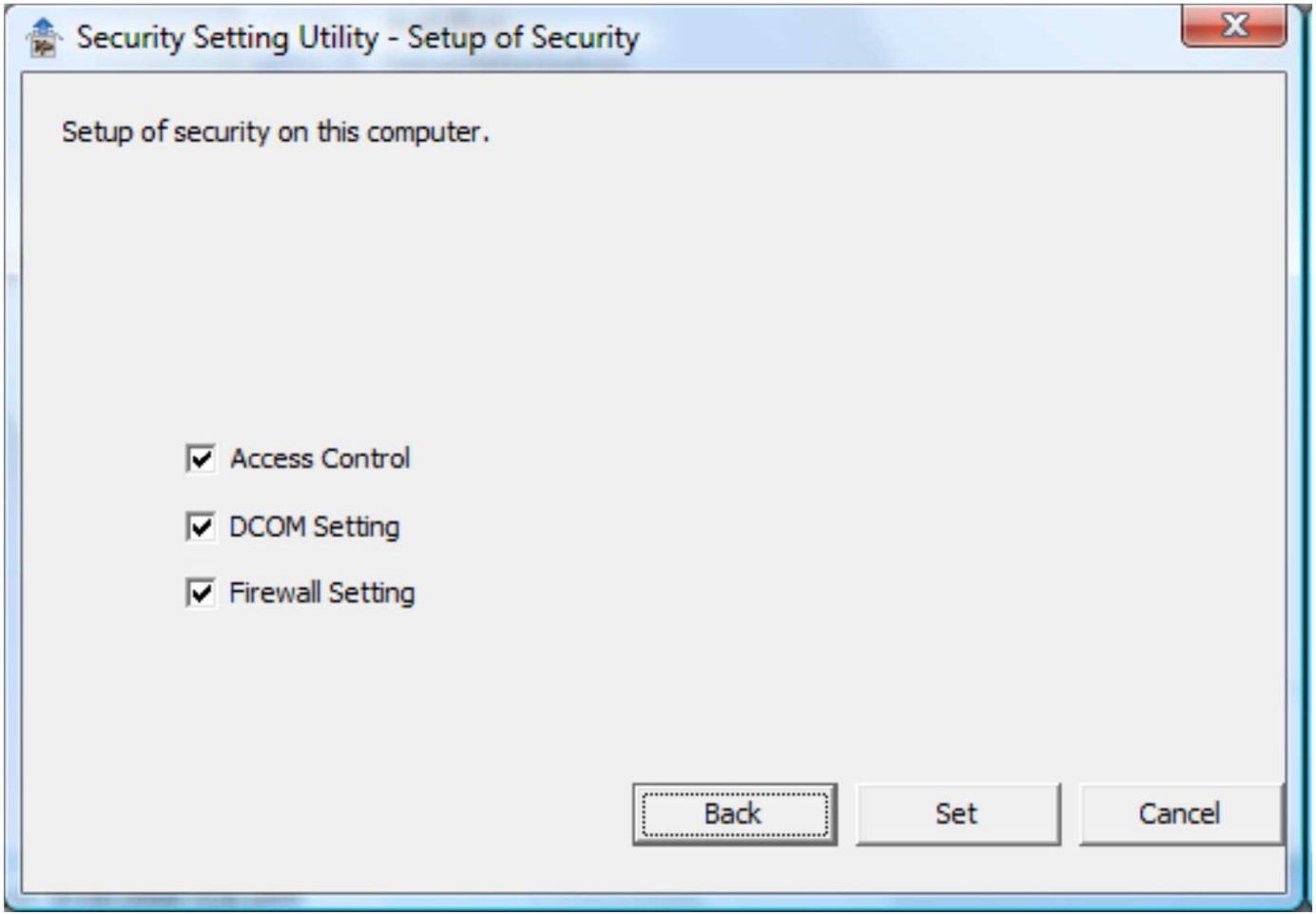
IT Security Settings

5. If you select [Standalone: Set the security for Workgroup Management. (Standard Model)] on the PC that belongs to a Windows domain, the following dialog box is displayed. Click [OK] to continue.



IT Security Settings

6. Three categories of security settings are shown.
You can choose the security settings only for what you need on this PC. However,
it is recommended to choose all the items.Click [Set] button to execute the security setting.



Creation of User account

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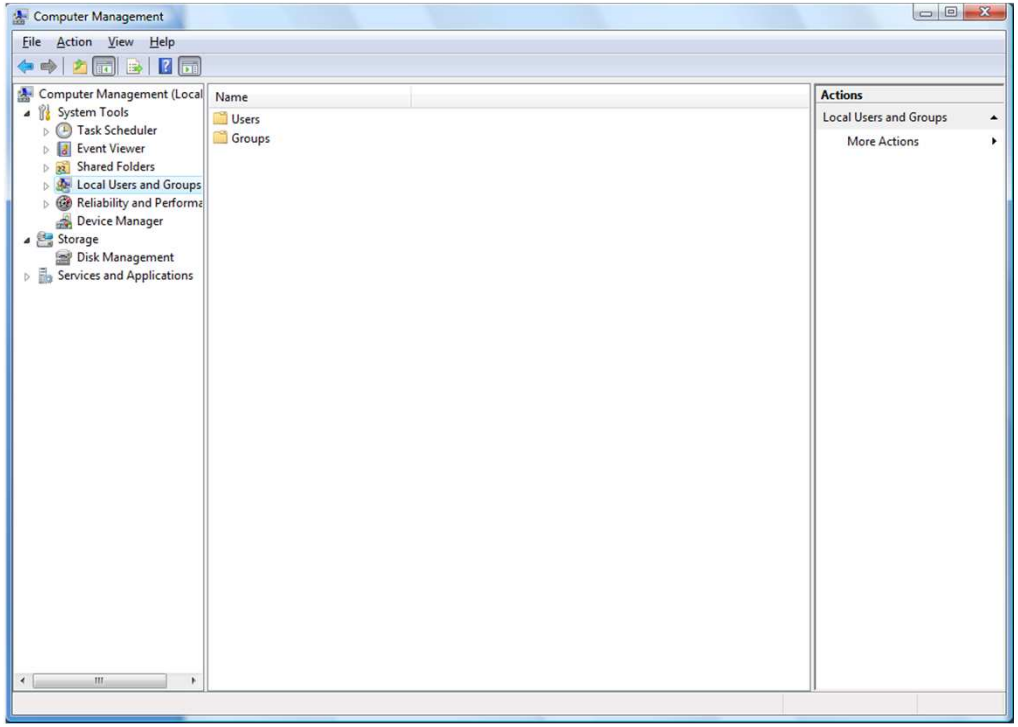
By the IT Setting Security, the Access permission to the data or program installed in CENTUM VP and the Access permission to the project database will be limited by the account or the group.

The procedure for creating user accounts on the PC is as follows:

1. Logon as an administrative user.
2. From Start menu, choose [Control Panel]-[Administrative Tools]-[Computer Management] so as to display Computer Management window.

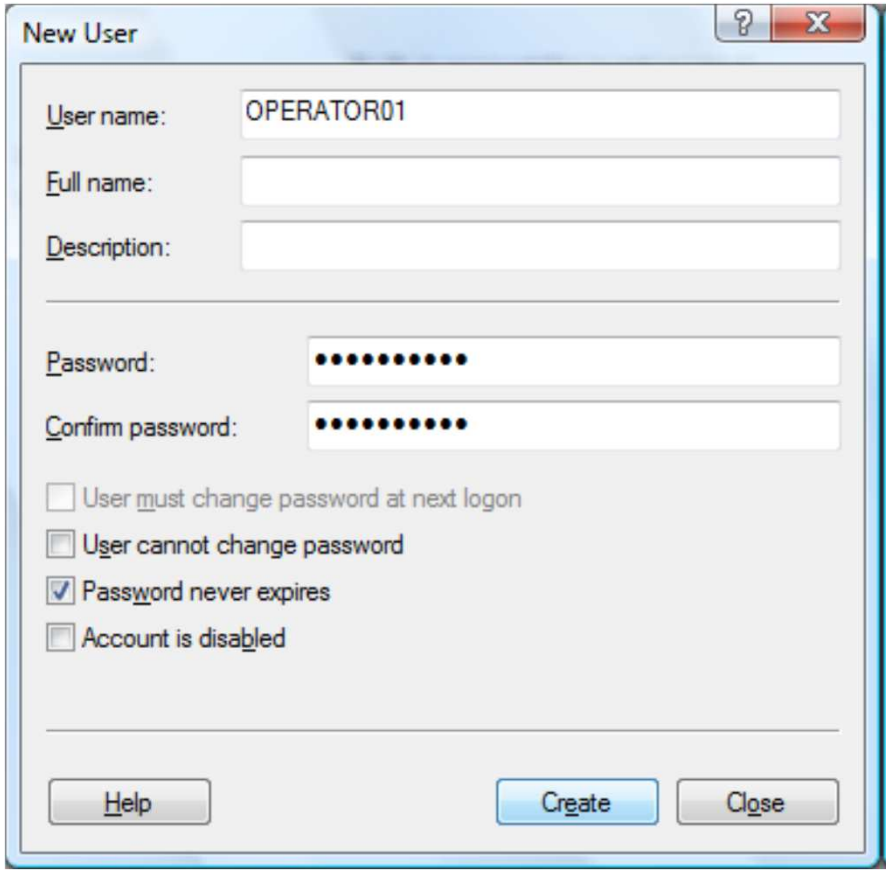


CENTUM VP

Creation of User account

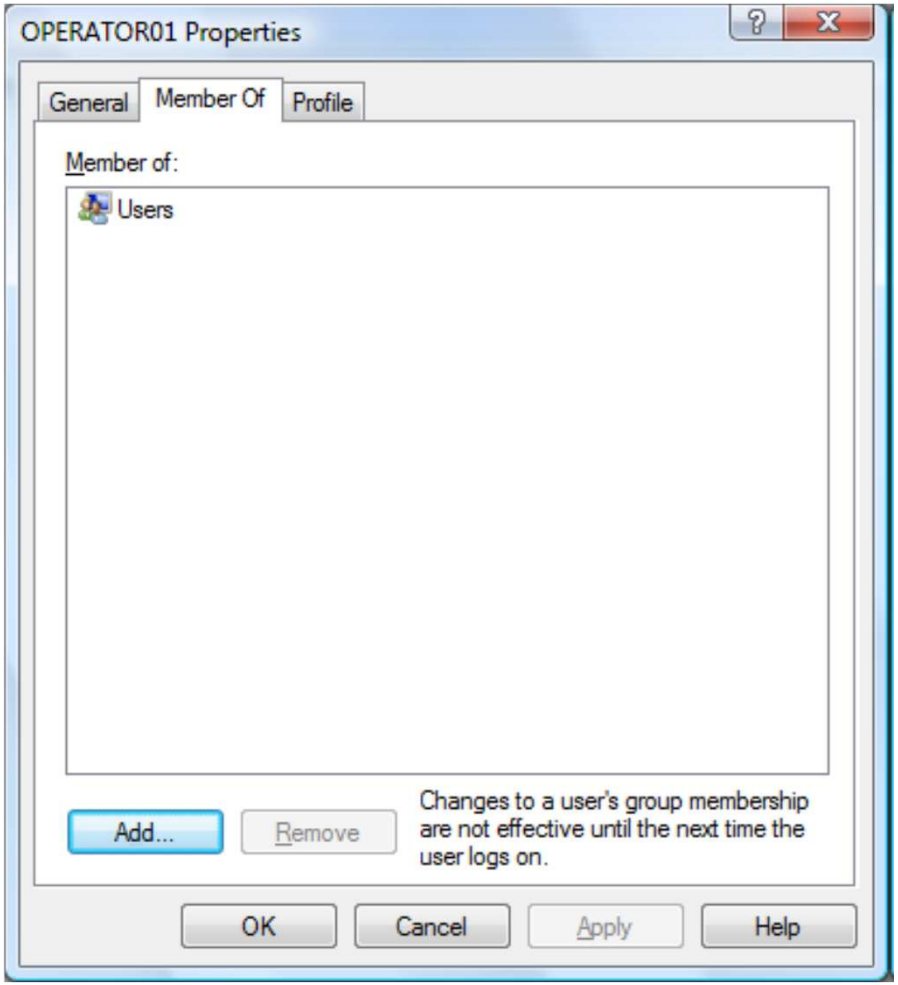
3. Choose [System Tools]-[Local Users and Groups]-[Users].
4. Choose [Action]-[New User] so as to display New User dialog box.

Refer to the following example and add the new user to CTM_OPERATOR group as "OPERATOR01."



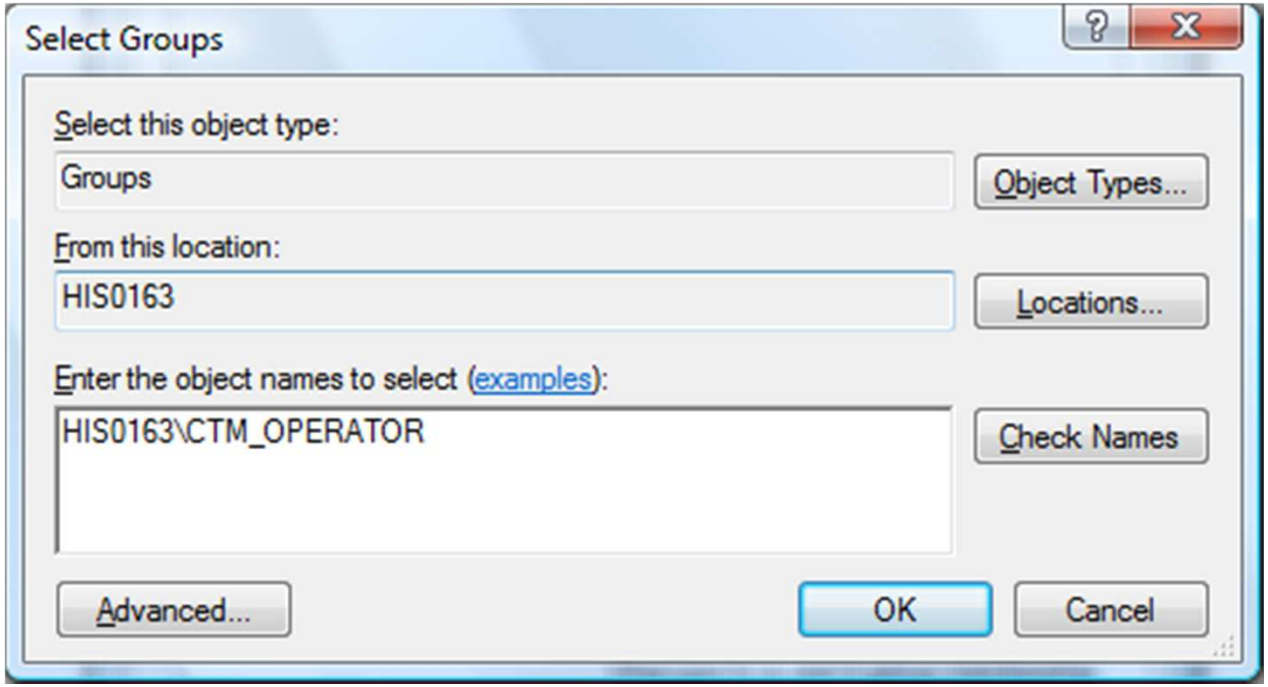
Creation of User account

5. Choose the newly created user and click the [Add] button on [Member of] tab.



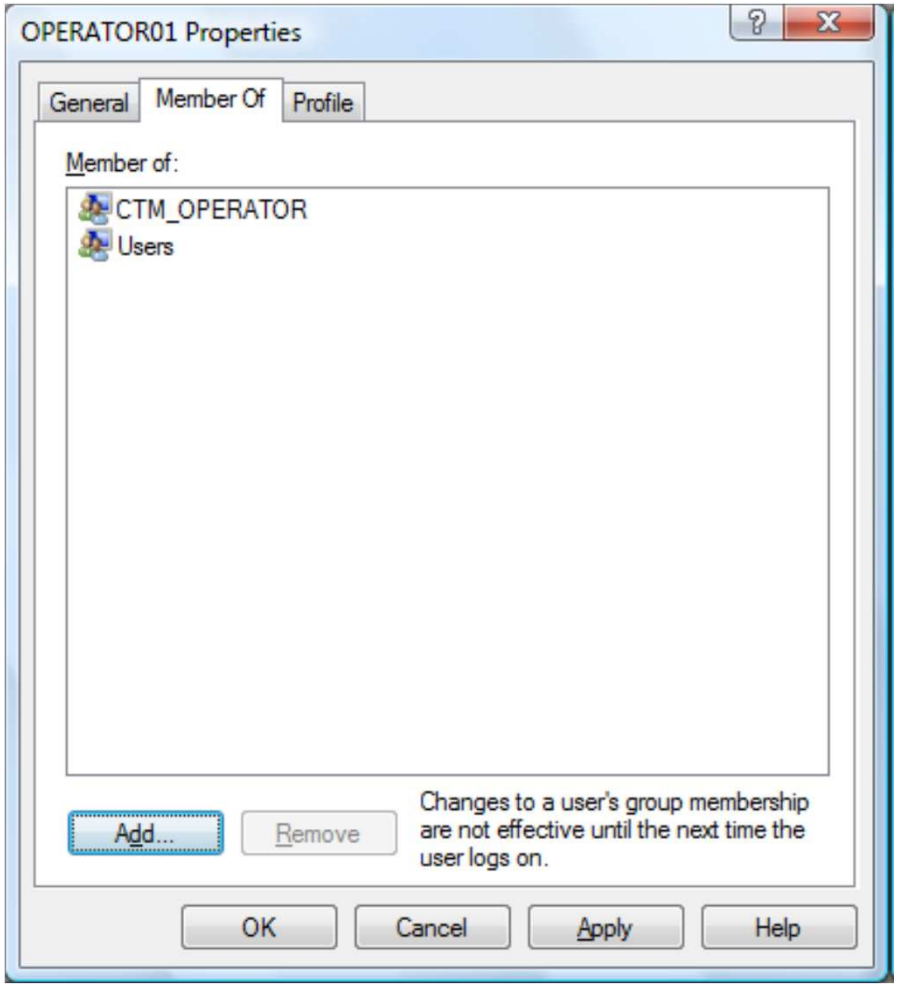
Creation of User account

6. Choose a proper user group for the newly created user.
The users belong to the administrative groups (CTM_MAINTENANCE, CTM_ENGINEER_ADM, CTM_MAINTENANCE_LCL), should also be defined as a member of the Administrators group.



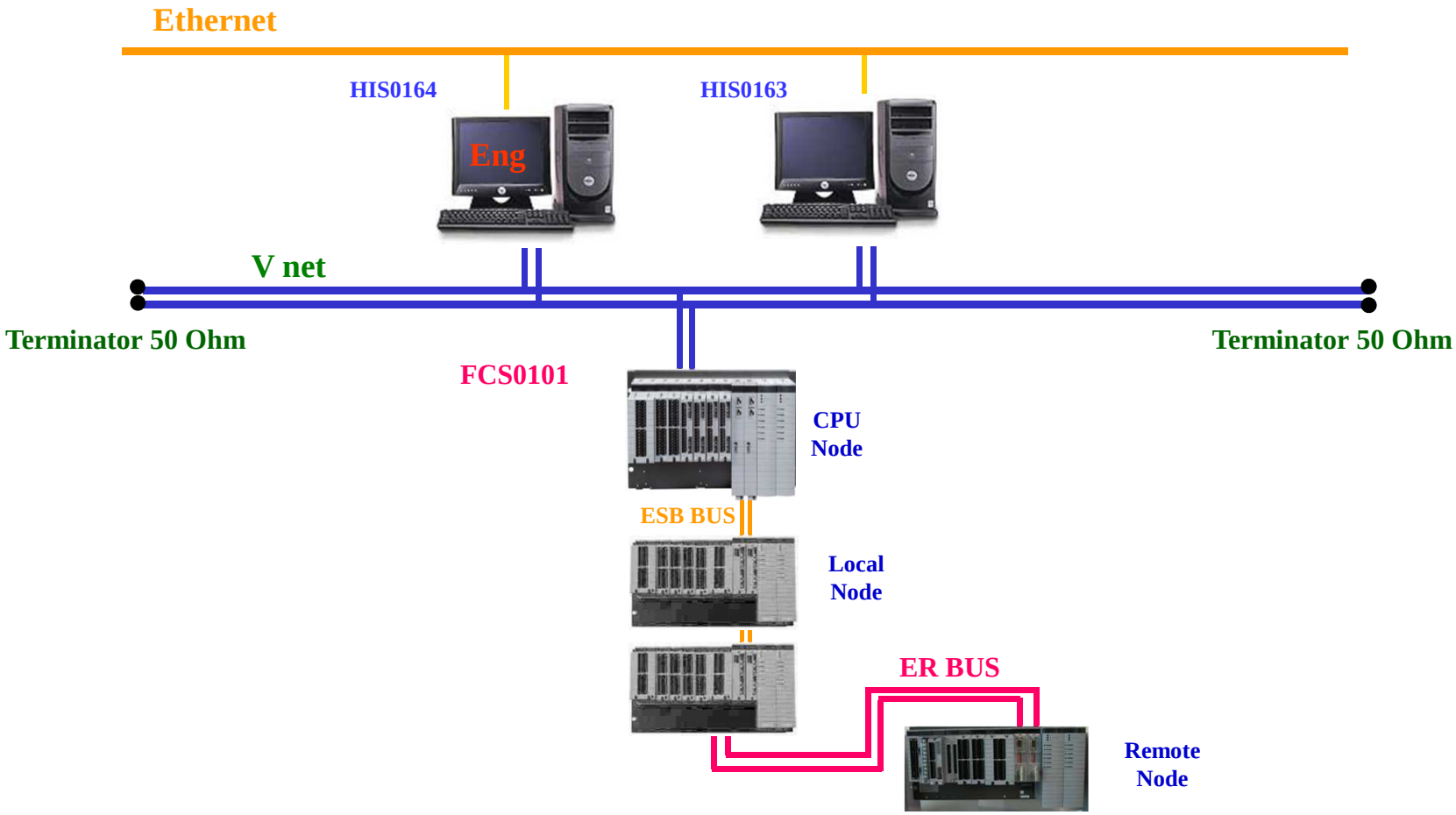
Creation of User account

7. Check if the user is added as a member of the group.



Connection FFCS

Confirm network wiring.



Connection FFCS-L

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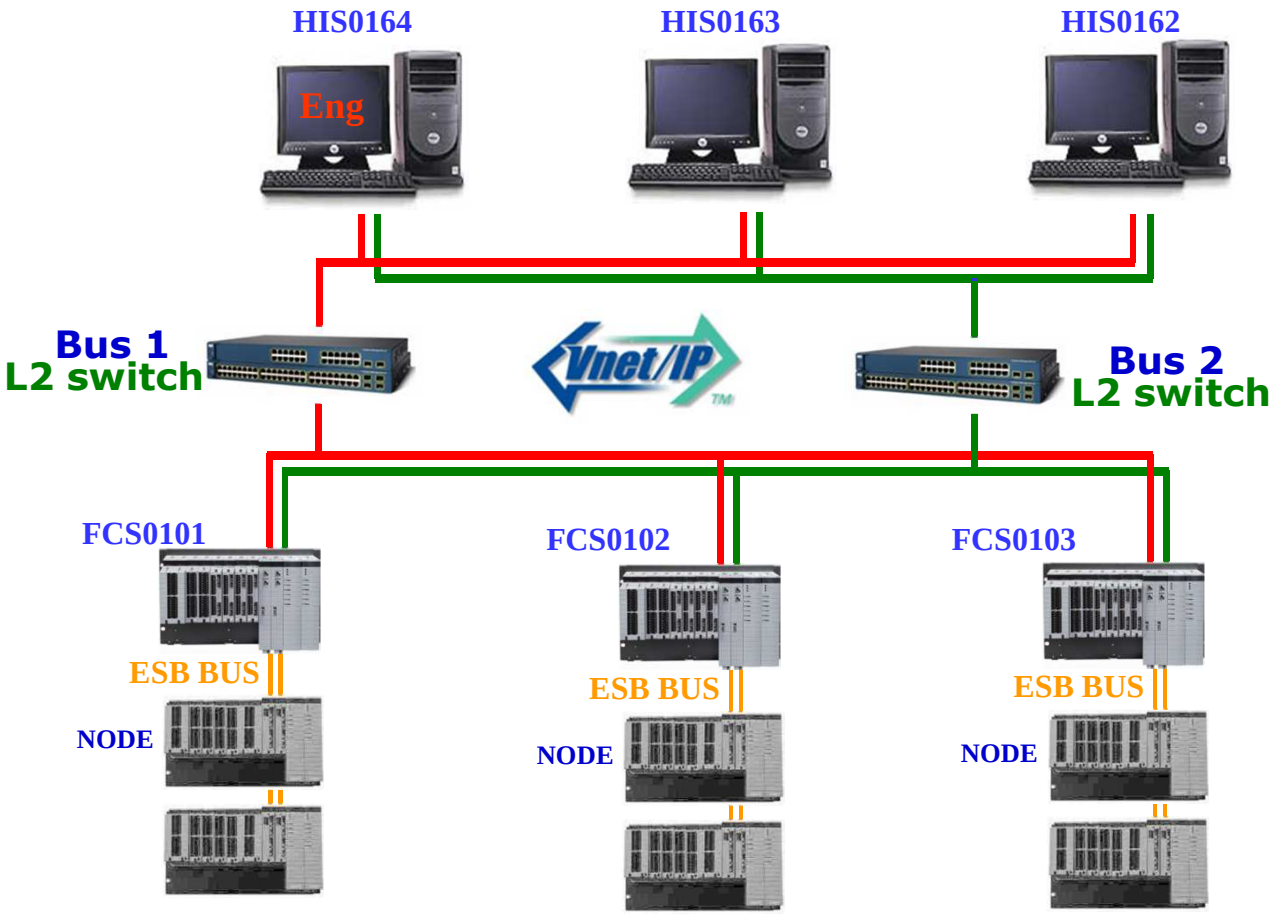
Confirm network wiring.



CENTUM VP

Check Network

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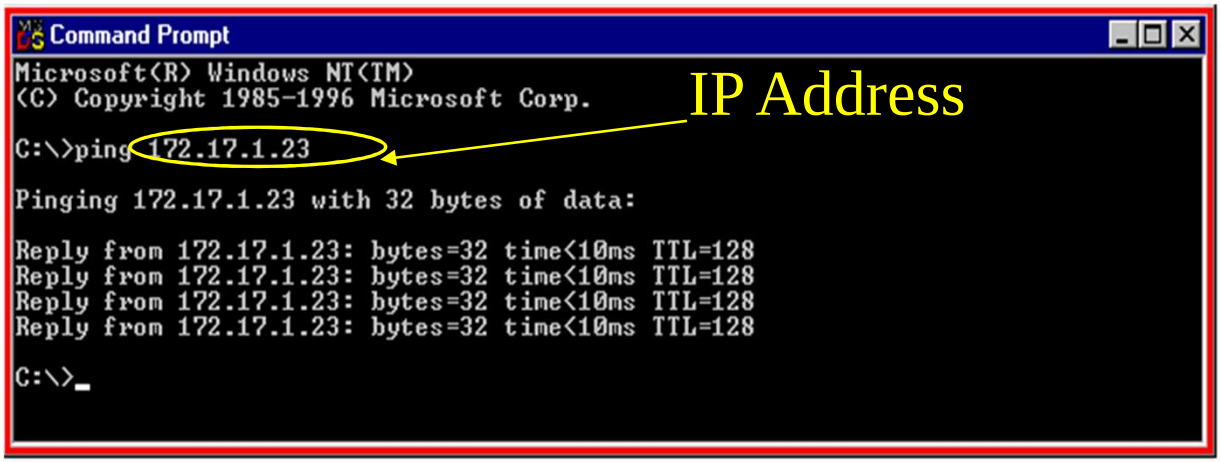
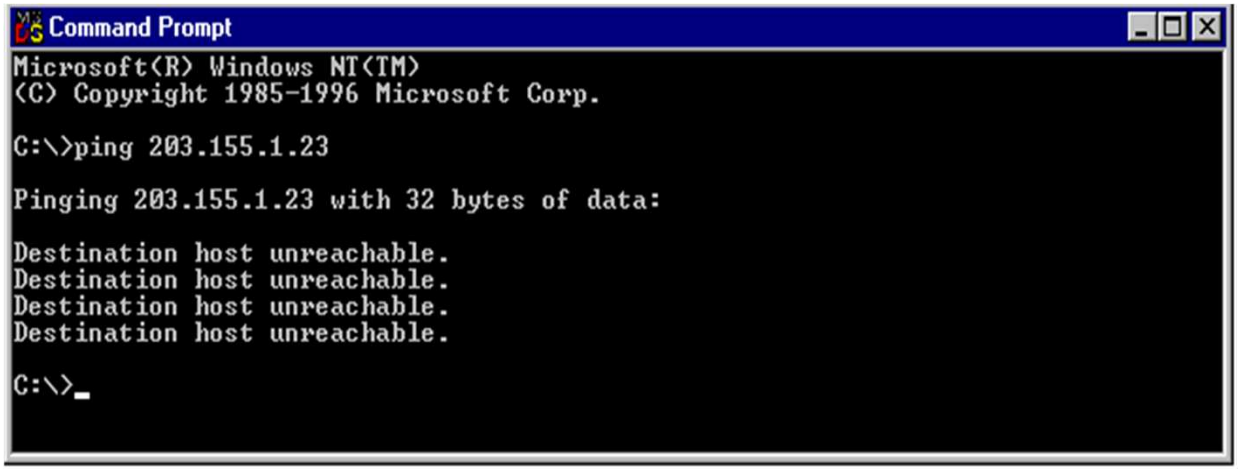
C:\>ping <IP Address>

Successful



Unsuccessful



CENTUM VP

Field Control Station (FCS) IP Address

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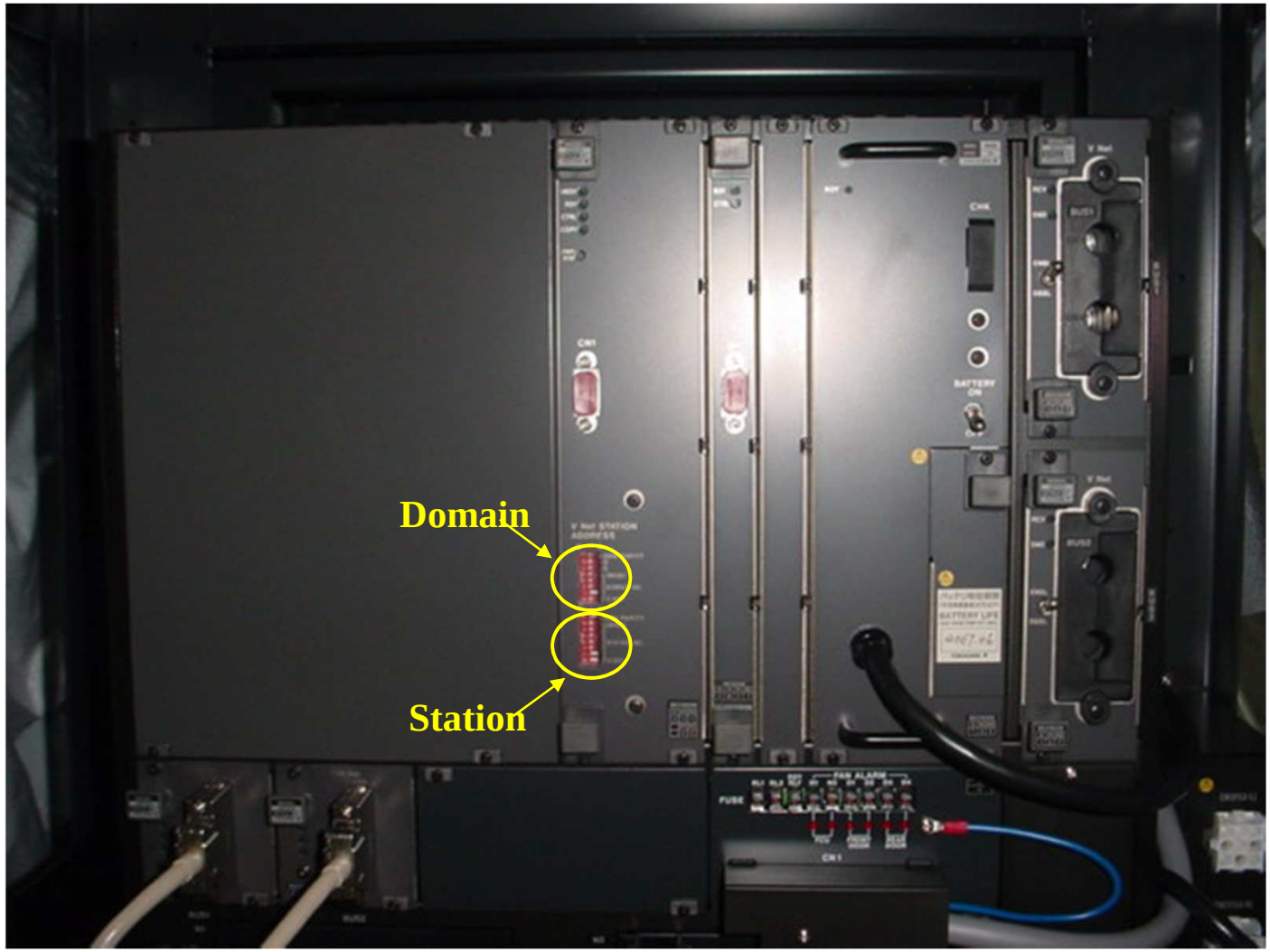
Check Domain and Station before off-line download.



CENTUM VP

Field Control Station (FCS) IP Address

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Check Domain and Station before off-line download.

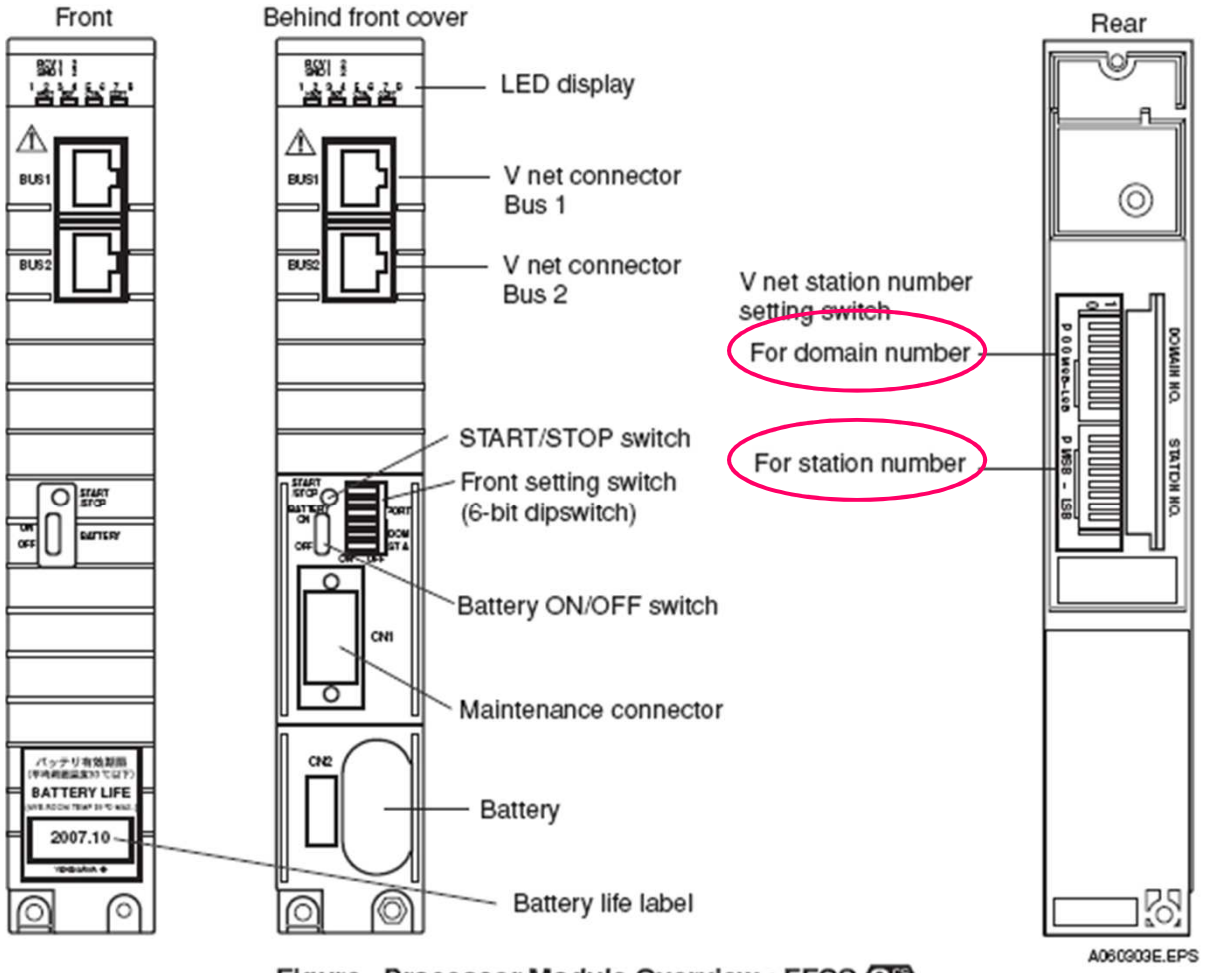
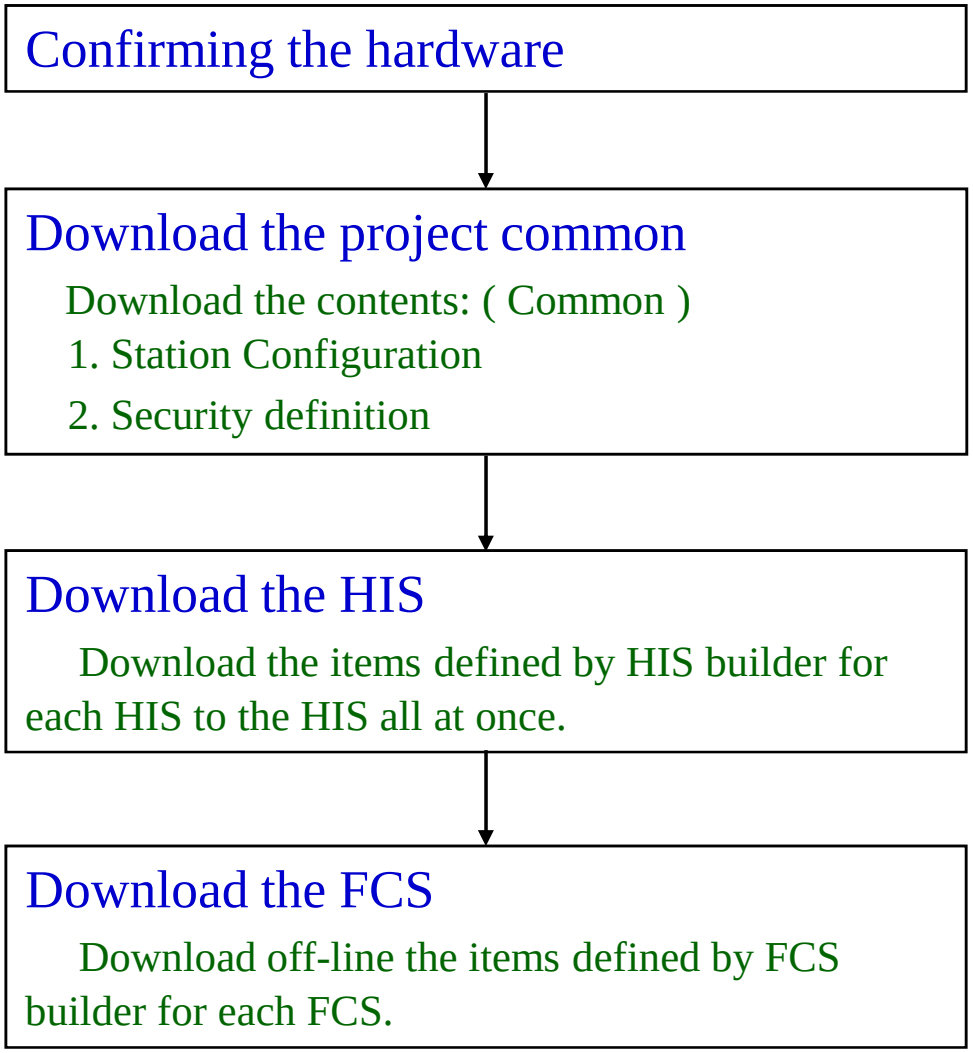


Figure Processor Module Overview : FFCS

CENTUM VP

OFF LINE DOWNLOAD TO FCS



! All function of FCS will be stop.

Laboratory – Windows setup and CS3000 Installation

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1. **Windows setup.**

   - Computer Name and Workgroup

   -Virtual Memory

   - Setup display properties

   - power options

2. **Installation Ethernet driver and set IP address.**

3. **Installation Vnet driver(Control Bus) and se IP address.**

4. **Installation of CentumVP software and electronic manual.**

CENTUM VP

Laboratory – Running project on FCS and downloading to the HISs

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1. **Click Start -> Programs -> YOKOGAWA CENTUM -> Project Attribution Utility.**
2. **Register Training as current project and exit. (Create new project for download)**
3. **Click Start -> Programs -> YOKOGWAWA CENTUM -> HIS Utility.**
4. **Check Activate HIS when you Logon and click OK.**
5. **Log-off the windows and log-in the windows again.**
6. **Start the FCS.**
7. **Login-in as ENGUSER**
8. **Click on Window Call Menu and select Activate System View**
9. **Select FCS0101.**
10. **Click Load -> Download Project Common Section**
11. **Click Load -> Offline Download to FCS -> Download**
12. **Select HIS0164 -> Load -> Download to HIS**
13. **Repeat Step 12 for the rest of the HISs**

CENTUM VP

END OF PRESENTATION

Thank you for your attention

Note…