
**User's
Manual**

**DXA410
DAQOPC
Install Manual**

Foreword

This manual explains the installation procedure of the DAQOPC and the setup parameters. To ensure correct use, please read this manual thoroughly before beginning operation. After reading the manual, keep it in a convenient location for quick reference whenever a question arises during operation.

For information on the functions and operating procedures of DAQOPC, refer to the DXA410 OPC Server DAQOPC User's Manual (IM04L01B03-61E).

Notes

- The contents of this manual are subject to change without prior notice as a result of continuing improvements to the instrument's performance and functions. The figures given in this manual may differ from the actual screen.
- Every effort has been made in the preparation of this manual to ensure the accuracy of its contents. However, should you have any questions or find any errors, please contact your nearest YOKOGAWA dealer as listed on the back cover of this manual.
- Copying or reproducing all or any part of the contents of this manual without the permission of Yokogawa Electric Corporation is strictly prohibited.

Trademarks

- All the brands or names of Yokogawa Electric's products used in this manual are either trademarks or registered trademarks of Yokogawa Electric Corporation.
- Microsoft, MS-DOS, Windows, and Windows 2000 are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Adobe and Adobe Acrobat are trademarks of Adobe Systems Incorporated (Adobe Systems).
- Other company and product names are trademarks or registered trademarks of their respective companies.
- For purposes of this manual, the ™ and ® symbols do not accompany their respective trademark names or registered trademark names.

Revisions

1st Edition	November 2000
2nd Edition	September 2001
3rd Edition	May 2002
4th Edition	November 2002
5th Edition	October 2005

Notes on Using This Product

Storing the CD

Please store the original CD in a safe place. During the actual operation, use the software that is installed on the hard disk.

Note

There is no printed user's manual that explains the operations of this product. Please use the electronic data that is on the CD.

Agreement

Restriction on Use

Use of this product (this utility software and manual) by more than one computer at the same time is prohibited. Use by more than one user is also prohibited.

Transfer and Lending

Transfer or lending of this product to any third party is prohibited.

Guarantee

Should a physical deficiency be found on the original CD or this manual upon opening the product package, please promptly inform Yokogawa. The claim must be made within seven days from the date you received the product in order to receive a replacement free of charge.

Exemption from Responsibility

Yokogawa Electric Corporation provides no guarantees other than for physical deficiencies found on the original CD or this manual upon opening the product package. Yokogawa Electric Corporation shall not be held responsible by any party for any losses or damage, direct or indirect, caused by the use or any unpredictable defect of the product.

Copyright

YOKOGAWA holds the copyright to the software that is on the CD.

Contents

	Notes on Using This Product	ii
1	Before Installation	1
	Things to Prepare	1
	Hardware Preparation	1
	Precautions to Be Taken before Installation	1
2	Flow of Installation Procedure	2
3	Windows Setup Procedure	3
	Convert FAT Format into NTFS Format	3
	Virtual Memory Paging File Size	4
	Cautions when Installing in Windows XP Environment	5
	Setting Items after Installing Windows XP	17
	Installing Specifically Required Software (Windows 2000 SP3)	19
	Setting Items after Installing Windows 2000	20
	When Using Windows 2000 Server	20
4	Installing the DAQOPC	21
	Before Installing the DAQOPC	21
	Installation Procedures of the DAQOPC	21
	DAQOPC Upgrades	21
5	Precautions to Be Taken When Reinstalling or Installing Additional Software	22
6	Precautions to Be Taken When Using UPS	23
7	Configuring the Windows Display Properties	24

1 Before Installation

Things to Prepare

Have the DAQOPC CD ready.

Hardware Preparation

The memory and hard disk space that are required for the installation of the DAQOPC are as follows:

Paging file size of the virtual memory

Set the size of the virtual memory so that the main memory and virtual memory together comprise 400 MB or more.

Free Disk Space

A free disk space of at least 1 GB must be available in the destination drive to install the DAQOPC.

Precautions to Be Taken before Installation

Do not install YOKOGAWA's Exaopc and DAQOPC in the same PC.

If installing DAQOPC on a PC in which DAQOPC OPC server for DARWIN series has already been installed, install the server in the same folder as the existing DAQOPC. Also, if installing the DAQOPC R3.01, set the DAQOPC OPC server for DARWIN series installed in the same folder to R3.01 or later. Otherwise, operation of the DAQOPC OPC server for DARWIN series and DAQOPC are not guaranteed.

2 Flow of Installation Procedure

Install the DAQOPC in the following fashion.

Operation Requirement

- Make sure to install an Ethernet adapter and TCP/IP when installing Windows NT.
- One of the following service packs must be installed.
 - Windows 2000: Either SP3 or SP4
 - Windows XP Professional: Either SP1 or SP2

Windows settings

Set up Windows before installing DAQOPC. See section 3, "Setting Up Windows."

Installing the DAQOPC

- Install the DAQOPC. See section 4, "Installing the DAQOPC."
- This operation creates a user name "DAQOPCUSER" on Windows. The initial password is "DAQOPCUSER." Password expiration is set to Password Never Expires.

Configuration When Using the DAQOPC via the Network

- This procedure is required when using the OPC function via the network on a PC that does not have the DAQOPC installed.
- To use the OPC function on a client machine, carry out the following procedure on the machine that has OPC server installed (server machine) and the client machine.
 1. Insert a formatted floppy disk into the floppy drive of the server machine.
 2. From a file management program such as Explorer, execute *installed* `folde\Program\ZOPMKEXAFDC.exe`.
 3. Click **OK**. A client setup disk is created.
 4. Log on to the client machine using a user name belonging to the Administrator group and insert the client setup disk into the floppy drive.
 5. Execute setup.exe in the client setup disk. A user account is created.

If you reboot Windows, the DAQOPC functions become available.

3 Windows Setup Procedure

The configuration after Windows and its Service Pack installation is described in this Chapter.

Convert FAT Format into NTFS Format

If the partition is in FAT format, it is necessary to convert the partition into NTFS format. The disk partition format can be confirmed as follows.

1. On Windows Explorer right click the local disk icon, then open the properties sheet of the disk.

If the file system of the partition is FAT, (confirmed on the properties sheet,) do the following.

2. Choose **Start > Program > Accessory > Command Prompt** of windows to open the command prompt window.

3. Type in the following command scripts:

```
CONVERT <Drive>: /FS:NTFS
```

Example:

```
CONVERT C:/FS:NTFS
```

Then the process to convert the partition from FAT to NTFS starts.

If the following message displays, enter **Y** to restart the PC.

“Convert cannot gain exclusive access to the <Drive>: drive, so it can not convert it now. Would you like to schedule it to be converted the next time the system restarts (Y/N)?”

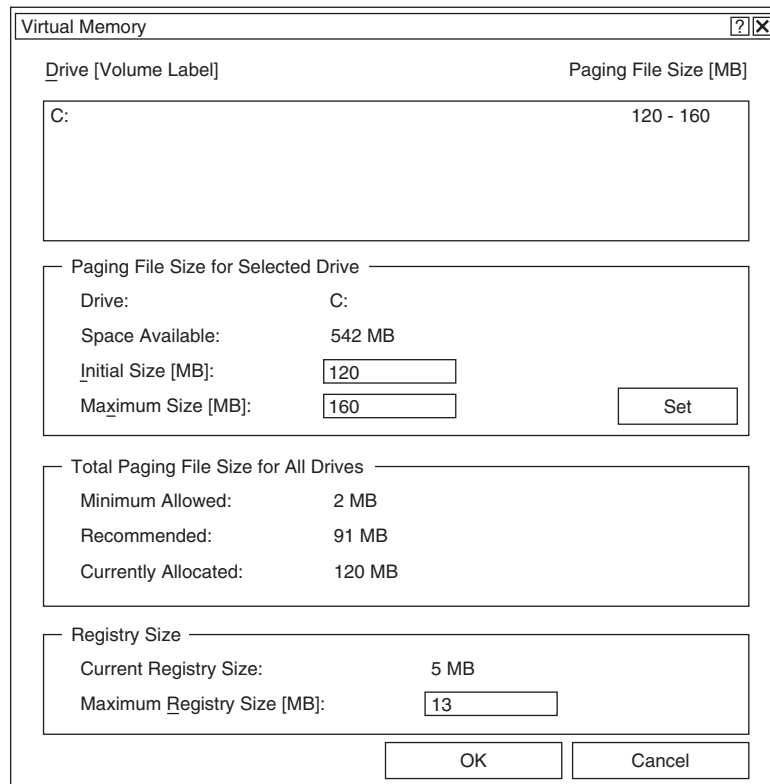
Virtual Memory Paging File Size

The virtual memory size should be at least 400 MB if the System Builders are used.

1. Log on as the administrator.
2. Set the virtual memory size opening **System > Performance** menus from the control panel.
3. Click "Change."

In case of Windows XP, click Settings button in Performance frame on the Advanced tab after clicking **System** icon in Control Panel, so as to open Performance Options.. dialog box. Then click Change button in Virtual Memory frame in the Advanced tab.

Virtual Memory dialog is displayed.



4. Input "Initial Size" and "Maximum Size" each other as a same value, click "Set."
If there is not space in the Windows start drive, use another drive so that the total size will be least 400 MB.
5. Click "OK" after confirmed setting value.

Cautions when Installing in Windows XP Environment

Exaopc R3.01 or later operates also on Windows XP.

To ensure the Exaopc to run properly in Windows XP environment, a certain setting items and other items need to be cautioned during installation.

- **User Name**

When starting the Windows XP pre-installed PC for the first time, or when installing the Windows XP to a PC, a dialog box prompting for entering a user name displays. In this case, a user name other than DAQOPCUSER and CENTUM should be entered. When DAQOPC has been installed, user names "DAQOPCUSER" are automatically created. If the user name is mistakenly set as DAQOPC needs to be installed again after deleting this DAQOPCUSER user account.

- **Administrator Password**

When starting the Windows XP pre-installed PC for the first time, it may prompt for entering the administrator password. In this case, a password for the administrator must be confirmed and entered. If the password for the administrator is omitted, various administration hindrances may occur such as part of software packages may not be correctly installed or operation log may not be properly saved.

- **Windows XP Service Pack 2**

When using Windows XP Service Pack 2 on the PC that a firewall is to be installed, the setting of firewall must be set to "Disable."

If Firewall settings are active, access from remote clients is disabled. To solve this problem, do the following changes:

Procedure 1: Turn off Windows firewall

Procedure 2: Change DCOM Configuration

Procedure 3: Change local security settings

To do the above changes, the Administrator privilege is required.

If the remote client is Windows XP Service Pack 2, the identical settings are required even on the remote client side.

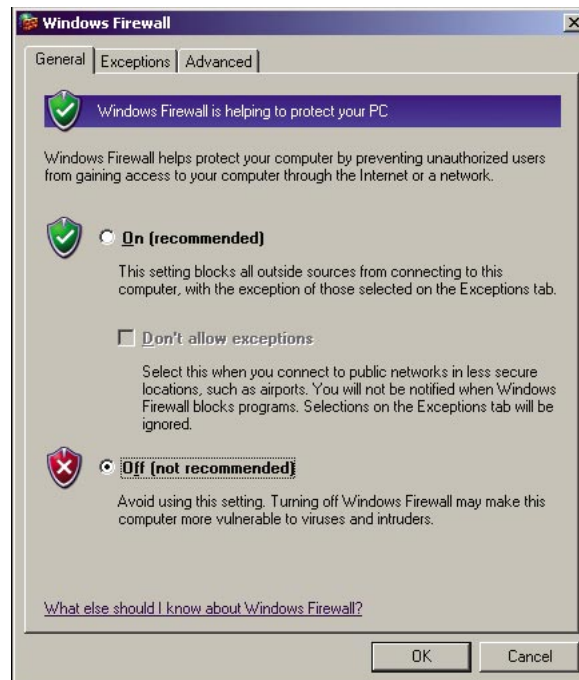
Procedure 1 Turn off Windows firewall

The following procedure can turn off Windows firewall.

1. Click **Security Center** from **Control Panel** so as to open Security Center window.



2. Click **Windows Firewall** so as to open Windows firewall dialog box.
3. Choose **Off (not recommended)** on **General** tab, and then click **OK** button.



Thus, Windows firewall will be turned off.

- When Windows Firewall is turned off, a balloon with warning message will be displayed. Close and ignore the balloon.

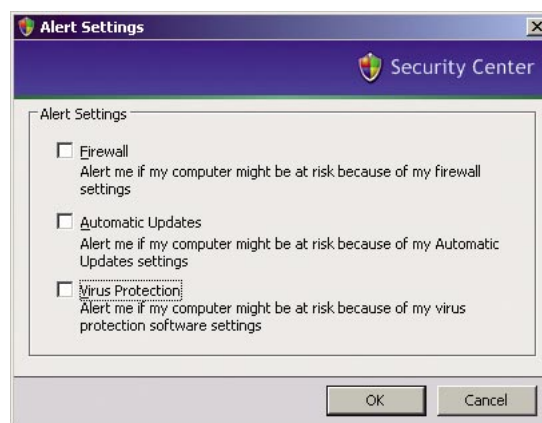
Note

On the balloon, the warning message is titled with "Your computer might be at risk."

Click **Security Center** from **Control Panel** so as to open Windows Security Center.



- Click **Change the way Security Center alerts me** on the left pane of Windows Security Center so as to open **Alert Settings** dialog box. All the options on this dialog box should be unchecked.



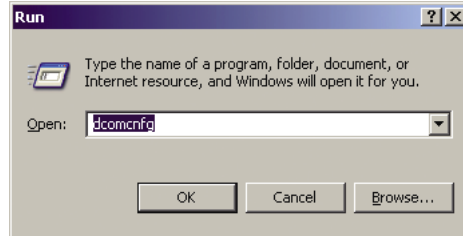
- Click **OK** button. The balloons with warning messages will be deactivated.

3 Windows Setup Procedure

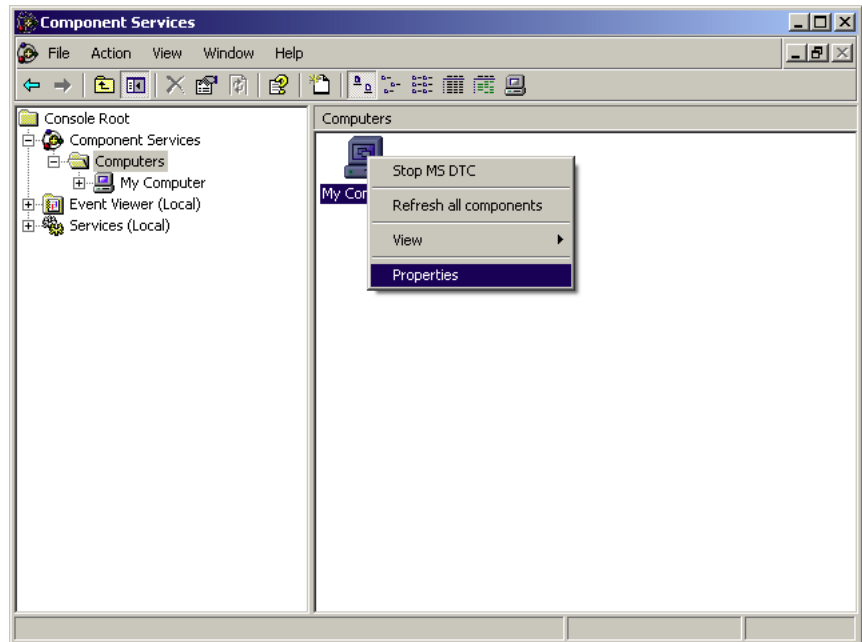
Procedure 2: Change DCOM Configuration

Regarding to DCOM, “Access Permissions” and “Launch and Activation Permissions” need to be configured.

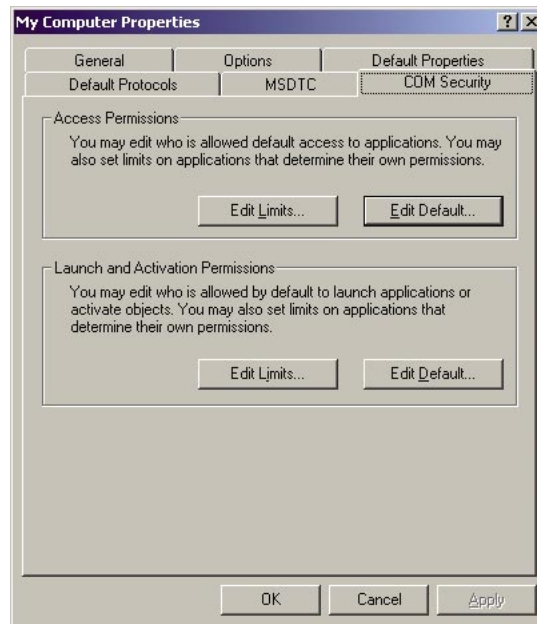
1. Choose **Run** from **Start** menu so as to open run dialog box.
2. Enter “dcomcnfg” in the field next to Open.



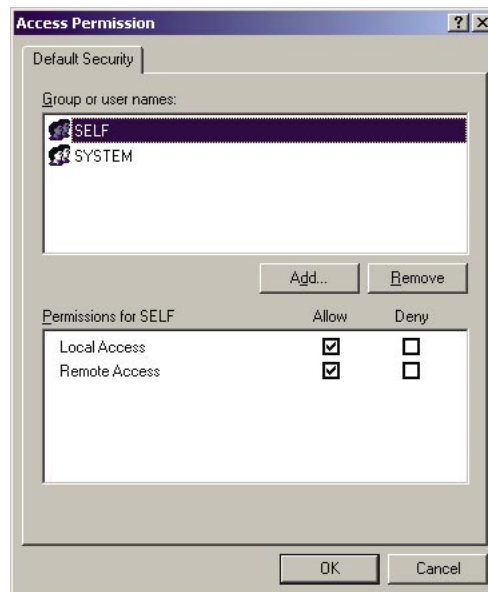
3. Click **OK** and then **Component Services** displays.
4. Choose **Console Root > Component Services > Computers > My Computer** from the tree view in the left pane and then right click the mouse and choose **properties** from the pop-up menu.
My Computer Properties dialog box will be displayed.



5. Edit Default Access Permissions
Open **COM Security** tab on **My Computer Properties** dialog box.

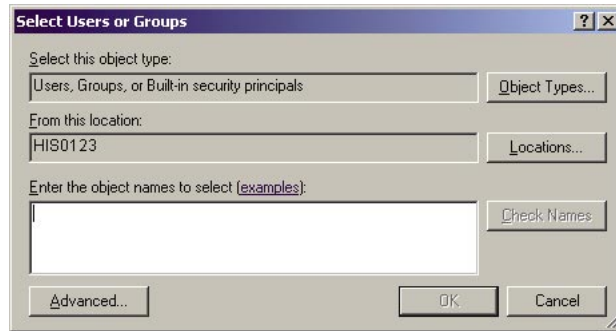


6. Click **Edit Default** button in **Access Permissions** area on **My Computer Properties** dialog box, so as to open **Access Permission** dialog box.

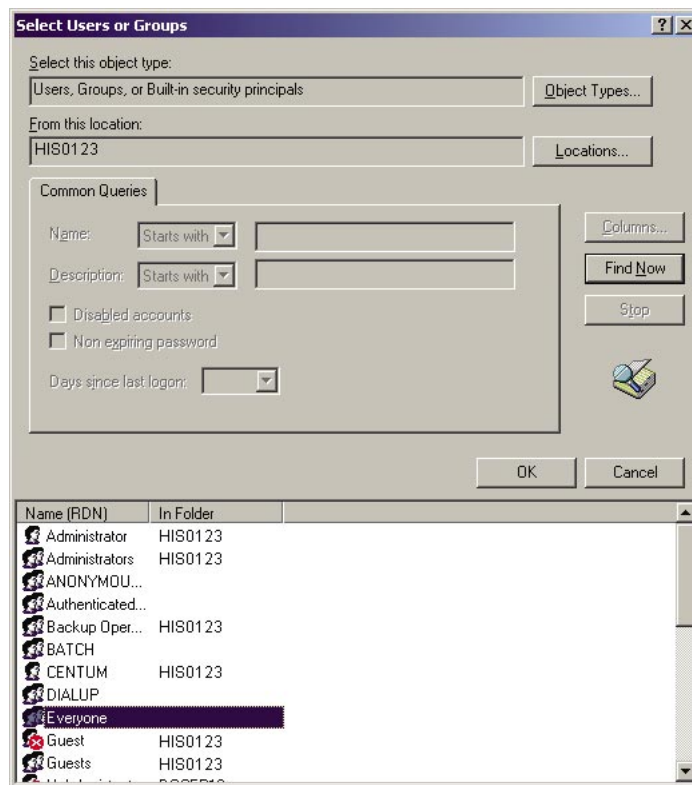


3 Windows Setup Procedure

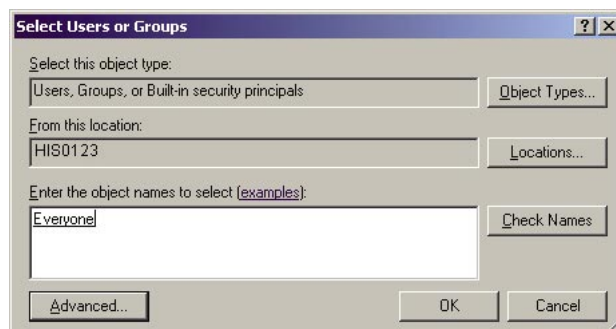
- Click **Add** button to open **Select Users or Groups** dialog box.



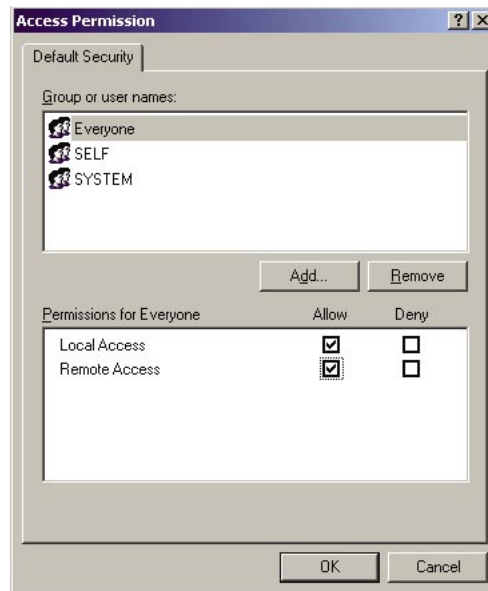
- Click **Advanced** button, **Find Now** button will be displayed on the dialog box.
- Click the **Find Now** button and a list of users and groups will be displayed.
- Choose **Everyone** from the list.



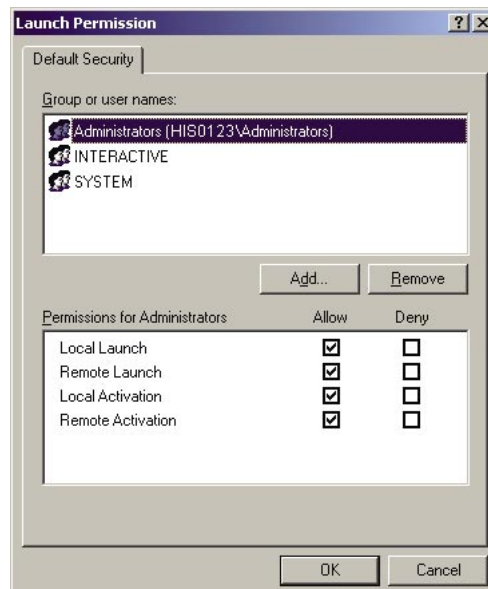
- Click **OK** button to continue.



12. Click the **OK** button. **Everyone** will be added to **Group or user names** of Access Permission dialog box.
13. Choose **Everyone** and check **Allow** for both **Local Access** and **Remote Access**.

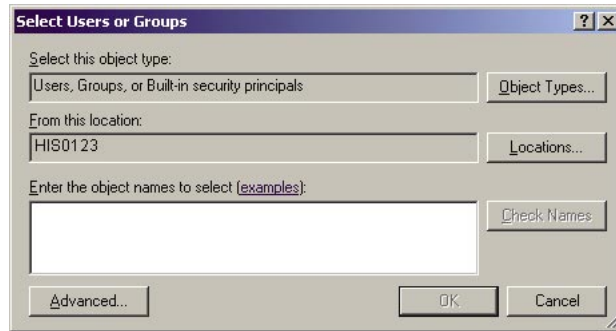


14. Click **OK** button so as to return to **My Computer Properties** dialog box. Thus, editing the default access permissions is completed.
15. Edit Default Launch and Activation Permissions
Click **Edit Default** button in **Launch and Activation Permissions** area on **My Computer Properties** dialog box, so as to open **Launch Permission** dialog box.

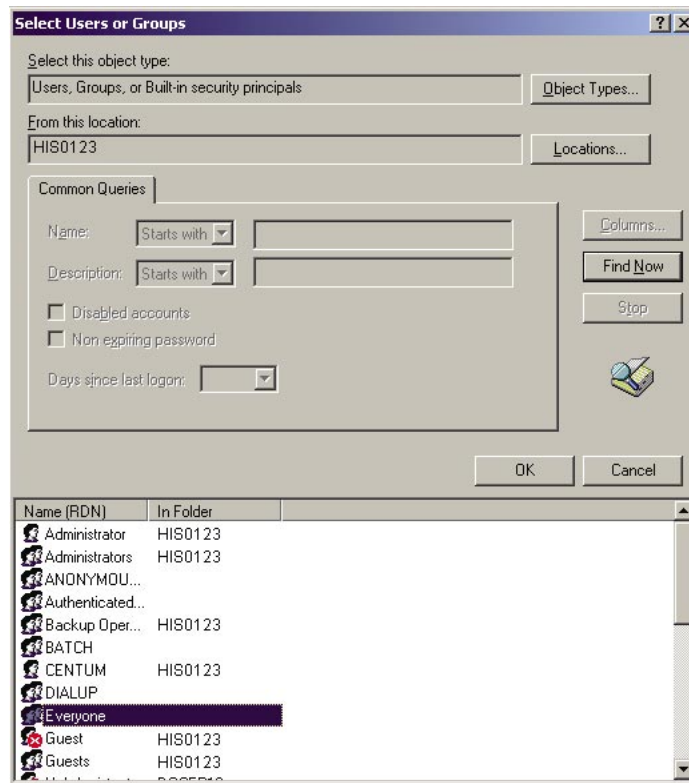


3 Windows Setup Procedure

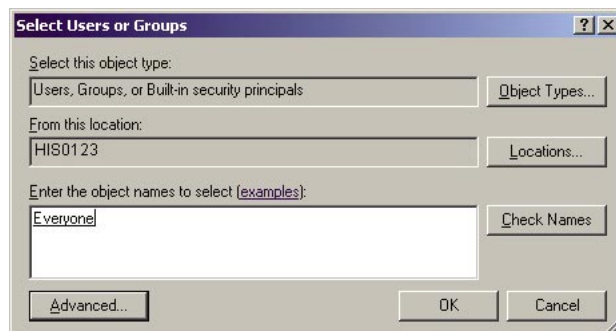
16. Click **Add** button to open **Select Users or Groups** dialog box.



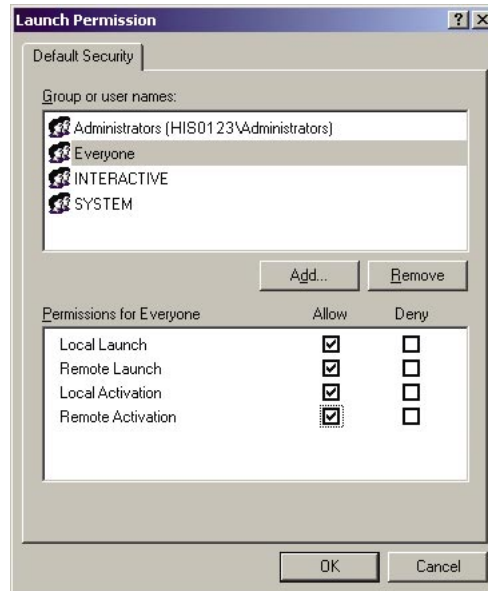
17. Click **Advanced** button, **Find Now** button will be displayed on the dialog box.
18. Click the **Find Now** button and a list of users and groups will be displayed.
19. Choose **Everyone** from the list.



20. Click **OK** button to continue.



21. Click the **OK** button. **Everyone** will be added to **Group or user names** of **Launch Permission** dialog box.
22. Choose **Everyone** and check **Allow** for **Remote Launch**], **Local Activation**], and **Remote Activation**.

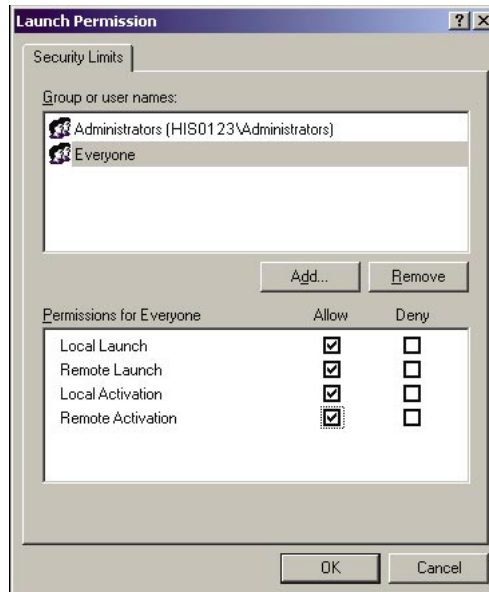


23. Click **OK** button so as to return to **My Computer Properties** dialog box. Thus, editing the default launch and activation permissions is completed.
24. Edit Limits of Access Permissions
Click **Edit Limits** button in **Access Permissions** area on **My Computer Properties** dialog box, so as to open **Access Permission** dialog box. Choose **ANONYMOUS LOGON** in **Group or user names** area and then check **Allow** for **Remote Access**.



3 Windows Setup Procedure

25. Click **OK** button so as to return to **My Computer Properties** dialog box. Thus, editing the security limits of Access Permissions is completed.
26. Edit Limits of Launch and Activation Permissions
Click **Edit Limits** button in **Launch and Activation Permissions** area on **My Computer Properties** dialog box, so as to open **Launch Permission** dialog box.
Choose **Everyone** in **Group or user names** area and then check **Allow** for **Remote Launch** and **Remote Activation**.

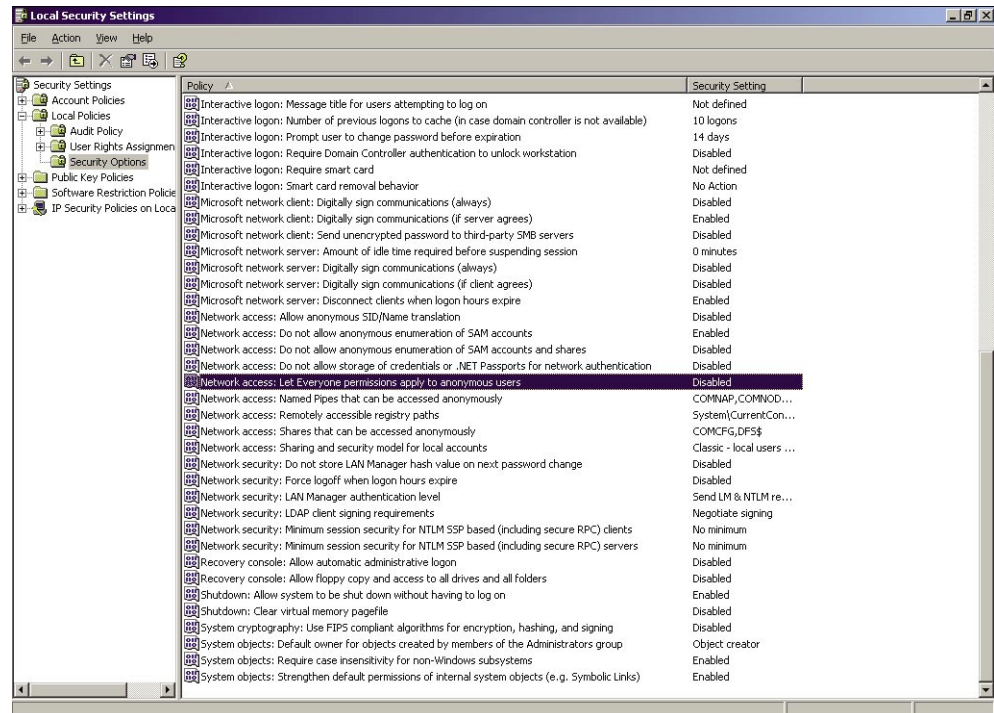


27. Click **OK** button so as to return to **My Computer Properties** dialog box. Thus, editing the security limits of Launch and Activation Permissions is completed.

Procedure 3: Change Local Security Settings

Local security settings need to be changed.

1. Click **Performance and Maintenance** button on **Control Panel** so as to open **Performance and Maintenance** window.
Click **Administrative Tools** so as to open **Administrative Tools** panel.
Double click **Local Security Policy** so as to open **Local Security Settings** window.
2. Choose **Security Settings > Local Policies > Security Options** from the tree view on the left pane.
Then the contents for “Policy” and “Security Setting” are displayed on the right pane.



3. Choose **Network access: Let Everyone permissions apply to anonymous users** from the left pane and double click it; its dialog box will be displayed.
Check the **Enabled** option on this dialog box.



Note

If **Network access: Let Everyone permissions apply to anonymous users** is disabled, the connection from the client PC can be only established with the same user accounts and passwords registered in the local PC.

3 Windows Setup Procedure

4. Click **OK**. And then on the **Local Security Settings** window, the policy **Network access: Let Everyone permissions apply to anonymous users** becomes Enabled as indicated in “Security Setting” column.
5. This setting will become valid after restarting the PC.

Setting Items after Installing Windows XP

Before installing DAQOPC to Windows XP environment, the following settings need to be confirmed.

- **Power Options**

For running DAQOPC, system standby should not happen. So that it is necessary to set System Standby to **Never**. Setting procedure is as follows.

Login Windows XP as administrator, and then choose **Start > Control Panel > Power Options** to open **Power Options Properties** dialog box. Confirm the settings on this dialog box are the same as follows. Some items may not active vary with the configuration of the PC, inactive item indicates the corresponding function is not available.

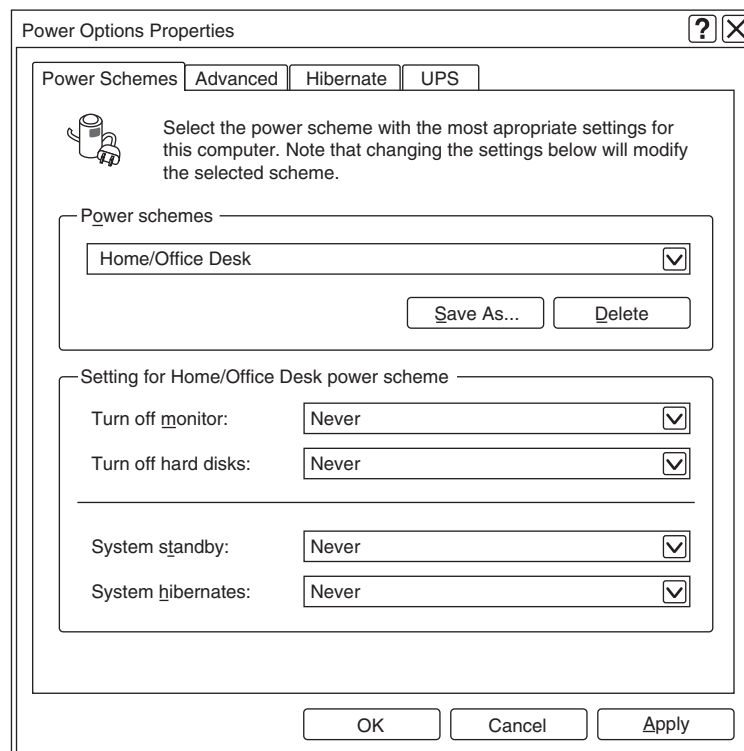
- Power Schemes Tab

The following settings on this tab are compulsory. System standby and System hibernates must be disabled.

Turn off hard disk: Never

System standby: Never

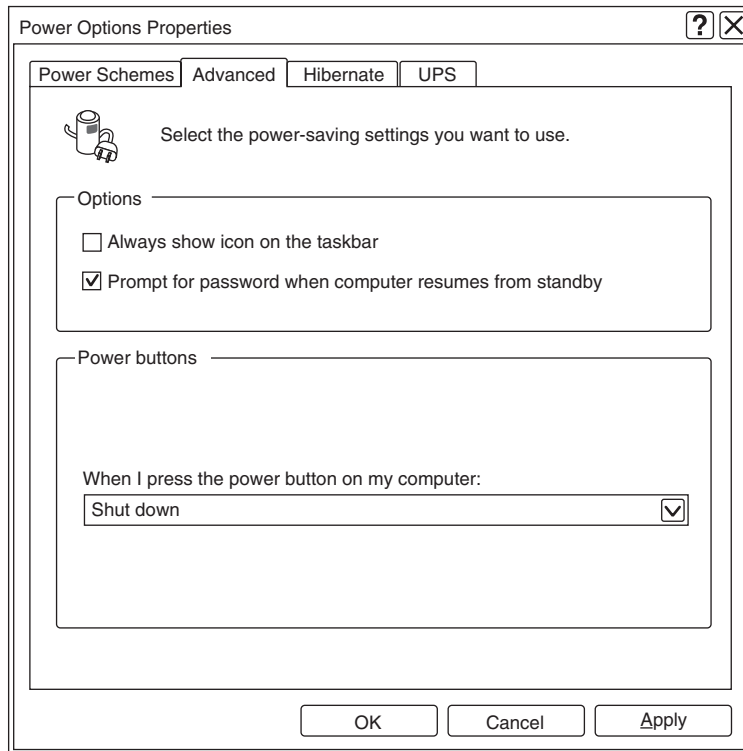
System hibernates: Never



3 Windows Setup Procedure

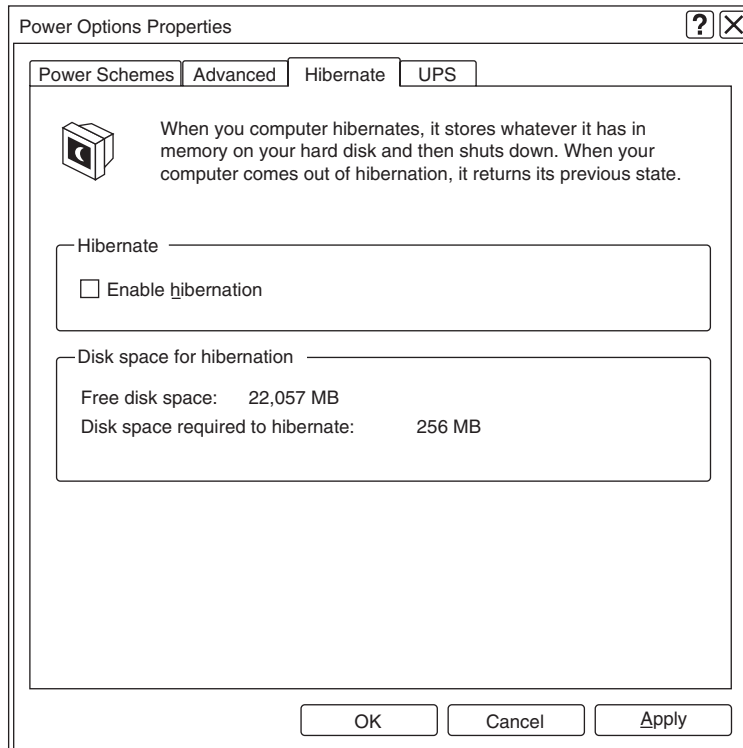
- **Advanced Tab**

Some PC keyboards have a sleep button. It is necessary to disable this button. When I press the sleep button on my computer: No action



- **Hibernate Tab**

Do not check the option **Enable hibernation**.



Installing Specifically Required Software (Windows 2000 SP3)

The DAQOPC specifically required software is necessary for running DAQOPC, and it is indispensable for certain applications (such as long term continuous applications). The DAQOPC specifically required software varies with the versions of DAQOPC and the operating environment, so that must be confirmed before installation.

- **Regarding the Specifically Required Software**

The DAQOPC specifically required software is provided for solving the “497 days” problem of Windows 2000. This software should be installed after installing Windows 2000 service pack.

- **Caution**

Cautions on installing the specifically required software are explained as follows.

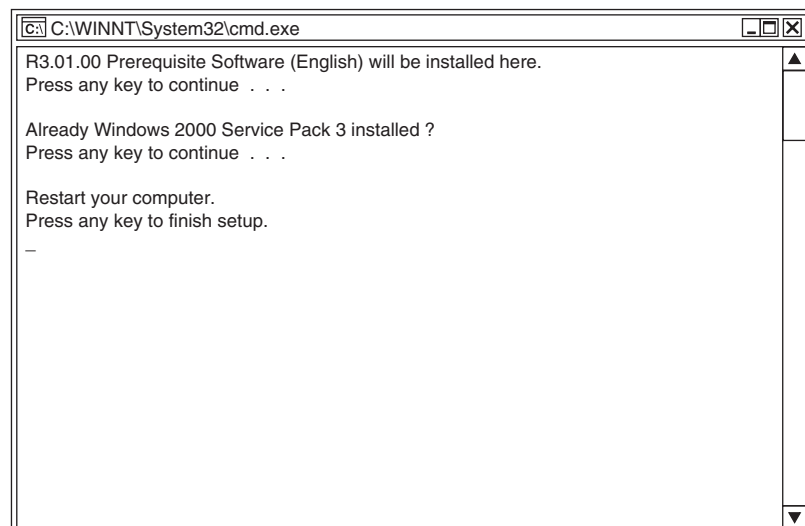
- This specifically required software is required for Windows 2000 Service Pack 3 only. It is not required for Windows XP.
- Make sure that the operating environment is Windows 2000 Service Pack 3.
- This required software is not required for Windows Service Pack 4.

- **Procedure**

Procedure for installing the DAQOPC specifically required software is explained as follows.

1. Logon as an administrator.
2. Load DAQOPC CD-ROM.
3. Double click Setup command in the following path.
<CD-ROM Drive>\EXA\W2K\COMMON_EXA\ENGLISH\Setup.bat
4. Following the instruction on the monitor to continue the installation.
During the installation, confirm the following.
 - Installation is started and running.
 - Windows 2000 Service Pack 3 exists in the environment.
5. Click Return to continue.
Click the **Close** mark on the upper-right corner of the window may stop installation.
When installation is completed, a message displays to prompt for restarting the PC.
6. Click any key to finish the setup.

Installation process detail is shown in the following figure.



7. Restart the PC.

Setting Items after Installing Windows 2000

- **Power Management**

The settings described here are for Windows 2000.

Do not change the settings for power saving purpose.

Thus, the power supply for hard disk might be cut or the computer may hibernate, the DAQOPC can not work properly and continuously.

The following settings are regarded to as power saving settings:

- Turn off the hard disk power supply after a certain idle time.
- Make PC hibernate.

Power management settings can be set as follows. However, the Administrator's privilege is required.

Note

For more information about the settings, see Windows help.

1. Choose **Settings > Control panel** from Start menu.
2. Double click **Power Options**.
"Power Options Properties" box displays.
3. Open "Power Schemes" tab, make sure the "Turn off hard disk" settings are set as "Never."
4. On **Hibernate** tab, make the option "Enable hibernate support" is not checked.

When Using Windows 2000 Server

When a server PC is used, Windows 2000 Server is available.

- **Setup When Installing Windows Server**

When the connection is completed, install Windows 2000 Server on the server PC.

The setting items are as follows:

Note

For the detailed information on the installation procedure of Windows 2000 Server, see Installation Guide provided in the same package as Windows 2000 Server installation CD-ROM.

Specify the following items.

- License mode
Specify the number of the clients to be connected.
- Server type
Specify the stand-alone server.
- **Windows Server Network Setup**
The network setup can be carried out after the installation of Windows 2000 Server. The setup method is as the same as Windows 2000 Professional. When installation is in progress, a dialog box appears to ask if you want to install Microsoft Internet Information Server, but you need not do so at this point.
- **Configuring Server**
If Windows 2000 Server is used, the Windows 2000 Server needs to be configured. After installing the Windows 2000 Server, when logon to the Windows 2000, a window for configuring server occurs. In control panel, choose **Administrative Tools > Configure Your Server** can also open the window. For DAQOPC, workgroup is the default network setting. So that, on this window, choose "I will configure this server later" option. The network settings should be the same as in Windows 2000 Professional.

4 Installing the DAQOPC

Before Installing the DAQOPC

Check the following points before starting the installation of the DAQOPC.

1. Reboot the PC. If memory-resident programs such as virus checkers are running, disable them from running and reboot the PC.

Installation Procedures of the DAQOPC

To install the software, an appropriate serial number needs to be entered. The serial number is printed on the CD case.

1. Restart the PC. If virus detection or other resident programs are set to load upon start-up, configure the system so that they do not load before restarting the PC.
2. Log on using a user name belonging to the Administrator group.
3. Exit all application programs.
4. Insert the DAQOPC CD in the CD drive.
5. The installation program starts automatically. Follow the instructions on the screen to proceed with the installation.

If the installation program does not start automatically when you insert the CD into the CD drive, use the following procedure to start it.

6. In **My Computer**], double-click the CD icon.
7. Double-click the setup.exe file in the root directory. Installation starts. Follow the instructions on the screen to complete the installation.

DAQOPC Upgrades

Items prior to DAQOPC R3.01 cannot be uninstalled.

To change DAQOPC to R3.01, start from installation of the OS.

5**Precautions to Be Taken When Reinstalling or Installing Additional Software**

When reinstalling the DAQOPC or installing additional software, note the following points.

After installing DAQOPC, if TCP/IP protocol is deleted, reinstall TCP/IP (including reinstallation of the Windows service pack) and after uninstalling DAQOPC, reinstall.

6

Precautions to Be Taken When Using UPS

If you are using the uninterruptible power supply (UPS), which is provided in the Windows Control Panel, to shut down Windows in an event of a power failure on the PC that is to run DAQOPC, configure the UPS so that the following command is executed before the shutdown operation.

Installed Folde\exaopc\Tool\ZOCXASTOP.EXE

Otherwise, the program may terminate abnormally.

For stable operation of the DAQOPC, carry out the following environment settings.

Wallpaper

Do not use wallpaper as this may disturb the colors of the screen.

Carry out the following steps to set the wallpaper to **None**.

1. Log on as DAQOPCUSER.
2. Select **Start > Settings > Control Panel**.
3. Select **Display** and open **Display Properties**.
4. Under **Wallpaper** in the **Background** tab, select **(None)** and click **OK**.

Screen Saver

Do not use screen savers, because the operation may become unstable when the screen saver starts causing a temporary increase in the CPU load.

Carry out the following steps to set the Screen Saver to **None**.

1. Log on as DAQOPCUSER.
2. Select **Start > Settings > Control Panel**.
3. Select **Display** and open **Display Properties**.
4. Under **Screen Saver** in the **Screen Saver** tab, select **(None)** and click **OK**.