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# **Installing MachineShop**

# **System Requirements**

To support MachineShop, your systems must meet the following requirements:

# **Hardware Requirements**

### **Development Systems**

- · Pentium CPU 133Mhz
- 24MB RAM (WIN 95/98), 32MB RAM (WIN NT 4.0, 2000 Professional)
- 50MB available hard drive space
- · CD-ROM drive
- 10MB Ethernet network interface (recommended) or serial port
- Video: SVGA 800 x 600 resolution, 256 colors
- · Microsoft-compatible mouse and keyboard

# Runtime Systems

- Intel 80386-SX CPU 25Mhz or equivalent
- 4MB RAM
- 8MB available non-volatile mass storage
- 10MB Ethernet network interface (recommended) or serial port
- Video: 320 x 240 or 640 x 480 resolution, 16 colors
- Microsoft-compatible mouse (or equivalent)

# **Software Requirements (Development Systems)**

### **Operating System**

• Windows 95 OSR2, 98, NT 4.0 SP3, or 2000 Professional.

### **Network Communication Software**

To transfer MachineShop projects over a Local Area Network using an Ethernet cable, you must have the following installed:

- Internet Explorer 5.0 (IE5)
- TCP/IP

To transfer MachineShop projects over a serial cable, using TCP/IP, you **also** must have the following installed:

- · Dial-Up Networking
- Dial-Up Adapter (Windows 95/98 only)
- · MachineShop Direct Connection Modem

Note When you begin the MachineShop Suite installation (see page 4), MachineShop Setup will determine if the required communication software is installed on your system. If it is not, Setup will lead you through the necessary installations. See "Installing Network Communication Software" on page 9 for instructions on how to install this software or decline installation.

# **Interact Compatibility**

- You can use Interact versions 5.0 and later with the MachineShop Toolbar.
- You can use Interact Project Manager (IPM) and the MachineShop Toolbar in the same system.

# Installing the MachineShop Suite

 MachineShop is compatible with existing Interact projects using IPM. When MachineShop is installed on a development system that has Interact projects stored on it, you can choose to have the existing projects copied into the new project directory structure.

# **Installing the MachineShop Suite**

# To install the MachineShop Suite, follow these steps:

- Insert the MachineShop Installation CD into the CD-ROM drive of your development system.
  - If automatic installation is enabled on your system, installation will begin, and the Setup Welcome dialog box will appear. Go to step 4.
  - If automatic installation is disabled, complete steps 2-3.
- 2. On the Windows taskbar, click **Start**, and then click **Run**. The Run dialog box will appear.
- 3. In the Run dialog box, next to the word "Open," type D:\Setup.EXE, and click OK. (If necessary, substitute your CD-ROM drive letter for D.)

  The Setup Welcome dialog box will appear.
- 4. Click Next.

The Select Operation dialog box will appear.

Note If you have previously installed the MachineShop Suite, a special Setup Welcome dialog box will appear allowing you to modify, repair, or remove the installation. If you select **Modify** and click **Next**, the Select Operation dialog box will appear.

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Click MachineShop Suite, and follow the installation wizard to install MachineShop.

You may choose to install Adobe Acrobat 4.0 as part of your suite installation. If, after Acrobat 4.0 installs, you are prompted to restart your computer, select **No**, and then click **Finish** to allow your system to complete the MachineShop Suite installation.

# Installing MachineLogic I/O Configuration Software

If you have purchased the MachineShop development suite, and you are using MachineLogic, you will use the Profibus or DeviceNet configuration software to configure your I/O network.

### To install the MachineLogic I/O configuration software, follow these steps:

- Insert the MachineLogic I/O Configuration Software CD into the CD-ROM drive of your development system.
- On the Windows taskbar, click **Start**, and then click **Run**.
   The Run dialog box will appear.
- 3. Next to the word "Open," type **D:**\, and then click **OK**. (If necessary, substitute your CD-ROM drive letter for **D**.)

The contents of the MachineLogic I/O CD will appear:

- PFB Master (Profibus tools)
- UCS DN Master (DeviceNet tools)

# To install Profibus configuration software, complete steps 4-7. To install DeviceNet configuration software, complete steps 8-9.

Note The default installation sites for Profibus and DeviceNet are different. For convenience, you may want to install the configuration tools for both drivers in the MachShop program folder.

- Open the PFB Master folder, and click the file entitled **Setup.EXE**.
   A Setup Wizard will open.
- 5. Follow the Setup Wizard to install the configuration tools you will need.
- In the Select Components dialog box, when you are asked which components you want to install, select only the SST Profibus Configuration
  Tools; clear the other check boxes.
- Click Next to continue the installation.
- 8. Open the UCS DN Master folder, and click the file entitled **Setup.EXE**. A Setup Wizard will open.
- 9. Follow the Setup Wizard to complete the installation.

# **Launching the MachineShop Toolbar**

When you install the MachineShop Suite, the setup program will place a MachineShop Toolbar shortcut on your desktop. To launch the Toolbar, simply click the shortcut.

# **Finding Documentation**

If you need help using MachineShop, Interact, or MachineLogic, you will find detailed instructions in the following resources, available on the MachineShop Installation CD. All printed documentation will be installed on your system in PDF format if you choose the **Typical** installation of MachineShop.

# **Online Resources**

- MachineShop Help
- Interact Tutorial
- Interact Help
- MachineLogic Tutorial
- · MachineLogic Help
- · MachineLogic Reference Guide
- · MachineLogic Runtime Reference Guide
- I/O Configuration Driver Help

### **Printed Documentation**

- MachineShop Getting Started Guide
- · MachineShop Shell Runtime Guide
- Interact Getting Started Guide
- · MachineLogic Getting Started Guide
- MachineLogic Control Adapter Installation

# **Creating Disk Sets**

You may want to create disk sets of some MachineShop components so that you can install these components on your runtime-only systems.

### To create the MachineShop disk sets, follow these steps:

- Launch MachineShop Setup (complete steps 1-4 on page 4).
   The Select Operation dialog box will appear.
- Click Create Disk Sets.
  - The Select Disk Set dialog box will appear, allowing you to create the MachineShop Toolbar Disk Set, the Interact Runtime Disk Set, and the Runtime Workstation Disk Set.
- Click the disk set that you want to create, and then follow the installation wizard to complete the installation.
  - When the disk set is complete, you will return to the Select Operation dialog box. If you want to create additional disk sets, click **Create Disk Sets**, and repeat step 3.

Note Label each disk in your disk sets. In the Runtime Workstation Disk Set, the first disk is the **PowerStation Start Disk**, and the second disk is the **MachineShop Shell Installation Disk**.

# Installing Network Communication Software

To transfer MachineShop projects over a Local Area Network using an Ethernet cable, you must have Internet Explorer 5.0 (IE5) and TCP/IP installed on your development system. To transfer MachineShop projects over a serial cable, using TCP/IP, you **also** must have Dial-Up Networking, Dial-Up Adapter (Windows 95/98 only), and the MachineShop Direct Connection modem installed on your development system.

When you begin the MachineShop Suite installation (see page 4), MachineShop Setup will determine if the required communication software is installed on your system. If it is not, Setup will lead you through the necessary installations. Instructions for installing this software are given in the sections that follow:

- Installing Internet Explorer 5.0 (page 10)
- Installing Other Communication Software (page 11)

Note IE5 and the MachineShop Direct Connection modem install from the Machine-Shop Installation CD. TCP/IP, Dial-Up Networking, and Dial-Up Adapter install from your Windows operating system. Be sure to have the MachineShop Installation CD, your Windows 95, 98, NT 4.0, or 2000 Professional distribution CD, and the distribution disks for any third-party networking software ready to insert during installation.

# **Installing Internet Explorer 5.0**

### To install IE5, follow these steps:

If IE5 is not installed on your development system, a dialog box will appear at the start of the MachineShop Suite installation asking if you want to install IE5 now or continue installing the MachineShop Suite.

- 1. Click **Yes**, and then follow the installation wizard to install IE5.
  - **Note** Select **Minimal** installation (installs the Internet Explorer 5.0 browser only).
- Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

### If you choose not to install IE5, follow these steps:

If you click **No** to skip the IE5 installation, Setup will search to see if Windows common controls are installed and updated on your system. If they are not, a dialog box will appear asking if you want to update the common controls.

- Click Yes.
  - If you are running Windows 95, Setup also will check whether Microsoft DCOM95 is installed.
  - If DCOM95 is installed, you will return to the MachineShop Suite installation.
  - If DCOM95 is not installed, a dialog box will appear asking if you want to install DCOM95

#### Click Yes.

When the common controls and DCOM95 are installed, you will return to the MachineShop Suite installation.

# **Installing Other Communication Software**

The following sections explain how to install required communication software other than IE5:

- TCP/IP
- · Dial-Up Networking
- Dial-Up Adapter (Windows 95/98 only)
- · MachineShop Direct Connection Modem

If any of this software is not installed on your development system, a dialog box will appear at the start of the MachineShop Suite installation telling you that a network component is not installed and asking if you want to install the required components.

- If you want to install the required components, click Yes, and use the instructions in the following sections to install the software you need.
- 2. If you do not want to install this software, or if you prefer to install it later, click **No**. You will return to the MachineShop Suite installation.

Note If you want to install any of the required communication software later, you can do so by re-running the MachineShop Suite installation program.

# Installing TCP/IP

# To install TCP/IP, follow the steps appropriate to your operating system: *Installing Under Windows 95/98*

If TCP/IP is not installed on your system, a dialog box will appear informing you that Setup will install TCP/IP.

Click OK.

The Network dialog box will appear with the Configuration tab selected.

Click Add.

The Select Network Component Type dialog box will appear.

3. Select **Protocol**, and then click **Add**.

The Select Network Protocol dialog box will appear.

 Select Microsoft in the Manufacturers list, select TCP/IP in the Network Protocols list, and then click OK.

Note The Select Device dialog box may appear asking you to choose a network adapter card for installation and to configure the card for network downloads. Because of the complexity of this process, please consult your MIS Administrator about how to choose and configure a network card before continuing. You also may be asked to insert your Windows 95 or 98 distribution CD into your CD-ROM drive.

You will return to the Network dialog box.

 Scroll through the Installed Network Components list to make sure that TCP/IP is listed, and then click OK. Windows will copy the TCP/IP files from the Windows 95/98 CD to your system. Then a dialog box will appear prompting you to restart your computer so that your new settings will take effect.

- 6. Click **No** if you intend to continue with installation.
- Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

### Installing under Windows NT 4.0

If TCP/IP is not installed on your system, a dialog box will appear informing you that Setup will install TCP/IP.

Click OK.

The Network dialog box will appear with the Protocols tab selected.

Note If you have no adapter card or networking services installed on your computer, the Network dialog box will not appear. Instead, the Network Configuration dialog box will appear telling you that Windows NT Networking is not installed and asking if you want to install it now. Because of the complexity of this process, please consult your MIS Administrator about how to install Windows NT Networking services before continuing.

Click Add.

The Select Network Protocol dialog box will appear.

In the Network Protocol list, select TCP/IP, and then click OK.
 The TCP/IP Setup dialog box will appear asking if you want to use a DHCP server.

Follow the instructions on the screen to determine your response, and then click Yes or No.

The Windows NT Setup dialog box will appear asking where Setup should look for Windows NT files.

Follow the instructions on the screen to determine where Setup should look for the files. When you are ready, click **Continue**.

Note If a Files Needed dialog box appears, insert your Windows NT 4.0 distribution CD into your CD-ROM drive.

- Windows will copy your TCP/IP files, and you will return to the Network dialog box. Go to step 8.
- If you already have Remote Access Services (RAS) and a modem installed on your computer, a Setup Message dialog box will appear telling you that Remote Access Services is installed and asking if you want to configure RAS to support TCP/IP. Complete steps 6-7.
- 6. Click **OK** in the Setup Message dialog box.

If you have a modem installed, the Remote Access Setup dialog box may appear showing your modem.

If a modem appears in the Remote Access Setup dialog box, click Continue. If a modem is not shown, click Cancel.

You will return to the Network dialog box.

8. Click **Close** in the Network dialog box.

A dialog box will appear prompting you to restart your computer.

- 9. Click **No** if you intend to continue with installation.
- Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

### Installing under Windows 2000 Professional

If TCP/IP is not installed on your system, a dialog box will appear informing you that Setup will install TCP/IP.

Click OK.

The Network and Dial-Up Connections Control Panel will appear.

Right-click on Local Area Connection, and click Properties.
 The Local Area Connection Properties dialog box will appear.

3. Click Install.

The Select Network Component Type dialog box will appear.

4. Select **Protocol**, and then click **Add**.

The Select Network Protocol dialog box will appear.

 Select Internet Protocol (TCP/IP) in the Network Protocols list, and then click OK.

Note The Select Device dialog box may appear asking you to choose a network adapter card for installation and to configure the card for network downloads. Because of the complexity of this process, please consult your MIS Administrator about how to choose and configure a network card before continuing. You also may be asked to insert your Windows 2000 Professional distribution CD into your CD-ROM drive.

- 6. A dialog box will appear asking you to restart your computer.
- Click OK.

**Note** You must restart your computer under Windows 2000 Professional for the installation to take effect.

Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

# Installing Dial-Up Networking

To install Dial-Up Networking, follow the steps appropriate to your operating system:

## Installing under Windows 95/98

If Dial-Up Networking is not installed on your system, a dialog box will appear asking if you want to install Dial-Up Networking.

- Click Yes.
  - The Add/Remove Programs Properties dialog box will appear with the Windows Setup tab selected.
- In the Components list, select Communications, and then click Details.
   The Communications dialog box will appear.
- Select Dial-Up Networking, and then click OK.
   You will return to the Add/Remove Programs/Properties dialog box.

#### Click OK.

Note You may be asked to insert your Windows 95 or 98 distribution CD into your CD-ROM drive. If you are using third-party networking software, you also may be asked to insert one or more distribution disks for it into your floppy drive.

Windows will copy the Dial-Up Networking files from the Windows 95/98 CD to your system. Then the Dial-Up Networking Setup dialog box will appear prompting you to restart your computer.

#### Click OK.

Note You must restart your computer under Windows 95/98 for the installation to take effect.

Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

### Installing under Windows NT 4.0

If Dial-Up Networking is not installed on your system, a dialog box will appear asking if you want to install Dial-Up Networking.

### Click Yes.

The Dial-Up Networking dialog box will appear prompting you to install Dial-Up Networking.

### 2. Click Install.

Note If a Files Needed dialog box appears, insert your Windows NT 4.0 distribution CD into your CD-ROM drive.

The Remote Access Setup dialog box will appear.

3. Click **Yes** in the Remote Access Setup dialog box.

The Install New Modem wizard will appear.

 In the Install New Modem wizard, select "Don't detect my modem; I will select it from a list," and then click Next.

The next dialog box in the Install New Modem wizard will appear.

- If necessary, insert the MachineShop Installation CD into your CD-ROM drive.
- Click Have Disk.

The Install from Disk dialog box will appear.

- 7. Under the words "Copy manufacturer's files from," type D:\Modem\, and then click OK. (If necessary, substitute your CD-ROM drive letter for D.) The next dialog box in the Install New Modem wizard will appear, and the Models list will show the MachineShop Direct Connection modem.
- 8. Click Next.

The next dialog box in the Install New Modem wizard will appear.

9. Select the COM port that the MachineShop Direct Connection will use during project downloads, and then click **Next**.

The final dialog box in the Install New Modem wizard will appear telling you that MachineShop Direct Connection has been set up successfully.

10. Click Finish.

The Add RAS Device dialog box will appear showing the MachineShop Direct Connection and COM port installed.

11. Click OK.

The Remote Access Setup dialog box will appear.

12. Click Continue.

A dialog box will appear prompting you to restart your computer in order to allow your settings to take effect.

13. Click **Restart** to restart your computer.

Note You must restart your computer under Windows NT 4.0 for the installation to take effect

 Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

# Installing the Dial-Up Adapter (Windows 95/98 only)

If you are running Windows 95 or 98, and the Dial-Up Adapter is not installed on your system, a dialog box will appear asking if you want to install the Dial-Up Adapter.

1. Click Yes.

The Network dialog box will appear with the Configuration tab selected.

2. Click **Add** on the Configuration tab.

The Select Network Component Type dialog box will appear.

3. Select **Adapter**, and then click **Add**.

The Select Network Adapters dialog box will appear.

 Select Microsoft in the Manufacturers list, select Dial-Up Adapter in the Network Adapters list, and then click OK.

You will return to the Configuration tab in the Network dialog box.

Scroll through the Network Components Installed list to make sure that the Dial-Up Adapter is listed, and then click OK.

Note You may be asked to insert your Windows 95 or 98 distribution CD into your CD-ROM drive. If you are using third-party networking software, you also may be asked to insert one or more distribution disks for it into your floppy drive.

Windows will copy the Dial-Up Adapter from the Windows 95/98 CD to your system. Then a dialog box will appear prompting you to restart your computer so that your new settings will take effect.

### 6. Click **OK**.

**Note** You must restart your computer under Windows 95/98 for the installation to take effect.

Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

# Installing the MachineShop Direct Connection Modem To install the MachineShop Direct Connection Modem, follow the steps appropriate to your operating system:

### Installing under Windows 95/98

If the MachineShop Direct Connection Modem is not installed on your system, a dialog box will appear asking if you want to install this device.

#### Click Yes.

If you do not have any modems installed on your system, the Install New Modem wizard will appear.

- Select Do not run the Hardware Installation wizard, and then click Next.
  - The next dialog box in the Install New Modem wizard will appear. Go to step 4.
  - If you already have one or more modems installed on your system, the Modems Properties dialog box will appear. Complete step 3.
- Click Add.

The Install New Modem wizard will appear.

 Select "Don't detect my modem; I will select it from a list," and then click Next.

The next dialog box in the Install New Modem wizard will appear.

- Click Have Disk.
  - The Install From Disk dialog box will appear.
- 6. Under the words "Copy manufacturer's files from," type D:\Modem\, and then click OK. (If necessary, substitute your CD-ROM drive letter for D.)
  The next dialog box in the Install New Modem wizard will appear, and the Models list will show the MachineShop Direct Connection.
- 7. Click Next.

The next dialog box in the Install New Modem wizard will appear.

Select the communications port that you want to use with the modem, and then click Next.

The Location Information dialog box will appear, asking you to provide dial-up information.

Under "What area (or city) code are you in now," type the number 1, and then click Next.

The Install from Disk dialog box will appear.

10. Click **OK**.

The last dialog box in the Install New Modem wizard will appear.

11. Click Finish.

The Modems Properties dialog box will appear showing the MachineShop Direct Connection.

- 12. Click **OK** in the Modems Properties dialog box.
- 13. Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

### Installing under Windows NT 4.0

If the MachineShop Direct Connection Modem is not installed on your system, a dialog box will appear asking if you want to install this device.

Click Yes.

The Modems Properties dialog box will appear showing your currently installed modem.

Click Add.

The Install New Modem wizard will appear.

Select "Don't detect my modem; I will select it from a list," and then click Next.

The next dialog box in the Install New Modem wizard will appear.

4. Click Have Disk.

The Install from Disk dialog box will appear.

- 5. Under the words "Copy manufacturer's files from," type **D:\Modem\**, and then click **OK**. (If necessary, substitute your CD-ROM drive letter for **D**.) The next dialog box in the Install New Modem wizard will appear, and the Models list will show the MachineShop Direct Connection.
- 6. Click Next.

The next dialog box in the Install New Modem wizard will appear.

Select the COM port that your modem will use during project downloads, and then click Next.

The final dialog box in the Install New Modem wizard will appear telling you that your modem has been set up successfully.

8. Click Finish.

The Modems Properties dialog box will appear showing the MachineShop Direct Connection.

- 9. Click **Close** in the Modems Properties dialog box.
  - The Modem Setup dialog box will appear telling you that Dial-Up Networking needs to be configured because your list of installed modems has changed.
- 10. Click Yes to configure Dial-Up Networking.
  - The Remote Access Setup dialog box will appear showing only your previously installed modem.
  - Windows NT Remote Access Service (RAS) will only allow one modem to be bound to a COM port. If you already have a modem attached to the COM port to which you want to bind MachineShop Direct Connection, and if you want to keep your existing binding, go to step 14. The MachineShop Direction Connection modem will be installed, but not bound to a COM port, and the MachineShop Direct Connection download option will not be available from the MachineShop Toolbar. Use TCP/IP for your downloads. Also, when you restart the MachineShop Suite installation, and you are asked if you want to install the MachineShop Direct Connection modem, click No.
  - If you want to bind the MachineShop Direct Connection modem to the COM port where your existing modem is installed, you must first remove the previous binding and then install the MachineShop Direct Connection modem. Complete the following steps:

 In the Remote Access Setup dialog box, select the modem that is bound to the COM port on which you want to install the MachineShop Direct Connection modem.

#### 12. Click Remove.

Another Remote Access Setup dialog box will appear asking if you want to remove a COM port.

13. Click **Yes**, and then click **Add**.

The Add RAS Device dialog box will appear.

 Select MachineShop Direct Connection from the RAS Capable Devices list, and then click OK.

The Remote Access Setup dialog box will appear with MachineShop Direct Connection highlighted.

#### 15. Click Continue.

A dialog box will appear prompting you to restart your computer so that your new settings will take effect.

16. Click Yes to restart your computer.

**Note** You must restart your computer under Windows NT 4.0 for the installation to take effect.

 Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.

# Installing under Windows 2000 Professional

If the MachineShop Direct Connection Modem is not installed on your system, a dialog box will appear asking if you want to install this device.

1. Click Yes.

The Phone and Modems Options dialog box will appear with the Modems tab selected.

2. Click Add.

The Install New Modem component of the Add/Remove Hardware Wizard will appear.

Select "Don't detect my modem; I will select it from a list," and then click Next.

The next dialog box in the Install New Modem wizard will appear.

Click Have Disk.

The Install from Disk dialog box will appear.

- 5. Under the words "Copy manufacturer's files from," type D:\Modem\, and then click OK. (If necessary, substitute your CD-ROM drive letter for D.) The next dialog box in the Install New Modem wizard will appear, and the Models list will show the MachineShop Direct Connection.
- 6. Click Next.

The next dialog box in the Install New Modem wizard will appear.

Select the COM port that your modem will use during project downloads, and then click Next.

The Digital Signature Not Found dialog box will appear.

8. Click **Yes** to continue.

The final dialog box in the Install New Modem wizard will appear.

9. Click Finish.

The Phone and Modem Options dialog box will now list the MachineShop Direct Connection Modem.

- 10. Click **OK**.
- 11. Restart the MachineShop Suite installation by clicking the Setup shortcut on your desktop.