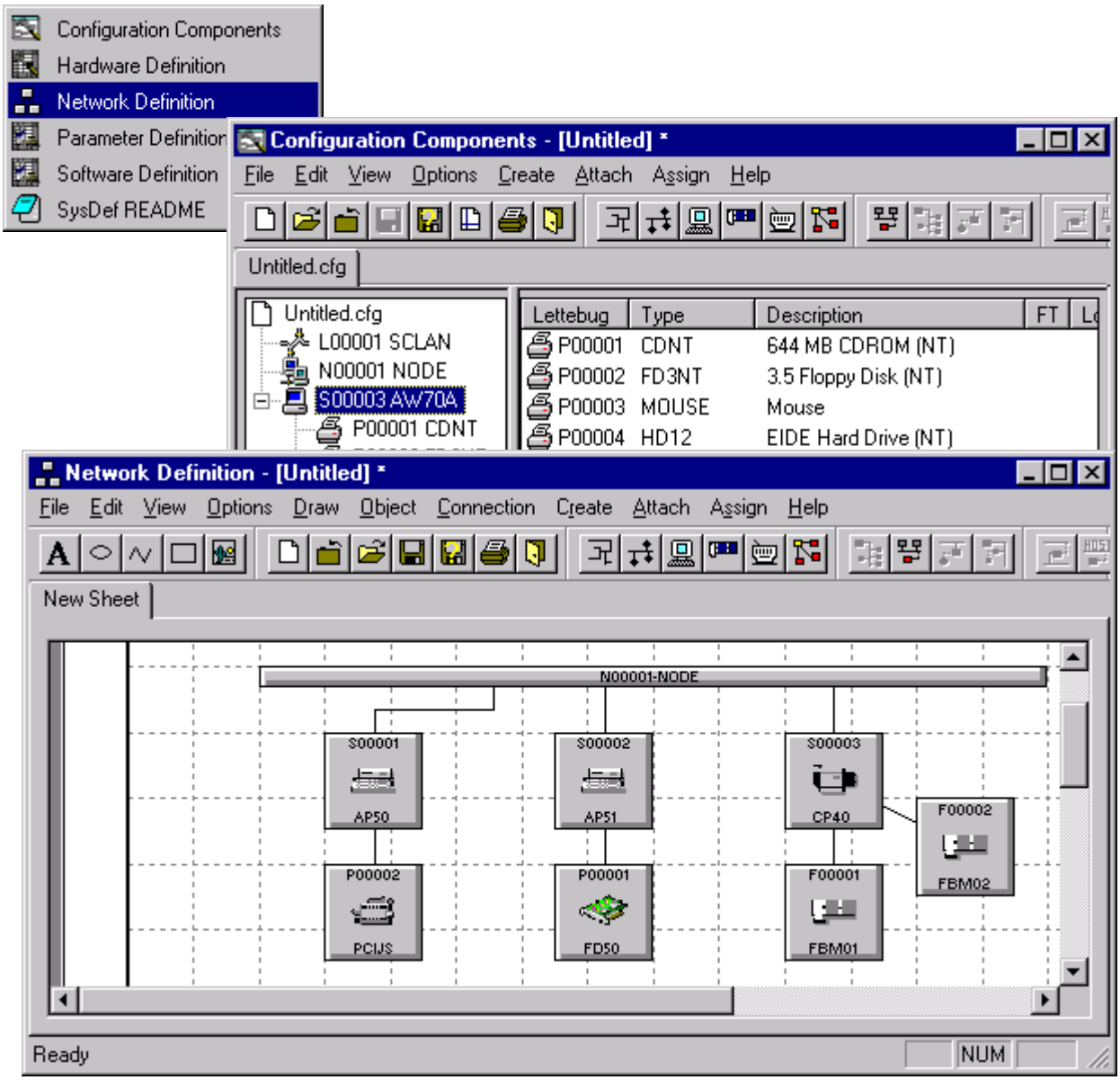
FOXBORO®

B0193WQ
REV E

I/A Series®
System Definition: A Step-By-Step Procedure

June 28, 2002



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Preface

This document provides a step-by-step procedure for defining an I/A Series system configuration using the System Definition (SysDEF) software. Although this step-by-step procedure uses a small Ethernet-based system as an example, the step-by-step procedure can be used to define any I/A Series system, including the 51 Series station(s) with Nodebus and/or Ethernet communications. Procedures apply to all I/A Series systems, both large and small. The step-by-step procedure demonstrates one approach for defining an I/A Series system using System Definition software. Refer to the System Definition on-line Help and *On-Line User's Guide* for other approaches to define an I/A Series system.

Audience

The document is intended for anyone who needs to define an I/A Series system configuration prior to installing I/A Series software on an I/A Series system. The step-by-step procedure defines a small Ethernet based system with an AW70 workstation and Micro-I/A™ Type 1 station. Readers are assumed to be installation personnel and/or applications engineers who are familiar with their purchased I/A Series hardware and software. This document assumes previous training on, exposure to, or experience with Windows NT™ operating system.

Contents

The illustrations in this book show the screen displays for defining a typical small I/A Series system. The book consists of a single section which is divided into the major steps required to define an I/A Series system configuration. These major steps apply to all I/A Series systems, both large and small. Each detailed step describes the System Definition process and the use of screens to configure a system. After successfully completing all steps, you should configure your I/A Series system and be ready to perform software installation.

Revision Information

For Release 6.4, the following changes were made to this document (B0193WQ/Rev E):

- Updated document for Release 2.3 of System Definition.
- Updated installation procedures on page 6.
- Made various editorial changes throughout the document.
- Added material for new equipment and procedures where applicable.

Related Documentation

Refer to the following reference documents for additional information:

- *I/A Series System Equipment Installation* (B0193AC)
- *Software Setup (Windows NT Platform)* (B0193ZT)
- *Software Setup (for UNIX and Solaris Platform)* (B0193ZU).

When using System Definition software, refer to the *On-Line User's Guide* and on-line Help.

System Definition: A Step-By-Step Procedure

This document presents a typical step-by-step procedure for defining an I/A Series system configuration using the System Definition software.

Introduction

The main purpose of this document is to illustrate the sequential steps required to use System Definition, rather than the I/A Series components used to illustrate the System Definition process.

System Definition identifies the I/A Series system components, system software required by each component, the system component letterbugs, and other system characteristics for correctly loading system software and identifying the system software objects. System Definition produces a Commit disk which is required for software installation and, therefore, must be completed before software installation. The example in this step-by-step procedure uses the following I/A Series system hardware components for the I/A Series system definition:

- Application Workstation 70 with control software
- Micro-I/A Station (Type 1)
  - FBM01
  - FBM04
- DeskJet™ Printer Parallel
- Workstation Processor 70.

This system communicates over a single Ethernet node.

Although the procedure describes a small Ethernet-based system, the step-by-step procedure can be used to define any I/A Series system, including 50 Series stations with Nodebus and/or Ethernet communications. These steps apply to all I/A Series systems, both large and small. The procedure uses one approach to define an I/A Series system. Refer to the System Definition on-line Help and On-Line User's Guide for other approaches to define an I/A Series system.

SysDEF comprises five software components and a READ ME file. The software enables system configuration, preparation of a system component database, and preparation of a Commit diskette. Components are:

- Configuration Components
- Hardware Definition
- Network Definition
- Parameter Definition
- Software Definition.

The steps to configure the example system are described sequentially in this document as follows:

- Loading System Definition software
- Accessing System Definition
- Selecting software release
- Creating stations
- Creating field modules
- Creating peripherals
- Changing station and field module letterbugs
- Attaching stations and field modules
- Assigning hosts (including control hosts)
- Assigning software hosts
- Assigning parameter definitions
- Printing parameter worksheets (optional step)
- Documenting the configuration (optional step)
- Checking the configuration
- Producing a Commit diskette
- Saving the configuration
- Reconciling the system configuration.

Figure 1 is a flowchart showing the basic sequential steps to configure the example configuration constructed in this document. First, access System Definition, and select the Hardware Definition screen as shown in Figure 1. During Hardware Definition, select the software release number, create the number of stations, modules, and peripherals in your system, and accept or change the letterbugs of your system components. Then select the Configuration Components screen to create the nodes in your system and assign the stations to a node. Next, select the Software Definition screen to assign optional software and software hosts to the stations and modules, and to assign specific software operating parameters. At this point, you can produce a graphical view of your system configuration (this is optional). Finally, select the Check Configuration utility to verify the installability of your configuration. If the configuration passes the Check Configuration function, create a Commit diskette from the **Options**>**Utilities** menu. The Commit diskette is used to install software on your system. After software installation, reconcile the software packages actually installed on the system with the software specified in System Definition.

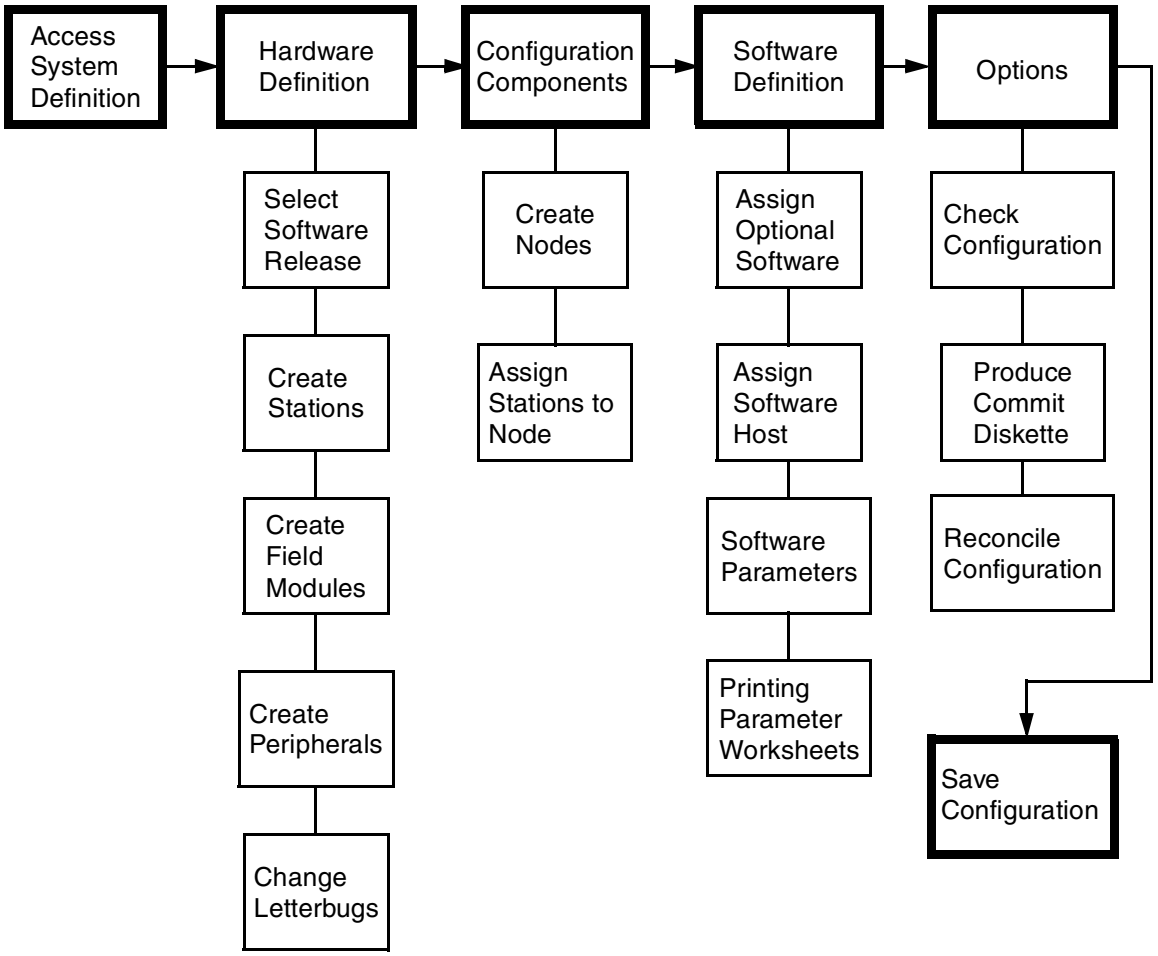

Figure 1. System Definition Overview

Loading System Definition Software

You can install the System Definition software package on any PC with the Windows NT 4.0 operating system installed. Also, you can load the software package on a 70 Series workstation on the C: or D: drive depending on the drive capacity. System Definition is shipped on a CD-ROM.

NOTE

If System Definition software on an AW70/WP70 resides on the D: drive, loading I/A Series software on the same workstation overwrites System Definition.

Prior to installing System Definition, you **must** uninstall other versions of the SysDEF software.

Uninstalling System Definition

Prior to uninstalling SysDEF, make sure you save all previous versions of system configurations.

To uninstall System Definition:

1. Click **Start** then move the cursor to **Settings** and **Control Panel**.

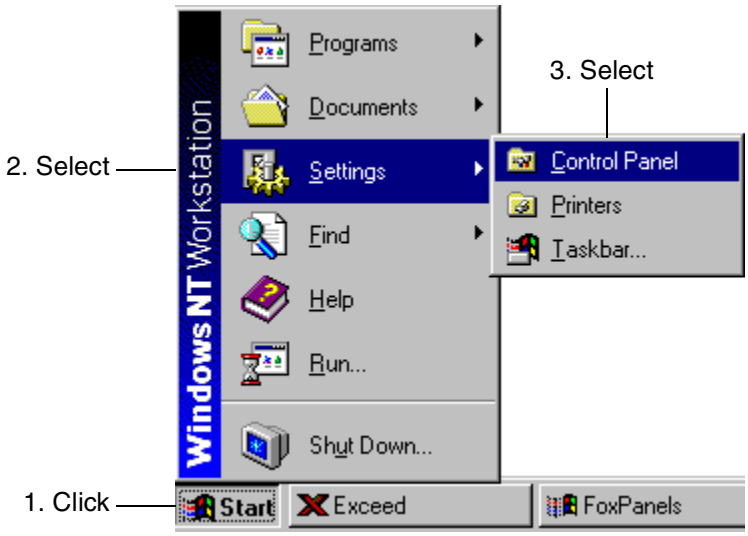

Figure 2. Accessing the Control Panel

2. In the Control Panel, double-click the **Add/Remove Programs** icon. In the Add/Remove Programs Properties window that appears, select **System Definition** and click **Add/Remove**.

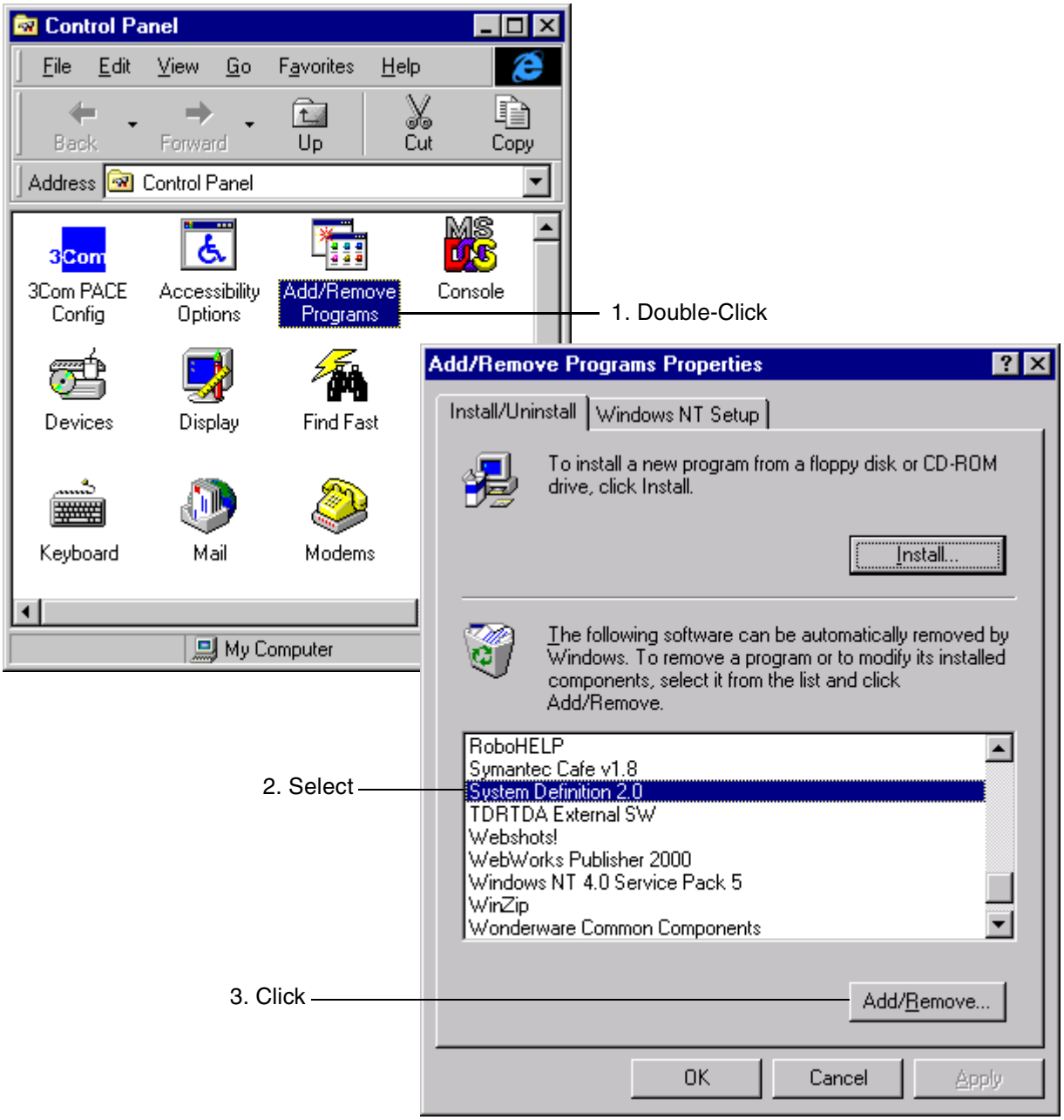

Figure 3. Uninstalling System Definition from the Control Panel

3. A Confirm File Deletion dialog box appears. Click **Yes**. The System Definition files are deleted.

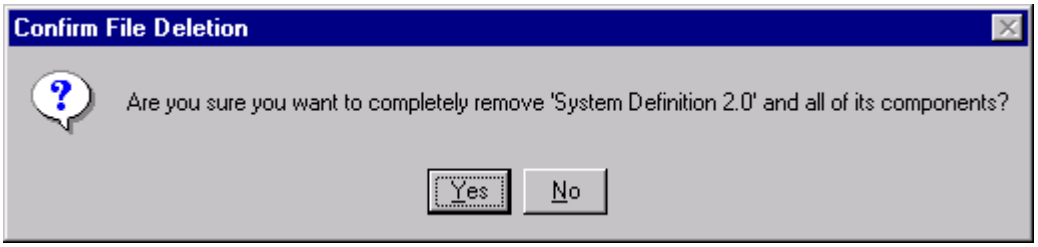

Figure 4. Uninstalling System Definition from the Control Panel (Continued)

4. Close the Control Panel after the files are removed.

There are several files that are not removed by the add/remove procedure. To remove these files:

1. Invoke Windows NT Explorer and access the C: or D: drive as applicable.
2. Select the System Definition folder, then select all the files in the folder and delete them. Delete the System Definition folder.
3. Proceed with the new System Definition software installation.

Installing System Definition

System requirements for installing System Definition 2.3 are:

- I/A Series AW/WP70

  OR

  Personal Computer with a Pentium™ 90 or higher processor
- Windows NT 4.0 operating system
- 25 MB disk space
- 32 MB memory
- VGA or higher resolution monitor
- Microsoft™ mouse or compatible pointing device

To install the software:

1. Log into an Windows NT account that has Admin privileges.
2. Insert the SysDEF 2.3 CD-ROM into the CD-ROM drive.
3. Access Windows NT Explorer.
4. Select the CD-ROM directory.
5. In the directory window, double-click on **setup.exe**.
6. When the Welcome dialog box appears, click **Next>**.
7. The Choose Destination Location window appears.
   a. If you want to install System Definition in the default directory (D:\usr\fox\foxDEF), Click **Next>**.
   b. If you want to change the destination location, click **Browse**. Type the new path or select it from the Directories list in the Choose Folder dialog box and click **OK**. Refer to Figure 5.

NOTE

If you want to install System Definition in a different directory from the default, you must associate each System Definition utility manually. Refer to “Configuring System Definition Utilities Manually” on page 8.

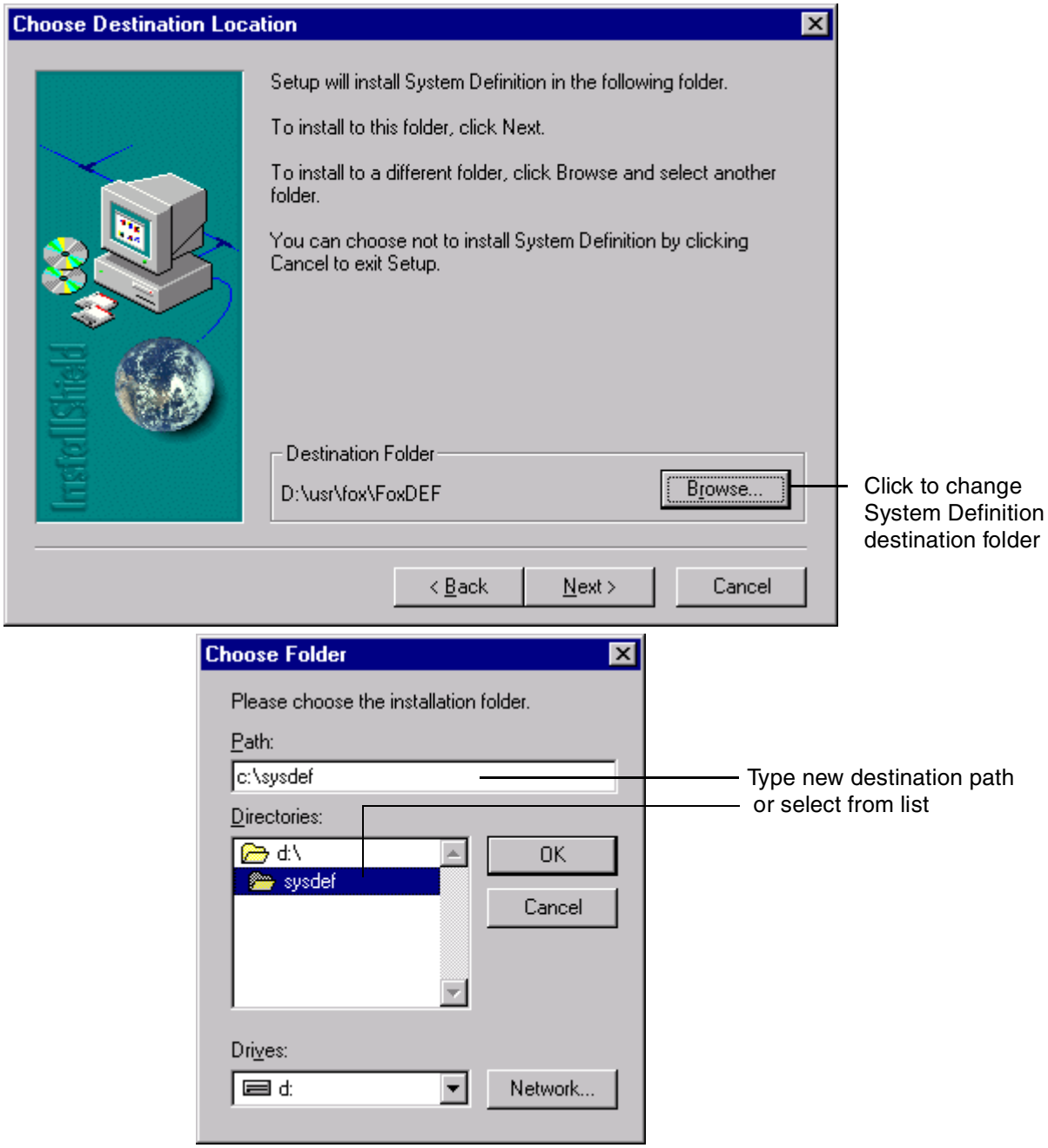

Figure 5. Changing the System Definition Destination Folder

8. Follow the remaining instructions that appear on the screen.

To operate the software, from the **Start** button, choose **Programs** then **System Definition** and click any view in the System Definition program group to begin your configuration.

Configuring System Definition Utilities Manually

If you install System Definition in a different directory from the default, you must associate each System Definition utility manually.

NOTE

You do not need to perform the following steps if installing into the default directory, D:\usr\fox\foxDEF.

For each utility:

1. Select **Options** -> **Customize** -> **Utility Menu**.

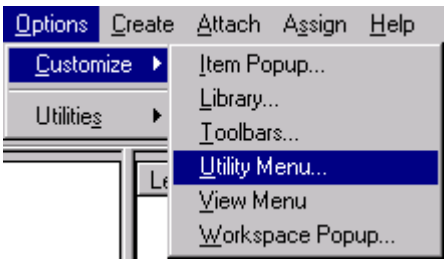

Figure 6. Associating the System Definition Utilities Manually (Step 1)

2. Change the Command box text to indicate the location you chose to install System Definition. The following example associates the Check Configuration utility with the directory c:\sysdef\bin.

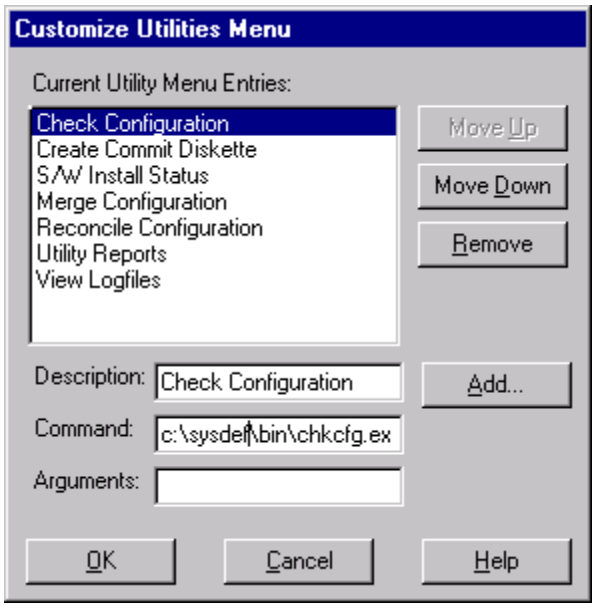

Figure 7. Associating the System Definition Utilities Manually (Step 2)

3. Repeat Steps 1 and 2 for each System Definition utility.

Accessing System Definition

To access System Definition:

1. Click **Start** as shown in Figure 8.

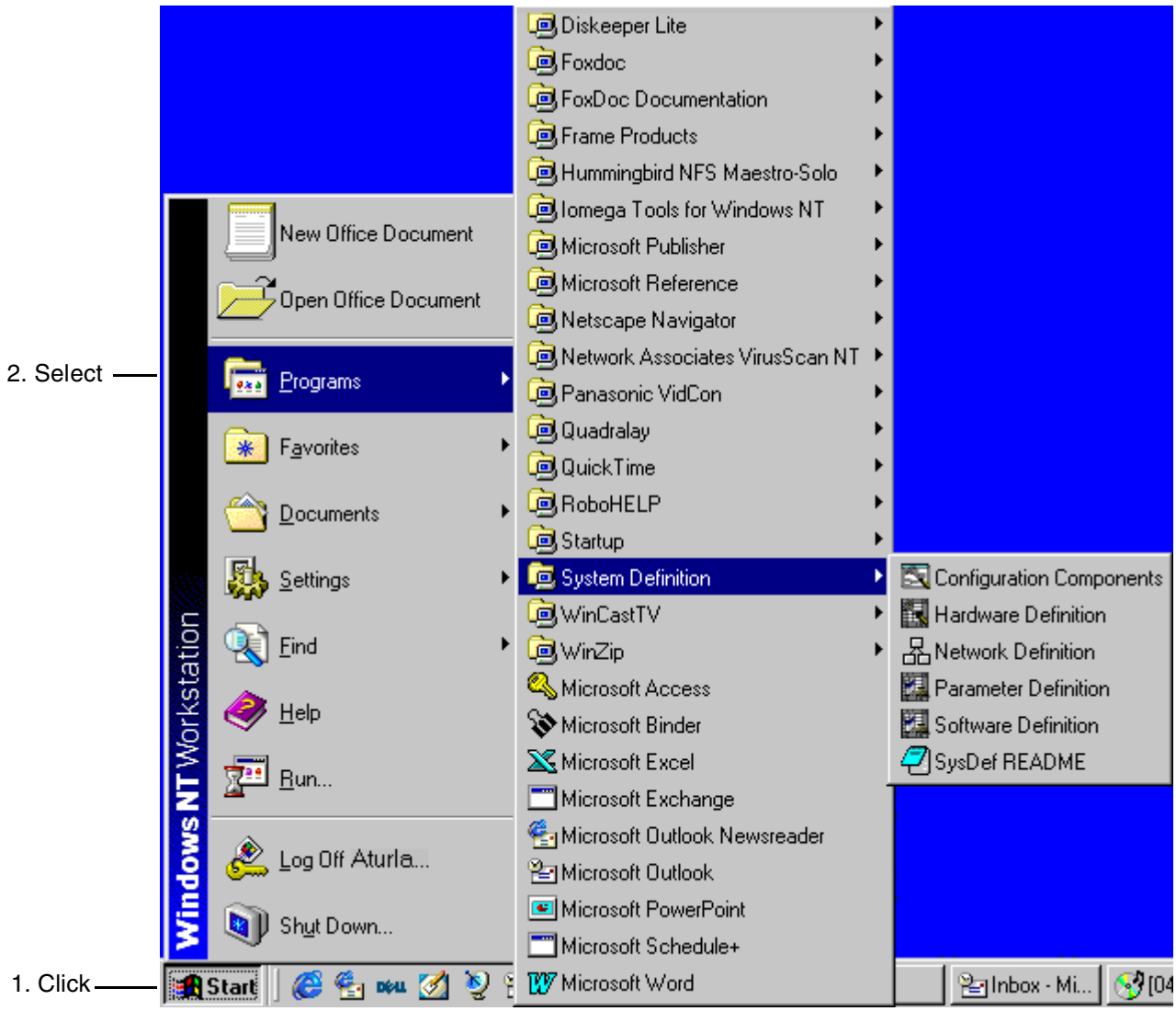

Figure 8. Accessing System Definition

2. Select **Programs**.
3. Select **System Definition**.
4. Select **Hardware Definition**.

   The Hardware Definition screen appears as shown in Figure 9.

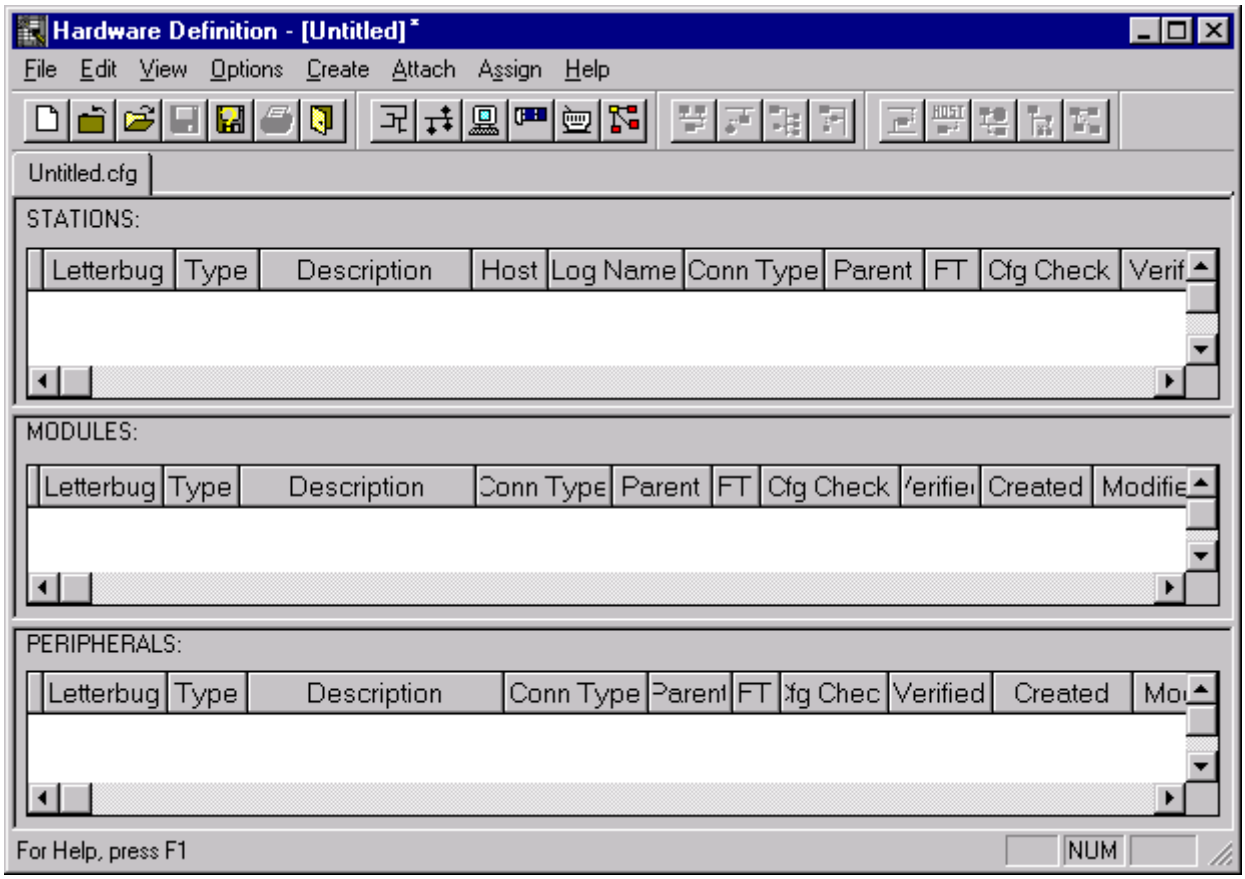

Figure 9. Hardware Definition Screen

Selecting the Software Release

To select the Software Release menu from the Hardware Definition screen:

1. Click **File** as shown in Figure 10.

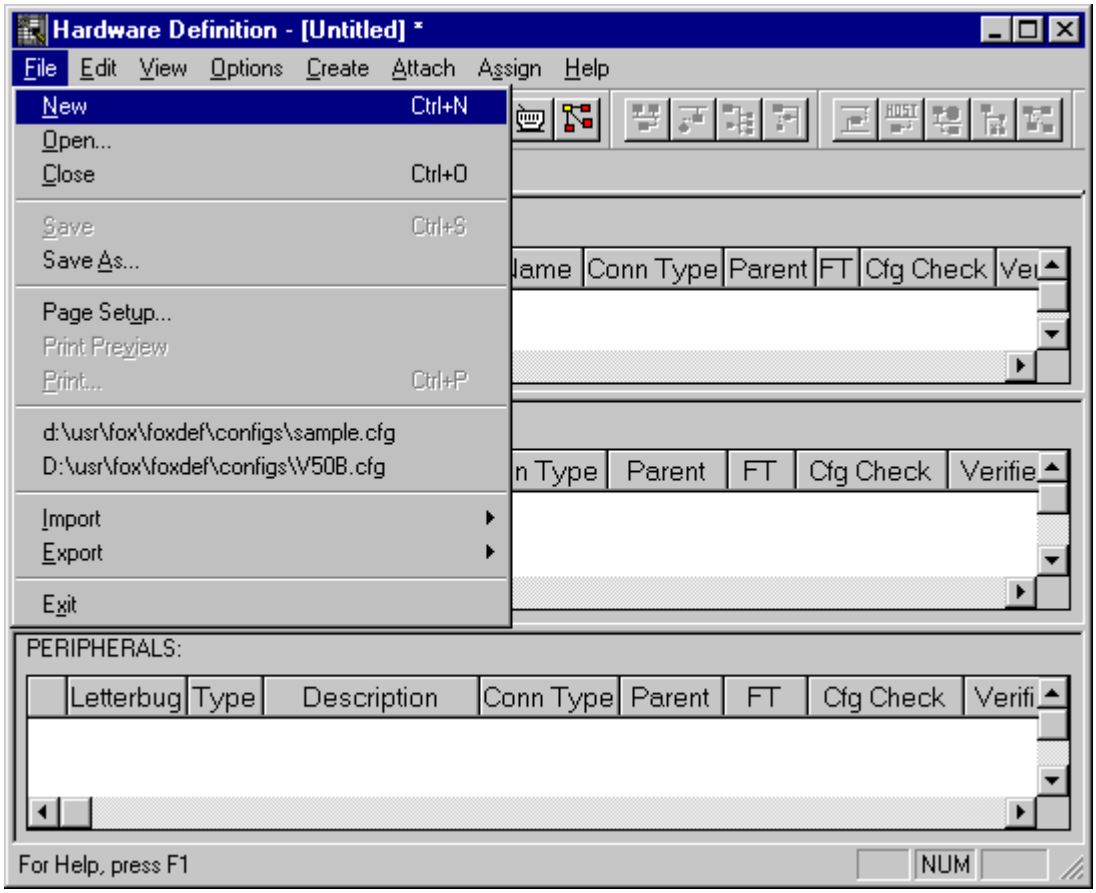

Figure 10. Selecting the Software Release

2. Select **New** from the pull-down menu.

   An example of the Select Version list appears as shown in Figure 11. Actual release version designations vary from one release to another.

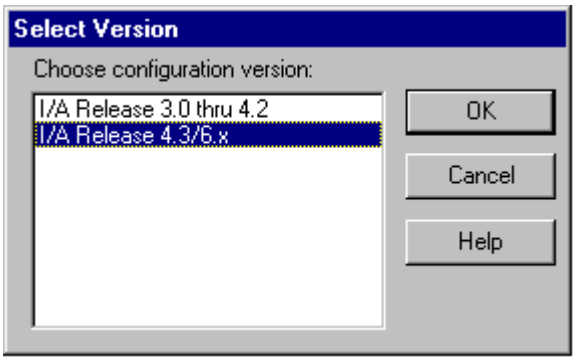

Figure 11. Select Version List

3. Select the appropriate release (for example, **I/A Release 4.3/6.x**) on the Select Version list.
4. Click **OK**.

Creating Stations

To create stations from the Hardware Definition screen, proceed as follows:

1. Click **Create** as shown in Figure 12.

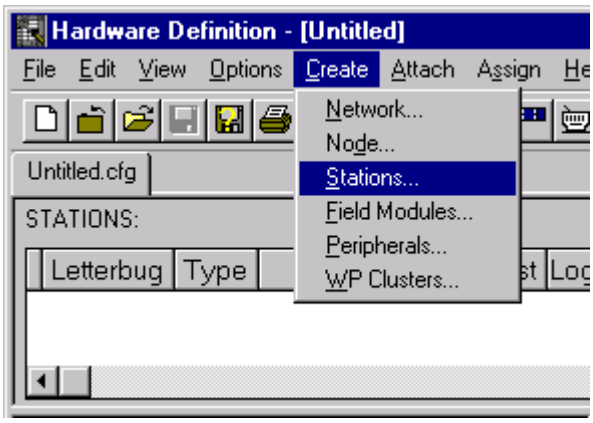

Figure 12. Selecting Create Stations

2. Select **Stations** on the pull-down menu.

   The Create Stations list appears as shown in Figure 13.

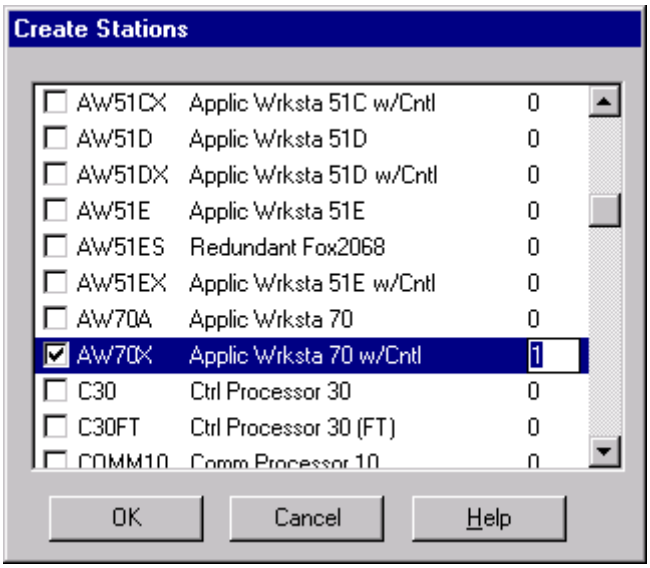

Figure 13. Create Stations List

   You can select 50/51/70 Series stations, control processors, communication processors, control stations, Integrators, Gateways, and so forth from the list.

   For this example, the following are selected:

   - Application Workstation 70 with control software
   - Micro-I/A station (Type 1)
   - Workstation Processor 70.

3. Use the scroll bars to move the list so that you can select the desired station.

4. Specify all the stations that are listed on your purchase order by selecting the station on the list. To change the quantity of stations, highlight the quantity field and type in the required number of components.
5. Click **OK**. After you click OK, the stations are automatically listed in the STATIONS part of the Hardware Definition screen.

   After all the stations for the example are selected, the Hardware Definition screen looks like Figure 14.

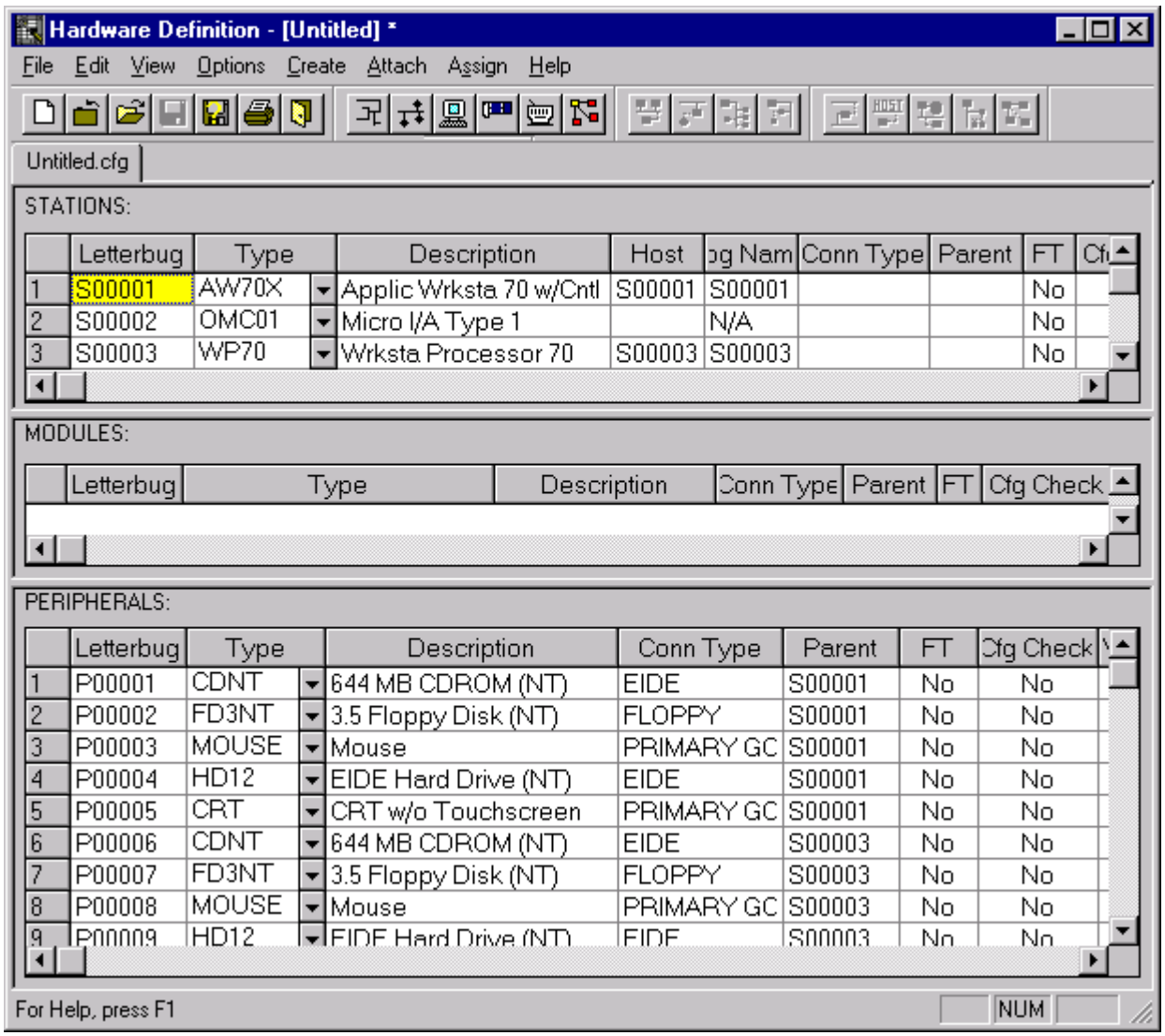

Figure 14. Hardware Definition Screen with System Stations

The peripherals shown in Figure 14 are required defaults which have been automatically added to the list of components.

Creating Field Modules

After selecting your system stations, select your field modules. The procedure for selecting field modules is basically the same as selecting system stations. To select field modules, from the Hardware Definition screen, proceed as follows:

1. Select **Create** as shown in Figure 15.

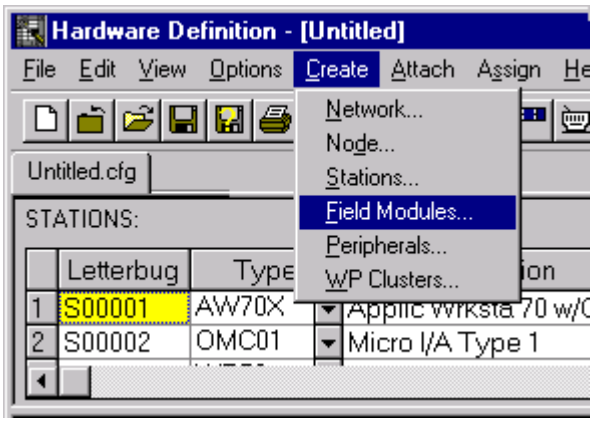

Figure 15. Selecting Create Field Modules List

2. Select **Field Modules** from the pull-down menu.

   The Create Field Modules list appears as shown in Figure 16.

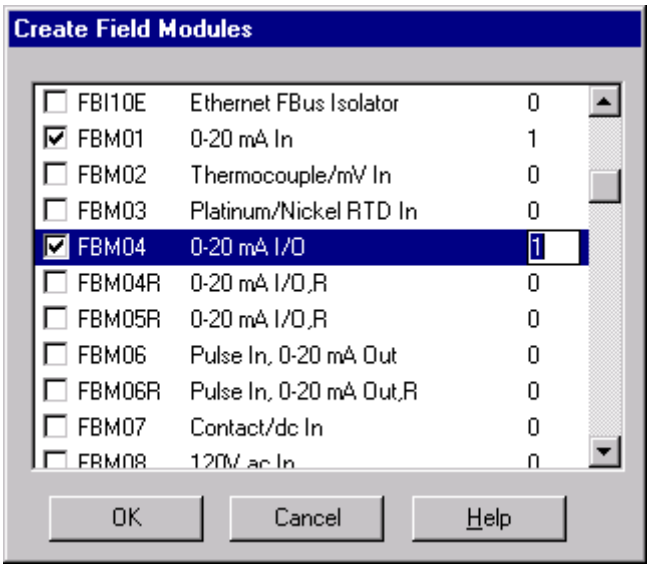

Figure 16. Create Field Modules List

   For this example, an FBM01 and FBM04 were selected.

3. Use the scroll bars to move the list so that you can select the desired field module.
4. Select all the field modules that are listed on your purchase order by selecting the field module on the Create Field Modules list. To change the quantity of field modules, highlight the quantity field and type in the required number of components.

5. Click **OK.** After you select OK, the field modules are automatically listed in the MODULES part of the Hardware Definition screen.

Creating Peripherals

After selecting your field modules, select your peripherals. The procedure for selecting peripherals is basically the same as selecting field modules. To select peripherals from the Hardware Definition screen, proceed as follows:

1. Select **Create** as shown in Figure 17.

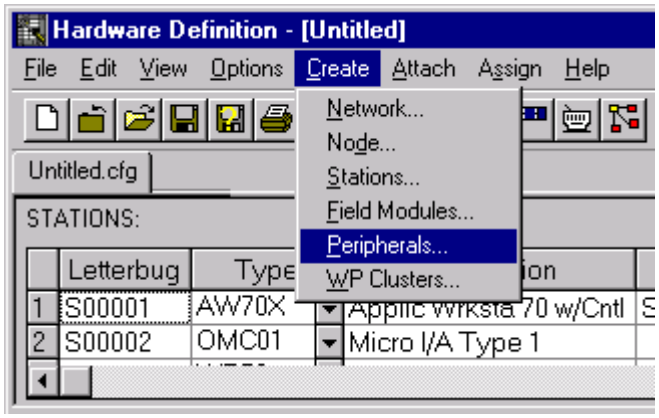

Figure 17. Selecting Peripherals List

2. Select **Peripherals** from the pull-down menu.

   The Create Peripherals list appears as shown in Figure 18.

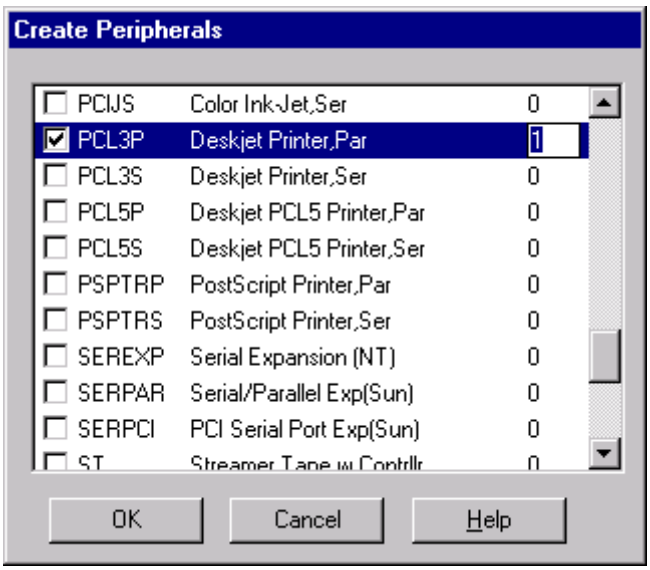

Figure 18. Create Peripherals List

   For this example a parallel DeskJet printer is selected.

3. Use the scroll bars to move the list so that you can select the desired peripherals.

4. Select all the peripherals that are listed on your purchase order by selecting the peripheral on the Create Peripherals list. To change the quantity of peripherals, highlight the quantity field and type in the required number of components.
5. Select **OK**. After you select OK, the peripherals are automatically listed in the PERIPHERALS part of the Hardware Definition screen.

   After all the system components for the example are selected, the Hardware Definition screen looks as shown in Figure 19.

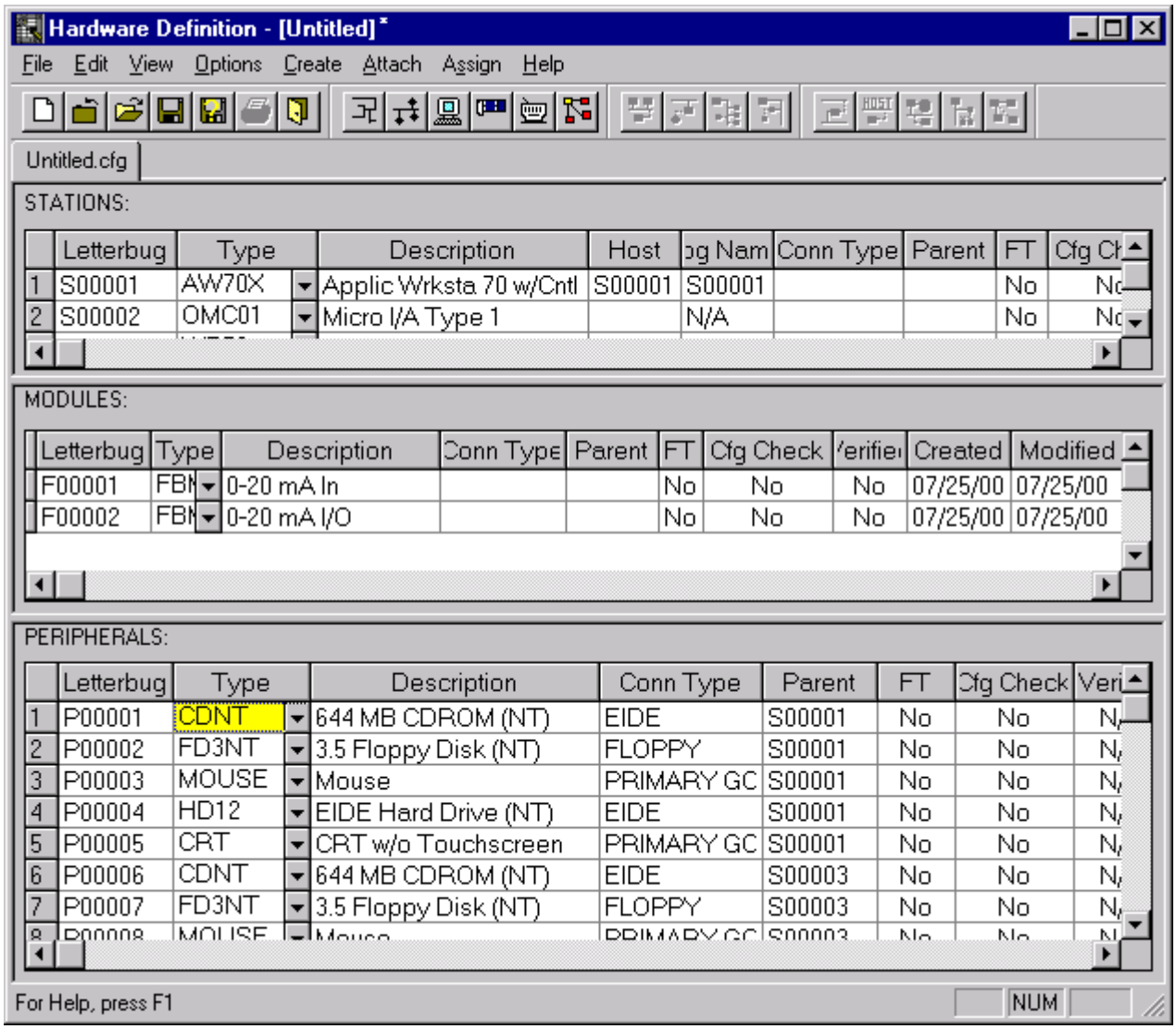

Figure 19. Hardware Definition Screen with System Components

Changing Letterbugs

After your stations, field modules, and peripherals have been selected, you can change the letterbugs of your stations and field modules. Letterbugs are a unique 6-character identifier assigned to each station, module and peripheral. Letterbugs are up to 6 alphanumeric uppercase characters and cannot contain spaces or dashes. System Definition assigns sequential letterbugs which can be used in your system.

To change a letterbug:

1. Select the letterbug to be changed in the column titled Letterbug of the Hardware Definition screen.
2. Delete the assigned letterbug using the **Backspace** key on the keyboard.
3. Type in the new letterbug.
4. Repeat the above steps for each letterbug to be changed.

After the letterbugs for the Application Workstation 70 and the Micro-I/A Type 1 station in the example are changed, the Hardware Definition screen looks as shown in Figure 20.

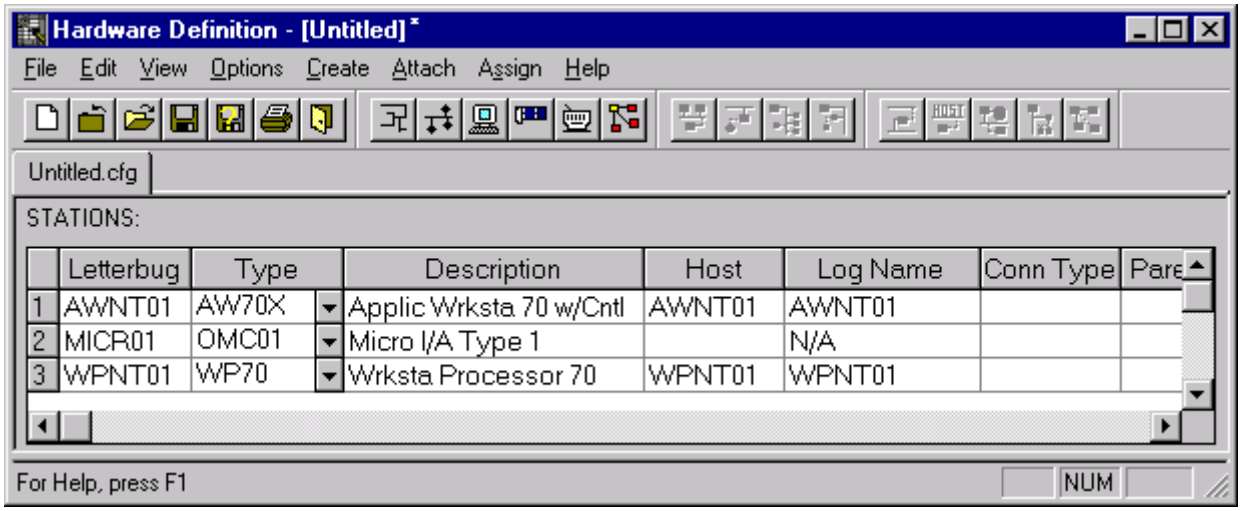

Figure 20. Hardware Definition Screen with Letterbugs Changed

Attaching Field Modules and Peripherals

After changing the letterbugs of your stations, field modules, and peripherals, you associate and attach field modules and peripherals to their station.

To attach field modules and peripherals, proceed as follows:

1. Select **View** from the main menu bar on the Hardware Definition screen as shown in Figure 21.

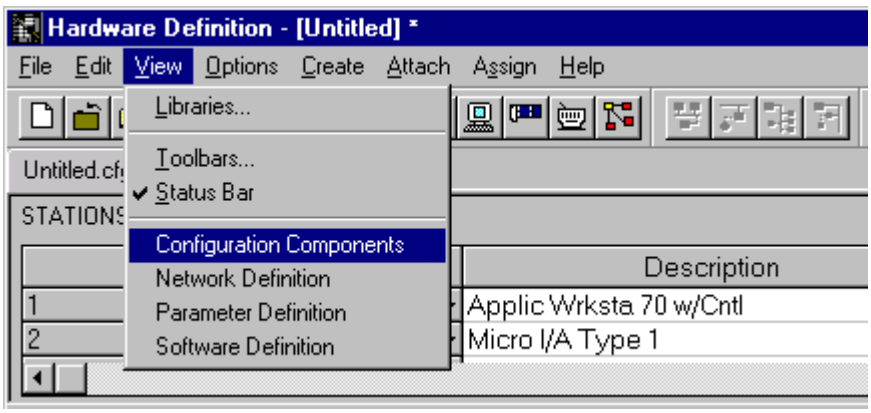

Figure 21. Selecting Configuration Components Screen

2. Select **Configuration Components** from the pull-down menu.
   The Configuration Components screen appears as shown in Figure 22.

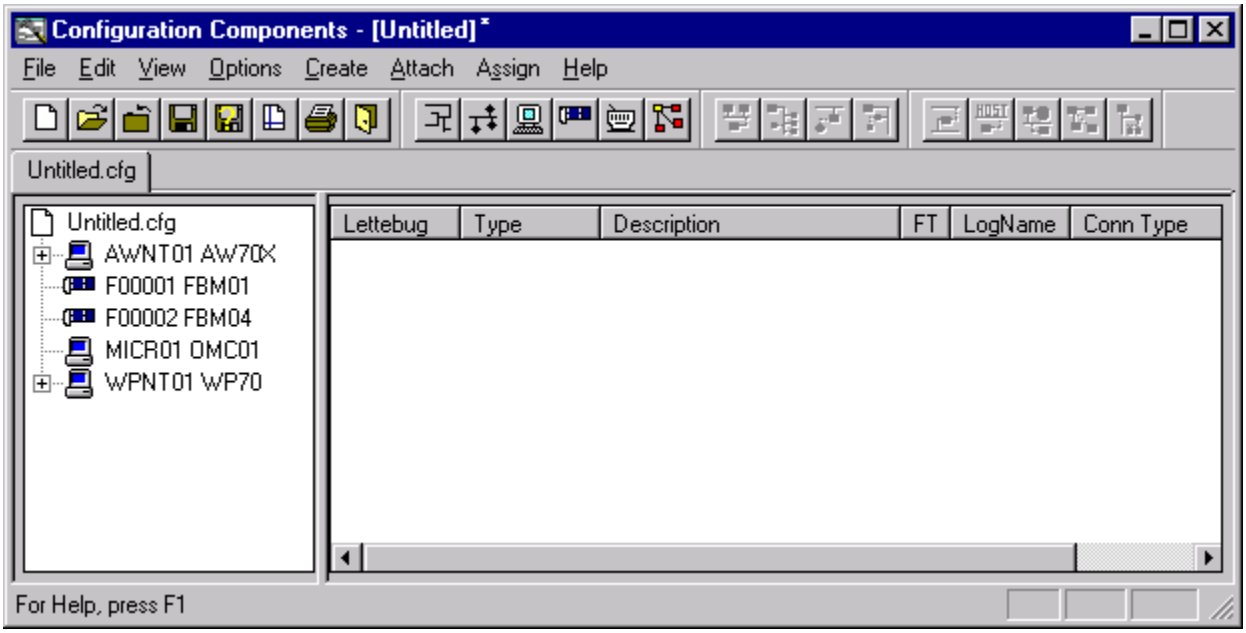

Figure 22. Configuration Components Screen

3. Select **Untitled.cfg** below the main menu bar. The Configuration Components screen appears as shown in Figure 23.

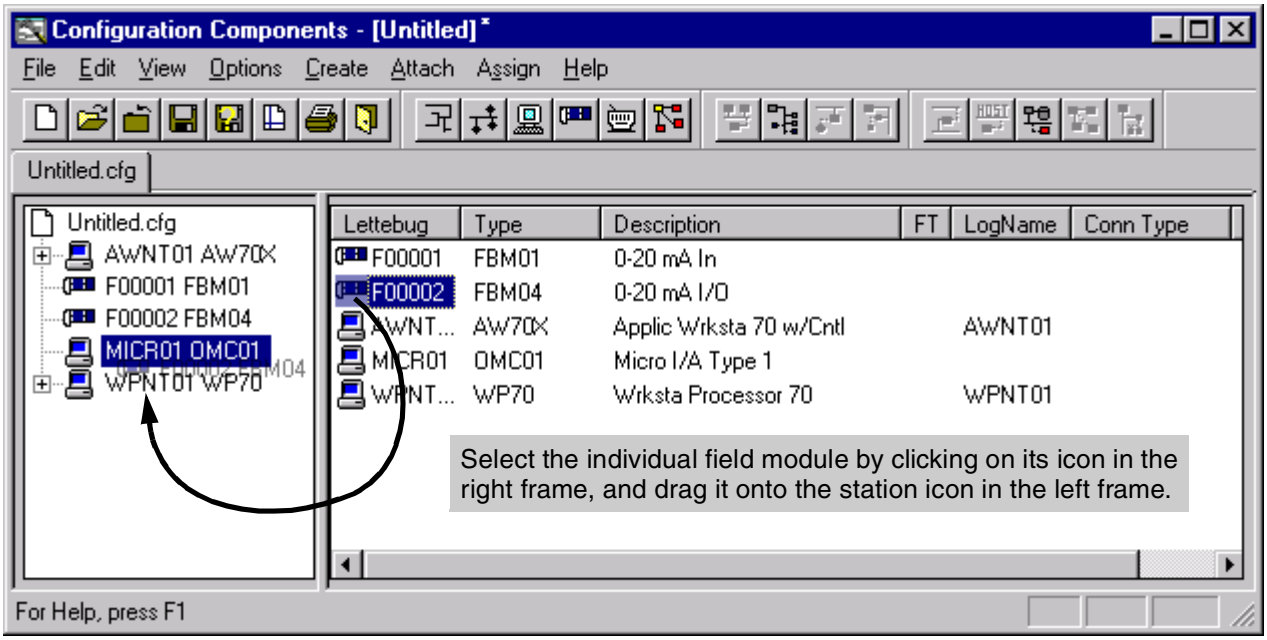

Figure 23. Configuration Components Screen (Untitled)

4. Select the Fieldbus Module (FBM) individually on the right side of the screen by pressing and holding the left mouse button on the icon of the module. Drag the field

module over the name of the appropriate station (Micro-I/A) in the Untitled.cfg area (see Figure 23) and release the mouse button.

NOTE

You can drag multiple modules by holding the **Ctrl** key depressed and selecting each module individually on the right side of the screen by pressing the left mouse button on the icon of the module. Release the **Ctrl** key. Drag the field modules over the name of the appropriate station in the Untitled.cfg area (see Figure 23) and release the mouse button.

5. Select the peripheral (printer) individually on the right side of the screen by pressing and holding the left mouse button on the icon of the peripheral. Drag the peripheral over the name of the station in the Untitled.cfg area (see Figure 23) and release the mouse button.

NOTE

You can drag multiple peripherals as described in the NOTE for Step 4, except that you select peripherals.

After field modules and peripherals are dragged over to their desired station, the example Configuration Components screen looks as shown in Figure 24.

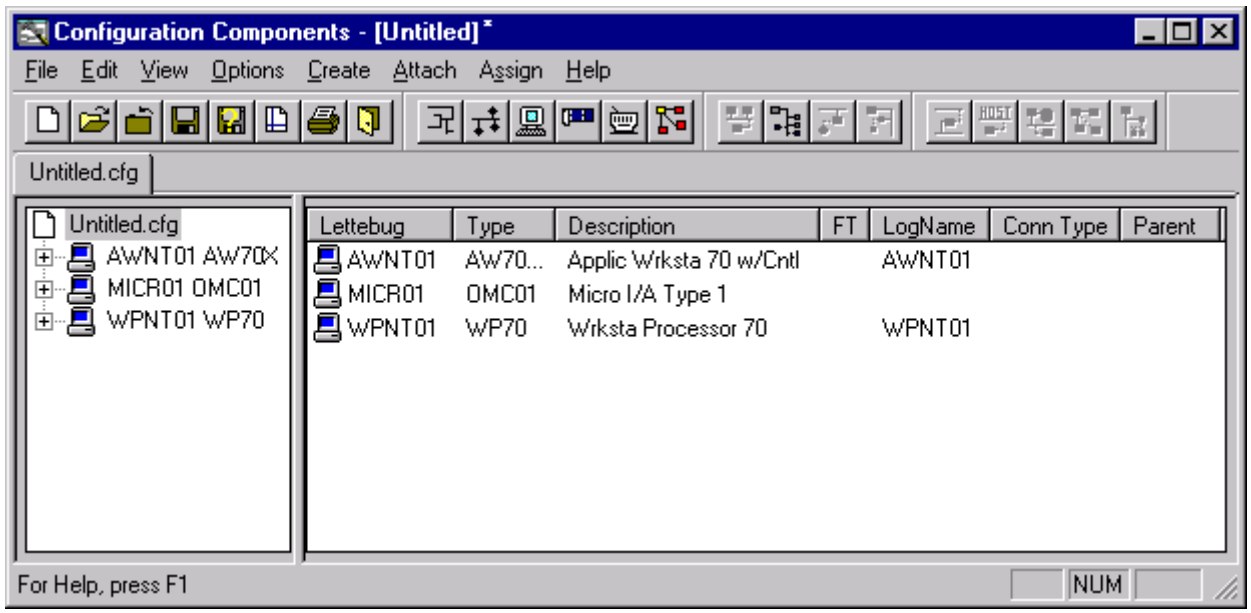

Figure 24. Configuration Components Screen After Attaching Modules and Peripherals

Creating Nodes

After your field modules and peripherals have been attached to their associated station, create the node(s) for the stations.

To create a node from the Configuration Components screen, proceed as follows:

1. Click **Create** as shown in Figure 25.

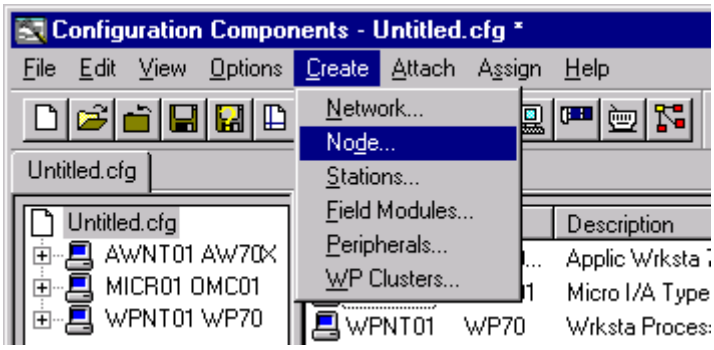

Figure 25. Select Create Node

2. Select **Node** from the pull-down menu.

   The Create Nodes list appears as shown in Figure 26.

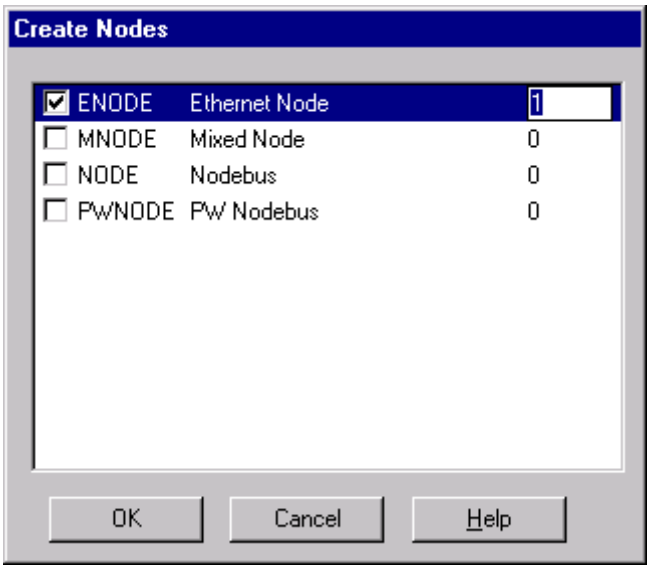

Figure 26. Create Nodes List

3. Select **ENODE**. The example, as selected, uses a single Ethernet node. It is not connected to the I/A Series Nodebus. To change the quantity of nodes, highlight the quantity field and type in the required number of nodes. Select **NODE** (Nodebus) if the Node(s) are connected to an I/A Series Nodebus. Select **MNODE** (Mixed Node) if the Node(s) are connected to both Ethernet and an I/A Series Nodebus.

   The station(s) and the selected node(s) appear on both sides of the Configuration Components screen as shown in Figure 27.

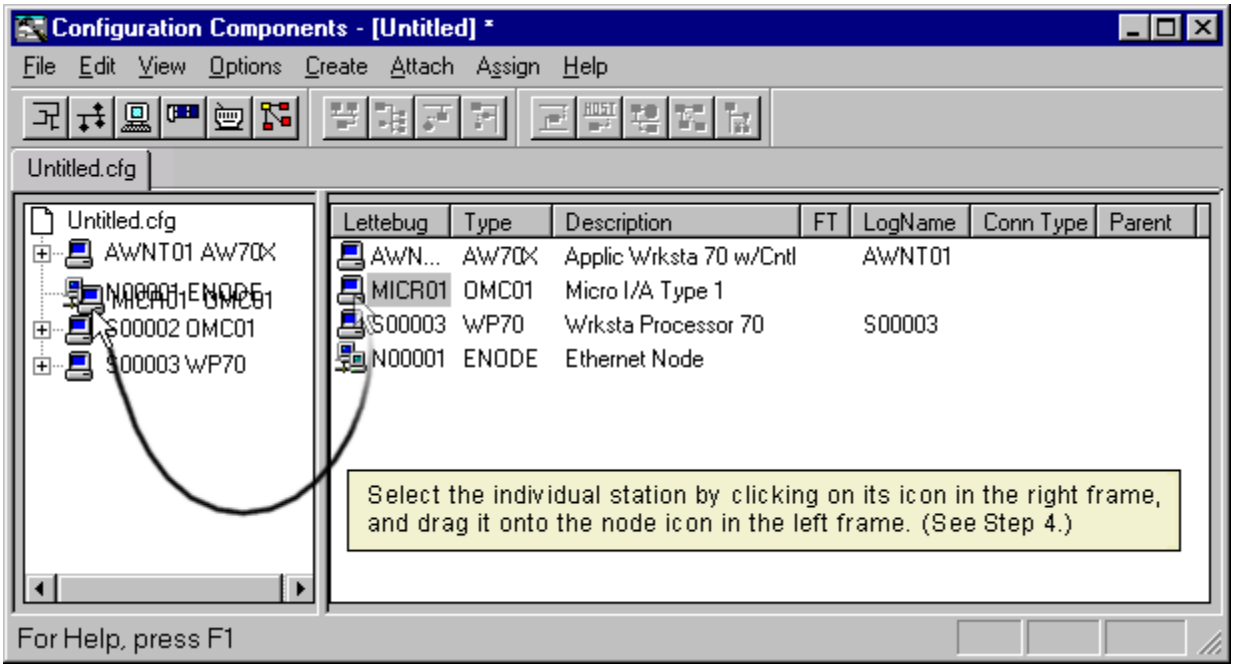

Figure 27. Configuration Components Screen with Stations and Node

4. Select each station individually by pressing and holding the left mouse button on the icon of the station, drag the station over the name of the appropriate node in the Untitled.cfg area (see Figure 27), and release the mouse button. This attaches the station(s) to the appropriate node. If you have more than one node, attach (drag) the station to the proper node.

NOTE

You can drag multiple stations by holding the **Ctrl** key depressed and selecting each station individually on the right side of the screen by pressing the left mouse button on the icon of each station that you wish to drag. Release the **Ctrl** key. Drag the stations over the name of the appropriate node in the Untitled.cfg area (see Figure 27) and release the mouse button.

After dragging stations to their desired node, you should have only the node(s) showing on your Configuration Components screen. If you have stations and nodes, you have not attached all your stations to a node. The example Configuration Components screen looks as shown in Figure 28.

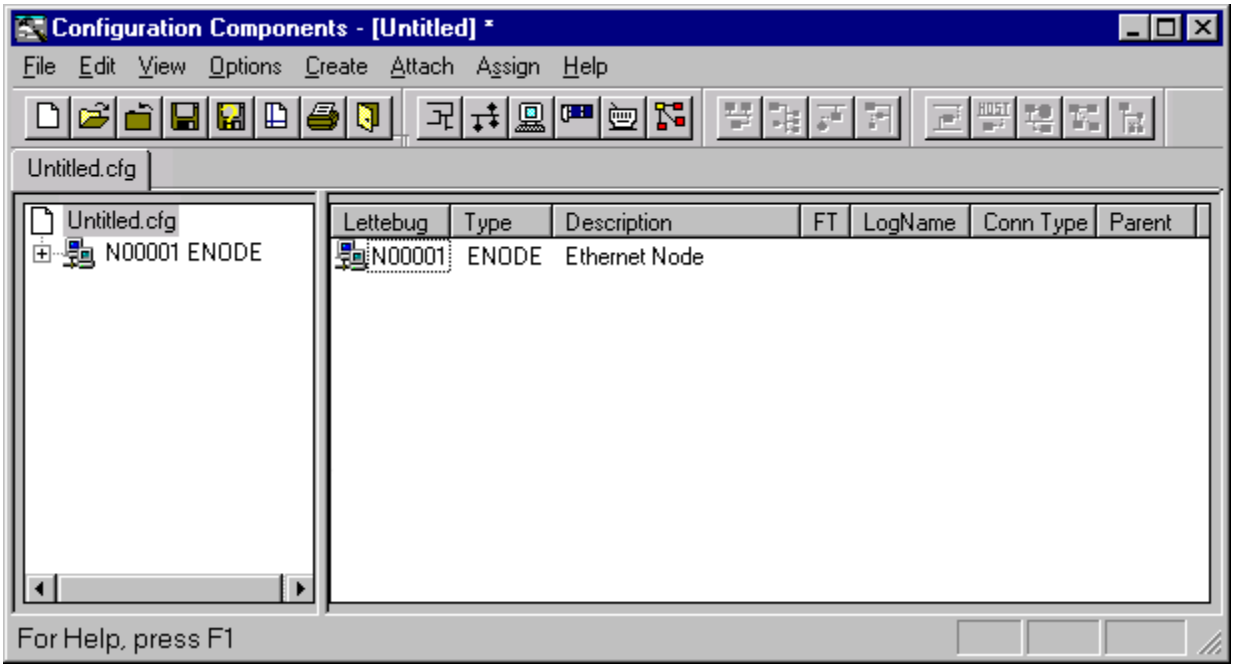

Figure 28. Configuration Components Screen after Attaching Stations to the Node

To expand the node, you can click on the **+** symbol next to the node.

Assigning Software

As you create hardware, the required software is automatically saved and assigned by System Definition. However, you may have ordered optional software, and you must select the optional software for each station and field module.

To assign software from the Configuration Components screen, proceed as follows:

1. Select **View** as shown in Figure 29.

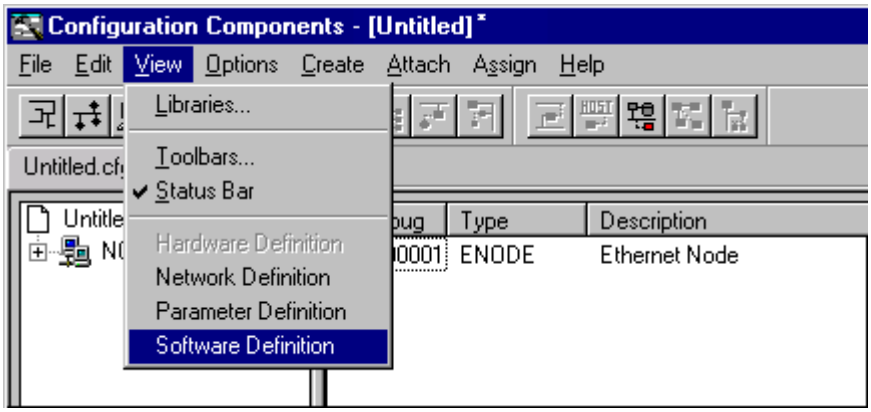

Figure 29. Selecting Software Definition

2. Select **Software Definition** from the pull-down menu.

   The Software Definition screen appears as shown in Figure 30.

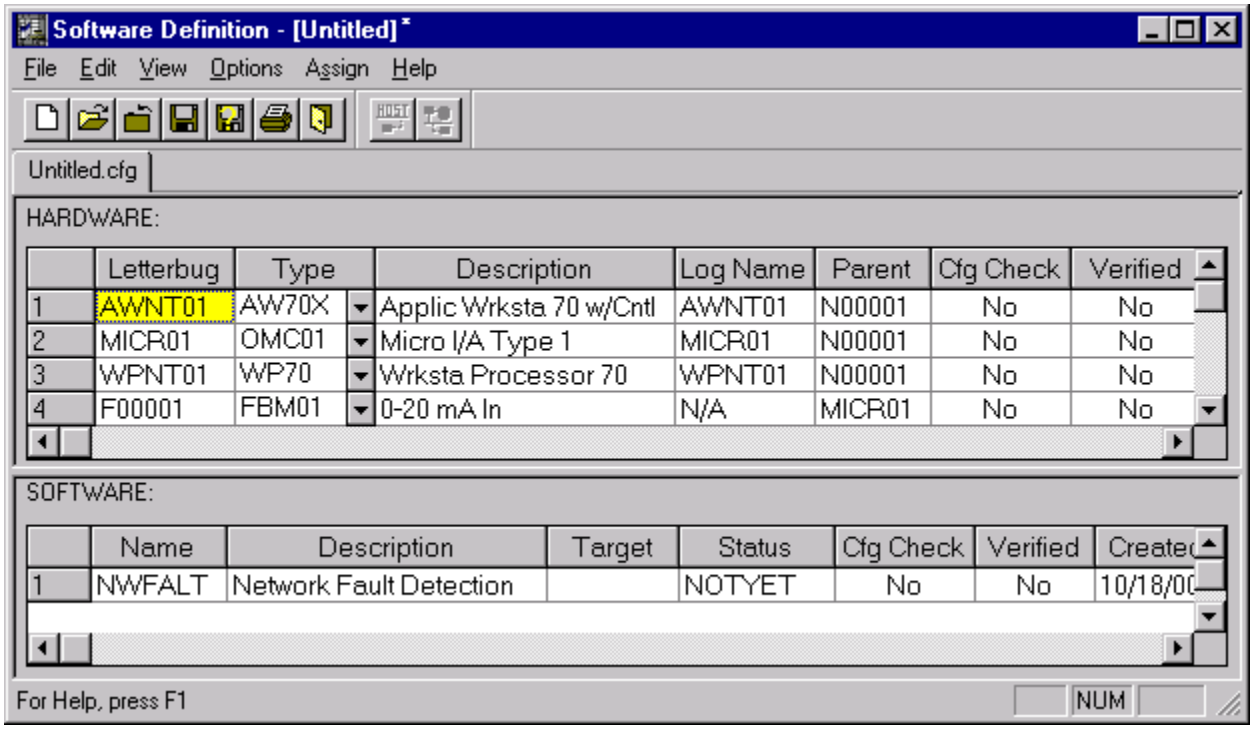

Figure 30. Software Definition Screen

The hardware is shown on the upper portion of the screen, and the software is shown on the bottom portion of the screen. You click on the numbered buttons (1, 2, and so forth) on the left side of the HARDWARE portion of the screen. Clicking on the numbered button lists the default software (in the SOFTWARE portion of the screen) for that hardware station, field module, or peripheral. The color blue identifies the operating system for the station.

3. Click on the numbered button **1** in the HARDWARE portion of the Software Definition screen. The default software for the first station (AWNT01 in the example) appears in the SOFTWARE portion of the screen as shown in Figure 31.

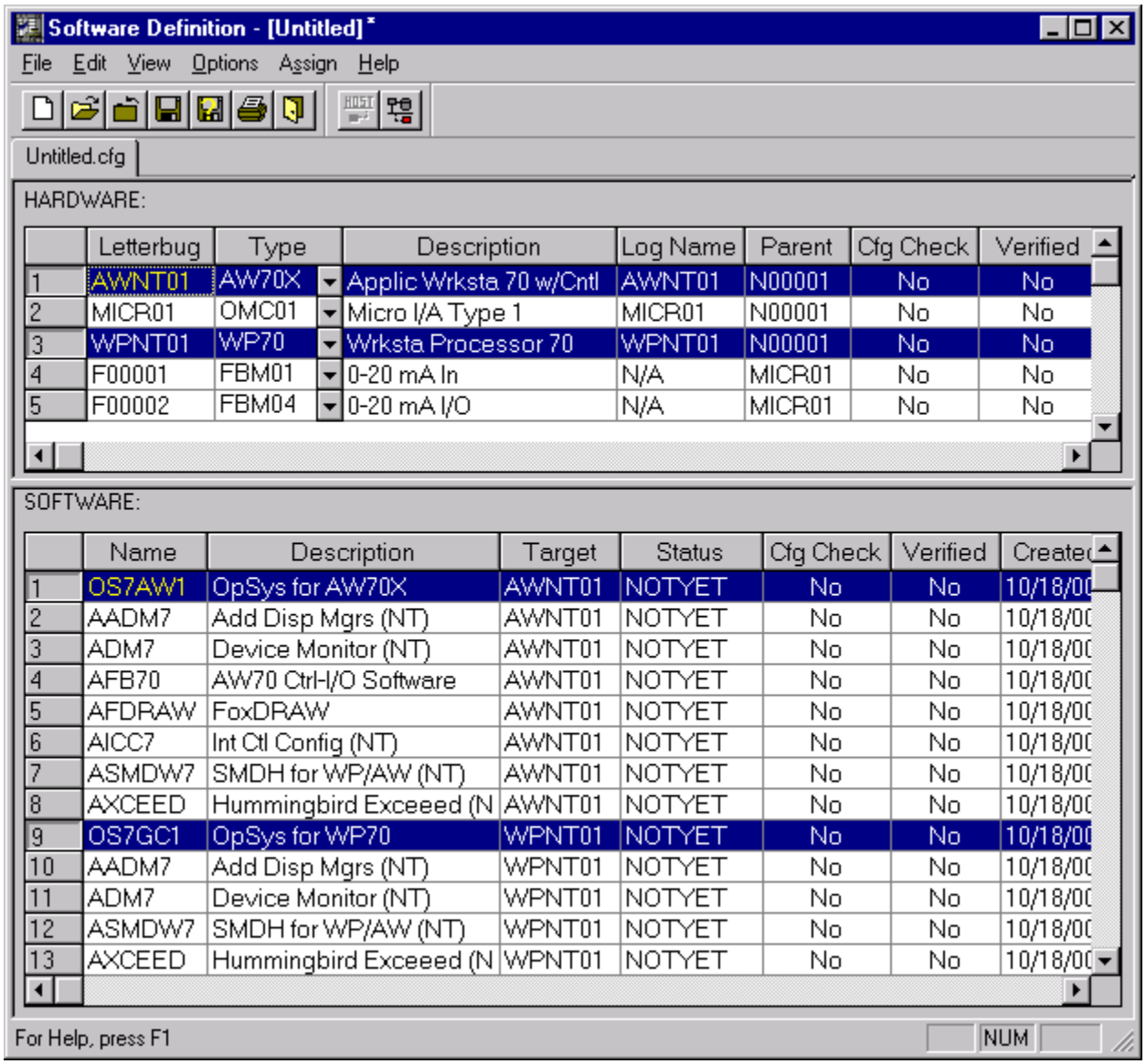

Figure 31. Software Definition Screen with Hardware Selected

4. Select **Assign** from the main menu bar as shown in Figure 32.

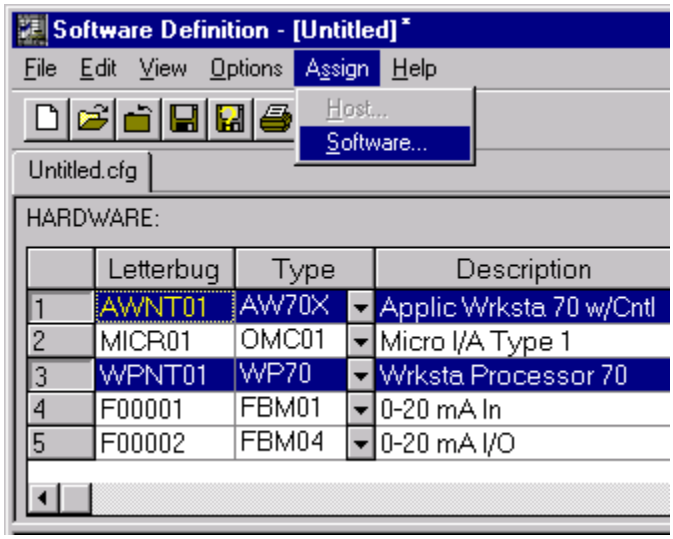

Figure 32. Selecting Assign Software Menu

5. Select **Software** from the pull-down menu.
   The Assign Software list appears as shown in Figure 33.

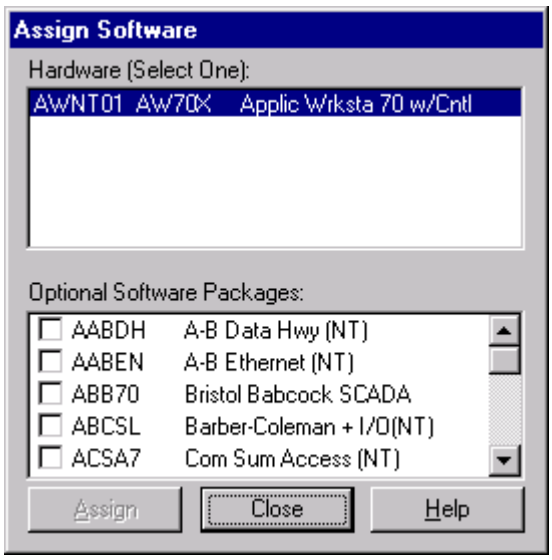

Figure 33. Assign Software List

6. Select one hardware station, field module, or peripheral from the Hardware portion of the Assign Software list as shown in Figure 34.

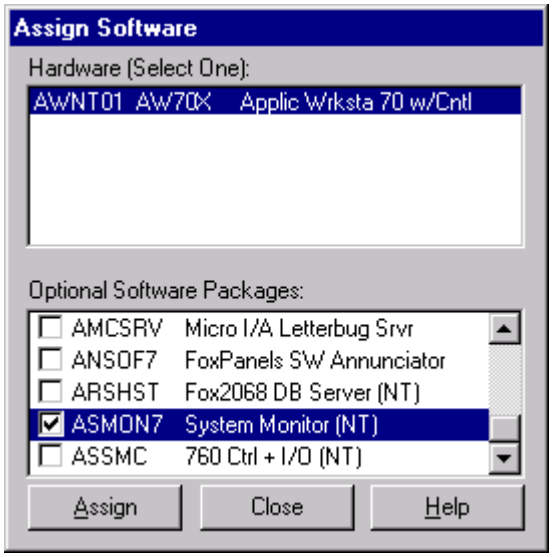

Figure 34. Optional Software in Assign Software List

The optional software for the station or field module selected in the list above appears in the Optional Software Packages portion of the Assign Software list as shown in Figure 34.

7. Select each of the optional software packages for that station or field module. Use the scroll bar to view all the packages. If no optional software packages are shown, that component does not have any optional software.
8. Select **Assign**.
9. Select **Close** on the Assign Software list after you have selected the optional software for each hardware component. When you select close on the Assign Software list, the System Definition screen is updated to show your selections.
10. Repeat Steps 6, 7, 8, and 9 for each hardware component.
11. Verify your selections by reviewing the Software Definition screen.

— NOTE

Each system requires one and only one Compound Summary Access (for example, Com Sum Access, ACSA7) software package.

Assigning the Software Host

Assigning the software host defines where the software for a hardware module resides. The procedure for assigning the host for each hardware module that requires a host (not all modules require a host) is basically the same as the procedure for assigning the software.

To assign a software host:

1. Select **Assign** from the Software Definition screen on the main menu bar as shown in Figure 35.

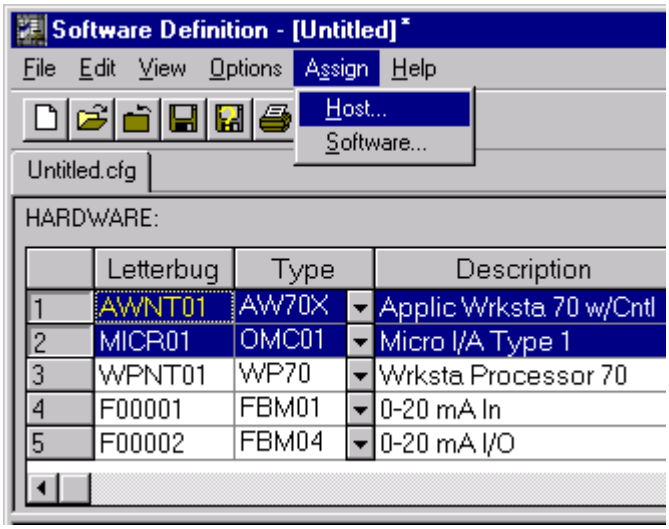

Figure 35. Selecting Assign Host Menu

2. Select **Host** from the pull-down menu.

   If a software host is not required for that hardware module, host is not selectable on the menu.

   The Assign Software Host list appears as shown in Figure 36.

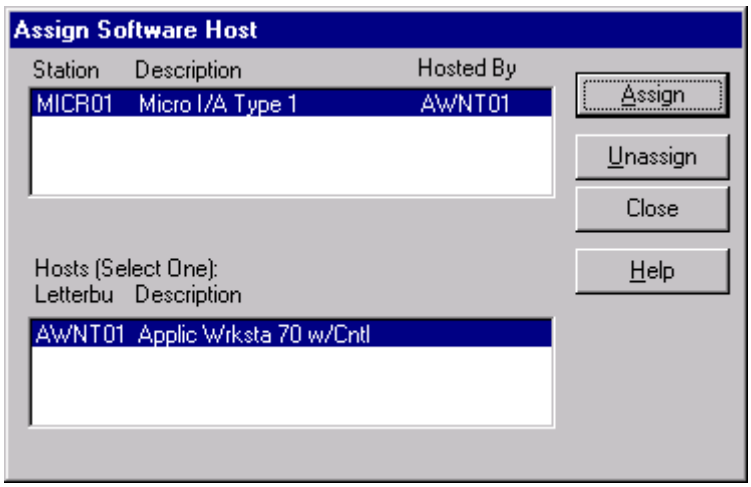

Figure 36. Assign Software Host List

   The hardware requiring the assignment of a host station is shown on the upper portion of the screen, and the possible host station(s) is shown on the bottom portion of the screen.

3. Select a station from the Station portion of the Assign Software Host list as shown in Figure 36.
4. Select a host from the station selected in Step 3 from the Hosts portion of the Assign Software Host list.
5. Click **Assign** from the Assign Software Host list.

6. Select **Close** on the Assign Software Host list after each hardware component has been assigned a software host.
7. Repeat Steps 3, 4, 5, and 6 for each hardware component.

Assigning Parameter Definitions

Assigning parameter definitions involves parameters which require the assignment of names or values that are dependent upon your system requirements; for example, logical names of library volumes, number of stop and start bits in a character, character baud rate, and so forth. To print or view the individual parameters for any software package from any screen in System Definition, refer to “Printing Parameter Worksheets” on page 30.

To assign parameter definitions:

1. Select **View** from the Software Definition screen top menu bar as shown in Figure 37.

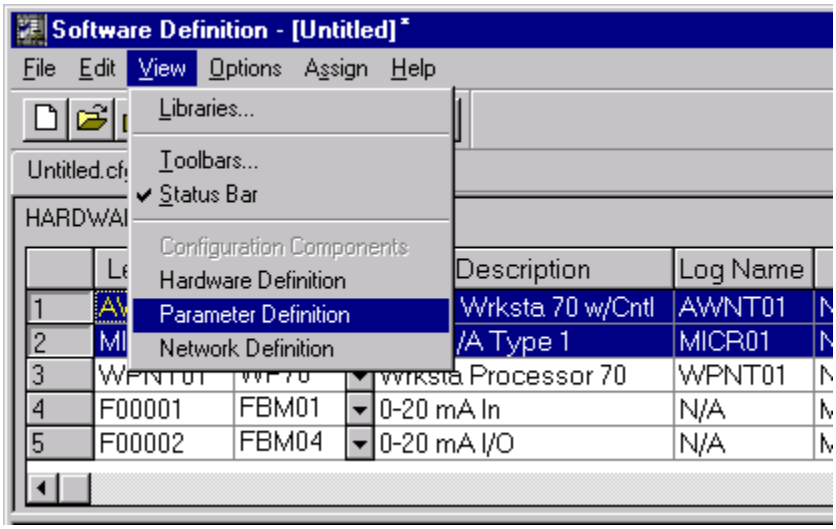

Figure 37. Selecting Assign Software Parameters

2. Select **Parameter Definition** from the pull-down menu.

   The Parameter Definition screen appears as shown in Figure 38.

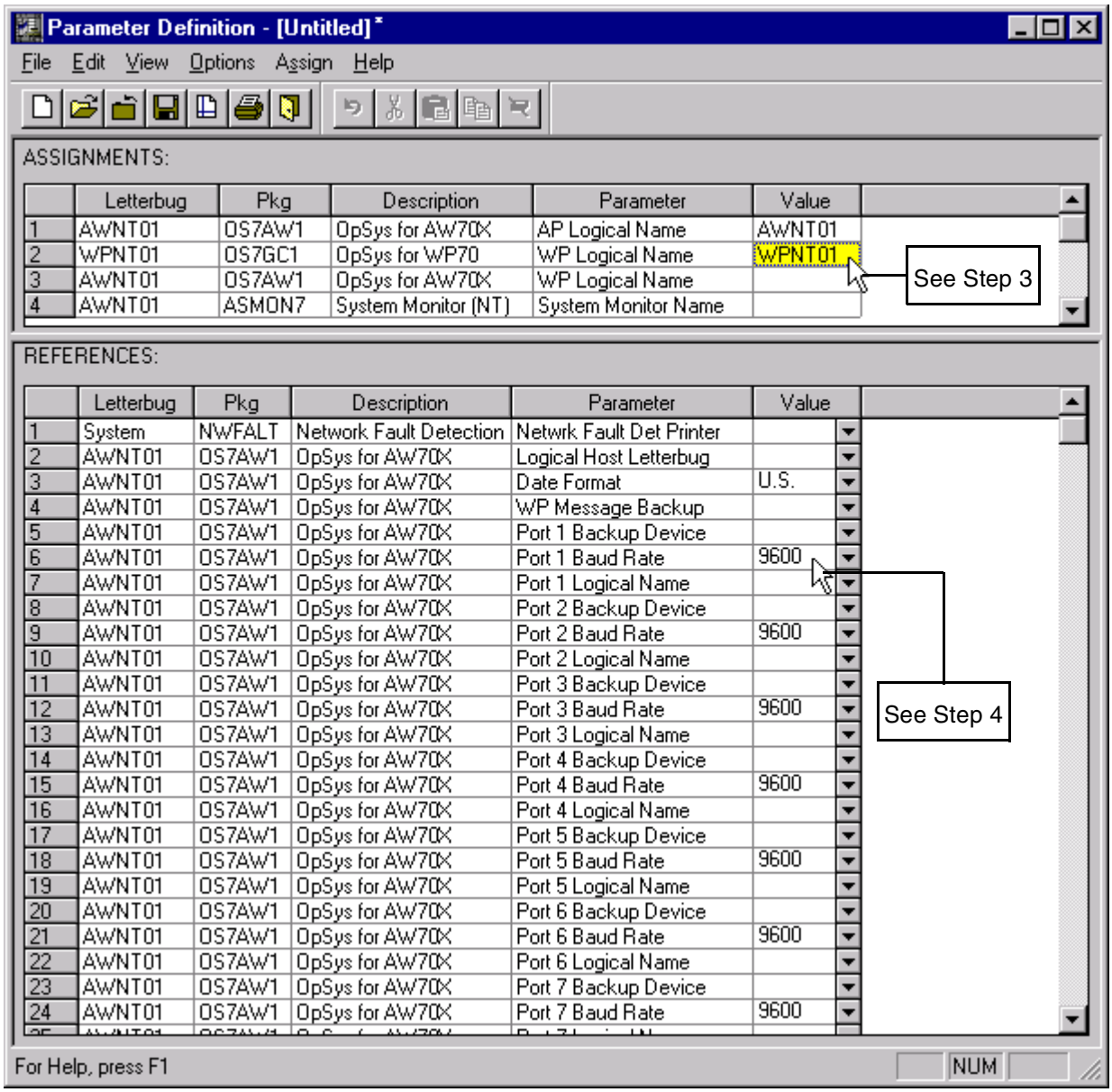

Figure 38. Parameter Definition Screen

The ASSIGNMENTS (top portion) of the Parameter Definition screen shows user-defined parameters for which you must enter (type in) the value. Values are entered (typed) in the column below the Value field of ASSIGNMENTS.

The REFERENCES (lower portion) of the Parameter Definition screen shows values that you must select from lists of possible values. Values for REFERENCES are changed by selecting the down arrow next to the Value field and clicking a value in the list. In both cases, you can keep the defaults, if defaults are assigned and if they meet the requirements for your system.

⚠ CAUTION

Do not type in values in the REFERENCES portion of the Parameter Definition screen.

3. To define a parameter in ASSIGNMENTS:
   a. Click (highlight) the **Value** field for a parameter listed in ASSIGNMENTS.
   b. Type in the new parameter.

   Repeat Steps a and b for each parameter.
4. To define a new value for a parameter listed in REFERENCES:
   a. Click the down arrow in the parameters **Value** list.
   b. Click the new value from the pop-up list.

   Repeat Steps a and b for each component.

NOTE

You must assign a work volume for each host. In the Value field, click **Ctl & IO Library Volume** and select a library volume such as volume work (**volwrk**).

Parameter descriptions for each software or hardware component are contained in worksheets in the On-Line User's Guide. It is suggested that you print and/or view the individual worksheets for each of your hardware or software components to determine the meaning and value range of each parameter. Hardware worksheets contain the parameter values for a particular processor. Software worksheets contain the parameter values for all other software.

Printing Parameter Worksheets

To print or view the individual parameter worksheets from the Parameter Definition screen or any screen in System Definition, proceed as follows:

1. Select **Help** as shown in Figure 39.

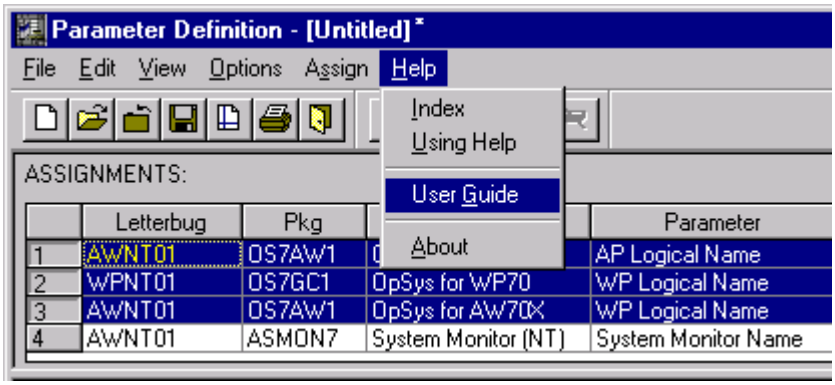

Figure 39. Selecting Help

2. Select **User Guide** from the pull-down menu.

3. Select **Hardware Worksheets** (Hardware in the example) or **Software Worksheets** located at the bottom of the Contents page for Help. The Hardware Worksheets or Software Worksheets list appears. An example hardware list is shown in Figure 40.

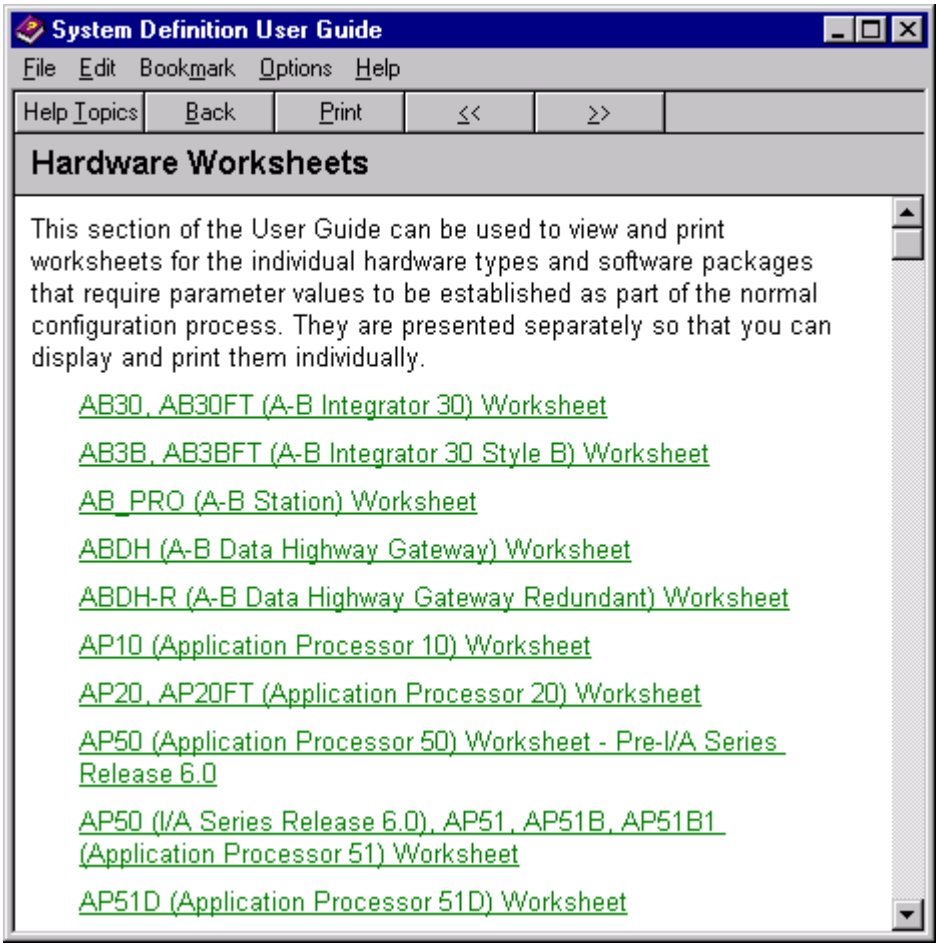

Figure 40. Hardware Worksheets List from the On-Line User Guide

4. Select the individual worksheet from the **Hardware** (AW70 in the example) or **Software Worksheets** list. The selected worksheet (AW70) appears as shown in Figure 41.

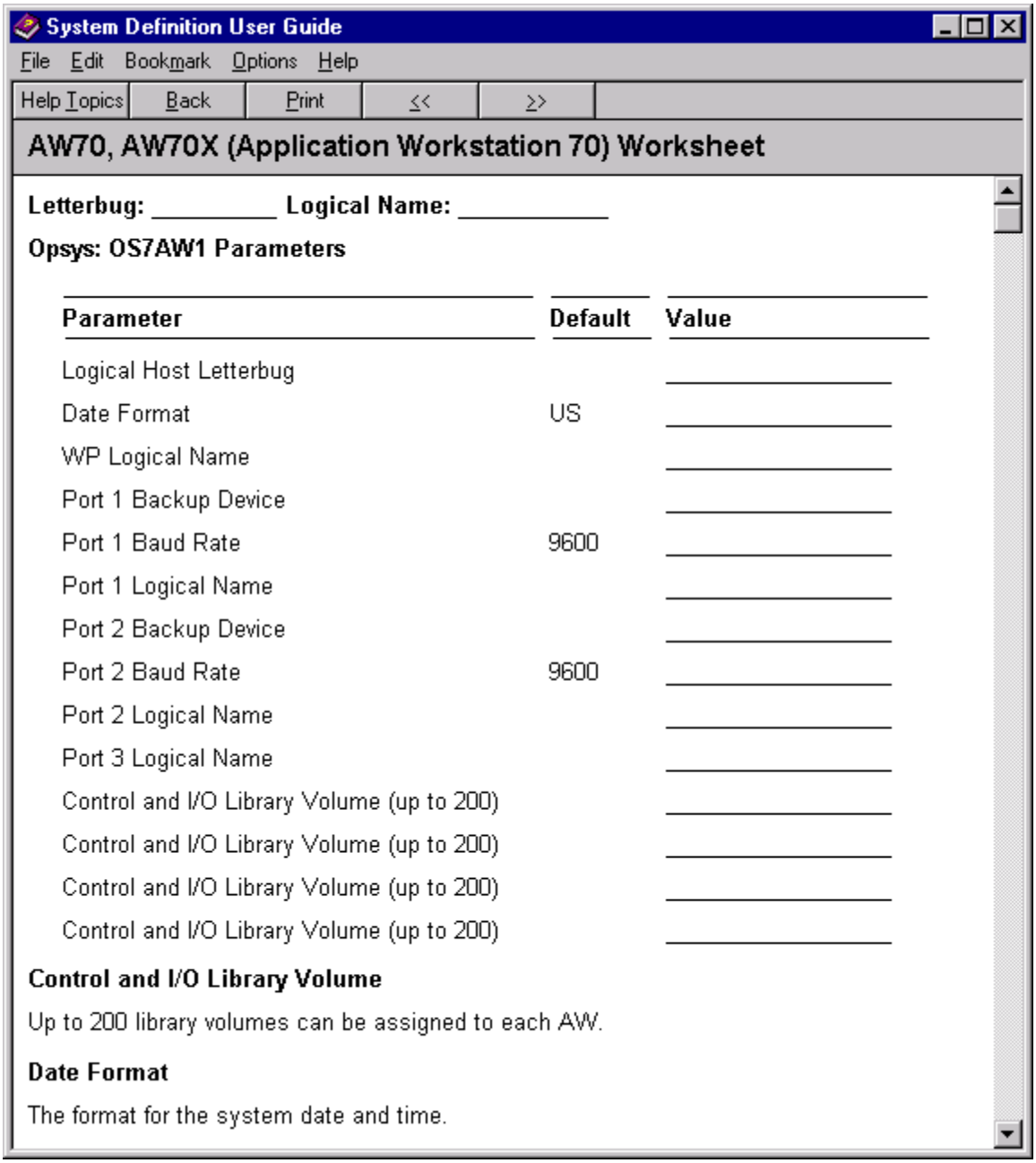

Figure 41. AW70 Hardware Worksheet

5. Print the Hardware and Software Worksheets for all required components as follows:
   a. Select **File**.
   b. Select **Print Topic**.
   c. To exit Help, select the **x** button at the upper-right of the Help screen.

Documenting the Configuration (Optional)

Documenting the configuration is an optional step that allows you to build a graphical view of your configured system.

To document a system from the Hardware Definition screen, proceed as follows:

1. Click on the numbered button(s) (for example 1, 2, and so forth) in the STATIONS, MODULES, and PERIPHERALS fields on the Hardware Definition screen. Select the components that you want to display graphically. For this example, the selected components are highlighted as shown in Figure 42.

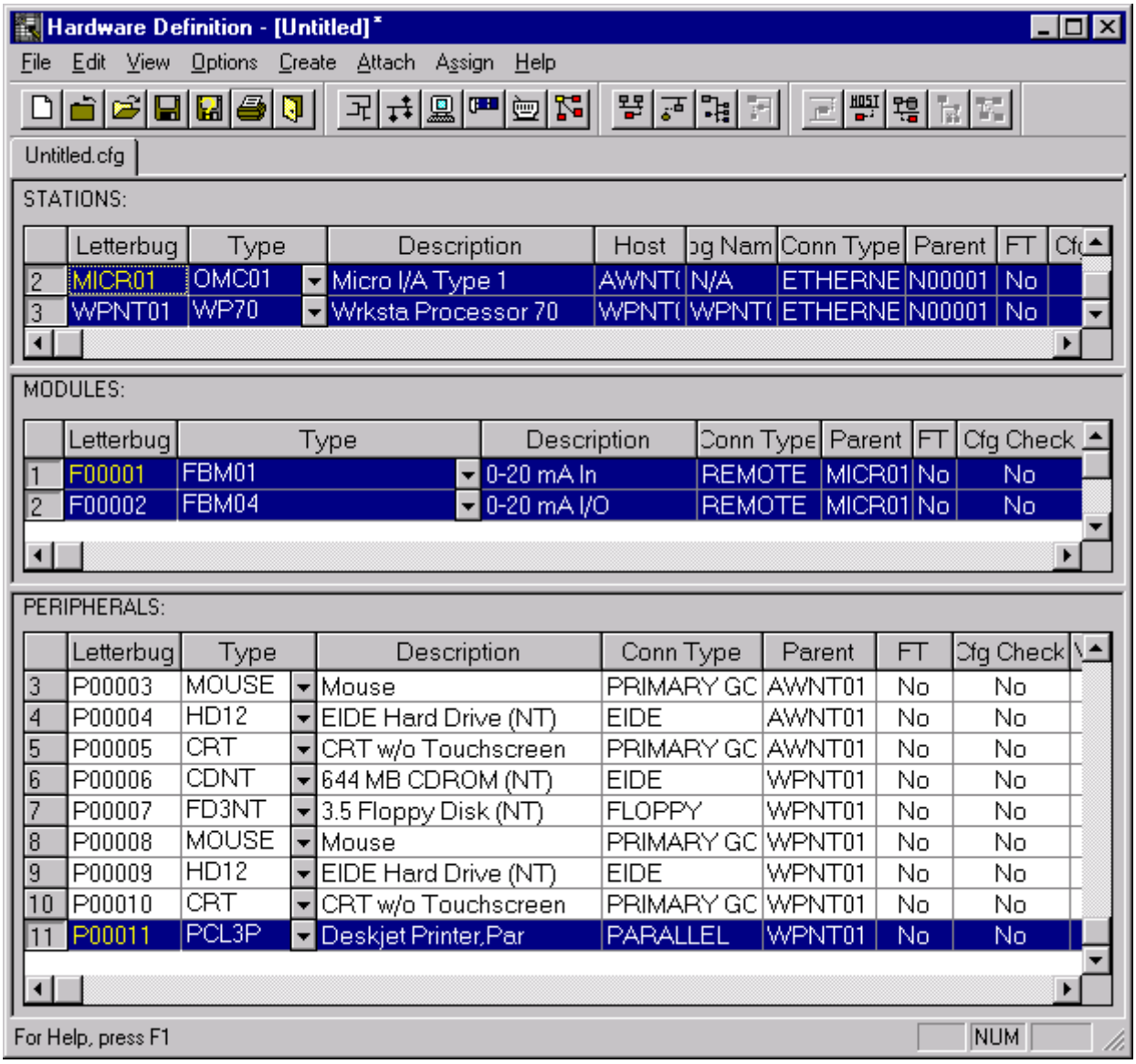

Figure 42. Hardware Definition Screen with Selected Components

2. Select **Edit** as shown in Figure 43.

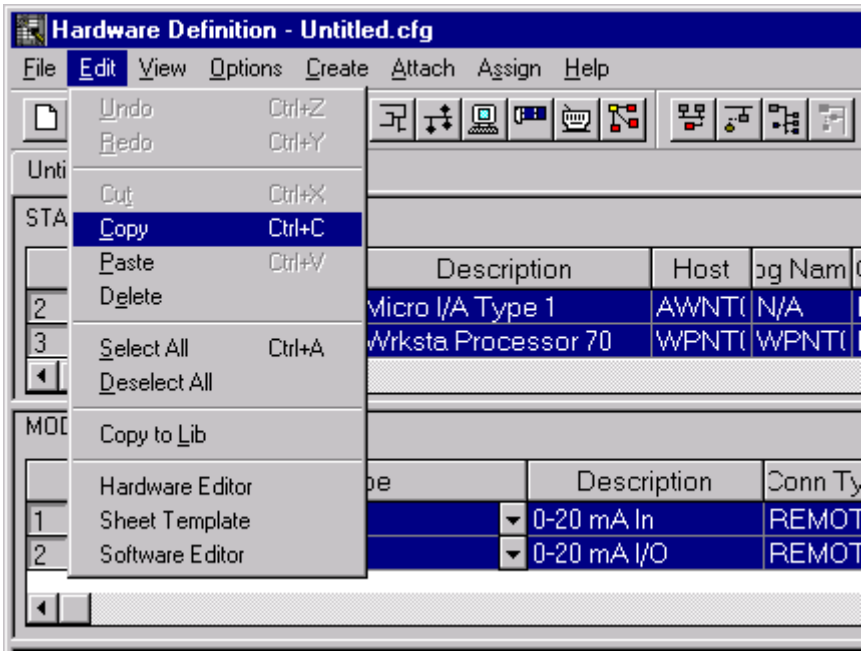

Figure 43. Copying Highlighted Components (selecting Edit)

3. Select **Copy** from the pull-down menu.
4. Select **View** from the main menu bar of the Hardware Definition screen as shown in Figure 44.

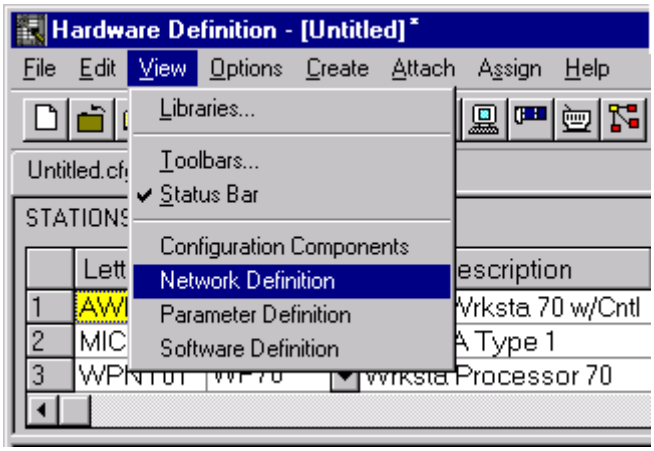

Figure 44. Copying Highlighted Components (selecting View)

5. Select **Network Definition** from the pull-down menu.

   The Network Definition screen appears as shown in Figure 45.

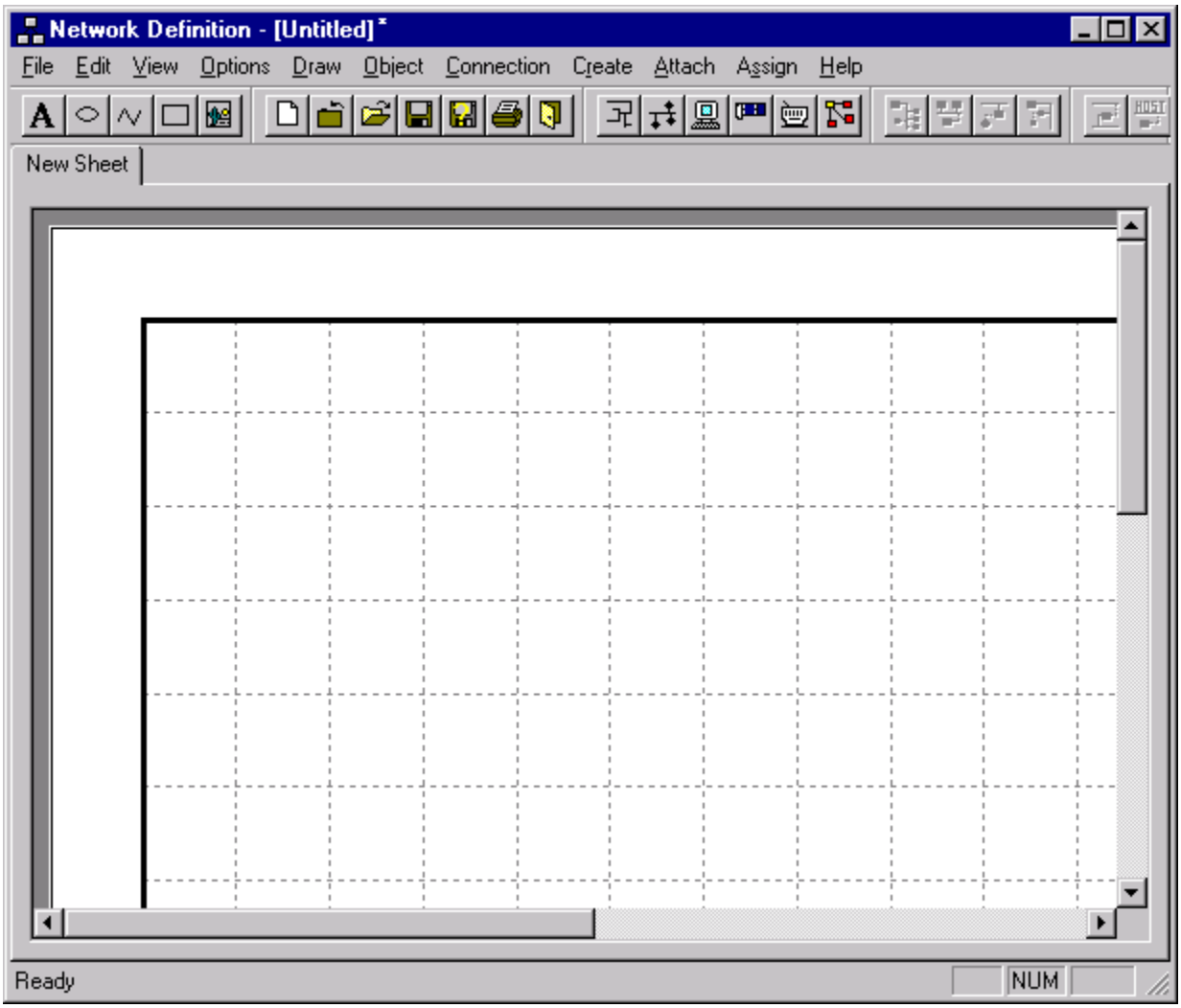

Figure 45. Network Definition Screen

6. Select **Edit** from the main menu bar of the Network Definition screen as shown in Figure 46.

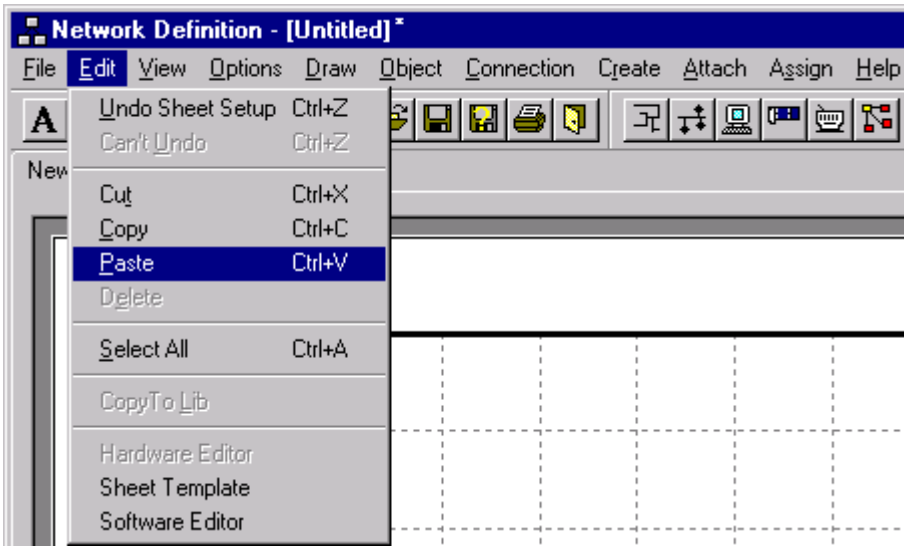

Figure 46. Pasting Components for Network Definition

7. Select **Paste** from the pull-down menu.

   The components copied from the Hardware Definition screen appear in the center of the Network Definition screen. The components for this example were pasted as a group and display as shown in Figure 47.

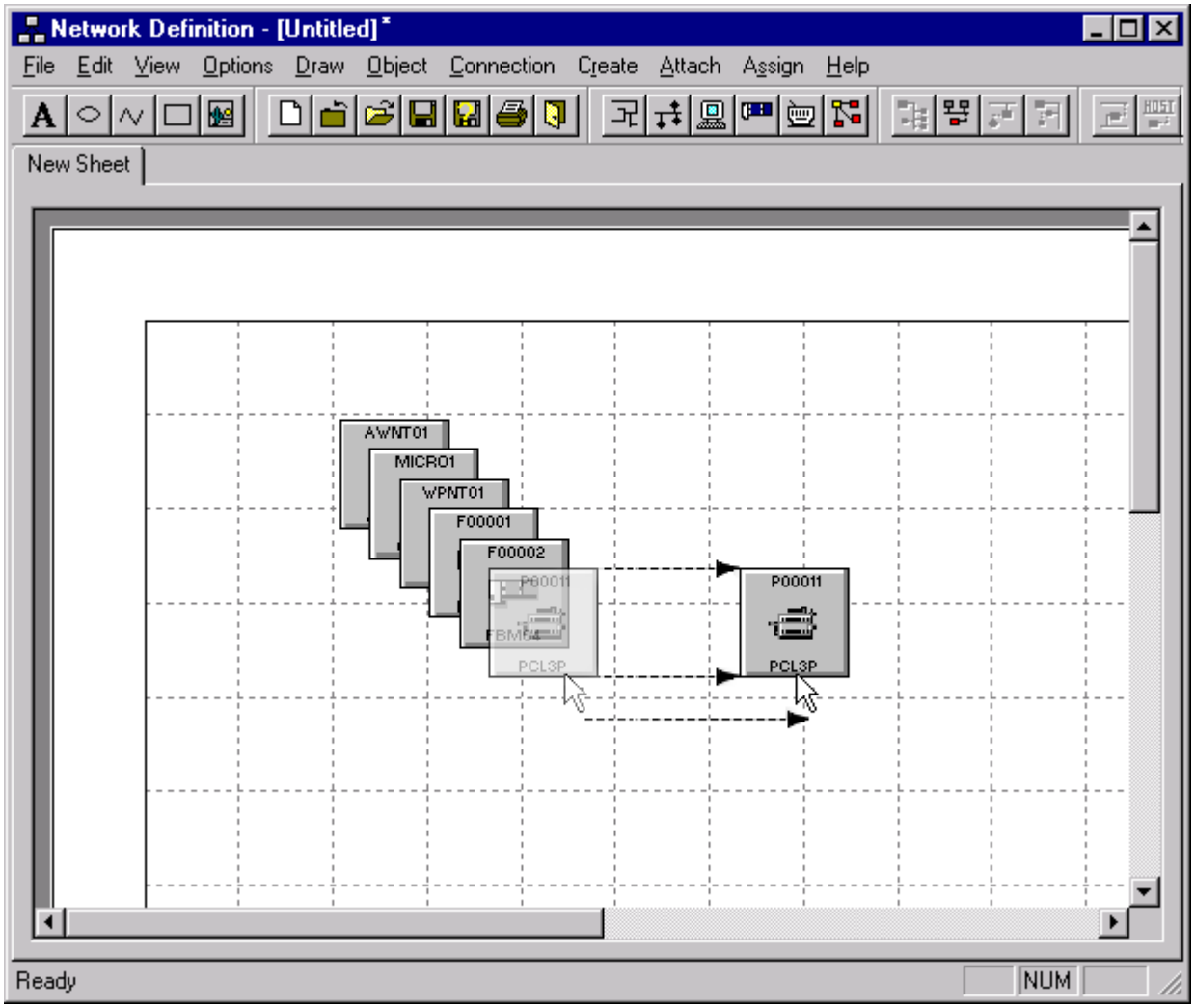

Figure 47. Network Definition with Grouped Components

8. Depress and hold the left mouse button on the component and drag the component to the desired location on the screen as shown in Figure 47. You can also resize components by clicking on a component and grabbing the rectangular boxes on the component to size the component. Refer to the on-line Help for additional information about drawing tools. After dragging and resizing the components, the example looks as shown in Figure 48.

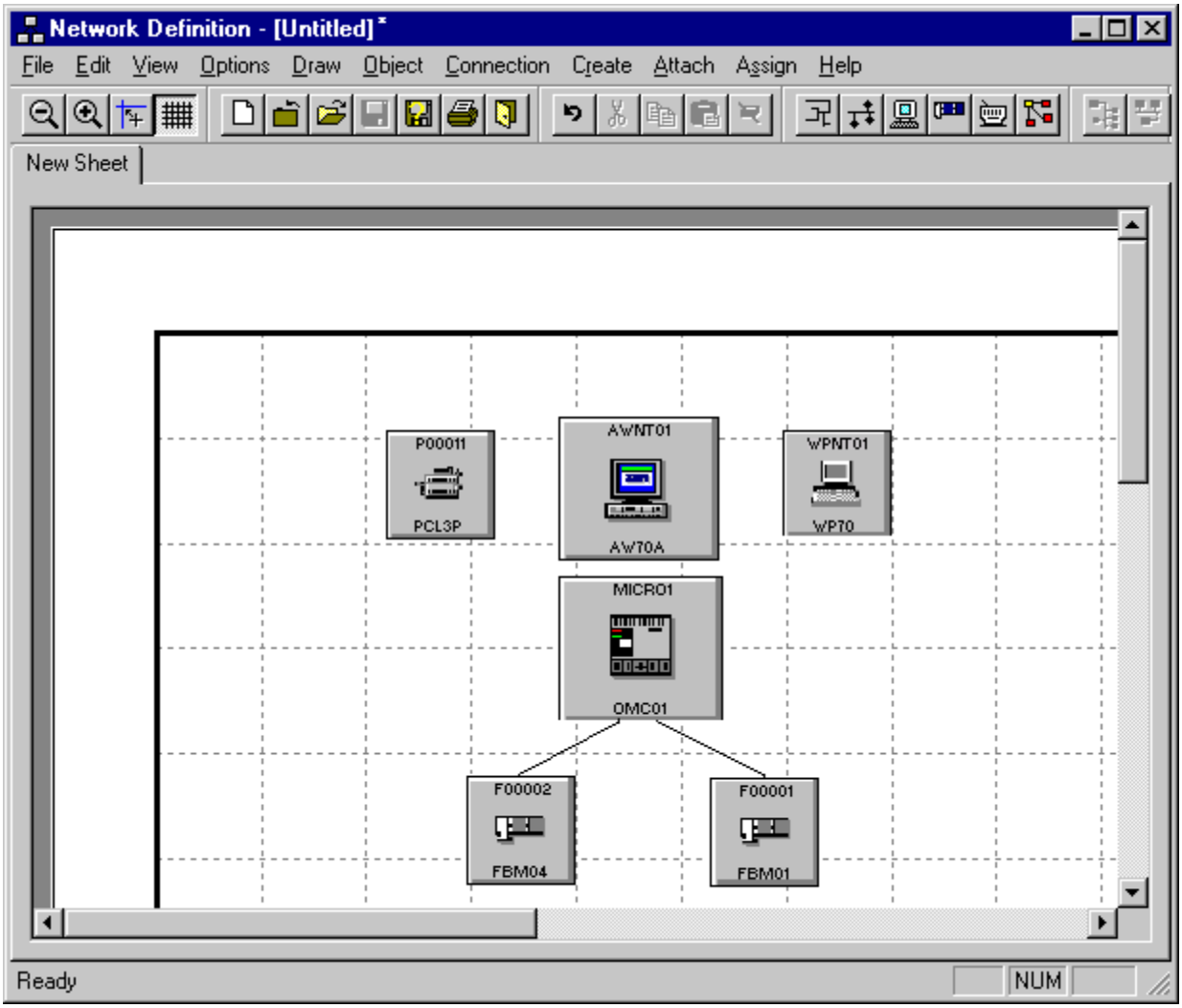

Figure 48. Network Definition, Graphical View

To print a copy of the Network Definition screen:

1. Select **File**.
2. Select **Print**.

Checking the Configuration

Checking the system configuration verifies the installability of the configuration. If a system configuration cannot pass the configuration check, you cannot produce a Commit diskette for software installation.

To check the configuration, proceed as follows:

1. Select **Options** from the Parameter Definition screen on the main menu bar as shown in Figure 49.

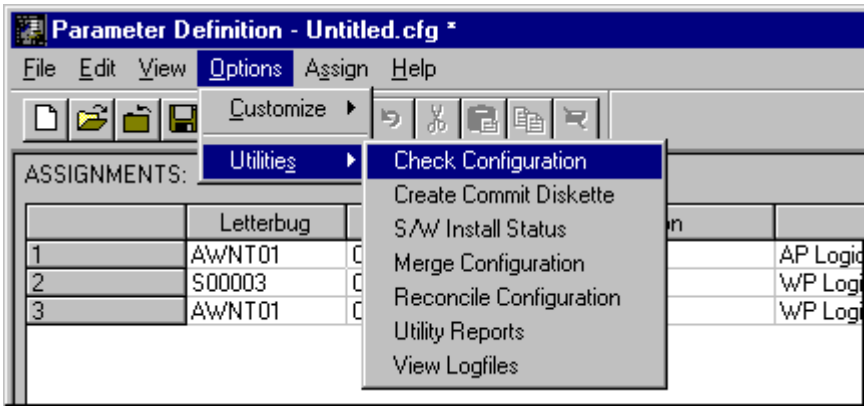

Figure 49. Selecting Options Menu

2. Select **Utilities** from the pull-down menu.
3. Select **Check Configuration** from the pull-down menu.

   The Check Configuration dialog box appears as shown in Figure 50.

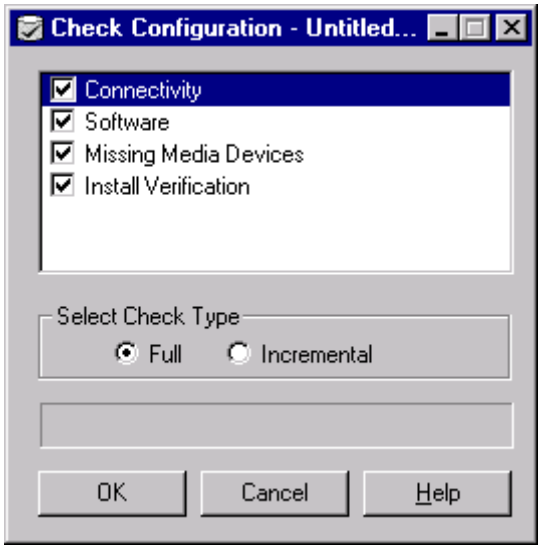

Figure 50. Check Configuration Dialog Box

4. Check all selections (**Connectivity**, **Software**, **Missing Media Devices**, and **Install Verification**) from the list as shown in Figure 50.
5. Select **Full** from the Select Check Type.
6. Click **OK** from the Check Configuration dialog box.

   A Check Configuration message appears as shown in Figure 51.

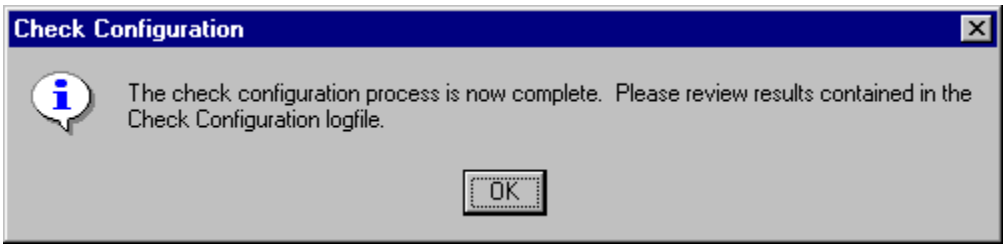

Figure 51. Check Configuration Message

7. Select **OK** from the Check Configuration message and view the Check Configuration logfiles as shown below.
8. Select **Options** from the Parameter Definition screen on the main menu bar as shown in Figure 52.

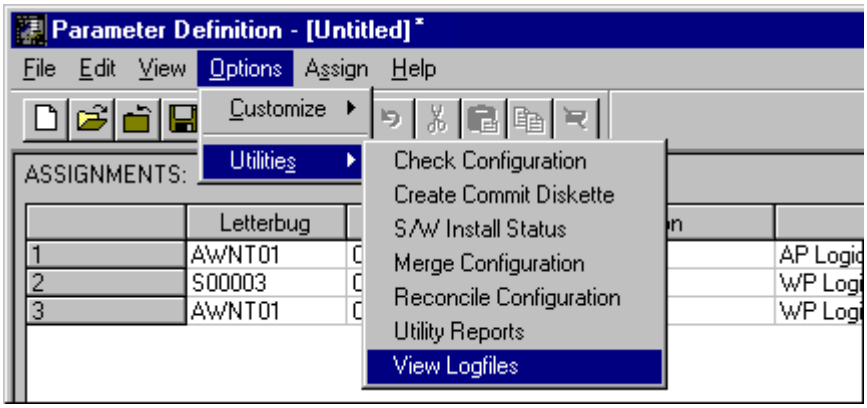

Figure 52. Selecting Options Menu

9. Select **Utilities** from the pull-down menu.
10. Select **View Logfiles** from the pull-down menu.

    In the resulting View Logfiles dialog box, you can choose to view the logfiles with or without timestamps.

    a. To view the logfile without timestamps, check **No** under Time Stamp in the View Logfiles dialog box. The resulting logfile is shown in Figure 53.

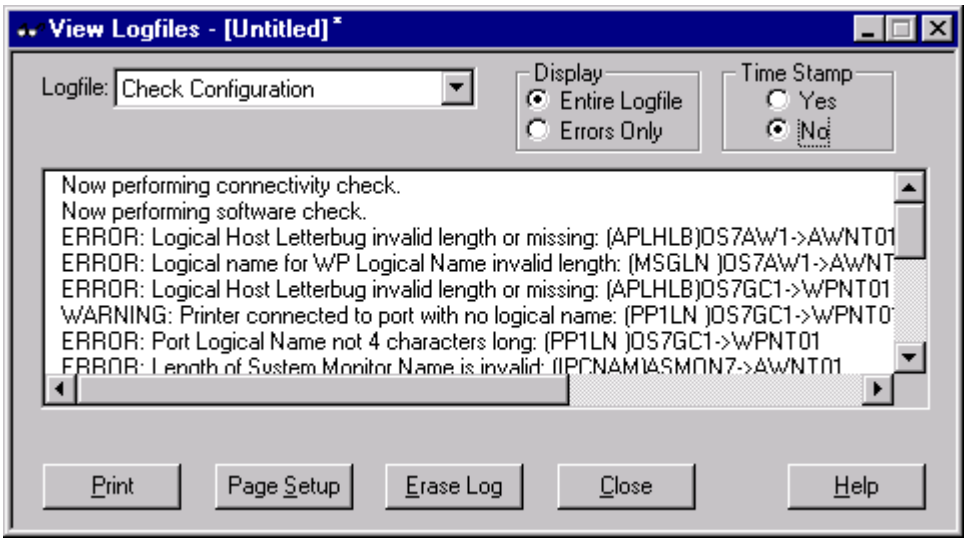

Figure 53. View Logfiles Dialog Box, without Timestamps

b. To view the logfile with timestamps, check **Yes** under Time Stamp in the View Logfiles dialog box. The resulting logfile is shown in Figure 54.

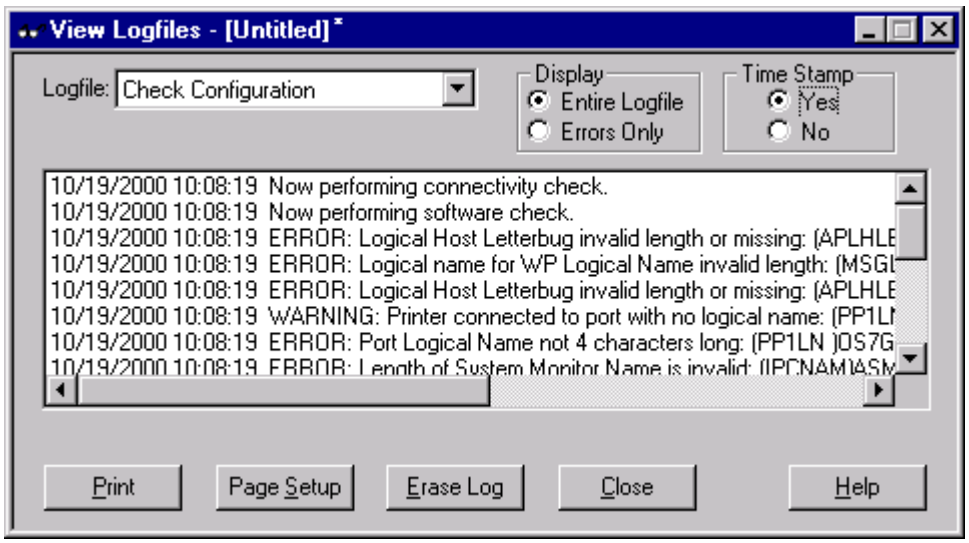

Figure 54. View Logfiles Dialog Box, with Timestamps

11. Select **Errors Only** from the View Logfiles dialog box.

View the logfiles and record or print all errors as shown in the View Logfiles dialog box (see Figure 55 and Figure 56). Return to the appropriate procedure as previously described to correct all errors. After the error(s) has been corrected, rerun the Check Configuration procedure.

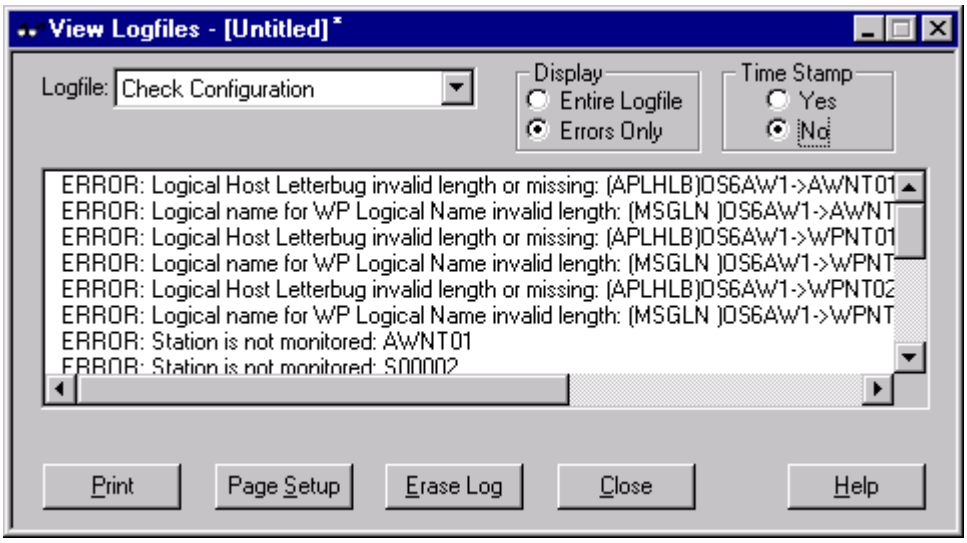

Figure 55. View Logfiles Dialog Box, Errors Only, without Timestamps

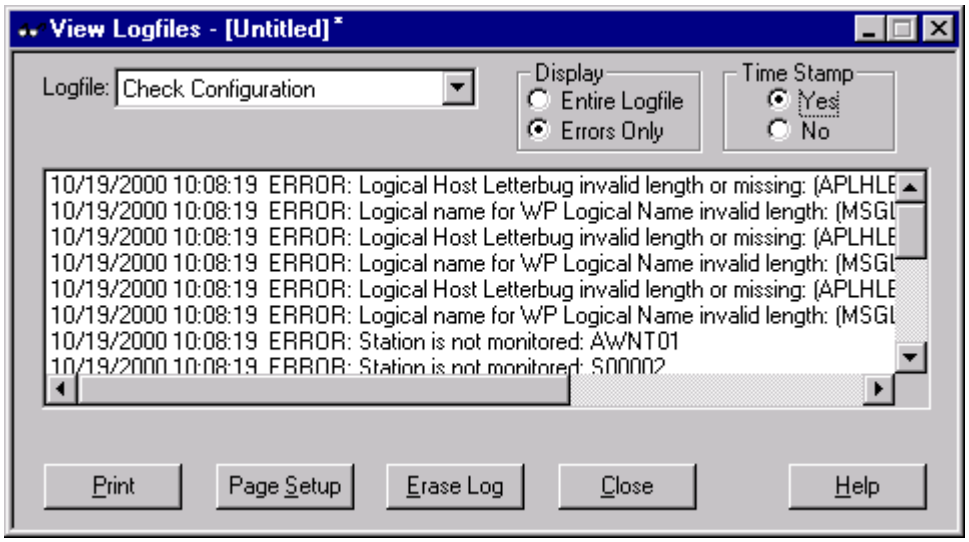

Figure 56. View Logfiles Dialog Box, Errors Only, with Timestamps

12. Select **Close** to exit from the Check Configuration dialog box.

Creating a Commit Diskette

You create a Commit diskette to install the I/A Series system software. The software packages installed and where they are installed are based upon the selections that you made during the definition of your system.

To create a Commit diskette, proceed as follows:

1. Select **Options** from the Parameter Definition screen on the top menu bar as shown in Figure 57.

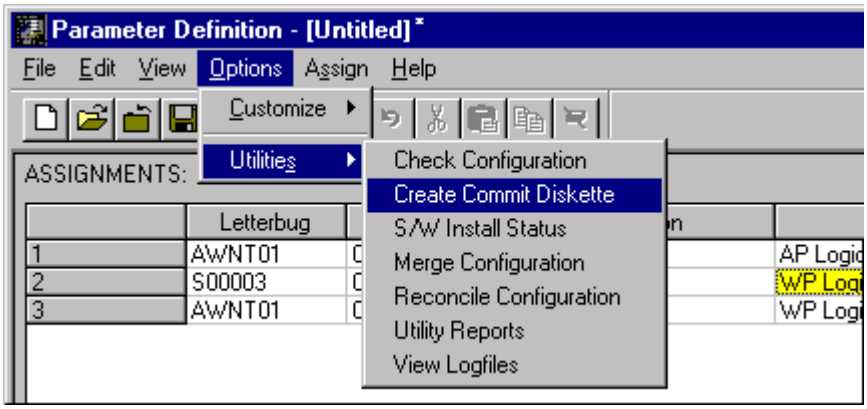

Figure 57. Selecting Options Menu

2. Select **Utilities** from the pull-down menu.
3. Select **Create Commit Diskette** from the pull-down menu.
   The Create Commit Diskette dialog box appears as shown in Figure 58.

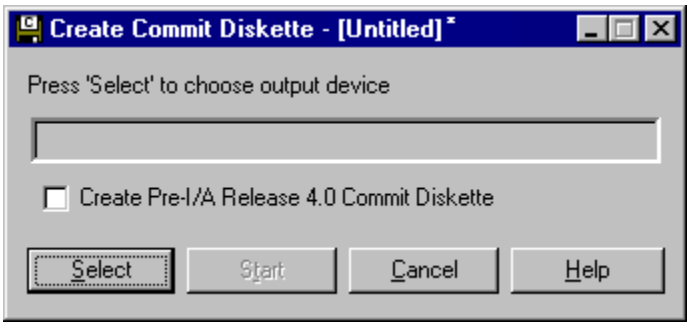

Figure 58. Create Commit Diskette Dialog Box

4. Click the **Select** button from the menu.
   The Select Commit Diskette Drive dialog box appears as shown in Figure 59.

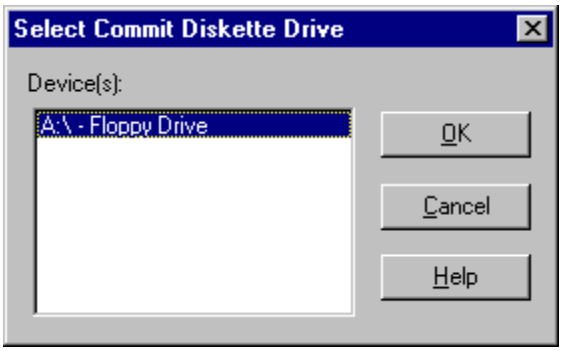

Figure 59. Select Commit Diskette Dialog Box

5. Select the diskette drive from the Select Commit Diskette Drive dialog box.
6. Select **OK** on the Select Commit Diskette Drive dialog box.
   The Create Commit Diskette dialog box shown in Figure 58 reappears.

7. Select **Start** on the Create Commit Diskette dialog box.
8. When requested by a dialog box, insert the media distribution diskette #10091 into the appropriate diskette drive of the PC.

   Diskette #10091 is shipped with your system.
9. Select **OK** from the Media Distribution dialog box.
10. When requested by a dialog box, insert a blank, formatted, 3.5-inch diskette into the selected diskette drive of the PC.

    This diskette, after the data is transferred, is the Commit diskette to be used for software installation.
11. Select **OK** from the Select Commit Diskette dialog box.

    The length of time that it takes to create a Commit disk depends on the speed of the PC on which you are building the database and the size of the system configuration.
12. Select **Y** (Yes) or **N** (No) when a dialog box appears asking if you wish to make additional copies of the Commit diskette. If you select **Yes**, repeat Steps 10 through 12. If you select **No**, you are automatically exited to the screen from which you entered the Create Commit Diskette function.

Saving the Configuration

To save a completed system configuration database, proceed as follows:

1. Select **File** from the Parameter Definition screen on the main menu bar as shown in Figure 60.

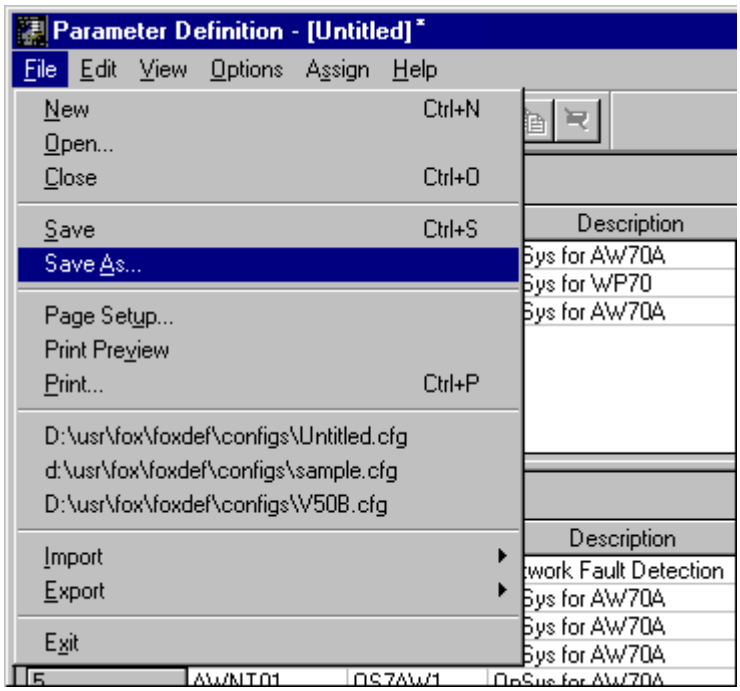

Figure 60. Selecting File Menu

2. Select **Save As** from the pull-down menu.

The Save Configuration As dialog box appears as shown in Figure 61.

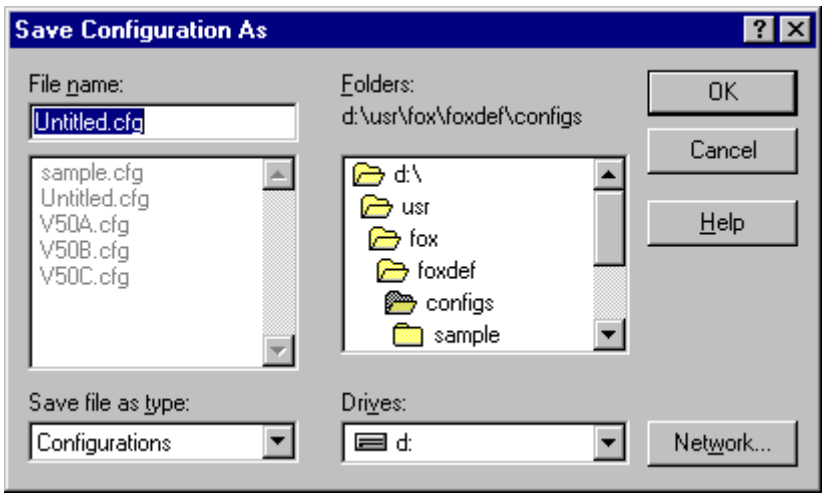

Figure 61. Save Configuration File Dialog Box

3. Select or enter the filename to which you desire to save the configuration.

   Do not save the file in the directory called buffer. Buffer is used by the System Definition to save temporary operations and overwrites your saved files.

4. Select **OK** from the Save Configuration As dialog box.

The example configuration is now stored and completed. The Commit diskette is ready to be used for software installation.

Make a hard copy of your letterbug assignments and your network configuration for file and reference purposes.

Reconciling the System Configuration

One of the results of the software installation process is a Reconcile diskette. This diskette (or series of diskettes) contains the results of all software package installations on the installed system. Once a system has been installed, you must reconcile the configuration which is stored within System Definition with the physical state of installed software packages. After the Reconcile process has been completed, the status of any software package can be:

Table 1. Software Package Status

Status	Description
NOTYET	Software package has not yet been installed.
DONE	Software package has been installed successfully.
FAILED	Software package installation failed.
REINST	Software package will be reinstalled.
REREAD	Software package needs to be reinstalled.

From the Hardware, Network, Parameter, or Software Definition screen, perform the following steps:

1. Open the database that is stored within System Definition and matches the database from the software installation process.
2. Select **Options**.
3. Select **Utilities**.
4. Select **Reconcile Configuration**.
5. From the Process Reconcile Diskette dialog box, choose the **Select** button to choose the device from which you wish to read the Reconcile diskette.
6. Select the diskette drive. Choose the **OK** button to continue the Reconcile process or choose the **Cancel** button to discontinue the Reconcile process.
7. Select **Start** to begin the Reconcile process.
8. Insert the Reconcile diskette into the selected diskette drive. Choose the **OK** button to continue the Reconcile process or choose the **Cancel** button to discontinue the Reconcile process.

   The progress bar in the middle of the dialog box keeps you informed of the progress being made. You can select **Cancel** at any time during the Reconcile process to terminate the procedure.

— NOTE

Do not save any configuration remaining after selecting the **Cancel** button as data corruption may have occurred.

9. From the dialog box, choose **Yes** if you have additional diskettes to reconcile or, choose **No** if you do not have additional Reconcile diskettes. If you choose **Yes**, the software jumps to Step 8, above. If you choose **No**, a dialog box reminds you to review the Process Reconcile logfiles.
10. Select the **OK** button to end the Reconcile process.
11. Remove the Reconcile diskette from the diskette drive and file the Reconcile diskette.
12. Save the reconciled database within System Definition. This is the Day 1 Configuration of the system.

The Reconcile process is now complete. You should review the Reconcile Process logfile.

You can view the Reconcile Process logfile by performing the following steps from the Hardware, Network, Parameter, or Software Definition screen:

1. Select **Options**.
2. Select **Utilities**.
3. Select **View Logfiles**.
4. Select the **Reconcile Process** logfile.

View the logfile for the software package status as defined in Table 1. When finished viewing and noting the logfile for software package status, select **Close** to exit the logfile. Depending on the software package status, you may wish to install or reinstall packages that have not been installed.

Summary

Table 2 is a summary of the procedural steps used to define a system configuration

Table 2. System Definition Summary

Function	Procedural Steps
Access System Definition	1. **Start**
	2. **Programs**
	3. **System Definition**
	4. **Hardware Definition**
Select the Software Release	1. **File**
	2. **New**
	3. Select appropriate software release.
	4. **OK**
Create Stations	1. **Create**
	2. **Stations**
	3. Select stations.
	4. **OK**
Create Field Modules	1. **Create**
	2. **Field Modules**
	3. Select modules.
	4. **OK**
Create Peripherals	1. **Create**
	2. **Peripherals**
	3. Select peripherals.
	4. **OK**
Change Letterbugs	1. Select letterbug.
	2. Delete old letterbug.
	3. Type new letterbug.
	4. Repeat Steps 1, 2, and 3 for more changes.
Attach Modules and Peripherals	1. **View**
	2. **Configuration Components**
	3. **Untitled.cfg**
	4. Drag module(s) to station.
	5. Drag peripheral(s) to station.
Create Node(s)	1. **Create**
	2. **Node**
	3. **ENODE(s)** or another node(s)
	4. Drag station(s) to appropriate node.

Table 2. System Definition Summary (Continued)

Function	Procedural Steps
Assign Software	1. **View**
	2. **Software Definition**
	3. Select numbered button.
	4. **Assign**
	5. **Software**
	6. Select hardware station.
	7. Select optional software.
	8. **Assign**
	9. **Close**
	10. Repeat Steps 6, 7, 8, and 9 for all stations.
	11. Verify software selections.
Assign Software Host	1. **Assign**
	2. **Host**
	3. Select station.
	4. Select host for station.
	5. **Assign**
	6. **Close**
	7. Repeat Steps 3, 4, 5, and 6 for each component.
Assign Parameter Definitions	1. **View**
	2. **Parameter Definitions**
	3. Highlight component in ASSIGNMENTS.
	4. Type new value.
	5. Repeat Steps 3 and 4 for each component.
	6. Select down arrow for component in REFERENCES.
	7. Release mouse on new value.
	8. Repeat Steps 6 and 7 for each component.
Print the Parameter Worksheets	1. **Help**
	2. **User Guide**
	3. **Hardware** or **Software Worksheets**
	4. Select individual worksheet.
	5. **File**
	6. **Print Topic**

Table 2. System Definition Summary (Continued)

Function	Procedural Steps
Document the Configuration	1. On Hardware Definition screen, highlight all components for display.
	2. **Edit**
	3. **Copy**
	4. **View**
	5. **Network Definition**
	6. **Edit**
	7. **Paste**
	8. Drag components.
	9. **File**
	10. **Print**
Check Configuration	1. **Options**
	2. **Utilities**
	3. **Check Configuration**
	4. Select all selections from Check Configuration list.
	5. Check Type – **Full**.
	6. **OK**
	7. Check Configuration complete message – **OK**.
	8. **Options**
	9. **Utilities**
	10. **View Logfiles**
	11. **Errors Only**
	12. **Close**
	13. Correct errors.
	14. Repeat Steps 8, 9, 10, 11, and 12 (if necessary).
Create Commit Diskette	1. **Options**
	2. **Utilities**
	3. **Create Commit Diskette**
	4. **Select**
	5. Select drive.
	6. **OK**
	7. **Start**
	8. Insert #10091 diskette.
	9. **OK**
	10. Insert blank formatted 3.5-inch diskette.
	11. **OK**
	11. **Y** or **N** to copy Commit

Table 2. System Definition Summary (Continued)

Function	Procedural Steps
Save Configuration	1. **File**
	2. **Save As**
	3. Select directory.
	4. **OK**
Reconcile Configuration	1. Open database.
	2. **Options**
	3. **Utilities**
	4. **Reconcile Configuration**
	5. **Select**
	6. Select diskette drive. **OK** or **Cancel**
	7. **Start**
	8. Insert Reconcile diskette. **OK** or **Cancel**
	9. Additional Reconcile diskettes? **Yes** (repeat Step 8) or **No**
	10. **OK**
	11. Save reconciled configuration.
View Reconcile Process logfile	1. **Options**
	2. **Utilities**
	3. **View Logfiles**
	4. **Reconcile Process**
	5. **Close**

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