

Feature Bill of Material (FFBM)

INSTALLATION of MICROCODE Level F70090

On 3746-900 attached to 3745-xxA

or

on 3746-950 alone

or

3745-xxA alone

**With Service Processor Type: 6563 65U (FC5054), or
6275 Model 56U or 83U (FC 5053),
or 7585-P02 (FC 5052)**

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3746	PN 10K8559	EC F70090	EC F70090A	EC F70110		
FBM	1 of 46	08 OCT 1999	18 NOV 1999	20 JAN 2000		

Before Installation (Steps 1-8)

1.0 Machines Affected

3746 Models 9x0

- With Service Processor Type: 6563 Model 65U (FC 5054), 6275 Model 56U or 83U (FC 5053) , or 7585-P02 (FC 5052)
- Without Microcode Level F70090.

Checkpoint: Check that the EC level is F70090.

If level is not present you must upgrade the Service Processor and the 3746-9x0 according to this instruction.

Note: Refer to 1.1, "Displaying the Level of Code Installed" for displaying the level of code.

1.1 Displaying the Level of Code Installed

1. On **MOSS-E View** window, click on **help**.
2. On **Help** window, click on **About**
3. On the **MOSS-E View About** window, click on **Licensed Internal Code**. On the window obtained the code EC number is displayed.
4. Click on **Close**, then **OK** to leave the function.

2.0 Related BMs and ECs

2.1 Prerequisites

(Must be installed prior to this installation)

Installed MAE FC 3000 (if any) must be upgraded to MAE FC 3001 (MAE FC 3000 conversion to MAE FC 3001 must be ordered via MES).

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Important!

If you are, at the same time using the Installation Instructions PN 02L1268, converting the MAE **FC 3000** to the MAE **FC 3001** (which consists in migrating from an MAE that connects to the token-ring, to an MAE that directly connects to the 3746-9x0 switch), then check that:

1. The customer has migrated the configuration files according to the instructions documented in the SA33-0475, *MAE Configuration Migration Guide from FC 3000 to FC 3001*.
2. The **PN** of the **MAE system card** currently plugged in your MAE **is not** one of the following: **78H6297**, **11J7464**, or **89H8395**. Otherwise replace the MAE system card using the installation instructions PN **02L4064** to be used for the system card P/N 31L4336.

2.2 Co-requisite

(Must be installed together)

None

2.3 Companion

(May be installed together)

None

3.0 BMs to be Installed

FBM	Title
10K8544	Installation of Microcode level F70090 on 3746-9x0 attached to 3745-xxA, and/or an 3746-950 stand-alone.

4.0 Preparation

- Familiarize yourself with the purpose and details of the installation instruction before negotiating machine time with the customer (refer to Figure 1 on page 8).
- Check all items listed on the BM(s) to determine that all parts have been received.
- Call your Support Center to obtain the Microcode Fixe(s) (MCF) to be installed with the new LIC.
Or, connect to <http://www.lagaude.ibm.com/3746pe> and download the mandatory fixe(s).
- Obtain the maintenance password from the Customer.

- If the customer has subscribed to RETAIN, ensure that both the 3745 and 3746-9x0 types and models are registered in RETAIN (CCPF).

For U.S.A machines, please call the Raleigh Multiplexor Support Center and verify your machine's registration in CCPF for:

- The seven digit serial number of the 3745 and 3746-9x0 are correct.
- The three digit model designation for the 3745 and 3746-9x0 are correct.

5.0 Programming

3746 Models 900 and 950 have a new requirement on NPM.

All new 3746s and 3746 upgrades which include the Licensed Internal Code F64810 or above (F70090,...) have the following software requirement on NetView Performance Monitor (NPM):

The reporting of active PU counts per TIC3, which is provided by the 3746 and MAE Extended Functions 4 (feature 5810 or 5811), requires NPM Version 2 Release 4 with APAR OW37743 (PTF UW59877) at minimum.

This APAR is required also for NPM users who do not need the reporting of active PUs per TIC3, but are operating the 3746 and MAE Extended Functions 4 (FC 5810 or FC 5811), or 3746 Extended Functions 2 (FC 5802) or any machine equipped with Licensed Internal Code at the engineering change level F64810 or above.

The APAR is available for the following NPM releases:

- NPM V2R2 (PTF UW59809)
- NPM V2R3 (PTF UW59810)
- NPM V2R4 (PTF UW59877)

6.0 Purpose and Description

Install the new level microcode level F70090.

- On the Service Processor, NNP(s) and MAE (if any), and
- Install on the 3746-9x0(s).

7.0 Installation Time

The installation time depends on:

- The number of 3746-9x0, and if any NNP and MAE are installed.
- The function used to update the LIC. Two functions are available:
 - The **LIC restore** function, available from any code level.
 - The **Update SP (and NNP) LIC non-active version**, which can be used only from LIC F64810.

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7.1.1 LIC Restore Function

The **LIC restore** function is traffic-disruptive. However, the code can be loaded on the service processor while the traffic is running.

- Nondisruptive operation estimated time: 3746-9x0/MOSS-E Code level upgrade on the Service Processor: 35 up-to 60 minutes for LIC install.
- Disruptive operation estimated times per 3746-9x0:
 - Update the NNP: about 45 minutes.
 - Update the MAE: about 30 minutes.
 - 3746-9x0 General IML: 6 minutes.
 - 3746-9x0 EEPROM Upgrade: 6 minutes.

To be reported as **MES** installation.

FB/M Installed	Machine Hrs	System Hrs	CE Hour	Nbr of CE
10K8559	2 to 3	0	3	1

7.1.2 Update SP (and NNP) LIC Non-active Version Function

The **Update SP (and NNP) LIC non-active version** function is not operation- or traffic-disruptive. But, switching to the new version, after updating the non-active version, is disruptive. In the same way, changing the MAE LIC and performing a general IML are disruptive operations.

FB/M Installed	Machine Hrs	System Hrs	CE Hour	Nbr of CE
10K8559	1	0	1	1

8.0 Tools/Materials Required

None.

Installation (Steps 9-12)

9.0 Safety

Not applicable.

10.0 Details of Installation

- If the current microcode level is anterior to **F64810**, the following phases take place:

Phase 1

During this phase, the Service Processor, the NNP (if any) and the MAE (if any) are upgraded. Upgrading the the NNP and the MAE is disruptive for the traffic flowing thru these units. For detail, see 10.1, "Procedure 1 - 3746-9x0/MOSS-E Code Level Upgrade" on page 9.

Phases 2 and 3

During these phases, every 3746-9x0 machine attached to the Service Processor is updated. For detail, see 10.3, "Procedure 2 - 3746-9x0 Code Level Upgrade" on page 32.

Any of these phases is disruptive, but can be serially performed to avoid disrupting all machines at the same time.

- If the current microcode level is **F64810** or **above**, use the **Update SP (and NNP) LIC non-active version** in order to upgrade the LIC without traffic- or operation-disruption. For detail, see 10.4, "Procedure 3 - Update SP (and NNP) LIC on Non-Active Version" on page 35. Two phases take place.

Phase 1

During this phase, the non-active version of the LIC is updated, which is not disruptive.

Phase 2

During this phase, you switch to the non-active version that has been updated. This operation is disruptive. A general IML is required after switching to the new LIC version.

To sum up...

- For microcode level anterior to F64810, start with Procedure 1 on page 9 and continue with Procedure 2 on page 32.
- For microcode level F64810 and higher, start with Procedure 3 on page 35.

If you are migrating a MAE from FC 3000 to FC 3001, refer to Figure 1 on page 8 to get the sequence of the installation tasks and the documentation to be used.

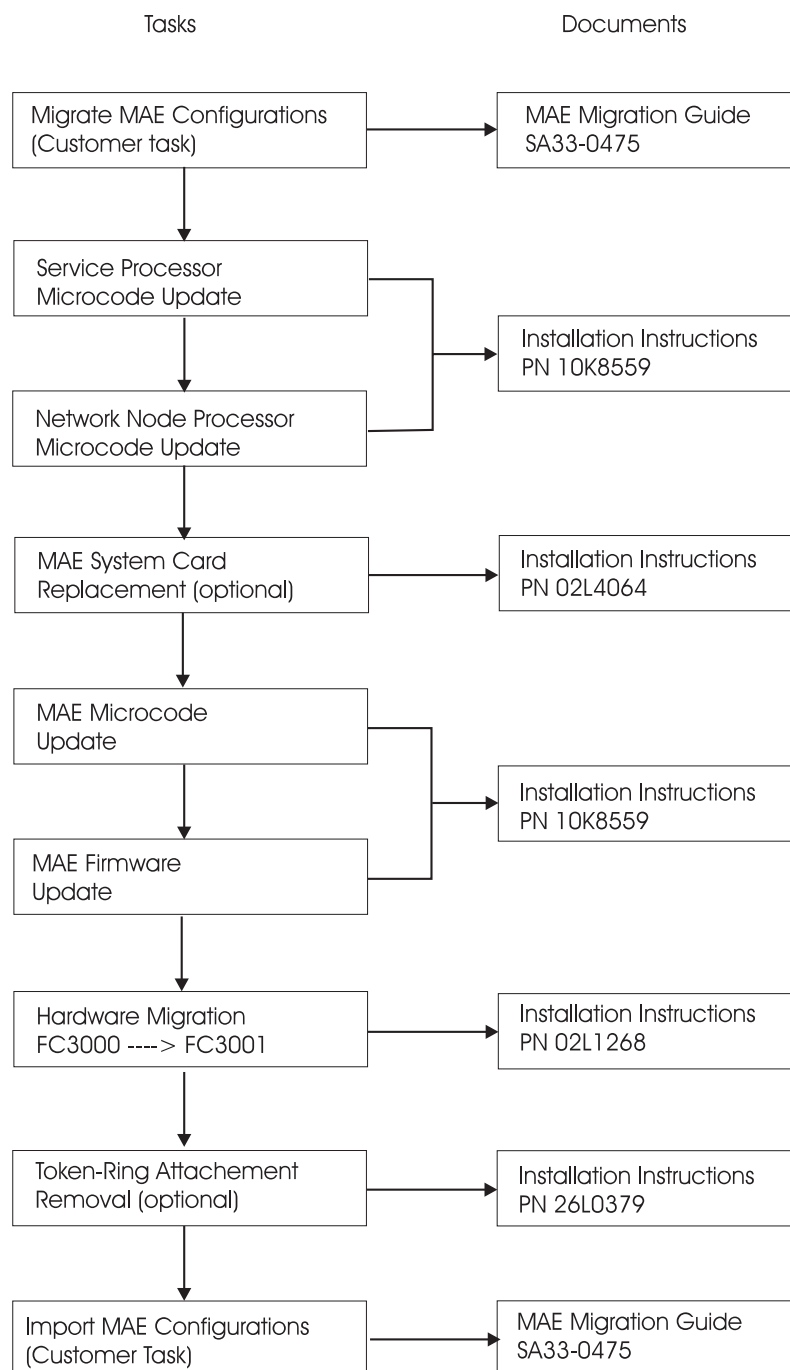


Figure 1. MAE FC 3000 to 3001 Migration Scenario

10.1 Procedure 1 - 3746-9x0/MOSS-E Code Level Upgrade

Saving the configuration...

Check the EC level of the current code installed on the service processor.

- For microcode EC **F12380** or above (microcode available on **CD-ROM**), go to 10.1.5, "Saving Configuration on Diskette" on page 12.
- For any other EC level **prior to F12380** (microcode available on **OD**), go to 10.1.1, "Saving the Configuration on the Optical Disk."

10.1.1 Saving the Configuration on the Optical Disk

1. If not already logged, enter the **Service Processor maintenance password** (default is IBM3745).
2. Double click on the **Service Processor** icon.
3. Click on **Operation Management**.
4. Double click on **Manage Disks and Databases**.
5. Click on **Save databases on optical disk** radio button.
6. Click on **OK** and follow the prompts.
7. When prompted, insert the optical disk.
8. When completed, click on **OK**, then click on **Cancel** to exit from the function.

10.1.2 Installing MES Data Save Function

1. Insert the **Customer Data Migration diskette** (PN 02L3850) in the Service Processor diskette drive.
2. Click on **Change Management**.
3. Double click on **Manage Microcode Fixes**
4. Click on **OK** for use of PE function.
5. On **Manage Microcode Fixes** window, click on **View** (On function bar). Then, click on **Change directory path** (On pull down menu)
6. On **Change Directory Path** window, enter **A:*.***. Then, click on **OK**.
7. On **Manage Microcode Fixes** window, click on the **fixes** to be applied.

Driver	If LIC EC Level	Apply MCF
607	D2251X	MD22426.418
810	D2256X	MD22726.418
830	D4612X	MD22526.418
840	D4613X	MD22326.418

- ___ 8. Click on **File** (On the function bar). Then, click on **Move** (On pull down menu).
- ___ 9. On the **Move Microcode Fix files** window, enter **J:\MCF**. Then, click on **OK**.

Enter the new path specification following the format {drive:\directory}:

J:\MCF\

OK

Cancel

Help

- ___ 10. On the **Change Directory Path** window, enter **J:\MCF\ALL**. Then, click on **OK**.

Enter the full path of path or directory to be displayed following the format {drive:\directory\filename.extension or *}, or click on the OK push button for default directory:

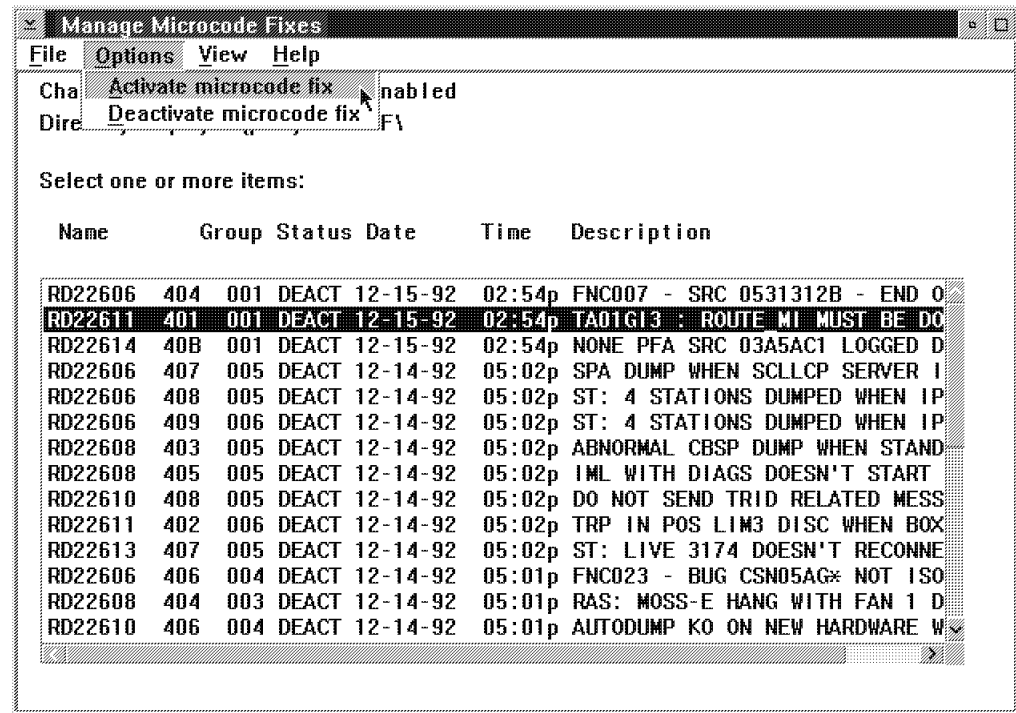
J:\MCF\ALL

OK

Cancel

Help

- ___ 11. Remove the diskette from the drive.
- ___ 12. On the **Manage Microcode Fixes** window, Click on the lines of the MCFs to be applied **MES-Data Migration**, click on **Options** (On function bar). Then, click on **Activate microcode fix** (On pull down menu).
- ___ 13. Answer **Yes** to reboot and shutdown.



Note: The current MCF is not shown on the preceding screen capture.

10.1.3 Verifying the MCF status

After IML is completed

- ___ 1. Enter the Service Processor maintenance password.
- ___ 2. Double click on the **Service Processor** icon.
- ___ 3. Click on **Change Management**.
- ___ 4. Double click on **Manage Microcode Fixes**
- ___ 5. The status of the MCF that has just been applied must change to **ACT**. If so, continue with next step. Otherwise, call the Support Center.
- ___ 6. Exit the **Change Management** functions.

10.1.4 Saving Customer Data on Diskette

- ___ 1. On the **MOSS-E View** window, click on **Program**.
- ___ 2. Double click on **Log OFF MOSS-E**, then double click on **Log ON MOSS-E**.
- ___ 3. Insert in the ODD the **backup** optical disk, that contains the current micro-code backup. This must be the one used when formerly saving the configuration (see 10.1.1, "Saving the Configuration on the Optical Disk" on page 9).
- ___ 4. Double click on the **Service Processor** icon.

- ___ 5. Click on **Functions to Use Under PE Guidance Only**.
- ___ 6. Double click on **Save Customized data on diskette**.
- ___ 7. When prompted, insert the **Configuration Parameters diskette** (PN 02L3427) (can be any blank 1.44 diskette) into the diskette drive.
Note: Only **one** diskette is provided, if more than one diskette is required, obtain an additional blank diskette (1.44Mb).
- ___ 8. Click on **OK** follow the prompts and wait for the following message: '*operation is successfully completed*'.
- ___ 9. Click on **Close**.
- ___ 10. Remove the diskette and the optical disk.
- ___ 11. Go to 10.1.6, "Shutting down the Service Processor."

10.1.5 Saving Configuration on Diskette

The following procedures must be done when coming from EC F12380 or above

- ___ 1. If not already logged, enter the **Service Processor maintenance password** (default is IBM3745).
- ___ 2. Double click on the **Service Processor** icon.
- ___ 3. Click on **Operation Management**.
- ___ 4. Double click on **Manage Disks and Databases**.
- ___ 5. Click on **Save database on diskette** radio button.
- ___ 6. Click on **OK** and follow the prompts.
- ___ 7. When prompted, Insert the **Configuration Parameters diskette** (PN 02L3427) in the diskette drive.
Note: Only one **Configuration Parameters diskette** is provided, if more than one diskette is required, obtain an additional blank diskette (1.44Mb).
- ___ 8. When completed, click on **OK** and remove the diskette.
- ___ 9. Go to 10.1.6, "Shutting down the Service Processor."

10.1.6 Shutting down the Service Processor

- ___ 1. On the **MOSS-E View** window, click on **Program**.
- ___ 2. Double-click on **shut-down**, then enter the maintenance password (default is IBM3745), and click on **OK**.
- ___ 3. When a pop-up window tells you that the service processor has been shut down, then power OFF the Service Processor.
- ___ 4. Check the service processor type:
 - For service processor **type 6275 or 6563**, go to 10.1.8, "LIC Installation" on page 13.
 - For service processor **type 7585-P02 or 3172**, check whether there is an OD drive installed:

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- **Yes**, go to 10.1.7, "Removing the Optical Disk Drive (ODD) from a 7585 or 3172" on page 13.
- **No**, check whether you have received the **FBM 25L4401**?
 - **Yes**, then use the FBM 25L4401 to install the MPA card and go to 10.1.8, "LIC Installation."
 - **No**, then go to 10.1.8, "LIC Installation."

10.1.7 Removing the Optical Disk Drive (ODD) from a 7585 or 3172

- ___ 1. **On the rear side of the ODD**, turn OFF the power switch (0).
- ___ 2. Disconnect the ODD Power cord from the ac Outlet Distribution Box or from the wall ac outlet, and the other end from the rear side of the ODD.
- ___ 3. **On the rear side of the Service Processor**, disconnect the signal cable from SCSI adapter (Position 3).
- ___ 4. Remove the ODD. Then, pack it into the return box (PN 32H0346) provided with this FBM
- ___ 5. Have you received the **FBM 25L4401**?
 - **Yes**, then use the FBM 25L4401 to install the MPA card. When complete, go to 10.1.8, "LIC Installation."
 - **No**, then go to 10.1.8, "LIC Installation."

10.1.8 LIC Installation

- ___ 1. Insert the Service Processor installation diskette:
 - **PN 26L0236**, if your SP is a **7585-P02** or a **3172-P90**
 - **PN 26L0456**, if your SP is a **6275** or **6563**
- ___ 2. Then, power **ON** the Service Processor and while the system is starting, insert the **CD-ROM** into the drive.
- ___ 3. When the diskette is booted, follow the prompts on the screen.
- ___ 4. Wait until completion. While you are waiting several messages are displayed: Build hardisk, reboot, format ...

Note: If the following message appears, **press enter** to continue:

SYS0627: Drive C: was improperly stopped. From the OS/2 command prompt, run CHKDSK with the /F parameter on the specified drive

Note: If the following message appears, ignore it:

SYS0318: Message file OSO001.msg cannot be found for message 1467
- ___ 5. When prompted, insert the **Configuration Parameters diskette (PN 02L3427)** in the diskette drive.
- ___ 6. Wait for a while, when prompted insert the **Service Processor installation diskette PN 26L0236 or 26L0456** in the diskette drive.

- 7. Wait for message displayed: *Number of bytes....Remaining computed time goes to 00 mn 00s*, but wait and stays on for an extra 5 minutes until message: *LIC Restoration has successfully completed* is displayed. Then, press **Enter** to continue.

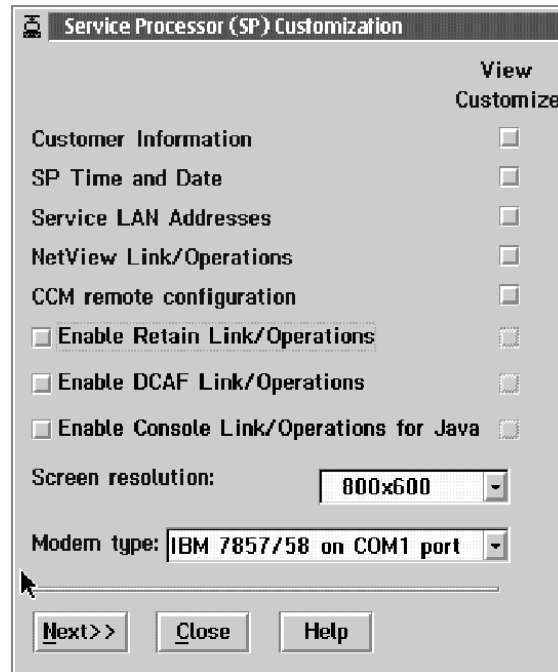
Note: If an error occurs, note the displayed message and press **Enter**. Keep the installation diskette available for investigation (log files: EULHIERR.LOG, OUT_BAK.1 and OUT_BAK.2), stored on diskette and hard disk for PE.

- 8. When prompted remove the diskette from the diskette drive. Then, press **Enter** key and remove the CD.
- 9. Wait until the system has re-booted. When the message *Do you want to customize your SP* is displayed, click on **OK**. If not automatically prompted, select the **SP Customization** function from the **service processor configuration** menu.

About the SP customization window...

Three new options are available:

- A link definition for a **Java console**. DCAF Link/Operations and Console Link/Operations for Java options are mutually exclusive. According to the customer requirements, select either a DCAF or a JAVA link.
- **Screen resolution** option (800x600 or 640x480) to be enabled for the screens that support this option. It is mandatory to select 800x600 when an **MAE** is installed.
- **CCM remote configuration password**. Note that the **CCM remote configuration** may be greyed when feature 5810 is not installed.



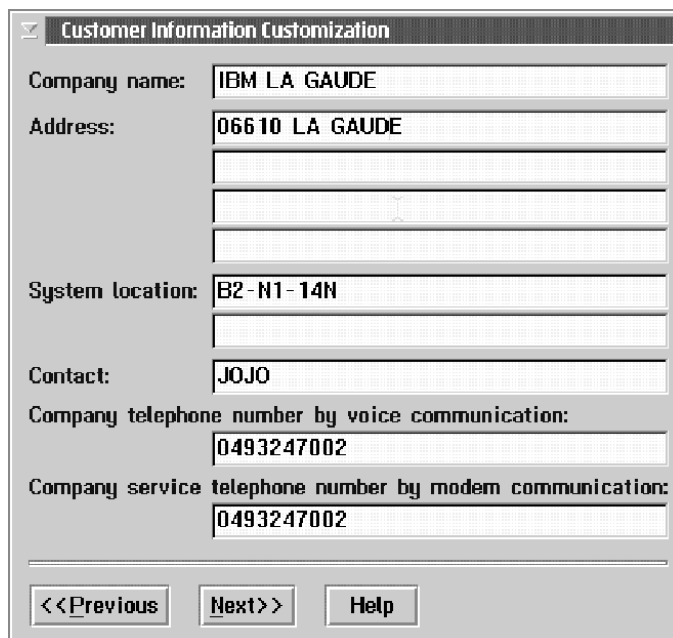
- ___ 10. On the **Service Processor (SP) Customization** window, except for DCAF Link/Operations and Console Link/Operations for Java options that are mutually exclusive and therefore require that you select one or the other option according to the customer requirements, click on every **View Customize** check-boxes in order to check and , if necessary, modify the configuration parameters according to the customer system configuration.

In particular, during the NNP and MAE code upgrade, two configuration options must be de-activated. They are:

- The **Generate alerts** option in the NetView Link(s) Reporting Customization window.
- The **Enable Remote Support** option in the RETAIN customization window.

You will be prompted to check these options in the rest of the procedure. Therefore continue with the next step.

- ___ 11. Check the screen resolution.
- ___ 12. Click on **Modem type** drop down list, then select the modem and connection type of the modem used.
- ___ 13. Click on **Next>>** button to display the **Customer Information Customization** window.



Customer Information Customization

Company name: IBM LA GAUDE

Address: 06610 LA GAUDE

System location: B2-N1-14N

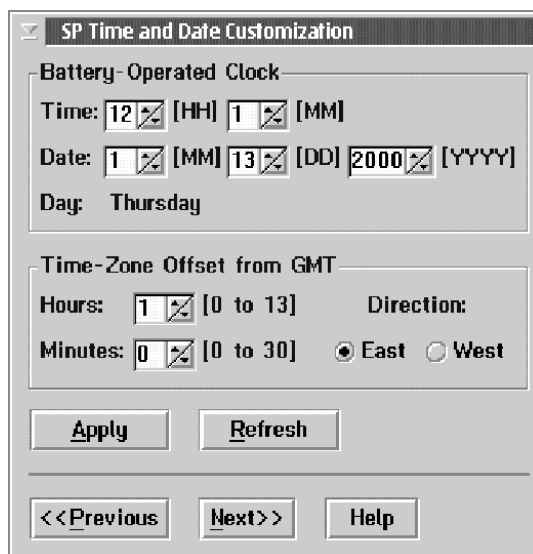
Contact: JOJO

Company telephone number by voice communication: 0493247002

Company service telephone number by modem communication: 0493247002

<<Previous Next>> Help

- ___ 14. Check the information recorded and make the necessary changes.
- ___ 15. Click on **Next>>** button to display the **SP Time and Date Customization** window.



SP Time and Date Customization

Battery-Operated Clock

Time: 12 [HH] 1 [MM]

Date: 1 [MM] 13 [DD] 2000 [YYYY]

Day: Thursday

Time-Zone Offset from GMT

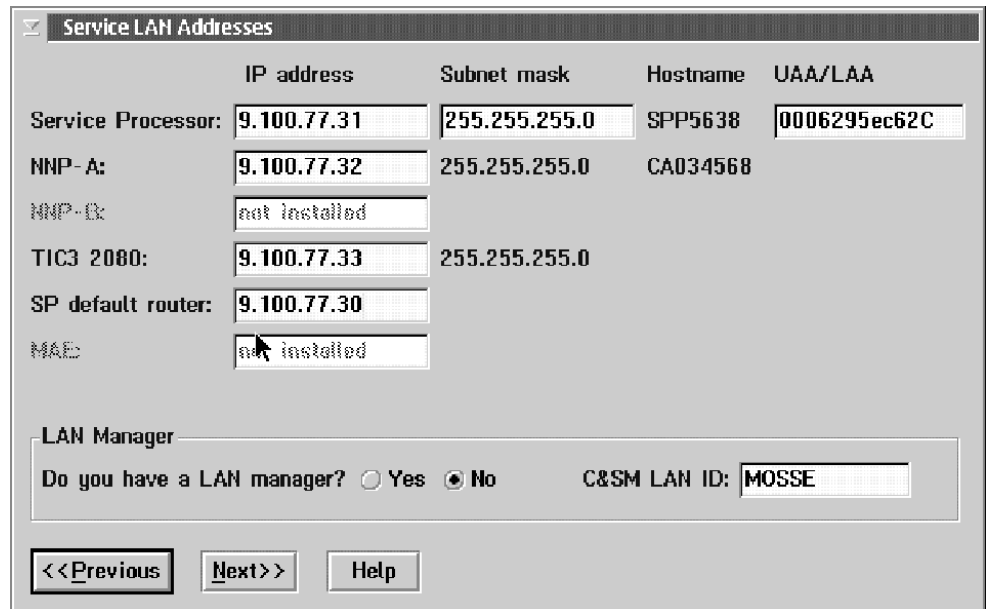
Hours: 1 [0 to 13] Direction: ☒ East ☐ West

Minutes: 0 [0 to 30]

Apply Refresh

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- ___ 16. Check the information recorded and make the necessary changes. Press **Apply** to take into account the changes.
- ___ 17. Click on **Next>>** button to display the **Service LAN Addresses** window.



Service LAN Addresses

	IP address	Subnet mask	Hostname	UAA/LAA
Service Processor:	9.100.77.31	255.255.255.0	SPP5638	0006295ec62C
NMP-A:	9.100.77.32	255.255.255.0	CA034568	
NMP-B:	not installed			
TIC3 2080:	9.100.77.33	255.255.255.0		
SP default router:	9.100.77.30			
MAE:	not installed			

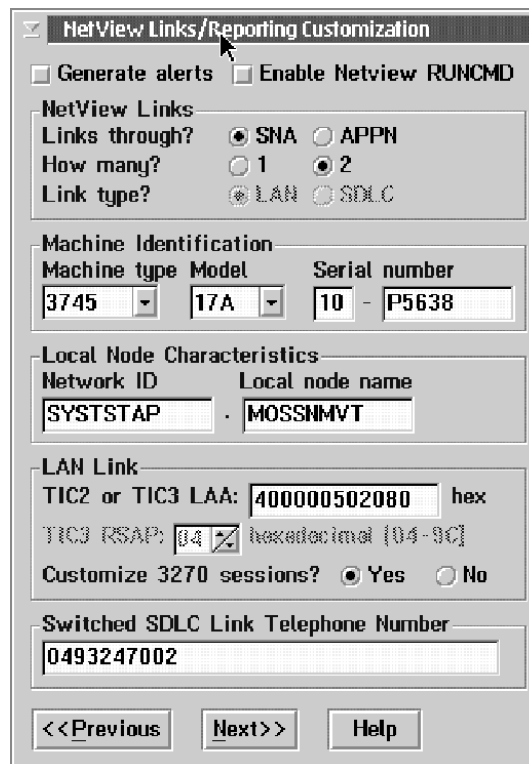
LAN Manager
 Do you have a LAN manager? ☐ Yes ☒ No C&SM LAN ID: MOSSE

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- ___ 18. Check the information recorded and make the necessary changes.

Note: If a controller is down, IP addresses cannot be changed.

- ___ 19. Click on **Next>>** button to display the **NetView Link(s)/Reporting Customization** window.



NetView Links/Reporting Customization

☐ Generate alerts ☐ Enable Netview RUNCMD

NetView Links
 Links through? ☒ SNA ☐ APPN
 How many? ☐ 1 ☒ 2
 Link type? ☒ LAN ☐ SDLC

Machine Identification

Machine type	Model	Serial number
3745	17A	10 - P5638

Local Node Characteristics

Network ID	Local node name
SYSTSTAP	MOSSNMVT

LAN Link
 TIC2 or TIC3 LAA: 400000502080 hex
 TIC3 RSAP: 04 ☒ hexadecimal (04-9C)
 Customize 3270 sessions? ☒ Yes ☐ No

Switched SDLC Link Telephone Number
 0493247002

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- ___ 20. Check the configuration settings and keep record of the **Generate alerts** option.

- If the **Generate alerts** option is selected, disable this option. Use Table 1 on page 38 to keep record of the customer configuration. Then return here and go to the next step.
- Otherwise, go to the next step.

___ 21. Do not change any information. Click on **Next>>** button to display the **Token-Ring 3270 Session Customization** window.



The window titled "Token-Ring 3270 Session Customization" contains the following fields and buttons:

- Host code page:** A dropdown menu showing "297 France".
- LU local/NAU address:** A text box containing "3" followed by a small icon and the text "numerical [3-255]".
- Long session/LU name:** A text box containing "B".
- Number of sessions:** A text box containing "1" followed by a small icon and the text "numerical [1-4]".
- At the bottom, there are three buttons: "<<Previous", "Next>>", and "Help".

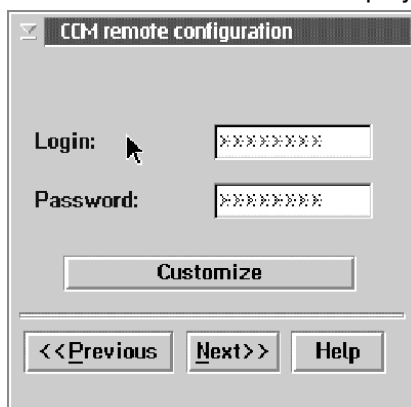
___ 22. Check the information recorded and make the necessary changes.

Customize

Pressing the Customize pushbutton allows you to display and/or modify the login and password. This function is password-protected and requires the management password.

After entering the login and password, passwords that were hidden with asterisks, are shown and can be modified.

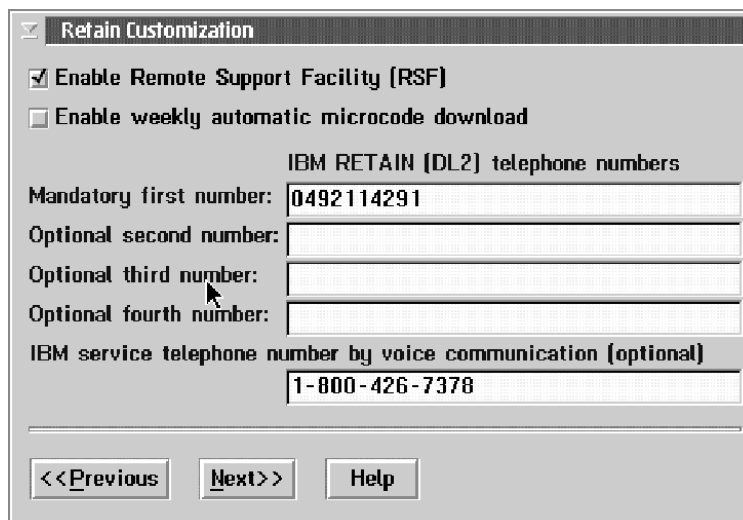
___ 23. Click on **Next>>** button. to display the **CCM remote configuration**.



The window titled "CCM remote configuration" contains the following fields and buttons:

- Login:** A text box filled with asterisks "*****".
- Password:** A text box filled with asterisks "*****".
- Below the text boxes is a button labeled "Customize".
- At the bottom, there are three buttons: "<<Previous", "Next>>", and "Help".

___ 24. Click on **Next>>** button to display the **Retain Customization** window.



Retain Customization

☒ Enable Remote Support Facility (RSF)

☐ Enable weekly automatic microcode download

IBM RETAIN (DL2) telephone numbers

Mandatory first number: 0492114291

Optional second number:

Optional third number:

Optional fourth number:

IBM service telephone number by voice communication (optional)

1-800-426-7378

<<Previous Next>> Help

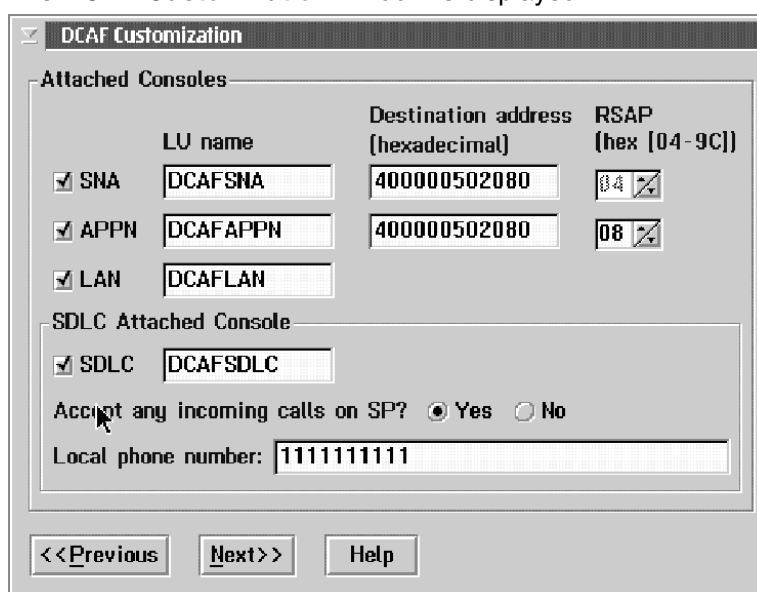
___ 25. Check the configuration settings and keep record of the **Enable Support Facility (RSF)** option.

- If the **Enable Support Facility (RSF)** option is selected, disable this option. Use Table 1 on page 38 to keep record of the customer configuration. Then return here and go to the next step.
- Otherwise, go to the next step.

___ 26. Click on **Next>>**.

- If, in step 10 on page 15, you have selected **DCAF Link/Operations**, then the **DCAF Customization** window is displayed. Go to the next step.
- Otherwise, if you have selected **JAVA Link/Operations**, then the **Point-to-Point Protocol Configuration** window is displayed. Go to step 28 on page 20

___ 27. The **DCAF Customization** window is displayed:



DCAF Customization

Attached Consoles

	LU name	Destination address (hexadecimal)	RSAP (hex [04-9C])
<input checked="" type="checkbox"/> SNA	DCAFSNA	400000502080	04 %
<input checked="" type="checkbox"/> APPN	DCAFAPPN	400000502080	08 %
<input checked="" type="checkbox"/> LAN	DCAFLAN		

SDLC Attached Console

☒ SDLC DCAFSDLC

Accept any incoming calls on SP? ☒ Yes ☐ No

Local phone number: 1111111111

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Check the information recorded and make the necessary changes. Go to step 30 on page 21.

- ___ 28. The **Point-to-Point Protocol Configuration** window is displayed:

Point-to-Point Protocol Configuration

PPP Server Customization

Accept any incoming calls on SP? ☒ Yes ☐ No

Local phone number: 1111111111

	IP Address	Subnet mask	Hostname
PPP Server	9.100.77.36	255.255.255.0	SSPP5638
PPP Client	9.100.77.37	255.255.255.0	

DTE Speed: 115200 MRU Size: 1500

PPP Client Login Customization

	Customer	IBM Service
User Name	CSPP5638	ISPP5638
Password	*****	*****

View/Change Passwords

<<Previous Next>> Help

From this window, configure the PPP server parameters.

- Click on **No** to reject any incoming call.
- Type in the **Local Phone number** which is the phone number of the modem connected to the SP.
- Specify the **IP addresses** of:
 - The **PPP-server**. This is PPP address of the **service processor**.
 - The **PPP-client**. This is PPP address of the **remote station**.

These IP addresses must be in the same subnet than the IP addresses of the units connected to the service LAN.

- Select the correct **DTE speed** which must be set according to the type of the modem installed. Use the online help for more information.

View/Change Passwords

Pressing the **View/Change Passwords** pushbutton allows you to display and/or modify the password(s). This function is password-protected and requires the *management password*.

After entering the management password, passwords that were hidden with asterisks, are shown and can be modified in both the **Point-to-Point Protocol Configuration** and **Console for Java Configuration** windows, until you exit the function.

- ___ 29. Click on **Next>>** button to display the **JAVA Console Configuration** window.

- ___ 30. Do not change any information. Click on **Next>>** button to return to the **Service Processor (SP) Customization** window.
- ___ 31. Click on **Close**. The **SP customization Message** is then displayed:

- ___ 32. Click on **Yes** button to confirm the changes and start the Service Processor customization updating.

- ___ 33. Wait until completion. When completed, the following window is displayed:

- ___ 34. Click on **OK** button.
- If the service processor automatically re-boots, you will be prompted to log onto the MOSS-E. Then go to the next step.
 - If the service processor does not re-boot, go to the next step.

- ___ 35. Is there any NNP installed?
- **Yes**, go to 10.1.9, “Upgrading the NNP(s) on 3746-9x0.”
 - **No**, go to 10.2.1, “Applying the Latest MCFs Received” on page 31.

10.1.9 Upgrading the NNP(s) on 3746-9x0

- ___ 1. From the **MOSS-E View** screen, double-click on the **3746-9x0** icon.
- ___ 2. From the **3746-9x0 Menu** screen, click on **Network Node Processor (NNP) Management**.
- ___ 3. Select **Manage Control Point (CP) on NNP**.
- ___ 4. If the **Automatic configuration activation** option is selected, go to the next step. Otherwise, go to step 6.
- ___ 5. Disable this option.
- ___ 6. Press **Close** to exit.
- ___ 7. From the **Network Node Processor (NNP) Management** menu, select **Install/Remove/Change/Restore LIC/NNP**.
- ___ 8. Select **NNP-A** to upgrade the LIC on NNP-A or **NNP-B** to upgrade the LIC on the backup NNP. Then click on **Restore LIC on NNP**.
- ___ 9. When requested, insert the NNP installation diskette **PN 26L0237** in the **SP diskette drive**.
- ___ 10. Select the NNP type and follow the prompts to remove the NNP installation diskette from the SP and install it in the **NNP diskette drive**.
- ___ 11. Follow the prompts and wait until **NNP LIC restoration operation successfully completed** is displayed. The NNP LIC restoration can last about 45 minutes. During the LIC restoration, click on OK to clear the alarm saying that the SP/APPN CP link has been lost.
- ___ 12. Click on **Close**. Then clear the reconnection alarm.
- ___ 13. If a backup NNP (NNP-B) is installed, return to step 7. Otherwise, continue with next step.
- ___ 14. Wait until the NNP icon(s) shown on the **MOSS-E View**, become blue.
- ___ 15. If, in step 5, you have disabled the **Automatic configuration activation** option, go to the next step. Otherwise, go to step 20.
- ___ 16. From the **3746-9x0 Menu**, select **Network Node Processor (NNP) Management**.
- ___ 17. From the **Network Node Processor (NNP) Management** menu, select **Manage Control Point (CP) on NNP**.
- ___ 18. Enable the **Automatic configuration activation** option.
- ___ 19. Press **Close** to exit.
- ___ 20. Is there any MAE installed?
- **No**, go to 10.2.1, “Applying the Latest MCFs Received” on page 31.

- **Yes**, check whether you have to migrate the MAE installed from **FC 3000 to FC 3001**?
 - **No**, go to 10.1.11, “Installing the MAE.”
 - **Yes**, go to 10.1.10, “Migrating the MAE.”

10.1.10 Migrating the MAE

- ___ 1. Verify the **PN** of the **MAE system card** plugged in your MAE.
If the **PN** of the card is one of the following: **78H6297, 11J7464, or 89H8395**, use the installation instructions **PN 02L4064** to replace the card. When complete, go to the next step.
- ___ 2. Use the installation instructions **PN 02L1268** to install the new hardware required to support FC 3001. When complete, go to the next step.
- ___ 3. Check whether the customer wants to remove the user token-ring kit (if any) between the MAE and the 3746-9x0?
 - Yes. Continue with next step.
 - No. Go to step 5.
- ___ 4. Use the installation instructions **PN 26L0379** to remove the user token-ring link. When complete, go to next step.
- ___ 5. Go to 10.1.11, “Installing the MAE.”

10.1.11 Installing the MAE

- ___ 1. Double click on the **3746-9x0** icon.
- ___ 2. Click on **Multiaccess Enclosure Management**.
- ___ 3. Now double click on **Install/Remove/Change LIC on MAE**.

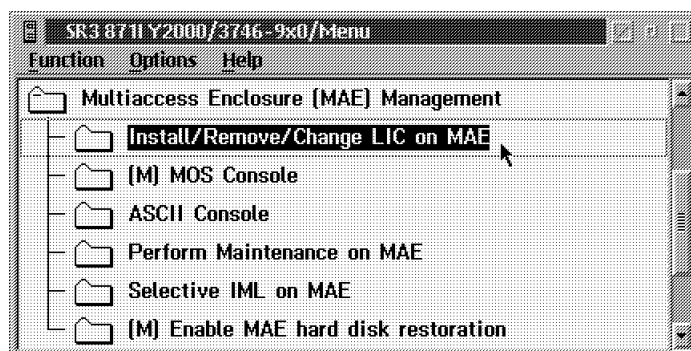


Figure 2. Install Multiaccess Enclosure

- ___ 4. Check the MAE installation status:
 - If **installed**, click on **Change LIC on MAE...**, then go to step 8 on page 25.
 - Otherwise, click on **Install MAE...**, then go to step 5 on page 24.

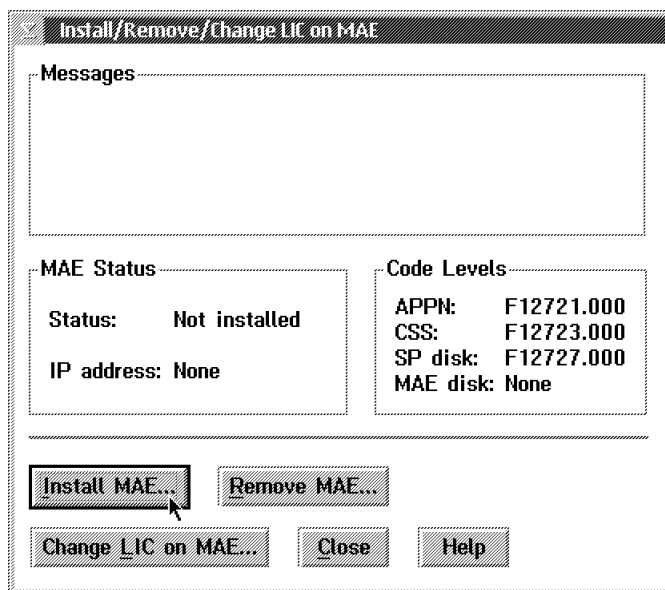


Figure 3. Install Multiaccess Enclosure

___ 5. Verify or enter the **MAE IP address**, then click on **OK**.

	IP address	Subnet mask	Hostname	UAA/LAA
Service Processor:	9.100.77.31	255.255.255.0	SPP5638	
NNP-A:	9.100.77.32	255.255.255.0	CA034568	
NNP-B:		255.255.255.0		
TIC3 2080:	9.100.77.33	255.255.255.0		
SP default router:	9.100.77.33			
MAE:	9.100.77.34	255.255.255.0	DA034568	

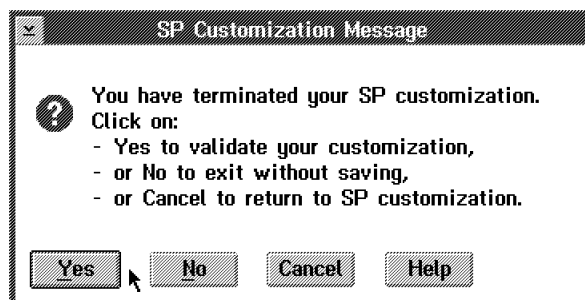
LAN Manager

Do you have a LAN manager? ☐ Yes ☐ No

CISM LAN ID:

Cancel OK Help

___ 6. Click on **Yes** to record your parameters.



- ___ 7. When completed, click on **OK**.

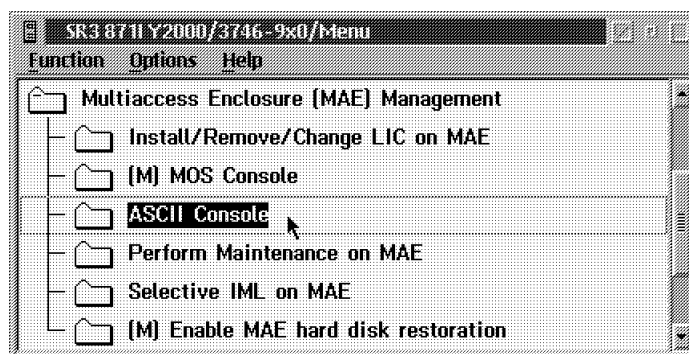


- ___ 8. Follow the prompts. The MAE code is now being installed: the transferred files are displayed on the window (it takes about 10 mn). Wait until **Operation successfully completed** is displayed, then click on **Close**.

Note: After a few minutes, verify that the MAE link icon is **green** (polling the MAE does not start immediately to give the green icon).

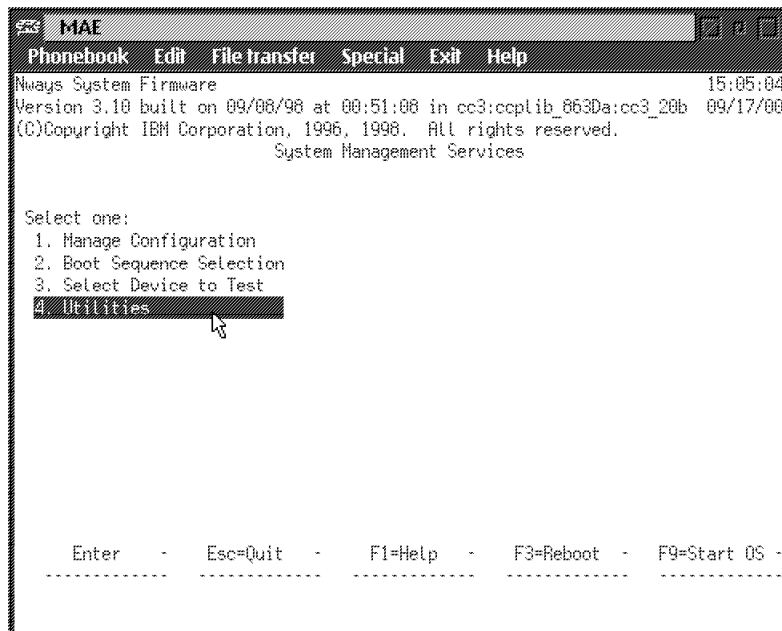
10.2 Installing the firmware

- ___ 1. Double click on **ASCII Console**.

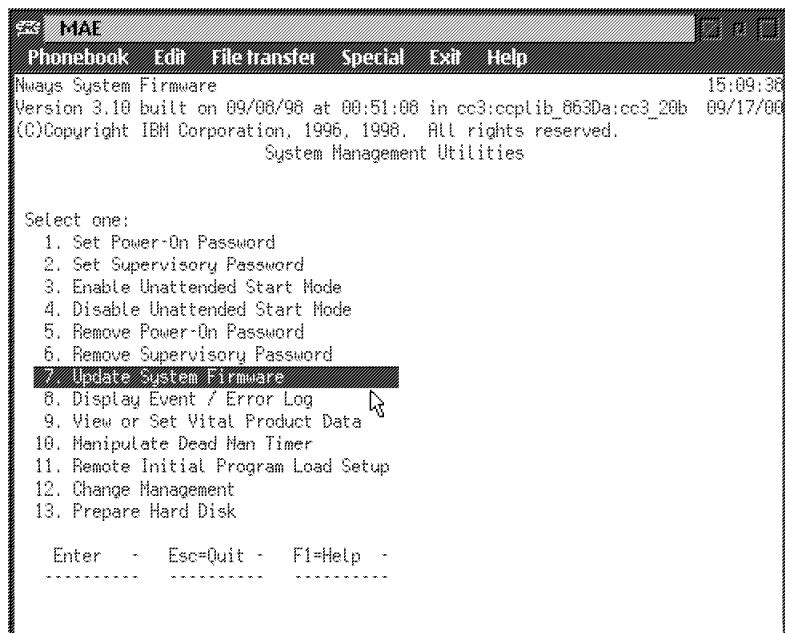


- ___ 2. Press the **Reset** button on the MAE (located on the front of the MAE system card).
- ___ 3. Several window are displayed during tests. Wait until the **Boot Information** window is displayed.
- ___ 4. Press **F1** when prompted (to prematurely terminate boot).

- ___ 5. On the **System Management Services** window, select **option 4 - Utilities**, press **Enter**.



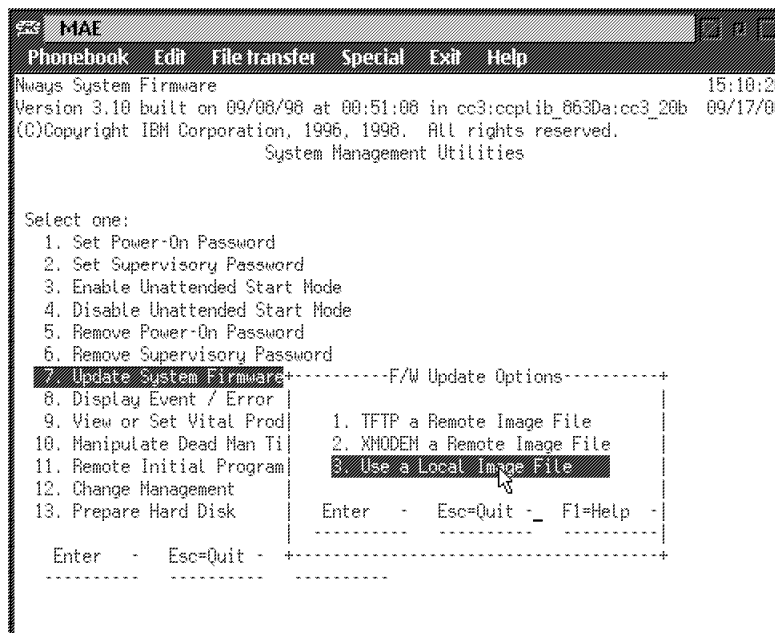
- ___ 6. Enter the Multiaccess Enclosure supervisory password when required:
2216.
- ___ 7. Select **7. Update System Firmware** from the utilities panel, press **Enter**





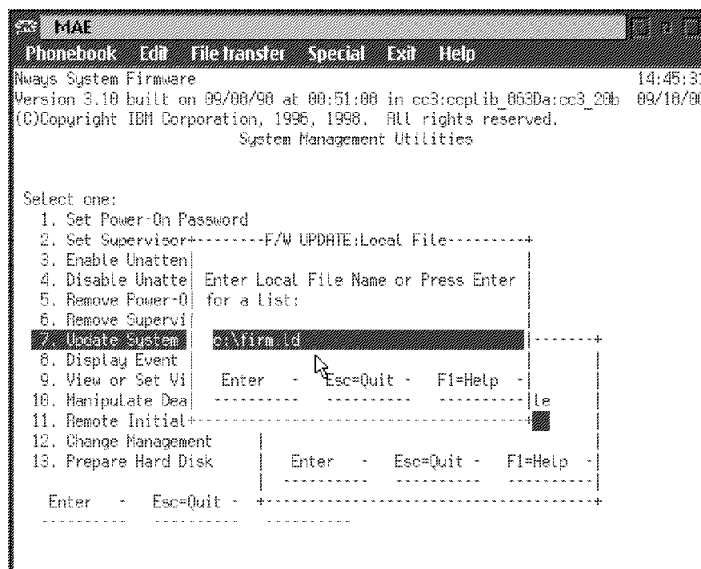
Do not power off the multiaccess enclosure while updating the firmware. In case of failure, the multiaccess enclosure re-boots with a backup firmware image. If that happens, repeat the procedure to reload the onboard firmware image.

- 8. From the **F/W Update Options** menu, select **3. Use a Local Image File**, then press **Enter** and follow the prompts.

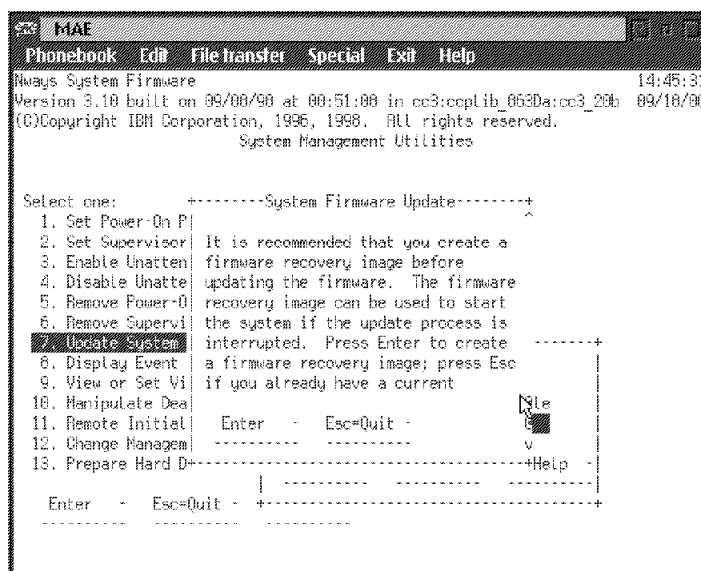


- 9. Enter the **Local File Name: c:\firm.ld**, then press **Enter**

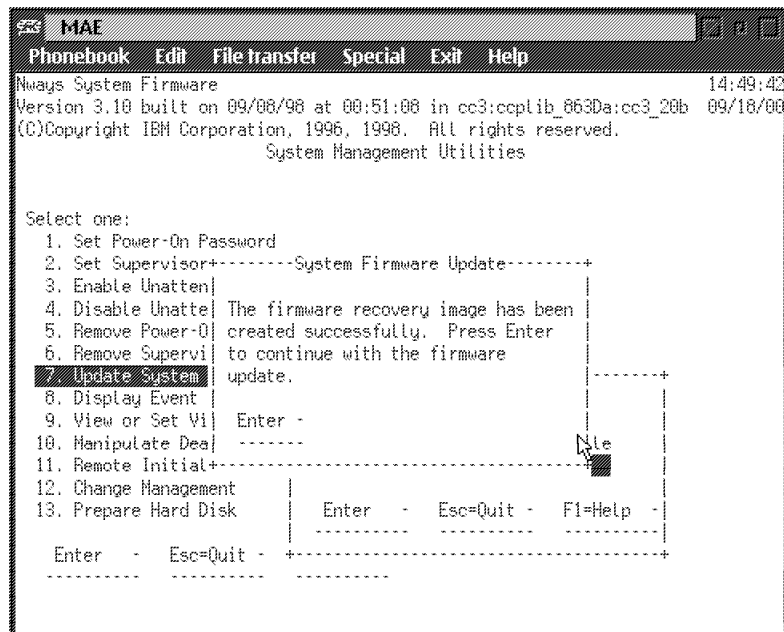
Note: If the firmware loaded on the MAE system card is at the same level as the firmware loaded on the SP hard drive, you will get the following message: *The firmware update file is at the same level as the system firmware. Firmware update cancelled. Press enter.* Then go to 10.2.1, “Applying the Latest MCFs Received” on page 31, otherwise continue with the next step.



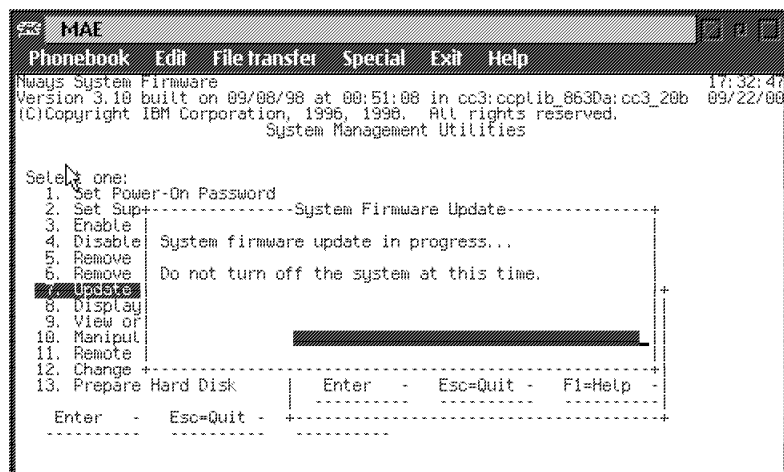
- ___ 10. On confirmation window, press **Y**. Then when this window is displayed, press **Enter**.



- ___ 11. When recovery image has been done, press **Enter**.

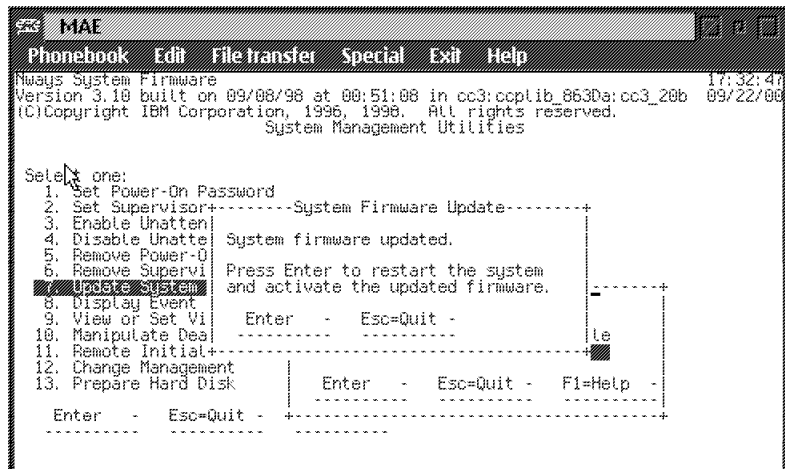


- ___ 12. Enter **Y** to confirm update of the firmware.
- ___ 13. Several windows are displayed following by:



Do not switch the system off. The process erases the old firmware and copies the new firmware into flash memory. If the machine is powered off before the process is complete, you will need to reload the firmware from the recovery image.

- ___ 14. When complete, a message is displayed.



- ___ 15. Press **Enter** to restart the system.
- ___ 16. Check the IP addressing by selecting **(11) Remote Initial Program Load Setup** and pressing **Enter**.
- ___ 17. Select **(1) IP Parameters** and press **Enter**.

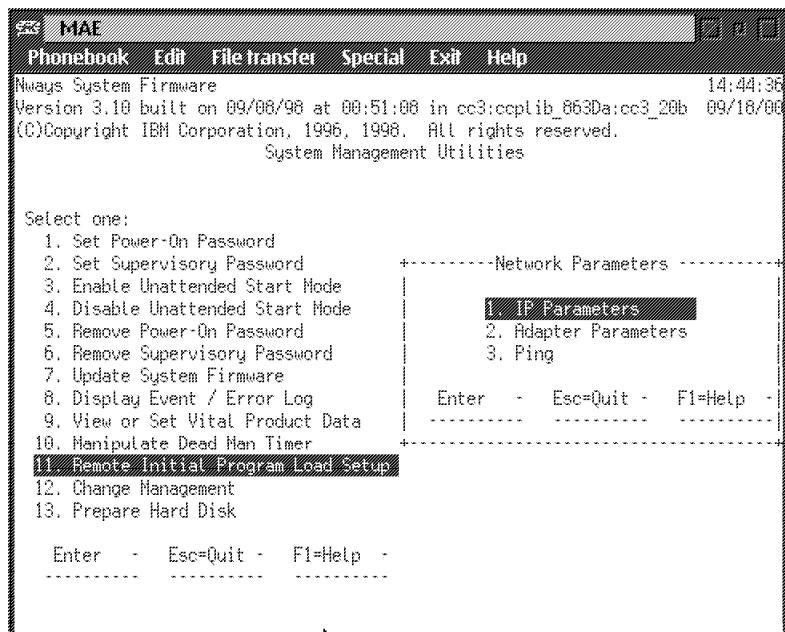
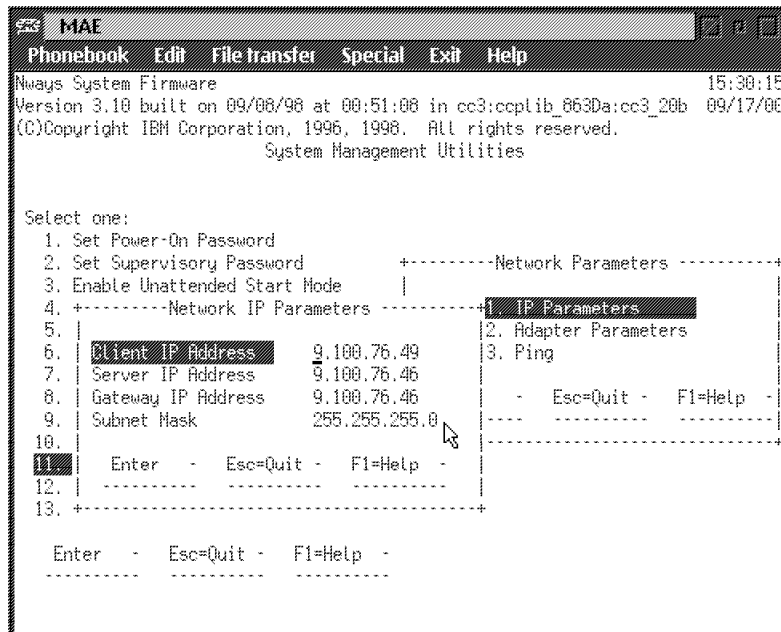


Figure 4. MAE

- ___ 18. Check that the following IP addresses and mask are the same as the ones defined in step 5 on page 24:
 - Client IP address (MAE address of the PCMCIA card)
 - Server IP address (service processor address)

- Gateway IP address (if no router on the ring, check the service processor IP address)
- Subnet Mask.



- ___ 19. Press **Esc** to exit.
- ___ 20. Press the **Space bar** to get the console.
- ___ 21. Then close the ASCII window and go to 10.2.1, “Applying the Latest MCFs Received.”

10.2.1 Applying the Latest MCFs Received

Have you received from your Support Center any MCFs to be installed on the new LIC?

- **Yes**, then apply the MCFs received according to procedure '**Handling the Microcode Fixes on the Licensed Internal Code**' listed in the SPIM or Service User's Guide shipped with your SP.
- **No**, then go to 10.3, “Procedure 2 - 3746-9x0 Code Level Upgrade” on page 32.

End of Procedure 1.

Go to 10.3, “Procedure 2 - 3746-9x0 Code Level Upgrade” on page 32.

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10.3 Procedure 2 - 3746-9x0 Code Level Upgrade

Before you start

Ask the customer for a 3746 maintenance window. Traffic must be deactivated on the 3746-9x0(s).

10.3.1 3746-9x0 EEPROM Upgrade

- ___ 1. Click on **3746-9x0 Menu**.
- ___ 2. Click on **Change Management**.
- ___ 3. Double click on **Upgrade/Downgrade EEPROM**.
- ___ 4. The **Upgrade Status** area will show the processors to be changed in reverse video.
- ___ 5. Click on **OK** to start the upgrade function, wait (up to 10 minutes) until the Upgrade Status is completed for each processor.
- ___ 6. Click on **Cancel** to leave the function.

10.3.2 Performing a General IML

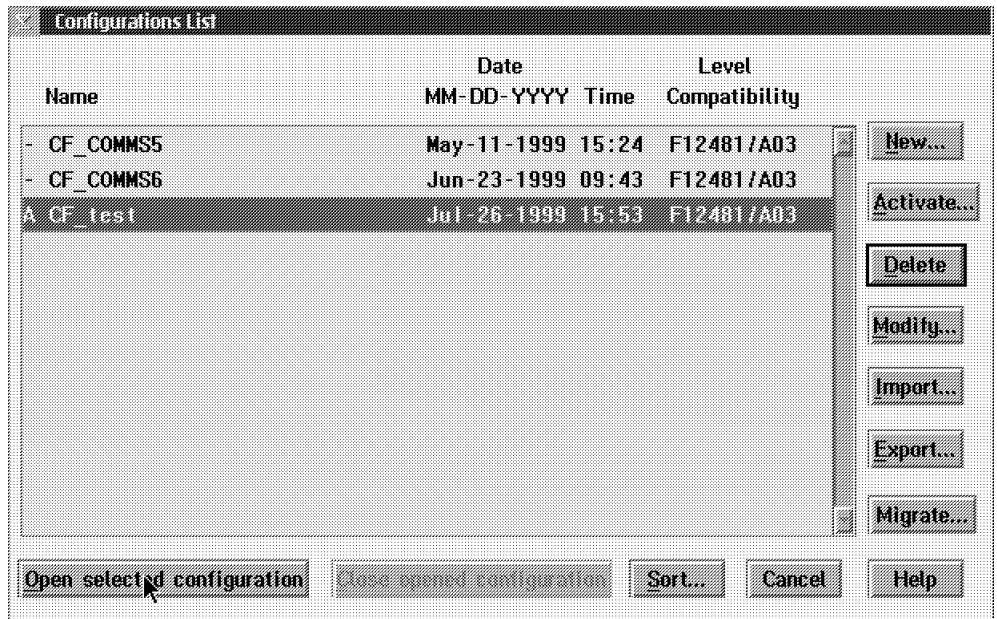


After installing the code, numerous **SRCs** and **alarms** can be generated. Just clear the messages and continue with the current procedure.

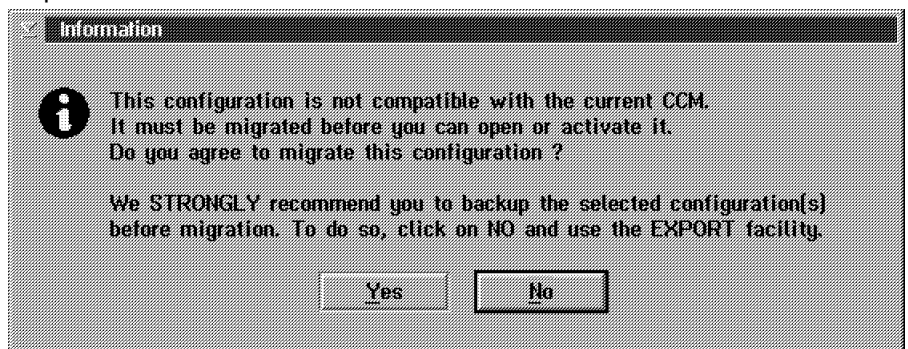
- ___ 1. On the **MOSS-E View** screen, double click on the **3746-9x0** icon.
- ___ 2. On the **3746-9x0 Menu** screen, click on **Operation Management**.
- ___ 3. Double click on **Perform a General IML**, then click on the **Yes** button.
- ___ 4. On the **Perform a General IML** window, click on **No** to start an IML without diagnostic.

10.3.3 Migrating the Active Configuration using CCM

- ___ 1. From the **Network Node Processor (NNP) Management** menu, select **CCM - Controller Configuration and Management**.
- ___ 2. From the CCM main window, select **File** → **Open....** The following window is then displayed:



- ___ 3. From the configuration list, select the configuration with the letter **A** before the configuration name and click on **Open selected configuration**.
- ___ 4. According to the configuration compatibility with the current CCM, one of the following occurs:
 - The configuration is compatible with the current CCM. Then, the procedure is complete. Go to 10.3.4, "Activating the Migrated Configuration" on page 34.
 - Otherwise, the configuration is not compatible with the current CCM, then the following information window is displayed. Continue with next step.



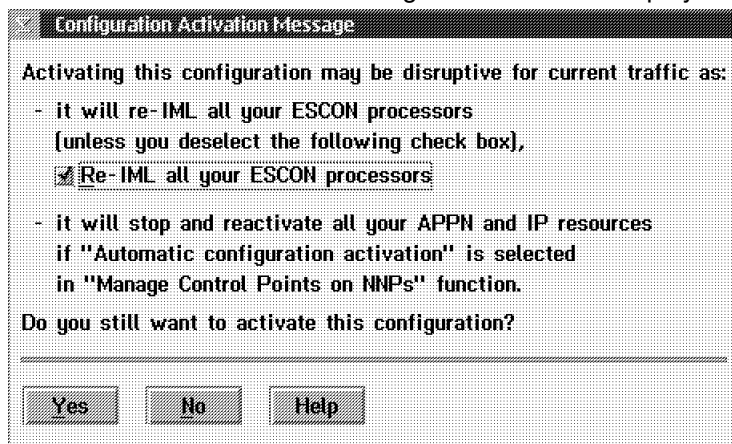
- ___ 5. Press **Yes** to migrate the configuration. It is not necessary to save the configuration before migrating it, because it has been already saved on the configuration parameter diskette. When the configuration has been successfully migrated, the following window is displayed:



- ___ 6. Press **OK**.
- ___ 7. Close the opened configuration by selecting **File** → **Close opened configuration**.
- ___ 8. You can now activate the migrated configuration. Go 10.3.4, "Activating the Migrated Configuration."

10.3.4 Activating the Migrated Configuration

- ___ 1. From the CCM main window, select **File** → **Open...**
- ___ 2. From the configuration list, select the configuration with the letter **A** and click on **Activate...** The following window is then displayed:



- ___ 3. Check that the **Re-IML all your ESCON processors** option is selected and click **Yes**.

End of Procedure 2.
Do not perform procedure 3.

Check whether there is another 3746-9x0 installed:

- **Yes**, then return to 10.3, "Procedure 2 - 3746-9x0 Code Level Upgrade" on page 32.
- **No**, then go to 10.6, "Returning the Machine to Customer" on page 38.

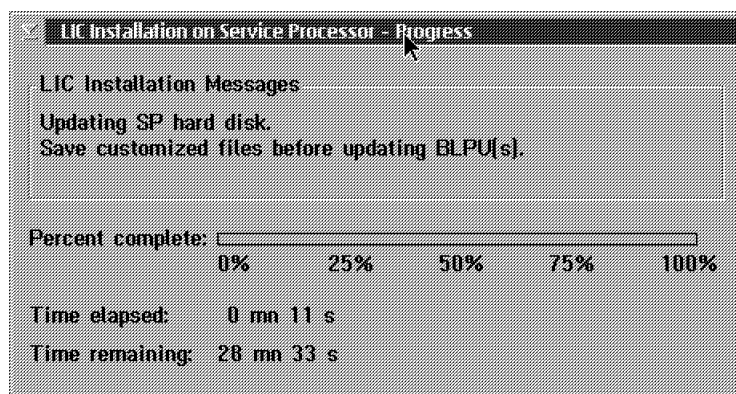
10.4 Procedure 3 - Update SP (and NNP) LIC on Non-Active Version

Before you start...

- In order to use the current function, the LIC **F64810** or higher must be already installed.
- Upgrading the non-active version is not operation- or traffic-disruptive, but switching to the new version is disruptive.
- No maintenance window is required to run the current function.

Updating the Non-Active LIC Version

1. From the **MOSS-E View** window, double-click on the **Service Processor** icon.
2. Insert the CD-ROM that contains the new LIC version.
3. From the **Change Management** folder, select the **Update SP (and NNP) LIC on non-active version**.



4. Click **OK** when complete.

During the LIC Update...

You are constantly informed of the progress of the LIC updating. It takes about 10 minutes to update the LIC non-active version.

A pop-up window informs you when the LIC non-active version has been successfully updated. When displayed go to step 5.

5. After updating the LIC non-active version, switch to the new version.

Before switching to the non-active version



Switching to the non-active version is **disruptive**.

Therefore, check the moment at which the customer wants to switch to the active version. Switching to the non-active version can take place later.

Switching to the Non-Active LIC Version

- ___ 6. From the **Change Management** folder, select the **Switch to non-active version** function.
- ___ 7. Press the **Switch to inactive code level** pushbutton.
- ___ 8. Click **Yes** to confirm.

Switching to the inactive level takes about ten minutes. During this operation, the service processor and the network node processor(s) automatically re-boot.

- ___ 9. Log on onto the MOSS-E program and IML the 3746 from the operator panel as prompted.
- ___ 10. Click **OK** when complete. If there is an MAE FC3001 installed, the MAE LIC must be updated. Go to next step. Otherwise, go to step 17 on page 37 to perform a general IML.

Changing the MAE LIC

- ___ 11. From the **3746-900** menu, select the **Multiaccess Enclosure (MAE) Management** folder.
- ___ 12. From the **Multiaccess Enclosure (MAE) Management** folder, select the **Install/Remove/Change LIC on MAE** function, in order to replace the MAE LIC on the MAE hard disk with the MAE LIC stored on the service processor hard disk. The following window is displayed (Figure 5 on page 37).

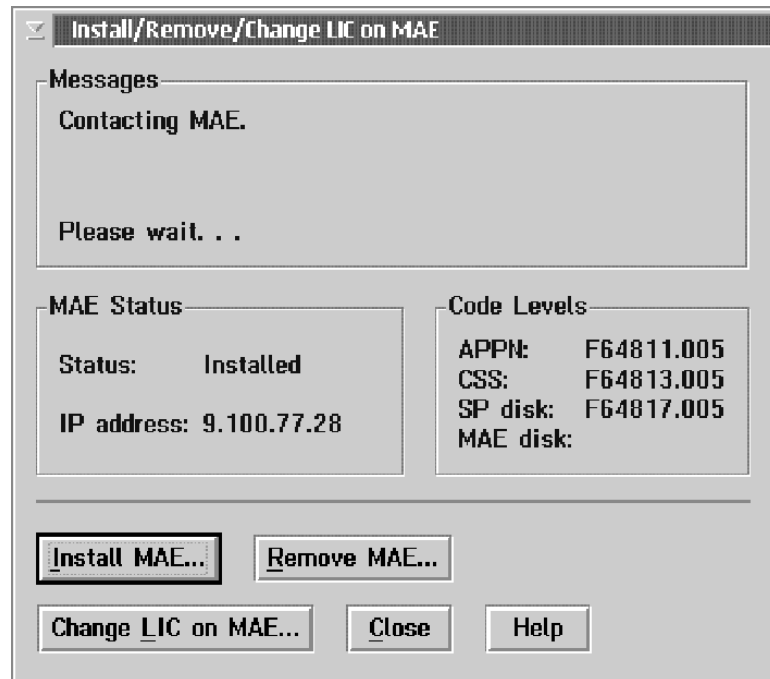


Figure 5. Changing MAE LIC Installation Window

___ 13. Press the **Change LIC on MAE** pushbutton.

___ 14. Click **OK** when prompted to confirm.

It takes about 10 minutes to the MAE LIC. After the MAE LIC has been updated, if there is no additional MCFs to apply, , go to step 17 to perform a general IML. Otherwise, go to next step.

Applying the Latest MCF(s)

___ 15. Apply the latest MCFs on the new LIC according to the '**Handling the Microcode Fixes on the Licensed Internal Code**' procedure given in the SPIM or Service User's Guide shipped with your SP.

When finished, go to the next step to perform a general IML.

Performing a General IML

___ 16. Click on **Close**.

___ 17. On the **MOSS-E View** screen, double click on the **3746-9x0** icon.

___ 18. On the **3746-9x0 Menu** screen, click on **Operation Management**.

___ 19. Double click on **Perform a General IML**; Then click on **Yes** button

___ 20. On the **Perform a General IML** window, click on **No** to start an IML without diagnostic.

___ 21. Click **OK** when prompted.

End of Procedure 3.

Go to 10.6, "Returning the Machine to Customer" on page 38.

10.5 Recording the Customer Configuration Settings

When performing the service processor customization during the LIC Installation (see step 10 in 10.1.8, "LIC Installation" on page 13), use Table 1 in order to keep record of the configuration of the following options:

- Generate alerts
- Enable Remote Support

When returning the machine to the customer, if you modify any of these options, you must re-configure these options as they were previously configured.

Table 1. Customer Configuration Settings		
Option Customer Setting	Selected	Not Selected
Generate alerts		
Enable Remote Support		

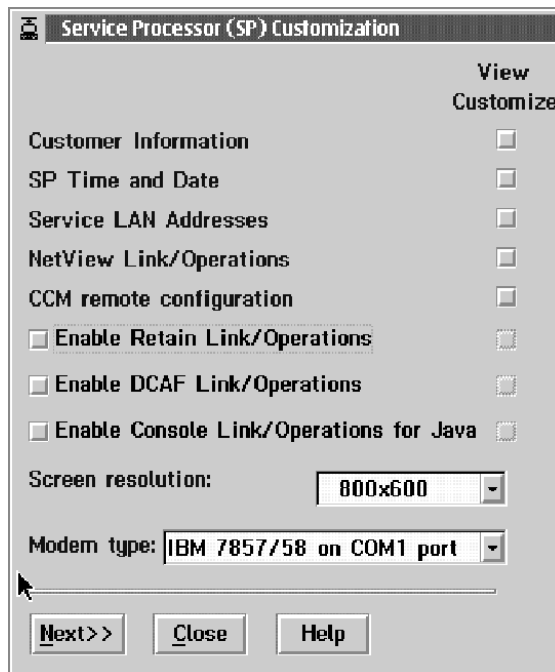
10.6 Returning the Machine to Customer

1. Have you migrated an MAE from FC 3000 to FC 3001?
 - Yes, go to the next step.
 - No, go to step 3.
2. If the customer has decided to remove the token-ring link between the MAE and the 3746-9x0 (no APPN or NCP traffic between the MAE and 3746), ask the customer to update the configuration by removing the definition of the resources used for this link. Then continue with the next step.
3. Check in Table 1 whether, during the service processor customization, you have modified the following options:
 - **Generate alerts** option
 - **Enable Remote Support** option.

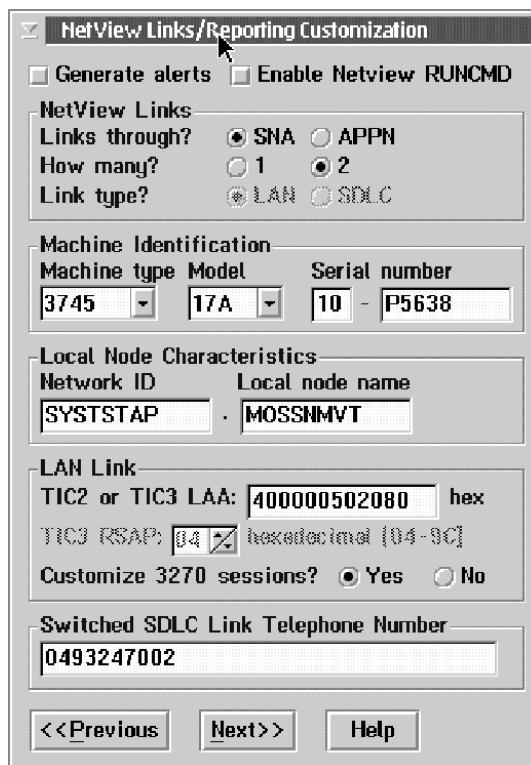
If you have changed one of these options or both, then go 10.6.1, "Re-configuring Service Processor Customization Options." Otherwise, continue with 10.6.2, "Adapter Code Loading per Processor Type" on page 41.

10.6.1 Re-configuring Service Processor Customization Options

1. Select the **SP Customization** function from the **Service Processor configuration** menu to display the **Service Processor (SP) Customization** window.



- ___ 2. Depending on the change you made, do one of the following:
 - If you have modified both options, click on the **NetView Link/Operations** and the **Enable Retain Link/Operations View Customize** check-boxes and go to the next step.
 - If you have modified only the **Generate alerts** option then select the **NetView Link/Operations View Customize** check-box and go to the next step.
 - If you have modified only the **Enable Remote Support** option then select the **Retain Link/Operations View Customize** check-box and go to step 5 on page 40.
- ___ 3. Press **Next>>** to display the **NetView Link(s)/Reporting Customization** window.



NetView Links/Reporting Customization

☐ Generate alerts ☐ Enable Netview RUNCMD

NetView Links

Links through? ☒ SNA ☐ APPN
 How many? ☐ 1 ☒ 2
 Link type? ☒ LAN ☐ SDLC

Machine Identification

Machine type Model Serial number
 3745 17A 10 P5638

Local Node Characteristics

Network ID Local node name
 SYSTSTAP MOSSNMVT

LAN Link

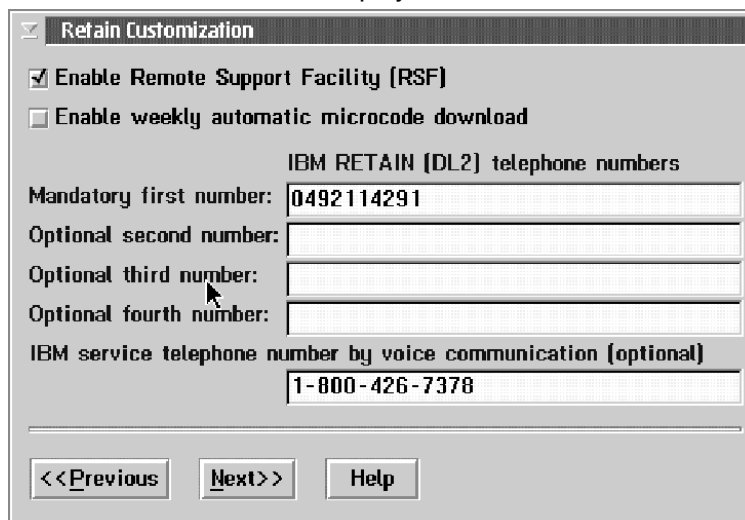
TIC2 or TIC3 LAA: 400000502080 hex
 TIC3 RSAP: 04 hexadecimal (04-9C)
 Customize 3270 sessions? ☒ Yes ☐ No

Switched SDLC Link Telephone Number

0493247002

<<Previous Next>> Help

- ___ 4. Select the **Generate alerts** option.
- ___ 5. Click on **Next>>** button to display the **Retain Customization** window.



Retain Customization

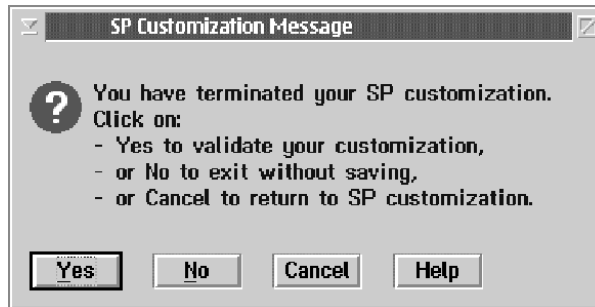
☒ Enable Remote Support Facility (RSF)
☐ Enable weekly automatic microcode download

IBM RETAIN (DL2) telephone numbers

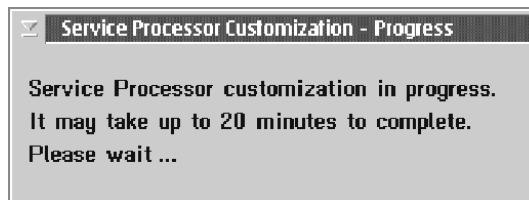
Mandatory first number: 0492114291
 Optional second number:
 Optional third number:
 Optional fourth number:
 IBM service telephone number by voice communication (optional)
 1-800-426-7378

<<Previous Next>> Help

- ___ 6. Select the **Enable Support Facility (RSF)** option.
- ___ 7. Click on **Next>>** button to return to the **Service Processor (SP) Customization** window.
- ___ 8. Click on **Close**. The **SP customization Message** is then displayed:



- ___ 9. Click on **Yes** button to confirm your customization and start the Service Processor customization updating.



- ___ 10. Wait until completion. When completed, the following window is displayed:



- ___ 11. Click on **OK** button.
- ___ 12. Go to 10.6.2, "Adapter Code Loading per Processor Type."

10.6.2 Adapter Code Loading per Processor Type

Before you start...

Perform the following procedure to define the network routing protocol to be loaded per processor type. If the customer does not want to specify this information, go to 10.6.5, "Logging OFF from Service Processor" on page 44 (All protocols will be loaded in all types of processors).

- ___ 1. On the **Service Processor** menu, click on **Configuration Management**, then double click on **Manage 3745/3746 Installation/Removal**.
- ___ 2. On the **Controller Installation** menu, select the 3746-9x0 by clicking on the <3746-9x0> line, then click on **Select Feature**.

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Controller Installation

Select an item:

Controller	Type	Model	S/N	Last changes saved
BS8-810L	<3745 not installed> 3746	950 (APPN)	12-34567	<Not saved>
BS FVT	3745 3746	900	BS-24681	<Not saved> <Not saved>
<New>	<3745 not installed> <3746 not installed>			
<New>	<3745 not installed> <3746 not installed>			
<New>	<3745 not installed> <3746 not installed>			

Buttons: Add... Save... Remove... Clean... Change... Repair... Select Feature Cancel Help

Status: 3746 M.E.S. 900->950

— 3. On the **Feature Selection** menu, click on **OK**.

Features Selection

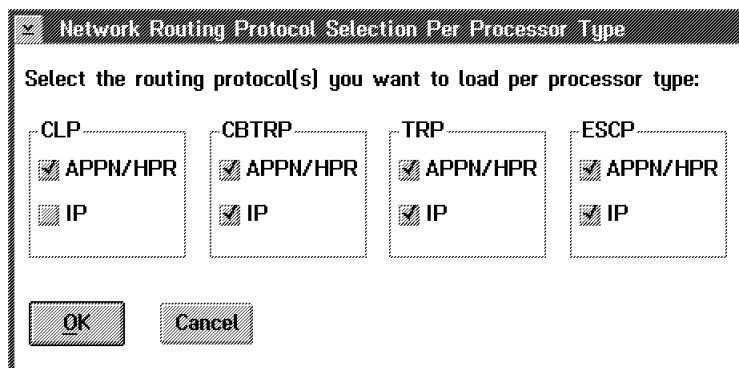
Select the features/functions you want to install and enter corresponding passwords:

Features	Password	Extended Functions	Password
<input checked="" type="checkbox"/> APPN/HPR	no password	<input type="checkbox"/> 3746 (FC.5800)	
<input checked="" type="checkbox"/> IP	XXXXXXXX	<input checked="" type="checkbox"/> MAE (FC.5804)	XXXXXXXX
<input checked="" type="checkbox"/> X.25	XXXXXXXX	<input type="checkbox"/> TN3270E Server (FC.5806)	
<input checked="" type="checkbox"/> ISDN	no password	<input type="checkbox"/> 3746&MAE (FC.5810/5811)	

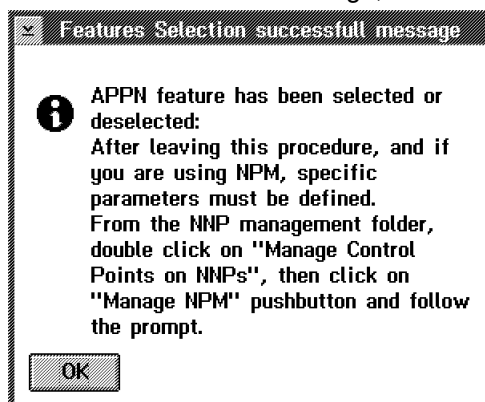
Extended Functions 4

Buttons: OK Cancel Help

— 4. According to the customer's requirement, On the **Network Routing Protocol Selection Per Processor Type** menu, disable or enable the protocol loaded per processor type, then click on **OK** button.



- ___ 5. Read the information message, then click on **OK** button.



- ___ 6. When completed, click on **OK** and perform a general IML to activate the feature installed, then go to 10.6.5, "Logging OFF from Service Processor" on page 44.

10.6.3 Saving Configuration Parameters

- ___ 1. Double click on the **Service Processor** icon.
- ___ 2. Click on **Operation Management**.
- ___ 3. Double click on **Manage Disks and Databases**.
- ___ 4. Use the radio button to select **Save databases on diskette** to save the configuration parameters. When prompted, insert **Configuration Parameters diskette** (PN 02L3427) into the diskette drive.
- ___ 5. Click on **OK** and wait for completion. If error, record the message and contact support.
- ___ 6. Remove the diskette, then click on **Cancel** to exit from the function.

10.6.4 Updating Installation Parameters Diskettes

Once you have upgraded the hardware of the machine, you have to regenerate the format on the Installation Parameters Diskettes using the following procedure: (Duration approximately 13 minutes)

- ___ 1. On the **Service Processor** menu, click on **Configuration Management**, double-click on **Manage 3745/3746 Installation/Removal**.

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- ___ 2. On the **Controller Installation** menu, Click on the **3746-9x0** installed, then Click on **Save**.
- ___ 3. After the **Saving Active CDF-E as Reference** pop-up window has been displayed, insert the **3746-900 installation parameters diskette (PN 17G5878)** of the 3746-9x0 and click on **OK**.
- ___ 4. On the third pop up screen confirming CDF-E saved to diskette, remove diskette as instructed and click on **OK**.
- ___ 5. Perform the above saving procedure for the backup diskettes, then click on **Cancel**.

10.6.5 Logging OFF from Service Processor

- ___ 1. On **MOSS-E View** window, click on **Program**.
- ___ 2. Click on **LOG OFF MOSS-E**.

11.0 Test Procedures

Not applicable.

12.0 Field Updating

None.

After Installation (13-15)

13.0 Publications Update

None.

14.0 Parts Disposition

14.1 Purchased Machines

Refer to the part ownership matrix to determine the correct owner of removed/unused parts.

- For non US Areas, refer to *Hardware and General Service Code Description*.
- For Domestic Areas, returns parts to the customer.

15.0 Machine Records

- Install updated machine history provided.

16.0 Activity Reporting

- Report the EC installation activity in normal QSAR.

End of instructions.



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