LCCM Compatibility and Configuration Guide
for Non-IBM Systems

IBM LANClient Control Manager 2.5.1 with Service Pack 3 and Patch 1

Updated June 19, 2001

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1. About the Guide

This document includes information about the non-IBM hardware and software that IBM LANClient Control Manager (LCCM) supports. You will find tables that detail which non-IBM systems are supported as LCCM clients. Supported network interface cards (NICs) are listed here as well. LCCM requires certain levels of firmware for both client hardware and network adapter to function properly. Please check the tables for proper BIOS levels.

Although one of the features of LCCM is to distribute software to client computers across a LAN, the terms and conditions of the IBM International Program License Agreement for LCCM do not grant any license to install, copy, or use any application software or operating system software not provided with LCCM. This includes, but is not limited to, Microsoft Windows 3.1, Windows 95, Windows 95 OSR2, Windows 98, Windows NT, Windows 2000 Professional, Windows 2000 Server and Advanced Server, and DOS. Always ensure that you have obtained suitable licenses for any software you intend to use with LCCM.

1.1. LCCM Licensing

IBM LANClient Control Manager is a part of the IBM System Installation Tool Kit, which is released as an Option By IBM. You must have a valid Proof of Entitlement (POE) licenses to use LCCM on non-IBM client systems. POE for non-IBM client systems are available for a fee from IBM Business Partners or direct from IBM. You must have a valid POE license for each non-IBM client system that utilizes LCCM. To order additional IBM System Installation Tool Kit POE licenses, use the following part numbers:

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19K0987	Additional License 100 Client POE Certificate
19K0988	Additional License 1,000 Client POE Certificate

1.2. How to Find Your Way Around

This guide is organized in numbered chapters and sections. The Table of Contents above lists the different sections and corresponding page numbers. If you are viewing the guide on-line with Acrobat Reader, you can easily navigate the document by clicking the hyperlinked text in the Table of Contents as well as the references to the World Wide Web. You will notice that the cursor changes when you move it above hyperlinked text.

1.3. Further Reference

In addition to this guide, there are various other sources that you can consult on LCCM:

► Context-sensitive help provided with LCCM. From the main window, select the **Help** menu and click the **Help Index**

► The LCCM home page is http://www.pc.ibm.com/us/desktop/lccm/index.html

► The User's Guide is available at http://www.pc.ibm.com/us/desktop/lccm/docs.html

- ► The compatibility and configuration guide for IBM systems is available at http://www.pc.ibm.com/us/desktop/lccm/compat.html

- ► Last minute updates and changes are given in ReadMe files. Please visit http://www.pc.ibm.com/us/desktop/lccm/download.html

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- ► Subscribe to the LCCM Users Forum to discuss problems and solutions with fellow users. Please see http://www7.pc.ibm.com/~UMS/

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- ► To purchase the System Installation Tool Kit to use LCCM on non-IBM client systems, please visit http://www.pc.ibm.com/ww/solutions/lcc/sit.html

2. Supported Computers

The following information is a list of all of the non-IBM computers tested as clients with LCCM version 2.5.1 with Service Pack 3 and Patch 1. The BIOS levels shown in the matrices indicate the levels that were used in testing. It is recommended that you update your systems to the most recent BIOS level using LCCM. Other systems, not listed here, may also work with LCCM.

2.1. Non-IBM Computers

Computer			Maintenance						Unattended Install					Clone Install	
Type	Model	Tested BIOS Level	WOL	BIOS Update	CMOS Update	Password Update	Asset ID Support	NT 4.0 WS (SP4-SP6a)	Win 2000	Win 95	Win 95 OSR2	Win 98	Win 98 SE	Win 95 & 95 OSR2	Win 98 & SE
Dell OptiPlex GX110	DCM	PhoenixBIOS Revision A02	N	N	N	N	N/A	Y	Y	N/A	N/A	Y [1,2]	Y [1,2]	Y	Y
Dell OptiPlex GX300	MMP	PhoenixBIOS Revision A03	N	N	N	N	N/A	Y	Y	N/A	N/A	Y [1,2]	Y [1,2]	Y	Y
HP Vectra VLI8 DT	Vectra VLI8 DT	PhoenixBIOS 4.0 Release 6.0	N	N	N	N	N/A	Y	Y	N/A	N/A	Y [1]	Y [1]	Y	Y
HP Vectra VL600 DT	Vectra VL600 DT	PhoenixBIOS 4.0 Release 6.0	N	N	N	N	N/A	Y	Y	N/A	Y [1]	Y [1]	Y [1]	Y	Y
Gateway E-4400	VHA E-4400-733	FB82010A.15A .006.P04	N	N	N	N	N/A	Y	Y	N/A	Y [1]	Y [1]	Y [1]	Y	Y
Gateway E-3200 [3]	MAV E-3200-550	PhoenixBIOS 4.0 Release 6.0	N	N	N	N	N/A	Y	Y	N/A	Y [1]	Y [1]	Y [1]	Y	Y
Compaq iPAQ	C500/810e	686J5 v1.09	Y	N	N	N	N/A	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A
Compaq iPAQ Legacy-Free	C500/810e	686J5 v1.09	Y	N	N	N	N/A	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

Y   = Yes, passed

N   = No, failed

1.   You must manually install the drivers for the on board network interface card or chipset.

2.   System hangs intermittently during the Windows 98 /98 SE GUI setup.

3.   E3200 may hang during scan. If this happens you must create the client manually. This system also intermittently hangs after FDISK and you will have to reboot the client manually.

2.2. Non-IBM Servers

Computer			Maintenance					Unattended Install	
Type	Model	Tested BIOS Level	WOL	BIOS Update	CMOS Update	ASM Cfg.	RAID Cfg.	NT 4.0 Server	Windows 2000 Server & Advanced Server
Servers Based on L440 GX Server boards		PhoenixBIOS 4.0 Release 6.0	N/A	N	N	Y[1]		Y	Y
Dell Power Edge 2450/600	SMP	PhoenixBIOS Revision A03	N/A	N	N	Y[2]	Y	Y	Y

Notes:

Y   = Yes, passed

N   = No, failed

1. You must assign a model number to the scanned client and then create an LCA file for it in the C:\LCCM\CLNTFILE\DEFAULT directory. L440 GX server boards have Adaptec 7896 SCSI Chipset.

2. Video is unknown. You must assign a model number to the scanned client and then create an LCA file for it in the C:\LCCM\CLNTFILE\DEFAULT directory. PowerEdge has Adaptec 7899 SCSI Chipset.

3. On-board Ethernet doesn't support PXE or RPL. Therefore, 3COM 3C905C based Adapter and Intel Pro/100+ adapter were used for testing.

3. Network Adapters

LCCM will automatically scan, configure, and recognize supported network cards. These network cards are listed in the Compatibility and Configuration Guide for IBM Systems, available at http://www.pc.ibm.com/us/desktop/lccm/compat.html.

It is possible that LCCM will work with an unsupported network adapter. These should adhere to the Wired for Management (WfM) baseline Version 2.0 specifications, and should support Preboot eXecute Environment (PXE) 1.0 specified in the NetPC Hardware Design Guidelines Version 1.0b or PXE 2.0, or later, specified by Intel Corporation (12/98). It is recommended that you use Wake-on-LAN®. This helps to simplify deployment by enabling remote systems management without user intervention to power the system on.

For LCCM to recognize an adapter that is not included on the list, you need to edit the file called NETWORK.LST. Unless you do this, LCCM won't be able to identify your adapter during the scan process. Modify NETWORK.LST with the update below for the non-IBM systems listed in the following pages. For more information about NETWORK.LST, please see the User's Guide:

```
3COM 3C905B based Adapter(Dell);44;44;LC3COM;OS2;BBLOCK\NDIS\EL90X.dos;10280092;00B0D02=1;XN2S;

3COM 3C905B based Adapter or NLX Riser
(Gateway);45;45;LC3COM;OS2;BBLOCK\NDIS\EL90X.dos;107B7056;00E0B8=1;XN2S;

3COM 3C905B Fast EtherLink XL or NLX Riser
(Gateway);46;46;LC3COM;OS2;BBLOCK\NDIS\EL90X.dos;107B4400;0050DA5=1;XN2S;

3COM 3C905B based Adapter(Dell);47;47;LC3COM;OS2;BBLOCK\NDIS\EL90X.dos;102800B4;00B0D04=1;XN2S;

3COM 3C905B based Adapter or NLX Riser
(HP);48;48;LC3COM;OS2;BBLOCK\NDIS\EL90X.dos;10B79055;00504D=1;XN2S;

3COM Etherlink 10/100 PCI Adapter;57;57;LC3COM;OS2;BBLOCK\NDIS\EL90X.dos;10B79200;000103=1;XN2S;
```

Note: Each of the above lines should be entered without a hard-return midway in the text.

4. Using LCCM to Deploy Non-IBM Systems

This section describes the procedure for setting up the non-IBM systems for LCCM use and to make the systems known to the LCCM server.

4.1. Compaq Systems

Models iPAQ (with legacy ports) C500/810e and iPAQ (Legacy-Free) C500/810e

1. Modify NETWORK.LST as described on page 5.
2. Close and reopen LCCM server to enable the new NETWORK.LST.
3. Change the client system BIOS settings to boot to the network in order to scan the client into LCCM:

    a) To access the system's set-up interface, boot the system and press **F10**. Select the **Storage** tab. In the Options menu select **Boot Order**. The two default options are displayed:

    Default Boot Sequence: Hard Drive **(1)**

                                        Intel Ethernet controller **(2)**

    b) Set the boot sequence to the following. Select the →, to make the change:

    Boot Sequence: Hard Drive **(2)**

                                        Intel Ethernet controller **(1)**

    c) Select the **Security** tab and choose the **Network Service Boot** option. Make sure this option is set to **Enable**, which is the default setting.

    d) Select the **Advanced** tab and choose the **Power-on** option. Scroll down to **Remote Wakeup Boot Source** and change the default setting option from Local Hard Drive to **Remote Server** - use the → to make the change. There is an arrow in front of First. The right arrow key toggles the sequence.

    e) Press **F10** to save the settings.

4. Click the **Scan** button on the LCCM server.
5. Power on the client system to scan in the client.
6. The client system should appear in the left panel of LCCM.

4.2. Dell Systems

Models Dell OptiPlex GX110 and Dell OptiPlex GX300

1. Modify NETWORK.LST as described on page 5.
2. Close and reopen LCCM server to enable the new NETWORK.LST.
3. Change the client system BIOS settings to boot to the network in order to scan the client into LCCM:

    a) To access the system's set-up interface, boot the system and press **F2**. At the main menu, select the **Boot Sequence** option and press Enter. The default boot-up selections are displayed as follows:

1. Disk Drive
    2. Hard Drive C:
    3. IDE CD-ROM device
    4. MBA UNDI

  b) Change the default boot sequence to the following (select the -, or + to make the changes):
    1. Disk Drive
    2. MBA UNDI
    3. Hard Disk C:
    4. IDE CD-ROM Device

  c) Scroll down the main menu, select the option **Integrated Devices** - press Enter. The Network
      Interface controller should be set to **ON w/ MBA** instead of **ON**.

4. Click the **Scan** button on the LCCM server.

5. Power on the client system to scan in the client.

6. The client system should appear in the left panel of LCCM.

This system does not support Wake-on-LAN.

4.3. Gateway Systems

Model Gateway E4400

1. Modify NETWORK.LST as described on page 5.

2. Close and reopen LCCM server to enable the new NETWORK.LST.

  a) Change the client system BIOS settings to boot to the network in order to scan the client into
      LCCM: To access the system's set-up interface, boot the systems and press **F1**. Select the
      Boot tab at the top of the main menu. (1st Boot Device – 4th Boot Device will appear near the
      bottom of the screen). The default boot-up selections are displayed as follows:
    1. Floppy
    2. IDE-HDD
    3. ATAPI CD-ROM
    4. MBA UNDI

  b) Change the default boot sequence to the following (highlight the device and press Enter to make
      the changes):
    1. Floppy
    2. MBA UNDI
    3. IDE-HDD
    4. ATAPI CD-ROM

3. Click the **Scan** button on the LCCM server.

4. Power on the client system to scan in the client.

5. The client system should appear in the left panel of LCCM.

This system does not support Wake-on-LAN.

Model Gateway E3200

1. Modify NETWORK.LST as described on page 5.
2. Close and reopen LCCM server to enable the new NETWORK.LST.
3. Change the client system BIOS settings to boot to the network in order to scan the client into LCCM:
   a) To access the system's set-up interface, boot the system and press **F1**. Select the **Boot** tab at the top of the main menu. (1st Boot Device – 5th Boot Device will appear near the bottom of the screen). The default boot-up selections are displayed as follows:
      1. Removable Devices
      2. Hard Drive
      3. ATAPI CD-ROM
      4. Network Boot
      5. MBA
   b) Change the default boot sequence to the following (highlight the device and press Enter to make the changes):
      1. Removable Devices
      2. Network Boot
      3. MBA
      4. Hard Drive
      5. CD-ROM
4. Click the **Scan** button on the LCCM server.
5. Power on the client system to scan in the client.
6. The client system should appear in the left panel of LCCM.

This system does not support Wake-on-LAN.

4.4. Hewlett Packard Systems

Models Vectra Li8 DT D9771T #ABA and Vectra VL 600 DT D9469T #ABA

1. Modify NETWORK.LST as described on page 5.
2. Close and reopen LCCM server to enable the new NETWORK.LST.
3. Change the client system BIOS settings to boot to the network in order to scan the client into LCCM:
   a) To access the system's set-up interface, boot the system and press **F2**. From the main menu select the **Security** tab. In the options select Boot Devices Security. Make sure that **Start from Network** is enabled.

b) Select the **Boot** tab. In the boot tab option menu select **Boot Device Priority**. The default boot-up selections are displayed as follows:

1. Removable Devices
2. Hard Drive
3. ATAPI CD-ROM
4. Managed PC Boot Agent [MBA]

c) Change the default boot sequence to the following (select the -, or + to make the changes):

1. Disk Drive
2. Managed PC Boot Agent [MBA]
3. Hard Drive
4. ATAPI CD-ROM

4. Click the **Scan** button on the LCCM server.
5. Power on the client system to scan in the client.
6. The client system should appear in the left panel of LCCM.

This System does not support Wake-on-LAN.

L440 GX server boards

(Servers based on L440 GX server boards Part # VAR-101679)

1. Modify NETWORK.LST as described on page 5.
2. Close and reopen LCCM server to enable the new NETWORK.LST.
3. Change the client system BIOS settings to boot to the network in order to scan the client into LCCM.

a) To access the system's set-up interface, boot the system and press F2. Select the Boot tab, scroll down and select the Boot Device Priority option and press Enter. The default boot sequence is displayed as follows:

1. Removable Devices
2. Hard Drive
3. CD-ROM
4. LANDesk ® Service Agent II

b) To scan into LCCM, change the default boot sequence to the following (select the -, or + to make the changes):

1. Removable Devices
2. LANDesk ® Service Agent II
3. Hard Drive
4. CD-ROM

4. Click the **Scan** button on the LCCM server.
5. Power on the client system to scan in the client.
6. The client system should appear in the left panel of LCCM.

Dell Power Edge2450

1. Modify NETWORK.LST as described on page 5.

2. Close and reopen the LCCM server to enable the new NETWORK.LST.

3. Change the client system BIOS settings to boot to the network in order to scan the client into LCCM:

   a) To access the system's set-up interface, boot the system and press **F2**. When the main menu appears, press **Alt + P** - this will take you to the **Boot Device Priority** selection. The default boot sequence is displayed as follows**:**

      1. Diskette Drive A:

      2. CD-ROM device

      3. Hard Drive C:

   b) To scan into LCCM, change the default boot sequence to the following (select the Control + Up arrow or the down arrow to make the changes):

      1. Diskette Drive A:

      2. MBA UNDI

      3. Hard Drive C:

      4. CD-ROM

4. Click the **Scan** button on the LCCM server.

5. Power on the client system to scan in the client.

6. The client system should appear in the left panel of LCCM.

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