



eComStation Preview

Quick Installation Guide

rev. 2 - oct. 21/2000

Welcome to the Preview Release of eComStation

This guide will try to help you installing this exciting new product as easy as possible.

Please remember: **This product is a Preview.**

This means that it will most likely change considerably in both appearance and function in the next few months, and will result in a General Availability version. You are entitled to this release, and you will automatically receive it once you have registered.

<http://www.ecomstation.nl/register/>

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Welcome

Please remember this product is a **Preview Version of eComStation**.

As such, the contents and appearance of this product will most likely change in the General Availability (GA) release.

This Preview Version of eComStation is based on the OS/2 Warp 4 Convenience Pak. Currently the level of this product is 4.51 - revision 14.049. Most likely the GA version will be based on a newer release of the Convenience Pak.

Before You Begin

Please read through the following notices and pages of this guide. It will help you understand the Logical Volume Manager which is required for the installation of eComStation.

IMPORTANT NOTICE

The installation of eComStation Preview, the OS/2 Warp 4 Convenience Pak or Warp Server for eBusiness results in the conversion of your current partitions to LVM volumes. What this means is, that **you will not be able to use 'classic' partitioning tools like Partition Magic from PowerQuest** after installing LVM.

Before installing eComStation Preview be sure to have your disk layout arranged as you like. Especially when you want to create room for a test-install of eComStation with PartitionMagic, FIPS or equivalent tools, make sure to do this before the actual install process of eComStation.

Ultimately we would recommend you to use a new, empty harddisk for testing the eComStation. You can install the upgrade version as well as the full version in a new, cleanly formatted partition (volume in LVM terminology).

We have had reports of successful migrations to eComStation from earlier installed OS/2 Warp 4 systems, however, we do not recommend upgrading currently. **Remember this is a preview version.**

Backup your system: Please make sure to have a full backup of your system and verify that you can actually restore your system (there's no much use to a non-functioning backup).

Understanding LVM

The following is an excerpt from the "*Quick Beginnings: Installing OS/2 Warp Server for e-business*" Book from IBM (SCT7-S2NA-00) you can find the PDF version of this book on the eCS_Main CD Rom in the subdirectory: \BOOKS\PDF\INSTALL.PDF

Please have a look at the contents of this book, and make sure you understand this.

Preinstallation Planning

Before installing eComStation, you should be familiar with concepts and terminology related to installation, including Logical Volume Manager, Journaled File System, and information about selecting a file system.

Active partition

The one primary partition that has the boot indicator set in the master boot record. One primary partition must be marked active to start the computer from a hard disk. On most computers, this must be the first hard disk. The active partition must contain an operating system or a program, such as Boot Manager, from which you can select a partition that has an operating system.

Extended partition

An extended partition is defined in the master boot record of a hard disk, but it must be divided into one or more logical partitions to be used. This arrangement exists to overcome the small limit of four primary partitions. The maximum number of logical partitions within an extended partition is not a fixed number, but it is limited only by installation-dependent, practical considerations.

Note: The Logical Volume Manager (LVM) utilities do not display or directly allow configuration of extended partitions. Operations on logical partitions are automatically performed within an extended partition.

File system

The function that stores data and indexing information on disk sectors, using a particular arrangement and method to access it. A disk volume must be capable of holding data to be used by applications and a directory structure for applications to organize and locate data. To prepare a volume for use by a file.

Logical Volume Manager

Logical Volume Manager (LVM) is a set of new OS/2 disk management functions and utilities. LVM allows user configuration of physical and logical volumes (usually referred to as drives in previous versions of OS/2) with much greater flexibility than before. Features such as persistent drive letters, dynamic drive letter assignment, disk spanning, and dynamic volume expansion greatly reduce downtime when disk configuration changes are made on a server.

LVM Utilities

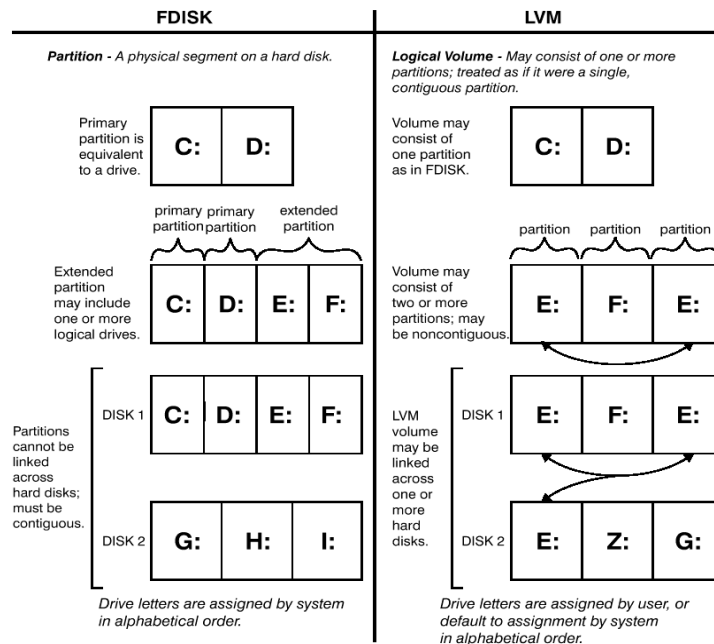
The Logical Volume Management Tool (LVM.EXE) is used to configure new LVM features as well as perform basic partitioning functions, which were done with the Fixed Disk Utility (FDISK.COM) in previous versions of OS/2.

A new Java application, Logical Volume Manager Graphical User Interface (LVMGUI.COM), likewise replaces the previous FDISK Presentation Manager utility (FDISKPM.EXE).

Important note: After volumes have been created with LVM, FDISK should no longer be used to manage partitions. As such, FDISK and FDISKPM are no longer included in eComStation. Please only use LVM or LVMGUI!

Comparison between FDISK and LVM

The following chart illustrates the differences between drives as they were defined by FDISK and drives as they are defined by LVM. Note that with FDISK, a partition is equivalent to a drive. However, with LVM, a volume is equivalent to a drive.



Logical Volumes

A logical volume is one or more partitions with an associated drive letter. It is treated as if it were a single, contiguous partition. Volumes have persistent drive letters associated with them. Partitions that are not part of a logical volume have no associated drive letter and cannot be accessed by applications. You can create two types of logical volumes with LVM: *Compatibility Volumes* and *LVM Volumes*. The differences are discussed below:

Compatibility Volumes

A compatibility volume is compatible with previous versions of OS/2 and other operating systems. It corresponds to a single physical partition on a single physical hard disk, and it can be made bootable. When you install eComStation, you will create a compatibility volume and set it installable to be the target for installation.

LVM Volumes

An LVM volume is a new type of volume that is not recognized or accessed by previous versions of OS/2 or other operating systems.

Four types of volume designations are possible with LVM: *bootable*, *installable*, *nonbootable*, and *startable*.

Bootable

Bootable is a volume designation, used by Logical Volume Manager, indicating that the volume contains a bootable operating system. When a bootable volume is created, it is automatically added to the Boot Manager menu. For example, if you have two operating systems installed in two different volumes on your computer, you can designate each volume as bootable. Then, using Boot Manager, you can select which of the volumes to boot. Note that bootable volumes exist only when Boot Manager is present; otherwise, the bootable volume is designated as startable.

A bootable volume can be used to boot an operating system from Boot Manager.

Installable

Installable is a volume designation, used by Logical Volume Manager during installation, indicating that eComStation will be installed on the volume. *Only one volume can be set as installable.*

Nonbootable

Nonbootable is a volume designation, used by Logical Volume Manager, indicating that the volume contains nonbootable data rather than a bootable operating system. For example, you might have an operating system installed in one volume on your computer, and you might save your data in another volume. To ensure that the system can be properly booted by the hardware, you would designate the volume that contains the operating system as bootable and designate the volume that contains your data as nonbootable. Because some systems do not support booting beyond certain hard disk limits, specifying a volume as nonbootable allows you to make use of those areas for data.

A nonbootable volume cannot be used to boot an operating system from Boot Manager.

Startable

Startable is a volume designation, used by Logical Volume Manager, indicating the volume that is used when the computer starts. A startable volume must contain either Boot Manager or a bootable operating system. For example, if Boot Manager is installed, it is automatically set as the startable partition, and the Boot Manager

menu is displayed when the computer starts. If Boot Manager is not installed, you must set, as startable, a volume that contains an operating system. Then, when you turn on your computer, that operating system will start automatically.

Only one volume or partition can be set startable.

A startable volume is the primary partition that is used to start the system, by virtue of being the active partition.

Volume Type Comparison

The following chart compares characteristics of compatibility volumes and LVM volumes.

Disk Spanning

Characteristic	Compatibility Volume	LVM Volume
Can be set installable, startable, or bootable	Yes	No
Maximum size	Size of disk device (the actual usable size may be limited by the intended file system)	2TB (terabytes)
Allowable file systems	386 HPFS, HPFS, FAT	JFS, 386 HPFS, HPFS, FAT
Can span multiple partitions and disks	No	Yes
Expandable	No	Yes, if formatted with JFS, or if unformatted
Supports Fault Tolerance feature of 386 HPFS	Yes	No
Partition ID values (for more information about this topic, see Appendix B of <i>Storage Device Driver Reference for OS/2, S71G-1897</i>)	x'06' (16-bit FAT > 32MB) x'07' (Installable File System)	x'35' (OS/2 Logical Volume Manager)

Disk spanning can be thought of as drive linking. It allows you to link multiple partitions on multiple physical disks (hard disks) into a single, LVM volume. Disk spanning allows you to create any size LVM volume by linking multiple physical disks together. The LVM volume appears as one drive letter, compatible with all file operations presently used.

Dynamic Volume Expansion

Dynamic volume expansion allows you to increase the size of an LVM volume to accommodate additional needed capacity without affecting the data already on the volume. Expansion works only with JFS, not other file systems. The LVM volume expands when you link additional partitions (which can be on the same physical disk or on other physical disks). Additional space is always added to the end of the current LVM volume space.

Dynamic Drive Lettering

Dynamic drive lettering allows you to manage drive letters on LVM volumes and compatibility volumes without having to restart the system under most circumstances. Previous OS/2 implementations statically allocated the number of drives at boot time, forcing you to restart the system whenever you added or deleted drives.

File System Descriptions

A file system is the software implementation of a method for managing user data on a disk or other medium. It is the part of the operating system that provides access to data and programs on a disk. Each type of Installable File System (IFS) has implementation-specific details, such as directory formats and file layouts.

The following file systems are explained below:

- Journaled File System (JFS)
- High Performance File System (HPFS)
- FAT File System

Please refer to Appendix A, File System Comparison Chart on page 85 of the *"Quick Beginnings: Installing OS/2 Warp Server for e-business"* Book from IBM for a side-by-side comparison of file system characteristics.

Journaled File System (JFS)

The Journaled File System (JFS) is a file system that uses database journaling techniques, such as recording file changes sequentially, to maintain file system integrity.

JFS provides a high-performance, 32-bit file system implementation for the OS/2 Warp Server for e-business environment. JFS is tailored primarily for the high throughput and reliability requirements of servers from single processor systems to advanced multiprocessor and clustered systems where performance and reliability are desired.

JFS uses the proven technology of the existing AIX JFS implementation, and it is enhanced to provide support for extended attributes, unicode names, and case-insensitive searches. Also, a number of significant features are added to JFS to make it more competitive and scalable, resulting in fundamental changes to the file system layout. These features include extent-based allocation, sorted directories, and dynamic space allocation for file system objects.

Additional features of JFS include:

- The ability to create and maintain volumes up to 2TB (terabytes) in size, in contrast to the 386 HPFS and HPFS limit of 64GB and the FAT limit of 2GB.
- File sizes of up to 2TB, while 386 HPFS, HPFS, and FAT allow file sizes of 2GB.
- Compatibility with applications already using 386 HPFS and HPFS.
- Improved recovery time from system failures by using journaling techniques.
- Dynamic volume expansion in conjunction with LVM, resulting in improved file system scalability compared to the other file systems.

Note: The Journaled File System can be used only on LVM volumes, and therefore is not bootable. See Volume Designations on page 18 of the *"Quick Beginnings: Installing OS/2 Warp Server for e-business"* book from IBM for more information about bootable volumes.

High Performance File System (HPFS)

HPFS file name rules are more flexible than those of FAT, allowing you to create more descriptive file names. HPFS allows file names of up to 254 characters. Spaces and periods are also allowed. HPFS has features that make it a better choice than FAT for larger volumes, up to 64GB. HPFS puts the directory at the seek center of the volume and is designed to allocate contiguous space for files, thus helping to prevent disk fragmentation. Use HPFS instead of FAT on larger volumes because the savings in disk space is dramatic.

FAT File System

The File Allocation Table (FAT) file system is a file system compatible with DOS. FAT file systems have a file allocation table that keeps track of the files and their locations on the hard disk. File names cannot exceed 8 characters, and the file name extension cannot exceed 3 characters. A period is always required between the file name and the extension. Spaces are not allowed, and fewer

nonalphanumeric characters are allowed compared to other file systems.

Select the FAT file system if you intend to share data in the volume with a version of DOS that is running independently of eComStation. DOS uses the FAT file system and does not recognize files created by JFS, 386 HPFS, or HPFS

Using the Logical Volume Manager

The following is an excerpt from the *"Using the Logical Volume Manager"* Book from IBM you can find the PDF version of this book on the eCS_Main CD Rom in the subdirectory:
\\BOOKS\\PDF\\USINGLVM.PDF

Please note that this description refers to the LVMGUI interface which is a PM frontend for the LVM.EXE tool, that will be used when installing eComStation. The commands are identical, only the 'toolbar' is not available as such.

Using the Logical Volume Manager

The Logical Volume Manager (LVM) enables you to create and manage volumes on the hard disks in your system. LVM components are initially installed and configured during the eComStation Preview installation process.

You can perform the following tasks with LVM:

- Create compatibility volumes (partitions), which can be seen by previous versions of OS/2 and other operating systems
- Create logical volumes that span physical disks
- Delete compatibility volumes (partitions)
- Delete logical volumes

LVM can also be used after installation to perform additional configuration, if necessary.

LVM provides both physical and logical views of the system. The physical view shows how the hard disks are configured. The logical view displays the volumes currently configured on the system. You can switch between the two views by pressing F5.

Physical View

Logical Volume Management Tool - Physical View				
Physical Disk	Size (MB)	Free Space:	Total	Largest
1 [D1]	28607		10440	10440
2 [D2]	96		96	96
Disk Partition	Size (MB)	Type	Status	Logical Volume
[BOOT MANAGER]	7	Primary	In use	
Win9x	2000	Primary	In use	Win9x
OS/2	2000	Primary	In use	OS/2
[A1]	2008	Logical	In use	LVM1
[A2]	2000	Logical	In use	LVM2
F1=help F3=exit F5=Logical View Enter=Options Tab=Window				

The physical view of LVM allows you to create and manage partitions on the hard disks in your system. This view has two windows to show how the disks are partitioned and the volumes that are associated with them. This view displays the partitions present on each hard disk, enabling you to create and manage individual partitions. When you select a partition, the details of that partition or the volume associated with that partition are displayed in the lower window.

The physical view includes the following information:

Volume Name - The name that has been assigned to the volume. A volume consists of one or more partitions. It is assigned a drive letter and is treated as if it were a single, contiguous partition. You can specify the name with the Create Volume option, and you can change the name with the Set/Change Name on Volume option.

Partition Name - The name that has been assigned to the partition. You can specify this name with the Create Partition option.

Status - indicates the status of the partition.

File System - indicates the type of file system on the volume. Volumes that have not been formatted do not have a file type indicated.

Size (MB) - Indicates the size, in megabytes (MB), of the volume.

Type - indicates the type of partition.

Logical View

Logical Volume	Type	Status	File System	Size (MB)
Win9x	Compatibility	Bootable	FAT16	2000
OS/2	C: Compatibility	Bootable	HPFS-H	2000
LVM1	D: Compatibility		FAT16	2008
LVM2	E: Compatibility		HPFS	2000
LVM3	F: Compatibility		HPFS	6149
[CDROM 1]	*->G: Compatibility		CDFS	157
[CDROM 2]	*->H: Compatibility		CDFS	80
WSeB	L: Compatibility	Bootable	HPFS	2000
eCS	M: Compatibility	Bootable	HPFS	2000
[LAN 1]	N: Compatibility		LAN	0

Disk Partition	Size (MB)	Disk Name
Win9x	2000	[D1]

F1=help F3=exit F5=Physical View Enter=Options Tab=Window

The logical view displays the volumes, their size, the unused portion size, and the volume name, and it indicates if the volume is linked. You can use this view to create, delete, and name volumes.

The logical view includes the following information:

Name - the name that has been assigned to the volume. A volume consists of one or more partitions. It is assigned a drive letter and is treated as if it were a single, contiguous partition. You can specify the name with the Create volume option, and you can change the name with the Set/change name of volume option.

Status - indicates the status of the volume (such as *startable*).

File System - indicates the type of file system on the volume. Volumes that have not been formatted will not have a file type indicated.

Size (MB) - indicates the size, in megabytes (MB), of the volume.

% Used - indicates the amount of space used on a volume.

Unused (MB) - indicates the usable free space, in megabytes (MB).

Type - indicates the volume type.

Creating a Volume

Use Create volume to create a volume. A volume consists of one or more disk partitions. Each volume is then assigned a drive letter. Currently, volumes have drive letters assigned to them, but partitions do not. You can create two types of volumes:

- Bootable Volume
- Nonbootable Volume

Creating a Bootable Volume

A bootable volume is a volume that can be used to boot an operating system. Only compatibility volumes are bootable.

To create a bootable volume:

1. Select Volume from the toolbar.
2. Select Create volume.
3. Select Create bootable volume.
4. Type the new volume name in the space provided.
5. Choose the new drive letter associated with the volume and select the partition or free space to create the volume from.
6. Click OK. The new volume name and drive letter is now displayed.

Creating a Non-bootable Volume

A non-bootable volume is a volume that cannot be used to boot an operating system. It can be a compatibility volume or an LVM volume.

To create a non-bootable volume:

1. Select Volume from the toolbar.
2. Select Create volume.
3. Select Create non-bootable volume.
4. Select Create compatibility volume if you want the volume to be accessed by other operating systems and previous versions of OS/2. Otherwise, select Create LVM volume if you want the volume to span multiple disks, support Bad Block Relocation, or eventually be expanded.
5. Type the new volume name in the space provided.
6. Choose the new drive letter and select the partition(s) or free space to create the volume from.
7. Click OK. The new volume name and drive letter are now displayed.

Changes are effective when you save the changes and exit LVM. The system attempts to add the new volume without restarting; however, if the Disk Device Manager has exhausted its resources, the system will need to restart to make the changes effective.

Setting a Volume Startable

Use Set the volume startable to set the selected volume startable. A startable volume is the volume (or partition) that is used to start the system from a hard disk. It is the active partition. Only a compatibility volume on a primary partition can be set startable with LVM. Boot Manager, if installed, is automatically set as the startable partitions. Only one partition can be set as startable; if Boot Manager is to be

active, no volumes can be set as startable. If you set a volume as startable, Boot Manager is disabled. Note that you cannot see Boot Manager from the LVM logical view because it has no drive letter assigned to it; you can see Boot Manager in the LVM physical view.

To set a volume startable:

1. Select Volume.
2. Select Set volume startable.
3. Select the volume you want to set startable.
4. Click OK.

Changing a Drive Letter Assigned to a Volume

Use Set/change drive letter assigned to a volume to change the drive letter associated with an existing volume. The new drive letter association will then remain unchanged until you change the drive letter again or delete the volume.

To change the drive letter assigned to a volume:

1. Select Volume from the toolbar.
2. Select Set/change drive letter assigned to a volume.
3. Select the volume that you want to modify. A warning is displayed that provides information about changing drive letters. Click OK.
4. Choose the new drive letter and click OK. The new drive letter is now displayed.

When the changes are saved, the system attempts to change the driver letter assignment without restarting; however, if the file system cannot be unmounted, or if the Disk Device Manager has exhausted its resources, the system will need to restart to make the changes effective.

Note: This option can also be used to make the volume visible to OS/2 after you have hidden it using Hide volume from OS/2.

Setting or Changing a Volume Name

Use Set/change the volume name to set or change the name of a volume. The volume name on the Boot Manager Startup menu is also changed, if applicable.

The names you assign to volumes remain unchanged through restarting and hardware changes, and they always identify the same area on the disk. Volume names can be up to 20 characters long, can be entered in mixed case, and can contain spaces.

To set or change a volume name:

1. Select Volume from the toolbar.
2. Select Set/change name on volume.
3. Select the volume you want to change. A warning is displayed that provides information about changing drive letters. Click OK.

4. Type the volume name in the space provided and click OK. The new volume name is now displayed.

Note: You can also set or change the volume name by right clicking the volume and selecting Set/change name on volume from the pop-up menu.

Deleting a Volume

Use **Delete volume** to delete volumes. All partition structures associated with the volume will be removed from the associated hard disk(s).

To delete a volume:

1. Select **Volume** from the toolbar.
2. Select **Delete volume**.
3. Select the volume you want to delete.
4. Click **OK** to delete the volume.

Hiding a Volume from OS/2

*Use **Hide volume from OS/2** to make a volume invisible to OS/2.*

1. Select **Volume** from the toolbar.
2. Select **Hide volume from OS/2**.
3. Select the volume you want to hide.
4. Click **OK** to hide the volume.

Note: Use **Set/change drive letter** assigned to a volume to make the volume visible to OS/2 again.

Unhiding a Volume from OS/2

*Use **Set/change drive letter** assigned to a volume to make a volume visible to OS/2.*

1. Select **Volume** from the toolbar.
2. Select **Set/change drive letter** assigned to a volume.
3. Select the volume that you want to modify.
4. Choose the new drive letter and click **OK**. The new drive letter is now displayed.

When the changes are saved, the system attempts to change the driver letter assignment without restarting; however, if the file system cannot be unmounted, or if the Disk Device Manager has exhausted its resources, the system will need to restart to make the changes effective.

Managing Partitions

The following sections describe creating and managing partitions.

Creating a Partition

Use **Create Partition** to create a new partition. You can create partitions for other operating systems that do not recognize LVM volumes or linked volumes. You can also use this option to create a

partition of a specific size and to allocate it from the beginning or end or free space.

Note: Partitions no longer have drive letters associated with them. You must create a volume to assign a drive letter.

To create a partition:

1. Select Partition from the toolbar.
2. Select Create partition.
3. Select the location, partition type, disk to create the partition from.
4. Click OK.

Using the Boot Manager

Boot Manager allows you to specify which volume to boot from and allows you to set or change the Boot Manager options. Boot Manager is automatically set as the startable partition at the time it is installed.

Note: Boot Manager cannot be seen from the LVM logical view because it has no drive letter assigned to it; it can be seen using the LVM physical view.

Installing Boot Manager

Boot Manager is installed as a new primary partition at the beginning of the first free space block where a new primary partition is allowed. This partition is the smallest size allowed (1 cylinder), typically between 1MB and 10MB, depending on the size of the hard disk.

To install Boot Manager:

1. Select Boot Manager from the toolbar.
2. Select Install Boot Manager.
3. Select the disk where you want to install Boot Manager.
4. Click OK.

Adding a Volume to the Boot Manager Menu

Use Add volume to Boot Manager to add a volume to the Boot Manager Startup menu. Only volumes that are bootable are displayed on the list. Choose this option if you have more than one operating system that you want to access when your system starts.

Note: When you create a bootable volume, it is automatically added to the Boot Manager Startup menu.

To add the volume to the Boot Manager Startup menu:

1. Select Boot Manager.
2. Select Add Volume to Boot Manager.
3. Select the volume you want to add.
4. Click OK.

Removing a Volume from the Boot Manager Menu

1. Select Boot Manager.
2. Select Remove volume from Boot Manager.
3. Select the volume to remove.
4. Click OK.

Committing Changes

Use Commit Changes to commit any changes you have made up to this point. After you commit changes, the changes cannot be undone.

To commit changes:

1. Select Tools from the toolbar.
2. Select Commit Changes.
3. Press OK.

Changes are effective when you save the changes and exit LVM. The system attempts to add the new volume without restarting; however, if the Disk Device Manager has exhausted its resources, the system will need to restart to make the changes effective. To exit without saving any changes you have made, close the LVM window. On the panel that appears, select Do not commit changes.

Step by step guide to Installing eComStation Preview

The following pages describe, step by step, what you need to do to successfully install eComStation.

The installation process of eComStation Preview can be started in two ways.

1 - Bootable CD

Since the installation CDROM (eCS_Main) is bootable, you can start the install process by inserting the CD in your CD drive and reboot your system.

This requires that you change in the BIOS of your computer, the boot sequence to start with CDROM. (Often you can enter the BIOS setup of a computer by pressing the [DEL] key right after power-on. IBM computers use [F1] for this purpose, Compaq [ALT + ENTER]) Make sure to turn CD booting of, halfway the install process (you will be prompted to do so).

Note: On some systems, the BIOS times out too soon and didn't give the newer generation of faster CD-ROMs a chance to spin up. You will see the message to the effect of "Booting from ATAPI - Failure" (the message is different in different systems) and the CD boot fails. On some systems, for some yet unknown reason, bootable CDs from Microsoft's Windows NT system, or Redhat's Linux system boots okay but cause trouble to the eCS bootable CD - although all are using the same El Torito "standard specification". If this is happening to you, try hitting the "Pause" key on your keyboard AFTER the BIOS detected the CD-ROM but BEFORE it attempts to boot from the CD. This will give the CD-ROM a chance to spin up to speed. To resume, hit the space bar once. The method has shown to help in a number of systems but does require that you do the PAUSE/SPACE at the right time. If you can not get this to work, you will have to create the boot diskettes and install from diskettes.

2 - Bootdiskettes

Your computer or CD drive might not support booting from CD, in that case you need to create three boot-diskettes. These diskettes can be created under OS/2 or DOS. To make them, please start [makedisk.cmd] (OS/2) or [makedisk.bat] (DOS) from the root of the eCS_Main CD. Running those scripts will format your diskettes, so make sure they contain no important data.

The 'classic' OS/2 script: CDINST.CMD will create bootdisks to use your eComStation installation CD as a Convenience Pak. This reportedly does not work currently - make sure to use **makedisk.cmd!**

Selecting the IDE driver

After the initial boot phase you will be prompted by a screen which let's you choose between several boot-options. The safe thing to do is pressing [D] which continues installation with the special IDE drivers provided by Daniela Engert. These support large harddisks (up to 128 GB) and fast controllers (UDMA66 and UDMA100)

If you prefer the IBM default drivers, you can select these by pressing [ESC] You can also select to boot to a minimal command prompt in this screen [F2].

The Daniela drivers will not get copied to your harddrive by the installprogram. They are only used during CD-boot!

VCU - converting partitions to Volumes

The installation process will start VCU which converts your current available partitions to LVM compatibility volumes, including the BootManager partition.

After this step, you will not be able to use Partition Magic, or other partitioning tools! Make sure your harddisklayout is as you wish, before starting the installation!

You need to reboot to activate the changes VCU made.

LVM - selecting installation volume

After this reboot you will be presented with a screen which welcomes you to the OS/2 Warp 4 install process. This is due to the heavy reliance on the OS/2 Warp 4 Convenience Pak and will be changed for the GA realease of eComStation.

Pressing [ENTER] takes you to the selection of the installation volume. You can choose to activate LVM now, for a description, see the previous pages, or the document *"Using the Logical Volume Manager"* from IBM, which you can find as PDF on the eCS_Main CD Rom in the subdirectory: \BOOKS\PDF\USINGLVM.PDF

After setting one of your volumes installable, exit LVM (F3), while saving your selections.

Please verify the install program reports the correct volume as to which it will install eComStation Preview.

Installing base system to your harddisk

After accepting the installation volume, you are prompted to format it and which filesystem you want to use.

The installer will start copying files from CD to the selected volume. Depending on the speed of your computer and CD drive this may take several minutes.

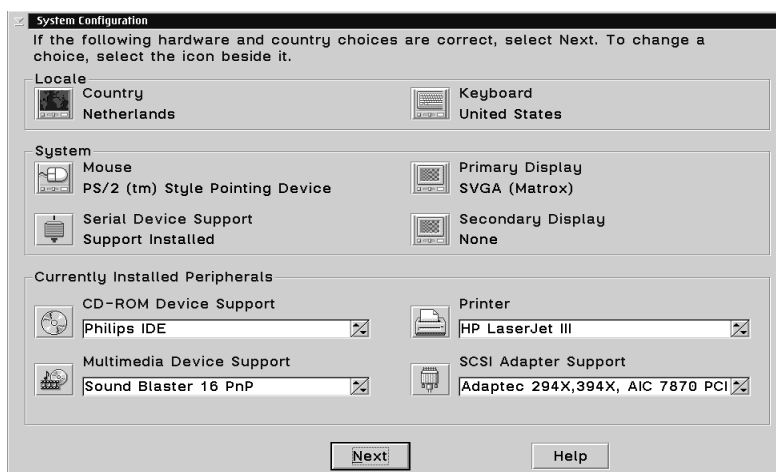
Change bootsequence of your system

Another reboot is required, however, the computer needs to boot from harddisk this time, so you will have to disable booting from CD Rom by changing the bootsequence in your BIOS settings. (Unless you were booting from floppydiskette)

The install program also reminds you to perform this action.

Basic installation options

When your system has restarted you will be presented with the 'normal' IBM OS/2 Warp Version 4 Setup and Installation screen.



You should be familiar with this screen, most settings are self-explanatory. The selection of the Primary Display can be a bit troublesome. If you have an unsupported videoadapter you may want to choose Generic VESA and unaccelerated GRADD (GENGRADD) which provides higher resolutions and colourdepths for all VESA compliant videocards (all current models are VESA

compliant). Otherwise simply choose VGA which supports 640 x 480 resolution in 16 colours on any VGA-videoboard.

Choose **Dynamically selected GRADD drivers** to use the IBM version of Scitech Display Doctor. These drivers support hardware acceleration.

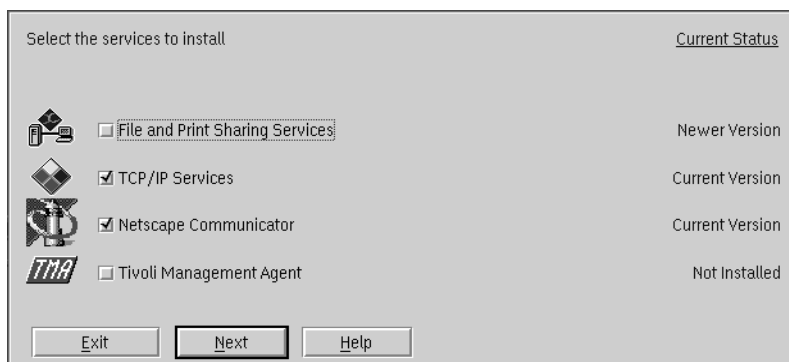
You may also choose to install the latest Scitech Display Doctor (beta) driver at a later moment, from the eCS_Prod CD. This driver supports accelerated Video drivers for most modern videochipsets.

The following screens ask you to specify your country, printer and additional features. Please check at the 'system components' that the JFS feature is checked (if you intend to use it).

The next screen prompts you to start the **client component installation** of your workstation configuration.

After filling out the screen prompting for your name and company you will get the chance to select services you want to install.

If you want to share your resources (harddrive, printer) with other computers in your network you should install the *File and Print*



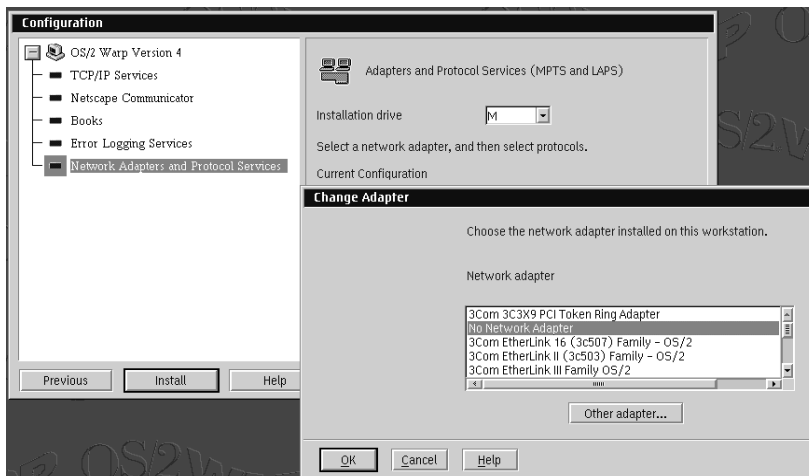
Sharing Services (peer to peer networking)

The *TCP/IP services* should be installed anyway, since this is required for Internet access.

The Netscape Communicator, version 4.61 (build august 2000) is the browser of Choice for your eComStation. Please do select this also.

The *Tivoli Management Agent* will not be needed for home- or stand-alone use.

The above configuration screen lets you choose which network adapter you have, choose 'No Network Adapter' if you do not have one, or if your adapter is not recognized correctly (you will be able to



change it at a later stage)

It is advisable to review the settings in this screen from bottom to top.

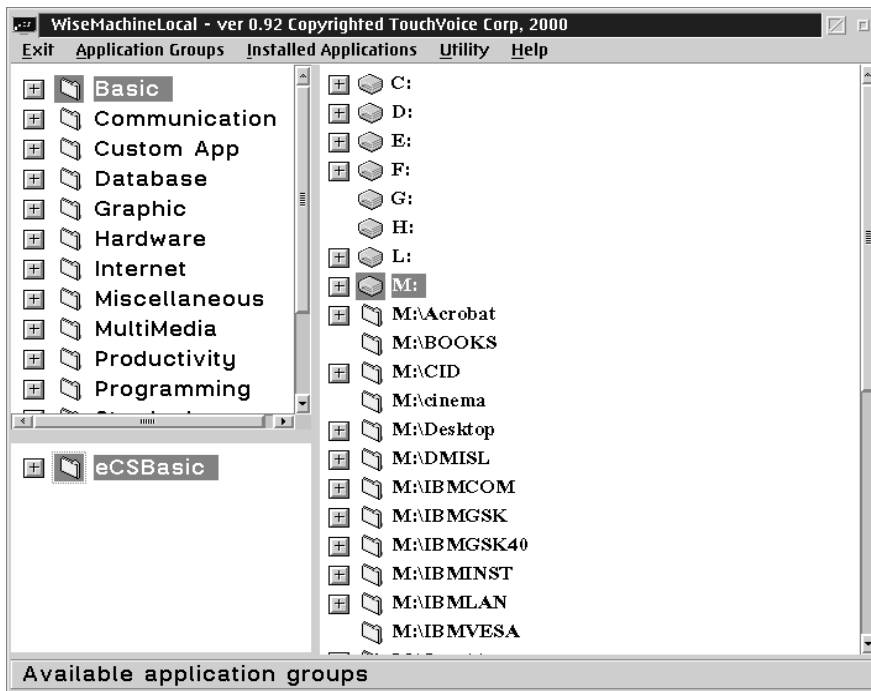
Most other settings are self-explanatory, you might have to check the TCP/IP settings but they also can be changed afterwards, if they are unknown or incorrect at this time.

If you selected *peer to peer* (File and Print Sharing Services) you also need to fill out a Userid and Password here. Please remember those, you'll need them later to be able to manage your resources.

Note: we have had reports that this part does not always work correctly. If this is the case, you can login by using the default userid and password, which are USERID and PASSWORD. After logon you can then change these in the User Profile Manager.

This completes the configuration and will result in the final copying of the system files onto your harddrive.

WiseMachine



When the copying is ready you will see the WiseMachine pop-up for the first time.

For now, you should simply drag the eCSBasic application group from the lower left hand side of the main window and drop it onto an empty space on the right hand side. When the confirmation window pops up, simply click "Install". After that, close the WiseMachineLocal window and the installation will finish.

Your computer will reboot and start (if all has gone well) with the new eComStation desktop.

Note: we received reports that at this stage the computer hangs after the reboot. This problem has been reported to IBM and will most likely be fixed in the GA release of eComStation. All you need to do currently, is reset your computer manually when this happens.

Java 1.3 install

When your computer starts, a popup window will ask you if you want to install Java 1.3.

Select yes and you will need to configure Netscape 4.61 first, since the Java installer requires Netscape as a frontend. The complete Java 1.3 package is quite large, so this installation process will take some time.

That completes the basic installation of eComStation.

Note: even though you might have selected to boot using the Danis506.ADD IDE driver, the installation process will not put those onto your harddrive, nor in your config.sys. This is done intentionally in the Preview.

If you want to use the (faster) Danis506.ADD driver, you will have to copy them from your installation CD:

- \ECS\DANIS506.ADD and \ECS\DANIATAP.FLT to your bootdrive in the subdirectory \OS2\BOOT\
- Make sure to change the reference in your CONFIG.SYS from IBM1S506.ADD to DANIS506.ADD and IBMIDECD.FLT to DANIATAP.FLT
- Also remove the reference to IBMATAP.FLT (since DANIATAP.FLT replaces that also)

Alternative installation/upgrade method:

You should backup your system before upgrading or trying this.

If you have enough free harddrive space you should be able to:
(Example: Warp4 boot drive is D:)

1. Boot eCS install
2. During the install hit F3 for commandline (not the boot menu screen)
3. Run LVM.EXE
4. Use "change drive letter" to change the D: to another letter.(Z:)
5. Create a new, bootable volume and give it volume letter D:.
6. Exit and save LVM (may have to reboot)
Now, your old OS/2 drive is Z: and there is a blank volume for the upgrade.
7. format the blank boot drive HPFS (or FAT, what your old Warp4 boot was)
8. XCOPY Z:* D:* /H/O/T/S/E/R/V
9. reboot to eCS CD and proceed with upgrade test.

Now, even though you have changed the original drives letter, you should be able to simply remove the new D: drive and change Z: back to D: and boot to your old Warp4 configuration, might need be.

Using WiseMachine

You can use WiseMachine to install applications to your eComStation system. To do so, select an application in the upper left window of WiseMachine. Pick it up with the right-mouse button and drop it on a drive in the right window.

A popup screen will appear with the source-path, the destination path and a few options you can select.

- The upper left window is a list of applications that are deployable to your machine.
- The lower left window is a list of application groups that are deployable to your machine.
- The right hand window is a list of your drives.

To bring up the Installed Applications window, click on "Installed Applications" on the menu bar. To switch back to the Drive Folders window, click "Drive Folders" on the menu bar.

Installed Application Window

The Installed Applications window displays a list of applications that was deployed to your machine using WiseMachineLocal. It has no way of knowing other applications that was installed outside of the WiseMachineLocal program.

You can recreate the WPS objects for a particular application (or groups of applications) by right clicking that particular application and select Create ICON or Create ICONs.

The System Files branch contains a list of the "important" files in your system. If you right click on any of the file objects, you can either edit the file with the system editor, or an ini file editor - if one has been installed in your system (WiseMachine simply issues the command inedit filename for this).

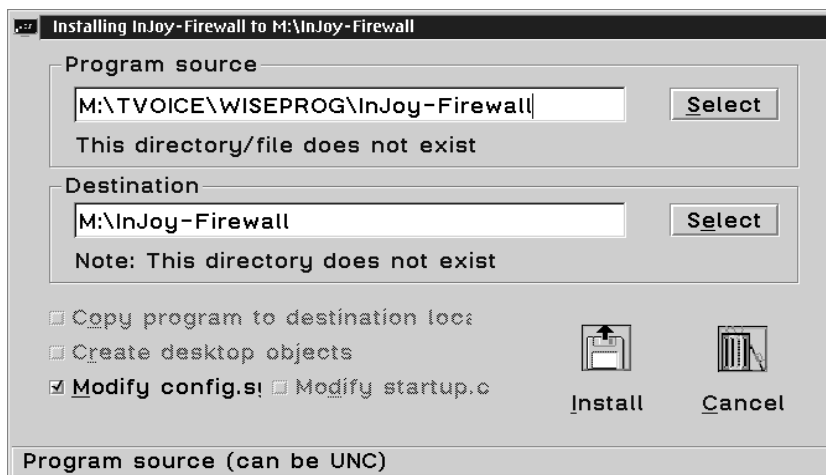
Application Window

The Application Window contains information in the file \TVoice\Config\program.lis. This file should only be modified by licensee of the WiseManager product (a separate package from WiseMachine). If you are a eCS upgrade protection subscriber, the eComStation distributors may send you new sets of control files from time to time to make additional applications deployable to your system.

To "deploy" an application, simply drag-n-drop a particular application to the desired destination location. A confirmation window pops up with the following options:

(a) Program source

By default, the actual program package of an application you are



trying to deploy is assumed to reside in a zip file or subdirectory under \TVoice\Wiseprog. For instance, the application netscape is assumed to be located in either \TVoice\Wiseprog\Netscape.zip, or in the subdirectory \TVoice\Wiseprog\Netscape. WiseMachine will search for the zip file first, then for a subdirectory. If neither the zip file nor the subdirectory can be found, you will see a message that the directory or file does not exist. You can then use the Select button to point to the actual location of the program package, or you can place the eCS Third Party Application CD into the CD ROM.

(b) Destination

Check to make sure the destination directory is correct.

(c) Copy program to destination location

This option is normally checked. However, if you have an application that was installed in the system already, or if the application requires that you run their install program, and you wish to have WiseMachine keep track of that application, you can uncheck this option so that no actual file transfer occurs but

WiseMachine will be able to "remember" that you have this application in your system.

(d) Create desktop objects

WiseMachine contains a database of information about commonly available program packages in the market. If this item has been grayed out, it means the particular application you are trying to deploy does not create any WPS objects.

(e) Modify config.sys

If this item has been grayed out, it means the particular application you are trying to deploy does not require changes to your config.sys.

Likewise, if this option is checked but you do not wish WiseMachine to make changes to your config.sys, you can uncheck this option.

(f) Modify startup.cmd

If this item has been grayed out, it means the particular application you are trying to deploy does not require changes to your startup.cmd.

Likewise, if this option is checked but you do not wish WiseMachine to make changes to your startup.cmd, you can uncheck this option.

Note that this option affects only the startup.cmd. It has nothing to do with the system startup folder. That's determined by the desktop WPS object creation process.

(g) Install

If you click this option, the application will be deployed to your system. Some applications require a reboot before the program can be used. If that's the case, you will see a WPS object indicating that a reboot is required.

More information can be found in the file \TVOICE\README.TXT on your bootdrive.

Applications on the eComStation Product CD

for your convenience we collected a lot of applications on the Product CD so you can start using your eComStation right away!

Lotus SmartSuite 1.5.1

This great Office Suite is available to you at no extra charge. To install this product you need to start the installation program from the eCS_Prod CD. The installer can be found at: \SS\INST-EN.CMD (for the english version)

After installation and (required) reboot, you can install the update to version 1.5.1 which has been included for your convenience. Start it from: \SS\ENGLISH\UPD151\INSTALL.CMD

Sun StarOffice 5.1a

StarOffice is a true cross platform Office Suite, and offers several features not seen in any other product. One of these is the integration of PalmPilot synchronization in the Scheduler and the excellent Internet integration throughout the product.

A detailed document on setting up StarOffice can be found in: \SO\OS2\docu\setup.pdf

The readme document resides at: \SO\OS2\Office51\readme.txt

To install StarOffice, start the install program in:

\SO\OS2\Office51\setup.exe

Desktop On Call V3 and V4.

Desktop on Call allows you to take over your desktop with any Java capable webbrowser. An extensive online manual can be found in: \DTC\MANUAL\CONTENT2.HTM

To install version 3 start the installation program in:

\DTC\V3\INSTALL.EXE

To install version 4 start the installation program in:

\DTC\V4\INSTALL.EXE

Netscape PluginPak

When you installed Netscape 4.6.1 during the installation of eComStation the PluginPak giving you several MultiMedia extensions (like AVI playback) was omitted. You can add this by installing it from: \NS461\PLUGPAK\SETUP.EXE

Macromedia Flash Player for OS/2

Thanks to Innotek SystemBeratung GmbH, a German IBM Business Partner, there is an excellent OS/2 and eComStation version of Macromedia Flash Player for OS/2. To install this great enhancement to your surfing experience, run the setup from:
\\NS461\\FLASH\\FLASHOS2.EXE

Please read and agree to the License Agreement!

Several other applications

Please browse the contents of the Product CD because we loaded it with current software to take profit of your new eComStation. Use the HTML interface by pointing Netscape to the root of the CD and opening \\INDEX.HTM

Registering your copy of eComStation

please take a moment to register your copy of eComStation as we need to know who you are to be able to send you the General Availability Release when it is available. We also need to know which language you would like to receive. Finally, by registering, you will receive a password for access to updates, fixes and enhancements to your eComStation.

Registration can be done in several ways, we prefer you to do this **online**, which you can do at:

<http://www.ecomstation.nl/register/>

You can also fill out the registration card and **fax** it to:
+31-23-5482030

Or, you may **mail** it in to:

**Mensys BV
P.O. Box 674
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 - IBM OS/2 Warp V4, IBM Product Number 31L0480M
Note: eCS upgrade product users are required to supply their own valid license for OS/2 V4
 - IBM OS/2 Warp Convenience Pak, IBM Product Number AS6Y5NA
 - IBM Desktop on Call for OS/2, IBM Product Number AS6YBNA
 - IBM Lotus Smart Suite for OS/2 R1.5, IBM Product Number AS76KNA
 - WiseMachine from Serenity Systems International

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eComStation is packaged on CD using Info-ZIP's compression utility. The installation program uses UnZip to read zip files from the CD. Info-ZIP's software (Zip, UnZip and related utilities) is free and can be obtained as source code or executables from Internet/WWW sites, including <http://www.cdrom.com/pub/infozip/>

eComStation includes the enhanced IDE driver by Daniela Engert. We are grateful to Daniela for granting us permission to do so.

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Parts of this document are based on the following IBM books:

"Quick Beginnings: Installing OS/2 Warp Server for e-business"
(SCT7-S2NA-00)

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