



Easy Manage ® Configuration Guide

Version 4.4

**The System Management and
Configuration Tool
for your Complete ICT infrastructure.**

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About This Guide

The purpose of the Easy Manage Configuration Guide is to assist the Administrator by managing the installation of the tool and use the Easy Manage programs to load applications and drivers in the Knowledge Database.

Other Easy Manage Manuals are:

- Easy Manage Reference Guide
- Easy Manage Admin Program Guide
- Easy Manage Helpdesk Program Guide

Table of Contents

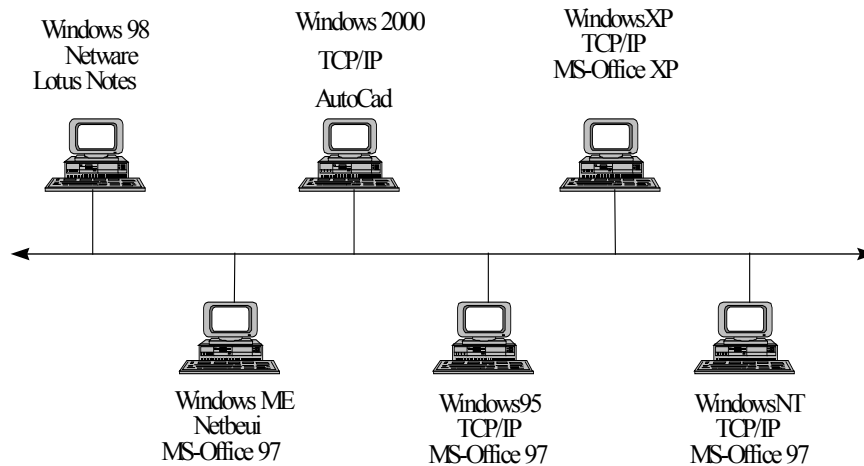
TABLE OF CONTENTS	5
GENERAL	7
SYSTEM REQUIREMENTS	7
ENVIRONMENT	9
SETUP EASY MANAGE	11
<i>Destination Location</i>	11
<i>Select the Installation type</i>	12
<i>Select the Server type</i>	13
<i>Select the Client components</i>	14
<i>Select the Master Server components</i>	15
<i>Select the Slave Server components</i>	16
<i>Easy Manage File Server</i>	17
<i>Local File Server</i>	18
<i>Remote File Server Shares</i>	19
<i>Setup the Easy Manage Slave Synchronizer</i>	20
<i>Java Runtime Environment</i>	21
<i>Apache Tomcat Web Server</i>	22
<i>Easy Manage Configuration Management DataBase</i>	23
<i>Easy Manage Web Server Application</i>	24
<i>CesarFTP Server</i>	25
<i>Service Authorized User</i>	26
<i>Preboot eXecution Environment (PXE) Server</i>	27
<i>Easy Manage Client</i>	28
<i>Start Installation</i>	29
<i>Upgrading</i>	29
<i>UnInstall</i>	29
CREATE THE EASY MANAGE USERS AND UPDATE THE SHARE RIGHTS	30
UNDERSTANDING THE CONCEPT	31
CREATE A BOOT DISK	33
BOOT DISK CREATION WIZARD	34
<i>Platform selection</i>	35
<i>Type selection</i>	36
<i>Media selection</i>	37
<i>Media burn information</i>	38
<i>Connections</i>	39
<i>CDRom Support</i>	40
<i>Network Card selection</i>	41
<i>Add Network card</i>	42
<i>Select the driver</i>	43
<i>Add/Modify Network Card</i>	44
<i>List the actions</i>	45
<i>Enter the TCP/IP Protocol settings</i>	46
<i>Create Boot Disk</i>	47
BOOT WITH THE BOOT DISK	49
ASSESSMENT OF THE MACHINE IN DOS MODE	51
SETUP THE EASY MANAGE KNOWLEDGE DATABASE	53
CREATE A WINDOWS DISTRIBUTION.....	53
LOAD THE NEEDED DRIVERS	53
EASY MANAGE DRIVER INSTALLER	55
DRIVER INFORMATION.....	55
INSTALL METHOD	56

USE THE OEM INSTALL FILE	57
DRIVER LIST	58
USE ONLY THE HARDWARE ID	59
INSTALL AS RUN ONCE.....	60
INSTALL WITH AUTOIT.....	61
LIST THE ACTIONS.....	62
EASY MANAGE ASSESSOR.....	63
SCAN THE PC FOR DRIVERS.....	63
DRIVER LIST.....	64
DRIVER INFORMATION	65
LIST THE ACTIONS	66
SET UP THE REFERENCE PC.....	67
EASY MANAGE AGENTS.....	69
PREPARATION AGENT.....	69
EASY MANAGE DESKTOP MANAGER.....	70
EASY MANAGE AUDIT AGENT	70
EASY MANAGE COLLECTOR AGENT.....	70
APPLICATION WORKSPACE WIZARD	71
SELECT APPLICATION.....	72
INSTALL METHOD	73
LOAD SETUP SCRIPT.....	74
DISTRIBUTION	75
POST SNAPSHOT ACTION.....	76
MAINTAIN APPLICATION	77
EDIT SCRIPT	78
USING EASY MANAGE IN AN EXISTING ENVIRONMENT	79
SETUP INTERACTIVELY.....	79
SETUP IN BATCH MODE	79
COMMON.....	79
EASY MANAGE SLAVE SYNCHRONIZER.....	81
PROPERTIES.....	82
<i>Connect via UNC.....</i>	82
<i>Connect via FTP.....</i>	83
<i>Slave Configuration.....</i>	84
REPORTING.....	85

General

Easy Manage has been developed for Open Systems. This means it will work for:

- any workstation Windows 98, Windows NT/2000/XP
- any network NetWare, LAN Manager, Microsoft NT
- any server UNIX, Windows NT/2000/2003, NetWare
- any application Word, Excel, Organizer



System Requirements

FTP/Web server

- Microsoft Windows 2000/XP/2003.
- PC with a Pentium III processor or higher.
- 256 Mb of memory required, 512 Mb of memory recommended.
- 128 Mb available hard disk space.
- CD-ROM drive.

Admin PC

- Microsoft Windows 9x/NT/2000/XP.
- PC with a Pentium III processor or higher.
- 128 Mb of memory required; 256 Mb of memory recommended.
- Floppy or CD-ROM drive.
- VGA res. 1024x768 or higher.

File Server

- File server function
- Hard disk space needed for all applications in the organization.

The FTP, Web, File Server and Admin PC could be the same PC.

Reference PC

- PC with a Pentium processor or higher.
- Network (parallel) adapter.
- Floppy drive or CD-ROM drive.
- Hard disk.
- 64 Mb of memory required.

Environment

Easy Manage will run with any standard type of file server (Windows, LAN Manager and NetWare). It will only need virtual disks or UNC paths to interact with the workstations.

Easy Manage needs a Windows 2000/3000/XP platform as FTP, Web and Database server.

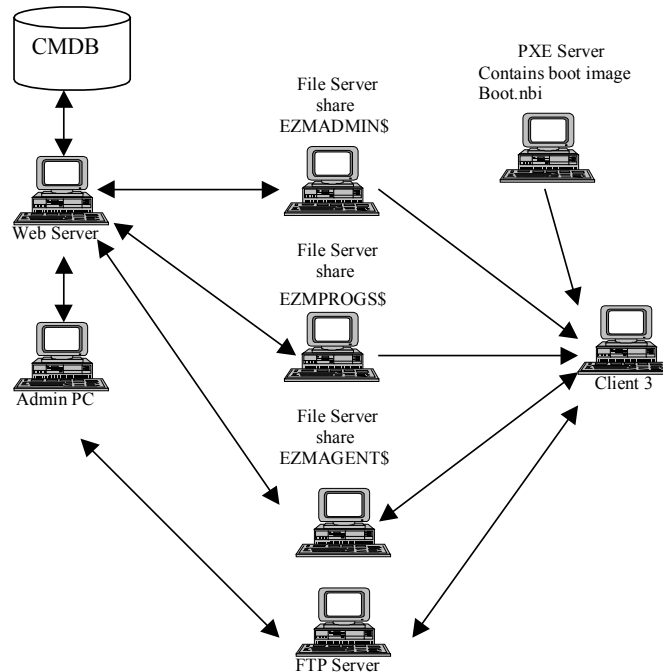
The Admin PC communicates via an Internet browser with the Web server.

The Admin PC communicates with FTP to the FTP server.

The Web server communicates with local disks or UNC path to the File Server.

The Clients communicate with virtual disks or UNC paths to the File Server.

The Clients communicate with FTP to the FTP Server.



Easy Manage Shares

The needed shares are:

- EZMADMIN\$ Common Admin (Admin Disk)
- EZMPROGS\$ Knowledge Database (Program Disk)
- EZMAGENT\$ Client transfer (Agent Disk)

The Admin, Agent and Program Disk have all different purposes.

- The Admin Disk is for the common files used to install workstations.
- The Agent Disk is for setting up each workstation and logging functions.
- The Program Disk is for distributing applications and operating systems to the workstations (The Knowledge Database).

The Easy Manage server is sharing by default:

Directory	Share-name	Permission
<Path>\EZMADMIN	EZMADMIN\$	Admin: Read & Write, Other: Read
<Path>\EZMPROGS	EZMPROGS\$	Admin: Read & Write, Other: Read
<Path>\EZMAGENT	EZMAGENTS\$	Admin: Read & Write, Other: Read & Write

The server can be accessed by the UNC path's:

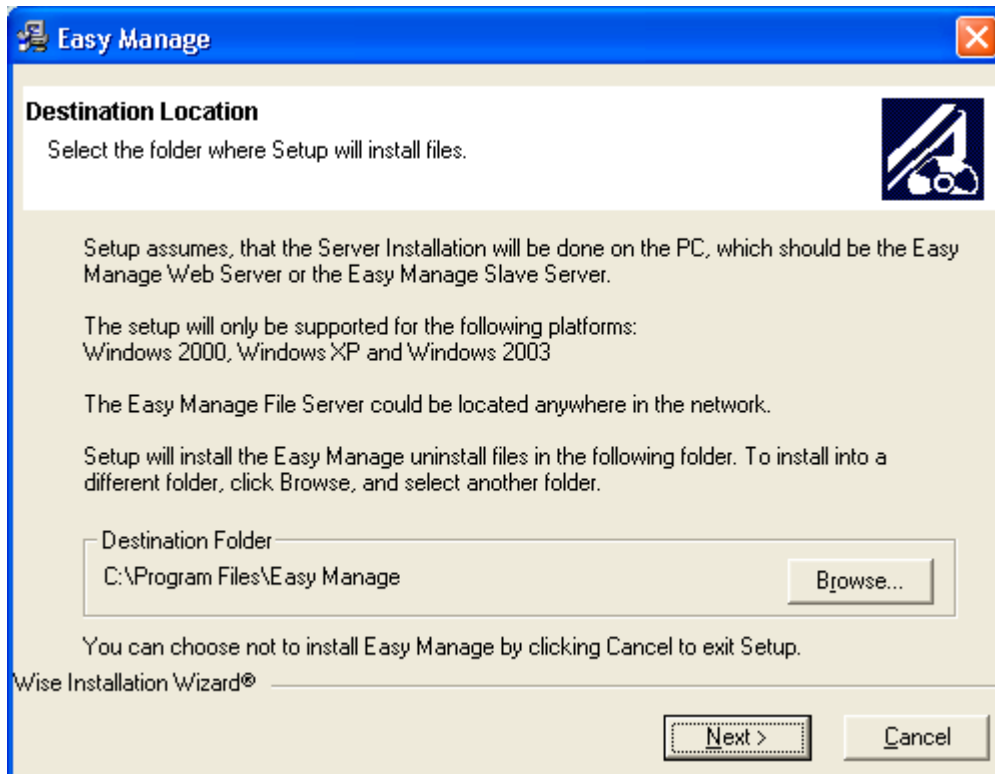
- \\<Server>\EZMADMIN\$ as Admin Disk (N:)
- \\<Server>\EZMPROGS\$ as Program Disk (P:)
- \\<Server>\EZMAGENTS\$ as Agent Disk (R:)

Setup Easy Manage

Use the Setup procedure of Easy Manage to setup a Client, the Master Server or the Slave Server. It is not possible to remove the installation with this setup procedure. You have to use the Windows uninstall procedure to uninstall the components (Control Panel -> Add or Remove Programs).

Destination Location

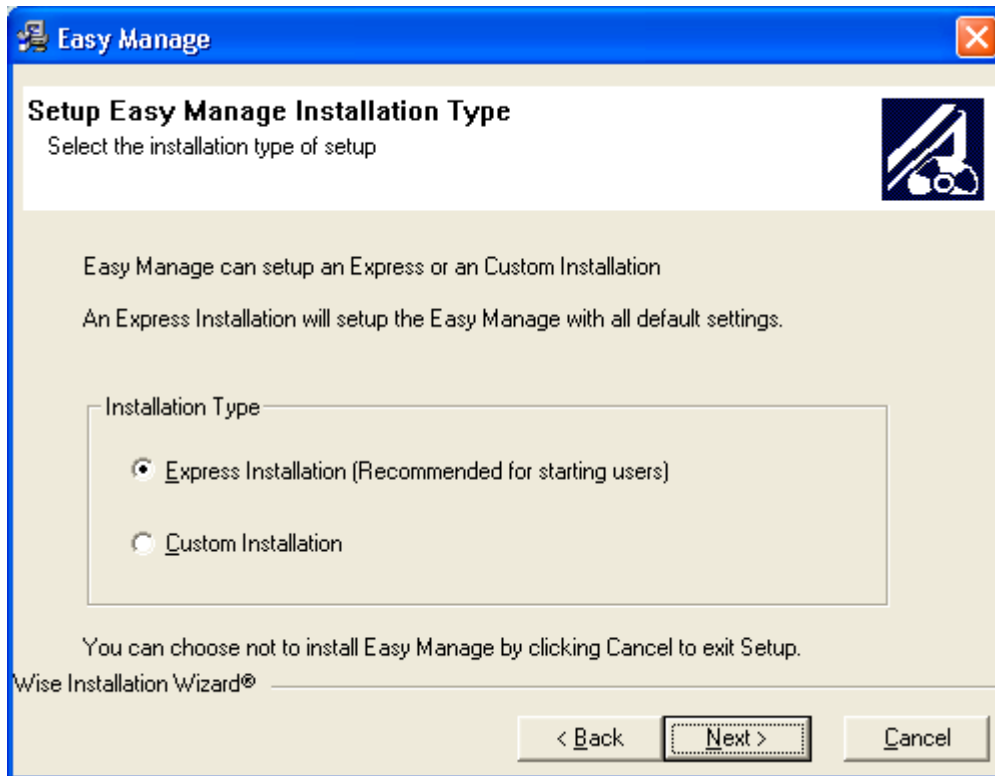
The setup procedure will install the files needed to uninstall the components in the chosen destination folder. This folder will also be the base folder for some other components.



The destination should be locally on the server.
Select the folder and click the **Next** button to continue.

Select the Installation type

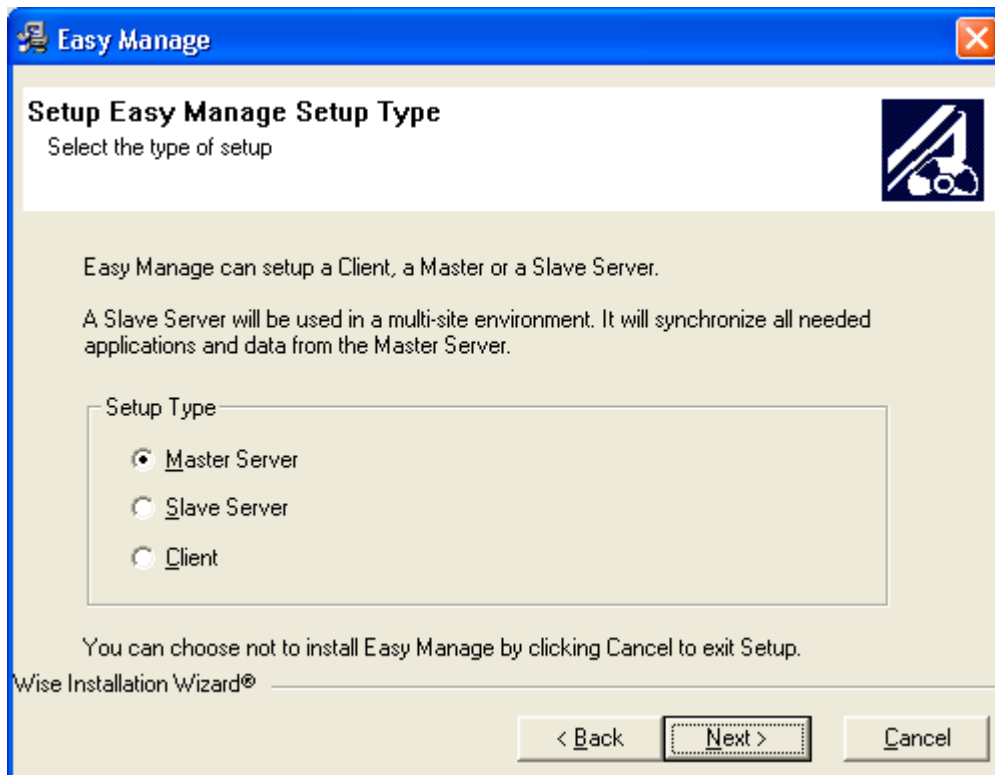
The installation of Easy Manage can run as Express or Custom Installation. In the Express mode it will install Easy Manage as a Master server with all default values.



Select the Installation type and click the **Next** button to continue.

Select the Server type

Easy Manage can be setup as a Master Server or as a Slave Server. You need at least one Master Server and you can setup as many Slave Servers as needed. A Slave Server is only synchronizing the needed data for a Site of the Admin , Program and Agent Disk

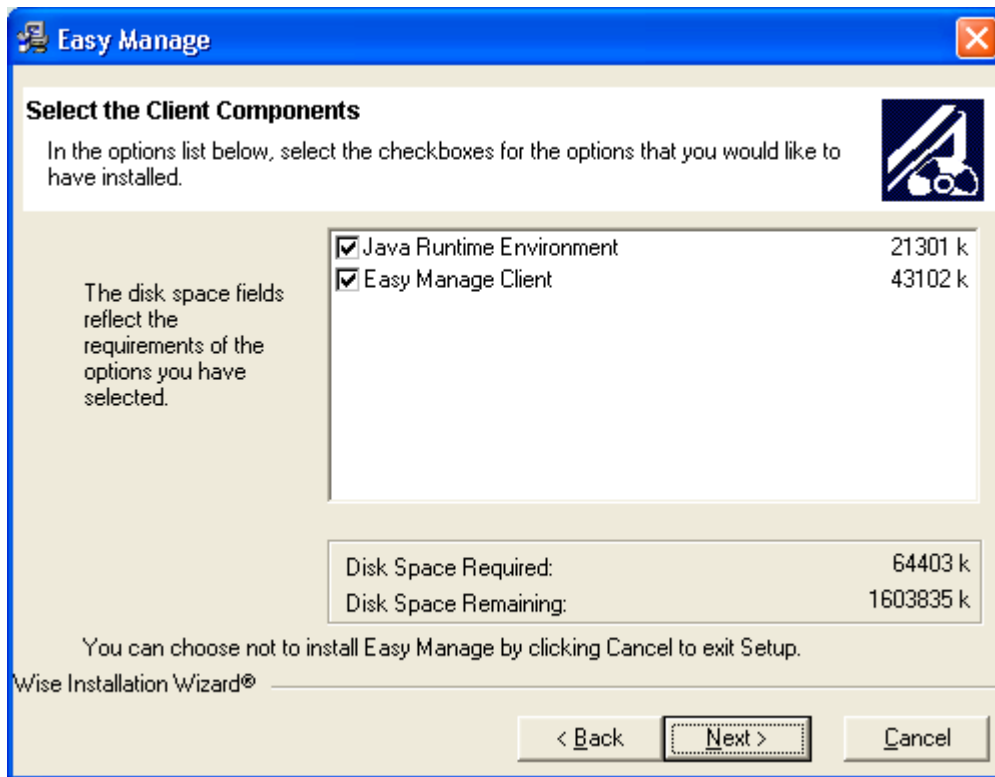


Select the Setup type and click the **Next** button to continue.

Select the Client components

If you have selected to install the Client then you have to select the components for the Client. Easy Manage is using the Apache Tomcat as web server. The Client needs the Java Runtime Environment.

You can install the components one by one. If a component is already installed, then the component is disabled.



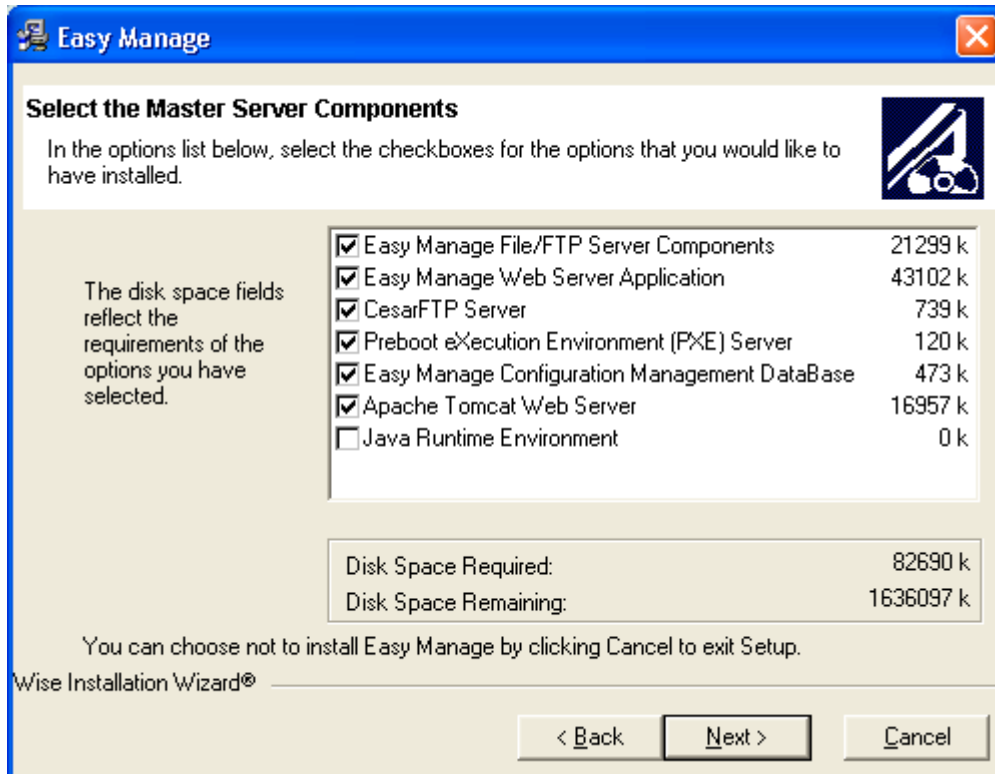
Select the components to install and click the **Next** button to continue.

Select the Master Server components

If you have selected to install the Master Server, then you have to select the components for the Master Server. Easy Manage is using Apache Tomcat as web server. The web server needs the Java Runtime Environment. CesarFTP will be used as FTP server to up- and download attachments, communicating with the Slave Server and for the Boot Disk procedure to communicate in a PXE environment.

You can install the components one by one. If a component is already installed, then the component is disabled.

If you are using the setup procedure for update, then the Easy Manage File/FTP Server Components and the Easy Manage Web Server Application will always initially be enabled. The PXE Server could be installed on a different server, but it is recommended to install it on the Web Server.



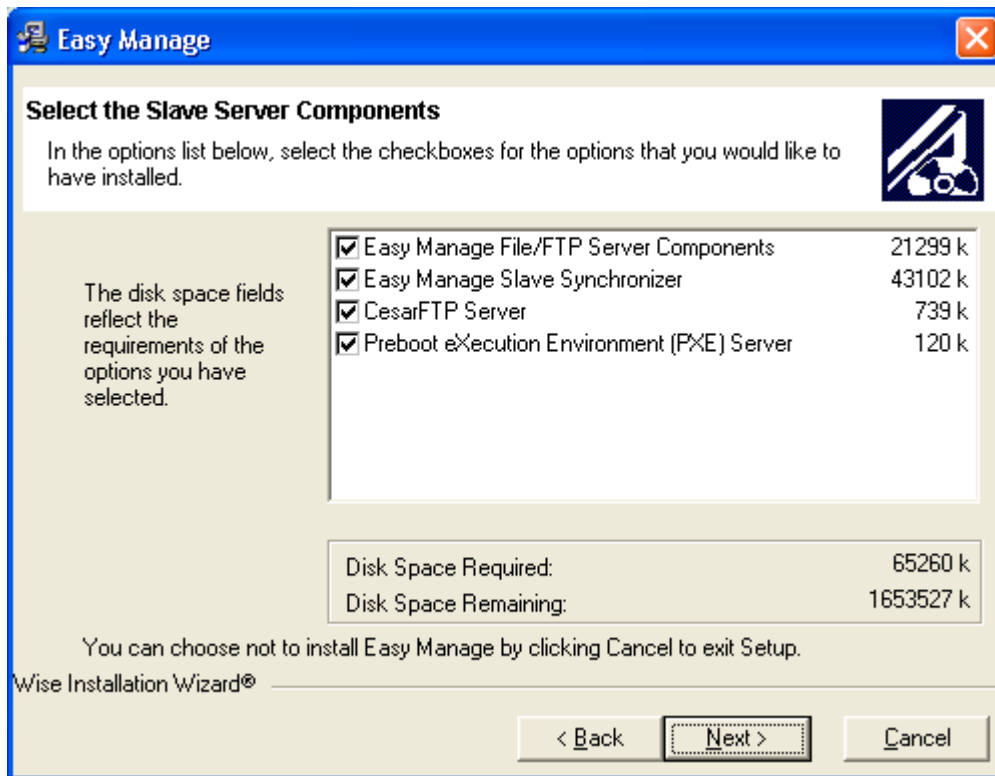
Select the components to install and click the **Next** button to continue.

Select the Slave Server components

If you have selected to install the Slave Server then you have to select the components for the Slave Server. CesarFTP will be used as FTP server for the Boot Disk procedure to communicate in a PXE environment.

You can install the components one by one. If a component is already installed, then the component is disabled.

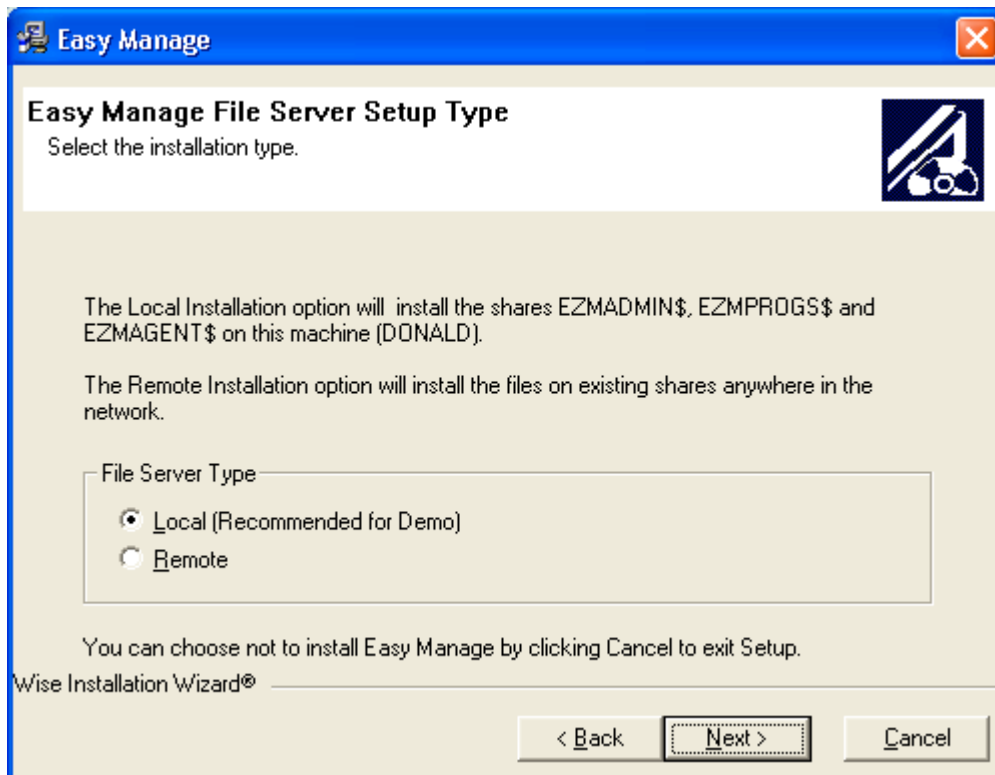
If you are using the setup procedure for update, then the Easy Manage File/FTP Server Components and the Easy Manage Slave Synchronizer will always initially be enabled. The PXE Server could be installed on a different server, but it is recommended to install it on the Slave Server.



Select the components to install and click the **Next** button to continue.

Easy Manage File Server

You can decide to install the Easy Manage File Server local or remotely. A local installation is recommended, but if you have a SAN environment, then you have to choose for a Remote installation.

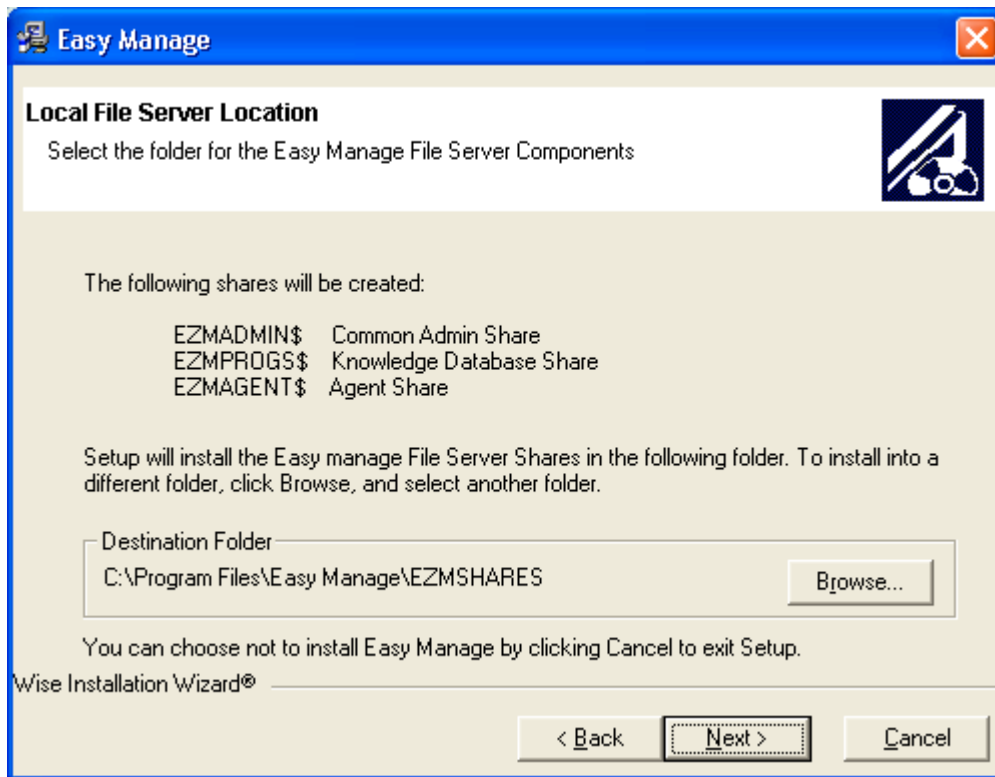


Select the installation type and click the **Next** button to continue.

Local File Server

If you have decided to install a local file server installation, then the shares will be created on this machine. If a previous version was detected, then the programs and templates will only be updated.

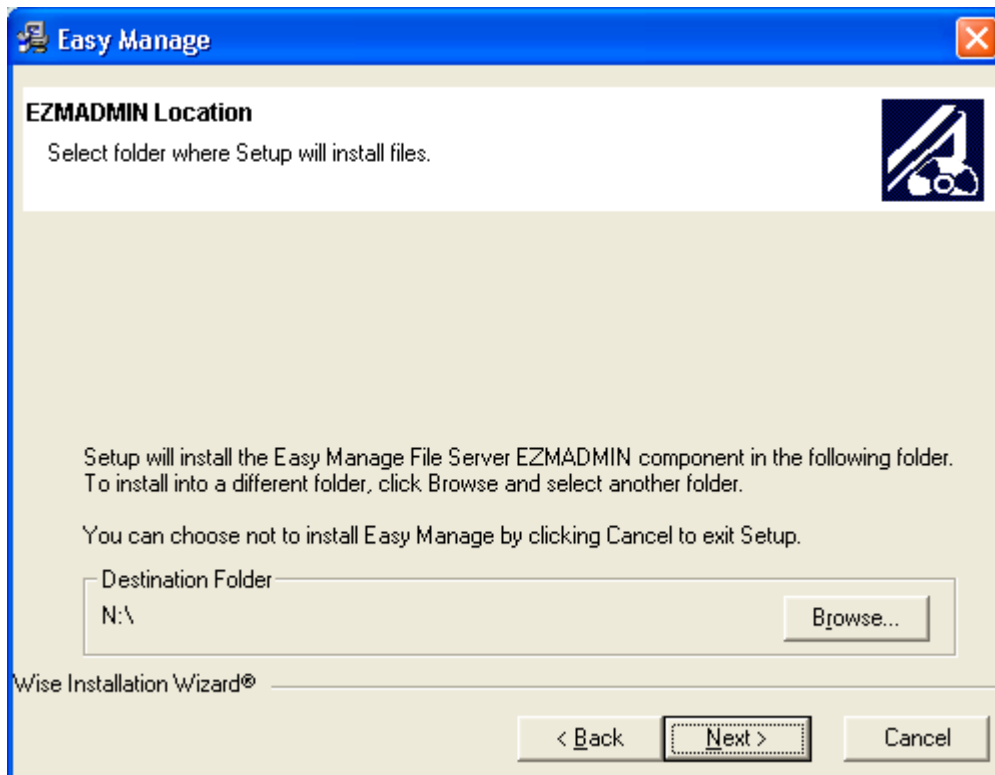
!! Do not forget to mention this folder in your backup procedure.



Select the root folder for the shares and click the **Next** button to continue.

Remote File Server Shares

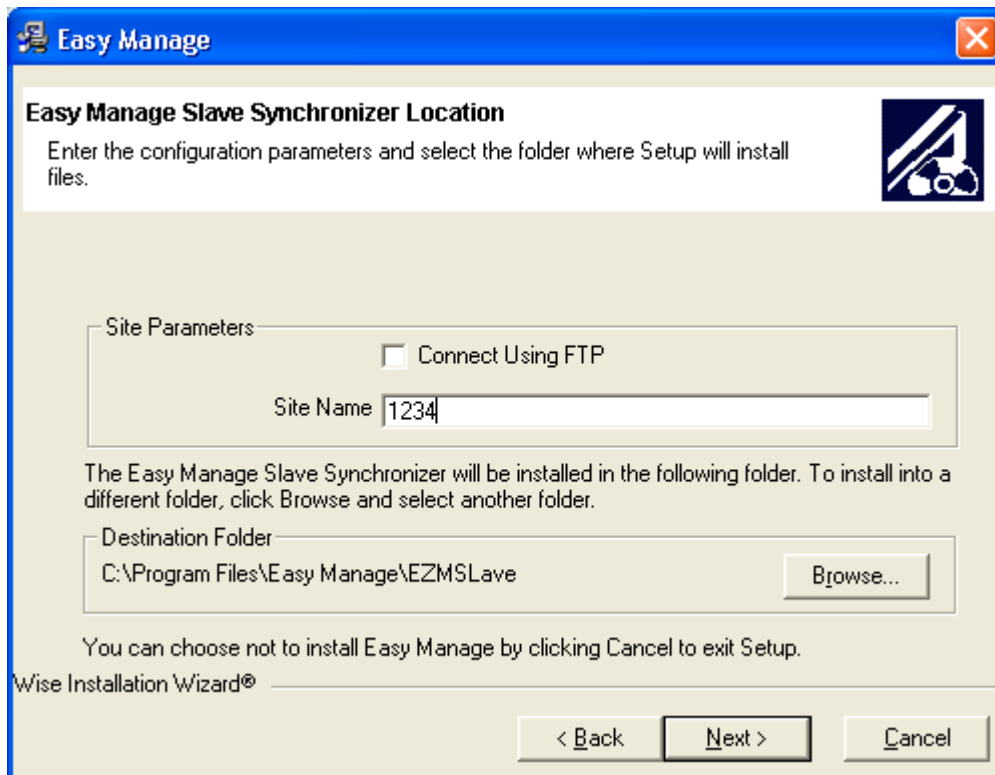
If you have decided to install a Remote file server installation, then the Setup procedure will only ask at the first time for each share. These settings will be saved in the configuration of the application. You may browse for a physical path or an UNC.



Select the drive or UNC path and click the **Next** button to continue.

Setup the Easy Manage Slave Synchronizer

The Easy Manage Slave Synchronizer can communicate with the master via FTP or via UNC. If you want to communicate with the Master via FTP, you have to install the FTP server on the Master Server. You have to identify for which Site this is the Slave server.

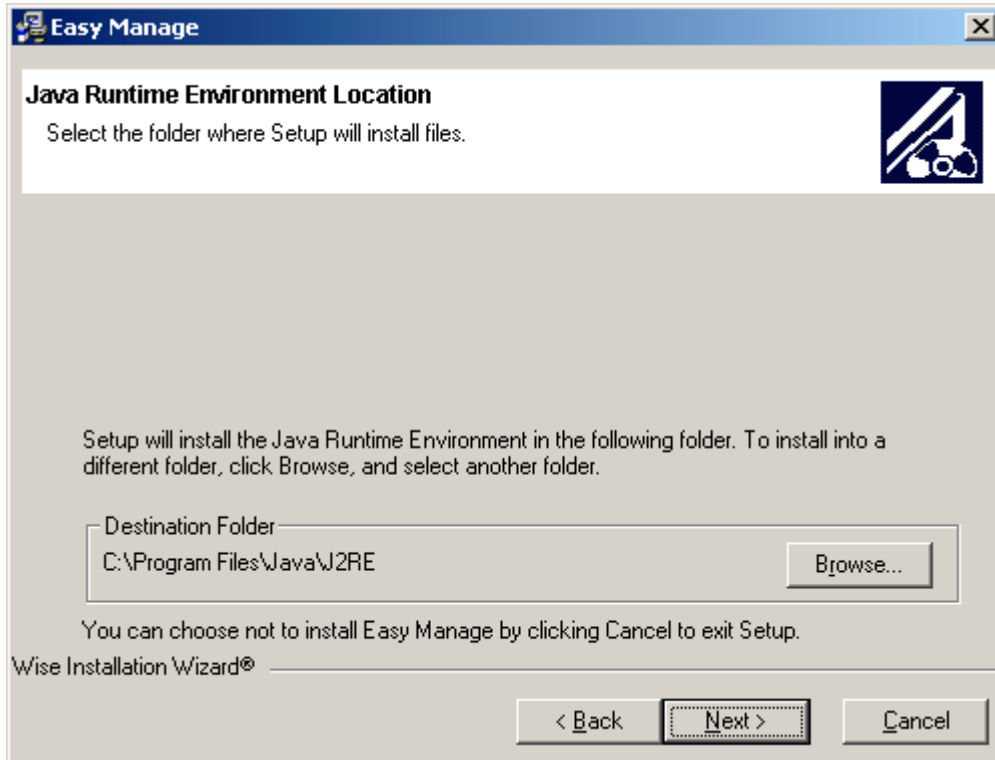


Enable Connect using FTP if the Slave Synchronizer should communicate via FTP otherwise disable this field, which means that it will communicate via UNC.

Enter the Site Name of this Slave and click the **Next** button to continue.

Java Runtime Environment

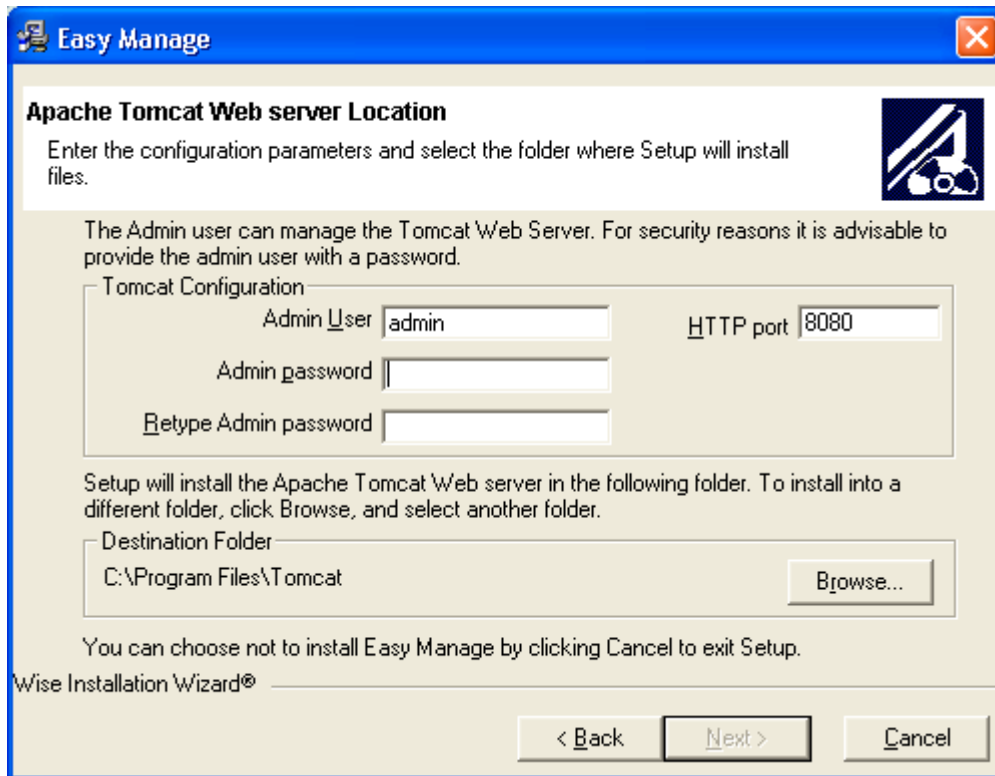
The Java Runtime Environment should be installed on the same machine as the Client and on the Apache Tomcat Web server and should be installed before the Apache Tomcat Web server is installed. This component will only be installed once.



Select the folder and click the **Next** button to continue.

Apache Tomcat Web Server

The Apache Tomcat Web Server will be used as Java Web Server to host the Easy Manage Application. This component will only be installed once.



The screenshot shows a Windows-style dialog box titled "Easy Manage" with a close button in the top right corner. The main title is "Apache Tomcat Web server Location". Below the title, there is a brief instruction: "Enter the configuration parameters and select the folder where Setup will install files." To the right of this text is a small icon of a computer monitor with a cursor. The main content area contains the following text: "The Admin user can manage the Tomcat Web Server. For security reasons it is advisable to provide the admin user with a password." Below this is a section titled "Tomcat Configuration" which contains three input fields: "Admin User" with the value "admin", "HTTP port" with the value "8080", "Admin password" (empty), and "Retype Admin password" (empty). Below the Tomcat Configuration section is another section titled "Destination Folder" with the text "Setup will install the Apache Tomcat Web server in the following folder. To install into a different folder, click Browse, and select another folder." The "Destination Folder" section shows the path "C:\Program Files\Tomcat" and a "Browse..." button. At the bottom of the dialog, there is a line of text: "You can choose not to install Easy Manage by clicking Cancel to exit Setup." and the text "Wise Installation Wizard®". At the very bottom are three buttons: "< Back", "Next >", and "Cancel".

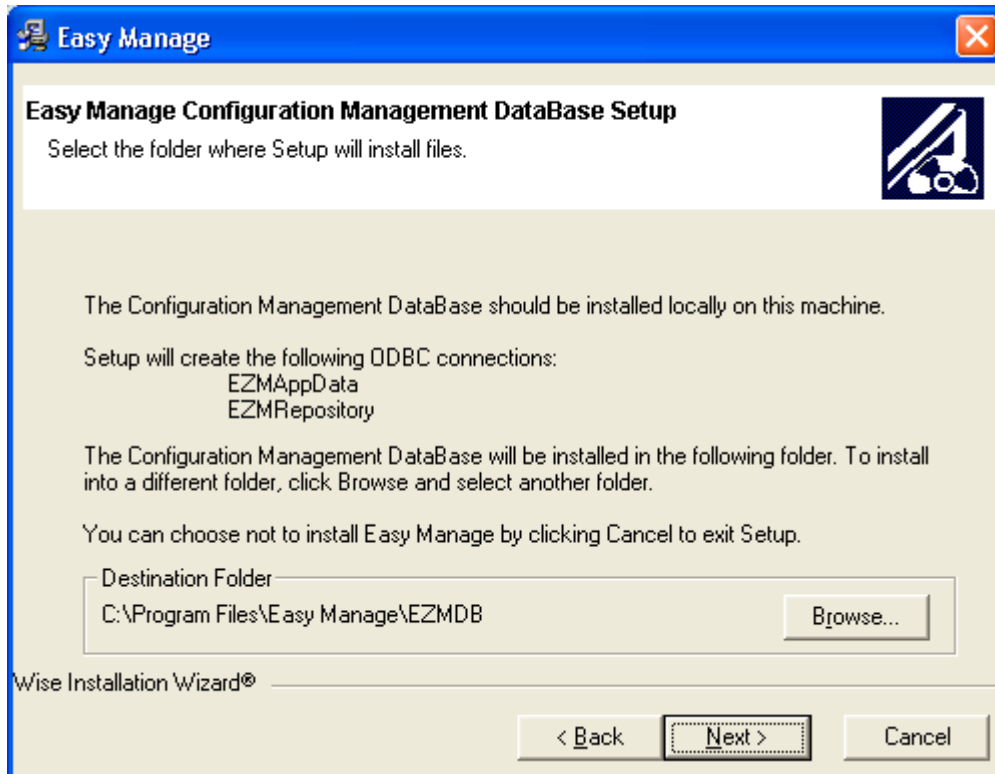
The Apache Tomcat Web Server will use port 8080 as default for the HTTP port. Change the port if port 8080 is already in use by another application.

You have to enter a password for the Tomcat admin user Admin for security reasons. Select the folder and click the **Next** button to continue.

Easy Manage Configuration Management DataBase

The Easy Manage Configuration Management DataBase (CMDB) should be installed on the same machine as the Web Server. Two ODBC connections will be created to the EZMAppData and EZMRepository databases. These databases will only be installed once.

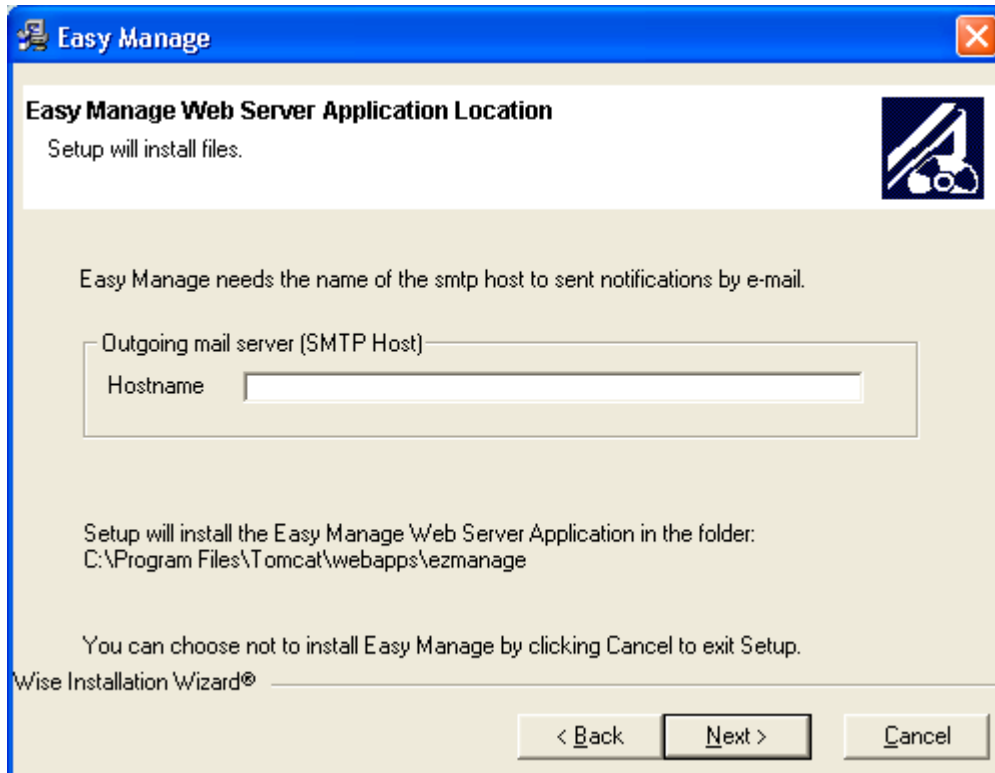
!! Do not forget to mention this folder in your backup procedure.



Select the folder and click the **Next** button to continue.

Easy Manage Web Server Application

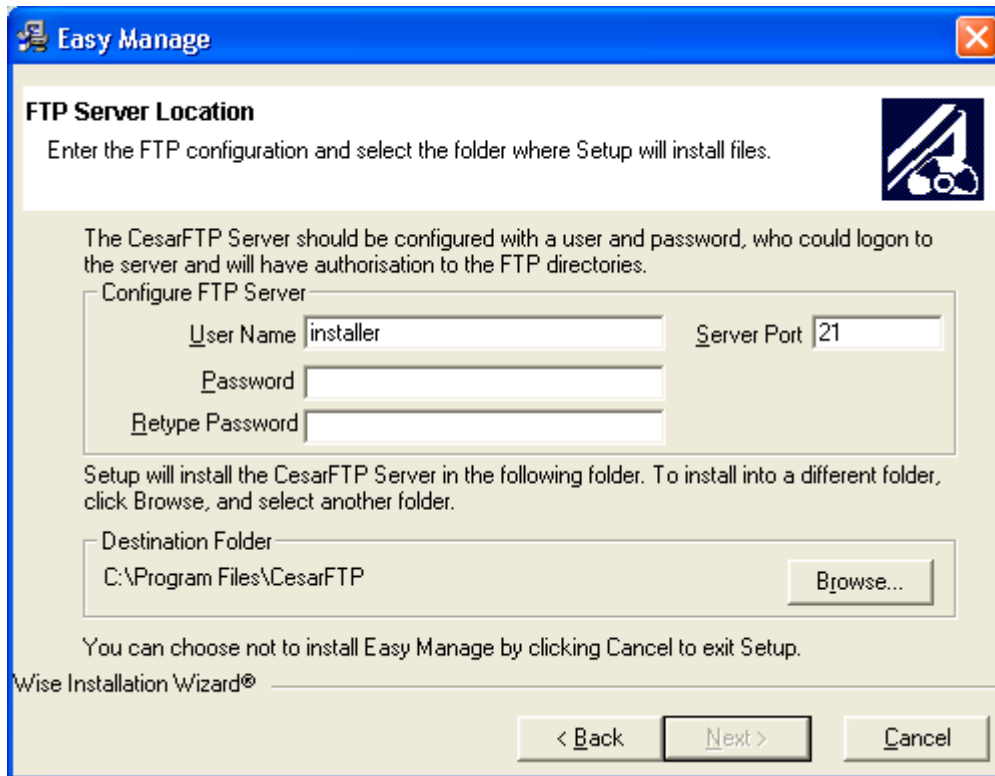
The Easy Manage Web Server Application will be inserted in the Apache Tomcat Web Server as application “ezmanage”. Only the first time it will be configured. The next time all files will be updated. It needs an outgoing mail server that will be used to send notifications within the helpdesk module.



Enter the SMTP host and click the **Next** button to continue.

CesarFTP Server

CesarFTP will be used as FTP server to host the Easy Manage Application and to communicate with the Slave server. This component will only be installed once.

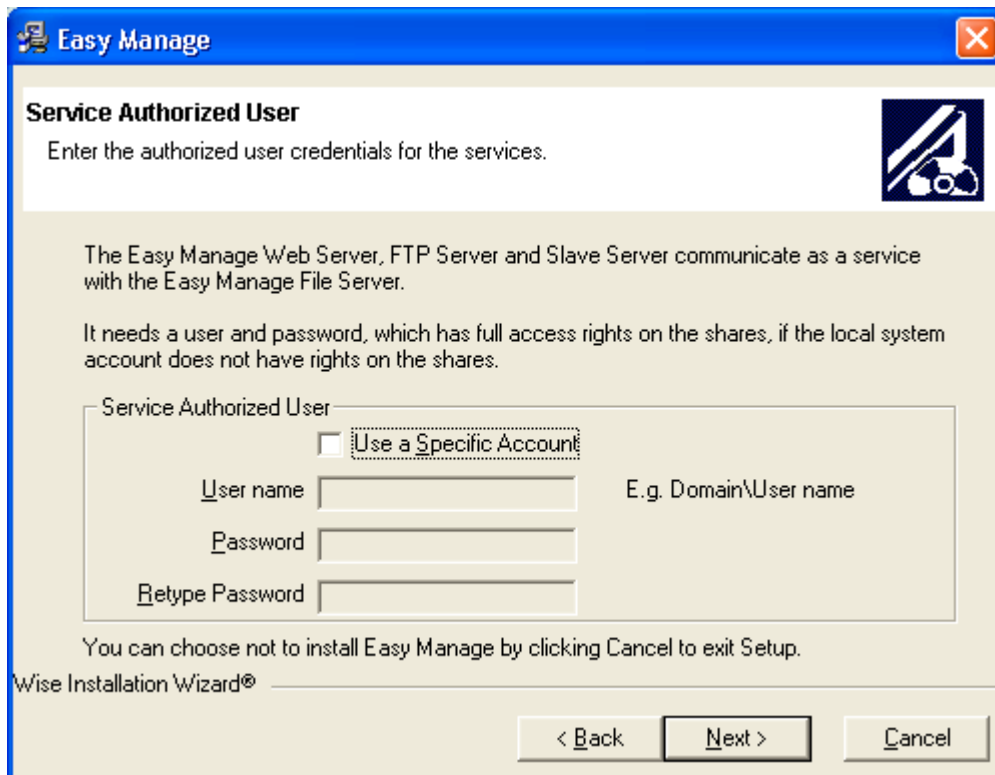


The screenshot shows a Windows-style dialog box titled "Easy Manage" with a blue header bar. The main content area is titled "FTP Server Location" and contains the following text: "Enter the FTP configuration and select the folder where Setup will install files." Below this is a small icon of a server rack. The text continues: "The CesarFTP Server should be configured with a user and password, who could logon to the server and will have authorisation to the FTP directories." There are two sections: "Configure FTP Server" with fields for "User Name" (containing "installer"), "Password", "Retype Password", and "Server Port" (containing "21"); and "Destination Folder" with a text box containing "C:\Program Files\CesarFTP" and a "Browse..." button. At the bottom, there is a note: "You can choose not to install Easy Manage by clicking Cancel to exit Setup." and the text "Wise Installation Wizard®". Navigation buttons for "< Back", "Next >", and "Cancel" are at the bottom right.

The FTP Server will use port 21 as default for the FTP port. Change the port if port 21 is already in use by another application. You have to enter a user and password for the FTP user, which have access to the shares and the upload directory. Select the folder and click the **Next** button to continue.

Service Authorized User

If you have decided to install a remote File server or installing the shares on a secure drive, than you have to define the User and password, which is authorized with full access to that file server. Leave the username blank, if you don't want to authorize the services with an authorized user.

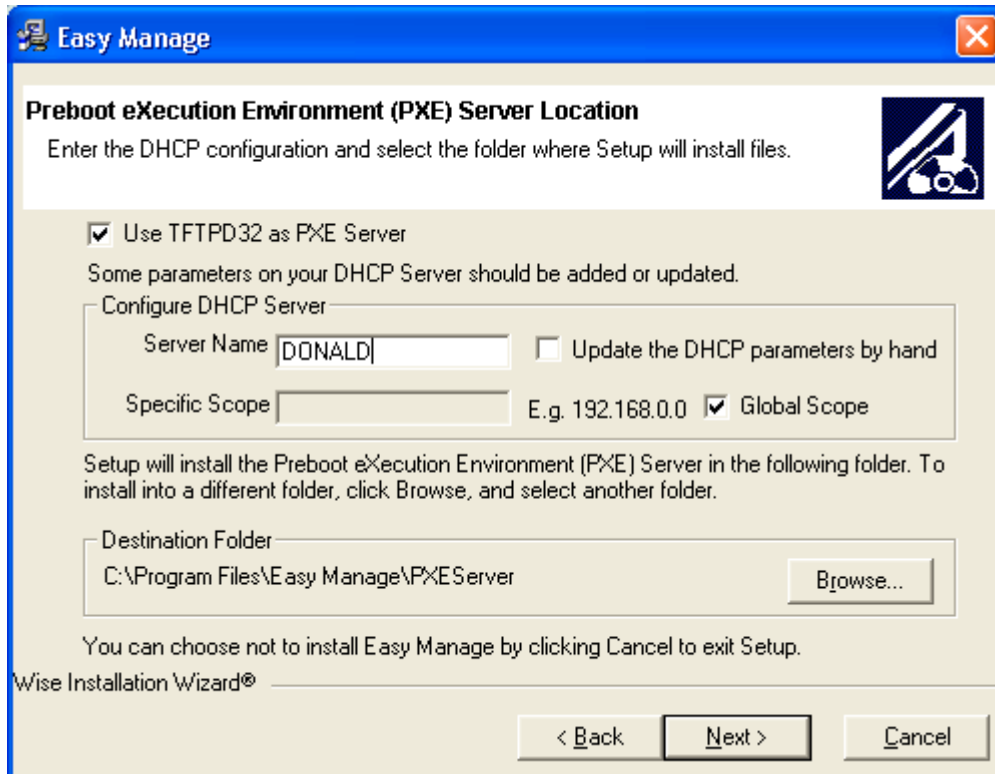


The screenshot shows a dialog box titled "Easy Manage" with a sub-header "Service Authorized User". The main text reads: "Enter the authorized user credentials for the services." Below this, there is a paragraph explaining that the Easy Manage Web Server, FTP Server, and Slave Server communicate as a service with the Easy Manage File Server, and that it needs a user and password with full access rights. A checkbox labeled "Use a Specific Account" is present, with a dotted box around it. Below the checkbox are three input fields: "User name", "Password", and "Retype Password". To the right of the "User name" field, there is an example: "E.g. Domain\User name". At the bottom of the dialog, there is a note: "You can choose not to install Easy Manage by clicking Cancel to exit Setup." and the text "Wise Installation Wizard®". The bottom of the dialog features three buttons: "< Back", "Next >", and "Cancel".

Enable the Use a Specific Account and enter the User name and password of the user with full authorization on the shares. Click the **Next** button to continue.

Preboot eXecution Environment (PXE) Server

Easy Manage supports the PXE method to boot with. The PXE server is a TFTP Server, which will transfer the pxelinux.0 file to the client who is asking for that. It will also setup a Windows DHCP server, which will demand the client to get the file from this server. Enable Global Scope if you want to install these values in the global scope, otherwise you have to fill in a specific scope. You have the choice to install the freeware TFTP32 or the Microsoft TFTP server.



Enter the name of the DHCP server and the Scope for which the PXE server should be configured. If the Server Name is blank, then you have to configure the DHCP server by hand.

Click the **Next** button to continue.

The following tags will be set in the Scope of the DHCP Server:

043 Vendor Specific Info	01 04 00 00 00 00 ff
060 ClassId	PXEclient
066 Boot Server Host Name	<PXE Server Name>
067 Bootfile name	pxelinux.0

The tag 060 will be created in the Server Options of the Server and will be set in the Scope of the Server. You could create this tag by hand with the following commands:

```
C:\WINDOWS\system32>netsh
netsh>dhcp
netsh dhcp>server \\<server name> *OR* <server IP address>
netsh dhcp server>add optiondef 60 ClassId String 0 comment=PXESupport
netsh dhcp server>set optionvalue 60 STRING PXEclient
```

Note:

If you want to install or update these options later, you can do this later by following the next steps:

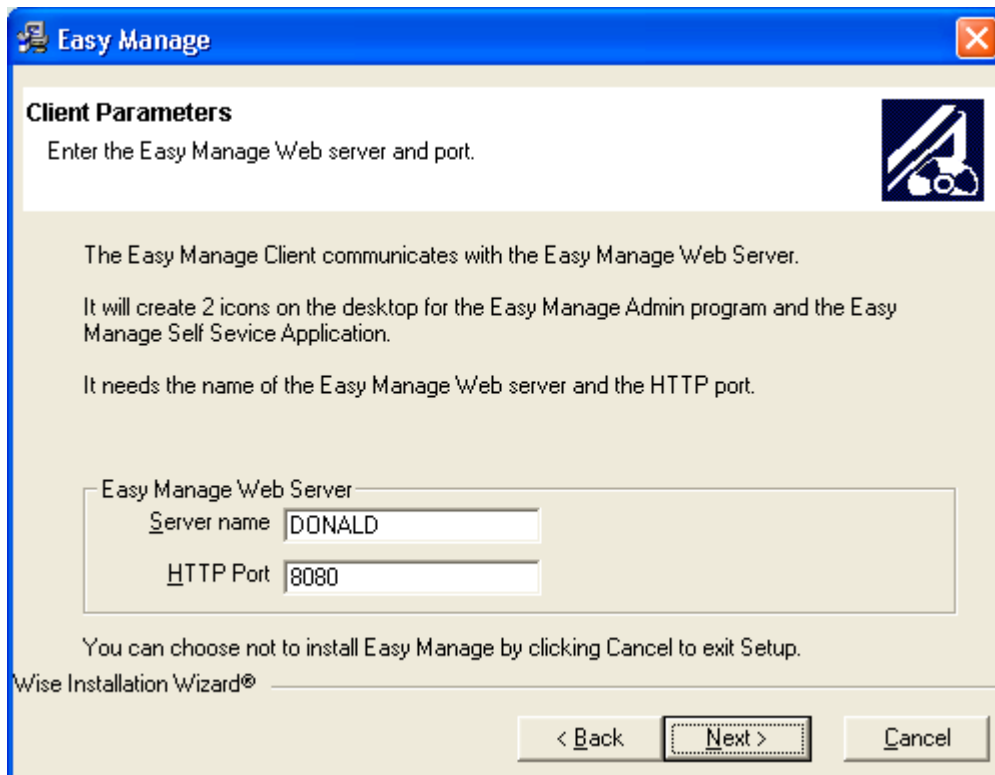
1. Update the file <PXE Server path>\Setup\PXEServer.txt
2. Open a dos box
3. Go to the setup directory where you have installed the PXE Server with CD <PXE Server path>\Setup
4. Execute the command "netsh exec pxeserver.txt"

Easy Manage Client

The Easy Manage Client Setup will create 2 Icons with the following parameters for:

Easy Manage Admin: `http://<Easy Manage Webserver>:<Portnumber>/ezmanage`

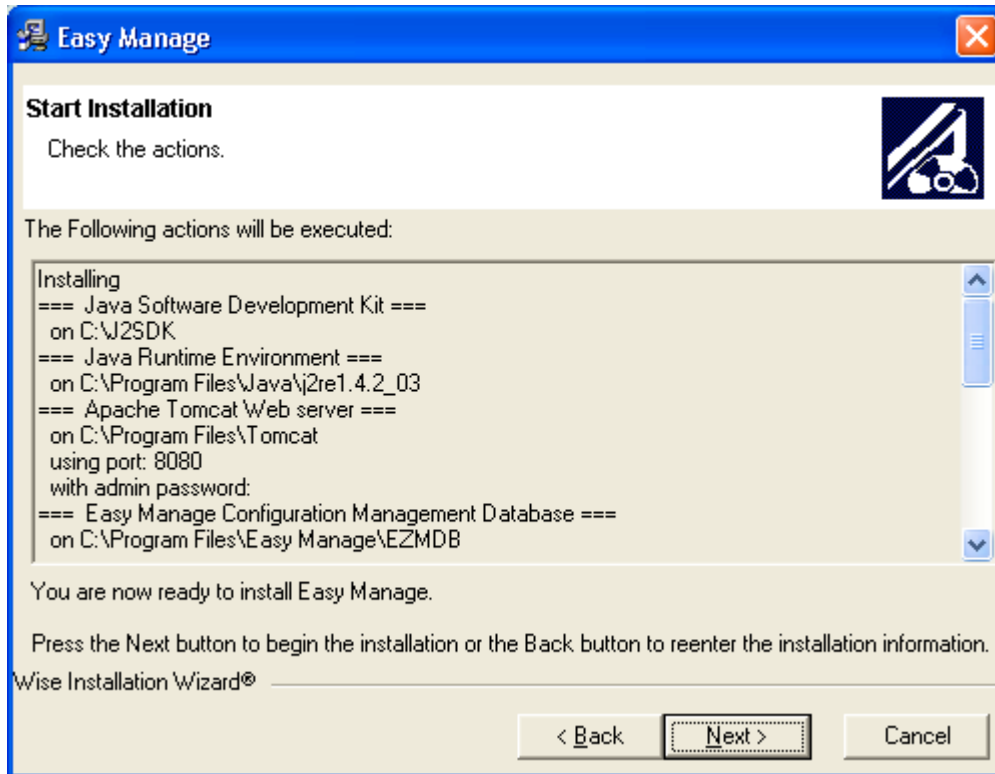
and Easy Manage Self Service: `http://<Easy Manage Webserver>:<Portnumber>/ezmanage/ssh.html`



Click the **Next** button to continue.

Start Installation

This form will inform you about the actions that will be executed by the setup procedure.



Click the **Next** button to install the components.

Upgrading

Use always the setup procedure to upgrade the package to newer versions.

Uninstall

Use the Windows uninstall procedure (control Panel -> Add/Remove Programs) to uninstall the components.

Create the Easy Manage users and update the share rights

Be sure that the shares have the correct permissions:

- EZMADMIN\$: Read Access for Everyone and Full Access for the EZManage Admins
- EZMPROG\$: Read Access for Everyone and Full Access for the EZManage Admins
- EZMAGENTS\$: Full Access for Everyone

It is advisable to set the Access Rights to Full Access for everyone if you setup Easy Manage for the first time.

To install a workstation and to add a workstation into a domain, Easy Manage needs a user with extra security. Create on your domain a user, who has the following rights:

- Full access rights on the share EZMAGENTS\$
- Read-only access rights on the share EZMPROG\$
- Read-only access rights on the share EZMAMIN\$
- Add workstations to domain (Local Security Settings -> Local Policies -> User Rights Assignment)

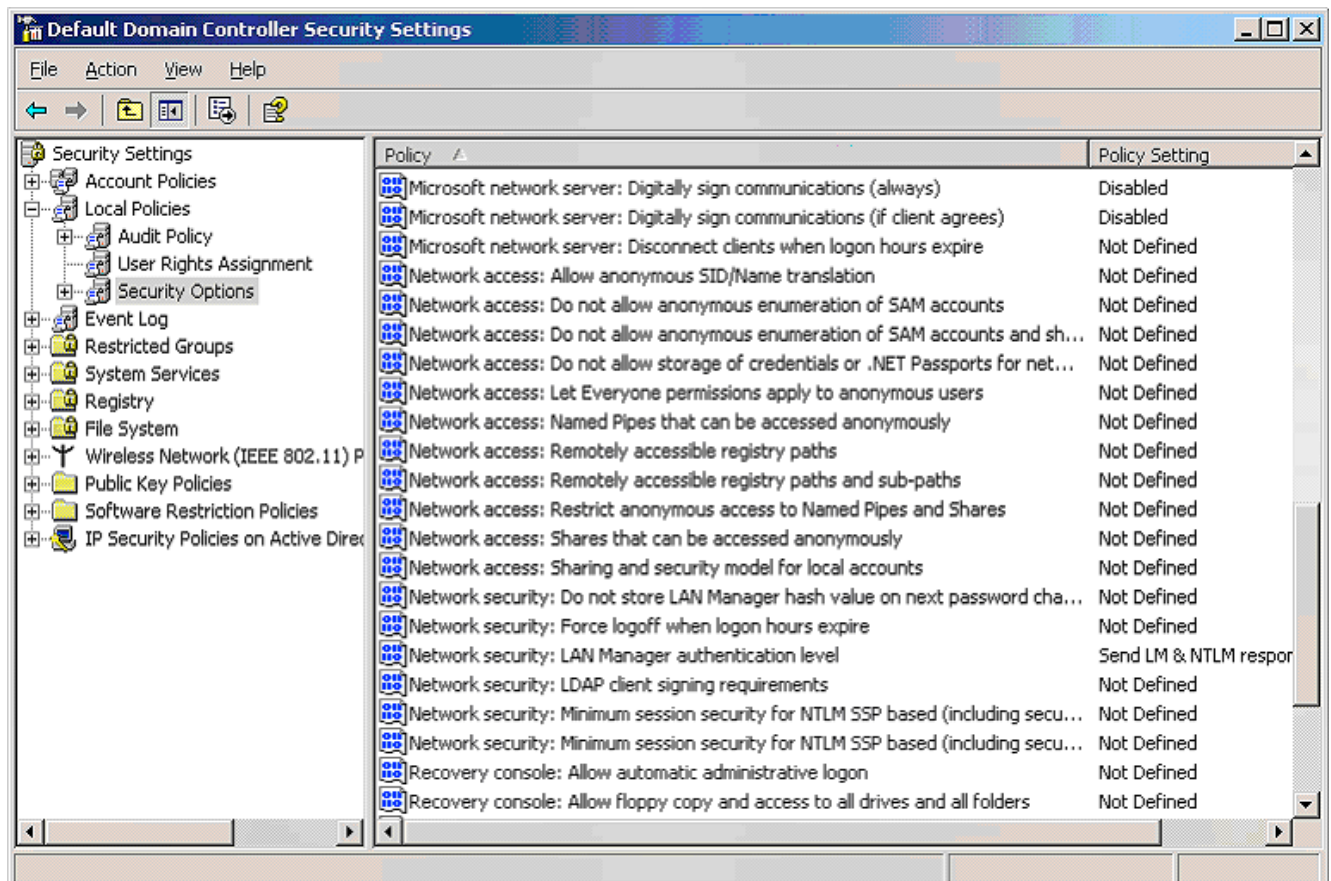
This user and password has to be registered in the Configuration Defaults in the Easy Manage Admin Program. (Setup -> System Parameters -> Tab Configuration Defaults)

To create Application Workspaces, Easy Manage needs a user with the following rights:

- Full access rights on the share EZMAGENTS\$
- Full access rights on the share EZMPROG\$
- Full access rights on the share EZMAMIN\$
- Defined in the Easy Manage Admin Program (Organization -> Users -> Open -> Tab Easy Manage) with security Administrator

In case your File Server is a Windows 2003 platform, you have to perform the following tasks:

- Be sure that the shares have the correct authorization.
- With Domain Controller Security Settings -> Local Policies -> Secure Options
disable the following Security Settings:
 Microsoft Network server: Digitally sign Communications (always)
 Microsoft Network server: Digitally sign Communications (if client Agrees)
Define Network security: LAN Manager authentication level Send LM & NTLM responses



Understanding the concept

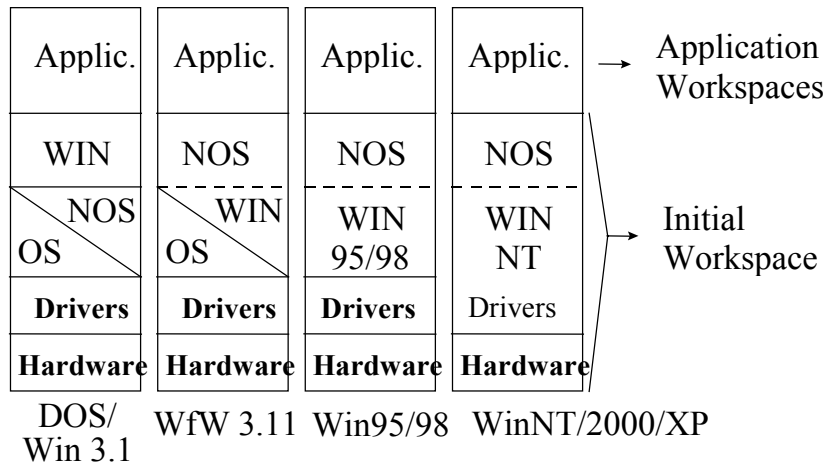
Easy Manage will build up the workstation in 2 stages. First it will create the Initial Workspace and after that the Application Workspaces are added to the workstation.

The Initial Workspace:

Easy Manage will start with creating the Initial Workspace, this can either consist of any Intel-based operating system.

The Initial Workspace contains four basic layers:

- Hardware
- Operating System
- Basic Drivers
- Network Operating System



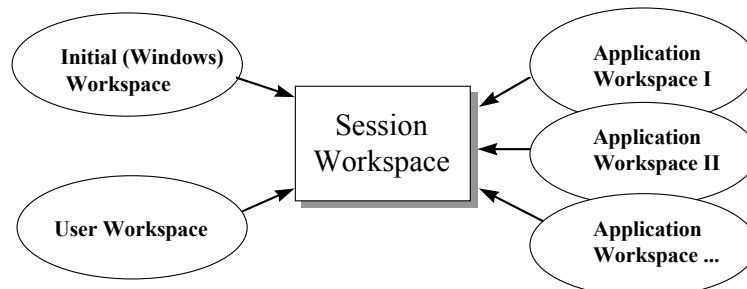
After creating the Initial Workspace the PC is ready to receive it's applications and additional drivers. In Easy Manage this means creating the Application Workspace.

The Application Workspace:

Easy Manage will install the required applications using the Application Templates. Easy Manage combines the **Application Workspaces** and the **User Workspace** to install the application without interventions that require manual input (i.e. User name, Department, IP-address etc.) nor any other intervention.

However, the user desktop is still incomplete, the user may have his own settings (i.e. colors, icon-sizes etc.). For these personal settings the **Session Workspace** will complete the correct installation of the application-layer.

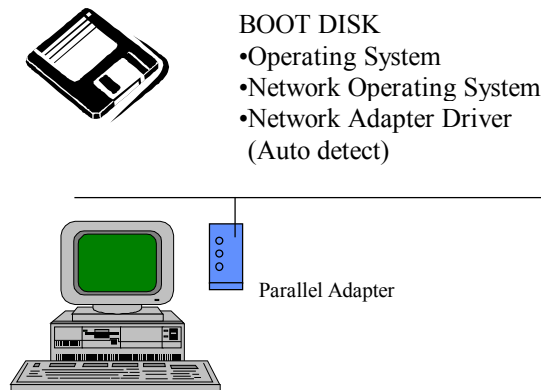
Easy Manage, the Concept



Create a Boot Disk

If you want to install the Initial Workspace on a workstation, then you have to make a connection to the Easy Manage server. This will be done by a Boot Disk, which will make this connection and after doing the initial work, you can use this Boot Disk for any other workstation. You can create a floppy, CD, DVD or PXE boot image to boot with. You can create one Boot Disk for all different Network Adapters that could be used with the auto detect function or you can create a Boot Disk for a specific Network Adapter that could not be detected.

One disk does it all



The Easy Manage Boot Disk contains:

- Operating System (mini-DOS).
- Network Operating System.
- Drivers for the network adapter.

Easy Manage provides a wizard to create a Boot Disk for the following operating systems, adapters and network stacks:

Operating systems

- Windows 98 UK (Default)

Adapters

- 3C509
- XIRCOM parallel adapter
- PROLAN 950 or REALTEK parallel adapter
- Unknown adapters (Auto detect)

Network stacks:

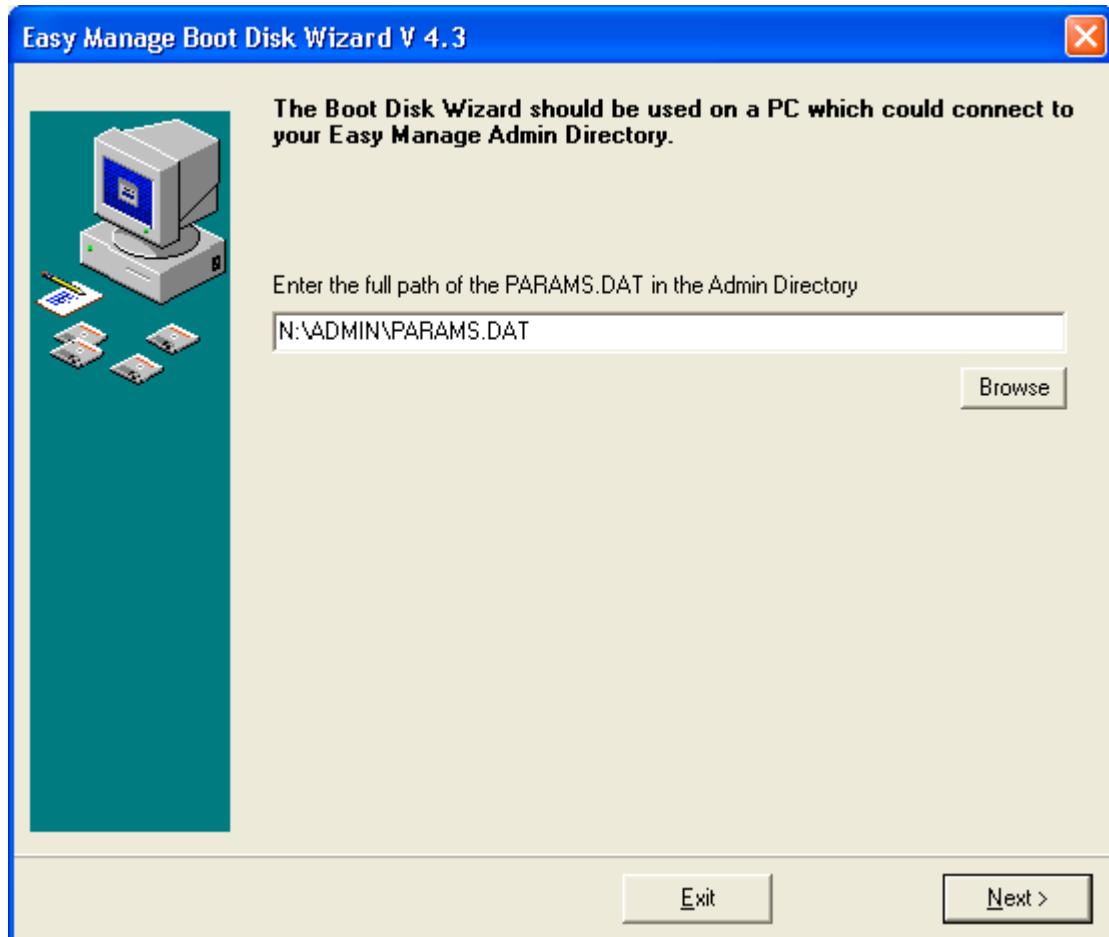
- TCP/IP (Microsoft Network)

To start the creation of the Boot Disk, click the **Create Bootdisk** button on the Control Menu of the Easy Manage Admin Program. This will start the **Boot Disk Creation Wizard**.

Boot Disk Creation Wizard

This wizard will guide you through the process to create a Boot Disk. This Boot Disk could be a floppy, a CD-R/CD-RW/DVD-R/RW or a PXE boot image. The wizard uses the values in the Servers.INI, PARAMS.DAT and FIRST.UAP files, which are located in the directory <AdminDisk>\ADMIN. If you are using a Multiple Site Environment, then the files are located in the <AdminDisk>\ADMIN\Sites\<Site> directory.

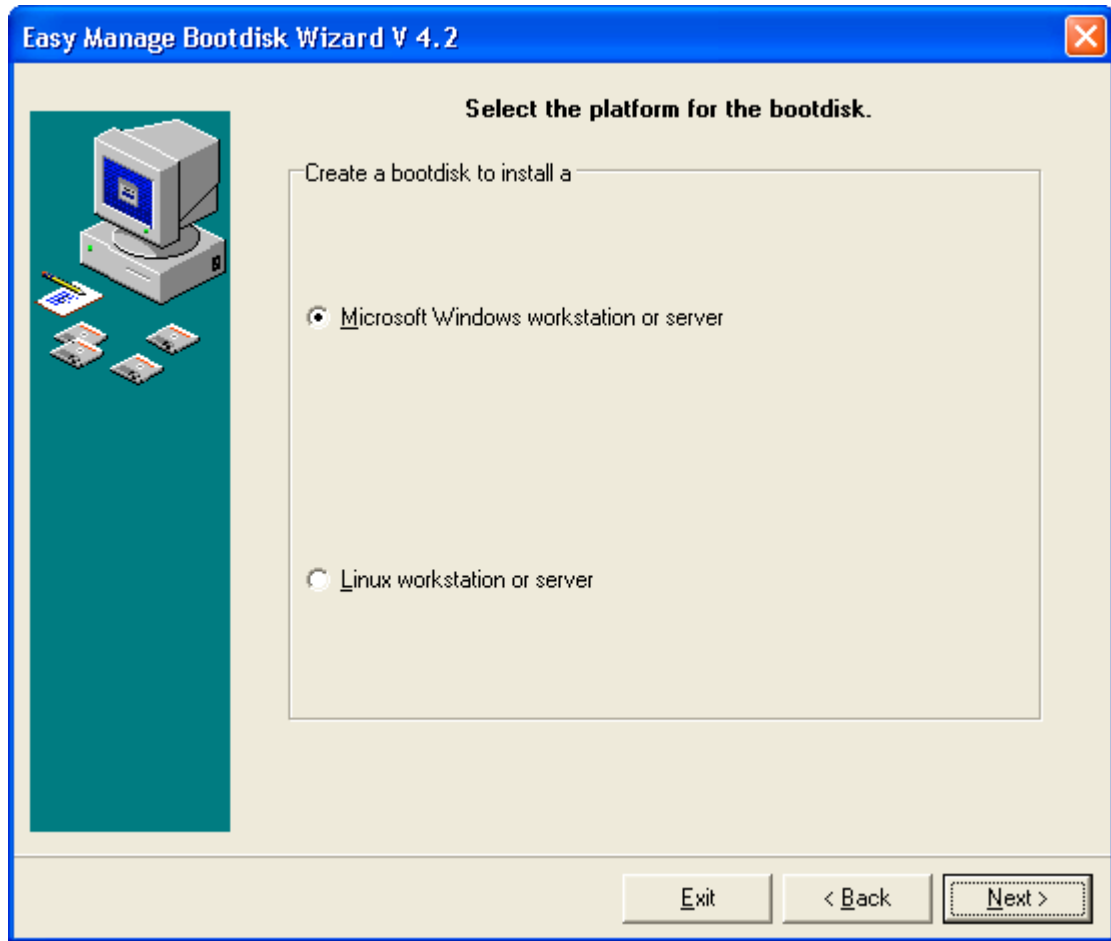
Before you can create a Boot Disk you have to fill in the Default Configuration settings in the Easy Manage Admin program. (Setup -> System Parameters -> Tab Configuration Defaults) to tell the Boot Disk wizard which User and password it should use to connect to your server.



Enter the name or use the browse button to select the PARAMS.DAT file and click the **Next** button. If the file was found, then the program will continue to the next screen. In a Multi site environment, you can create a Boot Disk for each site by selecting the correct PARAMS.DAT file for that site. If you want to create a PXE Boot Disk for a site you should be able to connect to the PXE server of that site.

Platform selection

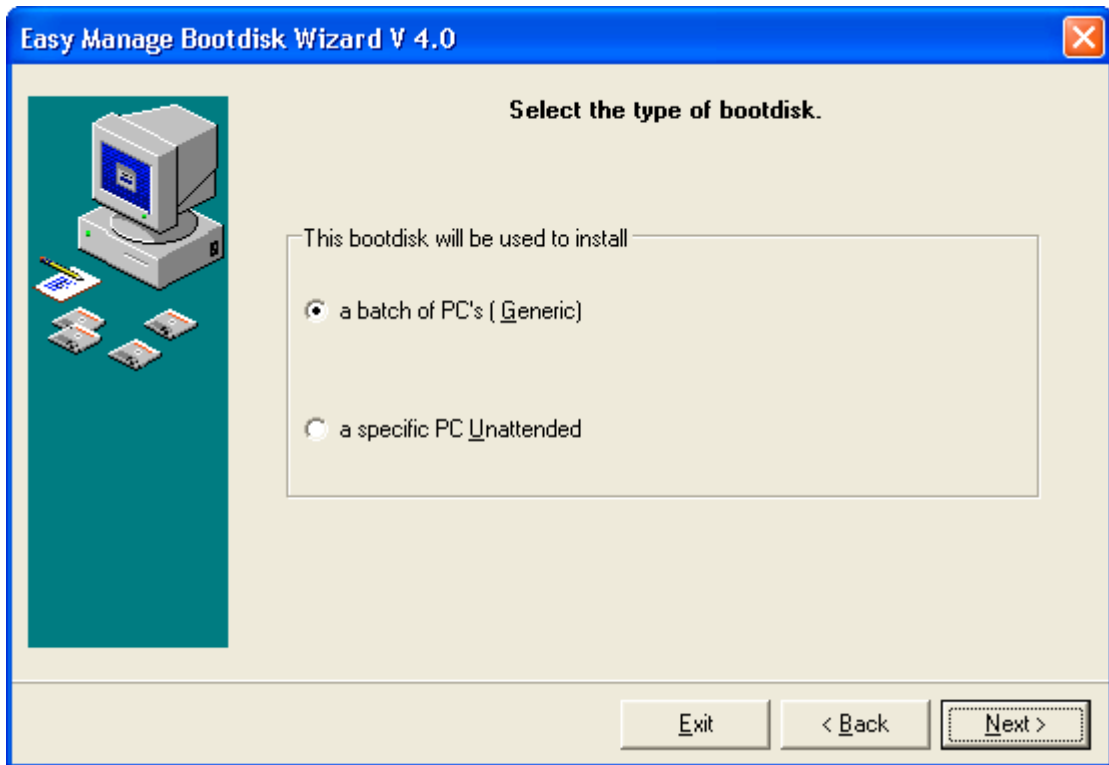
The wizard can create a Boot Disk for a Microsoft or a Linux platform.



Select the platform for the Boot Disk and click the **Next** button to continue.

Type selection

A Generic Boot Disk could be used for a batch of PC's. The Unattended can only be used for a specific PC and could only be created on a floppy.

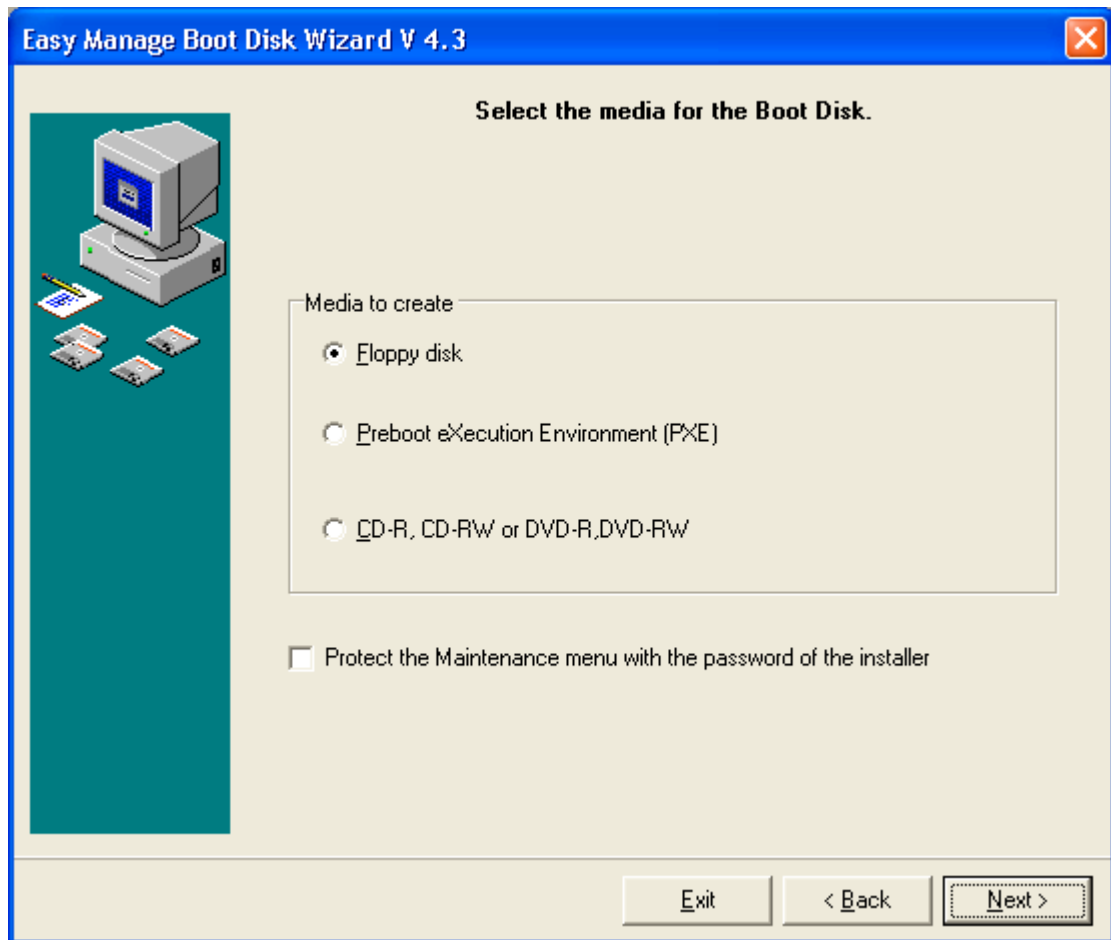


Select the type of Boot Disk and click the **Next** button.

Media selection

If the workstation has the capability to burn CD or DVD media, then this option will be shown. If you have installed the PXE server then this option will be shown too.

You can protect the Maintenance Menu of the Boot Disk by the password of the Installer user.



Select the Media type to create and click the **Next** button.

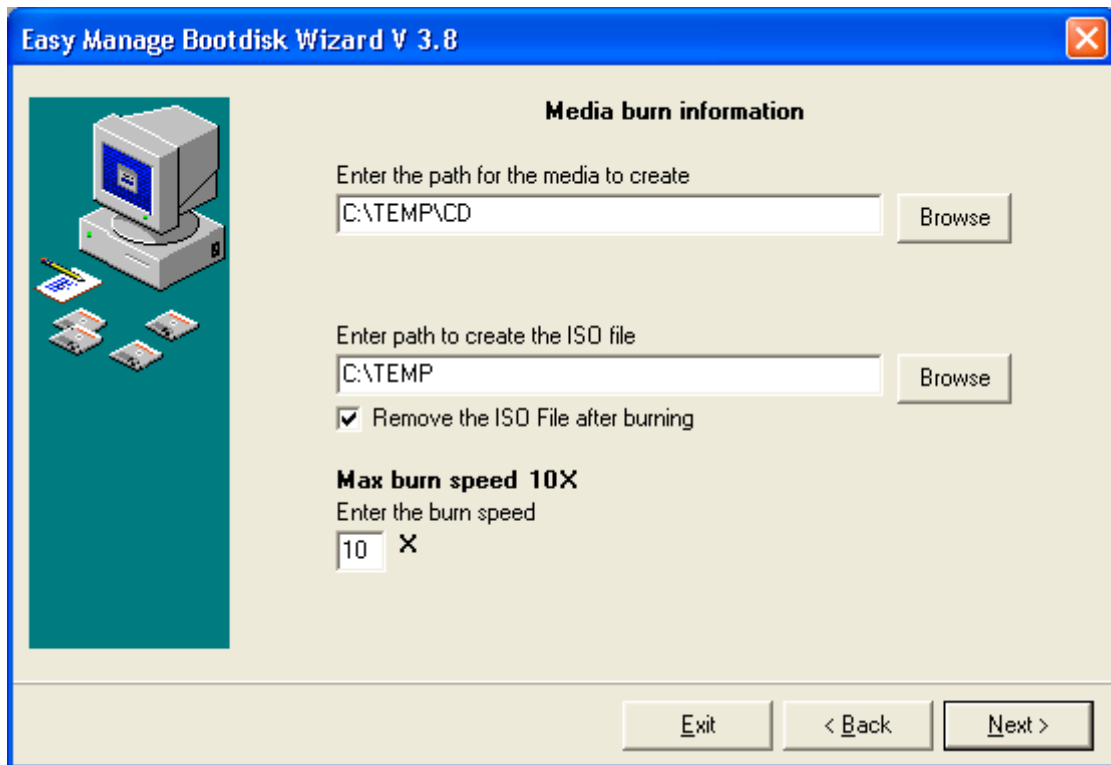
If you want to create a PXE boot image, then you have to install the PXE Server, which will create the control file **Servers.ini** in the Admin Directory (N:\Admin). At least the following lines should be in the file:

```
[PXEServer]
PXEServer=<PXEServerName> OR <PXE Server IP Address>
[FTPServer]
FTPHost=YourFtpServer
FTPPort=21
FTPUser=Installer
FTPPassword=<Encrypted password>
```

If you want to use a PXE environment, is it also advisable to install the FTP server, because the boot stages will be registered with the FTP protocol.

Media burn information

When the media to create was a CD or DVD, then this form will be shown. This will ask you for the burn information.



The screenshot shows a Windows-style dialog box titled "Easy Manage Bootdisk Wizard V 3.8". The main area is titled "Media burn information". On the left, there is a graphic of a computer monitor, a CD/DVD drive, and several CD/DVD discs. The main area contains the following fields and controls:

- A text box labeled "Enter the path for the media to create" containing "C:\TEMP\CD" and a "Browse" button.
- A text box labeled "Enter path to create the ISO file" containing "C:\TEMP" and a "Browse" button.
- A checked checkbox labeled "Remove the ISO File after burning".
- A section titled "Max burn speed 10X" with a sub-label "Enter the burn speed".
- A spin box containing the number "10" and a "X" button.

At the bottom right, there are three buttons: "Exit", "< Back", and "Next >".

Enter the path of the media to create in. It will be created if not yet exist.

Enter the path of the ISO File to create in. It will be created if not yet exist.

If the ISO file (Needed to burn the media) should be deleted after the burn action, enable the Remove the ISO File after burning field.

Enter the burn speed to burn the media.

After filling the requested data click the **Next** button to continue.

Connections

The Boot Disk uses the Admin Disk, Program Disk and Agent Disk, which should be mapped to the Easy Manage Server. You can select how the connection should be made if you have installed the FTP server.

Easy Manage Bootdisk Wizard V 4.2

Connections

EZMAdmin
Connection via
 UNC
 FTP
Server: pluto
Share: ezmadmin

EZMProgs
Connection via
 UNC
 FTP
Server: pluto
Path: ezmprogs

EZMAgent
Connection via
 UNC
 FTP
Server: pluto
Share: ezmagent

EZMDistr
Connection via
 UNC
 Local CD
Server:
Drive: X:

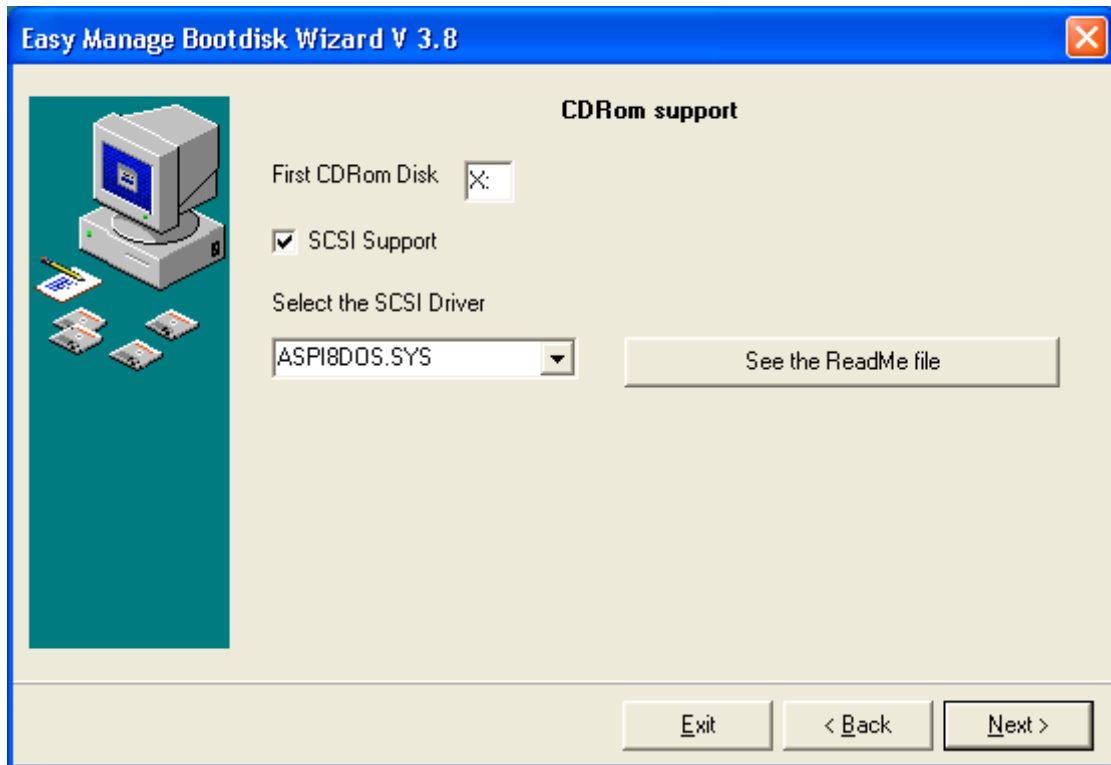
Exit < Back Next >

CD-ROM support will only be enabled, when the FTP connection was selected of the EZMProgs.

Click the **Next** button to continue.

CDRom Support

If you have selected to Support CD-ROM, this form will ask you for the CD-ROM Disk and a SCSI driver. When the Boot Disk is started, default drive X: will be the first CD-ROM drive and drive Y: the second (if available).



If your CD-ROM is a SCSI device, enable SCSI Support and select the SCSI Driver.

The drivers will not be supported by Easy Manage. This means Easy Manage will deliver the Adaptec drivers for DOS, but the decision of which driver should be valid for a device, should be done by you. You may append a new driver in the Boot Disk environment by placing the driver in the <ProgramDisk>\Bootdisk\CDRomSup\SCSI directory.

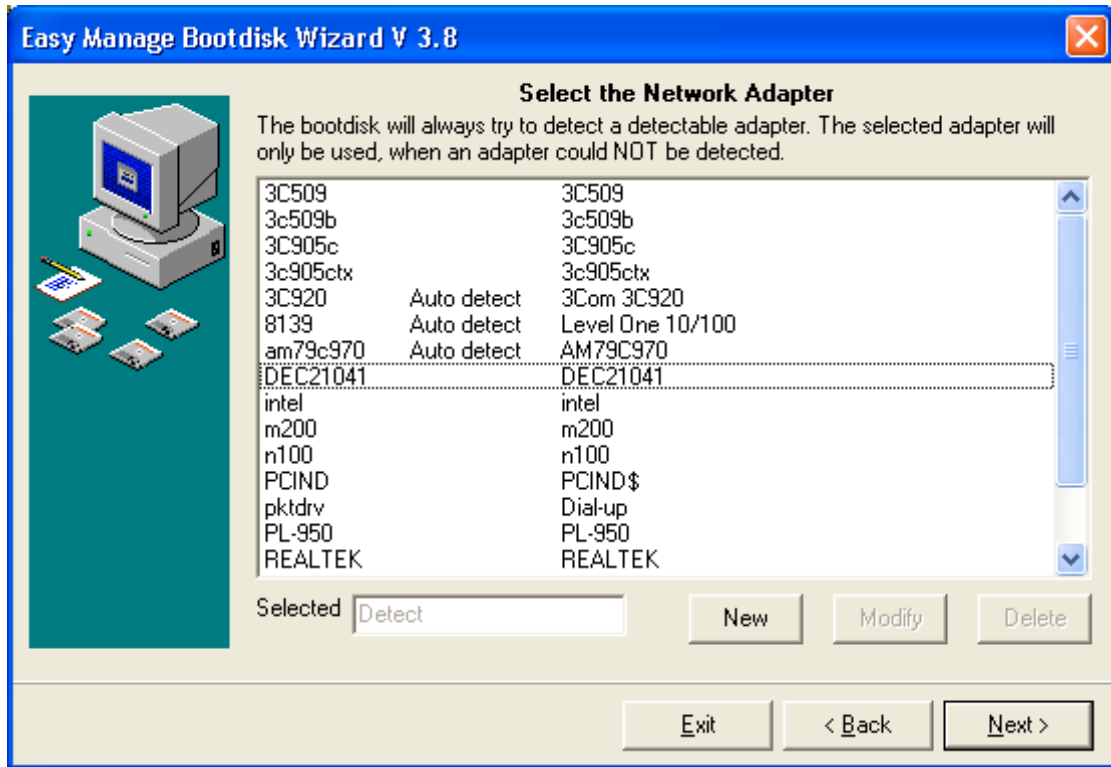
Click the **Next** button to continue.

Network Card selection

With this form you can select, add, delete or modify a network card in the Boot Disk Database.

This form will not be processed, when a PXE Boot Disk has to be created, because the PXE environment works with a UNDI driver, which is suitable for all adapters with PXE support.

The Boot Disk will detect PCI network cards, when the Vendor ID and Device ID are known for that adapter. You can create a Boot Disk for a specific legacy card (non PnP) and if that card is not present, it will try to detect one of the detectable cards.

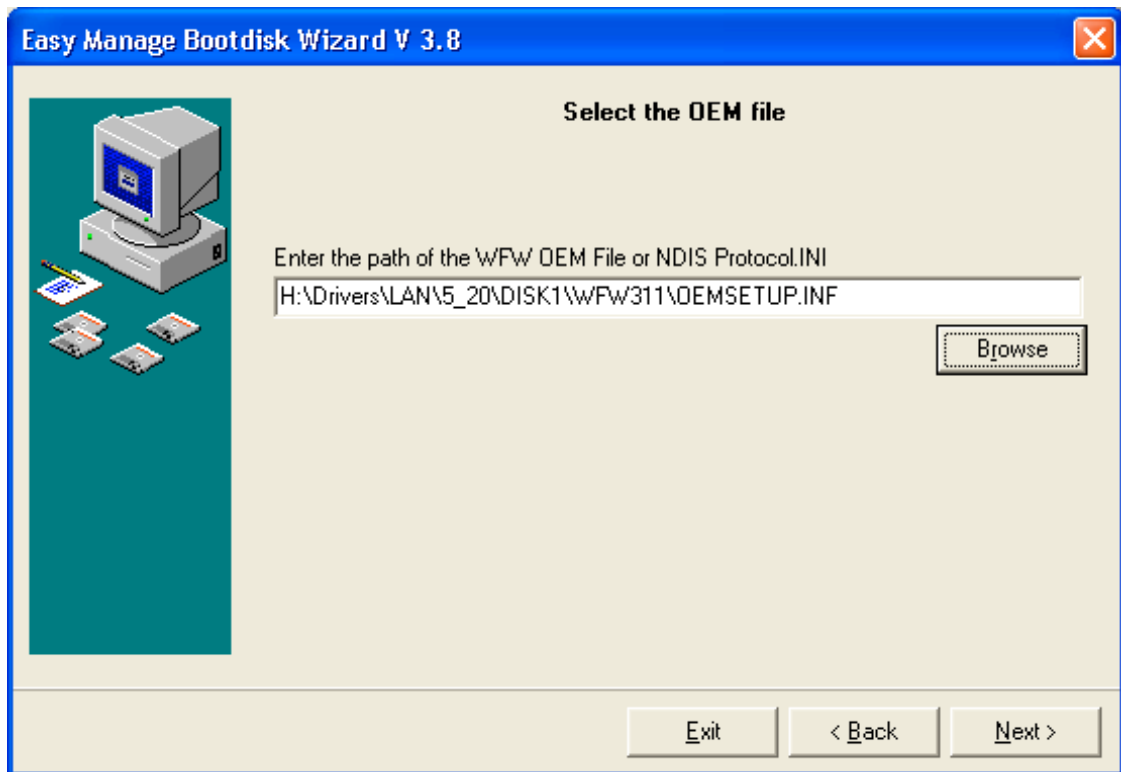


- If you want to add a new network card to the Boot Disk Database Click the **New** button. This will start the **Add Network card** function.
- If you want to delete a network card, select the network card and click the **Delete** button. The network card will be deleted from the Boot Disk Database and the **List the actions** function will be started.
- If you want to modify the description or the Detection parameters (Vendor Id and Device ID), select the network card and click the **Modify** button or double click on the network card. This will start the **Add/Modify Network Card** function.

Add Network card

With this function, you have to select the WFW OEM file or NDIS protocol.ini file where the card characteristics and drivers are specified.

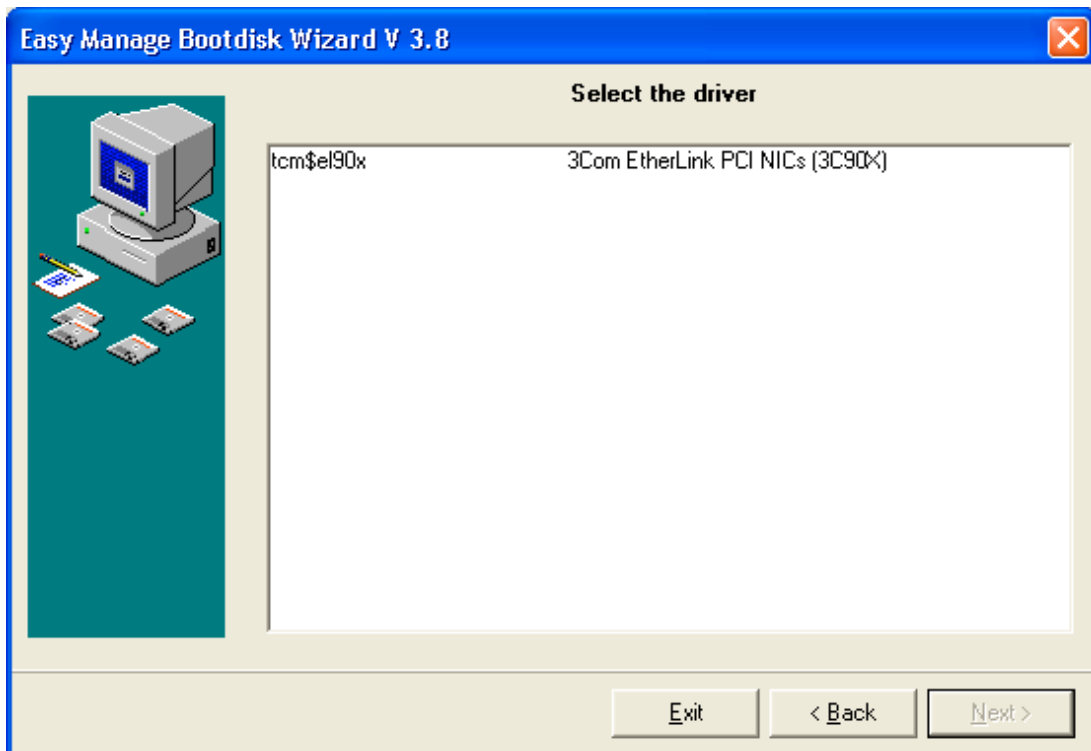
Note: When selecting the OEM Install file, use the WFW OEM install file, which will give you the description of the drivers. If the not available, select the DOS Install files (Protocol.INI).



Enter the full path or click the **Browse** button to select the WFW OEM file or NDIS protocol.ini file and click the **Next** button. This will start the **Select the driver** function.

Select the driver

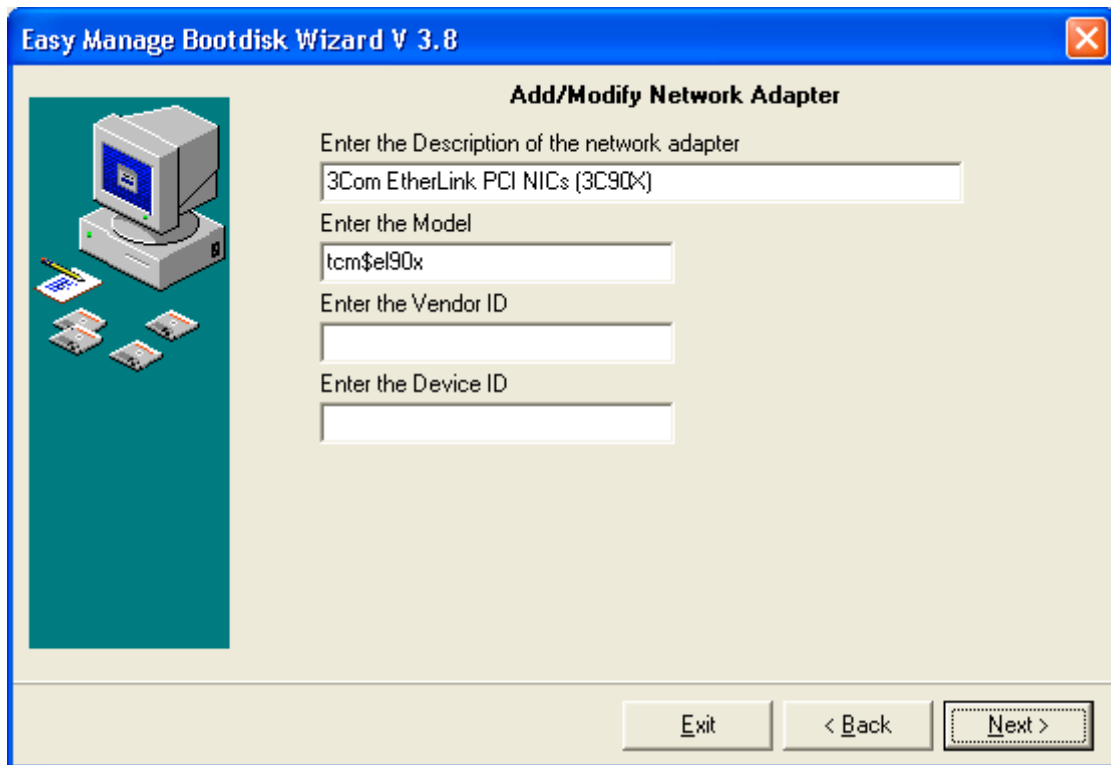
This function shows the available drivers in the selected WFW OEM file or NDIS protocol.ini file.



Select the driver and click the **Next** button. This will start the **Add/Modify Network Card** function.

Add/Modify Network Card

With this function you can modify the card characteristics, which will be used by the Boot Disk detection.



The screenshot shows a Windows-style dialog box titled "Easy Manage Bootdisk Wizard V 3.8" with a close button (X) in the top right corner. The main title of the dialog is "Add/Modify Network Adapter". On the left side, there is a vertical teal panel containing an illustration of a computer monitor, a tower PC case, and several network interface cards (NICs) with a pencil and paper icon. The main area of the dialog is light beige and contains four text input fields with labels above them: "Enter the Description of the network adapter" (containing "3Com EtherLink PCI NICs (3C90X)"), "Enter the Model" (containing "tcm\$el90x"), "Enter the Vendor ID" (empty), and "Enter the Device ID" (empty). At the bottom right, there are three buttons: "Exit", "< Back", and "Next >".

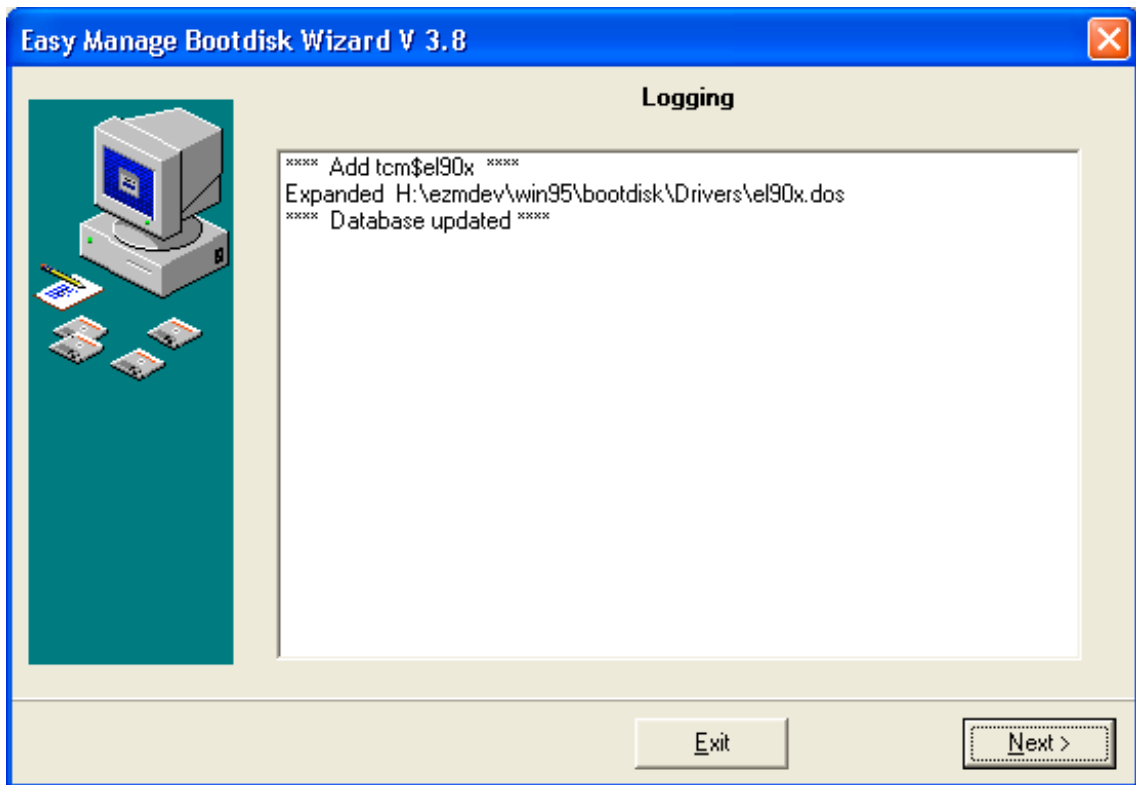
Enter the description and model name of the card. The model name should be unique.

Enter the 4 character Id for Vendor ID and the Device ID derived from the PCI detection program.

Click the **Next** button to continue.

List the actions

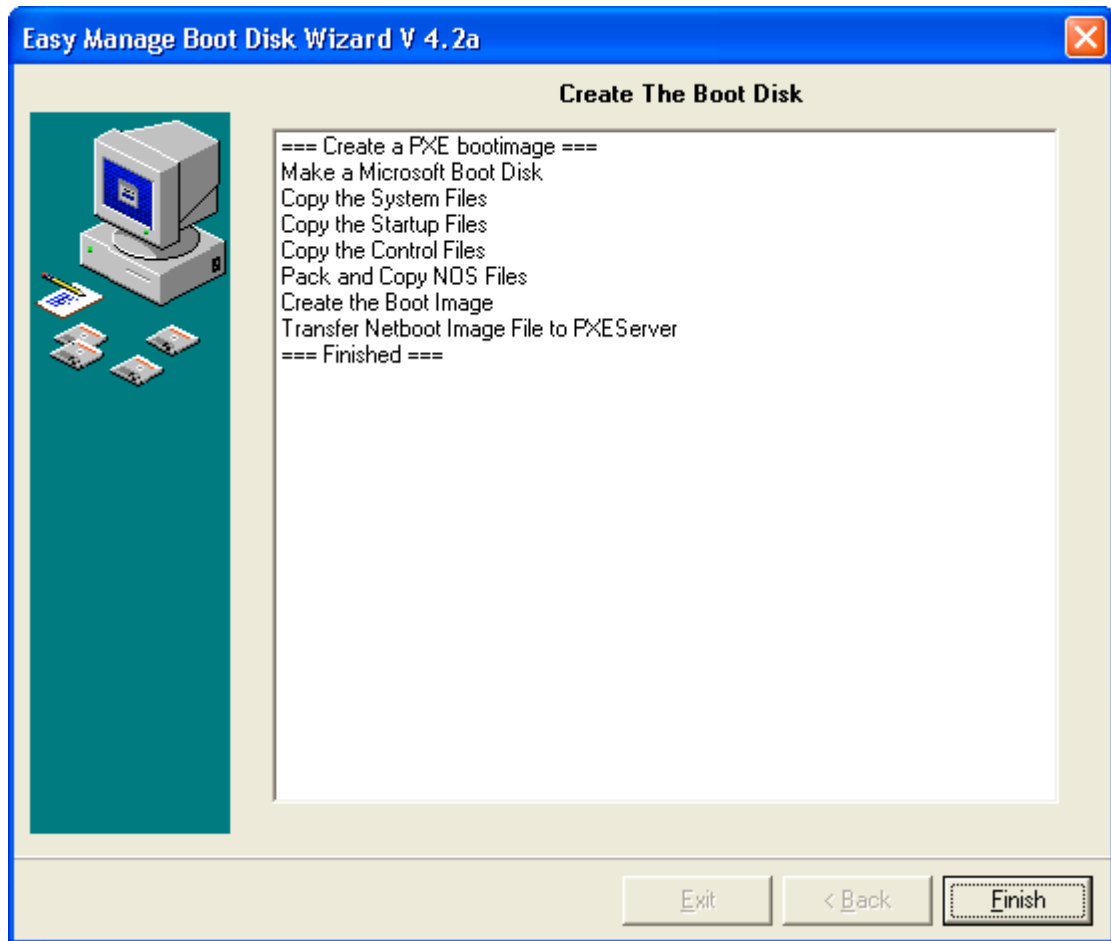
This function will list all actions done on the Boot Disk Database.



Select the **Next** button to go back to the **Network Card selection** function.

Create Boot Disk

This form will show the actions that will be performed, when the Next button is clicked. Be sure you have put a floppy or CD or DVD into the drive, if you did not choose to create a PXE Boot image.

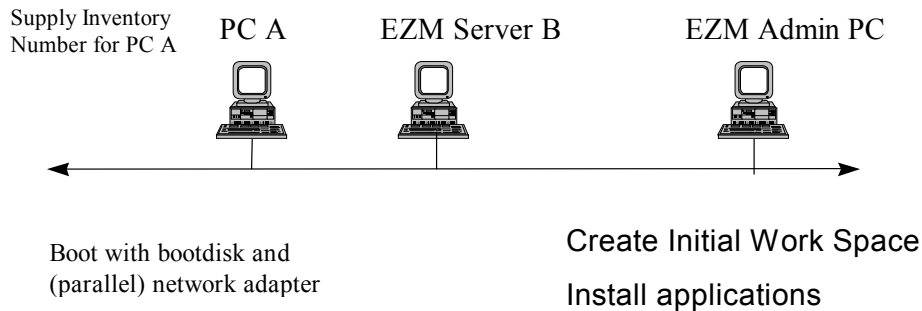


The Boot Disk will be formatted and a defined Operating System will be copied (this is a very small mini-DOS) to this Boot Disk. The network protocol and all network card drivers will be copied compressed to the Boot Disk.

Boot with the Boot Disk

After you have created a Boot Disk, you can use this Boot Disk to setup your PC's you just have created with the Easy Manage Admin Program.

Easy Manage BOOTDISK



If the PC has a NIC with PXE enabled, it will load the Boot Disk image from the PXE server. It is therefore advisable to setup the PXE boot as first in the BIOS. Booting a PC with the Boot Disk will start the mini DOS, the drivers for the specified network adapter and the specified network stack. The Boot Disk will make a connection to the Easy Manage server with its shares EZMADMIN\$, EZMPROGSS\$ and EZMAGENT\$. Then it will start the Common PC Install Procedure (PCINSTALL.BAT), which will ask you for the CI Number of the workstation to be installed or to start the **Maintain this Workstation** menu. If you had filled in the Mac address of this workstation with the Admin program, then the installation of the workstation will be done automatically. Select **Maintain this Workstation**, if you want to partition the hard disk, format the hard disk or copy the data of the hard disk to the server or other tasks.

The only interaction that is required to install the PC Desktop according the specifications in the Easy Manage Configuration Database is to enter the CI Number of this workstation.

The following steps will be executed depending on the System template you have selected for the workstation.

Step	DEFAULT.TPL	NETWORK.TPL	GHOST.TPL
Enter the CI number of the workstation	X	X	X
The Hard disk will be partitioned, if needed (inclusive automatic Reboot).	X	X	X
The rescue partition will be created, if demanded (Inclusive automatic Reboot).	X	X	X
The C: drive will be formatted.	X	X	
The Image will be dumped to the hard disk. (Inclusive automatic Reboot)			X
The Easy Manage Client Software will be installed on the C: drive.	X	X	X
The Windows distribution will be copied to the C: drive.	X		
The additional driver and initial software will be copied to the C: drive	X	X	X
The setup procedure of Windows installs now unattended the selected platform from the network.		X	
Remove the Boot Disk and Reboot the system	X	X	X
The setup procedure of Windows installs now unattended the selected platform from the C: drive	X		X
The Easy Manage Desktop Manager will install unattended all applications assigned to this workstation.	X	X	X
The created installation will be saved in the rescue partition, if demanded.	X	X	X
The Installation is completed	X	X	X

Assessment of the machine in DOS Mode

If you have booted with the Boot Disk and you want to know, what adapters are installed in the machine, you could follow the following steps:

Case 1. The Boot Disk tries to boot and connect to the Easy Manage server, but failed.
The Boot Disk will automatically start the PCI detection program

Case 2. The Boot Disk boots the machine and connects to the Easy Manage server

1. Select **Maintain this Workstation**
2. Select **Assess this Workstation**
This function will create a **Machine.txt** file with the contents of the assessment in the root of the AgentDir.
3. Or Select **Other Tasks in DOS Mode**
4. Start the PCI detection program. Type **PCI -S**

The PCI detection program will display all PCI Adapters installed in the machine with its Vendor ID and Device ID. Use the space key to continue on the screen

Notice the Vendor ID, Device ID's and the Description of the following adapters:
Network, Video and Audio, because these are the most important adapters.

Setup the Easy Manage Knowledge Database

The Easy Manage Knowledge Database will be created by the Setup procedure, but Easy Manage does not deliver the operating systems or Windows distributions. So before you want to setup a workstation, you have to create the distributions of the operating systems on the Easy Manage File server.

Create a Windows distribution

To distribute Windows to the client PC, the distribution on CD-ROM should be copied into the Knowledge Database. Start the Easy Manage Admin Program and carry out the following steps:

Step 1. Create a Class for the platform, if not yet exists. E.g. **Windows 2000**

A Class will be used as OS directory in the Knowledge Database and as Class Name in the templates

- Setup -> Class -> New
- Enter **WIN2000** as Name (Same as OS Directory in the platform type)
- Select **OS** as Type
- Enter **Windows 2000** as Description

Step 2. Create a Platform Type, if not yet exists. E.g. **Windows 2000**

A Platform Type is language and distribution method independent.

- Software -> Platforms -> Open
- Enter **Windows 2000** as Type
- Enter **WIN2000** as OS Directory (This will be the OS directory in the Knowledge Database)

Step 3. Create an Operating System for the distribution method. E.g. **Windows 2000 Default**

An Operating System will be used to define the distribution method.

- Software -> Operating Systems -> New
- Enter **Windows 2000 Default** as Description
- Select the **DEFAULT.TPL** or **NETWORK.TPL** as System Template
- Select the **DEFAULT.INF** as Answer Template

Step 4. Create an Initial Software Application to define the version and language for the Windows distribution. E.g. **Windows 2000 Professional UK**

- Software -> Initial Software -> New
- Enter the Name of the Distribution: **Windows 2000 Professional UK**
- Select **Windows 2000** as class
- Enter the mandatory fields on the General Tab
- Tab Script, Enter the **UKPRO** as Model Name
- Tab Networks, enter the Domain name if your workstation should become a member of a domain.

Step 5. Load the Distribution in the Knowledge Database

- Software -> Initial Software -> Select the Operating System
- Tab Drivers, Select the Platform Windows 2000
- Click the Load button to start the **Easy Manage Driver Installer**
- Select the Copy to OEM Distribution and click the Next button
- Select the distribution drive and the directory I386 and click the Next button.

You have to repeat step 1 until 5 for each Operating System that you want to distribute.

Load the needed drivers

Not all drivers are in the distribution of Windows. The newer drivers should be added into the Knowledge Database and will be copied to the workstation just before the Windows setup procedure is started. Use the **Easy Manage Driver Installer** to load the drivers in the Knowledge Database.

Easy Manage Driver Installer

The Easy Manage Driver Installer is a wizard, which will load additional driver software and Initial Software (Service Packs and Windows distributions) in the Knowledge Database. Easy Manage delivers a Knowledge Database with drivers and scripts for all platforms, but it is not complete. If you want to use adapters or devices, not yet defined in the Easy Manage Knowledge Database, then you have to put the drivers in the Knowledge Database and create your own scripts.

Use the **Load** button on the Tab Drivers in the Initial Application, Machine Type, Adapter Type or Device Type form with the Easy Manage Admin Program to start the Easy Manage Driver Installer (<AdminDisk>\EZMDB\EZDRVINS.EXE).

The software will be copied to the workstation in the Initial Workspace.
Only software with a MSDOS 8.3 filename format should be installed with this wizard.

It is possible to install more than one driver in the same <model> directory, but the name of the RunOnce or OEM Install file should be different.

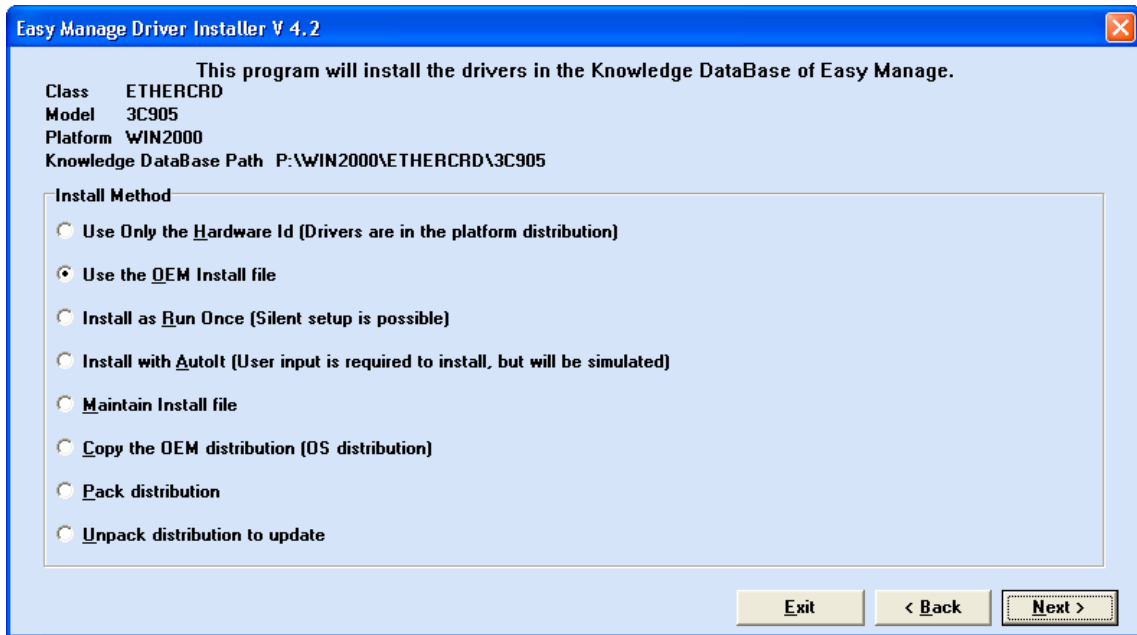
Driver information

This form will only appear, when the you start the program directly from the folder.
Enter all information for the driver to load into the Knowledge Database and click the **Next** button.

<i>Field</i>	<i>Description</i>
Class	Select the predefined driver class.
Other Class	Enter the class, when Driver class “Other” was selected (Max. 8 characters). This will be the class subdirectory in the Knowledge Database.
Model Name	Enter the model name of the object (Max 8 characters). This will be the model subdirectory in the Knowledge Database.
Platform Directory	Select the platform for which the driver should be installed.

Install Method

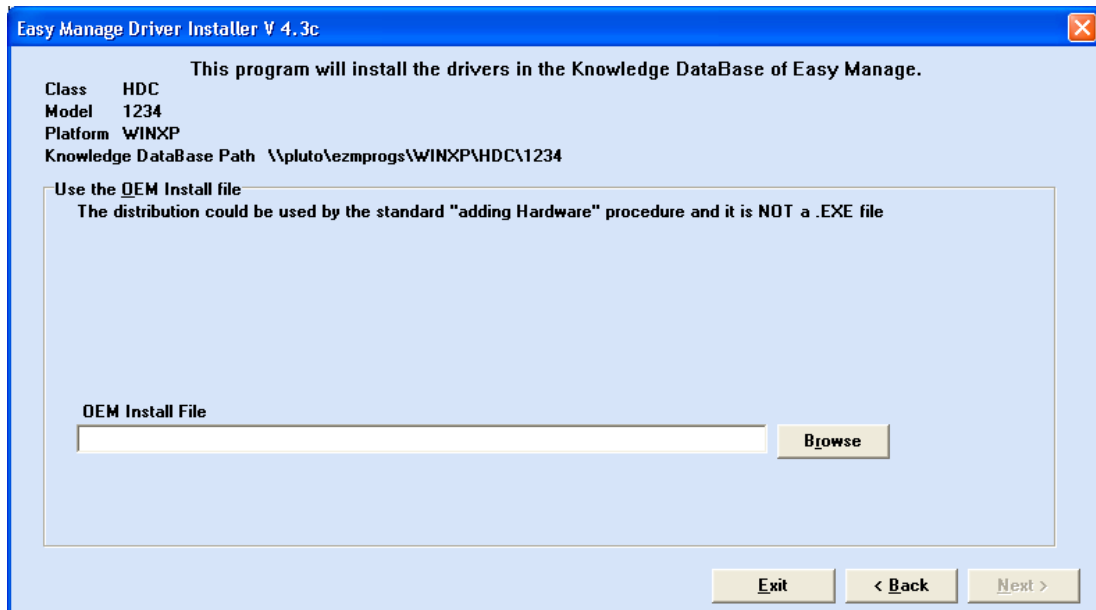
With this function you can select the install method for the software. Select the Install Method and click the **Next** button, which will start the appropriate function.



<i>Install Method</i>	<i>Description</i>
<i>Use Only the Hardware Id</i>	Select this option, if the drivers are already in the OS distribution and you want to force the installation of this object. (Windows 95)
<i>Use the OEM Install file</i>	Select this option, when you received a distributionset with the object. This distributionset could be used by the standard adding Hardware and it is NOT a .EXE file.
<i>Install as Run Once</i>	Select this option, if the distribution of the drivers is a self installing executable and could be installed without user intervention.
<i>Install with AutoIt</i>	Select this option, if the distribution of the drivers is an application and uses user intervention. You should already have created an AutoIT script for it.
<i>Maintain Install File</i>	Select this option, if you want to show or modify the created .INF file.
<i>Copy the OEM distribution</i>	Select this option, if you want to copy an OEM distribution into the Knowledge Database. E.g. Adding the Operating System Distribution.
<i>Pack Distribution</i>	Select this option, if you have updated drivers in the Knowledge Database by hand.
<i>Unpack Distribution to update</i>	Select this option, if you want to update a distribution by hand in the Knowledge Database.

Use the OEM Install file

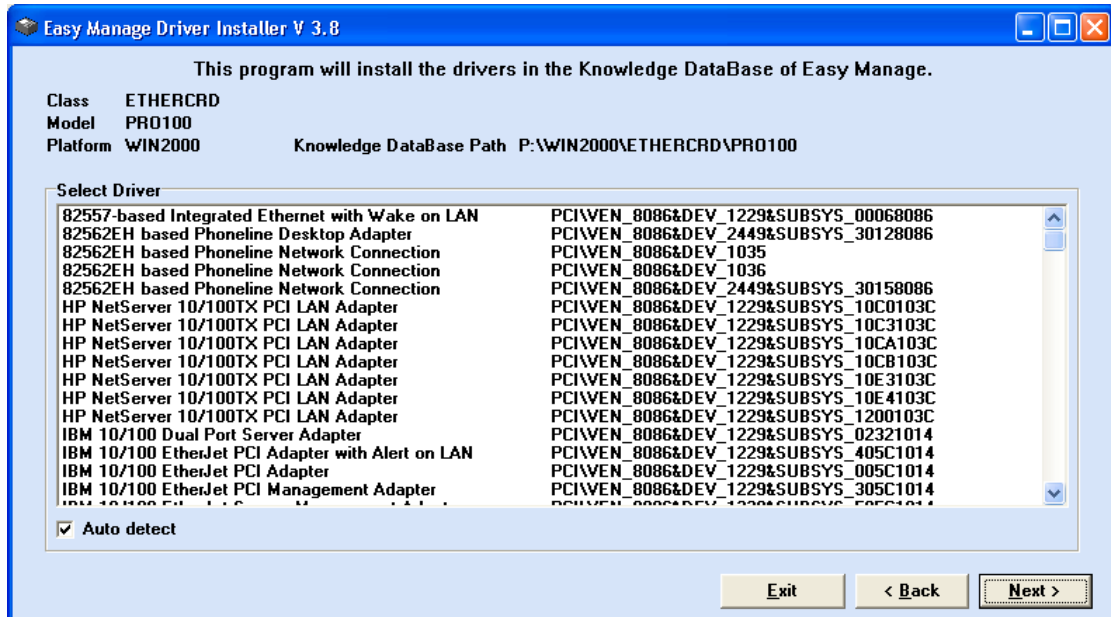
With this function you can enter or select the correct OEM install file. The contents of the file will be checked for the correct class and platform.



Enter or select with the **Browse** button the OEM installation file. The **Next** button will be enabled, when a correct installation file was selected. The wizard will continue with the **Driver List** function. When the selected class was HDC, then you could also select the txtsetup.oem file which will create a TXTSETUP environment, which is needed for SATA Drivers.

Driver List

This function will list the found driver types in the install file. Only descriptions of the drivers with a short HardwareId will be shown in case Windows 95 as platform was selected.



Select the specified driver and click the **Next** button. The logging screen will be shown and the distribution will be copied to the Installpath, a Easy Manage Installfile and a Windows Information file will be created in the Installpath.

Use only the Hardware ID

In this form, you have to enter the Hardware Id of the object.

Easy Manage Driver Installer V 3.8

This program will install the drivers in the Knowledge DataBase of Easy Manage.

Class ETHERCRD
Model PRO100
Platform WIN2000 Knowledge DataBase Path P:\WIN2000\ETHERCRD\PRO100

Use Only the Hardware Id (Drivers are in the platform distribution)

PNP Hardware ID *PNP0800

Exit < Back Next >

Enter the PNP hardware ID of the object, which you can find in the REGISTRY on a good running system. In case of class video, you have to enter the description of the adapter from the MSDISP.INF file. The **Next** button will be enabled, when the hardwareId was filled in. Click the **Next** button, the Logging form will be shown and a Windows Information file will be created in the Installpath directory.

Install as Run Once

This form should be filled with information of the distribution and the program to execute as Run Once.

The **Next** button will be enabled, after a check of the fields. Click the Next button to start the Logging form, which will create a Easy Manage Install file, a Windows Information file and copy the specified distribution to the InstallPath.

<i>Field</i>	<i>Description</i>
<i>Source is just one file</i>	Enable this field if the source is just One file and it is also the Run Once File to execute. Disable this field, if the distribution is a complete directory.
<i>Source Path/File</i>	Enter the name or use the Browse button to select the directory or .EXE file. The value will also be placed in the “Run Once File” field, if the “Source is just one file” field was enabled.
<i>Run Once File</i>	Enter the name or use the Browse button to select the .EXE file to run as first after the initial setup.
<i>Setup Parameters</i>	Enter the parameters to use for the setup.

Install with Autolt

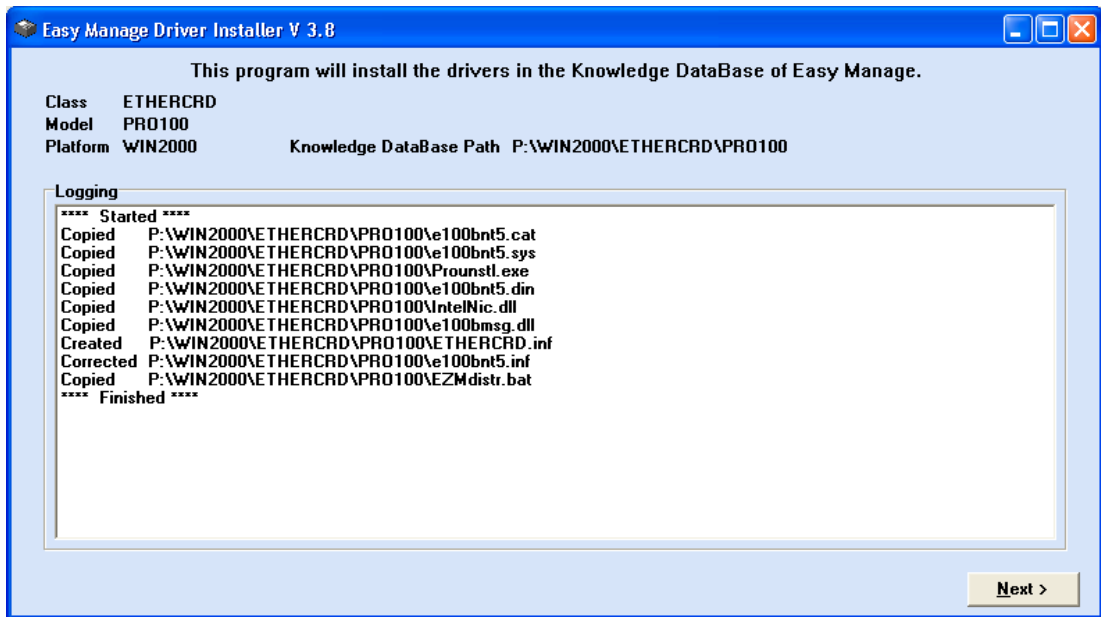
This form should be filled with information of the distribution and the AutoIT script to execute. The AutoIt script should be present.

The **Next** button will be enabled, after a check of the fields. Click the Next button to start the Logging form, which will create a Easy Manage Install file, a Windows Information file and copy the specified distribution to the InstallPath.

<i>Field</i>	<i>Description</i>
<i>Source is just One file</i>	Enable this field if the source is just One file. Disable this field, if the source is a complete directory.
<i>Source Path/File</i>	Enter the name or use the Browse button to select the directory or .EXE file.
<i>AutoIT Script File</i>	Enter the name or use the Browse button to select the AutoIt script file to run as first after the initial setup.

List the Actions

This form shows the actions, which were performed by the wizard.



When the action is finished, then the Next button will be enabled. Click the **Next** button and the wizard is ready to install the drivers for another platform.

Easy Manage Assessor

The Easy Manage Assessor could be used to put the drivers of a working PC into the Knowledge Database. It will scan a PC to see what drivers are installed and those drivers could be put in the Knowledge Database.

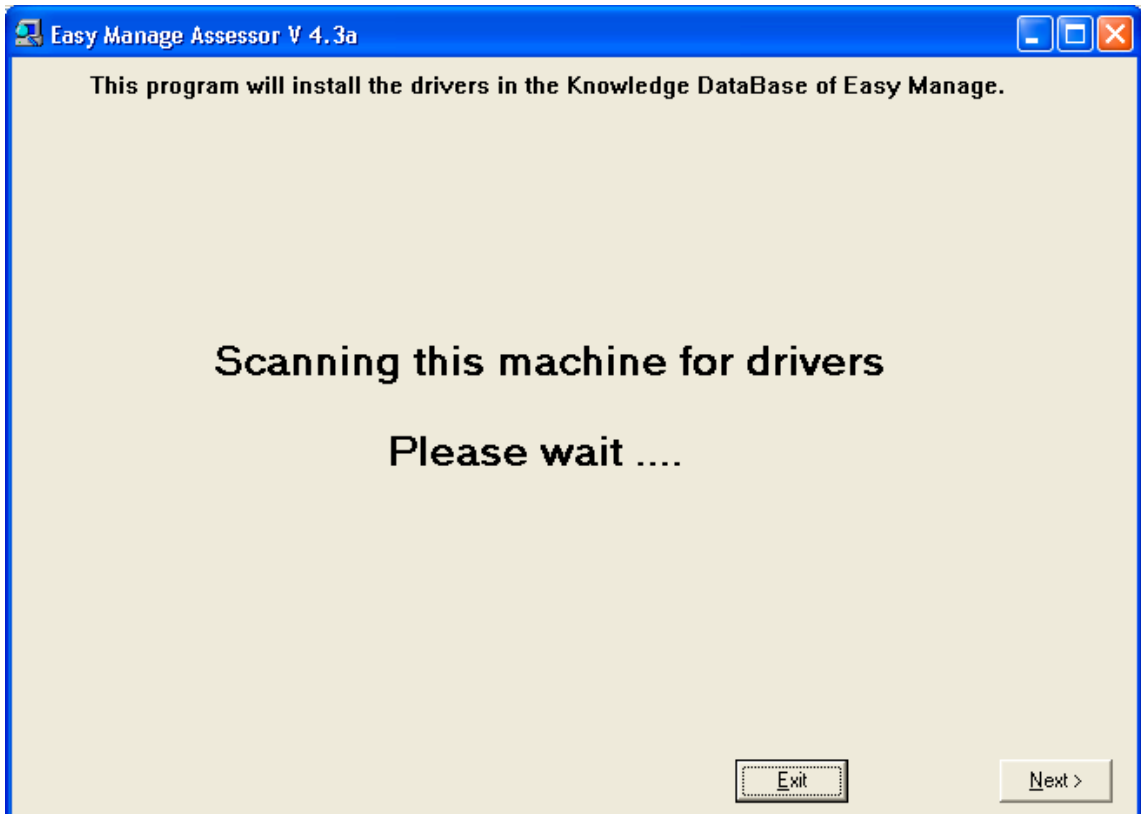
Before you start the Easy Manage Assessor you have to be sure that you have installed the latest drivers on the machine that you want to assess.

Login on the machine which you want to assess with a username which has the full access rights on the EZPROGSS\$ share. If you are using virtual drives, connect the <Program Disk> to the share EZMPROGSS\$.

Start the program EZMAssessor.exe from the <Admin Disk>\ezmdb directory.

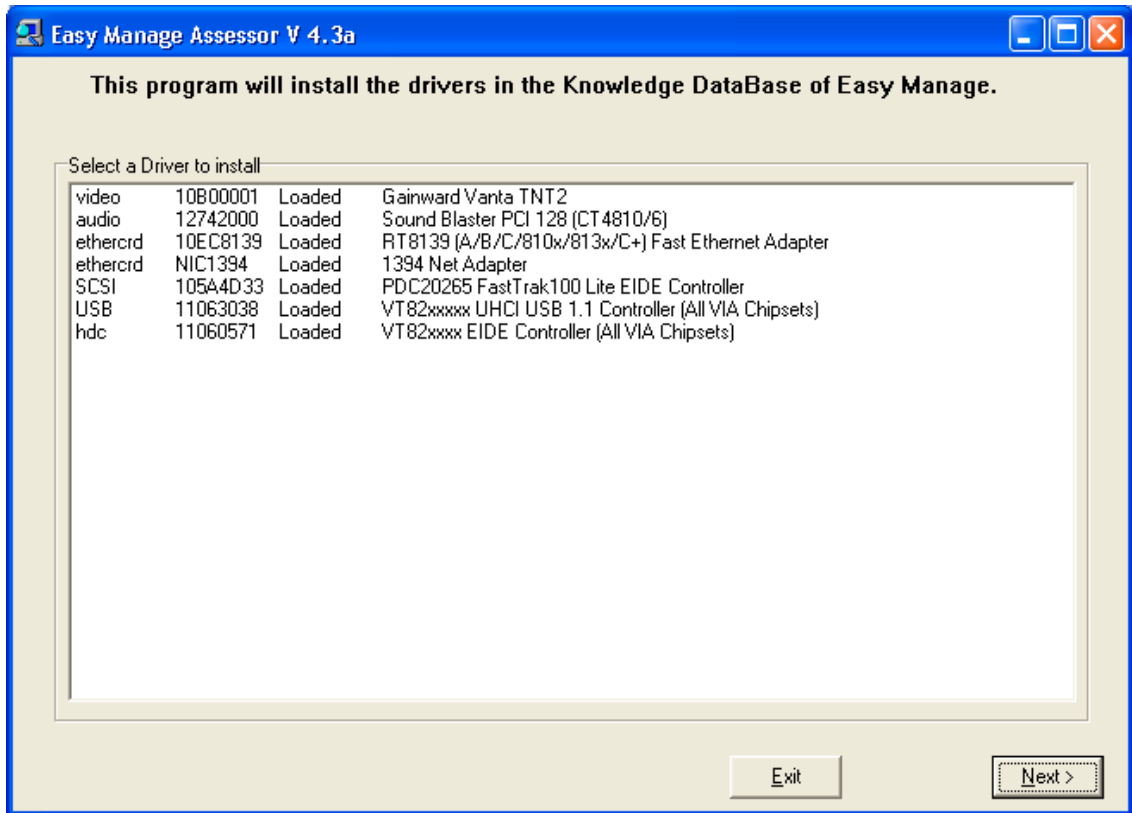
Scan the PC for drivers

It will first scan the PC for all drivers and after that, it will show the List Drivers function.



Driver List

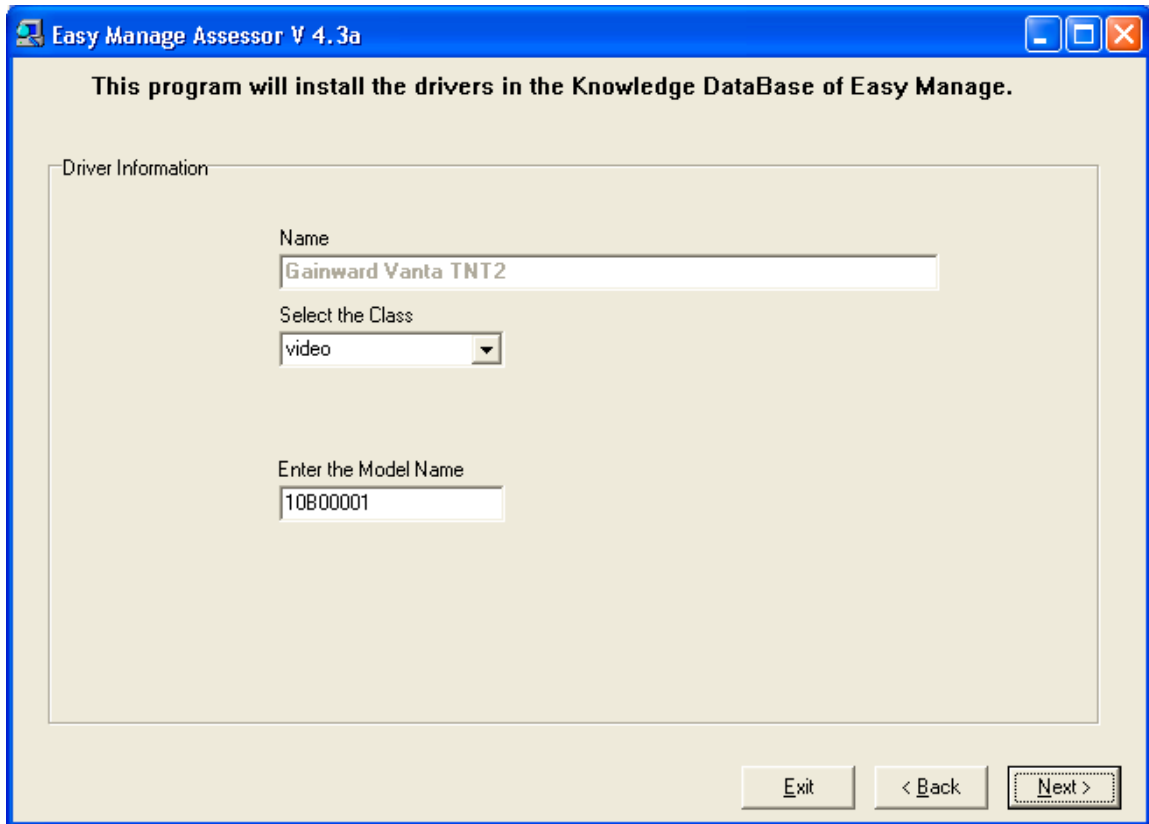
All found drivers will be displayed with its Class, Model, Status and description. You have to install the drivers one by one by selecting the driver.



Select the driver and click the Next Button.

Driver Information

You can modify the class and model name. E.g. When you want to put all drivers in the Machine model, you have to select the class and enter the model of the machine.

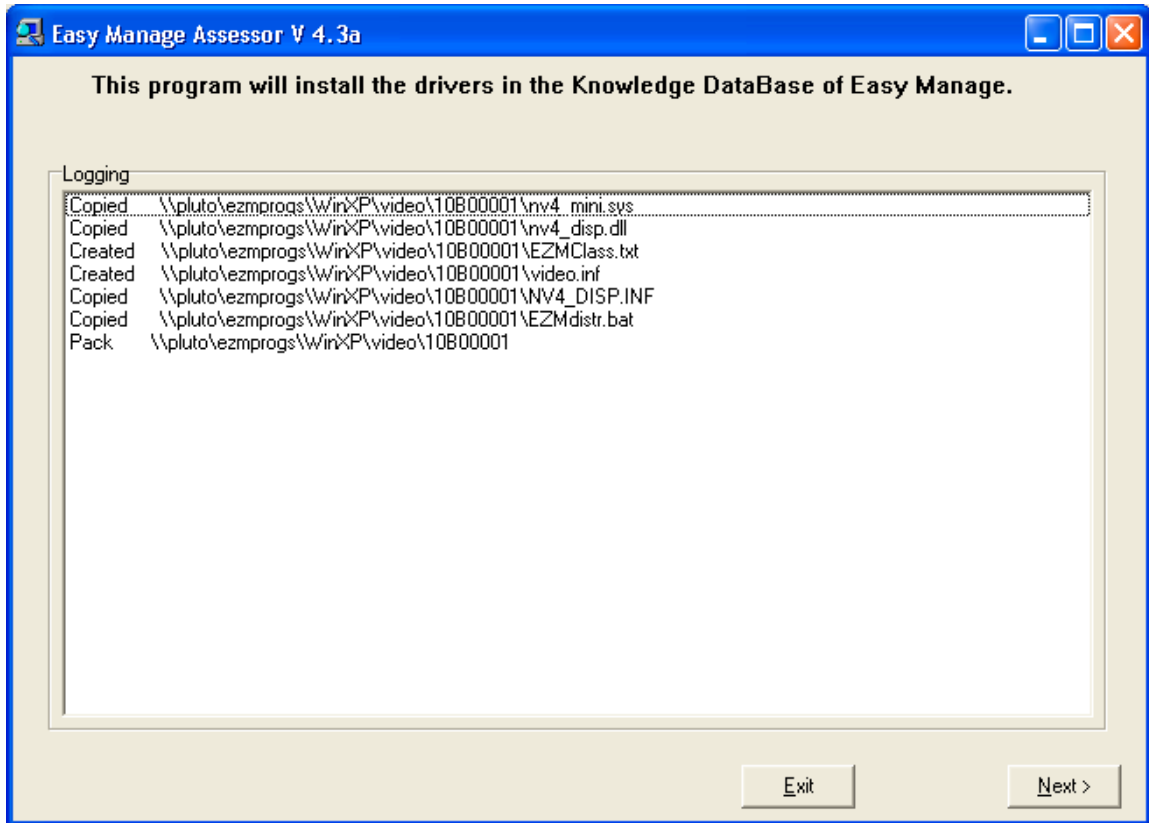


The screenshot shows a Windows-style dialog box titled "Easy Manage Assessor V 4.3a". The main text inside the dialog reads: "This program will install the drivers in the Knowledge DataBase of Easy Manage." Below this, there is a section titled "Driver Information" containing three input fields: a text box for "Name" with the value "Gainward Vanta TNT2", a dropdown menu for "Select the Class" with "video" selected, and a text box for "Enter the Model Name" with the value "10B00001". At the bottom right of the dialog, there are three buttons: "Exit", "< Back", and "Next >".

Click the Next button to load the drivers in the Knowledge Database.

List the actions

This screen will list the actions and ask you for the files that not could be found.



Click the Next button to select another Driver to load in the Knowledge Database.

Set up the Reference PC

The Reference PC is a PC that will be used to create Application Workspaces. After you have copied the distribution(s) to the server, you have to configure this PC in the Easy Manage Configuration Database with at least the initial software and the network card. Then reboot the system with the Boot Disk and install the initial software on this PC. For further action see the chapter **Application Workspace Wizard**.

Follow the following steps to setup a Reference PC:

Step 1. Create a Machine Type to define all hard and software components to use in the reference PC.

With the Easy Manage Admin Program you have to create an Operating System (Hardware -> Machine Types -> New).

- Enter **Machine** as description
- Select the Initial Applications
- Select the Adapters

Step 2. Create a Reference PC for a specific distribution

Create the workstation with the Easy Manage Admin Program (Configurations -> Workstations-> New).

- Enter **REFPC** as CI number and Machine Name.
- Select the Machine Type defined in **step 1**.
- Select the platform
- Tab Initial Software -> Add the Applications:
“<Windows xx>”
“TCP/IP”
- Place the Boot Disk in the floppy or CD-Rom drive, reboot and install the reference PC

Easy Manage Agents

Preparation Agent

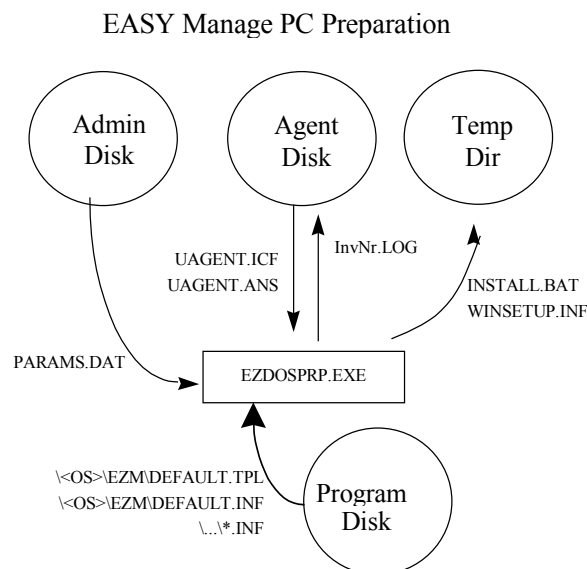
The Preparation Agent (EZDOSPRP.EXE) will prepare the installation of the Initial Workspace of a workstation. The preparation program runs on the workstation and will get the common information from the AdminDir, ProgramDir and the specific information from the AgentDisk.

After you have booted the workstation with the Boot Disk, the Common PC Install Procedure (PCINSTAL.BAT) will be started and ask you for the CI Number of the workstation. The procedure will look for the Initial Configuration File (UAGENT.ICF) and the System Answer File (UAGENT.ANS) on the InstallDir for the specified CI Number. When both files exist, the configuration is accepted and the preparation of the workstation as specified in the Easy Manage Configuration Database will be created by the Preparation Agent.

The Easy Manage Preparation Agent will do the following actions:

1. It creates the Log File Logging<CI-Number>. LOG in the ReportDir with all actions and errors.
2. It creates the Workstation Install Procedure (INSTALL.BAT) from the System Template (. TPL) with control of the Initial Configuration File (UAGENT.ICF) and the System Answer File (UAGENT.ANS) in the temporary directory.
3. It creates the Class Answer Files (*.ANS) in the temporary directory, which where defined in the Configuration Database for this configuration.
4. Depending on the defined Operating System for this workstation, it will create the Windows Setup Information File (WINSETUP.INF) in the temporary directory.
5. At least it will execute the Workstation Install Procedure created in step 2, which will install the Initial Workspace on the workstation.

For detailed information see the Easy Manage Reference guide Chapter **Easy Manage Templates**.



The Easy Manage Admin Program will create the following files on the AgentDisk (InstallDir):

<CI-Number>\UAGENT.ICF	Initial Configuration File
<CI-Number>\UAGENT.ANS	System Answer File

The Easy Manage Preparator will create the following files on the TempDir:

<TempDir>\INSTALL.BAT	Workstation Install Procedure
<TempDir>\WINSETUP.INF	Windows Setup Information Files
<TempDir>*.ANS	Class Answer File(s)

The Preparator will create the following files on the AgentDisk (LoggingDir):

Logging<CI-Number>. LOG	Workstation Log file
-------------------------	----------------------

Easy Manage Desktop Manager

The Easy Manage Desktop Manager will be started when Windows has started the network and the user had logged on to the server. The program uses the CI Number and User Name as key in the User Administration File and looks which applications have to be present on the workstation.

- If an Application Workspace is added to the workstation and it was not yet installed on the workstation, then it will be installed.
- An Application Workspace will only be installed, if the required space is available.
- If the version of an Application Workspace is changed on the server, then the Application Workspace will be updated. The Easy Manage Information File (. EIF) will be copied to the ParamDir of the workstation, when that application is installed or updated.
- If the Configuration manager removes an application from the configuration, then the application will be deleted from the workstation including the Easy Manage Information File.
- Files shared by another application will not be removed, because the Desktop Manager knows which files are needed by other applications.
- The Windows Session will be rebuild, if an application is installed, changed or removed or if an user is logged in, who is different from the last login.

The following Easy Manage Desktop Manager's will be used:

EZMAGENT.EXE	Stub for all Windows platforms.
EZW95AG.EXE	for all Windows platforms

Easy Manage Audit Agent

The Easy Manage Audit Agent reports all hardware and installed software on the workstation and checks all partitions on the workstation for executable files and reports this to the Audit Manager.

- The Auditor (EZW95AUD.EXE) will be started when Windows has started the network and the user had logged on to the server. The Windows Desktop Manager (EZW95AG.EXE) will launch this program.
- The Auditor will look on each partition for the space available on that partition and the program files (.COM and .EXE), which where installed on that partition. It will create the Audit File (<CI-Number>.ESI) in the LocalDir of the workstation. The Easy Manage Collector Agent will copy this Audit File to the server.

Easy Manage Collector Agent

The Easy Manage Collector Agent collects the files from the other agents and stores these files on the server.

- The Collector Agent will be started when Windows has started the network and the user had logged on to the server. The Collector is included in the Easy Manage Desktop Manager.
- The Collector Agent will collect the Report and Audit data of the workstation and stores it on the server in the Report Directory.
- An existing Log File will be concatenated with an existing one on the server.
- An Audit File will be copied to the server.

The Collector Agent will create the following files on the AgentDisk (ReportDir):

Logging\<CI-Number>. LOG	Workstation Log File
Sysinfo\<CI-Number>. ESI	Workstation Audit File

Application Workspace Wizard

In order to be able to automatically install and update applications, Easy Manage uses Application Information Files for installing and updating. The Easy Manage Configuration Database considers every additional program outside the Initial Workspace as an Application Workspace. This way any application, printer, font, policy or other program will be handled as an Application Workspace.

!!! A network stack is NOT an Application workspace.

The variable input (user name, available hardware etc.) required while installing the application, is not static stored in the Information file but dynamically refers to the user and machine settings in the Easy Manage Configuration Database.

The person, who installs the application, needs to be authorized as Administrator or Installer in the Easy Manage Admin program (Organization -> Users -> Select and open Installer user -> Tab Easy Manage -> Select Security) and should log on the Reference PC. An Installer could only manage Application Workspaces, which are allowed to the Installer.

The AdminDisk, ProgramDisk and AgentDisk should be connected to the Easy Manage shares, before you start the Application Workspace Wizard. Using the Easy Manage User Profiles could do this. See the Easy Manage Reference Guide or the Easy Manage Admin Program Guide.

Every workstation that has been installed with Easy Manage can be used for creating Application Workspace Information Files. The PC on which the application is created is the Reference PC.

Be aware if you are using the “Snapshot” method :

If the application should be rolled out without any dependency of other applications, then the reference PC should have no application installed before you start the Application Workspace wizard.

Only dependable applications are allowed to be installed in other cases.

It is not allowed to disable the Option “User switching enabled” for a reference PC.

Before you can distribute an Application Workspace to one or more workstations, you have to create one. Follow the following steps to create and distribute an application:

Step 1. Define a new Application Workspace with the Easy Manage Admin Program (Software -> Application Workspaces -> New). Select the user (Tab Users) to allow this application, in case the user has Installer rights.

Step 2. Start the Application Workspace Wizard (C:\EZM\EZW95INS.EXE) on the reference PC. Select the application to install and the desired method.

Note: Be sure that the Program and Admin disk are connected to the Easy Manage shares, before you start the program.

Step 3. Install the application. If you want to stop or you have finished the tuning of the application, **reactivate** the Application Workspace Wizard.

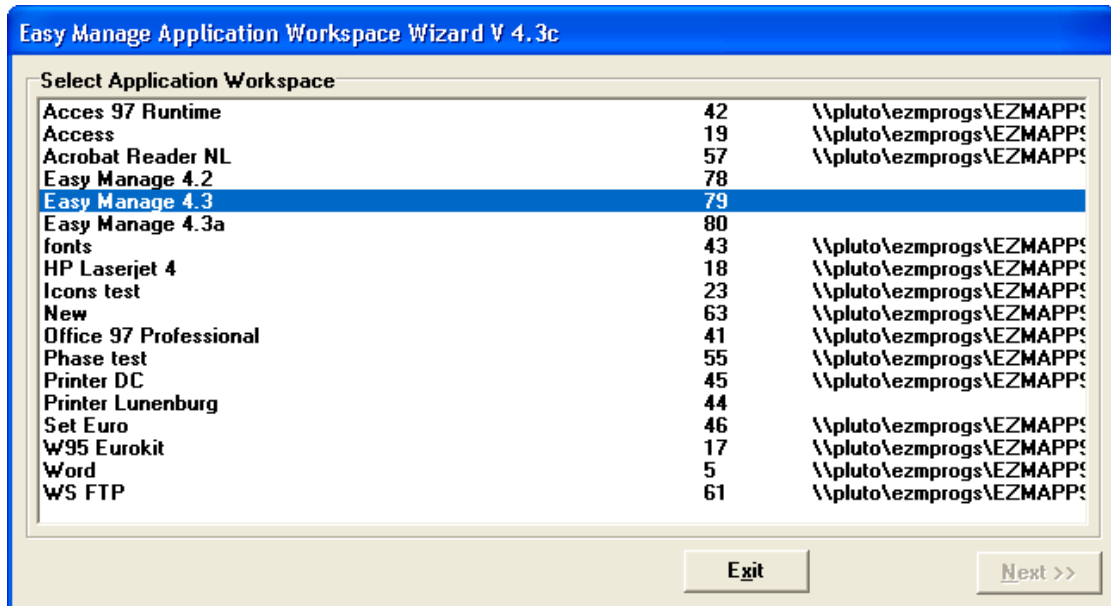
Step 4. Accept the application.

Step 5. Modify the template if you want to use variables with the Application Workspace Wizard program or with the Easy Manage Admin Program (Software -> Application Workspaces -> Modify -> Script)

Step 6. Add the Application Workspace to the Workstation(s) with the Easy Manage Admin Program.

Select Application

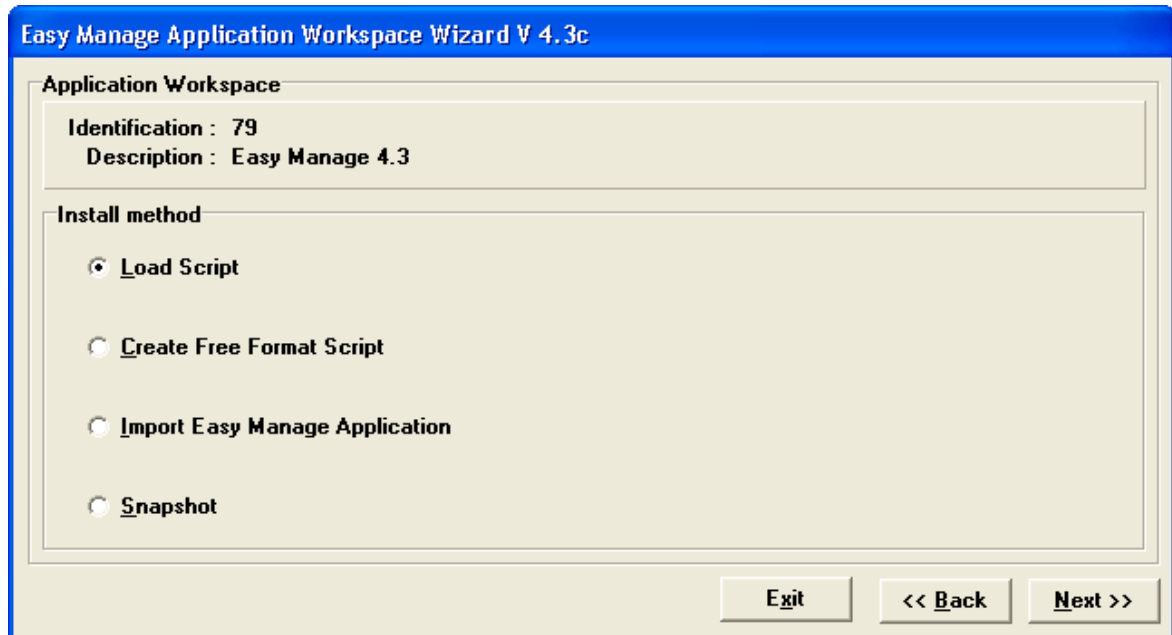
The Application Workspace Wizard starts with a list of all Application Workspaces that were defined in the Configuration Database and are allowed to manage depending on the Easy Manage rights (Administrator or Installer). An Application Workspace is installed, when the last column is filled with the path of the Easy Manage Information File.



Select the application you want to manage and click the **Next** button. Depending on the state of the application the **Install Method** or the **Maintain Application** function will be started.

Install Method

This function will be started, if the application not yet exists in the Knowledge Database (There is no EIF file). Select the install method and click the **Next** button.



<i>Install Method</i>	<i>Description</i>
<i>Load Script</i>	Select this option, when no user input is required. One of the following methods could be used <ul style="list-style-type: none"> • If the Install Shield created the distribution of an application, then a silent setup could be used (SETUP -S). • If the Windows Installer created the distribution of an application, then the Windows Installer could be used to setup the application (MSIEXEC). • When you have created a compiled AutoIt script.
<i>Free format Script</i>	Use this option, if none of the above options is suitable for your application. You can create your own script according to the Easy Manage Information File language (See Easy Manage reference Guide).
<i>Snapshot</i>	A snapshot of the system will be created before you install the application and a snapshot will be created after the installation. Then it creates an Easy Manage Information File with the differences between the two snapshots. It contains all differences in the registry, INI files and Icons. And all new files will be placed in the Application Workspace. This method is recommended, because you have full control over the complete application. But not all applications are suitable for this method. The function Post Snapshot Action will be started after the 1 st snapshot is taken.
<i>Import Easy Manage Application</i>	Import an Application Workspace created by a third party and you want to use it. (Not implemented yet)

Load Setup Script

With this function you will be asked for the information, which is needed for a Silent setup. If all necessary fields are filled, then the Next button will be enabled. Click the **Next** button, which will start the **Distribution** function.

<i>Field</i>	<i>Description</i>
<i>Install Command</i>	Enter the command or select the setup program with the browse button, which should be executed to install the application in the silent setup mode.
<i>Install Parameter(s)</i>	Enter the parameter(s) needed for the setup command.
<i>Wait for File</i>	Enter the file to wait for, when the setup is ended.
<i>UnInstall Command</i>	Enter the command or select with the browse button, which should be executed to uninstall the application in the silent setup mode.
<i>UnInstall Parameter(s)</i>	Enter the parameter(s) needed for the uninstall command.
<i>Use secure mode</i>	Enable this field, if you want to run the AutoIt script in the secure mode.

Distribution

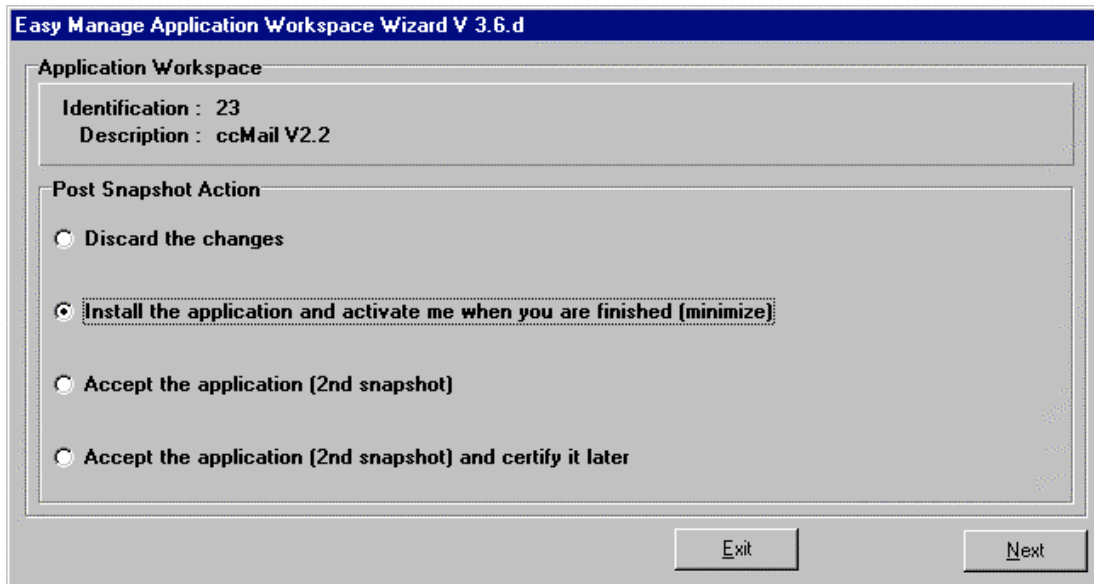
With this function, you can choose the way the application has to be distributed to the clients. If all necessary fields are filled, then the Next button will be enabled. Click the **Next** button, which will start the action.

Note: Not all fields are always available. This depends on the chosen script type.

Field	Description
<i>Copy the distribution to the workstation at installation time</i>	Enable this field, if you want to copy the distribution to the workstation.
<i>Local Destination Path</i>	The wizard will generate the destination path, but you are allowed to change it.
<i>Remove the distribution after installation</i>	Enable this field, if the distribution should be removed after the installation.
<i>Copy the distribution to the Knowledge Database</i>	Enable this field, if the distribution should be copied to the Knowledge Database.
<i>Source is just one file</i>	Enable this field, if the source is just one file, otherwise a directory tree as source will be assumed.
<i>Source Path/File</i>	Enter the source directory or file or use the Browse button to select.
<i>Estimated disk size</i>	Enter the estimated disk size in Megabytes of the installation.

Post Snapshot Action

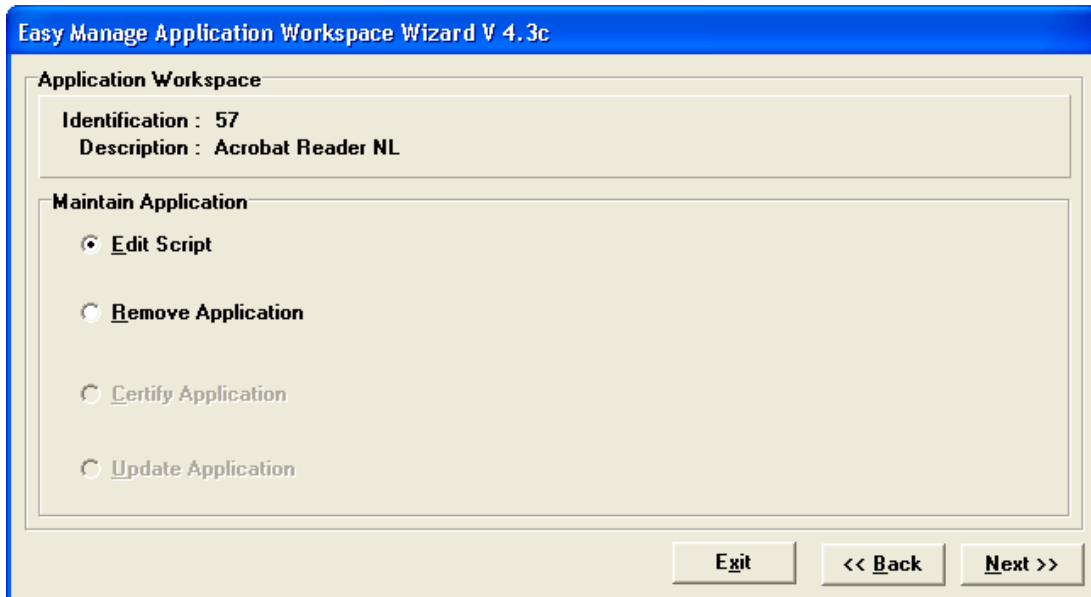
With this function, you can Install and tune the application according to the specifications to rollout. See actions for further information. Click the **Next** button after the selection.



<i>Selection</i>	<i>Description</i>
<i>Discard the changes</i>	Select this option, if you want to cancel the setup. This will remove all changes that you have made or that the application setup procedure has made.
<i>Install the application and activate me when you are finished (minimize)</i>	Select this option, if you want to install and tune the application. This will minimize the Wizard. Now you can tune the application according to your specifications. It is allowed to restart Windows or to shutdown the machine.
<i>Accept the application (2nd snapshot)</i>	Select this option, if you have finished the tuning and you want to distribute the application workspace to all other configurations. A 2 nd snapshot will be started and all the different files that belong to this application in every possible sub directory on the local system will be copied into a flat directory on the ProgramDisk. An Easy Manage Information File will be created, which defines exactly to which directory each file has to be copied, which modifications were made in the INI Files, the REGISTRY, the GRP Files and LNK Files. All this information together is an Application Workspace.
<i>Accept the application (2nd snapshot) and certify it later</i>	Select this option, if you want to stop tuning and start the tuning later, because you want to install another application first. If you want to distribute the application workspace to other configurations, you have to certify or to update this application first.

Maintain Application

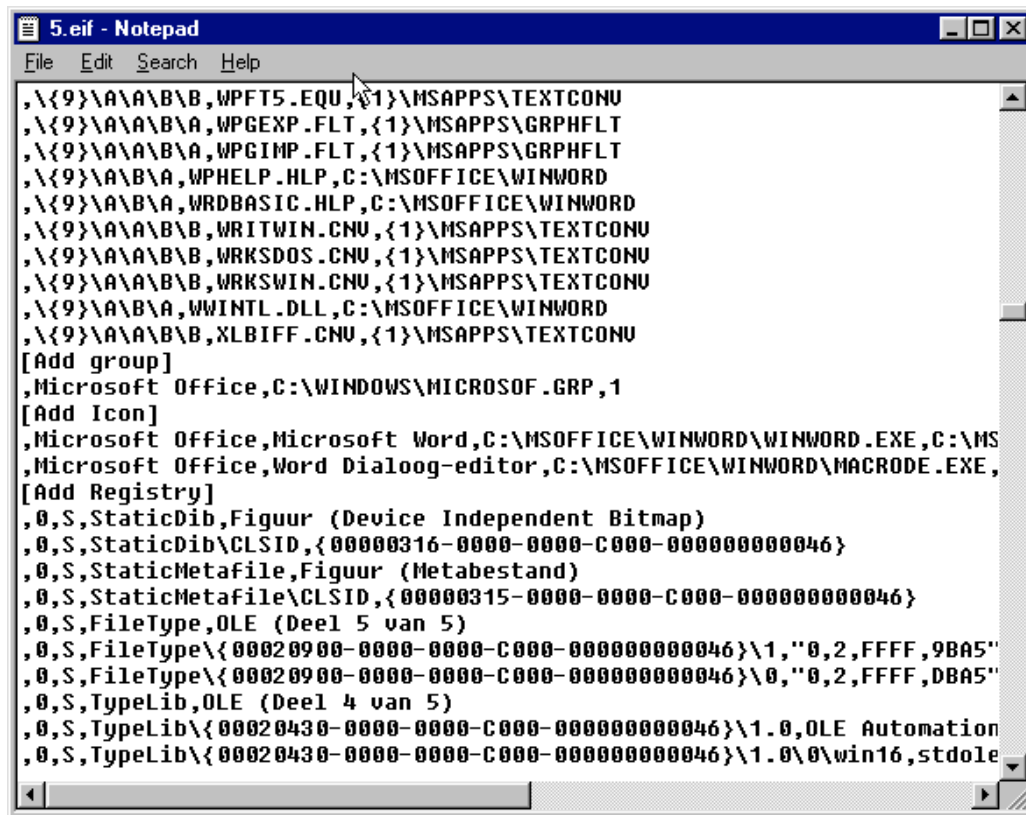
This screen will be shown, if the application was installed in the Knowledge Database. Select the action and click the **Next** button.



<i>Choice</i>	<i>Description</i>
<i>Edit Script</i>	Select this option, if you want to show or change the contents of the easy Manage Information file. The function Edit Script will be started.
<i>Remove Application</i>	Select this option if you want to remove the Application Workspace. The Application Workspace will be removed from the Knowledge Database according the specifications in the given Easy Manage Information File. The Application will not be removed from the clients.
<i>Certify Application</i>	Select this option, if the application was accepted (with the option to certify it later) and you want to certify it so it can be distributed to the clients. This field could only be selected for a an application created with the Snapshot method.
<i>Update application</i>	Select this option, if you want to change the application created with the snapshot method. The application will be installed on this reference PC and you can continue to finish the tuning. The function Post Snapshot Action will be started.

Edit Script

With this function you can modify the script of the application. You can insert the variables from the Configuration Database who will be substituted at install time. The standard (notepad) Windows editor will be used to make the modifications.



```

5.eif - Notepad
File Edit Search Help
,{9}\A\A\B\B,WPFT5.EQU,{1}\MSAPPS\TEXTCONU
,{9}\A\A\B\A,WPGEXP.FLT,{1}\MSAPPS\GRPHFLT
,{9}\A\A\B\A,WPGIMP.FLT,{1}\MSAPPS\GRPHFLT
,{9}\A\B\A,WPHelp.HLP,C:\MSOFFICE\WINWORD
,{9}\A\B\A,WRDBASIC.HLP,C:\MSOFFICE\WINWORD
,{9}\A\A\B\B,WRITWIN.CNU,{1}\MSAPPS\TEXTCONU
,{9}\A\A\B\B,WRKSDOS.CNU,{1}\MSAPPS\TEXTCONU
,{9}\A\A\B\B,WRKSWIN.CNU,{1}\MSAPPS\TEXTCONU
,{9}\A\B\A,WWINTL.DLL,C:\MSOFFICE\WINWORD
,{9}\A\A\B\B,XLBIFB.CNU,{1}\MSAPPS\TEXTCONU
[Add group]
,Microsoft Office,C:\WINDOWS\MICROSOFT.GRP,1
[Add Icon]
,Microsoft Office,Microsoft Word,C:\MSOFFICE\WINWORD\WINWORD.EXE,C:\MS
,Microsoft Office,Word Dialog-editor,C:\MSOFFICE\WINWORD\MACRODE.EXE,
[Add Registry]
,0,S,StaticDib,Figuur (Device Independent Bitmap)
,0,S,StaticDib\CLSID,{00000316-0000-0000-C000-000000000046}
,0,S,StaticMetafile,Figuur (Metabestand)
,0,S,StaticMetafile\CLSID,{00000315-0000-0000-C000-000000000046}
,0,S,FileType,OLE (Deel 5 van 5)
,0,S,FileType\{00020900-0000-0000-C000-000000000046}\1,"0,2,FFFF,9BA5"
,0,S,FileType\{00020900-0000-0000-C000-000000000046}\0,"0,2,FFFF,DBA5"
,0,S,TypeLib,OLE (Deel 4 van 5)
,0,S,TypeLib\{00020430-0000-0000-C000-000000000046}\1.0,OLE Automation
,0,S,TypeLib\{00020430-0000-0000-C000-000000000046}\1.0\0\win16,stdole

```

See the Easy Manage Reference guide for the specification of the EIF File.

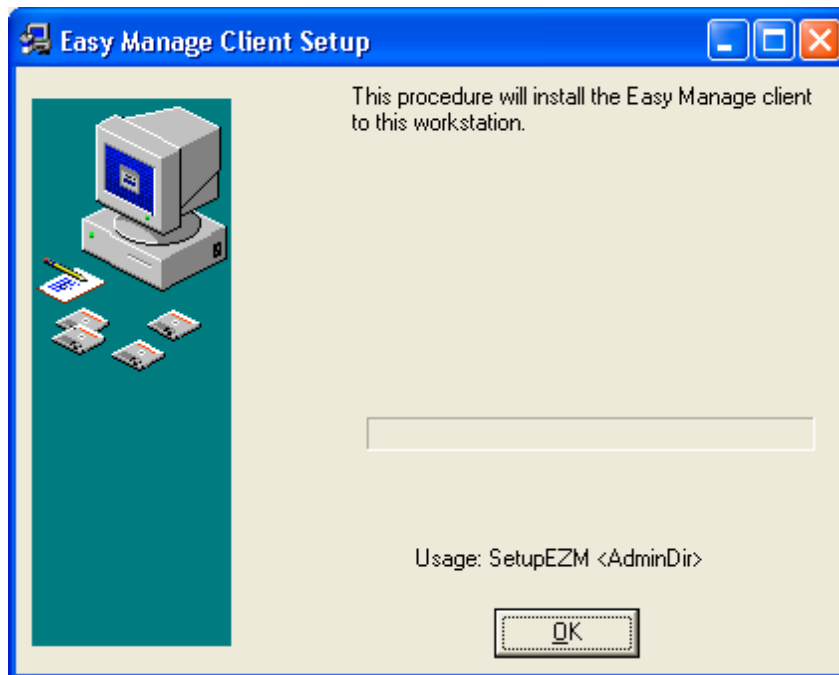
Using Easy Manage in an existing environment

The best way to use Easy Manage is to setup the clients from scratch. But it is also possible to use Easy Manage on running workstations without setting up from scratch.

Easy Manage provides a client setup procedure, which will install the client software on the workstation. You can run this program interactively or in batch mode.

Setup Interactively

After you have completely setup Easy Manage, you can run the program `<ProgramDir>\EZMBASE\Setup\SetupEZM.EXE` on the workstation, which should be managed by Easy Manage.



After you click the OK button, the program will ask you for the location of the `<AdminDir>` (E.g. `N:\ADMIN`).

Setup in Batch mode

If you are using a login script in your environment, you can invoke the program in this login script on the following manner: `<ProgramDir>\EZMBASE\Setup\SetupEZM.EXE <AdminDir> [<CI-Number>]` where `<AdminDir>` could be a physical path or a UNC path. If the `<CI-Number>` is not defined, then the name of the PC is used as CI number.

COMMON

It will run the FIRST profile (where the mappings are defined) and installs the client distribution to the workstation. It will start the Easy Manage Auditor, which will place the Audit file (.ESI) in the `<ReportDir>\SysInfo` directory. You can convert these audit files to comma separated text files by the Collect Data function in the Easy Manage Admin Program.

Control -> Collect Data

If you want to manage a workstation with Easy Manage, it has to be defined in the Easy Manage Configuration Database.

In this version you have to create the configurations by hand but in a future version this will be done automatically.

Easy Manage Slave Synchronizer

Easy Manage can work in a multiple site environment. If your organization has to manage more sites, then you need to setup a multiple site environment.

In a Multiple Site Environment you will have one master site and one or more slave sites. The master site is controlling all slave sites. All sites will share the Configuration Database and the Easy Manage Synchronizer will synchronize all shares from the Master Server and the Slave Server.

The client has to know which Knowledge Database should be used. This could be done with the following steps:

Step 1. Create the Site with a Site Code with the Easy Manage Admin Program.

Organization -> Sites -> New

It will create the directory <AdminDir>\Sites\<SiteName> where <SiteName> is the name of the site and it copies the files FIRST.UAP, LAST.UAP and PARAMS.DAT from the <AdminDir>.

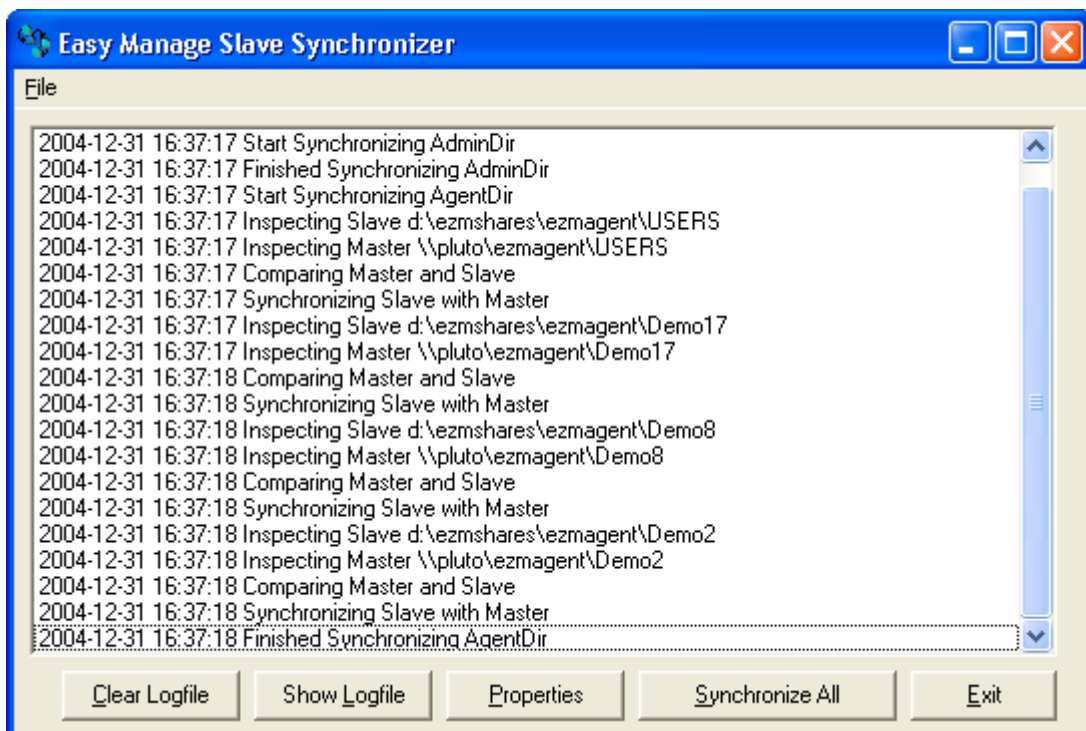
Step 2. Tune a Site environment

.Change the contents of the files according to the settings of the slave server which was created in step 1

Step 3. Install the Easy Manage Slave Synchronizer

With the Easy Manage setup program choose for the Server Type the option Slave.

The Easy Manage Slave synchronizer will be installed as service and start immediately after installing.



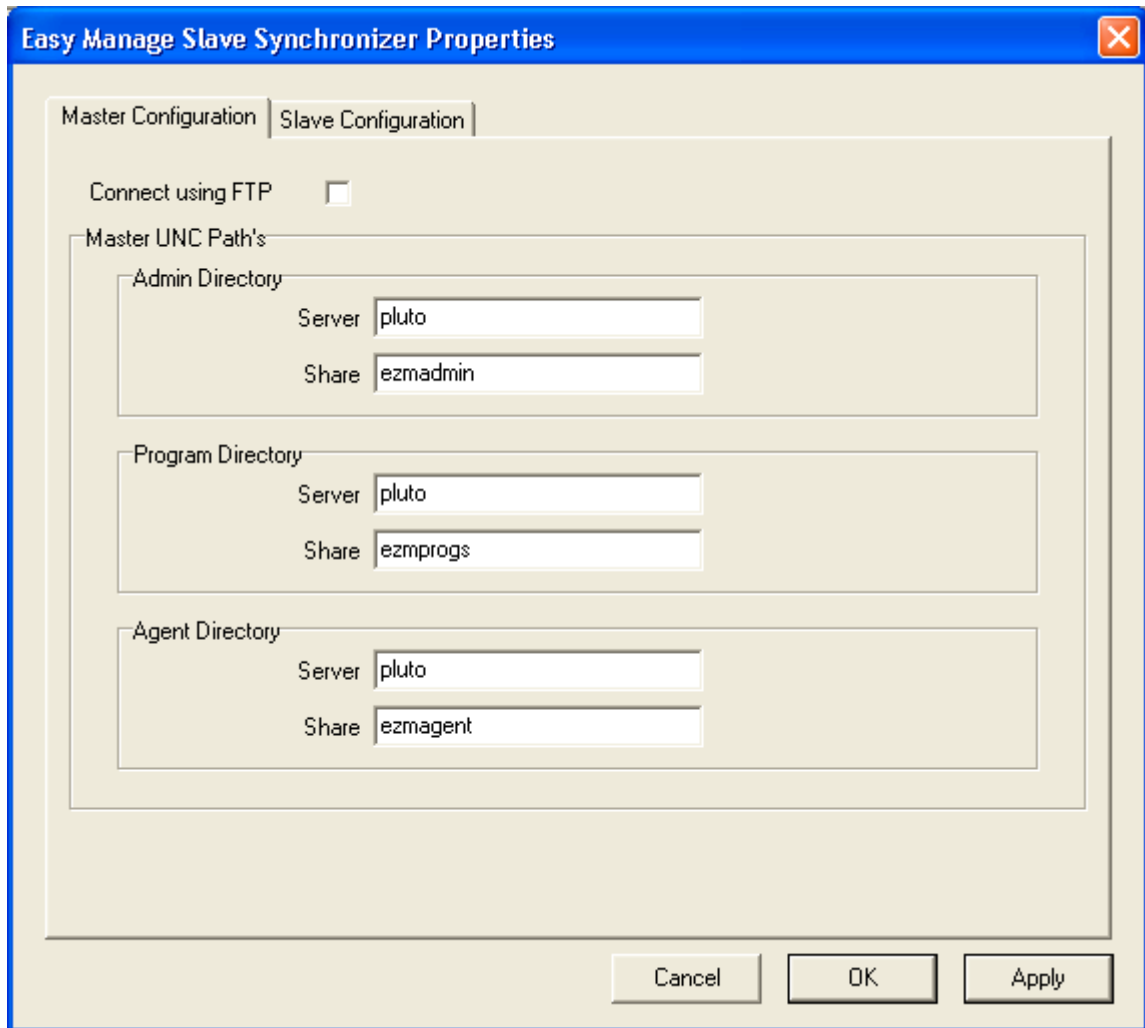
The property screen will be displayed, when the program is started for the first time.

Properties

With this screen you can set the properties of the Easy Manage Slave Synchronizer. You can connect to the Master with FTP or with UNC.

Connect via UNC

When you connect to the Master via UNC you have to be sure that the service has the full rights on the Master server.



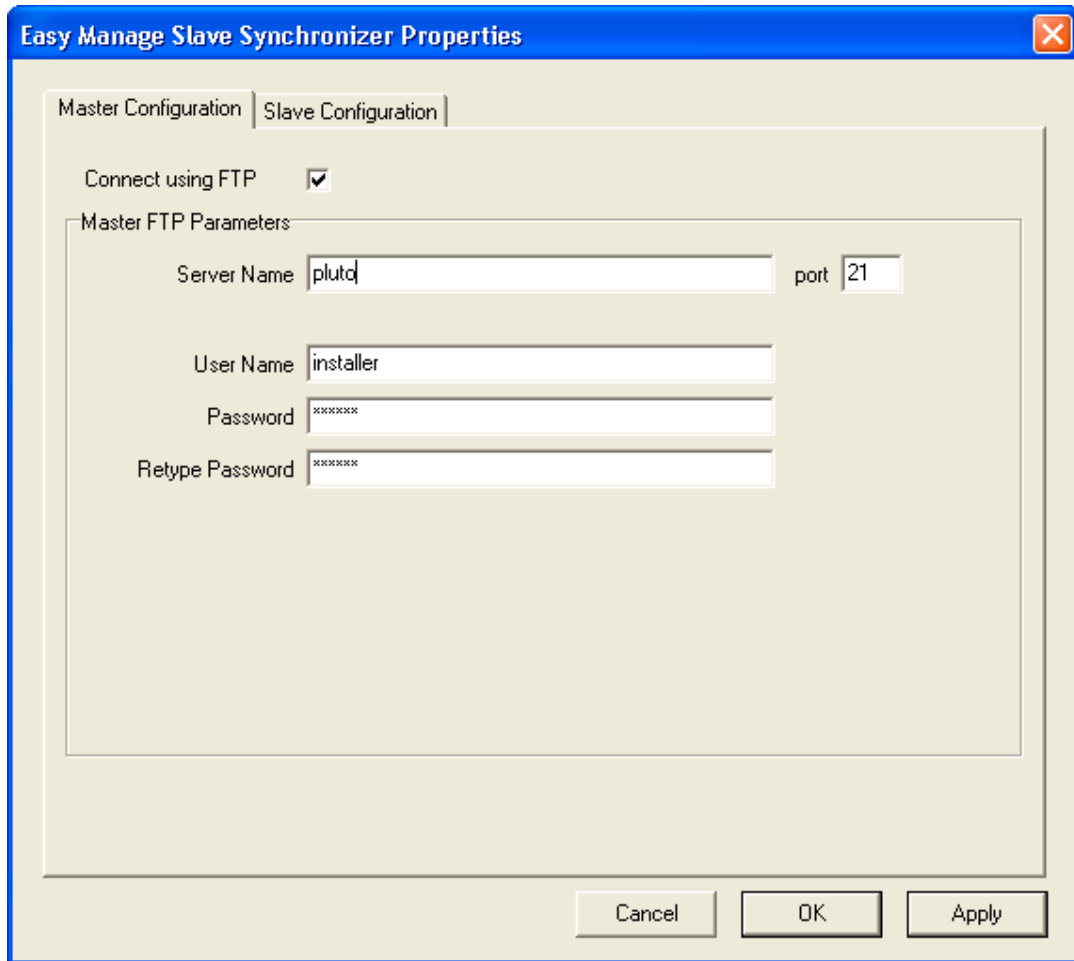
The screenshot shows the 'Easy Manage Slave Synchronizer Properties' dialog box with the 'Slave Configuration' tab selected. The 'Connect using FTP' checkbox is unchecked. Under 'Master UNC Path's', there are three sections: 'Admin Directory', 'Program Directory', and 'Agent Directory'. Each section has 'Server' and 'Share' text boxes. The 'Server' boxes for all three are filled with 'pluto'. The 'Share' boxes are filled with 'ezmadmin', 'ezmprogs', and 'ezmagent' respectively. At the bottom, there are 'Cancel', 'OK', and 'Apply' buttons.

Directory	Server	Share
Admin Directory	pluto	ezmadmin
Program Directory	pluto	ezmprogs
Agent Directory	pluto	ezmagent

Enter the Server and shares for the Admin, Program and Agent Directory and click the Apply or OK button.

Connect via FTP

When you want to connect to the Master server with FTP, the FTP server should be installed on the Master server.



The screenshot shows the 'Easy Manage Slave Synchronizer Properties' dialog box with the 'Master Configuration' tab selected. The 'Connect using FTP' checkbox is checked. The 'Master FTP Parameters' section contains the following fields:

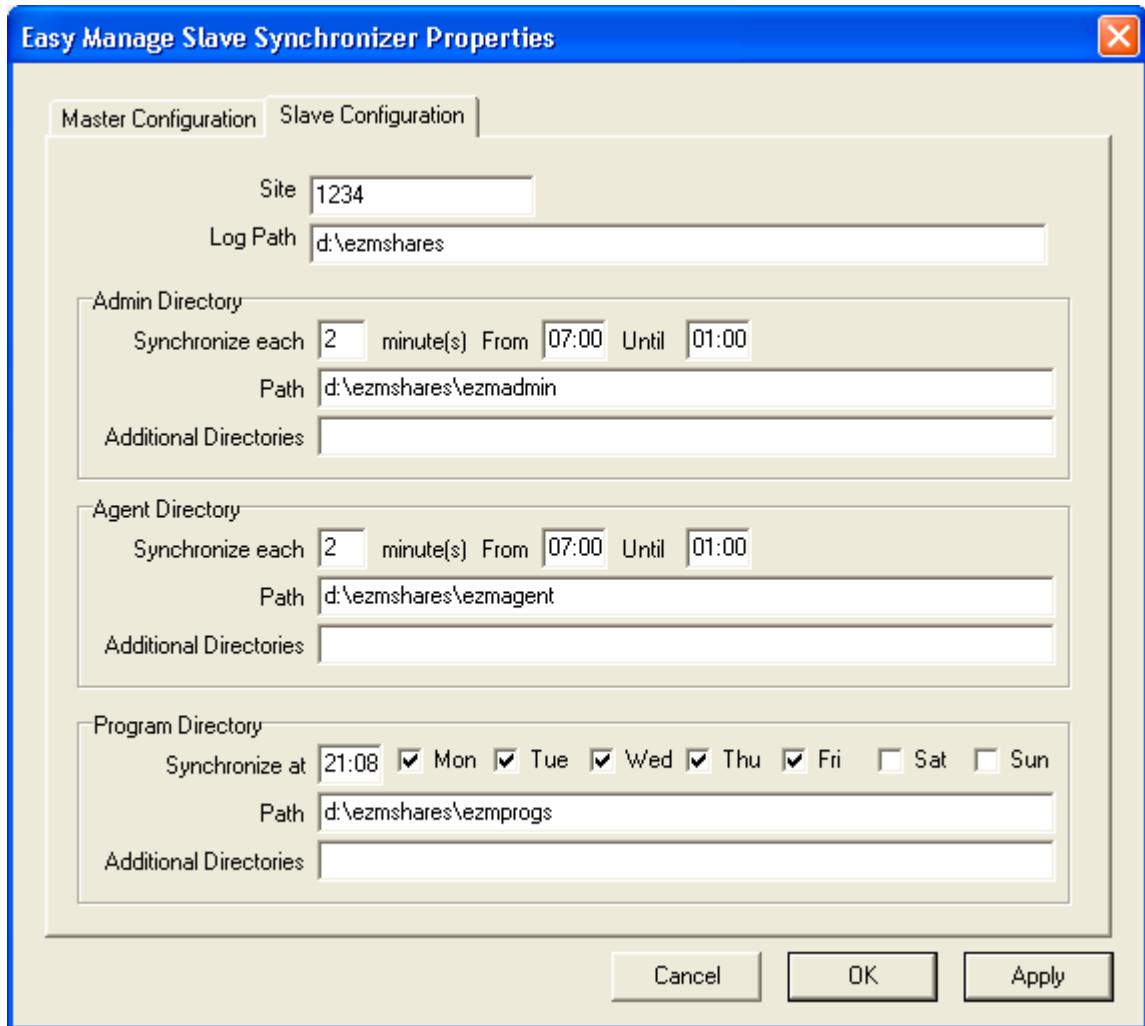
Field	Value
Server Name	pluto
port	21
User Name	installer
Password	*****
Retype Password	*****

At the bottom of the dialog box, there are three buttons: 'Cancel', 'OK', and 'Apply'.

Enter the Master FTP Server name, the FTP user and password on the Master server with the full authorisation for the shares.

Slave Configuration

With this form you can set the parameters for the behavior of the working of the Easy Manage Slave Synchronizer.



The screenshot shows the 'Easy Manage Slave Synchronizer Properties' dialog box with the 'Slave Configuration' tab selected. The dialog has a blue title bar with a close button. It contains three main sections: 'Admin Directory', 'Agent Directory', and 'Program Directory'. Each section has a 'Synchronize each' field, a 'From' and 'Until' time range, a 'Path' field, and an 'Additional Directories' field. The 'Program Directory' section also includes a 'Synchronize at' field and a set of checkboxes for days of the week.

Section	Synchronize each	From	Until	Path	Additional Directories	Synchronize at	Days
Admin Directory	2	07:00	01:00	d:\ezmshares\ezmadmin			
Agent Directory	2	07:00	01:00	d:\ezmshares\ezmagent			
Program Directory				d:\ezmshares\ezmprogs		21:08	Mon, Tue, Wed, Thu, Fri

Enter the Site Name for this site.

Enter the time parameters in 24 hours format.

You may add some additional directories separated with a semicolon to synchronize.

Reporting

Easy Manage does not have any reporting in it, because each user wants to have its own specific reports. Easy Manage has been developed with an MS Access 2000 database environment. So you can create your own reports with a few simple steps:

1. Create a blank database program with your MS Access 2000 environment.
2. In the newly created Blank database, create a link to all tables of the Easy Manage Data database (EZMAppData.MDB).
3. Create your own queries.
4. Create your reports.