

# MANTRA

The Plant Management System

Version 4.04

## Installation Guide

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[www.bmstech.com/mantra/](http://www.bmstech.com/mantra/)

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# 1 WHAT YOU NEED

## 1.1 System Software

Mantra runs on any 32-bit version of Windows. If you use 64-bit Windows (or other operating systems such as Linux or OS X) please read section 2.

Mantra includes a database management system; there is no need for additional database software.

## 1.2 Printer

Most standard printers are suitable but avoid Windows-only printers.

If you will be printing lots of jobs use a printer with low cost consumables.

## 1.3 Network

Mantra runs on a single computer or on a network. A peer-to-peer or server-based network may be used. Your network must support the Microsoft file system and file/record locking.

## 1.4 Your Agreement

Installing Mantra means that you have read and agreed to keep the terms and conditions:

[www.bmstech.com/mantra/terms.htm](http://www.bmstech.com/mantra/terms.htm)

## 2

## WINDOWS 64-BIT

Mantra is intended for 32-bit Windows. If you are using a 64-bit version we recommend that you run Mantra in a Virtual Machine (VM).

Linux, OS X and some other operating systems can also run Mantra using a VM.

Free VM software is available from Oracle and from VMware or Microsoft; it allows another operating system (the guest) to run on your 64-bit Windows operating system (the host).

We recommend either Windows XP (32-bit) or Windows 7 (32-bit) as the guest.

A VM (guest) can also be created easily from an existing computer using software available from Acronis or Paragon Software. This means that you can transfer all the software on your old computer and run it on your new computer - so all your existing applications continue to run, and all your settings and preferences are preserved.

The VM software from Oracle is called VirtualBox and may be downloaded free from

[www.virtualbox.org/wiki/Downloads](http://www.virtualbox.org/wiki/Downloads)

## 3 HOW TO GET MANTRA

### 3.1 Download

Download the Setup program from  
[www.bmstech.com/mantra/download.htm](http://www.bmstech.com/mantra/download.htm)

Do not run Setup yet.

### 3.2 Register

Register your copy of Mantra at  
[www.bmstech.com/mantra/register.htm](http://www.bmstech.com/mantra/register.htm)

You will receive by e-mail a key file (named Mantra.key) which lets Mantra run – it is not a program so do NOT try to open or run it!

### 3.3 Upgrading

If you are installing an upgrade please go to  
[www.bmstech.com/mantra/404/upgrade.htm](http://www.bmstech.com/mantra/404/upgrade.htm)

### 3.4 Problem?

**E-mail address** If you registered an incorrect e-mail address it is impossible for us to contact you. Register again.

**No e-mail** Check that your email and anti-virus software does not block attachments and check that bmstech.com is logged as a trusted domain.

**Attached file** If you cannot extract the key file from the e-mail contact your IT support people.

**Your details** If you have registered with incomplete or silly details you will not hear from us.

## **4 SINGLE-PC INSTALLATION**

### **4.1 Run Setup**

To install or upgrade Mantra run the Setup program that you downloaded.

Setup shows the Destination Directory – you should accept C:\Mantra.

If this is not an upgrade Setup shows the Data Directory you will use – accept C:\Mantra.

See section 5.9 if you want to change directories.

### **4.2 Copy the registration file**

Copy the file Mantra.key to C:\Mantra (this file must be in the same place as Mantra.exe).

### **4.3 Shortcut**

A shortcut should appear on your desktop. Some Windows versions fail to do this – right-click Mantra.exe, select Send to, Desktop.

### **4.4 User names & security**

See section 9. Use the Manager program from [www.bmstech.com/mantra/products.htm](http://www.bmstech.com/mantra/products.htm)

### **4.5 Backup**

Check that a backup regime is in place.

## 5 NETWORK INSTALLATION

### 5.1 Preparation

Network installation uses the Setup program. Before you run Setup think about how you want to use Mantra on your network.

Check that Mantra is given read, write and create file access.

Check that a backup regime is in place.

All users must use the same version of Mantra.

If you are using a Virtual Private Network (VPN) or remote server, make sure it is operational.

Read section 5.9.

Mantra program files and data files may be all together in one network location or you may distribute them. Data files include global data and local data.

### 5.2 Mantra program files

These files include

- the program Mantra.exe
- the registration file Mantra.key
- a file called Mantra.ini created by Setup.

Normally you have only one set of program files which are in the Destination Directory specified in Setup. A full list of program files is in the Mantra Manual.



## **5.3 Global data files**

Normally you have only one set of global data files which are in the Data Directory specified in Setup. The Data Directory may be the same as the Destination Directory (section 5.2).

Setup records the location of these files in Mantra.ini so you can change the location later by editing Mantra.ini and moving the files. A full list of global data files is in the Mantra Manual.

## **5.4 Local data files**

You may have one or many sets of local data files. Setup installs some example data in a sub-directory of the Data Directory. Additional files are created from within Mantra. A full list of files is in the Mantra Manual.

## **5.5 Run Setup**

Run Setup on the server or on a workstation; we suggest that you run it on the workstation you will most often use to run Mantra.

Setup shows you the Destination Directory – enter a file path using a computer name or drive letter: see section 5.9.

Setup shows you the Data Directory (unless you are upgrading an existing installation) – enter a file path using a computer name or drive letter.

## **5.6 Copy Mantra.key**

Copy Mantra.key to the Destination Directory.

## 5.7 Shortcuts

A shortcut should appear on the desktop. Some Windows versions may fail to do this – right-click Mantra.exe, select Send to, Desktop.

Create a desktop shortcut to Mantra.exe on each computer that will be used to run Mantra.

## 5.8 User names & security

Set up security using the Manager program from [www.bmstech.com/mantra/products.htm](http://www.bmstech.com/mantra/products.htm)

User names can be obtained from your network. See section 8.6.

## 5.9 Path Names

Use short names (8 characters or fewer) and avoid spaces and characters such as < > : \* | ?.

In some circumstances it is possible to refer to names longer than 8 characters by using a shortened name. We do not recommend this unless you are sure what you are doing because Windows 9x series and NT series operating systems shorten names in different ways.

Some examples:

<b>C:\Mantra</b>
------------------

This is the usual Destination Directory name for single-user computers.

**\\Server01\Mantra**

This is a Destination Directory name where Mantra is installed in a place called Mantra on a network server named Server01. This is the preferred way of specifying a network path.

**M:\**

Mantra is installed on a network server - a network drive M: has been mapped *on every computer that will run Mantra*.

**C:\Program Files\Mantra**

**Not recommended:** "Program Files" is longer than 8 characters and includes a space.

**\\IBM23\Engineer\MantraProgram**

**Not recommended:** "MantraProgram" is longer than 8 characters - it works on Windows XP but not on Windows 98.

## 5.10

## Slow Networks

Normally, install just one copy of the Mantra program to make upgrading easy. This means that the Mantra program loads via the network. Mantra gets data from the server only when needed. So generally loading the Mantra

program takes longer than working on your data.

Mantra contains a fast multi-user database management system. Your network speed and loading are outside the control of Mantra so speak to your network administrator if there are speed problems.

If your network is very slow (for instance via a dial-up link) and loading the Mantra program takes a long time, you can try installing the Mantra program on each computer

- run Setup on each computer
- copy Mantra.key to each computer
- edit Mantra.ini to point to the network location of your global data, for example:

**GlobalDataPath=\\Server2\workshop**

## 6 PRINTERS

### 6.1 Windows NT/2000/XP/Vista/7/8/10

Use your usual local or network printer. If it does not work:

EITHER

Run Mantra from a batch file which defines the printer you want to use.

Setup installed a file MantraPR.bat in the same directory as the Mantra program. Edit this file, replacing <server> and <printer> with your names as described below. Change your Mantra icon properties to point to MantraPR.bat instead of Mantra.exe.

OR

Use the same printer that your operating system uses for the Command Prompt. To set it up you have to be logged in as an administrator.

The printer is specified in a file C:\Autoexec.bat. Find C:\ using Windows Explorer. Check that 'Show hidden files and folders' is selected and 'Hide protected operating system files' is not selected. Select Tools, Folder Options, View.

If Autoexec does not exist, right-click a blank area in Windows Explorer, select New, Text Document, name it Autoexec.bat.

Right-click Autoexec and select Edit. If it has no line like the following, add it:

```
net use Lpt1 \\Server\Printer /persistent:yes
```

**Server**

Server is the name of the computer to which the

printer is attached. To find the computer name go to the Windows Control Panel, select System and look at the full computer name.

**Printer** Printer is the printer Share Name. To find the printer name click Printers and Faxes, right-click the printer and select Sharing. Make sure that 'Share this printer' is selected.

**Lpt1** Lpt1 is the printer device name. Mantra also supports Lpt2 and Lpt3.

Restart the computer before printing.

## 6.2 Windows 95/98/Me

Use your usual local or network printer. If it does not work:

**EITHER** Ensure the printer is set to print from MS-DOS programs. You may need to uncheck 'Spool MS-DOS print jobs' and for a network printer click Capture Printer Port.

**OR** Run Mantra from a batch file which defines the printer you want to use – see section 6.1.

**OR** Specify a printer in a similar way to NT/2000/XP/Vista above - edit Autoexec.bat:

```
net use Lpt1 \\Server\Printer /yes
```

**Server** Server is the computer name found in Control Panel, Network, Identification.

**Printer** Printer is the printer Share Name. To get the printer name click Printers, right-click the printer and select Sharing.

## Lpt1

Lpt1 is the printer device name. Mantra also supports Lpt2 and Lpt3.

Restart the computer before printing.

## 6.3 Examples

```
net use Lpt1 \\PC8\HP4550 /persistent:yes
```

This example is for a Windows XP computer named PC8. The printer named HP4550 has its software installed on PC8, is shared, and is connected via the network.

```
net use lpt1 \\PC8\HP 4550 /PERSISTENT:YES
```

**This will not work.** The printer name includes spaces – put the name in quotation marks:

```
net use lpt1 "\\PC8\HP 4550" /PERSISTENT:YES
```

You can also use lpt2 or lpt3:

```
net use lpt2 "\\PC8\HP 4550" /PERSISTENT:YES
```

The following example is from a Windows 98 computer with an Epson printer installed:

```
net use LPT2 \\192.168.2.17\Epson /yes
```

The number 192.168.2.17 is the IP address of the network card installed in the computer. To find the IP address of your computer type IPCONFIG from the command prompt.

## 6.4 Problem?

Printing is an operating system/network function. To test from XP (other Windows versions are similar) go to the Command Prompt and type:

```
print /D:Lpt1 Filename
```

### Filename

Filename is the name of a printable file such as C:\Autoexec.bat

If the file is not printed, check the basics such as printer power on, paper, ink, cables, network.

Some suggestions if you still have difficulty:

some firewalls block network printers;

information on printing may be found in the Microsoft Knowledge Base on the Internet;

use Mantra's "print to disk" facility – see the Mantra Manual

try a downloadable utility program

- [www.dosprn.com](http://www.dosprn.com) easy to use shareware
- DOSprint from [www.andtechnologies.com](http://www.andtechnologies.com) freeware for some operating systems
- PrintFile from [www.lerup.com](http://www.lerup.com) freeware for the technically minded.



## 7 SCREEN

### 7.1 Screen Size & Font

Right-click the Mantra icon on your desktop and select Properties, click on the Screen tab, choose either Full-screen or Window and tick Restore settings at startup.

Click the Font tab to select a font and size to suit your eyes and screen (eg Lucida Console 24).

When running Mantra press Alt+Enter to switch between a window and full screen.

### 7.2 Non-Latin Languages

Go to your computer's Control Panel, Regional and Language Options, Advanced and check that your Language for non-Unicode programs is set to English.

The appearance of Mantra may be incorrect if the language is set to (for instance) Chinese, Japanese, Thai or Vietnamese. One solution is to run Mantra from a batch file which includes this instruction:

```
MODE CON CODEPAGE SELECT=850
```

Setup installed a file Mantra.bat in the same directory as the Mantra program. Change your Mantra icon properties to point to Mantra.bat instead of Mantra.exe.

## 8 SECURITY

### 8.1 Manager

Use the Manager program to set up security. You can get Manager from

[www.bmstech.com/mantra/products.htm](http://www.bmstech.com/mantra/products.htm)

To restrict access to Manager we suggest that you keep it on a removable disk.

### 8.2 Users & Passwords

Use the Manager program to set up a list of users and passwords. This means that

- each user may be allowed or denied access to Mantra features eg a user may be prevented from confirming or deleting jobs, or denied access to the stock control system
- each user may optionally be restricted to one set of local data (called a File Group)
- the user's name is recorded for some operations such as completing a job
- access to Mantra may optionally require the user to enter a password
- Mantra can get a user's identity from your network.

Passwords must have at least 4 characters.

### 8.3 User Log-In

Use the Manager program to set User Log-In on

or off. Manager is available from  
[www.bmstech.com/mantra/products.htm](http://www.bmstech.com/mantra/products.htm)

## **8.4 Password Protection**

Use the Manager program to set Password Protection on or off. Manager is available from  
[www.bmstech.com/mantra/products.htm](http://www.bmstech.com/mantra/products.htm)

If User Log-In is off and Password Protection is on Mantra expects to read the user name from your network.

## **8.5 Time-Out**

Mantra times out after a period of inactivity. You can set the time (1 to 999 minutes) to suit your circumstances using the Manager program from  
[www.bmstech.com/mantra/products.htm](http://www.bmstech.com/mantra/products.htm)

## **8.6 User Variable Name**

If your network has log-in procedures Mantra may get the user's name from your network.

The user name is usually stored in a variable (an "environment variable") called USERNAME but your network may have a different name. Set up the variable name using Manager from  
[www.bmstech.com/mantra/products.htm](http://www.bmstech.com/mantra/products.htm)

Ensure that the user names for your network match entries in the user list (see section 8.2).

If User Log-In is turned on and the user is not listed, the user has to log in manually.