micros

# *Restaurant Enterprise Series*
# *Version 3.2*
# *Setup Instructions*

## General Information

### About This Document

This document provides installation and setup instructions for the MICROS Restaurant Enterprise Series (RES) Version 3.2 software. The process ensures the proper transfer and configuration of the files, programs, and databases required for the smooth operation of the applications.

The procedures described in this document are applicable to both new and upgraded systems.

To help you navigate the document, information is organized in sections and displayed in the following sequence:

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## Who Should be Reading this Document

This document is intended for the following audiences:

- MICROS Installers/Programmers
- MICROS Dealers
- MICROS Customer Service
- MICROS Training Personnel
- MIS Personnel

## What the Reader Should Already Know

This document assumes that you have the following knowledge or expertise:

- Operational understanding of PCs
- Understanding of POS terminology and concepts
- Working knowledge of the Microsoft Windows interface

# RES Setup Procedures

## Before You Begin: Tips, Traps, and Precautions

Before running the RES Setup procedure, the following should be noted:

- The individual installing the software must be logged on as "Administrator" before running RES Setup on a Microsoft® Windows NT® or Windows 2000 system.
- Make sure that all programs/applications are closed on the PC. If the system detects an active program/process during the installation routine, a notification to close may display.
- When upgrading on a RES system where the MICROS Portal is installed, be sure to manually shut down the Micros Agent and Micros Watchdog services. Failure to shut down these Portal-related services can result in a system lockup during database conversion.
- MICROS recommends using NTFS partitions for both the Operating System and the MICROS drive. This is because the NTFS file system provides greater security than FAT partitions.
- The KDS Display Application will not run on RES Server running Windows 2000 Server Edition. (It will run on Windows 2000 Pro.)
- Before installing Win 2000 on the server, make sure that OPOS devices and related software are Win 2000-compliant. Failure to do so may prevent KDS Controller from loading after setup.
- This version of the software supports PCWS Model Ultra or higher as a client only. A minimum of 32 MB of RAM is required.
- If a PCWS is to be used as the RES server, MICROS recommends the PCWS Model Eclipse with a Pentium processor.
- For your convenience, the files to install Adobe Acrobat Reader 5.0 and the ELO touchscreen drivers are included on Disk 2 in the Support folder.

- The RES setup process will automatically generate a setup log ONLY when running Netsetup or when installed from the CDs. This log is called **MicrosResSetup.log** and will be placed in the **Winnt** folder.

  When installing from the network, a setup log may be manually generated as follows:

  1. Open a DOS window.
  2. Navigate to the directory where the **Setup.exe** is located.
  3. At the prompt, run setup using the following command

  **Setup.exe/verbose"C:\32setup.log"**

- MDAC 2.6 sp1 will only install on a 95 client where the Y2K update has already been applied. Should netsetup fail while installing MDAC, quit the setup program and run the **w95y2k.exe** file, located in the Support folder on Disk 2. When the program finishes, reboot the system and start netsetup again.

- MICROS does not support remote installations to a client running a later version than the one installed on the server. To downgrade the client to an earlier version of RES, you must first manually delete MICROS from the clients and then reinstall the required version.

- When installing on two or more clients, be sure to wait at least 3 seconds between the start of each client setup. Failure to do so can cause one or more of the clients to hang.

- Rerunning the RES 3.2 GR CD for purposes of installing, modifying, or repairing any of the applications will reset all of the applications to their General Release versions. If you have already installed service packs to RES 3.2, you will need to rerun all service packs again. Failure to do may prevent you from opening previously installed programs.

## Database Conversion

- **MICROS no longer supports database Version 2.5 or below. The conversion process will only work with database Version 2.6 or higher**.

- When upgrading from Res 2.6 to Res 3.2, the **DeliveryDispatch.cfg** file is saved, but the new file is significantly larger and cannot be used as is. When Delivery Dispatch is started for the first time after conversion, a new config file will be generated. Settings can then be changed to suit the user.

- An existing Version 2.6/3.0 database with multiple languages created through the **Translate.exe** application may not convert properly. The first language in the database, which is the English US language, will convert correctly.

- An incomplete or incorrect translation of the other languages might occur *when creating a Version 2.6 database from the demo database*. The Version 2.6 database had a problem with the second language. Therefore, if any other languages were derived from the second language files, it could result in an improper translation.

  When the database is converted from Version 2.6 to 3.0, the system will detect the bad fields and insert the English US words and phrases. The user will be left with a second language that is partially translated, but still usable. A post-conversion check of all language translations is therefore recommended, with the understanding that additional translation may be required.

  Due to the nature of the problem, MICROS cannot predict how much of a given language will translate. During testing, the success rate ranged from 20-45%.

  It should be noted that this problem applies only to database conversions and does not affect any POS Operations languages translated through the **Translator.exe** application. Please follow normal procedures for this application to update your language for the new version of the software.

- The conversion script prior to RES version 3.1 does not support custom tables. As a result, when a RES Version 2.6 database with totals in the **ap_export** tables is converted to a Version 3.0 database, the following tables are lost:

  **ap_export_entry_addl_dtl**
  **ap_export_rpt_dtl**

  Follow these steps to work around this issue:

  1. Select *Start* | *Run* | *DBISQL*.
  2. Enter your user ID and password.
  3. Using the UNLOAD statement, extract the **ap_export** information from the Version 2.6 database to a file.
  4. Convert the Version 2.6 database to Version 3.0.
  5. Convert the Version 3.0 database to Version 3.1.
  6. Using the LOAD statement, insert the previously extracted **ap_export** information into the Version 3.1 database.

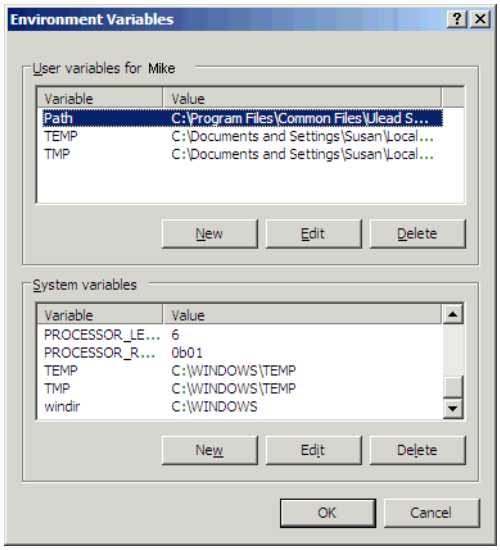
## Licensing

- This version of the software requires an activation code for each module (Version 3.0).
- The MICROSSVC user introduced in 3700 Version 2.5 requires a Microsoft client application license. Along with the 10-user license limit in Windows 2000 professional, this could be an issue for sites currently using 10-user licenses and upgrading from a previous Version of 3700 to Version 2.5 or higher.

## Win 2000

The following steps should be taken prior to installing RES 3.2 on a Win 2000 server:

1. Activate "File and Print Sharing For Microsoft Networks" prior to installing RES software.
2. Logon using the administrative user name/password allocated for the installer.
3. From the Windows Start Menu, select **Settings | Control Panel.**
4. Double-click the **System** icon to go to the **Advanced | Environment Variables** tab.
5. Make sure that the *Temp* and *TMP* paths in the **User Variables** box are the same as those in the **System Variables** box.
6. Click **OK** to exit the system..




***Note*** *Failure to make the user TMP and TEMP paths identical to the system TMP and TEMP variables may cause the Windows Installer to launch when you attempt to open one of the RES applications.*

### Upgrading from WinNT to 2000

Upgrading from Windows NT to Windows 2000 will overwrite the installed IE version with IE 5.0. Therefore, before upgrading, be sure that you have access to IE 6.0 sp1 so it can be installed after setup.

## Guest Services Solutions (GSS)

- The Guest Services Solution (GSS) Backoffice application is supported in RES Version 3.2.
- If you are currently running GSS on a RES 3.0 system and are upgrading to the integrated RES 3.2 product, be advised that file locations have changed and will affect the following:
  - The **GSS.exe** executable is now located in **Micros\RES\GSS\Bin**. If you had an existing shortcut to the GSS Backoffice, you will need to delete it and create a new one.
  - The **GSS.isl** file is installed in **Micros\RES\GSS\Bin**. This file must be copied to **Micros\RES\pos\etc** and renamed **pms#.isl** (where # = the object number of the GSS interface in *POS Configurator* | *Devices* | *Interfaces.*
  - GSS Reports are now installed in the **RES\GSS\Reports** directory. If you had GSS installed prior to loading RES 3.2, you will need to delete the old GSS report templates (with numbers greater than 10000) in *POS Configurator* | *Reporting* | *Report Templates* form.

    The new GSS report templates will also be present — these are numbered in the 7101 – 7120 range. Make sure that any autosequences that call a GSS report are linked to the new report number. Failure to delete the old templates (and link to the new ones) may result in a system error when a GSS report is run.

    Similarly, because of the directory change, you must re-link the Invoice Template and Batch Report Template (*GSS Backoffice* | *File* | *Configure* | *Accounts Receivable*) to the same report names, but in the new path (**RES\GSS\Reports**).

- When running from a 3.0 system with GSS installed, the system does not overwrite the stored procedures already in the database. To run the GSS Nightly procedures, the existing GSS autosequences must be manually linked to the new stored procedures, which are numbered as follows:
  - 7101 GSS Nightly
  - 7102 GSS Remove Inactive Customers
  - 7103 GSS Remove Inactive Gift Certificates
- When upgrading from GSS version 1.10 sp2 or earlier and using Caller ID, you must manually stop **calidsrv.exe** prior to running RES 3.2 setup. To do this:
  1. Go into the registry and delete the following Caller ID Key:

     **[HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\ CurrentVersion\Run]"CallerID"="D:\\Micros\\Res\\Pos\\GSS \\calidsrv.exe**
  2. Reboot Server.
- Please refer to Appendix D for further GSS installation instructions.

## PERL-Based Applications

- If you are running custom applications provided by MICROS Professional Services, be advised that the PERL scripts used are not compatible with the lastest version of Sybase.

  After installing RES 3.1 or higher, you must manually replace the **dbodbc6.dll**, found in the **\Micros\Database\Sybase\ Adaptive Server Anywhere 6.0\Win32** folder, with the version located in the Support folder on Disk 2, on the server only. Failure to do so may result in your PERL applications not returning the desired results.

## Documentation

- When updating from a previous version of RES, if you change the drive where the Documentation files are installed, be aware that the system will not automatically delete the old Documentation files from the previous directory location. You must delete them manually.

  If no change is made to the location (i.e., the letter drive remains the same), the system will overwrite the old Documentation files.

- To view the online documentation, Microsoft Internet Explorer 6 with Service Pack 1 must be set as your default browser.

## Site Requirements

In order to successfully install and enable a RES Setup system, the following requirements must be met:

| | Win 2000 Server | Clients[1] | | | |
|---|---|---|---|---|---|
| | | Win 2000[2] | NT[2] | 98 | 95[3] |
| Win 2000 Pro sp3[4] | X | X | | | |
| NT 4.0 sp 6a or greater[4] | | | X | | |
| Win 98 SE (Second Ed.) | | | | X | |
| IE 6.0 sp1 | X | X | X | X | |
| IE 5.5 sp 2 or greater[4] | | | | | X |
| IIS[5] | X | | | | |
| MDAC 2.6 sp 1 (RES setup will install) | X | X | X | X | X |

[1]Hard-drive clients only. Diskless clients are no longer supported in RES 3.2. The 9X clients only support running 3700 POS and Manager Procedures. Windows NT and Windows 2000 clients support all RES applications running on them.

[2]Backoffice clients must be Win 2000 or Win NT. Backup Server Mode (BSM) clients and KDS Controller on a client must be Win 2000 only.

[3]Win 95 clients require manual installation of the W95Y2K.exe patch, which is not included with the hardware.

[4]NT 4.0 sp 6a, IE 5.5 sp 2, and Win2K sp3 Pro do not automatically install as part of RES setup. They must be manually installed by the user. Downloads of these files may be obtained from the Microsoft® website (**www.microsoft.com**), under Downloads\Windows Security and Updates category.

[5]IIS is NOT required on Win 2000 clients.

## Additional Software Requirements

The following software tools are automatically installed with RES Setup. These application versions must not be changed by the installation of third-party software. Any changes to the software application will make the RES System unsupportable.

| Application | Version |
|---|---|
| Microsoft DCOM | 1.3 |
| ODBC | 3.52 |
| Sybase Adaptive Server | 6.03.3114 |
| Crystal Reports Professional* | 9.0 |
| Borland Delphi | 5.1.1.1 |
| Sentinel Software Key Driver | 5.3.9.0 |
| Adobe Acrobat Reader | 5.0 |
| ADO | 2.6 sp1 |

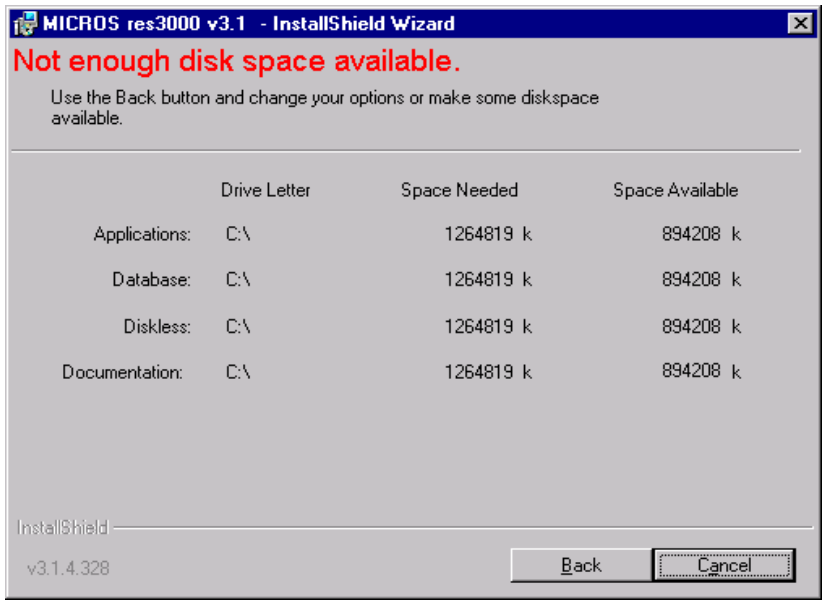
*Crystal Reports viewer is installed with RES. If report development is required, the installer must load a full version of Crystal Report Professional. If done, RES Setup must be reloaded afterwards.

## Hard-Drive Space Requirements

The space requirements listed below assume that the full range of options are to be installed:

| RES Environment | 2000 Server | 2000/NT Client | 95/98 Client |
|---|---|---|---|
| Clean, no prior RES installation | 1.2 GB | 600 MB | 500 MB |
| Over existing RES | 1.3 GB + size of DB | 600 MB | 500 MB |

Prior to setup, the system calculates how much space is required for installation of the selected features. If the available disk space is inadequate, the following message is displayed:.




***Note*** *RES 3.2 requires a minimum of 200 MB free space on the root drive, (usually C:). This is true even if choosing to install RES to a different drive.*

*For optimum system performance, 30% of the root drive should be free space.*

## Server Requirements

### RES Server Requirements—Small to Medium System

The following is a list of RES Server requirements for small to medium systems. Small to medium systems consist of stores with less than 10 workstations.

The table below illustrates the required hardware needed for RES Servers to be used in small to medium systems:

| Product(s) | Number of Terminals | Recommendations |
|---|---|---|
| 3700 System only | 1-4 | Pentium III, 550 MHz |
| | | 256 MB RAM |
| | | 6-9 GB Hard Drive |
| | 5-9 | Pentium III, 550 MHz |
| | | 512 MB RAM |
| | | 6-9 GB Hard Drive |
| 3700 System with Enterprise Office | 1-4 | Pentium III 550 MHz |
| | | 512 MB RAM |
| | | 9-12 GB Hard Driv |
| | 5-9 | Pentium III 550 MHz |
| | | 512 MB RAM |
| | | 9-12 GB Hard Drive |

NOTE: These are recommended configurations. Optimum hardware configuration may change depending on the site's volume.

## RES Server Requirements—Large System

This section details the RES Server requirements for large systems. Large systems consist of stores with more than 10 workstations. These requirements are for sites with average business volume. High volume sites will require additional resources.

***Note*** *Smaller sites that wish to have exceptional speed may also follow the requirements listed here.*

The table below illustrates the required hardware needed for RES Servers to be used in large systems::.

| Product(s) | Number of Terminals | Recommendations |
|---|---|---|
| 3700 System only | 10-15 | Pentium IV, 1.6 GHz |
| | | 512 MB RAM |
| | | 9-12 GB Hard Drive |
| | 15-25 | Pentium IV, 1.6 GHz |
| | | 768 MB RAM |
| | | 9-12 GB Hard Drive |
| 3700 System w/ Enterprise Office | 10-15 | Pentium IV 1.6 GHz |
| | | 1 GB RAM |
| | | 9-12 GB Hard Drive |
| | 15-25 | Pentium IV 1.6 GHz |
| | | 2 GB RAM |
| | | 9-12 GB Hard Drive |

***Note*** *Hard drive size can be an important factor in determining a viable PC. To ensure optimum performance of your ssystem, at least 33% of your hard drive should be free at all times during normal operations. This is true for each drive and drive partition. Disk defragmentation tools such as Diskeeper are recommended to maintain hard drives.*

*When upgrading from version 2.x to RES 3000, the size of the database will grow approximately 40%. Additionally, QSR POS systems and systems with Enterprise Office installed will generally use a larger database due to the increased volume of their transactions.*

## Further System Recommendations

Performance can be enhanced significantly through increasing RAM and by storing the database on a second hard drive, or moving to a RAID configuration with a caching RAID Controller.

- **Clients** — Windows NT Hard Drive clients provide better performance for larger configurations.
- **Network** — A 10-MB flat network provides adequate performance for a 25-workstation configuration. Integrating into existing, non-MICROS networks requires special considerations and are not covered here.
- When determining system size, the total number of clients refers to all units, including POS Clients, KDS Clients, and Backoffice Clients.
- **Resiliency** – Raid 5 is a resilient hard-drive configuration that will protect a site in the event of a single hard drive failure. Any sites that require additional operational and data resiliency should consider using a Raid 5 configuration on an appropriate server. It is always recommended to utilize raid configurations through the hardware controller and not recommended to use the raid features of the Operating System.
- RES does not currently support servers with Dual Processors, and this configuration is not recommended at this time.
- A mass storage device is recommended when configuring your system. Make sure that this backup storage device has sufficient capacity to hold the MICROS database and all other critical files.

## Client Requirements

### RES UWS Client Requirements

The following table provides the minimum hardware requirements for RES user workstation clients:

| | |
|---|---|
| Keyboard | PC/AT |
| Network | 10/100 Interface Network |
| Processor | 5x86 |
| Random Access Memory (RAM) | 32 MB |
| Hard Drive | 4 GB |
| Operating System | Windows 95/98/NT/W2K[1] |
| Virtual Registry Size | 20 MB |
| Monitor | Color Touchscreen Monitor or Color Monitor with Mouse |

[1]RAM requirements for a specific operating system should be used when the minimum is higher than 32 MB.

### RES Mobile MICROS Client Requirements

The following table provides the minimum hardware/software requirements for RES Mobile MICROS clients:

| | |
|---|---|
| Network | 802.11b Wireless Ethernet |
| Processor | ARM SA 1110 |
| Random Access Memory (RAM) | 64 MB |
| Operating System | Pocket PC 2002[1] |
| Monitor | Monochrome or Color |
| Software | Microsoft Active Sync[2] |

[1]PPC 2000, if not using Manager Procedures.

[2]Download available on the Micrsoft® website (www.microsoft.com).

## Before Running Server Setup

The section describes activities required prior to running RES 3.2 setup.

### Hand-Held Client Installation

Support for hand-held devices (originally available in RES 3.0 sp3), has been added to the RES 3.2 general release. Follow these steps to upgrade the server for hand-held support:

1. Make sure that the server has been upgraded to Windows 2000 sp3 and IE 6 sp1.

2. Select *Start* | *Settings* | *Control Panel* | *Administrative Tools* | *Services*.

3. Turn off the MDS HTTP service.

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***Note*** *Support for hand-held devices includes the system service "MDS HTTP." This service was set to use Port 80, which is also used by IIS. To avoid conflict with IIS, the MDS HTTP service must be turned off and set to "Disabled"* ***before installing IIS.*** *Failure to do so will prohibit IIS installation and prevent RES 3.2 from installing properly.*

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4. Install IIS to the server (see below). Reboot the system.

5. Install RES 3.2 (as described in the following section, Running Server Setup).

6. Select *Start* | *Settings* | *Control Panel* | *Administrative Tools* | *Services*. Verify that the **Startup Type** for MDS HTTP service is now set to **Automatic**.

## IIS Installation

Follow these steps to install Internet Information Services (IIS) security. (Refer to Appendix F, for more information on the IIS program.)

### On Win 2000 Pro

***Note*** *You will need to access the I386 folder. If this is not already on your computer, you can find it on the Win 2000 CD.*

1. Fom the Windows Start menu, select *Settings* | *Control Panel* | *Add/ Remove Programs*.
2. Click the **Add/Remove Windows Components** button.
3. Check the **IIS box** (third from the top).
4. Click **Next**.
5. If prompted for the I386 folder, enter the path or browse to it. Click **OK**.
6. When IIS setup completes, reboot the system.

### On Win 2000 Server

***Note*** *You will need to access the I386 folder. If this is not already on your computer, you can find it on the Win 2000 CD.*

1. Fom the Windows Start menu, select *Settings* | *Control Panel* | *Add/ Remove Programs*.
2. Click the **Add/Remove Windows Components** button (left side).
3. Check the **IIS box** (fifth from the top).
4. Click **Next**.

5. If prompted for the I386 folder, enter the path or browse to it. Click **OK**.

6. When IIS setup completes, reboot the system.

If your server is running **mymicros.net**, you will have to stop the Micros Agent and Micros Watchdog services prior to running RES 3.2 Setup:

1. From the Windows Start menu, select *Settings* | *Control Panel* | *Administrative Tools* | *Services*.

2. Double click on Micros Agent, and click *Stop*.

3. Double click on Micros Watchdog, and click *Stop*.

## Running Server Setup

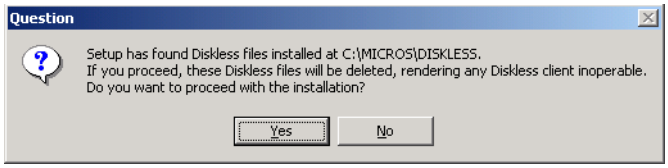
MICROS provides two methods for running RES Setup on a server—interactive and non-interactive. The most common method is the interactive (attended) mode, which provides a series of questions and options to guide you toward successful installation of the software.

The non-interactive (unattended) method is new in RES 3000. Procedurally, the method functions as an interactive session, but uses a pre-configured response file to answer the system queries presented during installation. This method is intended for use by customers with large rollout requirements. Its purpose is to ensure a uniform installation across locations.

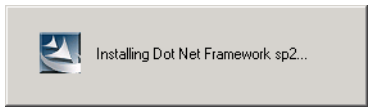
Follow the steps below to install your system software on a RES Server PC. If you are upgrading from a previous version of MICROS 3700 software, you should bring the Restaurant to OFF using MICROS Control Panel. You should also power off all hard-drive clients. With this release, diskless clients are no longer supported.

### Using Interactive Installation

1. Insert the RES Version 3.2, Disk 1 CD into the PC's CD-ROM drive. If you are upgrading a system with diskless clients, a dialog box will be displayed warning of the consequences should you attempt to continue. Click *No* to abort the installation..

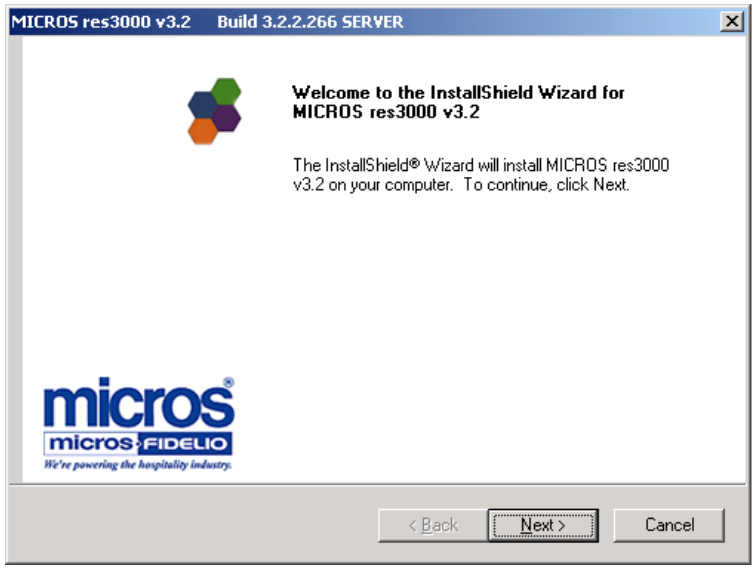



2. Click *Yes* to continue. The system will begin to install the Dot.Net framework required for this release. Notification is posted while this takes place..

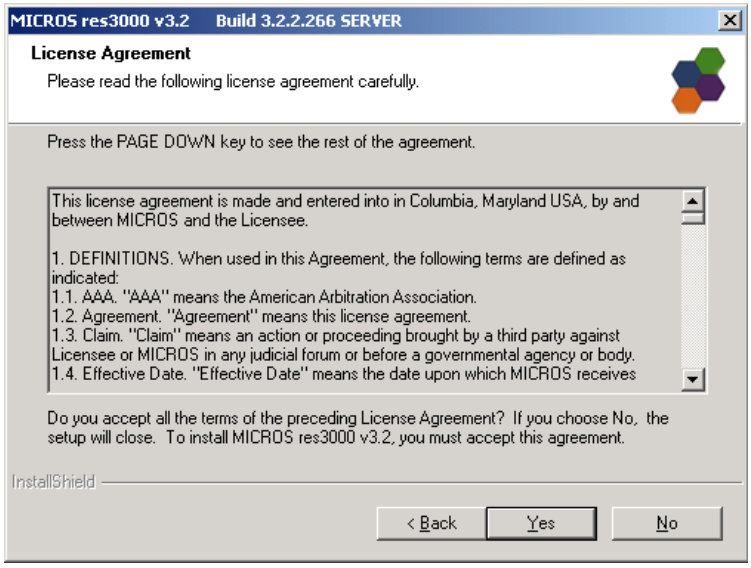



> ***Note*** *As you proceed through the dialogs, setup may pause for several seconds before continuing to the next screen. This is normal and requires no additional action from the installer.*

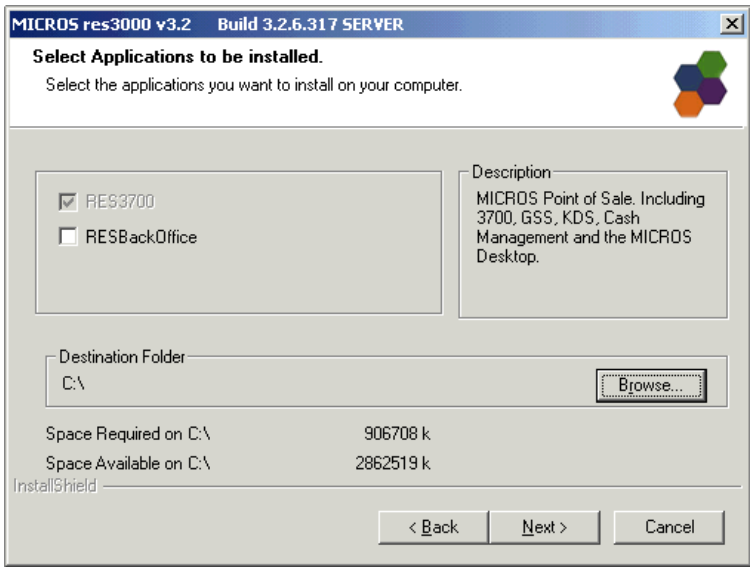
3. Once Dot.Net is installed the following Introduction screen is displayed.




4. Click *Next* to continue the installation. The Licensing Agreement is displayed.



5. Click *Next* to continue. The Applications selection screen is displayed. Check the components to be installed from the options shown in the screen below.




The contents of each selection are described as follows:

- **RES 3700** — Installs files and directories required by a RES Server PC to run *only* 3700 POS applications, CA/EDC Drivers, Transaction Analyzer, GSS, Cash Management, and the Kitchen Display System (KDS).

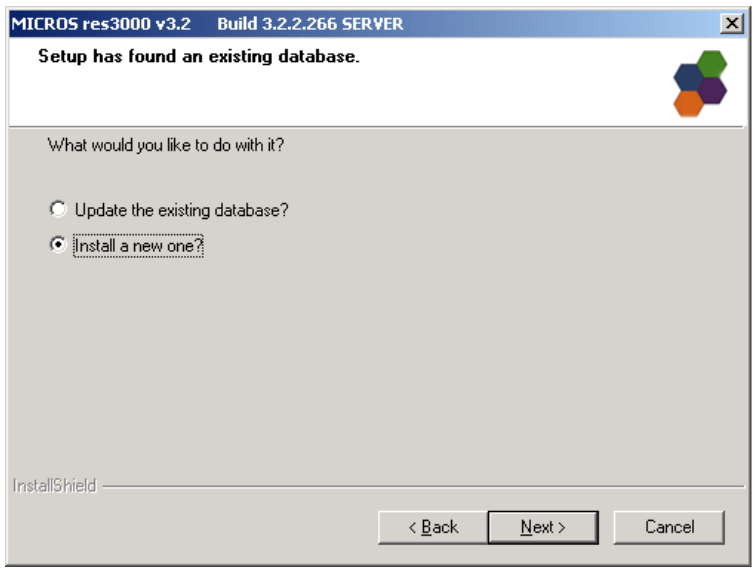
- **RES Back Office** — Installs files and directories for the entire Enterprise Office suite of products, which includes Labor Management Version 3.2, Product Management Version 3.2, and Financial Management Version 3.2.

Use the *Browse* button to specify where you want the MICROS files installed. The default location is **C:**. Once a drive is selected, the system will check to ensure that there is sufficient space available to continue the installation.

6. Click *Next* to continue. The system will respond appropriately, depending on whether this is a new or upgrade installation.

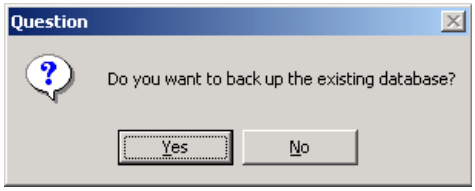
7. If this is a new installation, proceed to step 9.

8. If the installation is an upgrade from a previous RES version, the following screen is displayed:

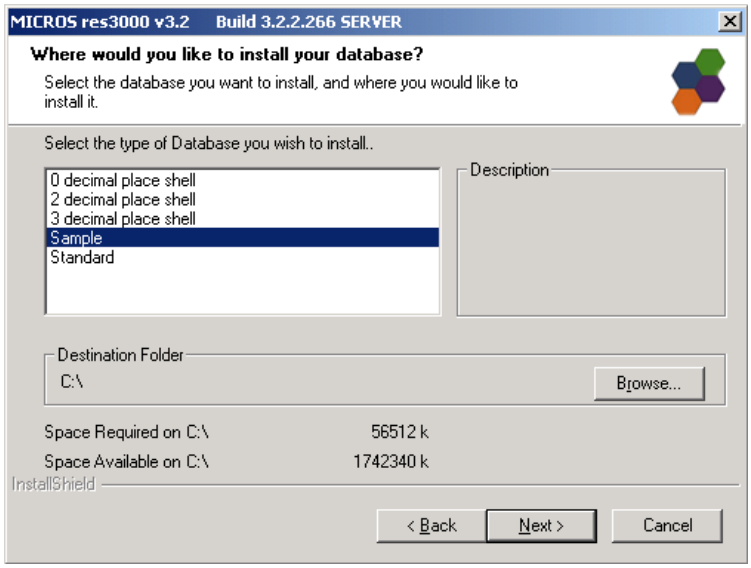



Select the appropriate radio button to indicate whether you want to upgrade the existing database or install a new one.

- If new is selected, click *Next* and continue to Step 9.
- If the update option is selected, MICROS suggests backing up the existing database as a safety measure. This can be done by selecting *Yes* when the confirmation dialog is presented.



9. If RES is installed on a clean system, or if the user opts to install a new database in an upgrade system, the following screen will be displayed:




Specify the type of database to be installed. The options are:

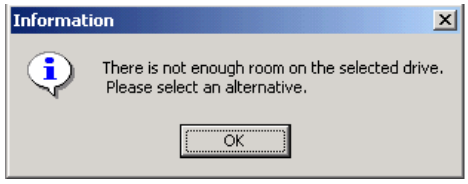
- **0 (or 2 or 3) decimal place shell** — Provides an empty MICROS database shell only. Select one of these three options to start programming from scratch with no preconfigured options or touchscreens. The number of decimal places selected depends on the currency used. For example, the US Dollar uses 2 decimal places and the Russian Ruble uses 3.

- **Sample** — Provides a demo/sample database that includes sample employee, menu item, reporting, and touchscreen configurations.

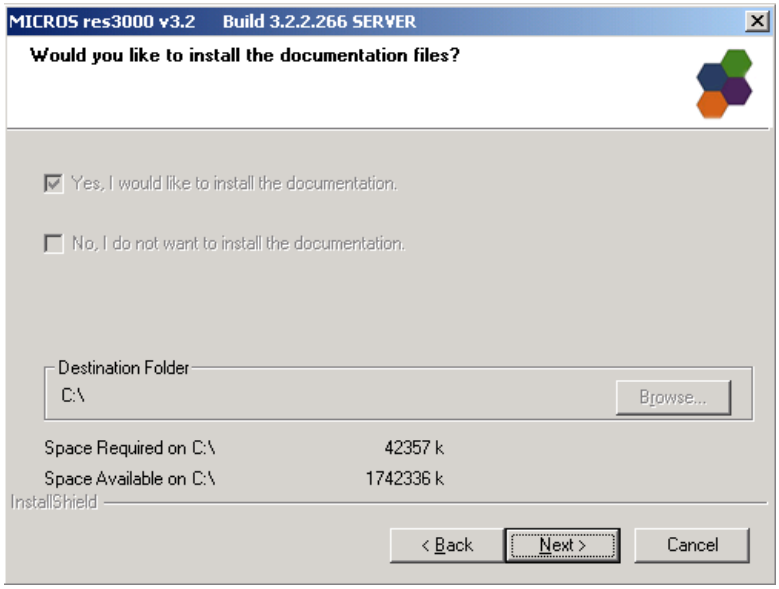
- **Standard** — Provides a standard MICROS database with some preconfigured forms and touchscreens. This option requires only site-specific programming from the Property Expert.

Confirm the location where the database will be installed. The default is **C:**. Once a drive is selected, the system will check to ensure that

there is sufficient space available to continue the installation. If not, the following message will be displayed:




10. Click *Next* to continue. The documentation screen is displayed.

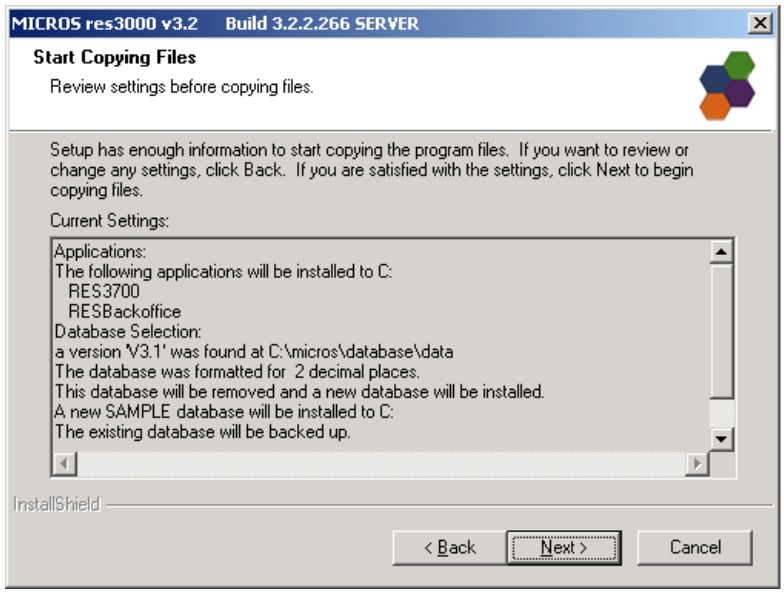



Specify whether you want the documentation files to be installed on your hard-drive. Documentation does require 40+ MB of space and installation is optional. However, MICROS does recommend that it be included.

***Note*** *Previous versions of RES automatically installed the correct version of Adobe Acrobat Reader necessary to view the help files. RES 3.2 does not do this. Adobe Acrobat Reader Version 5.0 is required to read the help files. It is included on Disk 2 of the RES 3.2 CDs in the Support folder.*

If installed, confirm the location for the documentation files. The default is **C:**. Once a drive is selected, the system will check to ensure that there is sufficient space available to continue the installation.

11. Click *Next* to continue. A summary of the selected options is provided for review.




12. Click *Next* when you are ready to proceed. If any running applications are detected, you will be prompted to close them and resume RES Setup.

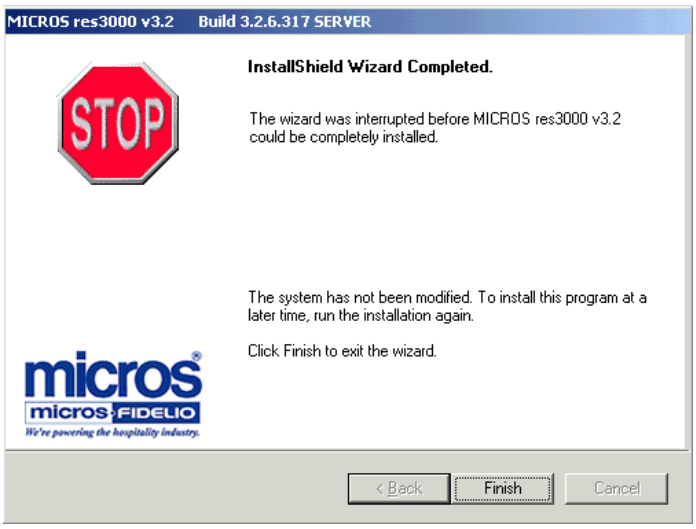
13. Follow the prompts during installation, changing from Disk 1 to Disk 2 and back, as required. After switching the disks, allow 3 seconds for the CD ROM drive to activate before hitting the *OK* button to continue with the setup..

***Note*** *Installation times will vary. A new installation may take up to an hour to complete, depending on the speed of the server. With an upgrade, the amount of time could increase to several hours, depending on the server speed, previous RES version, and size of the existing database. When upgrading from 3.0, for example, setup will first convert the database to 3.1 format before moving on to the 3.2 conversion.*

***Note*** *When running server setup across a network, the system will not automatically prompt you to change the disks during installation. As a workaround, before running setup, copy the contents of Disk 1 to a network hard-drive. Then copy the folders from Disk 2 into the Disk 1 tree. When complete, map a drive from the server to the Disk 1 tree on the network drive and begin setup.*

14. If, for any reason during installation, setup is unable to complete, the following message will be displayed:

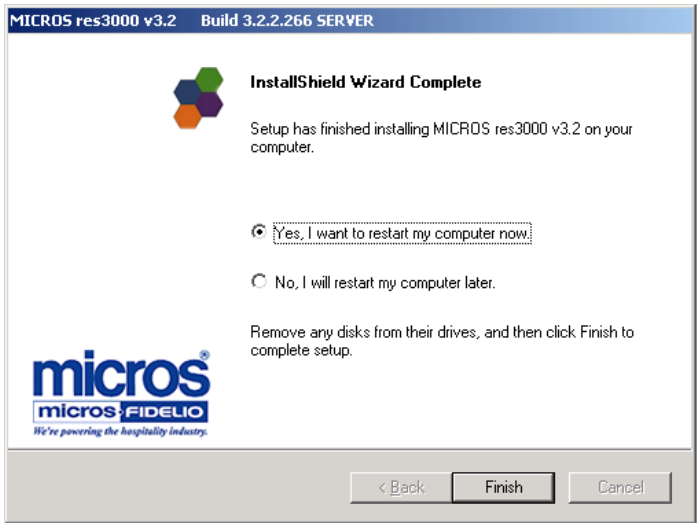
**For Server**




**For Client**


Click *Finish* to abort the installation. Once the problem is corrected, you can run setup again.

15. If setup is able to complete, the following screen is displayed:




16. Specify whether you wish to restart your computer now or later. You must reboot the system for the system changes to take effect. Click *Finish* to complete the installation process.

## MICROSSVC User Profile

In order for certain applications to behave properly, the microssvc user must log in at least once on the server. The microssvc user is created automatically as soon as the system finishes running setup.

When setup is completed and rebooted, log in as Administrator to allow final setup changes to occur. Once you are logged on and the system has finished updating settings, log off the current user from the Windows Desktop and log in with user *microssvc*, password *microssvc*. This will create a default profile for the system user. Confirm that this user has a default printer assigned. Then go to *Start* | *Settings* | *Printers* and confirm that a printer has been set as the default.

## Post-Setup Procedures

RES Setup enters into the post-setup phase, where the installation is finalized.

If this is the first time you have installed any Version of 3700 to your system, proceed to "Hard-Drive Client Installation" on page 40.

With the release of RES 3000, MICROS has included a remote install feature which allows user to install and update client workstations from the server. Remote client installation can be used in both interactive and non-interactive session. For more on this topic, proceed to "Remote Client Installation" on page 45.

## MICROS RES Setup Log File

RES Setup creates a log file named "MICROS RES SETUP.log" for both clients and servers. This file documents all events during setup in case some part of the installation is in question and the log is needed for reference. Under Windows NT/2000, the file resides in the *WinNT* folder. Under Windows 95/98, the file resides in the *Windows* folder.

If unattended or Remote Install is used, the log is stored as *RESSetup.log*. Under Windows NT/2000, the file resides in the *Winnt/System32* folder. Under Windows 95/98, the file resides in the *Windows* folder.

## Sybase Central Plug-In

The Sybase version used by the RES application was upgraded for the RES 3000 release. In the past, users who wanted to open Sybase Central could launch the program after setup through the Windows Start Menu. Beginning with RES 3000, a plug-in must be manually added before access is allowed.

Follow these steps to add the sybase plug-in:

1. From the Windows Start Menu, select *Programs* | *Micros Applications* | *Utilities* | *Database* | *Sybase Adaptive Server Anywhere* | *Sybase Central.*

2. From the main menu, select *Tools* | *Plug-ins*.

3. Click on the *Change* button.

4. Choose the plug-in for 'Adaptive Server Anywhere.'

5. Click *OK*.

6. Click *Close*.

Once the plug-in is added, you can exit the program or continue to work in Sybase Central. The plug-in only needs to be added once. After the initial selection, the program will again be available from the start menu.

## Perl Runtime for Quickbooks

Beginning with Version 3.1, RES Setup will no longer automatically install the Perl Runtime program required for use with the Quickbooks interface. The Perl program will still be available on the RES 3.2 CD Disk 2. If necessary, it can be added to the appropriate directory as follows:

1. In the MICROS directory, create a *Support* folder and *Utils* sub-folder.

2. Copy the **Perl.exe** from the RES CD Disk 2 *\Micros\Support\Utils* to the same path on the hard drive.

## Maintenance Options

Beginning with RES 3000 Version 3.1, users will be able to remove, repair, or modify the database installation after initial setup is complete. This is done with the application setup disks, which include three new maintenance options.

---

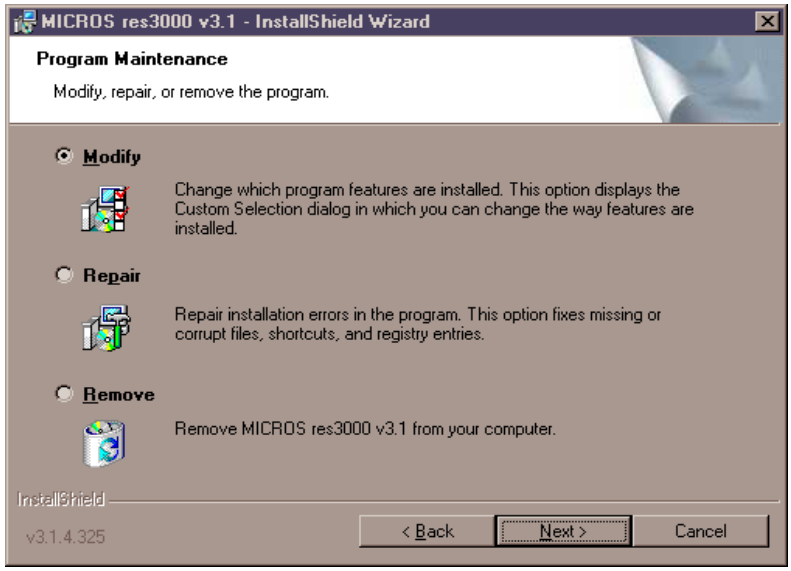
***Note*** *Before making any changes to your system, MICROS strongly recommends saving a copy of the current database.*

---

To access the maintenance options:

1. Insert Disk 1 into the server's CD ROM to launch the setup program. The system searches for a current installation and, when one is detected, displays the RES maintenance screen:

2. Click *Next* to continue. The following options are presented:



- **Modify** — Allows the user to install features that were not selected during the initial installation. For example, if you chose not to install documentation initially because of space limitations and then added hard drive capacity, you could use the option to install it later.

> ***Note*** *Modify is an add-only option. You cannot use Modify to remove any part of RES 3.2.*

- **Repair** — Restores deleted files or upgrades a new database to Version 3.2. When this option is selected, setup simply reruns the original installation. Configuration settings cannot be changed during a Repair session.

  To update the database using the repair option:

  1. Rename the current database and log file.
  2. Insert a new database and name it *micros.db*.
  3. Insert Disk 1 in the CD-ROM drive to start setup.
  4. When the maintenance screen displays, choose *Repair* and click *Next*.

- **Remove** — Removes files, services and environment variables installed by RES 3.2. This option does NOT remove any files generated or inserted after setup completes. It will not delete the registry settings. As a precaution, the database is not removed either.

  To remove RES 3.2:

  1. Save the database to a safe location outside of the MICROS tree.
  2. From the Windows Start Menu, select *Settings* | *Control Panel* | *Add/Remove Program* or insert Disk 1 in the CD-ROM drive to launch setup.
  3. When the maintenance screen displays, choose *Remove* and click Next.
  4. After the *Remove* process is complete, click *Yes* at the prompt to reboot the system.

5. Open the Windows Explorer and save any custom files, reports, etc. from the Micros tree to another location. Delete the Micros tree.

---

***Note*** *Registry settings do not have to be manually deleted, as they will be overwritten when the application is reinstalled. Should you opt to delete them manually, be sure to save the license codes first. Then use regedit to delete HLKM\Software\Micros.*

*Although all path information created by RES 3.1 is removed, some parameters left over from previous versions can be missed. Be sure to check and manually delete any MICROS path information, especially if you intend to reinstall RES to a new (letter) drive location.*

---

### Remove MICROS Software

To remove MICROS software from a system running Version 3.1 or 3.2, refer to the preceding **Maintenance Options** section, and follow the steps under the **Remove** bulleted item.

To remove MICROS software from a system running Version 3.0 or lower, follow these steps:

1. From the Windows Start Menu, select *Programs* | *MICROS Applications* | *MICROS Control Panel* to launch the interface.

2. Click the button to set the Restaurant to OFF.

3. Open the Windows Explorer and navigate to the **MICROS\ Database\Data** folder.

4. Save the **micros.db** and **micros.log** to another folder or directory (i.e., not within MICROS tree)

5. From the Windows Start Menu, select *Settings* | *Control Panel* | *Services*. Stop all MICROS services, including:

   - MICROS 3700 System
   - MICROS Caller ID Service
   - MICROS Distributed Service Manager
   - MICROS Secure Desktop
   - MICROS LM Com Scheduler

6. Open Windows Explorer and manually delete the MICROS tree.

7. Select *Start* | *Run* | *Regedit*.

8. Go to *My Computer\HKey_Local_Machine* and delete the following*:*

   - *Software\MICROS*
   - *Software\MICROS Professional Service*
   - *Software\MICROS Systems, Inc.*
   - *System\CurrentControlSet\Services\3700d*
   - *System|CurrentControlSet\Services|CISERVICE (Note: Do Not delete cisvc)*
   - *System\CurrentControlSet\Services\MicrosDistributedService Manager*
   - *System\CurrentControlSet\Services\Microsdesk*
   - *System\CurrentControlSet\Services\SQLANYs_sqlServerName*
   - *System\CurrentControlSet\Services\svcComScheduler*

9. Reopen the Control Panel and select *System* | *Environment*. Delete all micros environment variables, including:

   - ASANY
   - DBDIR
   - DocDir
   - Micros_Current_Installation
   - DisklessDrive
   - MICROSDrive
   - RESDBDIR
   - RESDISKLESS
   - RESROOTDIR
   - SQLANY

   Delete just the portions of the path that are in the Micros tree.
   Ex: c:\MICROS\Database\Data...
   Hit Set
   Hit Apply

10. Reboot the PC.

## Move MICROS to a New Drive

To move MICROS folder to a different drive, you must remove the previous software veersion, install Version 3.2, and convert the database. To do this:

1. Remove the MICROS software as follows:

   - RES Version 3.0 or lower — Follow instructions provided in the **Remove MICROS Software** section, beginning on page 36.

   - RES Version 3.1 or higher — Follow instructions provided in the **Maintenance Options**, Remove section, beginning on page 35

2. Install Res 3.2 to the new drive. When prompted, choose the ‘new database’ option as part of the installation.

3. When the installation is complete, navigate to the new **MICROS\Database\Data** folder and delete or rename the newly installed (i.e., empty) **Micros.db** and **micros.log**.

4. Copy the original **micros.db** and **micros.log** into the new **Micros\Database\Data** folder.

5. Open a DOS window and change to your current Database Data directory. Execute the following command:

   **dblog -t micros.log micros.db**

6. Run RES 3.2 setup again. Choose "Repair" to convert DB.

## Running Client Setup

This section provides instruction for installing RES on both hard-drive and hand-held clients. In addition, with the release of RES 3000, MICROS has included a remote install feature that allows user to install and update client workstations from the server. Remote client installation can be used in both interactive and non-interactive sessions.

### Hard-Drive Client Installation

To successfully run Netsetup, the following steps must be taken:

#### For Windows NT clients

1. Verify that Windows NT Service Pack 6a 128-bit Version is installed properly.
2. Verify that Internet Explorer 6.0 sp1 (or higher) is installed properly.
3. Enable the Windows Autologon feature as the microssvc user:
   - Select *Start* | *Run* | *Regedit*.
   - Go to *My Computer\HKEY_LOCAL_MACHINE\ Software\Microsoft\Windows NT\CurrentVersion\ Winlogon*.
   - Verify that these three STRING values are added/modified:
     - AutoAdminLogon = 1
     - DefaultUserName = microssvc
     - DefaultPassword = microssvc
4. Close Regedit and reboot the workstation. This Windows NT client should automatically login after the above steps have been completed.
5. Launch Netsetup:
   - Open Windows Explorer.
   - Map a drive to the *\\SERVERNAME\Netsetup* directory.
   - Verify that the **RECONNECT AT LOGON** option is selected. This must be done in order for Netsetup to install properly.

- In the *Netsetup* directory, double-click **Setup.exe** to start the setup process. The setup process has a series of prompts and selections similar to the screens mentioned earlier. After setup has finished, you are asked to reboot the workstation. Select *Yes* to reboot.

### For Windows 95/98 Clients

1. Verify that the Primary Network Logon is Client for Microsoft Networks, and that "File and Print Sharing" is enabled.
   - Select *Start* | *Settings* | *Control Panel* | *Network*.
   - Click "File and Print Sharing" and verify that both options are checked.
   - Change the Primary Network Logon to Client for Microsoft Networks, then reboot.
   - When prompted for user name and password, enter *microssvc* for user name and *miccrossvc* for password. If prompted for a Windows password, leave the field blank.
2. Verify that Internet Explorer 5.5 sp 2 (or higher) is installed properly.
3. Enable Windows Autologon feature as the microssvc user.
   - Select *Start* | *Run* | *Regedit*.
   - Go to *My Computer\HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Winlogon*.
   - Ensure that these three STRING values are added/modified:
     - AutoAdminLogon = 1
     - DefaultUserName = microssvc
     - DefaultPassword = microssvc
4. Close Regedit and reboot the workstation. The Windows 95/98 client should automatically login after the above has been completed.

5. Launch Netsetup:
   - Open Windows Explorer.
   - Map a drive to the *\\SERVERNAME\Netsetup* Directory.
   - Verify that the **RECONNECT AT LOGON** option is selected. This must be done in order for Netsetup to install properly.
   - Go to the *\Netsetup* folder and double-click **Setup.exe** to start the setup process. The setup process has a series of prompts and selections similar to the screens mentioned earlier. After setup has finished, you are asked to reboot the workstation. Select *Yes* to reboot.

### For Windows 2000 Clients

Follow these steps prior to installing RES 3.2:

1. Logon as the Administrative user who will be installing the program.
2. Select *Start* | *Settings* | *Control Panel* | *System* | *Advanced* | *Environment Variables*.
3. Set the **User Variables** (*Temp* and *Tmp*) to the same values as the System *Temp* and *Tmp* variables.

> ***Warning*** *Upgrading from Windows NT to Windows 2000 will overwrite the IE version IE 5.0. Before upgrading, be sure you have access to IE 6.0 sp1 so that it can be reinstalled later.*

4. Verify that Internet Explorer 6.0 sp1 (or higher) is installed properly.
5. Launch Netsetup:
   - Open Windows Explorer.
   - Map a drive to the *\\SERVERNAME\Netsetup* Directory.
   - Verify that the **RECONNECT AT LOGON** option is selected. This must be done in order for Netsetup to install properly.
   - Go to the *\Netsetup* folder and double-click **Setup.exe** to start the setup process. The setup process has a series of prompts and selections similar to the screens mentioned earlier. After setup has finished, you are asked to reboot the workstation. Select *Yes* to reboot.

### Mobile MICROS Client Installation

Support for hand-held devices (originally available in RES 3.0 sp3), has been added to the RES 3.2 general release. For more information, refer to the 3700 Mobile MICROS on-line document, available from the Windows Start Menu by selecting *Programs* | *MICROS Applications* | *MICROS Documentation.*

### Workstation 4 Client Installation

Support for the new Workstation 4 (WS4) device has been added to the RES 3.2 release. WS4 does not require the user to run Netsetup during installation. Instead, it uses Client Application Loader (CAL) technology to locate, install, and maintain the most up-to-date software programs implemented on the server.

---

***Note*** *For more information on the WS4, please refer to the Workstation 4 Setup Guide, available on the MICROS website under Products | Hardware Solutions | Documentation.*

---

Follow these steps to install a new WS4:

1. Unpack the WS4 unit and connect to the system LAN.
2. When the WS4 is powered up for the first time, the CAL looks for and displays a list of CAL Servers on the network.
3. Select a CAL Server and click OK. A list of the Server's available workstations is displayed. Workstations configured but not assigned are placed at the top of the list.
4. Select an available workstation and click OK. The system will automatically load the workstation ID and network configuration fields. This may be changed manually, if desired.
5. Save the configuration. The system will automatically transfer the required application software.
6. Once all software has been downloaded, the 3700 POS application will start.

## Remote Client Installation

In previous releases, users were required to run setup from each client via the *netsetup* directory on the server. This can become quite cumbersome if a site has many workstations to upgrade.

Beginning with Version 3.00, service packs or new releases that are installed to the server may be installed to each client without having to run Netsetup manually. This is accomplished by the use of a mechanism called **Remoteinstall.exe**. This file is installed to all disk-based clients after client installation has finished via Netsetup.

When Remote Install is executed by command line or automatically, **Remoteinstall.exe** runs a shortcut file pointing to the server's setup.exe file. It uses the *microssvc* user created by the setup program. Special requirements are listed below to ensure that this works correctly.

### Remote Install Requirements

1. Remote install is only available for 3.0 clients and up. This release does not support use of remote install to upgrade from Version 2.6 clients to Version 3.x clients.

2. Attended client installation (v3.0 or higher) must have been run at least once. Remote Install uses a shortcut to run the **Setup.exe** from the server's *netsetup* directory. This shortcut is created when client installation is run from the *netsetup* directory.

3. A permanent mapped drive must be in place on the client to the server’s *netsetup* folder.

4. Automatic user login must be activated on the the clients.

## Remote Install Usage

There are two methods of executing Remote Install. The first method is by way of command line execution. This is the most common way to run an unattended client install. The second method is automatic unattended install. This method is executed if the Distributed Service Manager (DSM) detects a difference between the registries of the server and the client. If they are different, unattended client installation is triggered automatically on the client.

### Command Line Execution from the Server

The syntax of the command line is as follows:

```
Remoteinstall [/?] [-h] [nodename]
```

where

**-h or /?** - Prints a help message

**nodename** - Computer name of the client

If you specified **remoteinstall pcws01**, PCWS01 will begin to run the unattended client installation. No further action is needed from you.

## Automatic Unattended Install

For Version 3.0 or higher customers with hard-drive clients who have met the requirements, the system will automatically launch remote install from their Version 3.0/3.1 clients after the server has been upgraded with RES 3000 software. The following is a summary of the upgrade events:

- Current Version 3.0/3.1 customer will bring Restaurant to OFF using MICROS Control Panel.
- All diskless and hard-drive clients are shut down.
- RES 3.1 Setup is run on the server. Server is rebooted after main setup portion is complete.
- Hard-drive clients are powered on. Once each client enters Windows 95/98/NT, Unattended Client installation will begin on each hard-drive client without user intervention.
- The clients will automatically reboot when setup is complete.
- User is now upgraded to RES 3000 Version 3.2 and uses the MICROS Control Panel to bring the Restaurant to Front of House.

# Appendix A: Microsoft Windows NT® Service Pack Installation

Prior to installing or updating your RES application suite, your RES Server PC should be equipped with the latest software. Doing so will reduce setup time, address known issues, and increase system functionality.

The following sections provide a cross-reference of standard software requirements for supported versions of RES.

## Internet Explorer

| Internet Explorer Version Requirements | | | | | |
|---|---|---|---|---|---|
| **RES Version** | **IE 4.0** | **IE 5.0** | **IE 5.5** | **IE 5.5 sp 2** | **IE 6.0 sp 1** |
| v2.0 | **X** | | | | |
| V2.5 | **X** | | | | |
| v2.6 | **X** | **X** | **X** | **X** | |
| v3.0 | **X** | **X** | **X** | **X** | **X** |
| v3.1 | | | | **X(1)** | **X** |
| v3.2 | | | | | |

(1) When upgrading a WinNT 4.0 server to Win2K, be advised that if the system under NT had IE 5.5 sp2 already installed, Win2K will downgrade the version of IE to 5.0. You must reinstall IE 6.0 sp1 prior to installing RES 3000 v3.2.

## Window NT® and Win 2000

| Windows NT/Win2K Service Pack Requirements | | | | |
|---|---|---|---|---|
| **RES Version** | **NT 4.0 sp 4** | **NT 4.0 sp 5** | **NT 4.0 sp 6a** | **Win2K sp 3** |
| v2.0 | **X(1)** | | | |
| V2.5 | **X(1)(2)** | **X(3)** | | |
| v2.6 | **X** | **X** | **X** | |
| v3.0 | **X** | **X** | **X** | |
| v3.1 | | | **X** | **X** |
| v3.2 | | | | **X** |

(1) Versions 2.5 and lower do not support Open Database Connectivity (ODBC) Version 3.5, which is installed with the **Y2KSETUP.exe** file included with the Microsoft Data Access Components (MDAC) 2.0 Service Pack 1.

When applying SP4 to these systems, a message may display stating that potential Y2K issues have been detected and that MDAC 2.0 Service Pack 1 needs to be installed. **Do not install MDAC 2.0 Service Pack 1 or run the Y2KSETUP.exe file.** According to Microsoft, ODBC Version 3.5 is not required to make the software Y2K- or euro-compliant. SP4 fulfills this requirement by itself.

Should ODBC Version 3.5 be installed on these systems, simply reinstall the RES software. The correct version of ODBC will be restored.

(2) Before using Remote Access to update RES on a Version 2.5 or higher system, you must first apply the NT Server Service Pack 4 hotfix. Without the hotfix, Sybase will attempt to start the TCP/IP link and access the RAS IP address instead of the Server IP address. The error message *Unable to start -- Unable to initialize requested communication links* is then displayed.

To apply the hotfix, go to *http://support.microsoft.com/Support/NTServer/Hotfixes.asp* and follow the instructions provided.

(3) Installation of SP5 on a RES Server may be done only if the POS system is the sole RES application installed (i.e., no back office products, such as Product Management, Labor Management, or other back office products)

# Appendix B: SEI KDS Client Hardware Setup

RES 3.2 provides support for the Select Electronics, Inc. (SEI) hardware platform. SEI offers an economical alternative to the traditional PC-based KDS system.

SEI KDS runs on the 32-bit OASys processor, which can host up to 4 independent video monitors and 4 2x9 bump bars. An EV1000 video card is required for each monitor connected to the base unit. With multiple units, up to 16 KDS displays can be linked to a single POS server.

***Note*** *The OASys KDS includes a duplicate video port with each video card. The duplicate can be connected to a second monitor, allowing 2 monitors to display identical information. Some restrictions may apply. Refer to the vendor's documentation for more information.*

Within the RES kitchen, a mix of both SEI KDS and traditional units is allowed.

This section provides information for setup of the **SEI KDS hardware only**. For additional information on configuring the RES KDS clients, refer to SEI KDS Client Support topic in the KDS Online Feature Reference Manual.

## Server Connections

OASys units can be connected to the POS server in two ways:

1. **RS232 (com port)** — This method allows the OASys unit to use all four slots for SE video cards (i.e., four KDS clients supported per OASys unit.)

2. **TCP/IP (Ethernet)** — This method uses one of the unit's four slots for a network card. The other three can be used for SE video cards (i.e., three KDS clients supported per OASys unit.)

## Hardware Setup

SEI OASys offers "out-of-the-box," plug-n-play hardware that can be set up and ready to go in minutes. This section describes the basic steps needed to assemble and connect the base units, bump bars, video displays, and related cables in preparation for configuring the system.

### Before You Begin

Before attempting to assemble each SEI OASys unit, assemble the following equipment:

- 1 OASys Processor Base Unit
- 1-4 EV1000 or AV1000 Video Cards (one for each KDS display to be linked to the base unit)
- 1 Ethernet Card (Optional; for connecting to the server via a network)
- 1-4 Bump Bars (one for each KDS display to be linked to the base unit)
- Phillips-head Screwdriver
- Flat-head Screwdriver
- Copy of the Select Electronics OASys KDS Hardware Installation Manual (Available from their website, http://www.selectelectronics.com/). Refer to this document for background information and clarification of terms.

***Warning*** *For your safety and the integrity of the equipment, do not disconnect ANYTHING to the OASys base unit without first disconnecting the power.*

### For Ethernet Communication

Follow these steps to set up the hardware for connection to the network server:

1. Using the screwdrivers, remove the cover from the OASys unit.
2. Locate the OASys video cards required for this unit. Cards may be loose or pre-loaded.
3. Set the ID dip switches for each of the video cards. Dip switches indicate the slot where the card resides in the base unit.

---

***Tip*** *Each video card must be assigned a unique ID # (location) in the base unit. To avoid confusion, MICROS recommends labeling the cards sequentially; where CN2=ID1, CN3=ID2, and CN4=ID3. (CN1 is reserved for the Serial Card.*

---

4. Load the video cards in their assigned slots.
5. Insert the network card into CN5.
6. Plug in the bump bar. Bump bar IDs should be set to **1** (factory default) for all bump bars.
7. Attach and turn on all monitors.
8. Attach power cable and turn on system. The system starts initializing the monitors, writing first to Monitor 1 and then confirming setup on the rest of the monitors. When complete, confirm that each monitor displays the appropriate video assignment.
9. Disconnect the power and attach a PC Keyboard to the OASys base unit.

---

***Note*** *A keyboard must be attached to activate the setup utility.*

---

10. Plug in power again.

11. When the OASys Setup Utility displays, select 1 to enter the base unit configuration.

12. On the Vendors screen, select 9 to go to the next page.

13. Select 5 for MICROS Ethernet. When the prompt "You have selected MICROS Ethernet" displays, select Y to confirm.

14. At the prompt, enter the full IP Address of the base unit.

***Note*** *To move to the next IP octet, press the **Enter** key.*

15. When the full IP address has been typed in, press **Enter** one more time. At the prompt, select **Y** to confirm the address.

16. At the prompt, enter the RES System Subnet Mask, using the **Enter** key to move between IP octets.

17. Press **Enter** one more and, at the prompt, select **Y** to confirm the address.

18. The system will now ask you to program your ethernet card with specific IRQ (10), I/O Address (0x300) and Half Duplex. Be sure to confirm in later steps that your ethernet card is set up this way.

19. Select **Y** to continue to the ethernet card setup utility. At this point the system will automatically take you to the Ethernet Adapter Setup and Diagnostic Utility.

20. From the main menu, select View Configuration to review settings. If a change is necessary, select Setup to return to the configuration screens.

21. When all changes are complete, power off the base unit and unplug the keyboard.

22. Plug the ethernet cable into the base unit and power the base unit back on. The base unit will automatically display video assignments on each monitor and be ready for RES KDS client configuration.

### For RS232 Communication

Follow these steps to set up the hardware for com port communication:

1. Using the screwdrivers, remove the cover from the OASys unit.
2. Locate the OASys video cards required for this unit. Cards may be loose or pre-loaded.
3. Set the ID dip switches for each of the video cards. Dip switches indicate the slot where the card resides in the base unit.

> ***Tip*** *Each video card must be assigned a unique ID # (location) in the base unit. To avoid confusion, MICROS recommends labeling the cards sequentially; where CN2=ID1, CN3=ID2, CN4=ID3, and CN5=ID4. (CN1 is reserved for the Serial Card.*

4. Load the video cards in their assigned slots.
5. Plug in the bump bar. Bump bar IDs should be set to **1** (factory default) for all bump bars.
6. Attach and turn on all monitors.
7. Attach power cable and turn on system. The system starts initializing the monitors, writing first to Monitor 1 and then confirming setup on the rest of the monitors. When complete, confirm that each monitor displays the appropriate video assignment.
8. Disconnect the power and attach a PC Keyboard to the OASys base unit.

> ***Note*** *A keyboard must be attached to activate the setup utility.*

9. Plug in power again.
10. When the OASys Setup Utility displays, select **1** to enter the base unit configuration.
11. On the **Vendors** screen, select **9** to go to the next page.

12. Select 4 for MICROS RS232. When the prompt "You have selected MICROS RS232" displays, select **Y t**o confirm.

13. When all changes are complete, power off the base unit and unplug the keyboard.

14. Plug the serial cable into the base unit and power the base unit back on. On boot up, the system will display "MICROS RS232 Version." It will then automatically display video assignments on each monitor and be ready for RES KDS client configuration.

# Appendix C: Non-Interactive Install

This appendix provides instructions for setting the system properties required to perform a non-interactive installation on a system Server.

***Warning*** *Modification of the ResSetup.ini is extremely dangerous and designed for advanced users only.*

Follow these steps to run server setup in unattended mode:

1. Create a Disk1 folder on the local drive.
2. Insert Disk1 into the CD-ROM and copy the contents to the Disk1 folder.
3. Insert Disk2 into the CD-ROM and copy the contents to the Disk1 folder.

   ***Note*** *Before copying, the system will display a message indicating that some files and folders already exist and asking if you wish to overwrite them. Select Yes to All.*

4. Create a file called **ResSetup.ini** and place it in the root directory of Disk1. (Use the directions and examples in the following section to create your own **ResSetup.ini**).
5. Open a DOS window and run the following from a command line:

   [PathToSetup.exe]\Setup.exe /v"/qb /l*v C:\WINNT\ MicrosResSetup.log REBOOTPROMPT=S"

## Creating a ResSetup.ini File

This section provides information for creating the ResSetup.ini file required to run a non-interactive installation.

Syntax: {Property} = {Choice}

---

***Note*** *These options are case-sensitive.*

*Example:* ***ResBackoffice*** *will NOT work.*
***RESBackoffice*** *will work.*

---

Available properties are:

| Property Name | Choices | Description |
|---|---|---|
| ADDLOCAL | RES3700<br>RESBackoffice<br>Documentation<br>Diskless | Tells the install program which features to install on the server. Separate multiple choices with a comma, but no spaces.<br>EX: ADDLOCAL=RES3700,RESBackoffice |
| CHANGEDB | NEW<br>UPDATE | Tells the install program whether to install a new database or update the existing one. |
| DBTOINSTALL | SHELL0<br>SHELL2<br>SHELL3<br>STANDARD<br>SAMPLE | Works in conjunction with the CHANGDB property. If the choice is NEW, the installer must specify a DB type. Skip this property if UPDATE was selected. |
| BACKUPDB | 1<br>0 | Works in conjunction with the CHANGEDB property. If UPDATE was selected, this property should be set to 1 to backup the current DB (strongly advised). Not necessary for NEW installations. |
| MICROSDRIVE | *(Examples):*<br>C:<br>D:<br>E: | Specifies the local drive where the MICROS apps will reside. |

| Property Name | Choices | Description |
|---|---|---|
| DBDIR | *(Examples):*<br>C:<br>D:<br>E: | Specifies the local drive where the DB will reside. |
| DOCDRIVE | *(Examples):*<br>C:<br>D:<br>E: | Specifies the local drive where the Documentation will reside. |
| DISKLESSDRIVE | *(Examples):*<br>C:<br>D:<br>E: | Specifies the local drive where the Diskless files will reside. |

***Note*** *Setup will look for the label [PROPERTIES] and will read everything below it. Anything above the [PROPERTIES] label will be ignored.*

**Example 1**

(New Installation, All options installed)
(Database stored on D: drive, all else on C)

```
[PROPERTIES]

ADDLOCAL=RES3700,RESBackoffice,Documentation,Diskless
CHANGEDB=NEW
DBTOINSTALL=SAMPLE
MICROSDRIVE=C:
DBDIR=D:
DOCDRIVE=C:
DISKLESSDRIVE=C:
```

### Example 2

(Existing Installation, no new options added)

Although no new options are added, all existing options must be listed if they are to be included in the update. For example, if the basic RES application and the diskless options were previously installed, they must be re-selected as part of the updated installation. Drive letters may not be changed from their current location.

Remember, documentation is optional. It must be included as an ADDLOCAL property to be installed on the hard-drive.

```
[PROPERTIES]

ADDLOCAL=RES3700,Diskless,Documentation
CHANGEDB=UPDATE
BACKUPDB=1
MICROSDRIVE=C:
DBDIR=C:
DOCDRIVE=C:
DISKLESSDRIVE=C:
```

# Appendix D: GSS Setup

Guest Services Solution (GSS) is the latest addition to the RES 3000 suite of software applications. Previously distributed on a separate CD, the application has been fully integrated into the core of RES products. Beginning with RES Version 3.1 Service Pack 1, GSS is included as part of the RES installation.

This appendix provides instructions for upgrading a 3700 system for installation of the integrated GSS application. Once installed, operation is the same whether running on a client or a server setup.

## Installing GSS: Where Do I Begin?

The following steps describe the process, beginning with a RES V2.6 system and continuing through various RES and GSS versions and service pack releases.

Depending on the current system configuration, some of these steps may be omitted. To assist the installer, side headings are provided to indicate the main starting points for RES and GSS version upgrades. Server and client differences are also noted.

### Upgrading the V2.6 Server to RES 3.1

1. If the system is a V2.6 site, load GSS SP2 as the first step in upgrading to the RES 3000. Refer to the GSS SP2 Installation Instruction for more information.

2. Follow these steps to upgrade the RES 2.6 server to RES 3000:

    1. Double-click the **\MICROS\RES\POS\GSS\ Manual26preconv.bat** file on the RES Server. This will unload all GSS database information into comma-separated value (CSV) files in the **c:\TEMP** folder. It will create a backup of your GSS information prior to upgrading.

    2. Create a “GSSBackup” folder under the **c:\TEMP** directory.

    3. Copy ***.CSV** from **c:\TEMP** to **c:\TEMP\GSSBackup**.

4. Install RES 3000 following the RES setup instructions included with the RES 3000 software.

> ***Note*** *When running RES 3000 setup:*
>
> - *Do not change any drive letters.*
> - *Choose to Convert the Database.*
> - *Be sure to check the backup database options.*

5. When RES setup completes and the system has been rebooted, you must log into Windows NT as Administrator.
6. Run netsetup to update all clients.

### Upgrading the RES 3.0 Server to RES 3.1

3. Detailed instructions for upgrading a RES 3.0 server to RES 3.2 are provided in the section "Running Server Setup" on page 22. Instructions for upgrading the RES 3.0 clients can be found in "Running Client Setup" on page 40.

> ***Note*** *After converting to RES Version 3.2, the system retains a copy of the* ***gsspreconv.bat*** *and* ***gsspostconv.bat*** *files for GSS-users in the* ***Micros\Common\Scripts*** *directory. These files are unnecessary for anything other than converting a 2.6 GSS database; however, attempting to convert a non-GSS database while these scripts are in place will cause that conversion to fail. MICROS recommends renaming these files unless (and until) you plan to convert a 2.6 GSS database.*

### Starting with a RES 3.1 System

4. Follow normal RES 3.1 to 3.2 updgrade process, using instructions starting on page 22.

> ***Note*** *For information on additional configuration changes, refer to the GSS notes in the Before You Begin: Tips, Traps, and Precautions section, located on page 8.*

## Installing Caller ID with Rochelle Box

Use the following steps to install Caller ID with the Rochelle Box.

> ***Note*** *Before installing Caller ID with the Rochelle box, contact the phone company to have the phone line split so that one part goes to the phone and the other part goes to the Rochelle box.*

1. Add the following registry entry to the server:

| | |
|---|---|
| **Key Location** | [HKEY_LOCAL_MACHINE\SOFTWARE\MICROS\GSS\CALLERID\ROCHELLE\PARAMETERS] |
| **Name** | ComPort |
| Data | COM1* |

*COM1 is the default setting. If using Caller ID on a COM port other than COM1, be sure to set the value accordingly.

2. Attach the Rochelle Caller ID box to the correct COM port on the Server.

3. Start the MICROS Caller ID Service from the Windows Control Panel Services.

> ***Note*** *Visit www.rochelle.com for more information about installing your Caller ID device.*

## Running Caller ID in Demo Mode

Use the following steps to run Caller ID in Demo Mode:

1. Add the following registry entry to the server:

| | |
|---|---|
| **Key Location** | [HKEY_LOCAL_MACHINE\SOFTWARE\MICROS \GSS\CALLERID\ROCHELLE\PARAMETERS] |
| **Name** | ComPort |
| **Data** | COM1* |

*COM1 is the default setting. If using Caller ID on a COM port other than COM!, be sure to set the value accordingly.

2. Attach a null model cable from COM1 to COM2 on the server.
3. Start the Rochelle Emulator.
4. Start the MICROS Caller ID Service from the Windows Control Panel Services.

***Note*** *The Rochelle emulator can be found on the Guest Services Solution product page at www.micros.com.*

# Appendix E: Internet Information Services (IIS) Security

Prior to RES Setup, Internet Information Services (IIS) security is configured to maximize security without affecting the functionality required by RES software. The IIS security is configured using Microsoft's IIS Lockdown tool.

If either the operating system drive or the Micros drive are FAT partitions, the IIS Lockdown procedure will not complete. Therefore, Micros recommends using an NTFS file system on both the operating system drive and the Micros drive. If your system is currently using a FAT partition, you can convert to an NTFS partition using the Convert command.

***Note*** *Prior to running RES Version 3.2 Setup, you should convert any FAT drives to NTFS so the IIS lockdown procedure will be able to complete.*

The next two sections list the IIS security changes that are made by RES Setup.

## IIS Lockdown

The following changes are made to lockdown IIS:

| Component | Action |
|---|---|
| HTTP | Enabled |
| FTP | Disabled |
| SMTP | Disabled |
| NNTP | Disabled |
| ASP | Disabled |
| Index Server Web Interface | Disabled |
| Server Side Includes | Disabled |
| Internet Data Connector | Disabled |

| Component | Action |
|---|---|
| Internet Printing | Disabled |
| HTR Scripting | Disabled |
| WebDAV | Disabled |
| Anonymous User Execute Rights | Disabled |
| Anonymous User Write Rights | Disabled |
| issamples virtual directory | Removed |
| MSADC virtual directory | Removed |
| iisadmin virtual directory | Removed |
| iishelp virtual directory | Removed |

## URL Security

The following changes are made for URL security scanning:

- Only allow the following HTTP verbs: GET, HEAD, POST, DEBUG
- Deny the following extensions: .asp, .cer, .cdx, .asa, .exe, .bat, .cmd, .com, .htw, .ida, .idq, .htr, .idc, .shtm, .shtml, .stm, .printer, .ini, .log, .pol, .dat
- Disallow high bit characters in URL
- Disallow dots that are not file extensions
- Log URL activity
- Deny the following request headers: Translate:, If:, Lock-Token:
- Deny the following URL Sequences: .., ./, \, :, %, &

## Modifying IIS Security Settings

The security settings made to Internet Information Services (IIS) during RES Setup may be modified if alternate settings are required by third-party software. To change the IIS security settings, perform the steps in the following sections after RES Setup has been run:

### Restore Security Settings

1. Run **iislockd.exe** from the **\MICROS\NetSetup\System32\inetsrv** directory.
2. Click Next.
3. Select Yes.
4. Click Next.
5. Click Finish.

The security settings are restored to their most recent previous state, which is either prior to running RES Setup or the last time **iislockd.exe** was run.

### Modify the IIS Files

1. Edit the [MICROSALT] section of the **iislockd.ini** file located in the **\MICROS\NetSetup\System32\inetsrv** directory as required...

***Warning*** *Do not modify the [MICROS] section of the iislockd.ini file.*

***Note*** *Refer to the Iislockd.chm file located in the \MICROS\NetSetup\System32\inetsrv directory for information on modifying this file.*

2. Edit the **urlscan_micros_customer.ini** files located in the **\MICROS\NetSetup\System32\inetsrv** directory as required..

***Warning*** *Do not modify the urlscan_micros_default.ini file.*

***Note*** *Refer to the UrlScan.doc file located in the \MICROS\NetSetup\System32\inetsrv directory for information on modifying this file.*

### Loading the New Security Settings

1. Run **iislockd.exe** from the **\MICROS\NetSetup\System32\inetsrv** directory.
2. Select Agree on the Microsoft license agreement screen.
3. Select Customer Configurable Settings.

---

***Note*** *To return to the default MICROS settings, select MICROS Default Settings.*

---

4. Click Next three times for processing to begin.
5. Click Next.
6. Click Finish.

### Starting the Default Web Site

It may be necessary to start the default web site once the new security settings are loaded. To start the default web site:

1. Select *Start Menu* | *Settings* | *Control Panel* | *Administrative Tools* | *Internet Services Manager*.
2. If the default web site is stopped, right-click on the site and select Start. .

---

***Note*** *If you are running a Windows Server product with more than one web site, use these steps to start the appropriate web sites. If there are multiple web sites, there may not be a "default web site".*

---

# Appendix F: Post-Installation Batch File for Windows 95/98/NT/ W2K Clients

The RES Setup process allows sites to run a custom batch file once installation is complete on Win32 Clients. The file must be installed prior to setup and will be run immediately after the system reboots.

The batch file provides installers with a mechanism for automatically loading ISL scripts, user configuration files, templates, drivers, or other customized files required by the clients. This process reduces client setup times while improving consistency and accuracy in their configuration.

## Procedures

Follow these steps to add a post-installation batch file:

1. Create the batch file and name it **PostInstall.bat.**

2. Copy the **PostInstall.bat** file to the *NetSetup* directory.

3. Run the Client installation.

Setup will find the file and copy it from the Server's *NetSetup* directory to the Client's *Temp* directory. An entry will be made in the **RunOnce** key, instructing the system to run the batch file when the system reboots.

# Appendix G: Frequently Asked Questions (FAQs)

This section provides answers to the most frequently asked questions about RES 3.2 and RES Clients.

## RES 3.2 Issues

### 1. Why won't the new image display after I replace the res3700.bmp file in \micros\res\pos\etc folder?

The **res3700.bmp** has been moved to the **\Bitmaps** folder under MICROS. RES Setup automatically moves this file from its old location to the new folder. If you wish to place your own **res3700.bmp** on the system, you must copy it to the appropriate folder location on each client, as indicated below:

> ***Note*** *A single .bmp file may be used on all three platforms. However, you may want to create a separate file for the Mobile MICROS due to its smaller screen size.*

- **Win32 Clients — \MICROS\RES\POS\Bitmaps**.
- **WS4 Clients — \MICROS\Bitmaps**:

  To replace the file on the WS4:

  1. Copy the **res3700.bmp** to the following folder on the RES Server: **\MICROS\RES\CAL\WS4\Files\CF\MICROS\Bitmaps**
  2. Wait up to 30 seconds for the file to transfer to the WS4 Client.
  3. Reboot the WS4 Client to load the image for POS Operations.

- **Mobile MICROS — \MICROS\Bitmaps**.

  To replace the file on the Mobile MICROS client:

  1. Copy the **res3700.bmp** to the following folder on the RES Server: **\MICROS\RES\CAL\HHT\MICROS\Bitmaps**
  2. Wait up to 30 seconds for the file to transfer to the Mobile MICROS Client.
  3. Reboot the Mobile MICROS Client to load the image for POS Operations.

---

***Note*** *Bitmaps used for POS touchscreen keys should also be placed in the* ***\Bitmaps*** *folder.*

---

## 2. Why are all client nodes listed in the POS Configurator (Devices | Network Nodes) displayed in the MICROS Control Panel even when they are not currently connected to the system?

With this release, MICROS Control Panel allows the user to specify whether all client nodes or just connected client nodes will be displayed. Previously (Version 3.1 and lower), only connected client nodes were shown. This remains the default behavior.

To display all clients:

1. From the Windows Start Menu, select **Programs | MICROS Applications | MICROS Control Panel**.
2. Go to the menu bar and select **View | Show All Clients**. The system tree is modified to display all clients.

### 3. After changing the computer name or IP address of the Server, why can't I start POS Operations on any of my clients?

Changes made to the Server identity are not automatically propagated out to the clients. To send these changed to the clients:

1. From the Windows Start Menu, select **Programs | MICROS Applications | MICROS Control Panel**.
2. Highlight the SQL Database Server node.
3. Go to the Status tab and click the **Reload** button.

Within a few minutes, the clients should be operational.

## 4. Is the host file still important to the system?

Yes, the host file is still used by the RES System and must be accurate. The RES System also uses a file called **MDSHosts.xml**. This file is automatically generated by the system and should not be manually copied or edited by the user. The location of the file depends on the platform, as indicated below:

- **Server — \MICROS\Common\etc**
- **Win32 Clients — \MICROS\Common\etc**
- **WS4 and Mobile MICROS — \MICROS\etc**

---

***Note*** *For troubleshooting purposes, this file may be read only. Do not edit this file in any way.*

---

This file is generated by the system and is based on information from the MICROS database. The following POS Configurator forms need to have accurate client information in order for the file to be correct:

- *Devices* | *Network Node*
- *Devices* | *Devices*
- *Devices* | *User Workstations*
- *System* | *Restaurant*

## Client Issues

### 1. Can I save the Compact Flash on a malfunctioning MICROS 3700 WS4?

Yes. If you have a WS4 Client that has gone bad, you simply remove the Compact Flash from that unit and install it into a good WS4.

> ***Note*** *For information and instructions on removing/installing the Compact Flash, please refer to the Worksation 4 Setup Guide, available on the MICROS website under Products | Hardware Solutions | Documentation.*

### 2. Can I move a WS4 from one system to another?

Yes. To do this, follow these steps to remove the MICROS folder from the Compact Flash of the WS4 before installing a unit into a new RES System:

1. On the WS4, open the Windows Explorer and navigate to **\CF**.
2. Delete the **\MICROS** subfolder at this location.
3. Power up the WS4 Client and establish a network connection to the new system.
4. Reconfigure CAL as follows:
   - Select Start | Programs | CAL | Reconfigure CAL.
   - Select the RES Server to which this WS4 will be connected. (Do not select the DHCP option.)
   - Select a name for this WS4 Client from the list of available nodes.
   - Save the configuration. CAL will update the unit with the new system application software.

## 3. How do I map a drive to a WS4 client?

You don't. The WS4 does not allow files to be transferred to it using traditional Windows methods. Instead, files are transferred to the unit via the Client Application Loader (CAL). For information on setting up CAL packages and files, refer to *Client Application Loader (CAL) File Specification (MD0003.061)*, available as **CAL.pdf** in the *\Support\sdk* folder on Disk 2 of the RES 3.2 CDs.

On the other hand, the system Server and its hard-drive (Win32) clients may be accessed *from* the WS4 using a method similar to Windows mapping. To do this:

1. From the WS4, open the Windows Explorer.
2. In the location box, type the UNC path of the PC to be accessed.

   For example, to access the **c:\micros\res\pos** share on a server with a computer name of "RESServer 5," enter **\\RESServer5\micros\res\pos**.

Once the approrpriate share has been accessed, you may perform the required Windows operation.

## 4. How do I set up my custom icons to work on a Mobile MICROS and WS4 client?

The **customicons.dll** created for previous versions of RES will work only on hard-drive clients. Additional **customicons.dll** files were created for Mobile MICROS and WS4 devices. As before, you will need to load your own icons into these files using an Icon Editor.

All **customicons.dll** files are available in the **Support\custom icons** folder on Disk 2 of the RES 3.2 CDs and must be manually copied to the folder location for each client type:

- **Win32 Clients — \MICROS\RES\POS\Bin**
- **WS4 Clients — \MICROS\Bin**

  To copy the file to the WS4:

  1. Create a **\MICROS\RES\CAL\WS4\Files\CF\MICROS\Bin** folder on the RES Server:
  2. Copy the WS4 **customicons.dll** to this folder.
  3. Wait up to 30 seconds for the file to transfer to the WS4 Client.

- **Mobile MICROS — \MICROS\Bin**

  To copy the file to the Mobile MICROS client:

  1. Create a **\MICROS\RES\CAL\HHT\MICROS\Bin** folder on the RES Server:
  2. Copy the Mobile MICROS **customicons.dll** to this folder.
  3. Wait up to 30 seconds for the file to transfer to the Mobile MICROS Client..

---

***Note*** *You will need to reboot the clients in order for the new images to take effect.*

---

## 5. How do I copy my OPSDisplayUser.cfg to all clients?

A single **OPSDisplayUser.cfg** file may be used on all three platforms. However, because it is not included in RES Setup, the file will not automatically copy during the installation. Instead, it must be manually copied to the following folder location for each client type:

- **Win32 Clients — \MICROS\RES\POS\etc**
- **WS4 Clients — \MICROS\etc**

  To transfer the file to the WS4:

  1. Copy the **OPSDisplayuser.cfg** file to the **\MICROS\RES\CAL\WS4\Files\CF\MICROS\etc** folder on the RES Server.
  2. Wait up to 30 seconds for the file to transfer to the WS4 Client.
  3. Reboot the WS4 Client to load the settings for POS Operations.

- **Mobile MICROS — \MICROS\etc**

  To transfer the file to the Mobile MICROS:

  1. Copy the **OPSDisplayuser.cfg** file to the **\MICROS\RES\CAL\HHT\MICROS\etc** folder on the RES Server.
  2. Wait up to 30 seconds for the file to transfer to the Mobile MICROS Client.
  3. Reboot the Mobile MICROS Client to load the settings for POS Operations.

## 6. How do I copy custom scripts to all clients?

Scripts are custom files, created by the installer to do a variety of tasks. They are not included during installation, but must be manually copied to the appropriate directory.

---

***Note*** *Because the WS4 and Mobile MICROS platforms are based on Windows CE, existing Win32 scripts may not work on those platforms. Be aware that compiled files may need to be recompiled in a development environment that supports this type of Operating System.*

---

Although scripts can reside anywhere on the system, MICROS recommends storing them together in the **Scripts** folder. The location of this folder will vary, depending on the client type:

- **Win32 Clients — \MICROS\RES\POS\Scripts**
- **WS4 Clients — \MICROS\Scripts**

  To add scripts to the WS4:

  1. Copy file(s) to the **\MICROS\RES\CAL\WS4\Files\CF\MICROS\Scripts** folder on the RES Server.
  2. Wait up to 30 seconds for the file(s) to transfer to the WS4 Client.

- **Mobile MICROS — \MICROS\Scripts**

  To add scripts to the Mobile MICROS:

  1. Copy file(s) to the **\MICROS\RES\CAL\HHT\MICROS\Scripts** folder on the RES Server.
  2. Wait up to 30 seconds for the file(s) to transfer to the Mobile MICROS Client.

## 7. How do I copy SIM scripts to all clients?

A single SIM script (**pmsxxx.isl)** may be used on all three platforms. This file is not included during installation, but must be manually copied to the appropriate client directory.

---

***Note*** *Because the WS4 and Mobile MICROS platforms are based on Windows CE, existing Win32 scripts may not work on those platforms. For more information, refer to the RES 3.2 Read Me First (MD0003-057).*

---

- **Win32 Clients — \MICROS\RES\POS\etc**
- **WS4 Clients — \MICROS\etc**

  To add SIM scripts to the WS4:

  1. Copy the **pmsxxx.isl** file to the **\MICROS\RES\CAL\WS4\Files\CF\MICROS\etc** folder on the RES Server.
  2. Wait up to 30 seconds for the file to transfer to the WS4 Client.

- **Mobile MICROS — \MICROS\etc**

  To add SIM scripts to the Mobile MICROS:

  1. Copy the **pmsxxx.isl** file to the **\MICROS\RES\CAL\HHT\MICROS\etc** folder on the RES Server.
  2. Wait up to 30 seconds for the file to transfer to the Mobile MICROS Client.

## 8. How do I open a file on a WS4 Client?

Files can be opened on a WS4 Client as follows:

- Using WordPad:
  - From the Windows Start Menu, select *Programs* | *Microsoft WordPad* to start the application.
  - From the menu bar, select *File* | *Open* to launch the dialog box.
  - Browse to the appropriate file and select. (You may need to change the **File Type** to *All Documents* to locate the desired file.)
  - Double-click to open the file.
- Opening a file directly:
  - Locate the required file in the Window Explorer.
  - Rename the file, giving it a .txt or .doc extension.
  - Double-click to open the file.

## 9. Where can I find MICROS Confidence Test on a WS4 Client?

This application can be launched from the Windows Start Menu by selecting *Programs* | *MICROS Applications* | *Confidence Test*.

---

***Note*** *The WS4 comes with a built-in diagnostic utility for all hardware components. This utility may also be used. To access it:*

- *From the Desktop, touch the My Computer icon twice.*
- *Touch the DOC icon twice.*
- *Touch the Utilities folder twice.*
- *Touch the DiagUtility icon twice to start the WS4 diagnostic utility.*

---

If a shortcut for the MICROS Confidence test is not available, you can always access the program via Explorer using the following steps:

- From the Windows Start Menu, select *Programs* | *Windows Explorer.*
- Open **\CF\MICROS\bin**.
- Touch **microscfdtest.exe** twice.

## 10. How do I open the Windows Registry on a WS4 Client?

The registry on a WS4 is similar to a Win32 client registry. MICROS does not recommend editing the registry directly. However, should it be necessary, the following steps should be taken:

- From the Desktop, touch the My Computer icon twice.
- Touch the DOC icon twice.
- Touch the Utilities folder twice.
- Touch the regeditWS4 icon twice to start the WS4 registry editor.

***Note*** *Mobile MICROS Clients do not permit direct access to the registry.*

## 11. How do I start POS Operations on a WS4 Client?

If the WS4 Client is up, POS Operations should be running already. That is the default start position for this workstation. If it is not, you may start OPS by going to the Windows Start Menu and selecting *Programs* | *MICROS Applications* | *Start POS.*

If a shortcut is not available, you can always access the program via Explorer using the following steps:

- From the Windows Start Menu, select *Programs* | *Windows Explorer.*
- Open **\CF\MICROS\bin**.
- Touch **AppStarter.exe** twice.

## 12. Why does POS Operations on a WS4 Client say "System Closed"?

Although POS Operations should always be running on the WS4 and Mobile MICROS clients, that does not guarantee the units will be operational (i.e., able to ring transactions).

WS4 and Mobile MICROS Clients are not individually controlled by the MICROS Control Panel. You cannot start and stop POS Operations on these devices as you would Win32 Clients.

WS4 and Mobile MICROS units are considered unmanaged clients — they take on the state of the RES Server. Therefore, if the Server is set to Back of House in the MICROS Control Panel, then all unmanaged clients will display a "System Closed" screen.

To ring transactions on unmanaged clients, the MICROS Control Panel must set either the entire RES System (i.e., the Restaurant) or the RES Server node to Front of House..

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***Note*** *You may have the RES Server at Front of House, but turn off POS Operations on the server and the unmanaged clients will still operate.*

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## 13. How do I bring up the CE Task Manager on a WS4 Client?

To start Task Manager on a WS4 Client, hold down the [Alt] key and press the [Tab] key on the keyboard.

## 14. How do I access other applications while POS Operations is running on a WS4 Client?

The CE Operating System does not provide a mechanism for minimizing POS Operations. You can still program a Minimize function key on a touchscreen, but be aware that when the key is pressed, it will bring up the Windows CE Start Bar. From here, you can access other applications, as necessary.

If a keyboard is attached to the WS4, the Windows CE Start Bar may be accessed by holding down [Ctrl] and pressing the [Esc] key.

## 15. How do I shutdown POS Operations on a WS4 Client?

Although MICROS does not recommend shutting down POS Operations on a WS4, we recognize that sometimes this is necessary for troubleshooting purposes.

To shutdown POS Operations, attach a keyboard to the WS4 and do the following:

- Bring up the Windows CE Start Bar by pressing the [Ctrl]-[Esc] key combination simultaneously.
- Hold down the [Alt] key and touch the POS Operations application that appears in the Task Bar. A **Close** option will display at the bottom of the screen.
- Press **Close** to shutdown POS Operations.

## 16. How do I turn off my WS4 Client?

The power switch is located on the front right of the unit, on the underside of the display screen. It is a small circular switch that protrudes very little and can be easily missed.

To turn off the unit, you must hold the power switch for at least five seconds. Make sure that the Operator LED changes from a solid green to OFF. **This is critical**. Failure to properly turn off the power will place the unit in Suspend Mode, not OFF. For more information about the power switch and it's different states, refer to the Workstation 4 Setup Guide, available from the MICROS Website under *Products* | *Hardware* | *Documentation*.

## 17. How do I create a screen capture on a WS4 Client?

Microsoft provides a utility called "Remote Display Control" which may be used through Active Sync to capture HHT screens and save them as bitmap files.

## 18. Can I load other applications on a WS4 Client?

The WS4 is capable of running any CE-compatible application. However, the WS4 is intended to be a POS appliance that allows the RES user to run POS Operations and Manager Procedures. By running other applications on the WS4, you assume the responsibility for installation and testing on this platform.

The WS4 has a built-in Client Application Loader (CAL). Additional information can be found in the *Workstation 4 Setup Guide* and in the *Client Application Loader (CAL) File Specification (MD0003-061)*, available as **CAL.pdf** in the *\Support\sdk* folder available on Disk 2 of the RES 3.2 CDs.

## 19. Do I need to translate OPS text for each client platform?

No. You can create one set of OPS translation files and copy them to all three platforms.

## 20. Why are my fonts different sizes since I upgraded to 3.2?

Please refer to the document "Editing OPSDisplayUserConfig File," located on Disk 2 of the RES 3.2 CD set under **\Support\sdk**.

## 21. Can you request time off from a WS4?

No, the Request Timeoff Wizard is built into the Labor Management application and can only be run on Windows NT and Windows 2K clients.

## 22. Why don't I see the standard bitmaps on my WS4?

Due to the size of the Compact Flash, MICROS assumes that users will not be using our distributed bitmap images. Should you wish to use the MICROS bitmaps, or have created bitmaps of your own to use, you will need to copy them to the CAL folder for download on your WS4. Please refer to question #1 for information on how to copy bitmaps to a client.

## 23. Does the OCB SIM script work with Version 3.2?

The OCB SIM script works with Version 3.2 as long as the OCB-connected devices are Win32 clients.

## 24. Can I reboot all my Clients from the Server?

Yes. MICROS provides a remote reboot utility that works for all clients (except SEI KDS Clients) running Version 3.2. It may be accessed as follows:

1. Open a DOS window.
2. Navigate to the \MICROS\common\bin directory on the server.
3. At the prompt, run the **remotereboot.exe** using the following command

   **RemoteReboot[/?] [-h] [/allclients] [<nodenames>]+**

   where:

   **/?** or **-h** — Prints a help message.

   **/allclients** — Reboots all configured clients, but will NOT reboot the server.

   **<nodenames>** — Specifying one or more computer node names reboots only those client workstations.