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*Restaurant Enterprise Solution  
Enterprise Management  
Version 4.9  
Installation and Setup Guide*

**About This Document**

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This document provides instructions for installing and configuring the MICROS Restaurant Enterprise Solution (RES) Enterprise Management (EM) software.

\*\*\*\*\*NOTE\*\*\*\*\*

**Due to changes implemented with RES 4.7, EM 4.9 does not support RES Version 3.1, Versions 3.2 SP7 HF 5 and lower, Version 4.3 and Versions 4.1 HF1 and lower.**

*For more information on the RES Versions that are supported by EM 4.9, refer to the EM & RES Version page in this document.*

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## **Declarations**

### **Warranties**

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## EM & RES Version Compatibility Reference

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An Enterprise Management environment can support multiple RES versions at their stores. When planning an upgrade, the current and planned RES/EM versions must be taken into consideration.

The following charts list the supported RES version for both corporate and stores for each EM release. The heading will list the minimum EM version installed at corporate. The associated table will list the acceptable RES versions running at EM Corporate and the EM Stores.

### **Caveat: Upgrading to RES Version 3.2 SP7 HF5 or Higher**

Special considerations must be taken into account when upgrading to RES Version 3.2 SP7 HF5 or higher. MICROS recommends applying EM SP8 **PRIOR** to upgrading to RES SP7 HF5 or higher. For an EM corporate server this can be accomplished by upgrading to RES 3.2 SP7, EM 3.2 SP8 then applying the desired Hotfix.

At an EM store, EM 3.2 SP8 can be applied to any RES version higher than 3.2 SP1. Therefore, apply EM 3.2 SP8 first, then upgrade to RES 3.2 SP7 HF5.

**EM & RES Version Comparison**    **EM 4.9 (4.9.1.654)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
4.9 (4.9.1.654)	4.5 (4.5.7.1983) & Higher
	4.3 HF1 (4.3.16.1526) & Higher
	4.1 HF2 (4.1.17.773) & Higher
	3.2 SP7 HF6 (3.2.101.1895) - 3.2 SP7 HF7 (3.2.105.2286)

**EM 4.8 (4.8.0.640)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
4.8 (4.8.3.2655)	4.5 (4.5.7.1983) & Higher
	4.3 HF1 (4.3.16.1526) & Higher
	4.1 HF2 (4.1.17.773) & Higher
	3.2 SP7 HF6 (3.2.101.1895) - 3.2 SP7 HF7 (3.2.105.2286)

**EM 4.7 (4.7.1.618)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
4.7 (4.7.1.2284)	4.5 (4.5.7.1983) & Higher
	4.3 HF1 (4.3.16.1526) & Higher
	4.1 HF2 (4.1.17.773) & Higher
	3.2 SP7 HF6 (3.2.101.1895) - 3.2 SP7 HF7 (3.2.105.2286)

**EM 4.6 (4.6.1.574)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
4.6 (4.6.4.2070)	4.0 HF1 (4.0.11.374) & Higher
	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)

**EM 4.5 (4.5.2.531)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>

4.5 (4.5.7.1983)	4.0 HF1 (4.0.11.374) & Higher
	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)

**EM 4.3 (4.3.1.448)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
4.3 HF1 (4.3.16.1526)	4.0 HF1 (4.0.11.374) & Higher
	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)

**EM 4.1 (4.1.4.367) & EM 4.1 HF1 (4.1.5.377)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
4.1 HF1 (4.1.13.641) - 4.1 HF3 (4.1.19.906)	4.0 HF1 (4.0.11.374) & Higher
	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)

**EM 4.0 (4.0.7.248)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
4.0 HF1 (4.0.11.374) - 4.0 HF3 (4.0.17.502)	4.0 HF1 (4.0.11.374) & Higher
	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)

**EM 3.2 SP8 (3.2.20.1107)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.2 SP7 (3.2.84.1378) - 3.2 SP7 HF6 (3.2.101.1895)	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

**EM 3.2 SP7 (3.2.17.1081)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.2 SP6 (3.2.74.1218) - 3.2 SP6 HF3 (3.2.79.1305)	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

**EM 3.2 SP6 (3.2.16.1067)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.2 SP5 (3.2.67.1117) - 3.2 SP5 HF1 (3.2.69.1136)	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

**EM 3.2 SP5 (3.2.15.1052)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.2 SP3 (3.2.51.965) - 3.2 SP4 (3.2.63.1077)	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

**EM 3.2 SP4 (3.2.14.1021)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.2 SP2 (3.2.35.724) - 3.2 SP2 HF2 (3.2.40.854)	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

**EM 3.2 SP3 (3.2.14.996)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.2 SP1 (3.2.25.545) - 3.2 SP1 HF2 (3.2.28.609)	3.2 SP1 (3.2.25.545) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

**EM 3.2 GR (3.2.8.942) & EM 3.2 SP1 (3.2.9.947) &  
 EM 3.2 SP2 (3.2.10.964)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.2 GR (3.2.8.335) - 3.2 GR HF3 (3.2.20.474)	3.2 GR (3.2.8.335) - 3.2 SP7 HF7 (3.2.105.2286)
	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)



**EM 3.1 SP2 (3.1.4.878)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.1 SP4 (3.1.13.621) - 3.1 SP4 HF3 (3.1.14.630)	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

**EM 3.1 SP1 (3.1.1.853)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.1 SP2 (3.1.11.485) - 3.1 SP3 HF1 (3.1.13.599)	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

**EM 3.1 GR (3.1.0.840)**

<b>RES Corporate Versions</b>	<b>RES Store Versions</b>
3.1 SP1 (3.1.10.427) - 3.1 SP1 HF4 (3.1.11.467)	3.1 SP1 (3.1.10.427) - 3.1 SP4 HF3 (3.1.14.630)
	3.0 GR (3.0.18.153) - 3.0 SP5 (3.0.28.237)
	2.6 GR - 2.6 SP9 (2.6.13.127)

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## **General Information**

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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
- ◆ MICROS Customer Database Administrator
- ◆ Customer MIS Personnel
- ◆ Customer Database Administrator

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### **What the Reader Should Already Know**

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

- ◆ Operational understanding of PCs
- ◆ Understanding of basic network concepts
- ◆ Experience with Windows Server and Desktop Operating Systems
- ◆ Basic knowledge of relational database concepts
- ◆ Understanding of hospitality terminology and concepts
- ◆ Understanding of MICROS 3700 POS system and Restaurant Enterprise Series products

## **How to Locate Information on RES Software Installation**

For information on installing RES software, including site requirements and installation tips, refer to the *Restaurant Enterprise Solution, Version 4.9 Installation Guide, MD 00003-121 Revision F*. This document can be accessed through the Members Services page on the MICROS website at the following location:

*Member Services / MICROS Products / RES / RES Documentation / Version 4*

A login and password is required.

## **Versions of this Document**

The table below lists the EM release versions and the corresponding versions of the EM Installation document.

<b>EM Version</b>	<b>Installation Revision Number</b>
4.1 General Release	Revision A
4.1 Hotfix 1	Revision B
4.3	Revision C
4.5	Revision D
4.6	Revision E
4.7	Revision F
4.8	Revision G
4.9	Revision H

## Getting Started

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### Directory Structure

During installation, EM application executables, sample layouts, and other files are installed in the following locations on the MICROS drive:

- ◆ **\Micros\Documentation\RES\EM** — EM documentation in pdf format.
- ◆ **\Micros\RES\EM\Bin** — Files and executables used by EM, including:
  - ◆ *StoreEmployeeImport.exe* — Used to load employee records into the central database.
  - ◆ *UCTConfig.exe* — Used after store setup to exclude store-managed options from Corporate updates
- ◆ **\Micros\RES\EM\ETC** — EM log files
- ◆ **\Windows [name dependent on Windows version]** — EM Setup log file
- ◆ **\Micros\RES\EO\Reports** — EM Crystal Reports Templates
- ◆ **\Micros\RES\POS\Bin** — The following executable used by EM:
  - ◆ *MIPriceWiz.exe* — Used by Corporate to make price changes to multiple items and distributed to selected stores.
- ◆ **\Micros\RES\EM\Transport** — Replication files sent to or received by the store.

- ◆ **\Micros\RES\EM\Utilities** — Additional files and executables used by EM, including:
  - ◆ *PackageViewer.exe* — Used to troubleshoot a package that fails. Allows the user to view only the contents of a package.
  - ◆ *PriceCleaner.exe* — Allows an EM user to remove old and obsolete pricing information from the database.
  - ◆ *SetStore.exe* — Used after store setup to change a store ID and to remove EM from the store's database so that it will no longer be managed by EM corporate.

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## Hardware Requirements

In order to successfully install and enable an Enterprise Management system, the requirements described in this section must be met.

### Overview

There are four computer resources that affect system performance:

1. Memory (RAM)
2. Hard disk size
3. Controller type/number
4. Processor speed.

The demands placed on these resources by EM and RES applications are a function of the database, the number of stores, RES suite applications employed, polling or not polling, and definitions managed within the enterprise. This section is based on the EM server being dedicated to EM and RES applications only. If the EM server is to be used for other third-party software applications, additional resources may be necessary. Please refer to the third-party software application resource requirements when determining the configuration needs of your system.

This section provides the recommended requirements for acceptable system performance. For increased performance (or if the customer is planning to upgrade in the near future), the next level of server configuration is highly recommended. All recommendations are based on current Personal Computer (PC) offerings.

The MICROS R&D team has neither tested nor certified PCs from any other manufacturers, and does not keep current on the offerings of other manufacturers. MICROS Customer Service and R&D typically do not support PCs from other manufacturers; therefore, it is recommended that PCs from other manufacturers be evaluated in terms of their equivalence to the Hewlett-Packard model; i.e., a Dell Optiplex as an equivalent model for an HP Vectra, but it is NOT an equivalent model for an E-60 or E-800 Net Server. Service and support for customers not using a MICROS-approved product will be the total responsibility of the end-user. Performance testing initial configuration of a third-party PC is available at prevailing rates.



### Other Notes

- ◆ Recommendations are based on requirements for acceptable performance under average conditions and based on the current version of software. Every effort is made by the development group to not significantly increase the server resource requirements as we move up in versions. However, because of our reliance on third-party components such as Microsoft Operating System, Sybase ASA DBMS and other tools, MICROS cannot guarantee that the suggested minimum requirements will be suitable for future versions of RES, Sybase, and Windows Operating Systems.
- ◆ MICROS does not recommend loading an operating system on a hardware platform that the manufacturer does not officially support. For example; the E-60 and E-800 do not support XP Pro. The Vectra Line does not support Windows 2003. These configurations are not recommended or supported.
- ◆ For new system purchases, it is recommended that RAM be purchased in 1 GB increments. This is the most cost-effective method and will minimize the usage of slots, should additional RAM be needed in the future.
- ◆ MICROS recommends using an EM client when backing up either the server's physical hard-drive or another PC on the network. Although tape drives may be used, it is no longer common practice to do so. ZIP drives, Jazz, and CD Read/Write drives do not have an adequate capacity to backup an EM database and are not recommended.

Sybase recommends that **no compression** be used when storing encrypted data. Since EM 4.x operates on an encrypted database, this needs to be considered when purchasing storage devices.

- ◆ Hard drives can be an important factor in selecting a PC. For maximum performance, at least 33% of the hard drive should be free at all times during normal operations. This is true for each hard drive and each drive partition. Disk defragmentation tools such as Diskkeeper are recommended to maintain hard drives at their most optimum performance.

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***Note** When upgrading to version 4.x, the size of the database will grow a minimum of 40%. Additionally, QSR databases or databases using Product Management will generally employ a larger database, due to the increased number of transactions.*

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- ◆ **Hard Drive Controllers** — These are a matter of preference and/or server type. In general, SCSI controllers offer faster data transfer rates than IDE controllers. However, users should make their own comparisons prior to purchase.
- ◆ **Dual Processors** — Dual processors are not used by EM software. However, some performance gains can be seen with operating systems called to multi-task additional applications and resources. As long as the Corporate EM server is not needed to run POS Operations, running dual processors will not be an issue.
- ◆ **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.

RAID configuration and features should ALWAYS be implemented through the hardware controller, not the operating system.

- ◆ **Polling Data** — MICROS has found that enterprise installations that take advantage of the complete RES suite of products and are polling totals from their locations will need approximately 1 GB of storage space per location polled. Because of the extreme storage required to achieve this amount of data, MICROS recommends that other services (e.g., the *myMicros.net*® portal solution) be given careful consideration as the Enterprise Reporting Solution.

- ◆ **Operating Systems** — Both Windows XP Pro SP2 and Windows Server 2003 SP1 are supported for Corporate servers. Wherever possible, MICROS recommends Windows Server 2003, as this operating system comes configured for optimum performance. The Windows XP Pro is configured for superior graphics handling with a user interface that requires more of the available system resources. Windows Server 2003 also offers enhanced security and logging.
- ◆ **Small Systems** — Refers to an EM configuration that manages between 1 to 100 sites, polling or not polling data back to the Corporate server for up to 400 days.
- ◆ **Medium Systems** — Refers to an EM configuration that manages between 100 to 250 sites, polling or not polling data back to the Corporate server for up to 400 days.
- ◆ **Large Systems** — Refers to an EM configuration that manages between 250 to 1000 sites, polling or not polling data back to the Corporate server for up to 400 days.

### Recommended Server Configurations

The following configurations have been tested and are recommended:

Configuration	Small-to-Medium (Non-Polling)	Medium-to-Large (Non-Polling)
Base	DC5100 - Tower	ML350 G4 - Tower
Processor Speed	3.2 GHz Pentium 4 Processor	3.2 GHz Pentium 4 Processor
RAM	1 GB – 2 GB	2 GB – 4 GB
HD Size	2 80-GB SATA (unless polling)	3 80-GB RAID 5 (unless polling)
Network Card	10/100 Network Card	10/100/1000 Network Card
CD Drive	DVD\CDRW Combo	DVD\CDRW Combo
Floppy Drive	Optional	Optional

Configuration	Small-to-Medium (Non-Polling)	Medium-to-Large (Non-Polling)
Operating System	Windows XP Pro SP2 or Windows Server 2003 SP1	Windows 2003 Server SP1
Other	IIS 5.0 .NET 2.0	IIS 6.0 .NET 2.0

MICROS Systems Inc. is an authorized reseller for Hewlett-Packard PCs. For information on available PC configuration options, please refer to the MICROS website ([www.MICROS.com](http://www.MICROS.com)) / *MICROS Pricelist page / HP Server Configuration* document.

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## Software Requirements

To successfully install and operate the EM application, MICROS requires/recommends the following software:

### EM Server Operating Systems Supported

Type	# of Stores in Enterprise
Windows XP Pro SP2	1 to 100
Windows Server 2003 SP1	101 or more

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**Note** *Windows Server 2003 is required on the Corporate server for an enterprise where the number of Enterprise clients exceeds 10. An Enterprise client is defined as a PC running EM corporate software. The Enterprise client may install either Windows XP Pro or Windows 2003.*

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### Minimum Version Requirements

- ◆ Not installed with RES

<b>Application</b>	<b>Version(s)</b>
Windows XP Pro	2002 SP2
Windows Server 2003	SP1
Microsoft Internet Explorer	6.0 SP1
Microsoft Internet Information Services (IIS)	5.0 for Windows XP Pro 6.0 for Windows Server 2003
Microsoft .Net Framework	2.0 (required for EM 4.3 and higher)
MDAC	2.6 SP1
Adobe Acrobat Reader	6.0
ASP.NET	1.0.3705

- ◆ Installed with RES 4.9

<b>Application</b>	<b>Version</b>
Sybase Adaptive Server	9.0.2.3586
Crystal Reports Viewer*	9.2.3.1336
Borland Delphi	5.1.1.1
Sentinel Software Key Driver	7.5.0

\*Crystal Reports Viewer is installed with RES. If report development is required, the installer must load a full version of Crystal Reports Developer. If done, RES Setup must be reloaded.

RES 4.9 supports Crystal Templates V9 only. Report templates may be developed using a higher version but must be saved in a V9 format.

## Before You Begin

Before running Enterprise Management setup, the following should be noted:

- ◆ The individual installing the software must be logged on as “Administrator” before running EM Setup on a Microsoft® Windows NT® system.
- ◆ All programs and applications must be closed on the PC. If the system detects an active program or process during the installation routine, a notification to close them may display.
- ◆ To view the online documentation, Microsoft Internet Explorer must be set as your default browser.
- ◆ Before attempting an EM store installation, you must disable at corporate the PM Access options that allow users to transfer items into, or order items for, a cost center to which the item does not belong. These options are:
  - ◆ Allow selection of cost centers where item is not assigned (Ordering)
  - ◆ Allow selection of cost centers where item is not assigned (Receiving)
  - ◆ Allow the transfer of items into cost center where they do not exist

Currently, these options are not available at the store level unless they are selected at Corporate. Failure to disable them means the store will have access to EM-managed definitions tables and can result in edits to the Corporate database.

- ◆ A setup log file (**MicrosEMSetup.log**) is created off of the *\Windows [name dependent on Windows version]* folder. This is the same location as RES Setup and RES Patch log files. Use this file to troubleshoot setup related issues.

## Installing the Enterprise Management Software

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This section describes the requirements and procedures for installing Enterprise Management (EM) Version 4.9 software.

For clarity, the instructions have been divided into two parts:

- ◆ **New Installations** — Includes procedures for creating a corporate EM database and synchronizing the data flow to and from the stores.
- ◆ **Upgrades** — Provides guidance for upgrading an existing EM environment from Version 3.x software to Version 4.9 or higher, and Version 4.x to Version 4.9 or higher.

As you review these methods, keep in mind that the installation process requires more than a simple walk-through of the EM application installation. Instead, it involves a sequences of events that must be coordinated between multiple locations (corporate and store). The lag time between these events may vary, depending on the complexity of the corporate database, the duration of the pilot program, and the number of enterprise stores to be brought online.

To meet the basic system requirements for EM setup, administrators may need to install, access, or configure other (i.e., non-EM) applications or service pack software. These are noted at the appropriate place in the event sequence.

It is not within the scope of this document to provide detailed instructions for installing and using the RES application suite and supporting software. For information on a specific product, consult the documentation provided by the vendor or refer to *How to Locate Information on Software Installation* on page 13 of this document.

## New Installations

There are three methods for accessing the Enterprise database:

1. Corporate server
2. Corporate client PC
3. Concept database server.

Complete instructions for implementing each method are described below.

## Running on a Corporate Server

The corporate server setup is required for EM maintenance activities to be conducted from the corporate server. Follow this sequence of events and processes:

1. **Establish a Pilot Store.**
  - ◆ Install RES 4.9 software in one or more of your enterprise stores. These will become the pilot or test stores on which a foundation database is built.

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**Note** *Micros recommends a pilot installation of two stores. This allows you to familiarize yourself with RES 4.9 configuration tools and operations, to identify store requirements (shared and store-specific), and to establish a stable database.*

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- ◆ Configure the RES software for the pilot store location. The POS and Labor Management software must be configured initially. Product Management and Financial Management may be configured at a later time.
- ◆ When the store is operating satisfactorily, make a backup of the database by creating an mbz file through Database Manager. Save this copy to disk or paste it into a temporary folder, accessible to the corporate server.



## 2. Create a Corporate Database.

- ◆ Backup the pilot store database and log file using the MICROS Database Manager.
- ◆ Place the .mbz file in a temporary folder on the Corporate Server.
- ◆ Install the RES 4.9 Prerequisites and Software on the Corporate server.
- ◆ When prompted during the RES 4.9 Software installation to chose either a *Shell Database* or to *Upgrade an Existing Database*, chose to upgrade an existing database and map to the pilot .mbz that you placed in the temporary folder.

---

**Note** *When installing programs on a Corporate server, install the same applications and programs that are on or will be on the Store servers (ie. Product Management, Labor Management, etc.). The Corporate system should mimic the Store systems.*

*For instructions on how to install the RES 4.9 Prerequisites and Software, refer to the RES 4.9 Installation Guide starting on page 28.*

---

## 3. Before installing EM (if database concepts are used).

If database concepts are in place, EM corporate may decide to manage multiple concepts on a single PC, or alternatively, to manage the concepts through different PCs networked together.

If setting up a separate PC to be used for a single concept database, only the RES Prerequisites must be installed before running the EM installation (the full version of RES does not need to be installed). When running the Central Setup on this PC, only the Concept

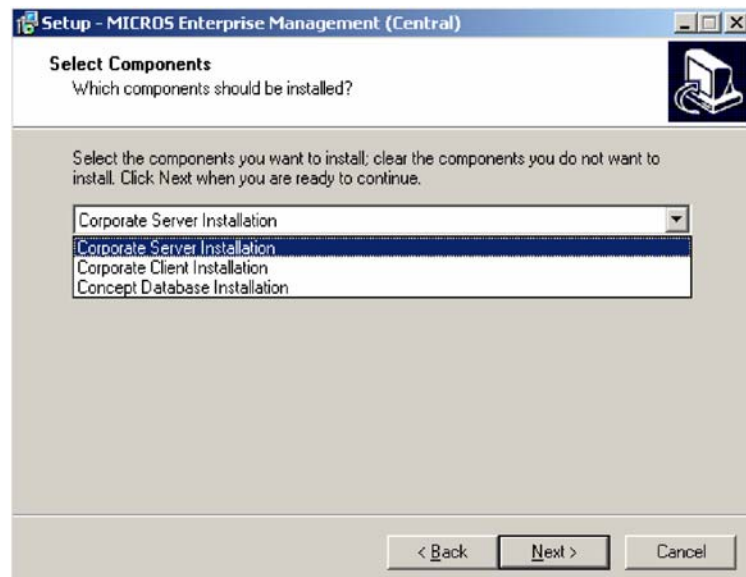
Database option will be available. The following behavior will govern this type of installation:

- ◆ When running installation no RES application executables will be installed.
- ◆ No database is required to install. Updates to the database will not be done via the executable, they will be done through Database Manager.

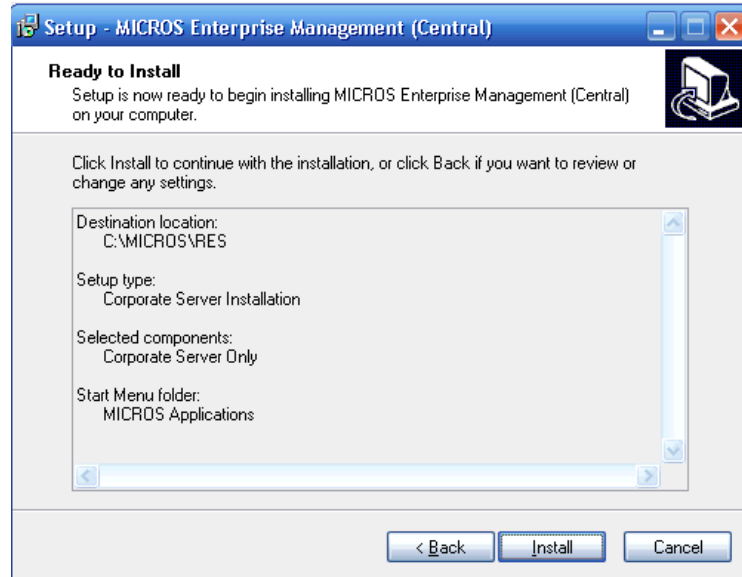
#### 4. Install EM on the Server.

- ◆ Insert the Enterprise Management software on the corporate server.
- ◆ Navigate to the location of the software through Windows Explorer and double-click on **CentralSetup.exe** to launch the application. When the Welcome screen is displayed, select [Next].
- ◆ The user will be prompted to select a component to install. The following options are available:
  - ◆ Corporate Server Installation: Select this type of installation if the PC is being used as the corporate server.
  - ◆ Corporate Client Installation: Select this type of installation if the PC is being used as a corporate client.
  - ◆ Concept Database Installation: Do not select this type of installation at this time. This component will be selected if a separate server is used for a different concept database.

Select the Corporate Server Installation option and click [Next].



- ◆ The EM Setup screen is displayed, indicating the path where the application files will be installed. Select **[Install]** to continue.

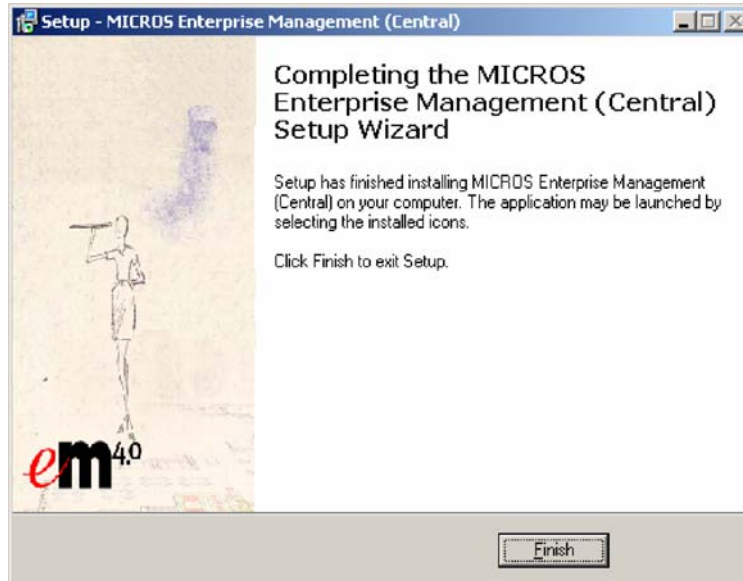


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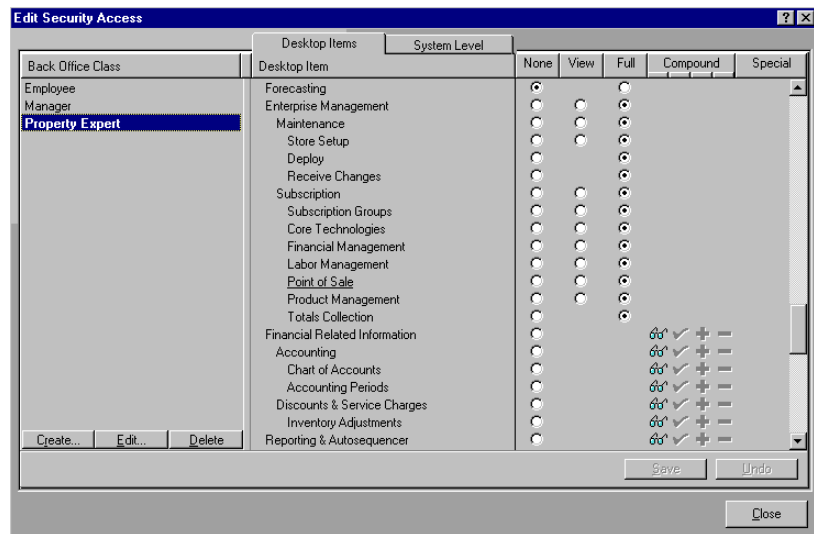
**Note** *Enterprise Management is installed automatically on the same drive as RES 4.9, in the \MICROS\RES\EM directory tree. This path cannot be changed.*

---

- ◆ When installation is complete the following prompt will display. Select **[Finish]**.



- ◆ Once the EM installation is complete, open the POS Configurator and select **Employees | Back Office Classes**. The Edit Security Access Form is displayed.



- ◆ Update the security levels to allow selected employees to access the newly installed EM forms. Changes can also be made to other back office classes, if required.

5. **Purge the Database Totals.**

- ◆ Open the POS Configurator and select **Totals** from the menu bar to display a drop-down list of options.
- ◆ Select **Clear All Totals**. A confirmation dialog box is displayed. Select [Yes] to continue. When the process is complete, a second dialog box is displayed with a prompt to restart POS Operations. Since POS Operations is not in use, ignore this advisory.
- ◆ If the Product Management (PM) application is installed and will be managed from the corporate office, the PM transaction totals may also be cleared from the database. To do this:
  - ◆ Open the PM application and click **Utilities**. A short-cut menu is displayed.
  - ◆ Select **Clear All Transaction/Totals**. When the confirmation dialog box is displayed, select [Yes] to clear all Product Management transactions and totals.

6. **Configure the Corporate Environment.**

- ◆ Go to *Setting Up the Corporate Database* on page 60 to complete this part of the installation.

7. **Activation of a Store.**

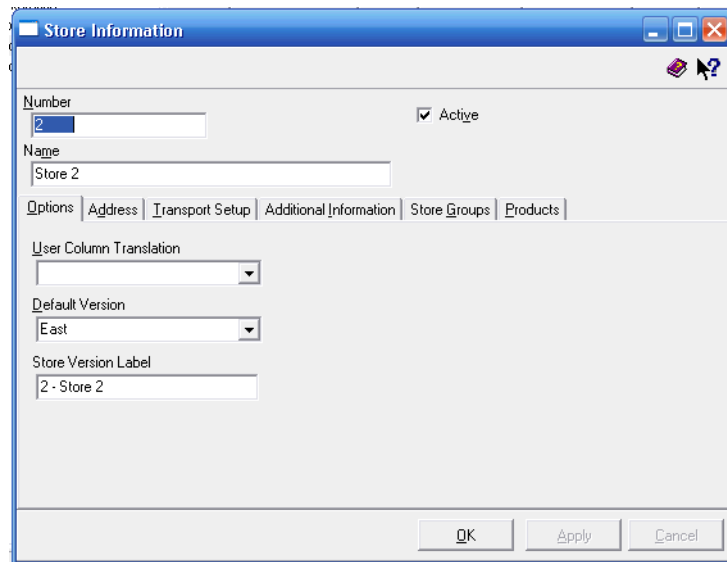
---

*Note* A store must be activated at Corporate prior to installing EM on the store server.

---

- ◆ From the Windows Start Menu, select **Programs | MICROS Applications | EM** and launch the MICROS Enterprise Configuration Utility (MECU).

- ◆ Log into the EM application. The MECU splash screen is displayed.
- ◆ Select the **Store Setup** icon from the Feature Selection Panel.
- ◆ Right-click on the store to be activated.
- ◆ Select **Edit Store** to display the **Store Information** form.



- ◆ Select the **Active** check box and click the [**Apply**] button and click [**Ok**].
  - ◆ Select the **Deploy** icon from the Feature Selection Panel on the left-hand side of the screen to create the initial activation file for the selected stores.
8. Send the initial activation file to the store. Place this file in a temporary directory.

## Running on a Store Server

### 1. Install EM at the Enterprise Stores.

---

**Note** *Prior to running store setup, you will need to know the Store ID that has been assigned to the enterprise store at corporate. To locate the Store ID:*

- ◆ *Select Store Setup from the Micros Enterprise Management Utility (MECU).*
- ◆ *Select the store that is being setup and note the value in the Store ID column.*

- 
- ◆ Close all Micros programs and applications.
  - ◆ Shutdown the Micros database from the Micros Control Panel.
  - ◆ Navigate to the Enterprise Management software on the store server using Windows Explorer. Double-click on **StoreSetup.exe** to launch the application. When the Welcome screen is displayed, select [**Next**].

---

**Note** *EM Store Setup can be run silently from the command line prompt by entering the following:*

- *On existing EM stores*

`StoreSetup.exe /silent /cn=1`

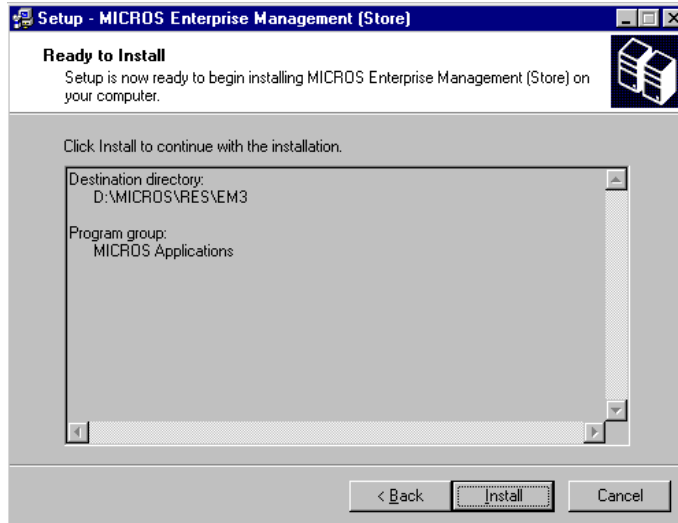
- *On non-EM stores (e.g., to set the Store ID to 2)*

`StoreSetup.exe /silent /ID=2 /cn=1`

---



- ◆ The EM Setup screen is displayed, indicating the path where the application files will be installed. Select [**Install**] to continue.



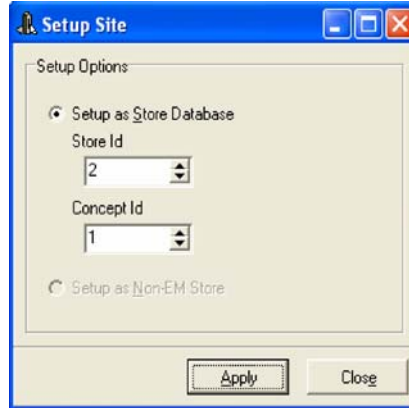
---

**Note** *Enterprise Management is installed automatically on the same drive as RES 4.7, in the \MICROS\RES\EM directory tree. This path cannot be changed by the end user.*

---

- ◆ After the files are copied to the local drive, the Setup Site screen is displayed.

- ◆ Select **Setup as Store Database** to apply a unique identifier for this store within the EM system.



---

**Note** Database ID (Store ID) numbers are assigned automatically when a new store is added to the EM system. This identifier allows EM to synchronize the flow of data between the corporate office and the enterprise stores. If an incorrect Database ID was entered, run *SetStore.exe* from the `\Micros\RES\EM\Utilities` directory and enter the correct ID number.

*If the store is removed from the EM system, the number will not be reassigned.*

- 
- ◆ Select the **Concept ID**. Once the store setup has set the Concept ID the user will not be prompted again. If only a single concept is identified set the Concept ID to 1.
  - ◆ Click [**Apply**].
2. Open the MICROS Control Panel and take the Restaurant to Off.

---

**Note** The initial activation packet will purge totals at the store level, requiring the Restaurant be set to Off. After the initial packet has been received, all other packets from Corporate must be received while the Restaurant is On.

---

3. Copy the initial activation file from the temporary directory to the \Micros\RES\EM\Receive folder.
4. Receive the initial activation file into the store by launching the **Receive.exe** application from the \Micros\RES\EM\Bin directory.

---

**Note** *Any managed definitions and totals are purged from the store database as part of receiving the initial synchronization file.*

---

5. After receiving the synchronization file, link the corporate-managed configurations with store-managed configurations, if necessary.

---

**Example** *The corporate office is responsible for managing security, which includes employee classes. The employee classes must be linked to each employee once the synchronization file is received.*

---

## Running on a Corporate Client

The corporate client option is used when multiple users require access to the corporate server to execute reports, make configuration changes, etc. In this case, EM setup and maintenance activities are managed through a client PC connected to the corporate database (located on the corporate server).

---

**Note** *It is recommended that Deploy and Receive are run from the corporate server and not the corporate client.*

---

To implement this method, the corporate server setup must already be in place. Once the server is operational, follow these procedures to set up a corporate client:

---

**Warning!** *There cannot be any other MICROS applications installed on the corporate client PC at the time of setup. Before you begin, make sure that any previously installed MICROS applications have been removed.*

---

## 1. Create the Corporate Client.

- ◆ Install the current CAL Win32 client.

---

**Note**     *Contact your MICROS Support Representative for the current version of the CAL Win32 Client.*

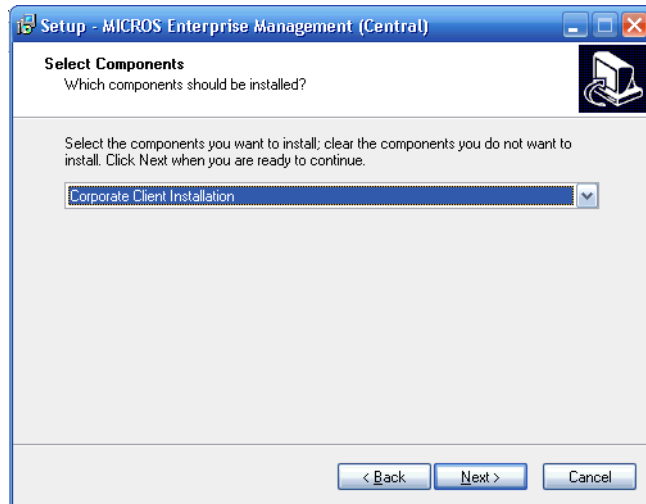
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- ◆ Using the CAL configuration tool, connect to the EM Corporate Server from the list of CAL Servers.
- ◆ Allow CAL to download and install the RES Win32 Client Setup
- ◆ At this point in the setup process, AppStarter will execute and attempt to start OPS (but will be unable to do so). A message will display referencing the MDS Host file. Ignore this message and proceed with running the EM Corporate Setup installation.
- ◆ At the end of Corporate Setup, AppStarter will no longer attempt to start OPS.

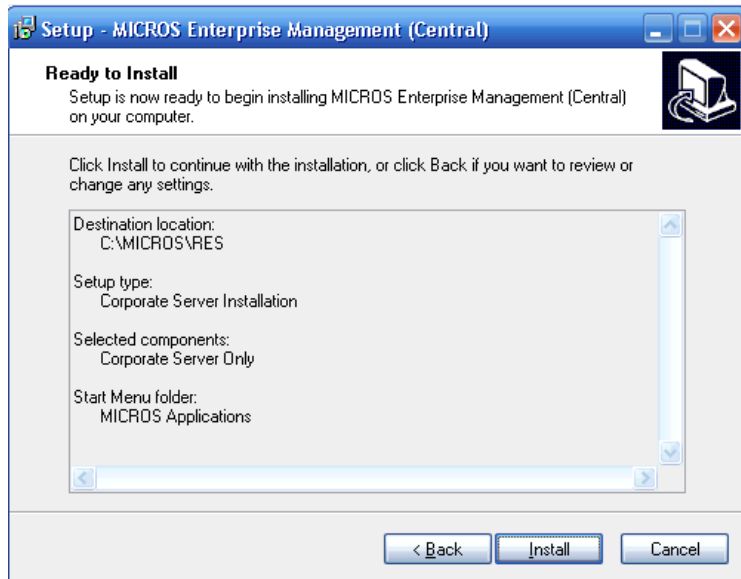
## 2. Install EM on the Client.

- ◆ Navigate to the location of the Enterprise Management software on the client PC. Double-click on **CentralSetup.exe** to launch the application. When the Welcome screen is displayed, select **[Next]**.
- ◆ The user will be prompted to select a component to install. The following options are available:
  - ◆ Corporate Server Installation: Do not select this type of installation if the PC is being used as the corporate server.
  - ◆ Corporate Client Installation: Select this type of installation if the PC is being used as a corporate client.
  - ◆ Concept Database Installation: Do not select this type of installation at this time. This component will be selected if a separate server is used for a different concept database.

Select the Corporate Client Installation and click [Next].



- ◆ The EM Setup screen is displayed, indicating the path where the application files will be installed. Select [Install] to continue.

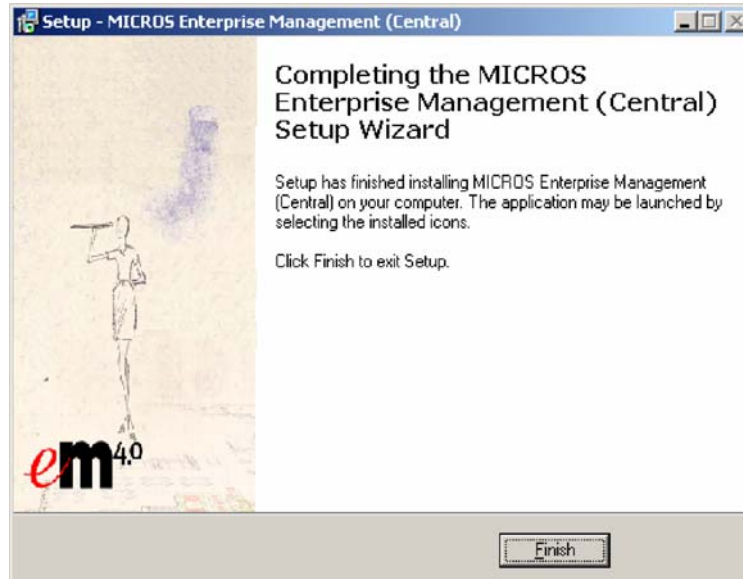


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**Note** *Enterprise Management is installed automatically on the same drive as RES 4.7, in the \Micros\RES\EM directory tree. This path cannot be changed.*

---

- ◆ When installation is complete the following prompt will display. Select **[Finish]**.



## Concept Database Installation

If database concepts are used, separate server(s) may be in place to store and manage the different concepts. The user does have the ability to manage more than one database concept on a single server. If only a single server is being used, the user can perform all configuration on their Corporate Server.

The recommended hardware setup is based entirely on the number of stores being managed. For more information see the *Hardware Requirements* section beginning on page 16.

This installation scenario for a concept database is different than that of a Corporate Server. An abbreviated version of EM will be installed, which will include:

- ◆ Fewer files and dll's will be installed taking up less space on the server.
- ◆ No RES application executables will be installed.
- ◆ No database is required to begin installation. Updates to the database are not executed through setup. They will be done later via Database Manager.

If different concepts are located on more than one PC, then follow the steps below for each additional concept database server.

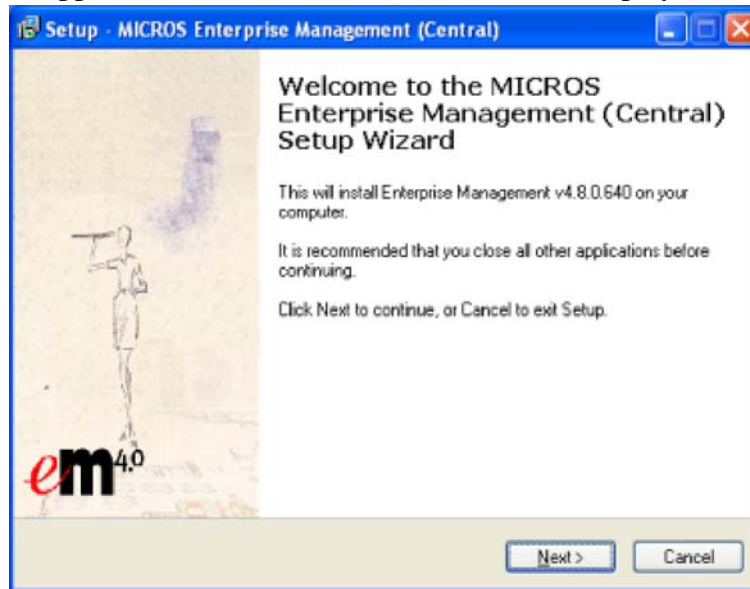
### Before You Begin

When setting up a separate PC to be used for database concepts only the RES Prerequisites for Version 4.9 are required before beginning installation.

### Installation

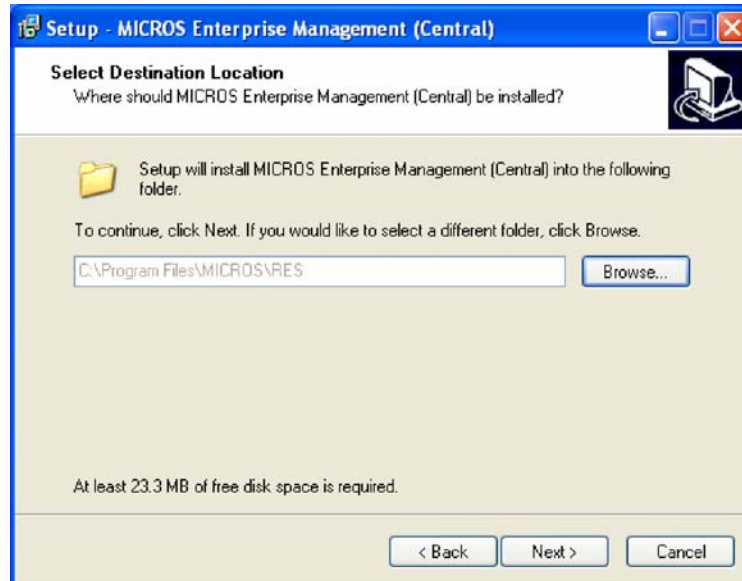
Follow these steps to install the software:

1. Navigate to the location of the Enterprise Management software on the client PC. Double-click on **CentralSetup.exe** to launch the application. When the Welcome screen is displayed, select [**Next**].

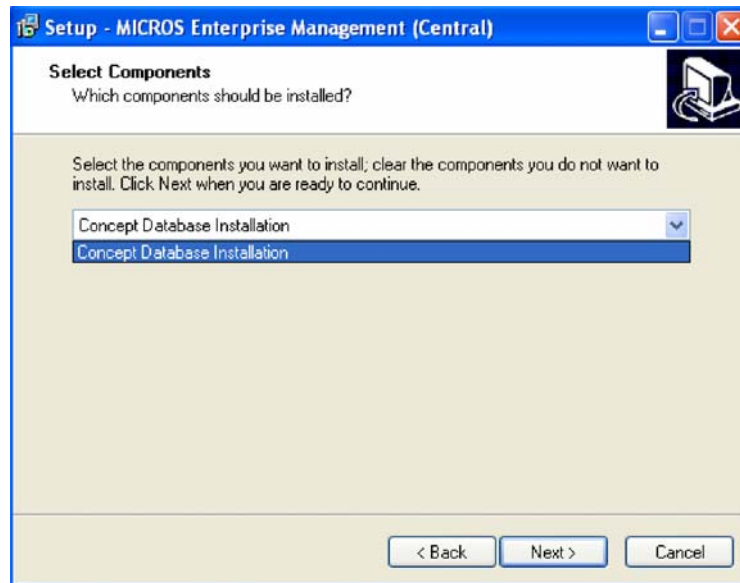




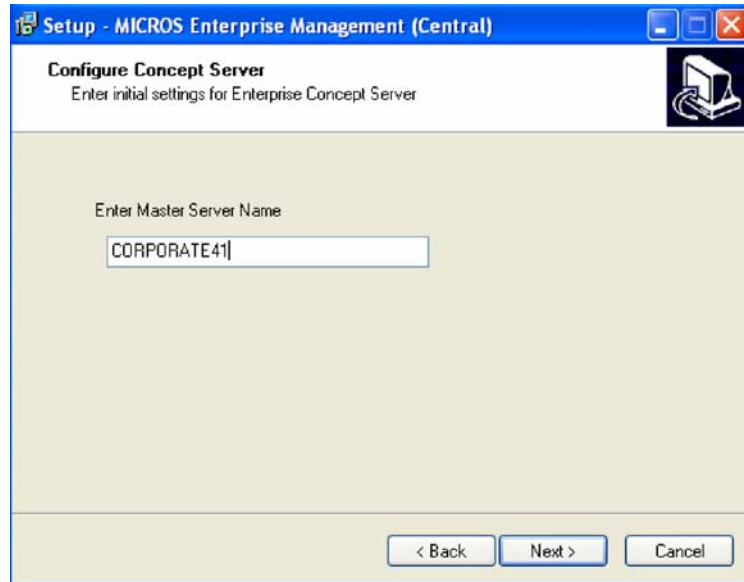
2. A window will display with the path where the software will be installed. Select **[Browse]** to alter the path. When finished select **[Next]**.



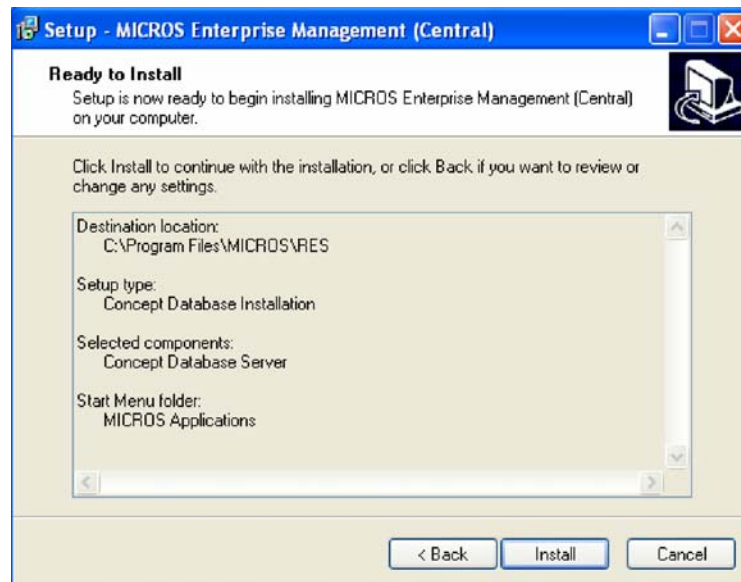
3. The user will be prompted to select a component to install. Only the following option will be available:
  - ◆ **Concept Database Installation:** Select this type of installation and click [Next].



4. A prompt will appear asking the user to enter the name of the Master PC. This is the name of the Corporate Server. The name is case sensitive. When finished select **[Next]**.



5. Setup is now ready to begin installation. A prompt will appear with a summary of the information entered. Verify this information and select **[Install]**. If some of the information is incorrect select **[Back]** to navigate backwards to edit the appropriate information.



6. The user will receive a prompt indicating that installation is complete. Select **[Finish]**.
7. Repeat steps 1-6 for each additional Concept Server.

## System Upgrades

Before installing EM Version 4.9 software on an existing Enterprise Management system, the corporate server must be upgraded to RES Version 4.9 or higher. Installation instructions may vary based in the Version of RES being installed.

The enterprise stores can continue to operate with RES 3.2 SP7 HF6 or HF7, 4.1 HF2 and higher, 4.3 HF1 and higher, 4.5, 4.6, 4.7 or 4.9 software, and simply upgrade to EM Version 4.9. However, new or enhanced functionality included in EM Version 4.9 will not be available to the stores until they are also running RES 4.9 or higher.

This section is divided as follows:

- ◆ Updating the Corporate Office from EM 3.2 to 4.7
- ◆ Upgrading the Corporate Office from EM 4.x to 4.7
- ◆ Upgrading a Concept Database

### Updating the Corporate Office From EM 3.2 to 4.9

This section describes the procedures required to update the corporate office to RES Version 4.9 or higher and to bring all stores (including corporate) from EM Version 3.2 to EM Version 4.9.

#### At the Corporate Office

1. Obtain a copy of all of the different `usr_coltrans` (`usr_coltrans.txt`) files from the EM stores. This step cannot be performed using EM; these files must be obtained directly from the EM stores (e.g., by dialing in or via a mapped network drive). These files will be required for future steps.
2. Check for replication files that may not have been sent to or acknowledged by the store. Process any pending changes.

3. Navigate to the *Tools\TAUpdate* folder in the EM installation directory and perform the following steps:
  - ◆ Copy the **dbupdkey.dat** and **export\_ta.dat** files into the *Micros\Database\Data* folder.
  - ◆ Go to the MICROS Control Panel and set the Restaurant to OFF.
  - ◆ Select *Start / Run*.
  - ◆ Enter the command **dbupdate** and select [OK].
4. Copy and distribute the following files to the enterprise stores and place them in the same directory:
  - ◆ **RunStoreSetup.bat**
  - ◆ **StoreSetup.exe**

These files can be found in the location of the Enterprise Management software in the *Tools* folder (from the root of the software select the *Tool* folder).

5. Copy the **EMDBUpdate.mbz** file from the *Tools* folder to the *Micros / Database / Data* folder.
6. Install RES Version 4.9 software or higher on the corporate server. When prompted, select the option to convert the existing database.

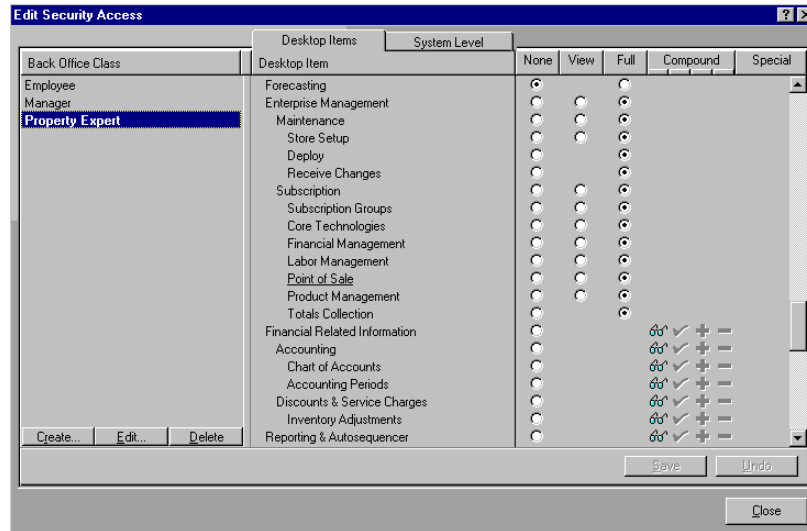
For additional instructions on installing RES software see the *RES Version 4.9 Installation Guide, MD0003-121*.

7. Execute a backup of the corporate database with validation.

8. Install EM 4.9 on the corporate server.
  - ◆ Shutdown the Micros database from the Micros Control Panel.
  - ◆ Navigate to the location of the Enterprise Management software on the corporate server. Double-click on **CentralSetup.exe** to launch the application. When the Welcome screen is displayed, select [**Next**].
  - ◆ Select the appropriate component (*Corporate Server Installation*).
  - ◆ The EM Setup screen is displayed, indicating the path where the application files will be installed. Select [**Install**] to continue.
  - ◆ Once the EM files are copied to the specified directory, the installation starts subscription conversion to migrate information from the previous EM version format to the new subscription format.

This step may take a long time depending on the number of stores and the number of subscriptions.

9. Setup the System Security. This step does not need to be performed if security is already setup for the database. Upgraded databases will maintain their previous security configurations.
  - ◆ Once the EM installation is complete, open POS Configurator and select **Employees / Back Office Classes**. The Edit Security Access Form is displayed.



- ◆ Update the security levels to allow selected employees to access the newly installed EM forms. Changes can also be made to other back office classes, if required.

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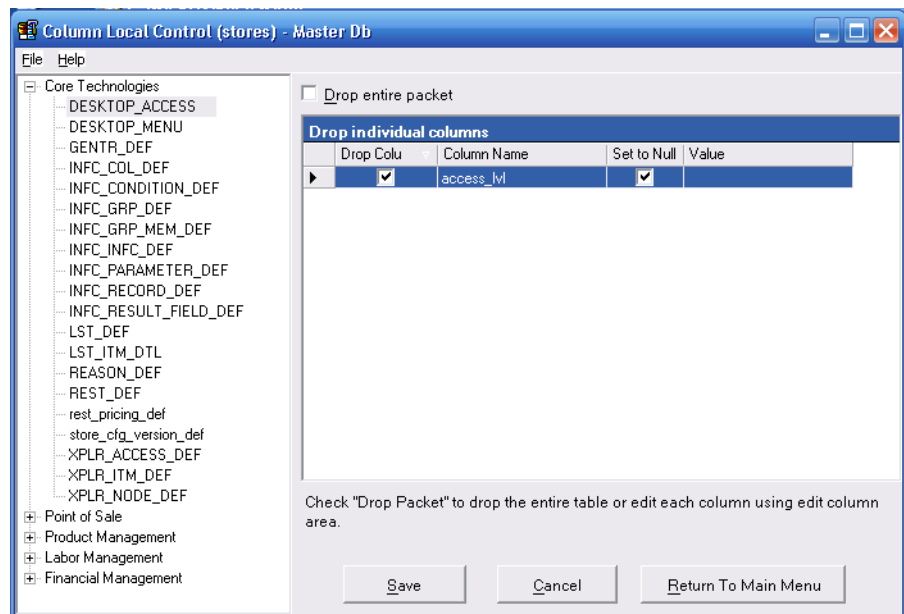
**Note** At least one Back Office class must be configured and assigned to the employee(s) that will access the Micros Enterprise Configuration Utility (MECU).

---

10. Configure the usr\_coltrans.
  - ◆ Open the *Micros\RES\EM\Bin* folder and double-click on the **UCTConfig.exe** file. For every unique usr\_coltrans file, a new configuration must be entered.
  - ◆ Click on the **[Create New Configuration]** button.



- ◆ Enter a name for the new configuration (e.g., Mike Rose Cafe). If there will be more than one configuration make sure to use a friendly descriptor that will easily identify the this configuration. The correct configuration will have to be linked to the stores. Select **[Save]**.
- ◆ Each existing usr\_coltrans configuration contains an associated table. Highlight the appropriate configuration and enable the correct check box(es). Configure the following fields where applicable:



- ◆ **Drop entire packet** – Select this option if the entire usr\_coltrans table should be removed.
- ◆ **Drop column** – Select this option if only a specific column should be removed.
- ◆ **Set to Null** – Select this option if the field at the store should always be set to null.
- ◆ **Value** – Select this option if the field at the store should be set to a specific value.

- ◆ To create an additional configuration the user can either create a new configuration record or copy the existing configuration.
  - ◆ Go to *MECU / Store Setup* and link the applicable stores to the correct configuration in the User Column Translation drop down box.
11. Open the Micros Enterprise Configuration Utility (MECU) and select the **Deploy** icon.
  12. Select all of the active stores to create a change file for each store.
  13. Distribute the change files to the stores.

### **At the Enterprise Stores**

1. Run the End-of-Day autosequence.
2. Execute the **runStoreSetup.bat** file supplied by the Corporate Office.

The system will automatically make a copy of the database, shut down the clients, and auto-install the EM 4.9 software upgrade.

3. When the installation is complete, the system will restart, bringing the clients online. The diskless clients may not restart automatically. If the blue screen appears on the diskless clients, power the systems off/on.
4. Once the EM Version 4.9 installation is complete, the store needs to receive the .mpz file and then deploy a package, sending it to back to Corporate. This package contains information required to populate the DB Version tables used to determine feature subscription availability at the enterprise store.

## Updating the Stores

This section describes the procedures required to bring the stores up to RES Version 4.9 or higher.

### At the Corporate Office

1. After receiving the version update files from the stores, create a separate synchronization file for each of them.
  - ◆ From the MECU, select **Maintenance | Deploy** to open the form.
  - ◆ In the explorer panel, expand the **Store** node and check the boxes next to the stores to be upgraded.
  - ◆ Select **Synchronize Stores** from the **Options** menu.
2. Send the synchronization file to each store. Place this file in a temporary directory.

### At the Enterprise Store

1. Run the End-of-Day autosequence.
2. Execute a database backup with validation, if it is not already a part of the End-of-Day process.
3. Install RES Version 4.9 software or higher on the store server. When prompted, select the option to convert the existing database.

For instructions on installing RES software see the *RES Version 4.9 Installation Guide, MD0003-121 Revision F*.

4. Navigate to the location of the Enterprise Management software and double-click on **StoreSetup.exe** to install the EM 4.9 software.
5. Start the database on the store server.
6. Receive the synchronization file generated by the Corporate Office.
7. Create a deployment file containing version information and send this to the Corporate Office.

## Updating the Corporate Office From EM 4.x to 4.9

This section describes the procedures required to update the corporate office to RES Version 4.9 or higher and to bring all stores (including corporate) from EM Version 4.x to EM Version 4.9.

### Before You Begin: Important Notice

All EM Corporate locations on EM 4.0 or 4.1 must rebuild their subscription databases after upgrading to EM 4.9. This operation may be performed during the upgrade process, or after the upgrade is complete. If performing this operations during the upgrade process, refer to the note embedded in step 5 of the *At the Corporate Office* section below.

The amount of time required to rebuild subscriptions varies based on the following factors:

- ◆ Number of stores subscribed.
- ◆ Number of subscriptions.
- ◆ Products used (e.g., PM, LM, etc.).

Due to the variation in the amount of time a rebuild will take, MICROS recommends evaluating the needs of the individual organization to determine the best time to perform this operation. Make sure that the subscription rebuild is performed relatively soon after upgrading to EM 4.9.

Follow the steps below to rebuild your subscription:

- ◆ **Upgrading from 4.x to 4.9.**
  1. Go to the registry by selecting *Start / Run* and typing *regedit*.
  2. Once in the registry navigate to *HKEY\_LOCAL\_MACHINE / Software / MICROS / EnterpriseManagement / V4Install* and locate the **RebuildSubscriptions** key.
  3. Double-click the **RebuildSubscriptions** key.
  4. Change the **Value Data** field to **True**.
  5. Close the registry and open an Explorer Window.

6. If rebuilding your database during the EM 4.9 upgrade process, then skip this step. If rebuilding your database at any other time then this step is required.

Navigate to `\MICROS\RES\EM\BIN` and double-click the **SubscriptionConversion.exe**. This executable will rebuild your subscriptions.

### At the Corporate Office

1. With the current RES and EM applications still at Version 4.x, check for replication files that may not have been sent to or acknowledged by the store. Process any pending changes.
2. Copy and distribute the following files to the enterprise stores and place them in the same directory:

- ◆ **RunStoreSetup.bat**
- ◆ **StoreSetup.exe**

These files can be found in the same location as the Enterprise Management software in the *Tools* folder.

3. (Only needed if upgrading from EM 4.0) Navigate to the *Tools\TAUpdate* folder in the EM installation directory and follow the steps below:
  - ◆ Copy the **dbupdkey.dat** and **export\_ta.dat** files into the *Micros\Database\Data* folder.
  - ◆ Go to the MICROS Control Panel and set the Restaurant to OFF.
  - ◆ Select *Start / Run*.
  - ◆ Enter the command **dbupdate** and select **Enter**.
  - ◆ Now select the [**Update**] button.
4. Execute a backup of the corporate database with validation.

**\*\*If rebuilding subscriptions during installation, then perform the steps to rebuild subscriptions now.** The steps for rebuilding a

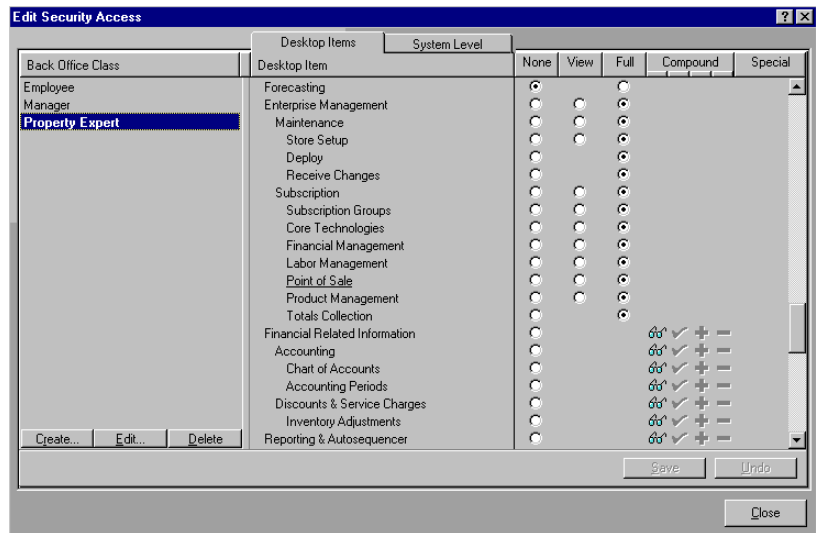
subscription database can be found at the top of this section. Otherwise, skip to the next step and perform this operation after upgrade is complete.

5. Upgrade to RES Version 4.9 software or higher on the corporate server by double clicking on the RES 4.9 patch.

For further instructions on installing RES software see the *RES Version 4.9 Installation Guide, MD0003-121 Revision F*.

6. Install EM 4.9 on the corporate server.
  - ◆ Shutdown the Micros database from the Micros Control Panel.
  - ◆ Navigate to the location of the Enterprise Management software on the corporate server. Double-click on **CentralSetup.exe** to launch the application. When the Welcome screen is displayed, select [**Next**].
  - ◆ Select the appropriate component (Corporate Server Installation).
  - ◆ The EM Setup screen is displayed, indicating the path where the application files will be installed. Select [**Install**] to continue.

7. Setup the System Security if additional security settings are required at the site. This step does not need to be performed if security is already setup for the database. Upgraded databases will maintain their previous security configurations.
  - ◆ Once the EM installation is complete, open POS Configurator and select *Employees / Back Office Classes*. The Edit Security Access Form is displayed.



- ◆ Update the security levels to allow selected employees to access the newly installed EM forms. Changes can also be made to other back office classes, if required.

---

**Note** *At least one Back Office class must be configured and assigned to the employee(s) that will access the Micros Enterprise Configuration Utility (MECU).*

---

8. Open the Micros Enterprise Configuration Utility (MECU) and select **Deploy**.
9. Select all of the active stores to create a change file for each store.
10. Distribute the change files to the stores.

### At the Enterprise Stores

1. Run the End-of-Day autosequence.

---

**Note** *If the End-of-Day autosequence does not include a nightly backup of the database, which is recommended, make a manual backup of the database prior to running End-of-Day*

*runStoreSetup.bat does not make a backup of the database prior to upgrading.*

---

2. Execute the **runStoreSetup.bat** file supplied by the Corporate Office.

The system will shut down the clients, and auto-install the EM 4.9 software upgrade.

3. When the installation is complete, the system will restart, bringing the clients online.
4. Once the Version 4.9 installation is complete, the store needs to receive the mpz file and then deploy a package, sending it to back to Corporate. This package contains information required to populate the DB Version tables used to determine feature subscription availability at the enterprise store.

### Updating the Stores

This section describes the procedures required to bring the stores up to RES Version 4.9 or higher.

#### At the Corporate Office

1. Create a synchronization file for each of them.
  - ◆ From the MECU, select **Maintenance / Deploy** to open the form.
  - ◆ In the explorer panel, expand the **Store** node and check the boxes next to the stores to be upgraded.



- ◆ Select **Synchronize Stores** from the **Options** menu.
  - ◆ Deploy
2. Send the synchronization file to each store. Place this file in a temporary directory.

#### At the Enterprise Store

1. Run the End-of-Day autosequence.
2. Execute a database backup with validation, if it is not already a part of the End-of-Day process.
3. Upgrade to RES Version 4.9 software or higher on the store server by double clicking on the RES 4.1.654 patch.
4. Navigate to the location of the Enterprise Management software and double-click on **StoreSetup.exe** to install the EM 4.9 software.
5. Start the database on the store server.
6. Receive the synchronization file generated by the Corporate Office.
7. Create a deployment file containing version information and send this to the Corporate Office.

### **Upgrading the Concept Database**

This section provides the steps for upgrading an EM concept database from EM Version 4.1 to EM Version 4.9. For information on creating a concept database, please refer to page 144.

1. Backup all databases at EM Corporate (including the Master and all concepts).
2. Make sure that the EM Corporate Server has been upgraded to RES 4.9, and EM 4.9. For additional information on performing this upgrade, please refer to the *Updating the Corporate Office From EM 4.x to 4.9* section of this document on page 52.

3. If the database concept is stored on the EM Corporate Server, then proceed to step 4. If the database concept is stored on a separate server, then the user must perform the following operations on the EM concept database server:
  - ◆ Install .net Framework 2.0.
  - ◆ Make sure that the concept server has been upgraded to EM 4.9. Select the **Concept Database Installation** option.
4. Open the *MECU* and select [**Concept Setup**].
5. Select the concept to be upgraded, right-click and set to **Available**.
6. Go to *Database Manager / enable Update\Upgrade Database* and select the concept to be upgraded by clicking on the [**Select Database**] button and selecting the appropriate concept from the drop-down. Select [**Run**] to perform the database upgrade.
7. Once the upgrade is complete, go into the MECU and start the database (select *Concept Setup / Select the Concept / Right-click / Start Database*).
8. Open the Micros Enterprise Configuration Utility (MECU) and select the **Deploy** icon.
9. Select all of the active stores to create a change file for each store.
10. Distribute the change files to the stores.

11. Perform the following steps at the Enterprise Stores:

- ◆ Run the End-of-Day autosequence.
- ◆ Execute the **runStoreSetup.bat** file supplied by the Corporate Office.
- ◆ The system will automatically make a copy of the database, shut down the clients, and auto-install the EM 4.9 software upgrade.
- ◆ When the installation is complete, the system will restart, bringing the clients online.
- ◆ Once the Version 4.9 installation is complete, the store needs to receive the mpz file and then deploy a package, sending it to back to Corporate. This package contains information required to populate the DB Version tables used to determine feature subscription availability at the enterprise store.

## Setting Up the Corporate Database

---

Once the software is installed on the corporate server, the next step is to configure the corporate database. This section provides step-by-step instructions for completing each of the tasks required to set up the corporate environment. These tasks include:

- ◆ Defining Stores
- ◆ Creating the Tax Structure
- ◆ Organizing the Menu Item Data
- ◆ Creating a Pricing Structure
- ◆ Implementing Other EM Changes
- ◆ Creating Touchscreen Versions
- ◆ Assigning Touchscreen Versions to Stores
- ◆ Managing Jobs and Default Pay Rates
- ◆ Setting Up Subscriptions by Product
- ◆ Configuring Totals Collections
- ◆ Managing Employees

## Defining Stores

Enterprise Management revolves around the setup, distribution, collection, and interpretation of data passed between the corporate office and its sales units, the enterprise stores. To accomplish this, the user must first identify all the stores (corporate and enterprise) within the EM system and establish a link between them.

This stage has been divided into three parts:

- ◆ Editing the Corporate Store
- ◆ Adding an Enterprise-Managed Store
- ◆ Creating a Store Group

## Editing the Corporate Store

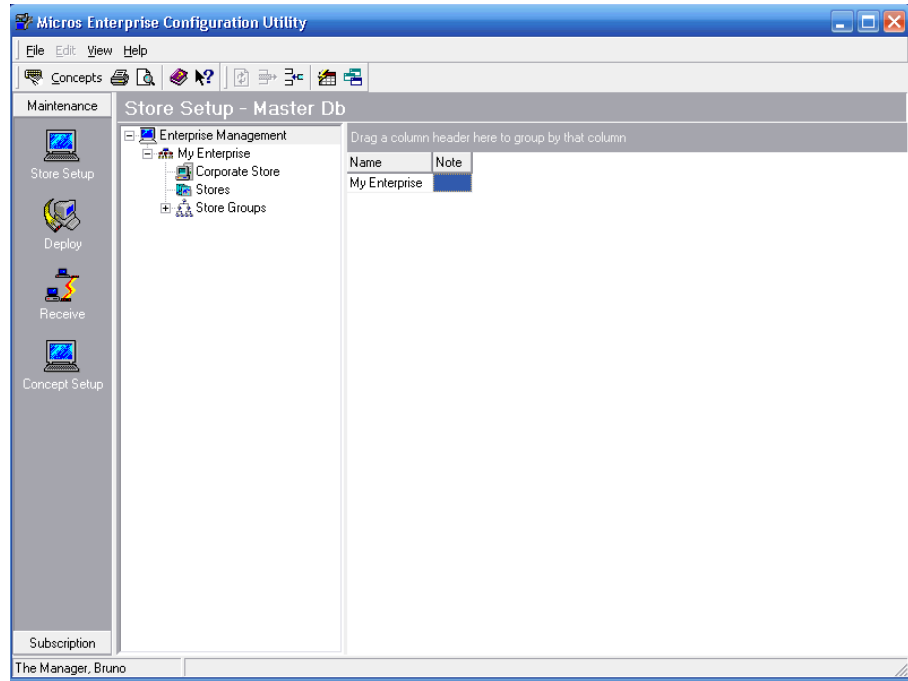
During a new installation, EM recognizes and creates the corporate entity, automatically assigning it a **RES Store ID** value of *1*. EM uses this value to distinguish the Corporate site from the enterprise-managed stores.

Follow these steps to complete the corporate store profile:

1. Open the Micros Enterprise Configuration Utility (MECU) and select the [**Maintenance**] button from the feature selection panel on the left. The slide bar repositions to display the available functions.
2. Click the *Store Setup* icon. The Explorer Panel expands to display the hierarchical structure of the EM system.



3. Click the *Corporate Store* node to expand the store information table in the task area. Notice that, with the exception of the **Name**, the rest of the data fields are blank.



4. Double-click on the *Corporate Store* table entry to open the Store Information form.
5. On the main panel of the form, enter the following information:
  - ♦ **Number**—A unique value that identifies this location as the corporate store. This is a user-defined value of up to 9 digits.:

---

**Note** *The store number assigned here should not be confused with the RES Store ID assigned during system installation. The RES Store ID is a system-defined value, applied sequentially as new stores are added to the database. Store numbers allow an organization to retain or apply its own structure for identifying stores.*


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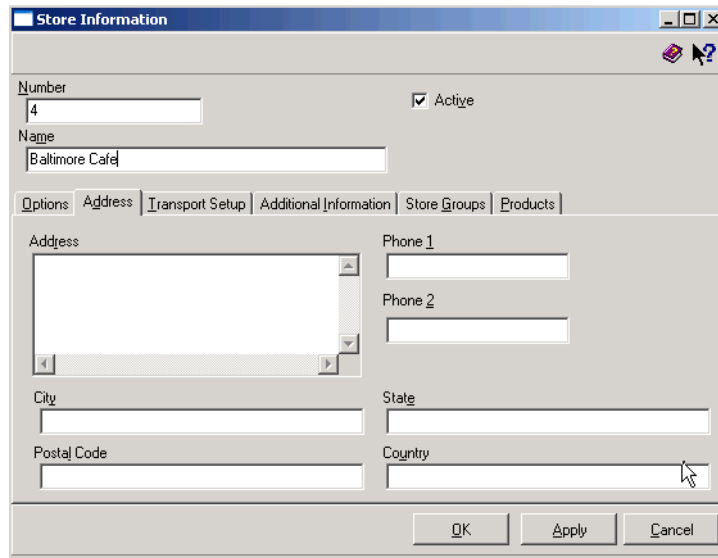
- ♦ **Name**—A unique name to identify the corporate store. Up to 16 alphanumeric characters is allowed.
6. (Optional) Go to the *Address* tab and enter the following:
- ♦ **Address**—The street address of the corporate store.
  - ♦ **City**—The city where the corporate store resides.
  - ♦ **State**—The state (full name or abbreviation) where the corporate store resides.
  - ♦ **Postal Code**—The zip or postal code for the corporate store's location.
  - ♦ **Country**—The name (full or abbreviated) of the country where the corporate store resides.
  - ♦ **Phone 1**—The main phone number for the corporate store.
  - ♦ **Phone 2**—A secondary phone number, like a fax number, for the corporate store, if applicable.
7. Go to the *Transport Setup* tab and enter the following:
- ♦ **Corporate Receive Directory**—Indicates the full directory path (including drive letter) where deployment files received from stores will be placed on the corporate server.
8. (Optional) Go to the *Additional Information* tab and enter the following:
- ♦ **User-Defined 1-4**—Includes any pertinent data that may be useful in the administration of the corporate store activities (e.g., the name of the system administrator, emergency contacts, etc.).
  - ♦ **User-Defined Comment**—Includes any pertinent data that may be useful in the administration of the corporate store activities.
9. Click [**Apply**] to update the corporate record.

## Adding an Enterprise-Managed Store

Once the corporate store is defined, the next step is to add a database record for each of the enterprise-managed stores.

Follow these steps to add a new store to the corporate database:

1. Open the Micros Enterprise Configuration Utility (MECU) and select the **[Maintenance]** button from the feature selection panel on the left. The slide bar repositions to display the available functions.
2. Click the *Store Setup* icon. The Explorer Panel expands to display the hierarchical structure of the EM system. 
3. Click the *Stores* node to expand the store information table in the task area.
4. To add a new store, right-click on the *Stores* node to open the shortcut menu and select the *Add New Store* option. A blank Store Information form is displayed.





5. On the main panel of the form, enter the following information:

- ◆ **Number**—A unique value that identifies this location. This is a user-defined value of up to 9 digits.:

---

***Note** The store number assigned here should not be confused with the RES Store ID assigned during system installation. The RES Store ID is a system-defined value, applied sequentially as new stores are added to the database. Store numbers allow an organization to retain or apply its own structure for grouping stores.*

---

- ◆ **Name**—A unique name to identify the enterprise-managed store. Up to 16 alphanumeric characters is allowed.
- ◆ **Active**—When checked, indicates that this store is an active member of the EM system. This option must be checked before the store can send to or receive data from the central (corporate) database.

---

***Note** It is recommended that all subscriptions for a store are defined prior to activating the store.*

---

6. (Optional) Go to the *Address* tab and enter the following:

- ◆ **Address**—The street address of the enterprise store.
- ◆ **City**—The city where the enterprise store resides.
- ◆ **State**—The state (full name or abbreviation) where the enterprise store resides.
- ◆ **Postal Code**—The zip or postal code for the enterprise store's location.
- ◆ **Country**—The name (full or abbreviated) of the country where the enterprise store resides.

- ◆ **Phone 1**—The main phone number for the enterprise store.
- ◆ **Phone 2**—A secondary phone number, like a fax number, for the enterprise store, if applicable.

7. Go to the *Transport Setup* tab and enter the following:

The screenshot shows a dialog box titled "Store Information" with a "Transport Setup" tab selected. The "Number" field is set to "4" and the "Active" checkbox is checked. The "Name" field contains "Baltimore Cafe". Below the tabs, there are three text boxes for directory paths: "Corporate Send Directory" (C:\MICROS\RES\EM\TRANSPORT\SEND\4.0 Store), "Store Receive Directory" (C:\MICROS\RES\EM\TRANSPORT\RECEIVE), and "Store Send Directory" (C:\MICROS\RES\EM\TRANSPORT\SEND). At the bottom are "OK", "Apply", and "Cancel" buttons.

- ◆ **Corporate Send Directory**—Indicates the full directory path (including drive letter) where deployment files created for the stores will be placed on the corporate server. The default path is:

**c:\MICROS\RES\EM\TRANSPORT\SEND\Store Name**

(where C:\ represents the drive on which MICROS is installed).

---

**Note** *The store name is automatically appended to the directory path when a store is added to the Enterprise through the Store Setup process. A store name that contains invalid filename characters ( /, \, ;, \*, ?, >, <, “, | ) will automatically be replaced with the underscore.*

*The directory path may be changed at a later date.*

---

- ◆ **Store Receive Directory**—Indicates the full directory path (including drive letter) where deployment packages received from the corporate database will be placed on the store's server. The default path is:

**c:\MICROS\RES\EM\Transport\Receive**

where C:\ represents the drive on which MICROS is installed.

---

***Note** Deployment packages created by corporate are used to add or update configuration items in the store's database.*

*When a new store is added to the enterprise, a default Receive folder is defined. To avoid confusion, MICROS recommends using the same receive directory paths for all of the enterprise-managed stores. The default directory paths may be changed at a later date.*

- 
- ◆ **Store Send Directory**—Indicates the full directory path (including drive letter) where deployment files to be sent to the corporate database will be stored on the store's server. The default path is:

**c:\MICROS\RES\EM\Transport\Send**

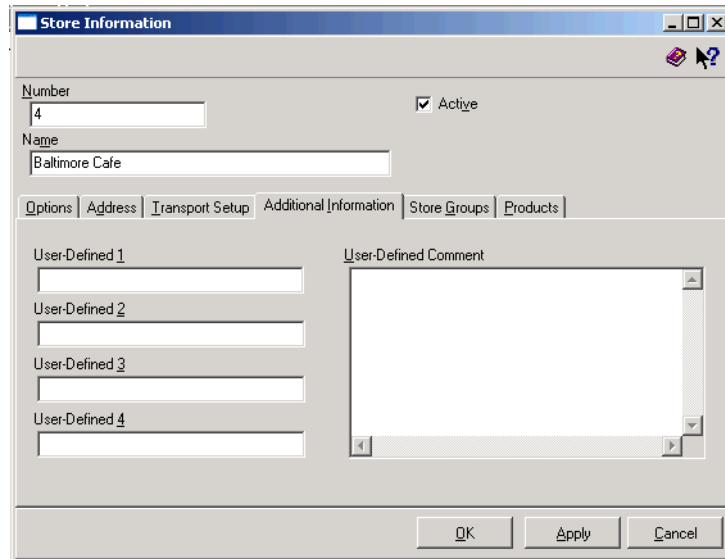
where C:\ represents the drive on which MICROS is installed.

---

***Note** Deployment packages created by the enterprise-managed stores contain acknowledgment of the receive status of the database updates along with the store totals required for corporate reports.*

*When a new store is added to the enterprise, a default Send folder is defined. To avoid confusion, MICROS recommends using the same send directory paths for all of the enterprise-managed stores. The default directory paths may be changed at a later date.*

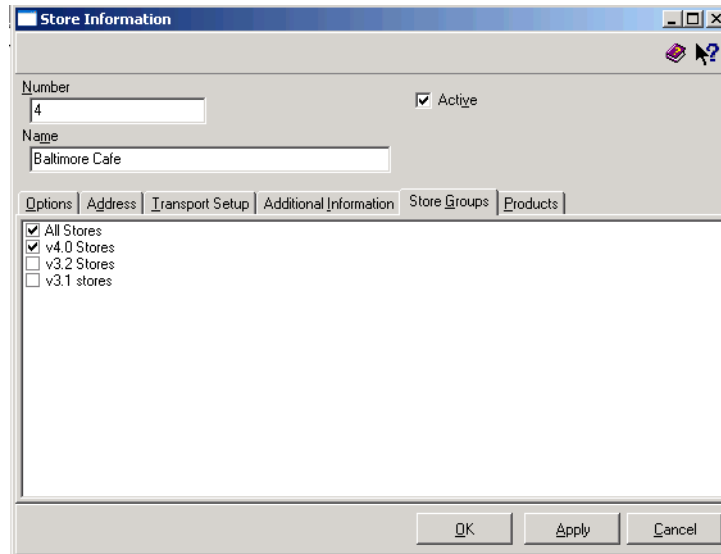
8. (Optional) Go to the *Additional Information* tab and enter the following:



The screenshot shows a window titled "Store Information" with a tabbed interface. The "Additional Information" tab is selected. The "Number" field contains "4" and the "Active" checkbox is checked. The "Name" field contains "Baltimore Cafe". Below the tabs, there are four "User-Defined" text input fields and a "User-Defined Comment" text area. At the bottom, there are "OK", "Apply", and "Cancel" buttons.

- ◆ **User-Defined 1-4**—Includes any pertinent data that may be useful in the administration of the corporate store activities (e.g., the name of the store/regional managers, emergency contacts, etc.).
- ◆ **User-Defined Comment**—Includes any pertinent data that may be useful in the administration of the corporate store activities.

9. (Optional) Go to the *Store Groups* tab and place a check next to each group to which this store belongs. A store may belong to one, several, or all groups listed.



---

**Note** *Store groups may be created before or after the enterprise stores are added to the corporate database. If this screen is blank, or if the requisite group is not listed, go to the subsection *Creating a Store Group* on page 71 and follow the procedures included there to generate or add to the listing.*

---

10. (Optional) Go to the *Products* tab. Select one of the radio buttons to identify the RES software version currently installed at this store location. The options are:
- ◆ MICROS RES v3.2
  - ◆ MICROS RES v4.1
  - ◆ MICROS RES v4.3
  - ◆ MICROS RES v4.4
  - ◆ MICROS RES v4.5
  - ◆ MICROS RES v4.6

- ◆ MICROS RES v4.7
- ◆ MICROS RES v4.8
- ◆ MICROS RES v4.9

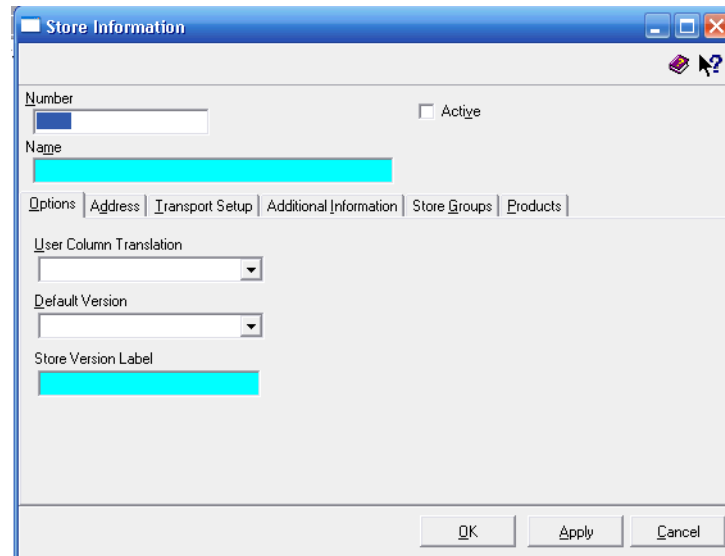
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**Note**      *This option does not install software on the system, but is used to track which stores have been upgraded.*

---

11. Click [**Apply**] to update and save the record.
12. Subscribe the Store to the appropriate items via the *MECU / Subscription* button.
13. Return to *MECU / Store Setup* and enable the **Active** field.
14. Deploy the activation package to activate stores by going to the *MECU / Maintenance / Deploy Icon*. Expand the Stores and select the stores that are needed. Select the [**Deploy**] button to create the Activation packet(s).
15. Return to the *MECU / Store Setup / Stores / Store Information / Options / User Column Translation* field. Use the drop down box to select the `usr_coltrans` record that was just created.
16. Select [**Deploy**].

17. (Optional) Go to the *Options* tab. Link the **User Column Translation** field to the configuration record.



## Creating a Store Group

As the number of stores in the corporate EM database increases, the time and effort required to manage and update data on a store-by-store basis can be prohibitive. To speed up the process, EM allows the user to define subsets or groups of stores that receive the same data from the Corporate Office. These store groups provide the mechanism for maintaining subscriptions to multiple stores as well as consolidating reporting data.

### Store Group Types

Stores may be grouped in any way that makes sense to the organization, although the most common method is based on geography (state, region, or district). Store groups are not required. That is, a store does not have to belong to a group to receive updates. Similarly, a store is not limited to membership in one group but may belong to several concurrently.

Follow these steps to create a new store group:

1. Open the Micros Enterprise Configuration Utility (MECU) and select the [**Maintenance**] button from the feature selection panel on the left. The slide bar repositions to display the available functions.

2. Click the *Store Setup* icon. The Explorer Panel expands to display the hierarchical structure of the EM system.



3. To add a new store group, right-click on the *Store Groups* node to open the short-cut menu and select the *Add Store Group* option. A blank Store Group Information form is displayed.

A screenshot of the "Store Group Information" dialog box. The dialog has a title bar with a question mark icon. It contains three text input fields: "Name" with the value "Mid-Atlantic Region", "Note" with the value "Following States are included: MD, DE, NJ, PA, VA", and "Group Version Label" with the value "Mid-Atlantic Region". At the bottom, there are three buttons: "OK", "Apply", and "Cancel".

4. In the **Name** field, enter a unique name for this store group.

5. In the **Notes** field, enter any comments or instructions relevant to this store group.

6. The **Group Version Label** will default to the descriptor listed in the **Name** field. This can be changed, if desired. This label will be used for menu item versions in the EMCC.

7. Click [**Apply**] to save the record.



## Creating the Tax Structure

If Corporate will be managing tax rates, the next step is to organize and configure the tax structure. This is done by setting up tax jurisdictions at the Corporate level, with each tax jurisdiction linked to a different set of tax rates. Since a store can only belong to one tax jurisdiction at a time, linking to a tax jurisdiction implicitly subscribes the store to that jurisdiction's tax rates.

With tax jurisdictions, Corporate assumes responsibility for entering and deploying the correct tax rates to each store. To ensure that rate changes are implemented in a timely fashion, the Effective From date may be specified. This allows Corporate to distribute the new tax rate to the Stores as soon as it is notified of a pending change and have the rates take effect on the date mandated by the taxing jurisdiction.

## Tax Terms Overview

All stores are required to collect taxes based on the sale of menu items or on service charges. The amount collected is the **Tax Rate**. The tax rate amounts are different for each transaction item. For example, a store may collect a 4% tax on prepared foods, but only 2% on alcoholic drinks.

Tax rates are set by government tax authorities (e.g., city, state, province, nation). More than one agency can impose a tax on the same menu item or service. Alcoholic beverages, for example, can be subject to both state and district (or county/province) taxes. If the beverage is sold in the city, a city tax may be applied.

The rates imposed on a menu item or service will vary by taxing authority. Thus, Maryland may impose a 2% state tax on alcohol, while California may set the tax rate at 5%.

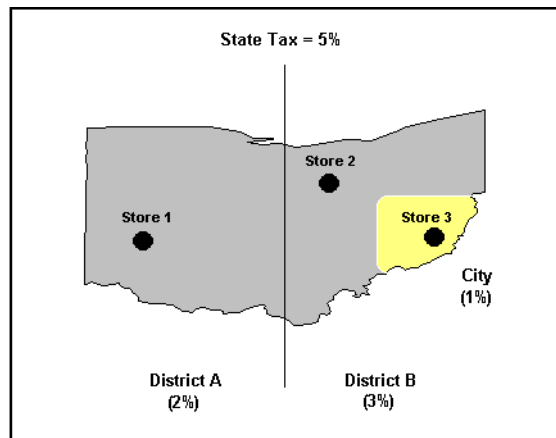
The combination of tax rates (e.g., city and state; or city, state, and nation) applied to a menu item are referred to as its **Tax Class**. In other words, if alcoholic beverages are taxed by the city (1%) and the state (3%), then the *Liquor Tax* class would be the sum of these two tax rates (4%).

The value of the combined rate for a tax class will depend on the store's location or **Tax Jurisdiction**. Since taxing authorities set their rates independently, the same tax class can produce different results, depending on where the sale or service is rendered.

Using the *Liquor Tax* example, suppose this particular tax class is an aggregate of state, district, and city taxes. Suppose further that the tax rates set by the taxing authorities are as follows:

- State = 5%
- District A = 2%
- District B = 3%
- City = 1%

If there are three stores in the enterprise, all selling alcoholic beverages, the amount of *Liquor Tax* collected will depend on which tax authorities have jurisdiction over the sale (as illustrated in the following diagram):



As a result, the *Liquor Tax* for each store would be:

Store 1		Store 2		Store 3	
State	5%	State	5%	State	5%
District A	2%	District B	3%	District B	3%
				City	1%
Total	7%		8%		9%

## Configuring Taxes

This section provides instruction for configuring Corporate to manage taxes. The text has been divided into the following parts:

- ◆ Defining the Tax Rates
- ◆ Creating Tax Jurisdictions
- ◆ Defining the Tax Classes
- ◆ Subscribing the Stores
- ◆ Implementing the Changes

### Defining the Tax Rates

At Corporate, the *Sales / Tax Rates* form can support an unlimited number of tax rate records, which allows it to support tax rates for every store in the enterprise.



To avoid confusion, Corporate managers should plan in advance how the list will be structured. An example would be to group tax rates by location (MD, NJ, VA), with each group of entries listed in the same order (Food Tax, Liquor Tax, Beverage Tax, etc.)

Follow these steps to set up the tax rates:

1. Open the POS Configurator and select *Sales / Tax Rates*. A dialog box displays with a list of default effective dates. Use this form to specify effective dates for each new tax rate.



Name	Effective From	Effective To
New Pricing	5/1/2006	
Standard Pricing	1/1/2000	

To continue, choose one of the following paths:

- ◆ To use an existing date range, highlight one from the table and click **[OK]**. Proceed to Step 6.
  - ◆ To create a new date range, click  and go to Step 2.
  - ◆ To skip this step, click **[No Default]** and then proceed to Step 6.
2. (Optional) Enter a **Name** for the effectivity period (e.g., Initial Setup for Central Database).
  3. (Optional) In the **Effective From** column, enter the first date and time that these taxes will be active.
  4. (Optional) In the **Effective To** column, enter the last date that these taxes will be active. This field can be left blank if desired.
  5. (Optional) Click **[OK]** to save the record. The Tax Rates form is opened.
  6. Press the  icon at the form level. A blank line is inserted in the list.

Use these icons to add/delete the tax rate record.

Number	Name
1	J2- Food Tax
2	J2- Beverage Tax
3	J5- Canadian PST
4	J5- Canadian GST
5	J2- Misc Tax
6	J2- Retail Tax
7	J2- Take Out Tax
8	J3- Food Tax
9	J3- Beverage Tax
10	J3- Misc Tax
11	J4- Food Tax
12	J4- Beverage Tax
13	J4- Liquor Tax
14	J4- Take Out Tax
15	J4- Retail


7. Enter the tax rate **Name** and click the  to save. The form is cleared, with the following exceptions:
  - ◆ If the user selected default effective dates before opening the form, the dates will be posted already in the appropriate fields. The **Effective From** field will be automatically disabled.
  - ◆ If the **No Default** button was pressed, the form will display with the date fields blank. Both fields may be edited, but only the **Effective From** date will be required. If a date is not provided, the current date will be inserted once the record is saved. The field will then be disabled.
  - ◆ The **Type** field will default to *Percentage*.
8. Complete the form (all tabs), as required.
9. Click the  at the form level, to save the record.

#### Updating Tax Rates

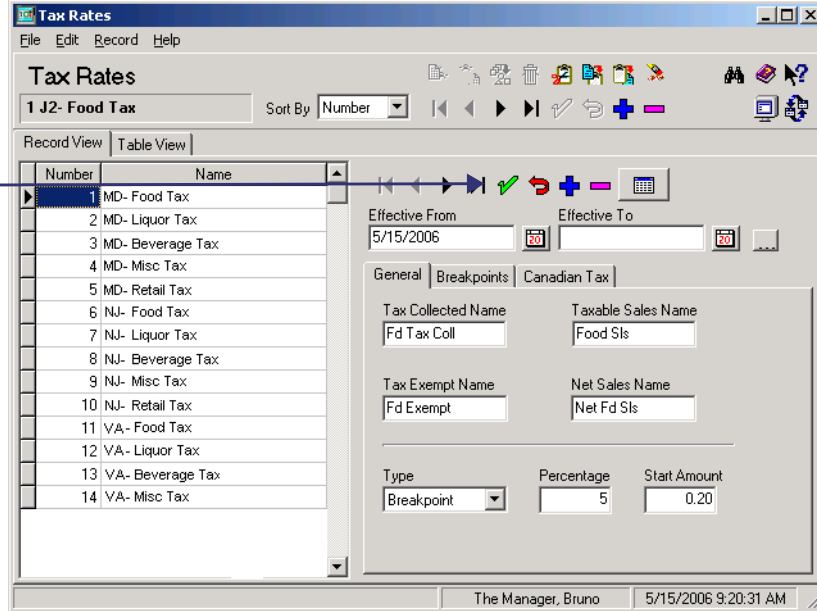
Since tax rates are revised periodically, Corporate must be able to distribute changes to its Stores in advance of their effective date, without disrupting the current tax settings. This is also done via the *Tax Rates* form.


To change an existing tax rate, the user should:

1. Open POS Configurator and select *Sales / Tax Rates*. The Default Effective Dates dialog box will display.
2. Click [**No Default**] to close this screen and access the *Tax Rates* form.
3. When the form displays, highlight the appropriate tax rate record.

4. Press the  icon at the record level. All fields (including the **Effective From** date will be enabled.

Use these icons to make change to an existing tax rate record.

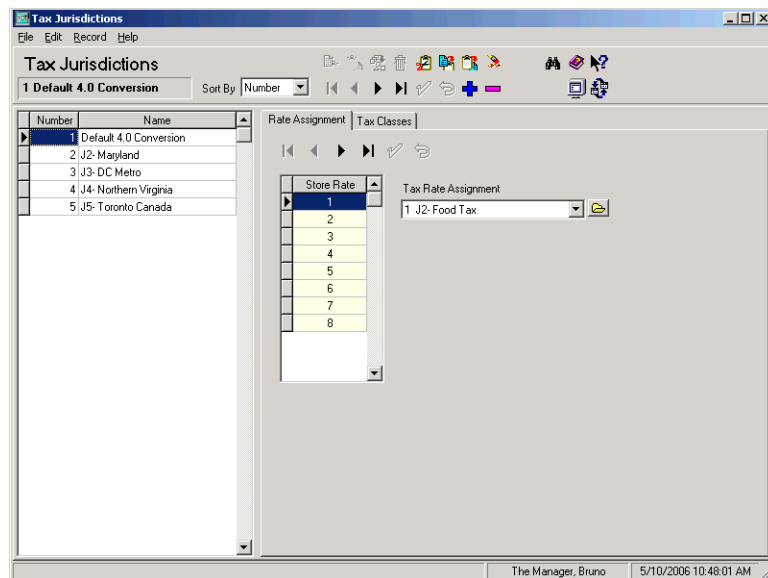



5. In the **Effective From/To** fields, specify when the revised rate will be active. (The **Effective To** date is optional.)
6. Modify the rest of the fields, as needed.
7. Click the  at the record level, to save the changes.

## Creating Tax Jurisdictions

After compiling a comprehensive list of tax rates, the next step is to define the tax jurisdictions that will be used to distribute tax rates to the stores. To do this:

1. Open the POS Configurator and select *Enterprise / Tax Jurisdictions* to open the form.



2. Click  to add a new record. Enter a name for this tax jurisdiction.
3. Go to the *Rate Assignment* tab.
4. Define the applicable tax rates by selecting a **Tax Rate Assignment** to the corresponding **Store Rates** for that tax jurisdiction. Up to eight store rates may be defined.

The number and type of tax rates will vary by tax jurisdiction. For example:

Jurisdiction 1	Jurisdiction 2	Jurisdiction 3
Food Rate	Food Rate	Food Rate
Liquor Rate	Liquor Rate	Beverage Rate
Beverage Rate	Beverage Rate	Drive-Thru Rate
Retail Rate	Misc Rate	
City Rate	Canadian Tax	

When linking tax rates to one of the eight available Store Rates on the *Rate Assignment* tab, Corporate users should consider not just which tax rates will be selected, but where there will be linked on the grid.

Most enterprise stores have a core set of rates that are applicable to all (e.g., Food Rate, Liquor Rate, Beverage Rate, etc.). Where possible, these rates should occupy the same positions on the **Store Rate** grid. When a core rate is not used in a particular tax jurisdiction, the corresponding **Store Rate** should be left blank (if at all possible). Using the above sample, the same set of rates would be mapped as followed:

Store Rate	Jurisdiction 1	Jurisdiction 2	Jurisdiction 3
1	Food Rate	Food Rate	Food Rate
2	Liquor Rate	Liquor Rate	
3	Beverage Rate	Beverage Rate	Beverage Rate
4	Retail Rate		
5	City Rate		
6		Misc Rate	
7		Canadian Tax	
8			Drive-Thru Rate

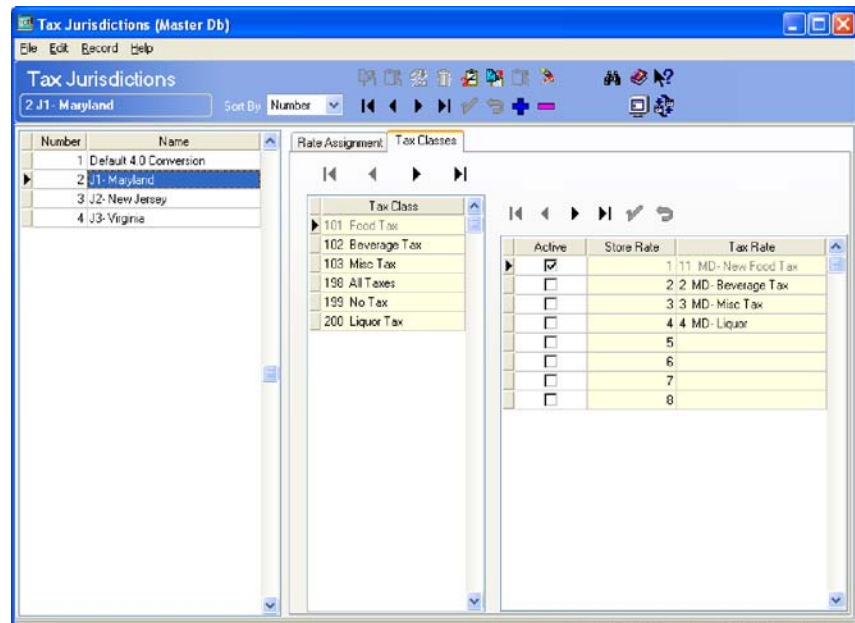
The system does not prevent users from entering taxes in a particular order, or from changing the order for every tax jurisdiction. However, a consistent structure makes it easier to combine tax rates into tax classes, and across multiple tax jurisdictions.




## Defining Tax Classes

In a managed environment, the tax rates associated with tax classes can be customized by jurisdiction. To do this:

1. Open the POS Configurator and select *Sales / Tax Classes*.



2. Click  to add a new record. Enter a name for this tax class. The Tax Jurisdictions grid will be populated with a list of all the predefined jurisdictions.
3. Highlight a **Tax Jurisdiction**. This field is read-only on this form.
4. In the **Status Grid** on the right, check the **Active** box for each Tax Rate that applies.
5. Repeat Steps 2 through 4 until all tax classes have been defined.

---

**Note** *Once the basic tax classes are defined, the Tax Jurisdictions form can be used to link tax classes to the appropriate tax rates. Please note that tax classes cannot be created on the Tax Jurisdiction / Tax Class form. Similarly, the Tax Jurisdictions grid is read-only on the Sales / Tax Classes form.*

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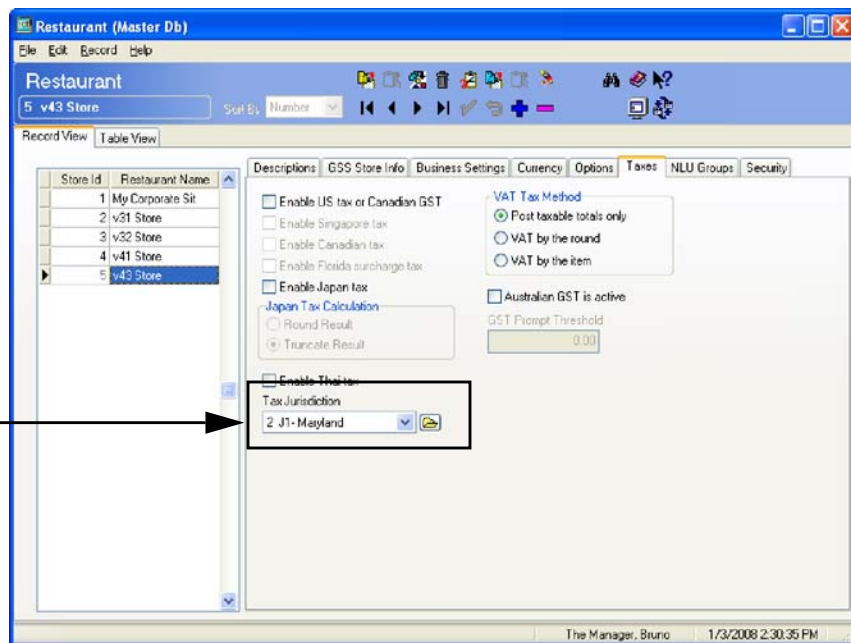
### Subscribing the Stores

Technically, Stores do not subscribe to tax rates, they subscribe to a tax jurisdiction. When a Store is subscribed to a tax jurisdiction, it implicitly subscribes to all of the tax rates associated with that jurisdiction. Stores can only subscribe to one tax jurisdiction at a time.

To subscribe the Tax Jurisdiction:

1. Open POS Configurator and select the *System / Restaurant / Taxes* form.
2. Highlight a Store name from the list.
3. Select the **Tax Jurisdiction** from the option's drop-down list.

Specifies the Store's Tax Jurisdiction, which implicitly subscribes the tax rates.



---

**Note** *During conversion from EM 3.x, the system will automatically create a default 4.9 tax jurisdiction, based on the tax rates configured in the EM 3.x central database. The default tax jurisdiction is not managed by Corporate until specifically linked to a Store on this form.*

---

### Implementing the Changes

When a store initially subscribes to tax jurisdictions, a deployment package is created comprising all of the relevant tax data (tax rates, breakpoints, tax classes, etc.) *for that jurisdiction only*.

When the package is received at the store, the new tax rates are not implemented immediately, but are posted to temporary tax tables. Since tax rates can be deployed in advance of their effective dates, this prevents the system from overwriting a tax rate before the new rates are active.

To ensure that the EM changes are updated properly, RES has created the following stored procedures that should be run on a regular basis — preferably as part of an autosequence:

- ◆ **8001 EM Price Update Process** — Reviews the temporary price tables for effective dates equal to the current date. When found, promotes Price Tier changes to the permanent tables. This stored procedure is recommended.
- ◆ **8002 EM Tax Update Process** — Reviews the temporary tax tables for effective dates equal to the current date. When found, promotes those tax rates to the permanent tax tables. This legacy stored procedure is available, however it is recommended that the user run procedure #8003 instead.
- ◆ **8003 EM Process All Pending Changes** — Reviews the temporary price and tax tables for effective dates equal to the current date. When found, promotes Price Tier and Tax rate changes to the permanent tables. This stored procedure is recommended.

If this stored procedure is run, you do not need to run procedure #8001 or #8002.

These autosequence should be timed to run **after** the activation time for the new rates.

For example, if the **Effective From** time for new tax rates is set for July 1, 3:00 AM, then the stored procedure should not be run on July 1, 2:00 AM. If run at 2:00 AM, the changes will not be made.

This is also true when performing an initial setup at the Store. The starting tax rates should all be assigned effective dates in the past. This way, when the tax jurisdictions are linked, the rates will be put into the permanent tables immediately, not just in the EM temporary tables.

## Creating a Pricing Structure

In building a menu item master list, the corporate administrator often uncovers variations in the prices charged by stores for the same menu items. The reasons for this are many, ranging from higher labor costs in some areas, to subtle changes in recipes and ingredients, to pricing errors during system setup. Prices may also differ within a store, depending on seasonal availability of products, local promotions, and neighboring competition.

To effectively manage an enterprise, it is necessary to develop a pricing structure by using price groups/tiers and effectivity dates.

## Pricing Structure Overview

### Price Groups and Price Tiers

Price Groups and Price Tiers allow the corporate office to control the price at which each menu item is sold, and to standardize the way price changes are implemented. This is accomplished through the use of price groups and price tiers.

**Price groups** are logical subsets of menu items in the central database. For example, the Beer price group may be defined for the purpose of assigning beer menu items to this group to manage their prices. A menu item must be assigned to a price group. There is no limit to the number of price groups that can be generated; however, the fewer number of groups there are, the easier they are to manage.

**Price tiers** are components of a price group and are used to define variations in menu item pricing. For example, price tiers may be defined by market, such as city (high), suburban (medium), and rural (low). Each price group has at least one price tier assigned. Only one price tier may be active for each price group at a given time in each store.

### Example

Cap'n Mike's restaurant chain has stores up and down the east coast, all of which sell seafood. Because it is a primary part of their menu, the central database includes a Seafood Price Group which comprises all seafood-related entrees (e.g., Lobster, Crab, Swordfish, etc.). However, seafood is less expensive in Baltimore than it is in Manhattan, but more costly than it is in Boston. To accommodate these price variations, three price tiers are set up for seafood: a high, medium, and low tier. Three sets of prices are listed for each seafood item in the database. When the prices are deployed to the stores, Boston implements the low tier prices, Baltimore uses the medium tier, and Manhattan uses the high tier.

### Effectivity Dates

The second part of defining a pricing structure is to specify when the menu item prices will be active. This is done by using effectivity dates to schedule changes in the pricing structure of a store. Effectivity dates can be used to schedule changes to a menu item price and changes to a store's active price tier.

### Example

As a Baltimore franchise in the Cap'n Mike's restaurant chain, the inner harbor store usually uses the medium price tier for its seafood entrees. However, during certain times of the year, the seafood costs are higher. When the seafood costs increase, the high price tier is implemented. This allows all seafood prices to be increased at once.

## Configuring Menu Item Pricing

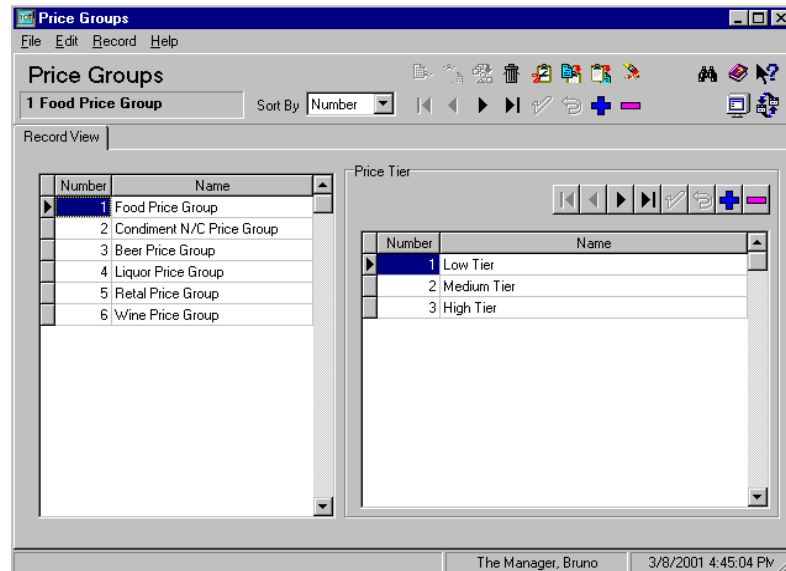
This section provides step-by-step instructions for setting up the POS Configurator to handle menu item pricing. The text has been divided into the following parts:




- ◆ Creating Price Groups and Price Tiers
- ◆ Assigning the Menu Item Price Groups and Price Tiers
- ◆ Assigning Price Tiers to Stores

## Creating Price Groups and Price Tiers

Follow these steps to create price groups and price tiers:

1. Open the POS Configurator and select *Enterprise / Price Groups*.



2. Click  to add a new price group record. The system will automatically insert the record at the bottom of the price group table. Price group numbers may be edited.
3. Enter a **Name** for this price group.
4. Go to the price tier table. Because every price group must have at least one price tier, a *Default* price tier was added automatically.
5. Highlight the *Default* price tier and rename, if necessary.
6. Using the navigation buttons above the price tier window, click  to add another price tier record. Repeat until all of the price tiers have been defined.
7. Click  save the record.
8. Repeat Steps 2 through 7 until all price groups have been defined.

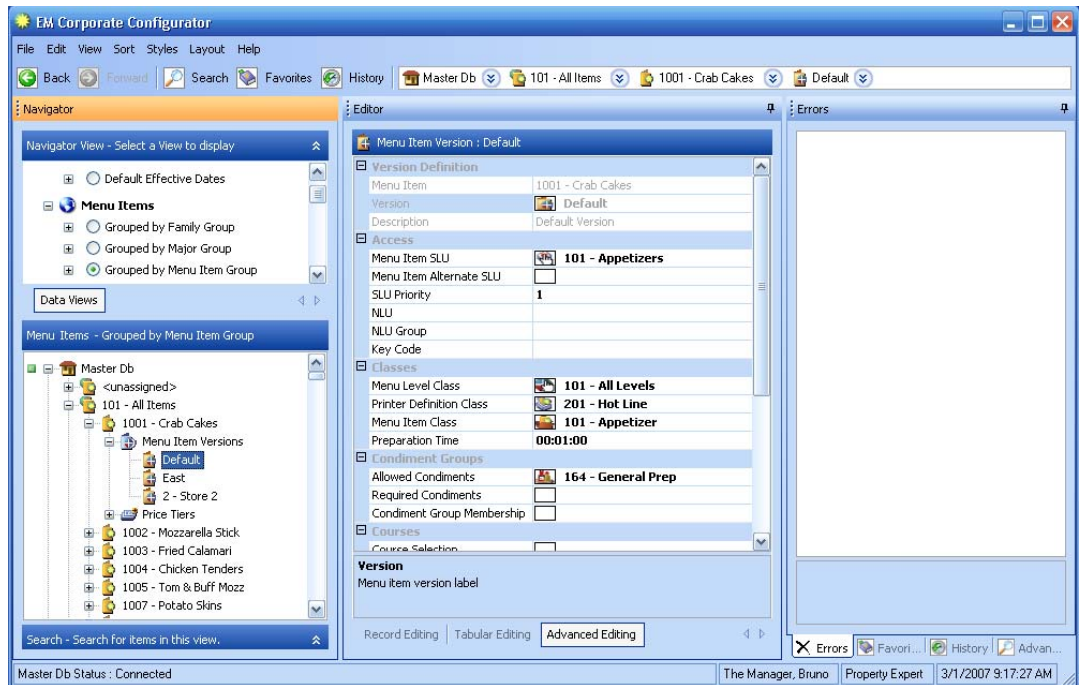
## Assigning the Menu Item Price Groups and Price Tiers

With the pricing structure defined, each menu item is assigned to a price group and its corresponding price tier(s). Menu item prices are assigned to each of the price tiers listed. At least one price tier is required.

Follow these steps to configure the menu item's default effective date, prices and price tiers:

### Configure the Default Effective Date

1. The user can access Default Effective Dates in one of the following ways:
  - ◆ From the Enterprise Management Corporate Configurator (EMCC), go to the *Navigator View / EM / Default Effective Dates* OR
  - ◆ From POS Configurator select *Sales / Menu Items* and this will route you to the EMCC.

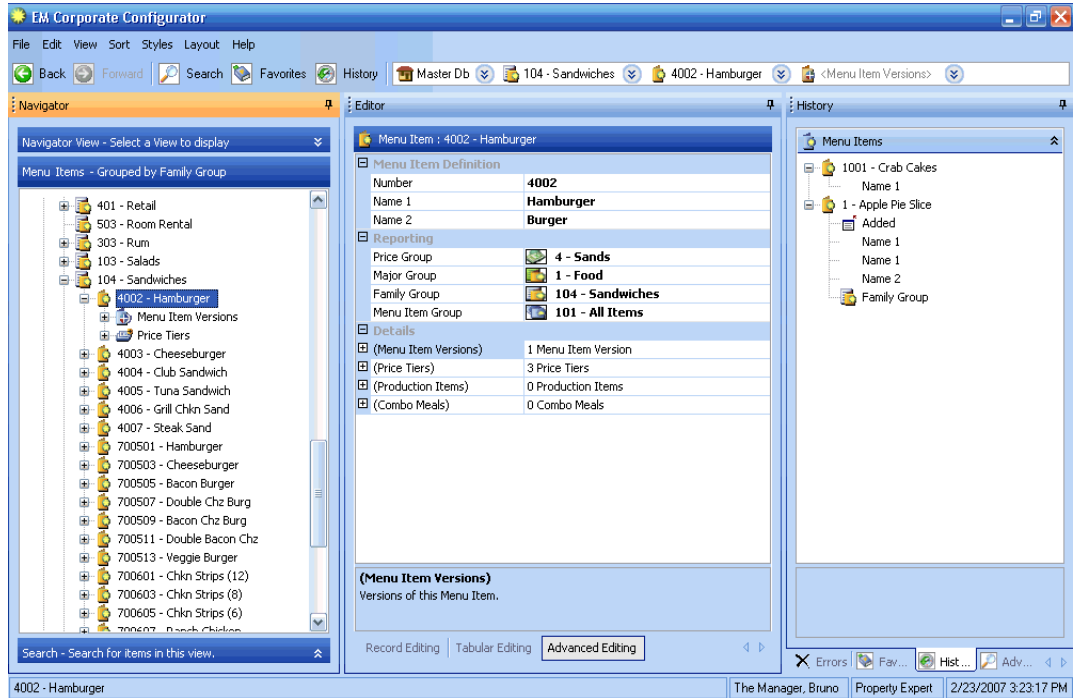




2. From here the user can perform any of the following configuration:
  - ◆ To use an existing effective date, set the **Current Default** field to **True** to enable this selection.
  - ◆ To add a new default effective date highlight the default record and right-click. Select **Add new Default Effective Date**.
3. Enter a **Name** for the effectivity period (e.g., Initial Setup for Central Database).
4. In the **Effective From** drop down box, enter the first date that these menu item prices will be active.
5. (Optional) In the **Effective To** drop down box, enter the last date that these menu item prices will be active.
6. Set the selected default to **True** to enable this setting.
7. All changes will be saved automatically.

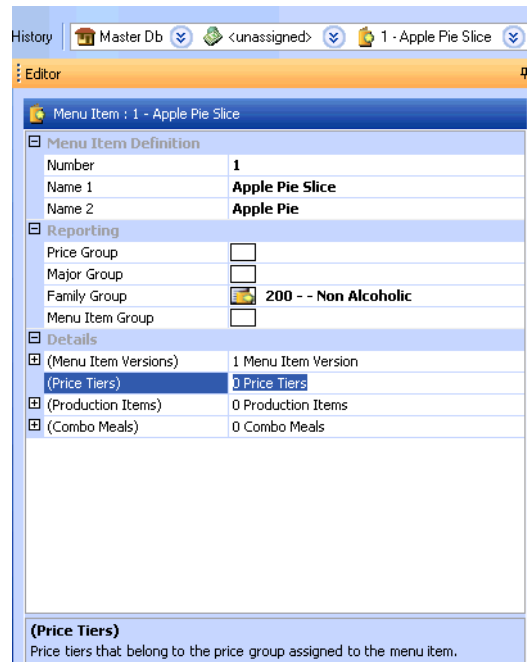
### Configure the Prices

1. Select a menu item from the *Navigator* window.



2. Go to the *Editor* section. The appearance of this section will vary based on the view (e.g., Record Editing, Tabular Editing, or Advanced Editing) that is selected.
3. Select a **Price Group** for this menu item from the drop-down list. When a menu item is assigned to a price group, a record is automatically created for every price tier in that price group.
4. All changes will be saved automatically.

5. Go to the *Prices* section.



Menu Item : 1 - Apple Pie Slice	
<b>Menu Item Definition</b>	
Number	1
Name 1	Apple Pie Slice
Name 2	Apple Pie
<b>Reporting</b>	
Price Group	<input type="checkbox"/>
Major Group	<input type="checkbox"/>
Family Group	200 - - Non Alcoholic
Menu Item Group	<input type="checkbox"/>
<b>Details</b>	
(Menu Item Versions)	1 Menu Item Version
(Price Tiers)	0 Price Tiers
(Production Items)	0 Production Items
(Combo Meals)	0 Combo Meals

**(Price Tiers)**  
Price tiers that belong to the price group assigned to the menu item.

6. Expand the Price Tier record in the *Navigator* window to view to list all available price tiers in the *Editor* window.
7. In the **Effective From** field, enter the date when this menu item price will be active. If a default date range was selected, the effectivity dates will be populated automatically.


This field can be edited without affecting the default effectivity date range record. If no date range is specified, the start date defaults to the current system date, while the end date (see below) is unspecified.
8. (Optional) In the **Effective To** field, enter the date when this menu item price will be active. If a default date range was selected, the effectivity dates will be populated automatically.
9. Enter the price(s) for this price tier.
10. This record will save automatically.

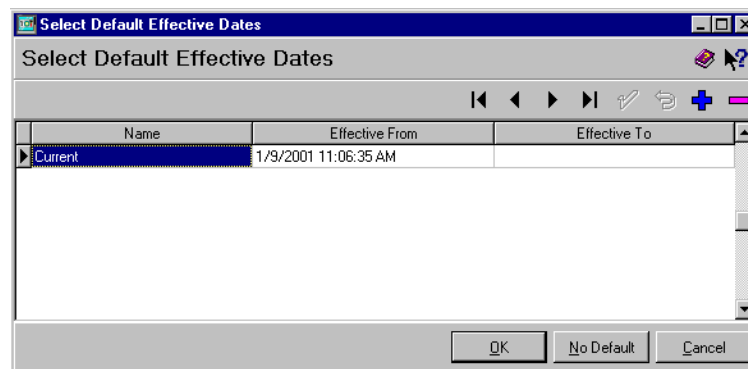
11. (Optional) To view all price tiers for this record go to the tabular editing view and multi-select all tiers.
12. Right-click on a price tier record and select **Add new Menu Item Price** to add a blank record.
13. Repeat steps 1 through 12 until all menu items have been configured.

### Assigning Price Tiers to Stores

After the menu items are configured, the price tiers are assigned for each of the enterprise stores. Remember, price tier assignments control which set of menu item prices will be active at any given time.

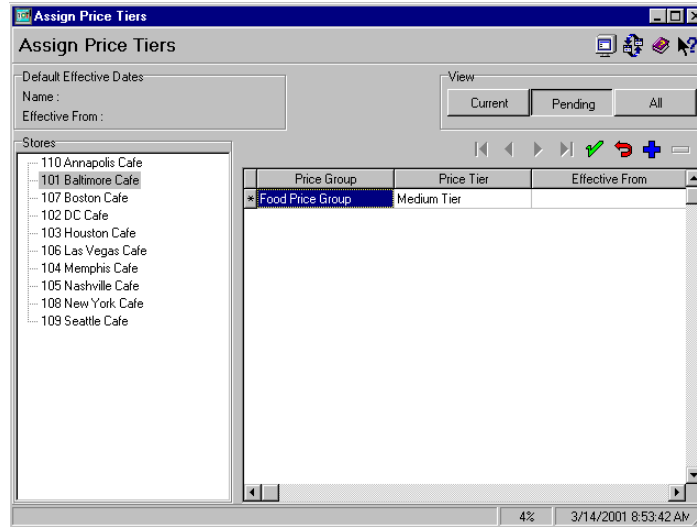
Follow these steps to assign price tiers:

1. Open POS Configurator and select *Enterprise / Price Tiers*. The **Select Default Effectivity Dates** form is displayed. Using a default date range will eliminate the need to specify effectivity dates for each new price tier assignment. Choose one of the following paths to continue:
  - ◆ To use an existing date range, highlight one from the table and click **[OK]**. Proceed to Step 6.
  - ◆ To create a new date range, click  and go to Step 2.
  - ◆ To skip this step, click **[No Default]** and then proceed to Step 6.




2. Enter a **Name** for the effectivity period (e.g., Initial Setup for Central Database).
3. In the **Effective From** column, enter the first date that the menu item prices associated with this price tier will be active. This will default to the current system date and time if one is not assigned.

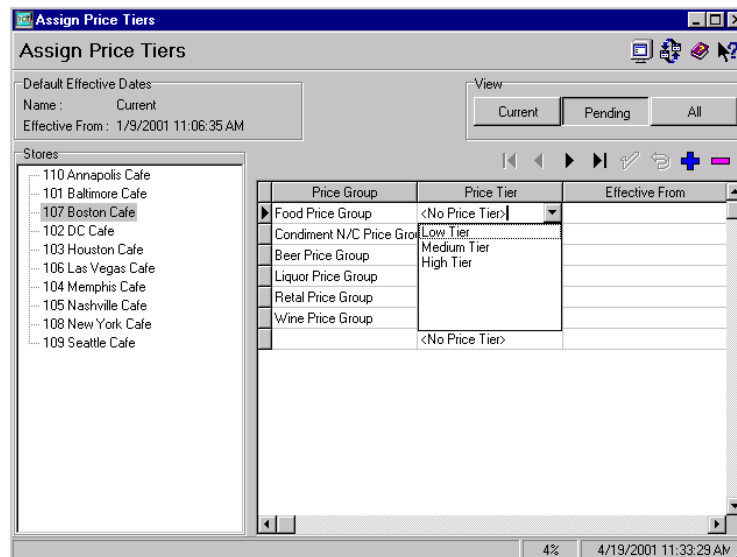
4. (Optional) In the **Effective To** column, enter the last date that the menu item prices associated with this price tier will be active.
5. (Optional) Click [**OK**] to save the record. The Assign Price Tiers form is displayed.
6. Select a store from the list box.



7. Refer to the **View** buttons in the upper right-hand corner of the screen. These buttons provide three sets of price tier data for each store listed. The options are:
  - ◆ **Current**—Displays the active price tier assignments for the selected store. This view is read-only.
  - ◆ **Pending**—Displays any price tiers assigned to the selected store whose effective start date is greater than the current date. Price tiers in this view may be added, modified, or deleted from the store assignments.
  - ◆ **All**—Displays all of the price tiers (past, present, or future) assigned to the selected store.

To assign price tiers, click [**Pending**].

8. Click  to add a new price tier record to the table.
9. Double-click in the **Price Group** column to open the drop-down list. Select a price group.
10. Double-click in the **Price Tier** column to open the drop-down list. Select a price tier.




11. Enter the effectivity date(s) for this price tier. If a default date range was selected, entries will be automatically posted in the **Effective From** and **Effective To** columns. These dates may be modified, if needed.

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**Note** *Editing these fields will not affect the pre-defined default effectivity date range record. If no date range is specified, the start date defaults to the current system date, while the end date is unspecified.*

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12. Click  to save the record.
13. Repeat Steps 6 through 12 until the appropriate number of price tiers have been assigned to all of the stores.

## Implementing Other EM Changes

In addition to pricing information, other changes may need to be implemented to accommodate setup of the corporate EM database. Modifications will vary, depending on store preferences and on which of the RES back office applications (if any) are installed on the system.

The following table provides a checklist of potential changes:

Form	Activity
<i>POS Configurator / System / Restaurant</i>	This form is used to configure each of the enterprise stores. Review the Descriptions, Business Settings, Currency, Options, Taxes, and NLU Group tabs to ensure that the options are appropriately set.
<i>LM / General / Restaurant / Labor</i>	Use this form to configure the restaurant's labor settings including the employer's identification number, the state where the restaurant is located, the work hours for that site, and how the forecast totals will appear for scheduling.
<i>POS Configurator / Devices / Touchscreen Designer</i>	Touchscreen layouts may vary from store to store. Review the enterprise requirements and, using the touchscreen version option, define the basic touchscreen and create a suitable number of variations for implementation in the enterprise stores. For more information on this process, refer to the section <i>Creating Touchscreen Versions</i> beginning on page 98.
<i>POS Configurator / Devices / Touchscreens / Touchscreens / General</i>	When an EM store receives a package, the system could delete all Combo Meal touchscreens and all Conversational Ordering Mode Build Screens. To prevent this, EM Corporate must enable the <b>EM Prevent Delete</b> option for all Combo Meal touchscreens and all Conversational Ordering Mode Build Screens.



<b>Form</b>	<b>Activity</b>
<i>POS Configurator / Enterprise / Assign Touchscreens</i>	If the enterprise is using variations of a default touchscreen, the touchscreens are assigned on a store-by-store basis. Instructions for <i>Assigning Touchscreen Versions to Stores</i> begin on page 102.
<i>POS Configurator / Employees / Jobs</i> or <i>LM / Time and Attendance / Jobs</i>	Jobs and default pay rates may vary from store to store. Review the enterprise requirements and create a suitable number of variations for implementation in the enterprise stores. For more information on this process, refer to the section <i>Managing Jobs and Default Pay Rates</i> beginning on page 104.
<i>POS Configurator / Employees / Time and Attendance</i> or <i>LM / Time and Attendance / Time and Attendance</i>	This form is used to configure the time and attendance options for each of the enterprise stores. Review the General, Time Clock Schedule, Breaks, Staff Requirements, and Payroll tabs to ensure that the options are appropriately set.
<i>LM / General / LM Parameters</i>	This form is used to configure the LM parameters for each enterprise store. Review the General and User-Defined tabs to ensure that the options are appropriately set.
<i>PM / Setup / PM Parameters</i>	This application does not automatically assign a default base currency. To prevent an error message, a base currency must be selected for the Corporate office and each store.

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## Creating Touchscreen Versions

Touchscreen requirements often vary between stores. EM manages touchscreen configuration by allowing the corporate office to set up a basic layout that includes all of the commonly used hard-coded keys and functions. This layout becomes the Default Touchscreen Version (TSV).


To customize the layout for a particular store, the administrator simply creates an alternate TSV based on the default. The administrator then modifies the keys (within prescribed rules), and implements this variation in place of the default. These modified layouts are referred to as override TSVs.

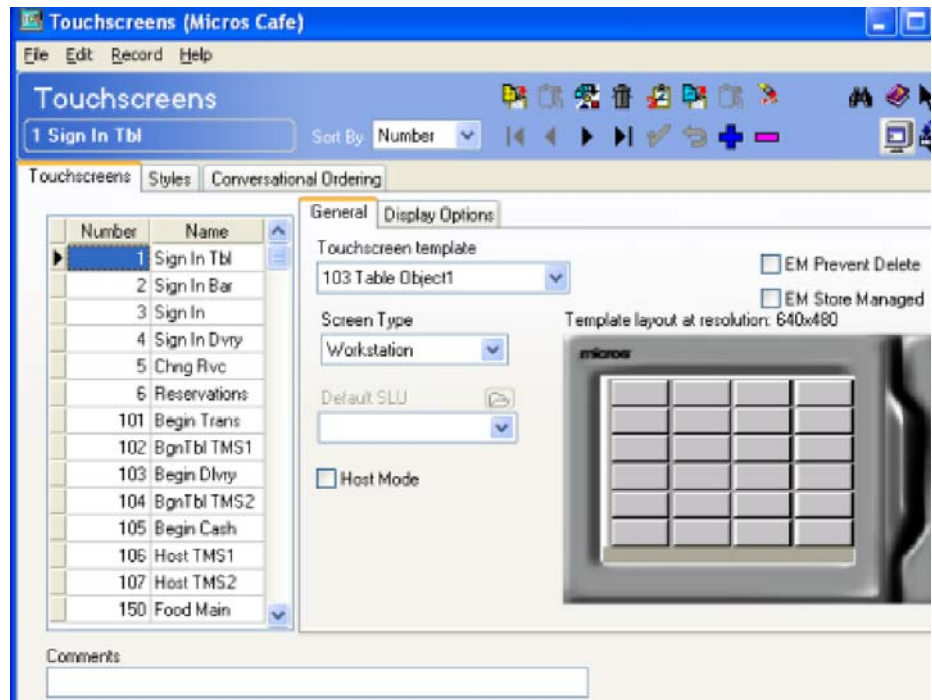
### Example

The Cap'n Mike's restaurant chain offers locally brewed beers in each of its stores. To accommodate local varieties, a Fast Transaction default touchscreen is generated with 6 hard-coded keys. An override touchscreen version is then created for each store which substitutes local beers in place of the hard-coded keys.

The default touchscreen version contains the initial set of keys used to create each subsequent version. The attributes, size, and position of keys on the default can be locked across all versions.

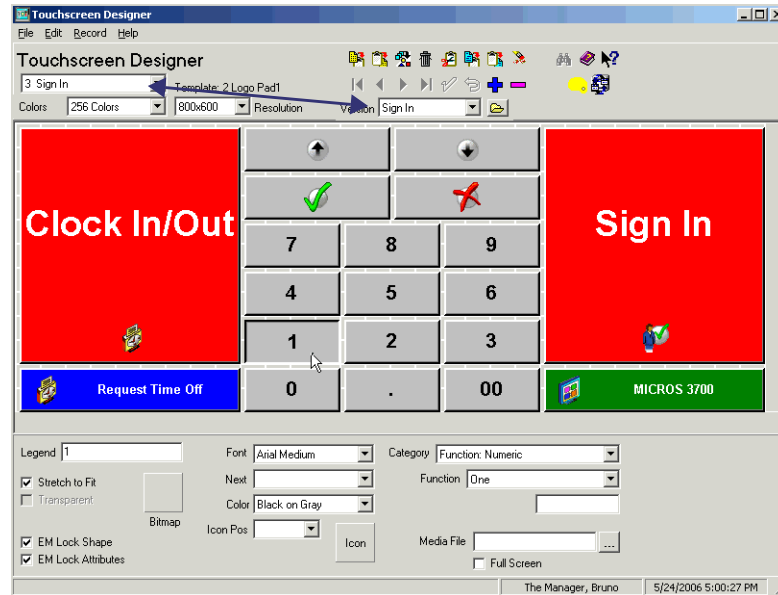
Follow these steps to create touchscreen variations:

1. Open the POS Configurator and select *Devices / Touchscreens*.
2. Click  to add a new touchscreen record.






3. On the **Touchscreens** tab, enter a **Number** and **Name** for this new touchscreen. This record will become the default TSV.
4. (Optional) Check **EM Prevent Delete** to override the deletion of this screen, in the even that it is not directly referenced at the Store.
5. (Optional) Check **EM Store Managed** to prevent future update packages from changing this screen. This option is only relevant after the initial receipt of the touchscreen.
6. Select the rest of the touchscreen options, as needed. For more information on this process, refer to the 3700 Feature Reference manual.

7. Close the Touchscreens form and select *Devices / Touchscreen Designer*.
8. From the drop-down list, select a touchscreen. Notice that the same touchscreen name is displayed in the **Version** field.



9. Configure the Default touchscreen. Check the '**EM Lock Shape**' and '**EM Lock Attributes**' options to prevent the touchscreen keys from being deleted or modified on subsequent versions.
  - ◆ Check '**EM Lock Shape**' to fix the size, shape, and location of the selected key.
  - ◆ Check '**EM Lock Attributes**' to fix the color, text, and functionality of the selected key.

If neither option is enabled, the key may be modified or deleted without affecting existing versions.

10. Click the  icon. The Touchscreen Version form is displayed.
11. Click  to add another record. Enter a name for this touchscreen version.
12. Select the touchscreen version that requires updating.
13. Click [OK] to close this screen and return to the Touchscreen Designer form.
14. From the **Version** drop-down list, select the appropriate name for this override Touchscreen Version.
15. Using the basic layout, modify the keys (attributes and/or functions) to create a store-specific or store-group version.
16. Click  to save the record.
17. Repeat Steps 10 through 16 until all of the variations have been defined.

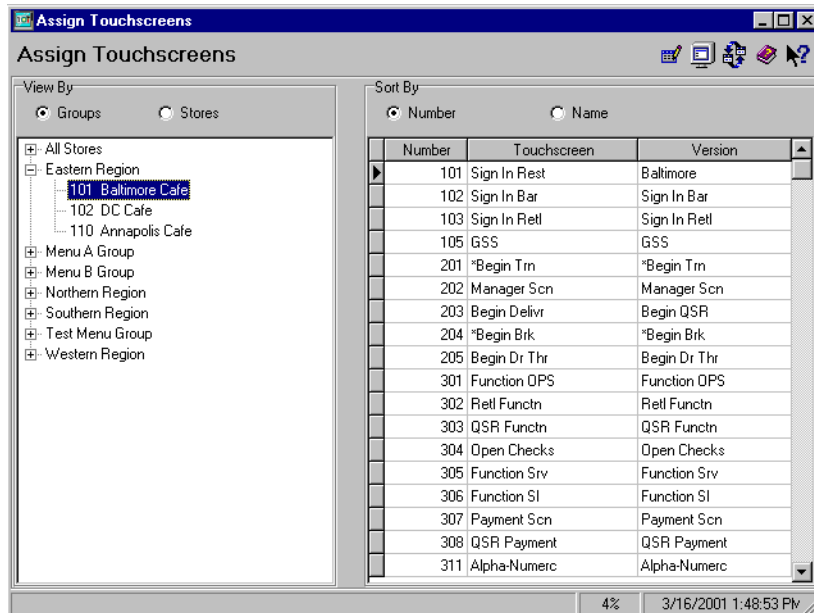


## Assigning Touchscreen Versions to Stores

Once the touchscreen versions are defined, they should be linked to the appropriate stores.

Follow these steps to assign the touchscreen versions:

1. Open the POS Configurator and select *Enterprise / Assign Touchscreens*. The Assign Touchscreens form is displayed.



2. In the **View By** panel, select a radio button to determine how the stores will be displayed. The options are:
  - ◆ Groups
  - ◆ Stores
3. Select a store or store group from the panel. The list of all the default touchscreens is displayed on the right.
4. To change the default Touchscreen Version, select a touchscreen and double-click on the **Version** name. A drop-down list of options is displayed. Select the appropriate entry.

5. Repeat until all of the appropriate touchscreen versions have been assigned to the appropriate store.
6. Select another store or store group and repeat Steps 4 and 5 until all of the stores have been configured.

## Managing Jobs and Default Pay Rates

Two stores managed by the same corporate office may be setup differently with one providing delivery and another only allowing the customer to dine-in. Differences such as these may create a variance in the type of jobs supported at each store (e.g., the delivery store will require a Delivery Job type).

As a solution to this issue EM allows the corporate office to vary the job definitions used in its enterprise-managed stores. Job types can be customized for each store. To support this feature, the process has been divided into five parts:

- ◆ Configuring Jobs
- ◆ Defining a Section
- ◆ Assigning Hourly Jobs to a Section
- ◆ Adding Premium Pay (Optional)
- ◆ Subscribing the Sections

The remainder of this topic provides background information on the individual processes, and includes step-by-step instructions for setting up and controlling the store configurations.

### Configuring Jobs


The first step in managing jobs is to define all of the jobs that are held throughout the enterprise.

Follow these steps to create a list of jobs:

1. From the Windows Start Menu, select **Programs / MICROS Applications / Enterprise Office / Labor Management** or **Programs / MICROS Applications / POS / POS Configurator**. The MICROS Security log screen is displayed.
2. Enter your employee ID and click [OK] to launch the application.




- From the Labor Management Setup screen, click **Time and Attendance** and select **Jobs** from the popup menu.  
*or*  
From the POS Configurator, select **Employees / Jobs**.  
The Jobs form is displayed.

- Click  to add another record.
- Enter the **Name** of the job.
- Select the **General** tab and complete the form, as required.
- Select the **Type** tab and complete the form, as required.

---

**Note** *It is not within the scope of this document to provide detailed instructions for defining jobs. This process is fully documented in the Labor Management Feature Reference Manual, included with the RES 4.9 software.*

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- Click  to save the record.

### Defining a Section

Because the types of jobs performed at each store may vary, corporate administrators need to create a separate set (or section) of jobs for different stores.

For example, within a corporation, one store may offer delivery where another store may not. The store offering delivery would employ delivery workers where the second location would not.

It is not necessary to define sections for every store or group of stores in the enterprise. A default section is automatically created and can be used by the enterprise, if the jobs are the same in each store.

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*Note*      *Sections are only applicable to Hourly jobs. Salaried and Non-Clock jobs are subscribed to separately through the EM MECU.*

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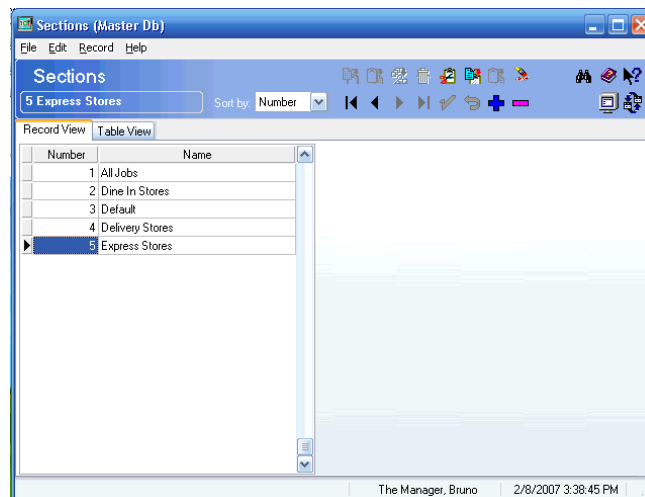
Follow these steps to define a new section:


1. From the Windows Start Menu, select **Programs / MICROS Applications / Enterprise Office / Labor Management** or **Programs / MICROS Applications / POS / POS Configurator**. The MICROS Security log screen is displayed.
2. Enter your employee ID and click [OK] to launch the application.
3. From the Labor Management Setup screen, click **Time and Attendance** and select **Sections** from the popup menu.

*or*

From the POS Configurator, select **Employees / Job Sections**.

4. Click  to add another record.



5. Enter a name for this section, taking care to be as specific as possible (e.g., Delivery Stores, Dine In Stores, Express Stores, etc.). Doing so now will make it easier to locate the right section as new stores are added or changes need to be implemented.
6. Click  to save the record.

### Assigning Hourly Jobs to a Section

Once the labor sections are added, the next step is to assign a section to each hourly job defined in the system. **This is a critical part of setup.**

For the process to work correctly, the following rules must be observed:

- ◆ **A Default Regular Rate must be assigned to every hourly job for every Section listed.** Suppose, for example, that the list of hourly jobs includes cashiers, cooks, servers, busboys, and delivery. Each time a new section is defined (e.g., Delivery Stores, Dine In Stores, Express Stores, etc.), the pay rates for every job on the list must be added to that section.

- ◆ **At each store, only one Section may be active at a time.** When an enterprise-managed store subscribes to a Section, it automatically receives all the hourly jobs associated with that section. If, for example, the hourly jobs assigned to the subscribed section includes cashiers, cooks, and servers, then any store subscribing to *Dine In Stores* (e.g., the Baltimore, Annapolis, and Rockville stores), will automatically receive those jobs and their associated pay rates.

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**Note** *In order for an hourly job to be deployed to a store, that job must be assigned to a section.*

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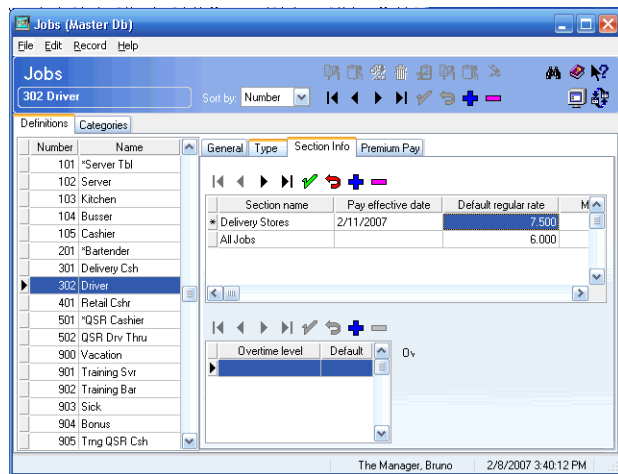
Follow these steps to configure the default pay rates:

1. From the Windows Start Menu, select **Programs / MICROS Applications / Enterprise Office / Labor Management** or **Programs / MICROS Applications / POS / POS Configurator**. The MICROS Security log screen is displayed.
2. Enter your employee ID and click [OK] to launch the application.


3. From the Labor Management Setup screen, click **Time and Attendance** and select **Jobs** from the popup menu to open the Jobs form.

or

From the POS Configurator, select **Employees / Jobs** to open the Jobs form.



4. From the **Definitions** table, highlight a job.

5. Go to the **Section Info** tab and click  above it to add another record.

6. For the blank record, click in the **Section name** field to open a drop-down list of the previously defined sections. Select one.



Section name	Pay effective date	Default regular rate	M
* Delivery Stores	2/11/2007	7.500	
Default		6.000	

7. Complete the rest of the table entries as follows:


- ♦ **Pay effective date**—Specifies when the default pay rate will take effect. If no date is specified, the system will set the date to the first day of the next pay period (based on the T&A labor week start day).
- ♦ **Default regular rate**—Specifies the default pay rate for all employees in this job during a normal working day. This field is required.
- ♦ **Min regular rate**—Indicates the lowest rate that an employee with this job may be paid during a normal working day. (Optional)
- ♦ **Max regular rate**—Indicates the highest rate that an employee with this job may be paid during a normal working day. (Optional)

---

**Note** *Max regular rate must be set in order to use override rates in Employee setup.*

---

- ♦ **Max overtime rate**—Indicates the highest rate than an employee with this job may be paid for working overtime. (Optional)
- ♦ **Minimum age**—Specifies the minimum age required for any employee working in this job. (Optional)

8. Repeat Steps 4-7 until sections have been added for **all** of the hourly jobs listed.
9. Click  to save the data.

---

**Note**     *If the store wants the ability to modify any of the pay rate fields, the user column translation file must be configured so that these fields will retain their current value the next time deployment files are received. To do this, the file must set these values equal to '\*'.*

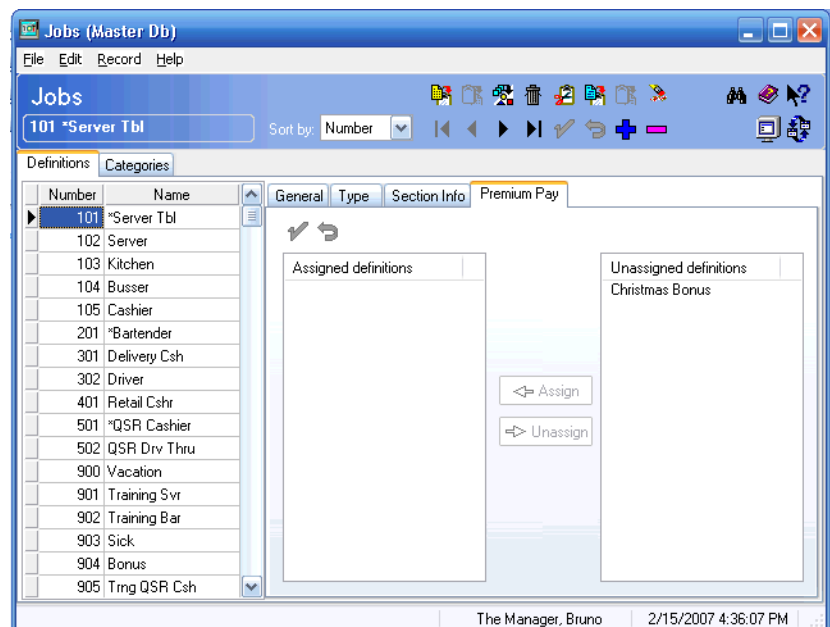
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### Adding Premium Pay (Optional)

Premium Pay is configured by job and cannot vary by section. Once premium pay is in place, it must be applied to all sections.

Follow these steps to configure Premium Pay:

1. Go to **Labor Management / Time and Attendance / Jobs** and select the **Premium Pay** tab or select the **POS Configurator / Employees / Jobs / Premium Pay**.



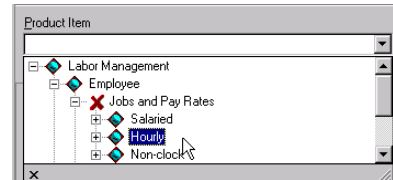
2. Select the Assign or Unassign keys to activate premium pay definitions for this job type.
3. Repeat steps 1 and 2 for each job type that is eligible to receive premium pay.
4. Select [**S**ave] when finished.

### Subscribing the Sections

To ensure that each enterprise-managed store receives the correct jobs, the corporate administrator must now set up the appropriate labor management subscriptions.

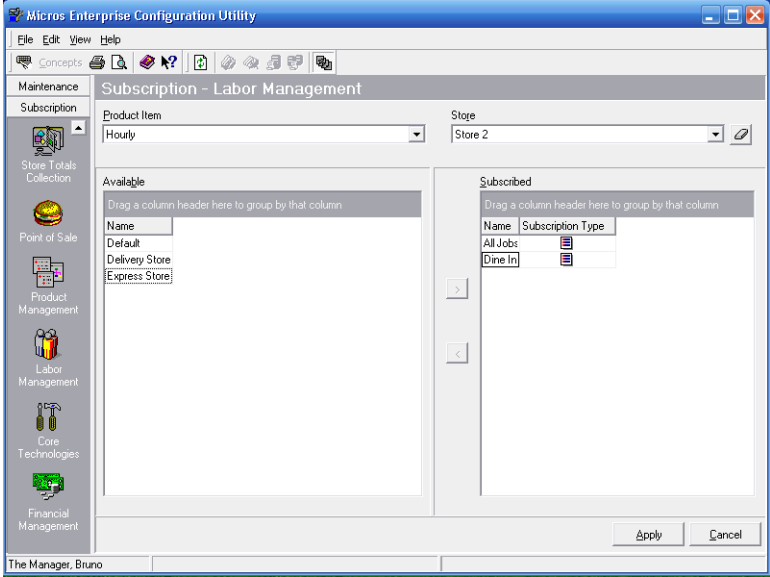
Follow these steps to configure sections:

1. From the Windows Start Menu, select **Programs / MICROS Applications / Enterprise Management**. The MICROS Security log screen is displayed.
2. Enter your employee ID and click [OK] to launch the MECU.
3. Click the [Subscription] button on the feature selection panel to reposition the slide bar and display the available functions.
4. Select the **Labor Management** option to open the appropriate subscription form.
5. From the **Product Item** drop-down list, expand the drop-down directory through the **Labor Management / Employee / Job and Pay Rates** node and double-click on **Hourly**. The **Available** panel will be populated with a list of sections.
6. From the **Store** drop-down list, expand the **Store** node and double-click on one of the entries.





- From the **Available** panel, highlight the appropriate section for the selected store and click the [ > ] button or drag and drop it in the **Subscribed** panel.



---

**Note**     *A store may subscribe to only one Section at a time. If more than one is subscribed, an error message will be displayed.*

---

- Repeat Steps 6 and 7 until all of the stores have been configured.
- Click [**Apply**] to save the records.

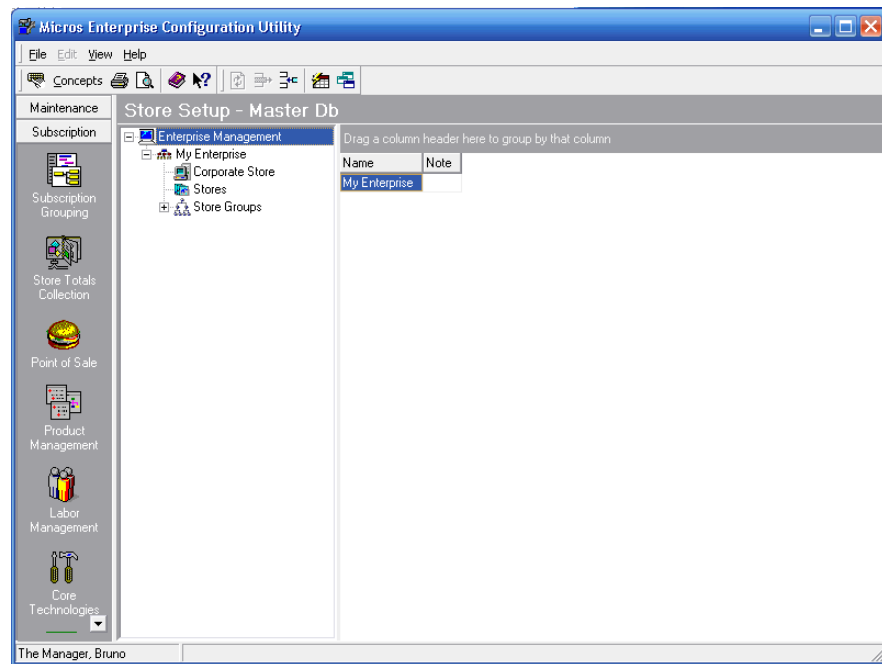
## Setting Up Subscriptions by Product

After the central database is established, the corporate administrator sets up the store subscriptions to determine which configuration options will be deployed to the enterprise stores.


Subscriptions are managed from the product level (i.e., Point-of-Sale, Product Management, Labor Management, Core Technologies, and Financial Management). Once a product is selected, the user specifies which items will be available at which stores. Product items may be assigned to individual stores or store groups.

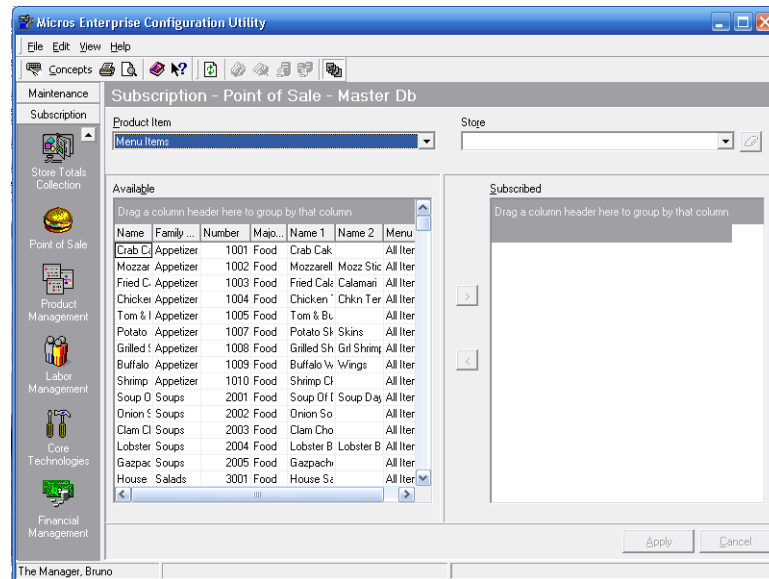
Follow these steps to set up the subscriptions:


1. Open the Micros Enterprise Configuration Utility (MECU) and select the [**Subscription**] button from the feature selection panel on the left. The slide bar repositions to display the available functions.



2. Select the **Point of Sale** icon from the subscription panel on the left. A Subscription form for the selected product is displayed.

3. Open the **Product Item** drop-down list by clicking the  button on the right side of the field. Double-click to select a product item and populate the **Available** pane.



4. Open the **Store** drop-down list by clicking the  button on the right side of the field. Expand the list to locate the appropriate store and double-click to make a selection. All of the product items in the **Available** pane that the store subscribes to are moved to the **Subscribed** pane for the selected store(s).
5. Highlight one or more items and use the left/right arrows to move product items between the panes until all of the required items (and only those required) are listed in the **Subscribed** pane.

**Warning!**

*When subscribing to a menu item with required condiments, the system will not automatically include those condiment menu items as part of the subscription. You must subscribe to all related condiment items separately. Failure to do so will result in an error message when the menu item is ordered during store operations.*

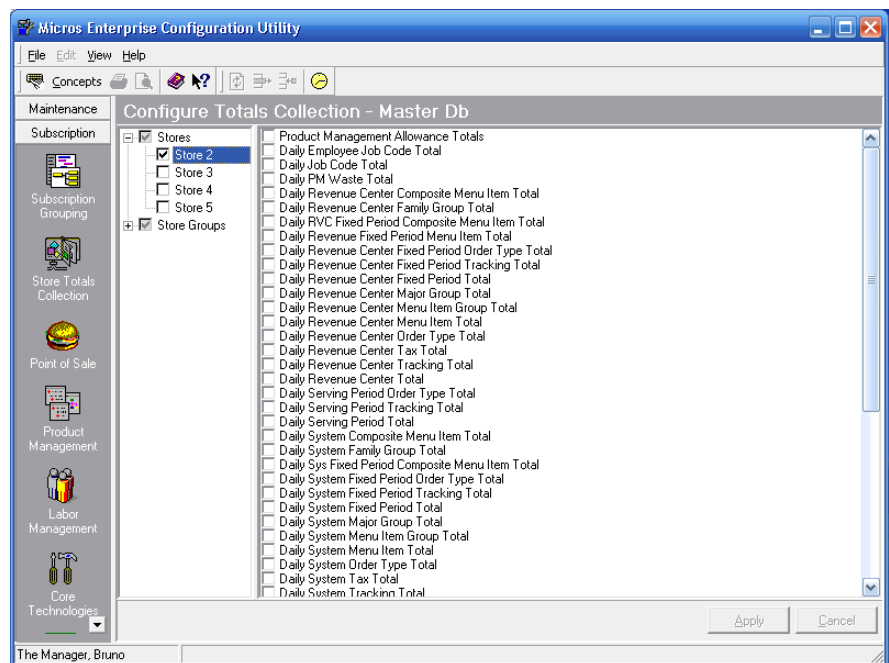
6. Click [**Apply**] to save the record.
7. Repeat Steps 3 through 6 until all of the product items have been assigned to the appropriate stores.
8. To setup subscriptions for another product, return to Step 3 and repeat the process.

## Configuring Totals Collection

The next step in setting up the corporate EM database is to define which totals will be collected for each of the enterprise-managed stores and how long the information will be retained. These totals populate the system reports and are used to analyze productivity in the stores and throughout the enterprise.

Follow these steps to configure totals:

1. Open the Micros Enterprise Configuration Utility (MECU) and select the [**Subscription**] button from the feature selection panel on the left. The slide bar repositions to display the available functions.
2. Select the **Store Totals Collection** icon from the subscription panel on the left. The Configure Totals Collection form is displayed on the right panel.



3. Expand the tree to locate the appropriate store(s) and check the boxes next to them to indicate a selection.
4. Place a check mark in the box(es) next to each store total to be retrieved for the specified store or store group.


- Click [**Apply**] to save the record.

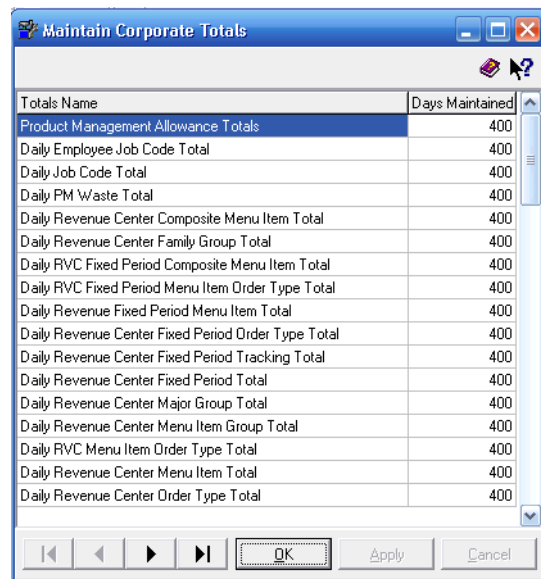
---

**Note** *A warning message may be received if the total checked is not maintained by Corporate (i.e., Employees) or if the total type that is being selected has not been subscribed to that store(s). For example, any totals collection that calls for Tracking Groups cannot be received if they are not subscribed.*

---

- Repeat Steps 3 through 5 until all of the totals have been selected for each store. Once the totals are selected, go to Step 7 to set the archive period for each of the totals collected.

- Click the  icon in the navigation bar at the top of the MECU. The Maintain Corporate Totals form is displayed.



Totals Name	Days Maintained
Product Management Allowance Totals	400
Daily Employee Job Code Total	400
Daily Job Code Total	400
Daily PM Waste Total	400
Daily Revenue Center Composite Menu Item Total	400
Daily Revenue Center Family Group Total	400
Daily RVC Fixed Period Composite Menu Item Total	400
Daily RVC Fixed Period Menu Item Order Type Total	400
Daily Revenue Fixed Period Menu Item Total	400
Daily Revenue Center Fixed Period Order Type Total	400
Daily Revenue Center Fixed Period Tracking Total	400
Daily Revenue Center Fixed Period Total	400
Daily Revenue Center Major Group Total	400
Daily Revenue Center Menu Item Group Total	400
Daily RVC Menu Item Order Type Total	400
Daily Revenue Center Menu Item Total	400
Daily Revenue Center Order Type Total	400

- Select a **Total** from the list. By default, the system maintains the data for 400 days. Edit the Days Maintained field, as required.
- Click [**Apply**] to update the record.

- When finished, click [**OK**] or [**Cancel**] to exit the screen.

---

## Managing Employees

One of the final steps in setting up the Corporate database is to determine who will be responsible for the collection and distribution of employee information. Enterprises have three options for managing employee records:

- ◆ **No Employees Managed** — Each store retains control over the addition of new employees and the maintenance of their personnel records.
- ◆ **Some Employees Managed** — Corporate maintains records for a core group of employees (e.g., district managers, support personnel, backup or substitute workers) who are accessible to all stores. These employees may be selectively subscribed at the store level. Meanwhile, each store handles its own (local) employee records.
- ◆ **All Employees Managed** — Corporate manages all employee records. Stores subscribe to a subset of all the employees in the enterprise, receiving information only on the employees relevant to their operation.

Employee subscriptions are determined on a store-by-store basis. The following table summarizes the three options and provides a comparison of the limitations and/or dependencies associated with each.

<b>Corporate manages the following employees:</b>	
<b>NONE</b>	<ul style="list-style-type: none"><li>• Employee data maintained at the store level. No shared resources.</li><li>• <i>(Optional)</i> Corporate manages selected employee-related dependencies (e.g., job and reasons managed; school districts are not).</li><li>• When managed by corporate, employee-related dependencies must be subscribed to the stores.</li></ul>

<p><b>PARTIAL</b></p>	<ul style="list-style-type: none"> <li>• Corporate maintains data on core staff and shared resources (e.g., district managers, accounting staff, support technicians).</li> <li>• Stores retain control of their local employees.</li> <li>• Stores may be subscribed to all or none of the Corporate employees.</li> <li>• Initial subscription of Corporate employees does not cause purge of locally managed records.</li> <li>• Stores must explicitly subscribe all employment-related dependencies before managing any employees. These include:                         <ul style="list-style-type: none"> <li>• School Districts</li> <li>• Payroll Banks</li> <li>• Deductions</li> <li>• States and Counties</li> <li>• Reasons</li> <li>• Job Sections (one Hourly section must be subscribed.)</li> </ul> </li> </ul> <p>NOTE: Of these, only Job Sections will cause a purge at the store, the first time they are subscribed.</p>
<p><b>ALL</b></p>	<ul style="list-style-type: none"> <li>• All employee records held at Corporate.</li> <li>• Individual employees are subscribed on a per-store basis.</li> <li>• Employees can be added at any site (Corporate or store). If entered at the store, records will still need to be posted to the central database before they can be managed by Corporate.</li> <li>• Employee subscription does not cause a purge at the store level. New employee records may be added without affecting current employee records.</li> <li>• Stores must explicitly subscribe all employment-related dependencies before managing any employees. These include:                         <ul style="list-style-type: none"> <li>• School Districts</li> <li>• Payroll Banks</li> <li>• Deductions</li> <li>• States and Counties</li> <li>• Reasons</li> <li>• Job Sections (one Hourly section must be subscribed.)</li> </ul> </li> </ul> <p>NOTE: Of these, only Job Sections will cause a purge at the store, the first time they are subscribed.</p>



## Employee Management

Before a store is subscribed, a “dialog” must take place between the central and store databases in which employment information is gathered from and passed back to the stores through a series of deployment packages. This dialog synchronizes the Corporate and store employment records and ensures that future updates will be handled correctly at the stores.

### Before You Begin

In order for this “dialog” to take place the store must be subscribed to employees it must also subscribe to the following employee package prerequisites:

- ◆ School Districts (*MECU / Labor Management / Labor Settings*) – Provides a list of the local school districts for labor purposes.
- ◆ Payroll Banks (*MECU / Labor Management / Payroll*) – Lists all local banks. Can be used for direct deposit purposes.
- ◆ Deductions (*MECU / Labor Management / Payroll*) – Lists all job deductions (e.g., 401K).
- ◆ States and Countries (*MECU / Labor Management / Product Item / Double-click on Labor Management*) – Lists all states and countries that can be configured (e.g., USA, MD).
- ◆ Reasons (*MECU / Core Functionality*) – Lists all reasons including those related to job termination.
- ◆ Hourly Jobs (*MECU / Labor Management / Employees / Jobs and Pay Rates / Hourly*) – Provides a list of all hourly jobs. Must subscribe to a minimum of one section.

If the user is not subscribed to these items then they will receive a dialog box when they attempt to subscribe to employees. The dialog will list the items to which the store must first subscribe.

◆ **Deploy the Package of Prerequisites to the Store**

Once the store is subscribed to the above items, corporate should deploy a package including all of the employee package prerequisites.

Follow these steps to deploy the package:

1. Go to the **MECU** and select the [**Subscription**] button. Navigate to *Product Item | Labor Management | Employee | Jobs and Pay Rates*.
2. Double click the appropriate Job and Pay Rate category (e.g., hourly).
3. Use the *Available* column to indicate which Jobs will be included in the package.
4. Use the **Store** drop down to select a Store group that will receive this package. Double-click on the appropriate record.
5. Drag the employee package from the *Available* column on the left to the *Subscribed* column on the right.

When the package is received at the store, the behavior of the database will vary depending on whether it is a new or existing store:

- ◆ A new store will write all of the new records into its database.
- ◆ An existing store will attempt to match the records in the packet with the existing records against the name of the record (this is case sensitive). If there is a match then the record in the packet will overwrite the existing record at the store. If there is not match then the new record will be written into the database.

◆ **Deploy the Package of Prerequisites Back to Corporate**

Once the packet is received at the store, they must then relay the packet back up to corporate to verify that the exchange was successful.

The store's package will include the following:

- ◆ A list of all of the records at the store that did not match the records in the package.
- ◆ All of the employees in the store's database.

When corporate receives the package they will import all records into the corporate database except for individual employees. The list of employees will be imported into a temporary holding table (**em\_emp\_def\_map**). This table must be accessed after the first time the store deploys an employee packet to corporate. Steps to access this information can be found in the *Subscribing Employees* section below.

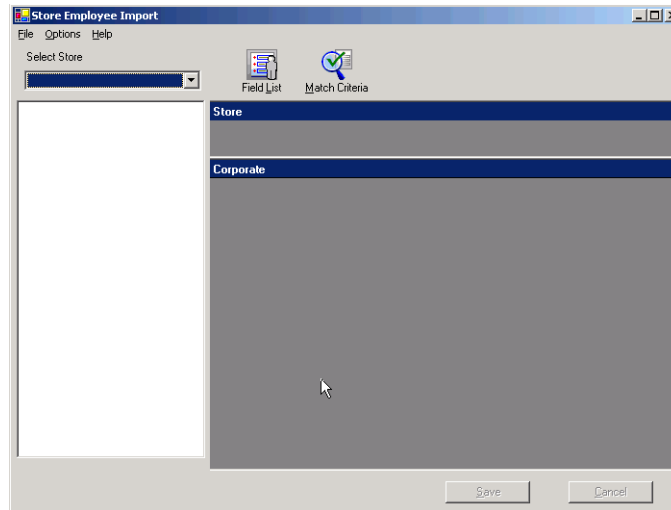
Initiating Employee Management

Once the dependencies are subscribed, the next step is to import and organize the employee records, using the **Store Employee Import** utility.

Follow these steps to upload employee records to the central database:

1. On the Corporate server, open the Windows Explorer and locate the **StoreEmployeeImport.exe** (\MICROS\Res\EM\Bin).
2. Double-click to launch the application. A MICROS log-in box is displayed.

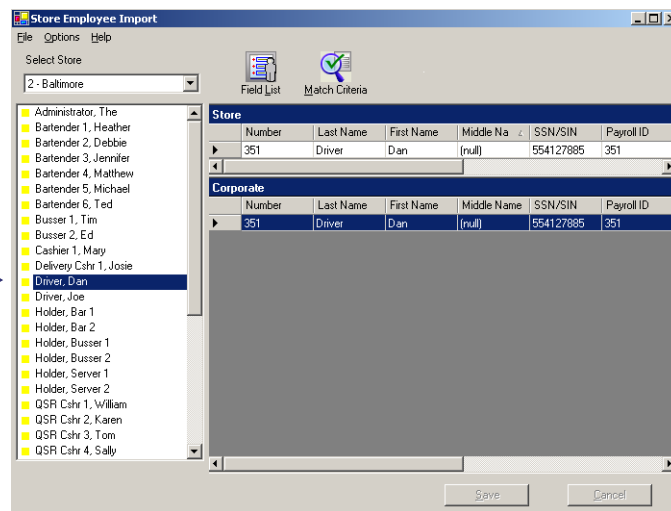
3. Enter an appropriate user ID and Password, select **[Enter]**.



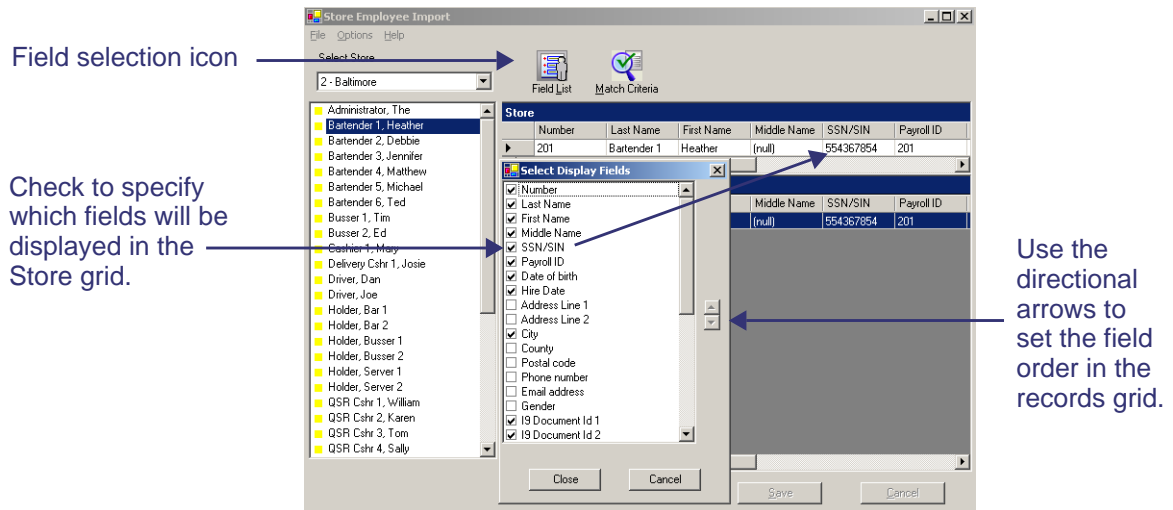
4. Click the **Select Store** drop-down box to view a list of stores with employees pending clarification of status.
5. Select a store. The left-side panel populates with the names of all unresolved employees. Employees are listed in alphabetical order. To the left of each name is a yellow square, indicating that a status has not been assigned.

Lists store with employees pending resolution of status. →

Yellow box indicates unresolved status. →



6. Select an employee. The record details will be displayed as a row in the **Store** grid on the right. Not all fields will be shown. Users can specify which field to display by pressing the **Field List** icon or selecting *Options / Field List* from the main menu bar.



Fields are displayed in the grid in the order in which they are listed in the dialog box. The box's up/down buttons can be used to change the order of the fields. The change will not be implemented until the [**Close**] button is pressed.

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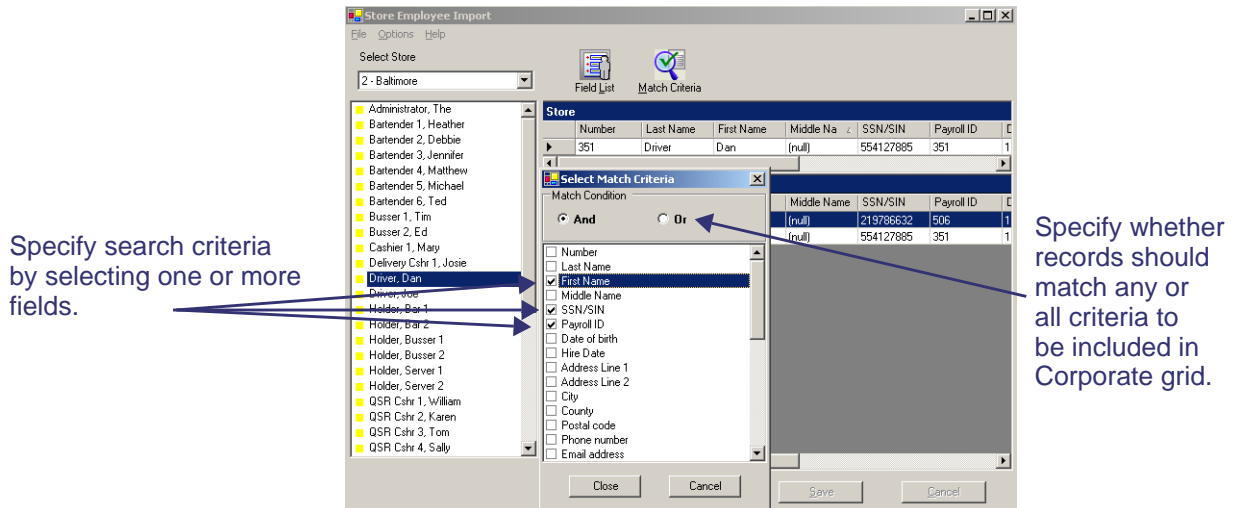
**Note** *Not all fields will be available for display. Security passwords and photo fields will not be available, nor will any of the reserved fields (i.e., those set aside for future use).*

---

7. Once a name is highlighted, the utility will check to see if that employee is already listed in the central database. The default search criteria are the employee's **First** and **Last Names**. If a record is found it will be displayed in the **Corporate** grid.

For larger enterprises, **First** and **Last Names** may not be the best criteria for narrowing a search. Certain names (e.g., Tom Smith, George Lopez, Kim Chen) are not uncommon. A search based solely on the **First/Last Name** combination may return multiple records.

- Users can modify the search criteria by pressing the **Match Criteria** icon or selecting *Options / Match Criteria* from the main menu bar. This will open the **Select Match Criteria** dialog box.



Specify the search criteria by checking one or more boxes. Use the **And/Or** radio buttons to specify whether the Corporate record must match all of the criteria (**And**) to be considered a match, or whether identical entries in any of the selected fields (**Or**) will suffice.

---

**Note** *A search may be ineffective if the person's data is entered incorrectly (either at the Store or at Corporate). When entering records, or generating a search, be sure that the criteria is sufficient to catch a misspelled entry or incorrect identifier. Failure to do so can result in duplicate records for the same employee.*

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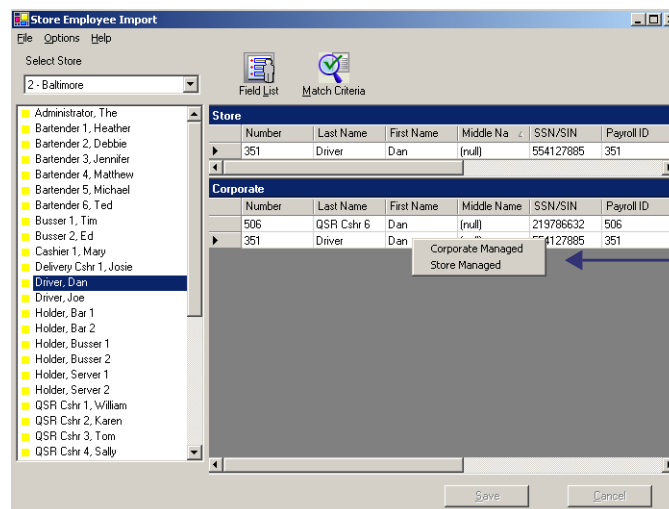
- Press [**Close**] to accept the criteria and run the search. A list of matching records is displayed in the **Corporate** grid. *This does not mean that the employee is already in the central database.* It only means that records supporting the search criteria have been found.

10. Review the **Corporate** records. If an exact match is located, highlight that record in the **Corporate** grid. Selecting the record ensures that the Store and Corporate entries are linked. Proceed with Step 12.

If a match is **not** found — or if none of the displayed records matches the Store employee — a new record can be added to the central database. **Records are only added if the employee will be managed at Corporate.**

To add the **Store** record to the central database, first make sure that none of the **Corporate** entries is highlighted. Click on the record to deselect, if needed.

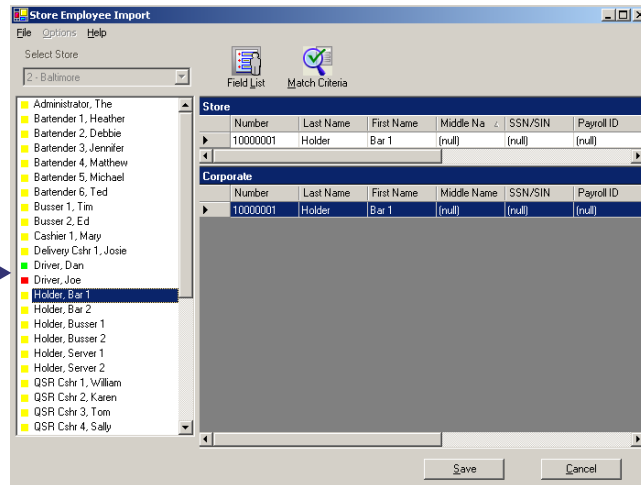
11. Highlight the matching entry and right-click on the record in the **Store** list. A pop-up menu will display with the two status options — **Corporate Managed** or **Store Managed**. Select one.



Right-click to display pop-up menu and set employee status.

12. Once the status selection is made, the colored icon in the employee list changes to either red or green. A green box indicates that the employee will be managed by Corporate; a red box indicates the Store will manage that record.

Green = Corporate Managed  
Red = Store Managed →



---

**Note** Once an employee has been assigned a status of either Corporate Managed or Store Managed, the employee will not show up in the pending list the next time the Store Employee Import Wizard is opened.

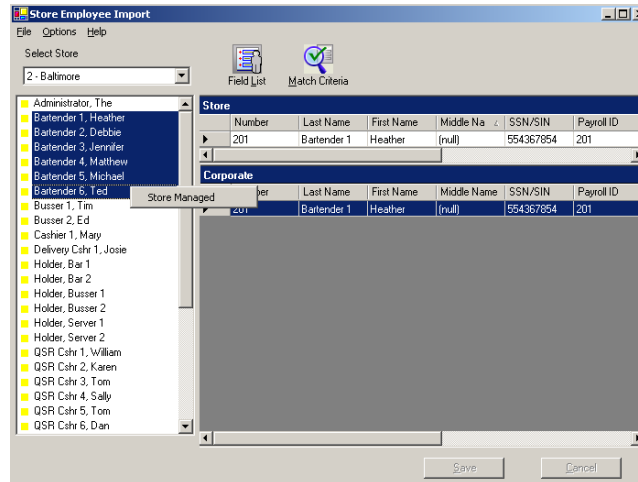
Refer to the section on **Error Correction** located on page 136 of this document for more information.

---



### Selecting Multiple Records

Corporate managers can save time by setting the status of multiple (Store-managed) records simultaneously. To do this, highlight multiple entries in the list box, then right-click to display the pop-up window. The selected status will be applied to all of the highlighted records.



- Press [**Save**] to add a new record or link the Store entry to an existing record in the central database.

Entries are not committed until the [**Save**] button is pressed. This allows EM users to review and/or reconsider their selections. Once a record is committed, it is deleted from the temporary table and cannot be recalled through the Store Employee Import utility.

---

**Note** *Records can still be edited, but the process becomes more difficult. For help in reassigning a saved record, see the section on **Error Correction** on page 136.*

---

As part of the save process, all Corporate-managed entries are assigned an employee GUID before being added to the central database. Store-managed records are neither added or given a corporate identifier. In future packages, the GUID ensures that employee updates will only affect the Corporate-based records without overwriting the Store-managed (locally controlled) employee files.

### Subscribing Employees

After the employee records are uploaded to the database, they can be subscribed to individual Stores. Once the assignments are set, future updates will only be sent for those employees to which the Store is subscribed. Please note that the changes will only affect the Corporate-managed employees. It will not purge locally controlled employee records.

The following illustrates the steps required to manage employee records. Although new employees may be added directly, these directions assume that the records were uploaded to the central database via the Store Employee Import utility.

For clarity, the directions have been divided into two parts. The first describes how to configure stores in a new EM 4.9 Enterprise or Store. The second discusses requirements for an EM 3.2 upgrade.

#### ◆ **New EM 4.9 Installations**

To configure the store assignments:

1. Launch either POS Configurator or the Human Resources application.
2. Go to *Employee Setup / Store Assignments* and highlight an employee name. In the upper grid, a single record will be listed, containing the Store where the employee is currently working.
3. Highlight the Store record. Enter or (right-click to) select a value in each of the data columns, if desired.

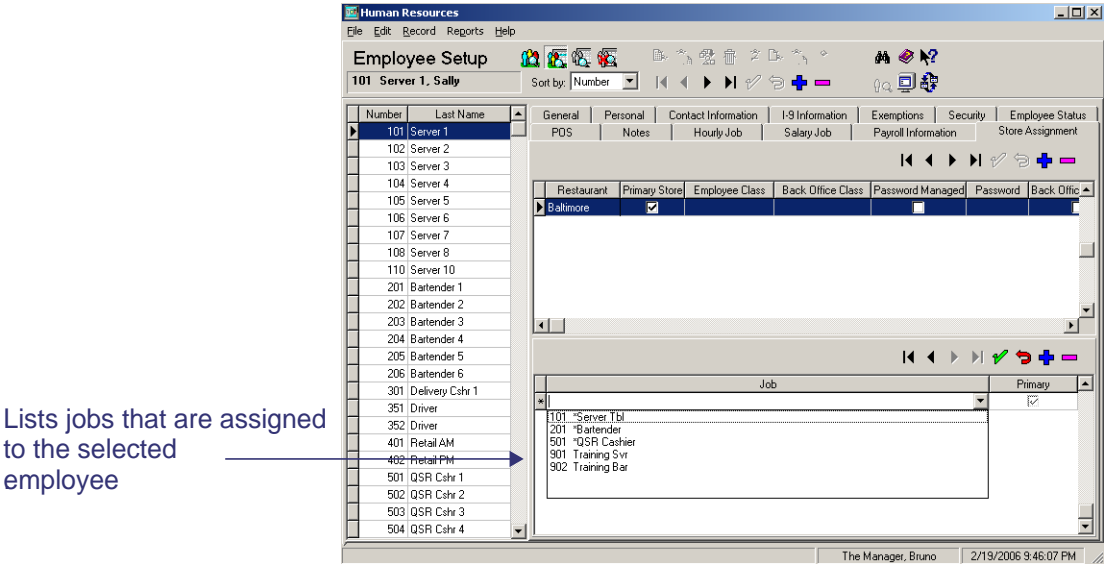
Entries made on this tab supersede values entered on other forms or tabs. For example, the effectivity dates entered here will override the dates shown on the *Employee Status* tab.

If no values are specified, the Store will use the entries listed on the *Security* tab.

- 4. The lower grid will be populated with a list of jobs that are assigned to the selected employee. An information box will appear if a job is selected that is not assigned to the store.

Click the **+** icon to add another row to the **Jobs** grid.

Highlight the new row and right-click in the job column to open the drop-down list of options. This list will only include jobs assigned to the employee at that store. Select one.

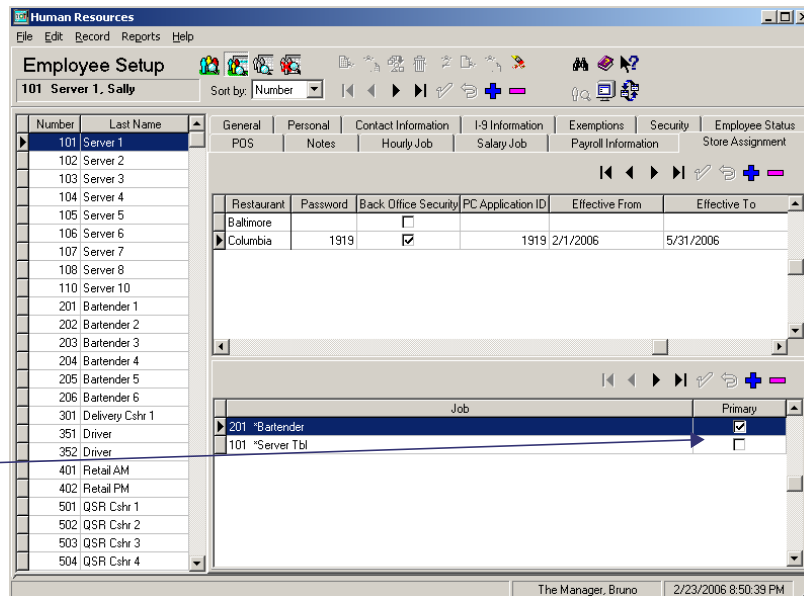


If a job is selected that is not assigned to the store, the user will receive the following error message:


The store must be subscribed to the job before it can be assigned to the employee.

5. Specify the employee's **Primary** job by checking the appropriate record. By default, the first entry will be designated the employee's primary job. This can be changed by manually selecting a different job entry.

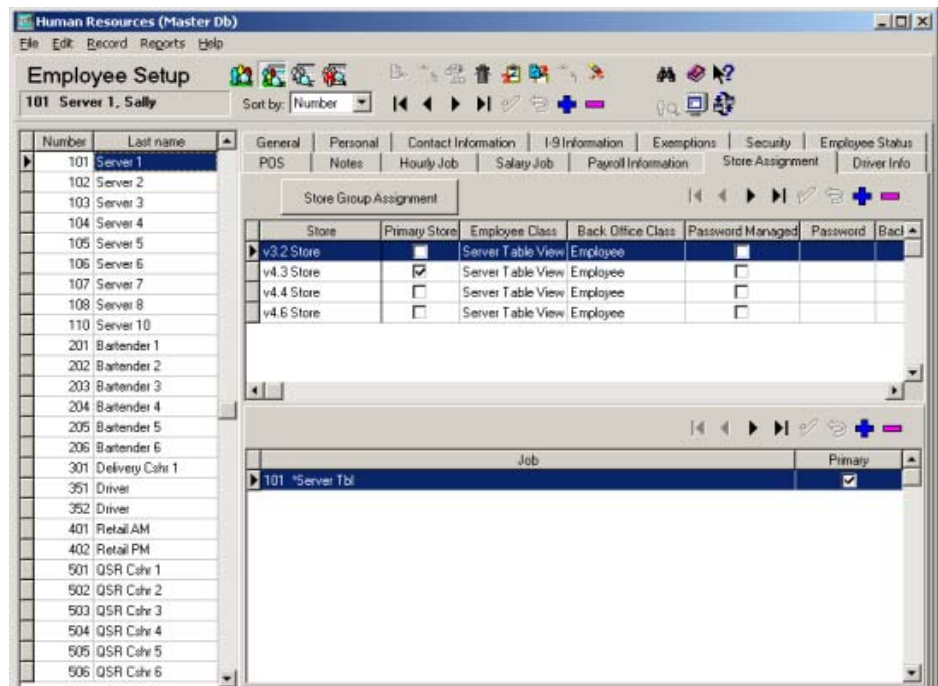
Specifies the employee's primary job function at this store.



6. If the employee will be working at more than one store, this will also need to be defined.

Click the  icon to add another row to the **Store** grid.

Right-click on the **Store** column to open the drop-down list of enterprise stores. The list will only display names of stores that have chosen to subscribe employees. Select one and fill in the rest of the columns, if desired.



7. If more than one Store is listed, specify which store is the employee's main workplace (Primary Store). By default, the first Store is automatically considered the **Primary** location. This can be changed by manually selecting another entry.

◆ **Upgrading an EM 3.2 Enterprise**

After you have upgraded to RES 4.9, follow these steps to update the store assignments in an existing EM 3.2 installation:

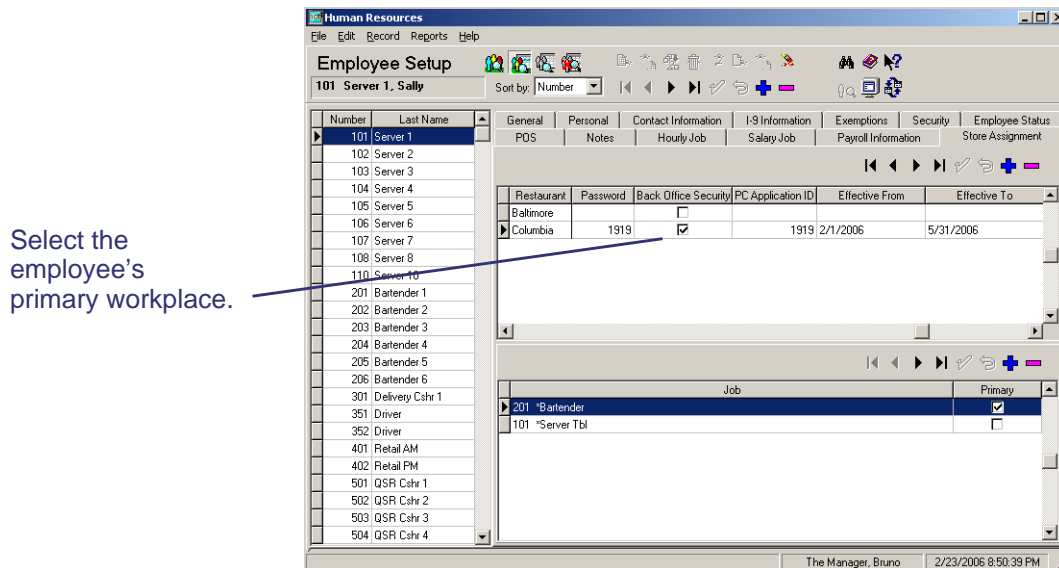
1. Open the POS Configurator or Human Resources application and go to *Employee Setup / Store Assignments*.
2. Highlight an employee name. The (upper) Store grid will be populated with a row for all of the Stores in the enterprise that the employee is subscribed to.
3. Review the Store records, deleting rows for those stores where the employee **will not** be working.

---


*Note*     *Deleting the row from the table only removes the link to the current employee. It does not delete the store from the enterprise.*

---

4. When the Store list is complete, specify the employee's **Primary Store** by enabling the corresponding check box. Only one row can be selected at a time.



5. Highlight a **Store** record. Notice that the Jobs grid is already populated with all of the employee's jobs.
6. Specify additional jobs that the employee will be allowed to do at that location. A different set of jobs may be configured for each employee at each Store listed. (In EM 3.2, stores that were subscribed to employees could only have one job section; all subscribing stores had to use the same job section.)

To do this, click the  icon to add another row to the Jobs grid.

Highlight the new row and right-click in the **Job** column to open the drop-down list of options. This list will only include jobs for which the employee is qualified.

Select a job entry.

Lists jobs that are assigned to the selected employee

Number	Last Name	General	Personal	Contact Information	I-9 Information	Exemptions	Security	Employee Status
101	Server 1	POS	Notes	Hourly Job	Salary Job	Payroll Information	Store Assignment	

Restaurant	Primary Store	Employee Class	Back Office Class	Password Managed	Password	Back Office
Baltimore	<input checked="" type="checkbox"/>			<input type="checkbox"/>		

Job	Primary
101 *Server Tbl	<input checked="" type="checkbox"/>
201 *Bartender	<input type="checkbox"/>
501 *QSR Cashier	<input type="checkbox"/>
901 Training Svr	<input type="checkbox"/>
902 Training Bar	<input type="checkbox"/>

- Specify the employee's **Primary** job by checking the appropriate record. By default, the first entry will be designated the employee's primary job. This can be changed by manually selecting a different job entry.

Specifies the employee's primary job function at this store.

Number	Last Name	General	Personal	Contact Information	I-9 Information	Exemptions	Security	Employee Status
101	Server 1	POS	Notes	Hourly Job	Salary Job	Payroll Information	Store Assignment	

Restaurant	Password	Back Office Security	PC Application ID	Effective From	Effective To
Baltimore		<input type="checkbox"/>			
Columbia	1919	<input checked="" type="checkbox"/>	1919	2/1/2006	5/31/2006

Job	Primary
201 *Bartender	<input checked="" type="checkbox"/>
101 *Server Tbl	<input type="checkbox"/>

- Repeat Steps 2-7 until all employees records have been updated.



## Error Correction

Records with an assigned status (whether Corporate- or Store-managed) are automatically removed from the pending list in the Store Employee Import utility. This allows the EM manager to filter out settled records and view only those whose status is undetermined.

In the event of an error, or if an assignment needs to be changed after the record is committed to the database, the record may be amended. Options for revising the status is dependent on when and how the employee record was saved.

## Store-Managed

Once an employee record has been posted for local control (*Store-managed*), the only way it can be set to *Corporate-managed* is to re-send all of the Store records. To do this, the Store must generate another package by running the **clEmployeeSync.exe** from a command line as follows:

```
micros\res\em\bin\clEmployeeSync.exe -R
```

When the package is received at Corporate, the records will be re-added to the temporary employee table, which will make them available again via the Store Employee Import utility. From there, the Corporate manager can retrace the steps beginning on page 123 and select, add, and/or link to a matching record in the **Corporate grid**.

---

**Note** *Re-posting the Store records means that the status of ALL store-managed records will need to be reassigned. (Corporate-managed employees will not be sent.) Depending on the size of the Store, a single mistake can be a time-consuming error to correct. Users should therefore review the temporary records carefully before committing them with the [Save] button.*

---

### Corporate-Managed

To relinquish Corporate control of a store-managed employee, simply unlink the employee from the assigned Store(s).

When a Corporate-managed employee is unlinked, a delete order is automatically sent to the Store, based on the record's GUID. If this is a new Store or a new Employee, the delete will be processed immediately and the record will be removed from the Store database. The EM user can start over by entering and configuring the employee record again.

Once the employee has been scheduled or has totals posted, his/her record cannot be removed from the Store database — it is merely *flagged* for deletion at a later date. In the interim, Store managers can update the record as though the employee was configured for local control. even though it retains its Corporate GUID.

---

**Note**     *Each time a package is received at the Store, the system will check for outstanding orders and attempt to process the deletion for that GUID. Should this occur after totals have been cleared and before an assignment is scheduled, the employee record may be deleted automatically.*

---

## Security Options

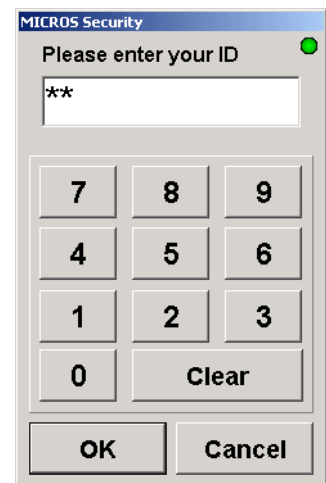
As part of store-based employee subscription, Corporate managers will have greater flexibility and control over password security for individual employees. This control may be applied to POS and back office applications (separately) and affects both MICROS Classic Security and the Enhanced Security options introduced in the RES 4.0 release.

### Classic Security

In the Classic Security model, employees are assigned a **Password ID** (for POS) and a **PC application ID** (for back-of-house applications). These IDs are provided when the employee is hired and are generally kept (unchanged) for the duration of their employment.

During POS operations, or when launching any of the RES applications or utilities, the system displays a MICROS Security form and prompts the user for a single ID before launching the application.

Classic Security is enabled in *POS Configurator / Restaurant / System / Security* by checking the **Use Micros Classic Security** option. This is the (traditional) default setting.



### Enhanced Passwords

As an alternative to Classic Security, RES 4.0 introduced the Enhanced Security model. This model exercises stricter control over password assignments with options for creating, validating, and updating the entries. These options are defined in the **Enhanced Password Security** section in *POS Configurator / System / Restaurant / Security*. (For an explanation of the new controls, refer to the *Password Management* section of the *Restaurant Management Solution (RES) 4.0 ReadMe First, MD0003-087, April 2006*).

When Enhanced Security is enabled, users who attempt to log on to RES applications are presented with a different MICROS Security window. The new window requires both a valid **User ID** and a corresponding **Password** before launching the application.



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**Note** *If managing **any** employee passwords at Corporate, Enhanced Password Security should be enabled at Corporate to mimic the stores that have Enhanced Password Security. Without Enhanced Password Security being enabled, the appropriate fields will not be active.*

*In order to be PCI Compliant, RES versions 4.3 HF 1 and Higher require Enhanced Password Security to run POS Operations.*

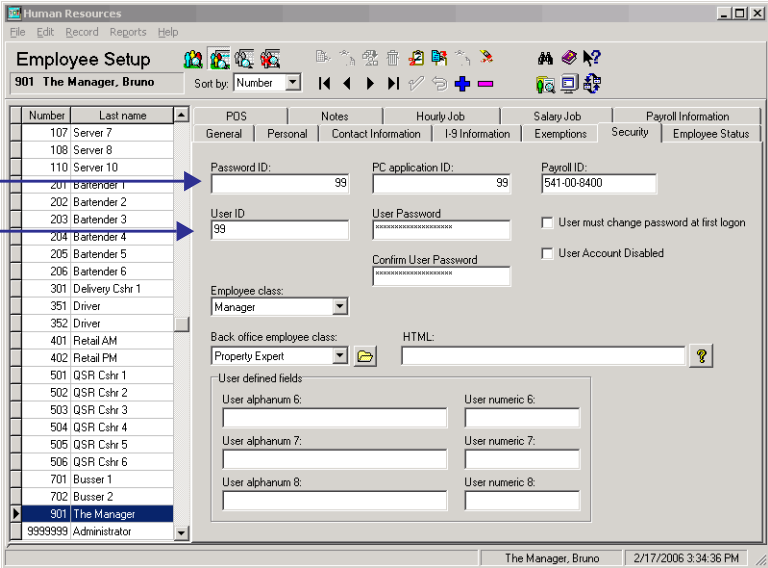
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#### Configuring the Passwords

Employee IDs and passwords are defined on the *Employee Setup* form. To differentiate between the two security models (Classic and Enhanced), a separate set of options is provided for each. The first set (**Password ID** and **PC application ID**) are the Classic Security options. The second set (**User ID** and **User/Confirm User Password**) were added for the Enhanced Security model.

Only one set is valid at a time.

Classic User Security Passwords  
Enhanced Security Passwords

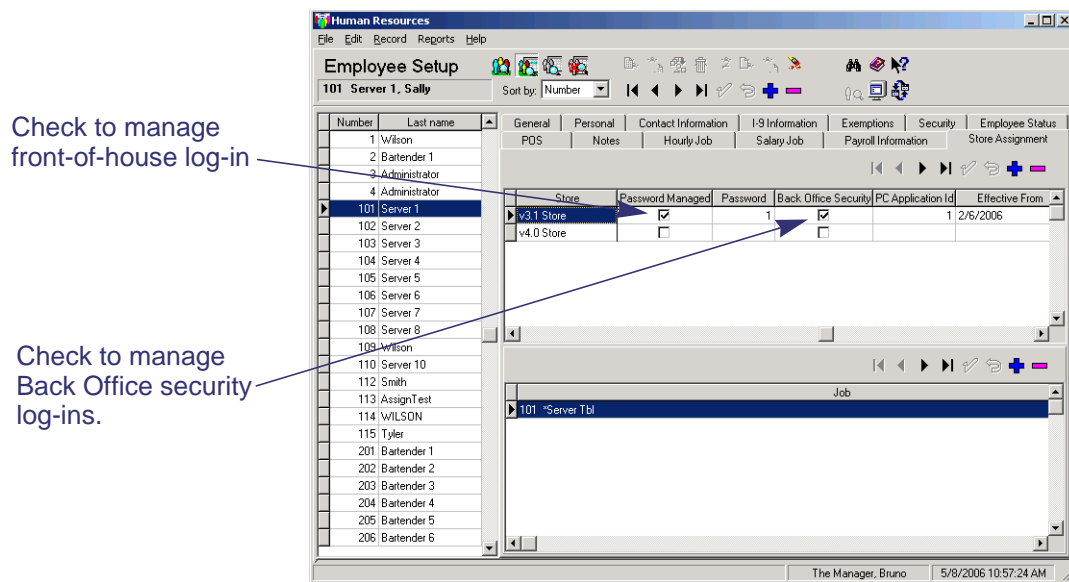


**Caution!** When using Enhanced Security, make sure new passwords have been assigned for at least one administrative-level employee before exiting the Employee Setup form.

Once the application is closed, users will not be able to log onto any application without a valid User ID and Password.

### Managing the Passwords

Passwords are only managed by Corporate if the employee is being managed. The options for doing so are configured on the *Store Assignment* tab. Separate options are provided for POS (**Password Managed**) and the back-of-house (**Back Office Security**) applications. The options consist of two related fields: 1) a check box to enable management, and 2) a data-entry field for supplying a Corporate-level password or identifier. Values in the data-entry fields are optional. If provided, they will override the passwords entered on the *Employee Setup / Security* tab.



**Caution!** *In a classic password management scenario, corporate can enable the Password Managed and the Back Office Security Options.*

*If managing passwords in an enhanced security scenario, the user must enable both the Password Managed and Back Office Security options. Failure to do so may cause the user to be locked out of the applications. In Enhanced Security mode, the User ID will not be deployed to the stores unless both options are enabled.*

Employee security options are managed on a store-by-store basis. To reduce conflicts within the enterprise, EM managers should be aware of programming inconsistencies that may affect an employees ability to log-in at a particular store.

Specifically, managers should make sure that password requirements (e.g., minimum length, alphanumeric composition, expiration dates) as defined on the *Security* form (*POS Configurator / System / Restaurant*) are the same for the Corporate Office and each of the Stores.

## Creating Concepts

This section describes how to create and configure a concept database on the Corporate server. For additional information on database concepts see the *EM Online Feature Reference Manual* by selecting Help in the EMCC. The Online Feature Reference is only available in versions of EM 4.7 and later. If using EM 4.1 or before, please consult the *EM 4.1 ReadMe First, MD0009-073*.

Once it is created, any upgrades to a concept database requires a unique set of steps. Steps for upgrading a concept database can be found in the *Upgrading a Concept Database* section of this document 57.

This section is divided as follows:

- ◆ Before You Begin
- ◆ Defining a Concept Through the MECU
- ◆ Uploading a Database via Database Manager

## Before You Begin

Prior to beginning the creation of a concept database, the user must perform the following tasks:

- ◆ The Remote Registry Service must be started if multiple database concepts are being used. This should be done on the Concept PC.

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**Note** *If the concept database will be located on a separate PC, then the user must create a mapped network drive on the Server PC to each concept PC. This drive must be accessible.*

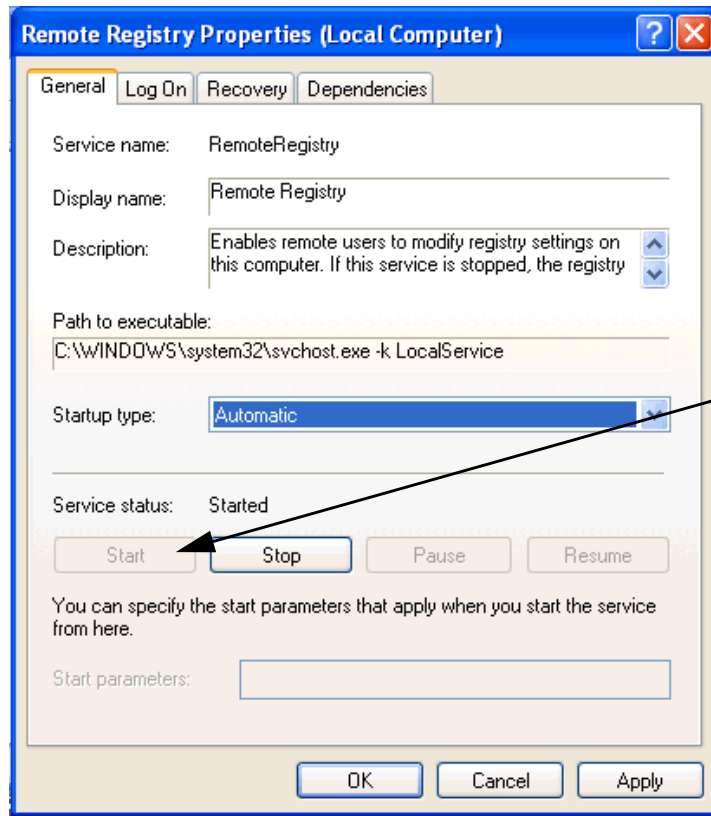
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Follow these steps to start the service:

1. Go to *Control Panel | Administrative Tools | Services* and right-click on the *Remote Registry Service*.
2. Select *Properties*.



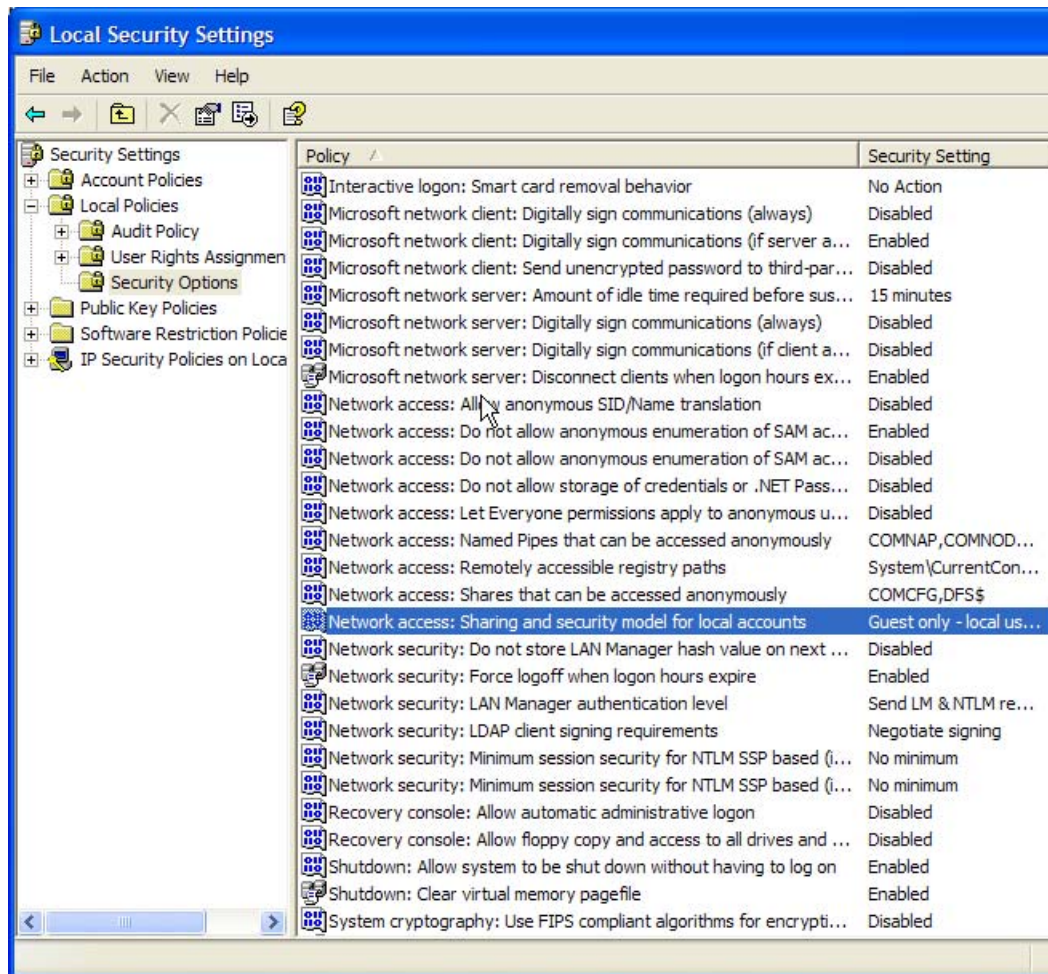
3. Use the **Startup Type** drop down box to select **Automatic**.



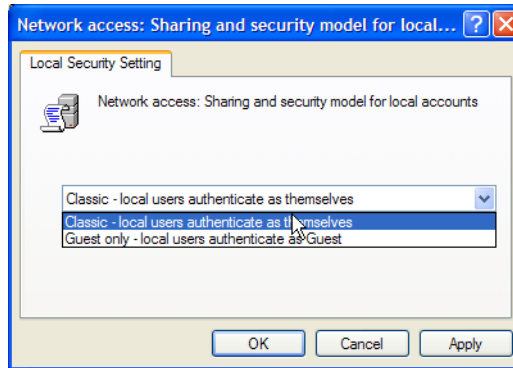
Select [Start] if the Service is not already Started

4. If the service is not yet started select the **[Start]** button toward the bottom of the screen. If the service is active then the **[Start]** button will be grayed out.
  5. Click **[Apply]** and then **[OK]** to save your changes.
- ◆ Set the Local Security Settings to permit the Corporate PC to access the concept PC. This should be done on the Concept PC.
    1. Go to *Control Panel / Administrative Tools / Local Security Policy*.

2. This will open the Local Security Settings window. Select *Local Policies / Security Options / Network access: Sharing and security model for local accounts*.



3. Right-click on the *Security Setting* column for **Network access: Sharing and security model for local accounts** and select *Properties*.

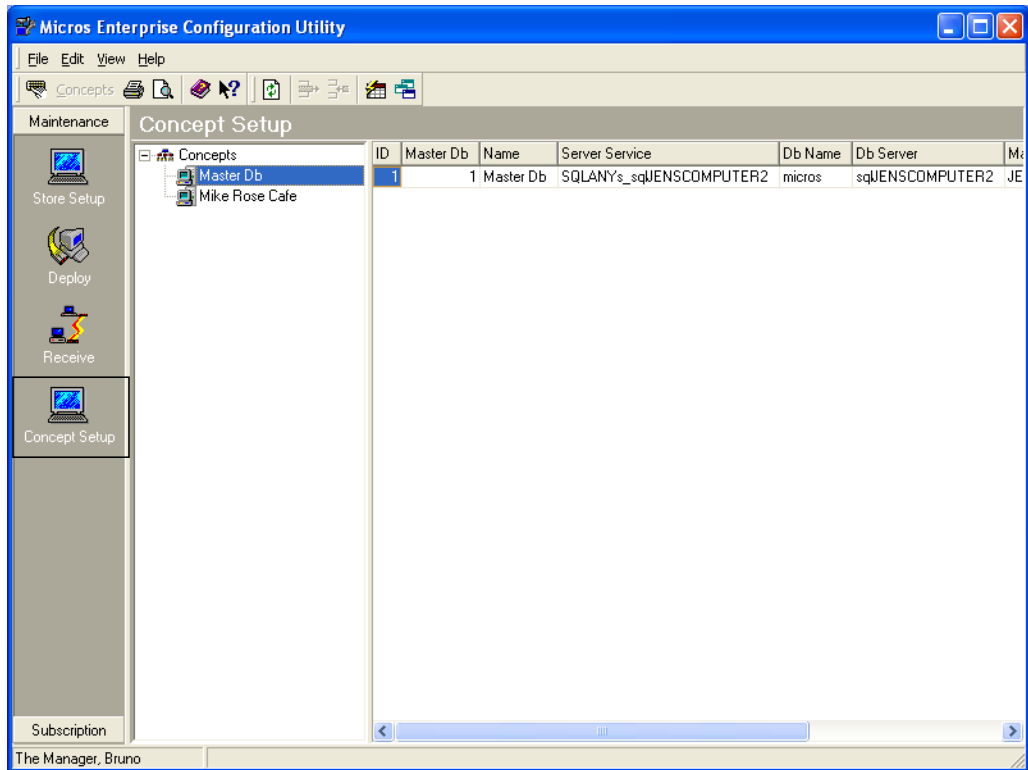


4. Select **Classic - local users authenticate as themselves**.
5. Click [**Apply**] and then [**Ok**].

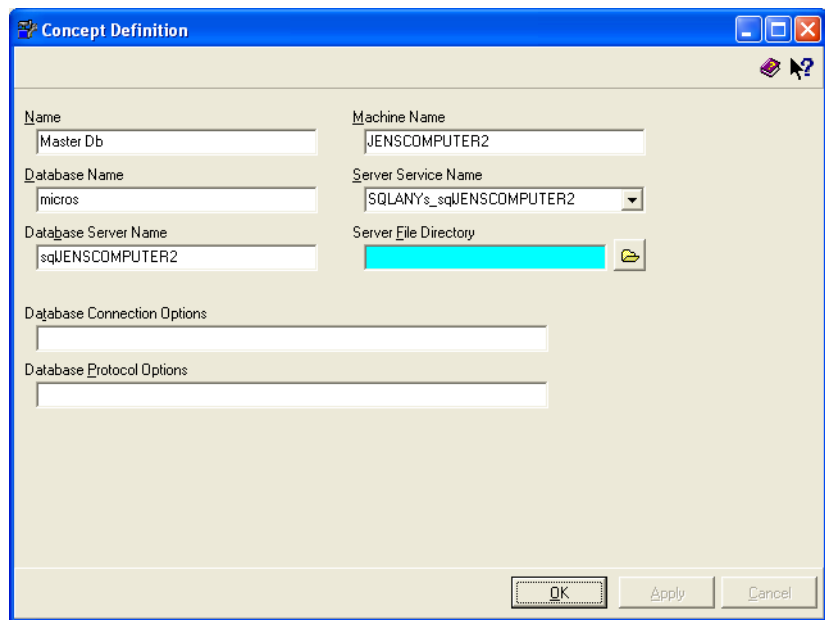
## Defining a Concept Through the MECU

Concept databases are added via the MECU. The *Concept Setup* section allows the user to define a concept.

The **Concept Setup** icon is available on the main MECU page after Sign In. Follow these steps to add a concept:

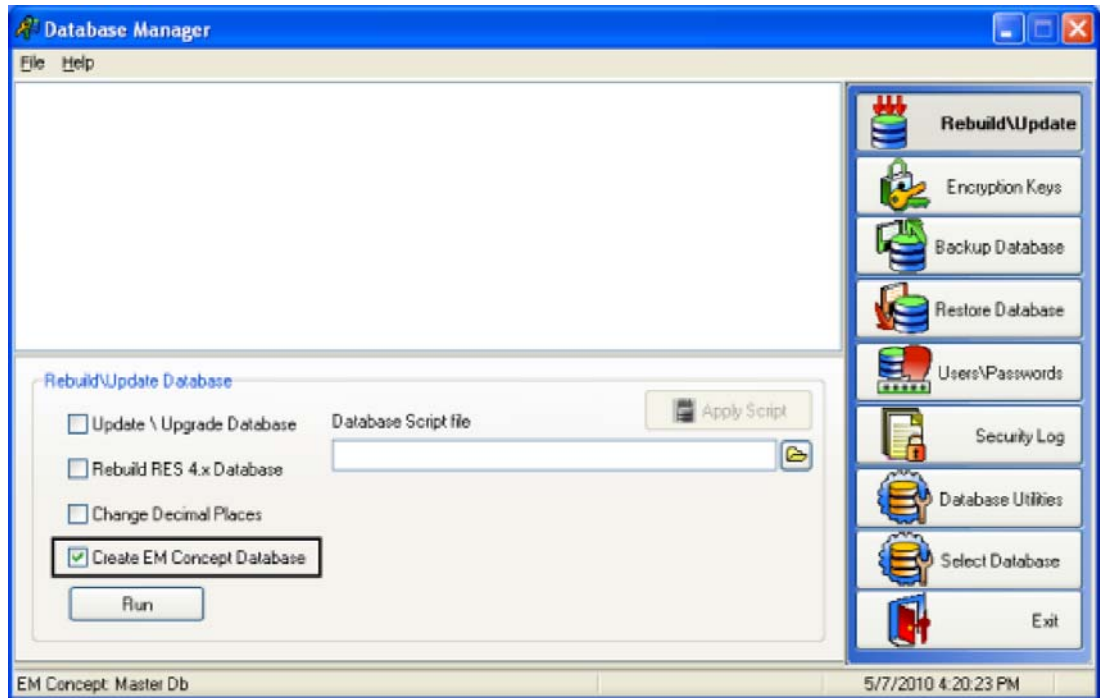


1. Click on [**Concept Setup**] to display a list of available concepts. Concepts are listed alphabetically. If the site has just been upgraded from an earlier version of EM, then the legacy database will be listed as the Master Db. The master is considered the first concept. If desired, the concept name can be changed to reflect a more friendly descriptor (e.g., the name of the concept).
2. Right-click on the *Concept* category to **Add** a concept.
3. The *Concept Definition* form will appear. Configure the following fields:



- ◆ **Name** – Indicate the name for this concept. Make sure this is a friendly descriptor as this will be how the database is referenced in all EM applications.
- ◆ **Machine Name** – The name of the machine on the network on which the database file is stored. This field will populate both the **Server Service Name** and the **Database Server Name**.
- ◆ **Database Name** – The name of the database file (e.g., ConceptName.db). Make sure that each database has a unique descriptor.

- ◆ **Server Service Name** – This is the name of the ASA database service as it appears in the Microsoft Service Control Manager found in Administrative Tools. The value is used to connect to a remote (or local) Service Control Manager and start/stop the ASA database server. This field will be automatically populated with the **Machine Name**.



- ◆ **Database Server Name** – Identify the name of the server where the database is housed. Multiple databases can be located on the same server. The database server name is required in order to allow the client applications to connect to each concept database. The Database Server Name is the logical name used by client applications to connect to a remote database server. This field will be automatically populated with the **Machine Name**.
- ◆ **Server File Directory** – Identify where the database file is located. Be certain that the pathing is correct or the database will not upload.

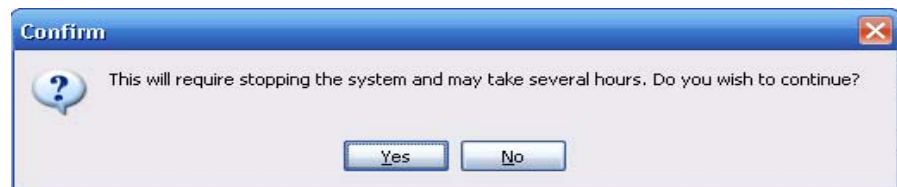
- ◆ **Database Connection Options** – This field can be used to specify additional database connection options when a client application is connecting to a concept database. This field should be used only at the direction of a MICROS customer support representative.
  - ◆ **Database Protocol Options** – This field can be used to specify additional communication protocol options when a client application is connecting to a concept database. This field should be used only at the direction of a MICROS customer support representative.
4. Click [**Apply**] and then [**Ok**] to save.

## Uploading a Database via Database Manager

Follow these steps to upload a concept database:

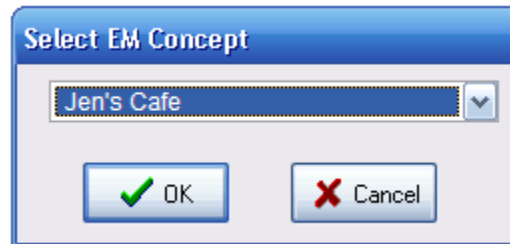
1. Go to Database Manager. When started, the application will always open the master database.
2. On the welcome screen select the '**Create EM Concept Databases**' option.

3. Select [**Run**].
4. The user will receive a prompt informing them that this will require stopping the database. Select [**Yes**] to continue.



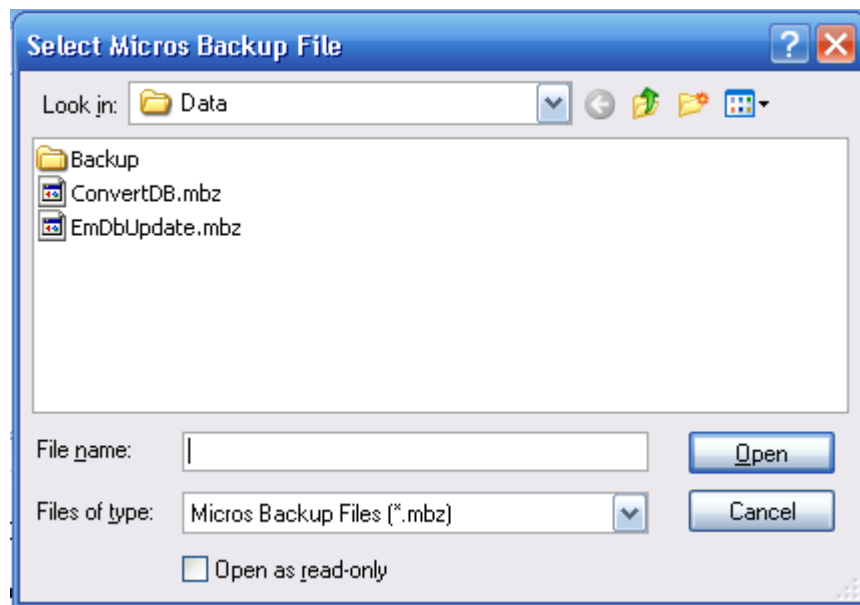


5. The user will then be prompted to select a concept to configure. The master database will not appear in this prompt.



Select the appropriate concept to upgrade from the drop down box and click **[Ok]**.

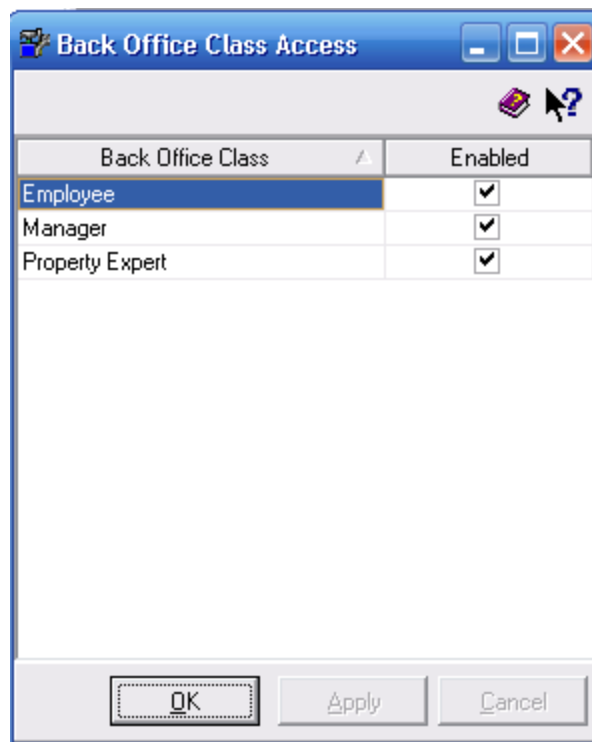
6. Browse to locate the appropriate .db or .mpz file that will be upgraded into EM 4.9. This can be an existing EM or RES database.



When selected the following will occur:

- ◆ The file will be copied to the location previously selected during installation.
- ◆ The application will verify that the database is currently at the correct version of RES. If not, the database will be upgraded.

- ◆ Runs an EM database upgrade.
  - ◆ Identifies the database as a concept and sets a Concept ID.
7. Go to the MECU and select the [**Maintenance**] button. Navigate to *Concept Setup* and select the concept database that was just upgraded.
  8. Right-click on the concept and select **Security**.
  9. Use the *Back Office Class Access* form to configure security access for this concept by Back Office Class.



10. Click [**Apply**] and then [**Ok**].