

# **Expense Management**

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## **Administration Guide**

**NEC** NEC Corporation

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## 1

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# Introduction

Chapter Topic • [Expense Management Overview](#)

The *Expense Management Administration Guide* defines the installation requirements and step-by-step instructions for the installation and set up of Expense Management.

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## Expense Management Overview

Expense Management provides an integrated, scalable IT management solution for businesses of almost every size and market segment. Organizations can become more productive using its tools to effectively manage IT operations and services while controlling IT-related expenses. Features include:

- **Integration with Back Office Accounting Systems** - Expense Management seamlessly integrates with back office accounting systems to provide detailed reports of voice and data use. The information provided can be used in compliance reports, to properly attribute time to specific customers, and for other budgeting purposes. Invoice management integrates with accounts payable to provide payment commands and receive paid transaction numbers.
- **Improving Customer Service** - Provides the tools to manage IT services such as usage, routing and scheduling, Expense Management enables enterprises to improve customer service. Customer registration and organization tools are offered, and registered customers can be assigned relevant services and resources. Customers are served with speed and accuracy, and customers' satisfaction with those services improves.
- **Monitoring Performance and Controls Expense** - Invoice management provides an ultimately accurate inventory list, facilitates term simulations and best-package allocation, identifies policy abuse and erroneous charges, and enables accurate bill-back of organizational units and convergent invoice issuance to employees. The policy-planning module implements and monitors real time performance and system usage based on policies and criteria defined by the organization.

- **Working for Organizations of Any Size** - Powerful, scalable and totally secure, Expense Management can handle jobs of nearly any size; it works as well for a global corporation's multiple high-traffic, heavy-volume sites as it does for a small organization with minimal traffic. It also provides multi-vendor PBX support and additional inputs including online mobile call detail records.
- **Supporting Business Growth** - The system's modular architecture supports the ongoing expansion of system functionality. Additional modules may be added based on customer request. The application is designed around a multi-tier processes, queues and services architecture, which offers the benefit of distributing loads across multiple servers and provides growth opportunities and flexibility.

## 2

# Application Language Packs and Settings

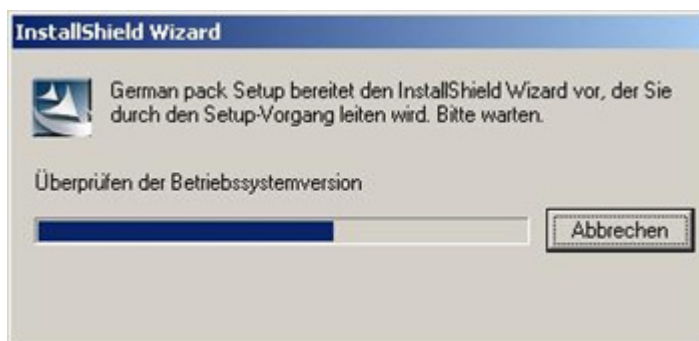
- Chapter Topics
- [Language Pack Installation](#)
  - [Language Settings](#)

## Language Pack Installation

The following steps are taken to install the language pack as a separate action from the total installation.

- Step 1** Double click on **Setup.exe** to commence the language pack installation. [Figure 2-1](#) displays the commencement of set-up.

**Figure 2-1** InstallShield Wizard - Installing



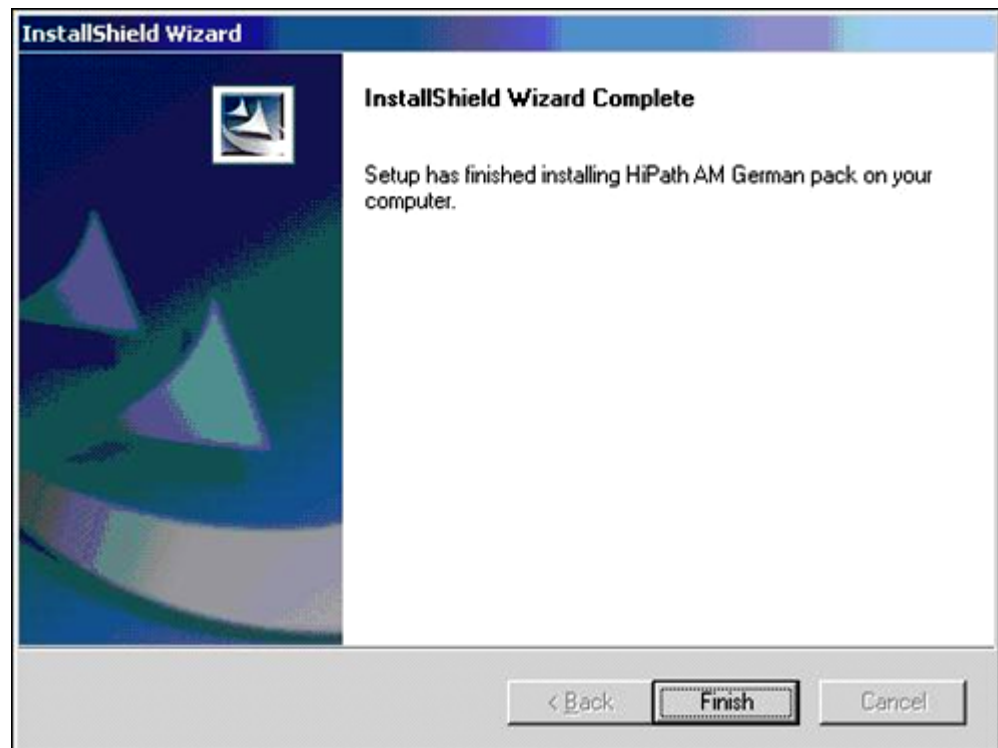
- Step 2** The installer must select the default language. See [Figure 2-2](#).

**Figure 2-2** InstallShield Wizard - Select Default Language



**Step 3** Click **Yes** to select the language as a system default language. [Figure 2-3](#) displays.

**Figure 2-3** InstallShield Wizard - Complete



**Step 4** Click **Finish** to confirm the end of the installation.

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## Language Settings

Expense Management enables the user to see the application UI in any language installed in the system. At this stage a user can work in English or German.

A Part of the User definition is the language he will see in the application UI.

- The user's language is the first priority: if the user has a language defined, the application UI will be in the user's defined language.

- If the user doesn't have any language defined then:

- If System Settings\General Settings - USE IE Language=1:

The application UI will be displayed in the client's Internet Explorer default language-only if this language was installed as the application language pack.

If the client's Internet Explorer language was not installed as The application language pack- the application UI will be displayed in the language of the last application language pack that was installed.

- If System Settings - USE IE Language=0: The application UI will be displayed in the language of the last The application language pack that was installed.





# 3

## Data Collection

Chapter Topic • [Preparing for Data Collection](#)

### Preparing for Data Collection

Data Collection is the process that collects Call Data Records (CDRs) from their Data Source, parses them, and inserts them into the Application database.

Data Collectors are the software entities by which Expense Management receives the CDRs. For the Application to receive calls data, at least one Data Collector must be defined in the Application.

#### Sites, Data Sources and Data Collectors

Each CDR entering Expense Management must come from a certain Data Source. A Data Source is the origin of digital telephony Call Data Records (for example, PBXs, IP Switches, and Calling Cards or Cellular Phones usage information).

A Data Collector can receive information from one or more physical Data Sources.

Each Data Source must belong to a certain Site. A Site refers to a geographic location where your organization, or one of its branches, is located. Each site must have at least one Data Source, and may contain several (heterogeneous or homogeneous) Data Sources.

In order to define a new Data Collector, its Site and its Data Source/s must be already defined.

In summary, in order for your application to receive calls data, you must define:

- At least one Site
- For each Site, at least one Data Source
- For each Data Source, at least one Data Collector

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### Define Data Collectors - Enterprise

To define a Data Collector in an Enterprise Application:

- Step 1** Go to **Organization Utilities>Facilities>Telephony Resources** and define your organization Sites and Data Sources.
- Step 2** Go to **Maintenance > Task Manager > Adding a Data Collector** and add the appropriate Data Collectors.

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### Define Data Collectors - Light

To define a Data Collector in a Light Application:

- Step 1** Go to **My Portal > Devices** and define your organization Sites and Data Sources.
- Step 2** Go to **Maintenance > Task Manager > Adding a Data Collector** and add the appropriate Data Collectors.

## 4

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# NEC Trial Mode

- Chapter Topic
- [Overview](#)
  - [Trial Mode Status](#)

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## Overview

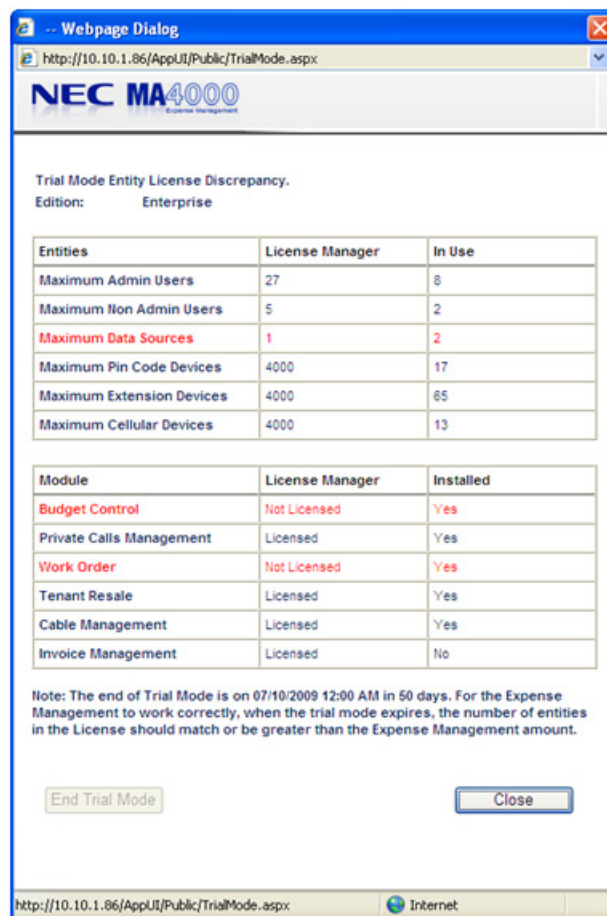
Expense Management has a Trial Mode that is active immediately after the installation. In this mode, for up to 60 days, all features and the maximum number of entities are allowed. Trial Mode does not enable the Light version to use any of the following modules:

- Budget Control
- Work Order
- Tenant Resale
- Cable Manager
- Invoice Management
- Asset Management

The Trial Mode screen can be reached from a link which is active during the Trial Mode period only. The screen displays:

- The discrepancies between the numbers of entities licensed through the License Manager Client versus the number of entities actually used in the system.
- The installation and license status and modules.
- The number of days left until the end of the Trial Mode.

After 60 days, Trial Mode automatically ends. When Trial Mode ends, all the licensing parameters are taken from the License Manager Client. This includes the modules enabled and licensed and the number of entities licensed. Trial Mode can be ended early by an administrator if no discrepancies exist on the Trial Mode Entity License Discrepancy page (see [Figure 4-1](#)).

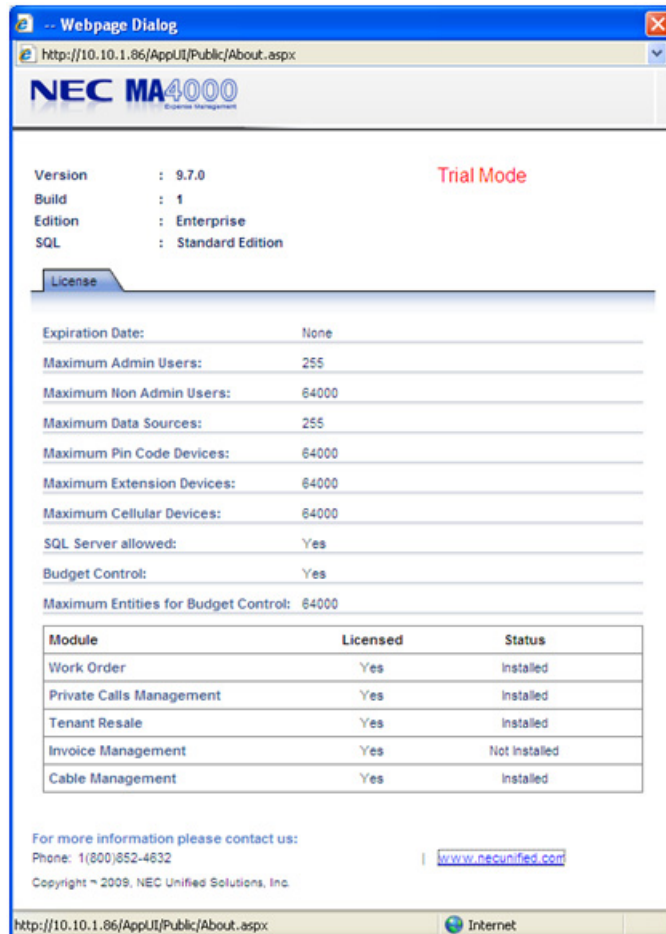
**Figure 4-1** Trial Mode Entity License Discrepancy

Trial Mode License Discrepancy screen enables viewing of the entities and modules in the system in comparison with the License Server information during trial mode. When the amounts in the License Manager Client are equal to or greater than the ones in the Expense Management system, the **End Trial Mode** button activates, and the trial mode can be terminated. Red text entries indicate a module or feature is not correctly licensed.

## Trial Mode Status

Figure 4-2 displays whether the system is running in Trial Mode. Also listed are the add-on modules and their status which includes whether or not they are licensed and whether or not they are installed.

Figure 4-2 About Screen



NOTE

When the Enterprise Edition is in Trial Mode, the modules will display as licensed in the About screen.



## 5

## General Module Behavior

There are several modules that can be installed along side of the Expense Management application. They are:

- Work Order
- Private Calls Management
- Tenant Resale
- Cable Management
- Asset Management



NOTE

*Expense Management Light only supports Private Calls Management. Expense Management Enterprise supports all modules.*

After the modules are installed, a Desktop link for **Work Order and Private Calls Management** is created. Expense Management has a navigation bar link for the other modules.

The Expense Management About screen shows whether or not a module is installed. Permissions to the modules are added to the permission tree in the maintenance module of Expense Management. In the case of the Private Calls Manager and Work Order modules, special roles are added. By default, the Admin User has permission granted to access the installed modules.



REFERENCE

*Refer to the individual module documentation for further details.*





# Appendix A

## Exchange Server

Chapter Topic • [Using the Organization's Exchange Server](#)

In order to output reports to E-mail, the application uses the SMTP capabilities on the server. SMTP configuration can be done in the following two ways:

- [Accessing the Exchange Server Directly](#)
- [Accessing a Relay of the Exchange Server](#)

### Using the Organization's Exchange Server

#### Accessing the Exchange Server Directly

The EM Server can access the Exchange Server directly. See [Figure Appendix A-1](#).

**Figure Appendix A-1** Direct Exchange Server Access



The following steps should be performed:

**Step** In EM go to - **Maintenance > Monitor > System Settings** and in **General Settings**, define the following:

- SMTP Server: Exchange server name or its IP.
- SMTP Server requires Username/Password: "True".
- SMTP User Name: <domain name>\user name.
- SMTP Password: user's password.
- SMTP Mail Account: A valid E-mail account on the Exchange Server.

If you don't have a special account designated for the application, you can try the following:

- SMTP Server: Exchange server name or its IP.
- SMTP Server requires Username/Password: "False"
- SMTP User Name: Leave blank
- SMTP Password: Leave blank
- SMTP Mail Account: A valid E-mail account on the Exchange Server. (Valid means any name with the correct domain following the '@' sign, e.g. xxx@domain.com).

### Accessing a Relay of the Exchange Server

The EM accesses a relay of the Exchange Server. See [Figure Appendix A-2](#).

**Figure Appendix A-2** Exchange Server Relay Access



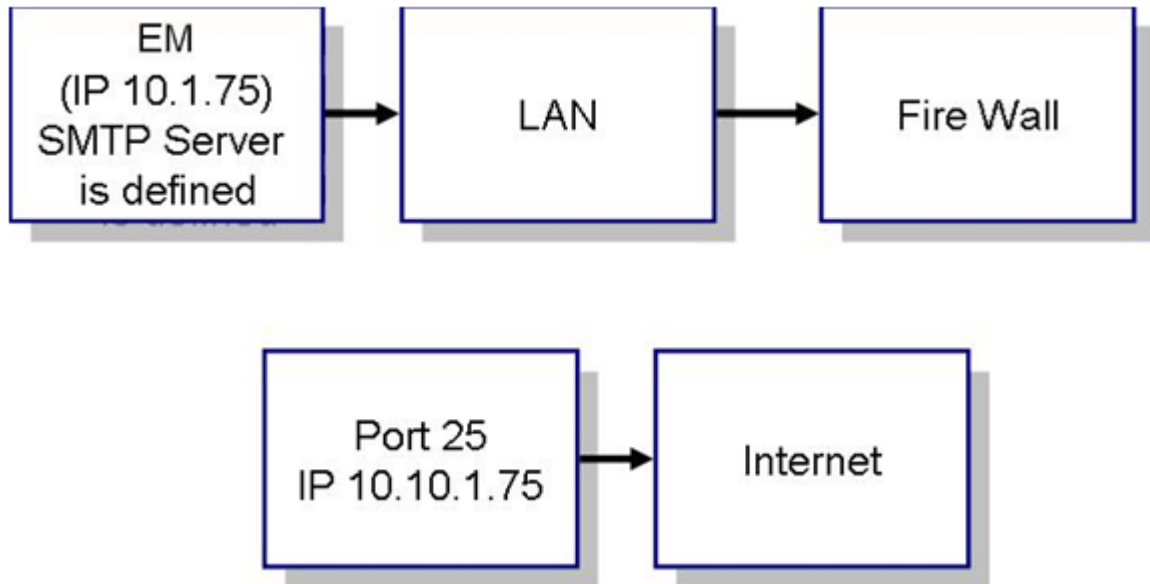
The following steps should be performed:

- Step** In the EM, go to > **Maintenance** > **Monitor** > **System Settings**, and in **General Settings**, define the following:
- SMTP Server: Relay Server name or its IP.
  - SMTP Mail Account: A valid E-mail address (should not include spaces and must have the signs @ and a dot) - will be used for displaying the sender. This string will appear in the "From:"
  - In the Exchange Server, define a relay to the 'HiPath Server' IP.

### Using the Expense Management Server as a SMTP Server

SMTP Server is defined on the 'EM Server' and the 'EM Server' IP is authorized in the Fire Wall for sending E-mail. See [Figure Appendix A-3](#).

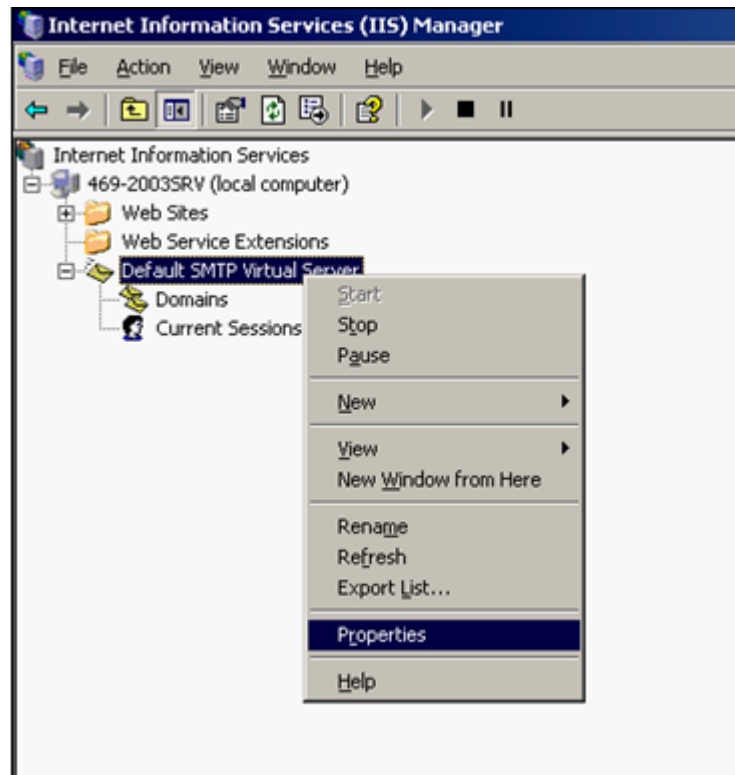
**Figure Appendix A-3** Using Expense Management Server as SMTP Server



In the Expense Management server define:

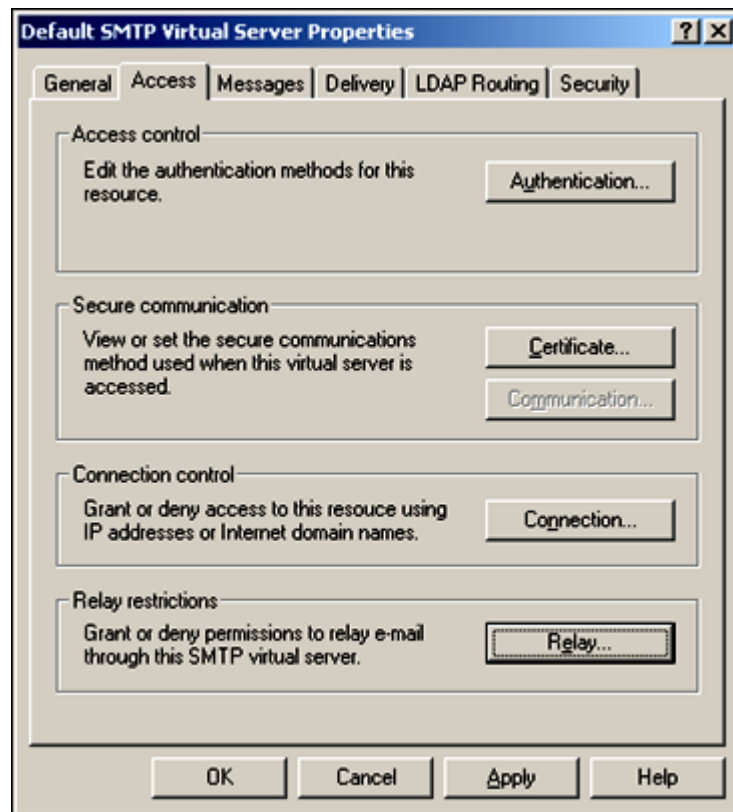
- SMTP Server - The SMTP service should be installed.
- SMTP Server - Define a relay for the local machine by doing the following:

**Figure Appendix A-4** Default SMTP Virtual Server - Properties

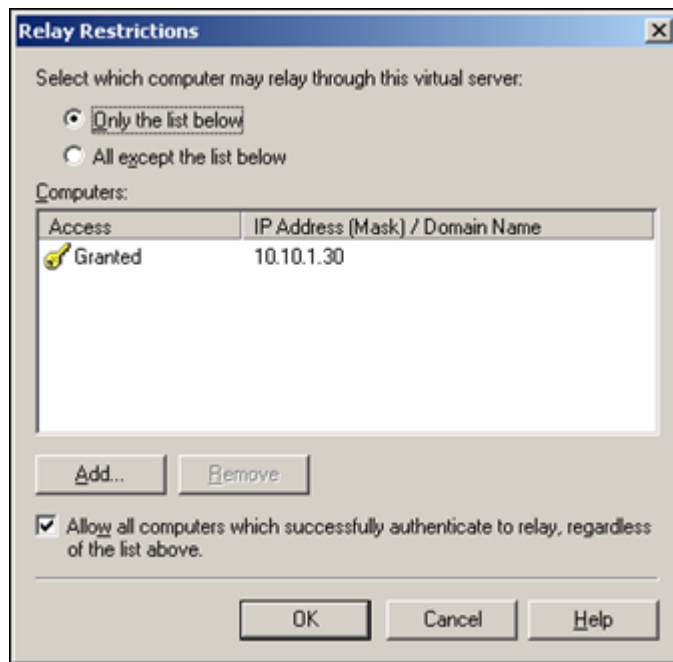


**Step 1** In Internet Information Services (IIS) Manager ([Figure Appendix A-4](#)) select **Default SMTP Virtual Server** → **Properties**. [Figure Appendix A-5](#) displays.

**Figure Appendix A-5** Default SMTP Virtual Server Properties - Access Tab



**Step 2** In the **Relay restrictions** section, click **Relay**. [Figure Appendix A-6](#) displays.

**Figure Appendix A-6** Relay Restrictions

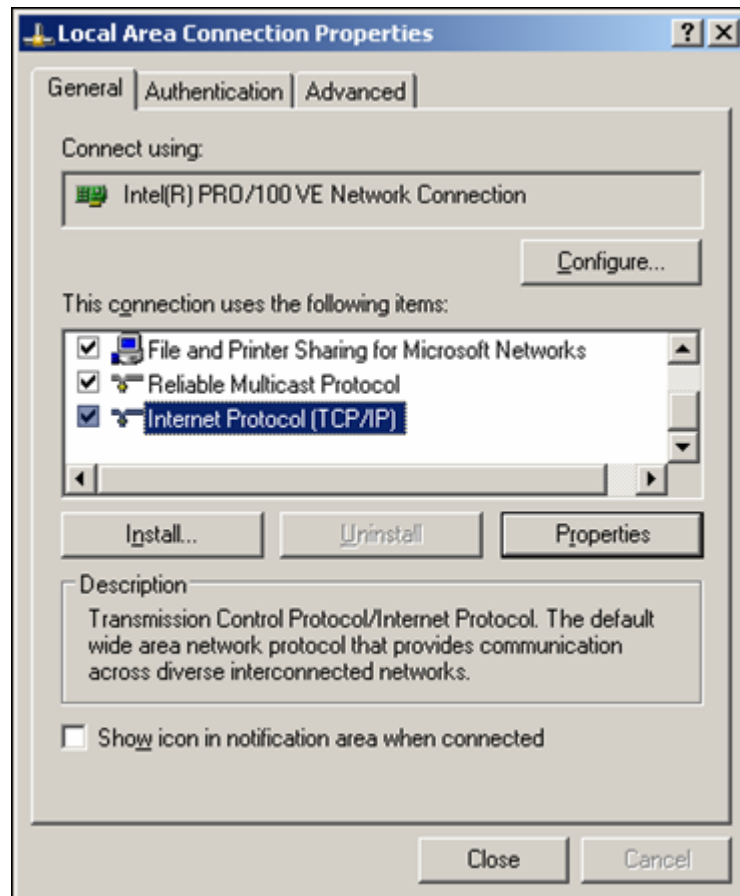
**Step 3** Choose the computers you are going to permit to relay, or not relay, through the virtual server, then click **OK**. See figure.

- Select the **Only the list below** option to allow relay only to those computers listed in the Computers section.
- Select the **All except the list below** option to allow relay by all computer except the ones listed in the Computers section.
- Select the **Allow all computers which successfully authenticate to relay regardless of the list above** option to permit any computer to relay if authentication is successful.
- Computers can be removed or added by using the **Add** or **Remove** buttons.

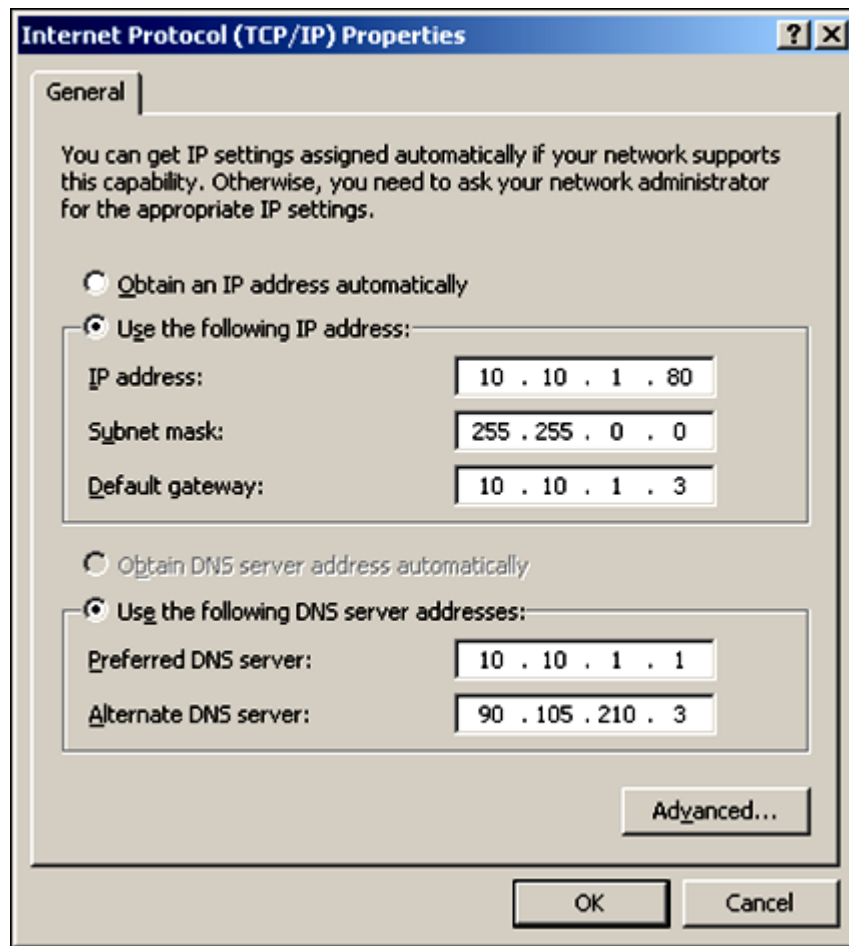
## Fixed IP and DNS

Define DNS and change system to a Fixed IP Settings (not DHCP) by doing the following:

**Figure Appendix A-7** Local Area Connection Properties - Internet Protocol (TCP/IP)



**Step 1** In [Figure Appendix A-7](#), select **Internet Protocol (TCP/IP)** then click **Properties**. [Figure Appendix A-8](#) displays.

**Figure Appendix A-8** Internet Protocol (TCP/IP) Properties

**Step 2** In the EM go to > **Maintenance > Monitor > System Settings**, and in **General Settings**, define the following:

- SMTP Server: Local SMTP Server name or its IP.
- SMTP Mail Account: A valid E-mail address (should not include spaces and must have the signs @ and a dot) - will be used for displaying the sender. This string will appear in the "From:" field.

**Step 3** In the Fire Wall, PORT 25 - Authorize the EM Server IP to send E-mails.



*It is recommended to stop and start the Mail job in the Scheduled Jobs screen under the Maintenance tab. Restart the MASSMail service in order to have the changes take effect.*



# Appendix B

## Uninstall

- Chapter Topics
- [Language Pack](#)
  - [Main](#)
  - [Manual Actions](#)



NOTE

Before beginning the uninstall process please reboot the system.

### Order of Uninstall

- Language Pack
- Main
- MSDE (For light versions only)
- Manual Actions

**Step 1** After uninstall please make sure that the following folders were deleted:

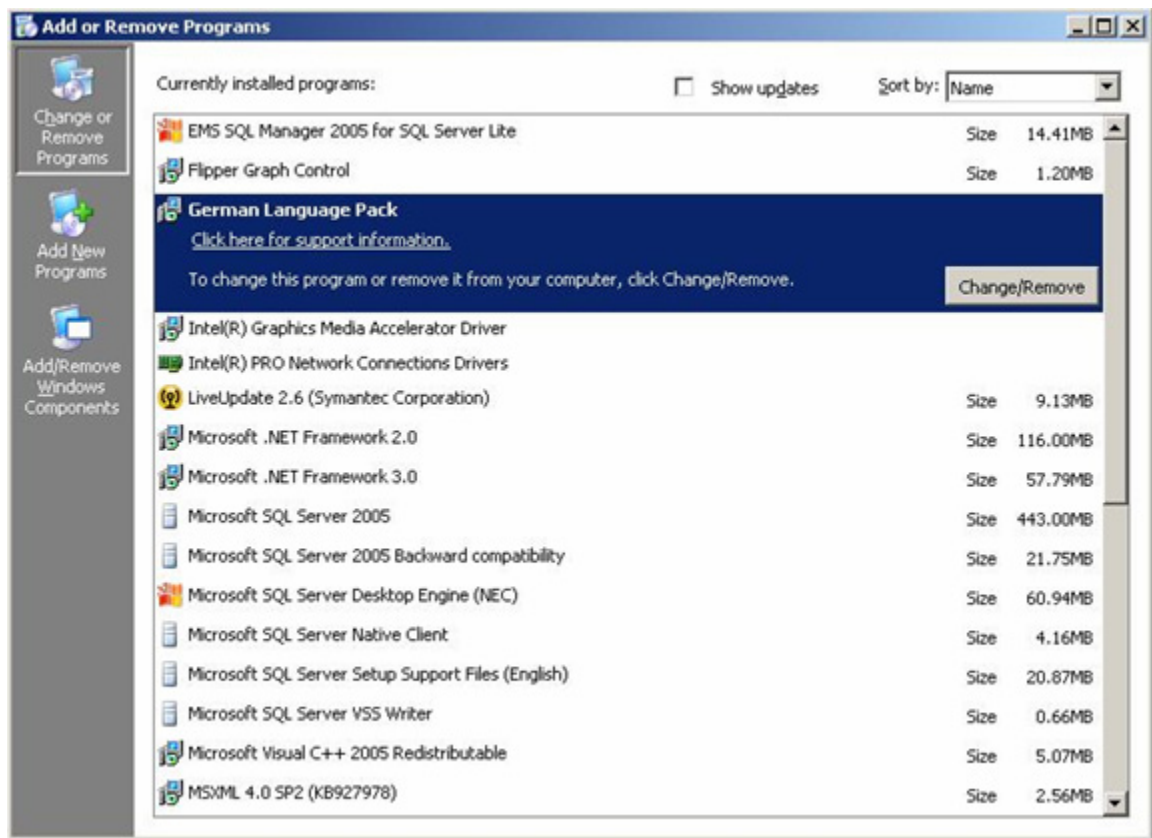
- Web folder: **C:\inetpub\wwwroot\AppUI**
- Applications folder: **C:\Program Files\NEC\EM**

**Step 2** Restart the server.

## Language Pack

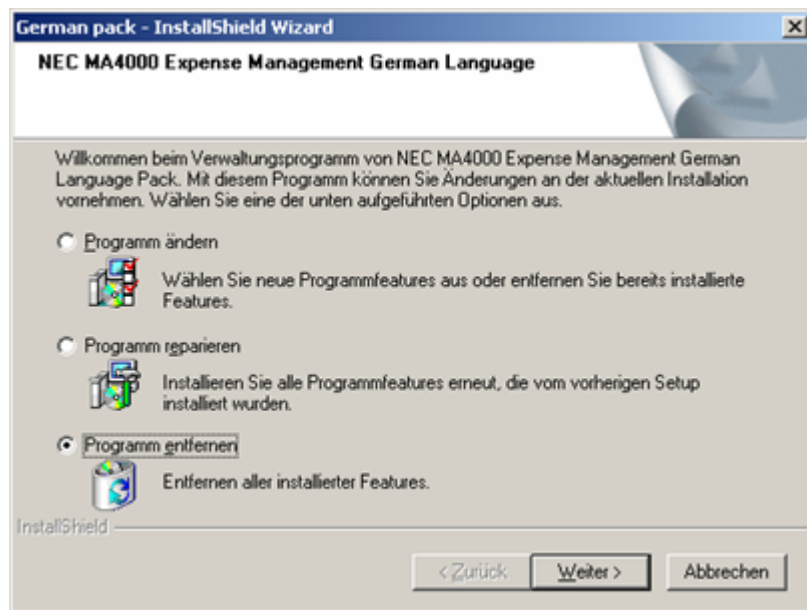
- Step 1** Click **Start**.
- Step 2** Select **Settings > Control Panel**. The Control Panel window displays.
- Step 3** In the Control Panel screen, double-click on the **Add/Remove Programs** icon. [Figure Appendix B-1](#) displays.

**Figure Appendix B-1** Add or Remove Programs



- Step 4** Select the language pack (e.g., **German Language Pack**) and click **Change/Remove**. [Figure Appendix B-2](#) displays.

**Figure Appendix B-2** InstallShield Wizard - German Pack Example

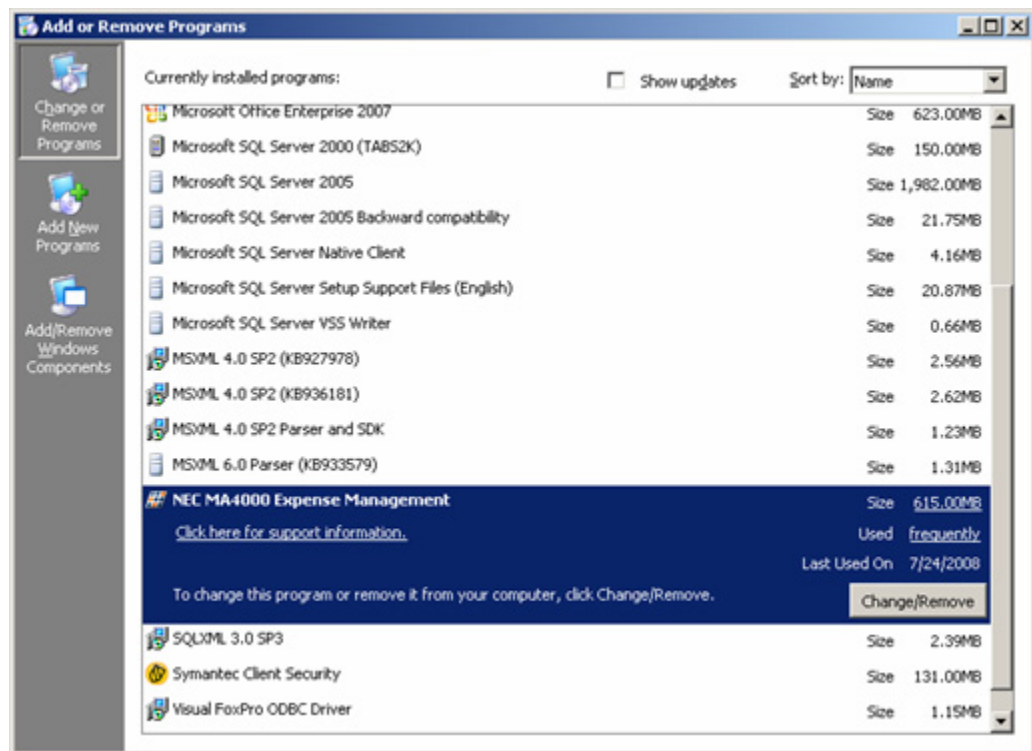


**Step 5** Click **Next** to remove the program.

## Main

- Step 1** Click **Start**.
- Step 2** Select **Settings > Control Panel**. The Control Panel window displays.
- Step 3** In the Control Panel screen, double-click on the **Add/Remove Programs** icon. [Figure Appendix B-3](#) displays.

**Figure Appendix B-3** Add or Remove Programs - NEC MA4000 Expense Management



- Step 4** Select MA4000 Expense Management and click **Change/Remove**. The InstallShield Wizard window displays.
- Step 5** Click **Next** to remove the program.

---

## Manual Actions

- Step 1** Reboot the computer.
- Step 2** Navigate to the installation folder: **C:\Program Files\NEC\EM**, then remove it.
- Step 3** In the light version, navigate to the installation folder: **C:\Program Files\Microsoft SQL Server**, then remove it.



# Appendix C

## Organization Import

Chapter Topic • [Generic Personnel Import](#)

Imports are an essential part of the application. It is very important that data from other systems, such as the Generic Personnel Import can be used to Import Personnel and their resources and administration structure from another Management Application, rather than having to be entered manually into the application. The imports detailed below allow the administrator to import data from a variety of other systems.

### Generic Personnel Import

The Generic Personnel Import is a tool that allows users to import generic personnel information from other applications. The import saves a great deal of time and effort, since the users do not have to individually enter the personnel data into the application.

The task is added as an additional component in the **Maintenance\Task Manager**, as an additional task of the **Import\Export**.

**Step 1** Select **Maintenance > Task Manager > Generic Personnel Import**. The **Personnel Import Job** wizard will appear (see [Figure Appendix C-1](#)).

Figure Appendix C-1 New Generic Personal Import Configuration - Maintenance

The screenshot shows the 'New Generic Personnel Import Configuration' window. The sidebar on the left contains a list of navigation items: Scheduled Jobs, Data Collector, Import/Export, Generic Export Calls, Generic Export Call Summaries, Generic Personnel Import (highlighted), Organization Export, Database Maintenance, Automatic User Creation, and Calls Archiving. Below this is a 'Monitor' section with icons for Task Manager, Costing, Permissions, and System Settings. The main window has a title bar with 'Reports', 'Org Utilities', 'Activity', 'Billing', 'Maintenance' (selected), and 'My Portal'. The title is 'New Generic Personnel Import Configuration'. Below the title is the instruction 'Configure generic personnel import job'. The 'Configuration' section includes:
 

- Name: Generic Personnel Import
- Description: (empty text box)
- Hierarchy ID: Administrative (dropdown menu)
- Default Data Source: Default Data Source (dropdown menu)
- ☐ Full Update
- ☒ Please Run Recalculate Celko Index
- Base Org. Unit: (empty text box) with 'Select Base Org' and 'Clear' buttons.

 At the bottom are buttons for '<< Prev', 'Next >>', and 'Finish'.

**Step 2** Give a meaningful name to the job and select the **Hierarchy** (Administrative Cost center Mailing list you want to import this information to).

The required **Data Source**, **Full Update** (in order to overwrite the existing info for this site) and leave **Base Org Unit** empty in case the information will be added to the highest available level. If you would like to add the info to a specific level in the tree, select the **Base Org Unit**.



NOTE

When **Full Update** is checked, extensions that were previously imported through **Personnel Import** but are not available anymore in the import file will be deleted from the **Organization Tree**.

**Step 3** Select the **Input** tab and browse to select the file you wish to import. See [Figure Appendix C-3](#).

Figure Appendix C-2 Input Tab - Encoding

The screenshot shows the 'General' tab of the 'Input Tab - Encoding' section. It features a dropdown menu for 'Encoding' with the following options: Default, Unicode, ASCII, UTF7, and UTF8. Below the dropdown is a checkbox labeled 'Manipulation File'. To the right of the checkbox is an empty text box.



**Figure Appendix C-3** Input Tab - General

The screenshot shows a software window titled 'Input Tab - General' with three tabs: 'General', 'Input' (selected), and 'Fields'. The 'Input' tab is active, displaying the 'Input File Location' section. This section has three radio button options: 'Local', 'Upload' (selected), and 'On FTP'. The 'Local' option has a 'Browse...' button. The 'Upload' option has a 'File Name' label and a text input field. The 'On FTP' option has labels for 'File Path', 'FTP Address', 'User name', and 'Password', each with a corresponding text input field. A 'Browse...' button is also present next to the 'File Name' input field. A note states 'NOTE: File size is limited to 20000 kb'. At the bottom of the window are three buttons: '<< Prev', 'Next >>', and 'Finish'.

Local	Select the input file from NEC\EM\Run Time\Input File
Upload	Copies the file from the location to NEC\EM\Run Time\Input File
On FTP	Fill out FTP details
Full Path	Locates the file on the local server
Encoding	Enter the Encoding Type of the input file (scroll down the Input tab to reveal the selection).

**Step 4** Select the **Fields** tab. [Figure Appendix C-4](#) displays.

Figure Appendix C-4 Fields Tab

Configure generic personnel import job

General Input **Fields**

**Format**

Start at row:  Field Delimiter:  OU Path Delimiter:

Address  
Building  
Data Source  
Device Comments  
Device COS  
Device Cost Plan  
Device Function  
Device Info 1  
Device Info 10  
Device Info 11  
Device Info 12  
Device Info 13  
Device Info 14

Field Index:

<< Prev Next >> Finish

- Step 5** Select the fields in the order as they appear in the row of the text file, and with the appropriate information for **Start at row**; the **Field Delimiter** that is used in the file, and the **OU Path Delimiter**.
- Step 6** For each field you need to define its position in the record. You begin counting from the first field as index 1 in input row and each field after next delimited is assigned the appropriate number. When done click **Finish** or **Next** and save the Job. The Job is now available to **Run** from the **Scheduled Jobs** list.
- Step 7** To run the Job, select it from the list and click on the **Run job now** icon.
- Step 8** Confirm that the job has finished running by selecting **Maintenance / Monitor / System Log** and look for the message Job has been finished successfully.
- Step 9** After the job is completed, check to see that all the required information was imported.

## Fields

Table Appendix C-1 outlines of the fields that can automatically be populated. The data being imported must be provided in a single file:

- Excel single worksheet (not a workbook, it must be saved as .CSV extension)
- ASCII comma or pipe delimited file (check with your switch vendor if file can be generated from the PBX)
- Each Person in the organization should have one line per Device (see the example below).

**Table Appendix C-1** Field Tab Description

Field Name	(*) Field Length	(**) Type	Field Requirement/Explanation
Device Name	20	A/N	Mandatory when doing a Device Import, otherwise optional
Device Type	3	A/N	EXT-Extension; PIN-Pin Code; CC-Calling Card; CEL-Mobile Mandatory
Data Source	50	A/N	Mandatory
Site	256	A/N	Optional, a default site will be created if this field is not filled
Person Identity	255	A/N	Mandatory when doing a Person Import, unless Person Email Address or First Name and Last Name (First Last name or Last First Name) and OU Path are specified. Mandatory when doing a User Import unless another person identifier is specified. Otherwise optional
First Name	50	A/N	Mandatory when doing a Person Import, unless Person Email Address or Person Identity and OU Path are specified. Otherwise optional
Last Name	50	A/N	Mandatory when doing a Person Import, unless Person Email Address or Person Identity and OU Path are specified. Otherwise optional
Personal Status	255	A/N	Optional
Phone Number	50	A/N	Optional
OU Path	1000	A/N	Mandatory when doing a Person Import and an Org Unit Import unless Sub OU Path is specified. Otherwise optional
Sub OU Path	1000	A/N	Mandatory when doing an Org Unit Import unless OU Path is specified. Otherwise optional.
Initial	5	A/N	Optional

Field Name	(*) Field Length	(**) Type	Field Requirement/Explanation
Salutation	20	A/N	Optional
Title	20	A/N	Optional
Job Title	20	A/N	Optional
Address	150	A/N	Optional
E-mail Address	50	A/N	Preferred
Location	50	A/N	Optional
Building	50	A/N	Optional
Floor	50	A/N	Optional
Room	50	A/N	Optional
Info 1	100	A/N	Optional
Info 2	100	A/N	Optional
First, Last name	100	A/N	Mandatory when doing a Person Import, unless Person E-mail Address OR Person Identity and OU Path are specified. Otherwise optional
Last, First name	100	A/N	Mandatory when doing a Person Import, unless Person E-mail Address OR Person Identity and OU Path are specified. Otherwise optional
VIP	1	Use Y or N	Optional. This is also a privacy designation. If you select Yes to designate this extension as a VIP extension, the associated call details are omitted on detailed reports; only the call cost and price are displayed. The system default is No.
User Name	20	A/N	Mandatory when doing a User Import. Otherwise optional
User Password	30	A/N	Mandatory when doing a User Import. Otherwise optional. User password existence depends on the authentication mode (EM/Windows/Network)
User Role	50	A/N	Optional
User Language	8		Optional
Start Date	8	Datetime	Optional
Termination Date	50	A/N	Optional
Device Cost Plan	50	A/N	Optional
Device Price Plan	50	A/N	Optional
Device COS	255	A/N	Optional

Field Name	(*) Field Length	(**) Type	Field Requirement/Explanation
Device Function	255	A/N	Optional
Device Status	255	A/N	Optional
Device Comments	255	A/N	Optional
Device Primary	1 or 0	Boolean (1,0,true,false,t,f)	Optional
Device Publish	1 or 0	Boolean (1,0,true,false,t,f)	Optional
Device Info 1	100	A/N	Optional
Device Info 2	100	A/N	Optional
Device Info 3	100	A/N	Optional
Device Info 4	100	A/N	Optional
Device Info 5	100	A/N	Optional
Device Info 6	100	A/N	Optional
Device Info 7	100	A/N	Optional
Device Info 8	100	A/N	Optional
Device Info 9	100	A/N	Optional
Device Info 10	100	A/N	Optional
OU Description	50	A/N	Optional
OU Contact Person	50	A/N	Optional
OU Telephone No	50	A/N	Optional
OU Fax Number	50	A/N	Optional
OU Address	50	A/N	Optional
OU E-mail Address	50	A/N	Optional
OU Info 1	100	A/N	Optional
OU Info 2	100	A/N	Optional
OU Info 3	100	A/N	Optional
OU Info 4	100	A/N	Optional
Device Cost Plan Start Date	8	Datetime	Optional
Device Price Plan Start Date	8	Datetime	Optional
Pin Code BP Status	1		Optional
Extension First Name	50	A/N	Optional
Extension Last Name	50	A/N	Optional
Extension E-mail	50	A/N	Optional

Field Name	(*) Field Length	(**) Type	Field Requirement/Explanation
Extension Location	50	A/N	Optional
Extension Building	50	A/N	Optional
Extension Room	50	A/N	Optional
Extension Floor	50	A/N	Optional
Middle Name	50	A/N	Optional

**Note:** (\*) The field lengths listed above is the maximum lengths allowed for each field. You may have fewer characters in each field if you choose.

**Note:** (\*\*) A/N = Alpha Numeric

### Sample Data Line

796,NEC-PBX,SF-Site,John,Smith,SFCA\Products\Support,john.smith@into.com,EXT 052-2211045,Cell-File,SF -Site,Rachel,Lord,SFCA\Products\PM,rachel.lord@into.com,CEL

**Table Appendix C-2** Sample Data Line Description

Device	Data Source	First Name	Last Name	OU Path	Device Type
796	NEC- PBX	John	Smith	SF-CA\products\support	EXT
052-2211044	Cell-File	Rachel	Lord	SF-CA \Products\PM	CEL

For minimum information the following is required:

- Employee ID
- First Name
- Last Name
- Device
- Device Type (extension, PIN Code, mobile, pager, etc.)
- Site
- Data Source
- E-mail Address
- Organization Unit (OU) path

The employee ID and or E-mail address will later be used as a unique key to enable the user to make changes to the Personnel information in the organization. One of them must be available in order to keep history information of OU change, name change and any additional Personnel information that one may need to add at a later stage.

Additional information that is useful to have for each person includes:

- Does the user need access to the system? One person can have multiple devices, yet the system requires one record per device. This means, for example, that if John Smith has three extensions, there will be three identical records for John Smith with only the extension being different in each record.
- Is the user is a simple user, manager or administrator?
- Is the user is the owner of the entity (administrative manager of OU)?

---

## Generic Import Format Support

Generic Import supports UTF8, UTF7, Unicode and ASCII files (GI).

In Generic Personnel Import, the Input tab contains the **Encoding** selection. The selection default value is Unicode and it must match the file encoding value.

To find out the file encoding format, open the file in **Notepad**. Click **Save As** and look in the **Encoding** field at the bottom of the window. Use this encoding format to decode the file.

---

**Example:** *If the Import File as saved as Unicode - the Generic Personnel Import should be defined with Unicode encoding. If the import file was saved as ANSI - the Generic Personnel Import should be defined with UTF7 encoding.*

---

## Standard Import

Standard Import is an import of files containing a standard format of fields, to be able to import data from existing human resources or management systems into the application.

The task is added as an additional component in the **Maintenance\Task Manager**, as an additional task of the **Import\Export**.

The Standard Import records include the fields in the order listed below:

- Device Name
- Device Type
- Data Source
- Site
- First Name
- Last Name
- OU Path
- Person Identity
- E-mail Address
- Sub OU Path
- Initial

- Salutation
- Title
- Job Title
- Address
- Location
- Building
- Floor
- Room
- Phone Number
- Personnel Status
- Info 1
- Info 2
- Info 3
- Info 4
- VIP
- User Name
- User Password
- User Role
- User Language
- Start Date
- Termination Date
- Device Cost Plan
- Device Price Plan
- Device COS
- Device Function
- Device Status
- Device Comments
- Device Primary
- Device Publish
- Device Info 1
- Device Info 2
- Device Info 3
- Device Info 4
- OU Description
- OU Contact Person
- OU Phone No
- OU Fax No
- OU Address
- OU E-mail
- Address



- OU Info 1
- OU Info 2
- OU Info 3
- OU Info 4



# Appendix D

## NEC Special Settings

- Chapter Topic
- [MA4000 Management System Integration](#)
  - [NEC PBX Collector](#)

### MA4000 Management System Integration

In System Settings there is a Group of settings for NEC. If those are not set during the installation (Depending on the installation .ini file parameters), they will have to be defined in the Maintenance\System Settings\NEC Settings.

**Figure Appendix D-1** Maintenance Tab - NEC MA4000 Parameters

The screenshot shows a web application interface with a top navigation bar containing 'Reports', 'Org Utilities', 'Activity', 'Billing', 'Maintenance' (selected), and 'My Portal'. Below the navigation bar is a search bar and a 'View by: NEC Settings' dropdown. The left sidebar shows a tree view with 'NEC Settings' expanded, containing 'NEC Settings'. The main content area is titled 'NEC MA4000 parameters' and contains the text: 'The following parameters are required to complete HEC MA4000 Expense Management installation:'. Below this text are five input fields: 'MA4000 Database Instance:' (empty), 'MA4000 Database Name:' (MA4000), 'MA4000 Database Username:' (agile), 'MA4000 Database Password:' (masked with asterisks), and 'HEC CAS URL:' (p://10.10.2.90/NECCAS). An 'Update' button is located at the bottom right of the form. At the bottom of the page, there is a sidebar with icons and labels for 'Monitor', 'Task Manager', 'Costing', 'Permissions', and 'System Settings' (highlighted).

The following parameters have to be set and updated:

- MA4000 Data base Instance
- MA4000 Data base Name
- MA4000 Data base Username
- MA4000 Data base Password
- NEC CAS URL

The Data Synchronization with the MA 4000 has to be defined in the Maintenance\Task Manage under Export\Import job configuration.

**Figure Appendix D-2** NEC MA4000 - New Import/Export Configuration

The screenshot shows the NEC MA4000 web interface. The top navigation bar includes 'Reports', 'Org Utilities', 'Activity', 'Billing', 'Maintenance' (selected), and 'My Portal'. A left sidebar contains a list of maintenance tasks: 'Scheduled Jobs', 'Data Collector', 'Import/Export' (highlighted), 'Generic Export Calls', 'Generic Export Call Summaries', 'Generic Personnel Import', 'Organization Export', 'Database Maintenance', 'Automatic User Creation', and 'Calls Archiving'. Below this is a 'Monitor' section with icons for 'Task Manager' (selected), 'Costing', 'Permissions', and 'System Settings'. The main content area is titled 'New Import/Export Configuration' and contains the instruction 'Configure import/export job'. A modal window is open with two tabs: 'General' and 'Component' (selected). Under the 'Component' tab, there is a 'Type Parameters' section with a dropdown menu showing 'MA 4000 Data Sync'. Below the dropdown is a large empty text area. At the bottom of the modal are three buttons: '<< Prev', 'Next >>', and 'Finish'. The browser's address bar at the bottom shows 'Internet'.

## NEC PBX Collector

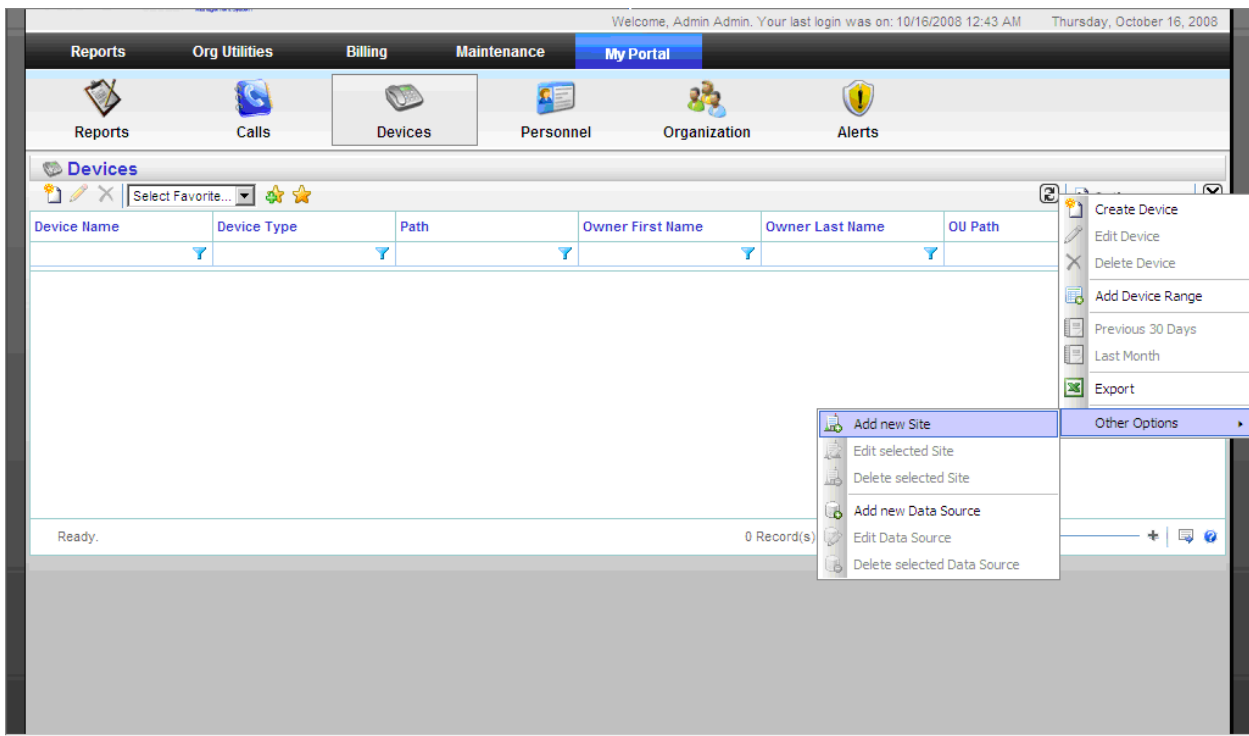
### Defining a Site and Data Source

#### Site and Data Source

Defining a site and a data source is the first step before defining a collector.

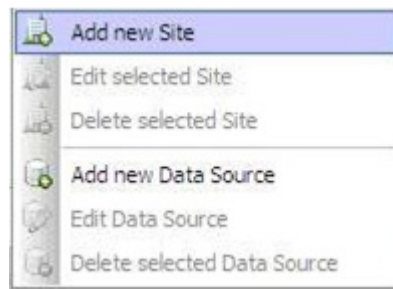
When in **My Portal**, those actions can be performed from the **Devices** component.

*Figure Appendix D-3 My Portal - Devices*



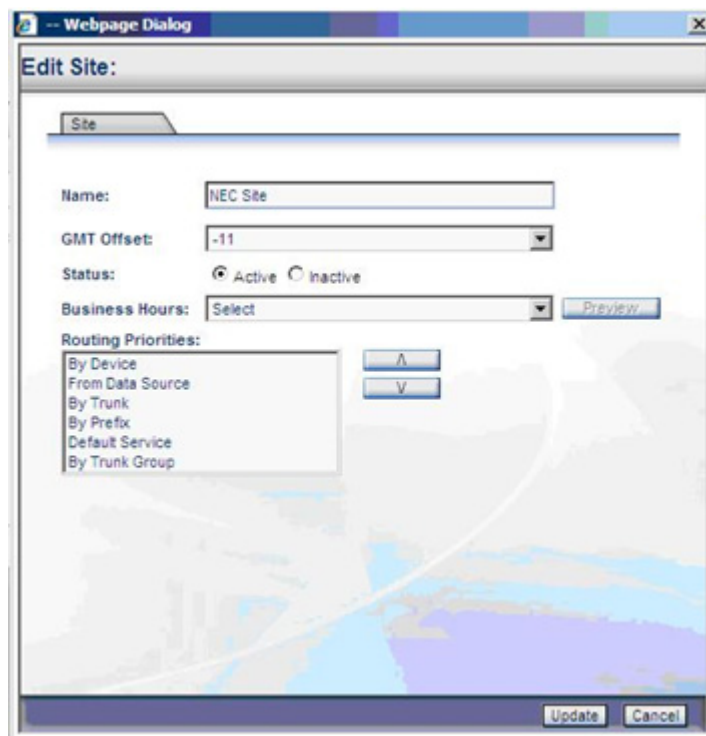
**Step 1** Click **Options**, then **Other Options**. [Figure Appendix D-4](#) displays.

**Figure Appendix D-4** Devices - Options - Other Options - Add New Site



**Step 2**    Select **Add new Site**. [Figure Appendix D-5](#) displays.

**Figure Appendix D-5** Devices - Options - Other Options - Add New Site - Edit Site



**Step 3**    Enter a title for the new site in the **Name** field.

**Step 4**    Select the desired time zone hours using the **GMT Offset** drop-down.

**Step 5**    Select the relevant status and business hours XML file for business hours definitions using the **Business Hours** drop-down.

**Step 6**    In the **Routing Priorities** section, use the Up or Down arrow buttons to set the order of priority.

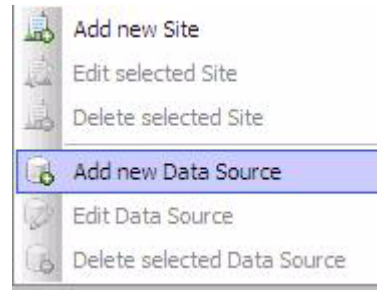
## Add New Data Source



For a system without MA4000 synchronization.

**Step 1** Click **Options**, then **Other Options**. [Figure Appendix D-6](#) displays.

**Figure Appendix D-6** Devices - Options - Other Options - Add New Data Source



**Step 2** Select **Add new Data Source**. [Figure Appendix D-7](#) displays.

**Figure Appendix D-7** Devices - Options - Other Options - Add New Data Source - New Data Sources

**Step 3** In the **Data Source** tab, enter the name of the Data Source and if required, additional information:

- **Identity** will be in use as the prefix of each device, when the value is empty the data source name is the default prefix.
- **Node** is required only for "user group".

**Step 4** Select the status of the data source using the **Active** or **Inactive** status option buttons, then click **Update**.

## Data Collector

Call data collection is the basic task of the application. The data is collected through the data collectors and saved to the application database.

Once data is collected it is parsed by the Data Recognition service and inserted into the database.

Once the Site and Data Source are defined you can define the **Data Collector**.

Defining a data collector is done in the **Maintenance Module** under the **Task Manager** tab by using the **Data Collector** tab. See [Figure Appendix D-8](#).

**Figure Appendix D-8** Maintenance - Task Manager - Data Collector



**Step 1** In the **Configuration** section's **General** tab, enter a name for the data collector in the **Name** field, and (optional) provide a description in the **Description** field.



**Step 2 To specify a data source:** Select the drop-down list and choose a source for the data collector.

**Step 3 To configure the collector:** In the **Type & Parameters** section, choose the type of the collector you want to add from the type list.

**DC File:** For the collector to receive data from a file. See Figure Appendix D-9.

**Figure Appendix D-9** New Data Collector Configuration - Configure Data Collector - DC File

The screenshot shows the 'New Data Collector Configuration' dialog box with the 'Collector' tab selected. The 'Type Parameters' section has a dropdown menu set to 'DC File'. Below this, there are several input fields and checkboxes: 'Input file path and name' (text field), 'Delete Input File' (checkbox, checked, value 'True'), 'Output to Parser' (checkbox, checked, value 'True'), 'Output file path and name' (text field), 'Ini File Path' (text field), and 'Log File Path' (text field). At the bottom of the dialog are three buttons: '<< Prev', 'Next >>', and 'Finish'.

**Table Appendix D-1** Configure Data Collector - Collector - DC File Field Descriptions

Field	Description
Input file path and name	Path for input file: Drive\File name.
Delete input file	Define whether to delete the input file after collection. For standard Data Collection, the value should remain True.
Output to Parser	Define whether to send the collected CDR data to parsing. For standard Data Collection, the value should remain True.
Output file path and name	Path for saving the input file: Drive\File name.
Ini file path	A selection of configuration files with advanced settings. For standard Data Collection, the Config.ini file should be selected.
Log file path	Data Collection log file path: Drive\File name.
Use Remote Access Connection	Define whether to use a dial up connection before collecting the input file.

Field	Description
Remote Access User	Dial up connection user name.
Remote Access Password	Dial up connection password.
Remote Access Number	Dial up connection dialed number.

When the data is collected via **TCP**, the following parameters in [Figure Appendix D-10](#) have to be defined.

**Figure Appendix D-10** Configure Data Collector - Collector - Type Parameters - DC TCP

**New Data Collector Configuration**

Configure data collector

General   **Collector**   Parser

Type Parameters

DC Tcp

<input checked="" type="checkbox"/> Output to Parser	True
<input type="text"/> Output file path and name	
<input type="text"/> Port	60010
<input type="text"/> Protocol File Path	
<input type="text"/> Log File Path	
<input type="text"/> Address	000.000.000.000

<< Prev   Next >>   Finish

**Table Appendix D-2** Configure Data Collector - DC TCP Field Descriptions

Field	Description
Output to Parser	Define whether to send the collected CDR data to parsing. For standard Data Collection, the value should remain True.
Output file path and name	Path for saving the input file: Drive\File name.
Port	TCP Port
Protocol file path	TCP Protocol file name. For standard NEC Data Collection, the file should be NEC.DCTCP.XML
Log File Path	Data Collection log file path: Drive\File name.
Address	TCP Server IP.

**Step 4** The parser settings need to be defined. See [Figure Appendix D-11](#).

**Figure Appendix D-11** New Data Collector Configuration - Configure Data Collector - Parser

**New Data Collector Configuration**

Configure data collector

General Collector **Parser**

Type Parameters

CR Raw Data

PD9 File Path	
Output to Inserter	True
Output file path and name	
Log Rejected	True
Log Processed	False
Ini File Path	

<< Prev Next >> Finish

**Table Appendix D-3** Configure Data Collector - Parser - CR Raw Data Field Descriptions

Field	Description
PBX Driver	Select the suitable PBX type to which the data collector is about to connect.
Output to Inserter	Define whether to send the collected parsed data to the database. For standard Data Collection, the value should remain True.
Output file path and name	Parser log file path: Drive\File name.
Log Rejected	Define whether to log all the rejected calls.
Log Processed	Define whether to log all the processed calls.
Ini file path	A selection of configuration files with advanced settings. For standard Parser, the Config.ini file should be selected.
Ignore out of scope calls	Define whether to ignore calls with a Minimum\Maximum values.
Outgoing Minimum Units	Ignore Outgoing calls under specified Minimum pulses.
Outgoing Minimum Duration	Ignore Outgoing calls under a specified Minimum Duration.
Incoming Minimum Ring Time	Ignore Incoming calls under a specified Minimum Ring Time.
Incoming Minimum Duration	Ignore Incoming calls under specified Minimum Duration

Field	Description
Outgoing Maximum Units	Ignore Outgoing calls above specified Maximum pulses.
Outgoing Maximum Duration	Ignore Outgoing calls above specified Maximum Duration.
Incoming Maximum Ring Time	Ignore Incoming calls above a specified Maximum Ring Time.
Incoming Maximum Duration	Ignore Incoming calls above specified Maximum Duration.

- Step 5** You can add the collector immediately or schedule it to be added later. You can also save the setting you configured for the new collector. To add the collector you can either:
- Click **Run Job Now** to add a new data collector immediately. The job is run immediately and you will be notified upon completion.
  - Click **Schedule** (see Scheduling a Job) to schedule the collector to be added later.
  - Click **Save** to save the configured settings. The settings are saved and will appear as defaults when you start adding a new collector.

# Appendix E

## LDAP Import

- Step 1** Select **Maintenance \ Task Manager \ Import Export**.
- Step 2** Select the **LDAP Import** component.
- Step 3** Name the job and select the component tab to select the **LDAP Import**. See [Table Appendix E-1](#).

**Figure Appendix E-1** LDAP Import - Type Parameters

New Import/Export Configuration

Configure import/export job

General **Component**

Type Parameters

LDAP Import

Host	localhost
Port	389
Protocol Ver.	3
Base DN	
User DN	
Password	

<< Prev    Next >>    Finish

— One can use any LDAP browser (such as Softerra LDAP browser in order to browse the LDAP data)

**Table Appendix E-1** LDAP Import Field Descriptions

Fields	Explanation
Host	The address of the LDAP server
Port	Port through which LDAP is communicated with
Protocol Ver.	LDAP protocol version being used
Base DN	The path from which the import should begin
User DN	Which username should be used to login
Password	Which password should be used to login
Hierarchy	To which hierarchy should the import be made
LADP Schema Path	Mapping of the LDAP and database
Import Type	What kind of information is imported

- Step 4** After completing the LDAP Import definition, press **Next** to define when it will run.
- Step 5** You can choose to initiate the Request-Response process in real time (**Run Job Now**) or enable the **Scheduler** to process the exchange at the time and frequency set in the Scheduler

# Appendix F

## General Settings

The **General Settings** contains a list of settings which are centrally defined and affect the behavior of the system. Those settings reside in the **Maintenance Module** under in the System Settings tree.

**Table Appendix F-1** System Settings - General Settings

Setting	Description	Default Value
Accept Devices with unrecognized node	Are devices that come in the CDR with unrecognized node to be accepted.	True
Add the Data Source Name to Device Names?	Will add the Data Source name to any device in the UI.	0 (=No)
Add the Data Source Name to Trunk Names?	Will add the Data Source name to any trunk in the UI.	1 (=Yes)
Added Data Source Delimiter Character	Character used to separate between Data Source and Device\Trunk name	.
Alert Notification Interval (seconds)	What is the interval between Alert Notifications	600
Alert Notification Permissions	The permissions set for Alert Notifications	Everyone
Alert Severity Indication	What severity of Alert to be displayed in the Alert Button	Critical
Allow Publish Report	Adds the option to Publish User Defined Reports to all users	0
Archive Default Folder	The Default folder for the Archive	
Browser Title	The title for the Browser	MA4000 Expense Management
Calls Monitor Auto-Refresh Timeout (sec)	The refresh time of the 'Calls Monitor' Viewer.	20
CDR Backups Root Folder	The name of the root folder for CDR Backup	C:\Programs

Setting	Description	Default Value
CDR Private Setting Overrides Pins	<p>If True</p> <ul style="list-style-type: none"> <li>• And PIN = Business and CDR = Business → Call=Business</li> <li>• And PIN = Business and CDR = Private → Call = Private</li> <li>• And PIN = Private and CDR = Private → Call = Private</li> <li>• And PIN = Private and CDR = Business → Call = Business</li> </ul> <p>If False</p> <ul style="list-style-type: none"> <li>• And PIN = Business and CDR = Business → Call=Business</li> <li>• And PIN = Business and CDR = Private → Call = Business</li> <li>• And PIN = Private and CDR = Private → Call = Private</li> <li>• And PIN = Private and CDR = Business → Call = Private</li> </ul>	True
Characters Allowed When Adding/Editing extensions	Allowed characters to be used for extensions	Empty
Characters To Allow When Adding/Editing a Pin Code	Allowed characters to be used for pin codes	Empty
Characters To Allow When Adding/Editing a trunk	Allowed characters to be used for trunks	Empty
Collector retry attempts	When the data collector fails, this value specifies the number of additional attempts for accessing the data collector source	3
Collector retry interval (minutes)	The period between attempts to access the data collector source	2
Company Link	Display a hyperlink of the web address in the About window	www.necunified.com
Configuration File Path	The path for the configuration folder that may contain various configuration files that are used for Jobs definition. For each job, a browse button will browse to the specified path and display only the relevant files (the files with a specific file's extension), which are used for this Job. For example: In the DC configuration properties dialog the "Protocol File Path" browse button displays only the files that has an extension of 'dcomm.xml' e.g. DataLink.dcomm.xml	C:\Program Files\NEC\EM\RunTime\Configuration
Contact E-mail	Display a hyperlink of the e-mail address in the About window	



Setting	Description	Default Value
Contact Phone	Displays the Support source telephone number in the About window	1(800)852-4632
Copyright Text	A string that is displayed at the bottom/center of the all UI screens	© Copyright 2008, NEC Infrontia Corporation
Create none existing Account Codes Automatically	An indication whether to create new Account Codes when arriving from a CDR during collection.	0 Displayed only when the license contains Account Code
Create new Devices Automatically	An indication whether to create new devices when arriving from a CDR during collection.	1
Create Only Log File for Nortel		0
Date For New Assignment (YYYYMMDD)	A date which will be used as default for the "Start Date" of a new Assignment. To be used when importing date from the 'past'.	20000101
Days to keep parser log	The number of days to keep the parser log file	30
Default call type	Used for calls that have no business or personal information	Business
Default Encoding	Default Import file type encoding	Default
Default Filter for Person Assignment		First Name
Default Pin Code State		B
Default Tariff type	Duration or Units	Duration
Determines if we use today as the assignment Date	Overrides the "Date for New Assignment" and uses today's date. Use when starting a new system with calls from today forward only. No past data.	0
DNA - Definition of OU root		
Enable calls insertion to Calls Debug	Determines if calls will be inserted to the database activity. The table is Calls Debug for Support Purposes	1
Enable Process Synchronization		1
Enable Special Location Table in Rating	Enable using a table for specific locations which would get special rates.	0
Exports use reports precision	Use settings for Reports (True) or Db settings of Database (False)	True
Generate System Health report	Defines when to send a Health report when scheduled: Always or Only on Alert	Always

Setting	Description	Default Value
GI: Delete Import File After Processing		0
GI: Use Device Name as Person ID		0
Ignore Tie Line Calls	Indication if the tie line calls should be ignored	1
Keep Alive Interval	<p>When a new user wants to log in, the system checks if there are users who have not sent a keep alive signal in the last X milliseconds and removes them from the user count.</p> <p>Setting the Keep Alive Interval to 0 (zero) will disable the keep alive mechanism.</p> <p>Note that it is NOT recommended to use very short intervals, as that will overload the server. The minimum recommended interval is 1 minute (60000 milliseconds) while the recommended intervals are 2-5 minutes (120000-300000 ms).</p>	120000
Leading Zeros in Generic Calls Export	Zeros to be added before a number to complete the number to the full length.	0
Mask Settings Changed	Display if masking settings changed by user	0
Max Calls in Calls Viewer	The maximum amount of calls to be displayed in the Call Viewer	200
Max Display Scope Objects in Reports	The maximum number of scope objects to display in a report.	20
Max Level in Personnel Tree	The maximum number of levels allowed in the personnel tree.	- 1
Max Print Records	The maximum amount of calls to be displayed when printing the display of call viewer of online monitor	1000
Max number of login attempts	Defines the number of login attempts before the system locks and one cannot enter the system	3
Minimal Length of password	Defines the minimum characters required in a password	6
Months to keep CDR backup files	Number of months backup files should be kept	0
No. of digits after the decimal for DB	Number of digits after the decimal to be saved in the database.	5

Setting	Description	Default Value
No. of digits after the decimal for reports	Number of digits after the decimal to be saved in the Reports.	2
Path for Create Output files	Path for files created via Generic Export Call and Generic Export Call Summaries.	C:\Program Files\NEC\EM\RunTime\OutputFiles
Path for maintenance backup files folder		C:\Program Files\NEC\EM\Maintenance\Backup
Path for search input files	The default Path for searching the input files.	:\Program Files\NEC\EM\RunTime\InputFiles
Rate 0 duration calls		0
Registration Site	The address of the Licensing server.	
Report Customer Logo Path	The path for the reports logo	C:\Program Files\NEC\EM\RunTime\TempFiles\logo.png
Reports Private Footer	A string that is displayed on the bottom center of the last page of each report.	Report Private Footer
Search bar open		1
Show Confirmation of OU Child Delete	When enabled, deleting the Organizational unit will display additional message relating to moving the child one level up or deleting them	0
Show Descendants in Tree	Define the default mode of the Show descendant in the Tree, 1= the default is Show all, 0= the default is do not show all.	0
Show full path in reports	Show in the report the full tree path of an entity.	0
Show QoS reports	In the Report Tree, add the branch of the Quality of Service (QoS) Reports (those have to be configured for switch type)	0
SMTP Account Size Limit	Defines the maximum size of the attachment included in e-mails or reports	1
SMTP mail account	Account name that will be the sender of the reports - this will be displayed in the "from" field	Administrator@test.com
SMTP password	A password needed by the SMTP mail server	
SMTP server name/address	Mail Server address	
SMTP server port	Mail port	25

Setting	Description	Default Value
SMTP server requires UserName/Password	If 1 (true) this flag indicates that the SMTP server requires a username and password for operating	1
SMTP User Name	A username needed by the SMTP mail server	Username
SQL Server Name	The name of the SQL server instance that will be used for viewing reports.	
Stop insertion till Costing Refresh running	The inserted should be stopped as long as the Costing Refresh is running.	1
Symbols To Allow When Adding/Editing a Pin Code	Allows the determined symbols to be used for pin codes	
Symbols To Allow When Adding/Editing a trunk	Allows the determined symbols to be used for trunks	
Symbols To Allow When Adding/Editing an extension	Allows the determined symbols to be used for extensions	Empty
Tabs root directory	The root directory for the application	C:\Program files\TABS
Temporary Files Folder	Path to the folder for the temporary files.	'Program Files'\ NEC\EM\TempFiles
Theme Name	For NEC Setup only	NEC
Unblock User Timeout (minuted)	The number of Minutes after which to unblock the user	5
Unique Extension names	If 1 (true): in a case that an extension number that is defined for a specific data source, if a collected call has the same extension number but a different data source - the call will be inserted to 'Calls' table as if it was collected with the already defined data source, instead of the one that is in the CDR. A new extension with the collected data source will not be defined.	0
Unique PIN Codes	If 1 (true): The same as for unique extension	1
Use Active directory Protocol for LDAP Imports		0
Use Device Centric Mode	In case you refer to the extension as the basic entity and NOT the person, set the application to be device centric.	0
Use IE Language	Use the Internet Explorer regional settings for the web application	1
Use License Server	If True use the NEC License server (For NEC Setup only)	True\False

Setting	Description	Default Value
Use Shrink Database	Use this functionality to shrink the data base.	True
Welcome message	A message at the top right corner of the UI screen. The value should be: [string] {0}. {0} Is the login full name	Welcome,{0}

**Table Appendix F-2** System Settings - NEC Settings

License Server Address	Address of the NEC License Server	
MA4000sqlDB	Name of the MA4000 SQL Database	MA4000
MA4000sqlDBUser	Name of the MA4000 SQL Database User	agile
MA4000sqlServer	Name of the MA4000 SQL Database Server	
NECCasServerURL	The URL address for the NEC CAS server	



# Appendix G

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## Maintenance Tasks

- Chapter Topics*
- *Clean System Logs*
  - *Clean Raw Data*
  - *Install Patches*
  - *Backup*
  - *Application Maintenance*
  - *Utility Process Manager*
  - *Utility Event Type Monitor*
  - *Report Management Tool*

## Clean System Logs

Clean the System Logs at a frequent basis as large System logs will slow down the system. See [Figure Appendix G-1](#).

**Figure Appendix G-1** Clean System Logs

The screenshot shows a web application interface for configuring database maintenance. At the top, there is a dark header bar with 'Maintenance' and 'My Portal' tabs. Below this, the main heading is 'New Database Maintenance', followed by the subtitle 'Configure Database Maintenance job'. There are two tabs: 'General' (selected) and 'Component'. Under the 'General' tab, there is a 'Configuration' section with two input fields: 'Name' with the value 'DB- Logs opruimen' and 'Description' with the value 'Perform DB maintenance tasks'. At the bottom of the configuration area, there are three buttons: '<< Prev', 'Next >>', and 'Finish'.



## Clean Raw Data

EM backs up the raw data received from the PBX's inside the RawData database. In order to keep the data at a minimum size, delete the old data frequently. See [Figure Appendix G-2](#).

**Figure Appendix G-2** Clean Raw Data

The screenshot shows a configuration window with two tabs: 'General' and 'Component'. The 'Component' tab is selected. Inside the window, there is a section titled 'Type Parameters' with a blue header. Below this, there is a dropdown menu labeled 'Raw Data GC' with a downward arrow. Further down, there is a table with two columns. The first column has a circular icon with the number '10' and the text 'Time to Keep Buffers (hours)'. The second column contains the value '24'. At the bottom of the window, there are three buttons: '<< Prev', 'Next >>', and 'Finish'.

Type Parameters	
Raw Data GC	
10 Time to Keep Buffers (hours)	24

## Install Patches



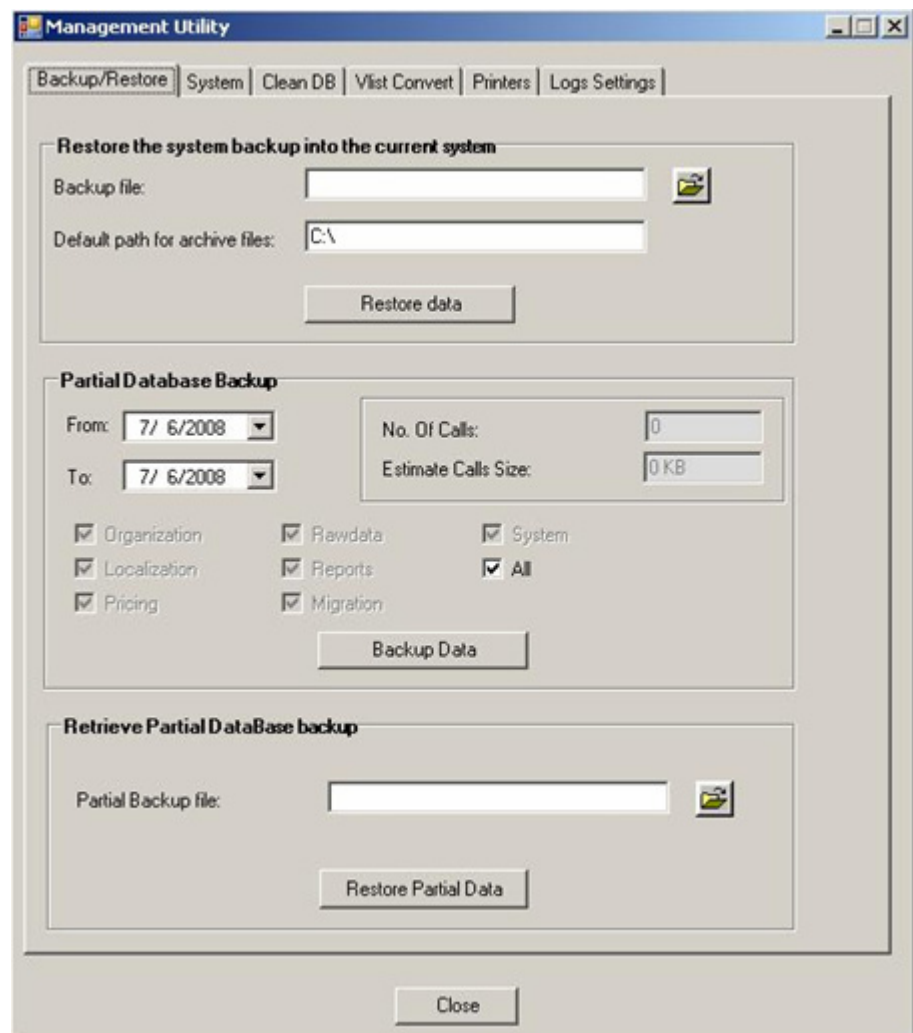
NOTE

Close all EM Utilities. If the Patches installation has been unsuccessful, log out and log in again.

Check in the user interface that all patches have been installed. In case Patches Installation remains unsuccessful, contact NEC's National Technical Assistance Center (NTAC) for support.

- Step 1** Copy over the patches **fix.zip** from the installation disks to the **Program Files\NEC\EM\Patches** folder.
- Step 2** Run **C:\Program Files\ NEC\EM\Utils\Utilities.Management.exe**. [Figure Appendix G-3](#) displays.

**Figure Appendix G-3** Management Utility



- Step 3** Select the **System** tab. The System tab displays.

- Step 4** To install patches provided following installation, click **Run**. It is recommended to stop the services prior to the patch installation.
- Step 5** In case there are problems with installing patches:
- Stop all services
  - Verify that the **fix.zip** is under the **Patches**-directory
  - Investigate the **Patcher.Log** file under **MASLogs** directory. If the log claims that a specific file is "locked by another application" or similar warning message, then rename the specific file (it should appear with full name and path) and try to install patches again.
  - If there are still problems installing patches, reboot the server.
  - Verify that the files renamed above have been recreated.

## Backup

In order to save old copies of the database run temporary backups. Move these backups frequently as they will fill up the disk (they do not overwrite old backups). See [Figure Appendix G-4](#).

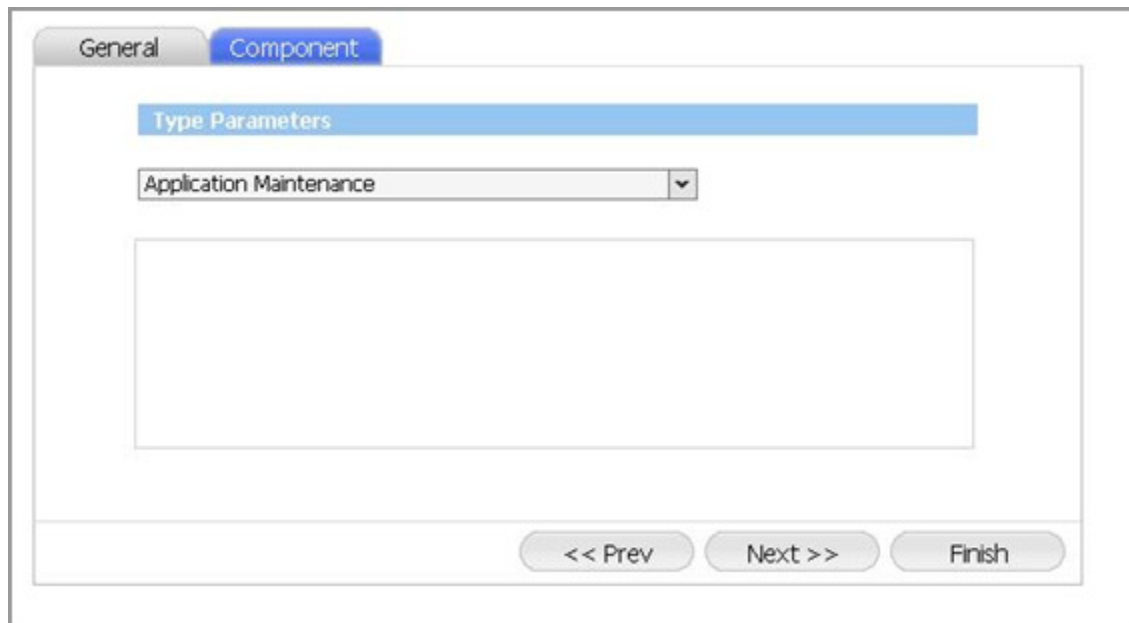
**Figure Appendix G-4** Backup

The screenshot shows a dialog box with two tabs: 'General' and 'Component'. The 'Component' tab is selected. Inside the dialog, there is a section titled 'Type Parameters' with a dropdown menu set to 'Database Backup'. Below this is a 'Backup directory' field with a folder icon and the path 'C:\Program Files\NEC\EM\BACKUPS\'. At the bottom of the dialog are three buttons: '<< Prev', 'Next >>', and 'Finish'.

## Application Maintenance

This will shrink the database and cleans the MAS Logs. It is by default run on a scheduled basis. See [Figure Appendix G-5](#).

**Figure Appendix G-5** Application Maintenance

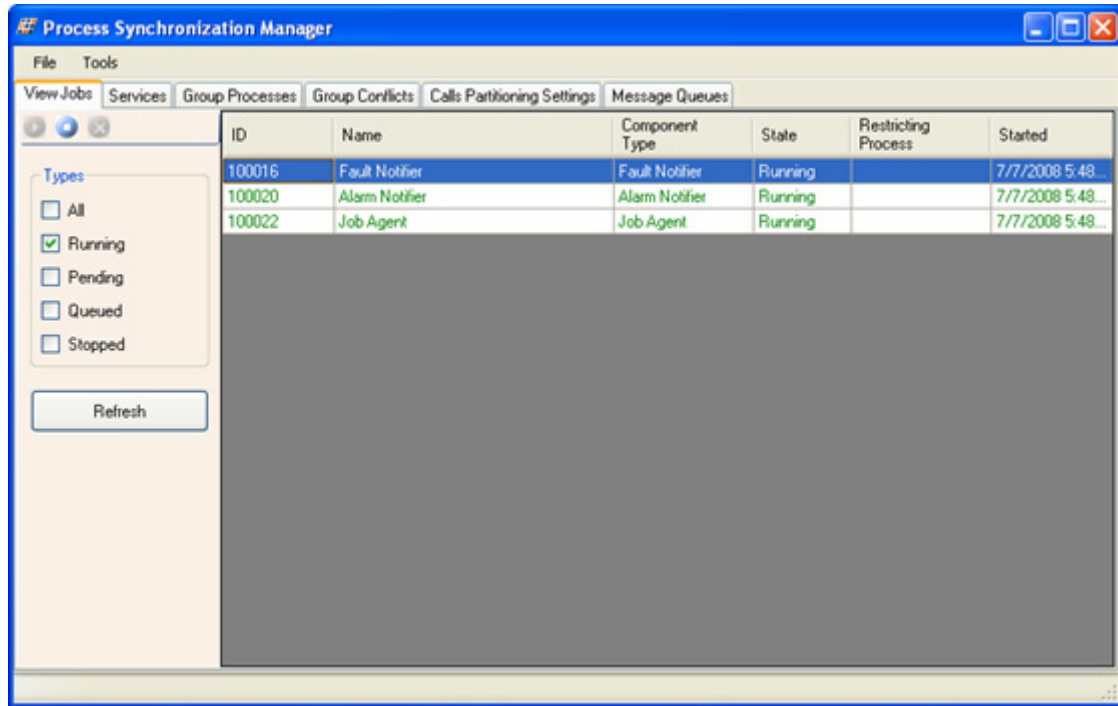


The screenshot shows a dialog box with two tabs: "General" and "Component". The "Component" tab is selected. Inside the dialog, there is a section titled "Type Parameters" with a dropdown menu showing "Application Maintenance". Below this is a large empty rectangular box. At the bottom of the dialog, there are three buttons: "<< Prev", "Next >>", and "Finish".

## Utility Process Manager

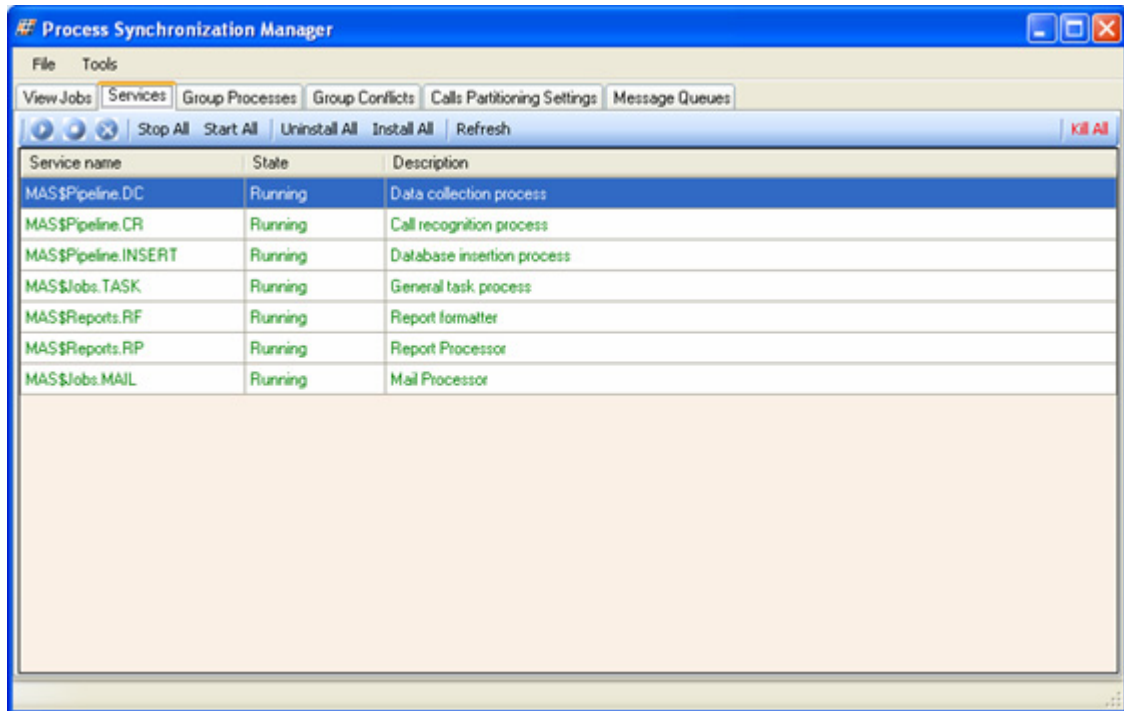
You can view and activate jobs. See [Figure Appendix G-6](#).

**Figure Appendix G-6** Utility Process Manager - View Jobs



You can stop and start services. See [Figure Appendix G-7](#).

**Figure Appendix G-7** Utility Process Manager - Services



You can define Group Conflicts and Call Partitioning settings. Do not change these without advanced knowledge and confirmation from the supplier. See [Figure Appendix G-8](#).

**Figure Appendix G-8** Utility Process Manager - Call Partitioning Settings

The screenshot shows the 'Process Synchronization Manager' window with the 'Calls Partitioning Settings' tab selected. The 'Partitioning Settings' section contains the following configuration options:

- ☒ Enable calls partitioning
- Partition unit: Month (dropdown)
- Unit span: 1 (spin box)
- Max call tables per database: 10000 (spin box)
- Hours to keep in latest call table: 48 (spin box)
- Store partial call tables in Activity DB: ☒
- First valid call date: 1/ 1/2000 (dropdown)
- Records count per move transaction: 100,000 (spin box)

At the bottom of the settings area are two buttons: 'Save' and 'Undo changes'.

Access to Message Queues. See [Figure Appendix G-9](#).

**Figure Appendix G-9** Utility Process Manager - Message Queues

Process Synchronization Manager

File Tools

View Jobs Services Group Processes Group Conflicts Calls Partitioning Settings Message Queues

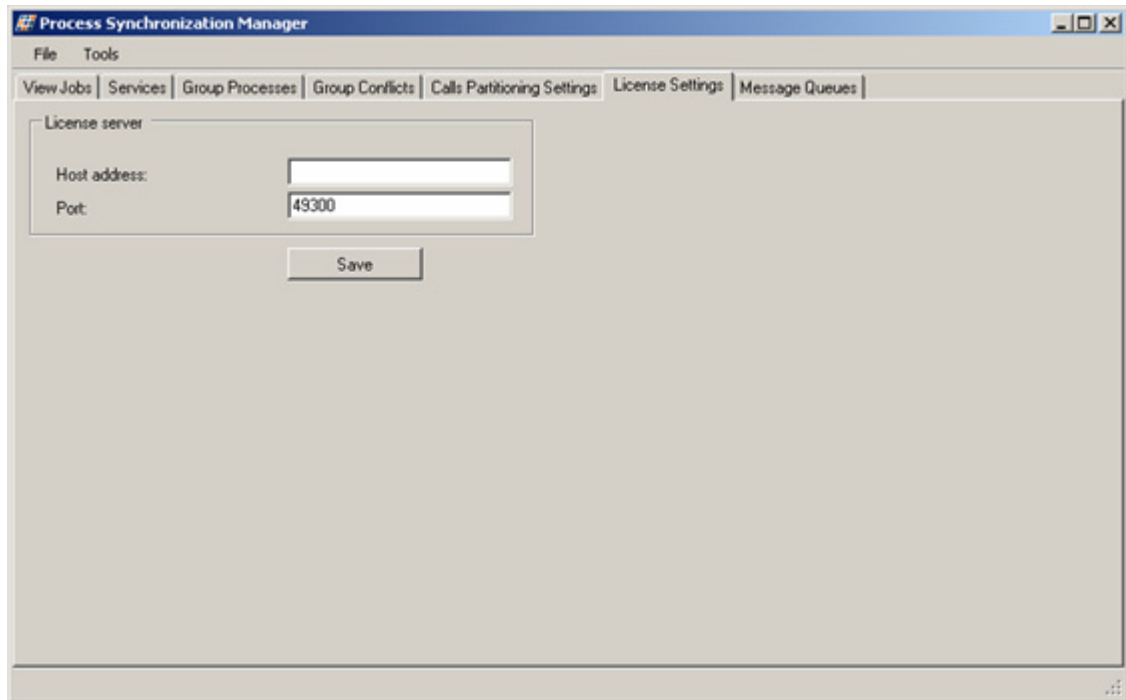
Refresh Delete All Create All

Queue Name	Queue Status	Number of Messages
\\Private\$NCTL_MAS\$Pipeline.DC	Created	0
\\Private\$NCR_Collector_h8k_853	Created	0
\\Private\$NCR_H4K_Collector_618	Created	0
\\Private\$NCTL_MAS\$Pipeline.CR	Created	0
\\Private\$NCR_INSERT_001	Created	0
\\Private\$NCTL_MAS\$Pipeline.INSERT	Created	0
\\Private\$NCR_RP_001	Created	0
\\Private\$NCTL_MAS\$Jobs.TASK	Created	0
\\private\$NCR_alarm_notifier	Created	0
\\Private\$NCR_Application.Maintenance	Created	0
\\Private\$NCR_FaultNotifier	Created	0
\\private\$NCR_job_agent	Created	0
\\Private\$NCTL_MAS\$Reports.RF	Created	0
\\Private\$NCTL_MAS\$Reports.RP	Created	0
\\Private\$NCTL_MAS\$Jobs.MAIL	Created	0
\\Private\$NCR_MAIL_001	Created	0



To enable the License Manager Client, select the License Settings tabs and enter the License Servers host address. See [Figure Appendix G-10](#).

**Figure Appendix G-10** Utility Process Manager - License Settings



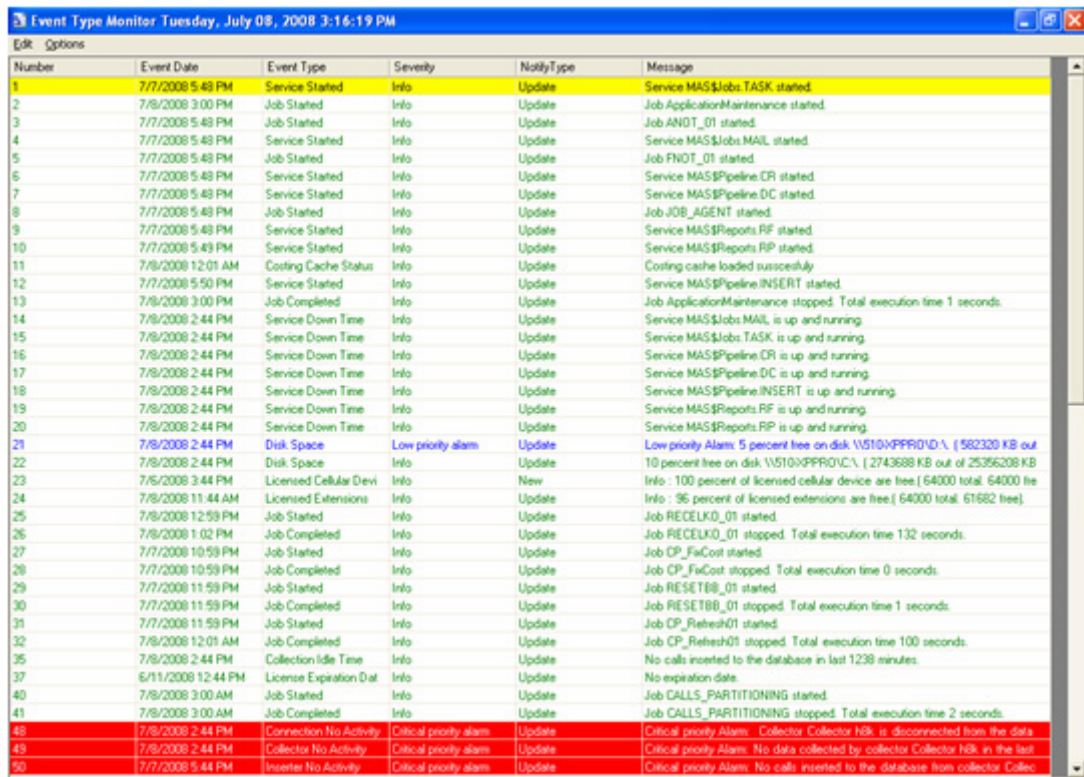
The screenshot shows the 'Process Synchronization Manager' application window. The 'License Settings' tab is selected in the top navigation bar. Below the navigation bar, there is a 'License server' section with two input fields: 'Host address' and 'Port'. The 'Port' field contains the value '49300'. A 'Save' button is located below the input fields.

License server	
Host address:	<input type="text"/>
Port:	<input type="text" value="49300"/>

## Utility Event Type Monitor

Define an e-mail address for the user Admin. In case of warnings or errors, the admin user will receive e-mails with notifications. See [Figure Appendix G-11](#).

**Figure Appendix G-11** Utility Event Type Monitor

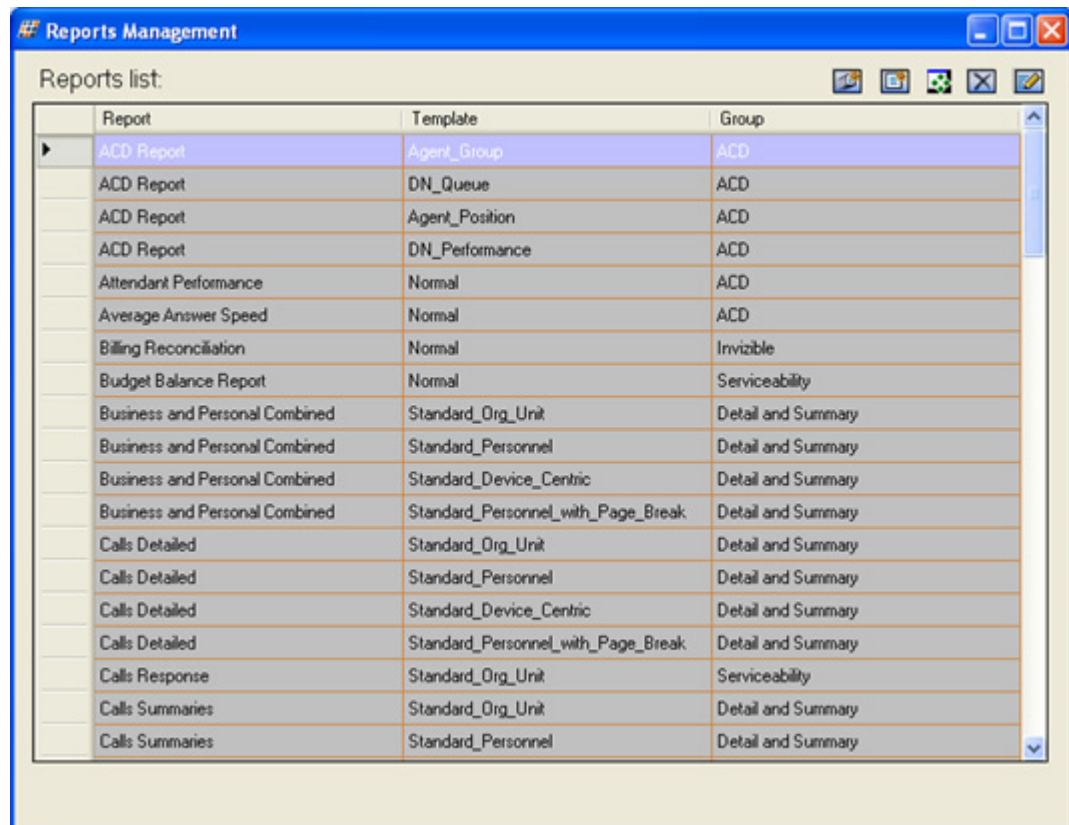


Number	Event Date	Event Type	Severity	Notify Type	Message
1	7/7/2008 5:48 PM	Service Started	Info	Update	Service MAS\$Jobs.TASK started.
2	7/8/2008 3:00 PM	Job Started	Info	Update	Job ApplicationMaintenance started.
3	7/7/2008 5:48 PM	Job Started	Info	Update	Job ANDOT_01 started.
4	7/7/2008 5:48 PM	Service Started	Info	Update	Service MAS\$Jobs.MAIL started.
5	7/7/2008 5:48 PM	Job Started	Info	Update	Job FNOT_01 started.
6	7/7/2008 5:48 PM	Service Started	Info	Update	Service MAS\$Pipeline.CR started.
7	7/7/2008 5:48 PM	Service Started	Info	Update	Service MAS\$Pipeline.DC started.
8	7/7/2008 5:48 PM	Job Started	Info	Update	Job JOB_AGENT started.
9	7/7/2008 5:48 PM	Service Started	Info	Update	Service MAS\$Reports.RF started.
10	7/7/2008 5:48 PM	Service Started	Info	Update	Service MAS\$Reports.RP started.
11	7/8/2008 12:01 AM	Costing Cache Status	Info	Update	Costing cache loaded successfully.
12	7/7/2008 5:50 PM	Service Started	Info	Update	Service MAS\$Pipeline.INSERT started.
13	7/8/2008 3:00 PM	Job Completed	Info	Update	Job ApplicationMaintenance stopped. Total execution time 1 seconds.
14	7/8/2008 2:44 PM	Service Down Time	Info	Update	Service MAS\$Jobs.MAIL is up and running.
15	7/8/2008 2:44 PM	Service Down Time	Info	Update	Service MAS\$Jobs.TASK is up and running.
16	7/8/2008 2:44 PM	Service Down Time	Info	Update	Service MAS\$Pipeline.CR is up and running.
17	7/8/2008 2:44 PM	Service Down Time	Info	Update	Service MAS\$Pipeline.DC is up and running.
18	7/8/2008 2:44 PM	Service Down Time	Info	Update	Service MAS\$Pipeline.INSERT is up and running.
19	7/8/2008 2:44 PM	Service Down Time	Info	Update	Service MAS\$Reports.RF is up and running.
20	7/8/2008 2:44 PM	Service Down Time	Info	Update	Service MAS\$Reports.RP is up and running.
21	7/8/2008 2:44 PM	Disk Space	Low priority alarm	Update	Low priority Alarm: 5 percent free on disk \\S10\PPR01D\ ( 582320 KB out
22	7/8/2008 2:44 PM	Disk Space	Info	Update	10 percent free on disk \\S10\PPR01C\ ( 2743688 KB out of 25356308 KB
23	7/8/2008 3:44 PM	Licensed Cellular Devi	Info	New	Info : 100 percent of licensed cellular device are free ( 64000 total, 64000 fre
24	7/8/2008 11:44 AM	Licensed Extensions	Info	Update	Info : 96 percent of licensed extensions are free ( 64000 total, 61682 free)
25	7/8/2008 12:59 PM	Job Started	Info	Update	Job RECELKD_01 started.
26	7/8/2008 1:02 PM	Job Completed	Info	Update	Job RECELKD_01 stopped. Total execution time 132 seconds.
27	7/7/2008 10:59 PM	Job Started	Info	Update	Job CP_FaCost started.
28	7/7/2008 10:59 PM	Job Completed	Info	Update	Job CP_FaCost stopped. Total execution time 0 seconds.
29	7/7/2008 11:59 PM	Job Started	Info	Update	Job RESETBB_01 started.
30	7/7/2008 11:59 PM	Job Completed	Info	Update	Job RESETBB_01 stopped. Total execution time 1 seconds.
31	7/7/2008 11:59 PM	Job Started	Info	Update	Job CP_Refresh01 started.
32	7/8/2008 12:01 AM	Job Completed	Info	Update	Job CP_Refresh01 stopped. Total execution time 100 seconds.
35	7/8/2008 2:44 PM	Collection Idle Time	Info	Update	No calls inserted to the database in last 1238 minutes.
37	6/11/2008 12:44 PM	License Expiration Dat	Info	Update	No expiration date.
40	7/8/2008 3:00 AM	Job Started	Info	Update	Job CALLS_PARTITIONING started.
41	7/8/2008 3:00 AM	Job Completed	Info	Update	Job CALLS_PARTITIONING stopped. Total execution time 2 seconds.
48	7/8/2008 2:44 PM	Connection No Activity	Critical priority alarm	Update	Critical priority Alarm: Collector Collector h8k is disconnected from the data
49	7/8/2008 2:44 PM	Collector No Activity	Critical priority alarm	Update	Critical priority Alarm: No data collected by collector Collector h8k in the last
50	7/7/2008 5:44 PM	Insertor No Activity	Critical priority alarm	Update	Critical priority Alarm: No calls inserted to the database from collector Collec

## Report Management Tool

This tool allows you to import new Report Templates into the application. See [Figure Appendix G-12](#).

**Figure Appendix G-12** Report Management Tool



The screenshot shows a window titled "Reports Management" with a "Reports list:" section. It contains a table with three columns: Report, Template, and Group. The first row is highlighted in blue.

Report	Template	Group
ACD Report	Agent_Group	ACD
ACD Report	DN_Queue	ACD
ACD Report	Agent_Position	ACD
ACD Report	DN_Performance	ACD
Attendant Performance	Normal	ACD
Average Answer Speed	Normal	ACD
Billing Reconciliation	Normal	Invisible
Budget Balance Report	Normal	Serviceability
Business and Personal Combined	Standard_Org_Unit	Detail and Summary
Business and Personal Combined	Standard_Personnel	Detail and Summary
Business and Personal Combined	Standard_Device_Centric	Detail and Summary
Business and Personal Combined	Standard_Personnel_with_Page_Break	Detail and Summary
Calls Detailed	Standard_Org_Unit	Detail and Summary
Calls Detailed	Standard_Personnel	Detail and Summary
Calls Detailed	Standard_Device_Centric	Detail and Summary
Calls Detailed	Standard_Personnel_with_Page_Break	Detail and Summary
Calls Response	Standard_Org_Unit	Serviceability
Calls Summaries	Standard_Org_Unit	Detail and Summary
Calls Summaries	Standard_Personnel	Detail and Summary



***For additional information or support on this NEC Corporation product, contact your NEC Corporation representative.***



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**Expense Management Administration Guide**

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