RFID Tracking System Installation

Installation Guide
Version 3.x

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# 3M™ RFID Tracking System Installation Guide Table of Contents

## Installation Overview ................................................................................................................1

## Part 1 – Install 3M RFID Tracking Database Server .................................................................2

### About 3M Tracking System architecture .................................................................................2

### Step 1 – Install 3M RFID Tracking Database, Web Locator and System Manager Software ....3
- Install 3M Tracking Database with System Manager and the Web Locator software on the same server .................................................................................................................................................. 3

### Step 2 – Install Microsoft Report Viewer and 3M Basic Reports in Reporting Services .......11
- Install the Microsoft Report View 2005 SP1 application ................................................................... 11
- Install the 3M standard reports for Locator in Reporting Services ................................................... 11

### Step 3 – Define SQL Server backup procedures ........................................................................15

## Part 2 – Use System Manager Software to Import Data and Program Tags .16

### 3M RFID Tracking System setup ...............................................................................................16

## Part 3 – Install 3M Client Software and Hardware .................................................................17

### 3-1 Determine installation type ..................................................................................................17
- Remote installation............................................................................................................................ 17
- Local installation .............................................................................................................................17

### 3-2 Determine client software/hardware for each workstation ..................................................18
- General installation guidelines ....................................................................................................... 18
- Administration workstations .......................................................................................................... 19
- Office workstations .......................................................................................................................20

### 3-3 Install Tracking System software on client workstations ..................................................21
- Step 1 – Install 3M RFID Tracking System software ........................................................................ 21
- Step 2 – Configure the "Modify Computer" settings ......................................................................... 22
- Step 3 – Install 3M RFID Tracking System hardware (if required) ................................................... 23

### 3-4 Install 3M RFID Tracking Pad software and hardware .....................................................24
- Step 1 – Install 3M RFID Pad Monitor software on a workstation .................................................... 24
- Step 2 – Connect the Tracking Pad to the computer ........................................................................ 27
- Step 3 – Configure the computer’s serial or USB port ................................................................... 28
- Step 4 – Test Tracking Pad operation ........................................................................................... 29

### 3-5 Install 3M RFID Handheld Tracker software and hardware ............................................30
- Step 1 – Install 3M RFID Tracking System software ........................................................................ 30
- Step 2 – Install the memory-card drive .......................................................................................... 30
- Step 3 – Install 3M RFID Handheld Tracker software on the Tag Programming Workstation ....... 30
- Step 4 – Configure System Manager software for use with 3M RFID Handheld Tracker software . 30

## Part 4 – Train Staff ..................................................................................................................31

### Training requirements.................................................................................................................31

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Copyright © 2003-2009, 3M. All rights reserved. RFID Tracking System Installation Guide, Rev. E
Appendix A Install and Configure SQL Server Express Edition 2005 ..........32
Install and Configure SSEE 2005 .............................................................................................................................................. 32
Appendix B Install and Configure SQL Server Express Edition 2008 ..........32
Install and Configure SSEE 2008 .............................................................................................................................................. 32
Appendix C – Setup and configure IIS 6 on Windows Server 2003 ..........33
Install and configure IIS 6 on Windows Server 2003 ........................................................................................................... 33
Enabling ASP.NET Extensions.............................................................................................................................................. 34
Appendix D – Setup and configure IIS 7 on Windows Server 2008 ..........35
Install and configure IIS 7 on Windows Server 2008 ........................................................................................................... 35
Appendix E – Automating Client Installation..................................................36
Creating a response file......................................................................................................................................................... 36
   How to create a response file for new software installation: ............................................................................................. 36
   How to create a response file for upgrades: ........................................................................................................................ 36
Running the Setup program with a response file ................................................................................................................ 37
Known issues and their workarounds .................................................................................................................................. 38
Requesting Service ................................................................................................................................................................. 40
3M service phone numbers ..................................................................................................................................................... 40
Installation Overview

3M assumes that qualified IT staff and others who understand your organization’s network architecture, capabilities and policies will supervise and perform 3M RFID Tracking System installation and commissioning. Although this guide is your primary source, other related documentation is referenced in the instructions on the following pages.

Implementation plan

Installation particulars for your Tracking System are described in detail in the 3M RFID Tracking System Implementation Plan created specifically for your facility by 3M. These particulars include:

- SQL database software purchased by customer and installed on a customer-supplied server.
- Type of ODBC data source required to import file and location data into the 3M Tracking Database from an existing ODBC-compliant database
- Installation details including server locations, authentication method, Tracking Pad locations, RFID tag placement on folders, etc.
- Hardware/software requirements for each person using the system at your facility
- Import query definitions and frequency of update to the Tracking Database with specific field names of data that will be imported from the ODBC data source
- Shelf-order/Search lists for use with 3M RFID Handheld Tracker software and hardware
- Special procedures for tasks such as working files, file archiving, etc.

Installation procedures

To install the 3M RFID Tracking System, perform the procedures on the following pages in the following sequence:

Part 1 – Install 3M RFID Tracking Database on page 2

Part 2 – Use System Manager Software to Import Data and Program Tags on page 16

Part 3 – Install 3M Client Software and Hardware on page 17

Part 4 – Train Staff on page 31

IMPORTANT NOTE — CHANGES EFFECTIVE IN VERSION 3.10

The system now includes support for time zones. All date/time fields are stored in UTC on the database server and are converted to the client time zone and format settings that initiate the update/query. For example, if a file is checked into a pad in Boston at 11:15 AM local time, when a user in San Francisco queries the database for that record, they will see 8:15 AM appear on their screen (Eastern time is 3 hours ahead of Pacific time). Exception: In all reports, the time displayed to users will be for the server time zone only.
Part 1 – Install 3M RFID Tracking Database Server

About 3M Tracking System architecture

As shown on the diagram, the 3M RFID Tracking Database as well as other 3M software may be installed on a dedicated network server. The Locator software is a web page that connects to a single database. The web server can be on the server as the SQL database or it can be on a different server, but it is recommended they be on the same server. NOTE: TCP/IP and Named Pipes protocols should be enabled in SQL Server.

- Data imports are performed using System Manager Software installed on the Tracking Database server or another server.
- You will be able to automate the import process by creating a batch file that can be executed on the Tracking Database server.
- When installing the 3M RFID Tracking Database and System Manager Software, you can choose to have both components reside on the same server, or you can separate them so the Tracking Database is on one server and System Manager Software is on a different server. Either method is acceptable, but setup procedures are different depending on your selection. Detailed installation and setup procedures are provided on the following pages.
- You need to have SQL Server Reporting Services installed on the database server to run the reports.
- It is recommended that IIS also be installed on the same server as the SQL database.
- **Important:** The 3M RFID Tracking System does not include the software or client licenses for Microsoft SQL Server. These must be purchased and installed before 3M Tracking System software installation.
- For detailed information on the type of installation planned for your facility, refer to the 3M RFID Tracking System Implementation Plan created specifically for your facility.
Step 1 – Install 3M RFID Tracking Database, Web Locator and System Manager Software

Before you begin, make sure that both SQL Server software and SQL Reporting Services are installed and working. You also need to make sure that IIS is installed and configured correctly. Refer to the appropriate appendix at the end of this document.

Install 3M Tracking Database with System Manager and the Web Locator software on the same server

Before you begin...

IMPORTANT: You must install SQL Server and establish Windows authentication or SQL user accounts and Passwords before continuing with this procedure.

You can have the 3M system create a SQL user account to enable clients to connect to the database. Instructions for creating this account are provided in the following instructions.

Installation Procedure

1. Insert the 3M RFID Tracking System CD-ROM into the computer where you will install the database and System Manager Software.
   - The installation program should start automatically. If it does not, run Setup.exe

2. The Installation Wizard begins.
   - Click Next to continue.

3. The License Agreement screen appears. Review the terms (you can print it as well). If you agree to the terms click Yes to continue. If you click No, the installation process terminates.
On the Select Features screen, select 3M RFID Tracking System Manager to run data imports on the server, 3M RFID Locator Web Server Setup to install the locator web page on this server and 3M RFID Tracking System Database to install the RFID SQL tracking database and click Next.

Enter the 3M SQL Server Product License Key number and click Next.

- The license key number is printed on the product license key certificate that was shipped with your software.

On the Language Selection screen, select the language that you wish to use with the 3M RFID Tracking System and click Next.

- The application will use this language once it is installed. The installation is always displayed in English.
7 On the **Web Site Name** screen, you must give the Locator web page a name. The default is **3M_Locator**. NOTE: You cannot have spaces or some special characters in the name. Click **Next** to continue.

8 On the **SQL Server Machine Name** screen, enter the name of the server and give the tracking database a name. Note: You can use (local) or you can enter the name of the server (for example DB_Server1). If you are using an instance name in SQL, make sure you enter that after the server name (for example DB_Server1\RFID). Click **Next** to continue.

9 On the **Setup Type** screen, select one of the following three methods to connect to the SQL Server database:

- **3M RFID Tracking System Standard User** – This selection will create a user account in SQL named RFID3M_User with a password that you can select.

- **Windows Authentication Only** – This selection will use the Windows account that is currently logged onto this computer to connect to the Tracking Database. **IMPORTANT:** Make sure that this Windows account has the following SQL rights: SELECT, DELETE, EXECUTE, INSERT and UPDATE.

- **SQL Server Authentication (Mixed Mode)** – This selection will use an existing SQL account that you have created to connect to the Tracking Database. **IMPORTANT:** Make sure that this SQL account has the following SQL rights: SELECT, DELETE, EXECUTE, INSERT and UPDATE.
10 Click Next.

- If you selected 3M RFID Tracking System Standard User you will see the Standard database user password screen asking you to enter and confirm the password for this account. 
  NOTE: The password you enter should conform to your Windows password rules (minimum length, upper and lower case letters, number, special characters etc.). Make sure the password follows these rules or the installation will fail. If it does not match these rules, you will get a warning message. This is the recommended connection method. Click Next to continue.

- If you selected SQL Server Authentication, you will see the SQL Server Username and Password screen prompting you for the username and password of an existing SQL account.

11 At the Choose Destination Location dialog box, enter the location where you will install the 3M Tracking System software.

- You can use the default location or click Browse and select a different folder location. Click Next to continue.
12 In the Start Copying Files dialog box, make sure that the Install components and the Destination items listed are correct. Click Next to install the software.

13 When the software and web site pages have been installed, you will be asked if you are creating a new database (Install) or upgrading an existing database (Upgrade). Select Install and click Next to continue.

14 You will now see a screen telling you that you are now about to create the RFID tracking database. Click Next to continue.
- On the **SQL Server Machine Name** screen, your selections for the server and database name from the previous screen will be displayed as confirmation. Click **Next** to continue.

- You are now asked how you wish to create the new database. Here you must select either Windows authentication using the Windows account you are currently logged on to the server with (make sure it has rights in SQL to create and modify databases) or you can use an existing SQL account such as the System Administrator (sa) account. When you have made your selection, click the **Test Connection** button to verify the connection will work with your selection.

If there is a problem, you will see an error screen. Verify the Windows account has the proper rights to SQL or the SQL account you used has the correct name, password and rights and try again.

If the connection works, you will see a **Connection succeeded** screen. Click **Next** to continue.

**NOTE:** You will not be able to continue with the installation until the authentication works.
15 For the email-alerting feature in Locator to work, you need to provide details on the SMTP server in your environment so the application can send email when files have been detected. Fill in the screen as follows:

**Email ID**: This is the email address of the account that will be used to send the notification. Example: name@company.com

**SMTP Server Name**: This is the name of the SMTP server that handles email messages. Examples: mail.company.com or smtp.gmail.com

**SMTP Port No.**: This is the port on the SMTP server that will be used to connect to from the database. The default is 25.

**Require SSL**: If your SMTP server requires a secure connection, you must check this box. Gmail requires SSL for example.

**SMTP User Name**: This is the account name that is used to log onto the SMTP server. Example: domain\useraccount

**SMTP Password**: This is the password for the SMTP user name. NOTE: If the password is not strong (minimum length 8 characters with upper, lower case as well as a number and special characters), you will get a warning message to remind you about having a strong password.

If you do not require authentication to the SMTP Server, uncheck the **Require Authentication** box at the bottom of the screen.

When you have entered all the information in, you can send a test message to make sure these settings work by clicking the **Send Test Email** box. If everything is correct, you will see a test email message.

**NOTE**: You cannot continue until the settings are correct. Click **Next** to continue.

16 On the **Select Directory for SQL Server Data Files** screen, you must navigate to the folder where SQL Server stores the databases. This will be different for each version of SQL Server.

- The **Destination Folder** path is relative to the SQL Server computer.
- Click **Next** to continue.
17 At the Installing 3M RFID Database screen, click Next. The database and SMTP settings will be created on the server.

18 When the installation is complete, you can click Finish.

Proceed to Step 2.
Step 2 – Install Microsoft Report Viewer and 3M Basic Reports in Reporting Services

IMPORTANT NOTE — CHANGES EFFECTIVE IN VERSION 3.10
The system now includes support for time zones. All date/time fields are stored in UTC on the database server and are converted to the client time zone and format settings that initiate the update/query. For example, if a file is checked into a pad in Boston at 11:15 AM local time, when a user in San Francisco queries the database for that record, they will see 8:15 AM appear on their screen (Eastern time is 3 hours ahead of Pacific time). **Exception:** In all reports, the time displayed to users will be for the server time zone only.

Install the Microsoft Report View 2005 SP1 application
To install Report Viewer software that is required for the 3M reports to be viewed, download the Report Viewer utility from Microsoft at http://www.microsoft.com/downloads/details.aspx?FamilyID=e7d661ba-dc95-4eb3-8916-3e31340ddc2c&DisplayLang=en
Run ReportViewer.exe and follow the prompts on the screen, taking all the defaults.

Install the 3M standard reports for Locator in Reporting Services
To install the reports for the RFID system, do the following. First, copy the RDL folder from the CD to the server (Desktop is okay)
On the server, go to the SQL Reporting Services web page (http://localhost/Reports). You will see this screen:

![Server Folder Creation](image)

Click **New Folder** and enter **3MReports** (NO SPACE IN THE NAME) and click **OK**
Click on the **3MReports** folder and you will see this screen:

Click on **Upload File**

Click the **Browse** button and navigate to the RDL folder. Double click the **CheckInReport.RDL** and make sure you have checked the "Overwrite item if it exists" check box and then click **OK**.

Repeat these steps for both the **CheckOutReport** and **NoActivityReport**.
You should now see all 3 reports in the 3MReports window.

Click on the **CheckInReport** to open this folder, and when that opens, click on the **Properties** tab.

Click on **Data Sources** on the left side of the screen.

You must change the connection string to point to the server and database name of the RFID tracking database. You must also select the connection type on the bottom half of the screen.

If you are using the 3M Standard User account OR a different SQL account, select “**Credentials store securely in the report server**” and enter the name (RFID3M_USER for the 3M standard account) and password.

If you are using Windows authentication, you must select “**Windows integrated security**”.

When you have changed the connection string and set the connection type, click **Apply**.

Repeat these steps for both the **CheckOutReport** and **NoActivityReport**.
Go to the Report Server Home page:

Click **Properties** and then select **New Role Assignment**

Add the user or group name (for example Domain\Users) in the **Group or user name** box and then select both the **Browser** and **Report Builder** roles from the choices and click **OK**.

**Proceed to Step 3.**
Step 3 – Define SQL Server backup procedures

Make sure that your facility establishes and implements a daily backup of the SQL Server.

<table>
<thead>
<tr>
<th>IMPORTANT!</th>
</tr>
</thead>
<tbody>
<tr>
<td>The customer is responsible for setting up and performing backups of the SQL Server database.</td>
</tr>
</tbody>
</table>

Proceed to Part 2 – Use System Manager Software to Import Data and Program Tags.
Part 2 – Use System Manager Software to Import Data and Program Tags

After the initial installation of the 3M RFID Tracking System, the Tracking Database consists of one default group that must be configured and populated with your site data.

After the database is configured and the folders are tagged, you can continue with Part 3 – Install 3M Client Software and Hardware on page 17.

For detailed instructions on how to set up Groups, see the Setting up Groups section in the 3M RFID Tracking System Manager User Guide included in the binder.

3M RFID Tracking System setup

(For detailed instructions, see the 3M RFID Tracking System Manager User Guide.)

Perform one of the following procedures that are outlined in the Setting up Groups section in the 3M RFID Tracking System Manager User Guide. (See the System Manager tab in this binder.) These procedures explain how to set up groups, data imports, locations, computers, lists and how to program tags.

Perform one of the following site-specific procedures outlined in the “Setting up Groups” section in the System Manager User Guide:

- Modifying a single group
- Creating and configuring a new group
- Splitting an existing group into multiple groups

For site-specific information on how many groups to set up, see the 3M RFID Tracking System Implementation Plan that was prepared for your facility.
Part 3 – Install 3M Client Software and Hardware

Use the following procedures to install hardware/software on the computers of individuals who will use the Tracking System.

Installation Note: You must purchase a Workstation License for each computer where you install 3M RFID Tracking System software.

3-1 Determine installation type

You can install and configure Tracking System software remotely, via a network, or locally at each user's computer.

Remote installation

Your IT staff may want to perform network software installations and remote configuration of Computer Settings for Pad Monitor and Locator software.

1 A System or Group Administrator can use System Manager software to remotely add computers (computer name required), add locations, and set up the allowed groups and location for any computer. For more information on remote configuration, see Step 2 – Configure the "Modify Computer" settings on page 22.

2 After setting up all the computers, you can perform a network installation of Pad Monitor and Locator software for each computer.

3 When each user starts Pad Monitor or Locator software for the first time, their computer’s Allowed Groups and location are already set up.

Local installation

You can install Pad Monitor and Locator software locally at each computer. Local installations can be performed two ways:

Remote configuration/local installation - You can remotely set up and configure all computers and locations using System Manager software, and then install the software locally. After remotely defining the allowed groups and locations for each computer, you can then locally install client software at each computer.

OR

Local installation/local configuration - You can install and configure all software locally at each computer. The first time you start Locator, Pad Monitor or System Manager, a prompt asks you to enter Admin Mode as a Group or System Administrator. You can then assign Allowed groups and set a location for the computer.
3-2 Determine client software/hardware for each workstation

Refer to the 3M RFID Tracking System Implementation Plan for a listing of the software and hardware that must be installed on each workstation at your facility.

General installation guidelines

Installation Note: You must purchase a Workstation License for each computer where you install Tracking System software.

<table>
<thead>
<tr>
<th>Software</th>
<th>Workstation Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M RFID Tracking Pad Monitor software</td>
<td>Install on each workstation that includes a 3M RFID Tracking Pad (Tracking Pad). This will be used to check files in and out of that computer’s tracking location.</td>
</tr>
</tbody>
</table>
| 3M RFID System Manager software       | Install on workstations where administrative and special function program functions such as adding locations/computers/folders, programming RFID tags, importing data, using the 3M RFID Handheld Reader (Handheld Tracker) or managing groups is required.  
  - Tag programming and check-in/check-out functions require a Tracking Pad.  
  - If you might use this computer to perform data imports, you must create the same ODBC source that you created for your server. |
| 3M RFID Handheld Tracker software     | Install on any workstation that will be used to transfer data, via a memory card, to and from the Handheld Tracker. This is in addition to the System Manager software.  
  - A memory-card drive connected to the workstation is required to perform these data transfers. |
| 3M RFID Locator software              | Access to this application is on an internal web server. Please contact your system administrator to get the URL for the Locator application. |
**Administration workstations**

The types of tasks performed dictate which hardware/software components are required (see table below).

The workstations described below are typical for most sites. You may want to combine functions. For example, you could add a Tracking Pad to a Handheld Tracker workstation.

### Tag Programming Workstation

<table>
<thead>
<tr>
<th>Workstation Tasks</th>
<th>Hardware</th>
<th>Installation Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>The primary task is to program location and folder tags. In addition to programming tags, this workstation can be used to check-in and check-out folders and add/delete folders, locations, and computers from the Tracking Database.</td>
<td>Tracking Pad</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
</tbody>
</table>

Perform these procedures:

1. [3-3 Install Tracking System software on client workstations](#) on page 21.
2. [3-4 Install 3M RFID Tracking Pad software and hardware](#) on page 24.

### Handheld Tracker Workstation

<table>
<thead>
<tr>
<th>Workstation Tasks</th>
<th>Hardware</th>
<th>Installation Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Handheld Tracker Workstation is used to perform Handheld-Tracker inventories. This includes exporting shelf-order, search, and pull lists; and importing inventory results, etc. In addition to using the Handheld Tracker, this workstation can be used to add/delete folders, locations, and computers from the Tracking Database.</td>
<td>3M RFID Handheld RFID Reader Memory-card drive</td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
</tbody>
</table>

Perform these procedures:

1. [3-3 Install Tracking System software on client workstations](#) on page 21.
2. [3-5 Install 3M RFID Handheld Tracker software and hardware](#) on page 30.
Office workstations

The majority of office workstations are only used to check-in and check-out folders, and search for folder locations. The types of tasks performed dictate which hardware/software components are required (see table below).

### Tracking Pad Workstation

<table>
<thead>
<tr>
<th>Workstation Tasks</th>
<th>Hardware</th>
<th>Installation Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Tracking Pad Workstation is used to check-in and check-out folders by placing folders on a Tracking Pad.</td>
<td>Tracking Pad</td>
<td><img src="image" alt="Tracking Pad Installation Wizard" /></td>
</tr>
</tbody>
</table>

Perform these procedures:

1. **3-3 Install Tracking System software on client workstations** on page 21.
2. **3-4 Install 3M RFID Tracking Pad software and hardware** on page 24.

### Locator Workstation

<table>
<thead>
<tr>
<th>Workstation Tasks</th>
<th>Hardware</th>
<th>Installation Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Locator Workstation</strong> - Used to search the Tracking Database for folder locations and use Locator Software to check-out folders to different locations (optional).</td>
<td>None</td>
<td>Perform this procedure:</td>
</tr>
</tbody>
</table>

1. Access to this application is on an internal web server. Please contact your system administrator to get the URL for the Locator application.

3-3 Install Tracking System software on client workstations

The following procedure describes the installation of Tracking System software on a computer workstation.

Refer to the 3M RFID Tracking System Implementation Plan for a listing of the software and hardware that must be installed on each workstation at your facility.

**Step 1 – Install 3M RFID Tracking System software**

Software can be installed via a network or locally, using a CD-ROM, at each computer.

1. Insert the 3M RFID Tracking System CD-ROM into your computer or start the network installation set up by your IT department.

2. Follow the instructions on the screen.

3. At the **Select Features** dialog box, select the check boxes for each program that you want to install (see below).
   - Any installation of System Manager on other computers that you might use to import data will require the same ODBC data source and drivers that you created on the database server.

4. Click Next and follow the instructions until the installation is complete.

**Software Requirements**

For a description of the various workstation functions, see 3-2 Determine client software/hardware on page 18.

---

**Tag Programming Workstation**

**Handheld Tracker Workstation**

**Tracking Pad Workstation**
Step 2 – Configure the "Modify Computer" settings
You must configure the Modify Computer settings before you can use client software.

Computer settings can be configured locally or remotely:

Remote configuration – A System or Group Administrator can use System Manager software to add computers (computer name required) and set up the allowed groups and location for any computer. When each user starts Pad Monitor or Locator software for the first time, their computer's settings are already set up.

Local configuration - You can configure Computer Settings locally by using Pad Monitor or Locator software. After installation, the first time you start either software, a prompt asks you to enter Admin Mode as a Group or System Administrator. You can then assign Allowed groups and set a location for the computer.

If your site only has one group, all computers will automatically be configured to use that group.

Procedure

1. Use one of the methods shown on the right to display the Modify Computer dialog box.

2. Enter Admin Mode as a System Administrator or as an administrator for the groups that you want to modify.
   - The Modify Computer dialog box appears (see below).

3. Configure the computer and click OK.
   - See the next page for explanations of the various Modify Computer settings.

Pad Monitor Software – Run locally on the computer that you are trying to configure.

System Manager - Use remotely to configure any computer.

For more information on Allowed Groups and Computer Settings, see the 3M RFID Tracking System Manager User Guide.
**Modify Computer Settings**

All these settings will be shared by all RFID Tracking System software (e.g., System Manager, Locator, and Pad Monitor software), and are loaded on the computer. A Group or System Administrator can use Locator, Pad Monitor, or System Manager software locally (at the computer) to modify the computer settings.

<table>
<thead>
<tr>
<th>Computer name</th>
<th>Type the network name of the computer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Type a descriptive name for the computer.</td>
</tr>
<tr>
<td>Allow Check-out from Locator</td>
<td>Select this check box if you want this computer user to be able to use Locator software’s <strong>Checkout</strong> feature to change the location of folders that belong to the computer’s allowed groups. Clear this check box to prevent this user from using Locator software’s <strong>Checkout</strong> feature.</td>
</tr>
<tr>
<td>Allow System Manager use</td>
<td>Select this check box to allow the user of this computer to run System Manager software. Clear this check box to prevent any user of this computer from running System Manager software.</td>
</tr>
<tr>
<td>Allowed Groups</td>
<td>In the <strong>Allowed Groups</strong> section, select the check boxes to specify which groups can be accessed when using Locator, Pad Monitor, and System Manager software on this computer.</td>
</tr>
<tr>
<td>Location</td>
<td>If desired, select the location that you want to assign to this computer from the <strong>Location</strong> drop-down list. Only locations that include all the allowed groups selected for the computer can be assigned to the computer. Any location that does not meet this criterion will not appear in the <strong>Location</strong> drop-down list.</td>
</tr>
</tbody>
</table>

**Step 3 – Install 3M RFID Tracking System hardware (if required)**

Refer to the *3M RFID Tracking System Implementation Plan* for a listing of the software and hardware that must be installed on each workstation at your site.

If the client workstation only has **Locator software**, the client installation is complete and you are ready to use Locator software.

If the client workstation requires additional Tracking System hardware, for example, a Tracking Pad or Handheld Tracker memory-card drive, perform the required hardware installation procedures:

- **3-4 Install 3M RFID Tracking Pad software** and hardware on page 24.
- **3-5 Install 3M RFID Handheld Tracker software and hardware** on page 30.
3-4 Install 3M RFID Tracking Pad software and hardware

Step 1 – Install 3M RFID Pad Monitor software on a workstation

For instructions on installing Tracking System software, see Pad Monitor software installation instructions below plus 3-3 Install Tracking System software on client workstations on page 21.

Refer to the 3M RFID Tracking System Implementation Plan for a listing of the software and hardware that must be installed on each workstation at your facility.

Install Pad Monitor software

1. Insert the 3M RFID Tracking System CD-ROM into the computer where you will install Pad Monitor software.
   - The installation program should start automatically. If not, run Setup.exe.

2. At the Welcome screen, click Next to continue.

3. On the License Agreement screen, review the terms (you can print this as well) and click Yes to accept the terms and conditions. If you click No, the installation process terminates.

4. On the Select Features screen, you need to select the client applications that will be used on this PC. The choices are Pad Monitor to check files in and out and System Manager, which is used to program tags, administer the system and exchange data with the Handheld unit.
   - Do not select either of the bottom two choices, as these are server-side applications.
   - Click Next to continue.
5 On the **Language Selection** screen, select the language that you wish to use with the 3M RFID Tracking System and click **Next**.
- The application will use this language once it is installed. The installation is always displayed in English.

6 On the **SQL Server Machine Name** screen, you need to enter the name of the server that has the RFID database as well as the database name. If the server has an instance name, you should include it as well. Click **Next** to continue.

7 You must now select how Pad Monitor and System Manager will connect to the SQL database. There are 3 options:
- **3M RFID Standard User**: If during the server installation, the setup program will create an account in SQL that will have a password you choose and will only have access rights to the 3M database. This is the recommended connection method.
- **Windows Authentication**: The system will use the logged on user’s Windows account information to connect to the tracking database. If they have been given sufficient rights in SQL server by your IT staff, they will be able to add, modify and delete records in the 3M database.
- **SQL Server Authentication**: You can use a SQL account that you have created and has sufficient rights in SQL to add, modify and delete records in the 3M database.

8 If you would like Pad Monitor software to automatically begin tracking when your computer is started, select (check) the **Begin 3M RFID Tracking Pad Monitor** selection and click **Next** to continue.

9 At the **Choose Destination Location** dialog box, confirm or enter the folder where you will install the software.

- Use the default location if possible or click **Browse** and select a new location. Click **Next** to continue.
10 The **Start Copying Files** screen appears. Verify your selections are correct and click **Next** to being installing the software on your computer.

11 When the software has been installed, you can click **Finish** to complete the installation.

Proceed to **Step 2 – Connect the Tracking Pad to the computer**.

**Step 2 – Connect the Tracking Pad to the computer**

The Tracking Pad hardware connects to your computer's serial or USB port.

- See the *Tracking Pad Owners Manual* for detailed hardware installation procedures.
- Installation should only be performed by qualified IT staff.
Step 3 – Configure the computer's serial or USB port

Before you can use the Tracking Pad hardware, you must select the serial port where your computer's Tracking Pad is connected.

Changing the serial port setting

Once Pad Monitor software is installed, use the Pad Settings dialog box to set the serial port used by the Tracking Pad.

1. From the View menu, click Pad Settings.
   - The Pad Settings dialog box appears.

2. Click the Admin tab.

3. Click Configure.

4. From the Serial Port drop-down list, select the serial port where the Tracking Pad is connected. You can also select Auto-detect and the software will look at all COM ports and find the correct one with the reader.

5. Click OK.
Step 4 – Test Tracking Pad operation

Pad Monitor software includes tag reader diagnostics that provide real-time controls and indicators that allow you to test the operation of the tag reader.

1. From the View menu, click Pad Settings.
2. Click the Admin tab.
3. Click Diagnostics.
   - The Tag Reader Diagnostics dialog box appears.
4. Select the Automatically Detect Tags check box.
5. Place a folder with a programmed tag on the Tracking Pad and make sure that the tag information appears in the Tags Read area at the bottom of dialog box.
6. If the tag is not read, click Test to test the 3M reader and its connections.
   If the reader fails the test, check for the following conditions:
   - The reader is not receiving power.
   - The COM port setting is wrong.
   - The cable (USB or serial) is damaged or not connected to your computer.
   - The serial (or USB) cable is not connected to the reader.
   - The Tracking Pad cable is not connected to the reader.
   - The computer’s COM port is not working properly.
   - There is an internal problem with the reader.

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3-5 Install 3M RFID Handheld Tracker software and hardware

**Step 1 – Install 3M RFID Tracking System software**
For instructions on installing Tracking System software, see [3-3 Install Tracking System software on client workstations](#) on page 21.

**Step 2 – Install the memory-card drive**
The memory-card drive is a USB device. When you connect the memory-card drive to the computer's USB port, Windows should automatically load the drivers and the memory-card drive will appear on the computer's desktop as a removable drive.

**Step 3 – Install 3M RFID Handheld Tracker software on the Tag Programming Workstation**
Install Handheld Tracker software on the workstation where the memory-card drive was installed. This is the workstation used to export/import data to and from the Handheld Tracker.

For detailed software-installation instructions, see the [3M RFID Handheld Tracker User Guide](#).

**Step 4 – Configure System Manager software for use with 3M RFID Handheld Tracker software**
See the [3M RFID Tracking System Manager User Guide](#) for detailed instructions on how to configure and use System Manager software with Handheld Tracker software.
Part 4 – Train Staff

Training can be performed by your 3M Account Representative or internally. At a minimum, there should be a “train the trainer” session where a representative from your organization is trained by 3M.

Training requirements

- Locator software training (all users)
- Pad Monitor software training (Tracking Pad users)
- System Manager software training (system administrators, tag programming and Handheld users)
- Handheld Tracker training (only staff that will use the Handheld Tracker)
Appendix A Install and Configure SQL Server Express Edition 2005

Install and Configure SSEE 2005

Please click on this link to open the instructions:

SSEE 2005 System Installation.doc

Appendix B Install and Configure SQL Server Express Edition 2008

Install and Configure SSEE 2008

Please click on this link to open the instructions:

SSEE 2008 System Installation.doc
NOTES: Administrator rights are required for the following steps.

1. Open Control Panel and navigate to Add or Remove Programs
2. Click on Add/Remove Windows Components
3. Click on Application Server and then click on Details
4. Enable ASP.NET
Enabling ASP.NET Extensions

1. Go to Start – Run and type Inetmgr and click OK.
2. In IIS Manager expand the local computer, and then click Web Service Extensions.
3. In the details pane, select ASP.NET 2.0.50727 under Web Service Extension, and then click Allow.
Appendix D – Setup and configure IIS 7 on Windows Server 2008

Install and configure IIS 7 on Windows Server 2008

NOTE: Administrator rights are required for the following steps.

1. Open Control Panel and click on Program and Features
2. Click on Turn Windows Features on or off.
3. Click on Roles and then click on Web Server (IIS)
4. On the Right panel scroll to Role Services and then click on Add Role Services
5. Enable ASP.NET under Application Development
6. Enable Windows Authentication under Security
7. Enable IIS 6 Management Compatibility
Appendix E – Automating Client Installation

Creating a response file

**NOTE:** Administrator rights are required for the following steps.

With the release of the 3M RFID Tracking System version 3.x, it is now easier to deploy the software to new workstations or to upgrade existing workstations using standard Install Shield response files. This document will outline how to create and use response files for both new software installations as well as how to upgrade existing workstations.

In order to automate the 3M installation / upgrade program so it can be deployed in silent mode (no user input required), you must first run Setup.exe with the `/r` switch from a command prompt to generate a response file, which stores information about the selections and options selected by the user at run time. When the command `Setup.exe /r` is run from a command prompt, it displays all the run-time dialog boxes, and stores the data in a file called `Setup.iss`, created inside the local system's Windows folder. If you want to specify an alternative response file location and name instead of the default, you can use the `/f1` argument. The `/f1` argument allows you to specify where the response file is (or where it should be created) and what its name is. For example: `Setup.exe /r /f1"C:\Temp\RFIDUpgrade.iss"

**How to create a response file for new software installation:**

To create a response file, you must run the Setup.exe command from a command prompt so you can add the `/r` switch and `/f1` switch if you want to specify the location and name of the response file. Then, just follow the installation as you would normally select the options for this specific installation. Start with a PC that you can verify all selections will work once the software is installed.

When creating a response file for a new software installation, you may need to create several response files based on the various configurations of the 3M RFID modules (Pad Monitor and/or System Manager). This way, you can run the appropriate response file for only the modules that a PC needs.

For example: you could create one response file that only installed the Pad Monitor module and connect to the SQL database. You could then create another separate response file would be used to install both pad Monitor and System Manager. You could then run a batch file with the appropriate response file with the Setup.exe command to install the appropriate modules.

**How to create a response file for upgrades:**

Upgrades are somewhat easier as they only require a few selections to upgrade the components already installed on the computer. Just as with a new install, start with a PC that you can verify the upgrade was successful, then use a different PC test the silent install on to confirm the upgrade worked. Since the upgrade is simpler, you should only need one response file for an upgrade, compared to possibly several for a new installation.
Running the Setup program with a response file

Once you have created the response file, you can run `Setup.exe /s` switch that runs the installation in silent mode, using the responses contained in a response (by default it looks for the file called `Setup.iss` in the same directory). To specify an alternative file name or location of the response file, use the `/f1` option to specify where the response file is (or where it should be created) and what its name is, as in `Setup.exe /s /f1"C:\Temp\RFIDUpgrade.iss"`.

Once you know the response file works, you can create a batch file for each response file you wish to use and then have users run that batch file or add it to a user's logon script to deploy it across multiple machines.

NOTE: A silent installation program does not display a dialog if an error occurs. Instead, status information for the silent installation is recorded (by default) in a file called `Setup.log`, created in the same directory as the response file being used.

There is a command line switch, `/f2`, that can be used to specify an alternative log file name. The `/f2` argument allows you to specify an alternative log file location and file name, as in: `Setup.exe /s /f2"C:\Setup.log"`
Known issues and their workarounds

If the Web.config is deleted and a repair is performed:

If the web.config file is deleted then the setup will copy a blank web.config during repair. The user has to manually enter the credentials in the file. This is by design, as the file locator does not have the UI to change the connection settings.

Solution:

Enter the credentials manually as per the following in the web.config file as follows:

```xml
<appSettings>
  <add key="Websitename" value="server=servername; database=DBName; uid=RFID3M_USER; pwd=password;" />
</appSettings>
```

If a new DB is installed with new 3M RFID user password

File locator website will stop working if a new database is installed with update 3M RFID user.

This issue is related with SQL. This will happen only if the 3M RFID user password will be changed during DB install. User has to change manually the password in web.config as there is no separate UI in file locator to modify the connection settings.

Solution:

Edit the web.config file and update the new 3M RFID password as following:

```xml
<appSettings>
  <add key="Websitename" value="server=servername; database=DBName; uid=RFID3M_USER; pwd=password;" />
</appSettings>
```
If a prompt for compatibility comes for Visual Studio (VS) 2005.

A prompt appear showing Compatibility issue for VS if Locator selected for installation. This happens due to AJAX toolkit installation setup, which tries to access the VS 2005 executables.

This is a special issue; it will happen only in Vista/Window Server 2008 if the user has installed VS 2005. This is not a common scenario. The prompt appears due to the some compatibility issues of VS 2005 with windows Vista and WS 2008. This will not cause any functionality issue.

Solution:
The prompt will not come if the user will install VS 2005 SP1 on his machine.

3M RFID user password gets updated during the upgrade from 2.11 to 3.xx.xxx.x

A new 3M RFID user password does not get updated in XML during the upgrade if the database is installed/upgraded along with the System Manager and Pad Monitor.

If a new database is created during upgrade of System Manager and Pad Monitor, the user will need to change the configuration of those components after configuration. This is because those components preserve their settings during upgrade scenario and will keep pointing to the old DB and settings.

Solution:
Open the XML file from the ProgramData folder and manually enter the new password in the FTCommonConfiguration.XML as following:

```xml
<DBConnectionSettings>
    <Password> "Enter the new password here"</Password>
</DBConnectionSettings>
```

The 3M RFID user password does not get updated in the restored database.

Database connection issue using 3M RFID User for a restored database

This is the default behavior of SQL Server user, SQL user needs to be added in respective database to access the db resource.

Solution:
You need to run a SQL Command to solve this issue:

Login to SQL using the sa account or with a Windows Administrator account and run the following code:

```sql
USE [3M_RFID_DB]
EXEC sp_dropuser RFID3M_USER
EXEC sp_adduser RFID3M_USER
EXEC sp_addrolemember 'RFID3M_USER_ROLE','RFID3M_USER'
```
Requesting Service

3M service phone numbers

For all service inquiries, including warranty service, call one of the following numbers and ask for software support.

In the United States
1-800-944-3512
In the United States, you can also send email to:
ft-softwaresupport@mmm.com

In Other Countries
Call your local 3M office.