

Quick Start Guide of RFID Enabling Engine Installation

Product Version: Version 1.0

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Introduction

Purpose of this document

This document will describe the procedures of RFID Enabling Engine installation. The procedures listed below assumed to be viewed and referenced by technical user.

Introduction of RFID Enabling Engine

The RFID Enabling Engine is an application that accelerates the implementation of RFID technology in Logistic Industry. The application acts as the bridge of RFID Middleware / Hardware & End-user Application.

End-user Application



RFID Middleware & RFID

Hardware

Preparing the Installation

The installation of RFID Enabling Engine requires the following software to be installed in the machine:

- Java Development Kit (JDK) 1.5
- MySQL 4.1
- Apache Tomcat 5.5
- RFID Enabling Engine

Installing Java Development Kit (JDK)

1.5

Step 1: Install Java SDK 1.5

- Run and Install jdk-1_5_0_14-windows-i586-p.exe

Step 2: Configure the system path as follow:

- First, right click (My Computer /我的電腦) and select (Properties/内容)
- Select the (Advanced/進階) tab as follow:

System Proper	ties			? 🛛
System Re	store	Automal	ic Updates	Remote
General	Compu	uter Name	Hardware	Advanced
You must be la	ogged on as	s an Administrat	or to make most of	f these changes.
Performance				
Visual effects	, processor	scheduling, me	mory usage, and	virtual memory
			(Settings
User Profiles				
Desktop setti	ngs related	to your logon		
			(Settings
Startup and F	ecovery-			
System startu	ip, system f	ailure, and debu	gging information	
			(Settings
	Er	wironment Varia	bles Erro	r Reporting
		ОК	Cance	Apply

- Click the (Environment variable /環境變數) as follow:

System Proper	ties			? 🔀
System Re:	store	e Automatic Updates		Remote
General	Compu	uter Name	Hardware	Advanced
You must be lo	ogged on as	s an Administra	tor to make most c	of these changes.
Performance				
Visual effects	, processor	scheduling, m	emory usage, and	virtual memory
				Settings
User Profiles				
Desktop setti	ngs related	to your logon		
				Settings
Startup and F	ecovery-			
System startup, system failure, and debugging information				
Settings				
	Er	wironment Vari	ables Err	or Reporting
		ОК	Cance	e Apply

The following window will be popup if success:

Environment Variables	? 🔀
User variables for Admin	
Variable Value	
TEMP C:\Documents and Settings\Adn	hin\Local
TMP C:\Documents and Settings\Adn	nin\Local
New Edit	Delete
System variables	
Variable Value	<u>~</u>
CLASSPATH C:\Program Files\QuickTime\QTS	System(📃
ComSpec C:\WINDOWS\system32\cmd.e>	ke 🛛
NUMBER OF P 1	
OS Windows_NT	×
New Edit	Delete
ОК	Cancel

- Find the (System variable/ 系統變數) call "PATH" in the bottom as follow:

Environment Va	riables 🔹 💽
-User variables fo	r Admin
Variable	Value
TEMO	Value
	C:\Documents and Settings\Admin\Local
11 ⁴ F	C: (Documents and Settings(Adminicocal
	New Edit Delete
System variables	
Variable	Value 🔼
FP_NO_HOST_	C NO
	V 1 Uladama NT
Path	C:\WINDOWS\system32:C:\WINDOWS:
PATHEXT	.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;
	New Edit Delete
	OK Cancel

- Click (Modify / 編輯) and append the location of the "bin" directory where the Java SDK is installed in (Variable Value/變數値) as follow:

System Properties		? ×
System Restore	Automatic Updates Remo	te
Environment Varia	bles 🙎	×
Edit System Var	iable ? 🔀	
Variable name:	Path	
Variable value:	C:\Program Files\Java\idk1.5.0 14\bin;%5	
System variables		
Variable	Value	
FP_NO_HOST_C NUMBER OF P	. NO 1	
OS Dath	Windows_NT	
PATHEXT	.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;	
	New Edit Delete	
	OK Cancel	

- Finally, click (OK/確定).

Step 3: Configure the JAVA_HOME as follow:

- Click (Add/新增) in the bottom as follow:

Env	vironment Varia	bles	?×
ſ	User variables for Ac	Jmin	
	Variable	Value	
	TEMP	C:\Documents and Settings\Admin\Local	
	TMP	C:\Documents and Settings\Admin\Local	
		New Edit Delet	e
ſ	5ystem variables		
	Variable	Value	
	FP_NO_HOST_C	NO .	
	NUMBER_OF_F	1 Windows NT	
	Path	C:\WINDOWS\system32;C:\WINDOWS;	
	PATHEXT	.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;	×
		New Edit Delet	e
		ОК Саг	ncel

- Type "JAVA_HOME" in Variable Name/ 變數名稱
- Type the Java SDK directory location.

System Properties ? 🗙
System Restore Automatic Updates Remote
Environment Variables
New System Variable
Variable name: JAVA_HOME
Variable value: C:\Progrem Files\Deva\juli1.4.0_14
OK Cancel
System variables
Variable Value
CLASSPATH C:\Program Files\QuickTime\QTSystem\
FP_NO_HOST_C NO
OS Windows_NT
New Edit Delete
OK Cancel

- Finally, click (OK/確定) in both window.

Step 4: Restart computer.

- Close all the application and restart the computer.

Installing MySQL 4.1

Step 1: Run mysql-essential-4.1.22-win32.msi **Step 2:** In the "Setup Type" screen, choose "Complete".

🛃 MySQL Server 4.1 - Setup Wizard
Setup Type Choose the setup type that best suits your needs.
Please select a setup type.
Common program features will be installed. Recommended for general use.
Choose which program features you want installed and where they will be installed. Recommended for advanced users.
< <u>B</u> ack <u>N</u> ext > Cancel

Step 3: In the "Wizard Completed" screen, check "Configure the MySQL Server now" and click "Finish" button.



MySQL Server Instance Configuration Wizard			
	Welcome to the MySQL Server Instance Configuration Wizard 1.0.8		
	MySQL Server 4.1 server instance. To Continue, click Next.		
E			
MySQL	Next > Cancel		

Step 4: First choose "Detailed Configuration" for the configuration type.

MySQL Server Instance Configuration Wizard	
MySQL Server Instance Configuration Configure the MySQL Server 4.1 server instance.	
Operation Configuration Choose this configuration type to create the optimal server setup for this machine.	
Standard Configuration Use this only on machines that do not already have a MySQL server installation. This will use a general purpose configuration for the server that can be tuned manually.	
< Back Next > Cancel	

Step 5: Then choose "Server Machine" for the server type.



Step 6: Choose "Multifunctional Database" for the database usage.

MySQL Server Instance Configuration Wizard	×
MySQL Server Instance Configuration Configure the MySQL Server 4.1 server instance.	
Please select the database usage.	
🔿 Transactional Database Only	
Optimized for application servers and transactional web applications. This will make InnoDB the main storage engine. Note that the MyISAM engine can still be used.	
🔘 Non-Transactional Database Only	
Suited for simple web applications, monitoring or logging applications as well as analysis programs. Only the non-transactional MyISAM storage engine will be activated.	
< Back Next > Cancel	

JUD 7. Osing the default setting for the innobb rabiespace settings

MySQL Server Instance Configuration Wizard	
MySQL Server Instance Configuration Configure the MySQL Server 4.1 server instance.	
Please select the drive for the InnoDB datafile, if you do not want to use the default se InnoDB Tablespace Settings Please choose the drive and directory where the InnoDB tablespace should be placed. C: Installation Path Interplace Interplace Interplace Installation Path Interplace Interpla	ettings.
<pre></pre>	ncel

Step 8: Choose "Decision Support (DSS)/OLAP" for the approximate number of concurrent connections to the server.

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration Configure the MySQL Server 4.1 server instance.
Please set the approximate number of concurrenct connections to the server.
Manual Setting Please enter the approximate number of concurrent connections. Concurrent connections: 15 < Back

Step 9: Using the default setting for the networking options.

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration Image: Configure the MySQL Server 4.1 server instance. Image: Configure the MySQL Server 4.1 server instance.
Please set the networking options.
<pre></pre>

Step 10: Choose "Best Support for Multilingualism" for the default character set.

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration Configure the MySQL Server 4.1 server instance.
Please select the default character set.
Makes Latin1 the default charset. This character set is suited for English and other West European languages.
Best Support For Multilingualism
Make UTF8 the default character set. This is the recommended character set for storing text in many different languages.
O Manual Selected Default Character Set / Collation
Please specify the character set to use.
Character Set: latin1 💌
<pre></pre>

Step 11: Using the default setting for the Windows options.

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration Image: Configure the MySQL Server 4.1 server instance. Image: Configure the MySQL Server 4.1 server 4.1 server 4.1 server 4.1 server 4.1 server 4.1 serve
Please set the Windows options.
This is the recommended way to run the MySQL server on Windows.
Service Name: MySQL Image: Image: Service Name Image:
Include Bin Directory in Windows PATH
Check this option to include the directory containing the server / client executables in the Windows PATH variable so they can be called from the command line.
< Back Next > Cancel

Step 12: Enter the root password, "PassWord" for the security options.

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration Configure the MySQL Server 4.1 server instance.
Please set the security options.
Modify Security Settings PassWord
New root password: ******** Enter the root password.
Confirm:
Enable root access from remote machines
Create An Anonymous Account This option will create an anonymous account on this server. Please note that this can lead to an insecure system.
< Back Next > Cancel

Step 13: Run and Install mysql-gui-tools-5.0-r12-win32.msi

Installing Apache Tomcat 5.5

Step 1: Run apache-tomcat-5.5.25.exe

Step 2: Install Tomcat to

C:\Program Files\Apache Software Foundation\Tomcat 5.5 and do not set any password

🗮 Apache Tomcat Setup	
Choose Install Location Choose the folder in which to install Apache Tomcat.	
Setup will install Apache Tomcat in the following folder. To install in a different fold Browse and select another folder. Click Next to continue.	er, click
Destination Folder C:\Program Files\Apache Software Foundation\Tomcat 5.5 Brow	se
Space required: 11.6MB Space available: 78.8GB	
Nullsoft Install System v2.0	Cancel

Configure Apache Tomcat 5.5

Step 1: Run apache-tomcat-5.5.25.exe

Step 2: In Window, press 開始->程式集->Apache Tomcat 5.5->Configure Tomcat

In General tab, Change the Startup Type to Automatic

🍗 Apache Tomc	at Properties	×
General Log On	Logging Java Startup Shutdown	
Service Name:	Tomcat5	
Display <u>n</u> ame:	Apache Tomcat	
Description:	Apache Tomcat 5.5.25 Server - http://tomcat.apache.c	
Pat <u>h</u> to executable:		
"D:\Sedna\Tomca	t 5.5\bin\tomcat5.exe" //RS//Tomcat5	
Startup typ <u>e</u> : 🤇	Automatic	\geq
Service Status:	Started	
	确定 取消 应用 ④	

Step 3: Finally, Press (Confirm/確定).

Installing RFID Enabling Engine

Step 1: Put RFIDEngine.war into C:\Program Files\Apache Software Foundation\Tomcat 5.5\webapps\

Step 2: Copy the folder REE to C:\

Step 3: Run MySQL Administrator

Step 4: Enter "localhost" for the Server Host, port "3306" and "root" for the Username and "PassWord" for the password and Click the button "OK".

MySQL Ad	ministrator 1.2	2.12	
My <mark>squ</mark> Admin	istrator		\bigcirc
Conne	ect to MySQL Serv	ver Instance	
Sto	ored <u>C</u> onnection:		✓ …
	Server <u>H</u> ost:	localhost	P <u>o</u> rt: 3306
	<u>U</u> sername:	root	
	<u>P</u> assword:		
<u>D</u> etai	ils >>		ar Cancel

Step 5: Select "Restore	e" and click	"Open Backup	File"
-------------------------	--------------	--------------	-------

🖲 MySQL Administrator - Connec	on: root@localhost:3306
<u>File E</u> dit <u>V</u> iew <u>T</u> ools <u>W</u> indow <u>M</u>	SQL Enterprise Help
Server Information	General Restore Content
Service Control	Restore Options
Startup Variables	Please select how the backup should be restored.
User Administration	- General
Server Connections	File to restore: Name of the backup file that should
W Health	De restored.
Server Logs	Backup Type: SQL Files Type of backup file.
Heplication Status	Target Schema:
Hackup	Original schema
Hestore	🔿 Another schema
	Define
	L Ignore Errors
Ŷ.	Create database(s) if they don't exist
	Character Set
	File Charset: ut/8 If you are importing a SQL file that has not been created with MySQL Administrator, you have to choose the correct character
	set of the file. If you have created the backup with MySQL Administrator the file was written in UTE-8
	Dpen Backup File Start Restore

Step 6: Choose the file, "RFIDEngine.sql"

Step 7: Click "Start Restore"

MySQL Administrator - Connec	tion: root@localhost:3306 📃 🗖 🔀
<u>File E</u> dit <u>V</u> iew <u>T</u> ools <u>W</u> indow <u>M</u>	USQL Enterprise Help
Server Information	General Restore Content
 Startup Variables Startup Variables User Administration Server Connections Health Server Logs Replication Status Backup Restore Catalogs 	Festore Options Festore Options General File to restore: C:\Documents and Settings\k\workspace\DpenSourceREEDox Backup Type: SQL Files Target Schema: Option
	Options Options Ignore Errors Create database(s) if they don't exist
	Character Set File Charset utl8 If you are importing a SQL file that has not been created with MySQL Administrator, you have to choose the correct character set of the file. If you have created the backup with MySQL Administrator the file was written in UTF-8.
	Dpen Backup File Stat Restore

Testing Installation of RFID Enabling

Engine

After the systems are installed and configured into the computers, the following scenario would test the successful installation of RFID Enabling Engine.

- 1. Restart the Apache Tomcat Services (Stop Apache Tomcat Services → Start Apache Tomcat Services)
- 2. Enter the following URL in a web browser: http://localhost:8080/RFIDEngine
- 3. The following screen should be shown.



4. User can login with username 'tomcat' and password 'tomcat'