IT-632-Software Engineering

Cafeteria Management System (Cashless Canteen)

Deployment Plan V1.1

Team-2

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Overview

This is the Deployment Plan of the Cashless Cafeteria System Project. It consists of instructions for deploying the system on server and making necessary changes on client side to make the system up and running.

Target Audience:

Software Development Team
Clients

Document Revision History:

Version	Primary Author(s)	Description	Reviewer(s)	Date
1.0	Aakash Thakkar, Jay Parikh	Deployment Plan V1.0	Utkarsh Patel	19th November, 2013

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1. Introduction

1.1 Purpose

This document will guide the user/client to install and deploy application on server and the necessary changes to make on client's device to up and run the system.

1.2 Scope

The scope of this document is to describe the installation and deployment process to the user/client. It might be referred by the network/system administrator for specific application associated requirements.

2. Deployment on Server

MySQL 5.0 or greater (Download link: http://dev.mysql.com/downloads/mysql/5.0.html)
phpMyAdmin 3.X (Download link: http://phpmyadmin.net)
jdk1.7.0 32 bit bundled to gather with project which includes RXTXComm.jar, win32COMM.dll.

Following are standard instructions used for deploying an application on server:

1. tar up your entire web application directory - tar -cvzf myApp.tar.gz myApp/
2. un-tar the zipped-up files: tar -xvzf myApp.tar.gz
3. Using phpMyAdmin, import your copy of the database file.
4. Right Click the Project in Eclipse / Netbeans.
5. Exporting the project into a .war file.
6. Move the created WAR file in to the tomcat deploy folder (usually web app folder).
7. Copy it into TOMCAT_HOME/webapps of tomcat server.
8. Run tomcat.

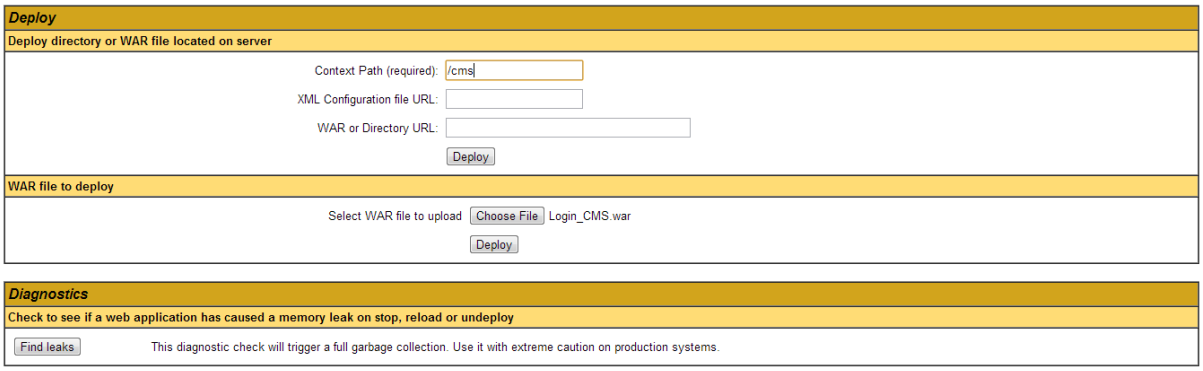
Using the Tomcat Web Application Manager

Open a browser and connect to http://localhost:8080/Login_CMS/. Provide the login/password of Tomcat's admin user. If you don't have one, check Tomcat's documentation and make sure you have the manager role and an admin user defined in `CATALINA_HOME/conf/tomcat-users.xml` as follows:

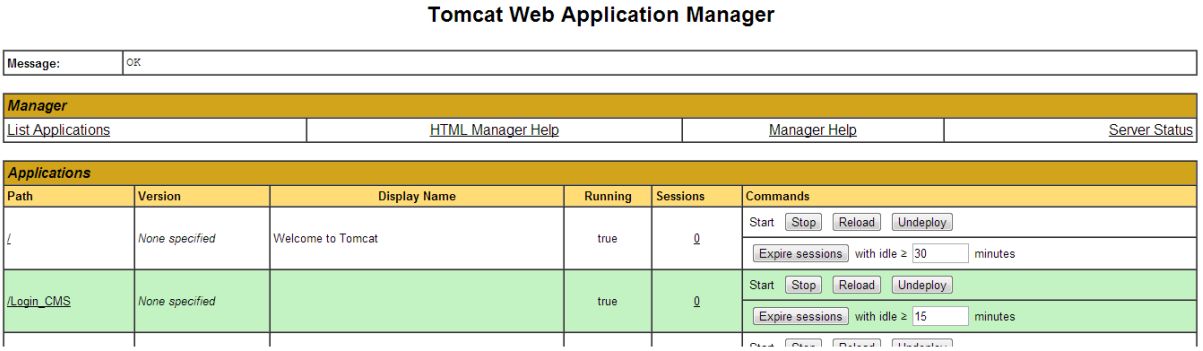
```
<role rolename="manager"/>

<user username="admin" password="password" roles="manager"/>
```

Leave the "XML Configuration file URL" filed blank.
Locate your WAR file and enter its absolute name (e.g., /absolute/path/filename-war.war) in the "WAR or Directory URL" field.

The section should look like this:



Click the "Deploy" button. The page will reload. At the top of the page, check that the message is "OK - Deployed application at context path /myapp".



3. Deployment on cafeteria systems

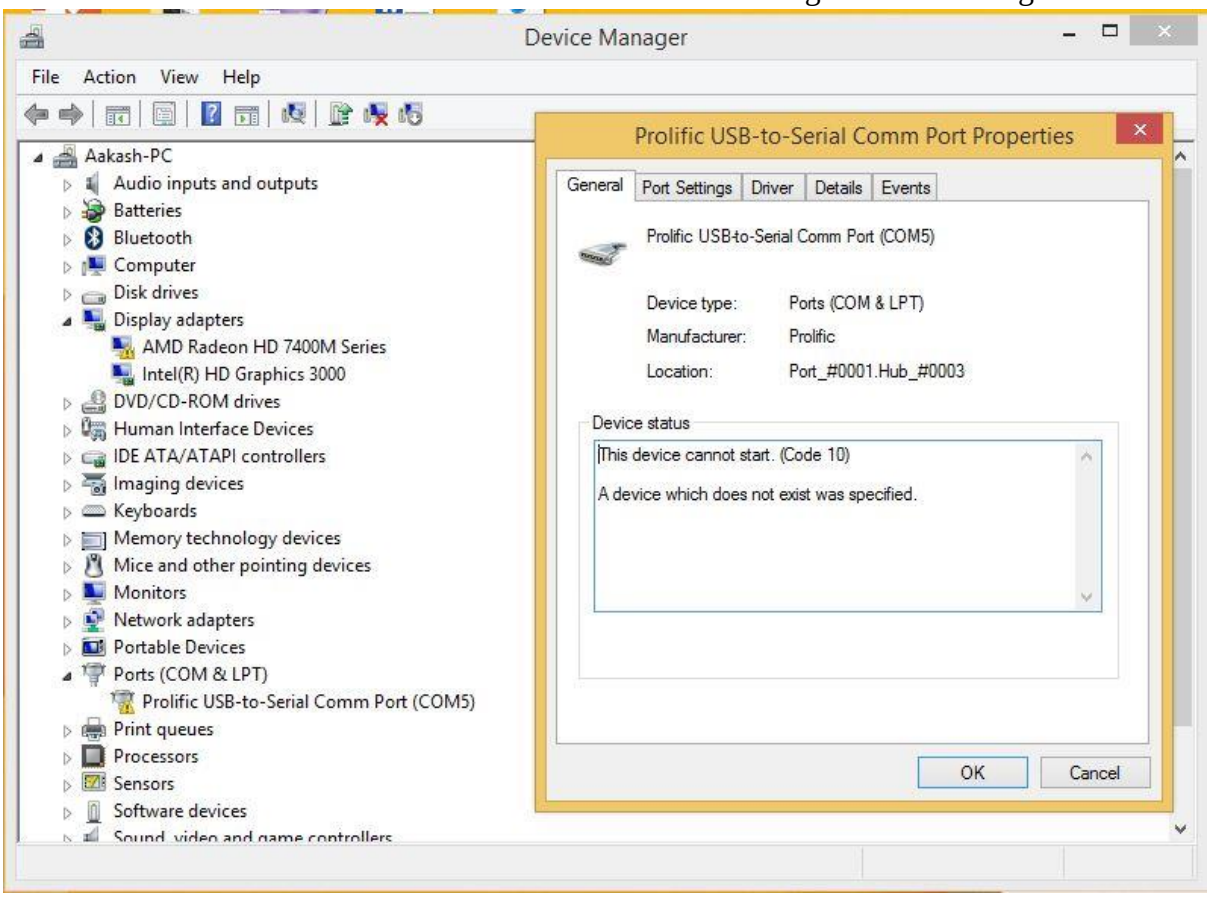
There are few steps which have to be finished to configure a canteen PC which can support the RFID Module

Following are the phases which needs to be completed one by one.

1. Installation of the RFID driver
2. Making changes in the JDK

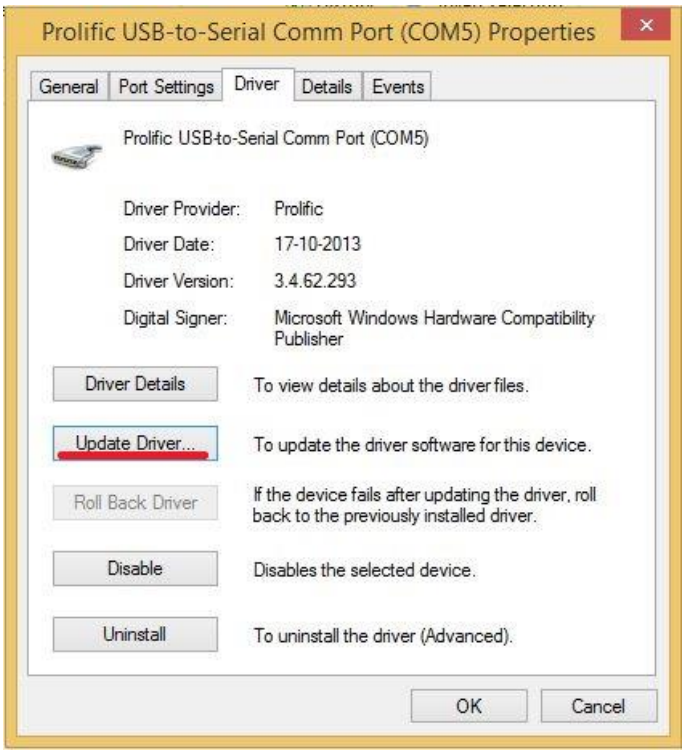
Phase 1: Installation of the RFID driver

1. First of all we will connect the RFID module with a PC running Windows 7 or greater

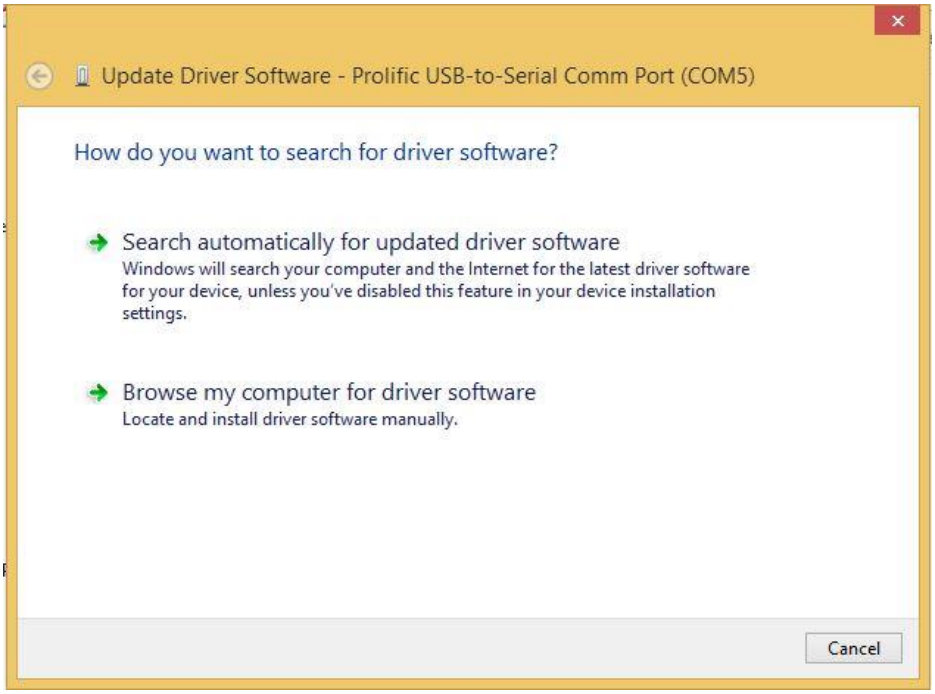


The situation in the device manager will be like the above screenshot. The RFID module which we have used is not Plug-and-Play. Hence we will require to install drivers manually.

2. Select the Driver tab from the properties of the uninstalled device from the device manager and click on “Update Driver”

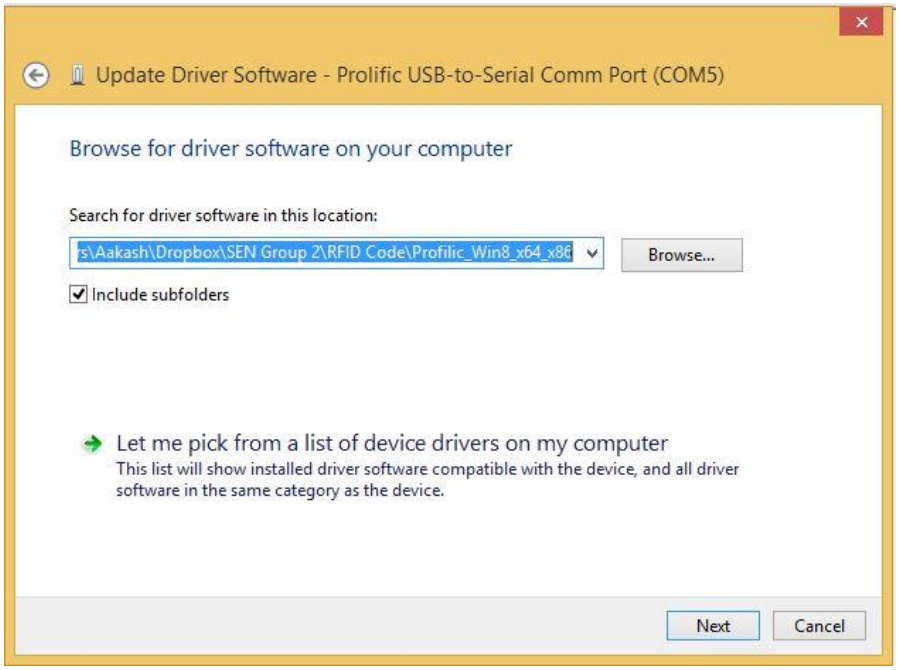


3. Now will select the option “Browse my computer for driver software”

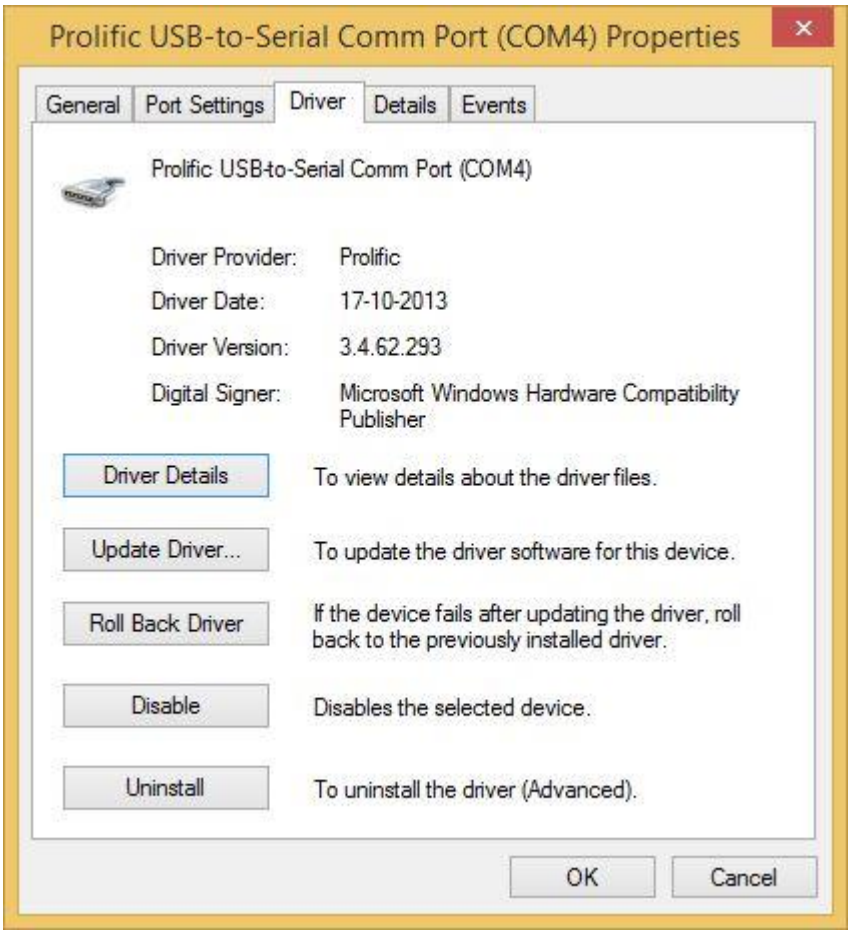


4. The driver has been provided with the packages for installation in a folder named “Profilic_Win8_x64_x86”.

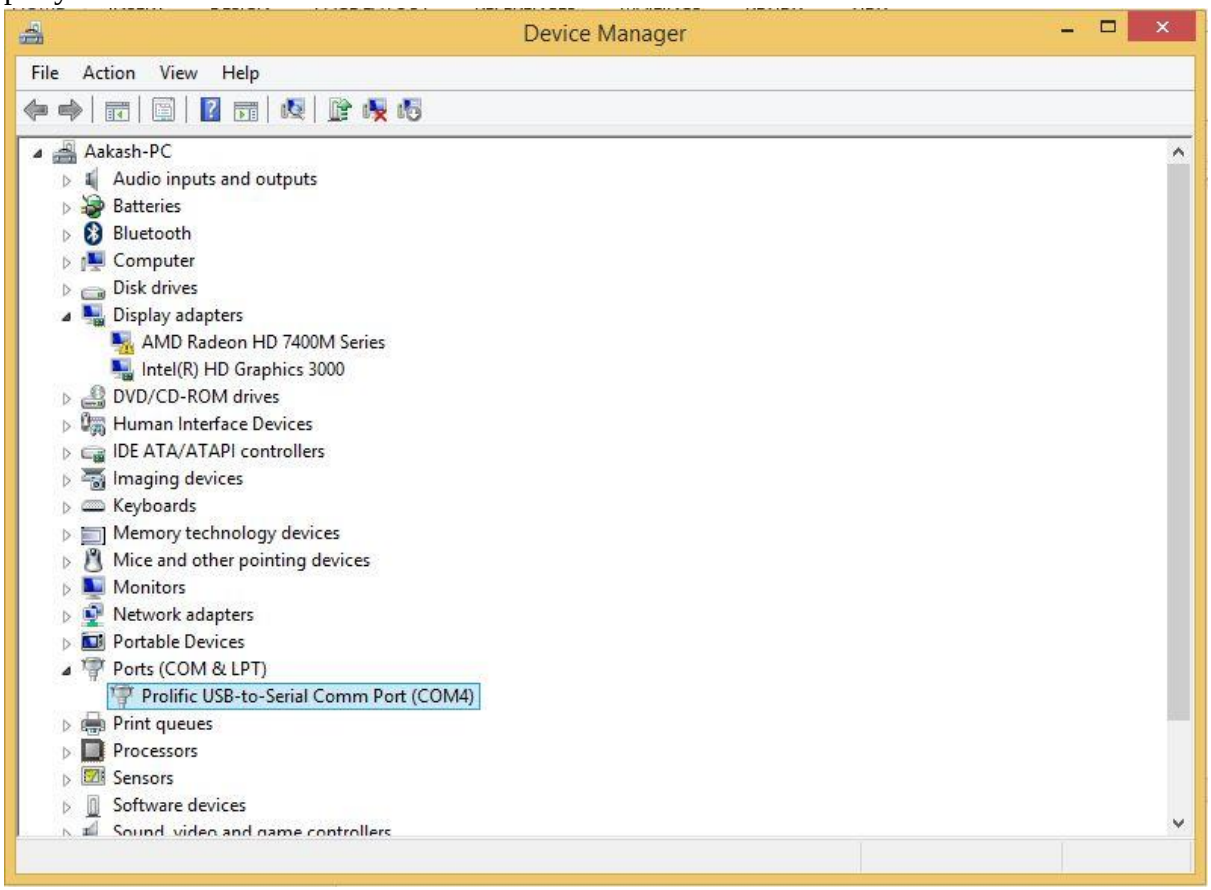
5. Browse to the location where the driver directory is located. In my case it is inside "C:\Users\Aakash\Dropbox\SEN Group 2\RFID Code"



6. In case if it still shows that the device is not working properly, uninstall the driver and let it install again using plug-and-play, now go to the device properties -> driver tab and select rollback driver.



7. The drive is now in running state. The above problem of roll backing the driver, is because the RFID module which we use didn't had any drivers, and hence we use 3rd party drivers.



Phase 2: Making changes in the JDK

- We have prepared a readymade JDK with all the changes done, but if in any case that doesn't work, these are the changes which have to be made.
- The reason behind making changes in the JDK is to install the libraries and the jar files which will allow the cafeteria computers to provide access of the ports to the java applet which will run in the background which will than enforce the payment procedure.
- Also, we have to make sure that we are using a 32-bit JDK, as the libraries which enforces the RFID system only run on 32-bit JDK.
- The Installation folder contains few files which needs to be copied into your ongoing JDK. Also, it is highly recommended to use the Java version of 1.7 because using the previous versions might not allow the applet to run on the client computer.
- Following are the changes to be made into the JDK folder
  1. Place comm.jar file in Program Files(x86)\jdk1.7\jre\lib\ext
  2. Place win32com.dll in Program Files(x86)\jdk1.7\bin
  3. Place javax.comm.properties in Program Files(x86)\jdk1.7\jre\lib
  4. Place both the rxtx dll's in Program Files(x86)\jdk1.7\jre\bin

- This will make the JDK allow the applet to run on the client machine, allowing the website to receive the value of the card tapped on the RFID module.

Phase 3: Installing and updating the JRE

- In this case, it is necessary to install the latest JRE to run the applet which takes in the value of the RFID tag from the client machine.
- If not latest, but should be minimum of 1.7
- Create an Environment Variable in system:
  JAVA_HOME
  C:\Program Files (x86)\Java\jdk1.7.0\jre\bin;C:\Program Files (x86)\Java\jdk1.7.0\jre\lib\ext;C:\Program Files (x86)\Java\jdk1.7.0\jre\lib