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INSTALLATION OF FIX and CTCL components on IML

Note:

A. Fix Engine and CTCL components should be run on the IML Server to connect to the FIX API.

B. PRE REQUISITIES FOR INSTALLATION -

a. IML SETUP
b. MS SQL 2005
c. JDK 1.6
d. Machine should have D: drives
e. Windows Operating System
f. System Configuration will be same as the IML Server Configuration

FIX/CTCL Installation Steps –

1. Folders and Files to be downloaded from the **boltntsbt** folders are-

    a. **FIX API** - FIX Connect.pdf

    b. **FIX Components (FIX.zip)** – This will contain the following folders and files -

        i. Projects.zip

        ii. Installation Manual for IML.pdf

        iii. Installation Manual for DIML.pdf

    c. **jdk1.6.0_10.exe** (this can also be downloaded from the http://java.sun.com/ website)

2. Double click on the **jdk1.6.0_10.exe** to be installed on the machine.

3. **Set the Environment Variable "PATH" –**
   Please follow the following steps to add the Environment Variable –

    i. Right-click on the icon of **My Computer** on desktop & click on Properties from the menu options. It will open up the **Systems Properties** window.

    OR

    ii. Select **Start -> Settings -> Control Panel** to open up Control Panel. Select System from Control Panel to open up the **Systems Properties** window

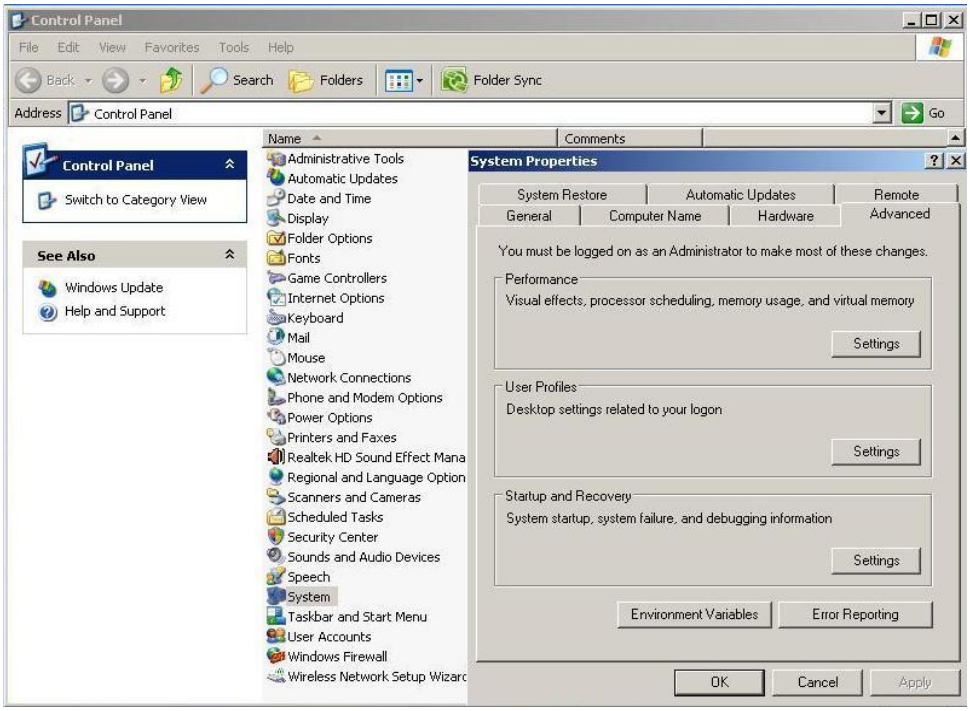
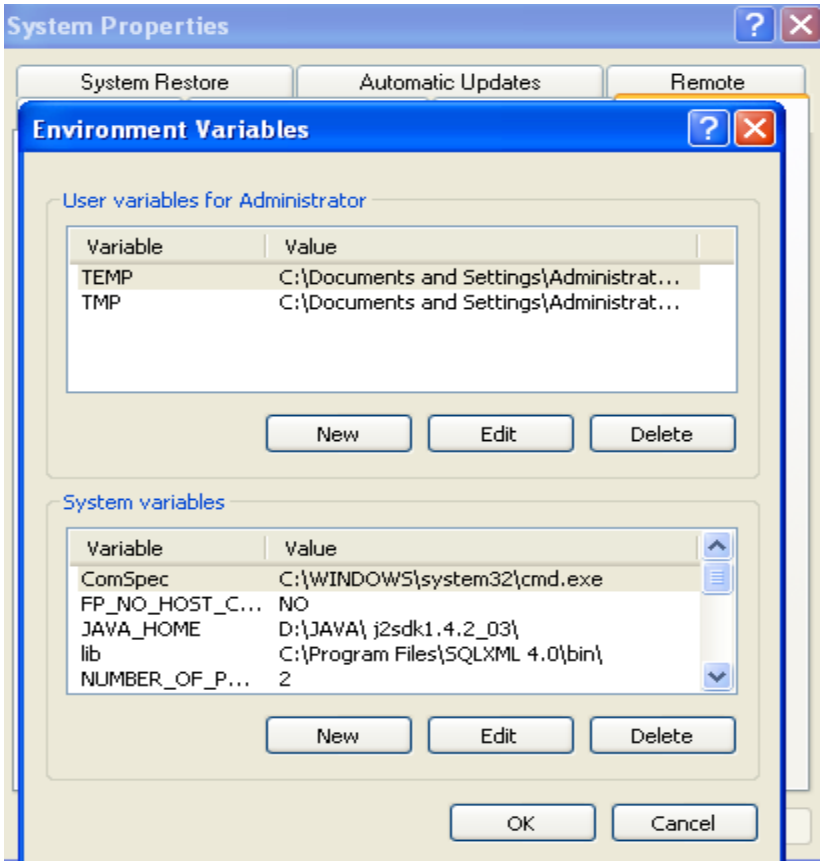


Fig – System Properties Window

iii. Select **Advanced** tab from **Systems Properties** window & click on the **Environmental Variables** button that's at the bottom of the window to open up the respective pop-up window

iv. In the **Environmental Variables** window you will be able to see 2 types of variables that can be defined i.e. **User Variables** & **System Variables**



v. We are creating System Environmental Variables so click on the **New** button from the **System Variables** group. Give variable name as **JAVA_HOME** and value as **C:\Program Files\Java\jdk1.6.0_10**

vi. Now, we need to edit an existing variable i.e. PATH. So, select **PATH** variable from the **System Variables** listing & click on the **Edit** button. It will open up the window asking for Variable Name & Variable Value settings.

vii. If it already has some value for jdk, we need to over-ride it with the new value so we have to add the new value along with a semicolon at the start of the value as shown in the figure below

Variable Name = **PATH**
New Variable Value = **C:\Program Files\Java\jdk1.6.0_10\bin**

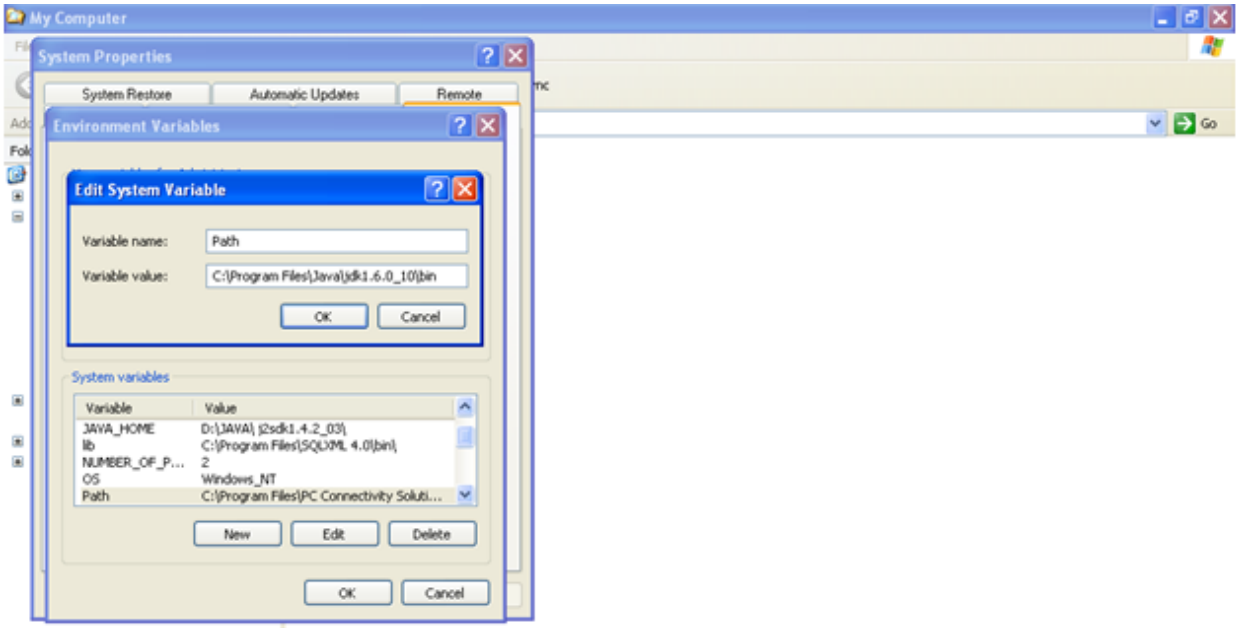


Fig. – Setting Environment Variable

4. Unzip **PROJECTS.zip** folder to **D:** drive of the machine

5. **CTCL Configuration**

Go to D:\PROJECTS\IML CTCL\ctcl.conf.
Open the file in the Notepad or Editplus.

The following parameters need to be set

iml_server=<IP of the machine where IML is running>
iml_server=<Port where IML listens>
rms_server_ip=<IP of the machine where fix engine resides>
rms_requests_port=<Port where ctcl listens> (can use default value)
rms_responses_port=<Port where fix engine listens>(can use default value)
member_id=<Broker Id>
trader_id1=<trader id>
password1=<password for the trader id>

Note : Whenever the Password of IML is changed, it needs to be changed in this file in the parameter ***password1***

6. FIX Engine Configuration

- Go to

  D:\PROJECTS\LDBSource\StocksLDB\properties\com\enext\stocks\stocks.properties

  Set the following parameter

  BSECMCONNECTORS = <IP of the machine where ctcl component resides> : <Port where ctcl component listens>:
  < BrokerId>|<TraderId>

  ACCEPTORBSECMCONNECTORS= <IP of the machine where fix engine resides> : <Port where fix engine listens> :< BrokerId>|<TraderId>

  Example:

  BSECMCONNECTORS = 127.0.0.1:5006:7529|205

  ACCEPTORBSECMCONNECTORS=10.228.23.166:9882:7529|205

- Install MSSQL Database server 2005 or above

- Create a database with name ***bsecmacceptor***

- Run the script ***D:\PROJECTS\tools\runfix_bsecm_db.sql*** in the above database

- *Go to*
  D:\PROJECTS\LDB Source\StocksLDB\properties\com\enext\stocks\acceptor_bsecm.cfg

  Set the following parameters

  SenderCompID= Exchange_Segment
  TargetCompID= BrokerId_TraderId
  JdbcURL=jdbc:jtds:sqlserver://<Database Server IP>:<Database Server Port>/<Database Name>
  JdbcUser=<db user id>
  JdbcPassword=<db user password>

  Example :

  SenderCompID= BSE_CM
  TargetCompID= 7529_202
  JdbcURL=jdbc:jtds:sqlserver://10.228.23.166:1433/bsecmacceptor
  JdbcUser=sa
  JdbcPassword=ms

7. Start the CTCL

a. Go to the folder **D:\PROJECTS\LDB Source\Stocks LDB\run**

b. Double click on short cut **Shortcut to BSE_CM.exe**

c. This will open the BSE CM CTCL

8. Start the FIX IML CTCL

a. Go to the folder **D:\PROJECTS\LDB Source\Stocks LDB\run**

b. Double click **acceptor_bsecm.bat.**

c. This will start the FIX IML CTCL