# Learning Hyperion HFM Rules

# Lab Guide Part III

This is another document from "Learn Hyperion Financial Management Rules beginner's Guide series". The documents briefs about writing financial ratio analysis formulas using HFM Rules. We are committed to provide the best learning material and training on Hyperion and OBIEE product suite. Join our professional training program to learn from industry experts.

## History:

| Version | Description Change | Author | Publish Date |
|---------|--------------------|--------|--------------|
| 0.1 | Initial Draft | Mitesh Agrawal | 13th Apr-2011 |
| 0.1 | 1st Review | Amit Sharma | 13th-Apr-2011 |

# Example#1 Prepare Test Sheet for Accounts Payable Turnover Ratio Calculation

## Accounts Payable Turnover Ratio Definition-

The *Accounts Payable Turnover Ratio* shows the number of times that accounts payable are paid throughout the year.

## Formula to Calculate Accounts Payable Turnover Ratio-

**Accounts Payable Turnover Ratio = Purchases / Accounts Payable**

## HFM Rule script-

Sub Calculate( )

Dim vIsICP

vIsICP=HS.Entity.IsICP("California")

    If vIsICP = True Then

        HS.Exp "A#Accounts Payable Turnover Ratio = (A#Purchases / A#Accounts Payable)"

    End If
End Sub

## Function-

Here we are using **IsICP Function,** which determine if the current  Account or Entity Dimension member or a specified account or entity member is an Intercompany partner(ICP).

### Syntax of IsICP Function-

Hs.Entity.IsICP(entity)

We need to open MS-Excel to prepare test sheet  for calculation-
The below screen shows the requirement which you want to perform (Calculate Accounts Payable Turnover Ratio ) in Hyperion Financial Management through HFM Rule Script.

| Accounts Payable Turnover Ratio | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Account** | **Year** | **Period** | **View** | **Entity** | **Value** | **ICP** | **Custom1** | **Custom2** | **Custom3** | **Custom4** | **Actual** |
| Accounts Payable Turnover Ratio | 2004 | January | Periodic | NewYork | USD | California | Golfballs | Customer2 | None | Increases | (5000/100)=50 |
| Purchases | 2004 | January | Periodic | NewYork | USD | California | Golfballs | Customer2 | None | Increases | 5000 |
| Accounts Payable | 2004 | January | Periodic | NewYork | USD | California | Golfballs | Customer2 | None | Increases | 100 |

## Purpose of creating HFM Rule Script–

Hyperion Financial Management Rule provide powerful, customized calculations. We use rules to perform calculations that we can not define through parent-child relationships in the dimension hierarchy.

## Steps to create HFM Rule Script-

**Go to Start→All Programs→Oracle EPM System→Financial Management→Rule Editor** then Rule Editor window will appear.

**For Example**- We want to create a rule script to calculate the value of **Accounts Payable Turnover Ratio**, just write **Rule Script** in **Rule Editor** window ,as shown in below screen then go to **File→Save** it.
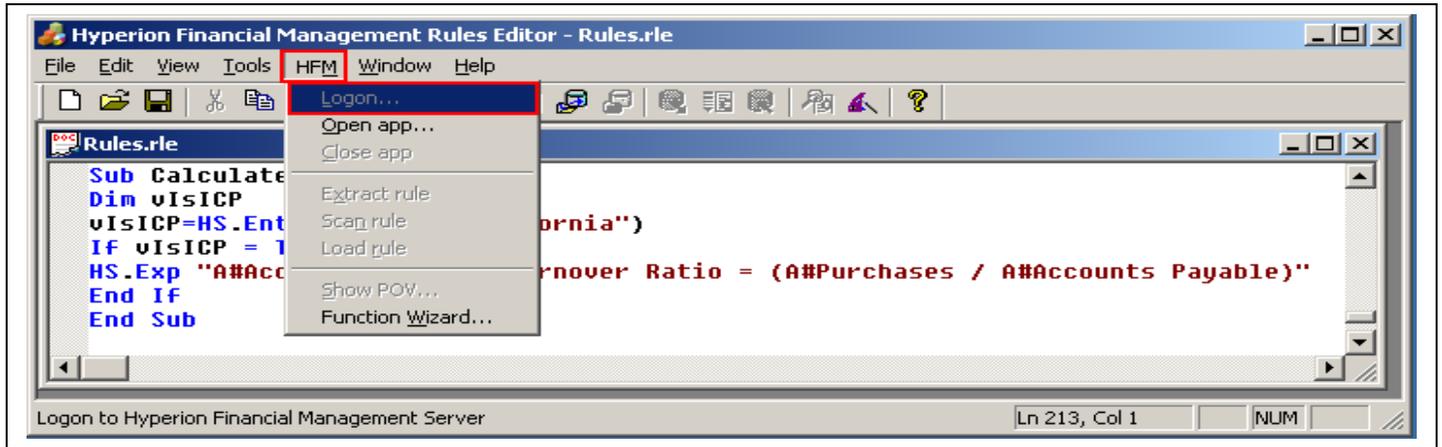
```
Sub Calculate()
Dim vIsICP
vIsICP=HS.Entity.IsICP("California")
If vIsICP = True Then
HS.Exp "A#Accounts Payable Turnover Ratio = (A#Purchases / A#Accounts Payable)"
End If
End Sub
```
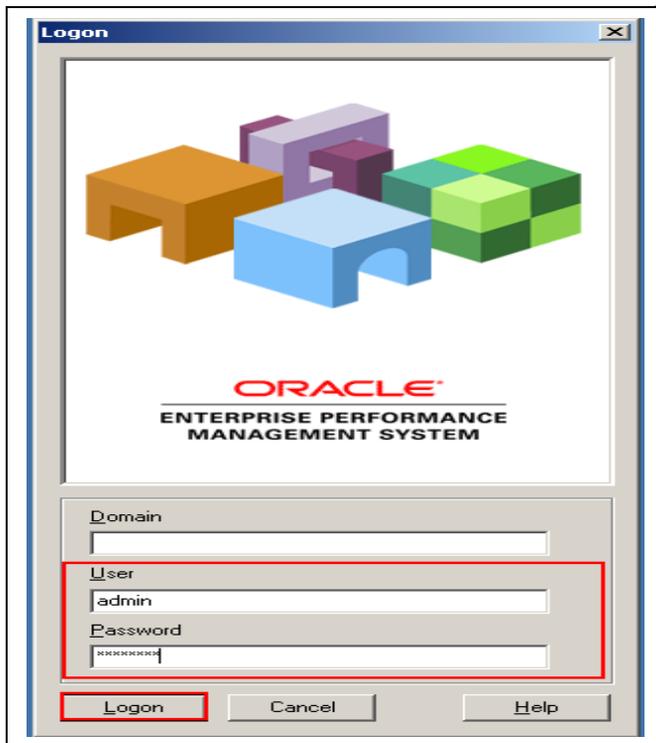
**Steps to Validate, Load Rule Script and Check Output is correct –**These are steps to execute calculation which comprise validating and checking of Rule Script.
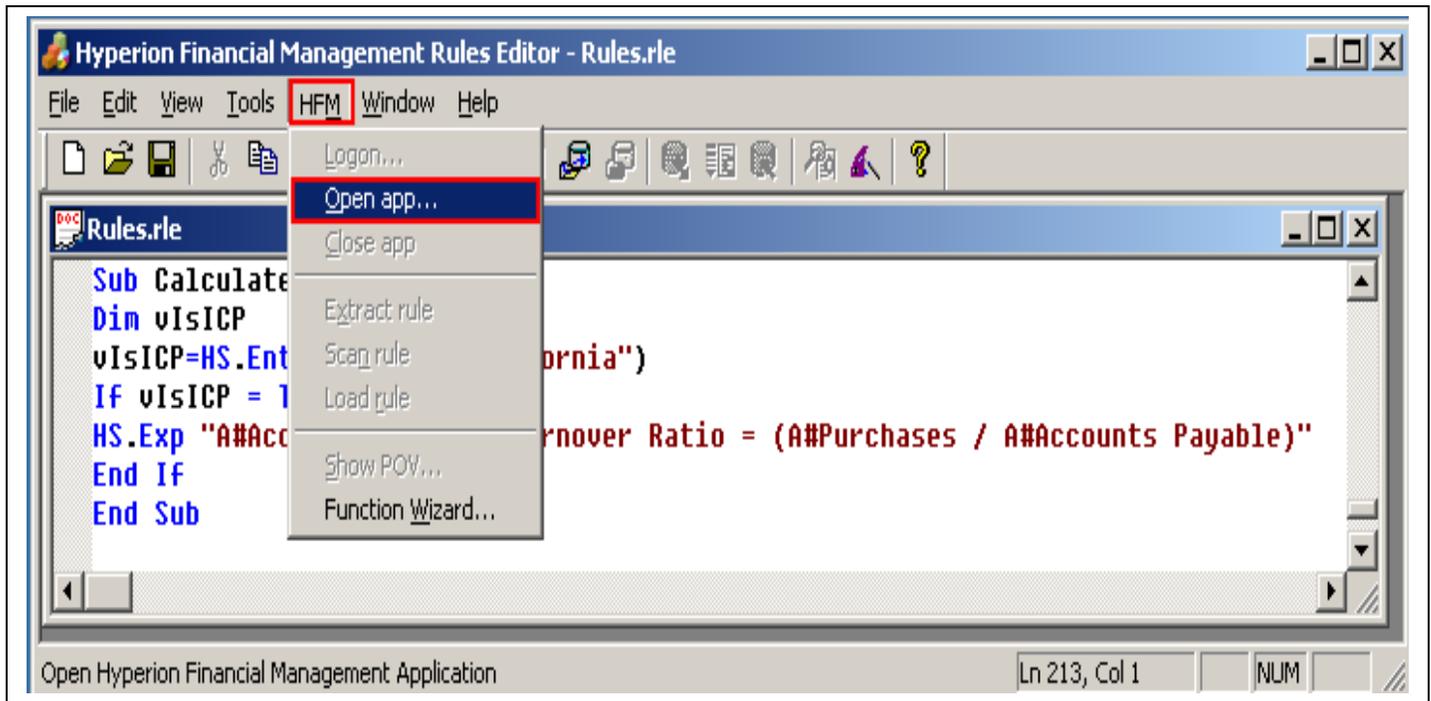
**Validate Rule Script** –

1.Tool bar is provided in **Rule Editor** window . Click on **HFM→Logon** button as mentioned in red box.
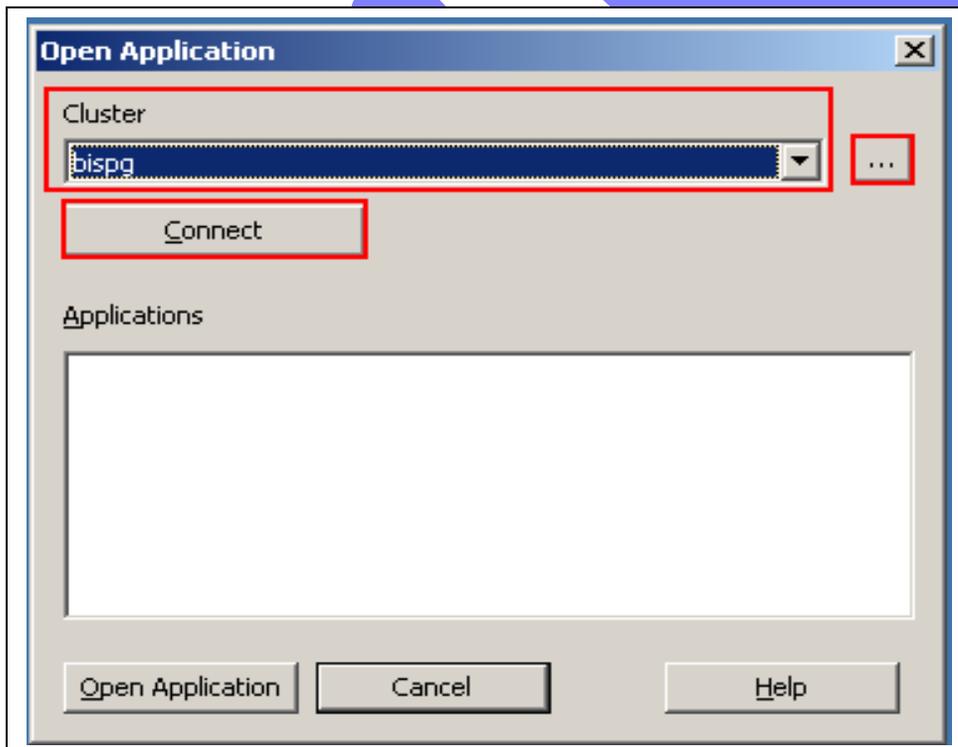
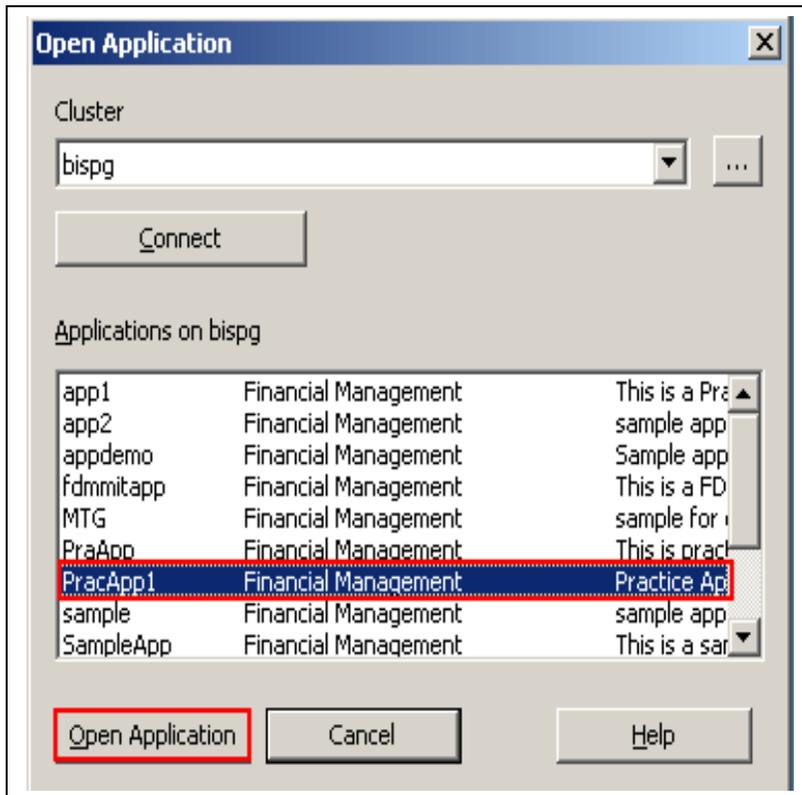2. Specify **user name** and **password** and click on **Logon.**



1. Click on **HFM➔Open Application** button as mentioned in red box.

4. Specify **cluster name** ( which is your server name or Full computer name) from drop down list or you can specify it by browse button and click on **connect.**
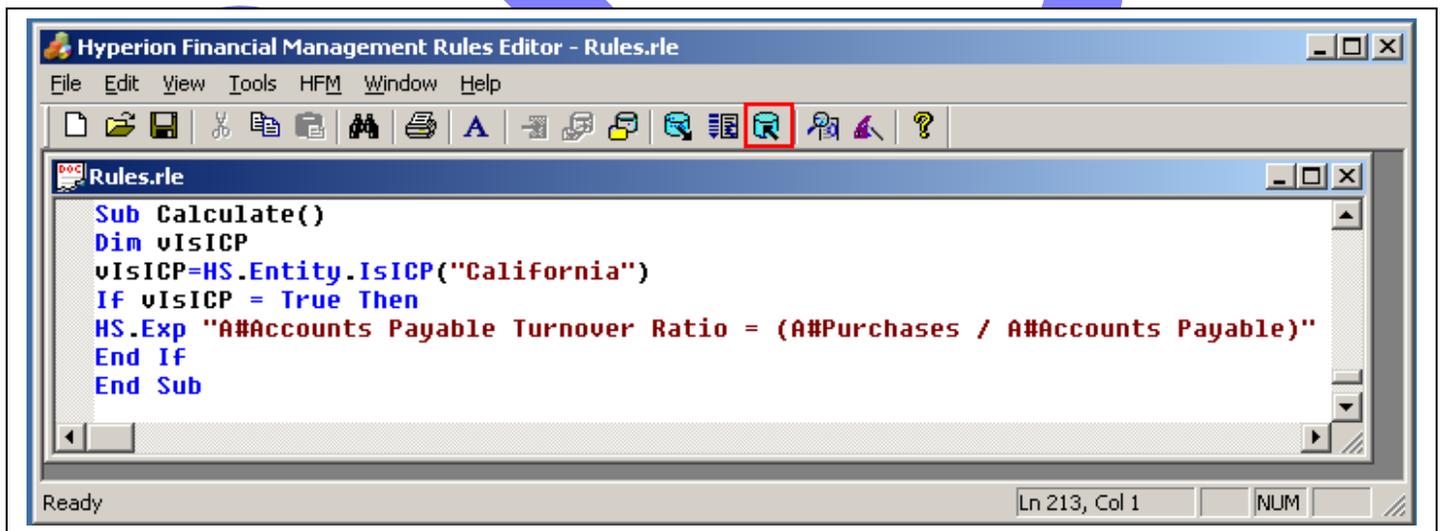


5. After click on connect list of **HFM application**s will be appear, which you have created previously, select one application and press **Open Application**.
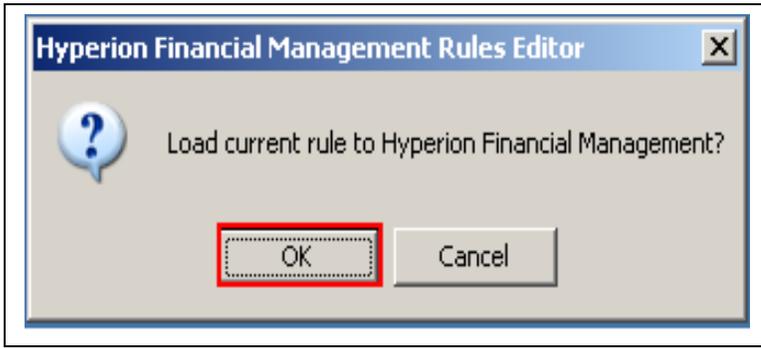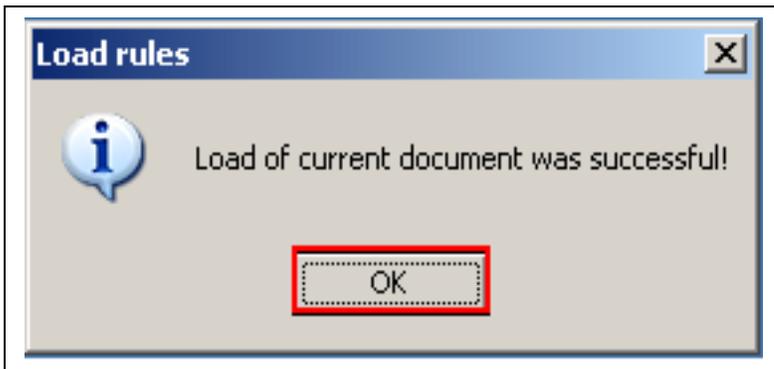
**Load Rule Script** –

1.After validating it next step is to **Load Rule Script** to Hyperion Financial Management . There is **Load Rule script** button in tool bar where we can load our rule script.



2. After click on **Load Rule script** button 'Hyperion Financial Management Rules Editor' window will appear and click on **Ok.**

**Hyperion Financial Management Rules Editor**

? Load current rule to Hyperion Financial Management?
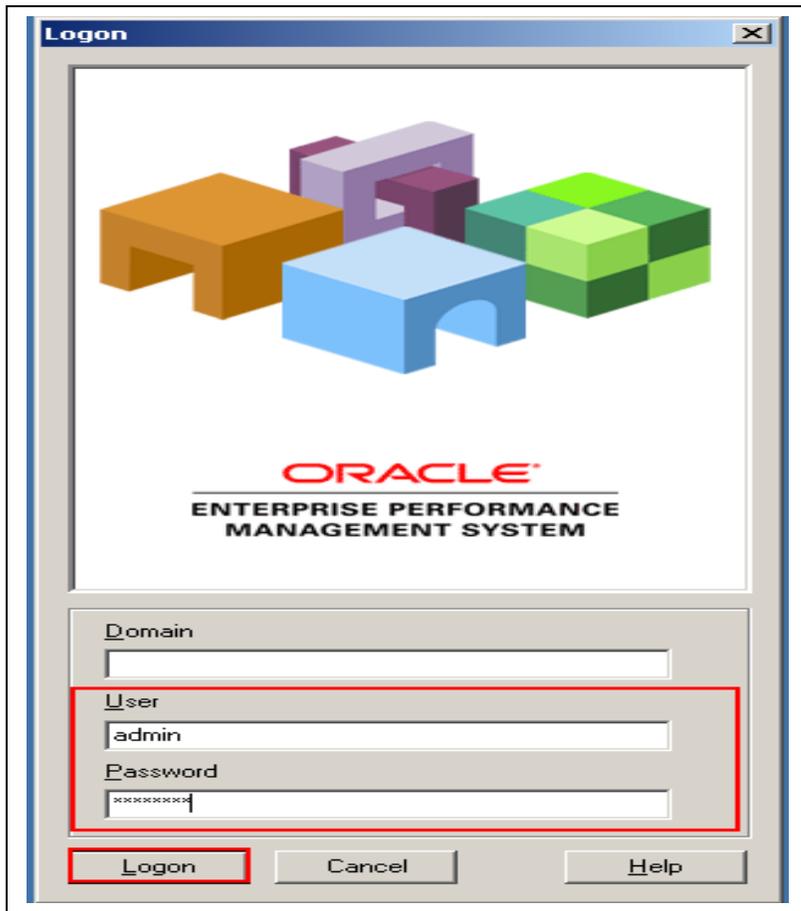
[OK]   [Cancel]

3. If current rule will successfully load to Hyperion Financial Management then message will be generate 'Load of current document was successful!' and click on 'Ok' otherwise it will generate an error.

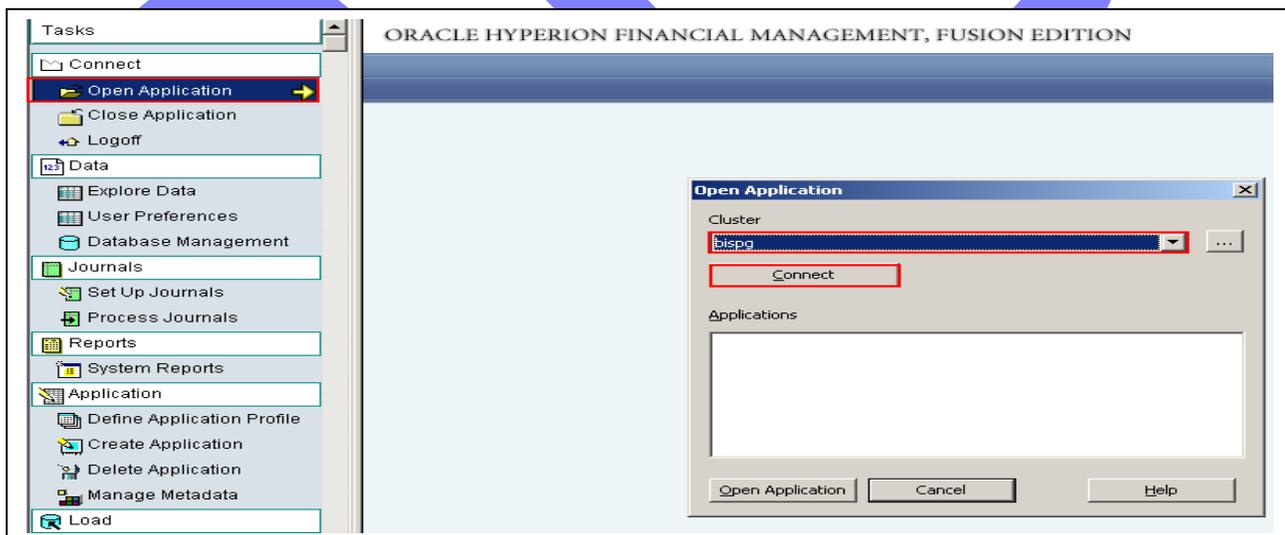**Load rules**
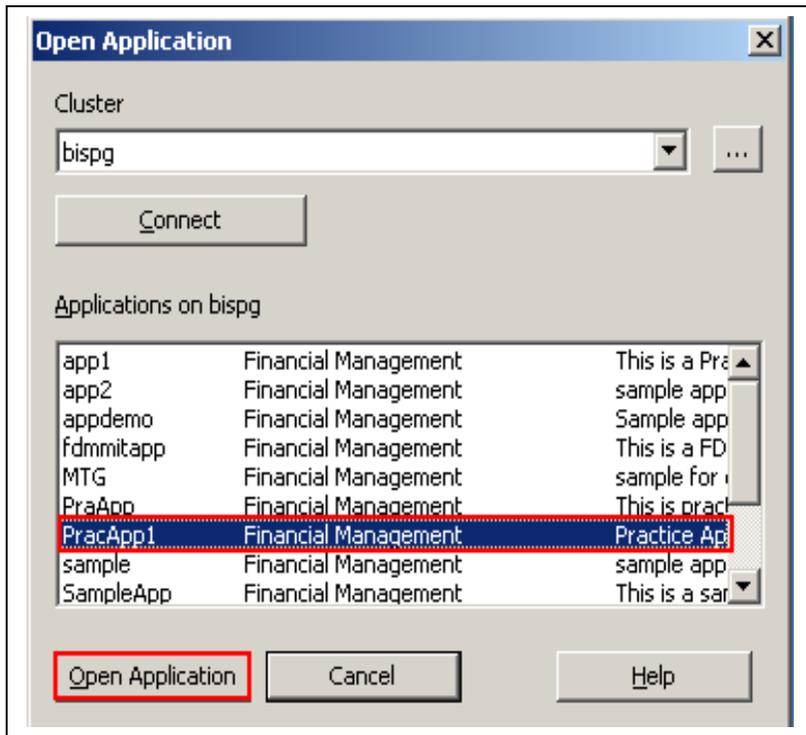
ℹ Load of current document was successful!

[OK]

**Check Output –**

**1. Go to Start→All Programs→Oracle EPM Syatem→Financial Management→ Financial Management.**

**2.** Specify **user name** and **password** and click on **Logon.**

3. click on Open Application and Specify **cluster name** ( which is your server name or Full computer name) from drop down list or you can specify it by browse button and click on **connect.**



4.After click on connect list of **HFM application**s will be appear, which you have created previously, select application where you loaded your rules and press **Open Application**.

5. Click on **Explore Data** and click on Data Explorer Setting button as shown in menu bar in red marked rectangular box and drag Account from Page Dimensions and drop it in Row Dimension and drag Period from Page Dimensions and drop it in Column Dimension then click on ok.
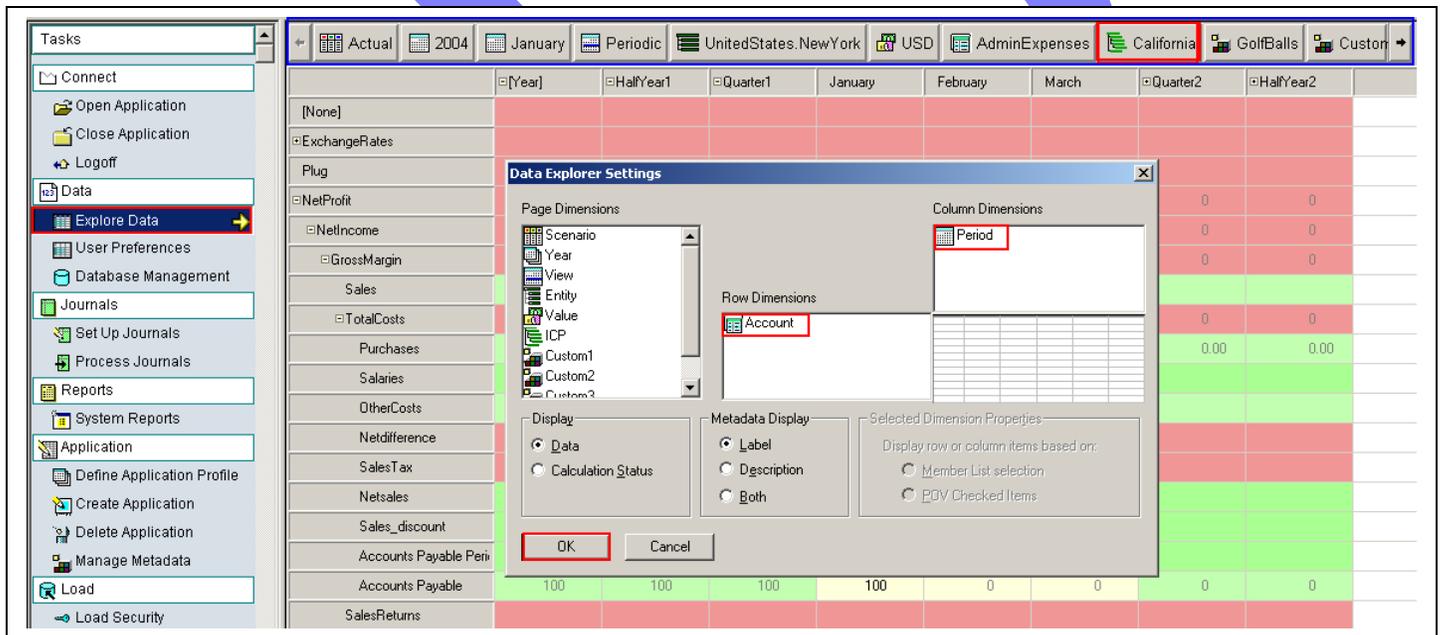


6. Set HFM point of view and set ICP as **California** then right click on **Accounts Payable Turnover Ratio** and click on calculate then result will be display, check it first it is correct or not.

| Tasks | | | |
|---|---|---|---|



| | ◄ | 🎛 Actual | 📋 2004 | 📋 January | 🎛 Periodic | 📊 UnitedStates.NewYork | 💱 USD | 📊 AdminExpenses | 📗 California | 📊 GolfBalls | 📊 Custom ➜ |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Tasks:**
- Connect
  - Open Application
  - Close Application
  - Logoff
- Data
  - **Explore Data** ➜
  - User Preferences
  - Database Management
- Journals
  - Set Up Journals
  - Process Journals
- Reports
  - System Reports
- Application
  - Define Application Profile
  - Create Application
  - Delete Application
  - Manage Metadata
- Load
  - Load Security
  - Load Metadata
  - Load Member Lists
  - Load Rules

| | [Year] | HalfYear1 | Quarter1 | January | February | March | Quarter2 | HalfYear2 |
|---|---|---|---|---|---|---|---|---|
| [None] | | | | | | | | |
| ⊞ExchangeRates | | | | | | | | |
| Plug | | | | | | | | |
| ⊟NetProfit | -5,100 | -5,100 | -5,100 | -5,100 | 0 | 0 | 0 | 0 |
| ⊟NetIncome | -5,100 | -5,100 | -5,100 | -5,100 | 0 | 0 | 0 | 0 |
| ⊟GrossMargin | -5,100 | -5,100 | -5,100 | -5,100 | 0 | 0 | 0 | 0 |
| Sales | | | | | | | | |
| ⊟TotalCosts | 5,100 | 5,100 | 5,100 | 5,100 | 0 | 0 | 0 | 0 |
| Purchases | 5,000.00 | 5,000.00 | 5,000.00 | 5,000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Salaries | | | | | | | | |
| OtherCosts | | | | | | | | |
| Netdifference | | | | | | | | |
| SalesTax | | | | | | | | |
| Netsales | | | | | | | | |
| Sales_discount | | | | | | | | |
| Accounts Payable Period | | | | | | | | |
| Accounts Payable | 100 | 100 | 100 | 100 | 0 | 0 | 0 | 0 |
| SalesReturns | | | | | | | | |
| Margin | | | | | | | | |
| Annual Credit Sales | | | | | | | | |
| Accounts Payable Turnover Ratio | 50 | 50 | 50 | 50 | 0 | 0 | 0 | 0 |
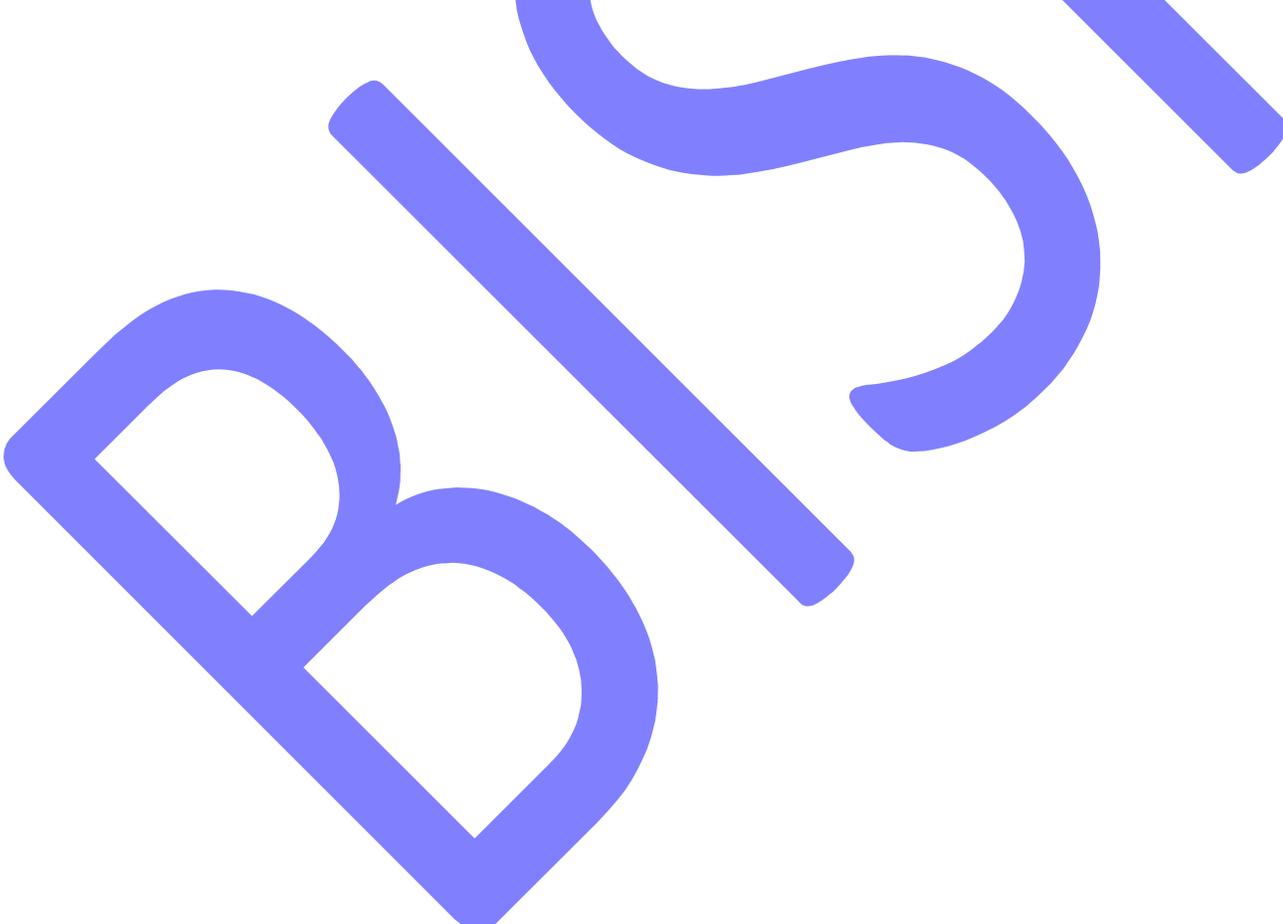
## 2. Prepare Test Sheet for Current Ratio Calculation –

## Current Ratio Definition-

The *Current Ratio* is used to evaluate the liquidity, or ability to meet short term debts.

## Formula to Calculate Accounts Payable Turnover Ratio-

**Current Ratio = Current Assets /Current Liabilities**

**HFM Rule script-**

Sub Calculate()

Dim vIsBase

vIsBase=HS.Entity.IsBase("Connecticut","Stamford")

If vIsBase Then

HS.Exp "A#Current Ratio = A#Current Assets /A#Current Liabilities"

End If
End Sub

## Function-

Here we are using **IsBase Function,** which determine if the current  member or a specified member  is the  a base member of the application or of the specified parent.

**Syntax of IsBase Function-**

Hs.Entity.IsBase(parent,element)

We need to open MS-Excel to prepare test sheet  for calculation-
The below screen shows the requirement which you want to perform (Calculate Current Ratio) in Hyperion Financial Management through HFM Rule Script.

| Account | Year | Period | View | Entity | Value | ICP | Custom1 | Custom2 | Custom3 | Custom4 | Actual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Current Ratio | 2004 | January | Periodic | Stampford | USD | [ICP None] | Golfballs | Customer2 | None | Increases | (1000/50)=20 |
| Current Assets | 2004 | January | Periodic | Stampford | USD | [ICP None] | Golfballs | Customer2 | None | Increases | 1000 |
| Current Liabilities | 2004 | January | Periodic | Stampford | USD | [ICP None] | Golfballs | Customer2 | None | Increases | 50 |

## Purpose of creating HFM Rule Script–

Hyperion Financial Management Rule provide powerful, customized calculations. We use rules to perform calculations that we can not define through parent-child relationships in the dimension hierarchy.

## Steps to create HFM Rule Script-

**Go to Start→ All Programs→Oracle EPM System→ Financial Management→ Rule Editor** then Rule Editor window will appear.

**For Example**- We want to create a rule script to calculate the value of **Current Ratio** , just write **Rule Script** in **Rule Editor** window ,as shown in below screen then go to **File→Save** it.
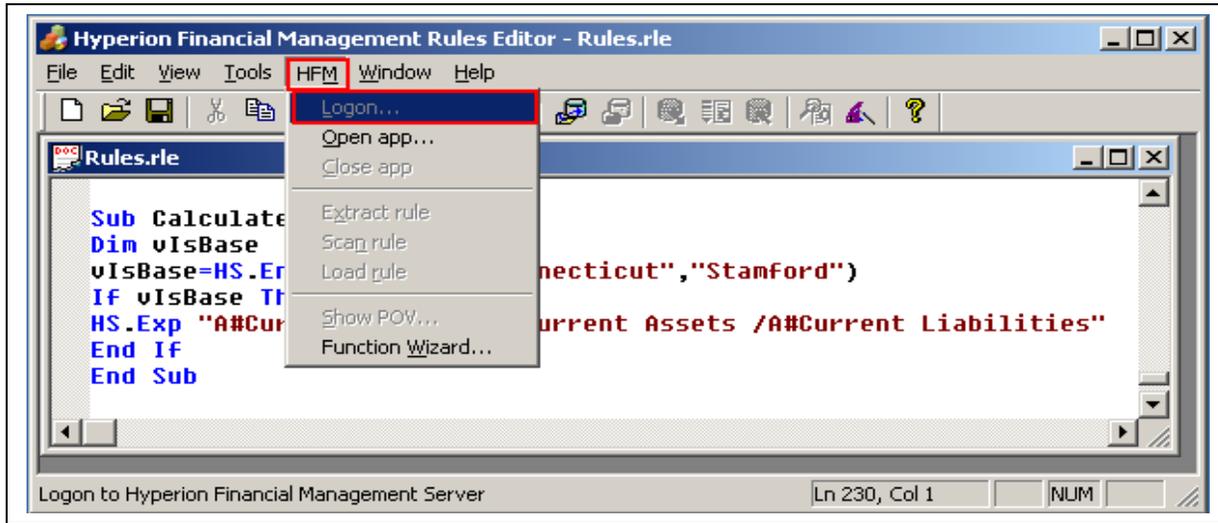
```
Sub Calculate()
Dim vIsBase
vIsBase=HS.Entity.IsBase("Connecticut","Stamford")
If vIsBase Then
HS.Exp "A#Current Ratio = A#Current Assets /A#Current Liabilities"
End If
End Sub
```
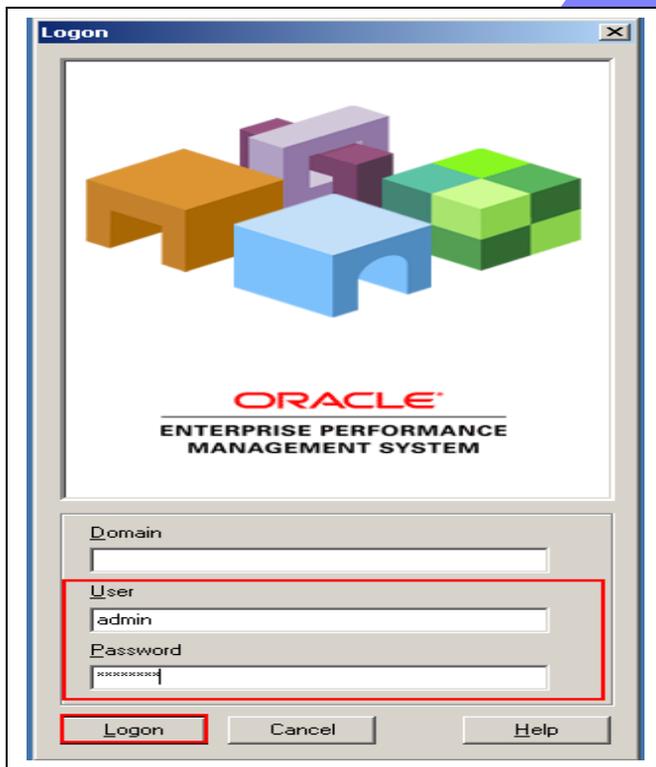
 **Steps to Validate , Load  Rule Script and Check Output is correct –**These are steps to execute calculation which comprise validating and checking of Rule Script.
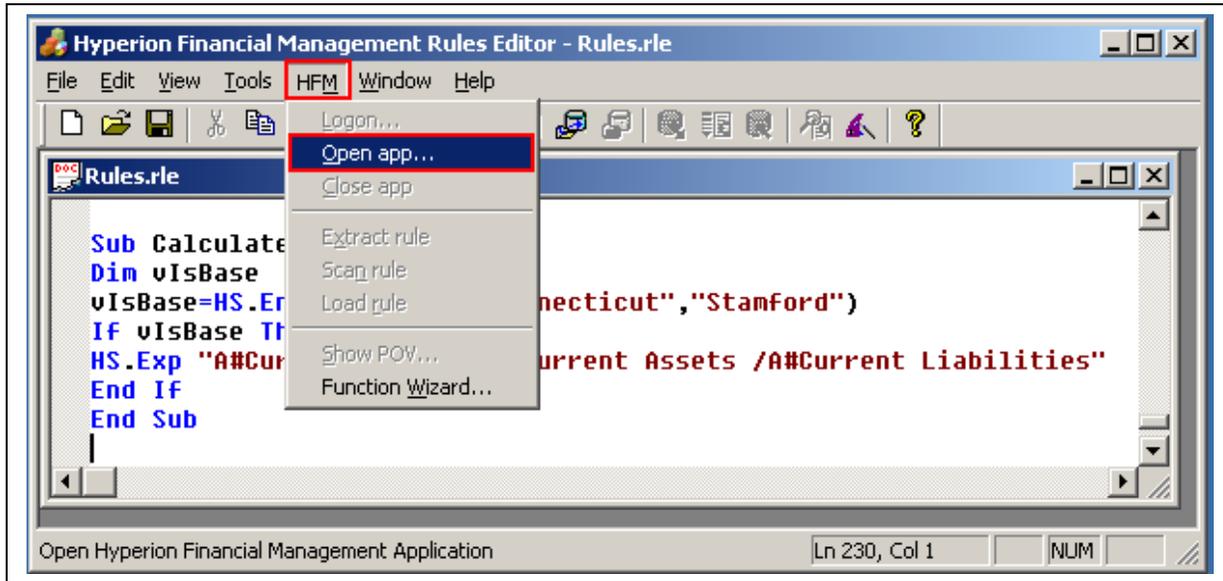
**Validate Rule Script** –

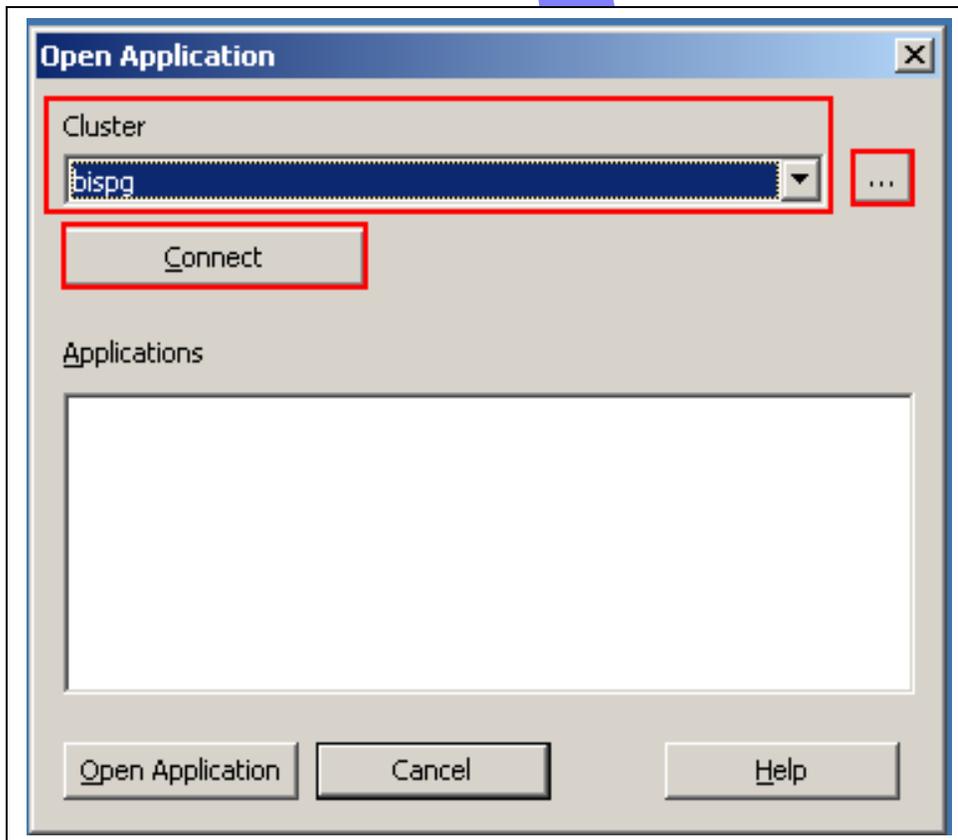1.Tool bar is provided in **Rule Editor** window . Click on **HFM→ Logon** button as mentioned in red box.

2. Specify **user name** and **password** and click on **Logon.**



3. Click on **HFM→Open Application** button as mentioned in red box.

4. Specify **cluster name** ( which is your server name or Full computer name) from drop down list or you can specify it by browse button and click on **connect.**
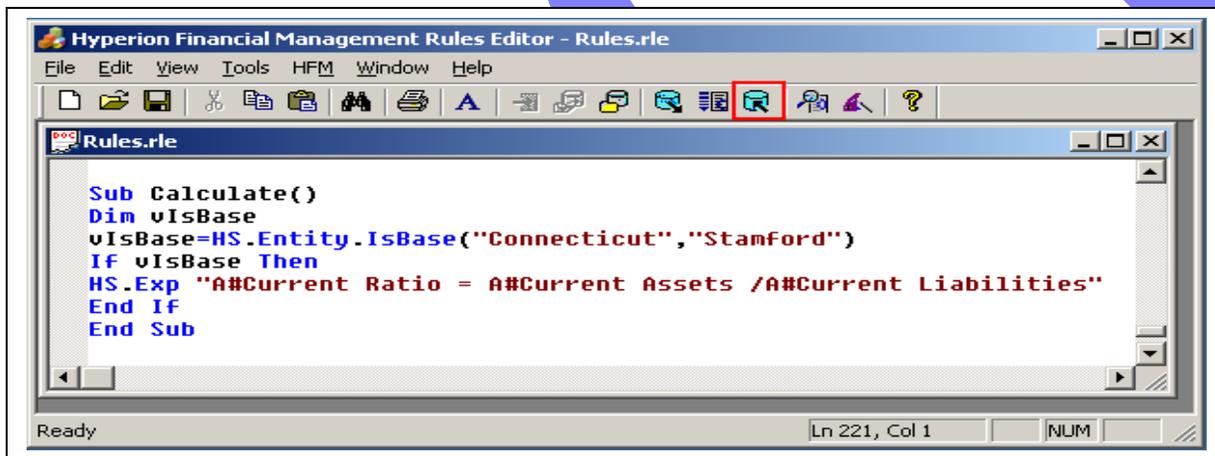


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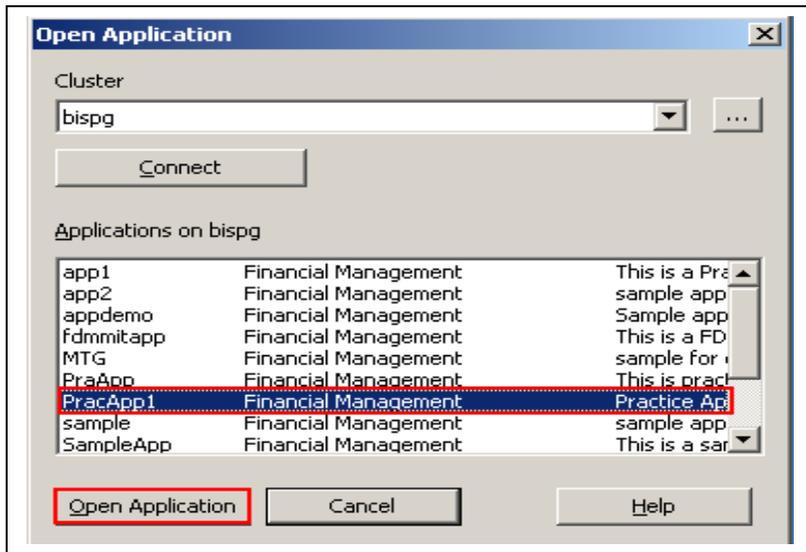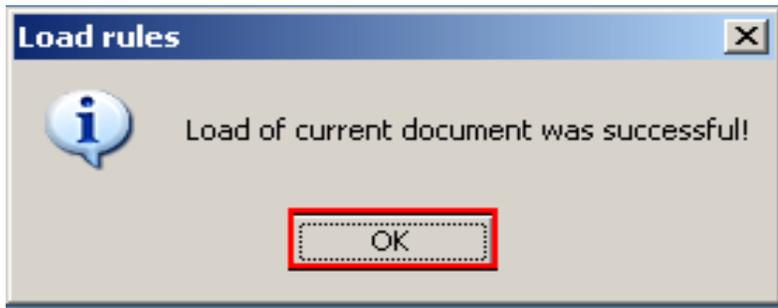
**Load Rule Script** –

1.After validating it next step is to **Load Rule Script** to Hyperion Financial Management . There is **Load Rule script** button in tool bar where we can load our rule script.



2. After click on **Load Rule script** button 'Hyperion Financial Management Rules Editor' window will appear and click on **Ok.**
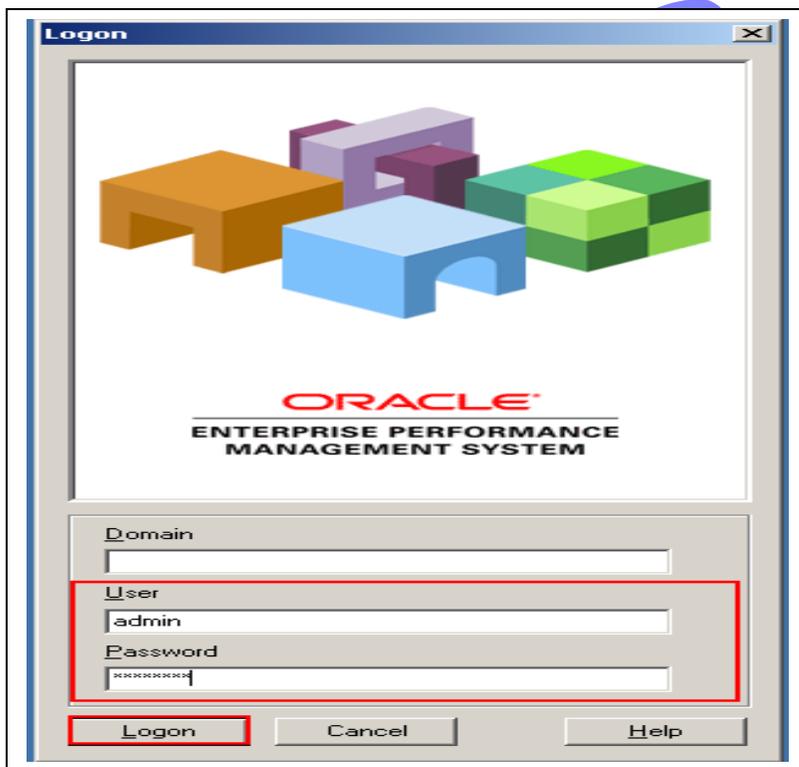


3. If current rule will successfully load to Hyperion Financial Management then message will be generate 'Load of current document was successful!' and click on 'Ok' otherwise it will generate an error.
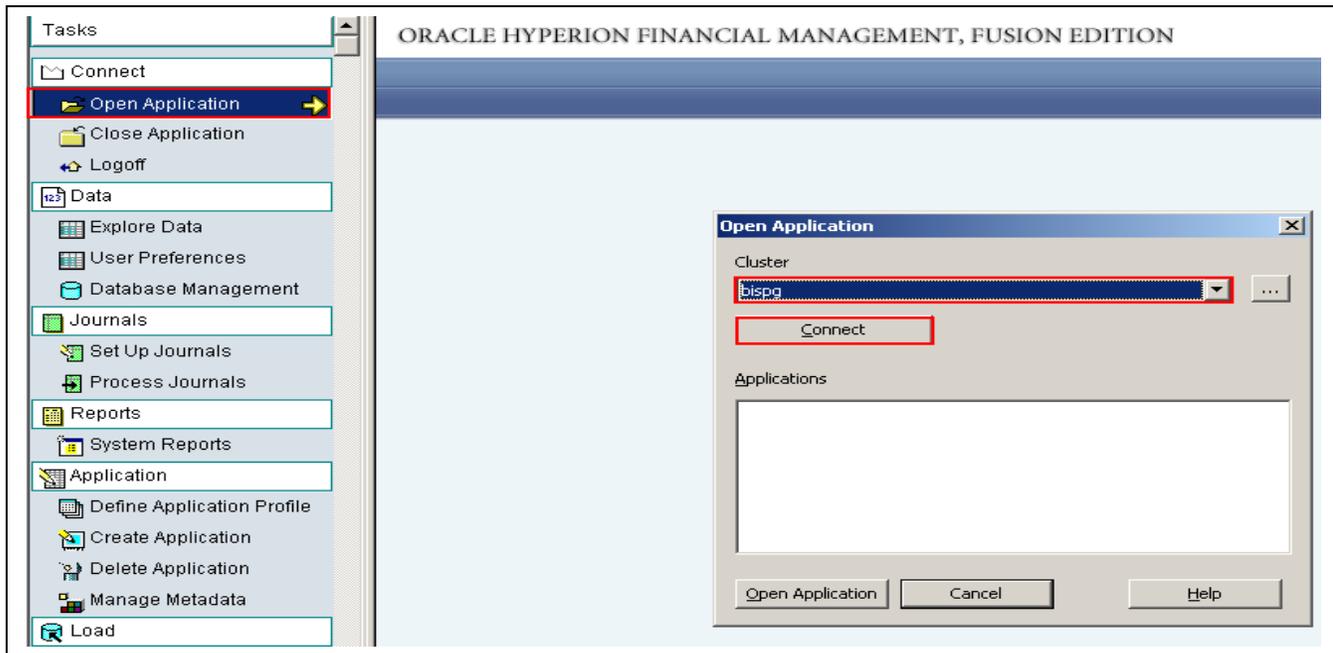
**Check Output –**

**1. Go to Start→All Programs→Oracle EPM Syatem→Financial Management→ Financial Management.**

**2.** Specify **user name** and **password** and click on **Logon.**



 3. click on Open  Application and Specify **cluster name** ( which is your server name or Full computer name) from drop down list or you can specify it by browse button and click on **connect.**

4.After click on connect list of **HFM application**s will be appear, which you have created previously, select application where you loaded your rules and press **Open Application**.
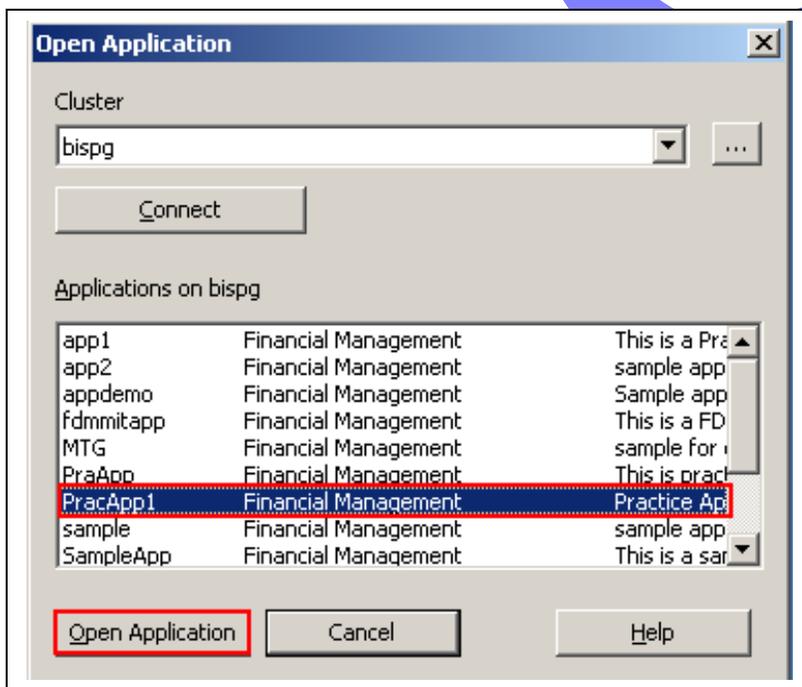


5.Click on **Explore Data** ,and  set HFM point of view  and Entity as **Stamford** whose parent is **Connecticut** then right click on **Current Ratio** and click on calculate then  result will be display, check it first it is correct or not.

| | [Year] | HalfYear1 | Quarter1 | January | February | March | Quarter2 | HalfYear2 |
|---|---|---|---|---|---|---|---|---|
| Current Assets | 1,000 | 1,000 | 1,000 | 1,000 | 0 | 0 | 0 | 0 |
| Current Ratio | 20 | 20 | 20 | 20 | 0 | 0 | 0 | 0 |
| Fixed Asset Turnover | | | | | | | | |
| Fixed Assets | 200 | 200 | 200 | 100 | 100 | 0 | 0 | 0 |
| Asset Turnover | | | | | | | | |
| ⊞TotalShortTermAssets | | | | | | | | |
| ⊟TotalLiabEquity | -60,164.00000 | -60,164.00000 | -60,164.00000 | -56,060.00000 | -60,164.00000 | -60,164.00000 | -60,164.00000 | -60,164.00000 |
| ⊟TotalLiabilities | -52.00000 | -52.00000 | -52.00000 | -50.00000 | -52.00000 | -52.00000 | -52.00000 | -52.00000 |
| ⊟TotalShortTermLiab | -52.00000 | -52.00000 | -52.00000 | -50.00000 | -52.00000 | -52.00000 | -52.00000 | -52.00000 |
| ShortTermDebt | | | | | | | | |
| ShortTermPay | | | | | | | | |
| Current Liabilities | 50 | 50 | 50 | 50 | 0 | 0 | 0 | 0 |
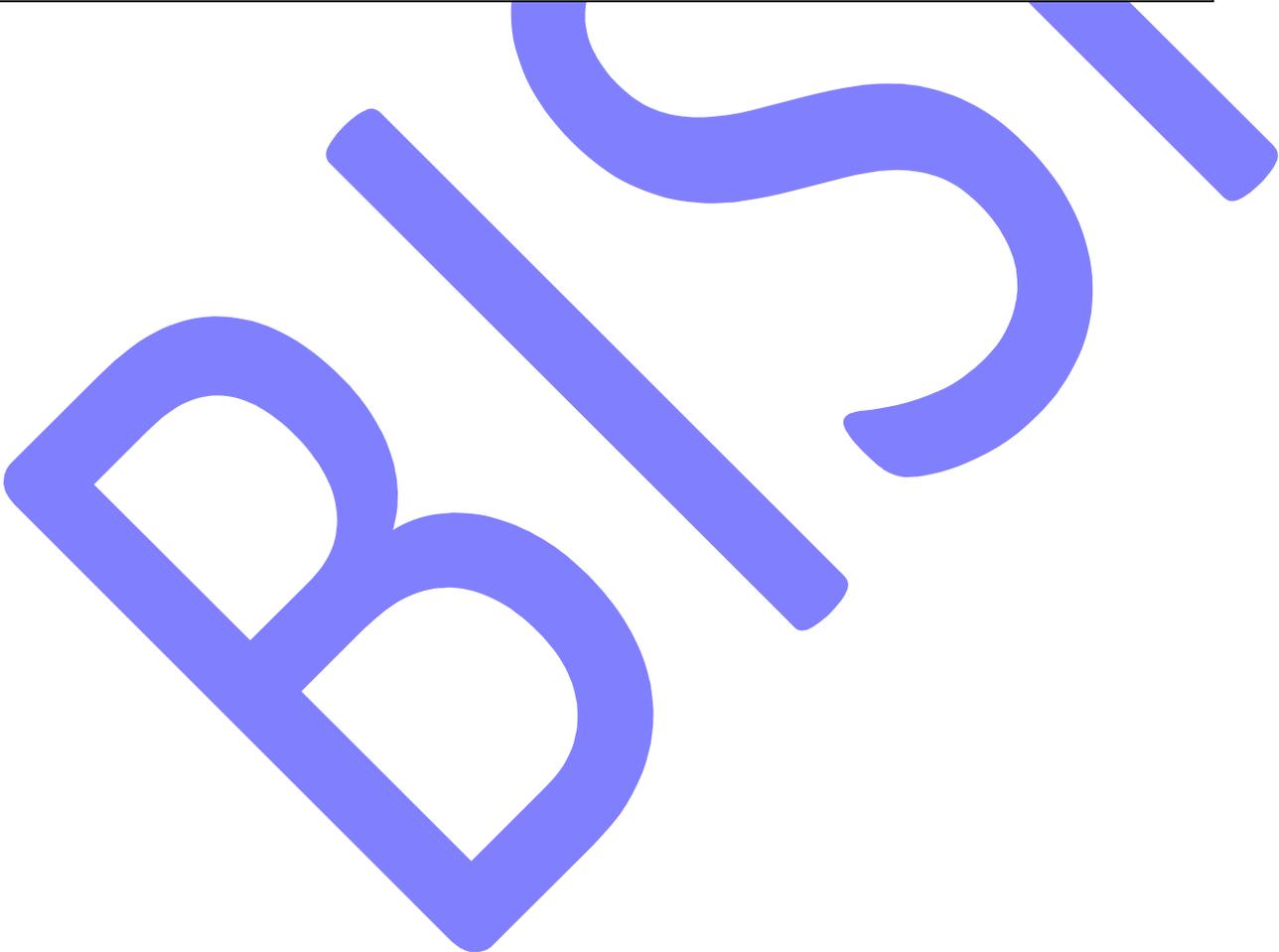
**Example#3 Prepare Test Sheet for Inventory to Net Working Capital**
**Example#4 Prepare Test Sheet for Long Term Debt to Capital Structure%**
**Example#5 Prepare Test Sheet for Debt to Asset Ratio (%)**
**Example#6 Prepare Test Sheet for Debt to Equity Ratio (%)**
**Example#7 Prepare Test Sheet for Long Term Debt to Capital**
**Example#8 Prepare Test Sheet for Time Interest Earned (Dec.)**
**Example#9 Prepare Test Sheet for Coverage of Fixed charges**
**Example#10 Prepare Test Sheet for Current Liabilities to Equity (%)**
**Example#11 Prepare Test Sheet for Price/Earnings Ratio (Dec.)**
**Example#12 Prepare Test Sheet for Dividend Payout Ratio (%)**
**Example#13 Prepare Test Sheet for Dividend Yield on Common Stock (%)**
**Example#14 Prepare Test Sheet for Inventory to Net Working Capital**
**Example#15 Prepare Test Sheet for Gross Profit Margin (%)**
**Example#16 Prepare Test Sheet for Net Profit Margin (%)**
**Example#17 Prepare Test Sheet for Cash Ratio**
**Example#18 Prepare Test Sheet for inventory turnover ratio**
**Example#19 Prepare Test Sheet for cash turnover ratio**

**Example#20 Prepare Test Sheet for Accounts receivable turnover ratio**