

**CETENNIAL COLLEGE  
CO-OPRATIVE EDUCATION**

**DAILY REPORT AUTO TRANSFERRING  
FROM ORACLE BI TO SHAREPOINT**

**Royal Bank of Canada  
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May 12, 2011

Ms. Kathleen Winningham

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Dear Ms. Winningham:

This is my first Co-op work term report which outlines my work at Royal Bank of Canada from January to February 2011.

Royal Bank of Canada (RBC) is Canada's largest bank as measured by assets and market capitalization. It provides personal and commercial banking, wealth management services, insurance, corporate and investment banking and transaction processing services on a global basis.

This report named "Daily Report Auto Transferring from Oracle BI to SharePoint", articulates my activities while working with Technical Support & Operations group at the RBC.

One of the responsibilities of the TS&O is to produce and transfer Daily Medium High Risk Report (DMHRR) from database (Oracle BI) to the website (TS&O SharePoint site). Nazario

Marchitto is the Enterprise Change Manager, who is responsible for transferring DMHRR. This report is to develop the program to produce and transfer DMHRR automatically. I have developed the program and given it to Nazario. It has passed the test in the test SharePoint site by Nazario. Nazario will report it to other relative departments for further test.

This report has been prepared and written by me and has not received any previous credit at this or any other institution. I would like to thank Ms. Morrison and Mr. Marchitto for their help in this report.

Sincerely,

Xiao Ping Cai

ID 300-591-463

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## **SUMMARY**

Nazario is the Enterprise Change Manager of another team in TS&O. One of his responsibilities is transferring Daily Medium High Risk Report (DMHRR) from database (Oracle BI) to the website (TS&O SharePoint site).

The current method is manually producing and transferring DMHRR from Oracle BI to SharePoint.

The purpose of this report is to develop a program to produce and transfer DMHRR automatically.

I have developed the program and given it to Nazario. It has passed the test in the test SharePoint site by Nazario. Nazario will report it to other relative departments for further test.

## **CONCLUSIONS**

The current method is manually producing and transferring DMHRR from Oracle BI to SharePoint. It is manual work. The procedures are very complex and are easy to make mistakes. It will take a person 3 hours to do it every day.

My program can produce and transfer DMHRR reports automatically in a minute with no person every day. It can save human resource. It is very simple and more accurate.



## **RECOMMENDATIONS**

The current method of producing and transferring DMHRR reports can be replaced by program.

The program has passed the test in the test SharePoint site.

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# **1 INTRODUCTION**

## **1.1 Background**

This is my first Co-op work term report which outlines my work at Royal Bank of Canada from January to February 2011.

Royal Bank of Canada (RBC) is Canada's largest bank as measured by assets and market capitalization. It provides personal and commercial banking, wealth management services, insurance, corporate and investment banking and transaction processing services on a global basis.

My report manager is Morrison Edna. She is a Senior Manager in Technical Support & Operations (TS&O) Department of RBC Financial Group. She introduced me to Nazario Marchitto.

Nazario is the Enterprise Change Manager of another team in TS&O. One of his responsibilities is transferring Daily Medium High Risk Report (DMHRR) from database (Oracle BI) to the website (TS&O SharePoint site). He asked me if I had development experience in SharePoint and Oracle BI. He needed a program to transfer DMHRR from database to the website automatically. He used to ask software department for help, but no one could do it. I said I had no development experience in SharePoint and Oracle BI, but I had development experience in website and database. I wanted him to give me a chance to try. Then he gave the opportunity to me.

I studied the SharePoint and Oracle BI in the work term. Finally I developed the program to transfer DMHRR from database to the website automatically. The program has passed the test in the test

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SharePoint site. Nazario will report it to other relative departments for further test.

## **1.2 Purpose of Report**

The purpose of this report is to develop a program to transfer DMHRR automatically. The current method is manually transferring DMHRR from Oracle BI to SharePoint, and it will take a person 3 hours to do it every day. My program can do it automatically in a minute with no person every day.

## **2 CURRENT OPERATING PROCEDURES**

### **2.1 Procedures**

A special person is responsible for transferring DMHRR report every business day. In business day, he will do the following in sequence:

1. Logon to the Oracle BI EE Presentation Services Dashboard URL
2. Input DMHRR report parameters: select special field from Oracle BI, retrieve data between prior business day and next business day
3. Download original DMHRR report from Oracle BI to local workstation
4. Produce the final DMHRR report: in local workstation, open the report, filter the data for special condition of the special fields, highlight the risk record, filter the data which are already appeared in the previous business DMHRR report, and add the date when the DMHRR report is original retrieved from the Oracle BI

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5. Upload the final DMHRR report from local workstation to the root of DMHRR Document Library in TS&O SharePoint website

On Monday, he will do the following additional work:

1. Logon the TS&O SharePoint site
2. Download the last week's DMHRR reports from the root of the DMHRR Document Library to local workstation
3. Create subfolder according the current month and the current year
4. Upload the last week's DMHRR reports to the correspond subfolder
5. Delete the last week's DMHRR reports in the root of the DMHRR Document Library

## **2.2 Working Systems**

The local workstation operating system is Windows XP. The remote server operating system is Windows Server 2003. The SharePoint Server is Windows SharePoint Services 3.0. The Database is Oracle Business Intelligence Enterprise Edition 11g. The DMHRR report is Excel document.

## **2.3 User Interfacing**

Because the current process is manual, there is no special user interface for the current DMHRR report. All the user interfaces are common Application user interface. For example, when operate in the Oracle BI EE Presentation Services Dashboard URL, the user interface is Oracle BI Dashboard

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common style; when operate in the SharePoint, the user interface is the SharePoint website style; when produce the DMHRR in local workstation, the user interface is Excel style.

### **3 ANALYSIS OF CURRENT PROBLEMS**

#### **3.1 Procedures**

The current procedures problems are the following:

- 1 The procedures are all manual work. It occupies a lot of human resource. It takes a person 3 hours to produce and transfer the DMHRR report every day. According a co-op student's salary in RBC (14.5\$/hour), it will take 946\$/month. (Normally, there are 365 days in one year, and 104 days are weekend days, so there are 261 work days per year. 261 work days divided by 12 months equals 21.75 work days per month. 21.75 work days per month multiply 3 hours per work day equals 65.25 hours. 65.25 hours multiply 14.5\$/hour equals 946\$/month)
- 2 The procedures are very complex. It will take a long time to train a new staff to do the procedures.
- 3 It is easy to make mistakes because all the procedures are manual work and complex.

#### **3.2 Working Systems**

There are too many applications in the working systems for producing and transferring DMHRR reports. It includes Oracle BI EE, Excel and SharePoint.

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### **3.3 User Interfacing**

There are too many user interfaces in the working systems. There are 3 different user interface styles.

It includes Oracle BI EE, Excel and SharePoint.

## **4 ANALYSIS OF ALTERNATIVE SOLUTIONS**

### **4.1 Procedures**

The alternative solution is developing the program to produce and transfer the DMHRR reports. The procedures are very simple. If the program is installed, all the procedures can be done automatically without any manual work.

So the following only introduce the installation procedures:

1 Create dir “c:\peterDMHRRm”, copy “holiday.xls” to this directory.

2 Running Scheduled Tasks:

Click Start-Settings-Control Panel, and then double click “Scheduled Tasks” icon.

3 Add Scheduled Task:

Procedure:

1) Double click “Add Scheduled Task” icon,

2) click Next;

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- 3) click Browse;
  - 4) select program to Schedule;
  - 5) select Daily option, and then click Next;
  - 6) set “Start time: 11:30 AM”, “Perform this task: Every Day”, and click Next;
  - 7) enter the username and the password, and then click Next;
  - 8) Click Finish.

4 Upload a previous DMHRR report:

In the first time, this program needs a previous DMHRR report to produce the first DMHRR report.

## **4.2 Working Systems**

The working systems are the same like current systems.

The local workstation operating system is Windows XP. The remote server operating system is Windows Server 2003. The SharePoint Server is Windows SharePoint Services 3.0. The Database is Oracle Business Intelligence Enterprise Edition 11g. The DMHRR report is Excel document.

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### **4.3 User Interfacing**

The user interface is dos command. It is only used for monitoring the whole process. It need no user input and any manual work.

## **5 ANALYSIS OF RECOMMENDED SOLUTIONS**

The recommended solution is to develop program to produce and transfer DMHRR report.

This solution has the following advantages:

- 1 It can save human resource. Once it is installed, there is no additional manual work to do.  
Comparing the current solution, it will save 946\$/month.
- 2 It is very quick. It only takes a minute to complete the whole procedures. Comparing the current solution, it takes 3 hours to do the same work.
- 3 It is very simple. Except the installation, all the procedures can be done automatically. It only needs to train how to install the program in the first time, and no training for daily work.
- 4 It is more accurate. All the procedures are done by computer, no manual work, so there is no manual mistake in the procedures.