


Database Driven Rebate Tracking (DDRT)

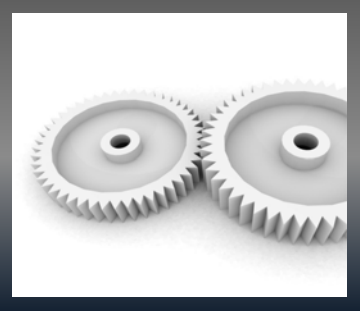
Senior Design Spring 2012
Instructor: Professor Paul I-Hai Lin
Senior Advisor: Associate Professor Gary Steffen, Chair of CEIT

Presenters:
Aaron Egbert
Chris Rottinger

1

DDRT Overview Key Points

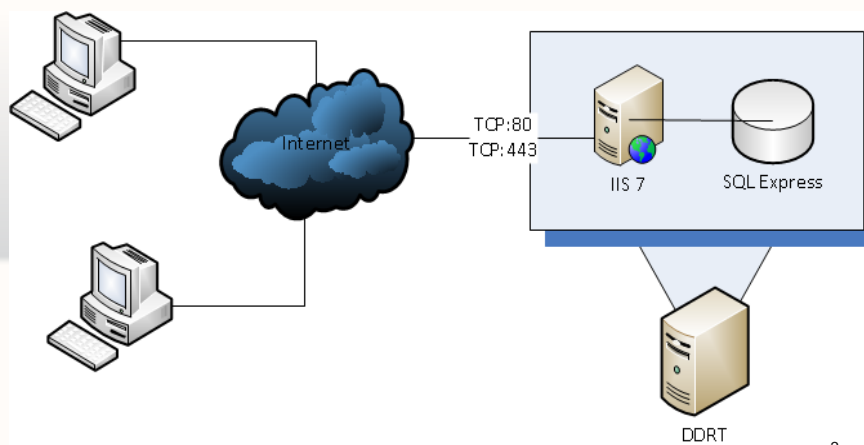
- ✓ 1 Design Overview
- 2 Virtual Machine Build
- 3 Database & Data Migration
- 4 DDRT Application
- 5 QuickBooks Connectors
- 6 Conclusion



2

DDRT Overview

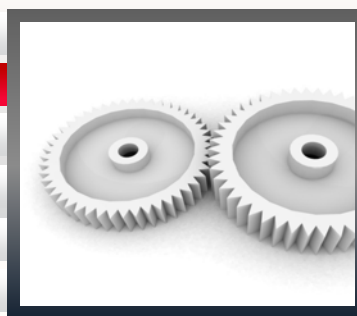
Hardware Architecture



3

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4

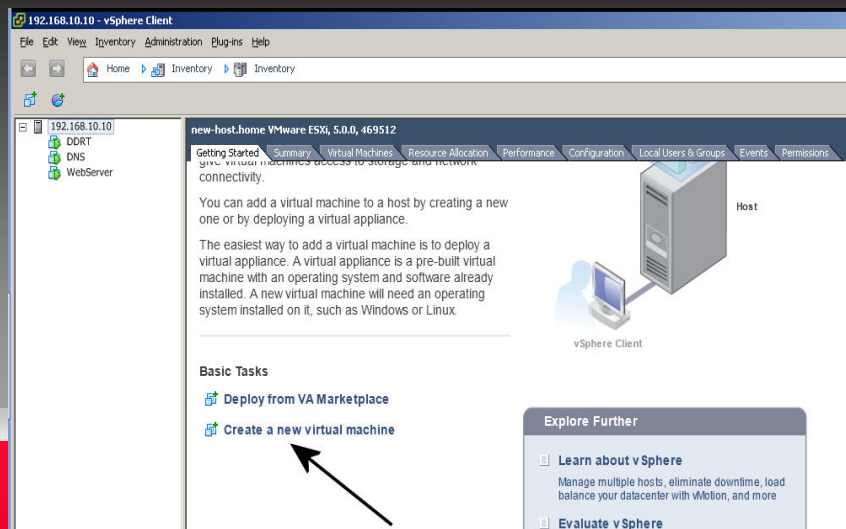
DDRT Requirements

VMWare Host Requirements

ID#	Requirement	Type
C-1	DDRT shall be installed on a Windows 2008 Server VMWare host.	Test
C-2	DDRT shall store data in Microsoft SQL database.	Test
C-3	DDRT shall store files on Windows file system.	Test
D-1	DDRT shall operate on VMWare Server Infrastructure.	Test
D-4	DDRT shall be programmed in ASP.NET.	Inspect
D-5	DDRT shall operate on IIS.	Test

5

Software Install



6

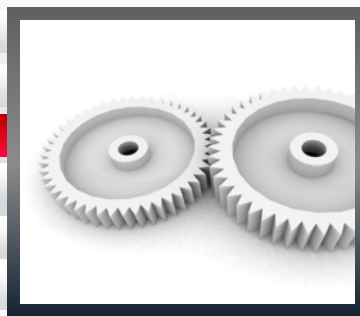
Network & Firewall

- Redirected TCP Ports to the VMWare Guest
- Port 80 for HTTP
- Port 443 for HTTPS
- Port 3389 for Remote Desktop

7

DDRT Overview Key Points

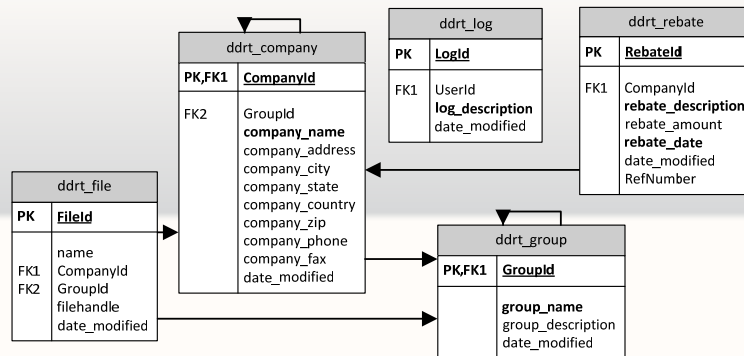
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8

Database & Data Migration

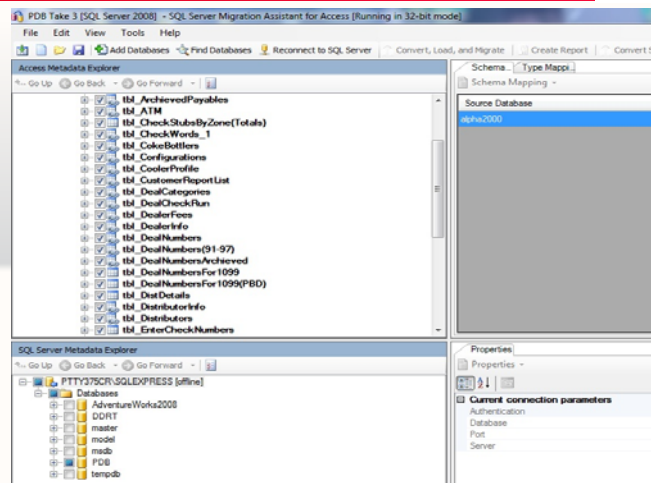
Database



9

Database & Data Migration

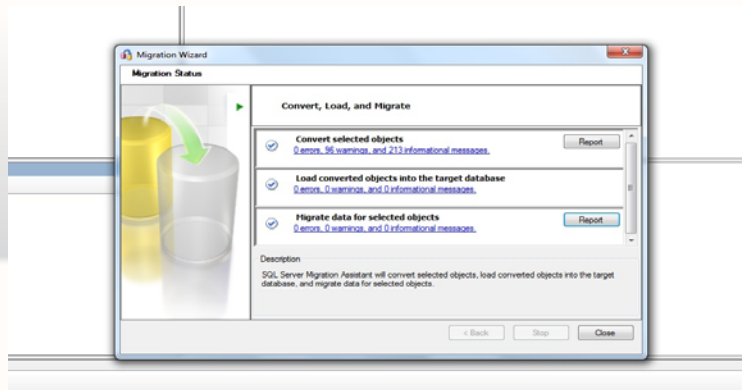
Data Migration



10

Database & Data Migration

Data Migration (cont.)



Actual migrated can't be shown for Security Reasons

11

SQL Script for Data Migration

Selected Code Segments

```
--Insert the PBD company data into the DDRT database DDRT_company table
INSERT INTO DDRT.dbo.ddrt_company
(company_name, company_address, company_city, full_state, full_zip, company_phone,
company_fax, PBD_KEY)
SELECT DealerName, StaAddress, StaCity, StaState, StaZip, StaPhone, StaFax, PBD
FROM PDB.dbo.tbl_DealerInfo
WHERE (DealerStatus = 1) AND (DealerName IS NOT NULL) AND (DealerName <> '');
GO

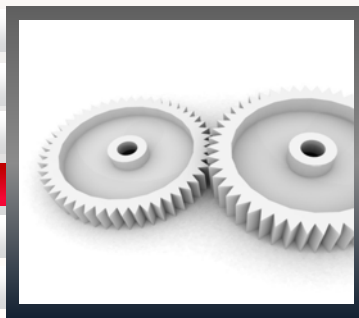
--Insert the PBD rebate data into the DDRT database DDRT_rebate table
INSERT DDRT.dbo.ddrt_rebate ( rebate_date, rebate_amount, rebate_description, PBD_number)
SELECT DealDate, DealAmount, DealName, P.PBD
FROM PDB.dbo.tbl_Payables P INNER JOIN PDB.dbo.tbl_DealNumbers D
ON P.DealNumber = D.DealNumber;
GO

--Connect the Company to each rebate
UPDATE ddrt_rebate
SET ddrt_rebate.CompanyId = ddrt_company.CompanyID
FROM ddrt_rebate LEFT OUTER JOIN ddrt_company on DDRT.dbo.ddrt_rebate.PBD_number =
DDRT.dbo.ddrt_company.PBD_KEY
WHERE ddrt_rebate.PBD_number is not null;
```

12

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13

Requirements

Authentication & Employee

ID#	Authentication Requirements	Type
E-1	All users shall authenticate before using DDRT.	Demo
E-2	DDRT shall authenticate users according to access.	Demo
E-3	DDRT shall encrypt passwords.	Inspect

ID#	Employee Requirements	Type
E-5	DDRT shall allow an Employee to add a rebate.	Demo

14

Requirements

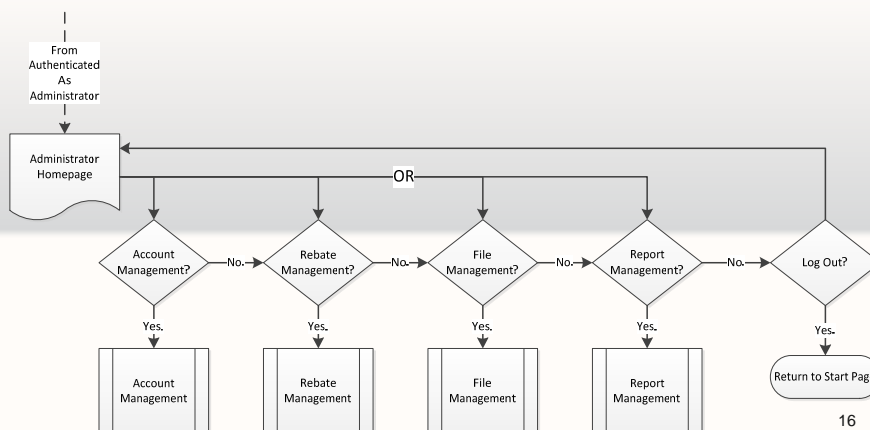
Customer

ID#	Customer Requirements	Type
E-7	DDRT shall only allow a Customer access to its companies rebate data.	Demo
E-11	DDRT shall allow Customers to download a rebate report for the last month.	Demo
E-12	DDRT shall allow a Customer to download rebate reports from the last year.	Demo
E-8	DDRT shall allow a Customer to download files.	Demo
E-9	DDRT shall only allow a Customer access to files associated to its company.	Demo
E-10	DDRT shall only allow a Customer access to files associated to its organizational group.	Demo
E-13	DDRT shall allow a Customer to download the company's published files.	Demo
E-14	DDRT shall allow a Customer to download the files of the organization that the company is associated to.	Demo

15

Application Workflow

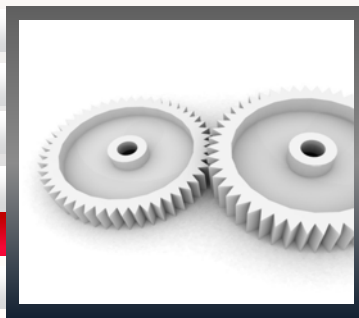
High Level Overview



16

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17

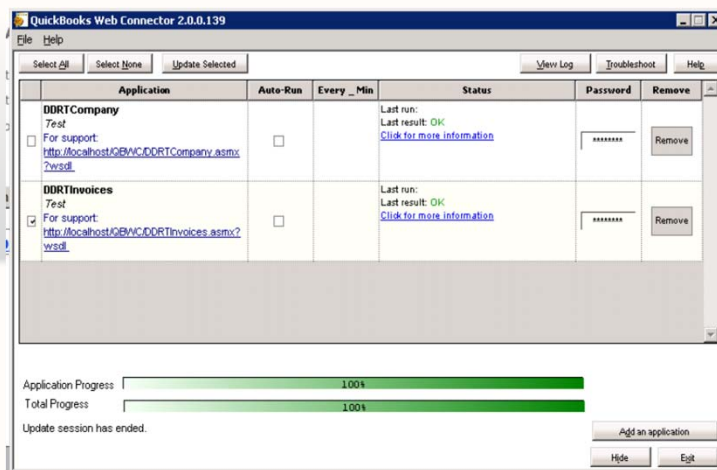
DDRT Requirements

Intuit QuickBooks Requirements

ID#	Requirement	Type
E-38	DDRT shall allow an Administrator to download transactions via Quickbooks.	Demo
E-39	DDRT shall allow an Administrator to download company info via Quickbooks.	Demo

18

Client View



19

SOAP Connection (cont.)

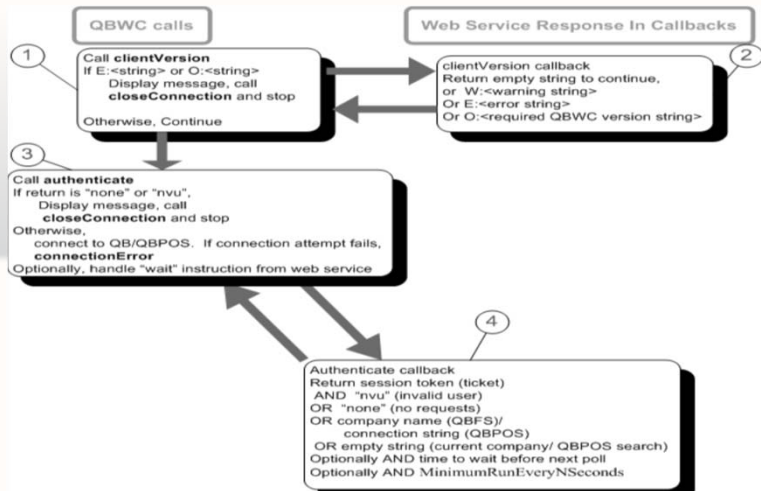
Methods



- authenticate
- sendRequestXML
- receiveResponseXML
- connectionError
- getLastError
- closeConnection

20

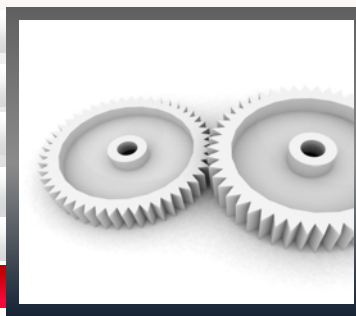
SOAP Connection



21

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22

DDRT Conclusion

Success



This project was a success!

Despite set backs due to a third partner, we finished our portion of the project as well as our third partners.

We were able to build DDRT and satisfy all of the requirements.

Overall our web based application is very versatile and can utilized as a template for non-internet based companies.

23

THANK YOU!
Questions?

24