



Exercise 1: Accessing Oracle Discoverer

Lesson Description

Lesson 1 is an introduction to Oracle Discoverer, and how to successfully log on as a user.

Training Objectives

At the conclusion of this lesson, Agency Fleet Headquarters Coordinators and Local Fleet Program Coordinators will be able to:

- 1. Open Discoverer on their desktop computer workstation.
- 2. Log on to Fleet through Discoverer, using their individual Username and Password.

<u>Methodology</u>

This lesson will be delivered as an Instructor-led exercise.

References. None.

Enclosures. None.



Logging On To Discoverer

To open your Oracle Discoverer, double-click the Coracle Discoverer icon on your desktop, or click the start button on your desktop, and select *Oracle Discoverer 3.1 User Edition* from your *Programs* Menu.

If you're Oracle Discoverer application is properly installed, you will briefly see the Oracle Discoverer 3.1 User Edition Start-Up Banner shown in Figure 1-1.



Figure 1-1

Following the Oracle Discoverer Start-Up Banner, you'll see Log In Window shown below in Figure 1-1.

Connect to Oracle Dis	CIEM IN	×
	Connection	Connect
X1/	Username:	Cancel
OF-	Password:	Help
\sim	Connect: pcmsprod	About
	Status	
Discoverer [™] Release 3.1 ORACLE	Please enter your username, password an	d the database name.

Figure 1-2



Enter your assigned Username, Password, the Connect string or database name you need to access, and click on the Connect button.

If you've correctly entered your connection information, the initial Workbook Wizard window shown below will appear.

🔑 Workbook Wizard		<u>_0×</u>
	<text><text><image/><image/><text></text></text></text>	
< Back Next >	Finish Cancel	Help

Figure 1-3

Congratulations, you've successfully logged onto Discoverer, and are ready to begin Data Mining!!

<u>Summary</u>. During this short lesson/exercise, you learned to open Discoverer on your desktop computer workstation, and log on to the PCMS database. In the next lesson/exercise, you will learn to create a query using Discoverer's Workbook Wizard, and create a simple report.





Exercise 2: Creating a Basic Report

Lesson Description

Lesson 2 is introduces the Workbook Wizard, and the six (6) -step workflow process used to create a simple report.

Training Objectives

At the conclusion of this lesson, Agency Fleet Headquarters Coordinators and Local Fleet Program Coordinators will be able to:

- 1. Using the Workbook Wizard, develop a simple query.
- 2. Create a simple report in table format.
- 3. Save a new report to either a computer or database.

<u>Methodology</u>

This lesson will be delivered as an Instructor-led exercise.

References. None.

Enclosures. None.



The Workbook Wizard

The Workbook Wizard provides a simple six (6)-step workflow process for producing the data you need.

- 1. Choose a Display Type.
- 2. Select the Items.
- 3. Arrange the Layout of the Data.
- 4. Define the Conditions of Your Query.
- 5. Sort by Items in Your Table.
- 6. Create a New Calculation.

The quickest way to build a new query is to use only the first four (4) steps. Using the Workbook Wizard, following Steps 1 through 4 listed above, we'll create a simple report to retrieve the *Voyager No*(s) within your Region/Unit.

Once you've successfully logged on to Discoverer, the first Workbook Wizard window will appear.

🥬 Workbook Wizard		
	This wizard will help you open an existing workbook or create a new one, so you can quickly retrieve information from the database. What do you want to do?	
	Create a new workbook Den an existing workbook	
	Å	
< Back Next >	Finish Cancel	Help

Figure 2-1



The first Workbook Wizard window has five (5) navigation buttons located across the bottom of the window, as seen in Figure 2-1. The remaining Workbook Wizard pages each haves six (6) navigation buttons, located at the bottom of the window. See Figure 2-2.

Finish Cancel Help

Figure 2-2

The table below provides a description of the functionality of each button at the bottom of the Workbook Wizard screen.

< Back	The 'Back' button returns the Workbook Wizard to the previous screen. When you are on the first Workbook Wizard screen, this button in inactive (gray).
Next >	'Next' moves Workbook Wizard to the next screen. On the first Workbook Wizard screen, this button in inactive until you opt to create a new workbook or use an existing one. This button is also inactive on the final Workbook Wizard screen, as there is no 'Next' screen.
Options	The 'Options' button sets defaults for query format and display settings. This button is inactive (gray) on the initial Workbook Wizard screen.
Finish	Use the 'Finish' button when completed creating a query. This button is inactive (gray) on the first Workbook Wizard screen, unless you're returning from the second Workbook Wizard screen.
Cancel	Use 'Cancel' to cancel the current task or step.
Help	This button opens a help file on using the Discoverer Workbook Wizard.

<u>Step 1</u>. To begin creating your first report, click to create a new workbook. Doing so opens additional fields below on the same window. See Figure 2-3 below.

Table	Page-Detail Table
Crosstab	💼 Page-Detail Crosstab
A Table displays data in rows a	nd columns. Click Next to continue

Figure 2-3



Click on to select a *Table* format, which will display data in a 'rows and columns' format. Then click on Next> to continue building your query, and proceed to the next Workbook Wizard screen.

🤗 Workbook Wizard: Sto	2p 2	v Line v	×
	To add items to your worksheet, select them them to the Selected list. Available CMS/FLEET Account Message Agency Agency Alc Agency Alc Agency Alc Card Transaction Card Transaction Card Profile Accounting Cardholder Cardholder Profile Acctg Cardholder Profile Acctg Cardholder Profile Acctg Cardholder Profile Acctg Credit Card Credit Card Fe Card Profile Acctg Fe Card Profile Acctg	from the Available list and move Selected	
< Back Next >	Options	Finish Can	cel Help

Figure 2-4

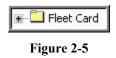
Step 2. The next step in the Workbook Wizard workflow process is shown in Figure 2-4 above. At the top of the left-hand column labeled *Available*, note the drop-down list of 'Business Areas', which represents logical groupings of folders.

Select PCMS/FLEET	Just by clicking on , and then
PCMS/FLEET, if it does not already appear in this window by	default.

A list of folders, analogous to database tables or views associated with the *PCMS/FLEET* Business Area, will appear in the left-hand column. This process may take a few seconds while the Discoverer performs a query and retrieval of folders, associated with *PCMS/FLEET*.



Next, click on the Inft-hand side of the *Fleet Card* folder. See Figure 2-5 below.



A list of items, similar to the columns of database tables or views, will appear beneath the *Cardholder* folder. (Figure 2-6)

Fleet Card
Fic Segno
Vehicle Make Model Year
E Lin Action Requested
Emboss In Spanish Ind
🖶 💼 Plastic Type Ind
🖶 Li Fuel Cost Per Trans Limit
🖬 Li Maint Cost Per Trans Limit
🖶 🗋 Price Per Gallon Limit
🖬 🚛 Trans Per Day Limit
🖶 Li Gallons Per Trans Limit
🖝 🚛 Created By
🖶 🔓 Updated By
■ Lin City
the Charles

Figure 2-6



Now you're ready to select the data fields needed to run your first query. This can be accomplished in two (2) ways:

- 1. The fastest way is to click on an item, and then drag-and-drop the item anywhere in the righthand column labeled *Selected*.
- 2. Alternatively, you can click on an item, highlighting it, and then click on the left-facing row located between the *Available* and *Selected* columns

Select the following items from the Available list, using one of the methods described above.

- 1. Region
- 2. Unit
- 3. Sub Unit
- 4. Prop Number
- 5. Voyager No

When completed, your *Selected* column should appear like the window shown in Figure 2-7 below.

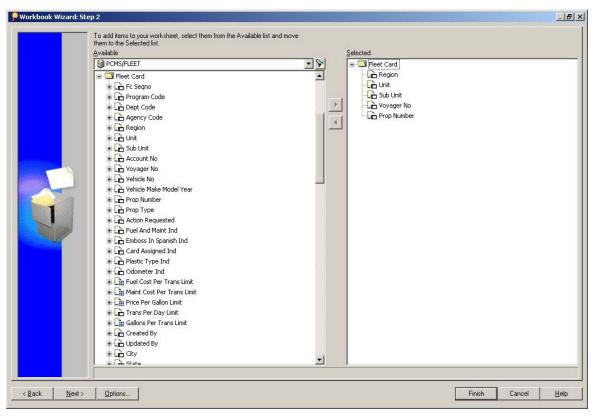


Figure 2-7



Click Next> to accept your item selections, and proceed to the next Workbook Wizard screen (Figure 2-8).

Ę			s	31	Hide <u>D</u> uplicate	
	Region	Unit	Sub Unit	Voyager No	Prop Number	
1						
2						
3						
4						
5						
6						
7		-				
9		-				
1						
1						
1						
99576 25324 94705 6343 37289 43325						
	5					
9960 5435 69403 34609 10						
1						
1						
1						
21						
2		-				
2						
2		-				
2						
2						
2						
2						
2'	9					
3						
3	1					

Figure 2-8

Step 3. Now, customize your data display, using the drag-and-drop method, to move *Prop No* to the first or leftmost column of your table. When your display is modified, click Next> to proceed to the next Workbook Wizard screen.

Prop Number	Region	Unit	Sub Unit	Voyager No

Figure 2-9



<u>Step 4</u>. This next step in the Workbook Wizard provides the opportunity to create conditions for your query. This is a critical step, which enables Discoverer users to minimize the size of their results set to a manageable level. Failure to set limiting conditions on a query could easily return a data result set numbering thousands of rows, or even more. Moreover, Oracle may *timeout* during a lengthy query, resulting in no data at all. Limiting your queries, at a minimum to a specific Region and Unit will likely preclude the return of a large, unwieldy results sets or failure due to timeout.

Click on	View Conditions for:	🗋 All Items	for the drop-down list
	in Figure 2 10 holow	and calact Pagion	

P Workbook Wizard: Step 4		<u>_ 8 ×</u>
	ne conditions to limit worksheet results by criteria you specify. Click New frine a new condition.	
	ecription:	New
< <u>B</u> ack <u>N</u> ext>	Finish Cancel	<u>H</u> elp

as shown in Figure 2-10 below, and select *Region*.

Figure 2-10



Next, click New..., and the New Condition window in Figure 2-11, shown below, will appear.

Name:	Region				 	
879878	Generate	e name au	utomatically			
Description:	[
Location:	2					
Formula						
Enter the name	of an item or :	select fro	om the drop l	ist.		
Inter the name	of an item or :	select fro	om the drop l	ist.		
Enter the name Item	of an item or Condil		om the drop l Value(s)	ist.		Advanced >:
Item Region	Condi			ist.		Advanced >
Item	Condi			- Canada	 Ŀ	-
Item Region	Condil			- Canada	 Þ	-
Item Region	Condil			- Canada	Ŀ	-

Figure 2-11

The *Condition* field is always an equal sign (=) by default. If you need a different conditional operator when creating a new condition, click \blacksquare in the *Condition* field.

Item	Condition	Value(s)		
Region	1	01*		
•	-			1
	0	10-1		
Match gase	>			
	<			
	<-		OK	Cancel
	>=		00	Paura

Figure 2-12

Enter a *Region* number in the *Value(s)* field, enclosed in single quotes, like the example shown in Figure 2-12, and click $\square K$.



Using the same process, enter a *Unit* number. If you support multiple Sub Units, you may choose to set a *Sub Unit* condition as well. Note that as you create conditions for your query, they appear in the Workbook Wizard window. When you've completed the conditions required for your query, click Finish

Congratulations, you successfully created a simple table-format report using Oracle Discoverer. Your results set should look similar to that shown in Figure 2-13 below. Note the column order, which you altered in Step 3 of the Workbook Wizard workflow process. Also, the *Voyager No* column has been truncated for security.

	Duese Manada en	Deview	1 10204	Orde Libria	Mary H
1	Prop Number A258048		Unit 05	DOODO	Voy. #
			05		
2	A262323	107.022 X		00000	179339
3	A262329	10200	05	00000	179303
4	A262321	3.3.	05	00000	179303
5	A272341	1000 B	05	00000	179304
6	A262324	- COSC	05	00000	179303
7	A278970		05	00000	179305
8	A278971	01	05	00000	179305
9	A238895	01	05	00000	179301
10	A238140	01	05	00000	179301
11	A278969	01	05	00000	179305
12	A238163	01	05	00000	179301
13	A238117	01	05	00000	179301
14	A186592	01	05	00000	179300
15	A186593	01	05	00000	179300
16	A186596	01	05	00000	179300
17	A186600	01	05	00000	179300
18	A238169	01	05	00000	179301
19	A186598	01	05	00000	179300
20	A110826	01	05	00000	179300
21	A251845	10000	05	00000	179302
22	A279038	17.200 C	05	00000	179305
23	A251338		05	00000	179307
24	A279039		05	00000	179305
25	A229427	3.3.	05	00000	179300
26	A251095		05	00000	179307
20	A186595	3.3.	05	00000	179300
28	A100333		05	00000	179302
20	A070021	10000	05	00000	
	Sheet 1				170205

Figure 2-13



_ 8 ×

If your query produced more than 100 rows of data, only the first 100 rows will be displayed. Immediately below row 100, you will see the following:

99	A279042	01	05	00000	179305
100	A251843	01	05	00000	179302
•	Click to ret	rieve ne>	a 100 r	ows.	10

Click on to view additional data in increments of 100 rows. If you need the total number of rows returned, from the Tool Bar (Figure 2-15) at the top of the screen., click on *Sheet* > *Count All Rows*.

and the second second second	Charles and Charles				1000000000000	100100100100	000000000000000	201112000
P) File	Edit	View	Sheet	Format	Tools	Graph	Window	Help

Figure 2-15

Discoverer will provide a count of the number of rows and present the result as shown in Figure 2-16 below. Click $\square K$ to close this window.



Figure 2-16

If you want all your rows of data to be displayed, from the Tool Bar, click on *Sheet* > *Retrieve All Rows*, and all data for your query will be displayed.



Finally, it's time to save your work. Click on Discoverer provides two (2) alternatives for saving your Workbooks; (1) to a computer accessible via your workstation, or (2) the database itself. See Figures 2-17.

9	My Computer			
	Database			
~	ve a workbook to	uour datat	t olick Say	
10.501		your datac		/c.

Figure 2-17

Click on 🔎 or 🧐 , and you will see one of the following windows (Figure 2-18 or 2-19) appear:

Save As			? X
Save in: 🔂 🕻	DISCVR31	- ÷ 主 (* 💷 *
DEMO DOC SQL 2500 or Ove Dispute Rep Fleet 1			
File name:	Fleet Basic Report		Save
Save as type:	Oracle Discoverer Workboo	ks (*.dis) 💽	Cancel

Figure 2-18



2500 and Over Account Numbers Check Transactions Dispute Report Exercise #2	<u> </u>
Fleet Test Query Regions Units - Region 01 Units - Region 05 Units - Region 08 Units - Region 1	
Name: Fleet Basic Report	

Figure 2-19

Enter *Fleet Basic Report* in the *File Name* field and click on ______.

<u>Summary</u>. Creating a query and a report using the Workbook Wizard is simple, easy and quick. Knowing your data and how to define your query to get the data you need is the challenge. In this lesson/exercise, you created a simple report to retrieve Voyager Numbers for a Specific Region and Unit. In the next lesson/exercise, you will create a report to display information on Fleet User Messages.





Exercise 3: Creating a Message Report

Lesson Description

In Lesson 3, participants will create a report containing data elements from three (3) different folders (*Message*, *Credit Card*, and *Fleet Card*) providing information on PCMS/Fleet User Messages.

Training Objectives

At the conclusion of this lesson, Agency Fleet Headquarters Coordinators and Local Fleet Program Coordinators will be able to:

- 1. Develop complex queries from multiple folders.
- 2. Format raw results into properly sized columns.

<u>Methodology</u>

This lesson will be delivered as an Instructor-led exercise.

References. None.

Enclosures. None.



Preparation. Using your Fleet Username, log on to Discoverer

		Connec
11/	Username:	Cancel
1-	Password:	Help
- <u>See</u>	Connect: pcmsprod	About.
/	_ Status	
Discoverer [™] Release 3.1 ORACLE	Please enter your username, password	d and the database name.

Figure 3-1

Creating the Basic Query / Report

Step 1. At the initial Workbook Wizard page, select *Create a New Workbook* and *Table*, and click

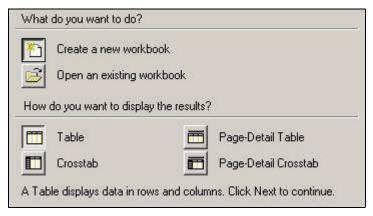


Figure 3-2



Step 2. Next, open the *Account Message* folder from the *Available* column on the left, by clicking on the \blacksquare .

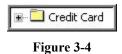


Figure 3-3

Select the following fields:

- 1. Region
- 2. Unit
- 3. Sub Unit
- 4. Account Number
- 5. Message
- 6. Message Status
- 7. Message Date
- 8. Comments
- 9. Last Updated

Select and expand the *Credit Card* folder from the *Available* column by clicking on **•**. Select *Cardholder/Prop Number* and *Voyager Number*.



Then, select and expand the *Fleet Card* folder from the *Available* column by clicking on ■. Select *Action Requested* and *PCMS User ID*.

🛨 🛄 Fleet Card

Figure 3-5



When these actions are completed, your *Selected* column on the right-hand side of the paged should appear like Figure 3-6 below. If yes, click to proceed.



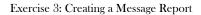
Figure 3-6

<u>Step 3</u>. No customization of this report is required yet. First we want to ensure the query we're building returns the data necessary to complete the report, so click $\xrightarrow{\text{Next}}$ and proceed to the next Workbook Wizard page.

Step 4. To set the conditions for your query/report, click the next to *All Items*. You should see a window containing each of the fields selected in Workbook Wizard Step 2, shown below in Figure 3-7.

D All Items	
Al Items	
Active Only	1
-BRegion	
- Unit	
ab Sub Unit	
Bub Unit BAccount Number	
als Message	
Message Status (R/U)	
Amessage Date	

Figure 3-7





Depending on the permissions granted to your Username, you may want to set conditions for *Region*, *Unit* and *Sub Unit*, as done in Lesson 2.

Your query/report is ready to run. Click on Finish and your report will appear.

	յ r b է թսու Nui	Message	Message Date
▶ 1	0 000 0000358	Purchase made on Holiday purchase date	15-Sep-1999 10:0
▶2	0 0 000 0000348	Purchase made on Holiday purchase date	16-Sep-1999 10:
)⊮З	0 0 000 0000361	Purchase made on Holiday purchase date	16-Sep-1999 10:
⊮ 4	0 0 000 0000339	Profile Accounting changed more than twic	04-Oct-1999 10:4
⊳ 5	0 0 000 0000339	Profile Accounting changed more than twic	04-Oct-1999 10:4
▶6	0 0 000 0000340	Profile Accounting changed more than twic	04-Oct-1999 10:4

Figure 3-8

Columns of the initial results table will likely appear truncated as in Figure 3-8 above. In order to re-size the columns, click on the blank (gray) cell in the upper left-hand corner of the table. This will select the entire table for an action, highlighting all items in the table blue. See Figure 3-9 below.

	a r b Count Nui	Message	Message Date
▶ 1	2 0 000 0000358 P	Purchase made on Holiday purchase date	(15-Sep-1999-10:(
▶2	0 0 000 000034E P	Purchase made on Holiday purchase date	[16-Sep-1999-10:
⊁3	0 0 000 0000361 P	Purchase made on Holiday purchase date	16-Sep-1999-10:
▶ 4	0 0 000 0000339 P	Profile Accounting changed more than twic	04-Oct-1999 10:4
⊁5	0 0 000 0000339 P	Profile Accounting changed more than twic	04-Oct-1999 10:4

Figure 3-9

Now, move to the tool bar at the top of your screen, and click on *Format*, *Columns* and *Auto Size*. (See Figure 3-10.) This action will adjust each column to display complete labels and data strings.

Format Tools	Graph	a Window	Help
Data Headings Exceptions	2	1 @ 3	1
Columns		Width	U
Sheet	P	Auto Size	
	Deta Headings Exceptions Columns	Deta Headings Exceptions	Dota Headings Exceptions

Figure 3-10



Your results set table should now appear similar to Figure 3-11 below. The *Account Number* column has been deliberately compressed for security. Use the horizontal scroll bar at the bottom of the screen to view the *Message Status*, *Message Date*, *Comments* and *Last Updated* fields. In later lesson/exercises, you'll learn to hide columns of unnecessary, redundant data, and alter the *Table Layout* and column format to provide a more user-friendly display.

	Region	Unit	Sub Unit	Acct No Message
⊩ 1	01	05	00000	00003584 Purchase made on Holiday purchase date is: 04-JUL-199 merchant name is: ROCKCREEK CONVENIENCE017
▶2	01	05	00000	00003465 Purchase made on Holiday purchase date is: 04-JUL-199 merchant name is: SUNSET MART #9 013
▶3	01	05	00000	00003617 Purchase made on Holiday purchase date is: 04-JUL-199 merchant name is: SUNSET MART #9 013
▶ 4	01	05	00000	00003399 Profile Accounting changed more than twice a month
⊾5	01	05	00000	00003399 Profile Accounting changed more than twice a month
▶6	01	05	00000	00003401 Profile Accounting changed more than twice a month
▶7	01	05	00000	00003404 Profile Accounting changed more than twice a month
▶8	01	05	00000	00003405 Profile Accounting changed more than twice a month
▶9	01	05	00000	00003406 Profile Accounting changed more than twice a month
▶ 10	01	05	00000	00003408 Profile Accounting changed more than twice a month
▶ 11	01	05	00000	00003409 Profile Accounting changed more than twice a month
▶ 12	01	05	00000	00003425 Profile Accounting changed more than twice a month
▶ 13	01	05	00000	00003430 Profile Accounting changed more than twice a month
▶ 14	01	05	00000	00003432 Profile Accounting changed more than twice a month
▶ 15	01	05	00000	00003432 Profile Accounting changed more than twice a month
▶ 16	01	05	00000	00003435 Profile Accounting changed more than twice a month
▶ 17	01	05	00000	00003440 Profile Accounting changed more than twice a month
▶ 18	01	05	00000	00003440 Profile Accounting changed more than twice a month
▶ 19	01	05	00000	00003442 Profile Accounting changed more than twice a month
▶ 20	01	05	00000	00003443 Profile Accounting changed more than twice a month
▶ 21	01	05	00000	00003444 Profile Accounting changed more than twice a month
▶ 22	01	05	00000	00003445 Profile Accounting changed more than twice a month
▶ 23	01	05	00000	00003447 Profile Accounting changed more than twice a month
▶ 24	01	05	00000	00003447 Profile Accounting changed more than twice a month
▶ 25	01	05	00000	00003447 Profile Accounting changed more than twice a month
▶ 26	01	05	00000	00003450 Profile Accounting changed more than twice a month
▶ 27	01	05	00000	00003450 Profile Accounting changed more than twice a month
▶ 28	01	05	00000	00003452 Profile Accounting changed more than twice a month
	01 Sheet 1 /	ΩE	00000	00002450 Ducit Apacunting shanned more than turing a month

Figure 3-11



Finally, save your report by clicking on , selecting a computer or the database for storing your report (Figure 3-12), and saving this report as *Message Report* (Figure 3-13).

_	re do you want to save this workbook?	
8	Database	
To sa	ave a workbook to your database account, click Save.	
To sa	ave a workbook to your database account, click Save.	
To sa	ave a workbook to your database account, click Save.	

Figure 3-12

Available workbooks:			
2500 and Over Account Numbers			-
Check Transactions			
Dispute Report			
Exercise #2			
Fleet Test Query			
Regions			
Units - Region 01 Units - Region 05			_
Units - Region 08			
Units - Region 1			-
			_
Name:			
Message Report			
Save	Cancel	Help	

Figure 3-13

Summary. In this lesson/exercise, you successfully created a Messages Report from data elements contained in multiple Discoverer folders, then re-sized your report display or printing. In the next lesson/exercise, you'll learn to add group sorts to your report, and edit your table layout using the *Show Page Items* feature.