

A World of Possibilities

**The Power of Oracle
Application Express to Extend
Oracle E-Business Suite**



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This is me

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President of the Chicago Oracle Users Group
(COUG)

President of the Real Application Cluster
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Oracle ACE

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Brake Parts Inc. is **committed to leading** the global aftermarket as **the premier manufacturer** of automotive braking components

Manufacturing plants and Sales offices across the globe allow us to provide outstanding service to customers in all regions.

Primary Products

- Friction
 - Pads
 - Shoes
- Rotors
- Calipers
- Wheel Hub Assemblies
- Hydraulics

Corporate Capabilities

- Research and Development
- Engineering
- Testing
- Manufacturing
- Logistics
- Distribution
- Customer Support



World Class Products. Global Commitment.

Agenda

- Typical Oracle EBS Extension Options
- Oracle APEX Architecture - Integration with EBS
- Let's Build an Interactive Report!
- Brake Parts APEX Applications

Typical Oracle EBS Extension Options

Traditional Extension Methods

Oracle Forms

Personalization or
Modification (Unsupported by Oracle)

Oracle Application Framework (OAF)

Personalization or
Modification (Unsupported by Oracle)

Oracle Reports

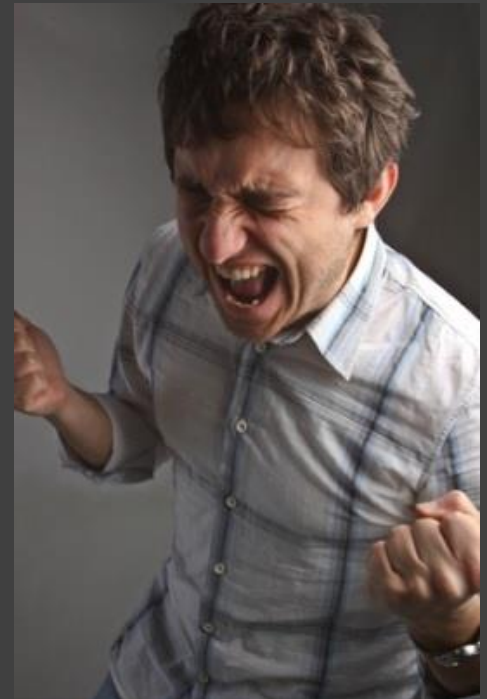
Custom



Traditional Methods Frustrating!

Oracle Forms, Reports, and OAF are great mature products but...

- They do require **additional** skills beyond SQL and PL/SQL
- Development time is typically longer to get business what they need
- May **not survive** patching or upgrades
- Need additional software installed on developer desktops



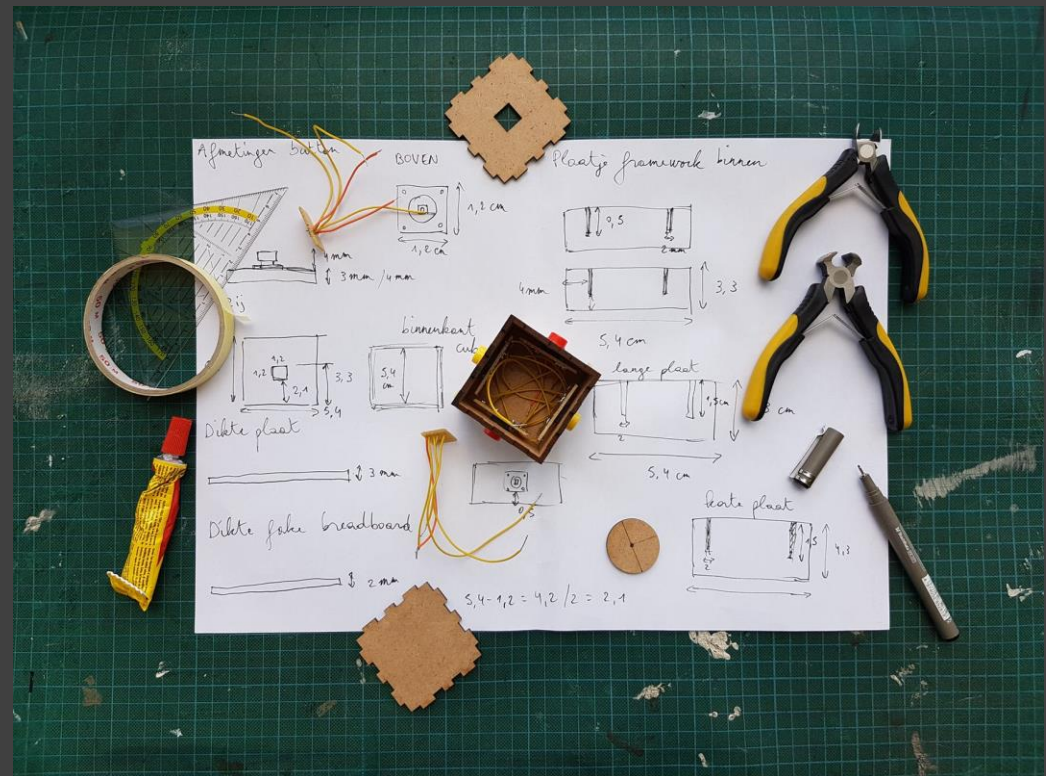
Oracle Application Express (APEX)

- What if you could use a tool to quickly turn those extensions/modifications into reality?
- Only need a **web browser** to develop
- Low code framework with built-in wizard driven tools
- Deploy something that is **secure, scalable** and **survives** EBS patches/upgrades
- Make both your IT staff and business users happier



RAPID APPLICATION DEVELOPMENT

- James Martin
- Iterative Development
- Prototyping



Oracle Application Express (APEX)

- Oracle Application Express is included with Oracle Database (since 2004)
- Fully supported and **no additional licensing** costs to use APEX
 - *Consult your Oracle Sales rep on impact to EBS licensing (you might be using the limited usage licensing).*
- Runs in the database so can scale with the database
 - Works with Exadata, Real Application Clusters (RAC) and In-Memory option
- Built in wizards that allow rapid development of applications

What can you do with APEX?

- Create data entry or lookup forms
- Create interactive reports with the ability to drill down, filter and create charts
- Eliminate Excel spreadsheets and Access databases!
 - Convert them to APEX so they can be easily accessible by everyone, secured and backed up.
 - **A true single source of truth!**



Drowning in Spreadsheets?

The background of the image is a dense, repeating pattern of Microsoft Excel spreadsheet icons. Each icon is a green square with a white grid pattern and a small white 'X' in the top-left corner. The icons are slightly offset from each other, creating a layered effect.

APEX is the spreadsheet killer!

Oracle APEX Architecture – Integration with EBS

APEX Architecture



“Oracle Application Express consists of a metadata repository that stores the definitions of applications and the APEX engine that renders and processes pages”

APEX Web Listener Options

- **Oracle REST Data Services (ORDS)**



Recommended

- Oracle REST Data Services Listener is a Java-based Web server. It features file system caching, offers improved file upload capability, and is certified with Oracle WebLogic Server, Apache Tomcat, or Standalone (built-in Jetty).

- **Oracle HTTP Server and mod_plsql (Deprecated)**

- Oracle HTTP Server uses the mod_plsql plug-in to communicate with the Oracle Application Express engine within the Oracle database.

- **Embedded PL/SQL Gateway (Legacy)**

- Oracle XML DB Protocol Server with the Embedded PL/SQL Gateway installs with Oracle Database. It provides the database with a Web server and the necessary infrastructure to create dynamic applications.

Supported Java EE Application Servers

- **WebLogic** - Best of class but licensing can be expensive.
- **Apache Tomcat** – Leader in open source web application server.
- **Standalone** - Uses built in web server called **Jetty**.

High Level Installation Steps

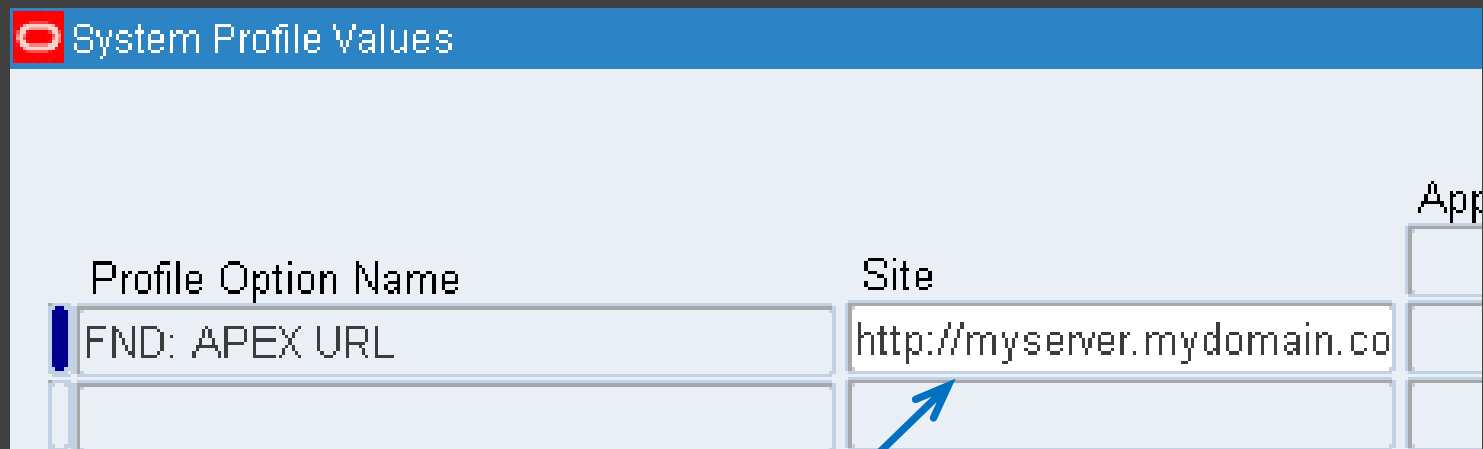
- Install APEX into the Oracle EBS database
- Install Oracle Rest Data Services (ORDS)
- Install web application server (WLS, Tomcat, Standalone)
- Deploy **ords.war** to web application server

High Level Installation Steps

- Make sure the required EBS patches to support APEX are installed (Patch **12726556**, **12316083**)
- Create your **custom schema** in the EBS database (e.g. XXAPEX)
- Create a **Workspace** in APEX and tie that to the custom schema
- Create APEX developer accounts

High Level Installation Steps

Set your Oracle EBS Profile Value with your APEX URL




Profile Option Name	Site	App
FND: APEX URL	http://myserver.mydomain.co	

http://myserver.mydomain.com:8080/ords







It's Installed...Now What?

Give the developer a browser and start creating!

ORACLE Application Express



Oracle Application Express

 XXAPEX	
 JOHN.DEVELOPER	
	

Sign In

[Reset Password](#)

APEX Authentication



- APEX uses authentication schemes to determine the user
- APEX offers pre-configured authentication schemes including Oracle Single Sign-On (OSSO) and Oracle Access Manager (OAM).
 - *Requires licensing*
- Use custom built authentication that will validate against current EBS users and their responsibilities
 - Custom PL/SQL using the FND_USER_PKG

APEX Authentication

- Another custom option that is available from **Insum Solutions (fee now)**
 - Uses EBS user credentials to validate and allow users to automatically and seamlessly login to an APEX application (think of it as a custom Single Sign On)
 - Includes the ability to initiate your standard EBS initialization calls from the APEX application
 - FND_GLOBAL.APPS_INITIALIZE
 - MO_GLOBAL.INIT
 - MO_GLOBAL.SET_POLICY_CONTEXT

APEX Authorization

- What can the user see in APEX?
- What can the user do in APEX?
- APEX authorization schemes can be applied to various components
 - Forms, buttons, page regions, etc.



APEX Themes

- APEX 5.0+ uses the Universal Theme by default.
- The APEX theme used by BPI initially was Traditional Blue # 20
- Looks most like Oracle EBS OAF pages
- **Note:** When using Traditional Blue #20 (or any other theme) will **overwrite** the default Universal Theme

The screenshot displays an APEX application interface with a blue header bar. On the left, there is a logo for 'BRAKE PARTS INC' featuring a red and white circular emblem. On the right, a 'Home' link is visible. Below the header, a 'Main Menu' section contains a dropdown menu. Further down, a 'Williams Report' section includes a form with the label 'Enter Account Number', a text input field, and a 'GO' button. At the bottom, a table header is partially visible with columns: Status flag, Vendor name, Scac code, Trans mode, Invoice num, Description, Invoice amount, Ship to location code, Quantity invoiced, and Gross weight.

Additional Setups in EBS

For each APEX application/report you'll need to do the following:

- Setup Function
- Setup Menus
- Setup Responsibilities
- Assign Responsibilities to Users

Some Best Practices

- Separate tablespace for the APEX engine (**don't use SYSAUX!**)
- Separate tablespace for custom database objects that will be created to support APEX applications (e.g. **XXAPEX**)
- **Never** access EBS data directly but only through views
- Modifications to EBS data should only be done via **supported APIs**

Some Best Practices (Cont.)

- PL/SQL, grants, and synonyms should be owned by APPS
- Don't forget about **menu exclusions** when adding APEX applications to seeded menus (not everyone should see everything)
- Make sure to **tune your underlying SQL**! APEX will only be as quick as the SQL!
- Give considerations for **high availability** if the rest of your EBS environment is doing so (e.g. multiple application servers).

EBS 12.2.x Guidelines

- Edition enable your APEX custom schema (e.g. XXAPEX)
- Create the editioned view on your custom tables
 - `exec AD_ZD_TABLE.UPGRADE('XXAPEX','XXAPEX_TABLE');`
- For updates to existing objects, follow the online patching cycle
- Review MOS documents 1306563.1 and 1531121.1 for additional details

How do we get started?

Basic Proof of Concept

Let's Build An Interactive Report!

Let's Build An Interactive Report!

- Functional analyst manually ran query to get business user data
- Provided in a spreadsheet
- Never up to date



Create Your Database Objects

--As APPS User

```
SQL>create or replace view apps.xxapex_supplier_listing_demo  
(ou_name,  
...
```

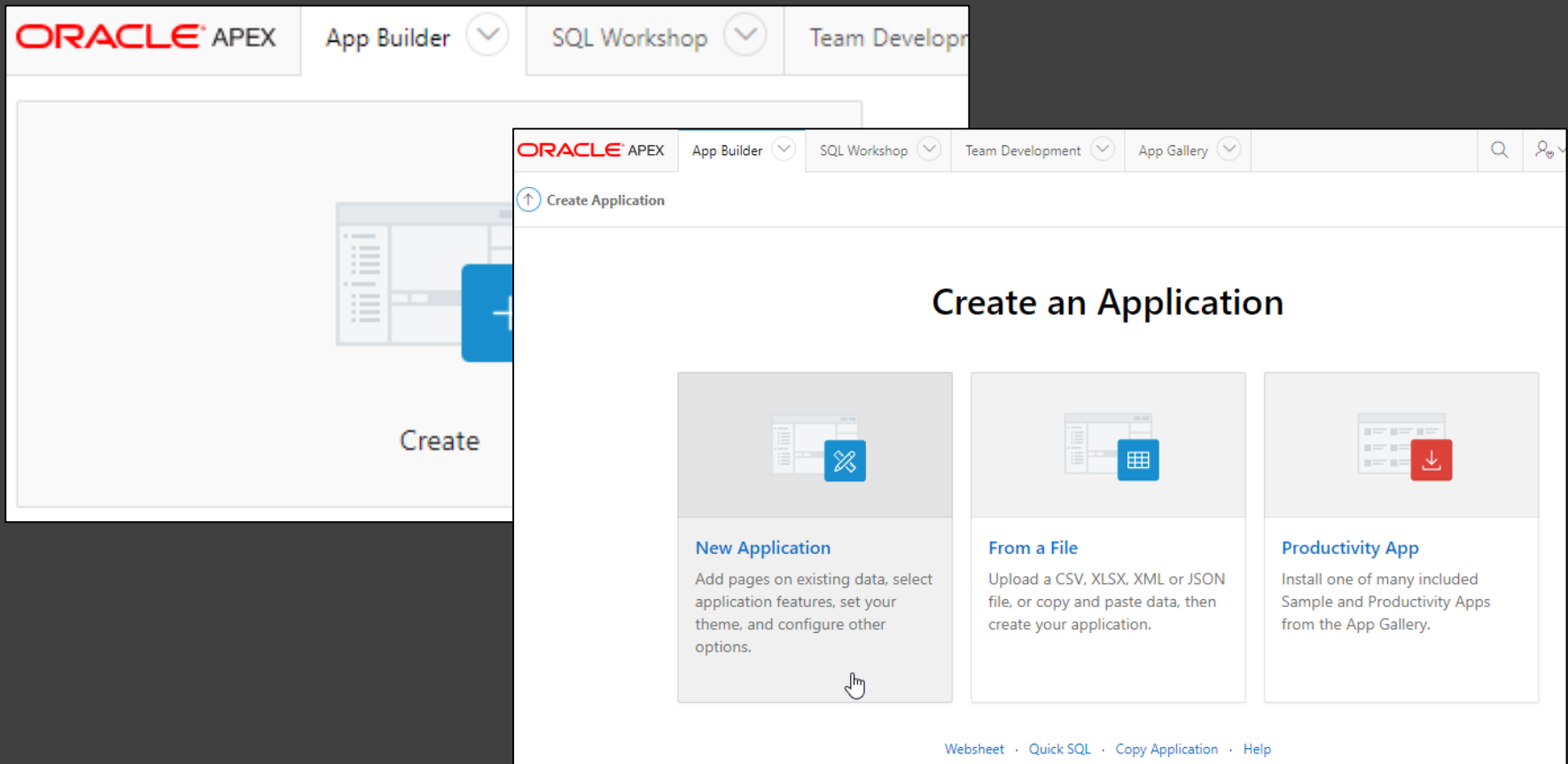
--As APPS User

```
SQL>grant select on apps.xxapex_supplier_listing_demo to xxapex;
```

--As XXAPEX User

```
SQL> create or replace view xxapex.xxapex_supplier_listing_demo AS  
select * from apps.xxapex_supplier_listing_demo;
```

Let's Build An Interactive Report!



The screenshot displays the Oracle APEX interface for creating a new application. The top navigation bar includes 'ORACLE APEX', 'App Builder', 'SQL Workshop', and 'Team Development'. The main content area is titled 'Create an Application' and features three distinct options:

- New Application**: Add pages on existing data, select application features, set your theme, and configure other options. A hand cursor is pointing at this option.
- From a File**: Upload a CSV, XLSX, XML or JSON file, or copy and paste data, then create your application.
- Productivity App**: Install one of many included Sample and Productivity Apps from the App Gallery.

At the bottom of the page, there are links for 'Worksheet', 'Quick SQL', 'Copy Application', and 'Help'.

Let's Build An Interactive Report!

Create an Application

Name

Supplier List Report

Appearance

Vita, Side Menu



Pages ?



Add Page



Home

Blank

Edit



Features ? Check All



About Page

Add about this application page



Access Control

Enable role-based user authorization



Activity Reporting

Include user activity and error reports



Configuration Options

Enable or disable application features



Feedback

Allow users to provide feedback



Theme Style Selection

Update default application look and feel

Settings ?

Application ID

150

Schema

XXAPEX



Authentication

Application Express Accounts



Language

English (en)



Advanced Settings



User Interface Defaults

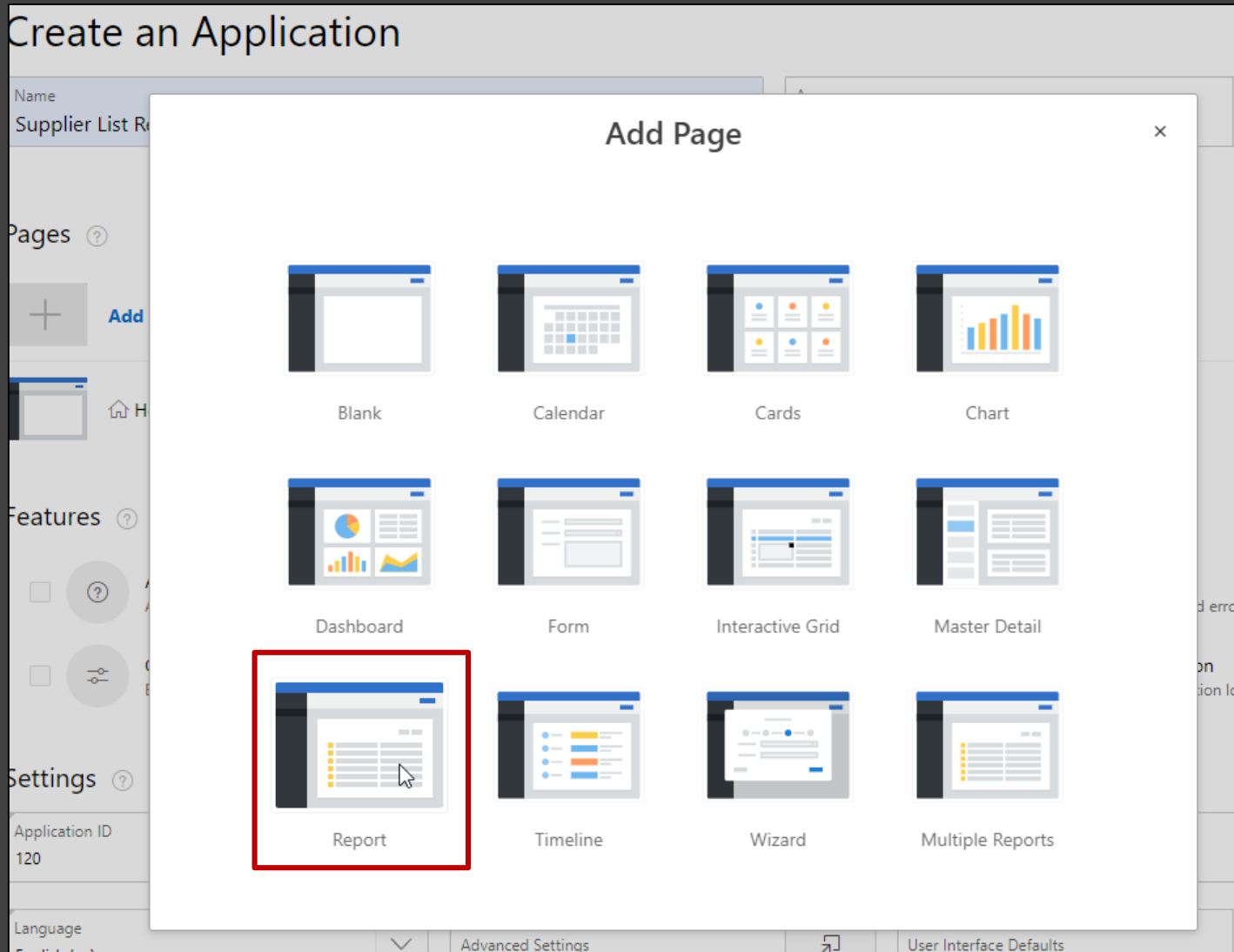


Cancel

Create Application

New Application ID

Let's Build An Interactive Report!



Let's Build An Interactive Report!

Create an Application

Name
Supplier List R

Pages ?

+ Add

Home

Features ?

Settings ?

Application ID
117

Language
English (en)

Advanced Settings

User Interface Defaults

Edit

error reports

on

tion look and fe

?

< ?

Add Page

Add Report Page

Page Name
Supplier List Interactive Report

Set Icon

Table or View SQL Query **Interactive Report** Classic Report

Table or View
XXAPEX_SUPPLIER_LISTING_DEMO

Include Form

Advanced

Let's Build An Interactive Report!

Create an Application

Name
Supplier List Report

Appearance
Vita, Side Menu

Pages ?

Add Page

Home

Blank

Edit

Supplier List Interactive Report

Interactive Report (xxapex_supplier_listing_demo)

Edit

Features ?

Check All

☐

?

 About Page
Add about this application page

☐ Access Control
Enable role-based user authorization

☐ Activity Reporting
Include user activity and error reports

☐ Configuration Options
Enable or disable application features

☐ Feedback
Allow users to provide feedback

☐ Theme Style Selection
Update default application look and feel

Settings ?

Application ID
117

Schema
XXAPEX

Authentication
Application Express Accounts

Language
English (en)

Advanced Settings

User Interface Defaults

Cancel

Create Application

Let's Build An Interactive Report!

ORACLE APEX

App Builder


SQL Workshop


Team Development


App Gallery



Application 150


Application 150 - Supplier List Report



Run Application



Supporting Objects



Shared Components

Go   Actions


0 - Global Page - Desktop


1 - Home


2 - Supplier List Interactive Report


9999 - Login Page

Create EBS Function

The screenshot displays the 'Form Functions' configuration interface. The 'Web HTML' tab is selected, showing a table with the following columns: Function, Type, Maintenance Mode Support, and Context Dependence. The first row in the table is highlighted, showing the function 'XXBPI_APEX_AP_SUPP' and the HTML Call 'GWY.jsp?targetAppType=APEX&p=150:1'. The 'MDS Reference Path' column is empty. Two callouts are present: 'APEX Application Page Number' points to the '150' in the URL, and 'APEX Application ID' points to the '1' in the URL.

Function	Type	Maintenance Mode Support	Context Dependence
XXBPI_APEX_AP_SUPP	HTML Call		

HTML Call: GWY.jsp?targetAppType=APEX&p=150:1

MDS Reference Path:

Create EBS Submenu/Add to Menu

Menus

Menu:

User Menu Name:

Menus

Menu: [View Tree...](#)

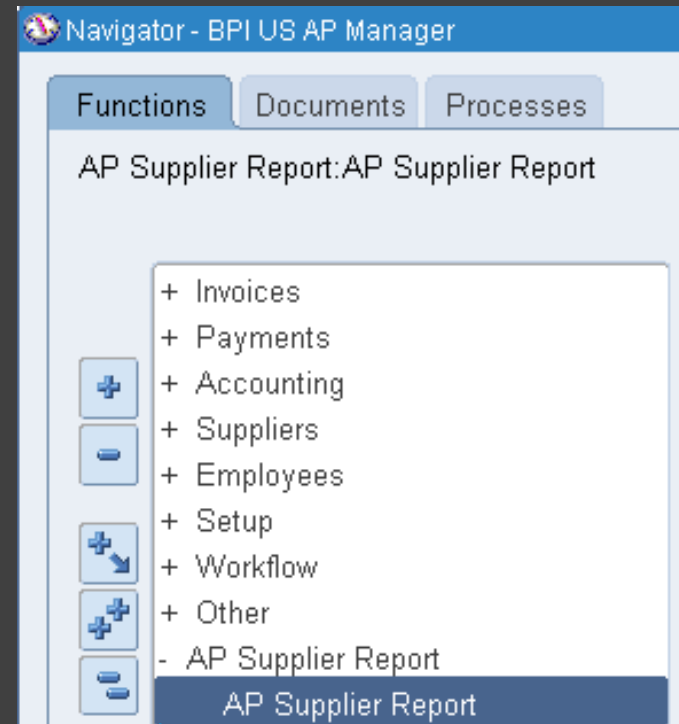
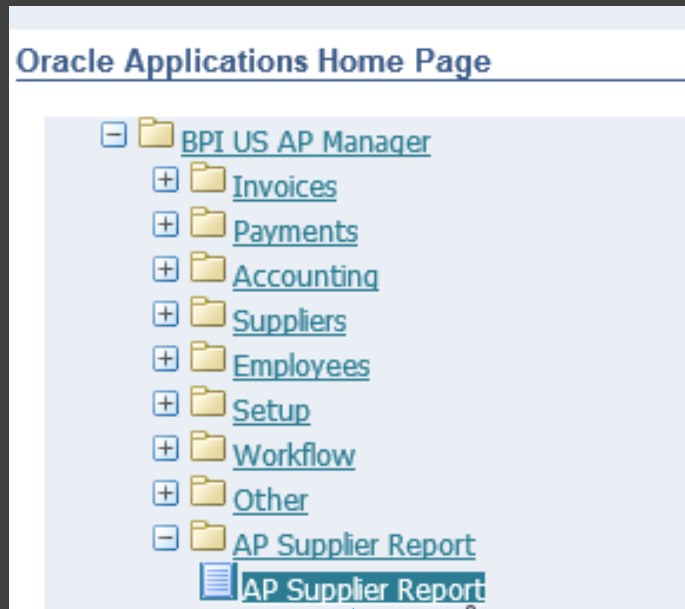
User Menu Name:

Menu Type:

Description:

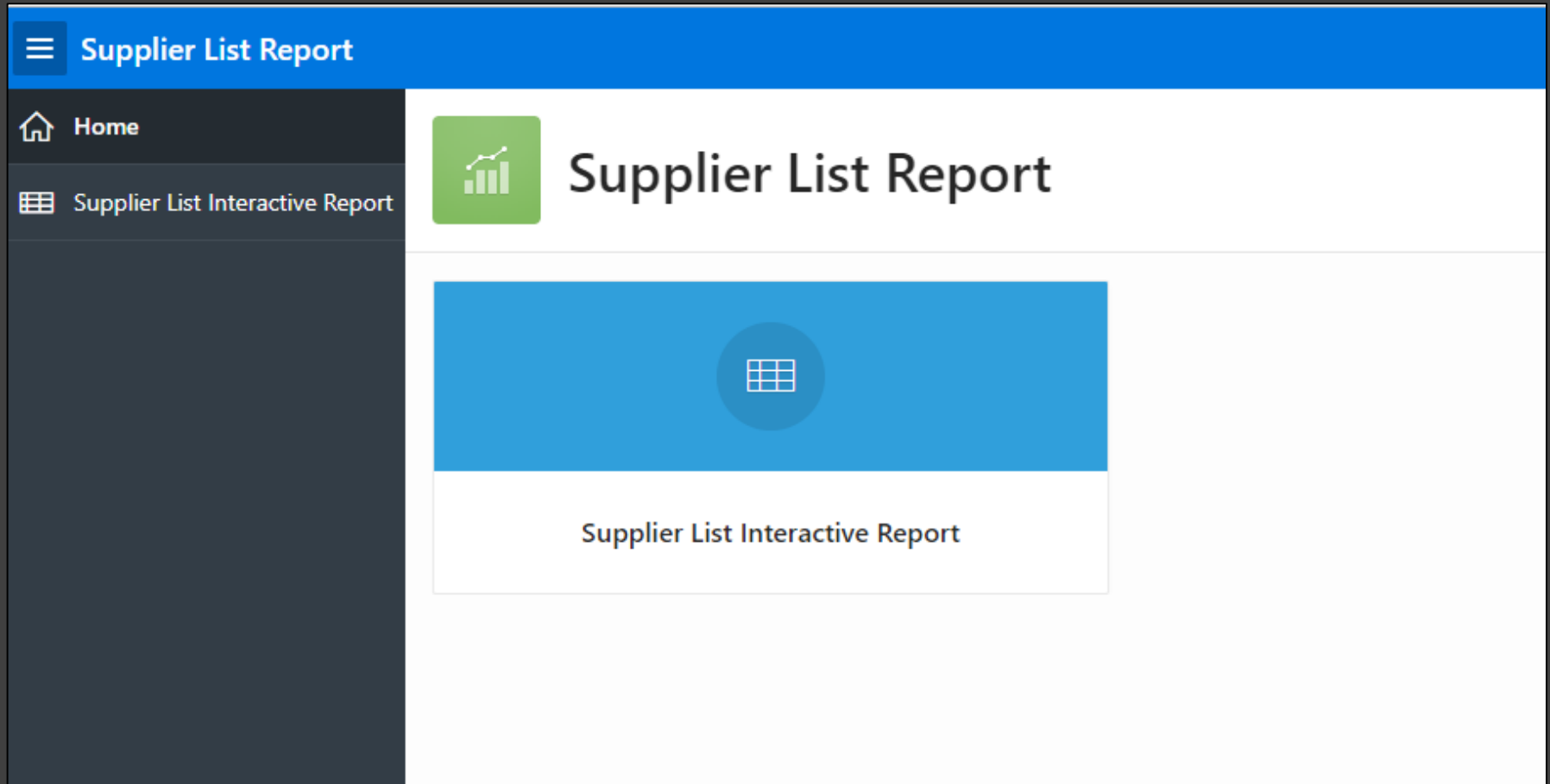
Seq	Prompt	Submenu	Function	Description	Grant
15		Supplier Information Mana			<input checked="" type="checkbox"/>
16		View Supplier Information			<input checked="" type="checkbox"/>
17		CE Bank Home Page Mei			<input checked="" type="checkbox"/>
18		CE Bank Search Home P			<input checked="" type="checkbox"/>
19		PO Order Tab			<input checked="" type="checkbox"/>
100			CE Bank Account View -		<input checked="" type="checkbox"/>
105			View Payment Page		<input checked="" type="checkbox"/>
110			Void All Payments in Pay		<input checked="" type="checkbox"/>
120	AP Supplier Repc	BPI AP SUPPLIER REPC			<input checked="" type="checkbox"/>

Launch APEX From EBS Menu



Entry to the APEX application is via a menu in EBS

Let's Build An Interactive Report!



Let's Build An Interactive Report!

Supplier List Report

Home

Supplier List Interactive Report

Supplier List Interactive Report

Q

Go

Actions

Ou Name	Supplier Name	Supplier Number	Payment Term Name	Payment Term Description	Sup Invoice Currency Code	End Date Active	Vendor Site Code	Country	Po Invoice Currency Code	Payment Method Code	Pay Site Flag
		2875	IMMEDIATE	IMMEDIATE	MXN	-		MX	MXN	RECORD_WIRE	Y
		2539	IMMEDIATE	IMMEDIATE	MXN	-		MX	MXN	RECORD_WIRE	Y
		2553	IMMEDIATE	IMMEDIATE	MXN	-		MX	MXN	RECORD_WIRE	Y
		2815	IMMEDIATE	IMMEDIATE	USD	-		US	USD	EFT	Y
		3430	IMMEDIATE	IMMEDIATE	USD	-		US	USD	EFT	Y
		4806	IMMEDIATE	IMMEDIATE	MXN	-		MX	MXN	WIRE	Y
		2546	IMMEDIATE	IMMEDIATE	USD	-		MX	USD	RECORD_WIRE	Y
		2546	IMMEDIATE	IMMEDIATE	USD	-		MX	USD	WIRE	Y
		3951	IMMEDIATE	IMMEDIATE	USD	-		MX	USD	WIRE	Y
		3505	IMMEDIATE	IMMEDIATE	MXN	-		MX	MXN	RECORD_WIRE	Y
		3464	IMMEDIATE	IMMEDIATE	MXN	-		MX	MXN	WIRE	Y
		3509	IMMEDIATE	IMMEDIATE	MXN	-		MX	MXN	WIRE	Y
		2980	IMMEDIATE	IMMEDIATE	MXN	-		MX	MXN	WIRE	Y

Control Break

Supplier List Report

Supplier List Interactive Report

Search: Go Actions

Supplier Name	Supplier Number	Payment Term Name	Payment Term Description
	2654	95	95 NET
	2666	95	95 NET
			95 NET
			45 NET
			30 NET
	2704	95	95 NET
	2724	30 NET	30 NET
	2876	30 NET	30 NET
	2829	15 NET	15 NET
	2648	95	95 NET
	2933	IMMEDIATE	IMMEDIATE

Columns

Filter

Data

Format

Control Break

Highlight

Rows Per Page

Chart

Group By

Pivot

Report

Download

Subscription

Help

Control Break

Supplier List Interactive Report

Q ▾ Go Actions ▾

Control Break

×

	Column	Status
1	Supplier Name ▾	Enabled ▾
2	- Select Column - ▾	Enabled ▾
3	- Select Column - ▾	Enabled ▾
4	- Select Column - ▾	Enabled ▾
5	- Select Column - ▾	Enabled ▾
6	- Select Column - ▾	Enabled ▾

Cancel Apply

	Supplier Number
	2654
	2666
	2674
	2814
	2821
	2704
	2724
	2876
	2829

Control Break

Supplier List Report

Supplier List Interactive Report

Q ▾

Go

Actions ▾

▼

☒

☰

Supplier Name

×

Supplier Name :

Ou Name <div>↑</div>	Supplier Number	Payment Term Name	Payment Term Description	Sup Invoice Currency Code	End Date Active	Vendor Site Code	Country	Po Invoice Currency Code	Payment Method Code
<div></div>	5661	IMMEDIATE	IMMEDIATE	USD	-	<div></div>	US	USD	CHECK

Supplier Name :

Ou Name	Supplier Number	Payment Term Name	Payment Term Description	Sup Invoice Currency Code	End Date Active	Vendor Site Code	Country	Po Invoice Currency Code	Payment Method Code
<div></div>	3361	10 NET	10 NET	USD	-	<div></div>	US	USD	CHECK

Supplier Name :

Ou Name	Supplier Number	Payment Term Name	Payment Term Description	Sup Invoice Currency Code	End Date Active	Vendor Site Code	Country	Po Invoice Currency Code	Payment Method Code
<div></div>	2603	IMMEDIATE	IMMEDIATE	CAD	-	<div></div>	CA	USD	WIRE
<div></div>	2603	IMMEDIATE	IMMEDIATE	CAD	-	<div></div>	CA	USD	EFT
<div></div>	2603	IMMEDIATE	IMMEDIATE	CAD	-	<div></div>	CA	CAD	RECORD_WIRE
<div></div>	2603	IMMEDIATE	IMMEDIATE	CAD	-	<div></div>	CA	CAD	EFT
<div></div>	2603	IMMEDIATE	IMMEDIATE	CAD	-	<div></div>	CA	USD	RECORD_WIRE

Supplier Name :

Ou Name	Supplier Number	Payment Term Name	Payment Term Description	Sup Invoice Currency Code	End Date Active	Vendor Site Code	Country	Po Invoice Currency Code	Payment Method Code
<div></div>	3900	IMMEDIATE	IMMEDIATE	MXN	-	<div></div>	MX	MXN	EFT
<div></div>	3900	IMMEDIATE	IMMEDIATE	MXN	-	<div></div>	MX	MXN	RECORD_CHECK

Highlight Rows w/ Certain Criteria

[illegible]

Highlight Rows w/ Certain Criteria

Highlight

Name

Give Me Wires

Sequence

10

Enabled

Yes ▾

Highlight Type

Row ▾

Background Color

#FF7755

^

[yellow] [green] [blue] [orange] [red]

Text Color

^

[yellow] [green] [blue] [orange] [red]

Highlight Condition

Column

Payment Method Code ▾

Operator

= ▾

Expression

WIRE

▾

Cancel

Apply

Highlight Rows w/ Certain Criteria

Supplier List Interactive Report

Q v

Go

Actions v

▼

☑

★

Give Me Wires

×

Ou Name ↑	Supplier Name	Supplier Number	Payment Term Name	Payment Term Description	Sup Invoice Currency Code	End Date Active	Vendor Site Code	Co
		2875	IMMEDIATE	IMMEDIATE	MXN	-		MX
		2539	IMMEDIATE	IMMEDIATE	MXN	-		MX
		2553	IMMEDIATE	IMMEDIATE	MXN	-		MX
		2815	IMMEDIATE	IMMEDIATE	USD	-		US
		3430	IMMEDIATE	IMMEDIATE	USD	-		US
		4806	IMMEDIATE	IMMEDIATE	MXN	-		MX
		2546	IMMEDIATE	IMMEDIATE	USD	-		MX
		2546	IMMEDIATE	IMMEDIATE	USD	-		MX
		3951	IMMEDIATE	IMMEDIATE	USD	-		MX
		3505	IMMEDIATE	IMMEDIATE	MXN	-		MX
		3464	IMMEDIATE	IMMEDIATE	MXN	-		MX
		3509	IMMEDIATE	IMMEDIATE	MXN	-		MX
		2980	IMMEDIATE	IMMEDIATE	MXN	-		MX

How about a chart?





Supplier List Interactive Report					
<input type="text" value="Q"/>		Go	Actions		
Ou Name	Supplier Name	Supplier Number	Payment Term Name	Payme Descrip	
		2654	95	95 NET	
		2666	95	95 NET	
		2674	95	95 NET	
		2814	45 NET	45 NET	
		2821	30 NET	30 NET	
		2704	95	95 NET	
		2724	30 NET	30 NET	
		2876	30 NET	30 NET	
		2829	15 NET	15 NET	
		2648	95	95 NET	
		2933	IMMEDIATE	IMMED	

How about a chart?

Supplier List Interactive Report

Q ▾ Go Actions ▾

Chart ✕

Chart Type ☒  ☐  ☐  ☐ 

Label Axis Title for Label

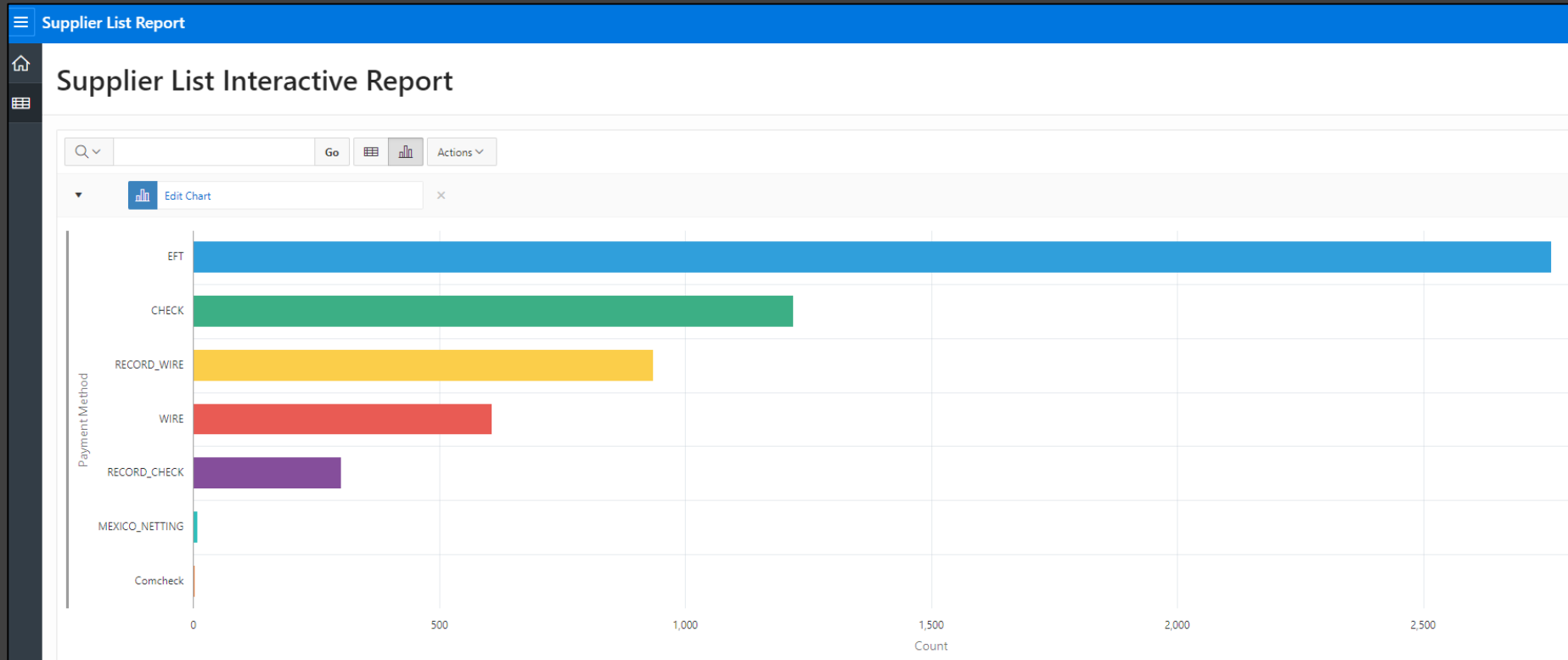
Value Axis Title for Value

Function Orientation

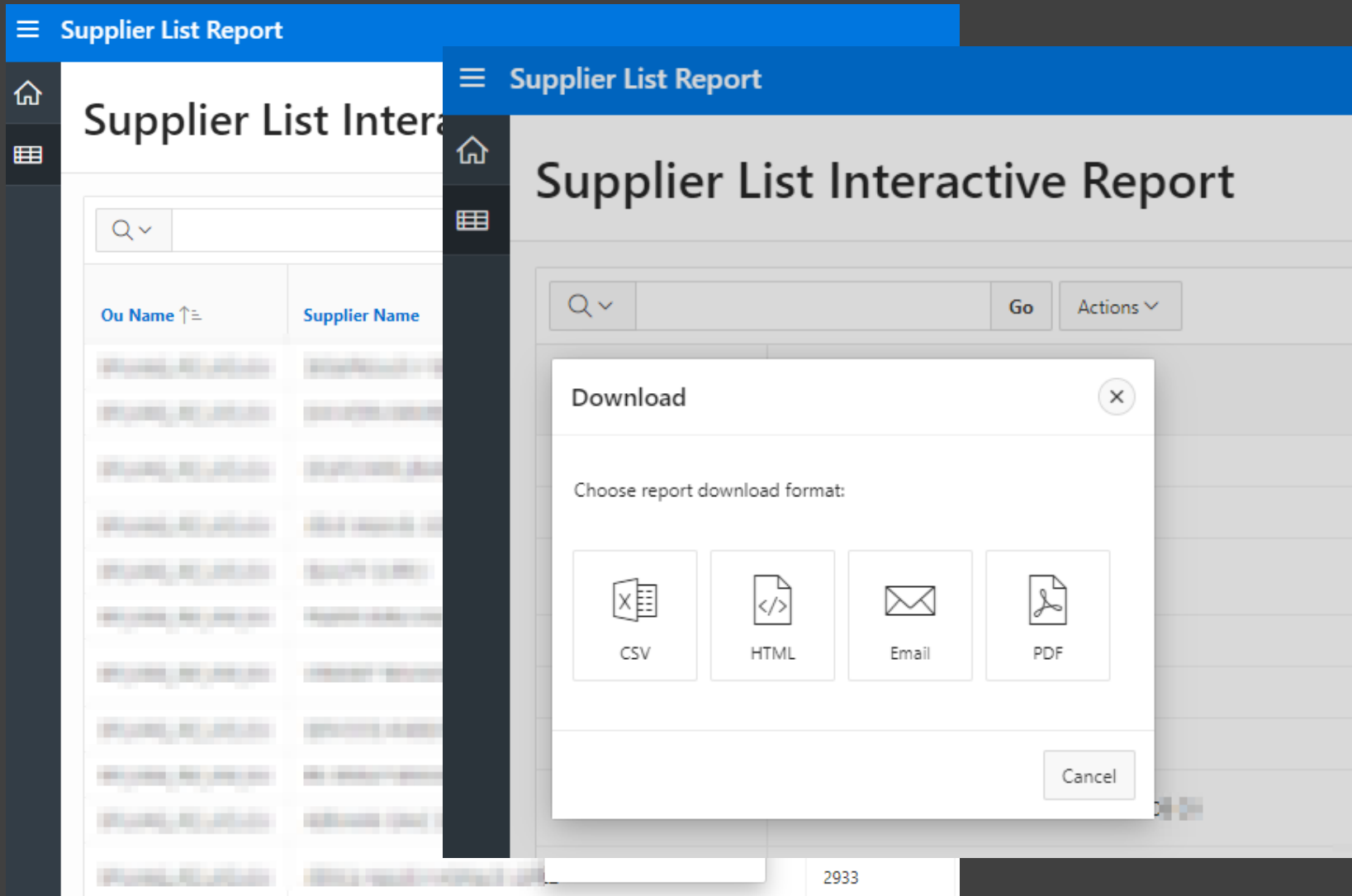
Sort

Payment Term Name	Payment Term Description
95	95 NET
95	95 NET
95	95 NET
45 NET	45 NET
30 NET	30 NET
95	95 NET
30 NET	30 NET
2876	30 NET
2829	15 NET
2648	95
2933	IMMEDIATE

How about a chart?



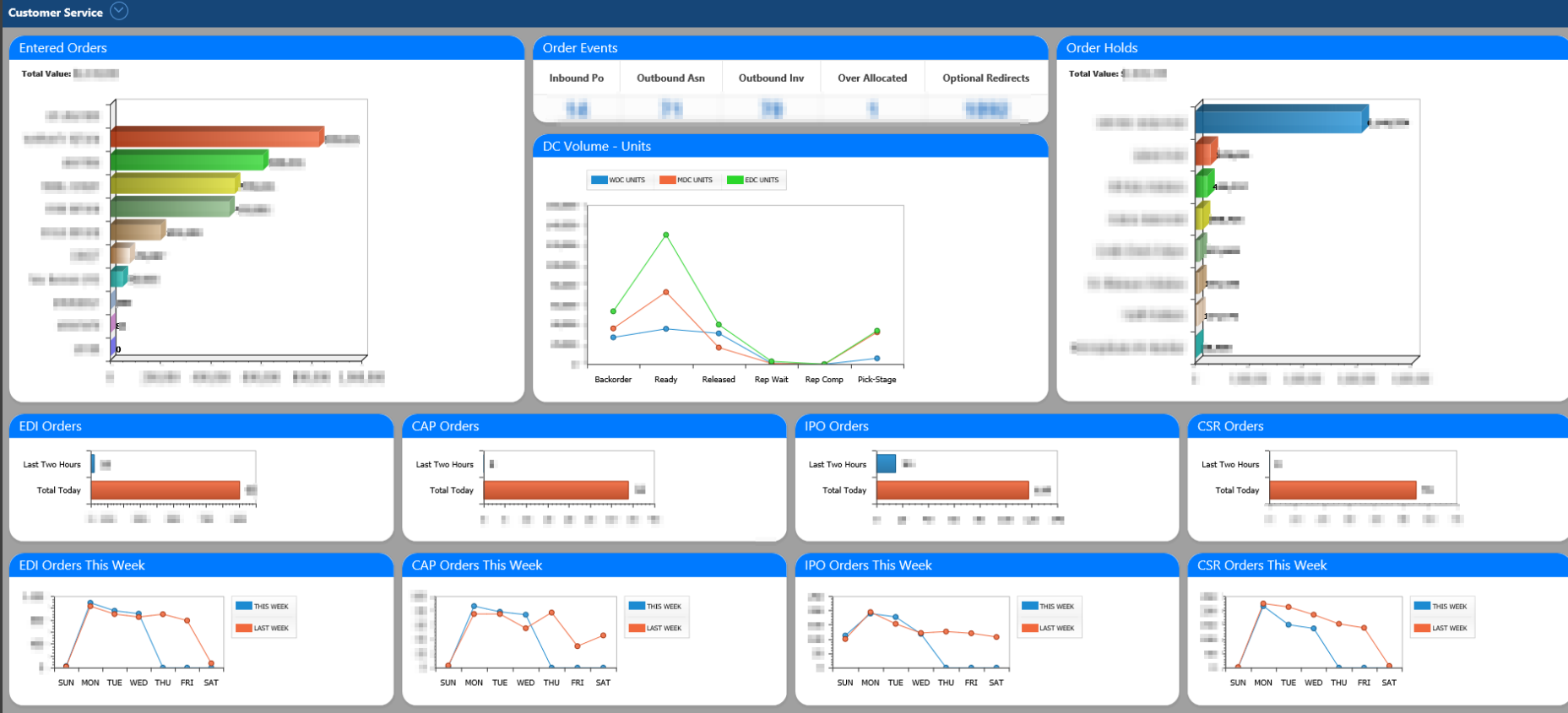
But I Want My Data in Excel!




Brake Parts

APEX Applications

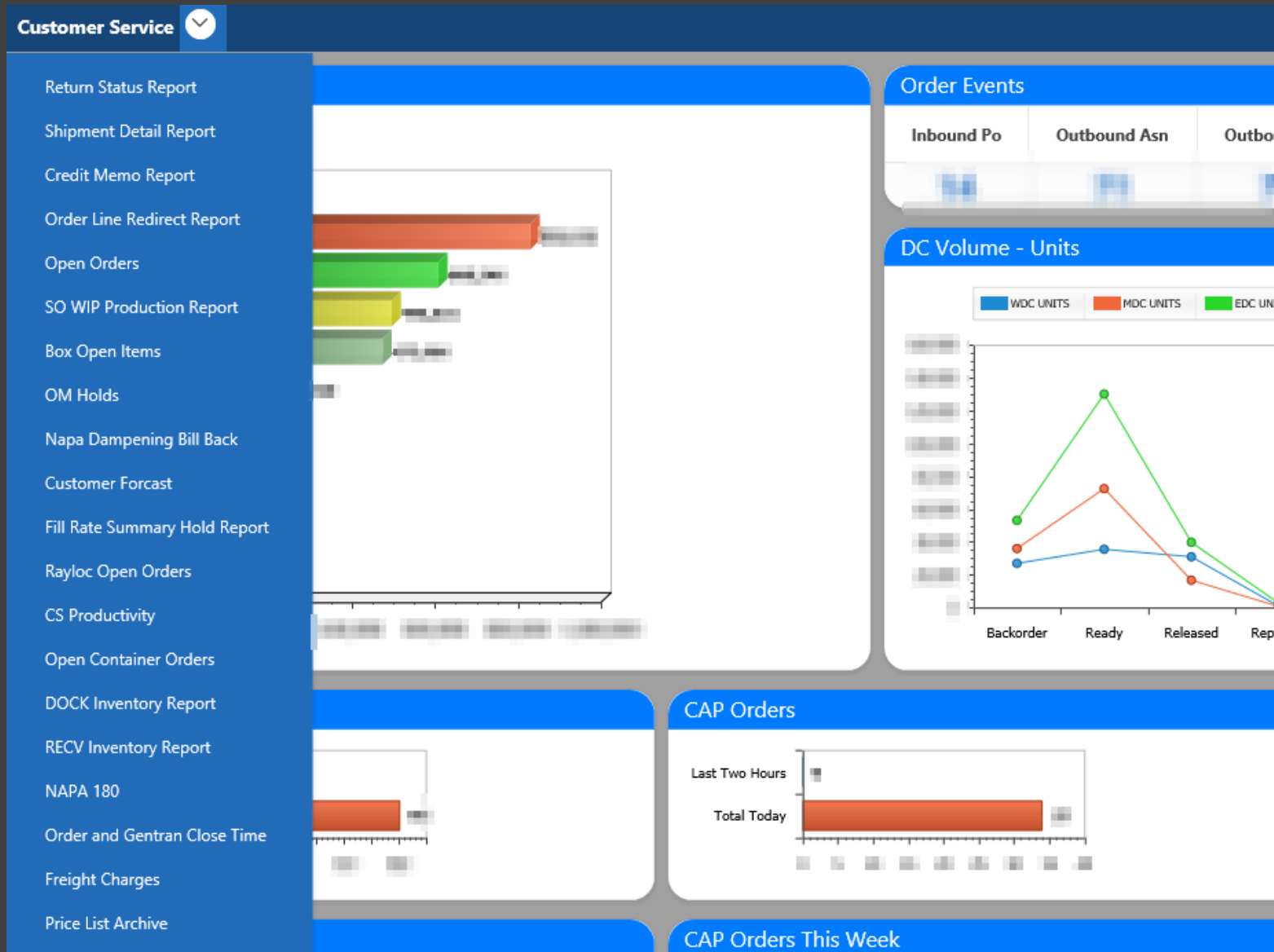
Customer Service Dashboard



Customer Service Dashboard

<div> BRAKE PARTS INC.</div> <div>Customer Service</div> <div></div>																		
EDI Daily Report																		
<div><div>Q</div><div></div><div>Go</div><div>Rows</div><div>50</div><div></div><div>Actions</div></div> <div>1 - 50 of 633</div>																		
Account Name	Sold To	Bill To	Ship To	Sales Channel	Cust Po Number	Order Number	Order Type	Order Status	Warehouse Status	Order Value	Line Count	Holds Applied	Backorder Allowed	Ship From	Order Source	Time Created	Order Date	Request Date
	1135	2340	2340351		19513445OD000NB123578	101381096	LEADTIME	BOOKED	Ready to Release		48	N	N	MDC	EDI	02:36:13 AM	31-JUL-19	02-AUG-19
	1135	2430	2430158		19513367OD000NB1842F	101381094	LEADTIME	BOOKED	Ready to Release		61	N	N	EDC	EDI	02:36:13 AM	31-JUL-19	02-AUG-19
	1135	2050	2050764		19513212OD000NB513F	101381097	LEADTIME	BOOKED	Ready to Release		30	N	N	EDC	EDI	02:36:13 AM	31-JUL-19	02-AUG-19
	1135	2030	2030525		19513404OD000UP2261F	101381095	LEADTIME	BOOKED	Ready to Release		149	N	N	MDC	EDI	02:36:13 AM	31-JUL-19	02-AUG-19
	1135	2030	2030522		19513403OD000UP5807F	101381098	LEADTIME	BOOKED	Ready to Release		54	N	N	MDC	EDI	02:36:26 AM	31-JUL-19	02-AUG-19
	1135	2115	2115421		19513477OD000NB9133F	101381099	LEADTIME	BOOKED	Ready to Release		42	N	N	EDC	EDI	02:36:31 AM	31-JUL-19	02-AUG-19
	1135	2030	2030501		19513393OD000NB5522F	101381100	LEADTIME	BOOKED	Ready to Release		117	N	N	MDC	EDI	02:36:39 AM	31-JUL-19	02-AUG-19

Customer Service Dashboard



Distribution Center Dashboard

Brake Parts Inc

Access Control

ALFREDO.ABATE

Home

EDC

MDC

WDC

WAREHOUSE STATUS

RECV Over 7 Days 0	RECV No FPL 0	DOCK Over 7 Days 83	STAGE Over 7 Days 124
No Pick Location 51	Wave Lines Over 72HR 731	Open Tasks Over 72HR 6067	LPN Loaded Over 72HR 125
Duplicate Pick Location 0	Over Alloc Inventory 0	Low Box ATR 10 Day Demand 0	Empty OS Locations 17159

REPLENISHMENT TASKS

Pending 88	Queued 1202	Dispatched 0	Active 2	Loaded 7
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PUTAWAY TASKS

Pending 0	Queued 0	Dispatched 0	Active 0	Loaded 32
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CYCLE COUNT TASKS

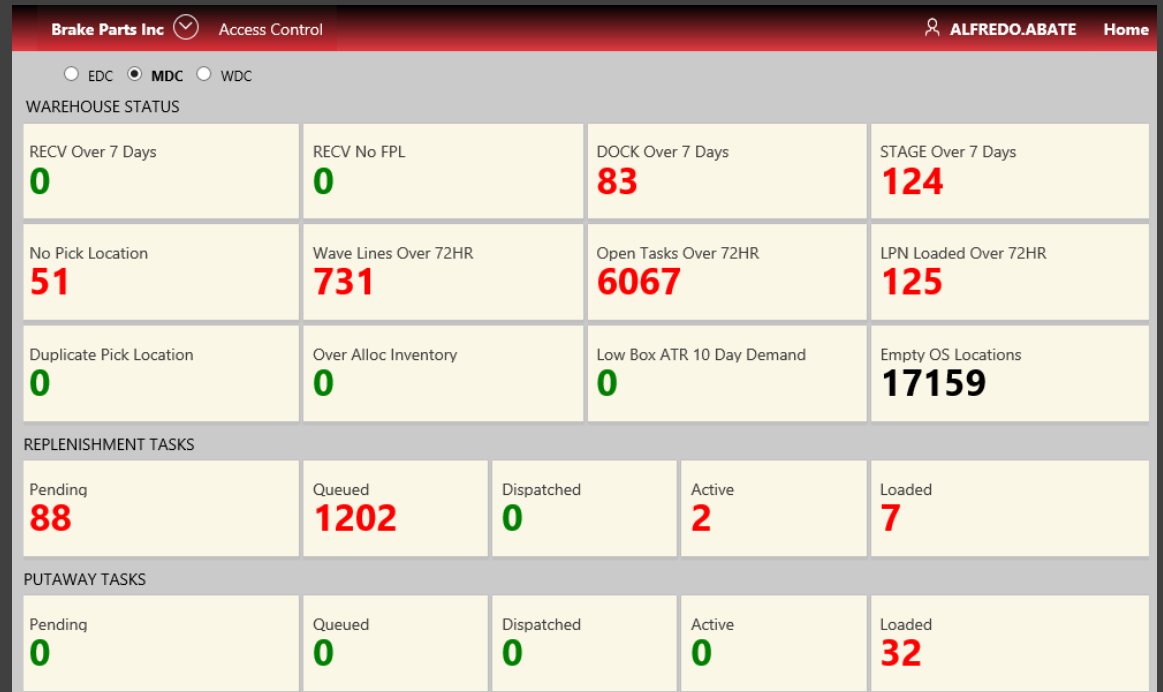
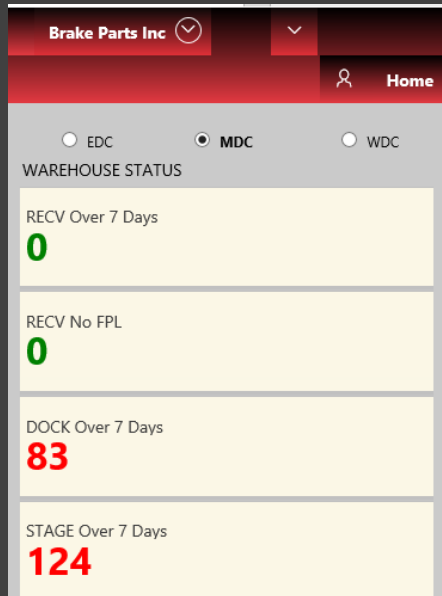
Pending 5520	Queued 207	Dispatched 0	Active 2	Loaded 0
-----------------	---------------	-----------------	-------------	-------------

OUTBOUND TASKS


Pending 6614	Queued 624	Dispatched 1426	Active 37	Loaded 1458
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Distribution Center Dashboard




APEX Universal Theme Responsive - Tablet/Cell Phone Ready




Distribution Center Stock Returns

		Check-In Stock Returns				Stock Returns	Pallet Put Away	LPN Report	Zone Image Links	INV_PRODUCT_GROUP_GRADE	ALFREDO.ABATE Home	
--	--	------------------------	--	--	--	---------------	-----------------	------------	------------------	-------------------------	--------------------	--

Station / Printer		Data Entry Close Pallet		Order number		Cust supp name		Cust supp nbr		Scan Items Reset	
Station		Shipment Number		99004005		GENERAL MOTORS		1130		Scan Item	
TEST		10000								SGD320M	
4" Printer		RMA Number								Stock As Item	
BPI_RIGHT		99004005								SGD320M	
8" Printer		Pallet Number								Scrap Code	
BPI_LEFT		2									
										Country	
										Mexico	
										Rebox Needed?	
										>>>Y or N<<<	
										Label Needed?	
										>>>Y or N<<<	
										E-Cert-Image	

Front Image	36-P102SG2	FO3451PLHW
		

Distribution Center Stock Returns

BRAKE PARTS INC.

Check-In Stock Returns

Stock Returns

Pallet Put Away

LPN Report

Zone Image Links

INV_PRODUCT_GROUP_GRADE

ALFREDO.ABATE

Home

Station Printer

Station

TEST

Printer

BPL_RIGHT

Warehouse

MDC

Item Scan

Item Number

LPN Number

INV Locator

Place Items on this Pallet Location:


SGD1264C	B.OS...	Successfully Processed Inventory Transaction	31-JUL-019 17:09:52
SGD320M	SCRAP.0.0.0.0	Successfully Processed Inventory Transaction	31-JUL-019 17:07:04
SGD320M	SCRAP.0.0.0.0	Successfully Processed Inventory Transaction	31-JUL-019 17:05:56

Employee & Item


ALFREDO.ABATE

SGD1264C

Zone



Status



Forward Pick

Zone	LPN Number	Count	Open Next LPN
1	RF10000001	0	Open next LPN?
3	RF30000001	0	Open next LPN?
A	RFA0000001	0	Open next LPN?
B	RFB0000001	0	Open next LPN?
J	RFJ0000001	0	Open next LPN?
W	RFW0000001	0	Open next LPN?

Overstock

Zone	LPN Number	Count	Open Next LPN
1	RS10000001	0	Open next LPN?
3	RS30000001	0	Open next LPN?
A	RSA0000001	0	Open next LPN?
B	RSB0000001	1	Open next LPN?
J	RSJ0000001	0	Open next LPN?
W	RSW0000001	0	Open next LPN?

Scrap

Zone	LPN Number	Count	Open Next LPN
Y	RFY0000001	2	Open next LPN?

No Location

Zone	LPN Number	Count	Open Next LPN
Z	RFZ0000001	0	Open next LPN?

Distribution Center Stock Returns

BRAKE PARTS INC

Check-In Stock Returns

Stock Returns

Pallet Put Away

LPN Report

Zone Image Links

INV_PRODUCT_GROUP_GRADE

ALFREDO.ABATE

Home

Station Printer

Station

Printer

Warehouse

TEST

BPI_RIGHT

MDC

Item Scan

Item Number

LPN Number

INV Locator

Place Items on this Pallet Location:

SGD1264C		There were no remaining records to update for item SGD1264C	31-JUL-019 17:10:03
SGD1264C	B.OS...	Successfully Processed Inventory Transaction	31-JUL-019 17:09:52
SGD320M	SCRAP.0.0.0.0	Successfully Processed Inventory Transaction	31-JUL-019 17:07:04
SGD320M	SCRAP.0.0.0.0	Successfully Processed Inventory Transaction	31-JUL-019 17:05:56

Employee & Item

ALFREDO.ABATE

SGD1264C

Status

Forward Pick

Zone	LPN Number	Count	Open Next LPN
1	RF10000001	0	Open next LPN?
3	RF30000001	0	Open next LPN?
A	RFA0000001	0	Open next LPN?
B	RFB0000001	0	Open next LPN?
J	RFJ0000001	0	Open next LPN?
W	RFW0000001	0	Open next LPN?

Overstock

Zone	LPN Number	Count	Open Next LPN
1	RS10000001	0	Open next LPN?
3	RS30000001	0	Open next LPN?
A	RSA0000001	0	Open next LPN?
B	RSB0000001	1	Open next LPN?
J	RSJ0000001	0	Open next LPN?
W	RSW0000001	0	Open next LPN?

Scrap

Zone	LPN Number	Count	Open Next LPN
Y	RFY0000001	2	Open next LPN?

No Location

Zone	LPN Number	Count	Open Next LPN
Z	RFZ0000001	0	Open next LPN?

Even for the DBA!

DBA Dashboard

DBA Dashboard

- Home
- Dashboard
- Concurrent Request Search
- Integrated SOA Logs

Go

Actions

Request Id	Request Date	Requested By	Phase Code	Status Code	Requested Start Date	Actual Start Date	Actual Completion Date	Completion Text	Argument Text
39352048	26-JAN-2020 02:29AM		P	Q	1/27/2020	-	-	-	
39351338	26-JAN-2020 12:30AM		P	I	1/26/2020	-	-	-	
39351758	26-JAN-2020 01:43AM		P	I	1/27/2020	-	-	-	
39351598	26-JAN-2020 01:17AM		P	I	1/26/2020	-	-	-	
39351349	26-JAN-2020 12:30AM		P	Q	1/26/2020	-	-	-	
39543797	18-JUL-2020 07:51AM		C	C	7/18/2020	7/18/2020	7/18/2020	Normal completion	(None)
39543840	18-JUL-2020 08:41AM		C	C	7/18/2020	7/18/2020	7/18/2020	Normal completion	(None)
39543844	18-JUL-2020 08:46AM		C	C	7/18/2020	7/18/2020	7/18/2020	Normal completion	(None)
39543858	18-JUL-2020 09:01AM		C	C	7/18/2020	7/18/2020	7/18/2020	Normal completion	(None)

DBA Dashboard

EBS Administrator Dashboard

Home

Dashboard

Concurrent Request Search

Integrated SOA Logs

Go

1. Primary Report

Actions

Request Timestamp	Message Id	Method	Interface	Request Status	Response Status	Request Started	Request Completed	Response Time (secs)
13-JAN-2020 11:57PM	13783779	IPO_CHECK_STOCK	XXBPILBPIONLINE	SUCCESS	SUCCESS	1/13/2020	1/13/2020	0
13-JAN-2020 11:57PM	13783778	IPO_CHECK_STOCK	XXBPILBPIONLINE	SUCCESS	SUCCESS	1/13/2020	1/13/2020	1
13-JAN-2020 11:52PM	13783777	IPO_CHECK_STOCK	XXBPILBPIONLINE	SUCCESS	SUCCESS	1/13/2020	1/13/2020	0
13-JAN-2020 11:50PM	13783776	TRANSFER_ADSI_INFO	XXBPILWSH_ADSI_DELIVERIES_PKG	SUCCESS	SUCCESS	1/13/2020	1/13/2020	1
13-JAN-2020 11:49PM	13783775	RETRIEVE_DELIVERY_INFO	XXBPILWSH_ADSI_DELIVERIES_PKG	SUCCESS	SUCCESS	1/13/2020	1/13/2020	1
13-JAN-2020 11:44PM	13783774	TRANSFER_ADSI_INFO	XXBPILWSH_ADSI_DELIVERIES_PKG	SUCCESS	SUCCESS	1/13/2020	1/13/2020	1
13-JAN-2020 11:44PM	13783773	RETRIEVE_DELIVERY_INFO	XXBPILWSH_ADSI_DELIVERIES_PKG	SUCCESS	SUCCESS	1/13/2020	1/13/2020	1
13-JAN-2020 11:44PM	13783772	TRANSFER_ADSI_INFO	XXBPILWSH_ADSI_DELIVERIES_PKG	SUCCESS	SUCCESS	1/13/2020	1/13/2020	0
13-JAN-2020 11:44PM	13783771	RETRIEVE_DELIVERY_INFO	XXBPILWSH_ADSI_DELIVERIES_PKG	SUCCESS	SUCCESS	1/13/2020	1/13/2020	1

DBA Dashboard

EBS Administrator Dashboard

admin

Home

Dashboard

Concurrent Request Search

Integrated SOA Logs

Q

Go

1. Primary Report

Actions

Request Timestamp	Message Id	Method	Interface	Request Status	Response Status	Request Started	Request Completed	Response Time (secs)
13-JAN-2020 11:57PM	13783779	IPO_CHECK_STOCK	XXBPLBPIONLINE	SUCCESS	SUCCESS	1/13/2020	1/13/2020	0
13-JAN-2020 11:57PM	13783778	IPO_CHECK_STOCK	XXBPLBPIONLINE	SUCCESS	SUCCESS	1/13/2020	1/13/2020	1
13-JAN-2020 11:52PM	13783777	IPO_CHECK_STOCK						0
13-JAN-2020 11:50PM	13783776	TRANSFER_ADSI_IN						1
13-JAN-2020 11:49PM	13783775	RETRIEVE_DELIVERY						1
13-JAN-2020 11:44PM	13783774	TRANSFER_ADSI_IN						1
13-JAN-2020 11:44PM	13783773	RETRIEVE_DELIVERY						1
13-JAN-2020 11:44PM	13783772	TRANSFER_ADSI_IN						0
13-JAN-2020 11:44PM	13783771	RETRIEVE_DELIVERY						1

Integrated SOA Payload

Message Id

13783779

Belongs To

REQUEST

Body

<?xml version = '1.0' encoding = 'UTF-8'?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
soap:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:tns="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
 <tns:Envelope>
 <tns:Header>
 <tns:Header>
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 </tns:Envelope>
 </tns:Envelope>
</soap:Envelope>

APEX will change your organization!

A World of Possibilities Awaits!



Learning More About Apex

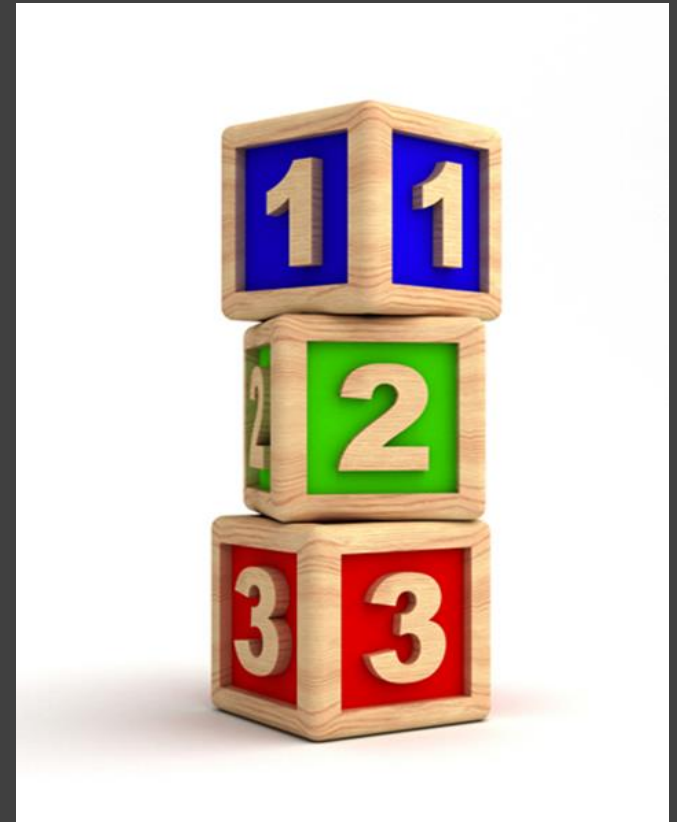
- Get a **free workspace** and start exploring!
<https://apex.oracle.com/en/>
- Oracle APEX Curriculum
<https://www.oracle.com/database/technologies/appdev/apex/apex-curriculum.html>
- Download and install Oracle Database 18c XE, APEX 20.1, ORDS 20.2 on your desktop.
- Check out the official **Oracle APEX documentation**
<http://www.oracle.com/technetwork/developer-tools/apex/documentation/index.html>

References

- "Extending Oracle E-Business Suite Release 12.1.3 and Above Using Oracle Application Express (APEX) (Doc ID 1306563.1)." *My Oracle Support*. Oracle, Jun. 2019. Web.
- Johnson, Chad. "Extend E-Business Suite with Application Express." *OAUG Insight* Summer 2014: 25-29. Print.
- *Application Express Installation Guide* -. Oracle, Web. Jul. 2019.
<<https://docs.oracle.com/en/database/oracle/application-express/19.1/htmig/index.html>>.
- *REST Data Services Installation, Configuration, and Development Guide* -. Oracle, Web. May. 2019.
<<https://docs.oracle.com/en/database/oracle/oracle-rest-data-services/19.1/aelig/index.html>>.

If you only remember three things today!

- APEX is free!
- Start with a simple POC
- Fully supported by Oracle Support



Thank You For Attending My Session!

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