

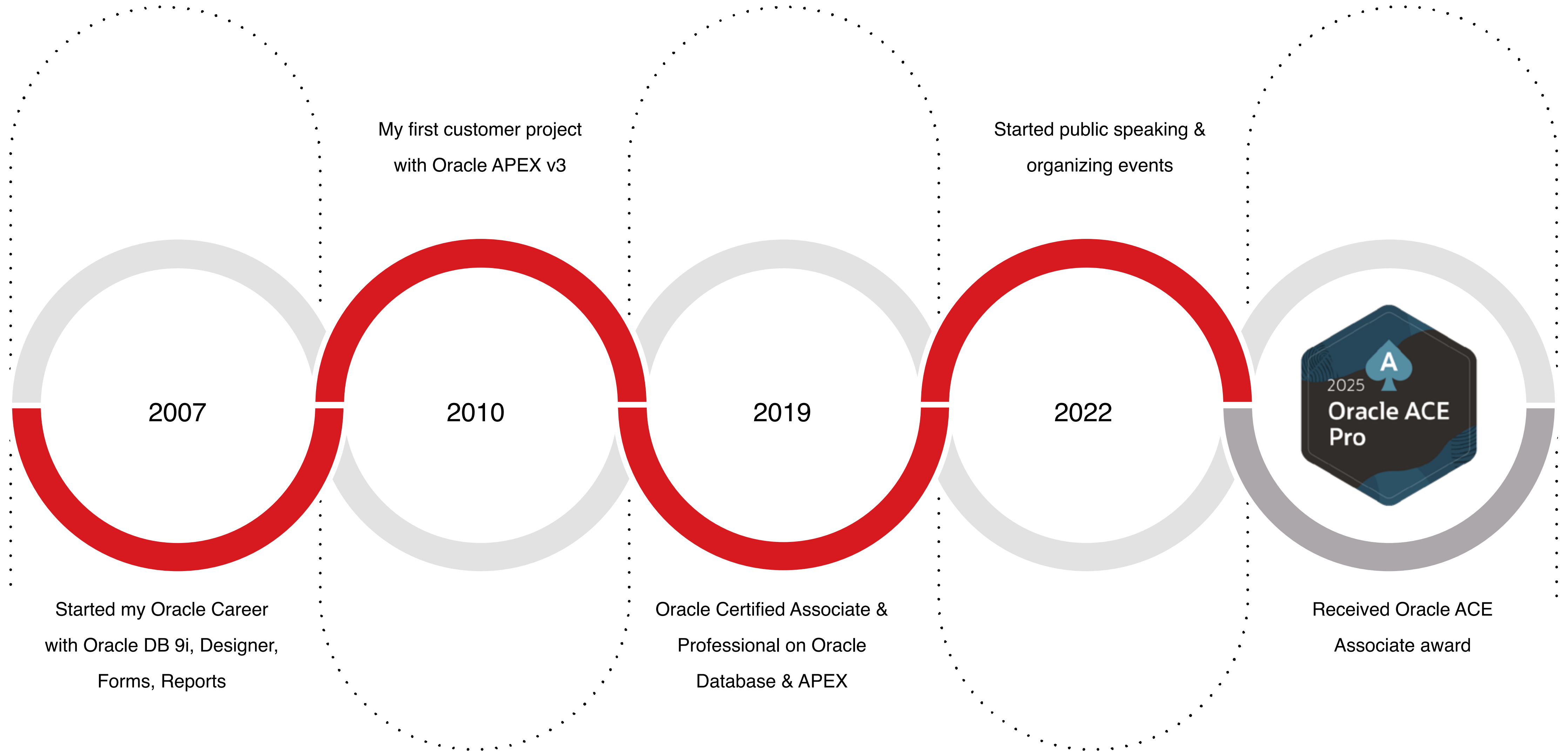
Debug like a pro

APEX Debugger edition



QUALOGY

Giliam Breems





The Oracle ACE Program

400+ technical experts helping peers globally



- The Oracle ACE Program recognizes and rewards community members for their technical and community contributions to the Oracle community
- 3 membership levels: Director, Pro, and Associate
<

What is debugging?

“... is the process of
identifying (and fixing)
the cause of an
unexpected behaviour”

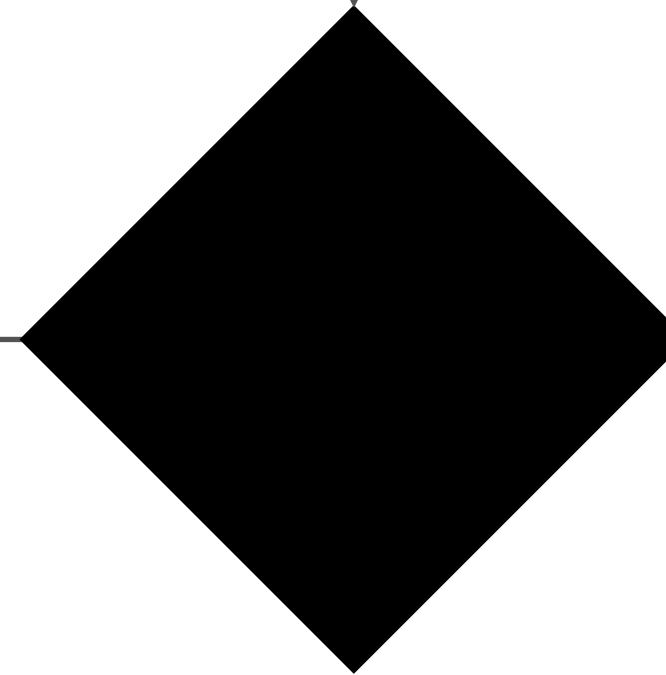
Employees

Job
MANAGER ▾

Order By
Ename ▾

FO FORD 12/3/1981	SC SCOTT 12/9/1982
ANALYST	ANALYST

**Common/usual
workflow**

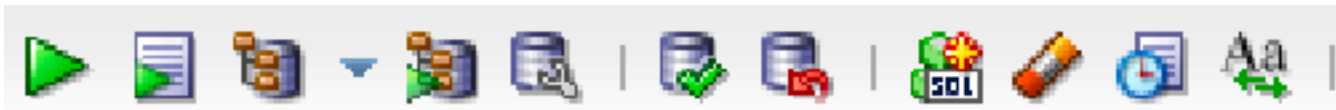


**Very special occasion,
when right clicking in a
specific area and current
time is between 1pm and
2pm**



Why debugging?

How do we find a bug?



Worksheet

Query Builder

create or replace package debugging
is

procedure abc
begin

log ('Logging start');

log ('Yooohoo, I am here');

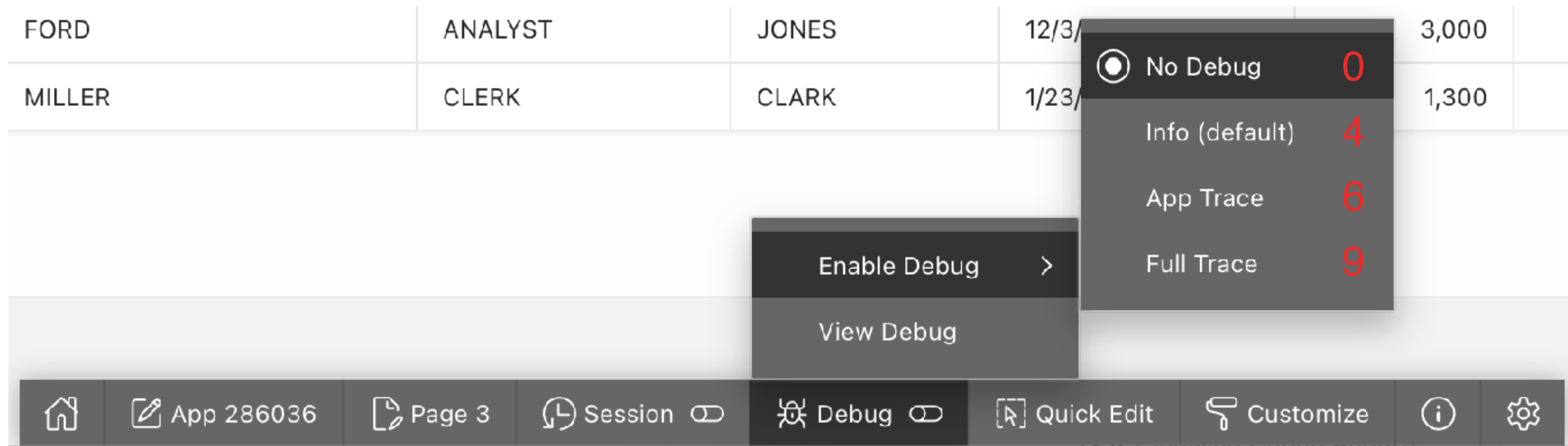
—code;

Debug mode and levels

Debug Mode	Level	Menu Item	Syn	Message Detail	URL “&debug=...”
Off	0	No Debug	NO	None	LEVEL0
Error	1			Error	LEVEL1
Warning	2			Warning	LEVEL2
<i>(APEX only)</i>	<i>3</i>			<i>Section head & footer</i>	<i>LEVEL3</i>
Info	4	Info (default)	YES	Information / Debug	LEVEL4
App Enter	5			Custom Procedure/Function Enter	LEVEL5
App Trace	6	App Trace		Custom Procedure/Function Trace	LEVEL6
APEX Engine Enter					

How can we activate them?

APEX Developer Toolbar



Browser URL

breems_demo/apex-debug-like-a-pro/no-data-found?session=11313219018341

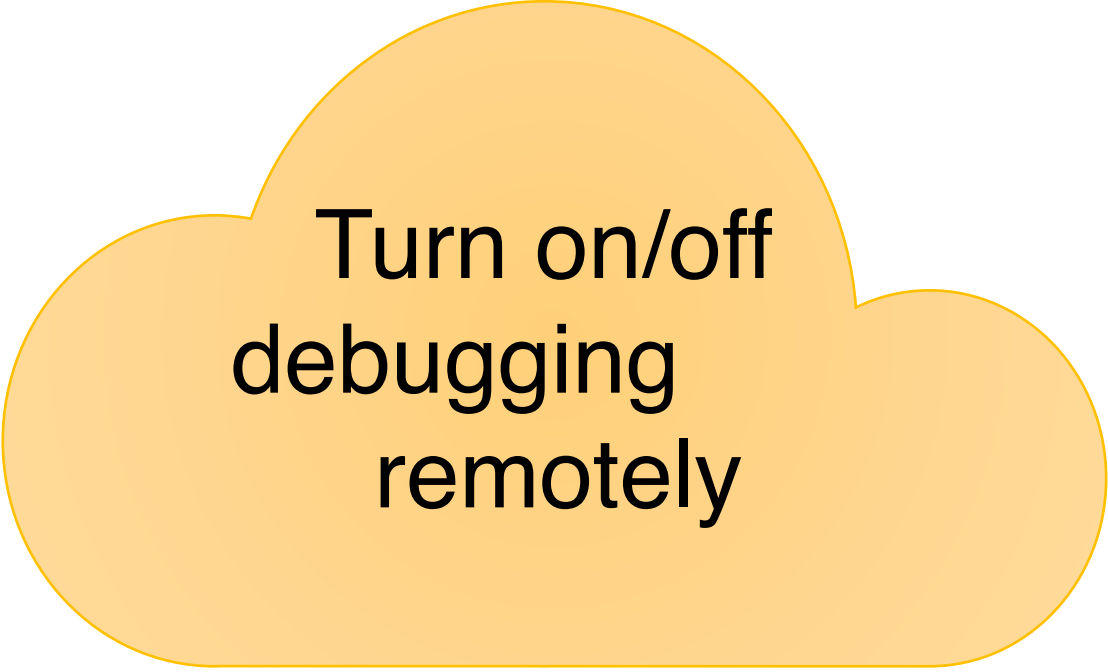


breems_demo/apex-debug-like-a-pro/no-data-found?debug=YES&session=11313219018341



Debug Mode	Level	Menu Item	Syn	Message Detail	URL “&debug=...”
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Info	4	Info (default)	YES	Information / Debug	LEVEL4
App Enter	5			Custom Procedure/Function Enter	LEVEL5
App Trace	6	App Trace		Custom Procedure/Function Trace	LEVEL6
APE					

Database PL/SQL



Turn on/off
debugging
remotely

APEX_DEBUG.ENABLE(1)

APEX_SESSION.SET_DEBUG
(session_id , debug_level)

APEX_DEBUG.ENABLE(2)

...

APEX_SESSION.ATTACH
(app_id , page_id , session_id)

APEX_DEBUG.ENABLE(9)

APEX Builder

Administration -> Monitor Activity ->
Active sessions

How can we see those messages?

APEX Developer Toolbar

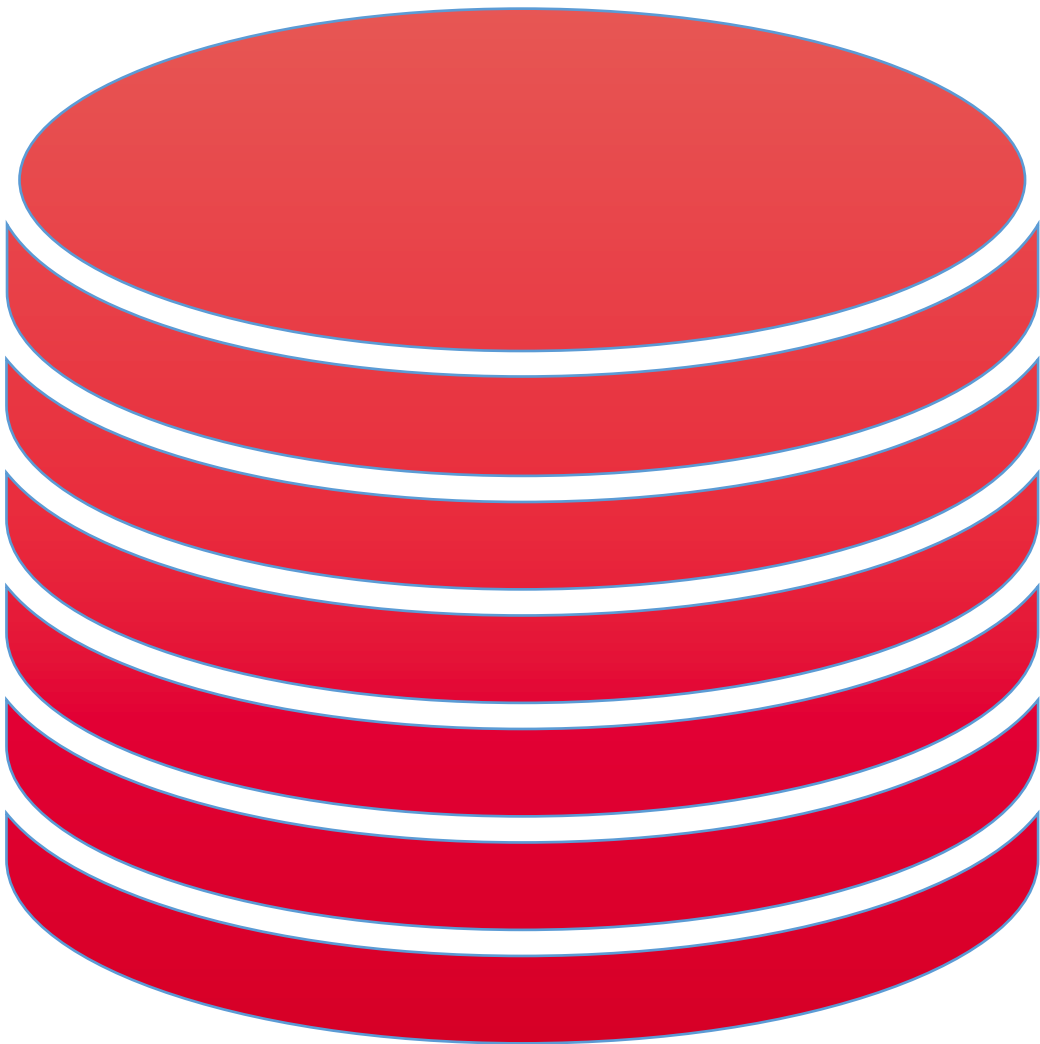
FORD	ANALYST	JONES	12/3/1981	3,000	
MILLER	CLERK	CLARK	1/23/1982	1,300	

Enable Debug >

View Debug

 App 286036  Page 3  Session  Debug  Quick Edit

Oracle Database



Page Load



Plugins



AJAX Calls

