



FRT Consulting GmbH

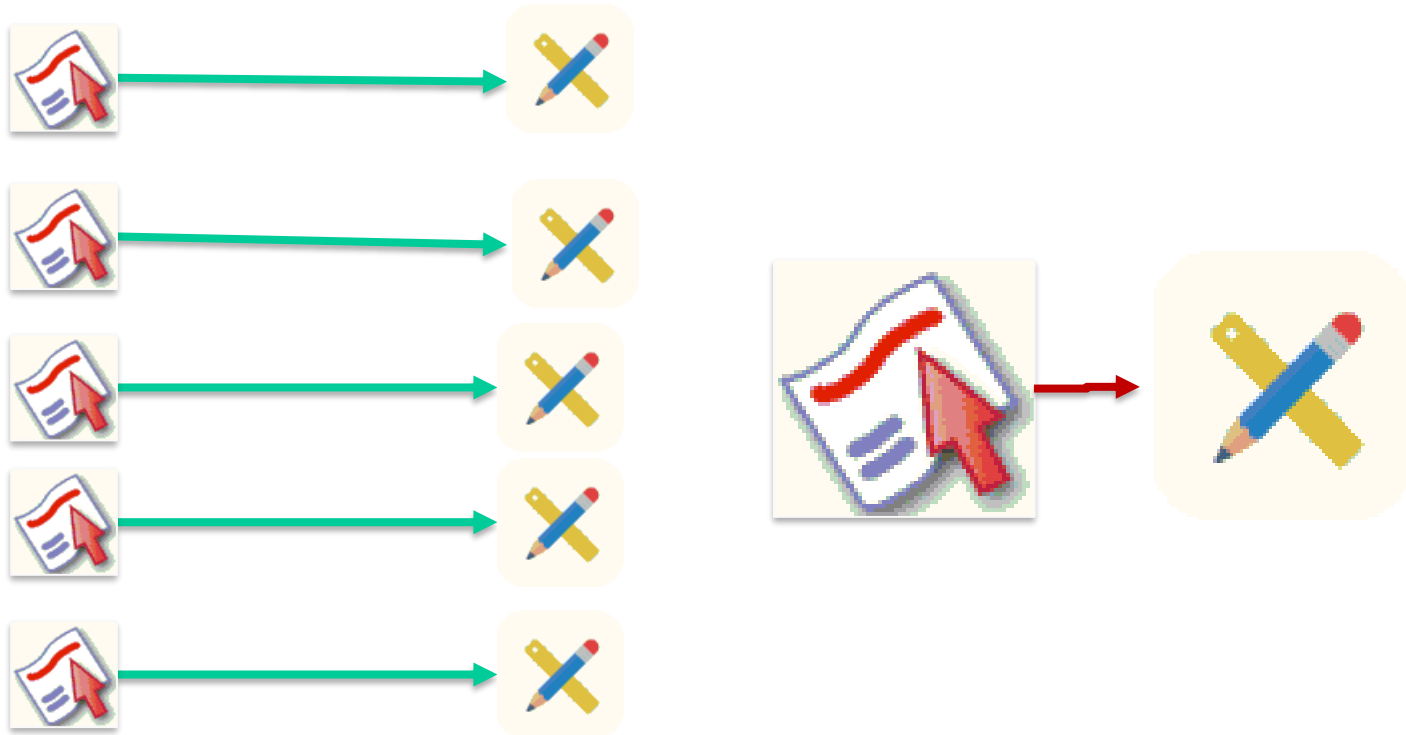
Voraussetzungen/konkrete Erfahrungen bei der Migration von Forms/Reports auf APEX

Pavel Glebov
Ivan Lazarov

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ORACLE Gold Partner

Teilmigration oder Big - Bang



FORMS → APEX

Purchase Order Summary to Purchase Orders - 6274

Operating Unit: Vision Operations Created: 07-SEP-2006 06:48:08

PO, Rev: 6274 Type: Standard Purchase Order P-Card:

Supplier: GMC Site: GMC NY Contact:

Ship-To: L1 - LeaseQA Bill-To: L1 - LeaseQA Currency: USD

Buyer: Smith, Mr. Jonathan Status: Approved Total: 55,393.00

Description:

Lines | Price Reference | Reference Documents | More | Agreement

Num	Type	Item	Rev
1	Goods	AS54888	

Item: AS54888 Sentinel Standard Catalog

Sample Projects Mobile demo

Home

3 Open Projects 8 Upcoming Milestones 28 Open Tasks

Recent Projects

- Develop Production Partner Portal** (Assigned)

Develop the production app that partners can use to work more collaboratively...
- Develop Partner Portal POC** (In-Progress)

Develop a proof of concept that partners can use to work more collaboratively...
- Migrate Legacy Applications** (In-Progress)

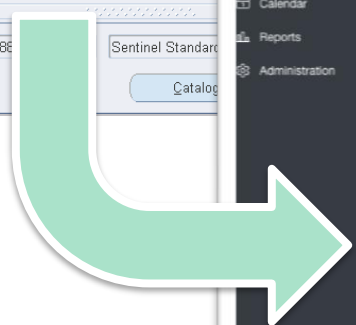
Move the data and redevelop the applications currently running on top of legac...
- Train Developers on Web development tool** (Completed)

Ensure all developers who will be developing with the new tool get the appropr...
- Configure Web Development Tool Environment** (Completed)

My Outstanding Tasks

Project	Task	End date
Develop Partner Portal POC	Define scope of Partner Portal App.	4/1/2018
Develop Partner Portal POC	Present POC to Key Stakeholders	4/9/2018
Develop Production Partner Portal	Define production scope of Partner Portal App.	4/11/2018
Develop Production Partner Portal	Review Beta Feedback	4/26/2018
Develop Production Partner Portal	Provide user credentials for partners	5/26/2018

1 - 5



APEX → FORMS

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Description:

Lines | Price Reference | Reference Documents | More | Agreement

Num	Type	Item	Rev	Job	Category	Description	UOM	Quantity	Price
1	Goods	AS54888			PRODUCTN.FINC	Sentinel Standard Des	Each	50	1107.86

Item: AS54888 Sentinel Standard Desktop TPD

Buttons: Catalog... | Currency... | Terms | Shipments | Approve...



Mobile | demo

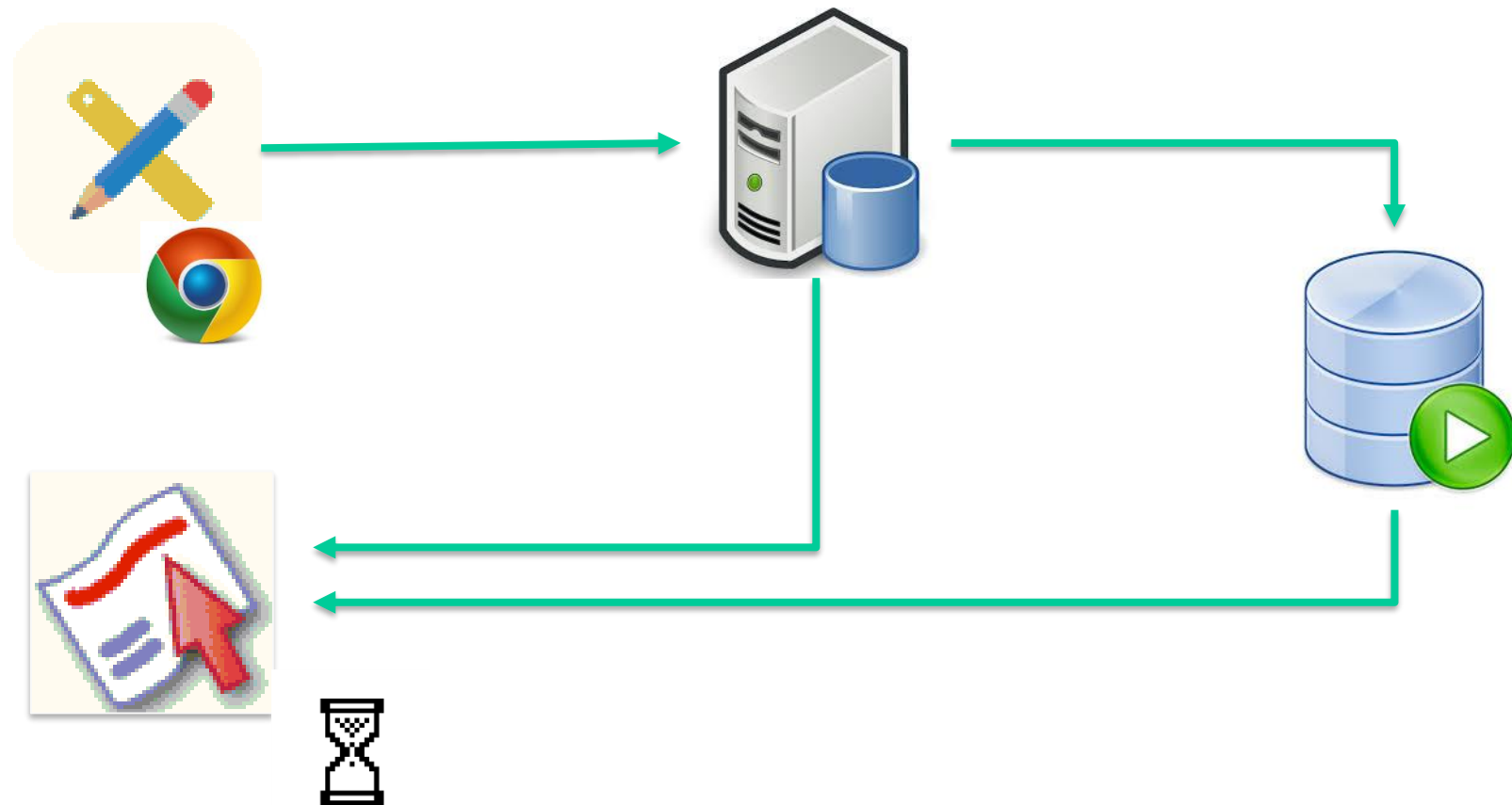
3 Milestones | 28 Open Tasks

My Outstanding Tasks

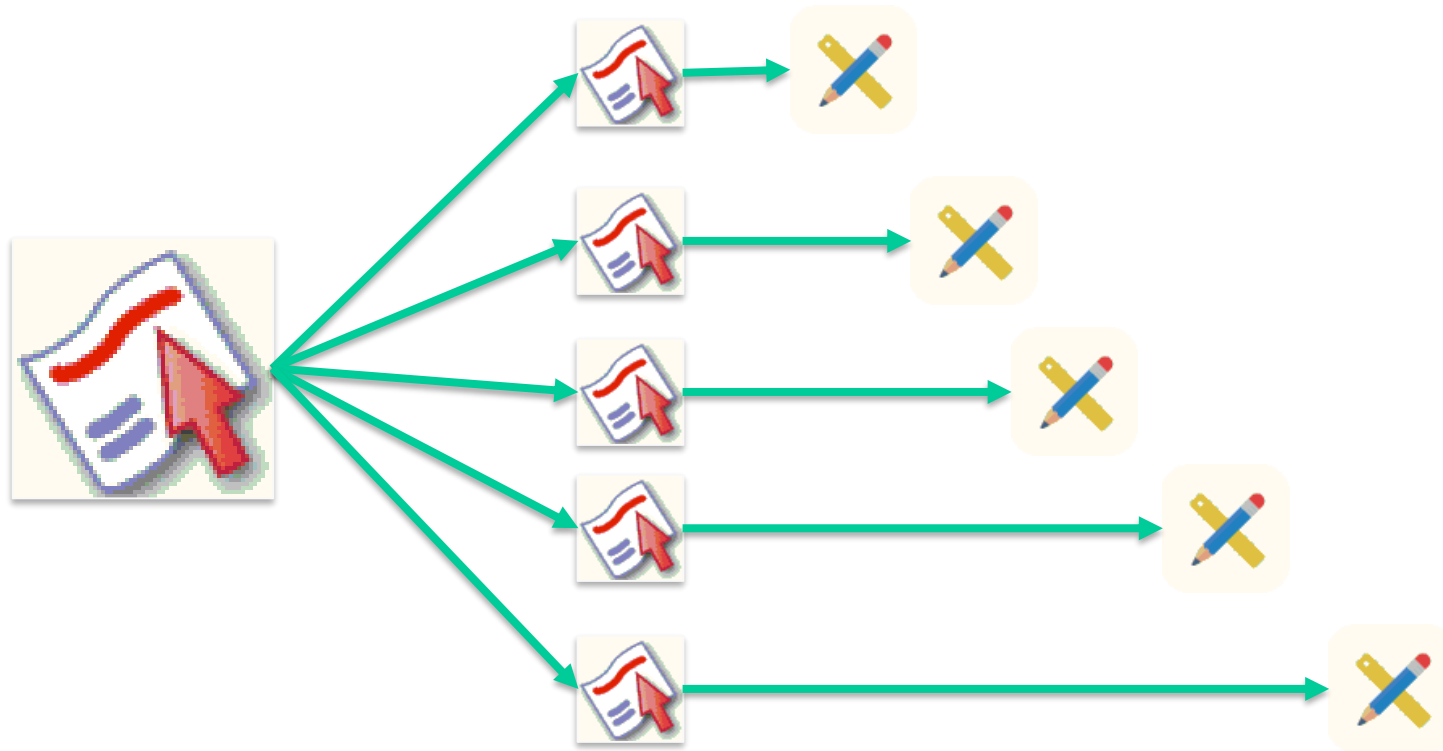
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Develop Production Partner Portal	Review Beta Feedback	4/26/2018
Develop Production Partner Portal	Provide user credentials for partners	5/26/2018

1 - 5

APEX → FORMS



Teilmigration



BENUTZEROBERFLÄCHE

Purchase Order Summary to Purchase Orders - 6274

Operating Unit: Vision Operations Created: 07-SEP-2006 06:48:08
 PO, Rev: 6274 0 Type: Standard Purchase Order
 Supplier: GMC Site: GMC NY
 Ship-To: L1 - LeaseQA Bill-To: L1 - LeaseQA
 Buyer: Smith, Mr. Jonathan Status: Approved
 Description:

P-Card:
 Contact:
 Currency: USD
 Total: 55,393.00 []

Lines Price Reference Reference Documents More Agreement ...

Num	Type	Item	Rev	Job	Category	Description	UOM	Quantity	Price
1	Goods	AS54888			PRODUCTN.FINC	Sentinel Standard Des	Each	50	1107.86

Item: AS54888 Sentinel Standard Desktop TPD

Catalog... Currency... Terms Shipments Approve...

BENUTZEROBERFLÄCHE

Authentication Scheme [Go To](#) [Home Page](#) [URL](#)

Show All	Name	Subscription	IP=	Source	Session Not V...	Login Processi...	Post-Logout ...	Session Sharing	Comments
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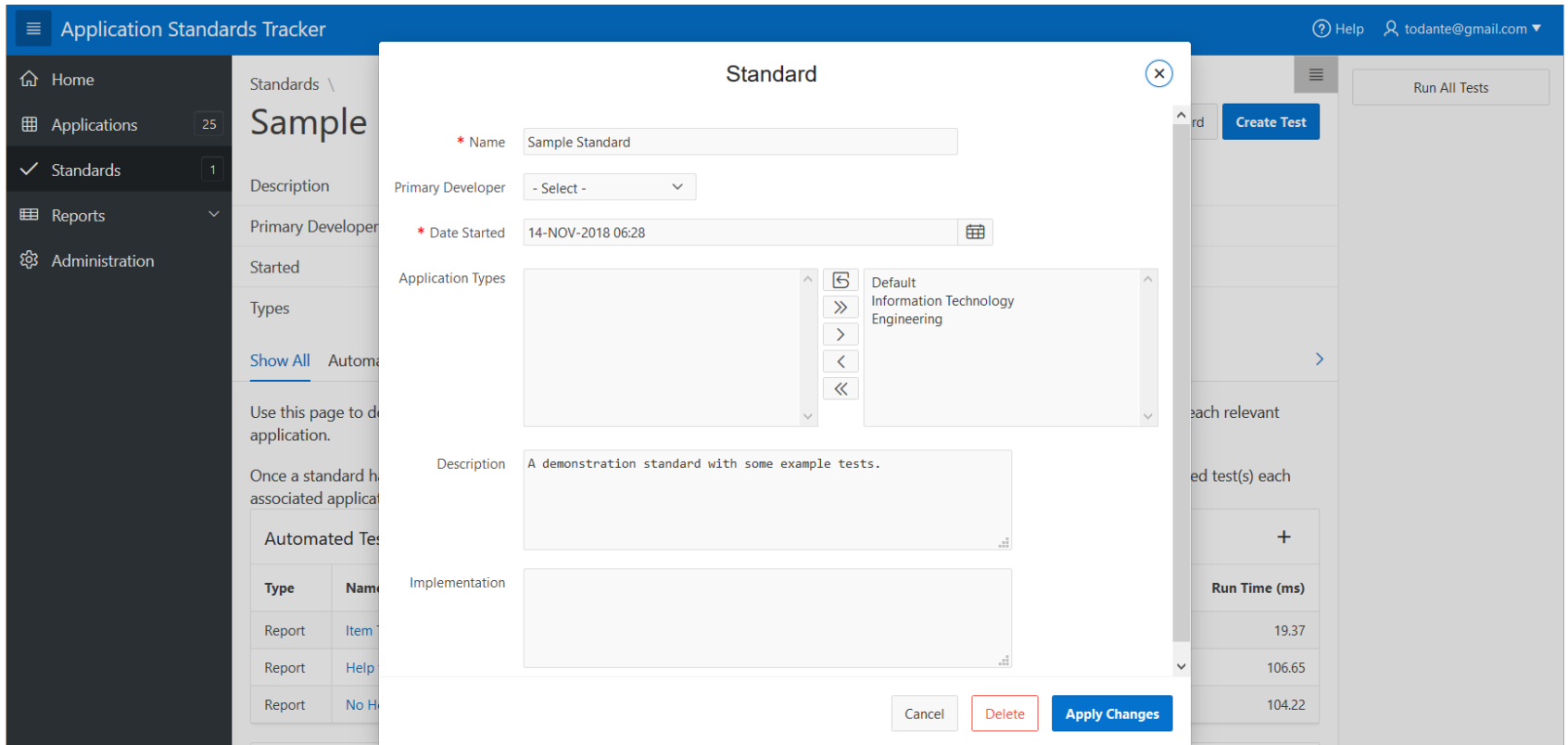
Session Sharing

Type

Comments

Comments

DESIGN REGELN



The screenshot displays the 'Application Standards Tracker' application. A modal window titled 'Standard' is open, showing the following fields:

- Name:** Sample Standard
- Primary Developer:** - Select -
- Date Started:** 14-NOV-2018 06:28
- Application Types:** A list containing 'Default', 'Information Technology', and 'Engineering'.
- Description:** A demonstration standard with some example tests.
- Implementation:** (Empty text area)

At the bottom of the modal, there are three buttons: 'Cancel', 'Delete', and 'Apply Changes'.

In the background, the application interface shows a sidebar with navigation options: Home, Applications (25), Standards (1), Reports, and Administration. The main content area displays a 'Sample' standard with a table of 'Automated Tests':

Type	Name
Report	Item
Report	Help
Report	No H

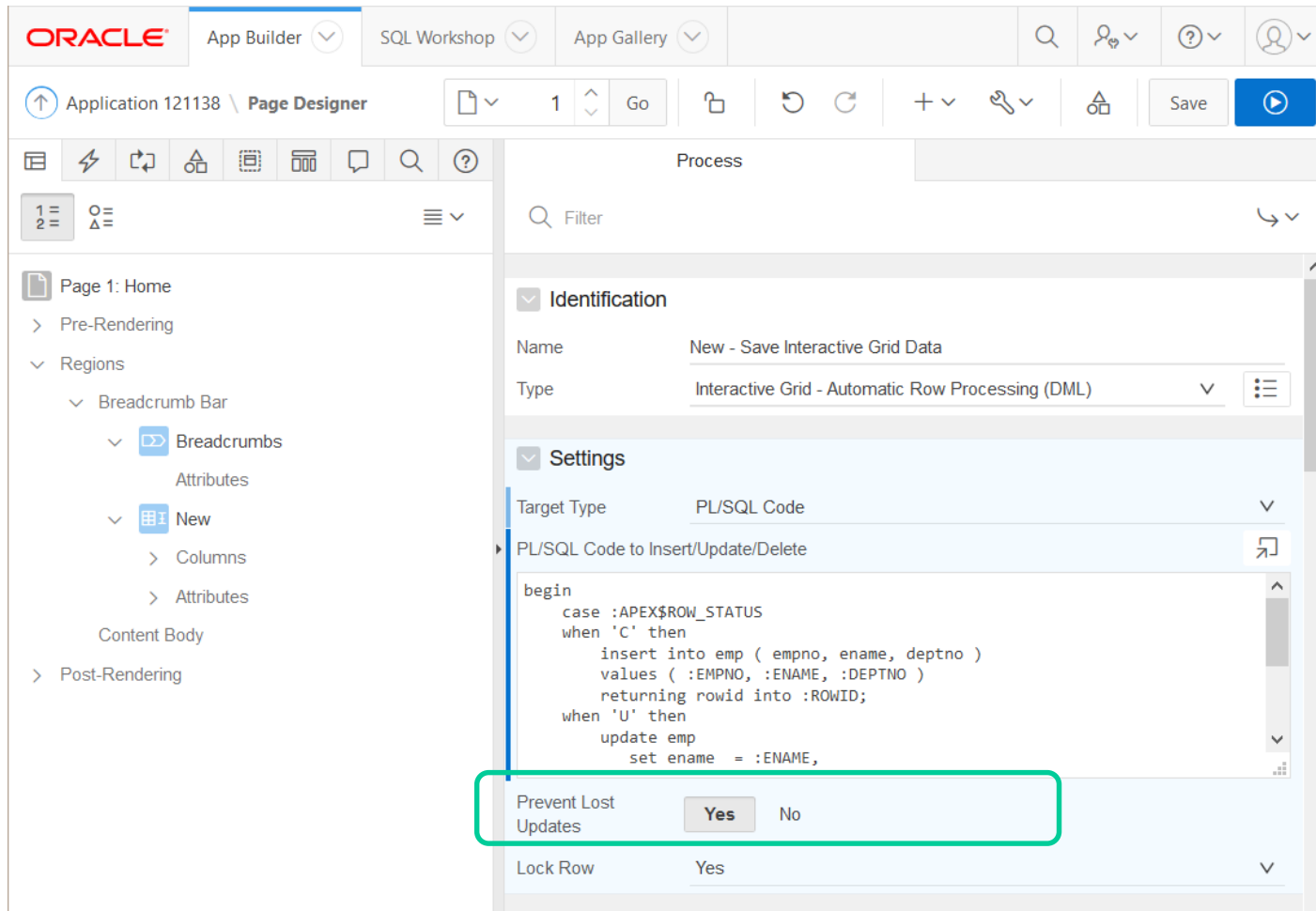
SOURCE VIEWS

```
CREATE OR REPLACE FUNCTION get_tab_tf (p_rows IN NUMBER)
  RETURN t_tf_tab AS
  l_tab t_tf_tab := t_tf_tab();
BEGIN
  FOR i IN 1 .. p_rows LOOP
    l_tab.extend;
    l_tab(l_tab.last) := t_tf_row(i, 'Description for ' || i);
  END LOOP;

  RETURN l_tab;
END;
/

SELECT *
FROM TABLE(get_tab_tf(10))
ORDER BY id DESC;
```

AUTOMATIC ROW PROCESSING

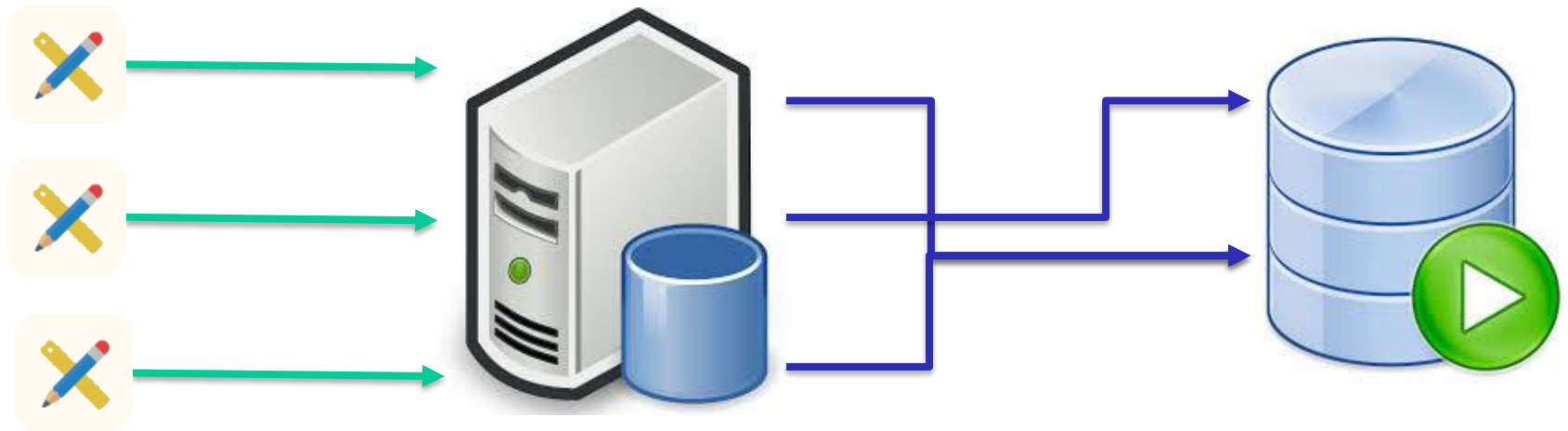
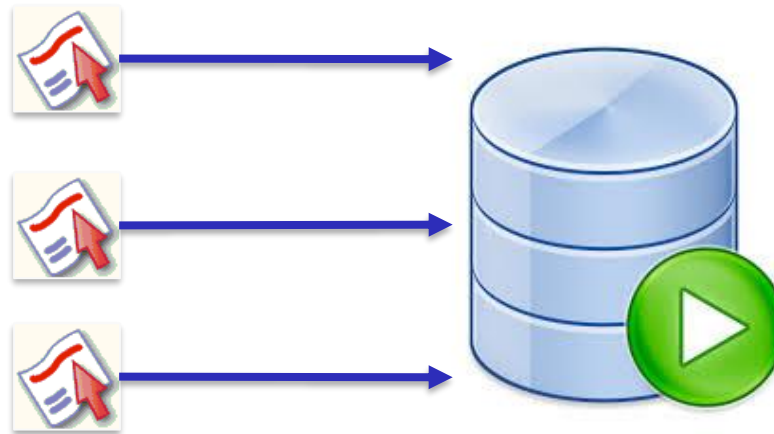


The screenshot shows the Oracle APEX Page Designer interface. The main configuration area is titled 'Process' and contains the following details:

- Identification:**
 - Name: New - Save Interactive Grid Data
 - Type: Interactive Grid - Automatic Row Processing (DML)
- Settings:**
 - Target Type: PL/SQL Code
 - PL/SQL Code to Insert/Update/Delete:

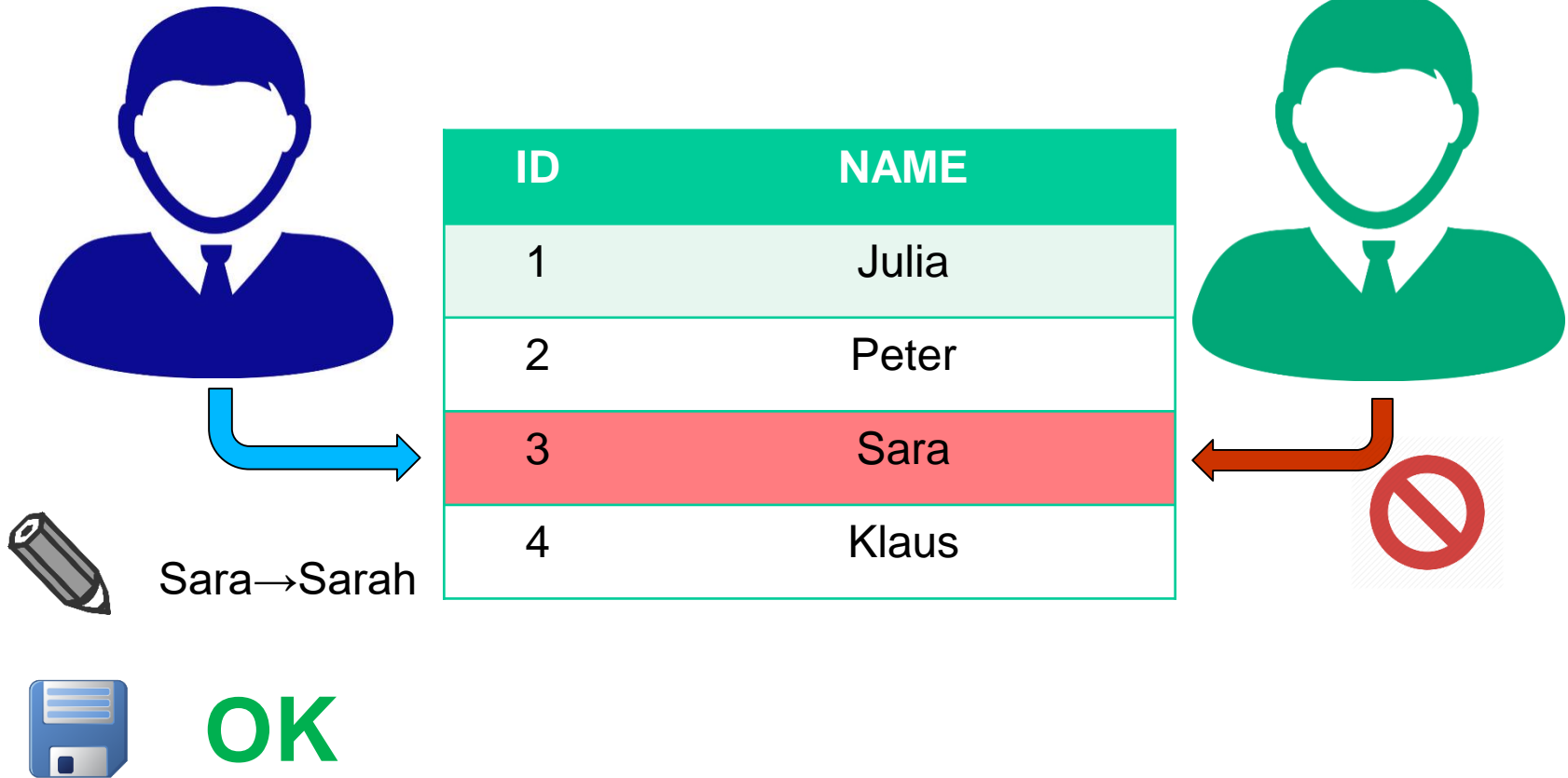

```
begin
  case :APEX$ROW_STATUS
    when 'C' then
      insert into emp ( empno, ename, deptno )
        values ( :EMPNO, :ENAME, :DEPTNO )
        returning rowid into :ROWID;
    when 'U' then
      update emp
        set ename = :ENAME,
```
 - Prevent Lost Updates: Yes No (highlighted with a green box)
 - Lock Row: Yes

SESSIONS



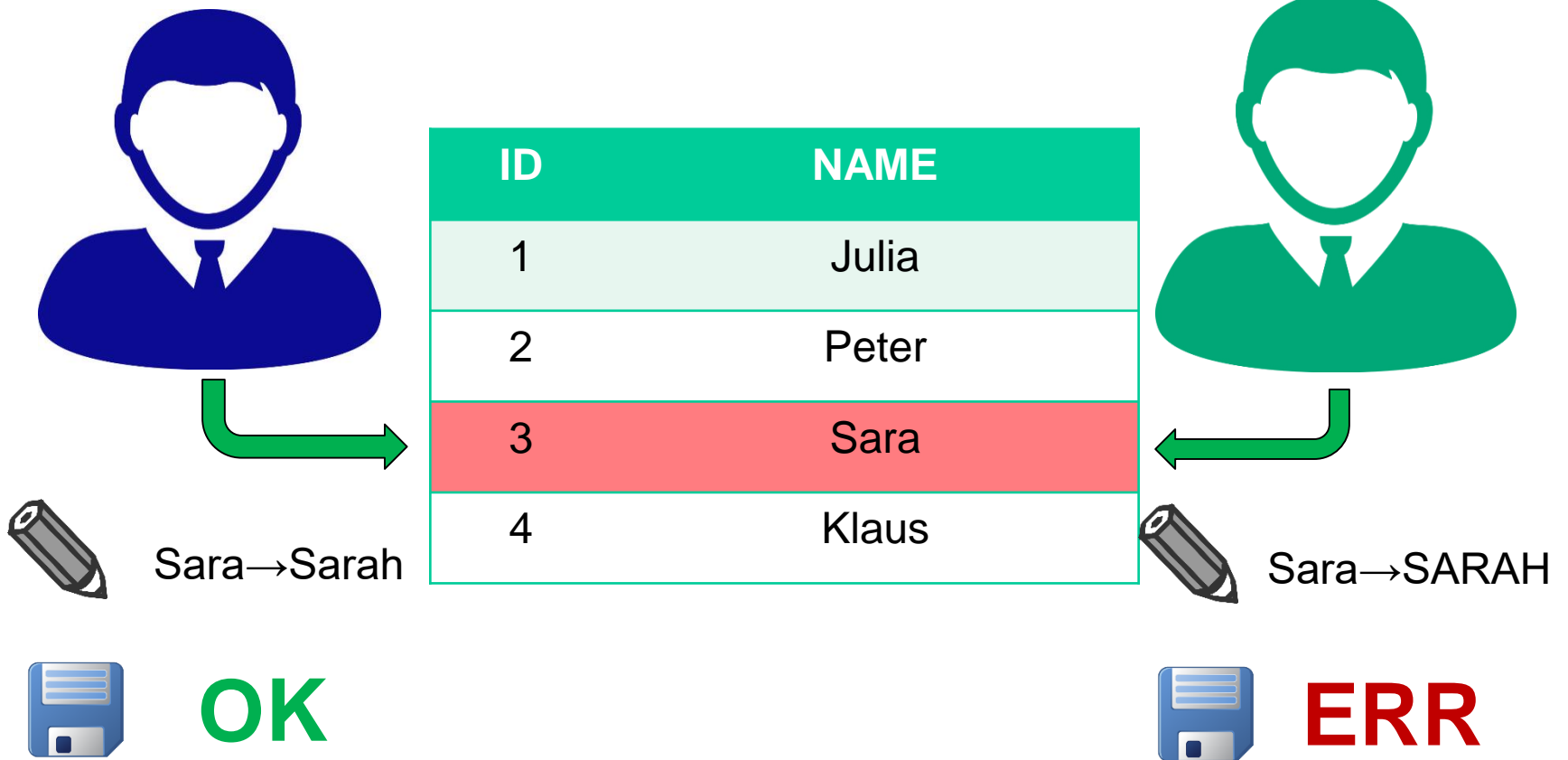
PESSIMISTISCHE SPERRUNG

„Hilfe, unser System hängt!“



OPTIMISTISCHE SPERRUNG

„Ich soll alle Daten neu eintragen!“



PRÜFSUMME



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OPTIMISTISCHE SPERRUNG MASKEN

Process

Filter

Identification

Name: Fetch Row from TEST_IG

Type: Automatic Row Fetch

Settings

Table Owner: Parsing Schema

Table Name: TEST_IG

Primary Key Column: ID

Primary Key Item: P3_ROWID

Secondary Key Column: - Select -

Row Version Column: VERSION

Runtime Where Clause

Process

Filter

Identification

Name: Process Row of TEST_IG

Type: Automatic Row Processing (DML)

Settings

Table Owner: Parsing Schema

Table Name: TEST_IG

Primary Key Column: ID



Primary Key Item: P3_ROWID

Secondary Key Column: - Select -

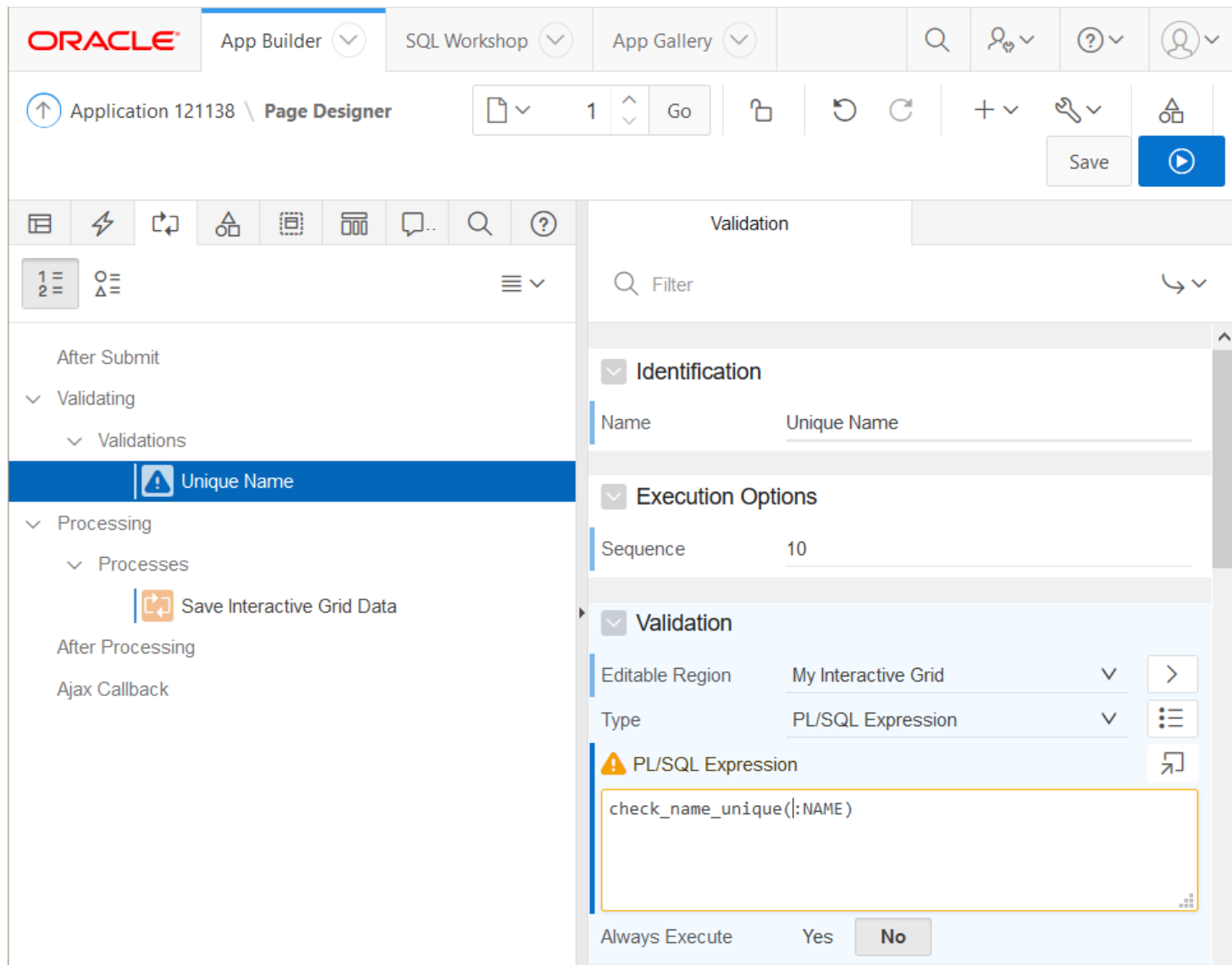
Row Version Column: VERSION

Runtime Where Clause

NÖTIGE ÄNDERUNGEN

- Version Spalte 
- Temporary Tables → APEX Collections
- Package Variables → Session Variables V(), NV()
- USER → V('APP_USER')
- WEB_UTIL 

VALIDATIONS



The screenshot shows the Oracle APEX Page Designer interface. The top navigation bar includes 'ORACLE', 'App Builder', 'SQL Workshop', and 'App Gallery'. The main toolbar shows 'Application 121138 \ Page Designer' with various icons for file operations, navigation, and saving. The left-hand navigation pane is expanded to 'Validations', with 'Unique Name' selected. The right-hand pane displays the configuration for this validation:

- Identification:** Name is 'Unique Name'.
- Execution Options:** Sequence is '10'.
- Validation:** Editable Region is 'My Interactive Grid', Type is 'PL/SQL Expression'. The PL/SQL Expression is `check_name_unique(:NAME)`.
- Always Execute:** The 'No' button is selected.

MODAL LOV

x

%

ACCOUNTING

RESEARCH

SALES

OPERATIONS

x

Select a value or use up and down keys and hit enter

Name	Country	Born in
50 Cent	United States	1975
A. P. de Candolle	Switzerland	1778
Aage Niels Bohr	Denmark	1922
Aaron Burr	United States	1756
Aaron Ciechanover	Israel	1947
Aaron Klug	Lithuania	1926
Aaron Spelling	United States	1923
Abbas I of Persia	Afghanistan	1571
Abbas II of Egypt	Egypt	1874
Abbas Kiarostami	Iran	1940

1 - 10
Next ▶

Deptno

ACCOUNTING

RESEARCH ▼

ACCOUNTING

RESEARCH

SALES

OPERATIONS

SPALTE BEFÜLLEN

ORACLE
App Builder
SQL Workshop
App Gallery

Empno	Deptno	Country	Ename	Job
7782	OPERATIONS	BOSTON	ADAMS	CLERK
7783	OPERATIONS	BOSTON	BLAKE	MANAGER
7784	OPERATIONS	BOSTON	CLARK	MANAGER
7785	OPERATIONS	BOSTON	ALLEN	SALESMAN
7786	OPERATIONS	BOSTON	WARD	SALESMAN
7787	OPERATIONS	BOSTON	MARTIN	SALESMAN
7788	OPERATIONS	BOSTON	SMITH	CLERK
7789	OPERATIONS	BOSTON	SMITH	CLERK
7790	OPERATIONS	BOSTON	SMITH	CLERK
7791	OPERATIONS	BOSTON	SMITH	CLERK
7792	OPERATIONS	BOSTON	SMITH	CLERK
7793	OPERATIONS	BOSTON	SMITH	CLERK
7794	OPERATIONS	BOSTON	SMITH	CLERK
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7796	OPERATIONS	BOSTON	SMITH	CLERK
7797	OPERATIONS	BOSTON	SMITH	CLERK
7798	OPERATIONS	BOSTON	SMITH	CLERK
7799	OPERATIONS	BOSTON	SMITH	CLERK
7800	OPERATIONS	BOSTON	SMITH	CLERK
7801	OPERATIONS	BOSTON	SMITH	CLERK
7802	OPERATIONS	BOSTON	SMITH	CLERK
7803	OPERATIONS	BOSTON	SMITH	CLERK
7804	OPERATIONS	BOSTON	SMITH	CLERK
7805	OPERATIONS	BOSTON	SMITH	CLERK
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7809	OPERATIONS	BOSTON	SMITH	CLERK
7810	OPERATIONS	BOSTON	SMITH	CLERK
7811	OPERATIONS	BOSTON	SMITH	CLERK
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7820	OPERATIONS	BOSTON	SMITH	CLERK
7821	OPERATIONS	BOSTON	SMITH	CLERK
7822	OPERATIONS	BOSTON	SMITH	CLERK
7823	OPERATIONS	BOSTON	SMITH	CLERK
7824	OPERATIONS	BOSTON	SMITH	CLERK
7825	OPERATIONS	BOSTON	SMITH	CLERK
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7860	OPERATIONS	BOSTON	SMITH	CLERK
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7862	OPERATIONS	BOSTON	SMITH	CLERK
7863	OPERATIONS	BOSTON	SMITH	CLERK
7864	OPERATIONS	BOSTON	SMITH	CLERK
7865	OPERATIONS	BOSTON	SMITH	CLERK
7866	OPERATIONS	BOSTON	SMITH	CLERK
7867	OPERATIONS	BOSTON	SMITH	CLERK
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7870	OPERATIONS	BOSTON	SMITH	CLERK
7871	OPERATIONS	BOSTON	SMITH	CLERK
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7880	OPERATIONS	BOSTON	SMITH	CLERK
7881	OPERATIONS	BOSTON	SMITH	CLERK
7882	OPERATIONS	BOSTON	SMITH	CLERK
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7886	OPERATIONS	BOSTON	SMITH	CLERK
7887	OPERATIONS	BOSTON	SMITH	CLERK
7888	OPERATIONS	BOSTON	SMITH	CLERK
7889	OPERATIONS	BOSTON	SMITH	CLERK
7890	OPERATIONS	BOSTON	SMITH	CLERK
7891	OPERATIONS	BOSTON	SMITH	CLERK
7892	OPERATIONS	BOSTON	SMITH	CLERK
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7894	OPERATIONS	BOSTON	SMITH	CLERK
7895	OPERATIONS	BOSTON	SMITH	CLERK
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7897	OPERATIONS	BOSTON	SMITH	CLERK
7898	OPERATIONS	BOSTON	SMITH	CLERK
7899	OPERATIONS	BOSTON	SMITH	CLERK
7900	OPERATIONS	BOSTON	SMITH	CLERK

Select a value

Enter a search term

ACCOUNTING	10	NEW YORK
RESEARCH	20	DALLAS
SALES	30	CHICAGO
OPERATIONS	40	BOSTON

Action

Filter

Settings

Set Type: SQL Statement

SQL Statement:

```
select loc as "Country"
from DEPT
where DEPTNO = :DEPTNO
```

Items to Submit: DEPTNO

Escape Special Characters: Yes No

Suppress Change Event: Yes No

Affected Elements

Selection Type: Column(s)

Column(s): COUNTRY

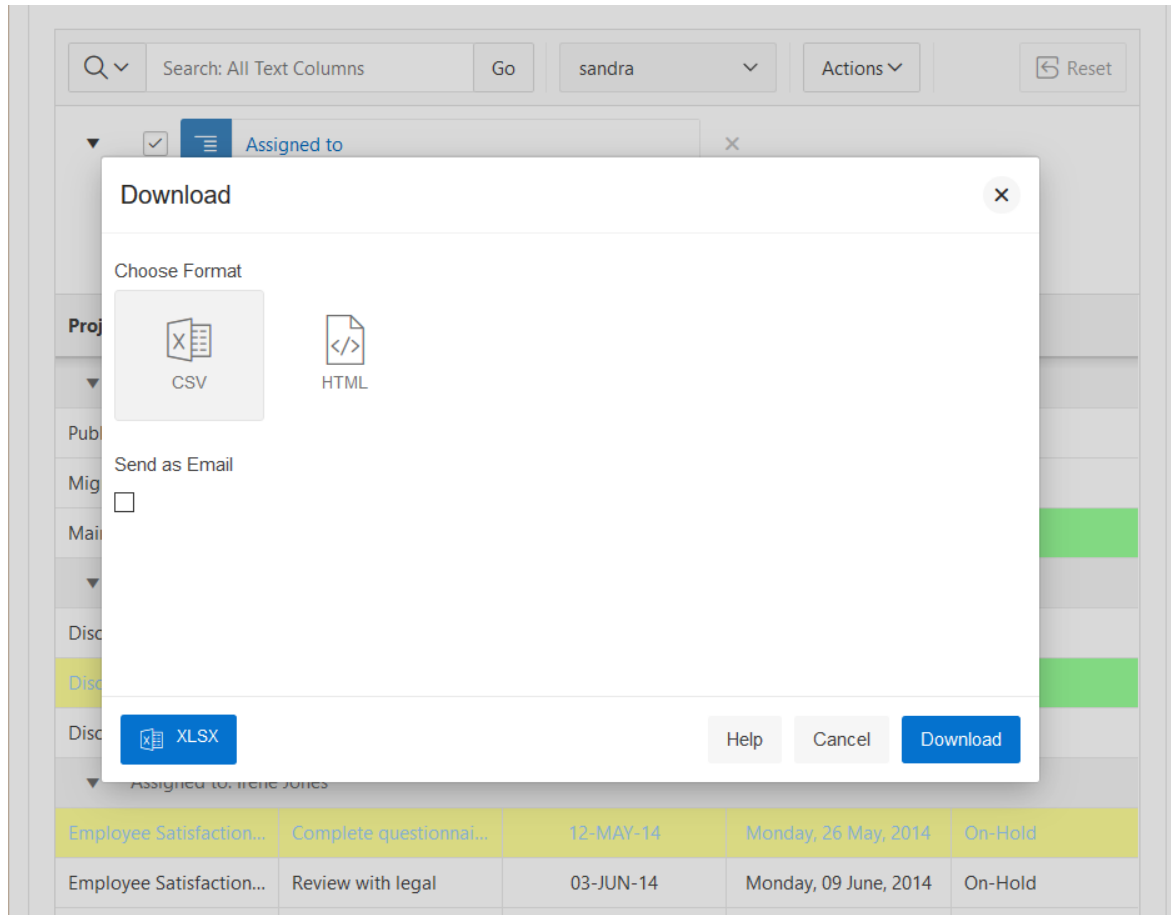
is-readonly

apex_disabled

- DEPTNO
 - Dynamic Actions
 - On Change
 - True
 - Set Value**
- COUNTRY
 - Attributes

PLUGINS

- Extend IG Toolbar with Input Field
- Interactive Report/Grid to MSExcel



EXPORT TO EXCEL

	A	B	C	D	E	F
1	Project	Start Date	Status	Cost	Code	Task Name
2	Assigned To: Al Bines					
3	Public Website	04-May-2014	On-Hold	\$300.00	06	Purchase additional software licenses, if needed
4	Migrate from SQL Server	26-Jun-2014	Pending	\$0.00	05	Decommission SQL Server
5	Maintain Support Systems	14-May-2014	Open	\$300.00	1c	Arrange for vacation coverage
6				\$600.00		
7	Assigned To: Hank Davis					
8	Discussion Forum	13-May-2014	Closed	\$250.00	09	Identify owners
9	Discussion Forum	22-May-2014	Open	\$450.00	08	Monitor participation
10	Discussion Forum	21-May-2014	Closed	\$100.00	05	Install APEX application on internet server
11				\$800.00		
12	Assigned To: Irene Jones					
13	Employee Satisfaction Survey	12-May-2014	On-Hold	\$1,200.00	06	Complete questionnaire
14	Employee Satisfaction Survey	03-Jun-2014	On-Hold	\$200.00	07	Review with legal
15	Employee Satisfaction Survey	10-Jun-2014	On-Hold	\$0.00	10	Plan rollout schedule
16				\$1,400.00		
17	Assigned To: James Cassidy					
18	Migrate from SQL Server	28-May-2014	Pending	\$0.00	15	Obtain SQL Server credentials
19	APEX Environment Configuration	05-Apr-2014	Closed	\$100.00	1f	Run installation
20	APEX Environment Configuration	27-Mar-2014	Closed	\$100.00	04	Determine Web listener configuration(s)
21	Train Developers in APEX	25-Apr-2014	Closed	\$500.00	07	Create training workspace
22	APEX Environment Configuration	28-Mar-2014	Closed	\$200.00	1.12	Select servers for Development, Test, Production
23				\$900.00		
24	Assigned To: John Watson					

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