



PeopleSoft Security for All Introduction to How Security Works

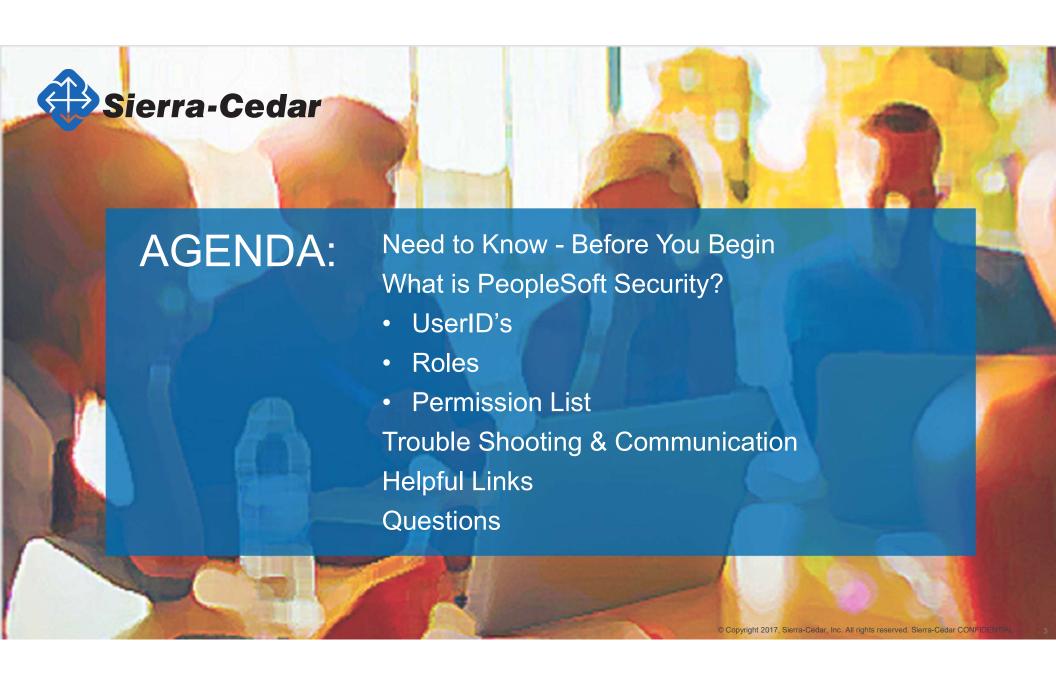


## MEET THE PRESENTER

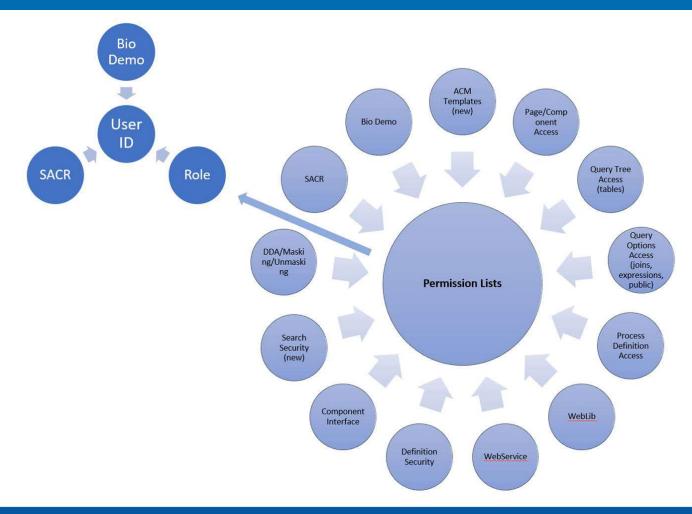


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- 22+ years of experience with PeopleSoft in Higher Ed, City Government, K-12 and Public/Private Commercial sector.



#### HIGH LEVEL- WHAT IS SECURITY?





#### POLICIES & DECISIONS

#### **Security Policy Document**

- Defines what is acceptable and what is not acceptable for your environments- not just production.
- Lays out naming standards.
- Defines who can approve what, especially what approvals are required for elevated access, correct history

#### **Data Access Policy**

- Defines who is allowed access to POI/Sensitive data (HIPPA/FERPA.)
- Query tree access/management



### **SECURITY POLICY**

## Sample of Security Policy/Strategy

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### **DATA POLICY**

### **Sample of Data Access Policy**

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#### NAMING STANDARDS

#### Consistency is important

- Many methods- no wrong or right -- think about who will be doing this job in 10 years
- Things to consider-
  - School, Campus, Location, Module, Actions- CH/A/U/DO or RO.
  - What kind of permission list is it? Pages/Cl's/weblibs/query PeopleTools?
- Examples-
  - Prefix XX\_R\_PY\_PNA\_USAP\_CW2\_YE\_PRCS
  - Suffix XX\_PY\_PNA\_USAP\_CW2\_YE\_PRCS\_R
  - Abbreviations to be used (remember consistency)
    - Mst cmmn- rmv vwls
    - Use of 2-3 letter representation for common words/modules
  - Navigation Path (XX\_R\_PY\_PNA\_USAP\_CW2\_YE\_PRCS)
    - Payroll for North America > U.S. Annual Processing > Create W-2 Data > Load Year End Data



#### NAMING STANDARDS: NOT JUST PERMISSION LISTS & ROLES

#### UserID's

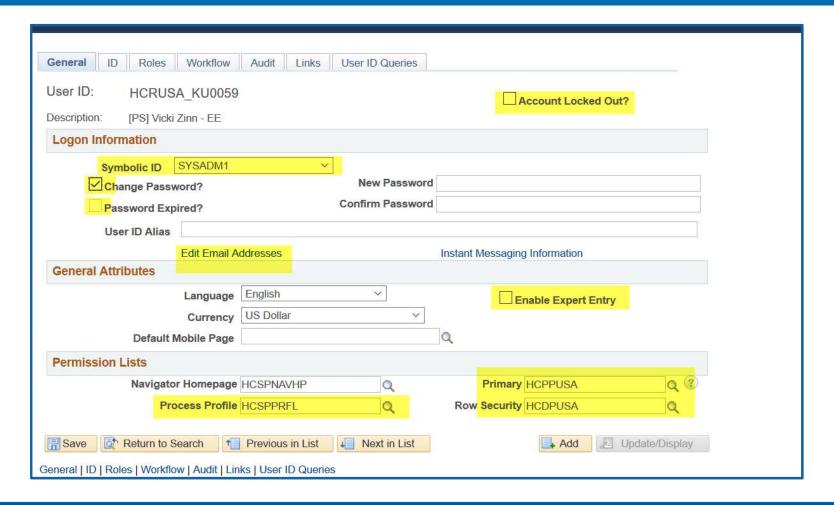
- Test accounts- if they all follow the same naming convention you can use a select statement in a datamover to pull out all testing accounts BEFORE a refresh- XX\_PYTEST001, XXBNTESTYE01
- Training Accounts- same as above- spend time creating basic training accounts for vastly different training groups, move them with dms or reload them with excel to ci.
- Batch Userids- same concept as above- XX\_HR\_BATCH
- Vendor/3<sup>rd</sup> party accounts
  - A good idea to have a separate account for each vendor, in case there is ever an issue you can shut down just that vendor account.



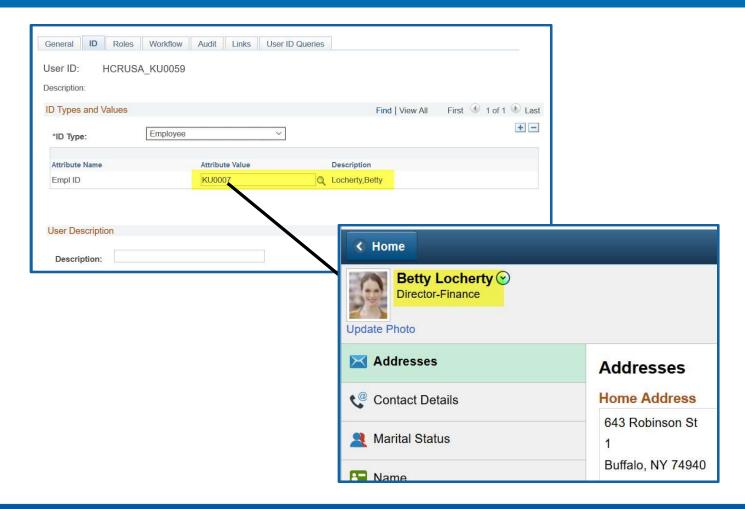


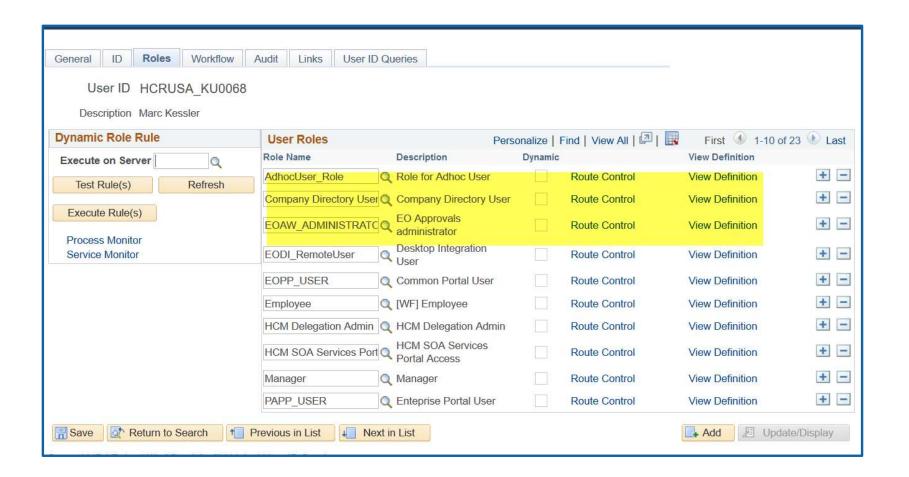
# What is PeopleSoft Security? User ID's:

- Unique to a person
- Multiple roles and data security to that UserID
- Ties to personal data on EMPLID tab

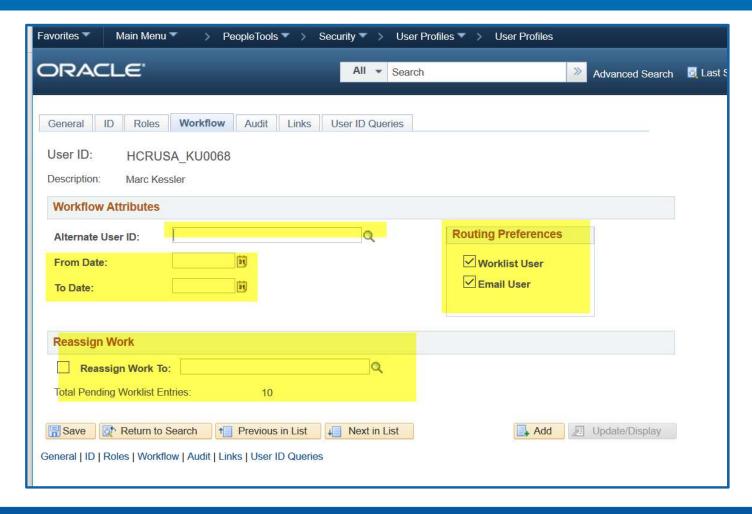




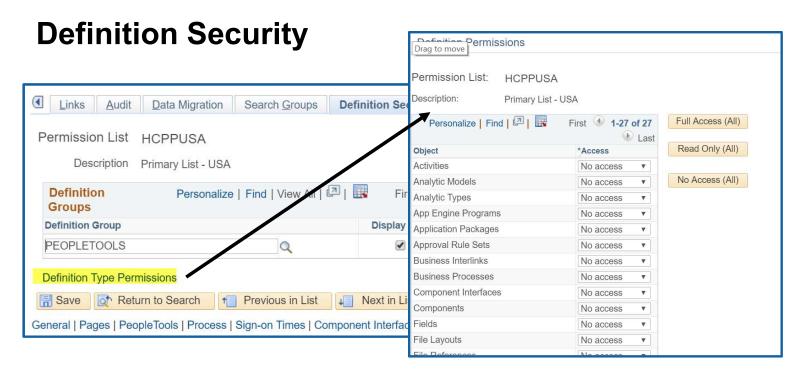








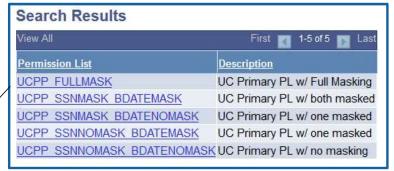


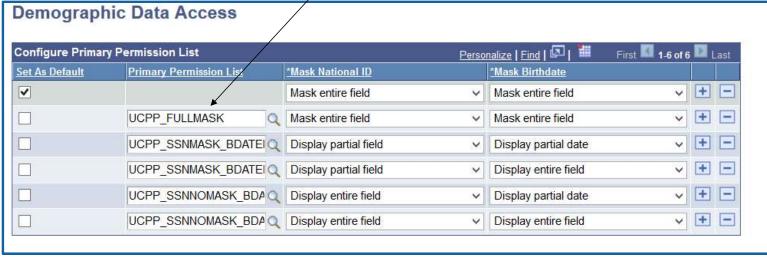


Definition security defines what you are allowed to do with certain objects that are grouped together- such as the Definition Group PeopleTools (Delivered)

#### Data Masking - (Campus Solutions)

- DDA (Demographic Data Access)
- Deciding who should get what?
- Search Match

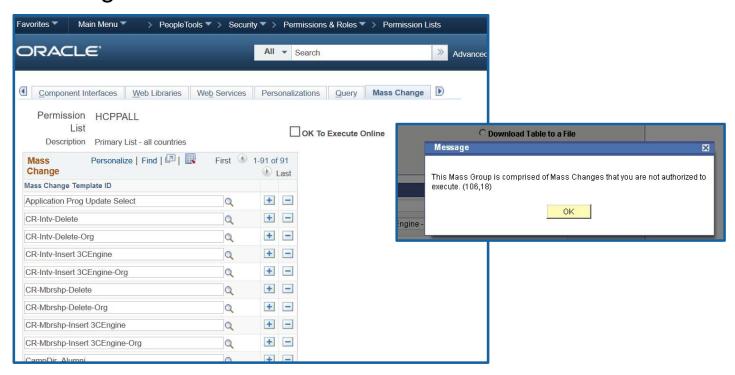




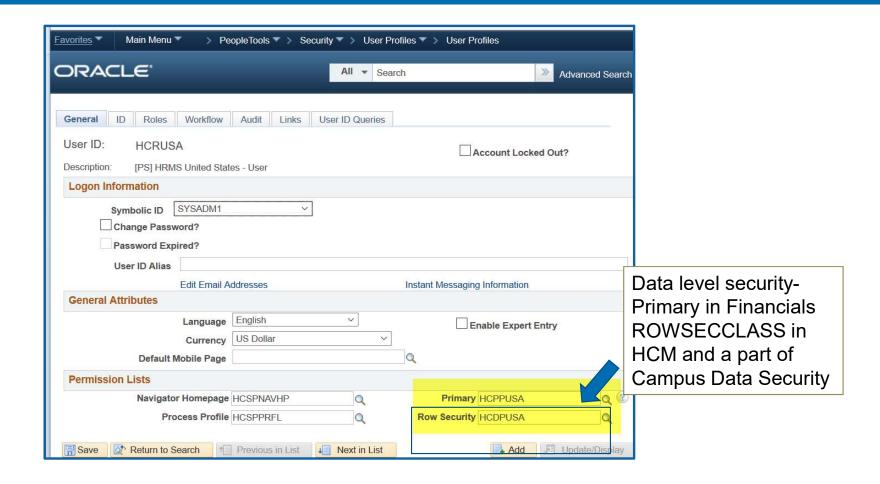


#### Mass Change

Users inherit mass change authorizations through their primary permission lists, not through roles.

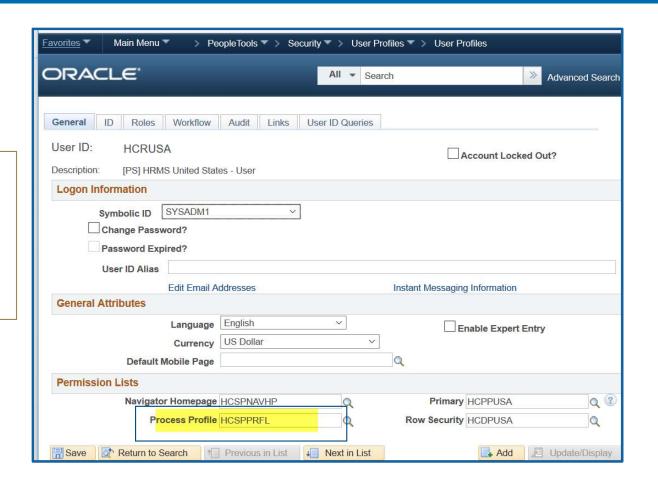


#### USERID: PRIMARY PERMISSION LIST / ROWSECCLASS



#### **USERID: PROCESS PROFILE PERMISSION LIST**

Process Profiledefines which ACTIONS can be completed when running processes





#### **USERID: PROCESS PROFILE PERMISSION LIST**

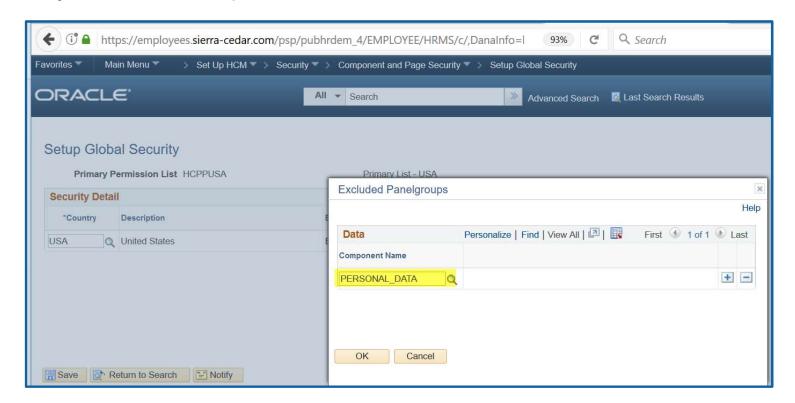
Might have 2 or 3 process profile permission lists- one for Selfservice (includes students in CS), one for the majority of users, and one for powerusers or batch users.



All Primary Permission lists need to be registered here.



Excluded Components -- you can restrict access to country-specific functionality in select components.





# What is PeopleSoft Security?

#### Roles:

 Logical grouping of permission lists, shared between UserID's with similar job DUTIES.

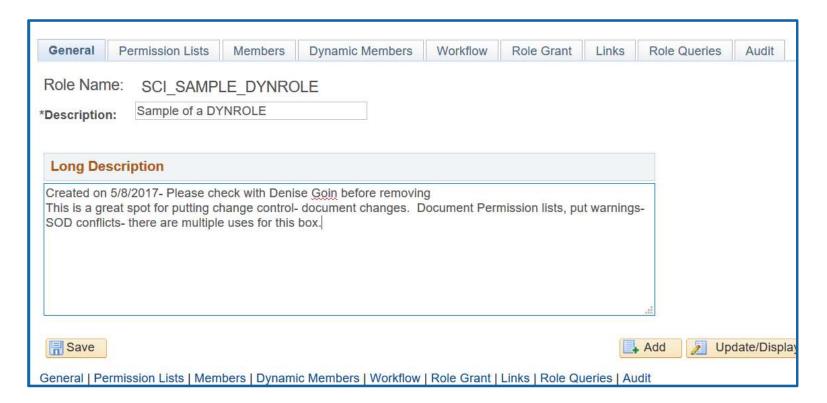
#### ROLES

- Logical grouping of permission lists
- Good idea to have a Base role for main job location-SR/FA/SF/AD/AA/PY/HE/BN/AP
  - Can be used in future for querying and grouping, identifying a group of people to add additional access to.
- Self-Service Roles
  - Assigned by Affiliation/a queryable group of people
    - Active Employees
    - Students
    - Retirees
- Staff Roles
  - Assigned by Security Team or dynamic by key features



#### **ROLES: GENERAL**

#### Make the description helpful when viewing on a User Profile



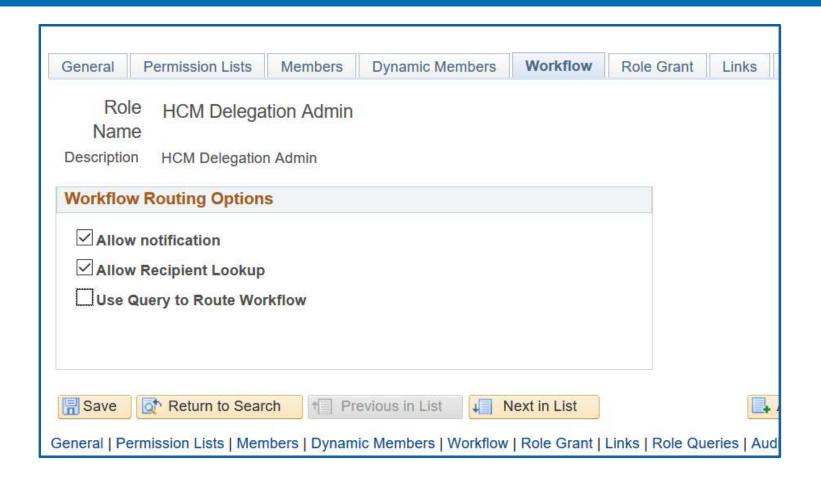


#### **ROLES: PERMISSION LISTS**

When you name your permission lists and put in a description make them useful when viewing in the Role Permission List page.

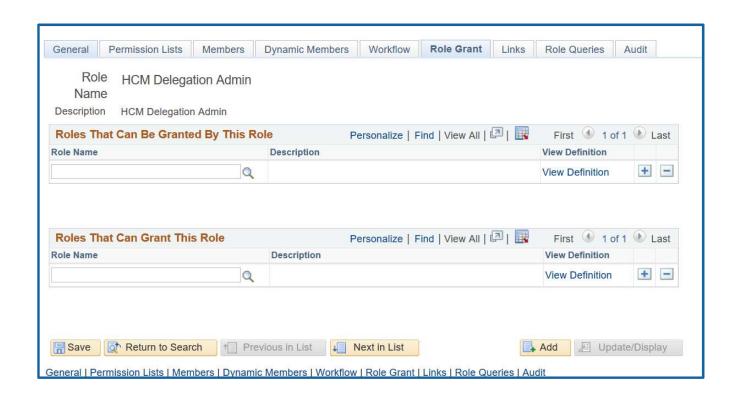


#### **ROLES: WORKFLOW**



#### **ROLES: ROLE GRANT**





#### **ROLES: ROLE GRANT**

Why is Role Grant a favorite of mine?

#### In Non-Production Environments

- Great for non-prd/testing access to team leads/functional testers
  - Let them add and remove all Self Service or module specific roles
  - Simplifies the testing process and reduces wait times
- Great for training environments
  - Let the training team assign/remove roles based on the upcoming training sessions
- To grant access to a "All Pages" role but you do not want it on all the time.



#### **ROLES: ROLE GRANT**

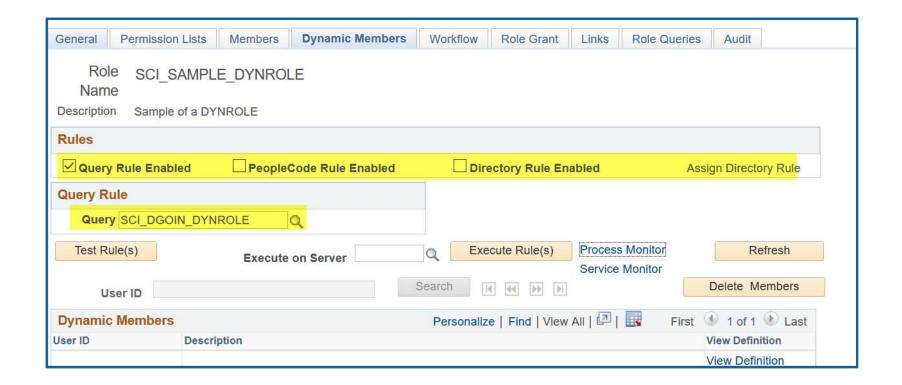
Why is Role Grant a favorite of mine?

In Production- suggest only if auditing psroleuser table

- Multiple Campus School
  - If you need to restrict access to a specific set of roles based on location
- To grant access to specific pages when needed, instead of them being assigned 24x7x365-
  - Message Catalog
  - Translate Values
- SOD/Leading Practice fulfillment
- Enrollment Page- granted by Registrar when needed

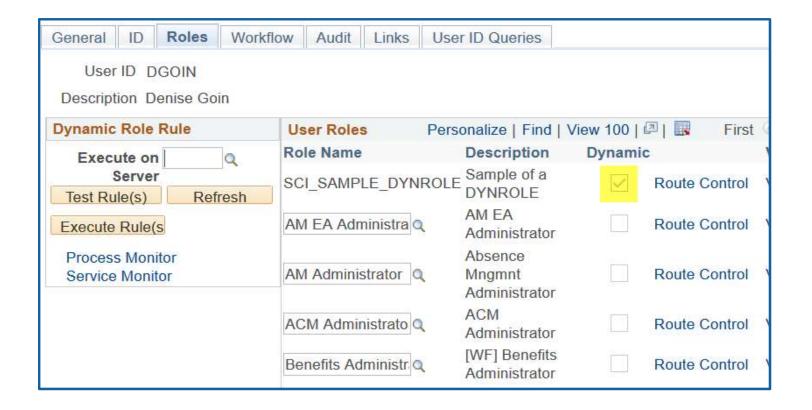


#### **ROLES: DYNAMIC**





#### **ROLES: DYNAMIC**



#### **ROLES: DYNAMIC POP QUIZ 1**

 SELECT DISTINCT A.OPRID FROM PSOPRDEFN A, PS EMPLOYEES B, PS EMPLMT SRCH QRY B1 WHERE (B.EMPLID = B1.EMPLID AND B.EMPL RCD = B1.EMPL RCD AND B1.OPRID = 'DGOIN' AND (A.ACCTLOCK = 0 AND B.EMPLID = A.EMPLID AND B.EFFDT = (SELECT MAX(B ED.EFFDT) FROM PS EMPLOYEES B ED WHERE B.EMPLID = B ED.EMPLID AND B.EMPL RCD = B ED.EMPL RCD AND B ED.EFFDT <= SYSDATE) AND B.EFFSEQ = (SELECT MAX(B ES.EFFSEQ) FROM PS EMPLOYEES B ES WHERE B.EMPLID = B ES.EMPLID AND B.EMPL RCD = B ES.EMPL RCD AND B.EFFDT = B ES.EFFDT) ))



#### **ROLES: DYNAMIC POP QUIZ 2**

 SELECT DISTINCT A.OPRID FROM PSOPRDEFN A, PS EMPLOYEES B, PS EMPLMT SRCH QRY B1 WHERE (B.EMPLID = B1.EMPLID AND B.EMPL RCD = B1.EMPL RCD AND B1.OPRID = 'DGOIN' AND (A.ACCTLOCK = 0 AND B.EMPLID = A.EMPLID AND B.EFFDT = (SELECT MAX(B ED.EFFDT) FROM PS EMPLOYEES B ED WHERE B.EMPLID = B ED.EMPLID AND B.EMPL RCD = B ED.EMPL RCD AND B ED.EFFDT <= SYSDATE) AND B.EFFSEQ = (SELECT MAX(B ES.EFFSEQ) FROM PS EMPLOYEES B ES WHERE B.EMPLID = B ES.EMPLID AND B.EMPL RCD = B ES.EMPL RCD AND B.EFFDT = B ES.EFFDT) ))



#### **ROLES: DYNAMIC POP QUIZ 3**

 SELECT DISTINCT A.OPRID FROM PSOPRDEFN A, PS\_EMPLOYEES B, PS\_EMPLMT\_SRCH\_QRY B1 WHERE (B.EMPLID = B1.EMPLID AND B.EMPL RCD = B1.EMPL RCD AND B1.OPRID = 'DGOIN' AND (A.ACCTLOCK = 0 AND B.EMPLID = A.EMPLID AND B.EFFDT = (SELECT MAX(B ED.EFFDT) FROM PS EMPLOYEES B ED WHERE B.EMPLID = B ED.EMPLID AND B.EMPL RCD = B ED.EMPL RCD AND B ED.EFFDT <= SYSDATE) AND B.EFFSEQ = (SELECT MAX(B ES.EFFSEQ) FROM PS EMPLOYEES B ES WHERE B.EMPLID = B ES.EMPLID AND B.EMPL RCD = B ES.EMPL RCD AND B.EFFDT = B ES.EFFDT) ))



## **ROLES: DYNAMIC POP QUIZ 4**

- EMPLID
- EMPL\_RCD
- BIRTHDATE
- BIRTHPLACE
- DT\_OF\_DEATH
- Name data including preferred first name
- ADDRESS1
- NATIONAL\_ID\_TYPE
- NATIONAL\_ID
- SEX
- HIGHEST EDUC LVL
- MILITARY\_STATUS





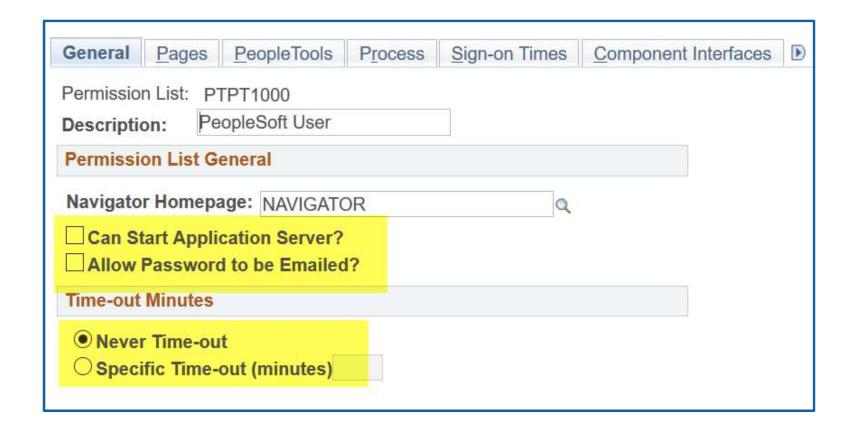
# What is PeopleSoft Security?

## **Permission Lists:**

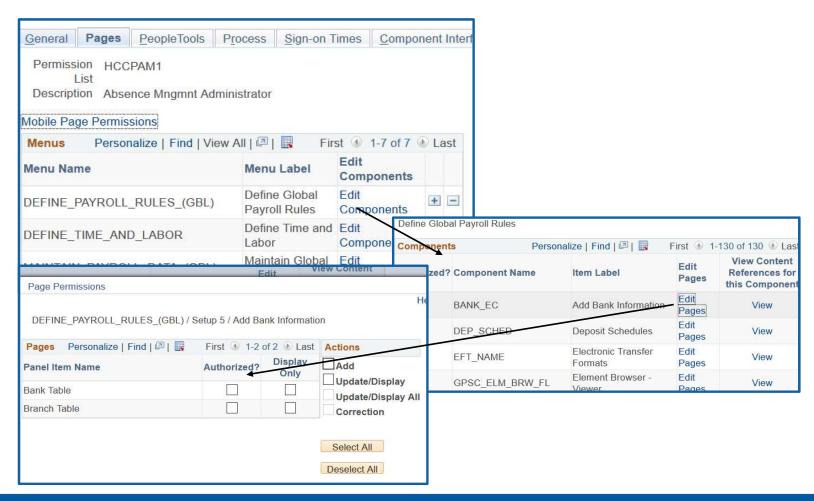
- Logical grouping of pages/components based on TASKS
- Masking of SSN/Birthdates (on UserID)

- General- App Server/ and Timeouts
- Access to Pages
   Permissions to PeopleTools objects
- Data Set Access
- Process Group access
- Process Profile- What you can do in Process Monitor or when running processes
- Component Interface (just the basics)
- Web Libraries
- Query Access Group (tables to see/use)
- Query Profile (What can be done in Query)
- Mass Change (just the basics)
- Links/Audit
- Permission List Queries

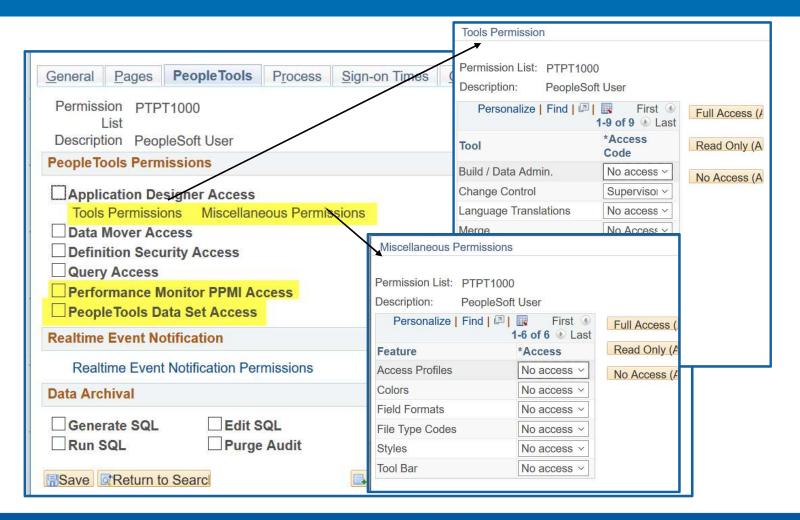








## PERMISSION LISTS PEOPLETOOLS

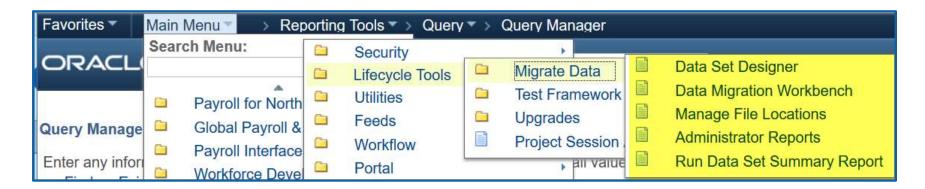




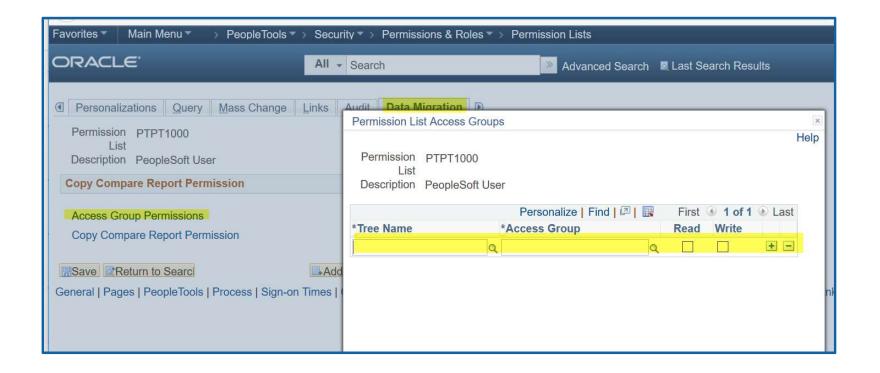
## PERMISSION LISTS PEOPLETOOLS

#### **Newer Features**

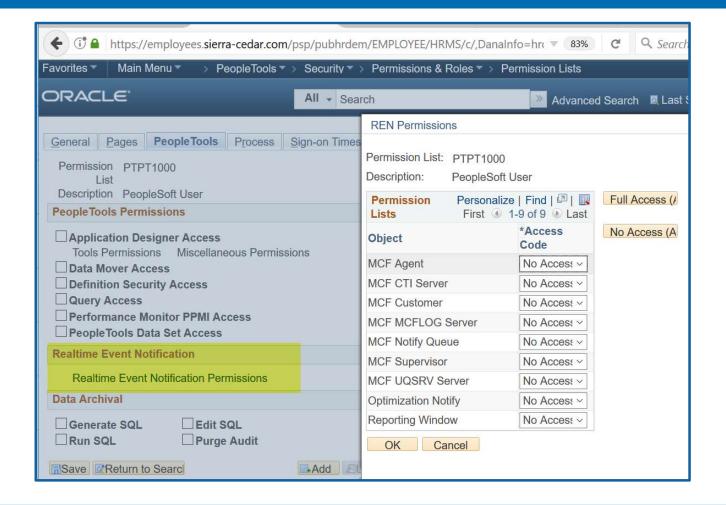
Data Sets- search for **Understanding the PeopleSoft Data Migration Workbench** in your PeopleBooks



# PERMISSION LISTS DATA MIGRATION









#### **Authorized Actions:**

- Misunderstanding on CH: Not correction mode. Iis Correct History, as in going back in history and changing data. Those changes must be brought forward in time where relevant. Can cause orphans and corrupt data if done incorrectly.
- Add: means when you first navigate to a page there is an Add and Search Tab- not needed to add a row in a grid on a page.

#### **Update Display vs. Update Display All:**

- Update display means that you can load the page with the current data and any future data. You can Add a row of data- current or future. You can change future dated rows.
- Update Display All means you can do all above + view historical rows
- Correct History means you can do all the above plus make historical changes (see above- Misunderstanding on CH)



Page Action Symbol	Action Type	Rows to Retrieve	Rows to Insert	Rows to Update
<b>E</b> →Add	Add	N/A	New high level key	N/A
∠ Update/Display	Update/Display	Current, Future	New EFFDT> Current Row EFFDT	Future only
	Update/ Display All	History, Current, Future	New EFFDT> Current Row EFFDT	Future only
Correct History	Correction	History, Current, Future	Any EFFDT	All rows



# PERMISSION LISTS – AUTHORIZED ACTIONS

#### **PSPGEACCESSDESC**

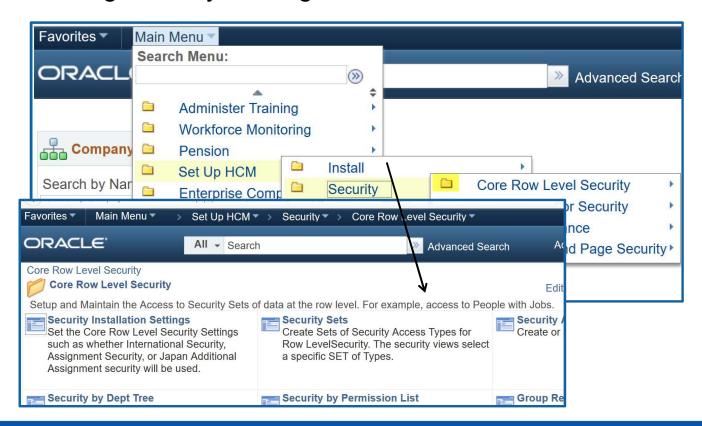
1	Add
2	Update/Display
3	Add Update/Display
4	Update/Display All
5	Add Update/Display All
6	Update/Display Update/Display All
7	Add Update/Display Update/Display All
8	Correction
9	Add Correction
10	Update/Display Correction
11	Add Update/Display Correction
12	Update/Display All Correction
13	Add Update/Display All Correction
14	Update/Display Update/Display All Correction
15	Add Update/Display Update/Display All Correction
139	Add Update/Display Correction Data Entry
143	Add Update/Display Update/Display All Correction Data Entry





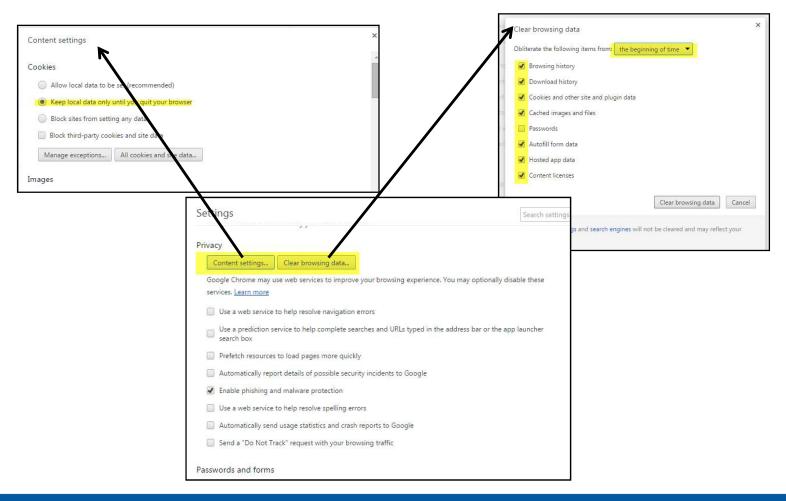
## MY SECURITY IS BROKEN: NAVIGATION

Sometimes cache can get "confused". If you do not see it in the drop down navigation, try clicking on the folders.



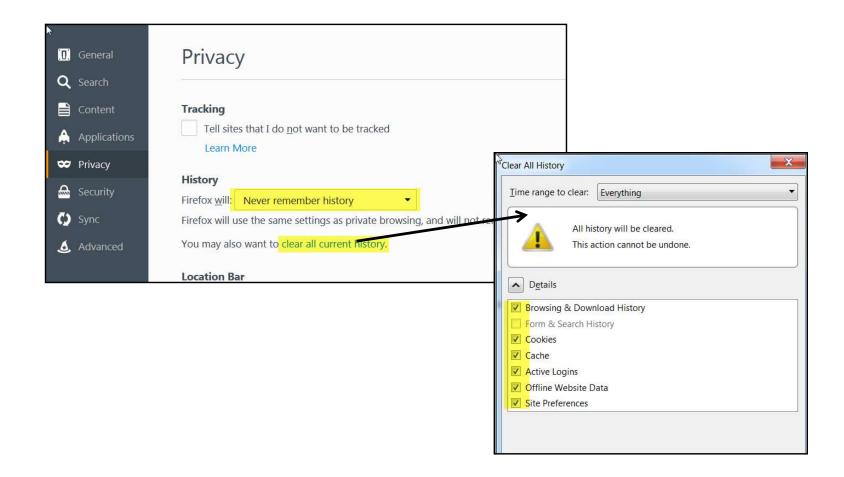
# MY SECURITY IS BROKEN: CACHE

#### **Chrome**



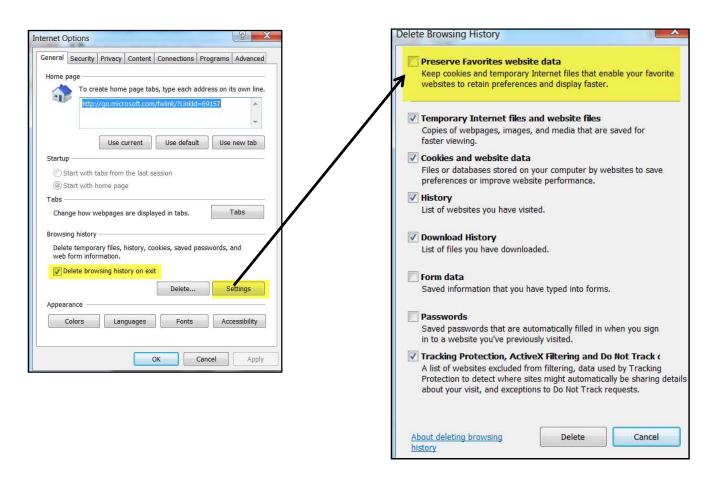
# MY SECURITY IF BROKEN: CACHE

#### **Firefox**



# MY SECURITY IF BROKEN: CACHE

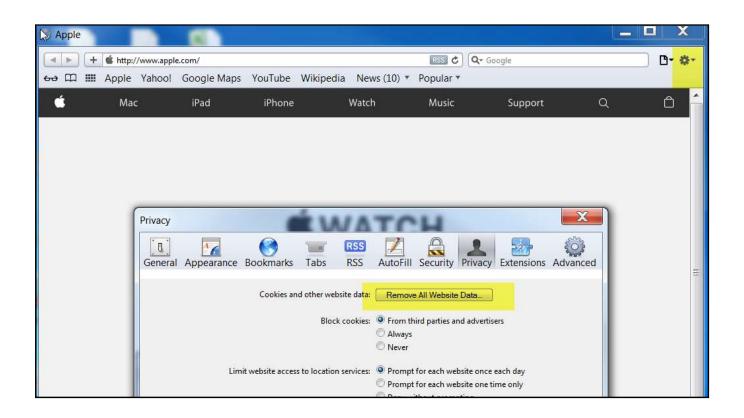
#### **Internet Explorer**





# MY SECURITY IS BROKEN: CACHE

#### Safari





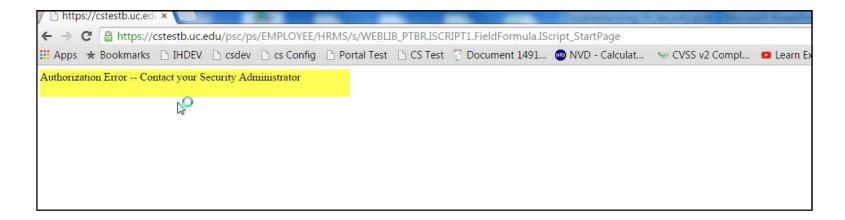
#### MY SECURITY IS BROKEN: CACHE

#### **Hints:**

- Always clear cache when NOT on a PeopleSoft page.
- Multiple tabs in the same browser window is the same as multiple windows.
- You will receive warning pop-ups, that might not pop up in front of the window you are working on, the time-outs are based on the longest inactive window, not the one you are working in.
- Always sign out from PS/Catalyst, and close all browser windows.
- Sometimes network cache is what is causing the issues, which is when clicking on the folders will work, when the normal drop down navigation will not work.



#### MY SECURITY IS BROKEN: CANNOT LOG IN

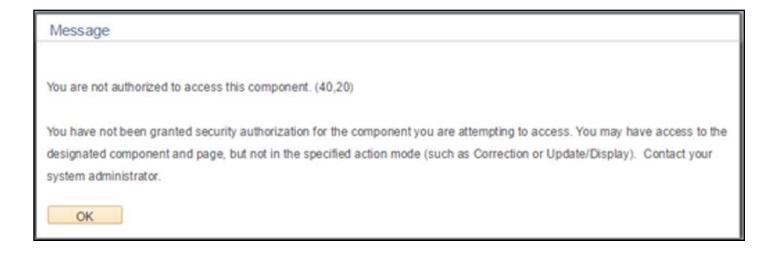


#### If you get this error on an all white page:

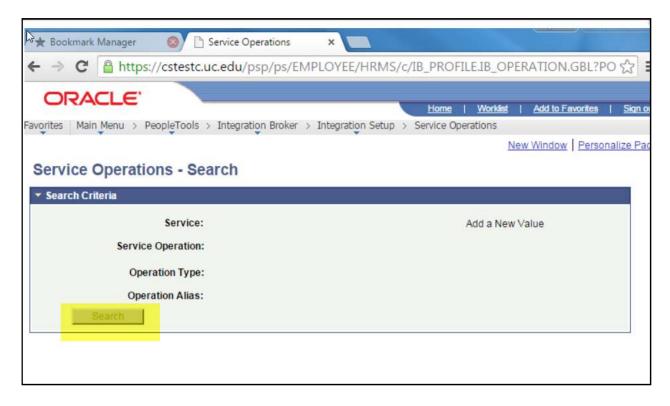
- There is something missing in your security access. Common causes are a permission list referenced in a role but the permission
- List was not actually moved into the environment you are logging into, or you are missing a base login role.

#### MY SECURITY IS BROKEN: CANNOT ACCESS A PAGE

You do not have permission to the page or to one of the aspects of the page, such as a weblib (peoplecode behind the page build), or in the case of the centers (student/advisor/faculty), you do not have access to one of the main pages needed to open it. You also might have Update/Display permissions and not Correct History. In a couple of situations Oracle requires CH.



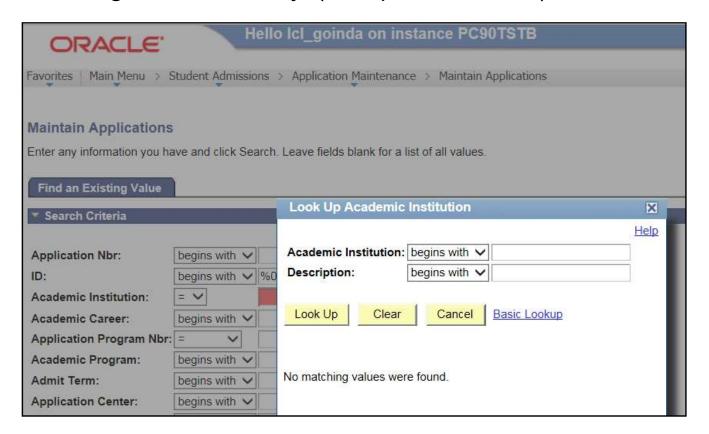
# MY SECURITY IS BROKEN: PAGE DOES NOT WORK AS EXPECTED



You have been granted Display Only access. In some cases, pages will not work in display only mode.

## MY SECURITY IS BROKEN: CANNOT POPULATE REQUIRED FIELD

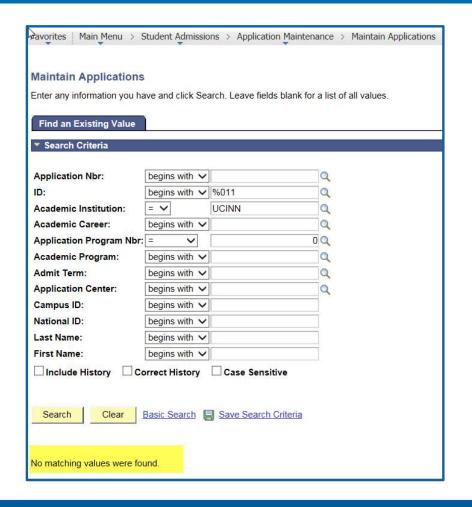
You are missing SACR security. (Campus Solutions)





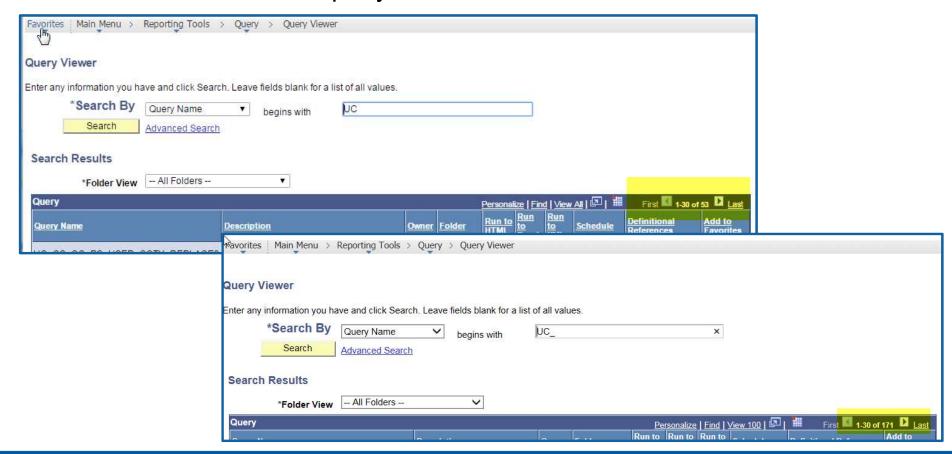
# MY SECURITY IS BROKEN: CANNOT SEE ANY DATA

You are probably missing the Row Security Permission list that grants access to Bio/Dem data.



## MY SECURITY IS BROKEN: CANNOT FIND A QUERY

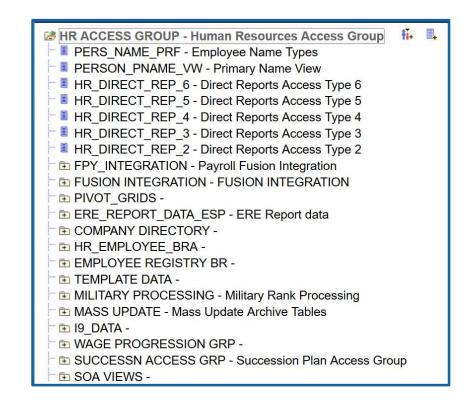
You do not have access to the query tree where some of the records are.



## MY SECURITY IS BROKEN: CANNOT FIND A QUERY

Think of a query tree as similar to Windows Explorer. We place records, such as NAMES (CC) and STDNT\_CAR\_TERM (SR), into the appropriate folders.

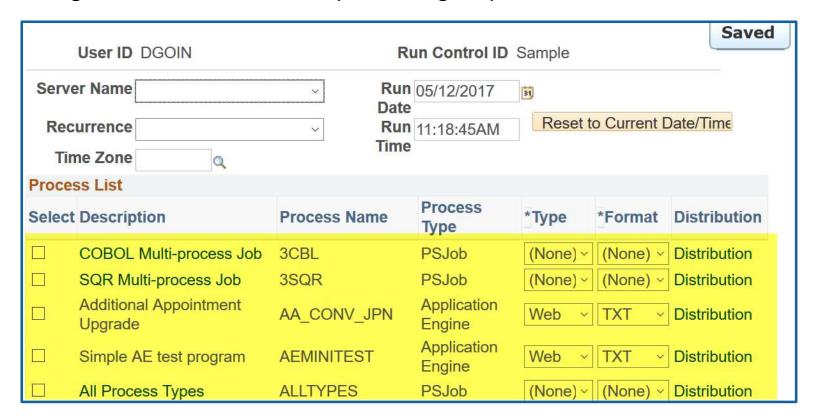
Some contain restricted data and are put into restricted areas, such as PERS\_NID (CC restricted)
SSR\_TSRSLT\_PERS (SR restricted)





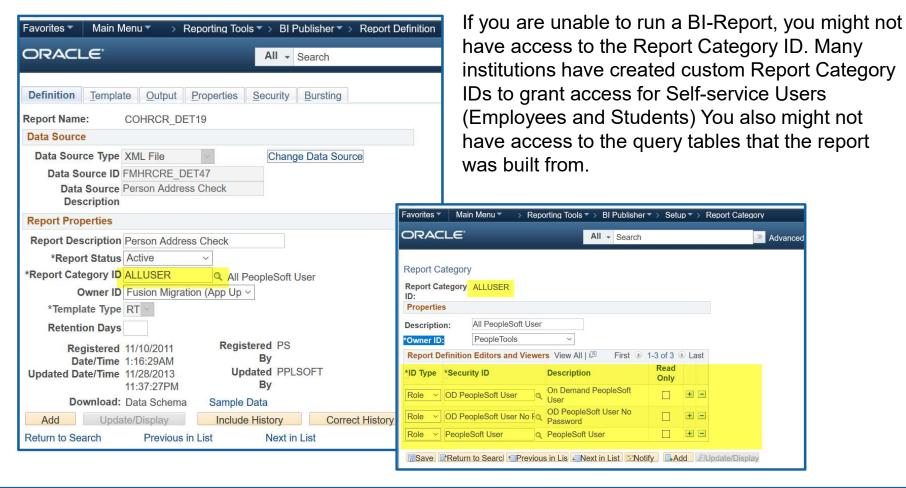
# MY SECURITY IS BROKEN: ERROR MESSAGE IN PROCESS LOG

If you click 'Run' on a run control page and the process list is empty, you have not been granted access to that process group.

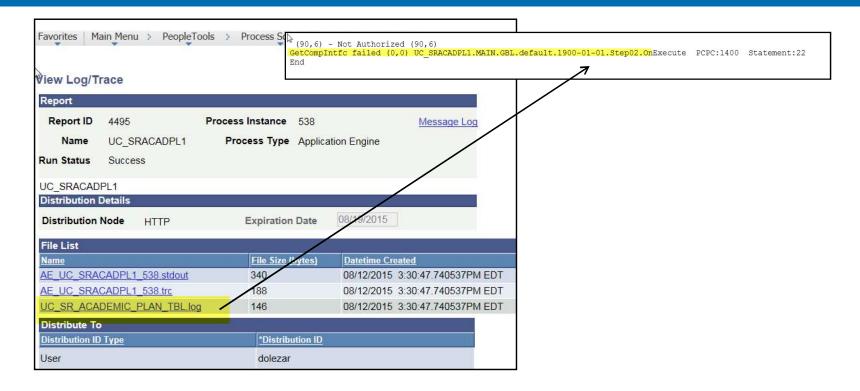




# MY SECURITY IS BROKEN: BI REPORTS



# MY SECURITY IS BROKEN: ERROR MESSAGE IN PROCESS LOG



If running an application engine, and you get this message, it is calling a component interface that you do not have permissions to access.

# Helpful Links:

https://community.oracle.com/community/support/support-blogs/peoplesoft-enterprise-support-blog/blog/2015/10/23/peoplesoft-talk-security-featuring-greg-kelly?customTheme=mosc

https://blogs.oracle.com/peopletools/entry/peopletools cpu\_analysis\_and\_supported

http://www.learnpeoplesoftsecurity.com/

https://www.heug.org/p/bl/ar/blogaid=3238



# Helpful Links new:

#### **Using Role and Permission List Aliases**

PeopleTools enables you to create aliases to verify user membership in user-defined roles and permission lists. The PeopleCode APIs IsUserInRole() and IsUserInPermissionList() will extend the verification against these user-defined objects when they are configured as aliases of delivered objects. As a result PeopleCode will no longer need to be customized when calling these APIs.

#### See Also

Product documentation for *PeopleTools 8.56: Security Administration*, "Using Role and Permission List Aliases

http://docs.oracle.com/cd/E87544 01/pt856pbr1/eng/pt/tsec/task UsingRoleAndPermissionListAliases.html



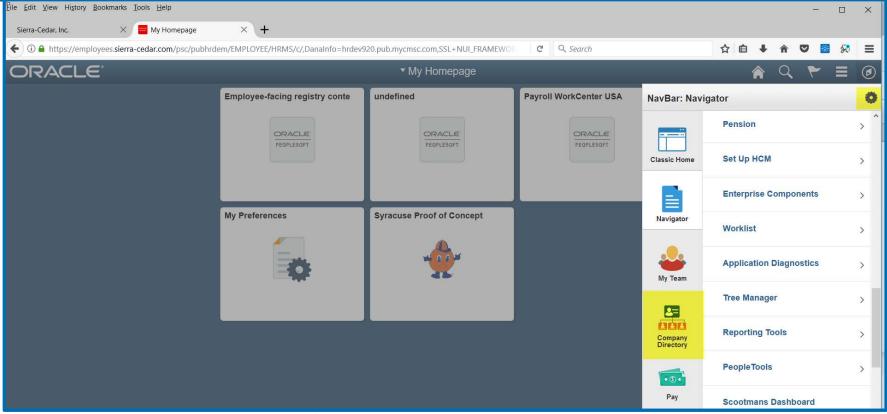
# If time- Fluid Just a taste

Fluid has introduced some new concerns for Security teams.

- Home Pages-
- NavBar- (hint this is also a home page)-
- Personalizations- what carries over to fluid from classic? (Big Gotcha)
- Redirects-

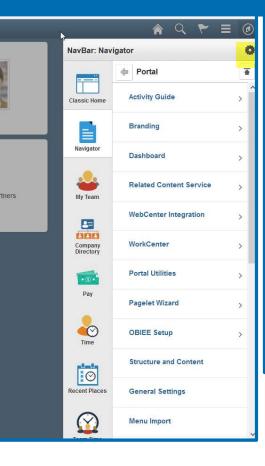


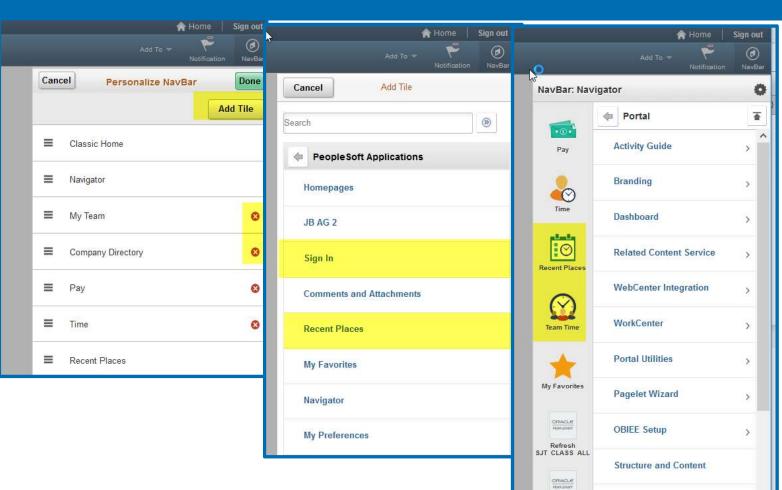
## FLUID: NAVBAR/NAVIGATOR



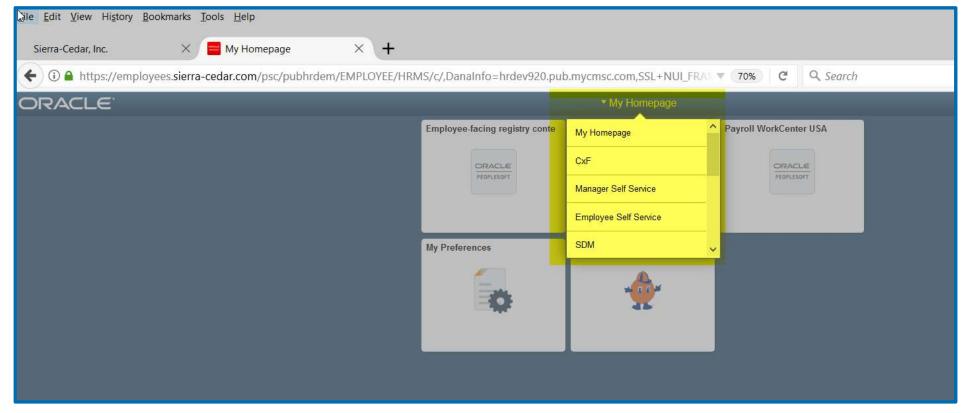
Welcome to Fluid- NavBar/Navigator on the right has the menu navigation, as well as a bar to put shortcuts, if you allow this.

# FLUID: NAVBAR/NAVIGATOR



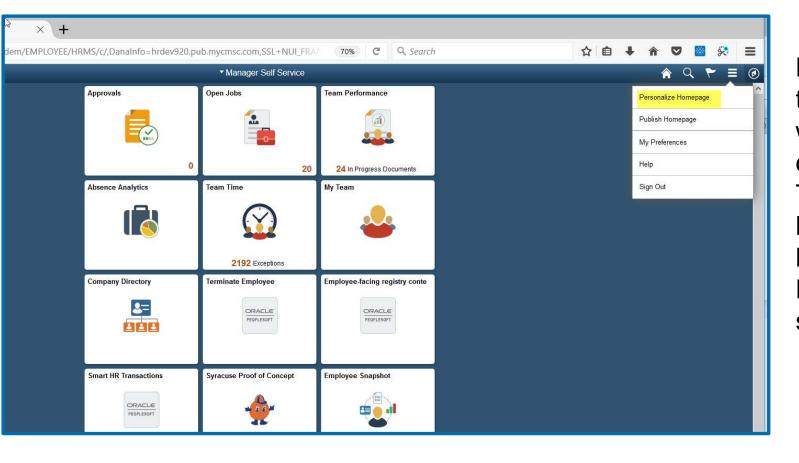


# FLUID: HOMEPAGE

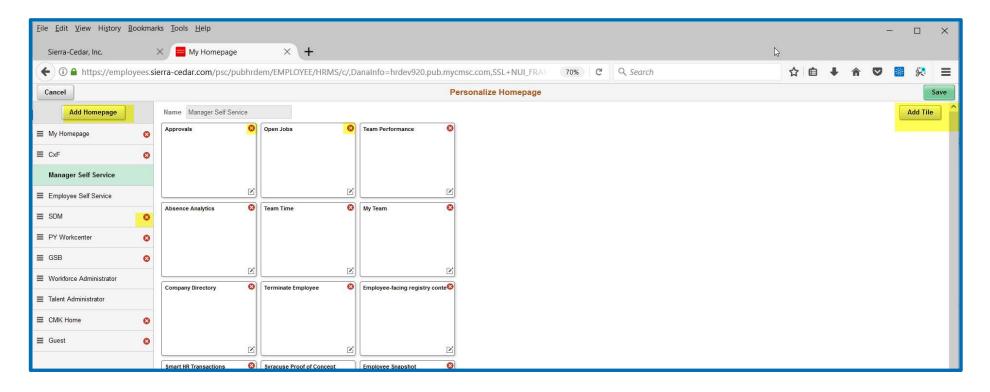


If you do not remove this access here is what all people can do-Add Tiles, Remove Tiles from the NavBar.

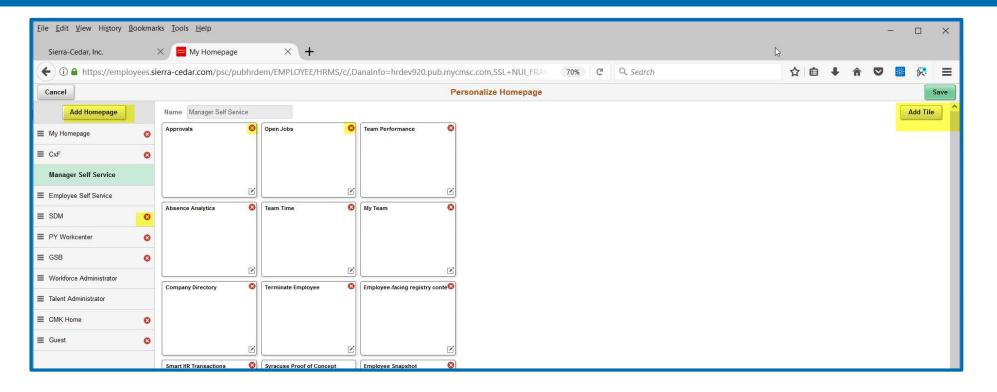
# FLUID: HOMEPAGE



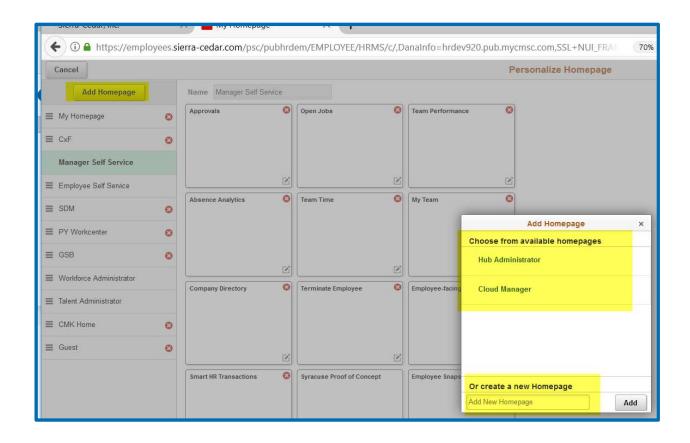
If you do not remove this access here is what all people can doTo any of the homepages they have access to.
Note- Only they can see their changes!



If you do not remove this access here is what all people can do- Add tiles to HomePages and Add a NEW Homepage and delete tiles off of their HomePages

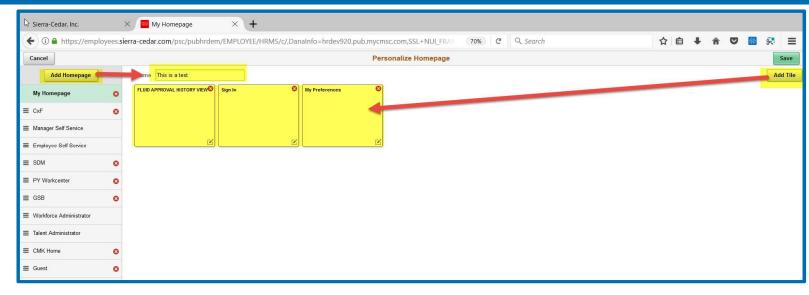


If you do not remove this access here is what all people can do- Add tiles to HomePages and Add a NEW Homepage



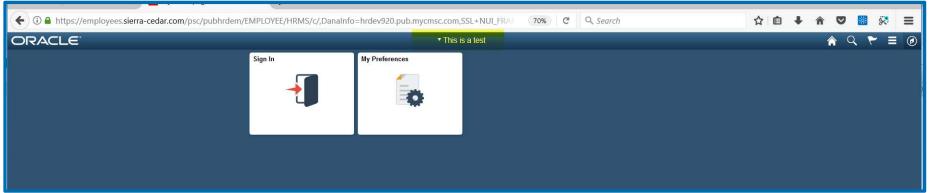


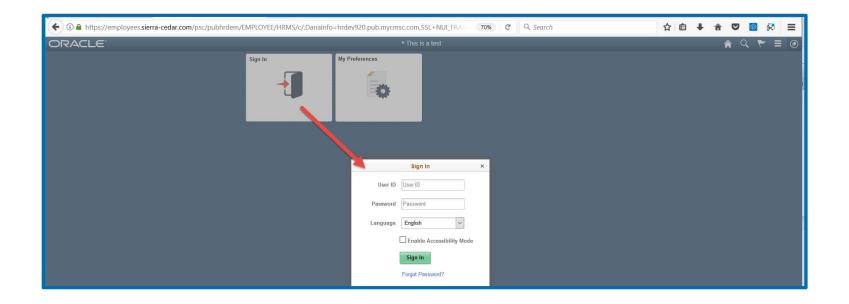


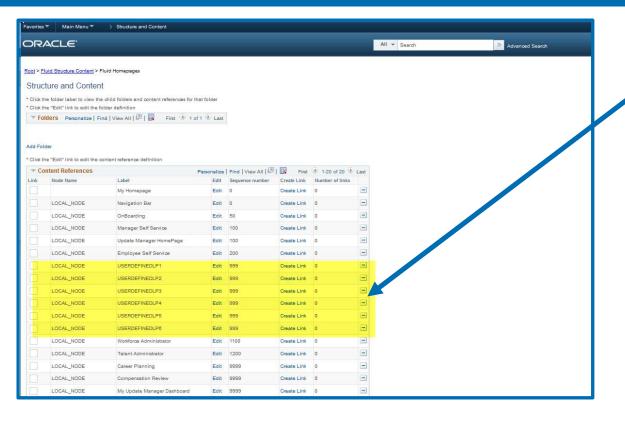


Cool Right?

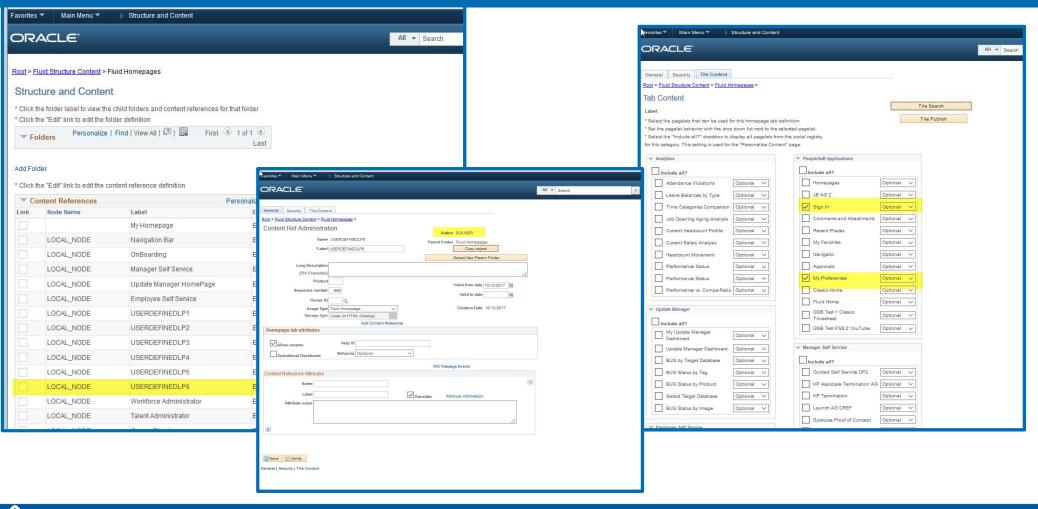
Or Not?

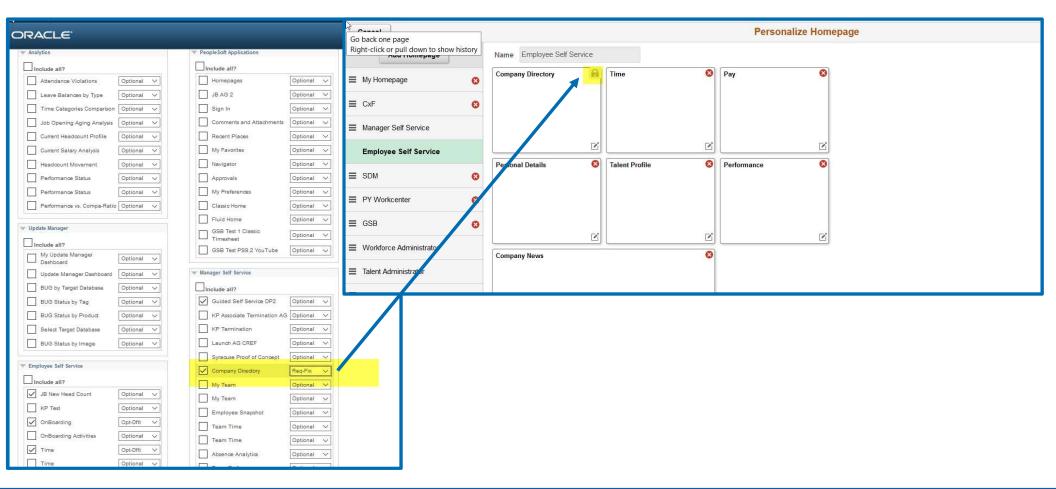


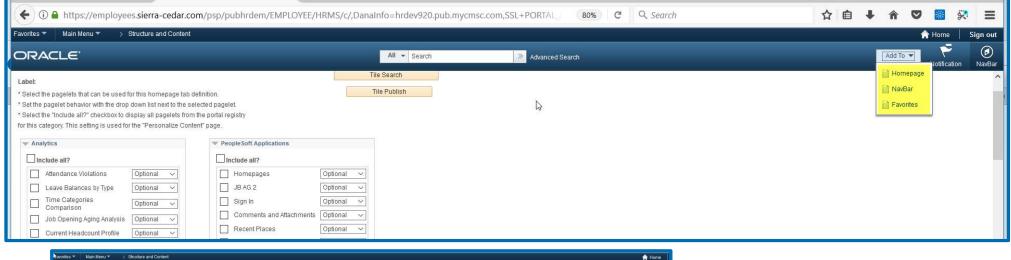


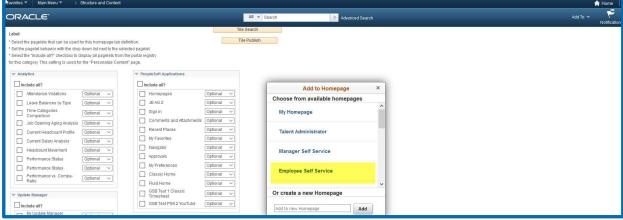


Each "New HomePage" adds a line here- if you have 800 staff, that is 800 lines that no one knows what they are and who they belong to until you go into the edit for each one!

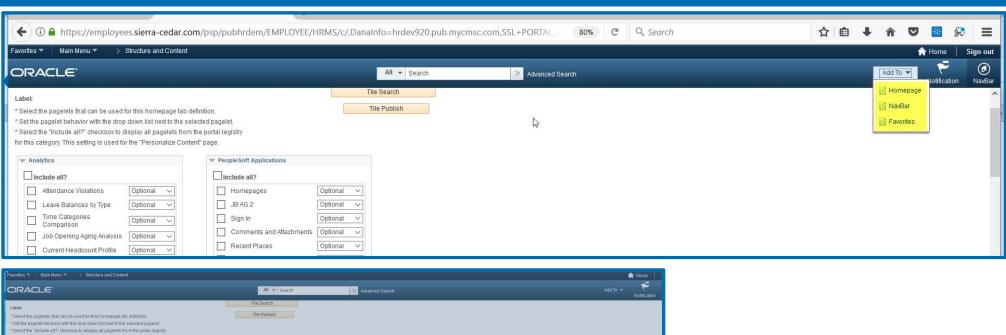


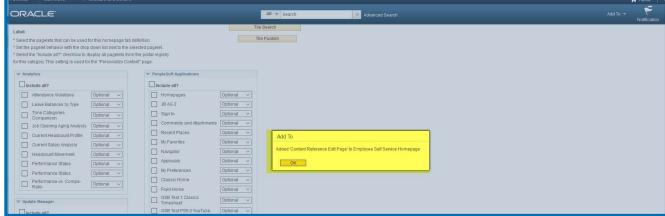




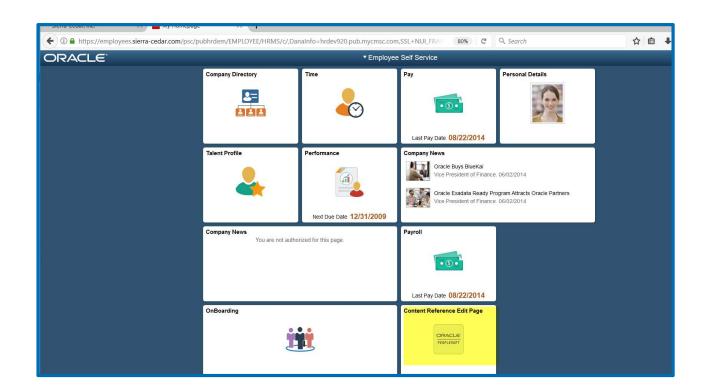






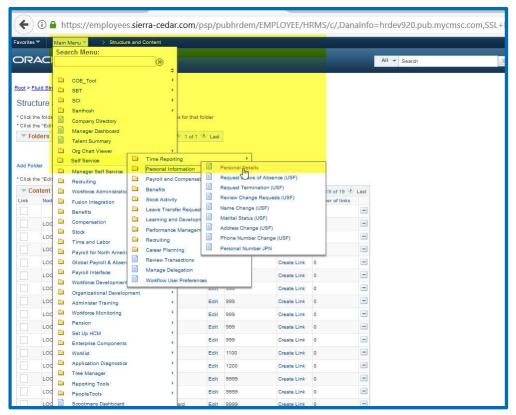


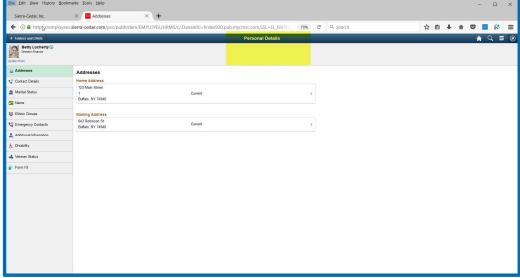




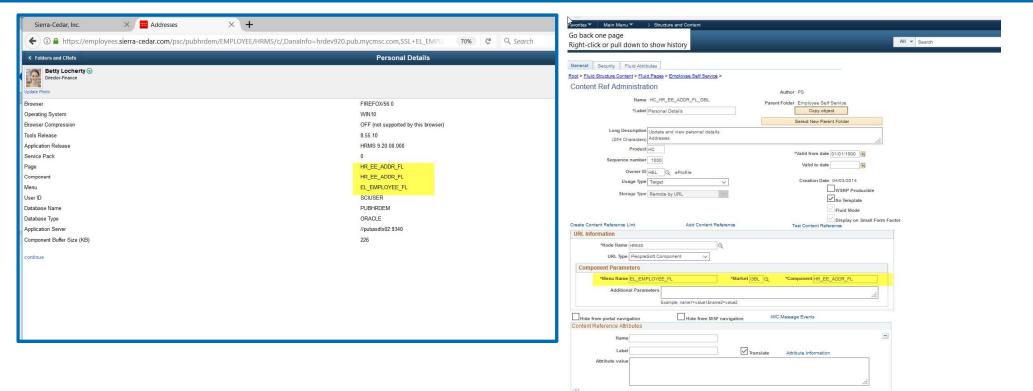


# **FLUID: REDIRECTS**





#### **FLUID: REDIRECTS**



**SQL-Find redirects** 

SQL- Find Missing Security in Redirects

Base Fluid Spreadsheet





# Thank You for Attending Any Questions?

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