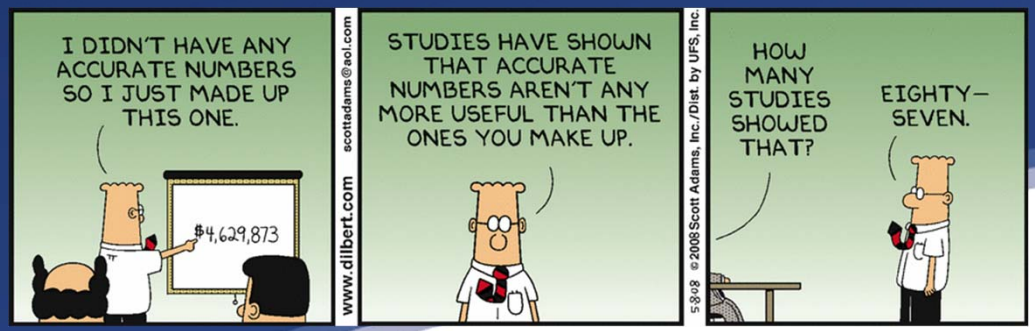
Oracle Business Intelligence (OBIEE 12c)

Tips & Tricks for Developers and Power Users



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Presenters

- Robert Flum
- Director, Information Systems & Reporting
- University of Wisconsin-Platteville

- Andy Cunningham
- Manager, Business Intelligence & Reporting Enterprise Systems
- University of Wisconsin-Madison

- Zac Palet
- Higher Education EPM Solution Lead
- Huron Consulting Group

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Overview

- University of Wisconsin System - Background & Current State
- Tips & Tricks
  - RPD Development Tasks
  - Reports & Dashboards
  - Other Tips
- Design Considerations
- Q&A

University of Wisconsin System
Background & Current Status

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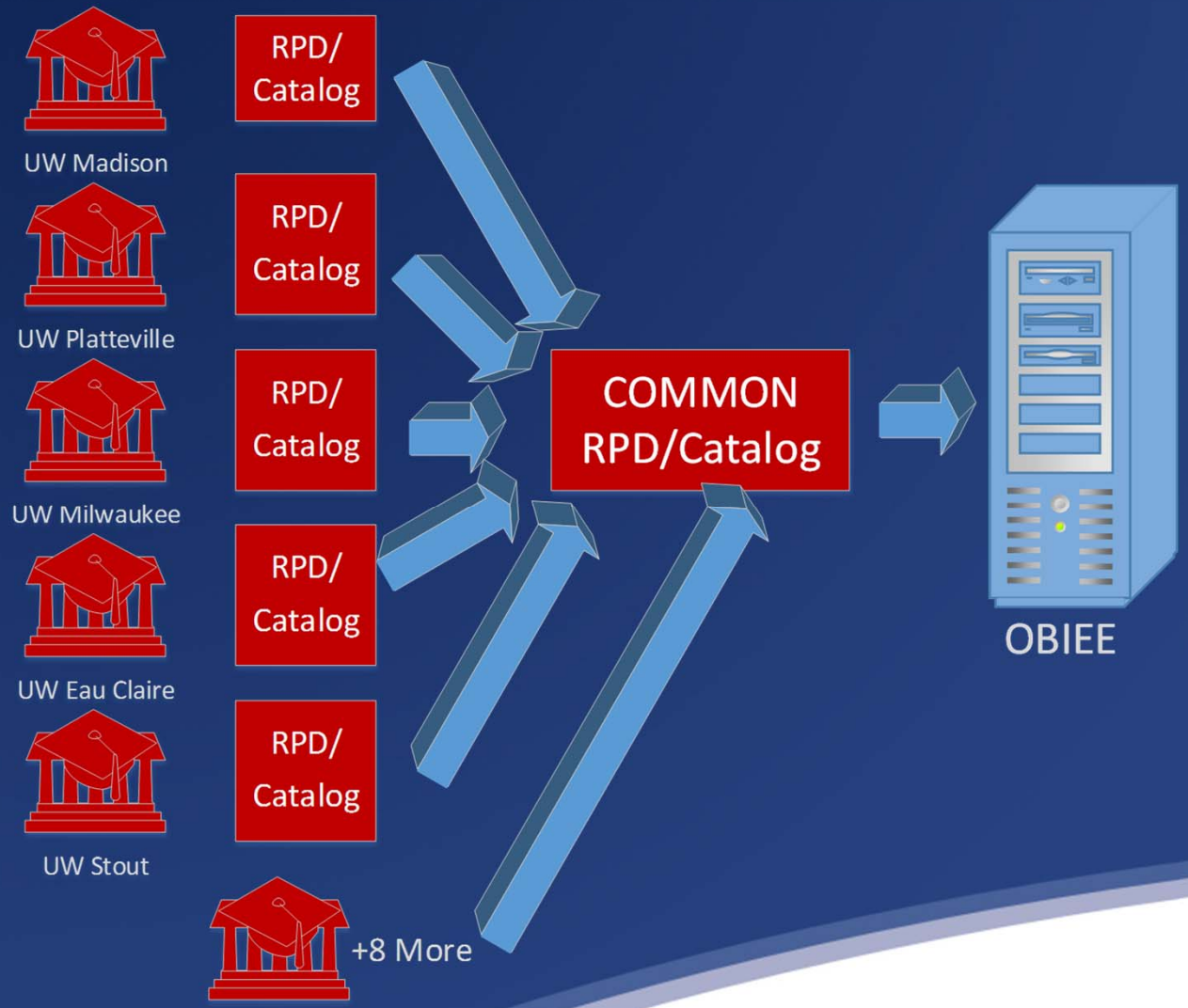
University of Wisconsin System

The UW System is one of the largest systems of public higher education in the country.

- Approximately 180,000 students
- 39,000 faculty and staff
- 13 four-year universities
- 13 freshman-sophomore UW Colleges campuses
- Statewide UW-Extension

University or Wisconsin OBIEE



Tips & Tricks
RPD Development Tasks

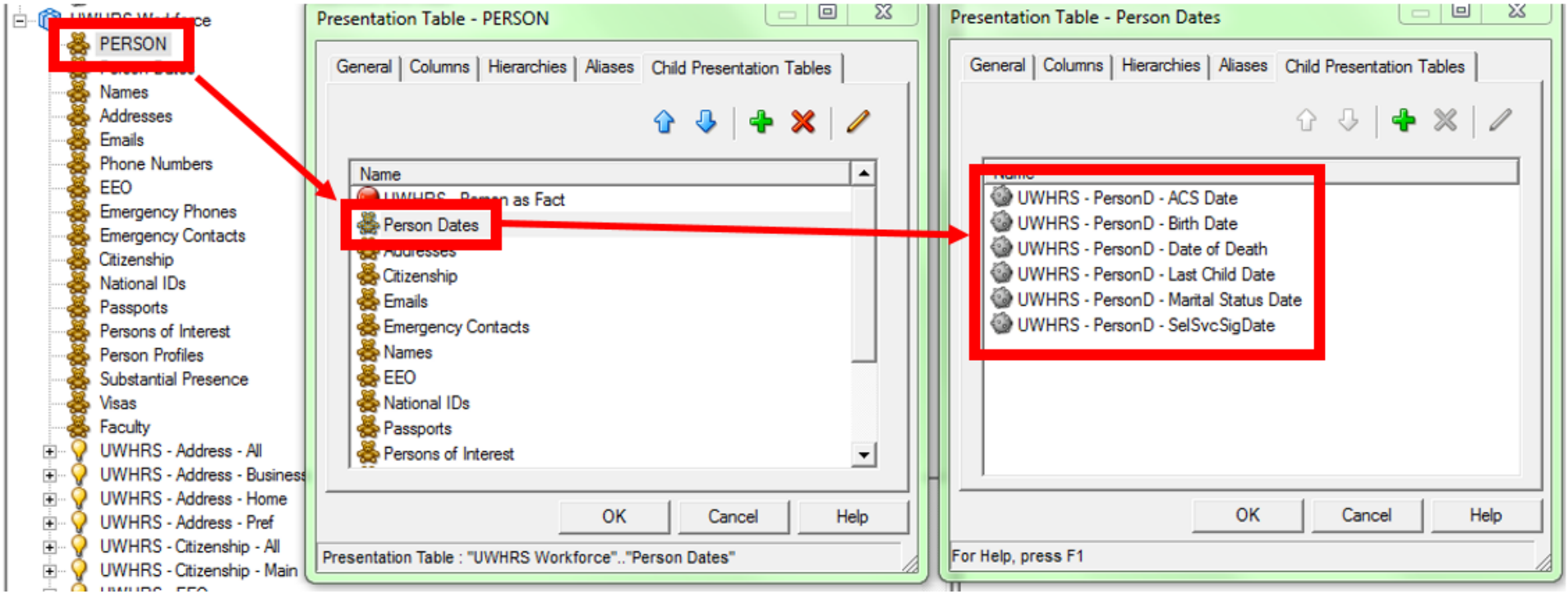
Presentation Layer

Remove any field that won't be used. Could possibly be:

- IDs (if you are just using descrs)
- Duplicates
- Surrogate and foreign keys

Organize the presentation columns:

- Child presentation tables
- Commonly used tables



Renaming Process

Method 1 – initial pass

- Import Metadata and run Repository Documentation Utility and provide the results to report developers to mark up

Logical Table	Logical Column		Physical Table	Alias	Physical Column
UWHRS - Dim - Date - VisaD - All - Status Date	Date	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Status_Date	CALENDAR_DATE
UWHRS - Dim - Date - VisaD - All - Status Date	Day of Month	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Status_Date	DAY_OF_MONTH
UWHRS - Dim - Date - VisaD - All - Status Date	Month	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Status_Date	MONTH_NAME
UWHRS - Dim - Date - VisaD - All - Status Date	Month#	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Status_Date	MONTH_NUMBER
UWHRS - Dim - Date - VisaD - All - Status Date	Year-Qtr	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Status_Date	QUARTER_NAME
UWHRS - Dim - Date - VisaD - All - Status Date	Qtr#	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Status_Date	QUARTER_NUMBER
UWHRS - Dim - Date - VisaD - All - Status Date	Year	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Status_Date	YEAR_NUMBER
UWHRS - Dim - Date - VisaD - Main - Effective Date	Date	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Effective_Date	CALENDAR_DATE
UWHRS - Dim - Date - VisaD - Main - Effective Date	Day of Month	<-------	D_DAY	_UWHRS_Dim_D_DAY_VisaD_Effective_Date	DAY_OF_MONTH

Method 2 – to finalize if method 1 is not sufficient

- Do it real time in the RPD with report developers in the room

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Tips & Tricks
Reports & Dashboards

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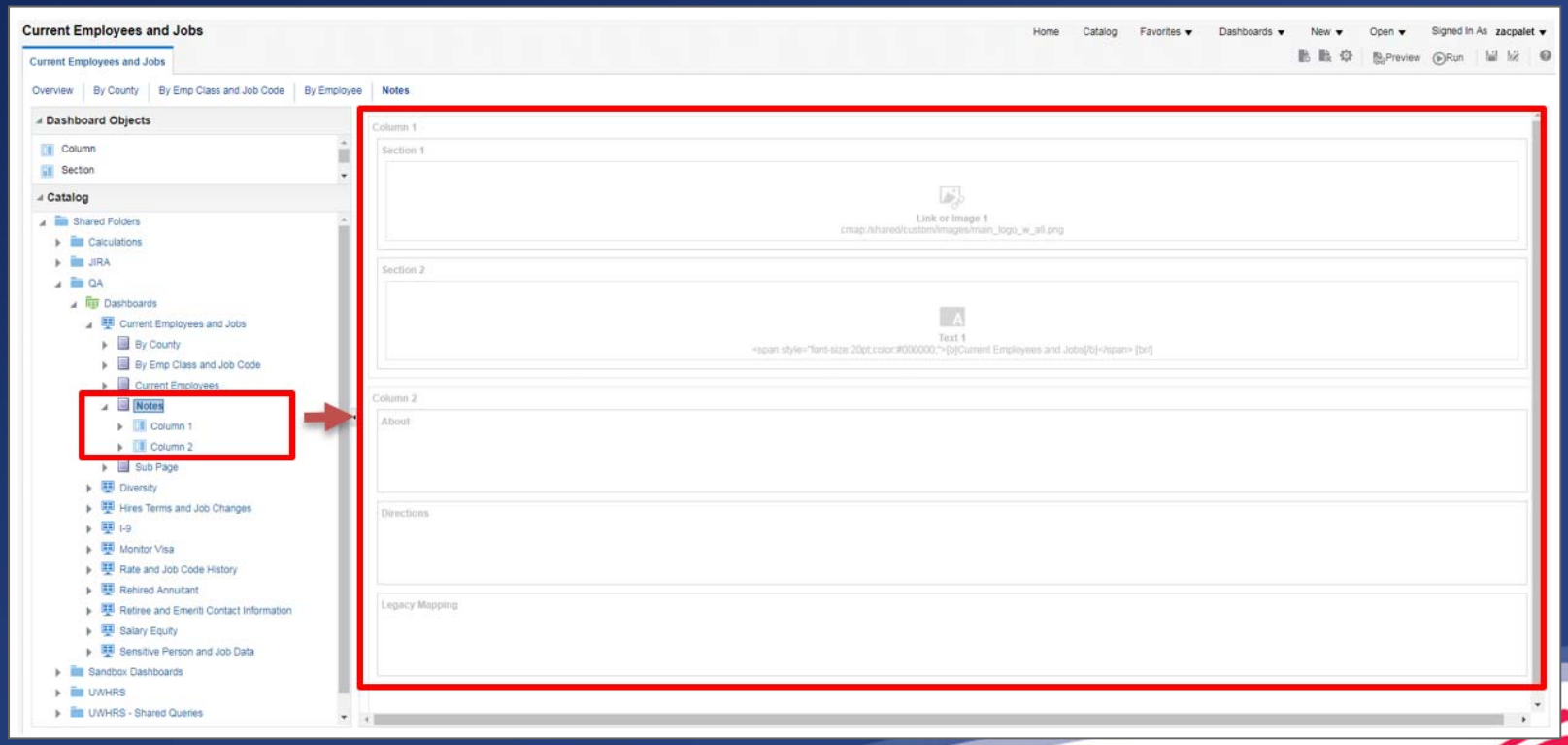
Use Templates from Dashboard Catalog

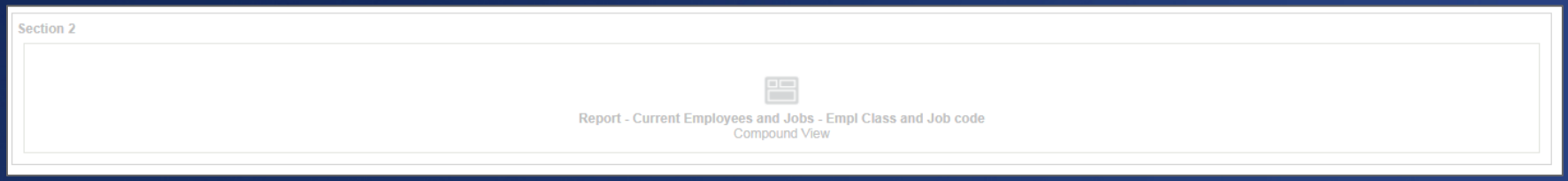
- Re-usable content speeds up development
- Ensures consistent formatting
- Helps to move pages to subpages and vice versa



Minimize the amount of Catalog objects

- when presenting a table and graph together:

- Use: 2 views in 1 analysis



- Don't Use: 1 view each in 2 analyses

Create matrix in excel to identify area for consolidation

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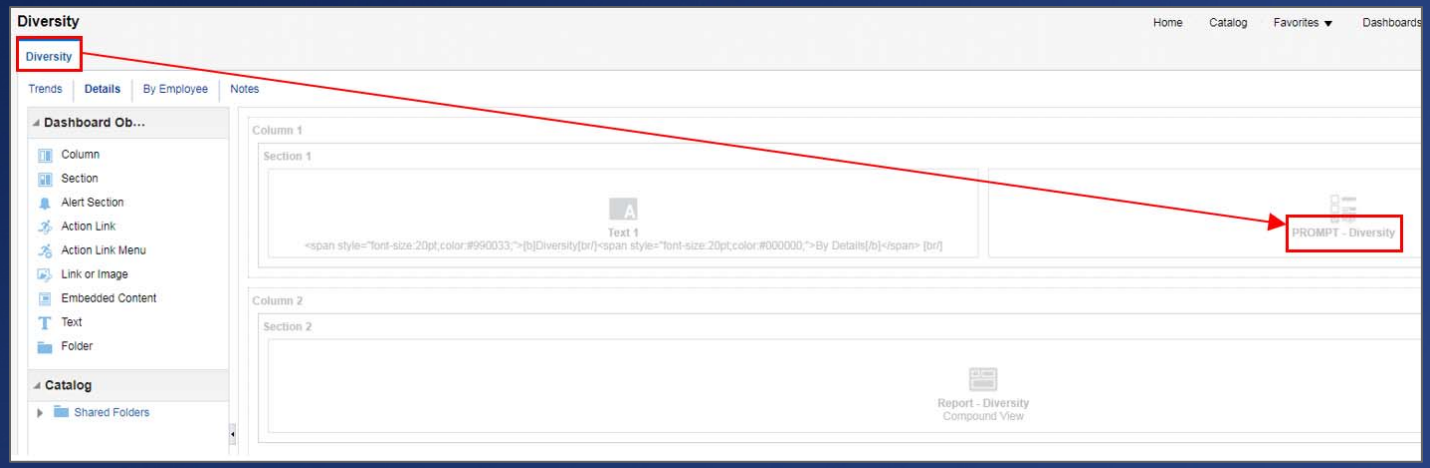
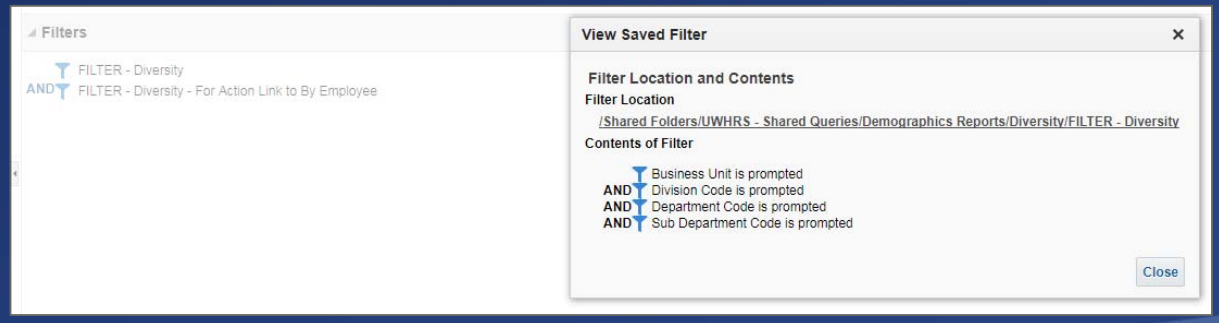
Create common prompts and filters





Options: Hiding Content

- Prompt before Opening
  - Simple
  - Helps performance

- Use variables and conditions to hide the analysis before selecting prompts
  - Put a Condition on the dashboard section
  - Filter on presentation variables rather than “is prompted”

- Neither
  - Use session variables and default members where necessary
  - If performance is a problem, use one of the above

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Drill through

Use an Action Link as the primary interaction on tables to drill to the detail

Business Unit	Ethnicity	Head Count
UW Eau Claire	-	10,833
UW Eau Claire	WHITE	3,463
UW Eau Claire	ASIAN	216
UW Eau Claire	HISPA	77
UW Eau Claire	BLACK	54
UW Eau Claire	AMIND	37
UW Eau Claire	2 OR MORE RACES	30
UW Eau Claire	PACIF	3

Business Unit	Division	Department	Sub Department	Name	Emplid
UW Eau Claire	VICE CHANC FOR STD AFFAIRS	DEPT-C0305	STU AFF/DEAN OF STUDENTS		00791854
UW Eau Claire	COLLEGE OF ARTS & SCIENCES	DEPT-C0640	LANGUAGE		00702620
UW Eau Claire	VICE CHANC FOR STD AFFAIRS	DEPT-C0305	STU AFF/DEAN OF STUDENTS		00702620
UW Eau Claire	VICE CHANC FOR STD AFFAIRS	DEPT-C0335	PRINTING SERVICES		00702620
UW Eau Claire	COLLEGE OF BUSINESS	DEPT-C0802	BUSINESS, COLLEGE OF		00852066
UW Eau Claire	COLLEGE OF BUSINESS	DEPT-C0802	BUSINESS, COLLEGE OF		00852066

Filters:

- Must be exactly the same between analyses
- Fields from table must be “is prompted”

Empl Status is equal to **Active, Leave With Pay, Leave of Absence**
and Job FTE is greater than **0**
and HR Status is equal to / is in **Active**
and Pay Basis is not equal to / is not in **L, S, V**
and Annualized F-T Rate is greater than **0**
and Current Row is equal to / is in **C**

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Use Filter Views

- This helps end users know what was exported
- Make every Analysis on the dashboard a compound view
- You can make multiple compound views

JobCode	Job Title	# of Employees	Annualized Salary				
			Minimum	Average	Maximum	Median	Std Dev
00120	FINANCIAL SPEC PRG SU	7	$48,152	$60,953	$71,635	$62,587	$62,587
00160	ACCOUNTANT	44	$41,600	$52,762	$70,824	$52,239	$52,239
00161	FINANCIAL SPECIALIST	72	$32,074	$35,986	$47,694	$35,277	$35,277
00162	FINANCIAL SPECIALIST SENIOR	341	$37,502	$42,519	$57,346	$41,392	$41,392
00163	FINANCIAL SPECIALIST ADVANCED	33	$43,846	$49,507	$60,320	$48,235	$48,235
00203	AUDITOR - JOURNEY	1	$54,683	$54,683	$54,683	$54,683	$54,683
00204	AUDITOR - SENIOR	6	$60,611	$67,285	$69,243	$68,754	$68,754
00205	AUDITOR - ADVANCED	4	$67,704	$79,446	$97,698	$76,190	$76,190
00212	ACCOUNTANT SENIOR CONF	1	$72,862	$72,862	$72,862	$72,862	$72,862
00263	ACCOUNTANT - JOURNEY	53	$50,814	$66,144	$98,093	$61,942	$61,942
00264	ACCOUNTANT - SENIOR	42	$59,550	$75,118	$91,707	$71,791	$71,791
00265	ACCOUNTANT - ADVANCED	16	$67,954	$82,334	$114,275	$77,490	$77,490
00270	AUDITOR	3	$51,272	$54,524	$60,486	$51,813	$51,813
00320	FINANCIAL SPEC SUPV	5	$48,402	$54,126	$58,614	$56,264	$56,264
00530	FINANCIAL MGMT SUPV	4	$88,421	$93,813	$96,616	$95,108	$95,108
00580	FINANCIAL PROG SUPV	26	$60,986	$75,012	$102,149	$71,989	$71,989
00602	ACAD DEPT SUPV NON-EXEMPT	1	$59,197	$59,197	$59,197	$59,197	$59,197
03462	REAL ESTATE SPEC SEN	2	$62,400	$69,389	$76,378	$69,389	$69,389
04161	COLLECTIONS SPEC	7	$38,002	$43,326	$48,922	$38,480	$38,480
04320	RISK MANAGEMENT OFFR	3	$65,624	$71,261	$74,422	$73,736	$73,736
04361	RISK MGT SPEC	6	$45,843	$52,585	$59,363	$56,576	$56,576
04362	RISK MGT SPEC SENR	11	$49,858	$59,120	$67,933	$60,528	$60,528
04371	CONTRACTS SPEC	1	$41,683	$41,683	$41,683	$41,683	$41,683
04372	CONTRACTS SPEC SENR	1	$36,275	$36,275	$36,275	$36,275	$36,275
04380	RISK MANAGEMENT MGR	2	$84,677	$86,039	$87,402	$86,039	$86,039

Rows 1 - 25

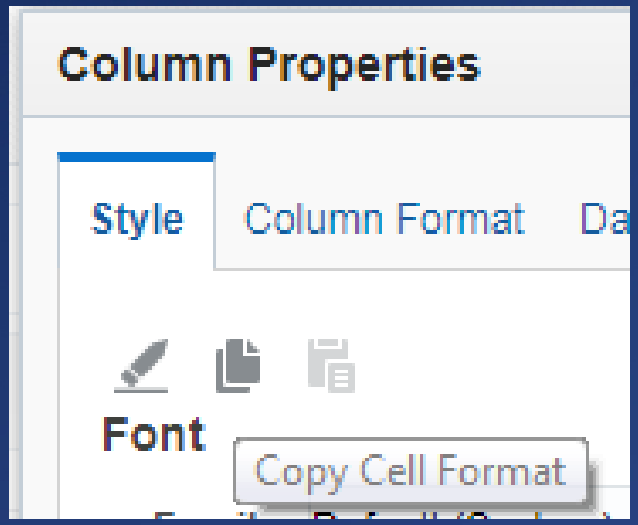
Empl Status is equal to **Active, Leave With Pay, Leave of Absence**
and Job FTE is greater than **0**
and HR Status is equal to / is in **Active**
and Pay Basis is not equal to / is not in **L, S, V**
and Annualized F-T Rate is greater than **0**
and Current Row is equal to / is in **C**

Edit - Print - Export - Copy

Other Tips

Copy and paste formatting

- Speeds up any formatting

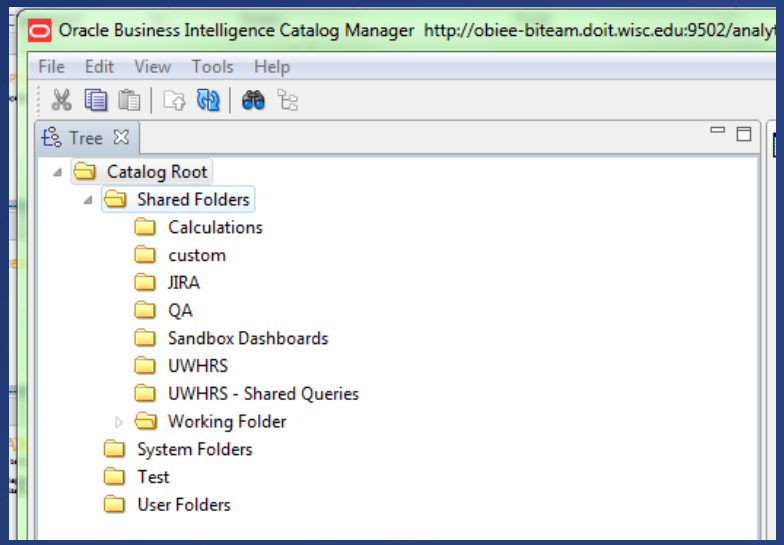


Mass Changes in the **Catalog** using XML

Open Catalog Manager

(it comes with the RPD admin tool download)

https://docs.oracle.com/cd/E23943_01/bi.1111/e10541/prescatadmin.htm#BIESG339)



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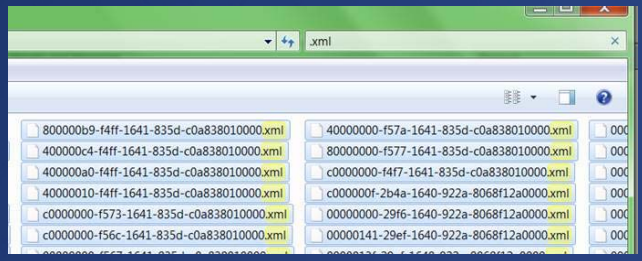
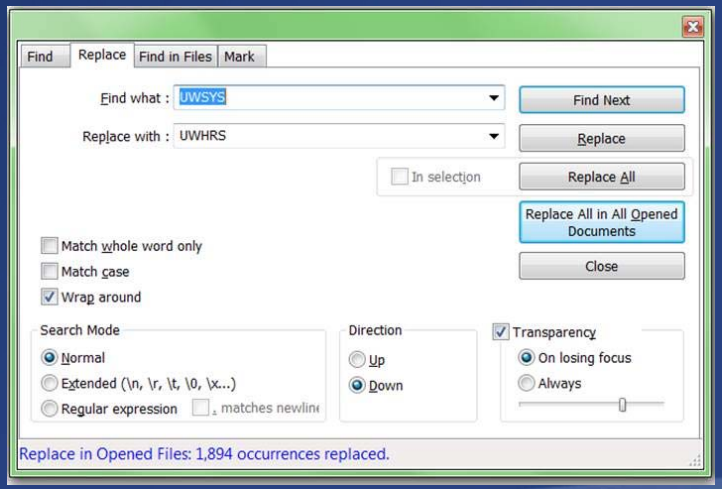
Mass Changes in the **RPD** using XML

How to:

1. Open the RPD, and Save As MDS XML Documents
2. Search for .xml files in the saved folder, and select all using CTRL-A. Drag all files into notepad++
3. Find and Replace All using CTRL + H, and save all
4. Open the RPD again using MDS XML





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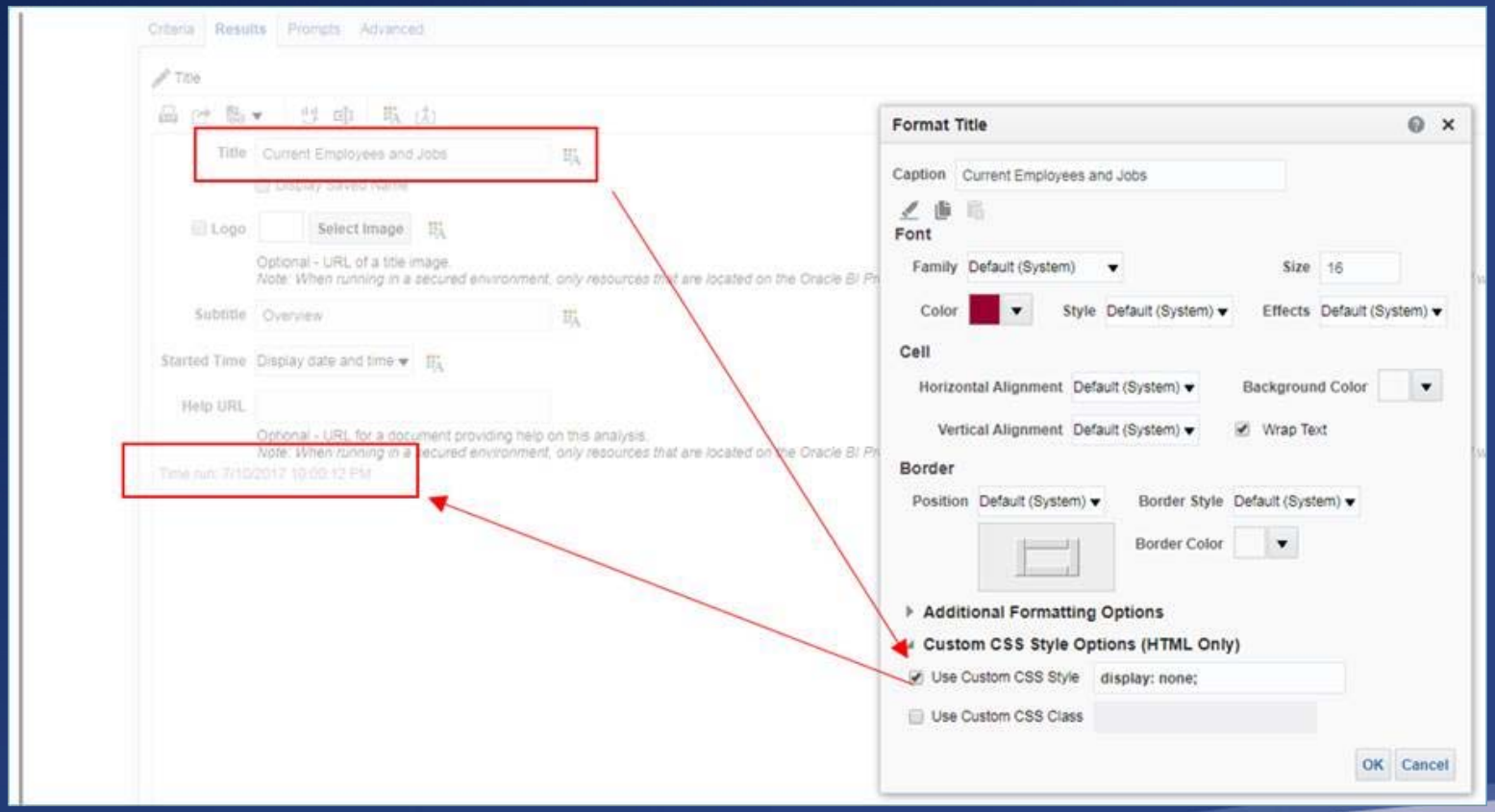
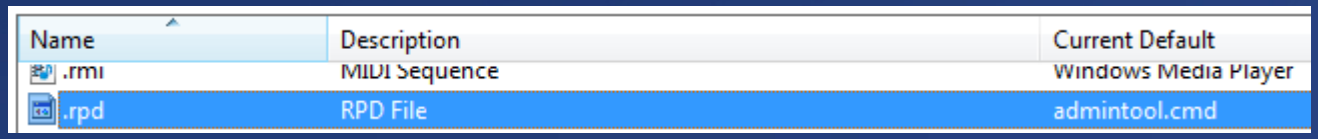
Hide Titles or Notes on a Dashboard



Double click to open the RPD

- Search Default Programs from the Start Menu....
- Click **Associate a file type** or protocol with a program.
- Double click .rpd and browse for the path for the admintool.cmd
  - Path for the admin tool on my comp (may be different on depending on install location): C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Oracle Business Intelligence Client\biclient_home1
  - If you don't find it there, just right click on the admin tool from how you normally find it, and select Copy UNC path



...and much more...
Use what works for you.

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Design Considerations

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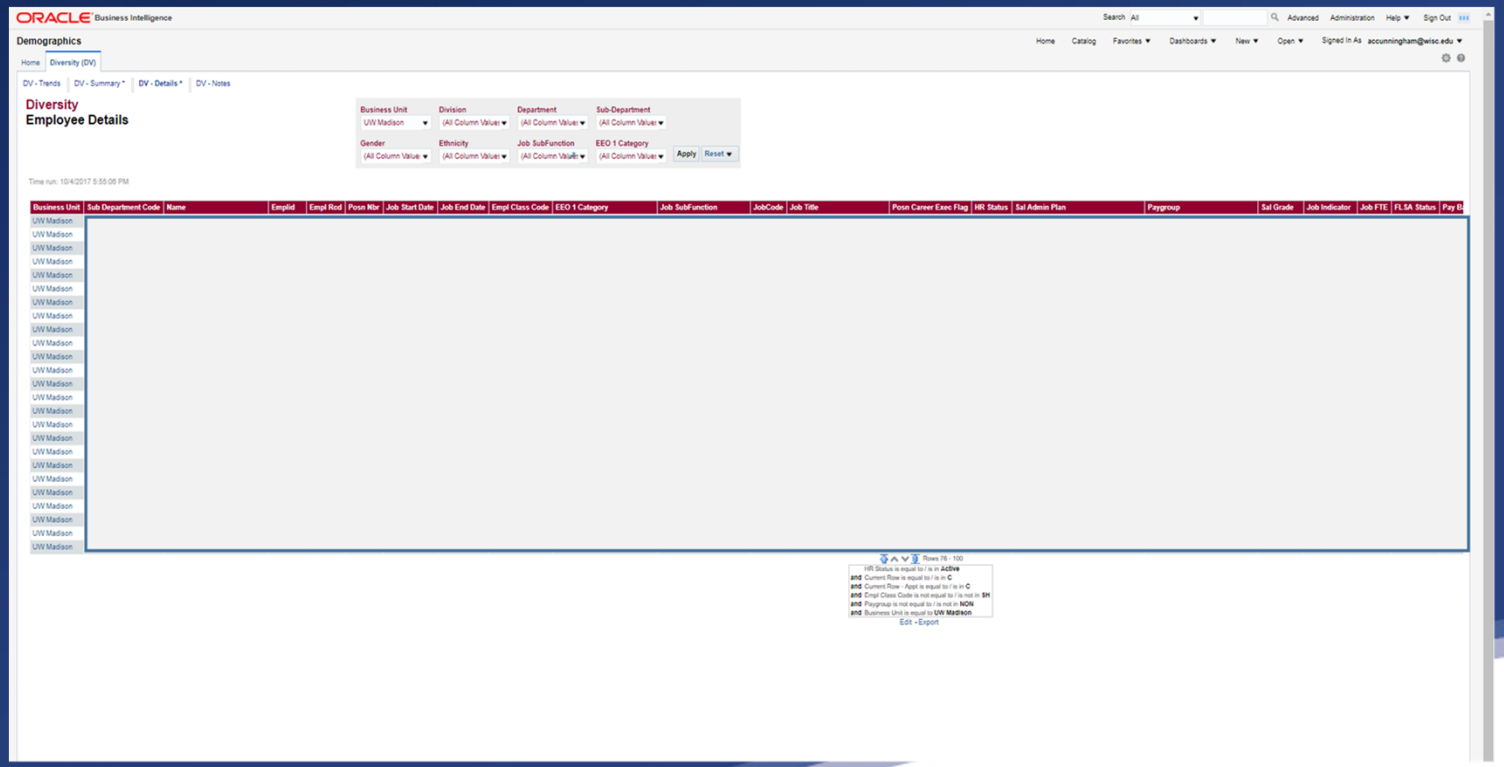
Drive BI Adoption

- Data consumers are used to data, not information
- Example report is hundreds of pages of data!



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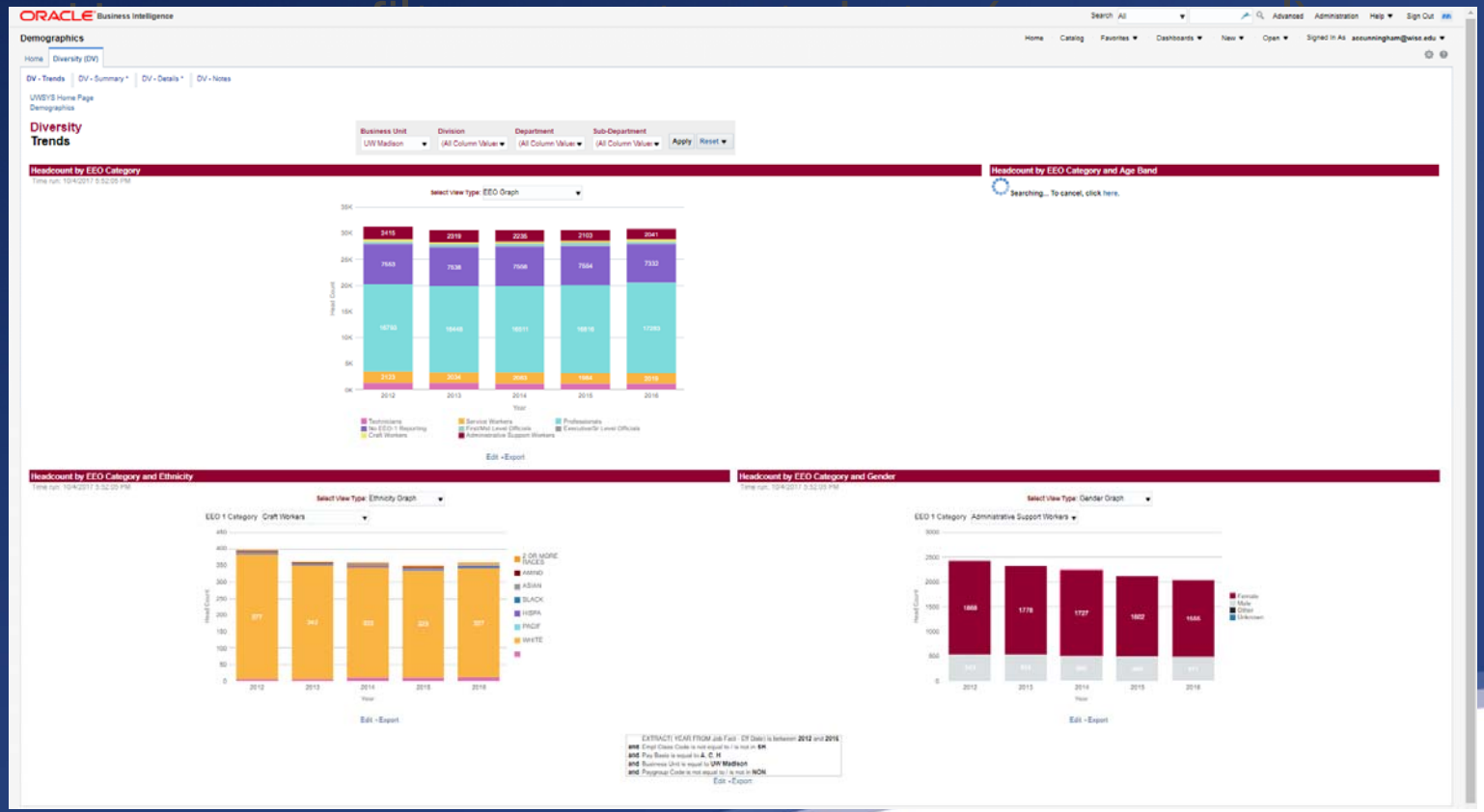
Introduce BI (as well as data)



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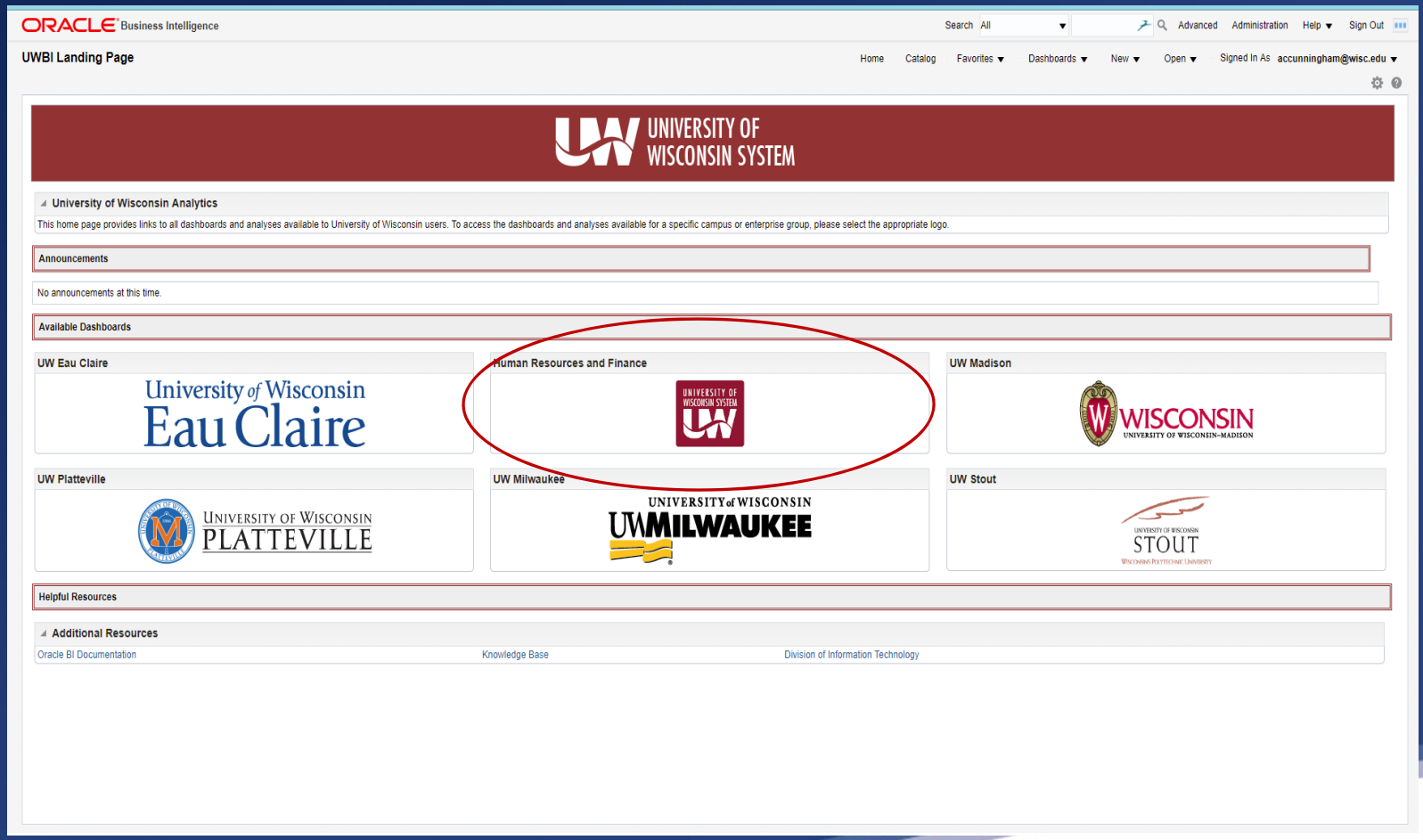
Make BI Easy to Use



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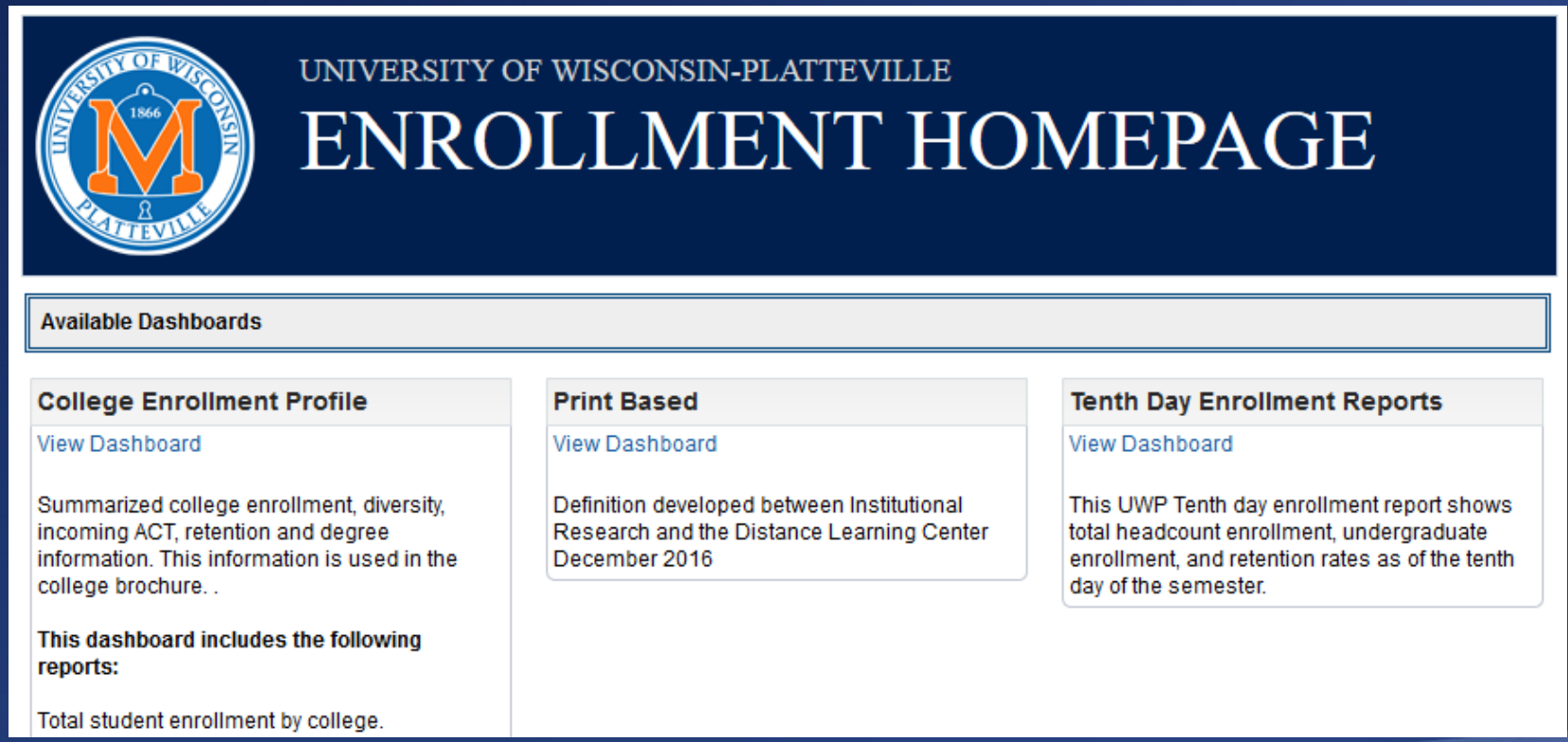
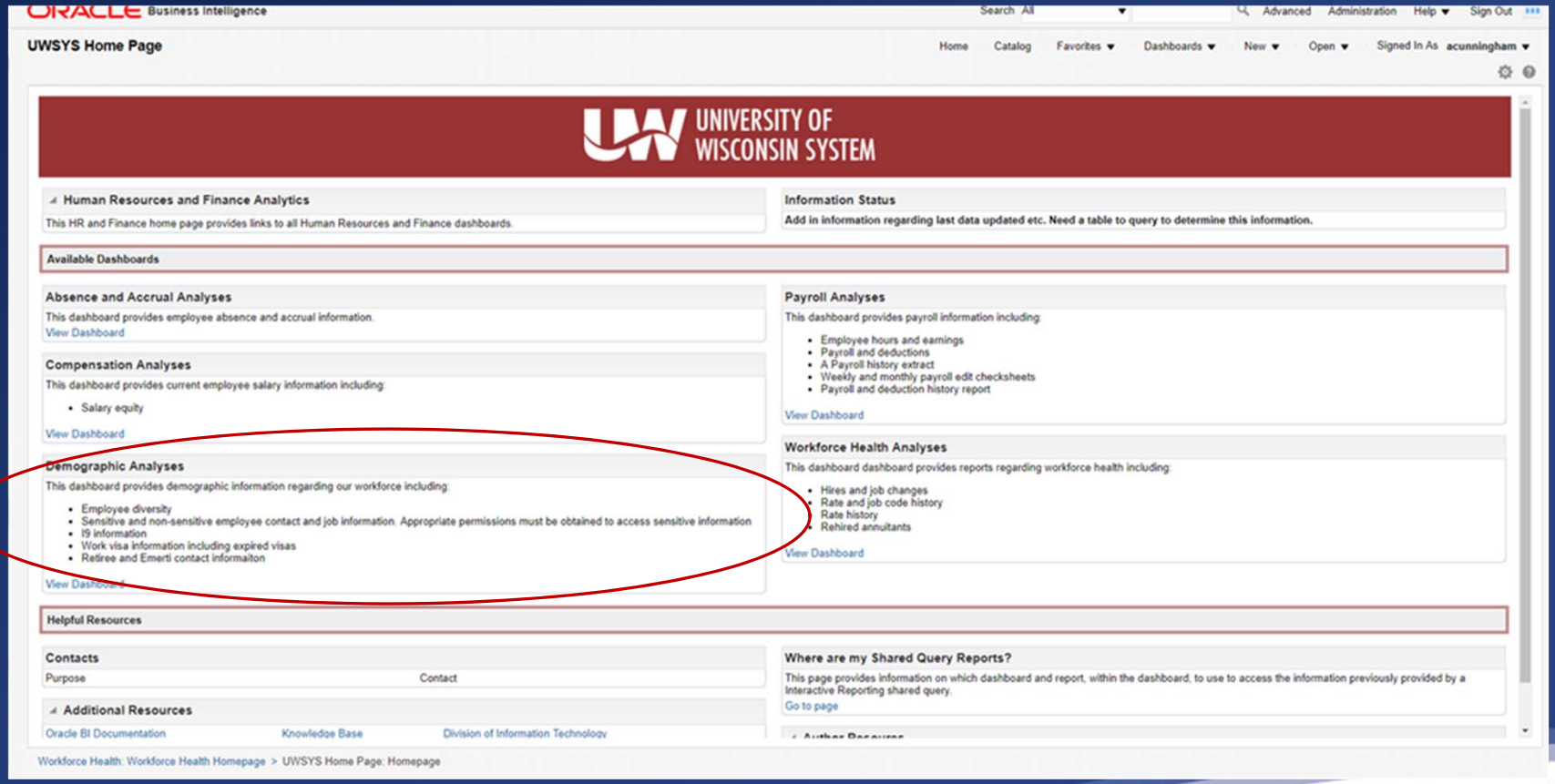
UW-Platteville



Leads to Enterprise Systems Dashboard



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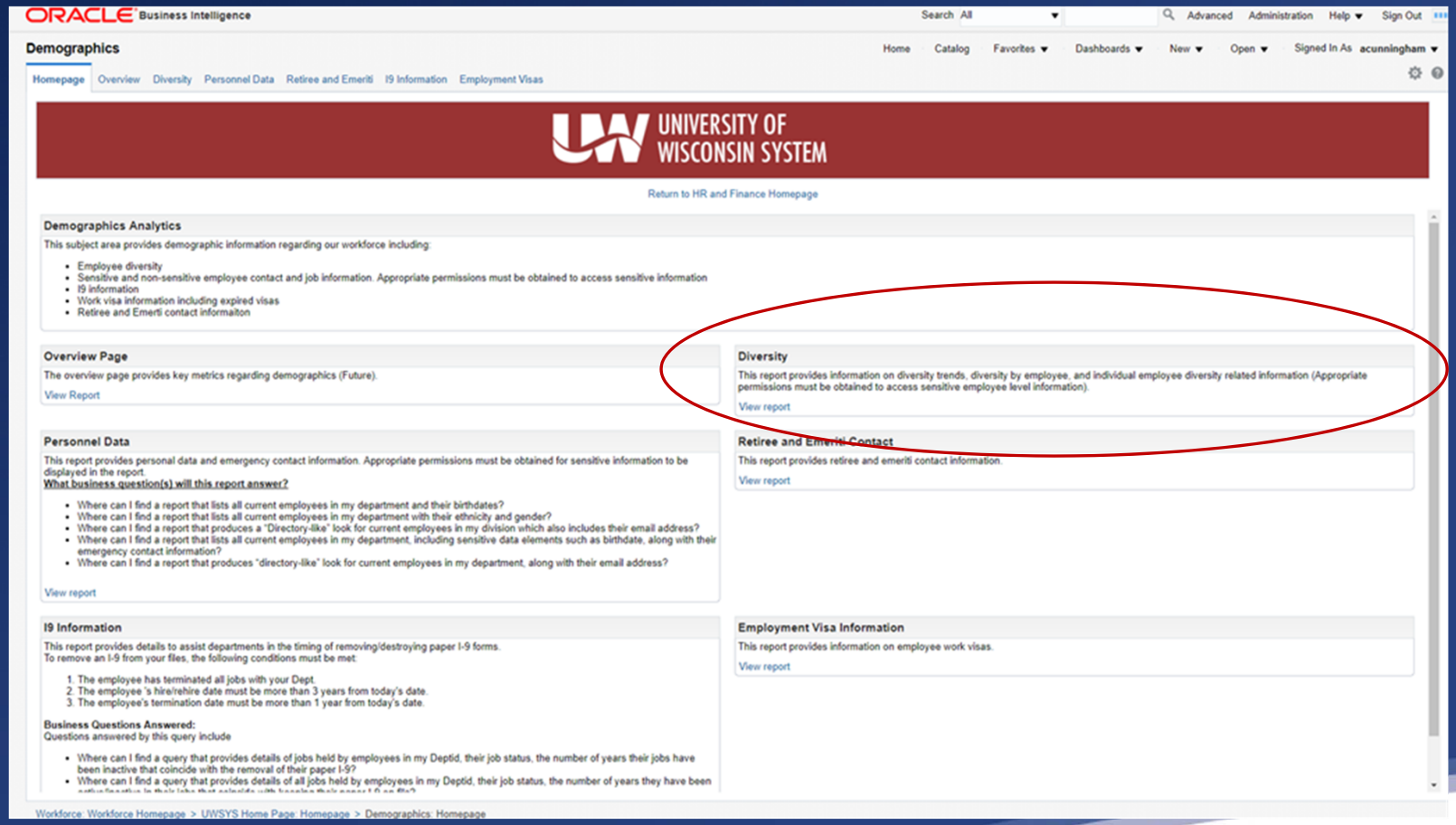
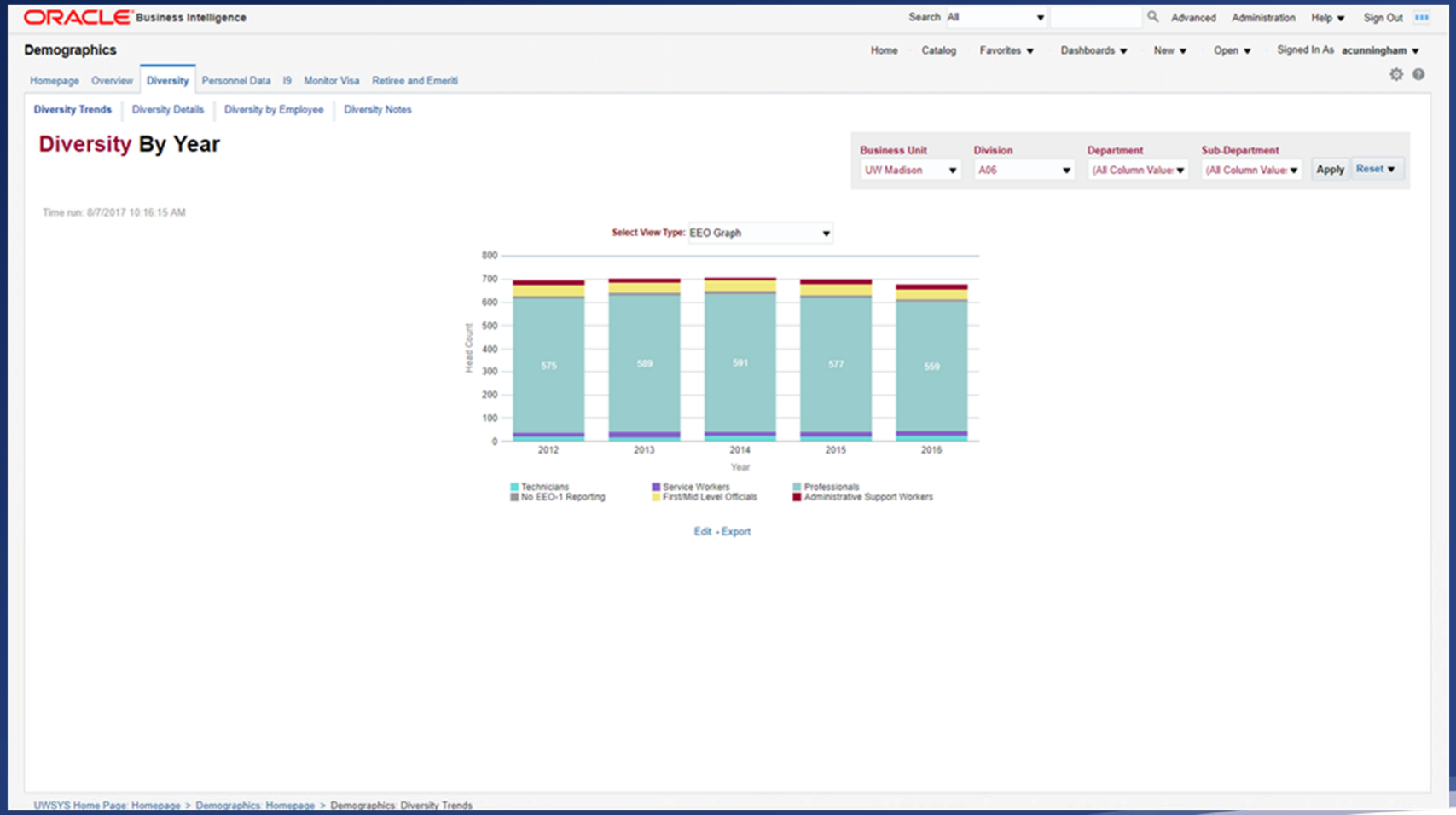
Leads to a subject specific Dashboard



Leads to Analyses



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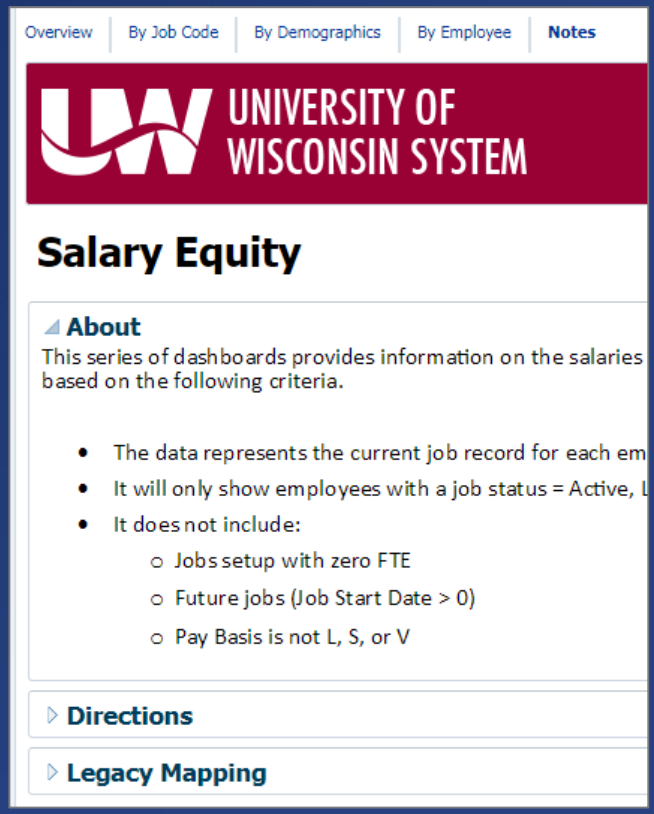
Notes page

Sections:

1. **About:** An overview of the information available on the page. Be sure to explain parts that may be confusing
2. **Directions:** How to run and interact with the dashboard page (prompts, action links, etc.)
3. **Legacy Mapping:** The BQY to OBIEE mapping and model documentation

How to:

1. Create a word document for the notes sub page
2. Save the word doc as "Web Page, Filtered"
3. Open the document in an internet browser
4. Right click and view page source (Ctrl + U)
5. Copy and Paste Page source into the notes



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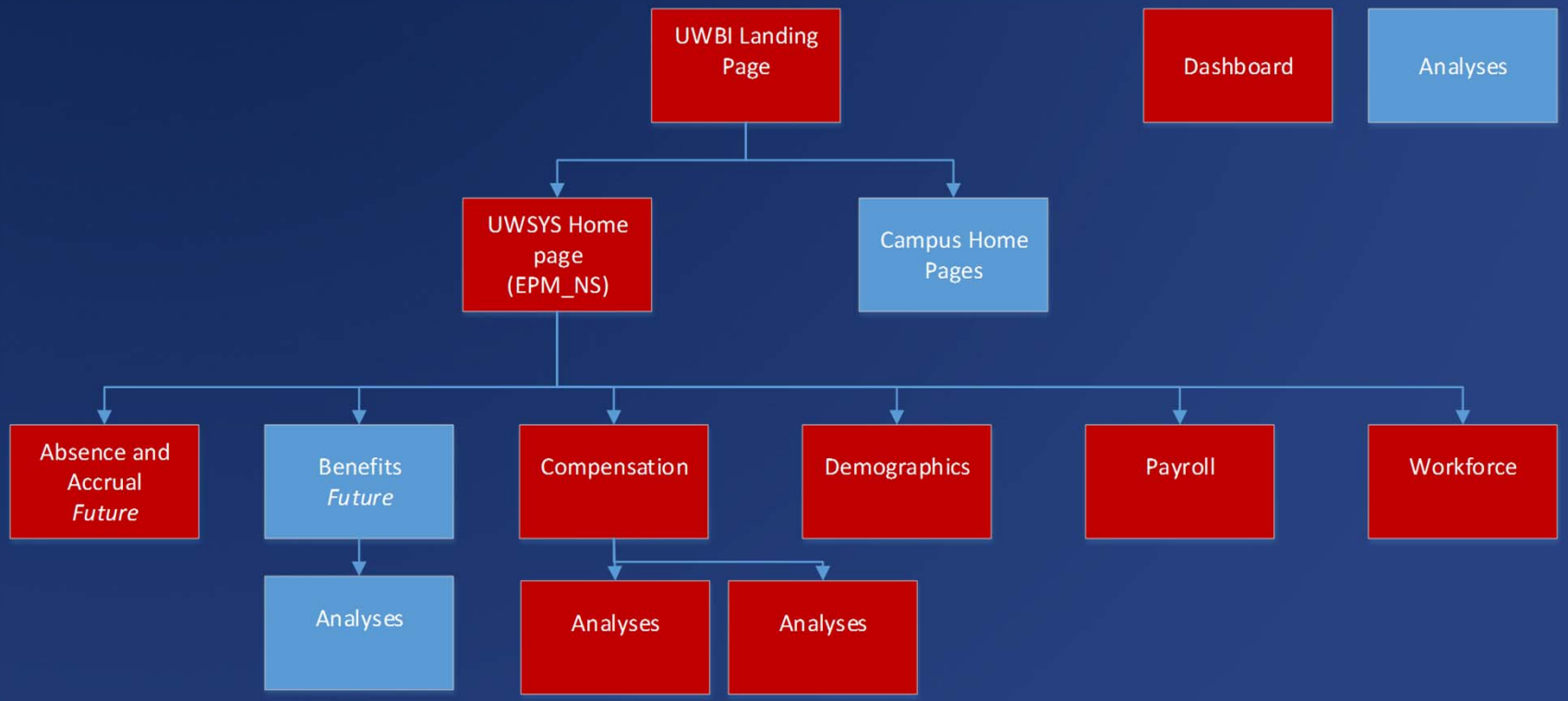
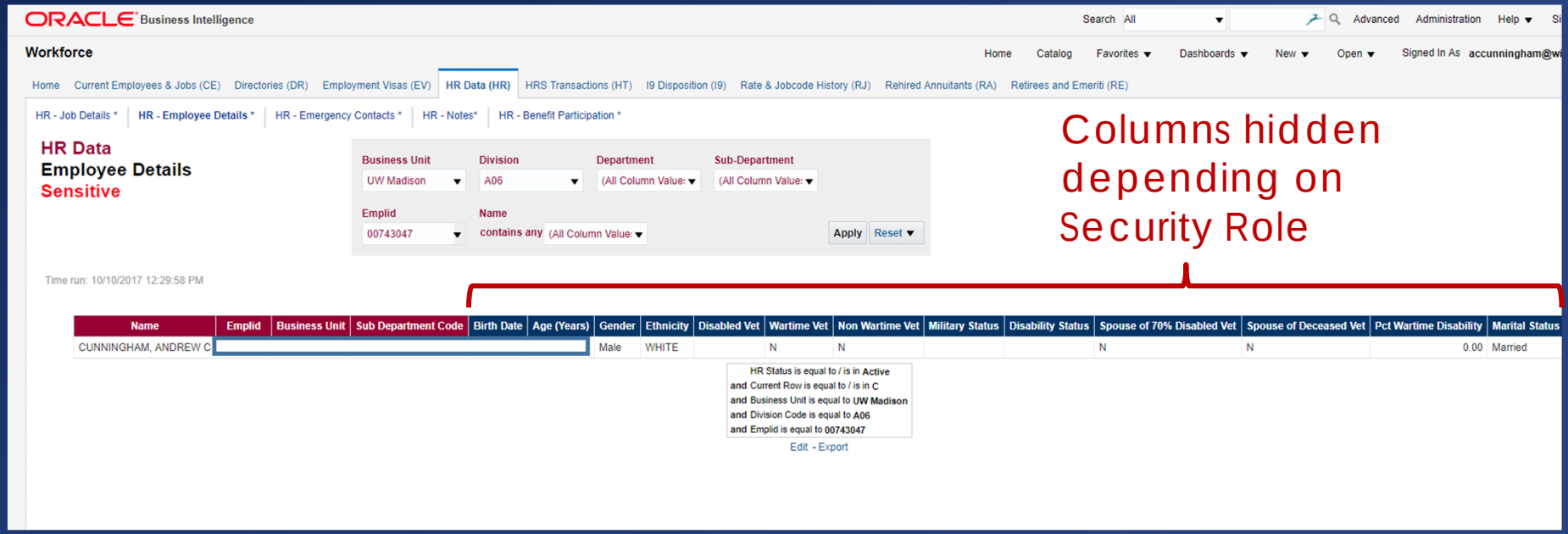
Site Map


UWBI Landing Page
Dashboard
Analyses
UWSYS Home page (EPM_NS)
Campus Home Pages
Absence and Accrual *Future*
Benefits *Future*
Compensation
Demographics
Payroll
Workforce
Analyses
Analyses
Analyses

Minimize Reporting Footprint

- Create General purpose reports
- Use filters (ideally scoped to a dashboard with pages) to combine reports
- Use column filtering based on user roles to hide columns dependent on a user's function

Column Filtering



Columns hidden depending on Security Role

QUESTIONS?

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  - Higher Education EPM Solution Lead
  - Huron Consulting Group
  - zpalet@huronconsultinggroup.com

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Note: Sessions from previous HEUG conferences are also available.