

# Query Foundations

VICKY WALL  
AND  
LENNA WENKE

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Welcome!

Goal	At the end of this section you will be able to:
Look up	Look up common tables to use in Query development.
Create	Create simple Queries.
Join	Join multiple records together to create more complex Queries.
Make	Make Queries more efficient by using Prompts.

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Log in

<https://csmtt92pr-oci.wsu.edu/>

## Query2020

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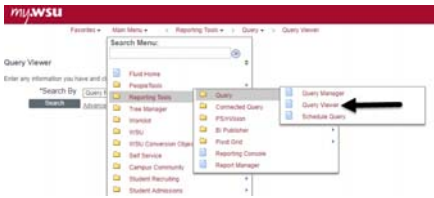
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## Using PS Query Viewer

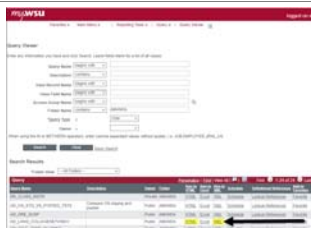
Query Viewer: Main Menu > Reporting Tools > Query > Query Viewer

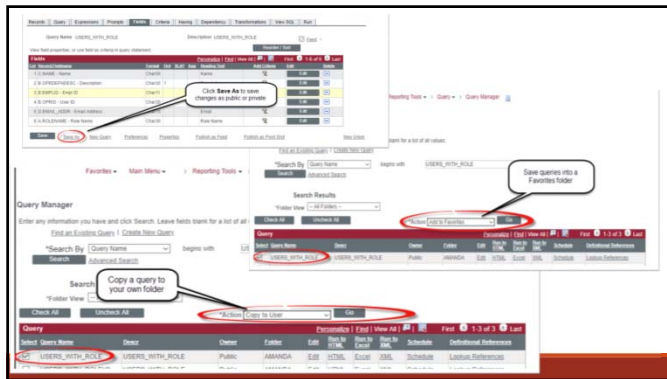


## Search for a Query



## Advanced Search






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Using Wildcards to search

\_ replaces a single character

% replaces a string of characters. It can be used in front of or in back of the search term.

## Searching Using Wildcards

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## Where do you start?

First thing in creating a query is that you need to find the record that holds the information that you want to extract so you can go through and you can search or you can use the PS query QuickStart guide which has a list of core tables to help you get started.

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## QUERY NAMING CONVENTION

Based on the WSU Data Standards, here are some suggested prefixes to use for naming your services:

A	Admissions
F	Financial Aid
R	Student Records
S	Student Financials
V	Advising
P	Payroll Services

WSU\_A\_ENROLLED\_NO\_ADVISOR

Module

Description

## QUERY DEVELOPMENT

QUERY DESCRIPTION AND DEFINITION

### Description

30 Characters

General description of the query

Use key words to facilitate searching

Can search in Query Viewer

## QUERY DEVELOPMENT



Runtime prompts are pop-up selection windows which appear when the query is ran that asks the end user to enter information or select something from a list.



Is your query PUBLIC or PRIVATE?



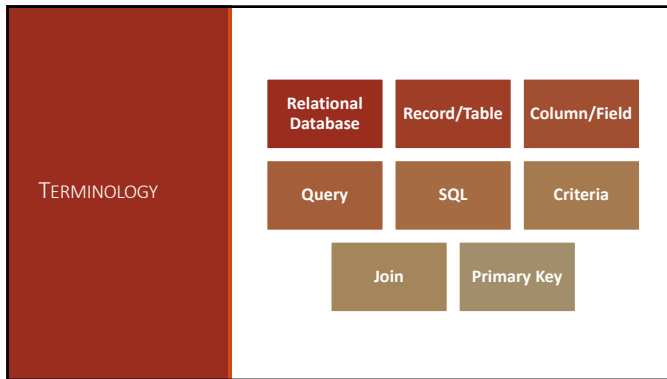
Folders can be used to categorize and organize Queries. Queries may only be stored in one folder at a time.



The best way to ensure the query is efficient is to run it and verify that its run-time is less than one minute, preferable just a few seconds.



TEST IT IN THE TEST ENVIRONMENT!!!!




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my.wsu

Favorites > Main Menu > Reporting Tools > Query > Query Manager

Records Query Expressions Prompts Fields Criteria Having Dependency Transformations View SQL Run

Creating a Simple Query

Tabs that we will be using:

Records	Fields
Query	Criteria
Prompts	View SQL
	Run

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Query Manager

Favorites > Main Menu > Reporting Tools > Query > Query Manager

Query Manager

Enter any information you have and click Search. Leave fields blank for a list of all values.

\*Search By: Query Name   Search

Advanced Search

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## Records

THE PURPOSE OF THE RECORDS TAB IS TO PROVIDE A LOCATION WHERE USERS ARE ABLE TO SEARCH FOR AND SELECT ONE OR MORE RECORDS TO USE IN THEIR QUERIES



Search for and add Records to your Query.

### Search Results

Record	Personalize	Find	View All	First	1-20 of 75	Last
Record Name	Add Record	Show Fields				
ADMIT_LVL_TBL - Admit Level Table	Add Record	Show Fields				
ADMIT_TYPE_LNG - Related Lang-Admit Type Table	Add Record	Show Fields				
ADMIT_TYPE_TBL - Admit Type Table	Add Record	Show Fields				
ADM_ACTION_LNG - Related Lang-Adm Action Tbl	Add Record	Show Fields				
ADM_ACTION_TBL - Admissions Actions Table	Add Record	Show Fields				
ADM_APPLCTR_LNG - Related Lang-Applicatr Ctr Tbl	Add Record	Show Fields				
ADM_APPLCTR_TBL - Application Center Table	Add Record	Show Fields				
ADM_APPL_CMP - Adm Application Component	Add Record	Show Fields				
ADM_APPL_DATA - Admission Application Data	Add Record	Show Fields				
AFRM_SFRT_NSP - Financial Information	Add Record	Show Fields				

## Review Record and Field Information

CTRL+SHIFT+C shortcut keys  
Inspect Element



## Adding the Prompt from Query tab

From the Query tab select the funnel by the field you wish to add criteria/prompt


The screenshot shows the 'Choose Fields' dialog in Tableau. The 'Columns' shelf contains 'EXP\_PROMPT - Student Academic Program'. The 'Rows' shelf contains 'ACAD\_CAREER - Academic Career'. The 'Filters' shelf contains 'ACAD\_PROM - Academic Program'. The 'Marks' shelf contains 'EXP\_PROMPT - Effective Date'. The 'Columns' shelf is highlighted with a red box, and a yellow arrow points to the 'EXP\_PROMPT - Student Academic Program' field.

## Edit Criteria Properties

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Once the funnel has been clicked this page opens and you change the Choose Expression 2 type from Constant to Prompt.

You then can choose New Prompt or if you already have a prompt in the query choose the magnifying glass and select the prompt.

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## Creating Prompts Tab

**Field Name** – Name of field to be prompted.

**Heading Type** – Long or Short Version of the Field Name or input Text.

**Type** – Select the type of table.

**Heading Text** – Enter the text for the Prompt Header.

**Format** – choose the format for the prompt table, the system selects the default format for the field selected.

**Unique Prompt Name** – filled in automatically by the system and shouldn't be changed.

**Length** – determine the Prompt field's length

**Decimals** – number of decimals allowed for numeric prompts

**Edit Type** – define the prompt type of field edit

- **No Table Edit** – No Data Validation (Optional)
- **Prompt Table** – Data Validation (Required)
- **Translate Table** – Select from dropdown list. (Xlat only)
- **Yes/No Table** – This will produce a Yes/No Prompt checkbox. By Default it will be checked (Y).

**Prompt Table** – provide users with a list of values pulled from a different Record to use as a comparison or a look up tool.

## Using Prompts from Criteria button

Adding Prompts through the "Add Criteria" Button automatically adds the Prompt as Criteria.

Adding Prompts through the Prompts tab will add the Prompt however, the prompt will have to be manually added as Criteria

## Prompt Tab

THE PURPOSE OF THE PROMPTS TAB IS TO CREATE AND DISPLAY PROMPTS

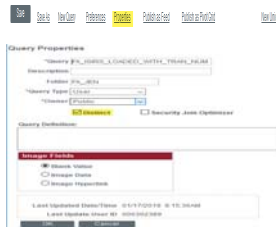
Prompts are specific to each Query and must be re-created for each new Query.







## Query Properties Link



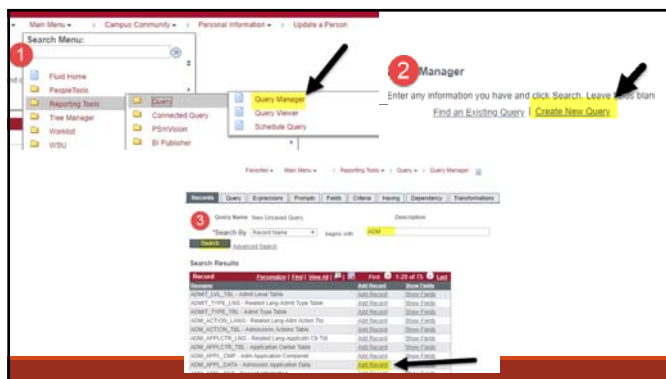
If you are seeing duplicate rows in your query you can use distinct in Properties to limit your results.

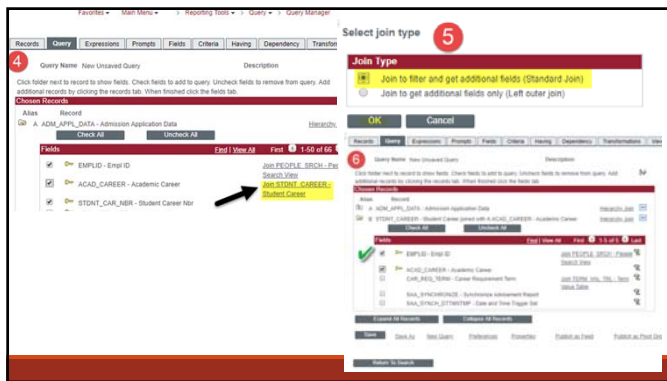
Caveat – this doesn't work if you have unique information displaying in your rows.

## Standard Joins

Standard joins only display rows where there is a match between BOTH records, meaning it is possible not all of the rows from Record A will be displayed.

Record A	Record B	Standard Join
Name: ID	ID: Favorite Thing	ID: Name: Favorite Thing
Mia: 001	001: Fishing Pole	001: Mia: Fishing Pole
Sophia: 002	002: Computer	002: Sophia: Computer
Olivia: 003	003: Fishing	003: Olivia: Fishing
Drake: 004	004: Dirt	004: Drake: Dirt
Alvin: 005	005: Dogs	005: Alvin: Dogs
Caroline: 006	006: Engines	006: Caroline: Engines
Josh: 007	007: Antiques	007: Josh: Antiques
Lucinda: 008	008: Reading	008: Lucinda: Reading
Carol: 009	009: Football	009: Carol: Football
Alan: 010		
Brett: 011		






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## Effective Date

There is frequently a need to keep track of historical changes to information within the database. The student status will change as he or she enrolls, graduates, etc. Name, addresses, service indicators, or amounts are also often kept as historical references. There may also be a need to store something that will be effective in the future.

Effective-date (**EFFDT**) specifies the date on which data becomes effective.

Effective status (**EFF\_STATUS**) indicates which row is currently active and which rows were previously active (inactive) for configuration history.

Effective sequence (**EFFSEQ**) tracks the sequence of changes in rows for transactional history.

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## Effective Data

Effective dated records are classified in one of three categories

**Current** – The latest effective date that is less than or equal to today's date. Only the current row will display in the Query results.

**History** – The effective date is less than the current effective date.

**Future** – The effective date is greater than the current date.




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# Effective Date Criteria

**EffDate<=**

Returns the one row that is closest or equal to the Expression 2 date value without exceeding it. If Expression 2 is "Current Date", then Query will retrieve the most current row from the table.

**EffDate<**

Returns the one row that is closest to the Expression 2 date value without equaling or exceeding it.

**Eff Date >=**

Returns the one row that is the nearest to being equal to or greater than the Expression 2 date.

**Eff Date >**

Returns the one row that is nearest to and greater than the Expression 2 date.

**First Effective Date**

Returns the row with the oldest effective date, usually the first row that is entered for an item.

**Last Effective Date**

Returns the row with the latest effective date, even if that date is still in the future.

What is the Effective Date Status Type? A

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Create  
your  
Own  
Query!

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