2023

DEPARTMENT OF DEFENSE

PROCURE-TO-PAY

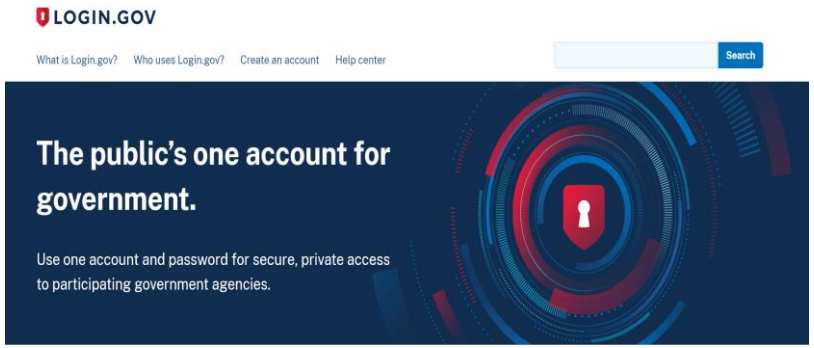
& Financial Audit Training Symposium

Using Standard/Ad Hoc Reports in SAM Data Bank Basic

Presented by: Jovanka Caton, Brian Davidson

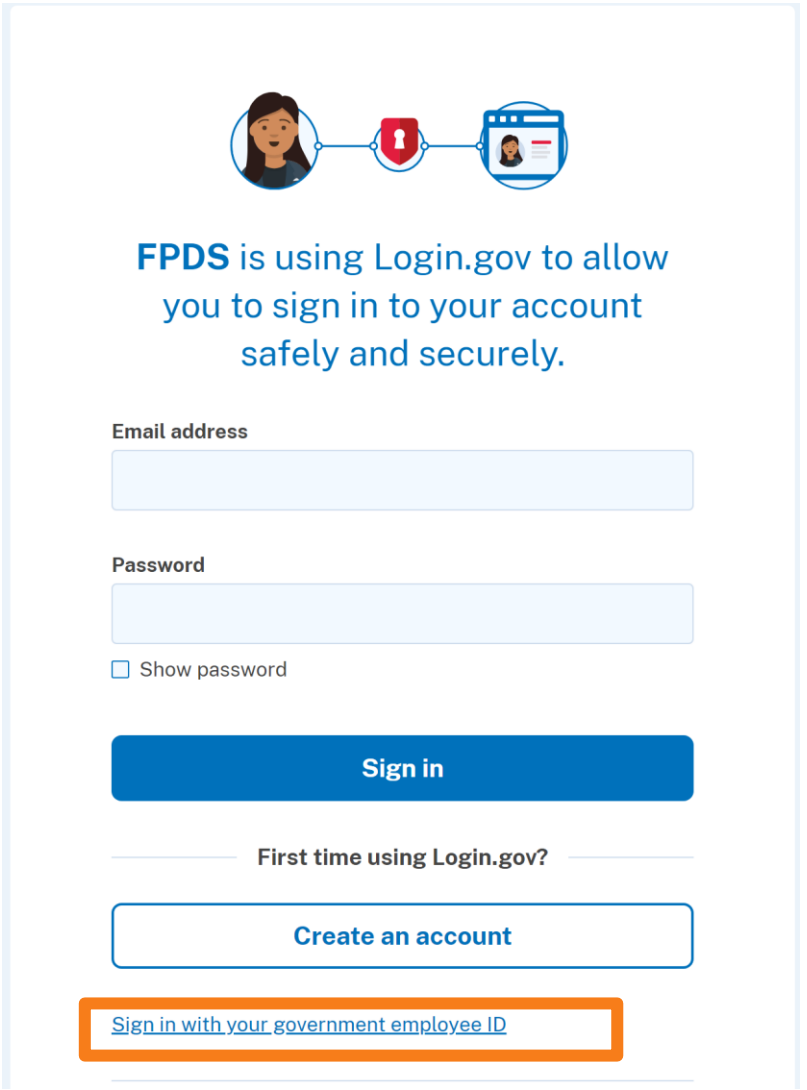
Register in LOGIN.GOV

- Create Account Using Government Email Address
- Select Language (English, Spanish, French)
- Send Request
- Respond to Sent Email to Confirm Email Address
- Create Password
- Setup Authentication - Government Employee ID (CAC)
- Sign-in with Your Government Employee ID(CAC)



FPDS via LOGIN.GOV

- Now you can Login to FPDS using LOGIN.GOV
- Do not Enter Email Address and Password
- Scroll and Click - Sign in with Government Employee ID
- Click - Insert your PIV/CAC
- Select the Certificate Shown and Click - OK
- Email Address in Login.gov Matches FPDS User IDs with Same Email Address – Select User ID (if more than one)



Register in LOGIN.GOV

If CAC Email Changes - i.e. @mail.mil to @army.mil

- May Need to Delete Login.gov with Old Email
- Register Again in Login.gov with New CAC Email
- Adding a Second Email to Login.gov May Work Temporarily
- Safer to Delete Old Email and Register with New Email

SAM.gov Background

- FPDS Reports Are in SAM Databank (since 3/16/2020)
  - Static Reports
  - Standard Reports
  - Administrative Reports (must request admin user role)
  - Ad Hoc Reports
- ezSearch remains in FPDS for now
- No User Roles Required to Run Most Reports
- Contract Data Admin Role
  - Needed for Administrative Reports and FAADC Access

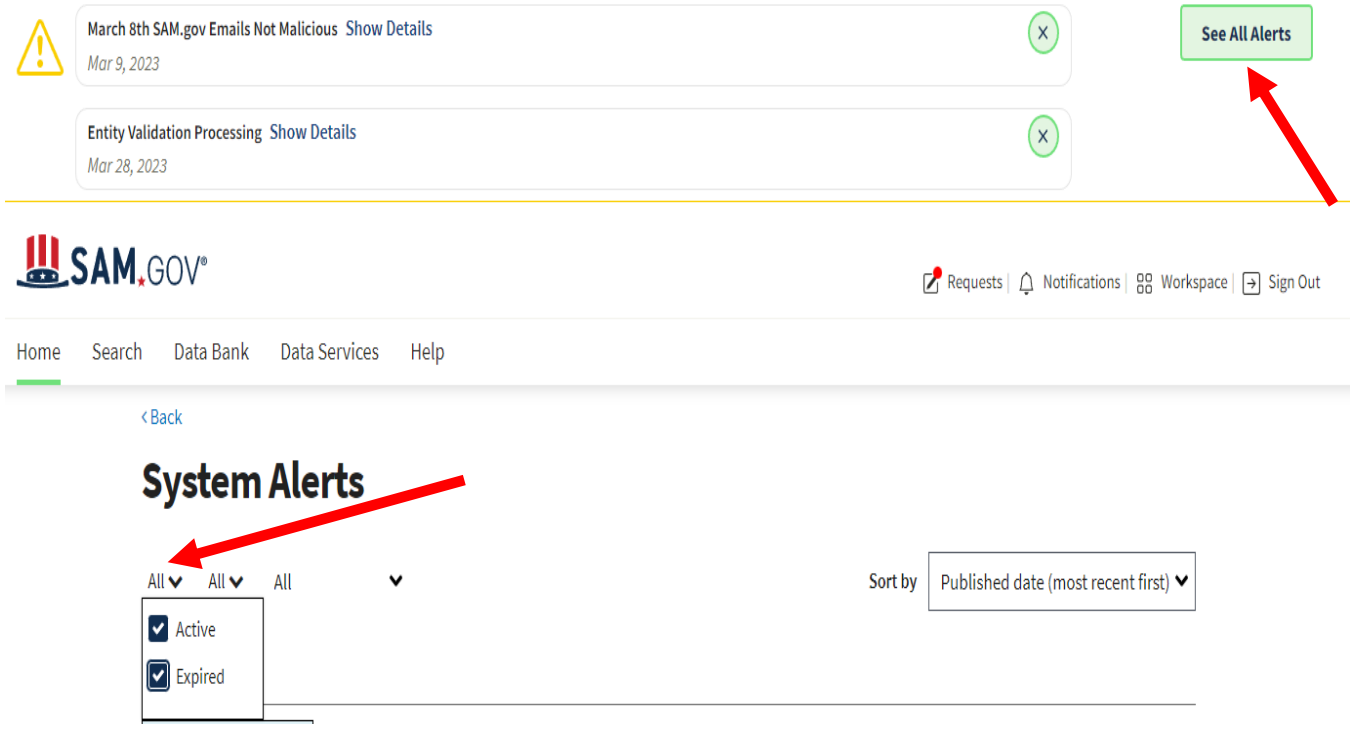
SAM.gov Background

- Direct Web Access - https://sam.gov
- FPDS database is Not Connected to SAM Reports
- FAADC database is Not Connected to SAM Reports
- Daily FPDS Add/Correct/Deletes Sent to SAM
- Daily FAADC Add/Correct/Deletes Sent to SAM
- Must Refresh SAM database with Current data
  - Usually Completed by 9:00 AM ET

SAM.gov Background - Data Refresh

WARNING - SAM Data Refresh May Process Longer

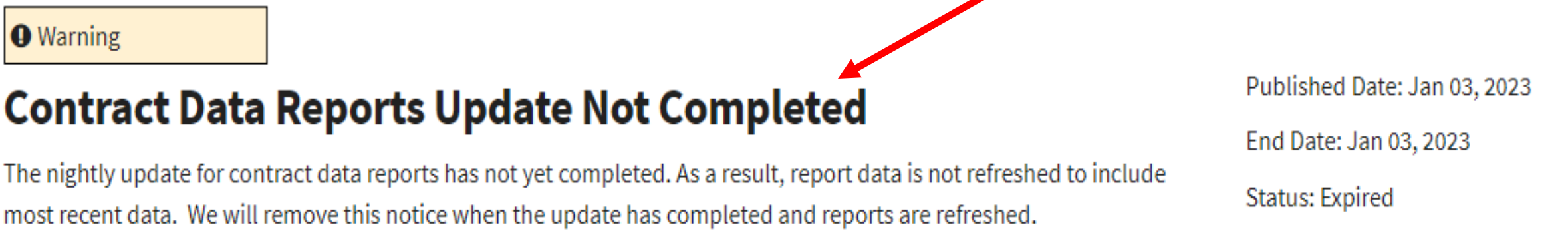
- ALWAYS Check SYSTEM ALERTS Prior to Executing a Report or Getting Output from a Scheduled Report
- When Data REFRESH IS NOT COMPLETE
  - Report Results Will Have Numbers Too High or Too Low
  - DO NOT USE REPORTS
  - Scheduled Reports Will Also Be Inaccurate



Click – SEE ALL ALERTS – SYSTEM ALERTS (upper right)

Data Refresh - System Alerts

- Turn On ACTIVE and EXPIRED Alerts
- Scroll through Recent Alerts – Look for:



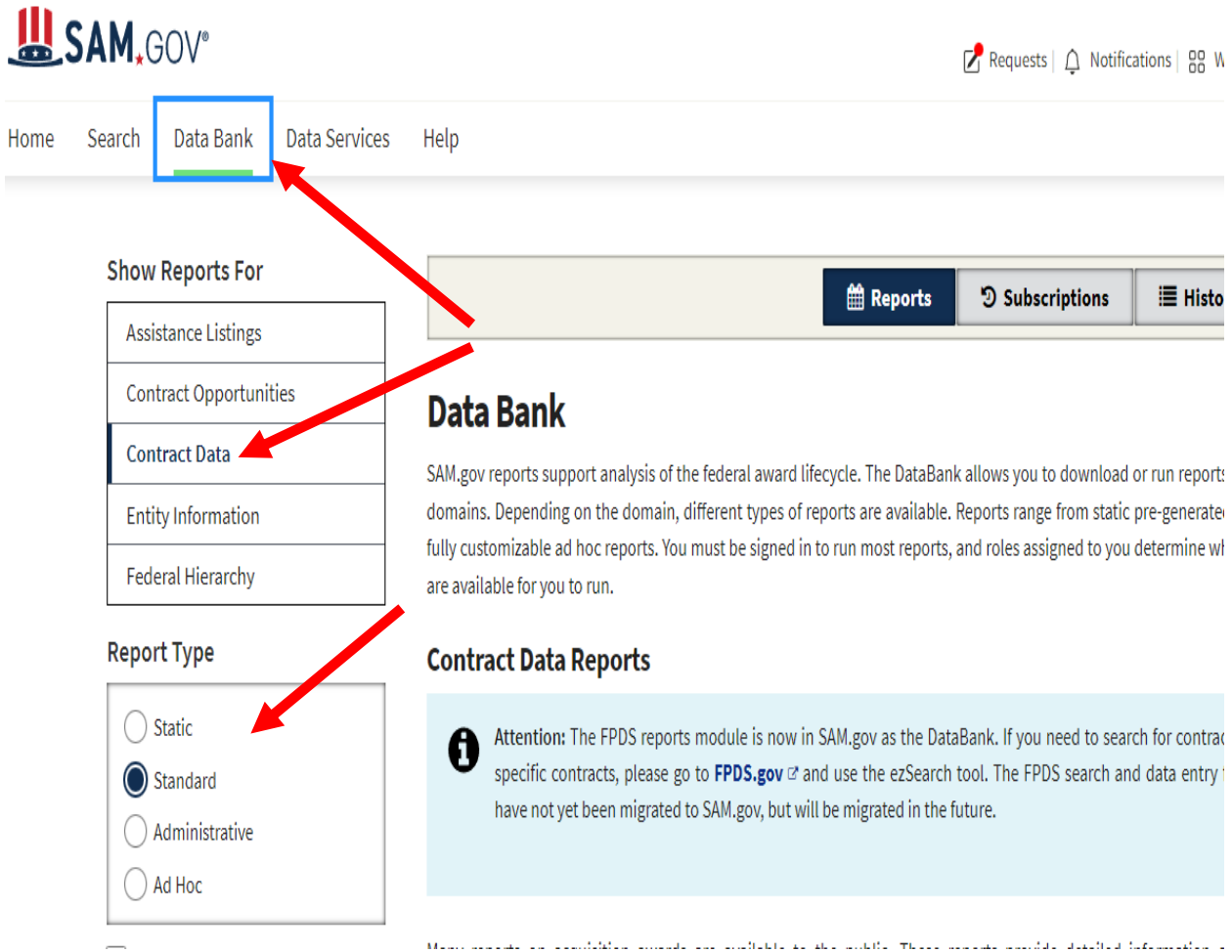
SAM.gov Background

- If SAM.gov is not Working Properly
  - Keeps Returning to the Login Screen
  - System Could be Down – Wait and Try Later

- Problems Keep Repeating
  - Go in Browser to Get to Settings
  - In Chrome Go to Privacy and Security
  - Clear Browsing Data - All History for All Time

Four DATA BANK Report Types

- Sign in to SAM.gov
- Land on WORKSPACE with Your Profile
- Click - DATA BANK
- Click - CONTRACT DATA
- Click – Radio Button under Report Types
  - Static
  - Standard and/or Administrative (needs admin user role)
  - Ad Hoc Reports



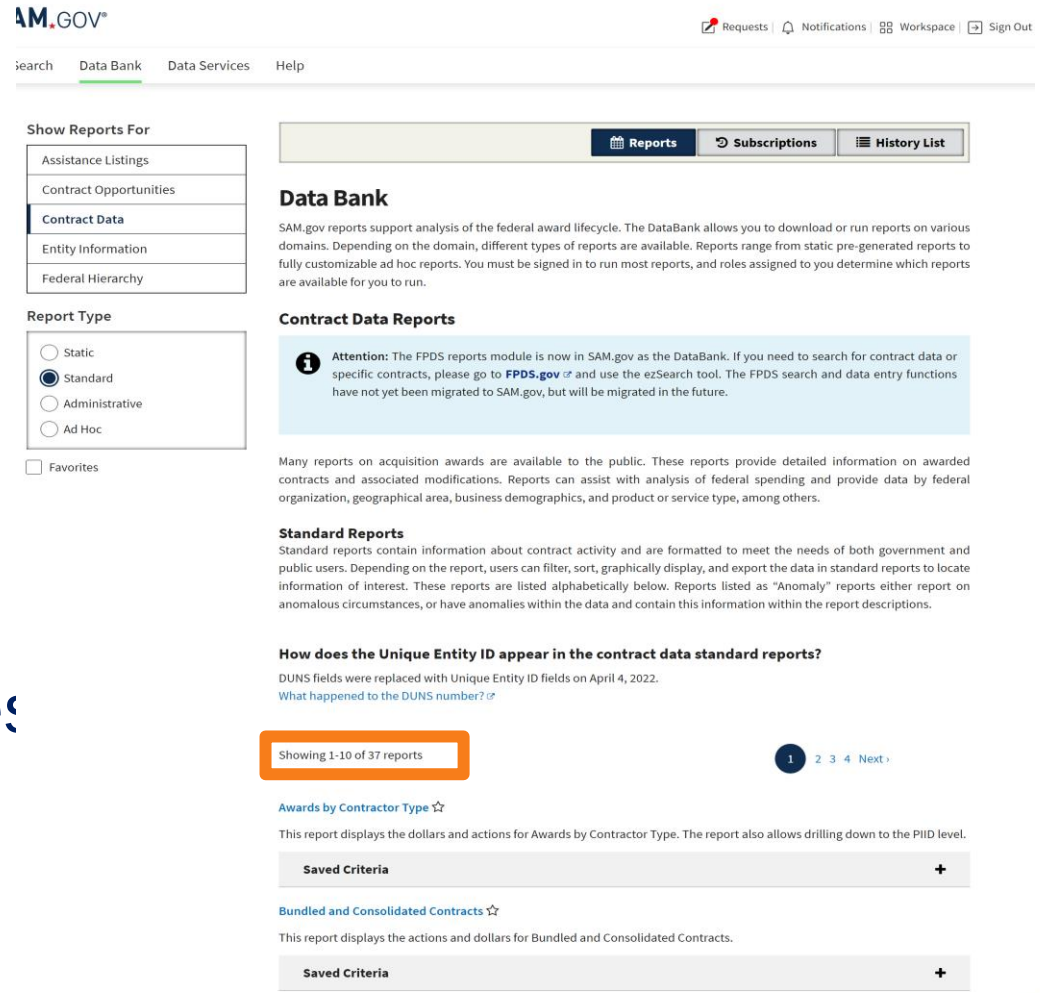
Standard Reports - Data Bank, Contract Data

FPDS Standard Reports

- Predetermined Additional Filter Criteria for Reports
- Same Filters and Run on the Same Day = Same Results
- Drill Down to Display Additional Field Columns
- SORT GRID to Sort on Multiple Fields
- Execute Report to Run on a Schedule (Daily, Weekly)
- Export Results to Desktop as EXCEL, CSV, HTML, Text File
- Print Results by Exporting PDF to Desktop and Print
- Email Results through SAM.gov to non-SAM users

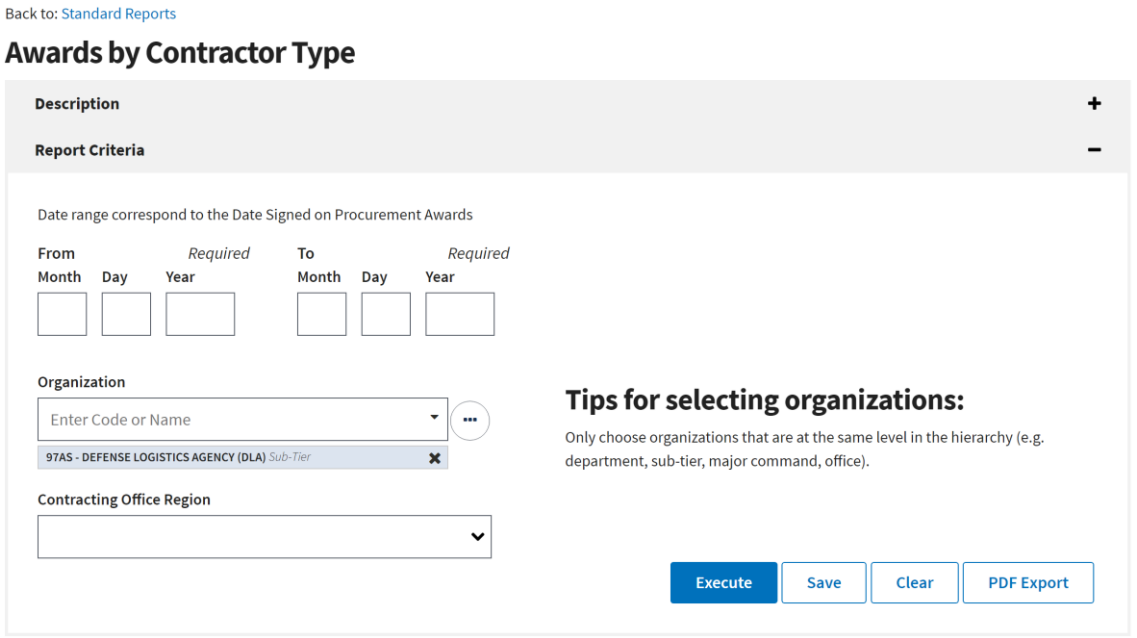
Standard Reports - Data Bank, Contract Data

- Sign in to SAM.gov
- Land on WORKSPACE with Your Profile
- Click - DATA BANK
- Click - CONTRACT DATA
- Click – Radio Button for STANDARD REPORTS
- Scroll to the 37 Standard Report Names
  - 10 Report Names per Page – Four Pages of Report Names
- Click on Report Name to Open Criteria and Execute



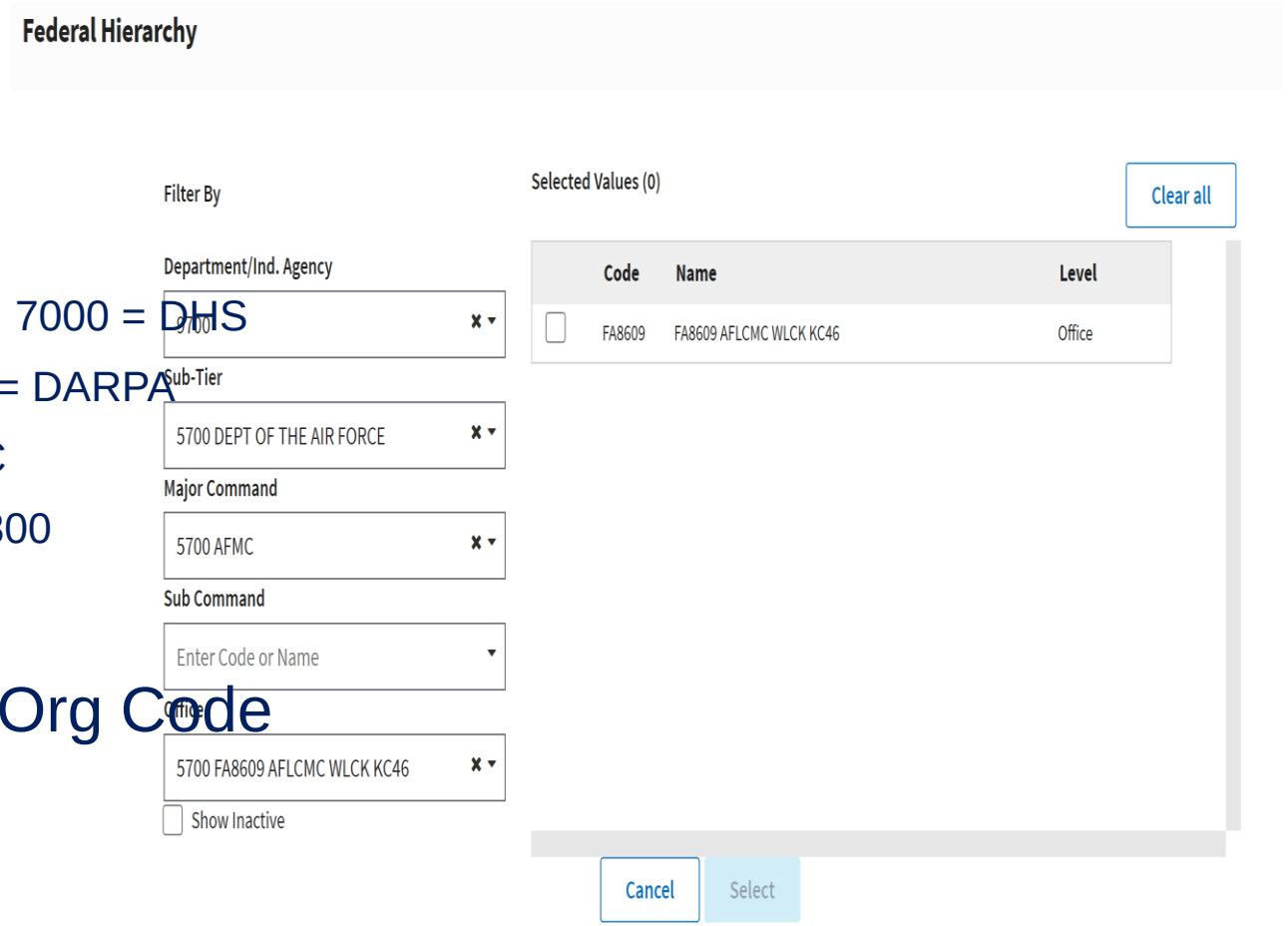
Standard Report – Report Criteria

- Date Range From and To Dates
  - Corresponds to Date Signed on Procurement Awards
- Organization
  - Defaults to Your SAM.gov User Profile (gray background)
  - Click - X at End of Your Organization to Remove
  - Results in All Federal Government Data for Date Range
  - Covers Dept Code, Agency Code, Command Code and Office Code
- Contracting Office Region – non-DOD Field



Standard Report Criteria - Organization

- Organization
  - Can Enter a Maximum of 20 values
- 4 Types of Organization Codes
  - Department Code - i.e. 9700 = DOD; 4700 = GSA; 7000 = DHS
  - Agency Code - i.e. 5700 = AF; 2100 = Army; 97AE = DARPA
  - Command Code - i.e. AMC, NGB, NAVSEA, AFMC
  - Office Code - i.e. FA8609, W31P4Q, N00019, SPE300
- Realize How 20 Values Are Evaluated
- Use Same Org Code Type or Use 2 – 4 Org Code Types



Standard Report Criteria - Organization

- Organization Example
- Enter 9700; 4700 (Department Codes)
- Enter 97AE; 2100 (Agency Code)
- Enter NGB; NAVAIR (Command Codes)
- Enter FA8609; N00019 (Office Codes)
- Asking For DOD and GSA, then DARPA and Army
- Asking For NGB and NAVAIR and 2 DODAACS

Standard Report Criteria - Organization

- Go to the Lowest Level DODAAC
- DODAAC must equal FA8609 or N00019

  AND

- Command must be NAVAIR or NGB
- FAIL – NO DATA for FA8609 is not in NAVAIR or NGB

  AND

- Agency Code Must be Army(2100) or DARPA(97AE)
- FAIL – NO DATA for N00019 is not in Army or DARPA

Standard Report Criteria - Organization

AND

- Department Code must be DOD or GSA
- We Never got to Department Level Evaluation
- Two Conclusions
- ONE - Enter All Values at Only One Level
  - Enter only Dept Codes and No Other Data Level
  - Enter only Agency Codes and No Other Data Level
  - Enter only Command Codes and No Other Data Level
  - Enter only Office Codes and No Other Data Level

Standard Report Criteria - Organization

- TWO - Lowest Level Entered Must Match One Value

  At Every Higher Level Entered

- Example:

  ((DODAC = Value1 OR Value2)

  AND (COMMAND = Value1 OR Value2)

  AND (AGENCY = Value1 OR Value2)

  AND (DEPARTMENT = Value1 OR VALUE2))

- N00019, NAVAIR, 1700, 9700 - All 4 Values Must Be Present in Organization to get Results for N00019

Standard Report Criteria - Organization

GOOD DATA Combination Examples:

- DODAAC - N00019, W31P4Q, FA8609,
- Command - AMC, AFMC, NGB, NAVAIR, NAVSEA
- Agency - 1700, 2100, 5700 , 97AE, 97AS
- Department - 4700, 7000, 9700
- N00019 -> NAVAIR -> 1700 -> 9700 - Good Combo
- FA8609 -> AFMC -> 5700 -> 9700 - Good Combo
- W31P4Q -> AMC -> 2100 -> 9700 – Good Combo

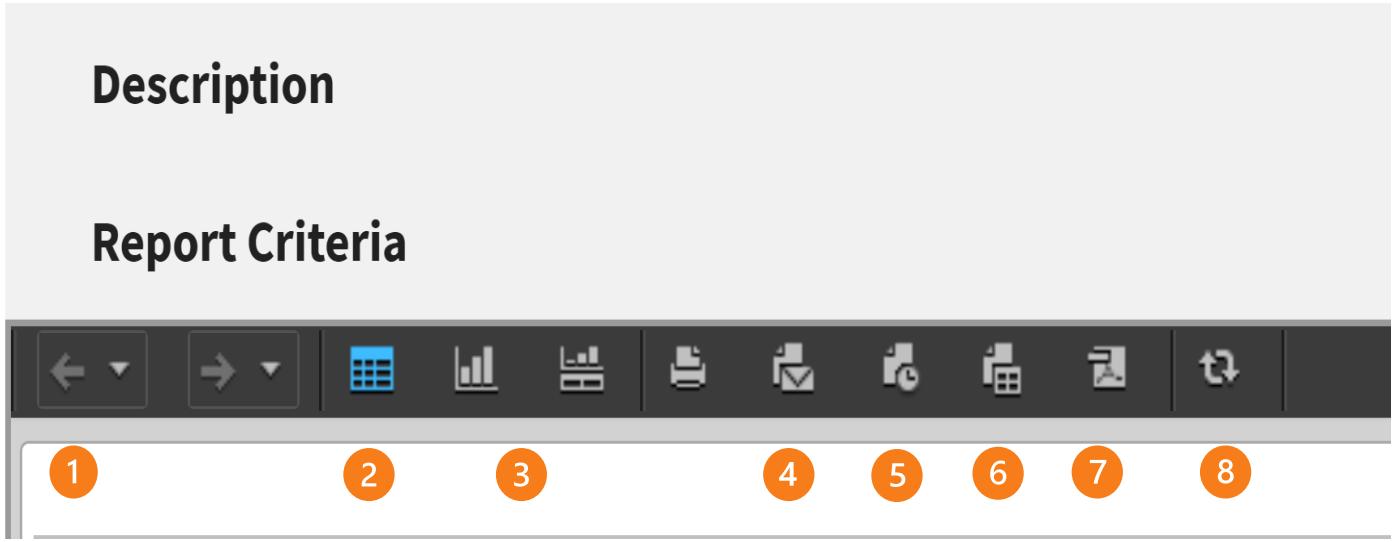
Standard Report Criteria - Organization

- NO DATA from
- Command – NAVSEA (No NAVSEA DODAAC)
- Agency - 97AE, 97AS (No DODAACs for DARPA or DLA)
- Department – 4700, 7000 (No Office Code in GSA, DHS)

Commands for Standard Report After Execution

Back to: Standard Reports

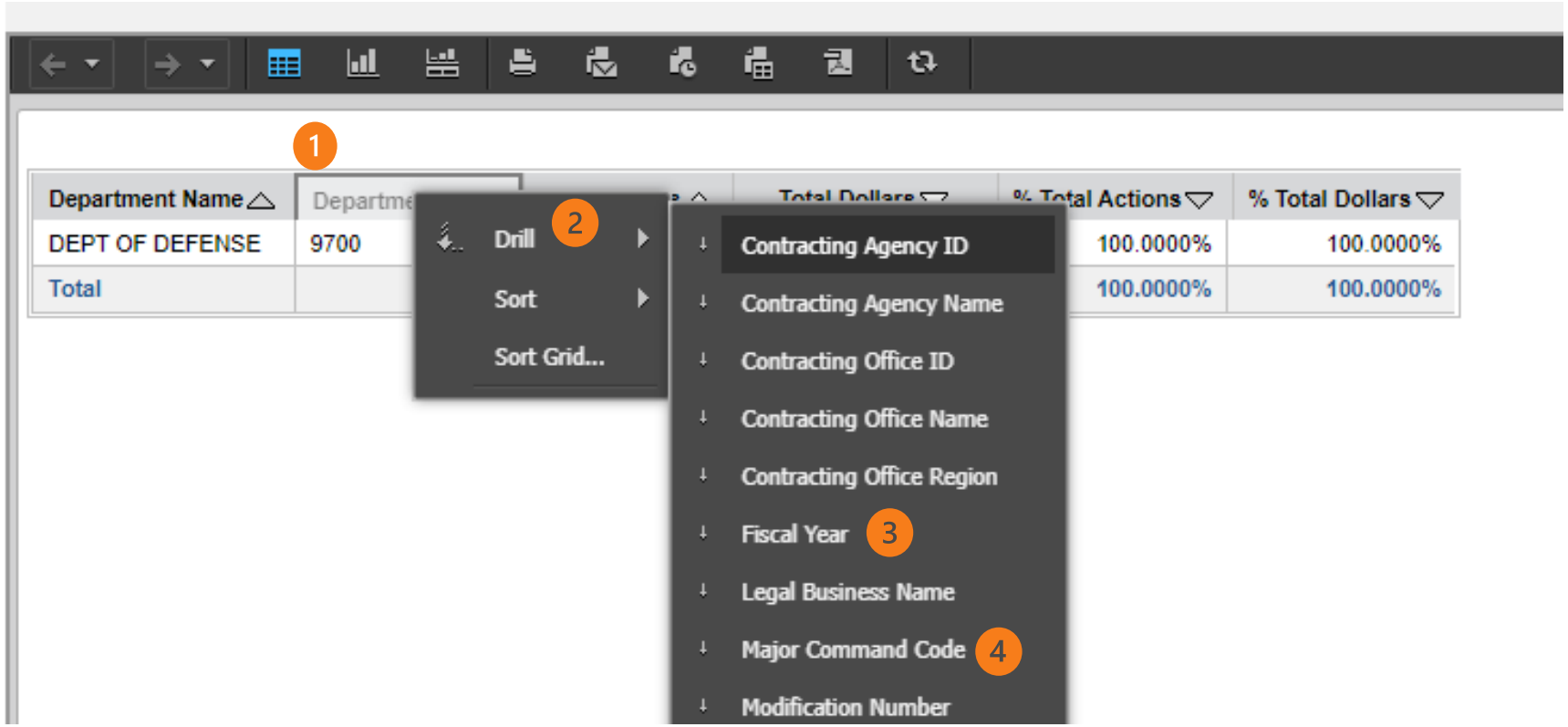
Federal Contract Actions and Dollars



1. Go Back
2. Display Data Grid
3. Create Graph or graph with Data
4. Email Report
5. Schedule Report to Run Automatically
6. Export Report to EXCEL, CSV, txt File
7. Export Report to PDF
8. Refresh Data

Standard Reports - Data Output

Drill to Reveal More Fields



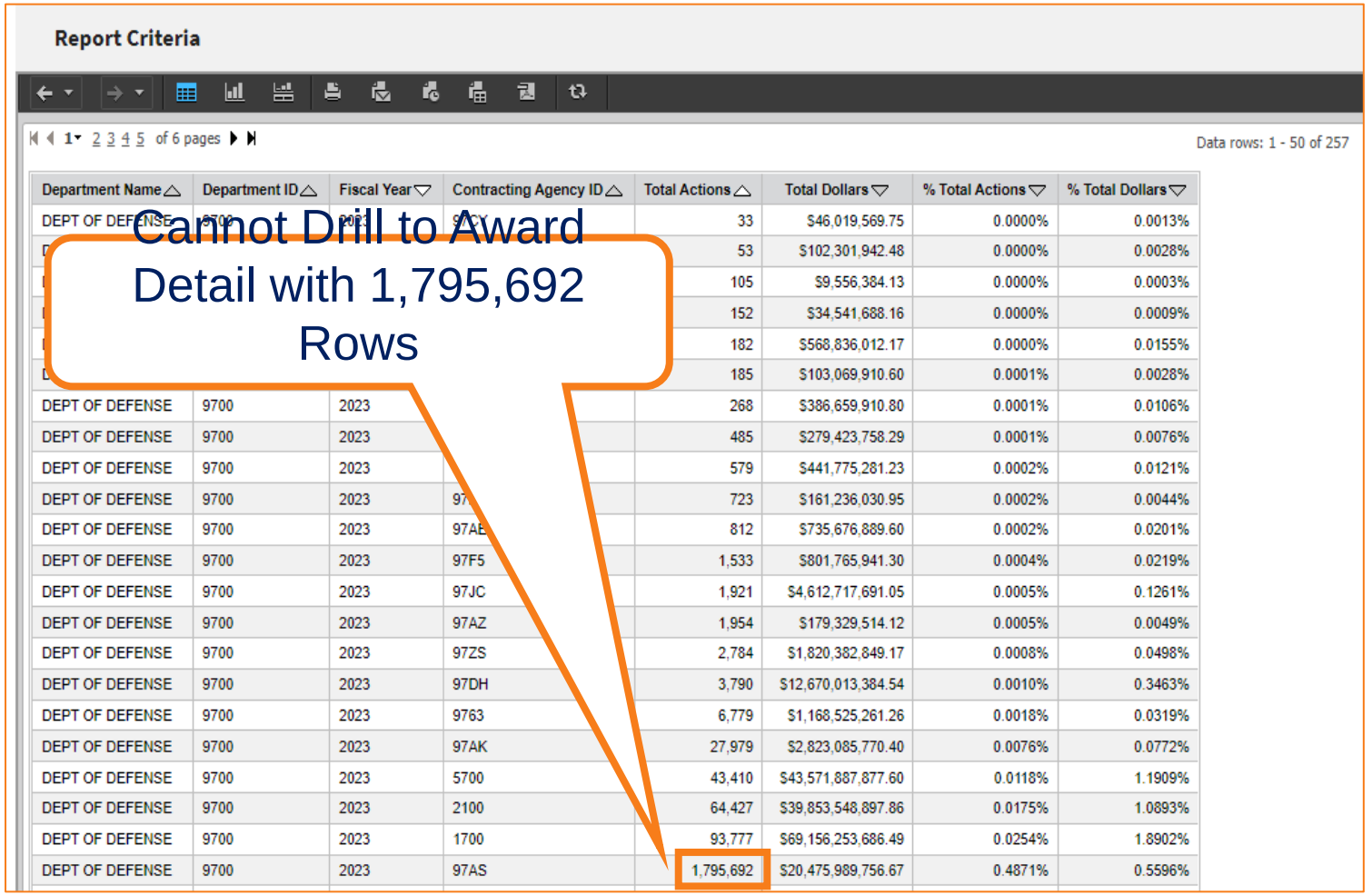
1. Right Click Column Heading
2. Mouse Over DRILL
3. Select One Field to Appear Next in Report
4. Repeat for Additional Fields to Appear

Standard Reports - Drilling

- Mouse Position is Critical Before Right Mouse Click
  - Drill from a Column Header and All Data in Report Stays
  - Drill from a Data Row - Only Data For the Row Stays
- 15 Additional Fields Can Be Added in Drill Process
  - Limited to 150,000 Rows of Data Output
  - Exceed 150,000 Rows - There is No Warning of Lost Data
    - Make Sure Adding a Field Will Not Lose Data
- Last Drill Feature - Award Detail (150,000 Row Limit)
  - Get All Records with the Majority of Fields Behind Report

Standard Reports – Drilling Limitations

Can Drill to Award Detail When < 150,000 Rows



Department Name	Department ID	Fiscal Year	Contracting Agency ID	Total Actions	Total Dollars	% Total Actions	% Total Dollars
DEPT OF DEFENSE	9700	2023	97CY	33	$46,019,569.75	0.0000%	0.0013%
				53	$102,301,942.48	0.0000%	0.0028%
				105	$9,556,384.13	0.0000%	0.0003%
				152	$34,541,688.16	0.0000%	0.0009%
				182	$568,836,012.17	0.0000%	0.0155%
				185	$103,069,910.60	0.0001%	0.0028%
DEPT OF DEFENSE	9700	2023		268	$386,659,910.80	0.0001%	0.0106%
DEPT OF DEFENSE	9700	2023		485	$279,423,758.29	0.0001%	0.0076%
DEPT OF DEFENSE	9700	2023		579	$441,775,281.23	0.0002%	0.0121%
DEPT OF DEFENSE	9700	2023	97	723	$161,236,030.95	0.0002%	0.0044%
DEPT OF DEFENSE	9700	2023	97AE	812	$735,676,889.60	0.0002%	0.0201%
DEPT OF DEFENSE	9700	2023	97F5	1,533	$801,765,941.30	0.0004%	0.0219%
DEPT OF DEFENSE	9700	2023	97JC	1,921	$4,612,717,691.05	0.0005%	0.1261%
DEPT OF DEFENSE	9700	2023	97AZ	1,954	$179,329,514.12	0.0005%	0.0049%
DEPT OF DEFENSE	9700	2023	97ZS	2,784	$1,820,382,849.17	0.0008%	0.0498%
DEPT OF DEFENSE	9700	2023	97DH	3,790	$12,670,013,384.54	0.0010%	0.3463%
DEPT OF DEFENSE	9700	2023	9763	6,779	$1,168,525,261.26	0.0018%	0.0319%
DEPT OF DEFENSE	9700	2023	97AK	27,979	$2,823,085,770.40	0.0076%	0.0772%
DEPT OF DEFENSE	9700	2023	5700	43,410	$43,571,887,877.60	0.0118%	1.1909%
DEPT OF DEFENSE	9700	2023	2100	64,427	$39,853,548,897.86	0.0175%	1.0893%
DEPT OF DEFENSE	9700	2023	1700	93,777	$69,156,253,686.49	0.0254%	1.8902%
DEPT OF DEFENSE	9700	2023	97AS	1,795,692	$20,475,989,756.67	0.4871%	0.5596%

Static Reports - Data Bank, Contract Data

Static Reports

- Current National Interest Reports are Run Daily
- Official Standard Reports ‘Frozen’ in Time
- Small Business Goaling Reports by Fiscal Year
- Top 100 Contractor Reports by Fiscal Year by Agency
- Procurement Reports by FY, Agency, Geographic Location
- Most are PDF format Created as Official for A Fiscal Year

Administrative - Data Bank, Contract Data

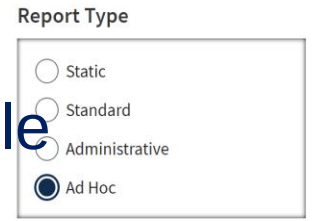
Administrative Reports	4 Administrative Reports Run in Real Time	4 Administrative Reports Updated Once per Day
• SAM User Needs Contracts Admin Role to Run Report • Must Ask Existing Admin User to Assign Role to You	• Audit Procedures - Uses Live Data • FPDS Contracting Office - Uses Live Data • List of FPDS Users - Uses Live Data • Status of Actions – Uses Live Data	• Individual Data Item Oversight Tracker • Rerepresentation • Rerepresentation Eligible Actions • Transfer Action

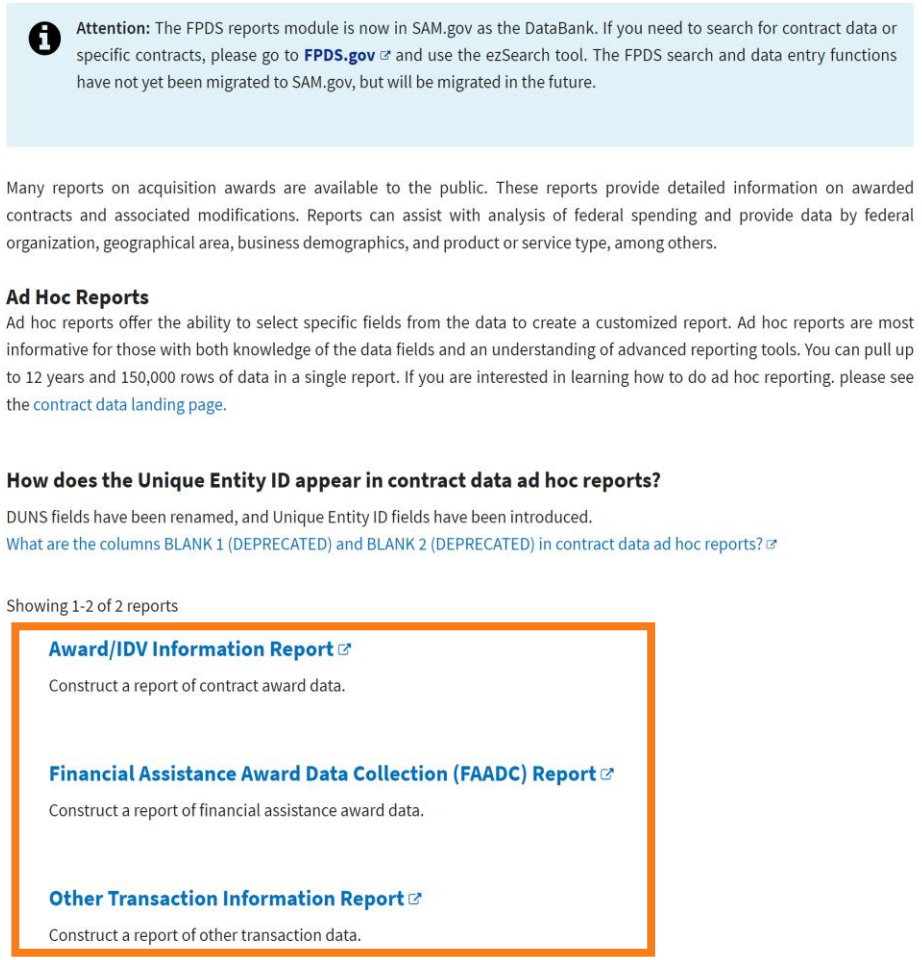
Ad Hoc Reports - Data Bank, Contract Data

- Custom Report - Your Filters and Your Field Selection
- Save Report for Future Execution
- Share Report Code with Other SAM.gov Users
- Data Summarization Occurs when All Field Values Shown Have Same Value for Multiple Records
- Must Know Fields and Relationship Between Fields
- Must Test Report Results for Accuracy
- You Are Your own Programmer - Check Your Work

Ad Hoc Reports – Data Bank, Contract Data

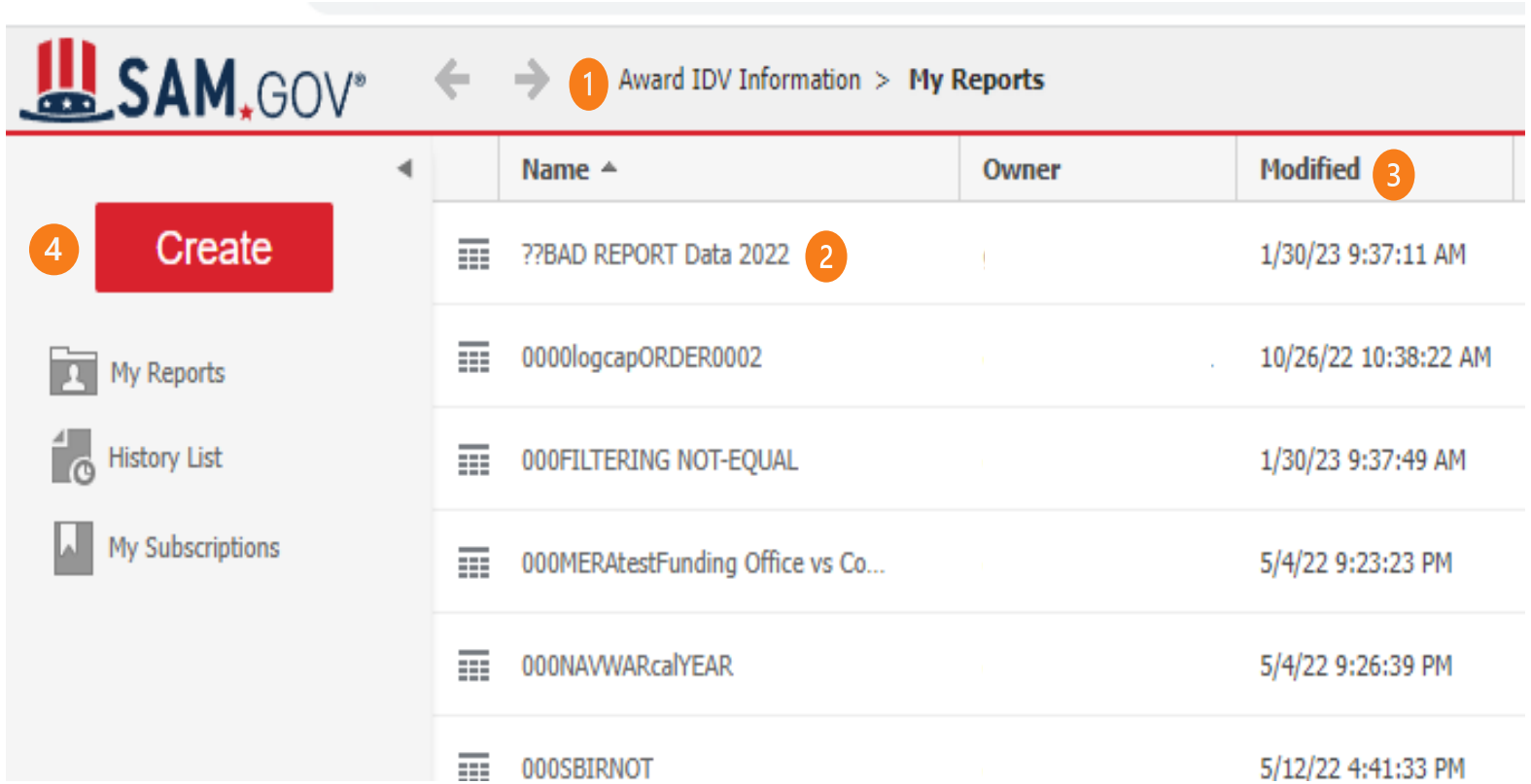
- Sign in to SAM.gov
- Land on WORKSPACE with Your Profile
- Click DATA BANK
- Click CONTRACT DATA
- Click Report Type - Ad Hoc
- Choose 1 of 3 Databases to Access
  - Award/IDV Information Report - FPDS
  - Financial Assistance Award Data Collection (FAADC) Report - FAADC
  - Other Transaction Information Report – OT's





Ad Hoc Reports – Data Bank, Contract Data

Ad Hoc – My Reports Page



1. Database Selected

2. Your Saved Reports
   - Double Click on Name to Run Report
   - Right Click on Name For Additional Menu Options

3. Change Sort Order Click on Any Column

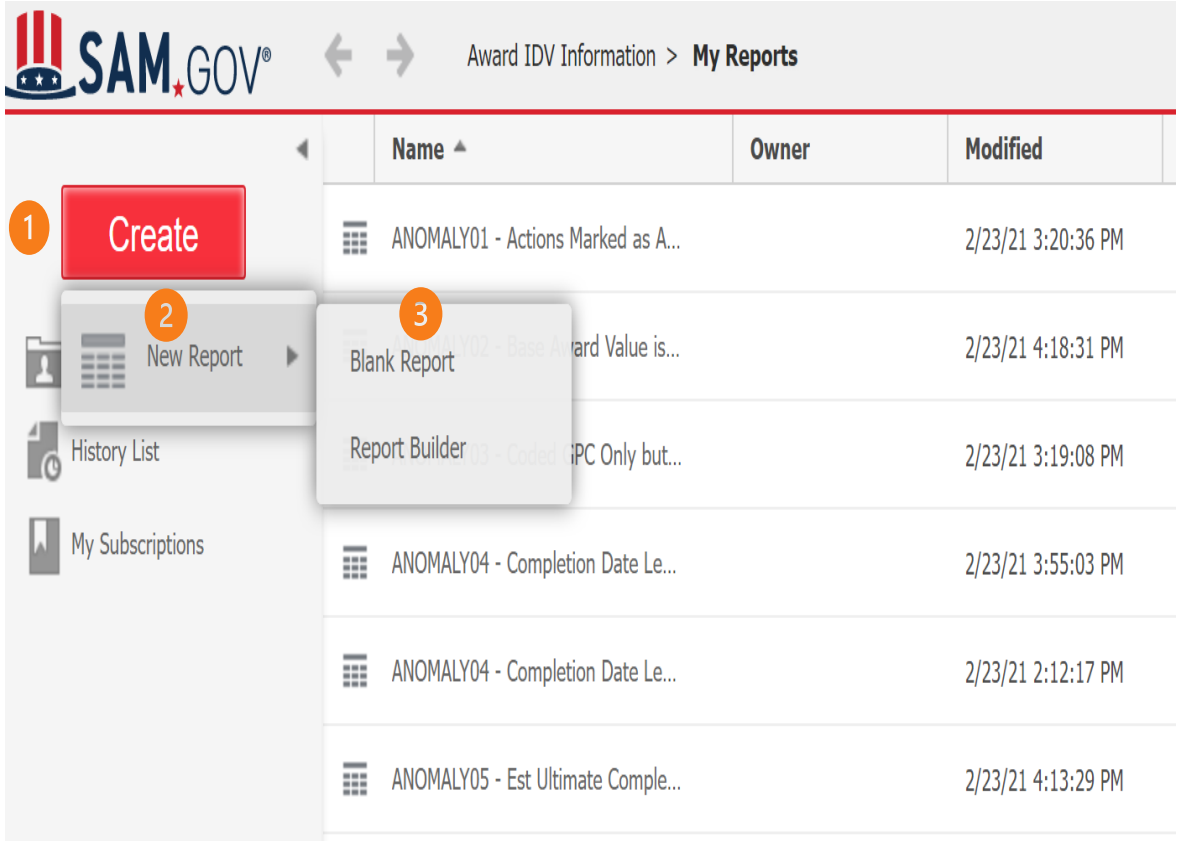
4. Click Create to Start New Report

Ad Hoc Reports – New Report

1. Click - CREATE (red)
2. Click - NEW REPORT
3. Click - BLANK REPORT

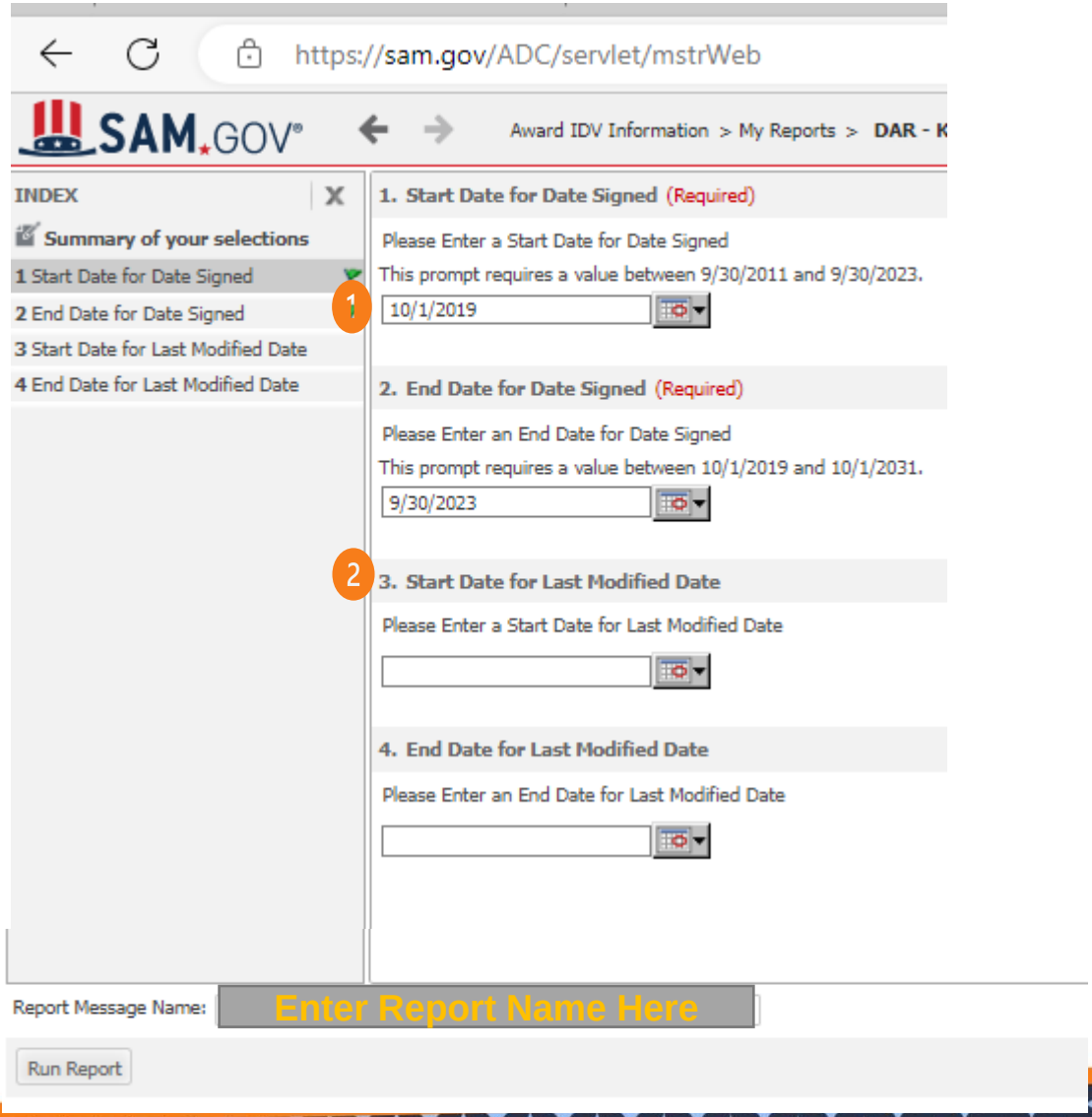
Recommend not Using Report Builder

- Too Restrictive



Ad Hoc Reports – New Report

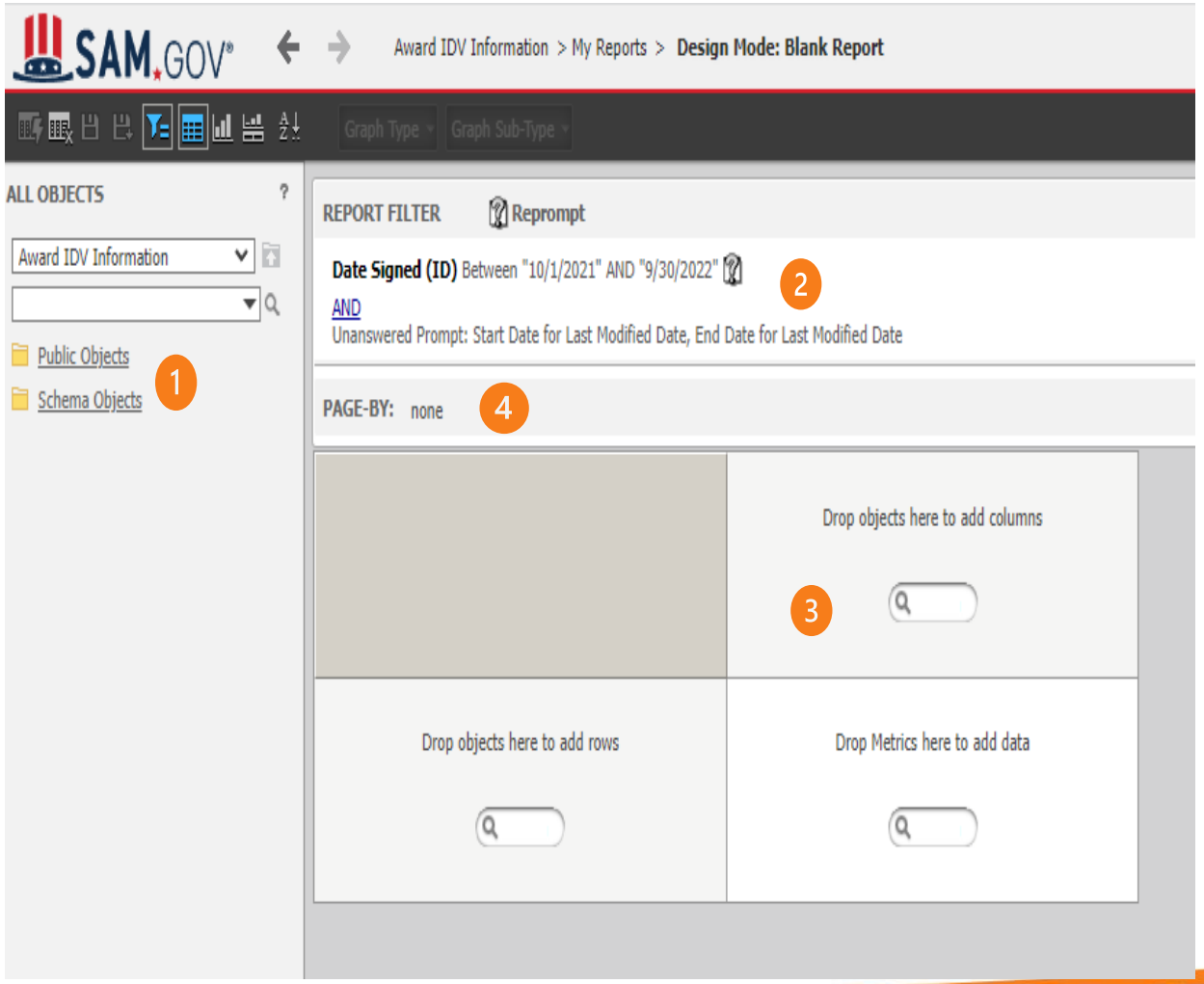
1. Enter Start and End Dates for Date Signed
   - Use One Recent FY to Create Draft Report
   - Maximum 12 Years for a Start/End Date Range
2. No Dates Needed for Last Modified Date Range
3. Go to Bottom Left Corner; Click - Edit in Design Mode



Ad Hoc Reports – Design Mode (or edit)

Design Mode - Four Screen Areas

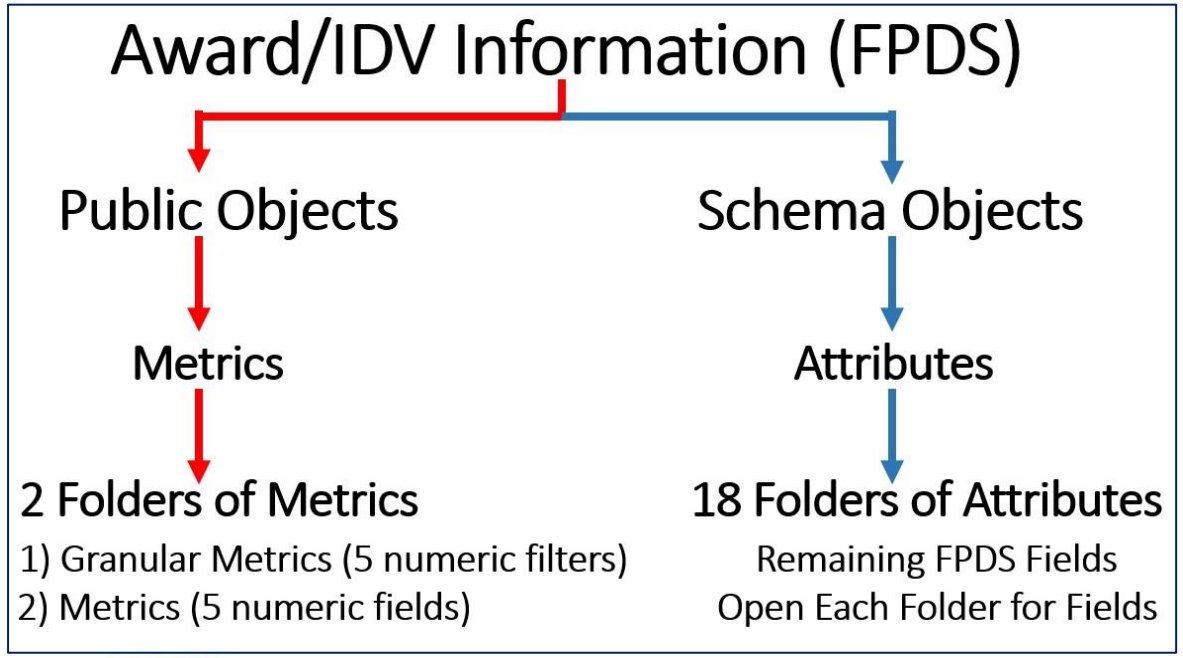
1. ALL OBJECTS - All Fields Available to make a Report
2. REPORT FILTER – What Data is Selected for Report
   - Initially Only the Date Signed Start/End Range is the Filter
   - Without Adding A Filter, You Get All the Data for Date Range
3. OUTPUT GRID - 4 Boxes Are Field & Column Names
4. PAGE BY is an Advanced Feature - Do Not Use Initially



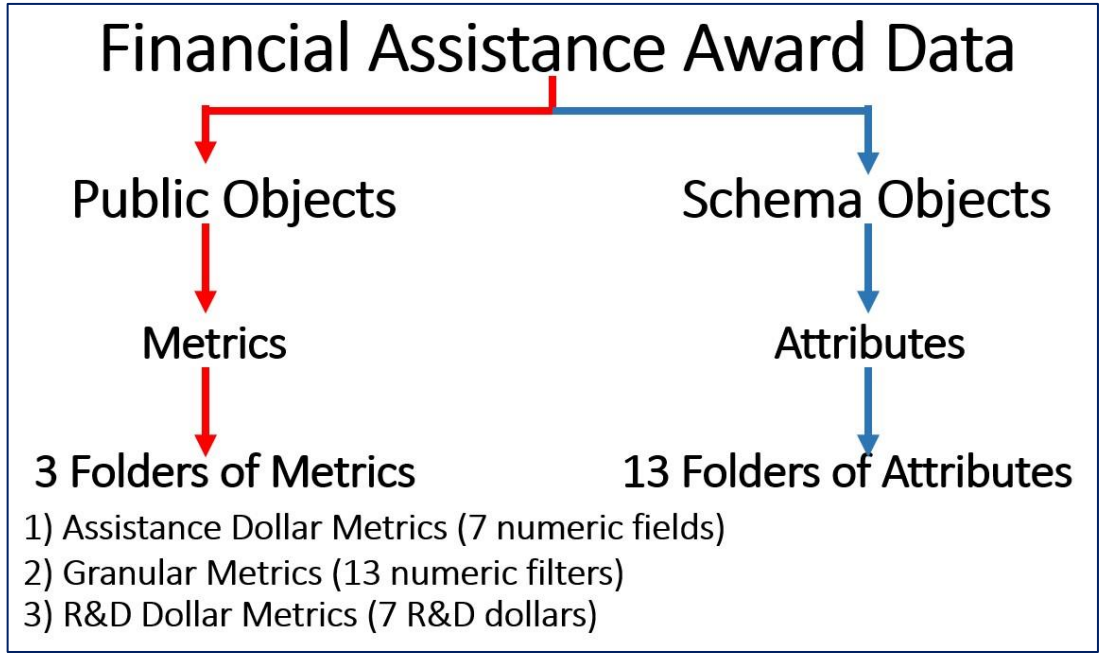
Ad Hoc Reports – Design Mode (or edit)

ALL OBJECTS Divided into 2 Groups – **Public Objects** Metrics (all numeric Fields) **Schema Objects** Attributes (all non-numeric Fields)

FPDS Tree Structure



FAADC Tree Structure

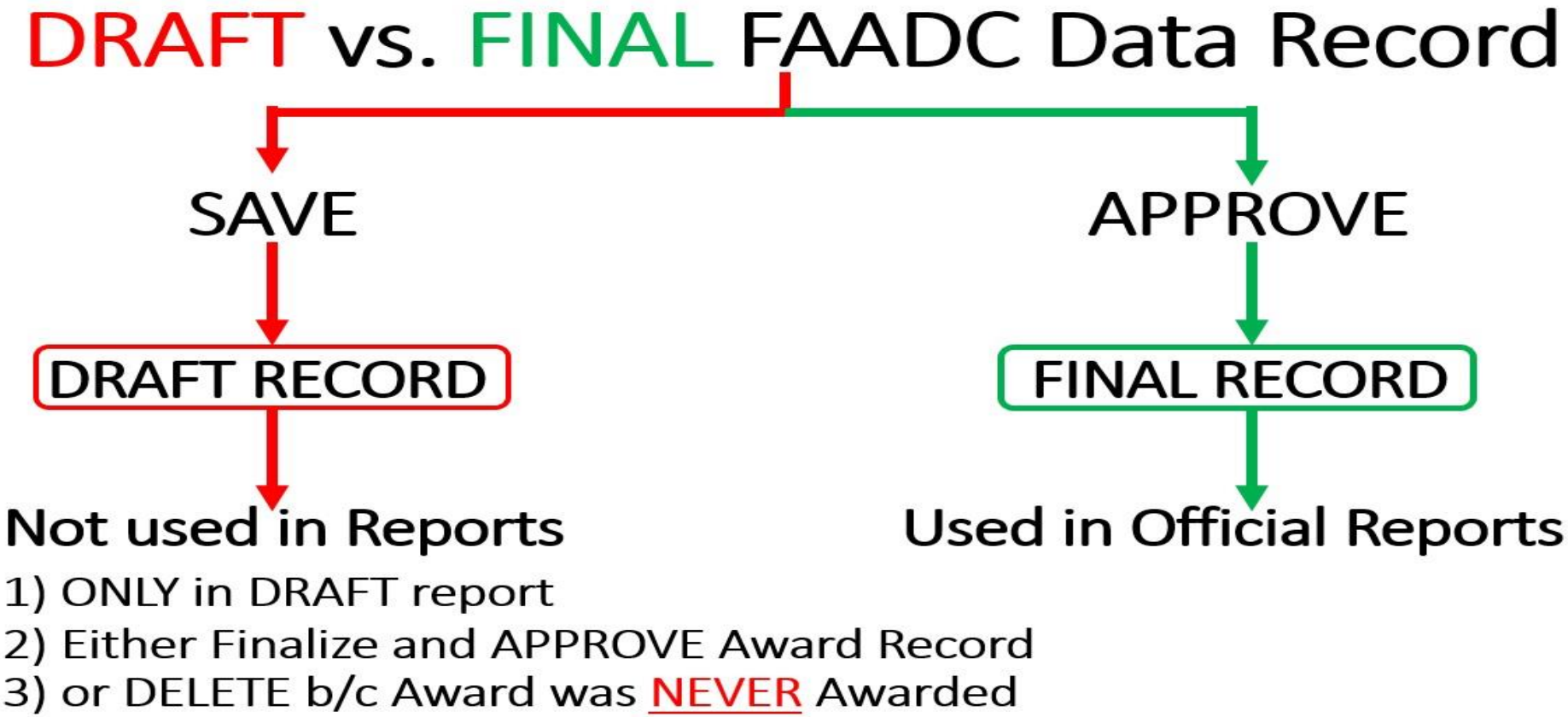


Ad Hoc Reports – Design Mode (or edit)

- FAADC Can Access 2 Different Data Types
  - Draft Records and Final Records
- At CREATE Step a Decision for Draft or Final is Made
  - Along with Blank Report vs. Report Builder (never use)
  - Select either Draft Blank Report or Final Blank Report
- Draft Report Cannot Change to See Final Data
- Final Report Cannot Change to See Draft Data
- A New Report Must Be Created to Switch Data Types

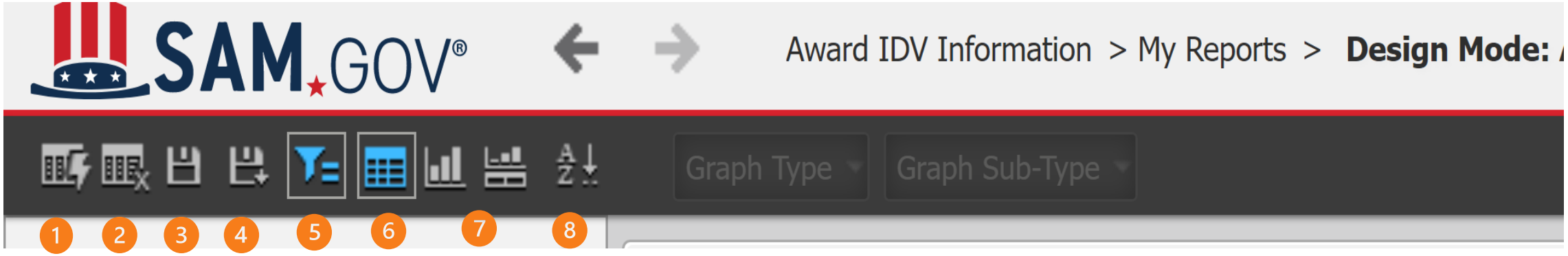
Ad Hoc Reports – Design Mode (or edit)

Draft vs. Final Records in FAADC



Ad Hoc Report - Design Mode(edit)

Design Mode Commands – Black Bar Command Icons



1. Run Report
2. Cancel Run
3. SAVE
4. SAVE AS (1st time)
5. Make Report Filter Disappear - DO NOT USE
6. Report is to Create a Data Grid
7. Report is to Create a Graph Or Graph With Data
8. Set Report SORT

Ad Hoc Reports – New Report

- Click - CREATE (red)
- Click - NEW REPORT
- Click - BLANK REPORT
  - Never Use Report Builder (Too Restrictive)
- Enter Start and End Dates for Date Signed
  - Use One Recent FY to Create Start Drafting a Report
  - Maximum 12 Years for a Start/End Date Range
- No Dates Needed for Last Modified Date Range
  - Go to Bottom Left Corner; Click - Edit in Design Mode

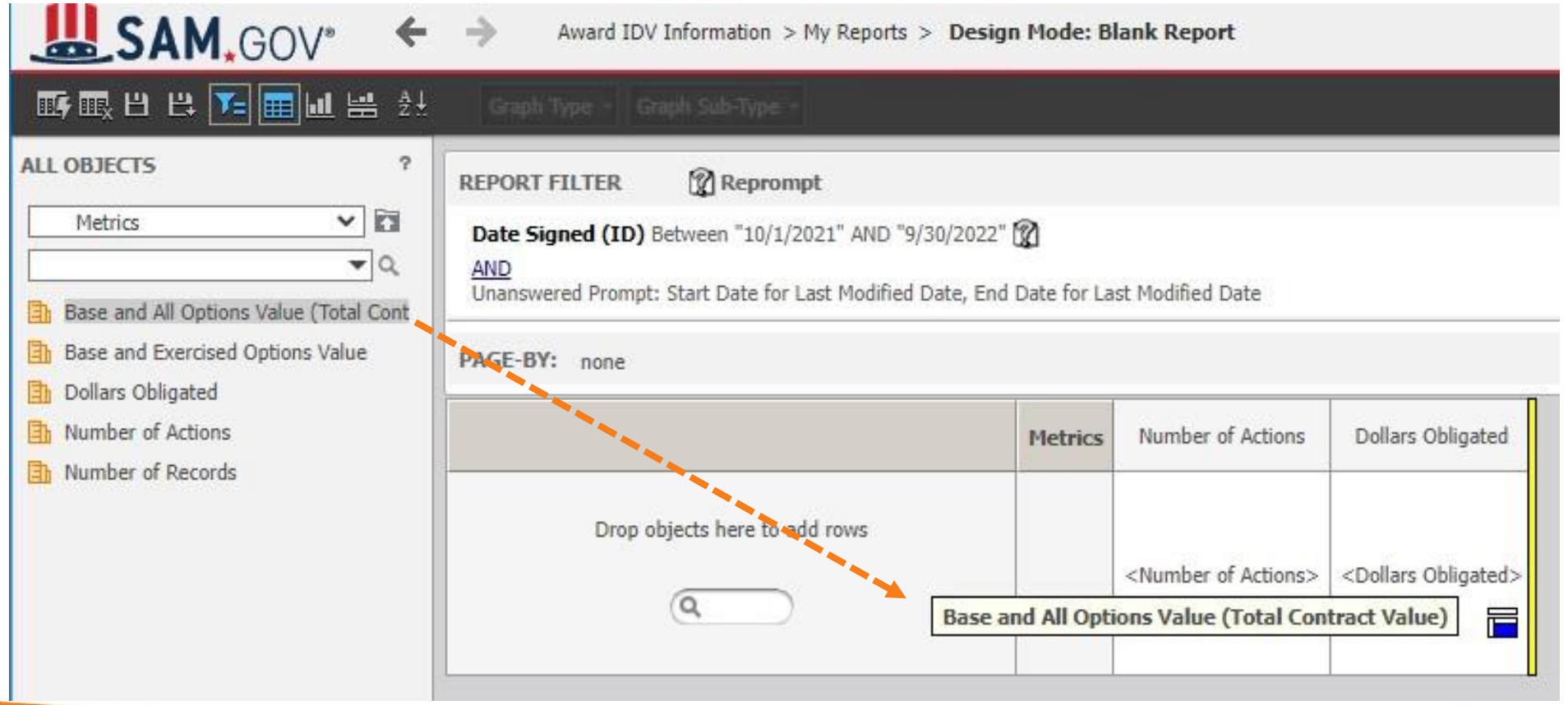
Ad Hoc Reports – Design Mode (or edit)

- Start Moving Fields to the Output Grid
- Suggest - Do Metrics First - Schema Objects -> Metrics
  - Must Select One Metric - suggest - Number of Actions
  - Number of Actions Show If More Than One Record is Behind a Given Row in the Report (value is not One)
  - Add from the Remaining Four Metrics, if needed.
- 3 Ways to Move Field from ALL OBJECTS to GRID
  - Double Click on Field Name – adds field to the far right
  - Right Click on Field Name and Choose ADD to GRID
  - Left Click and Hold on Field Name and Drag into GRID

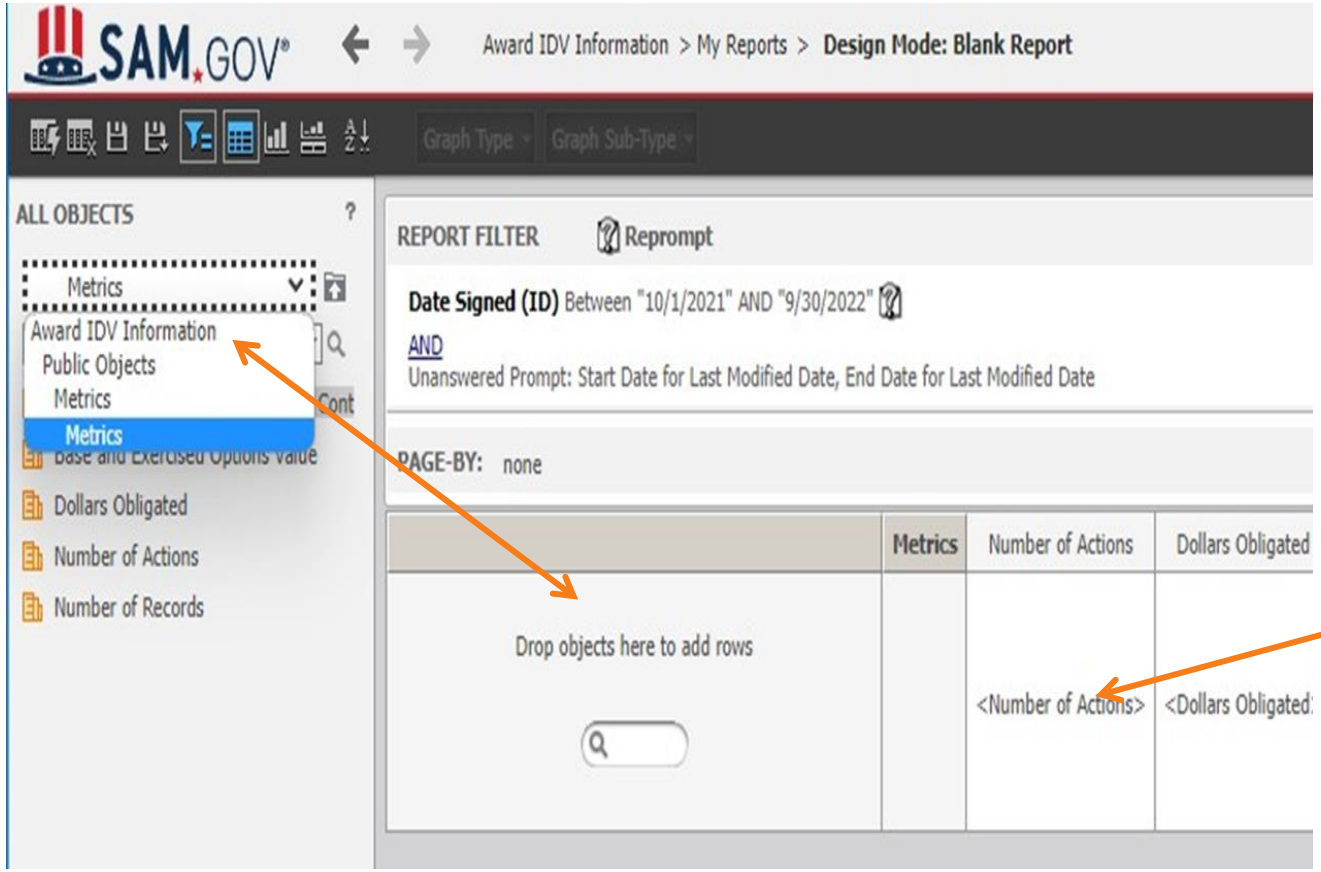
Ad Hoc Reports – Design Mode (or edit)

Left Click and Hold on Field Name and Drag into GRID

- Make sure Yellow Vertical Bar appears in the Grid



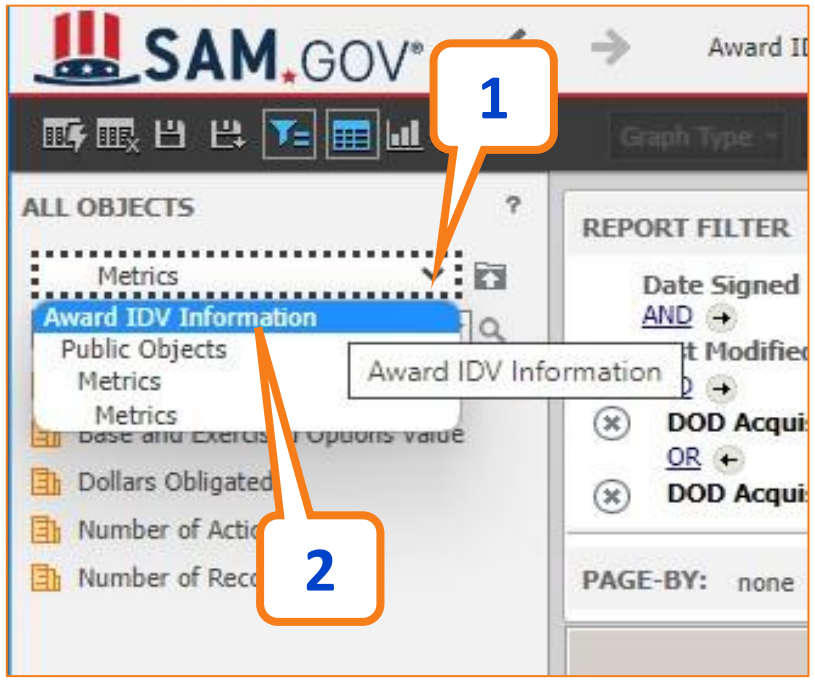
Ad Hoc Reports – Design Mode (or edit)

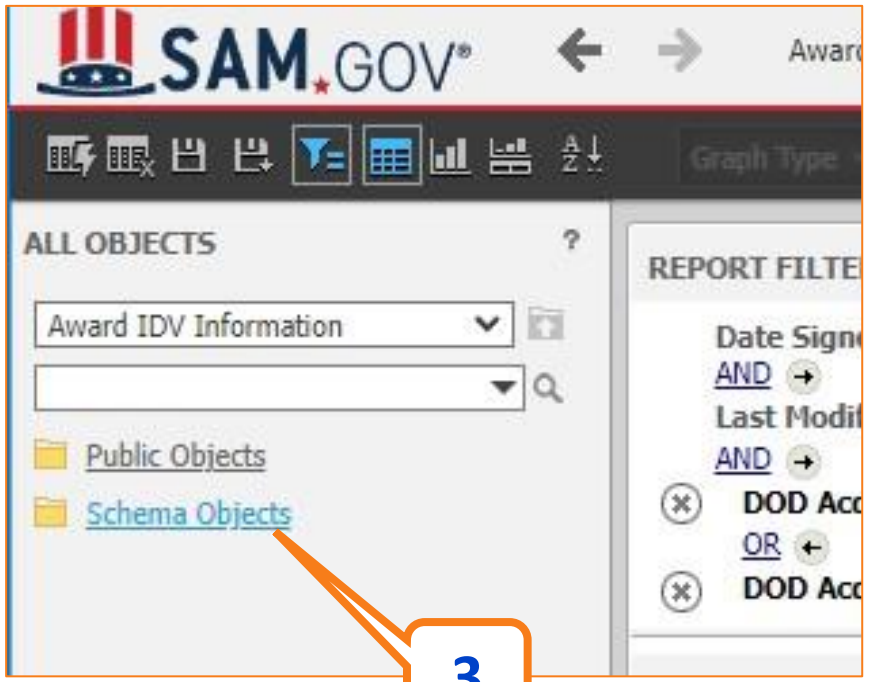


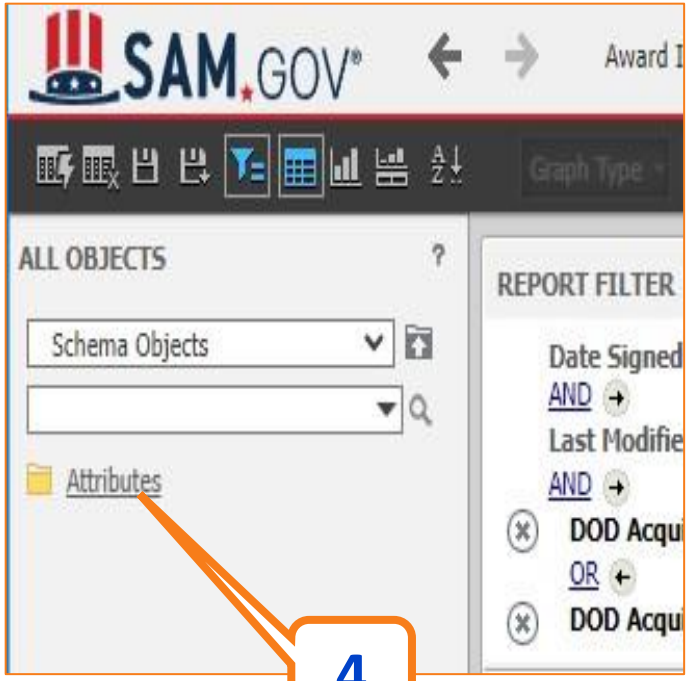
- Go Up All Objects Data Tree to Get to Attributes
- Top Box Click Down Arrow - Click - Award IDV Info
- Click -> Schema Objects -> Attributes
- Open Folder (18) Where Desired Field Resides
- Move Attribute Field from ALL OBJECTS to GRID
  - Double Click on Field Name – adds field in front of Metrics
  - Right Click on Field Name and Click - ADD to GRID
  - Left Click and Hold on Field Name and Drag into GRID

Ad Hoc Reports – Design Mode (or edit)

Get to Attributes by Going Up All Objects Data Tree



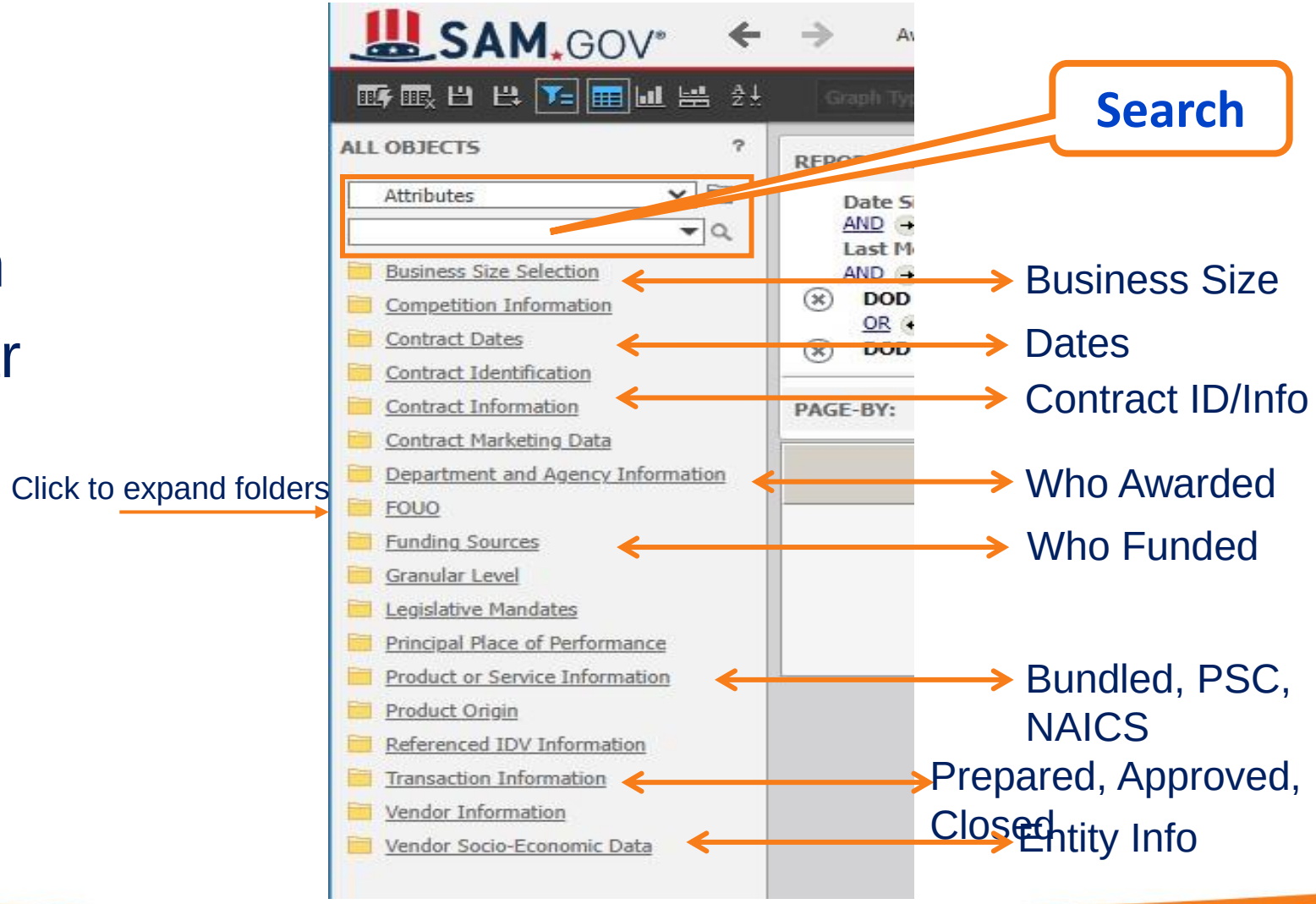




Ad Hoc Reports – Design Mode (or edit)

Attribute Folders

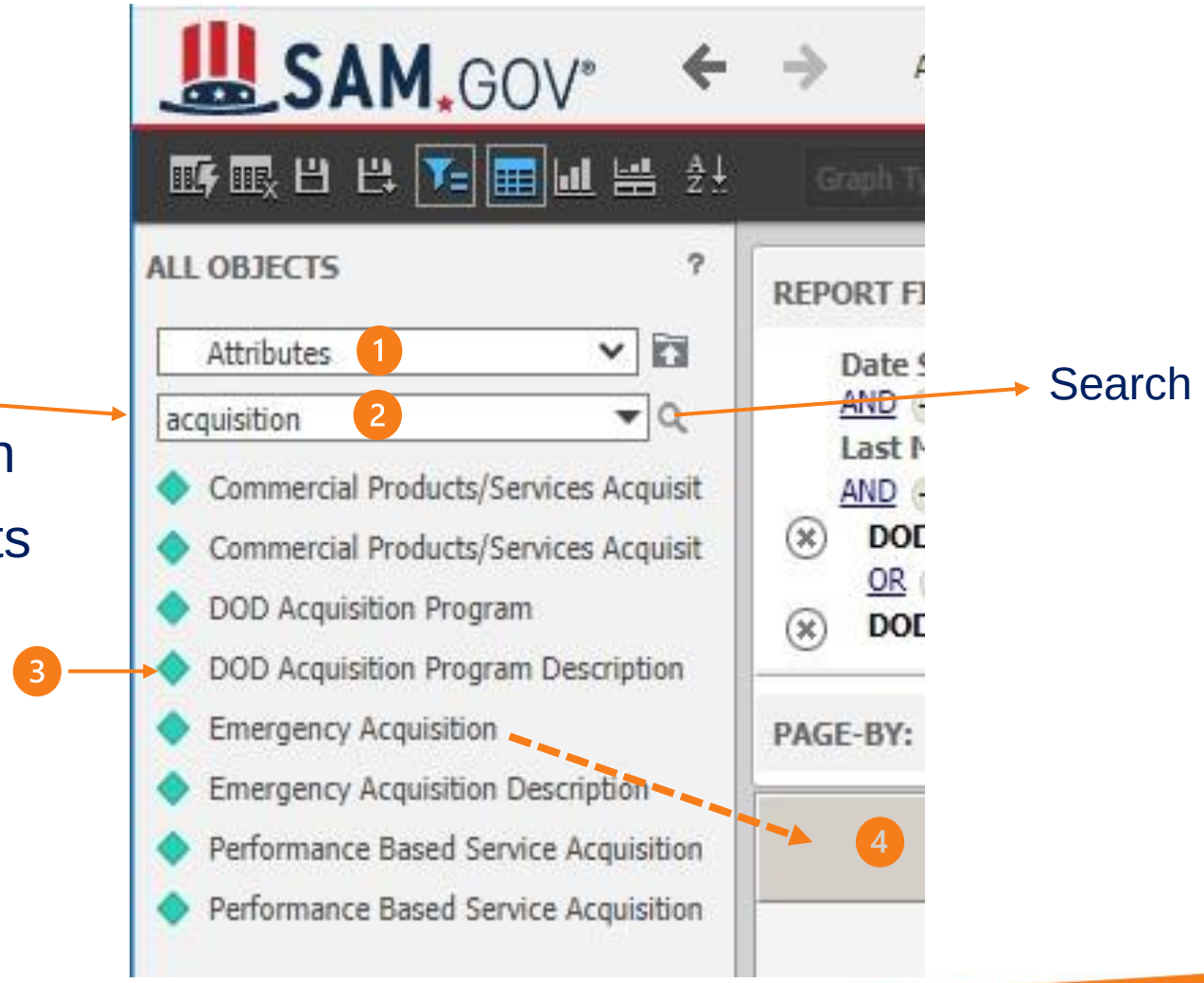
- 18 Folders
- Learn Field Location
- Attributes on Top Bar
- Search 2nd Bar
  - Type Field Name
  - Click - Search icon
- Move Field to Grid



Ad Hoc Reports – Design Mode (or edit)

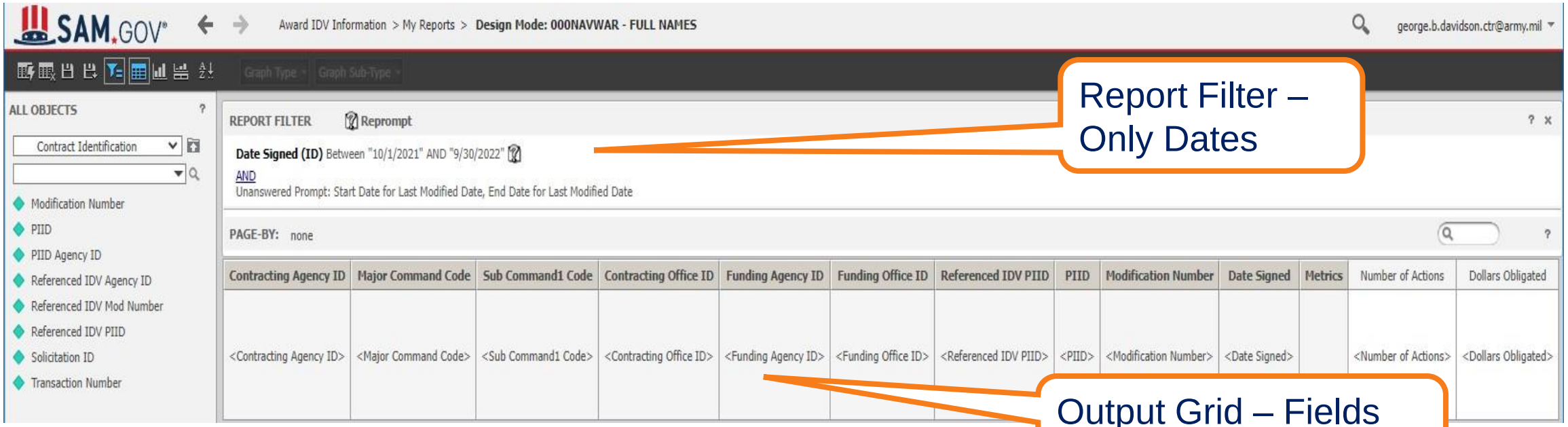
Search Attribute Folders for Field

1. First Bar
   - Ensure Attributes is selected
2. Second Bar
   - Type Part of Field Name
   - Click Magnifying Glass to run search
3. Diamonds are attributes search results
4. Select to Move to GRID
   - Double Click - Field Name
   - Right Click - ADD to GRID
   - Left Click - Drag into GRID



Ad Hoc Reports – Design Mode (or edit)

- Output Grid – DO SAVE or SAVE AS (first time)
- Start with small number of Fields for Draft Report
- Now Add Report Filter and Test If Filters Get Data

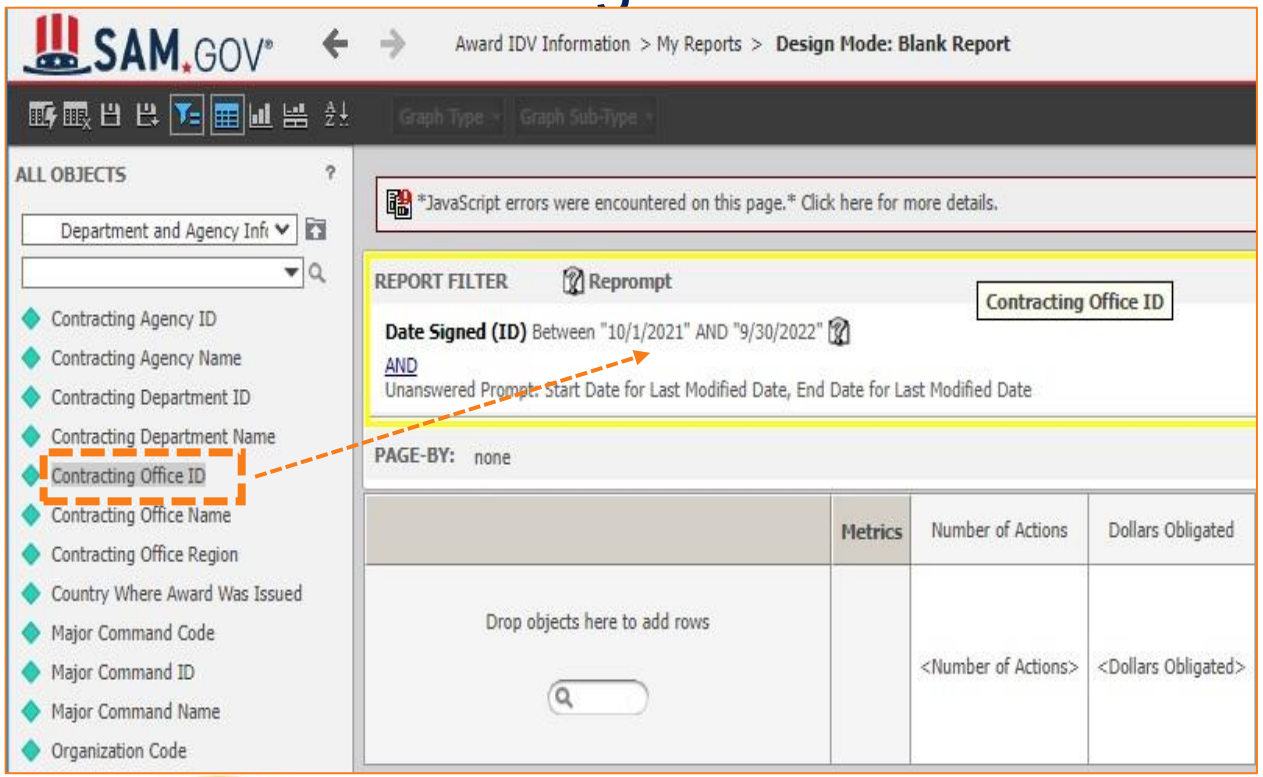


Ad Hoc Reports – Design Mode (or edit)

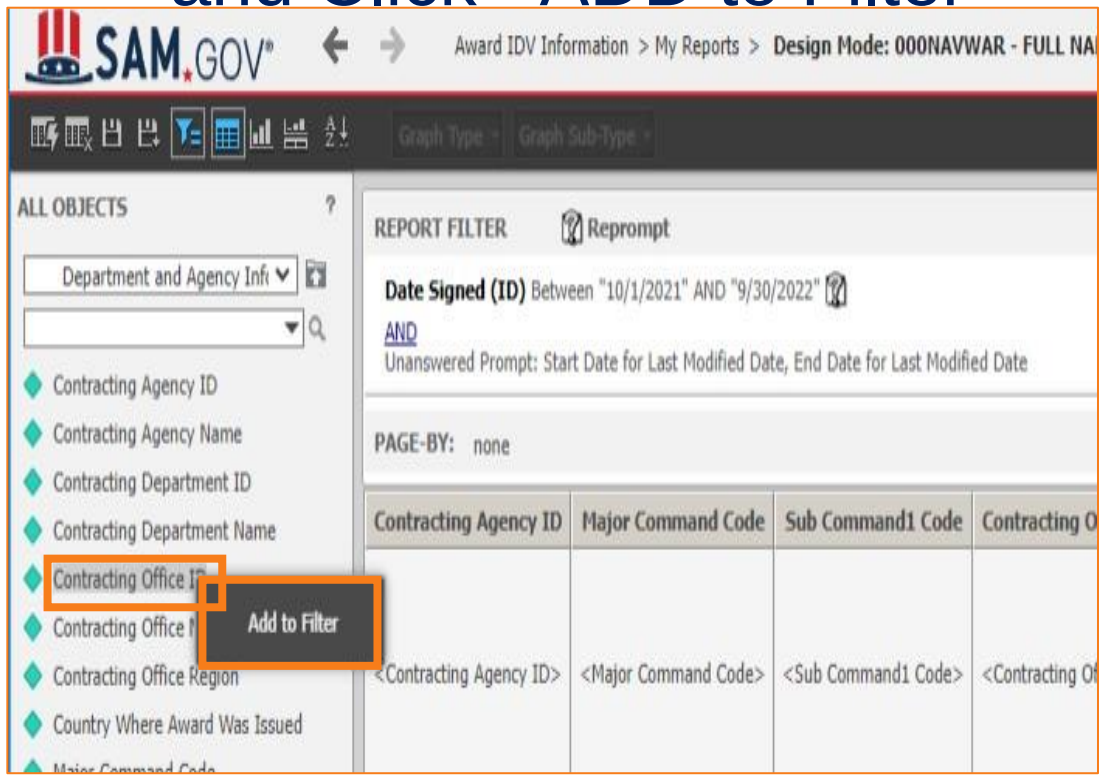
- Go Up All Objects Data Tree to get to Attributes
- Top Box Click Down Arrow – Click - Award IDV Info
- Click -> Schema Objects -> Attributes
- Open Folder (18) Where Desired Field Resides
- Move Field from ALL OBJECTS to REPORT FILTER
  - Right Click on Field Name and Click - ADD to Filter
  - Left Click and Hold on Field Name and Drag to Report Filter
  - Release with Yellow Line Box Around Report Filter

Ad Hoc Reports – Design Mode (or edit)

Left Click and Hold on Field Name and Drag to Filter



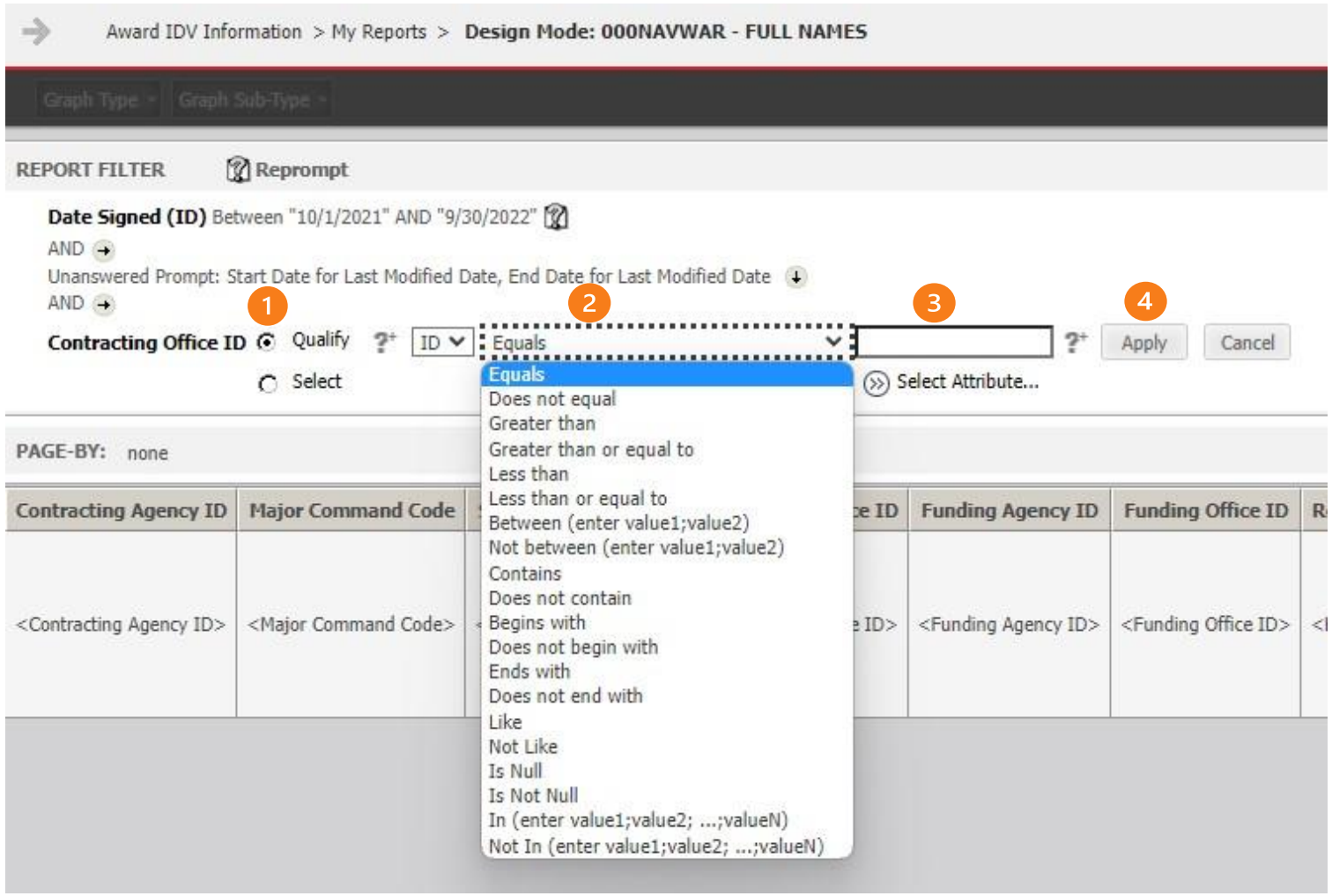
Or Right Click on Field Name and Click - ADD to Filter



Ad Hoc Reports – Design Mode (or edit)

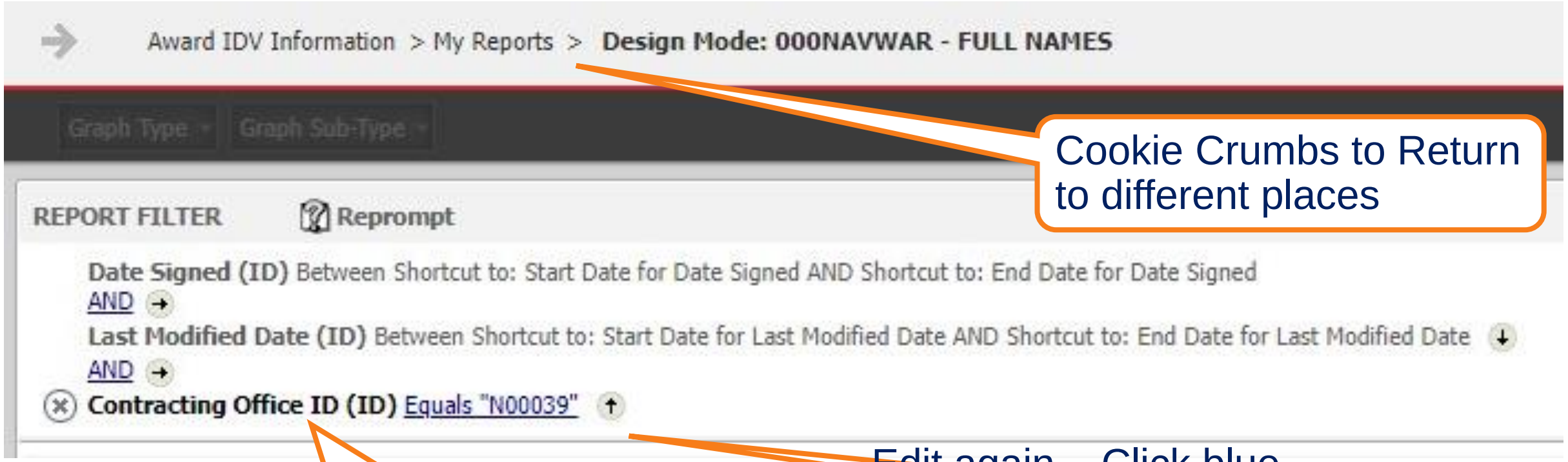
REPORT FILTER

1. Click - Qualify
2. Select Operator
3. Type Data Value
4. Click - Apply



Ad Hoc Reports – Design Mode (or edit)

REPORT FILTER

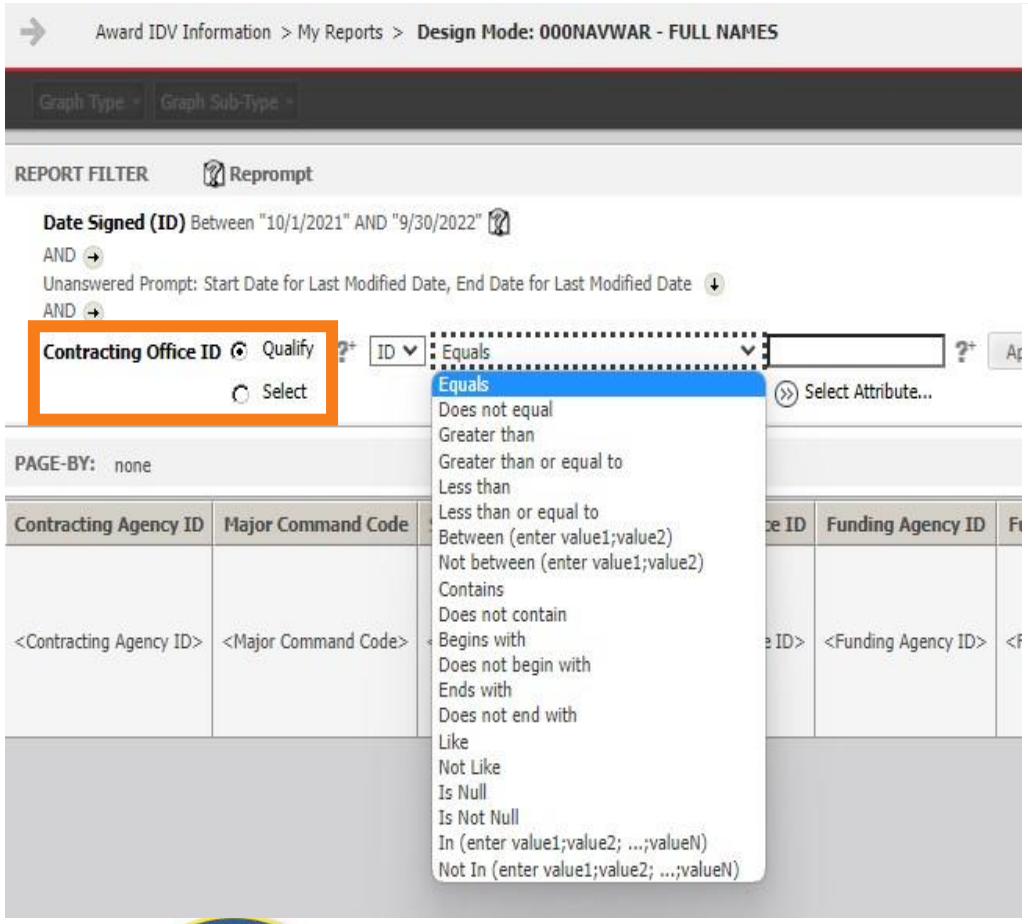


Cookie Crumbs to Return to different places

Filter Added

Edit again – Click blue text

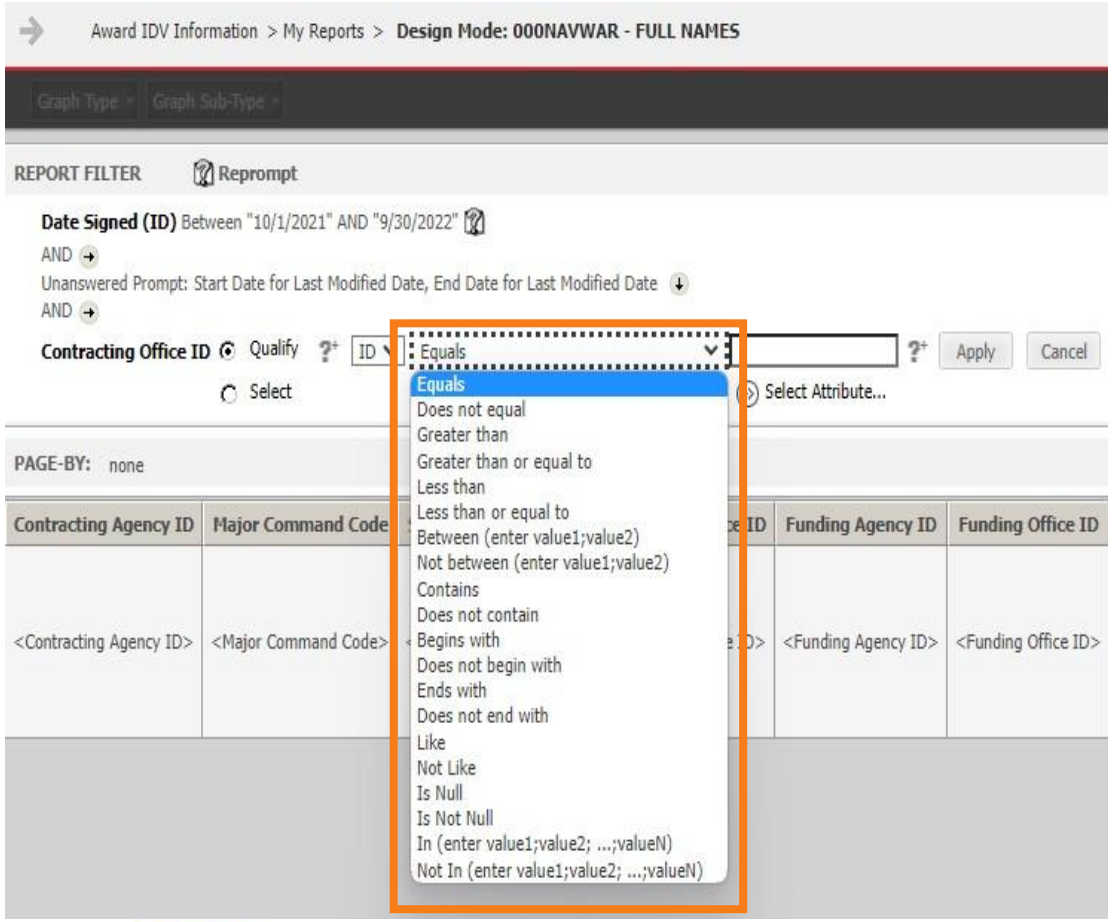
Ad Hoc Reports – Design Mode (or edit)



Report Filters - Qualify vs Select buttons

- **Qualify**
  - Means You Know the Value in the Database and Can Type it Accurately (i.e. DODAAC for Office ID)
  - Type a Wrong Value and No Records are Returned
- **Select**
  - Is Needed When You Do Not Know the Database Values
  - Select Shows You Every Value for the Field
  - You Select the Correct Value(s) to Use.

Ad Hoc Reports – Design Mode (or edit)



Report Filter - Operators (20)

- 16 Operators Can Have Only One Data Value for the Field
- 4 Operators Allow More than One Value in a String
  - BETWEEN/NOT BETWEEN-Upper and Lower Value Limits(2)
  - IN/NOT IN – More than 1 Value Separated by Semicolon (;)
- How Many Values Can Be In a String (v1;v2;v3;v4;v5;..;vN)?
  - Tested 10,000 Office DODAACs and It Works
- Limit is a Software Buffer of approx. 8 kb (8,000 characters)
- Exceed Buffer Size and Get an Error
  - Solution is to Use a Second Report Filter Using IN operator

Ad Hoc Reports – Design Mode (or edit)

Report Filters

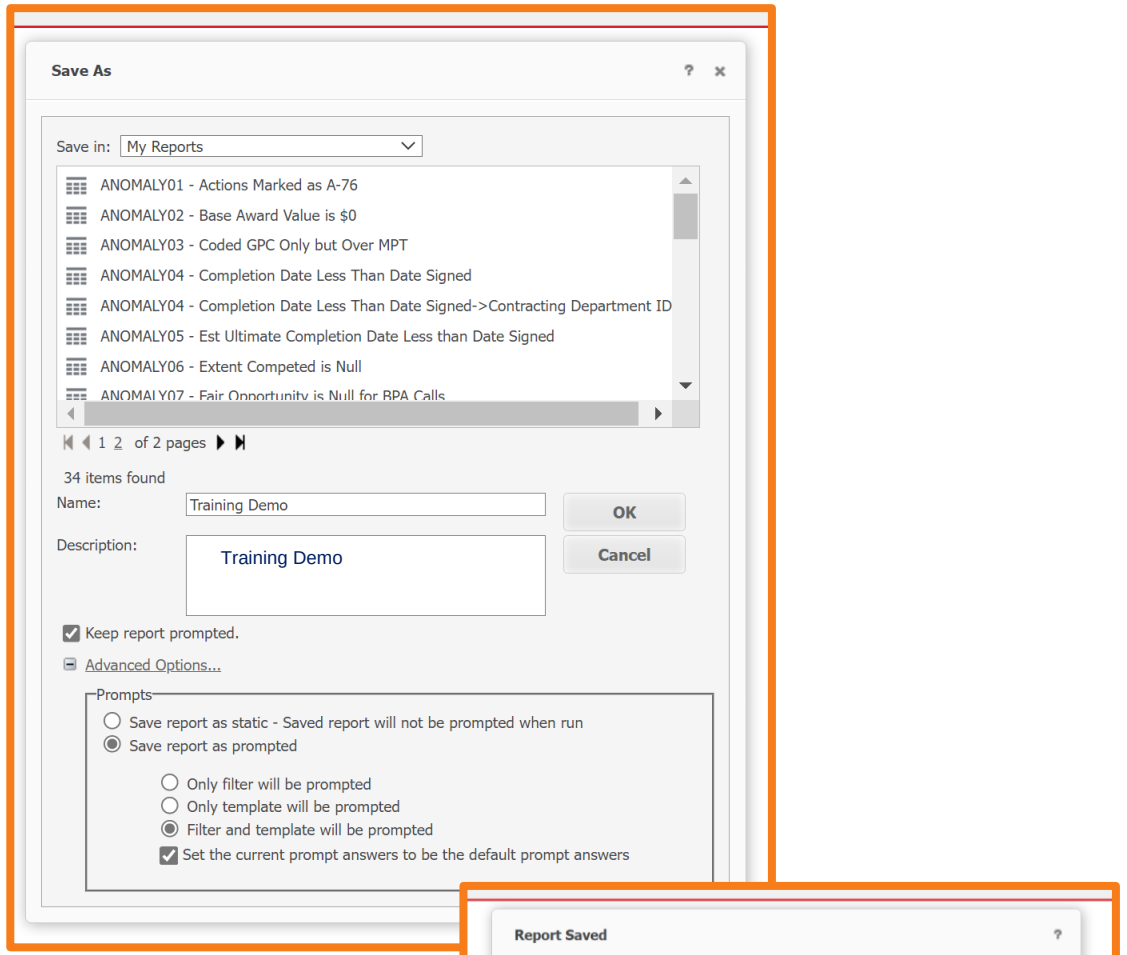
- Multiple Filters Possible
- Each Are Joined with an AND
- Example:

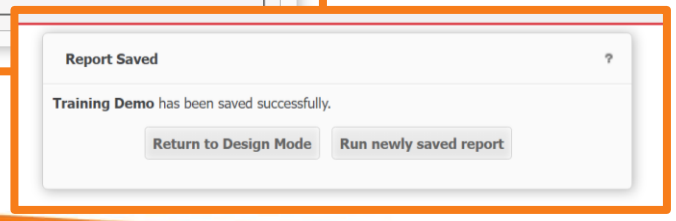
  Date Signed is between 10/01/2021 and 09/30/2022

  AND Contracting Agency ID = 1700

  AND Major Command Code in NAVSEA;NAVAIR;ONR;SSP
- NO SPACES are Allowed in the Data Value String
- Wrong Filter Combinations can Cause No Data Retrieved

Ad Hoc Reports – Design Mode (or edit)



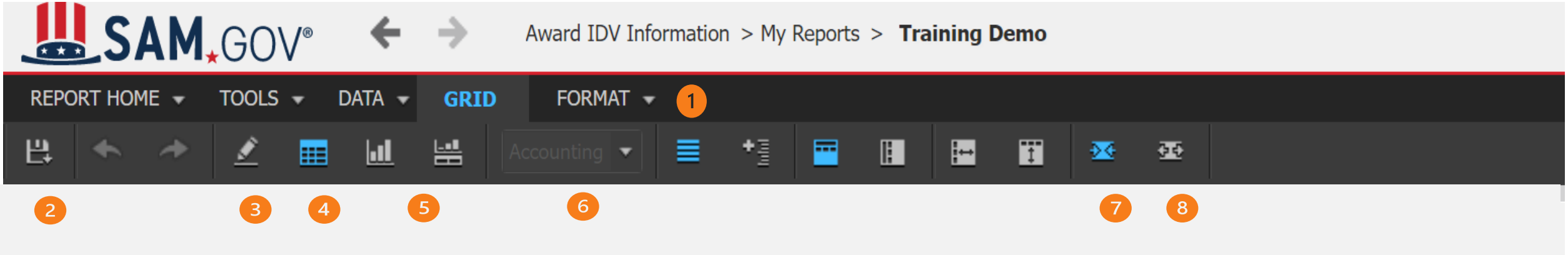


SAVE AS – first time

- Save your work frequently
- Supply Report Name
- Document What Report is Doing in Description
- Click – OK
- Choose – Run Newly Saved Report
- Report Succeeds with a Data Grid of Values Requested
- Execution Phase Starts with More Capabilities to Change Report

Ad Hoc Report - Execution Mode(Data Output)

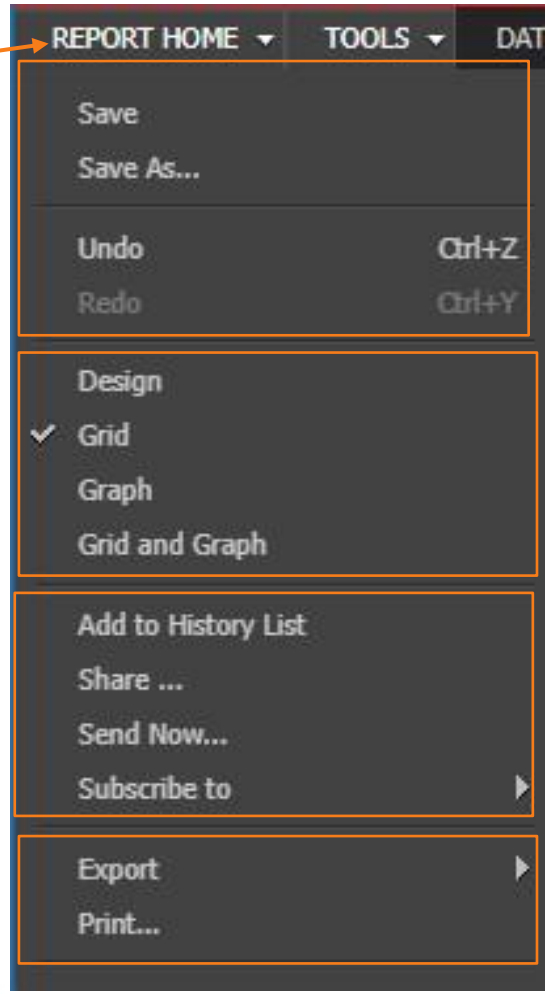
Black Bar Icon Commands (frequently used ones)



1. Toolbar Pull Down Menus
2. Save As
3. Design (edit)
4. Display Data grid
5. Create Graph Or Graph With Data
6. 25 Versions of Accounting Formatting of Grid
7. AUTOSIZE Columns Report Values
8. AUTOSIZE Columns to Screen Window

Ad Hoc Report - Execution Mode(Data Output)

REPORT HOME Pull Down Menu



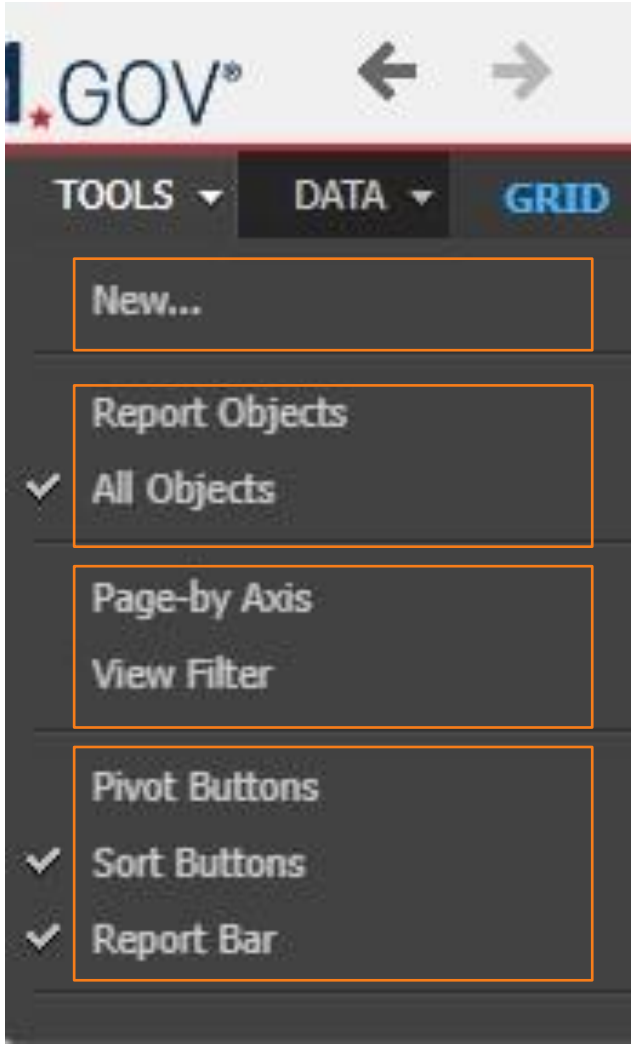
- SAVE and SAVE AS
- DESIGN -Go back to Design Mode (edit)
- SHARE - Give code to Other User
- SEND NOW - email report output now
- SUBSCRIBE TO - Schedule Recurring Run
- EXPORT - EXCEL, CSV, TXT file, etc.
- PRINT - as a PDF

Ad Hoc Report - Execution Mode(Data Output)

TOOLS Pull Down Menu

Most are Advanced Features

- NEW
  - To Create a New Report
- REPORT OBJECTS
  - Display Only Fields in the Report
- ALL OBJECTS
  - Display All Fields Available for a Report
- PAGE BY AXIS (advanced – leave off)

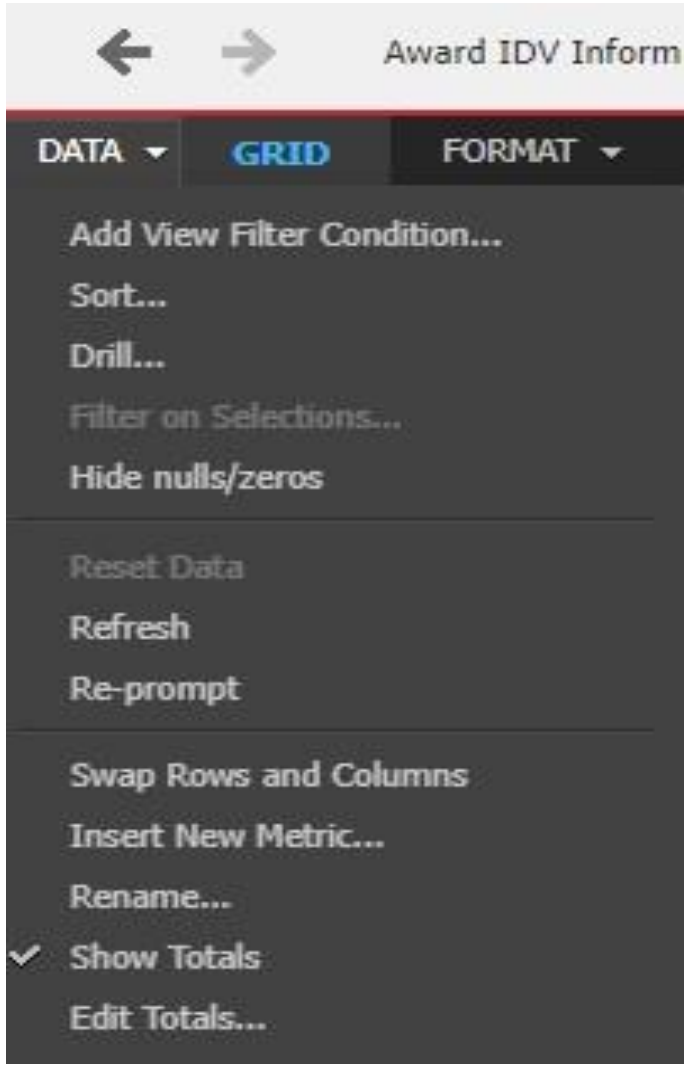


- PIVOT BUTTONS
  - Adds Buttons to Each Column Heading
  - Move a Column to Be a Row
- SORT Buttons (want it on)
  - Turns On/Off Column Heading Sort Arrow
- REPORT BAR (want it on)
  - Turn On/Off Report Stats- Num Pages/Rows

Ad Hoc Report - Execution Mode(Data Output)

DATA Pull Down Menu

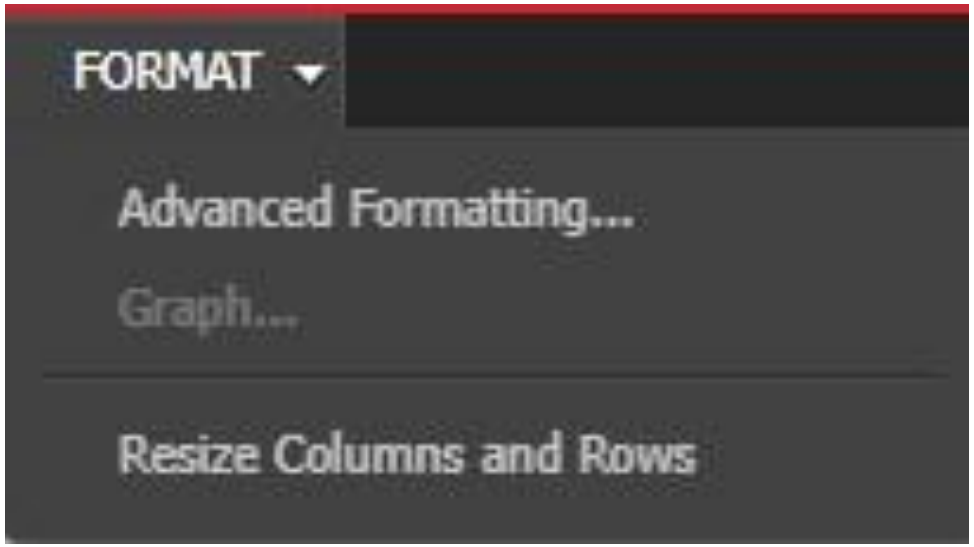
- Sort - Goes to SORT GRID
- Drill -Same Drill Fields from Std. Reports
- Refresh - Rerun Report
- Re-Prompt - Prompt for Date Changes
- Insert New Metric (advanced)
- Rename - Change Column Headings Text



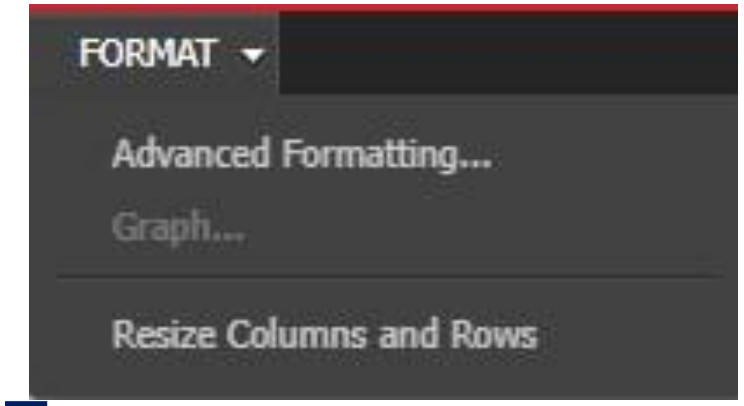
- Show Totals
  - Click - SHOW TOTALS
  - Each Field Gets a Total (probably do not want)
- Click – EDIT TOTALS
- ALL SUBTOTALS - Uncheck box
  - Using Subtotal is an Advanced Feature
- Check - Grand Total Box – to get Final Total
- Click – APPLY and OK Boxes

Ad Hoc Report - Execution Mode(Data Output)

- FORMAT (pull down - click down arrow)
- Advanced Formatting
  - Change Entire Report Template
  - Change Font and Style and Size
  - Change Font Color
  - Change Cell Padding and Lines
- Recommend to Take Format Defaults



Ad Hoc Report - Execution Mode(Data Output)



- FORMAT (pull down - click down arrow)
- RESIZE Columns and Rows
- Use for a Report Used Repetitively
- Worth the Effort to Size Columns of Similar Field Types
  - Make All Long Description Fields – Same Size (i.e. 2.5 inches)
  - Make All Dollar Fields – Same Size (i.e. 1 Inch)
- Under DATA use RENAME to rename Column Headings to Common Use Names in your organization (i.e. MSC vs MAJCOM vs MACOM vs Major Command Code)

Ad Hoc Reports – Check List

- Create -> New Report -> Blank Report -> Date Range
- Edit in Design -> Metrics to Grid -> Go Up All Object Tree
- Attributes to Grid -> A Few Fields, Same as Filters
- Attributes to Report Filter -> Save As -> Run Newly Saved
- Check Date Range -> Run Report -> Validate Results
- Add More Attributes to Output -> Report Home -> Save
- Format -> Resize Columns -> Data -> Rename Headings
- Report Home -> Save -> Data -> Re-prompt -> Run Report

Ad Hoc Reports – Check List

- Validate Results
- Report Home -> Export -> Formatted EXCEL to desktop
- Report Home -> Subscribe -> History List
  - Set Run Immediately -> Daily 7:15 PM
  - Advanced Options -> Uncheck Box to Overwrite Self
  - Delivery -> Do Not Deliver After 12/31/2023
  - Change Name at top to Be Descriptive Name
  - i.e. - N00019 FY 22,23 PSC DAILY until 12/31/2023 - > OK

2023

DEPARTMENT OF DEFENSE

PROCURE-TO-PAY

& Financial Audit Training Symposium