All About Dates

Cindy Spohn | AZBOCUG| August 16, 2017

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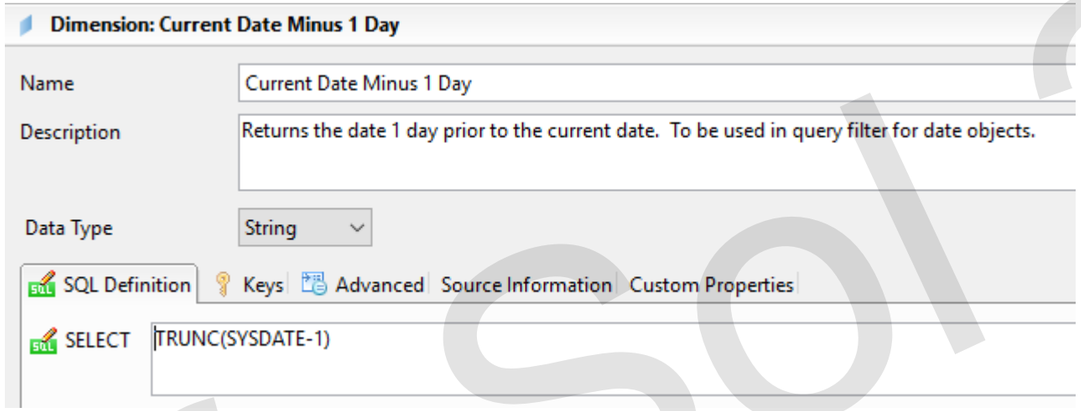
ALL ABOUT DATES

- Universe Filtering Methods
  - Date Filter Objects
  - Predefined Query Filter
  - Build Prompt into a Date Dimension
  - Dates vs Details
- Report Filtering Methods
  - Hard Code
  - Prompts
- Dates – Miscellaneous Thoughts
- Dimension vs. Detail
- Date/Time vs. Date
- Date Formatting in Universe
- List of Values

UNIVERSE FILTERING - DATE FILTER OBJECTS

- Can be used to show data for any dates



- Use code based on your database
  - Oracle – TRUNC(SYSDATE-1)
  - SQL – CAST(GETDATE() -1)
- BENEFITS
  - Can be used on any date in your universe
  - Not specific to any one date
  - Easy for users

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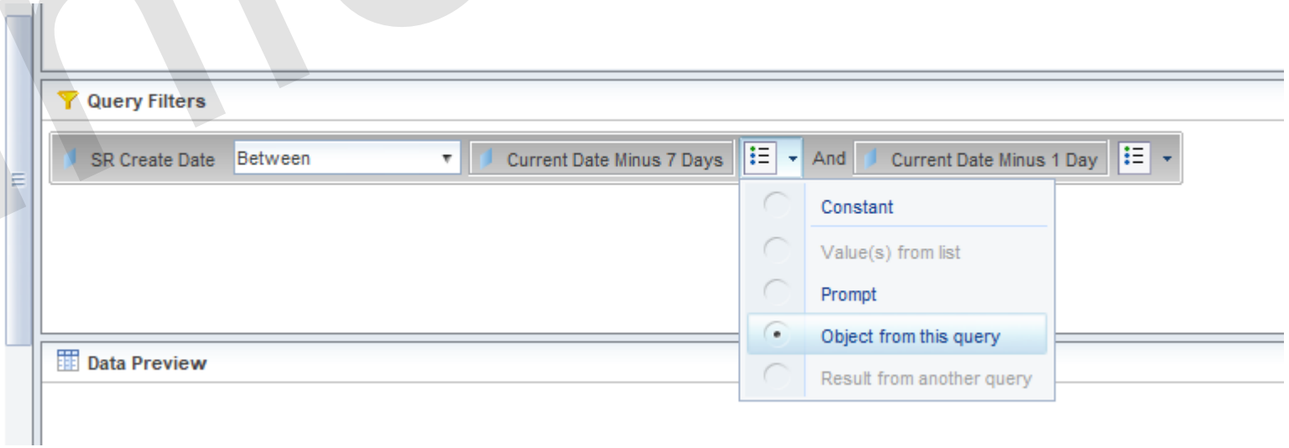
UNIVERSE FILTERING - DATE FILTER OBJECTS – CONT'D

- Utilize this technique to define other dates such as
  - First and Last Day of the Month
    - First - TRUNC(SYSDATE, 'MM')
    - Last - TRUNC(LAST_DAY(SYSDATE))
  - First Day of the Quarter
    - TRUNC(SYSDATE, 'Q')
  - First Day of the Year
    - TRUNC(SYSDATE, 'Y')
- Report Usage



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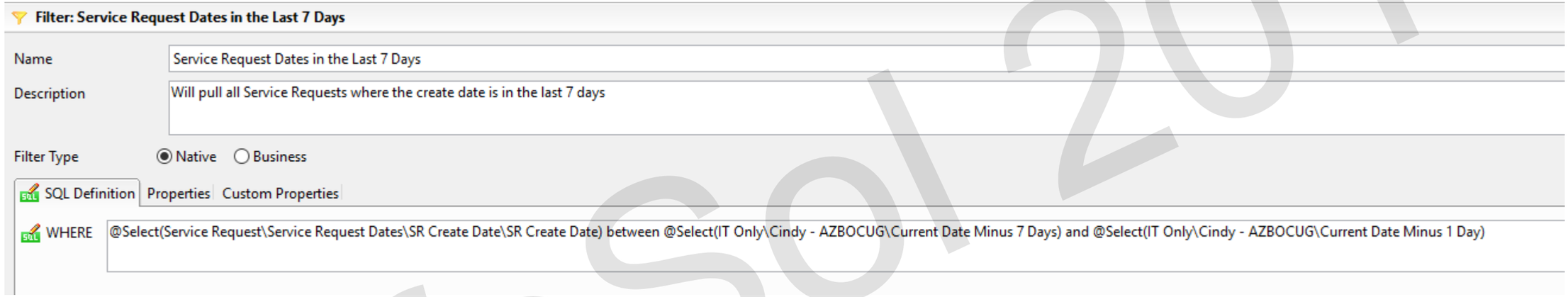
UNIVERSE FILTERING - DATE FILTER OBJECTS – CONT'D

- Utilize this technique to define other formats
  - Some databases and/or data warehouses store dates as numbers or a character string in a YYYYMMDD format
  - Convert a date to either a character or a number
    - TO_CHAR(DATE,'YYYYMMDD')
    - TO_NUMBER(TO_CHAR(DATE,'YYYYMMDD'))

UNIVERSE FILTERING - PREDEFINED QUERY FILTER

- Specific to one date



  - BENEFITS
    - Make the specific filters you use the most permanently available
    - You don’t need to create the same filters all the time
    - Can be complex or as simple as the one I have created above
    - Users cannot view or edit predefined filters
    - Easy for users

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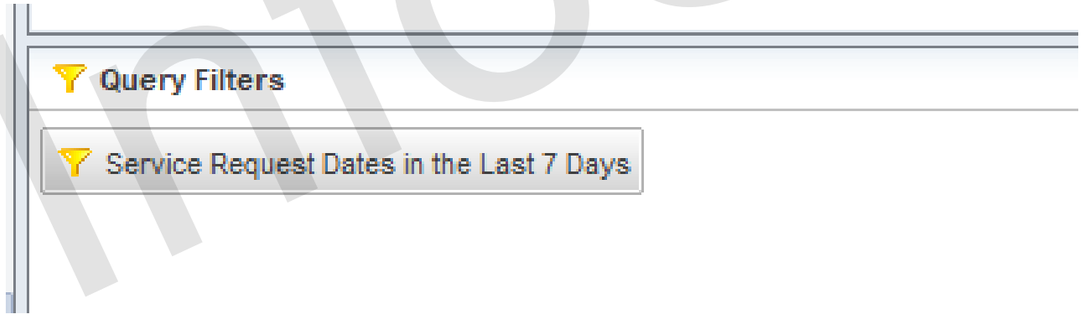
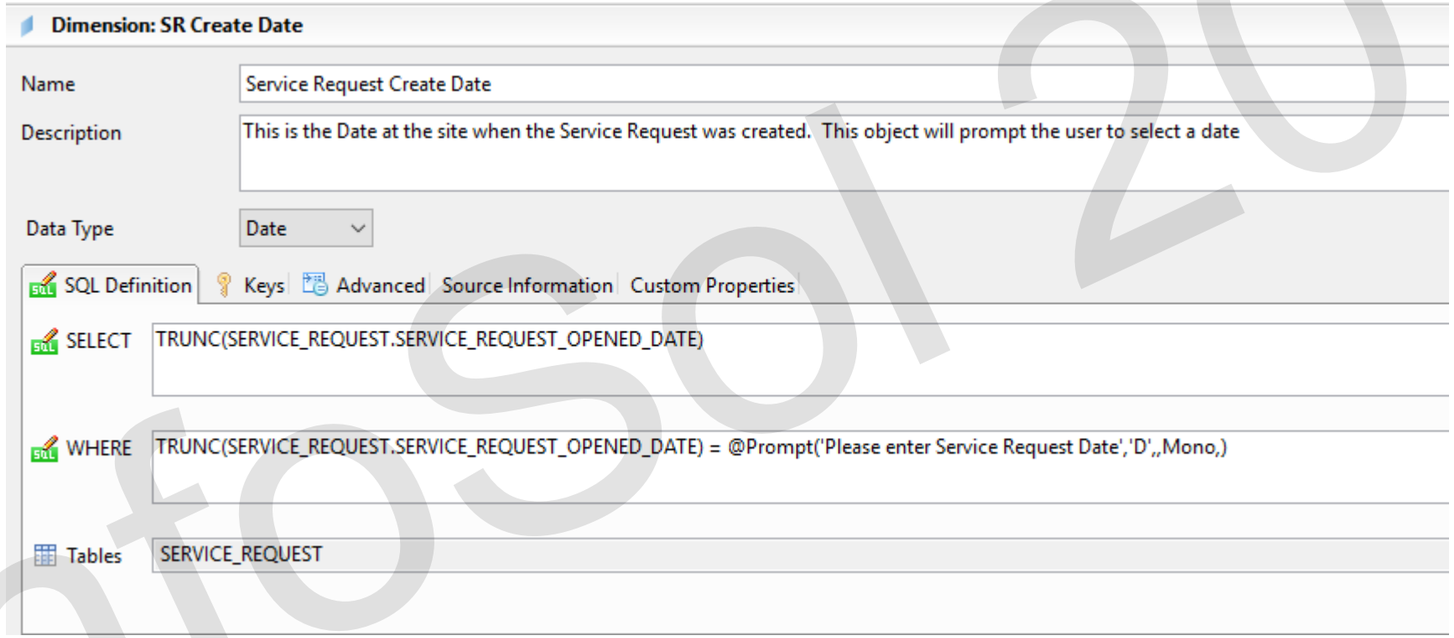
UNIVERSE FILTERING - PREDEFINED QUERY FILTER

- Benefits Continued
  - Creative use
    - Use a case statement
    - Case when @Prompt('Please enter Service Request Date','D',,Mono,) is null then TRUNC(SYSDATE-1) else @Prompt('Please enter Service Request Date','D',,Mono,) end
- Report Usage



UNIVERSE FILTERING - PROMPTED DATE BUILT INTO DATE OBJECT

- Specific to one object



- BENEFITS
  - Forces the user to enter a date or date range depending on how the object is built even if the user forgets to add a query filter
  - Easy for users

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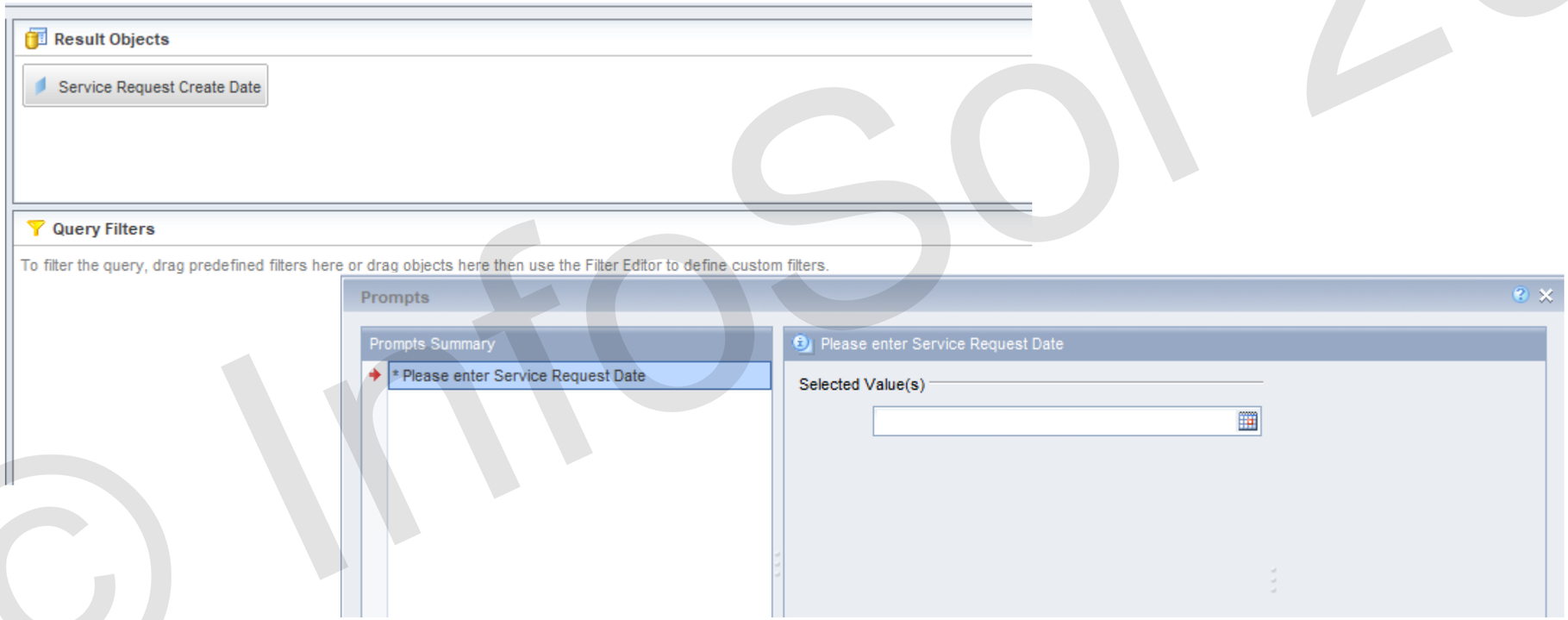
UNIVERSE FILTERING - PROMPTED DATE BUILT INTO DATE OBJECT

- Report Usage
  - Even without query filter will prompt the user to enter a date



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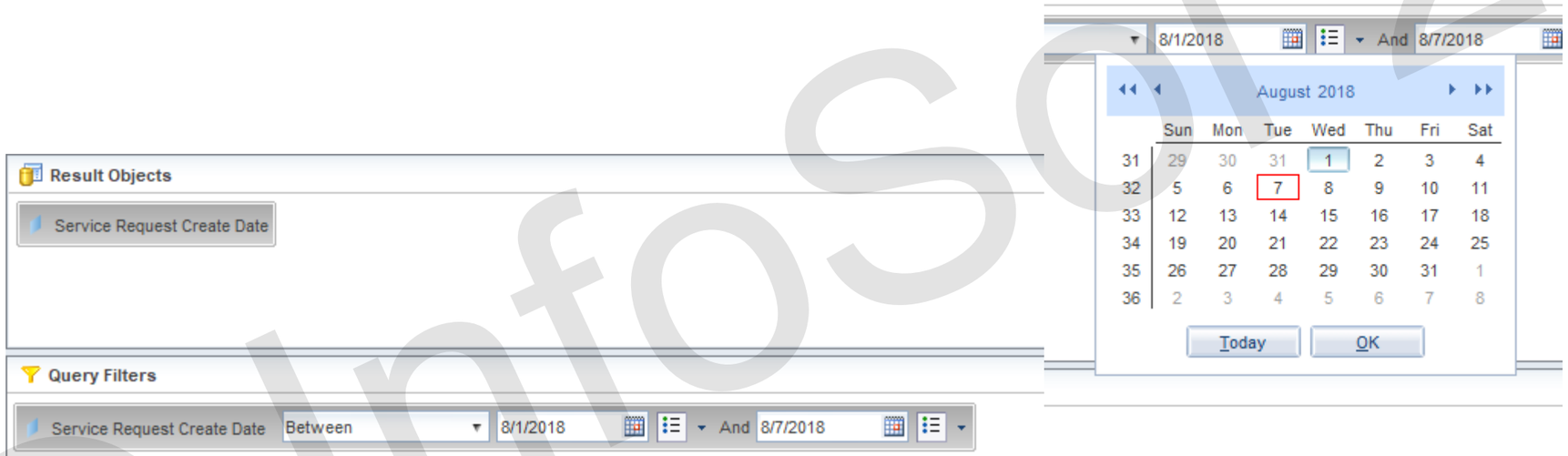
REPORT FILTERING – HARD CODED DATES

- I never recommend hard coding dates, but it can be helpful while developing
- Use calendar or just use keyboard



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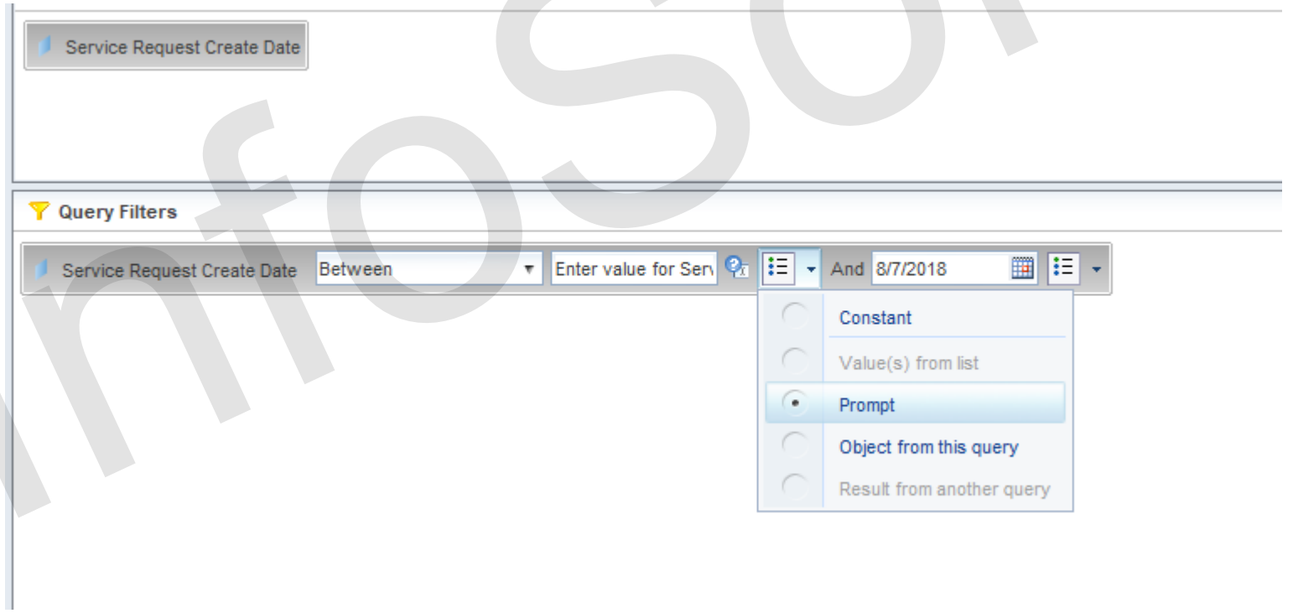
REPORT FILTERING – PROMPTS

- Most flexible (in the world according to Cindy ☺)
- InfoBurst
  - Create macros for scheduling but have the ability to run for any period



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DATE – MISCELLANEOUS ITEMS

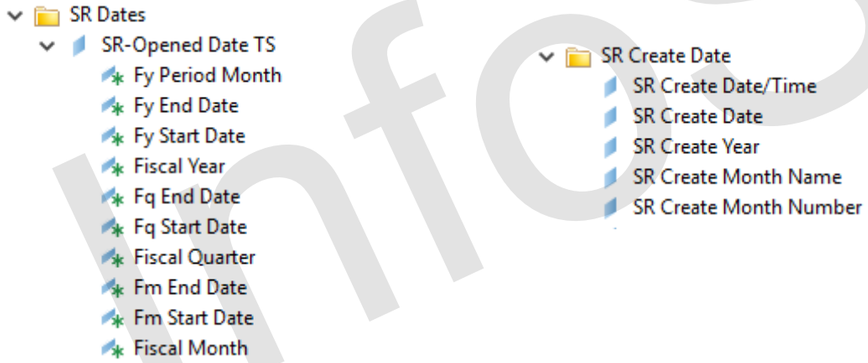
- Between vs. >= and <
  - Date between 7/1/2018 and 7/31/2018
    - Date Time Field
      - Between 7/1/2018 12:00:00 AM and 7/31/2018 12:00:00 AM
      - >= 7/1/2018 12:00:00 AM and < 8/1/2018 12:00:00 AM
    - Date Field Trunc (Date Time Field)
      - Between 7/1/2018 and 7/31/2018
      - >= 7/1/2018 12:00:00 AM and < 8/1/2018 12:00:00 AM

DATE – MISCELLANEOUS ITEMS

- Date Indexing
  - Work with your DBA
  - Assure commonly used date fields are indexed
  - Important to index how it's used
    - Trunc(SERVICE_REQUEST.SERVICE_REQUEST_OPENED_DATE)

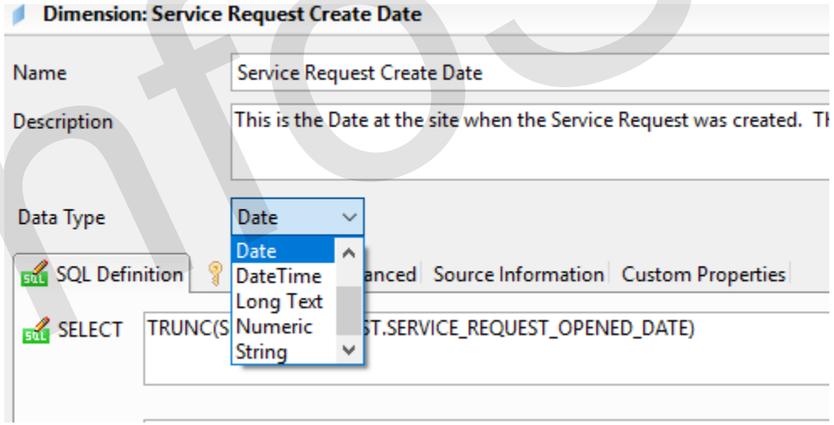
DATE, DIMENSION VS. DETAIL

- Main date objects will always be dimensions
- For ancillary objects (year, quarter, etc.), they can either be a dimension or detail
  - Review - Details give more information about a dimension
- Why would we use one over another?



DATE TIME VS. DATE

- With the release of 4.0, SAP added a new Data Type
- Prior to 4.0, we only had Date
- Now, we have both Date and Date/Time
- It is important to select the correct one, or you will get an error when used in a report



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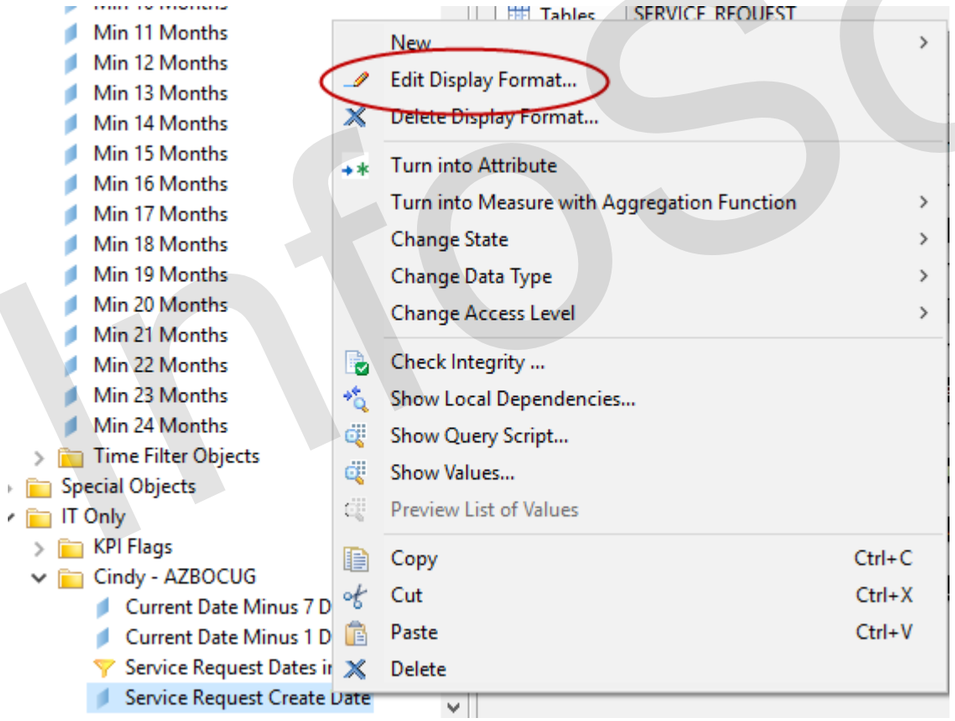
DATE FORMATTING IN THE UNIVERSE

- You can format dates in the universe
- Eliminate need to format on the reports
- Right click on the object and select Edit Display Format



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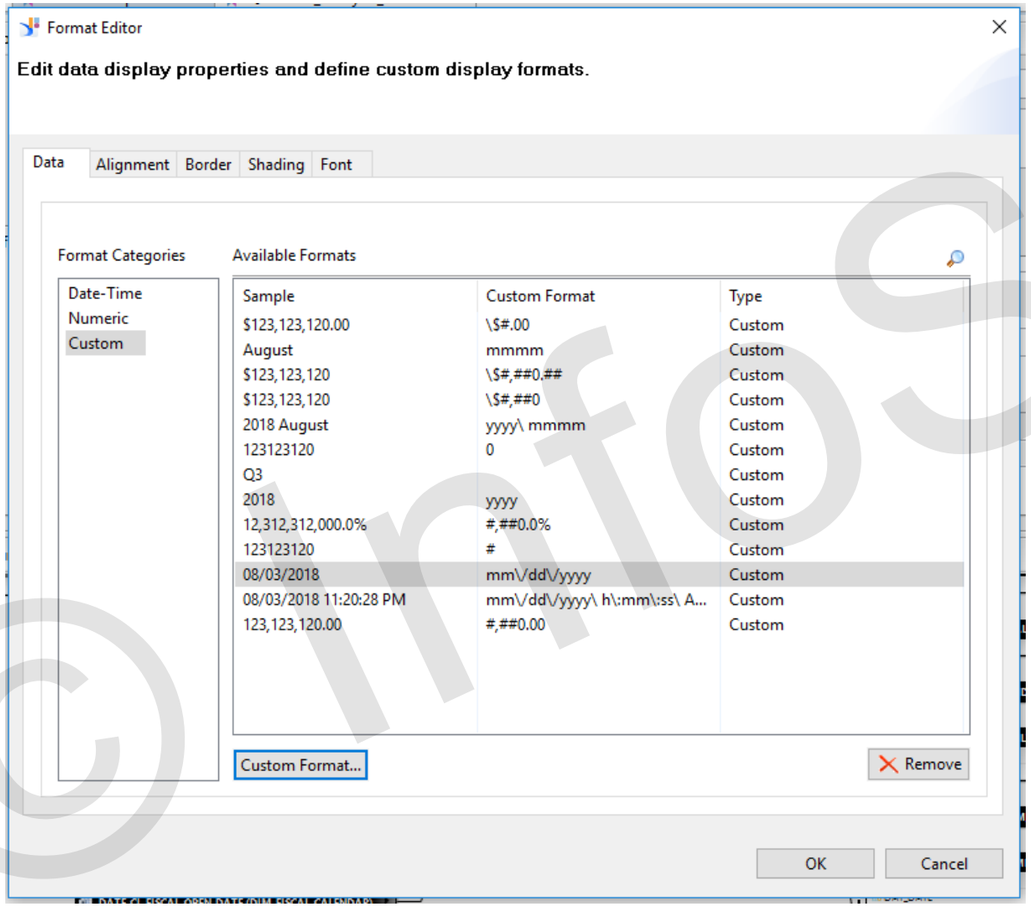
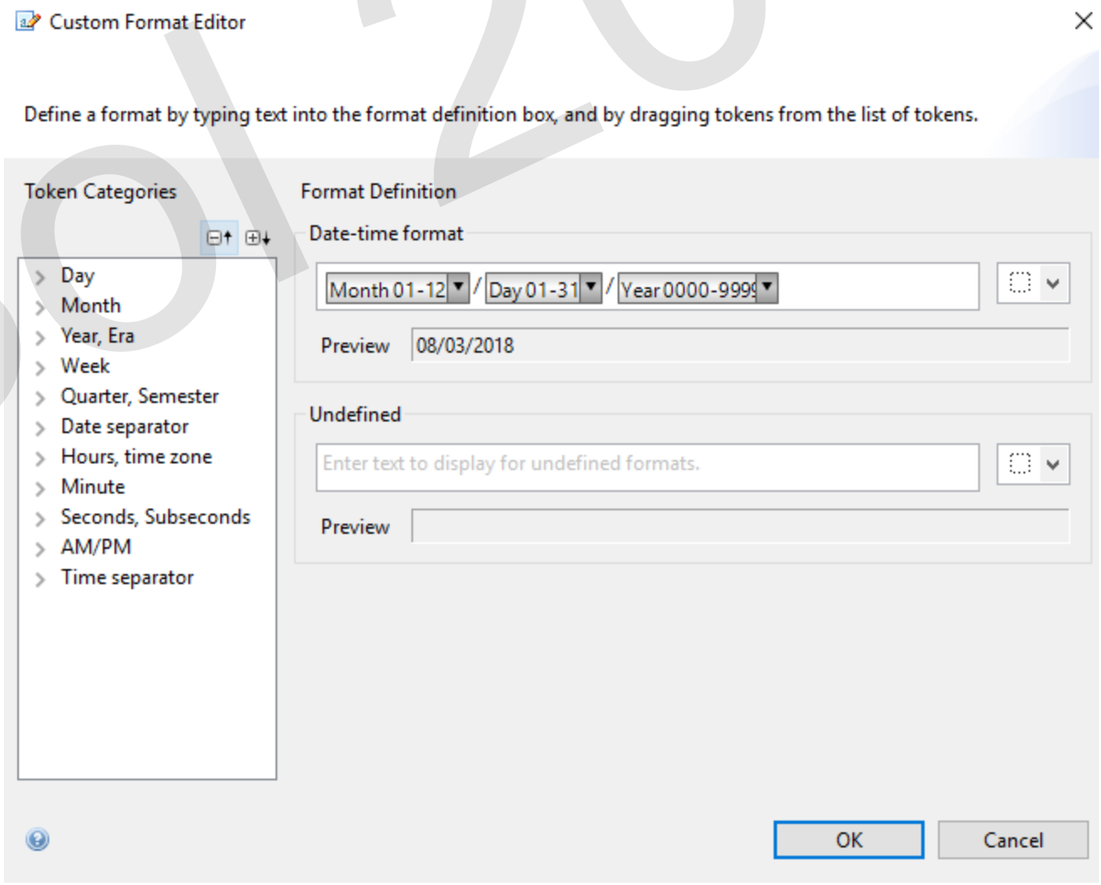
DATE FORMATTING IN THE UNIVERSE - CONT'D

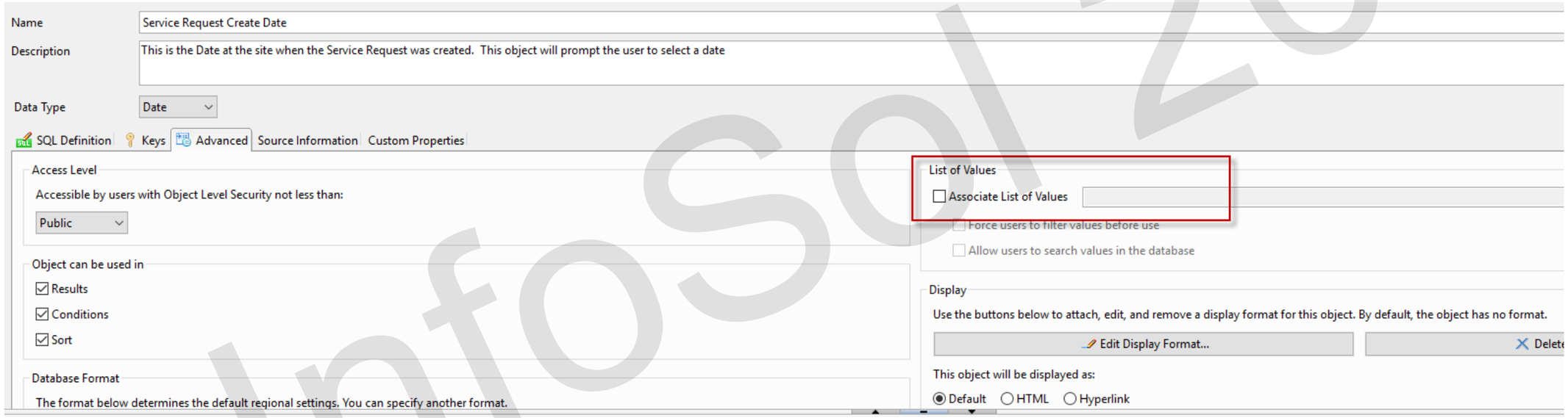
- Either select one of the predefined formats or create a custom format





DATES – LIST OF VALUES

- Never allow a list of values on a date object in the universe



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Questions?

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