



Vertex

# Synapse Bootcamp

Module 3

Exploring and Filtering Data

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# Objectives

- Understand the Synapse Explore feature
- Use Explore in Tabular mode to examine data
- Use Explore in Force Graph mode to examine data
- Use the pivot menu to view connected data
- Filter your display using column filters
- Downselect results using the select and query menus



# Exploring Data in Synapse



# Exploring in Synapse

- The **Explore** feature allows you to navigate data in Synapse
- Synapse's data model represents:
  - Objects (**nodes**)
  - Their **connections** or relationships in the real world
- **Explore** allows you to see **all** the connections
  - Regardless of **how** they're connected
- View connections you expect
  - FQDN to DNS A to IPv4
- **Discover** connections you didn't know about
  - "This email used for phishing is also the technical contact for a netblock in Belarus"



# Explore Demo



# The Pivot Menu



# Using the Pivot Menu

- The **Explore** button shows you **all** connections
- The **pivot** menu shows you a **particular** connection
  - Focus your navigation more narrowly
- Allows you to view:
  - Related nodes
    - “Pivot from a DNS A record to its associated IPv4 address”
  - Nodes that share a property value
    - “Pivot from a file to all files with the same imphash value”



# Pivot Menu Demo





# Filtering Data in Synapse



# Filtering

- When you **filter** data, you take a set of results and "reduce" it
  - **Include** (keep) the things you want
  - **Exclude** (remove) the things you don't care about
- Two ways to filter in the Synapse UI
  - Column filters
  - Menu options (query, select)



# Column Filters

- Limit or focus your **display**
  - Results don't **change** - some are simply **hidden**

The screenshot shows a data table with a column header ':dns:rev' and an upward arrow icon. The table contains four rows, all with the value 'tfs2480.sipnav.in'. A dropdown menu is open over the table, showing a search bar and a list of filter options. The dropdown menu has a search bar with the text 'Search' and a magnifying glass icon. Below the search bar, there is a checkbox labeled '5 values' and '4 selected', and a 'Reset all' button. The list of filter options includes:

- ☒ <not set> (32)
- ☒ h176-227-195-36.host.redstation.co.uk(1)
- ☒ io.uu3.net (1)
- ☐ sink-1.virustracker (3)
- ☒ tfs2480.sipnav.in (12)



# Menu "Filters"

- **Change** the focus of your analysis / results
- Menu options allow you to:
  - Easily run a **new** query
  - "Restart" your navigation from the data that interests you
- **query** menu
- **select** menu



# Filtering Demo



# Summary

- Synapse's **Explore** feature allows you to easily view "connected" nodes
  - Examine data and relationships
  - See **all** connections
- Navigate more specific connections using the pivot menu
  - Pivot on a selected property, while maintaining breadcrumbs
- The query menu allows you to:
  - **Filter** existing results by resetting your query
  - Remove breadcrumbs and start over
  - The select menus help you choose nodes to query
- **Column filters** allow you to filter your display
  - Combine with pivot and / or query for flexible navigation