Introduction

You can explore MITRE Shield data frames as you usually analyze data, but the power reside in relations. Let's try to visualize the hole graph with a ShinyApp... let's call it: MITRExplorer.

MITRExplorer

This is as Proof Of Concept project to provide an exploration tool for MITRE data sets.

Try to build your own MITRExplorer app using the following code for ui and server.

ui.R

```
# library(shiny)
# library(visNetwork)
# # Define UI for application that draws a histogram
# shinyUI(fluidPage(
#
     # Application title
     titlePanel("MITRE Shield Explorer"),
#
     # Show a plot of the generated distribution
#
#
     mainPanel(
#
         visNetworkOutput("shieldnetwork")
#
# ))
```

server.R

```
# library(shiny)
# library(mitre)
# library(visNetwork)
#
# mitredata <- mitre::getLatestDataSet()
# shieldnet <- mitredata$standards$shield$shieldnet
#
# shinyServer(function(input, output) {
#
# output$shieldnetwork <- renderVisNetwork({
# ggnet <- visNetwork(nodes = shieldnet$nodes,
# edges = shieldnet$edges)
# ggnet %>%
```

```
# visOptions(highlightNearest = TRUE, nodesIdSelection = TRUE) %>%
# visLayout(randomSeed = 123)
# })
# })
```

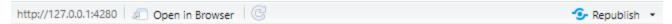
Run MITRExplorer

Open RStudio, check your working directory and run the app.

```
# shiny::runApp()
```

Main explorer

The package vis Network does the magic:

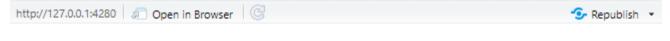


MITRE Shield Explorer

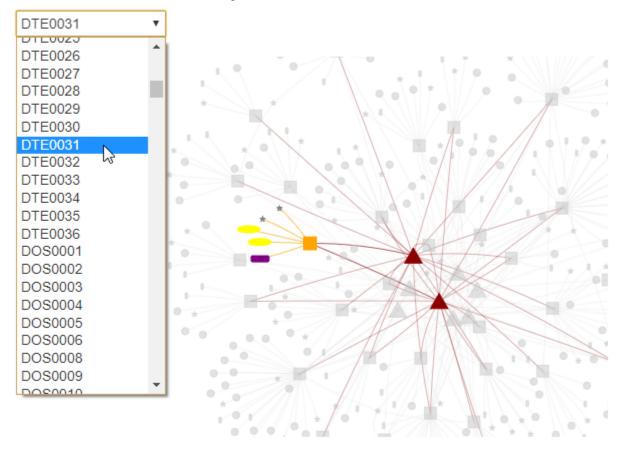


Select objects

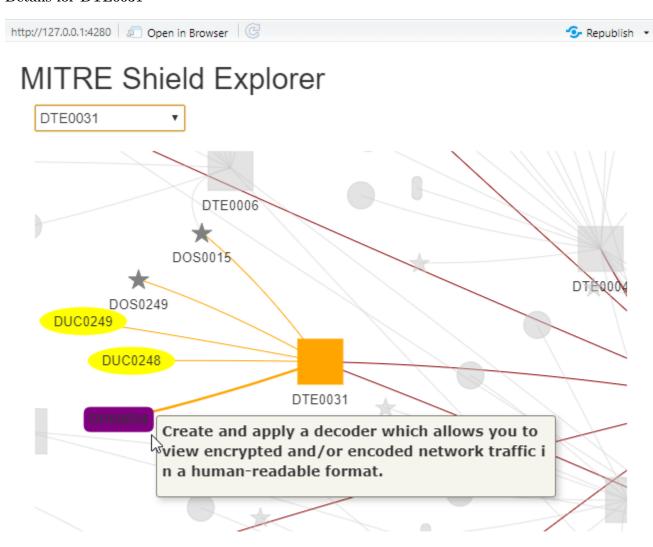
It's possible to interact with the network (zoom in, zoom out, drag object, etc.). Selecting an object will pop up its description and highlight its relations. Try it selecting one object from list or point and click.



MITRE Shield Explorer



Details for DTE0031



MITRExplorer online

 ${\bf MITRExplorer}$