

A complex network diagram with nodes and connections, overlaid with a circular light effect. The nodes are represented by circles of varying sizes and colors (blue, orange, grey) and are interconnected by a web of thin lines. A bright, circular light effect is centered on the left side of the image, creating a gradient from white to blue and purple.

CISSM and WATERFALL analysis

DENEXUS PROJECT

The team of Python Scripts. Automation



Data Source

Description

- CISSM faculty and researchers conduct original, in-depth, interdisciplinary research on global policy challenges. CISSM research focuses on fundamental questions at the root of these challenges and that extend over a long time-horizon

Origin

- Web:
<https://ciissm.umd.edu/cyber-events-database>

Output Format

- Xlsx
- Provided: csv

Source:
CISSM

WATERFALL

Description

- As cyberattacks on critical infrastructure are on the rise, software alone is not able to deliver sufficient protections. Waterfall's unidirectional technology uses an innovative approach, combining unique hardware paired with dedicated software that provides industrial systems with dedicated protection while still allowing remote visibility and remote access.

Attackers are physically restricted with a hardware enforced barrier that stops OT cyberattacks and shields industrial controls from any outside attempts to plant malicious code or any other harmful activity.

Origin

- Web: <https://waterfall-security.com/>

Output Format

- Xlsx
- Provided: csv

The pipeline consists of three main steps: Extract, Transform, and Load. We use Azure Data Factory to automate and manage each step of the pipeline. Integration with Databricks allows efficient processing of the transformed data

PIPELINE Process



ON Prem Testing

- We attempted to run the pipeline locally (on-premise), but the test failed with a 504 error, which means the URL was unavailable. This could be due to network restrictions, access settings, or simply that the external server wasn't responding. Since the website is not under our control, this error is not a significant concern.