

#### Viterbi School of Engineering Information Sciences Institute

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## **CHALLENGE**

- Ad hoc cybersecurity experimentation severely retards scientific progress
- Use of one-off, painstaking, and error-prone processes; not shared for reuse and validation
- Lack of repeatable, reproducible, and reusable processes and other artifacts

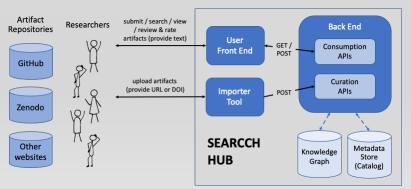
## **APPROACH**

#### **SEARCCH Stores Artifact Metadata**

- SEARCCH does not store artifacts directly, rather it stores a rich metadata representation of artifacts
- Enables researchers to quickly find relevant artifacts and access them in their native locations

#### **High-level Architecture**

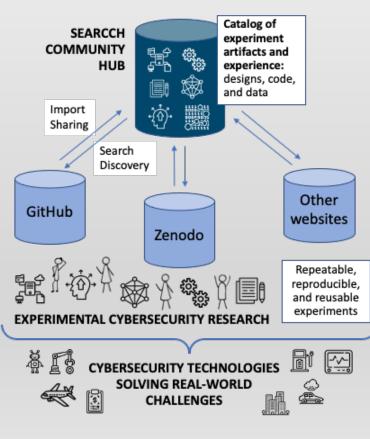
 SEARCCH is comprised of a front end and an importer tool which enable users to interact with a back end that supports consumption and curation of artifacts via a knowledge graph and the metadata store



#### SEARCCH COMMUNITY HUB

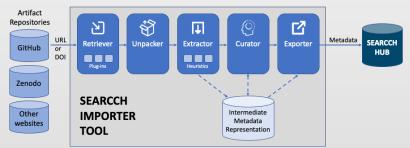
Community-driven platform that lowers the barrier to sharing and reusing research artifacts

- Sharing artifacts though web interface and "importer"
- Discovering artifacts with smart search capability
- Exchanging experiences via reviews and ratings



# **IMPORTER TOOL**

- Python application partially automates task of creating metadata that describes an artifact
- · Allows manual editing of metadata prior to export



## **HUB FEATURES & CAPABILITIES**

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- Submit artifact
- Search artifacts
- View artifacts
- Review & rate artifacts
- Best Practices FAO

Favorite artifacts

Manage Account

# INVITATION TO ACSAC COMMUNITY

- Actively participate in planned SEARCCH community engagement activities
- Contribute and make use of experiment expertise and artifacts in the SEARCCH hub

## FOR MORE INFORMATION

https://searcch.cyberexperimentation.org/, @SEARCCH Hub

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