Create Workflows of Tools/Simulators

Object Curation

- The Ephemerol Internet
- OCCAM

Software is replicated and exchanged among OCCAM servers along with metadata describing how to build and run the software object.

External resources (git repos, downloaded files) are archived and can be pulled down from OCCAM instead of the original source. Implementation with Docker.

Configure Simulator/Tool

Within workflows, simulators and other tools are configured and then executed.

Resulting data given to plot tools/visualizers. Actual data points back to the workflow that produced it.

Workflows can be edited, cloned, and re-executed by others.

Run Workflow To Produce Data

Experiments describe the digital objects used in workflows.

Objects are wrapped for first experiment: 2 JSON files plus command line

Data is organized based on user specification (following sim output)

Push Data to Interactive Tools

Experiment Workflows

Example: archive SST Workbench, without modification, to run it on different systems in the future

Provenance

Each change (configuration or input) to an experiment is recorded in a revision history.

Data Links Back to Source

Open Curation and Repeatability for Scientific Artifact Evaluation

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