AnyLogic Simulation Ecosystem

New Modeling Capabilities & Optimization Experiment at Scale

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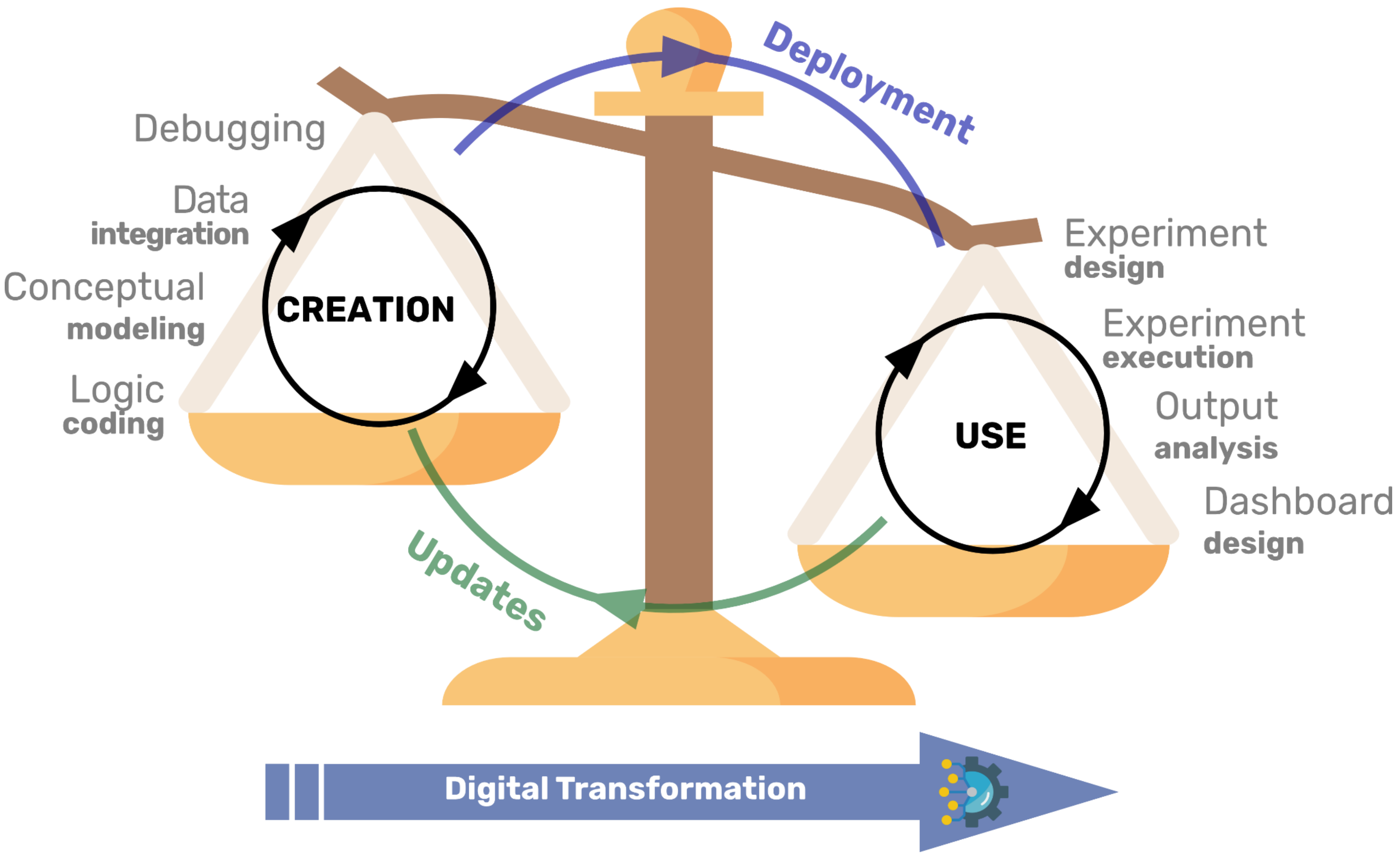
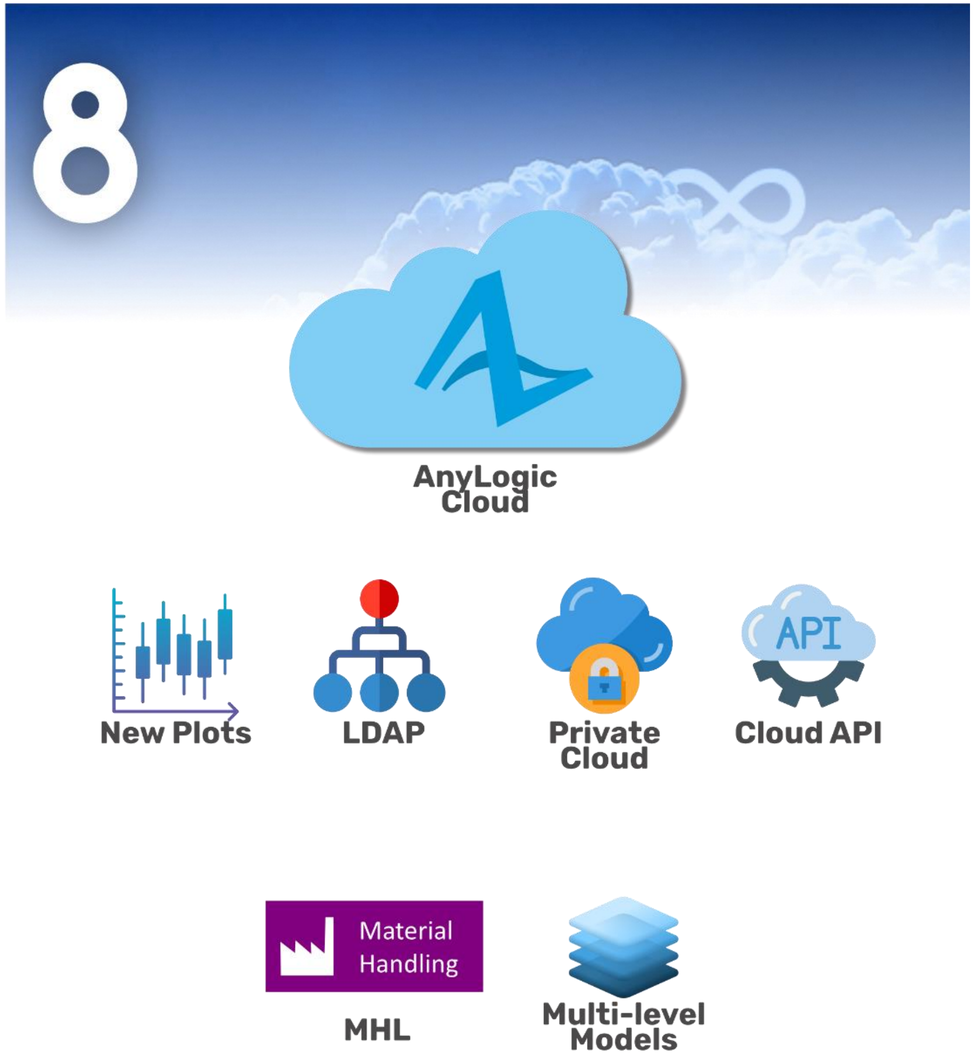
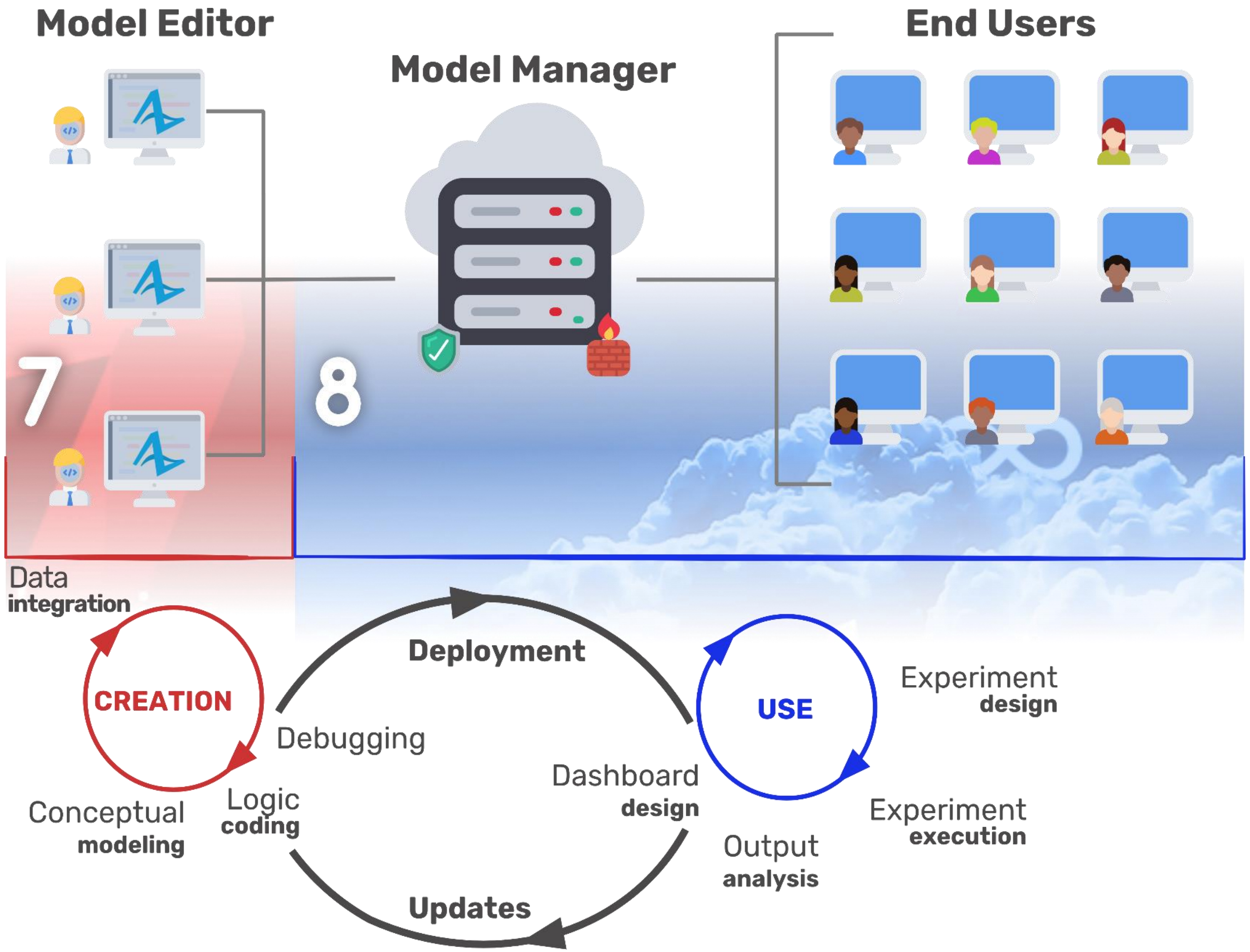
Simulation Lifecycle



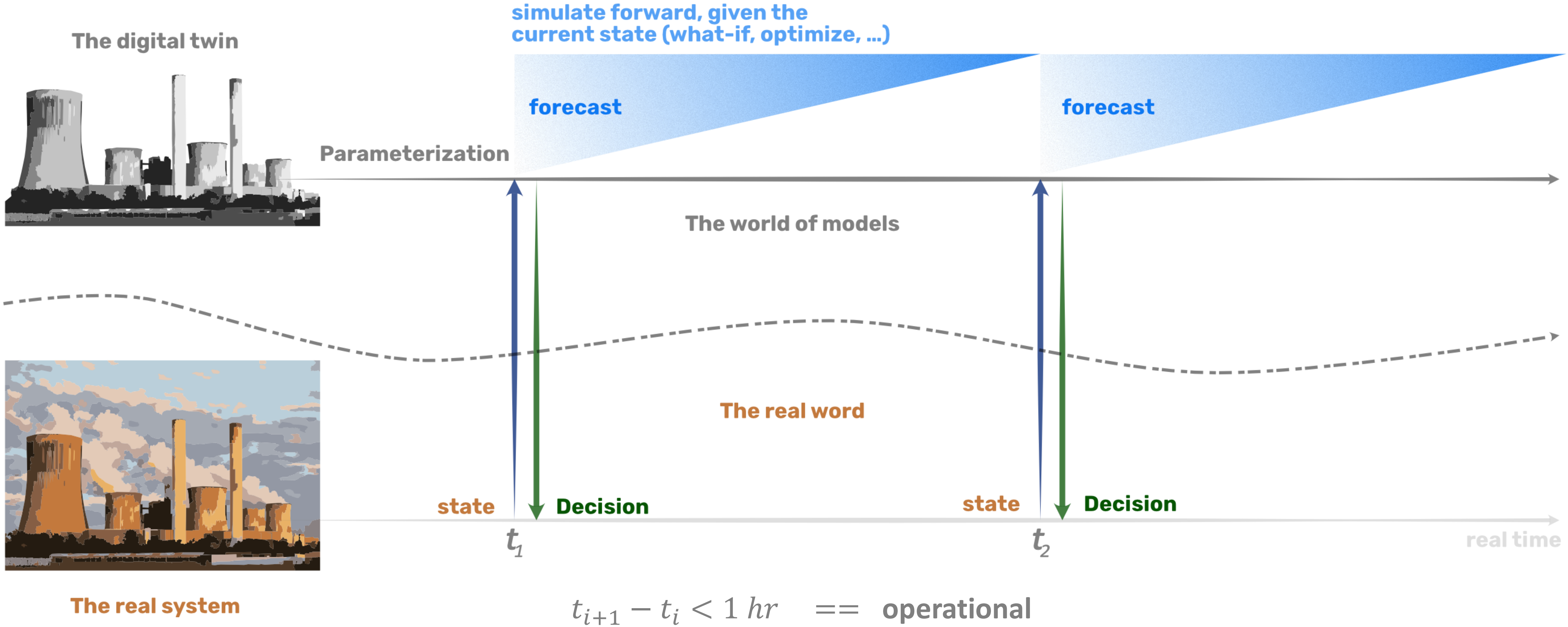
AnyLogic evolution from 7 to 8 – Technology Stack



AnyLogic evolution from 7 to 8 – Lifecycle



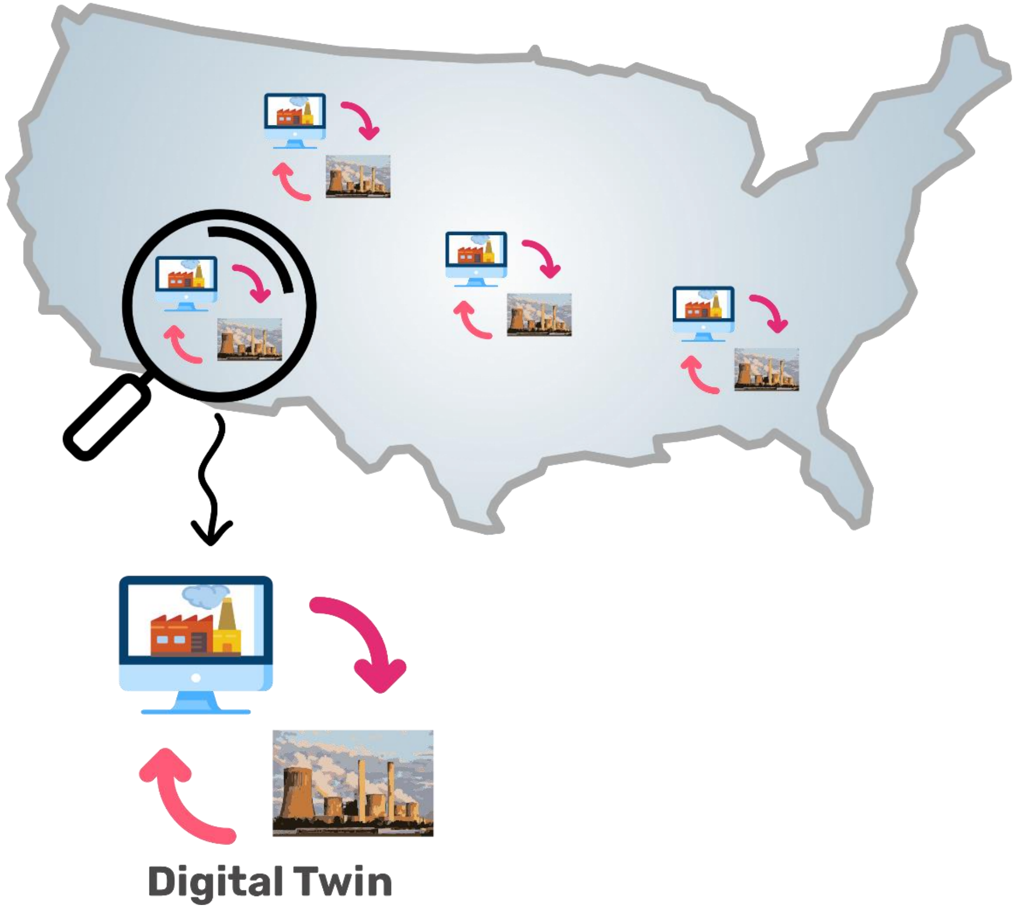
Simulation-Based Digital Twin



$t_{i+1} - t_i < 1\ hr$ == **operational**

$t_{i+1} - t_i > 1\ day$ == **tactical**

Enterprise Simulation – Defining the underlying shift



Enterprise Simulation is a set of deployable/deployed simulation models that are likely to be at operational level and accessible by a large number of stakeholders.

The set is likely comprised of many heterogeneous models with common underlying behavior that are associated with geographically distributed business units.

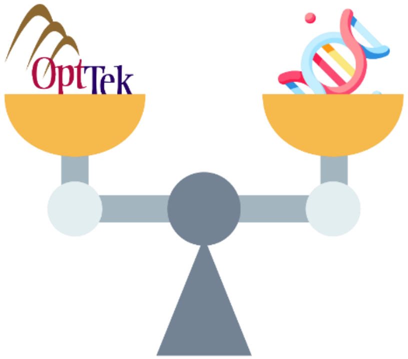
The objective of an Enterprise Simulation is to create many simulation-based digital twins that represents the interconnected nodes or components of a distributed business.

THE AnyLogic COMPANY

Simulation-based optimization (genetic optimization)

Non-Dominated Sorting Genetic Algorithm II (NSGA II)

All Versions [free of charge]



Comparable Results

Optimization Experiment on Server

Simulation-based optimization (genetic optimization)

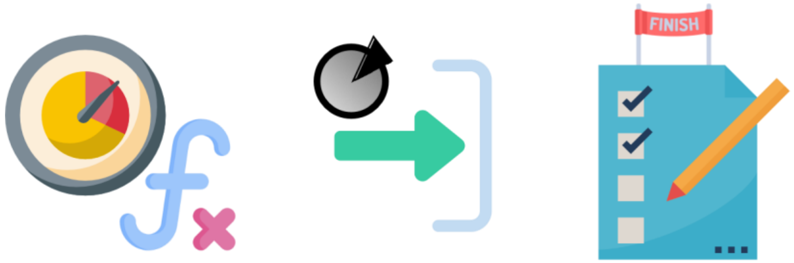
**Optimization
Experiment on Server**

Optimization experiment

- Coming in version 2.4.0

- Two new experiments: Optimization and Optimization With Replications

- Basic functionality – single objective, any number of decision variables, requirements



- The best solution can be played with animation

Roadmap

NOW

2024

2.4.0

- Optimization MVP
- Improved Private Cloud Installer Logging
- Automated collection of diagnostic information in Private Cloud
- Minor bugfix

Optimization Experiment enhancements based on user feedback

All Runs View:

- Integrated table of All Runs in Cloud GUI
- Sort, Filter, and Search capabilities for results
- Scenario management features
- Downloadable run results

Added Podman support in Private Cloud

More Authentication and Authorization Protocols in Private Cloud thank you!