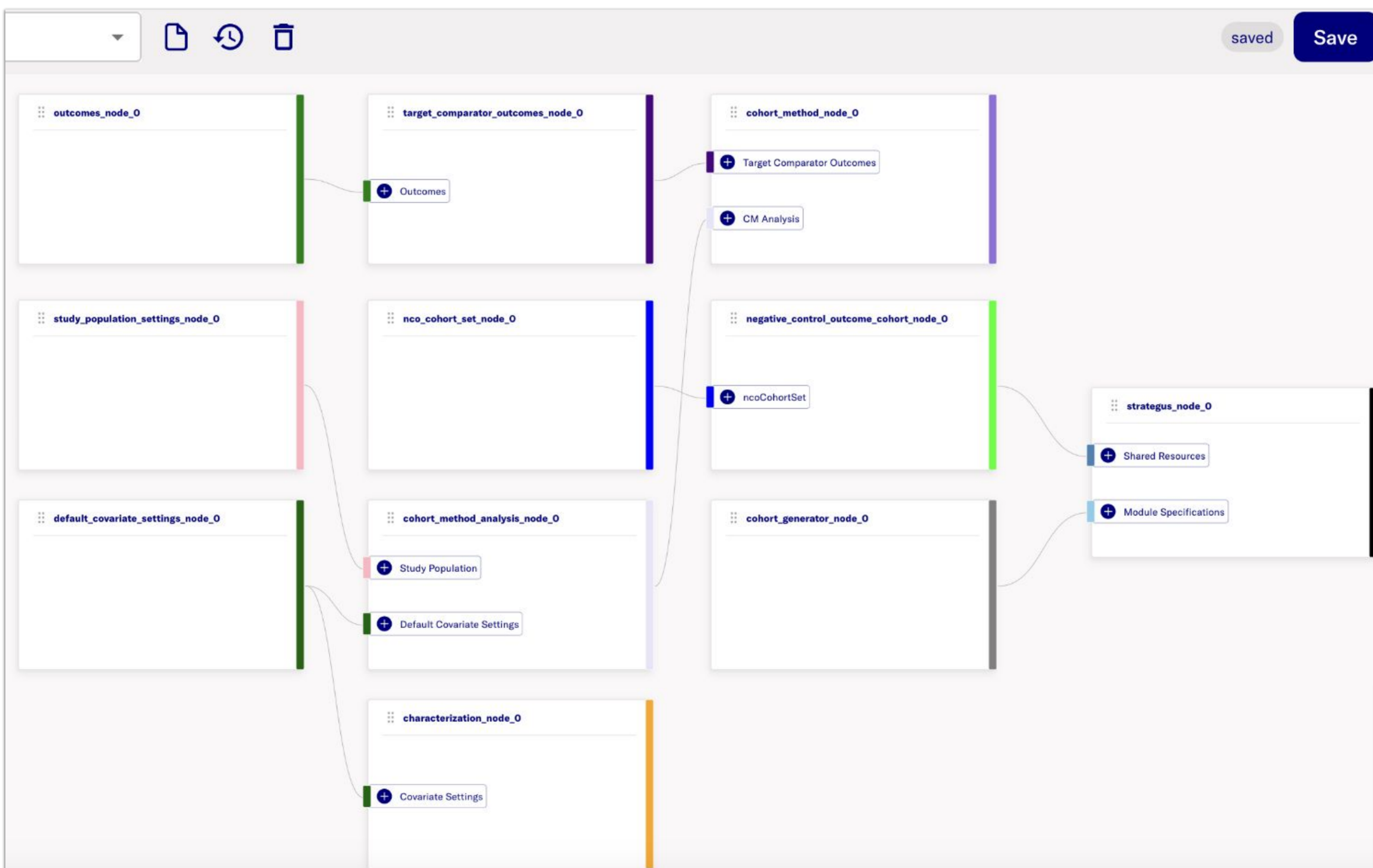


Interactive, drag-drop interface with pre-installed and centralized execution layer for OHDSI network study design and execution

Graphical Interface and Workflow Engine for Strategus

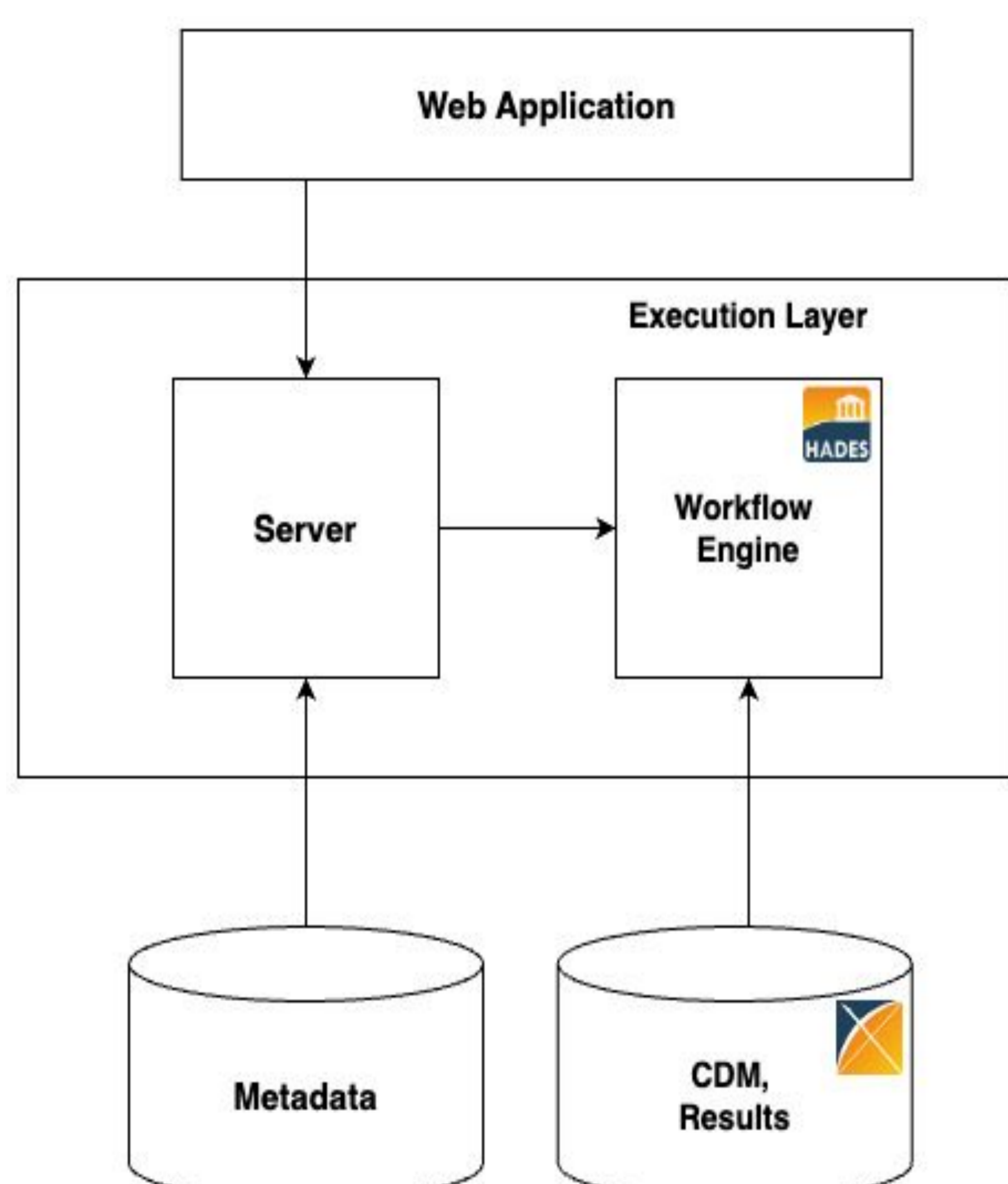
Background: The design and execution of network studies using R packages - Strategus and HADES - require prior knowledge in R programming and technical expertise. This limits participation to technical users only and becomes a barrier for non-technical users who are essential for collaborative research. We have developed a software that includes a user-friendly interface with an interactive drag-and-drop system complementing R packages, and an execution layer with an environment for executing network studies.



The graphical interface with canvas grid and color-coded nodes. Each node contains predefined inputs and adjustable parameters, representing a specific function of a OHDSI HADES package.

The user defines the relationship by drawing edges between nodes based on the color-codes.

Edges characterize the flow of information in the graph - the output of a node serves as an input to another node. In addition, color-codes are a convenient way of visualizing node dependencies and are essential for defining the graph correctly and completely.



The execution layer consists of the Workflow engine and Server. Workflow engine bundles OHDSI R packages such as Strategus and HADES and other dependencies for network study execution and the server is an intermediary between the graphical interface and the workflow engine.

Each node has its own configuration interface to add custom values on the predefined parameters of the analysis. Here as an example the Target Comparator Outcomes Node.

Configure Target Comparator Outcomes Node ✕

Name
target_comparator_outcomes_node

Description
Describe the task of target_comparator_outcome

targetId
4

comparatorId
5

ExcludedCovariateConceptIds
118084 ✕ 1124300 ✕ Enter Excluded Covariate ...

IncludedCovariateConceptIds
Enter Included Covariate Concept ID