

ICT System design automation

AI designs system configuration from system requirement

Features

- AI finds a combination of components and parameters which meets customer requirements
- AI explains the reason why the design is selected

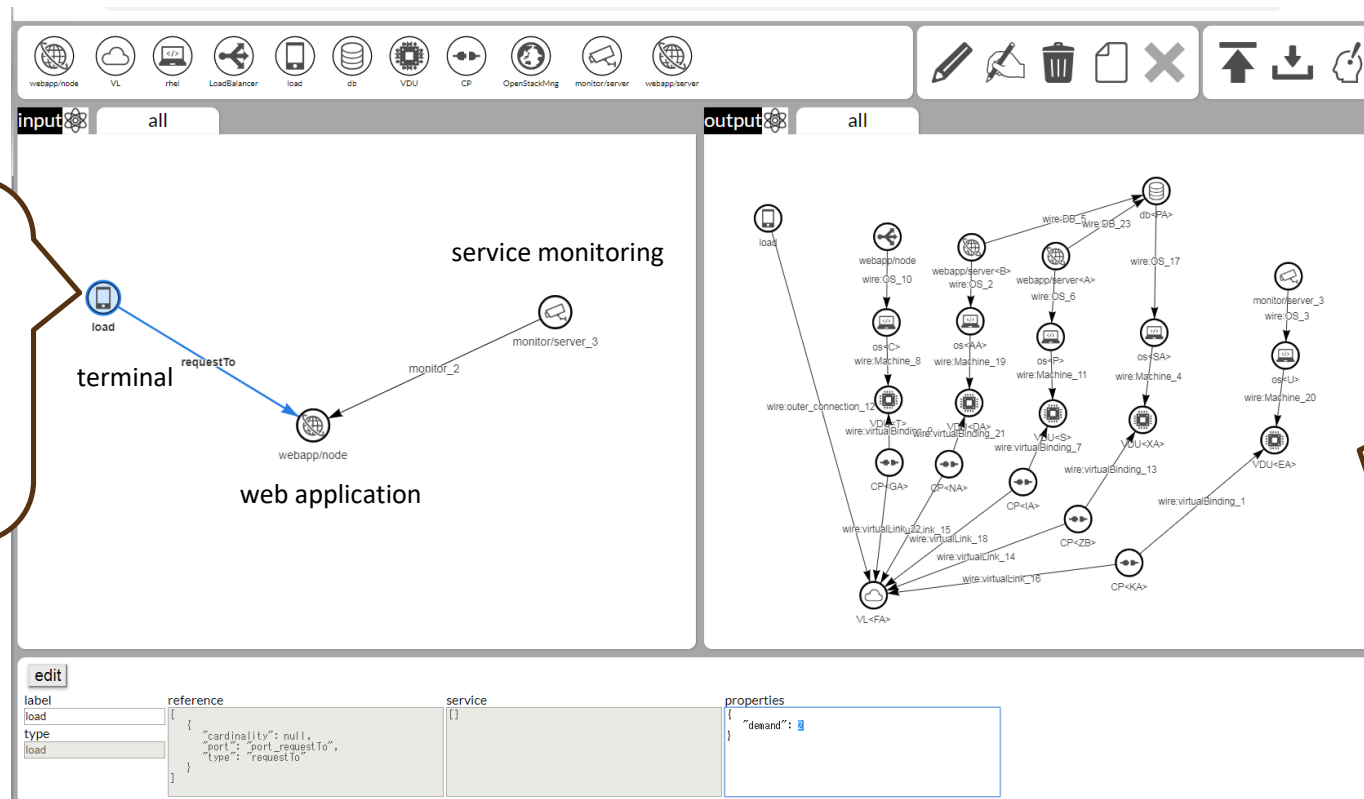
Use-case

- System integration of enterprise ICT system
- Concretizing vague user requirements gradually



Input:
system requirements

Ex.) web application service



Output:

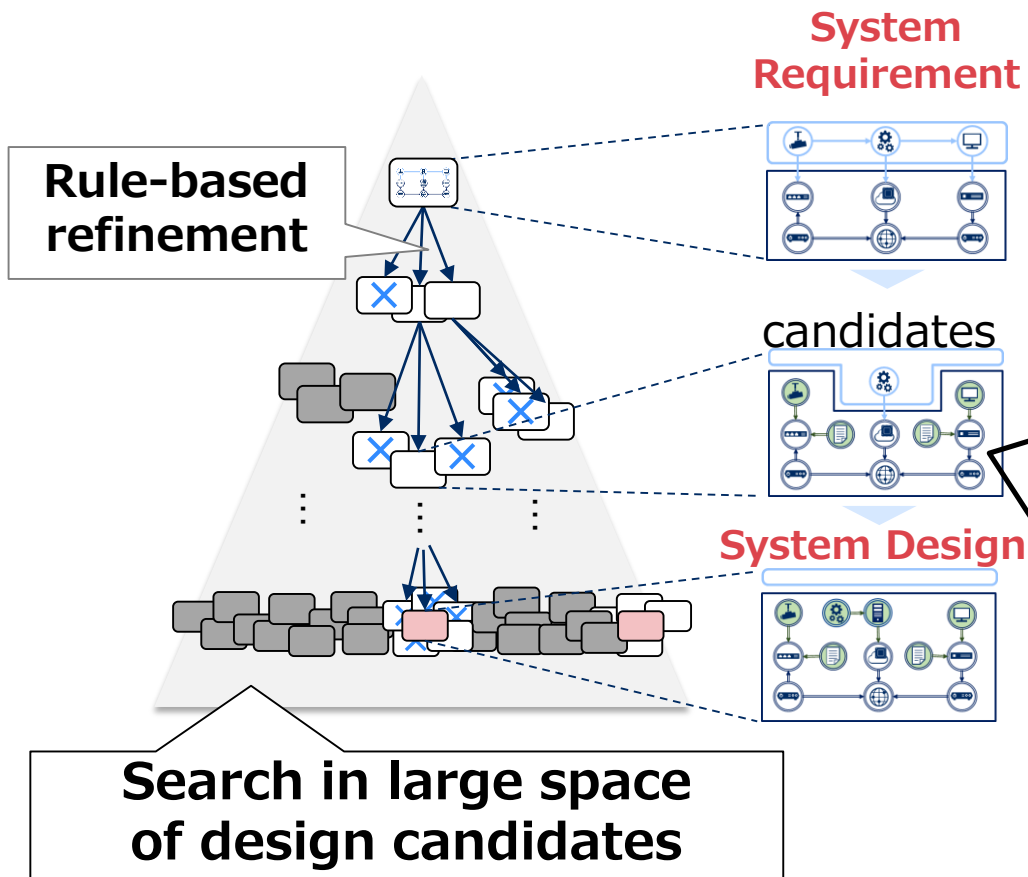
- system configuration which meets customer requirements
- it can be deployed automatically on OpenStack environment

Technologies for design automation

Modeling system designing as search problem and train AI for the search

1. Design by Rule-based Method

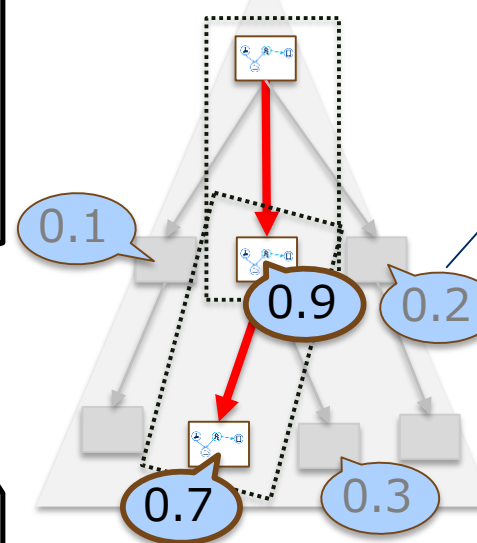
Step-by-step refinements by fine-grained refinement rules



2. ML for Search

Evaluate *promise* degree and choose the most promised branches

Search Tree



[Promise degree]
Possibility to reach appropriate design from each candidate
→ **Learned by machine learning**