

# Dynamic Resource Allocation in Cloud Computing

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# Outline

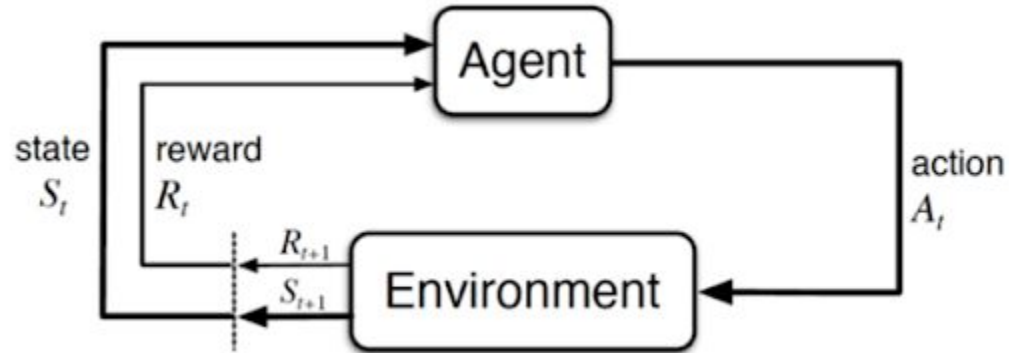
- Describe Problem
- Method
- Why this Method ?
- Basic Terminologies
- Execution Example

# Problem

## Save Energy

- Only Turn On System When User Need it.
- Give Min Resources or Decrease it so for less Energy.

# Method :: Markov Decision Process



# Why MDP ?

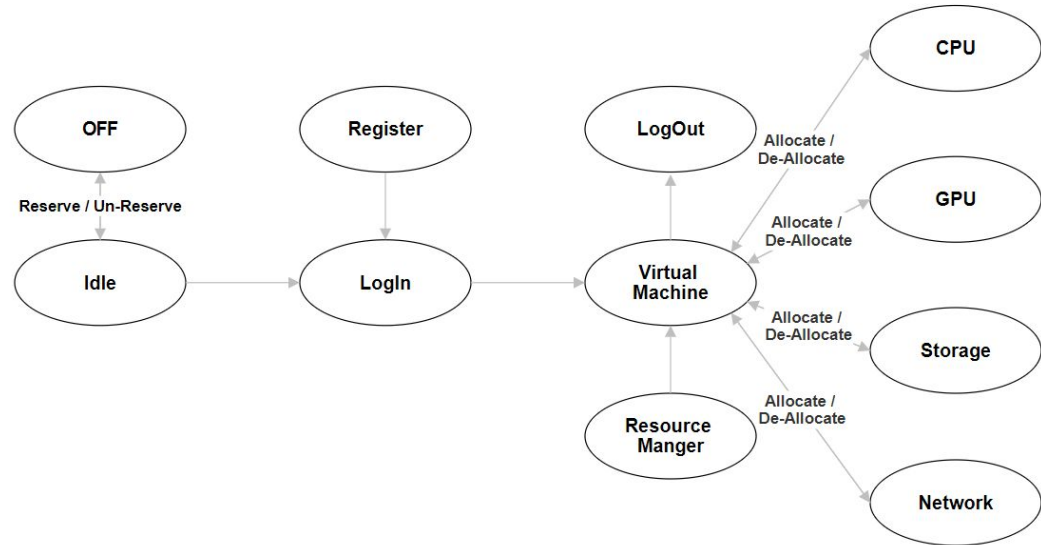
- Finite States
- Finite Actions
- Rewards Maximization
- Optimal Policy Sample Space Small

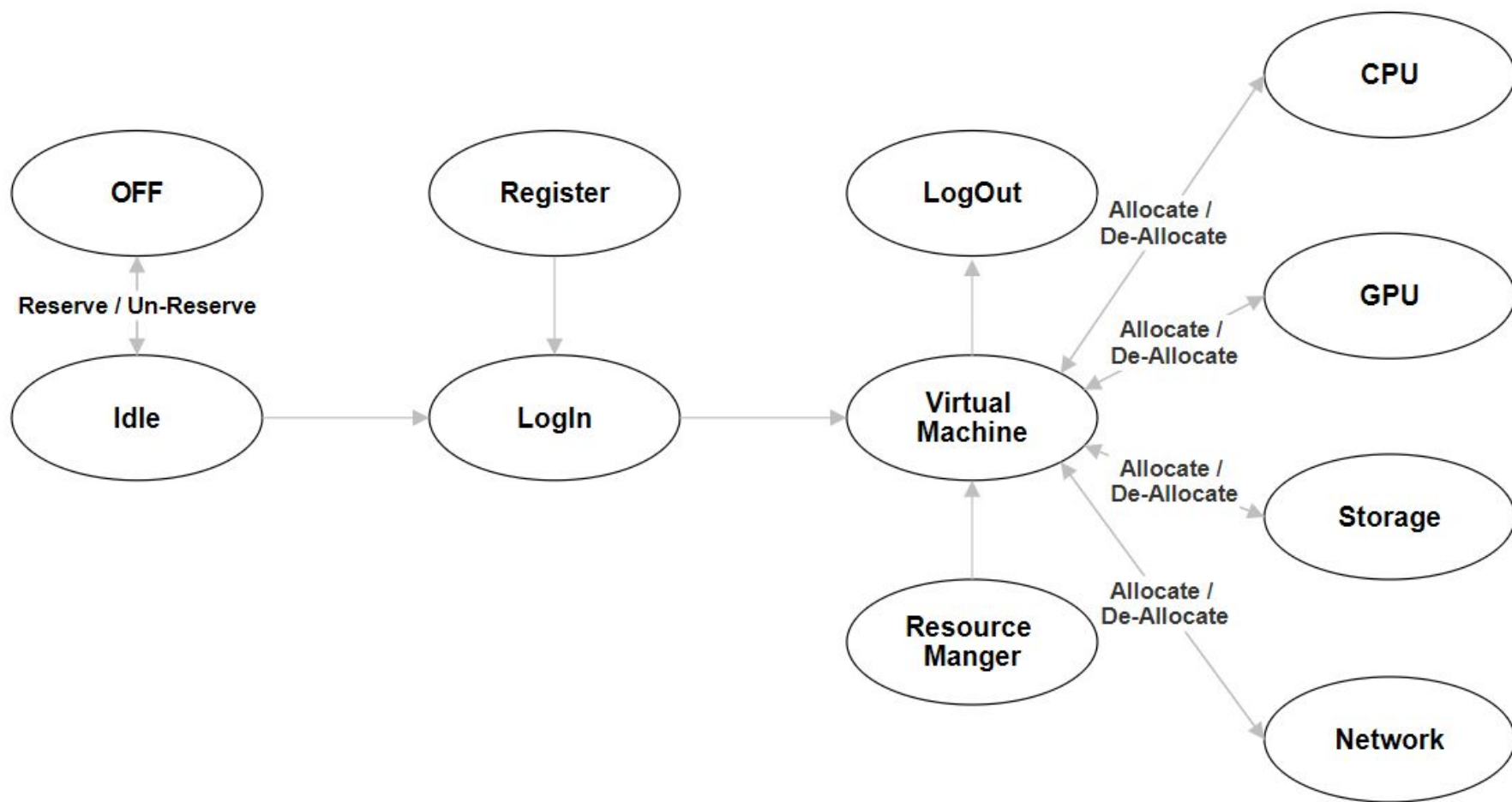
# Basic Terminologies and Execution Example

- States are in Oval
- Actions are on vertex
- One Arrow means

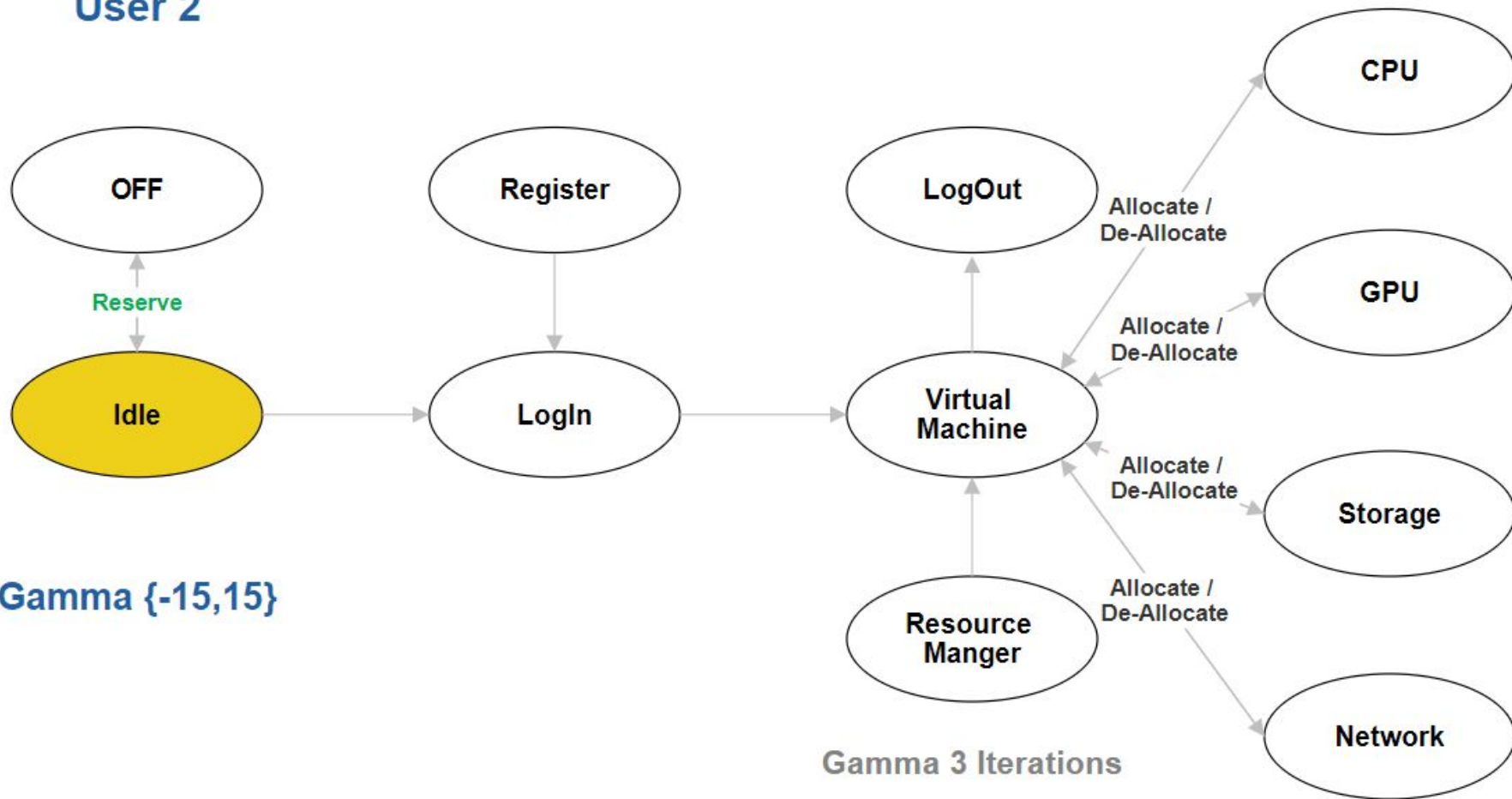
Single Direction

GitHub



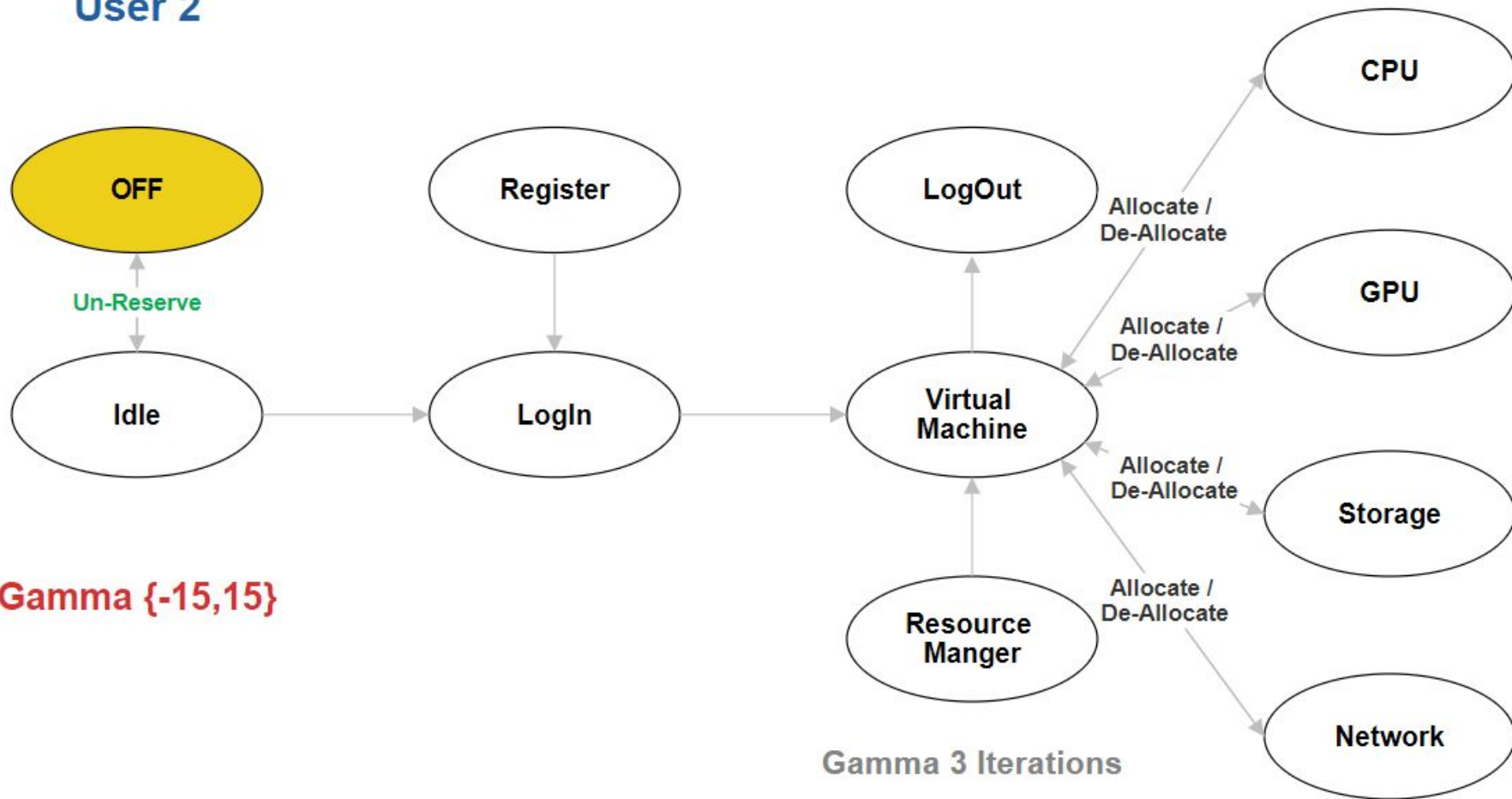


User 2

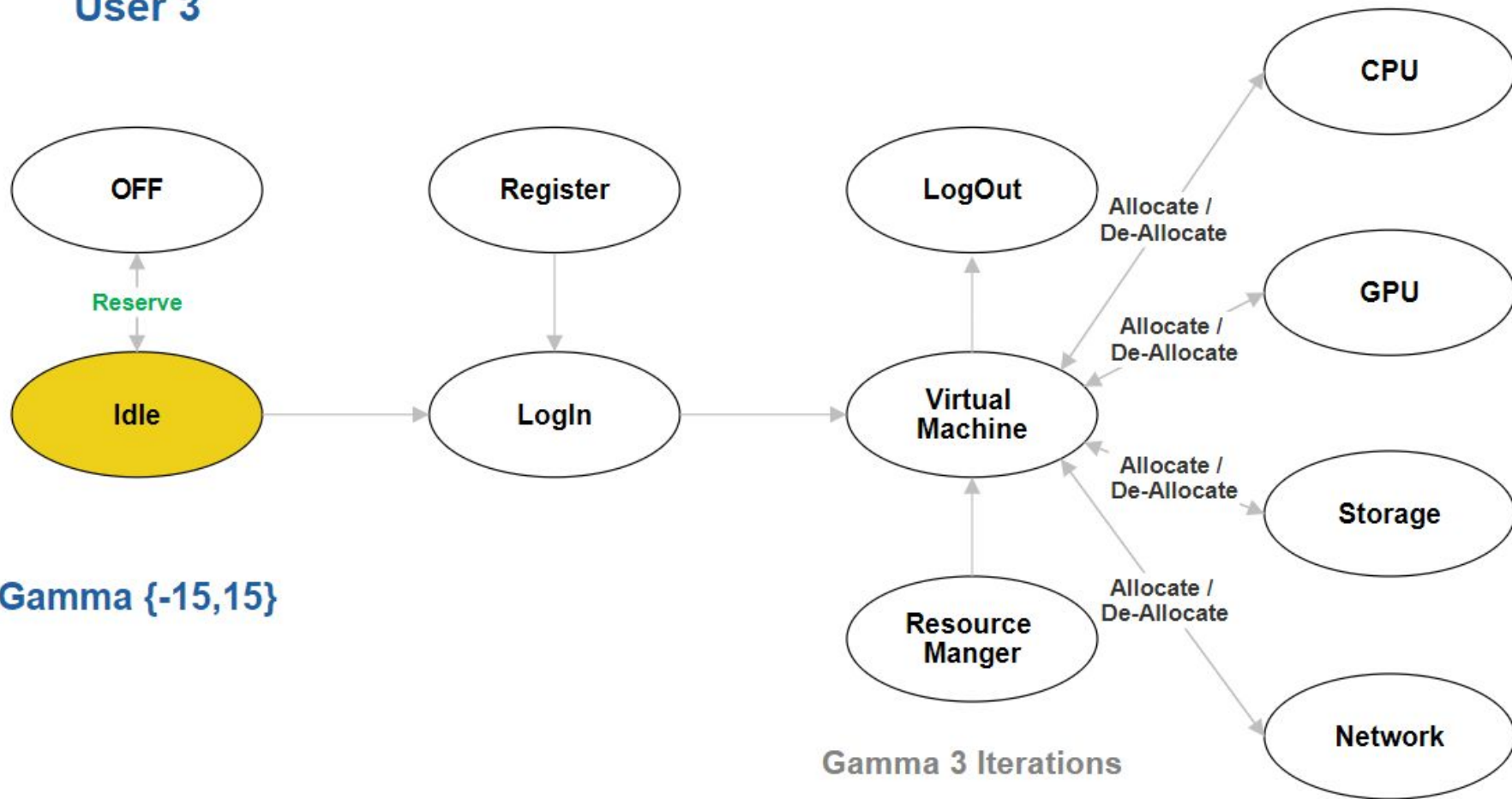




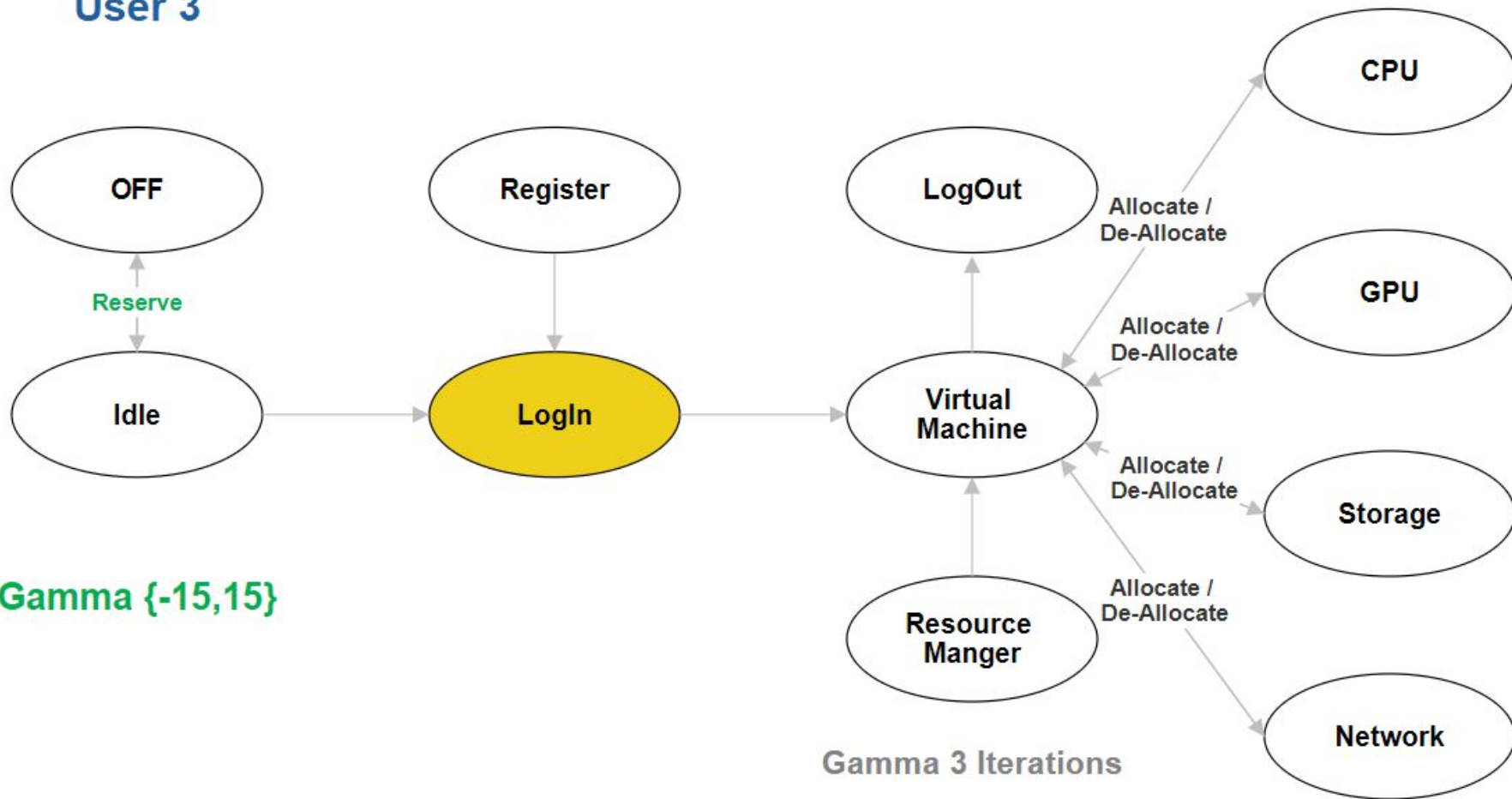
User 2



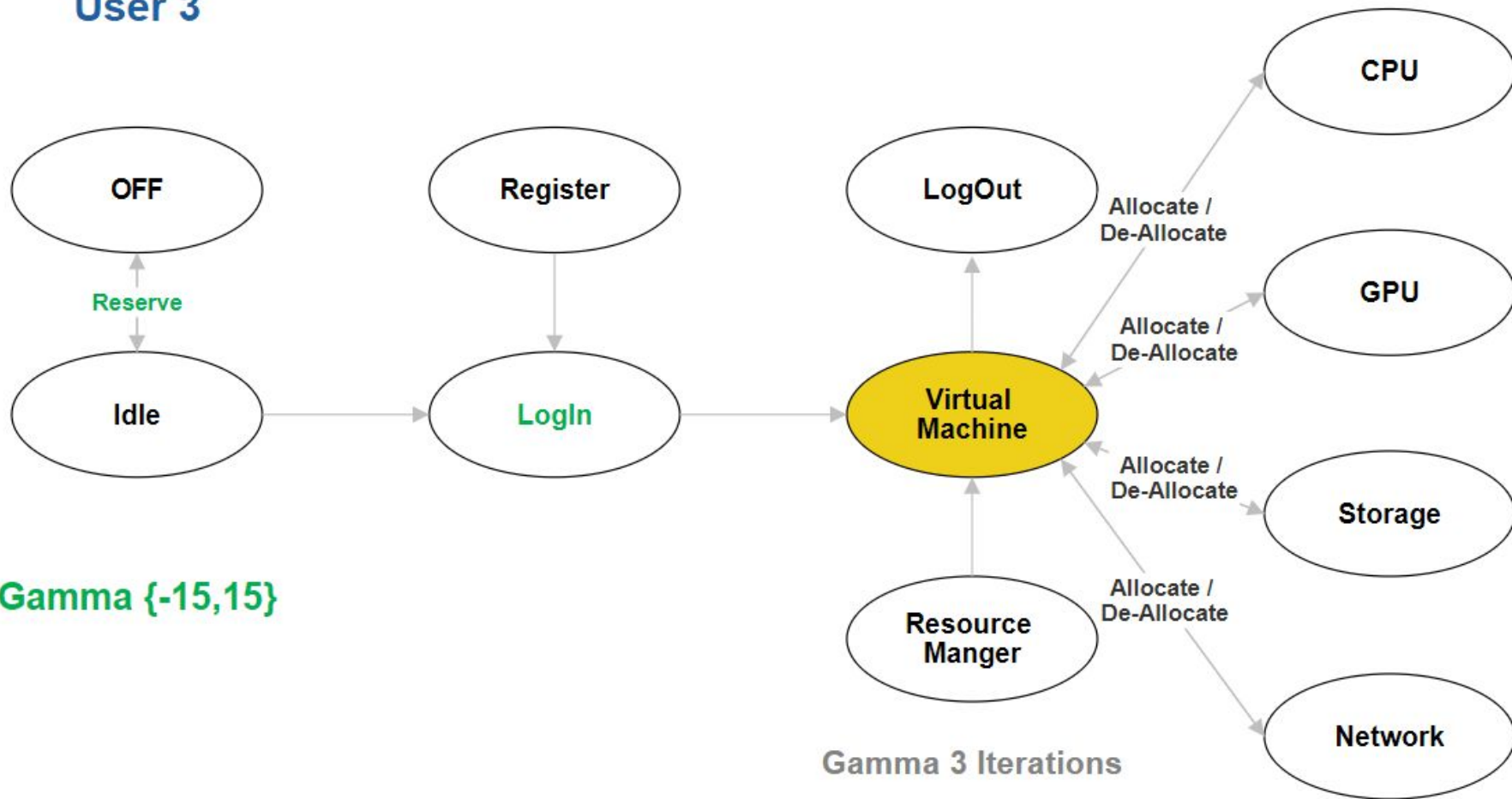
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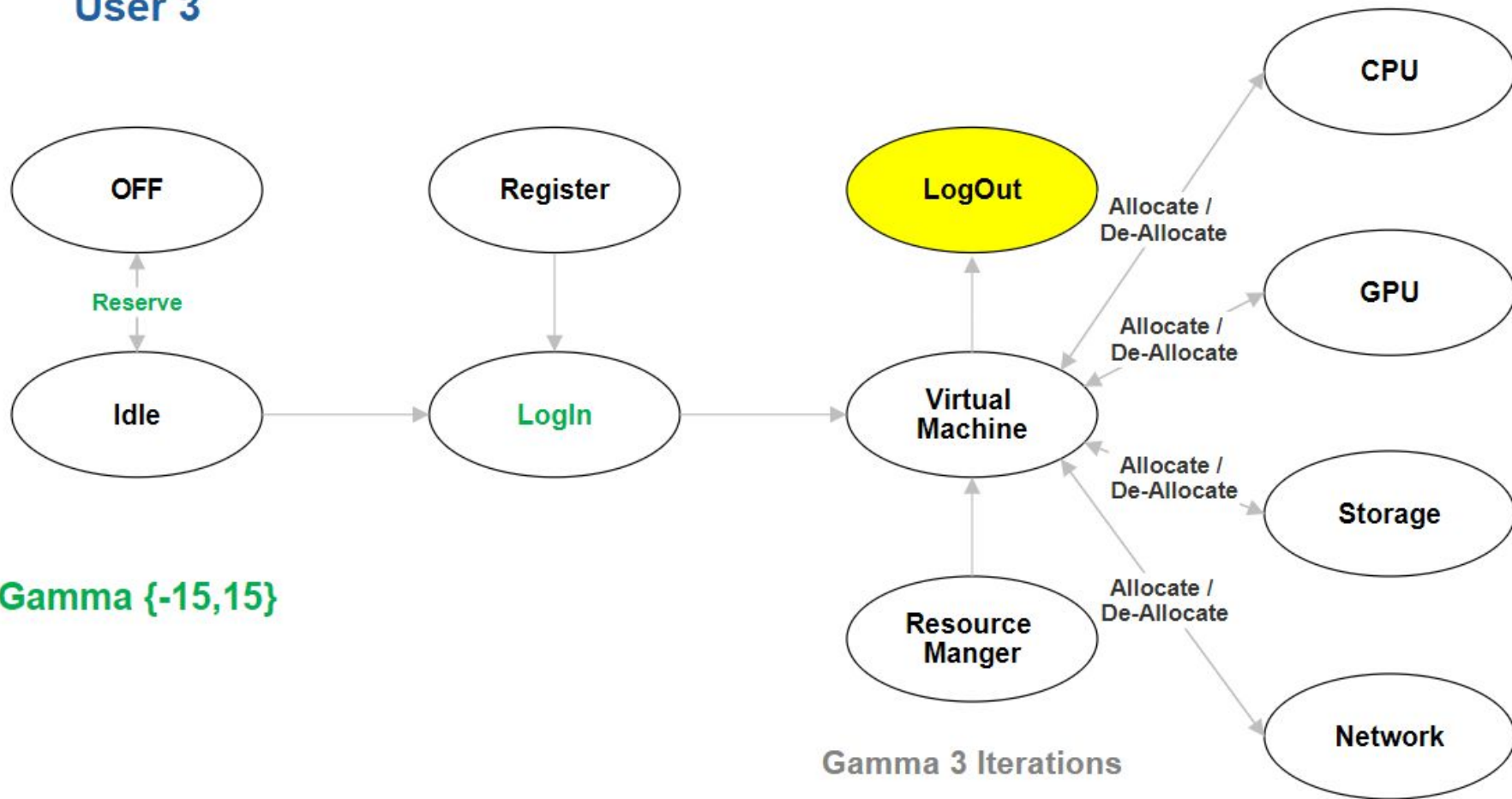
User 3



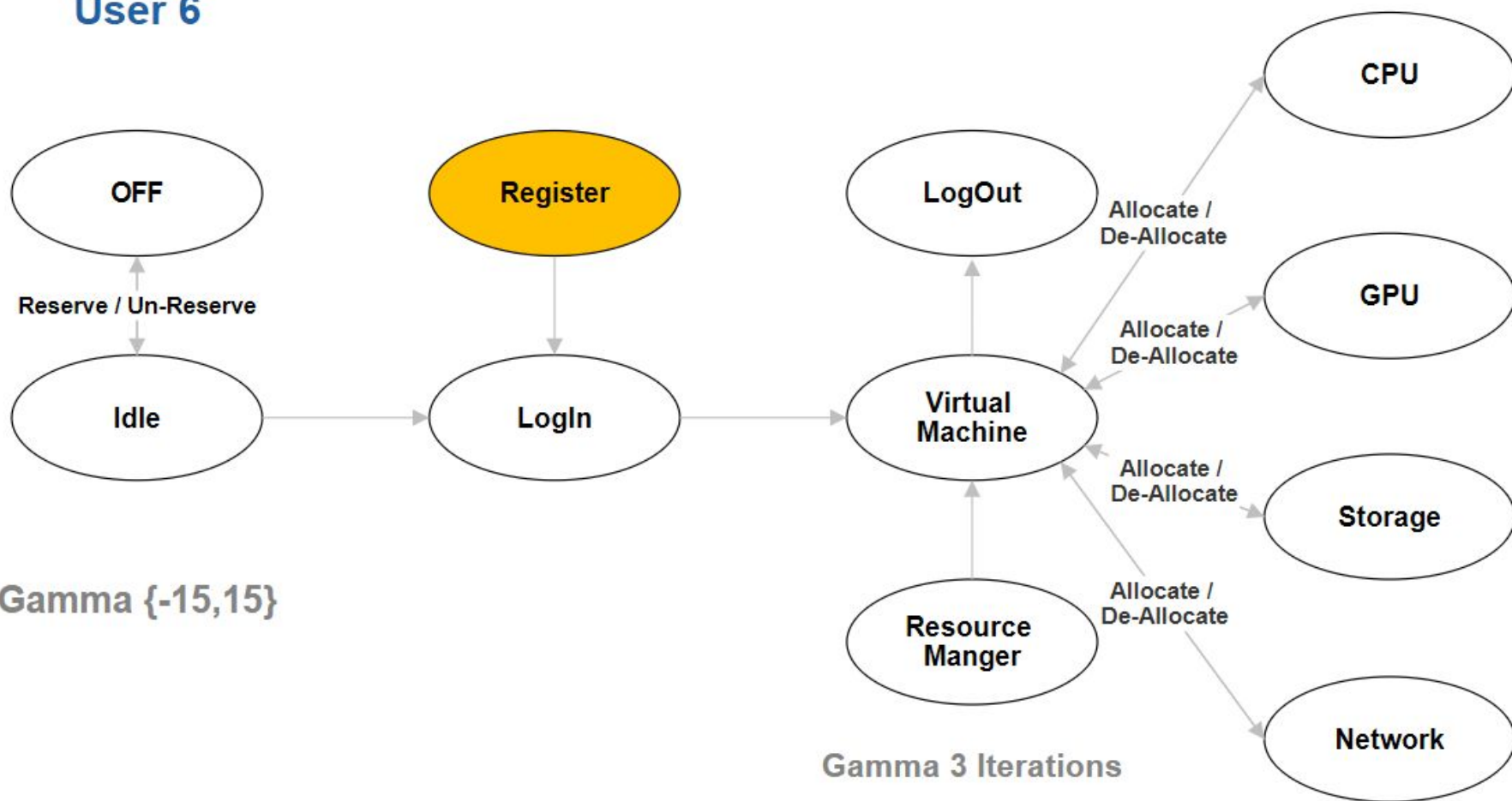
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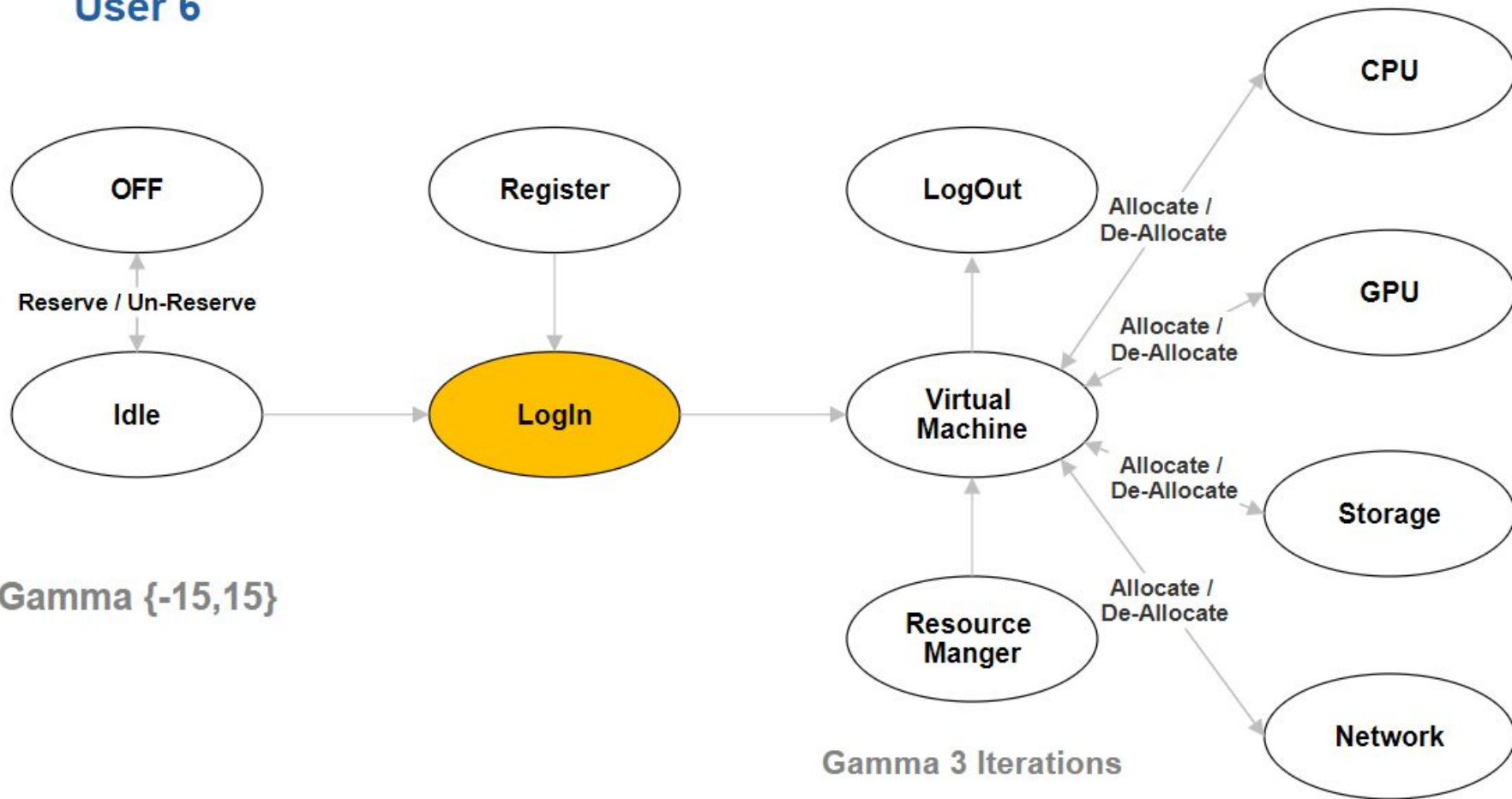
User 3



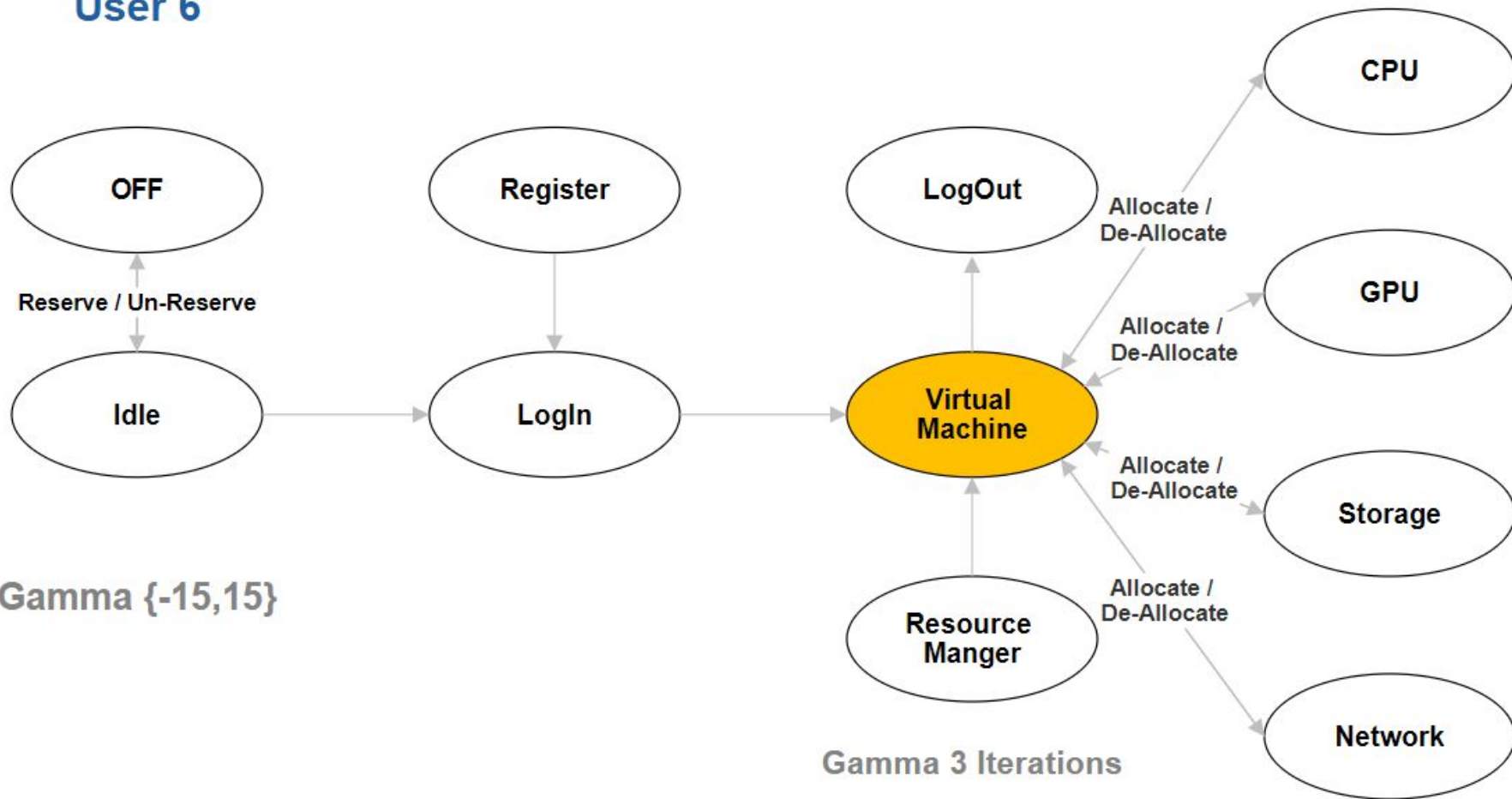
## User 6



## User 6

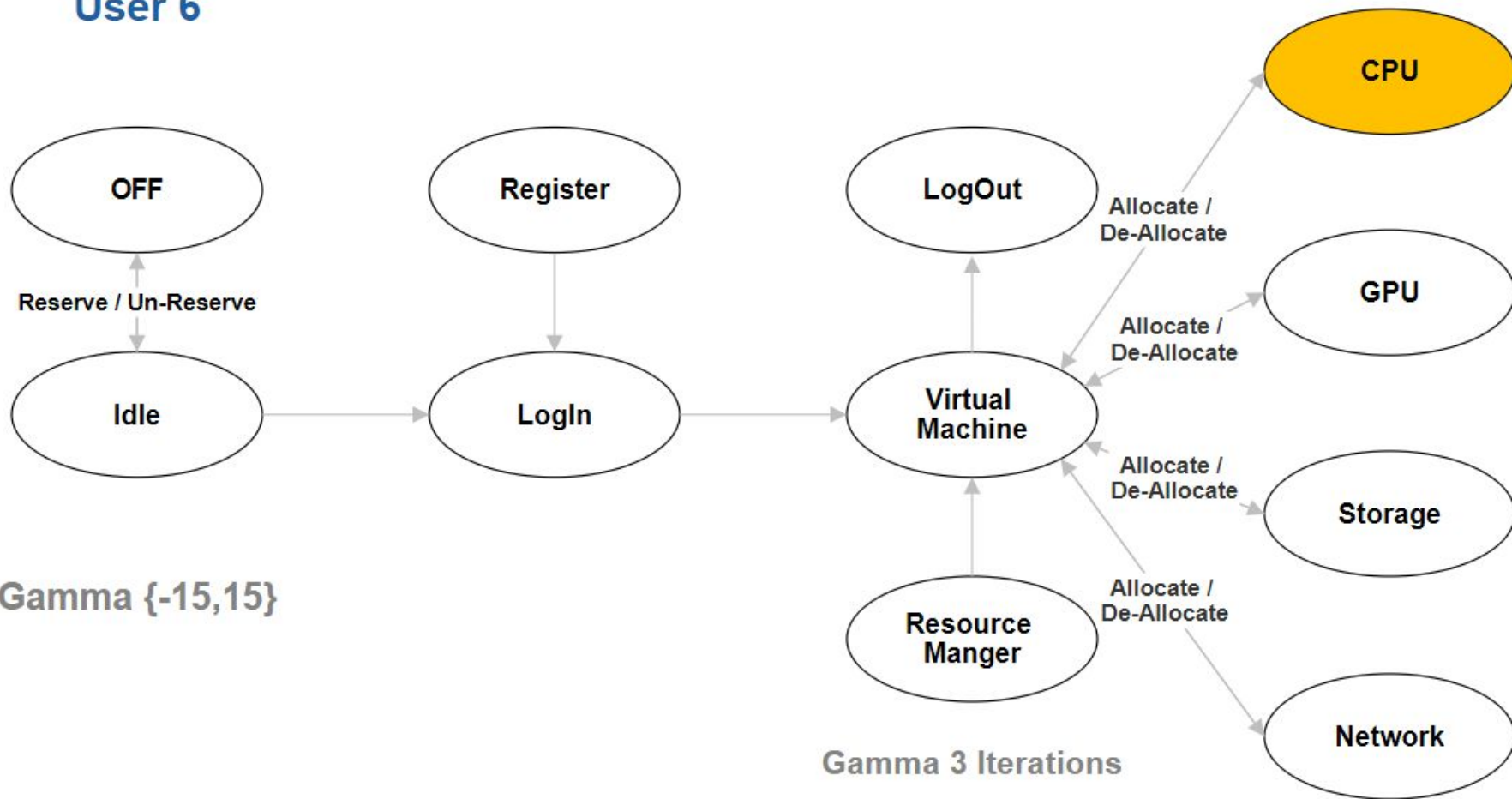


## User 6

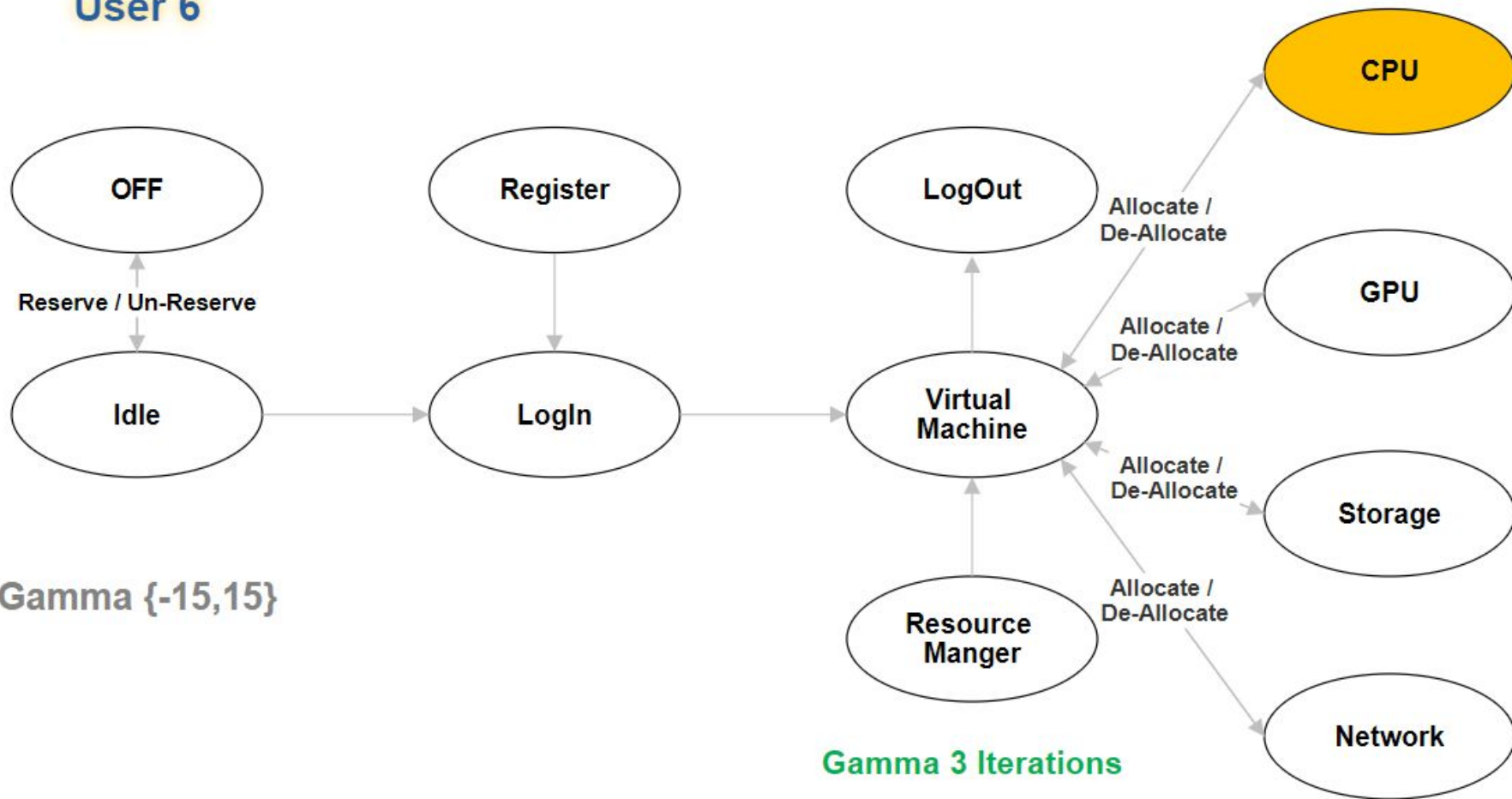




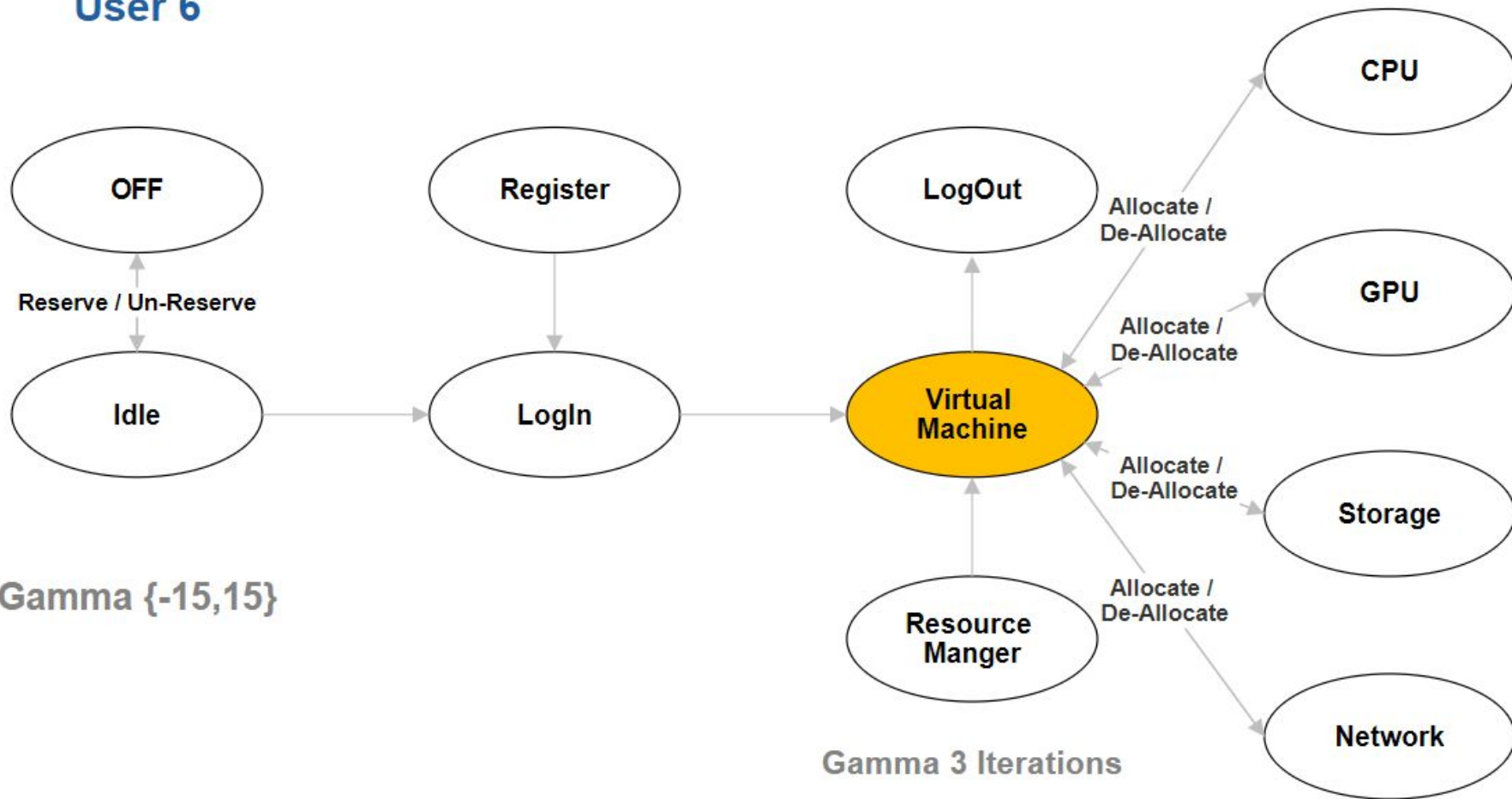
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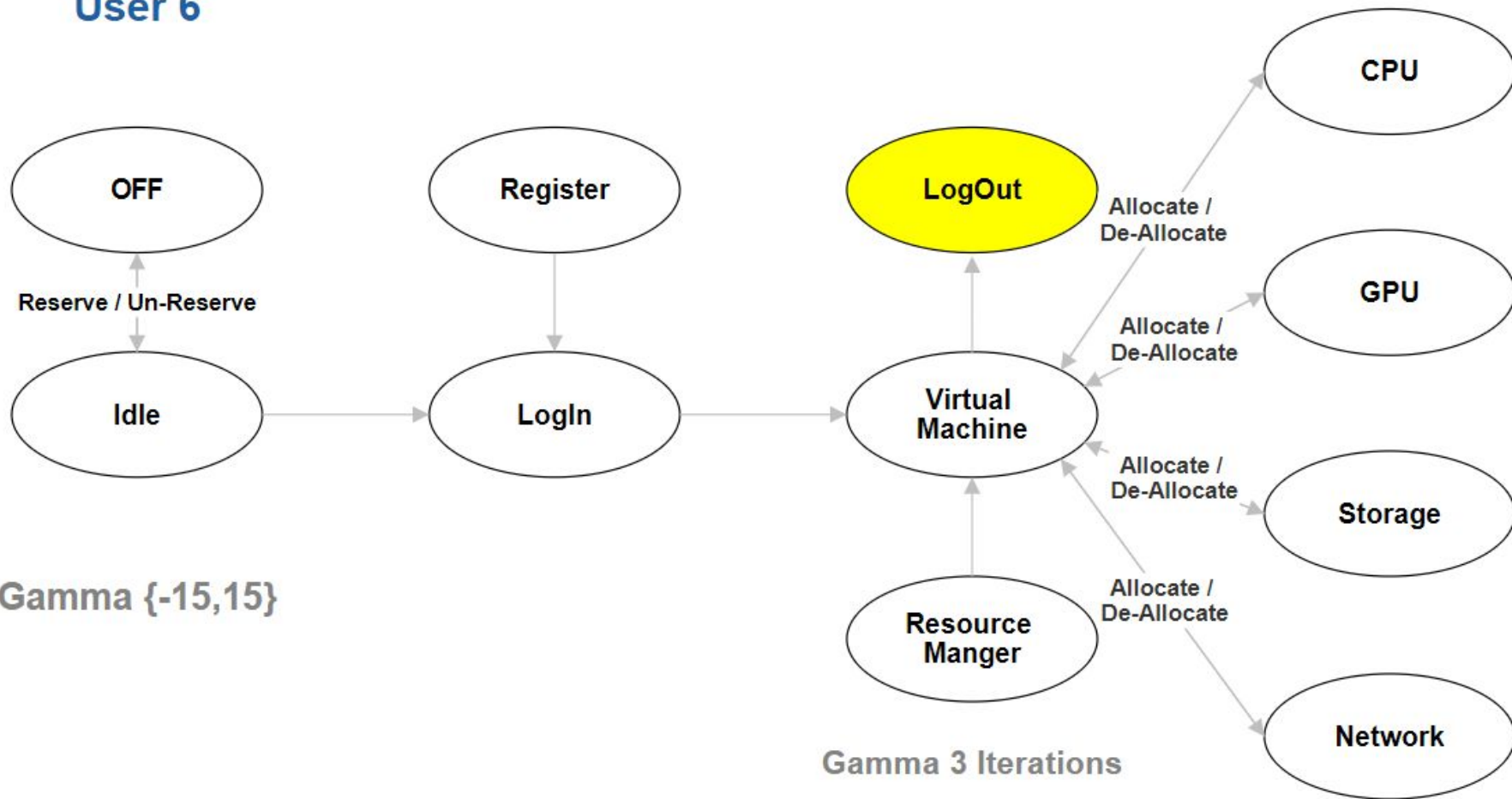
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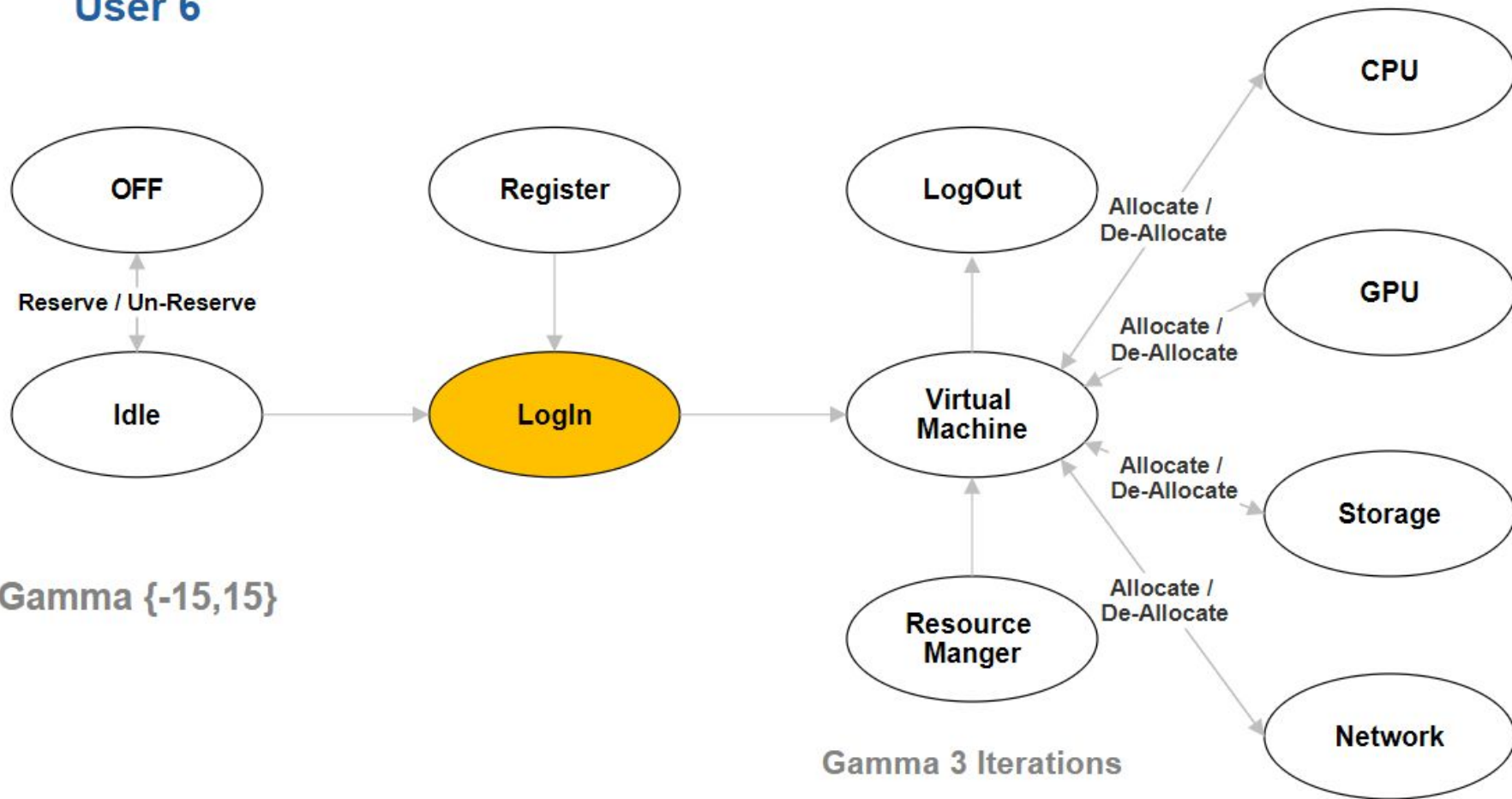
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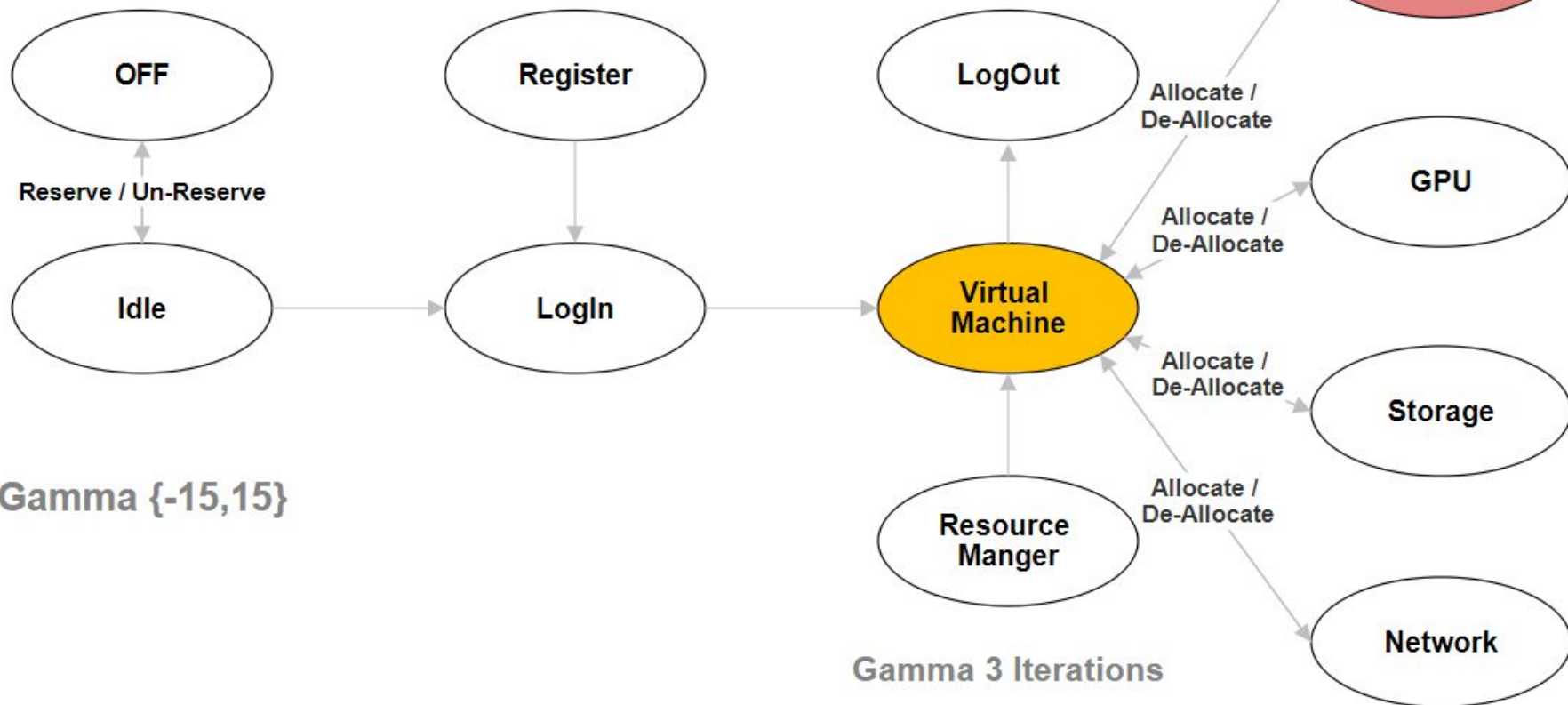
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