

# Network Load Balancing using MAS

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# Problems in current mode



- Require separate devices
- Highly resource intensive
- Centralized
- Static algorithms

# Solution

MAS solution to handle the load balancing

- Low resources
- Distributed
- Uncertainty
- Interconnected
- Dynamic



# MAS Features

Emergent  
Property

Butterfly Effect

Self Organising

Uncertainty  
Handling

# Architecture

Request - Resource - Coordinator

# Communication

Peer-to-peer  
Broadcasting

# Essential Features

Collaboration  
Negotiation

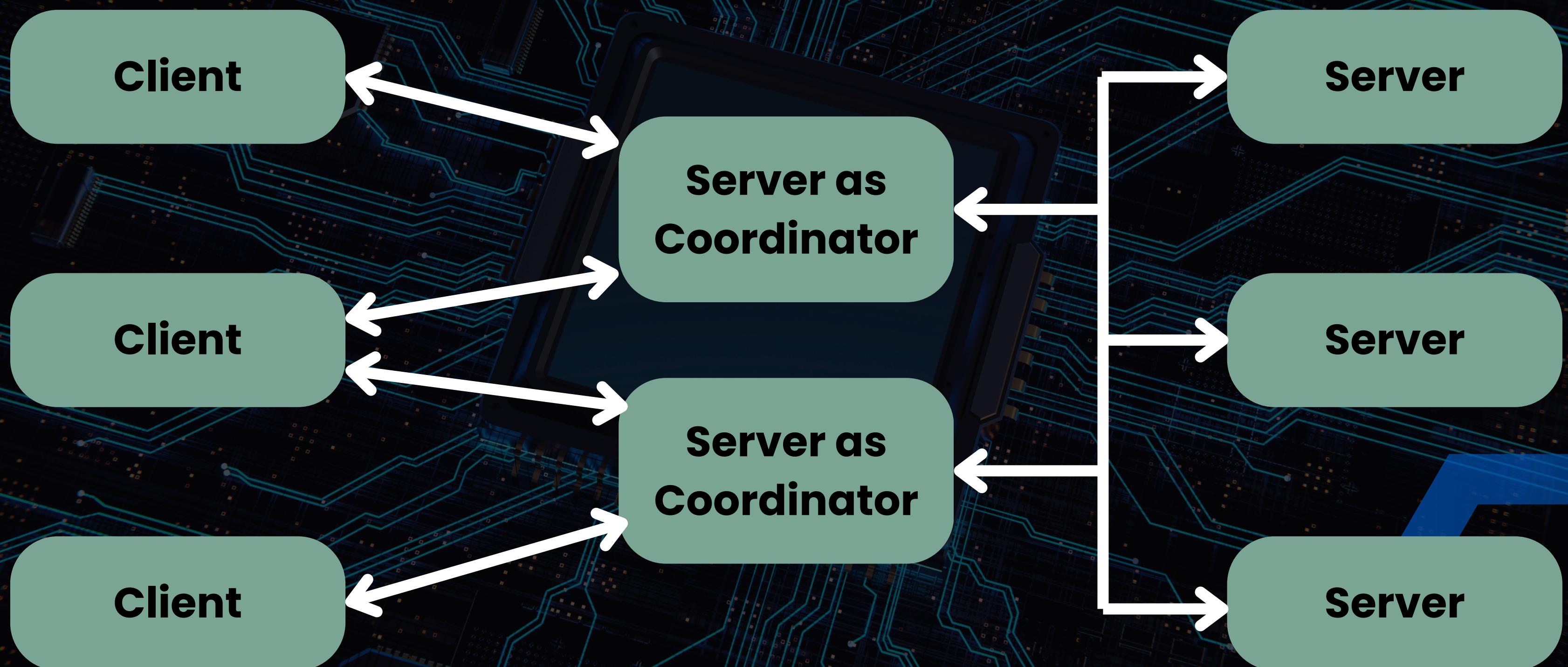
# Environment

- **Partially observable** – users don't know the server loads
- **Stochastic** – not deterministic on the current connections
- **Episodic** – only depend on current knowledge
- **Dynamic environment** – changes while decision making

# Agents

1. **User Agent** : users connecting to the system
2. **Coordinator Agent** : message coordinator. Coordinate between User and Server
3. **Server Agent** : serving user requests

# System



# DEMO

[www.reallygreatsite.com](http://www.reallygreatsite.com)



# Thank You