Distributed Coordination Architecture For MMOGs

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What is MMOG?

MMOG - Massively Multiplayer Online Game

-Supporting large number of players simultaneously.

-Played online

-Have persistent worlds

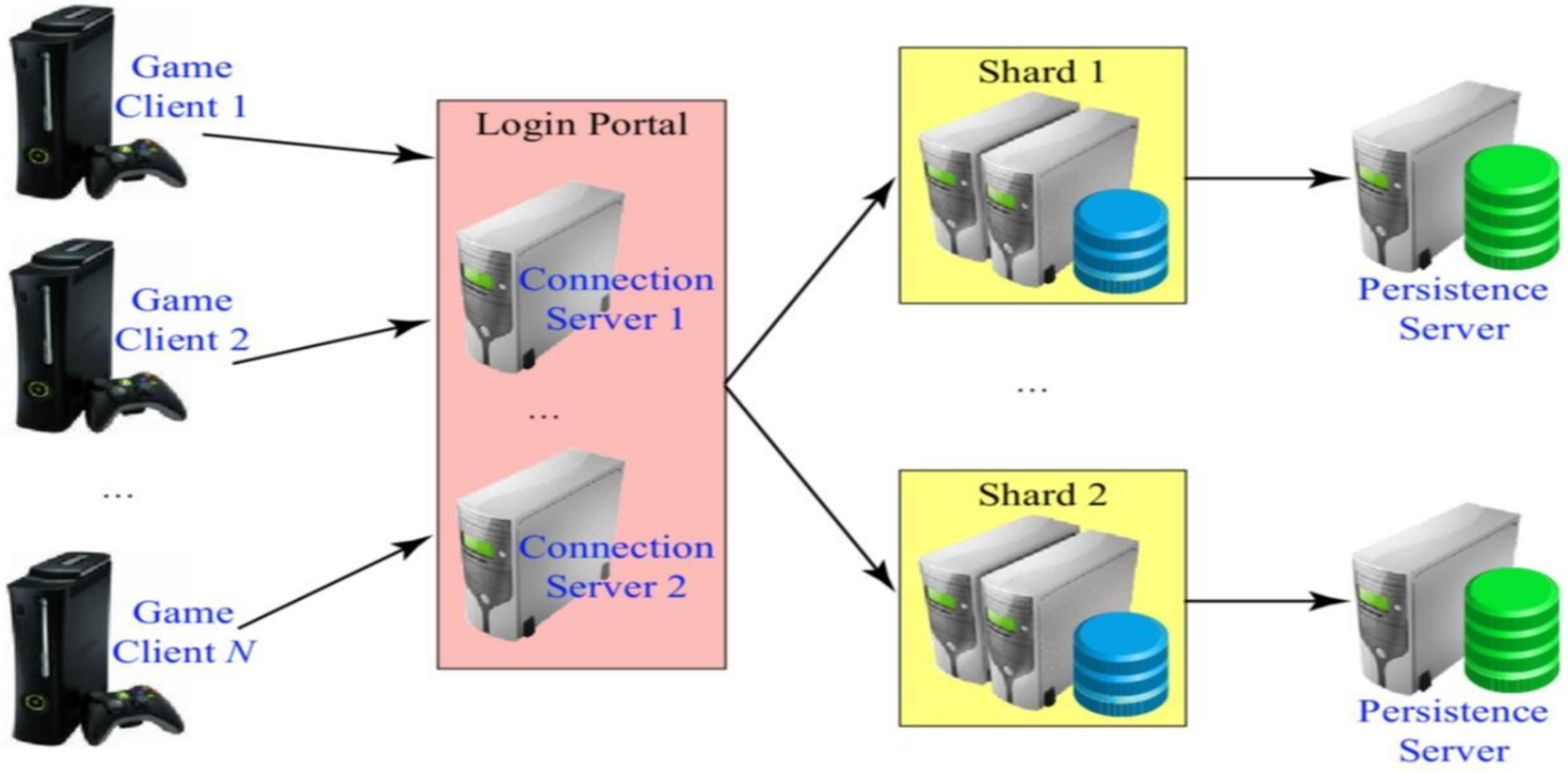
-Ex: World of Warcraft

Our project focus

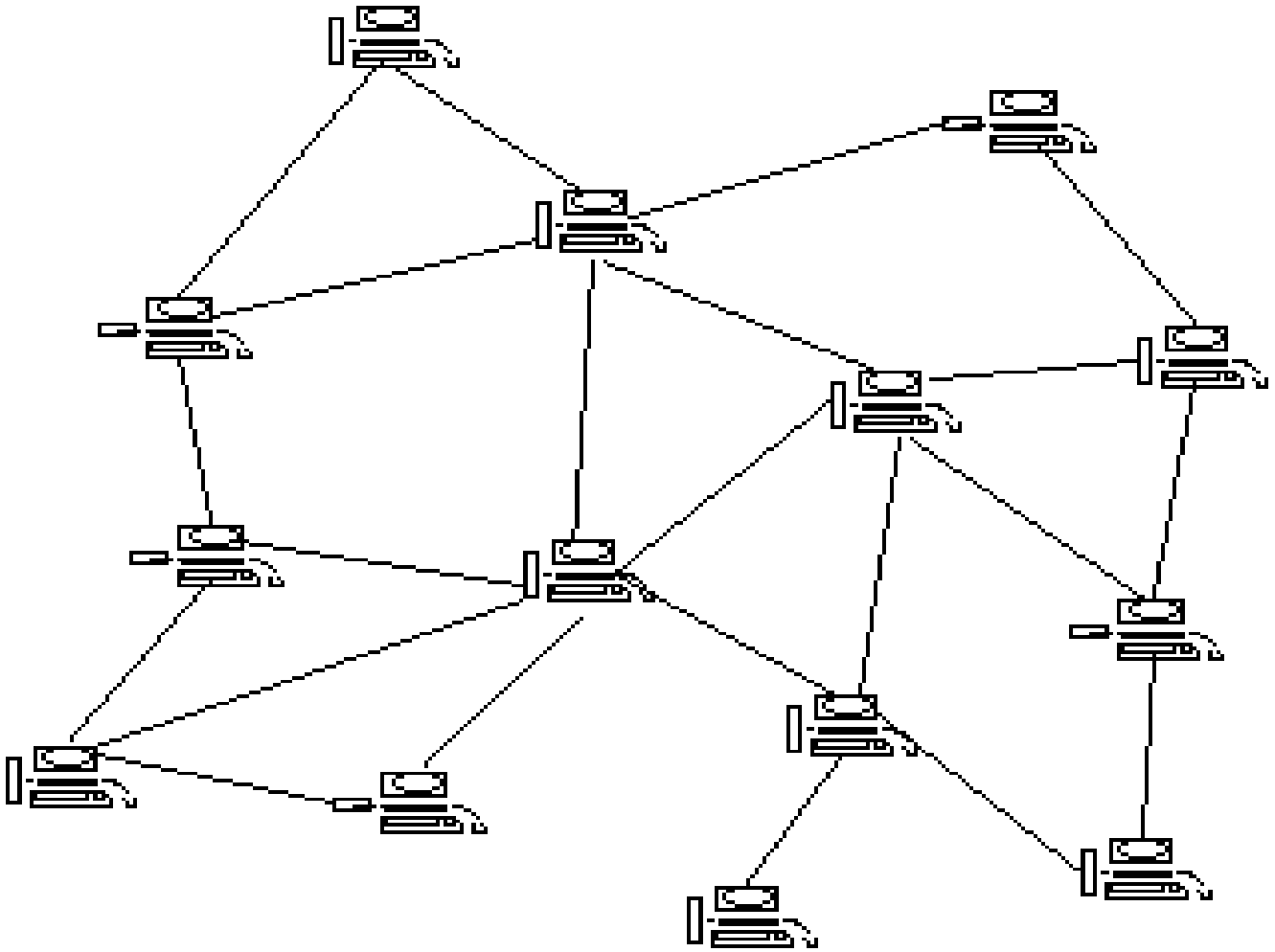
- Learn about Distributed Systems & how those are applied in MMOGs
- Learn about Distributed Systems algorithms , improvements to existing algorithms/ new algorithms
- performance comparision between algorithms
- Open source framework for people to build similar multiplayer games with minimal effort (they can extend/ write new algorithms easily by extending our framework without having to rewrite everything from scratch)

Existing MMOG Architectures

Client-Server



Peer to peer



Challenges

Peer to Peer

- The clients would have no main point of connection, and hence have no stable way of connecting to the game.
- Game may split up into parts
- The game would have no means of a central authority, meaning any client would have potential to cheat.

Challenges

Client server

- When game become complex a server may stuck.

Our project objectives

- Open source framework
- Research paper about performance comparison between algorithms
- Improvements to existing algorithms
- Implement a game using framework

Current Progress

- Literature Review
- Learning different technologies & using them
  - java servlet
  - Spring MVC
  - HTML5
  - AJAX & JSON
- Research about peer-to-peer in details
- Meet and discuss about implementation of P2P

Thank You !