

iSnake

Intelligent Multiplayer Snake





What is iSnake?

- is the variant of snake game popular among cell phone users





Features of iSnake

- Multi player feature
- Computer controlled intelligent opponents

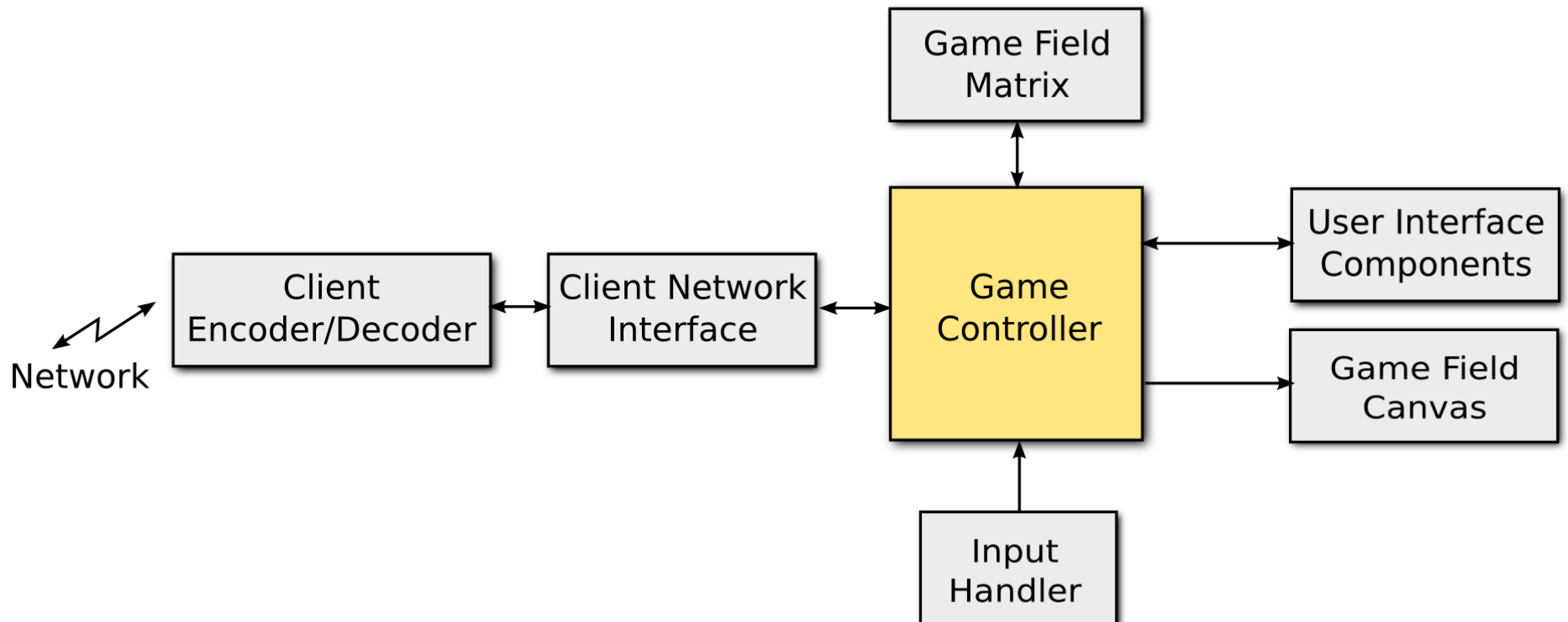


Components of iSnake

- iSnake Client Application
- Autonomous Intelligent Opponent Application
- iSnake Game Server
- Game Server Manager @ sourceforge.net



iSnake Client Application





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Autonomous Intelligent Opp.

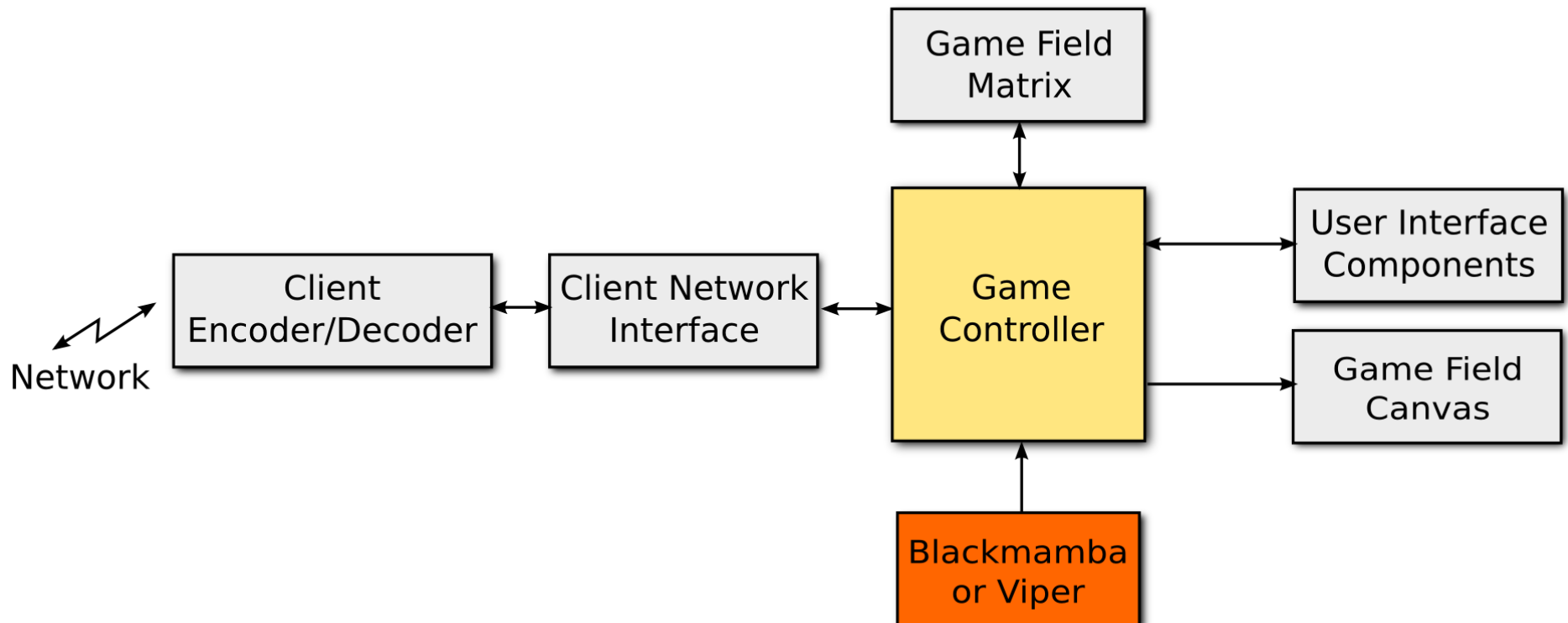
Two path finding algorithms have been developed:

- Blackmamba
- Viper

The Input Handler of iSnake Client Application is replaced by the module implementing Blackmamba or Viper



Autonomous Intelligent Opp.



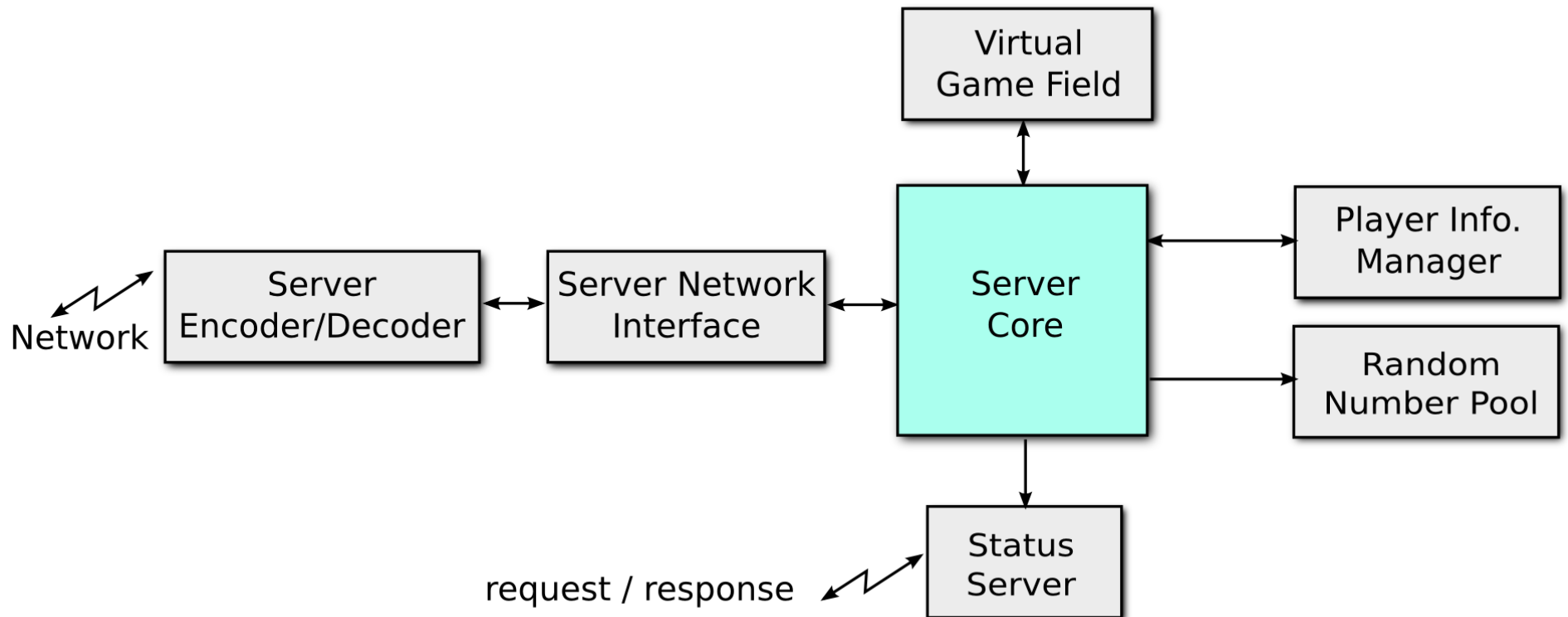


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iSnake Game Server



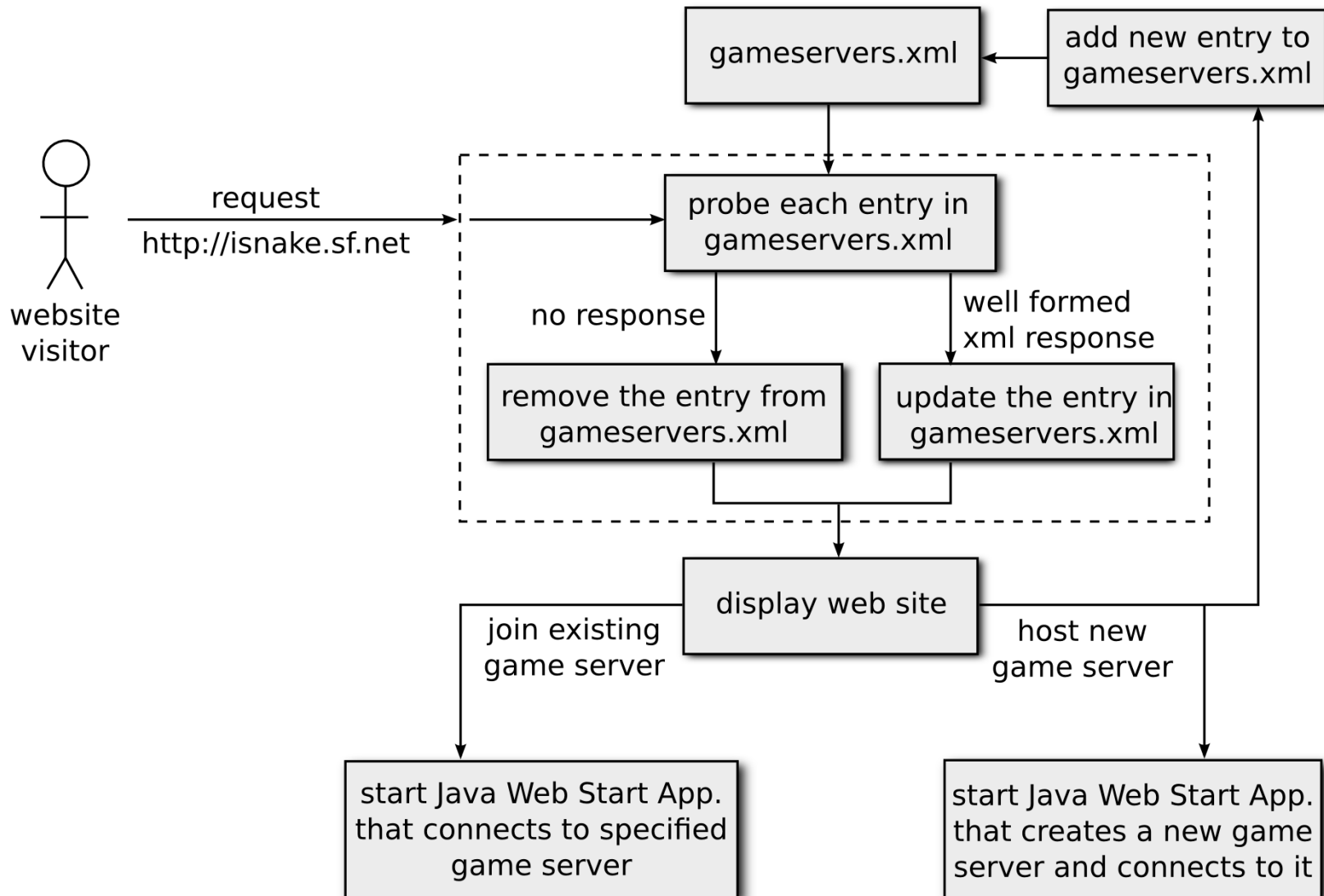


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iSnake GSM@ SF.net





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Performance of Game Server

- Local Network
- Homogeneous LAN
- Heterogeneous LAN

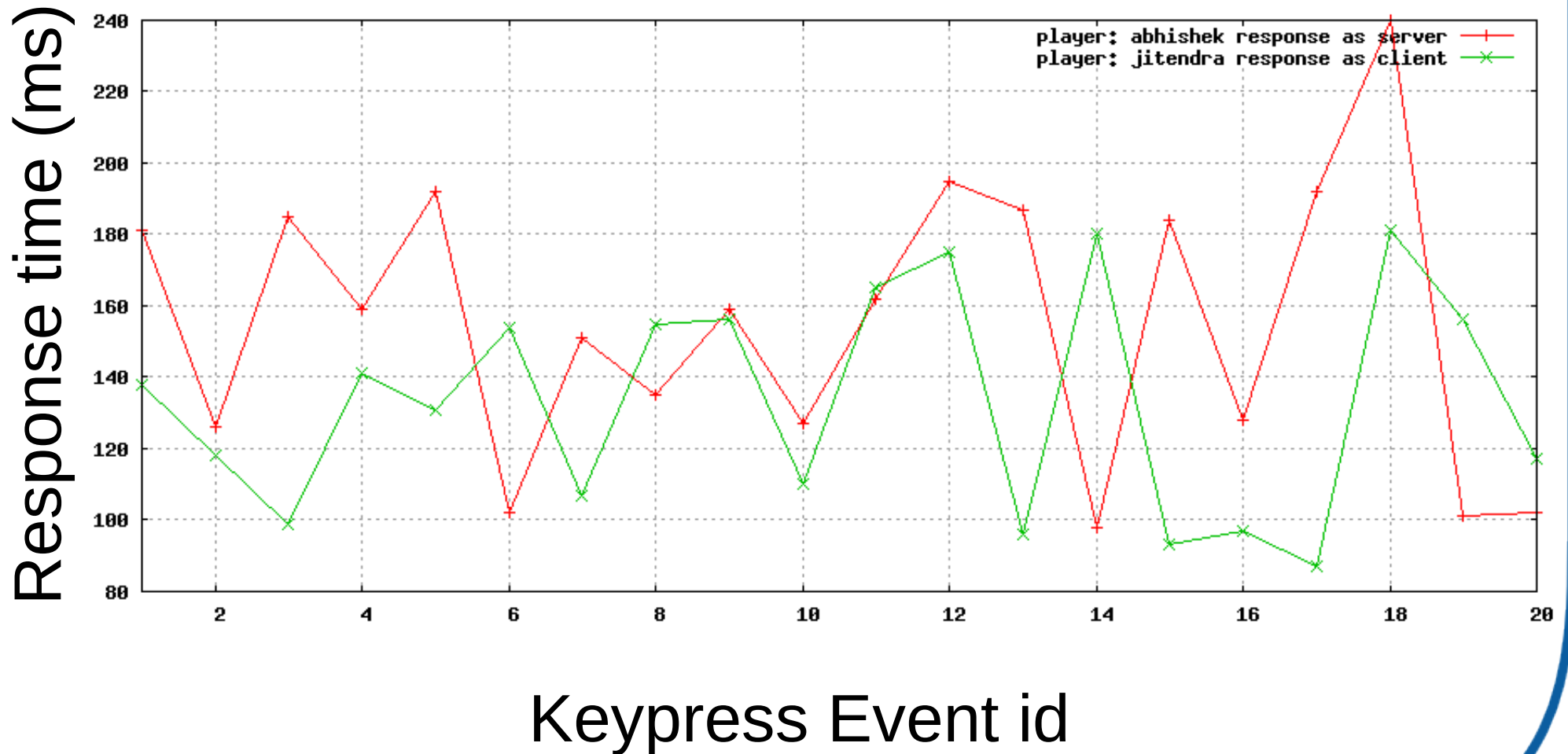
Performance evaluation parameter

- Response Time

Local Network



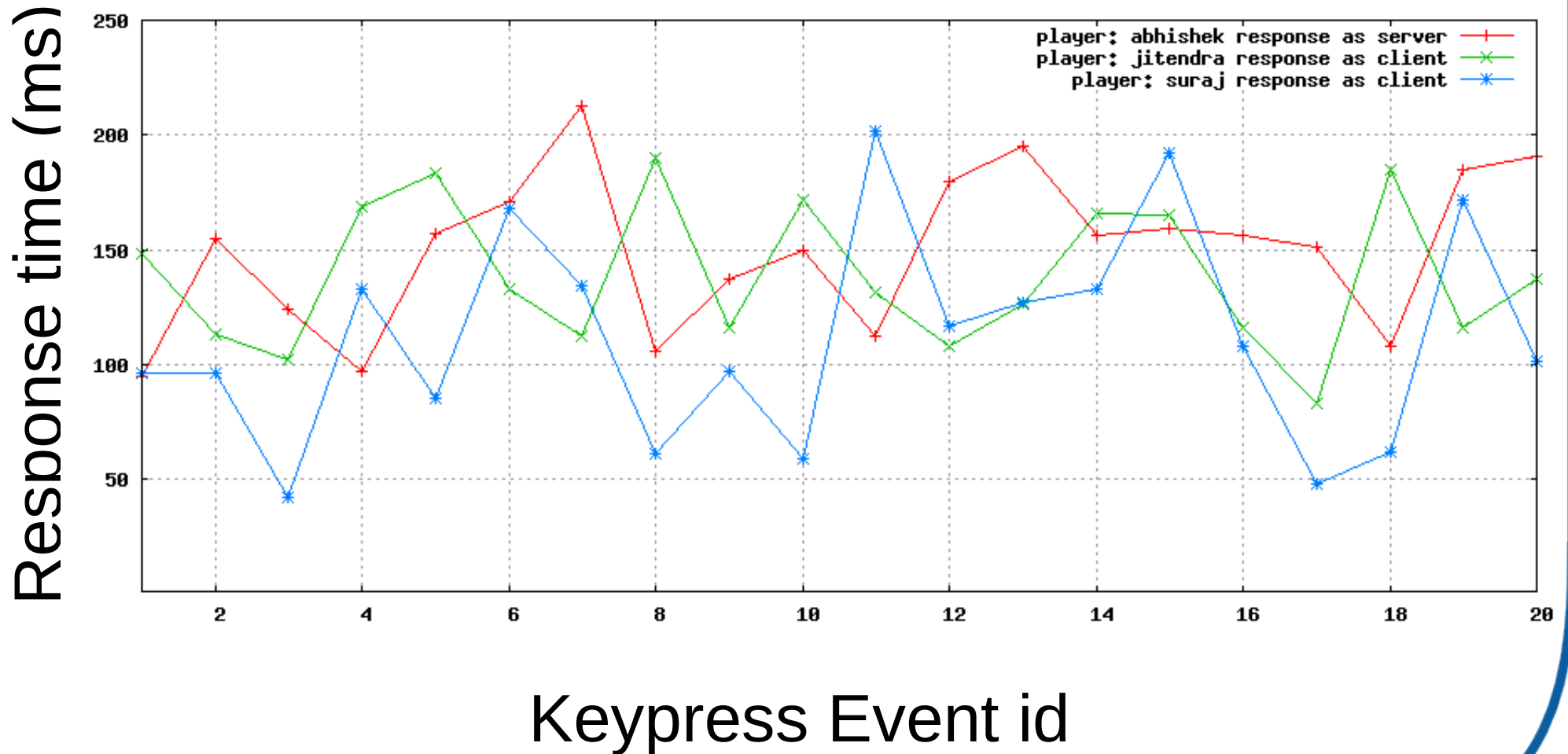
2 players



Local Network



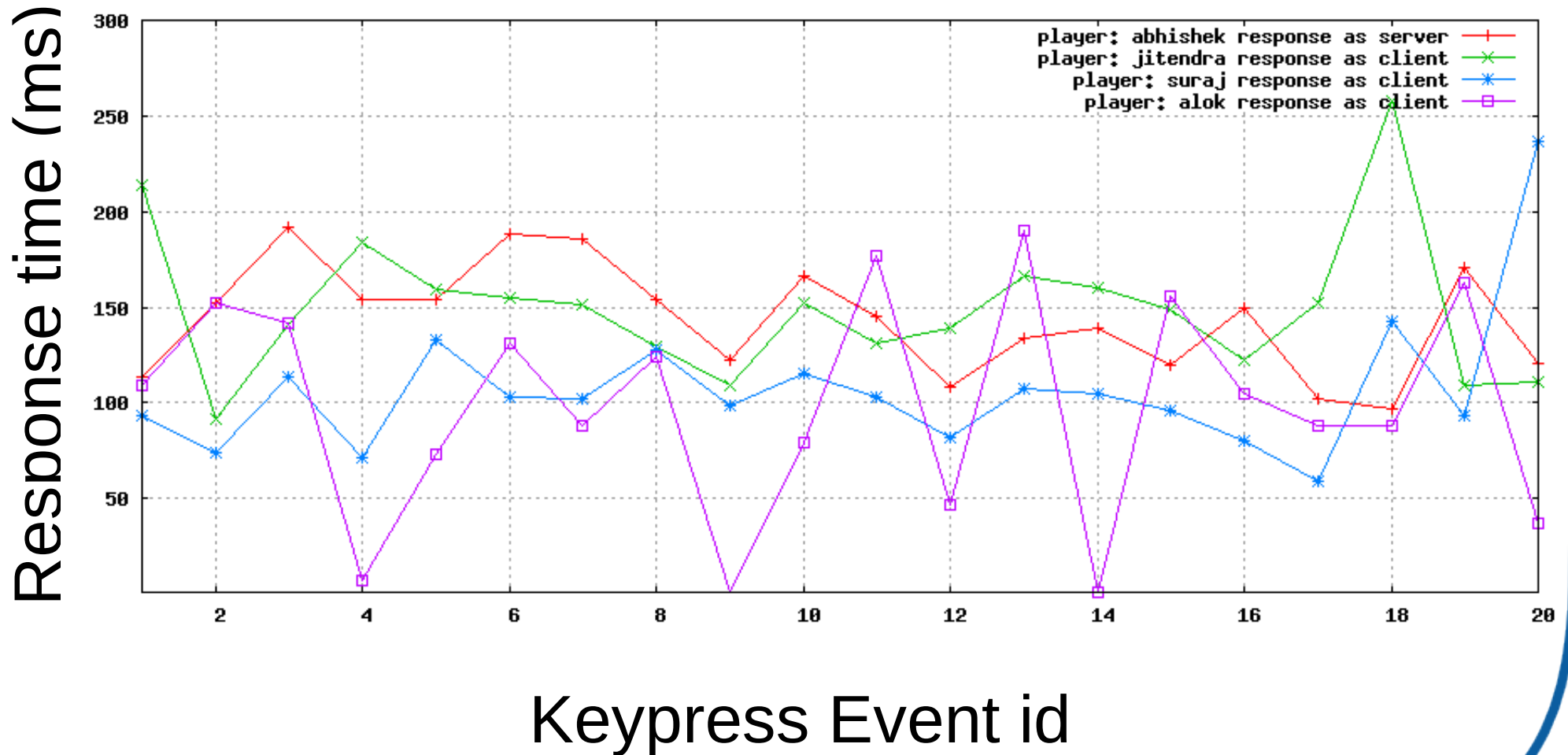
3 players



Local Network



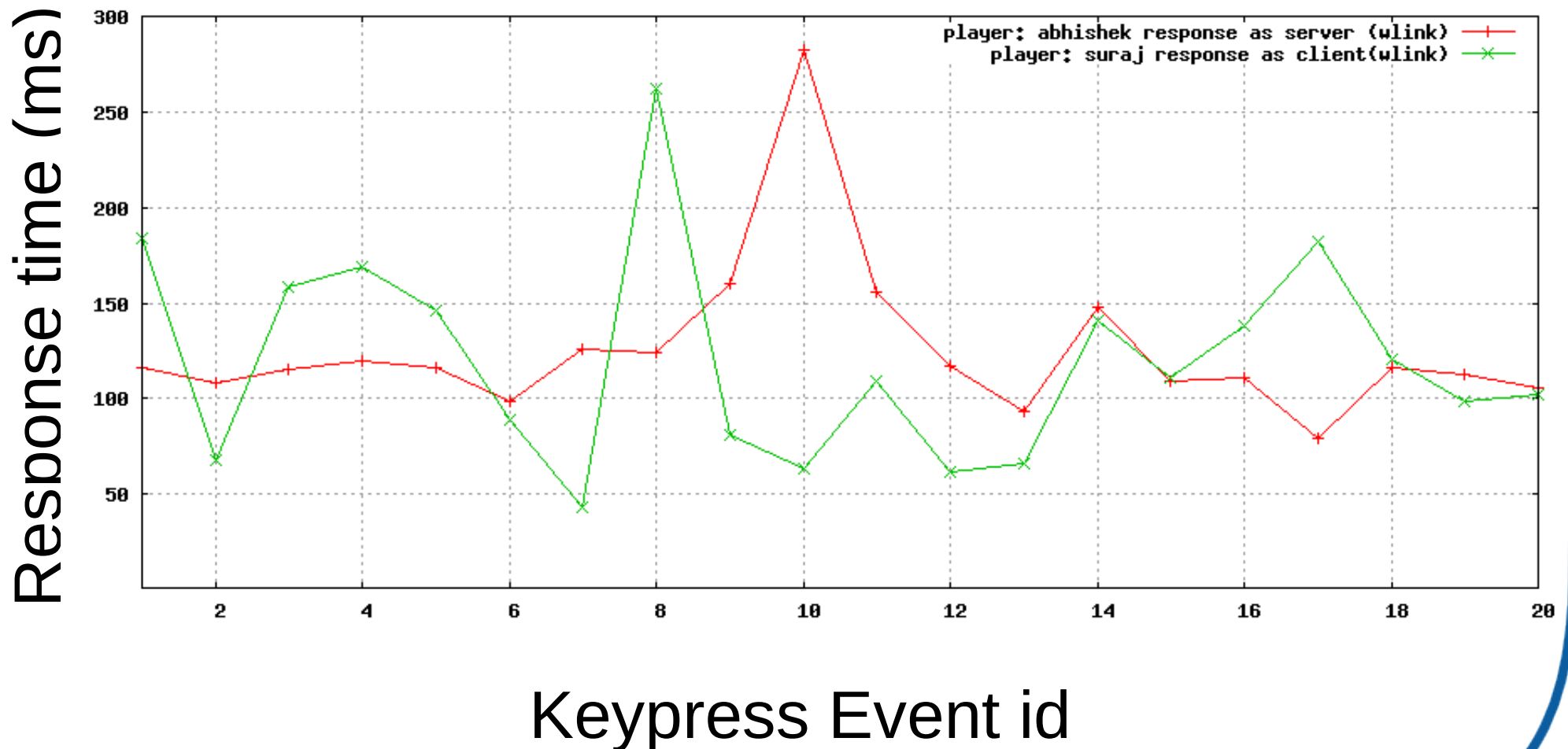
4 players





Homogeneous LAN

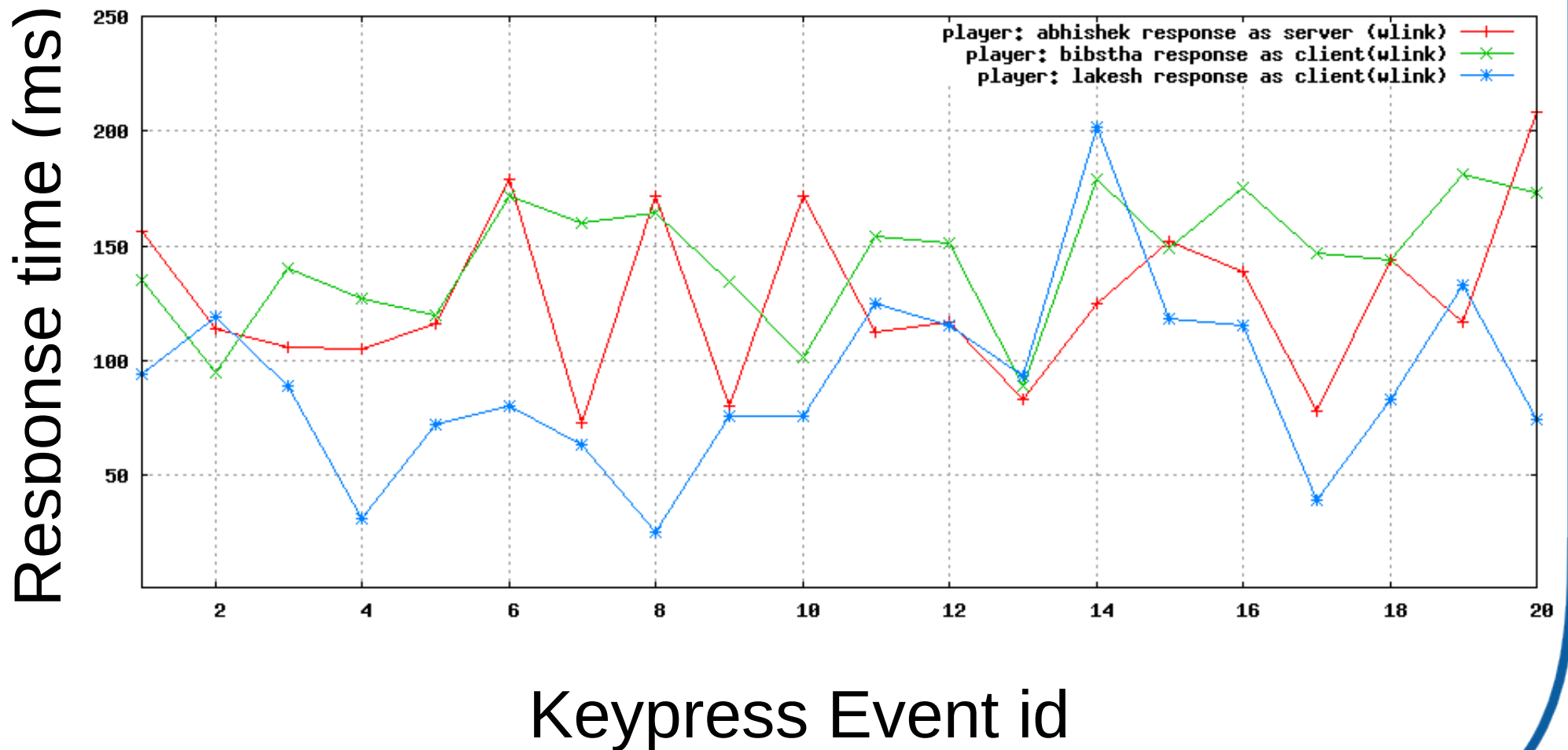
2 players





Homogeneous LAN

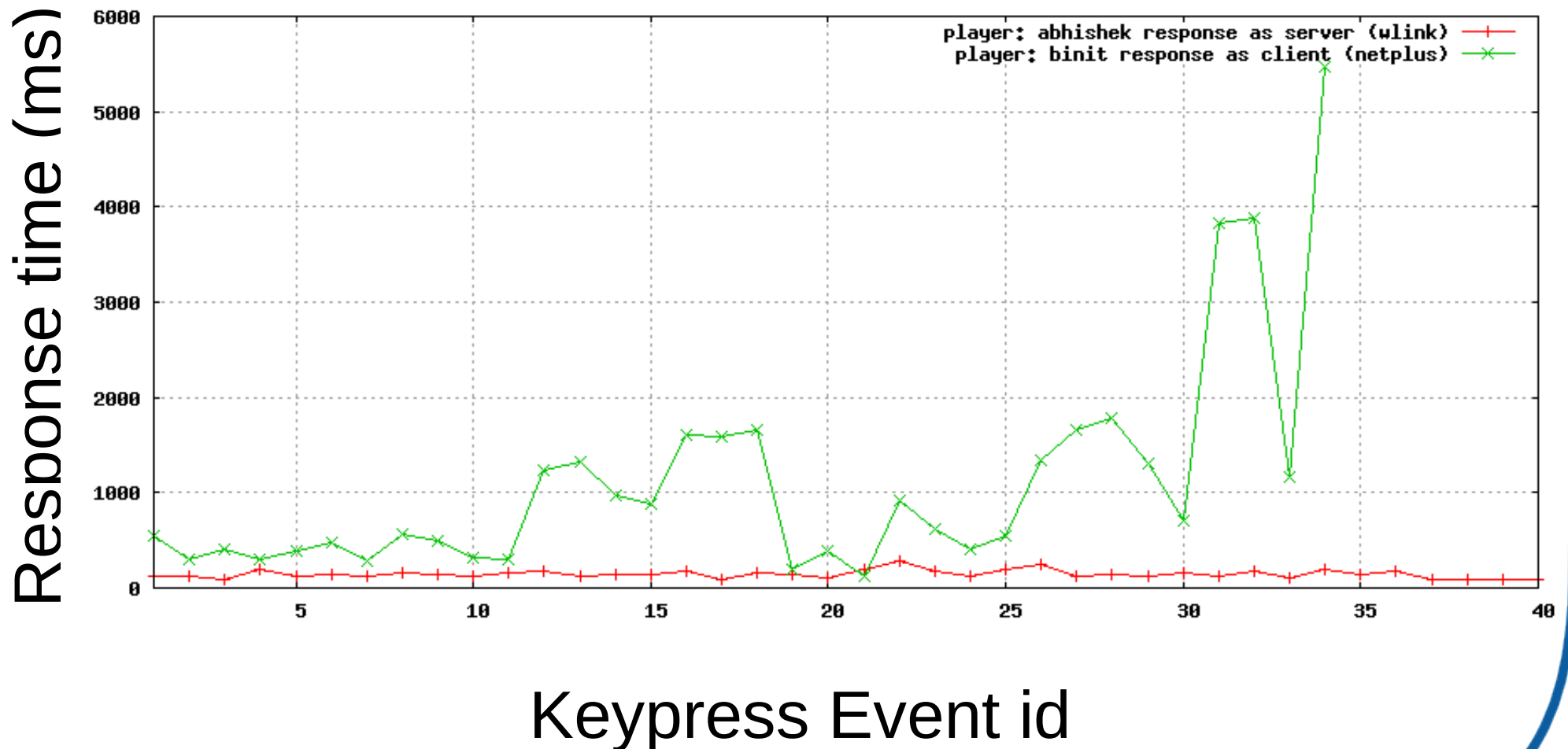
3 players





Heterogeneous LAN

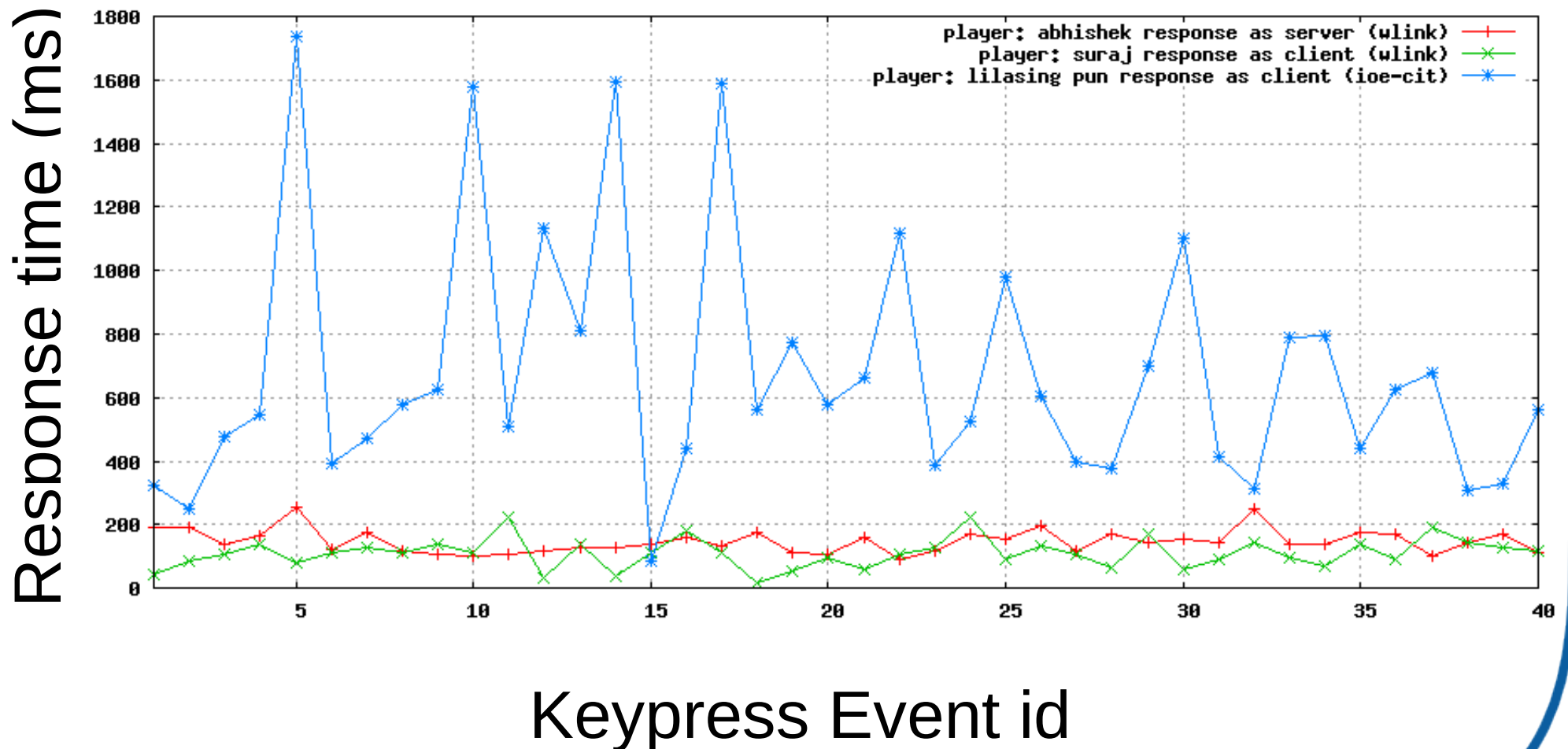
2 players





Heterogeneous LAN

3 players





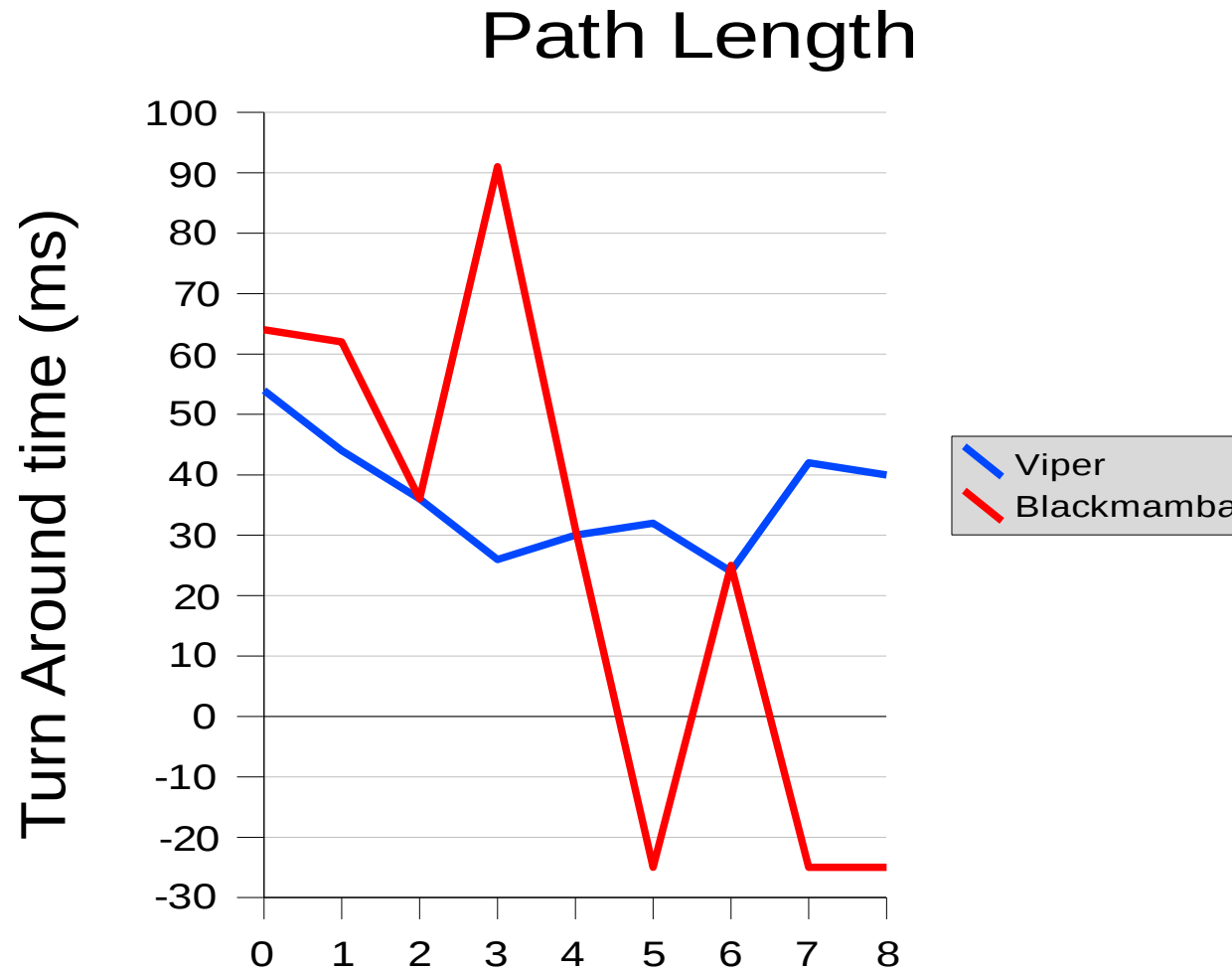
Performance of intel. opp.

Performance evaluation parameters :

- Path Length
- Turn Around Time



Performance of intel. opp.

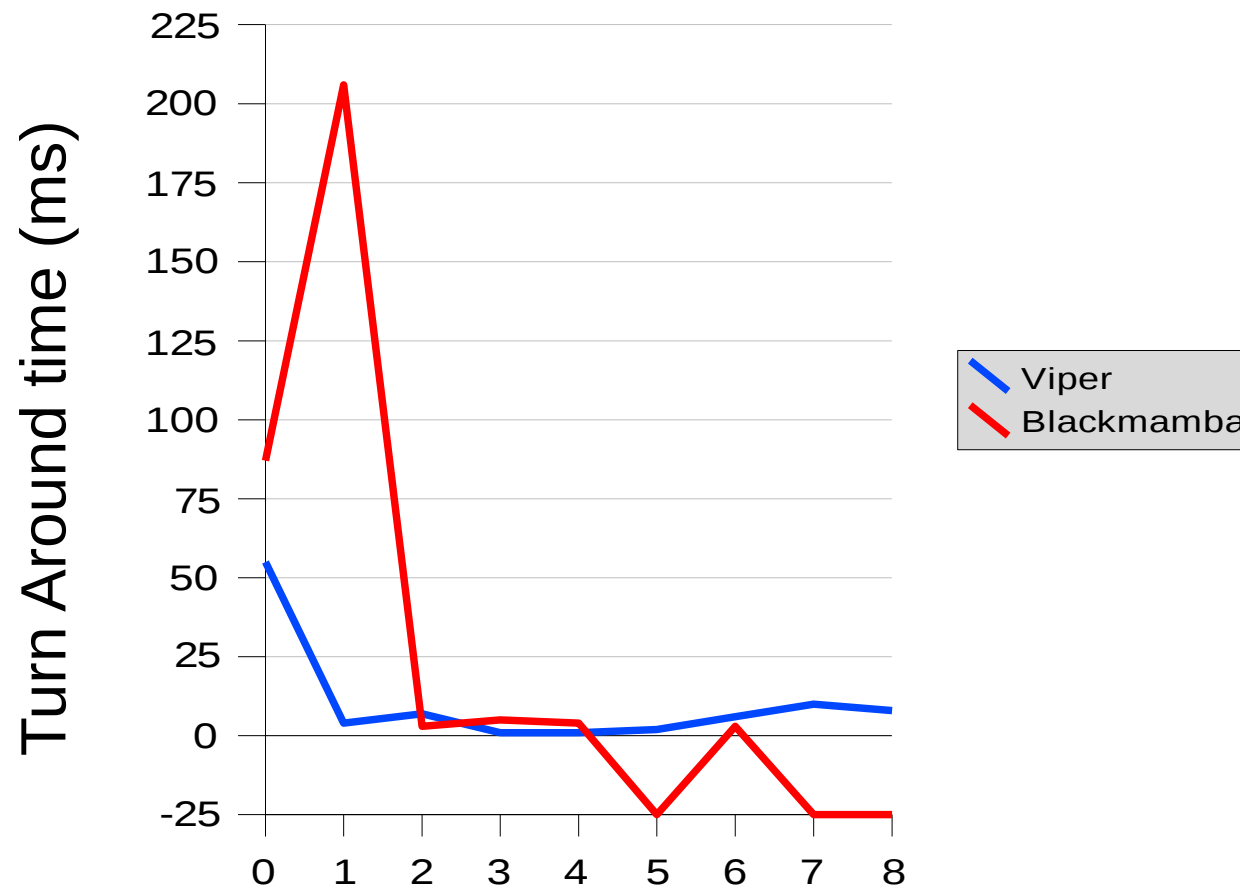


(Source, Target) coordinate pair id



Performance of intel. opp.

Turn Around Time



(Source, Target) coordinate pair id



Documentation

- Source code contains full code documentation conforming to Javadoc standards.
- Both path finding algorithms have been fully documented with illustrations.
- The protocol devised for communication between game server and clients has also been documented.
- All documents available at iSnake's Doc. Repo.
<http://isnake.sf.net/docs>



Project Management

- iSnake code managed using subversion – a version control system
- Collaboration on project docs (prototype design, project plan, TODO list, etc) done using WIKI
- JUnit tests were developed to test modules before integration
- All the project management resources were provided by sourceforge.



Why Snake game?

Simplicity !





<http://isnake.sourceforge.net>

Thank You