ServerCommunicateThread
//Communicates

final int QUEUE_SIZE;
HashMap<String, Agent> agents;
boolean simulationRunning;
ArrayBlockingQueue inBoundQueue;

void run() {};
void endSimulation() {};
void handleMessage(Message) {};

ServerListenThread
//Listens for all connecting agents

int port;
ServerSocket socket;
HashMap<String, Agent> agents;
HashSet<String> agentsToWaitFor;

void run() {};

Thread

Agent

String name;
Socket socket;
PrintWriter outputWriter;
BufferedReader inputReader;
HashMap<String, Node> nodeVisibility;

void write() {//write to external agent};
void read() {//read from external agent};
boolean hasNextMessage() {};

Simulator

int tick;
long tickLength;
long seed;
int port;
HashMap<String, Agent> agents;
HashSet<String> agentNames;
Logger logger;
ServerCommunicateThread commThread;
ArrayList<Method> runningMethods;
TaskTree tree;
void startServer() {};

AskMethodStatusMessage
//Agent to Sim

String methodName;
String convertToJSON() {};

AgentRegistrationMessage

String convertToJSON() {};

ConfirmMethodStartMessage
//Sim to Agent

String methodName;
String convertToJSON() {};

StartMethodMessage
//Agent to Sim

String methodName;
String convertToJSON() {};

NotifyMethodStatusMessage
//Sim to Agent

String methodName;
boolean inProgress;
boolean completed;
boolean enabled;

String convertToJSON() {};

NotifyMethodCompleteMessage
//Sim to Agent

String methodName;
double quality;
double duration;

String convertToJSON() {};

Message

final String SIMULATOR_NAME;
String senderName;
String destinationName;

String convertToJSON()
static Message getMessageFromJSON(String) {};

NewNodeMessage
//Sim to Agent

Node node;
String convertToJSON() {};

SetRandomSeedMessage
//Sim to Agent

long seed;
String convertToJSON() {};

NotifyRelationshipActivationMessage
//Sim to Agent

String relationshipName;
String convertToJSON() {};