

com.\_604robotics.tcpcommunicator

Class TcpCommunicator

java.lang.Object  
com.\_604robotics.tcpcommunicator.TcpCommunicator

All Implemented Interfaces:

java.lang.Runnable

```
public class TcpCommunicator
extends java.lang.Object
implements java.lang.Runnable
```

Server class for the vision data transfer protocol.

Constructor Summary

Constructors
Constructor and Description
<b>TcpCommunicator</b> () Initializes a new TcpCommunicator.
<b>TcpCommunicator</b> (java.lang.String ip) Initializes a new TcpCommunicator with the specified robot IP address.
<b>TcpCommunicator</b> (java.lang.String ip, int port) Initializes a new TcpCommunicator with the specified robot IP address and port.
<b>TcpCommunicator</b> (java.lang.String ip, int port, boolean debug) Initializes a new TcpCommunicator with the specified robot IP address, port, and debug mode.

Method Summary

Methods	
Modifier and Type	Method and Description
void	<code>down()</code> Disables the TcpCommunicator.
void	<code>forceQuit()</code> Interrupts the TcpCommunicator thread, forcing it to quit.
boolean	<code>isEnabled()</code> Checks whether or not the TcpCommunicator has been enabled.
boolean	<code>isRunning()</code> Checks whether or not the TcpCommunicator thread is currently running.
static void	<code>main(java.lang.String[] args)</code> For testing purposes.
void	<code>run()</code> Don't use this to launch the server; use up() instead.
void	<code>up()</code> Enables the TcpCommunicator, launching the thread.
void	<code>writePoints(Target[] points)</code> Writes the specified points to the stream.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

TcpCommunicator
<pre>public TcpCommunicator()</pre> <p>Initializes a new TcpCommunicator. By default, the robot IP address is set to "10.6.4.2", the port is set to 3333, and the debug mode is set to TRUE.</p>

## TcpCommunicator

```
public TcpCommunicator(java.lang.String ip)
```

Initializes a new TcpCommunicator with the specified robot IP address. By default, the port is set to 3333 and the debug mode is set to TRUE.

### Parameters:

`ip` - The IP address of the robot.

## TcpCommunicator

```
public TcpCommunicator(java.lang.String ip,  
                        int port)
```

Initializes a new TcpCommunicator with the specified robot IP address and port. By default, the debug mode is set to TRUE.

### Parameters:

`ip` - The IP address of the robot.

`port` - The port to connect to.

## TcpCommunicator

```
public TcpCommunicator(java.lang.String ip,  
                        int port,  
                        boolean debug)
```

Initializes a new TcpCommunicator with the specified robot IP address, port, and debug mode.

### Parameters:

`ip` - The IP address of the robot.

`port` - The port to connect to.

`debug` - Print debug info?

## Method Detail

### isEnabled

```
public boolean isEnabled()
```

Checks whether or not the TcpCommunicator has been enabled.

### Returns:

Whether or not the TcpCommunicator has been enabled.

### isRunning

```
public boolean isRunning()
```

Checks whether or not the TcpCommunicator thread is currently running.

### Returns:

Whether or not the TcpCommunicator thread is currently running.

### up

```
public void up()
```

Enables the TcpCommunicator, launching the thread.

### down

```
public void down()
```

Disables the TcpCommunicator.

forceQuit

```
public void forceQuit()
```

Interrupts the TcpCommunicator thread, forcing it to quit. Use only in emergencies!

writePoints

```
public void writePoints(Target[] points)
```

Writes the specified points to the stream. If there is no robot currently connected, it fails silently and discards the points into the ether.

Parameters:

points - An array of Targets to write.

run

```
public void run()
```

Don't use this to launch the server; use up() instead. This implements the run() method of type Runnable, allowing this to be run as a thread. For internal use!

Specified by:

run in interface java.lang.Runnable

main

```
public static void main(java.lang.String[] args)
```

For testing purposes. Run this as an application, and it will connect to 127.0.0.1 and stream arbitrary data for testing purposes.

Parameters:

args - Command-line arguments. Not currently used.