Class java.net.SocketImpl

```
java.lang.Object
   |
   +----java.net.SocketImpl
```

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public class **SocketImpl**
extends Object

This is the Socket implementation class. It is an abstract class that must be subclassed to provide an actual implementation.

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Variable Index

o **address**
The internet address where the socket will make connection.
o **fd**
The file descriptor.
o **localport**
o **port**
The port where the socket will make connection.

Constructor Index

o **SocketImpl**()

Method Index

o **accept**(SocketImpl)
Accepts a connection.
o **bind**(InetAddress, int)
Binds the socket to the specified port on the specified host.

- **close**()
  Closes the socket.
- **connect**(String, int)
  Connects the socket to the specified port on the specified host.
- **connect**(InetAddress, int)
  Connects the socket to the specified address on the specified port.
- **create**(boolean)
  Creates a socket with a boolean that specifies whether this is a stream socket or a datagram socket.
- **getInputStream**()
  Gets an InputStream for this socket.
- **getOutputStream**()
  Gets an OutputStream for this socket.
- **listen**(int)
  Listens for connections over a specified amount of time.
- **toString**()
  Returns the address and port of this Socket as a String.

Variables

- **fd**

```
protected int fd
```

  The file descriptor.

- **address**

```
protected InetAddress address
```

  The internet address where the socket will make connection.

- **port**

```
protected int port
```

  The port where the socket will make connection.

- **localport**

```
protected int localport
```

Constructors

- **SocketImpl**

```
public SocketImpl()
```

Methods

o **create**

```
protected abstract void create(boolean stream) throws IOException
```

Creates a socket with a boolean that specifies whether this is a stream socket or a datagram socket.

Parameters:

stream – a boolean indicating whether this is a stream or datagram socket

o **connect**

```
protected abstract void connect(String host,
                                int port) throws IOException
```

Connects the socket to the specified port on the specified host.

Parameters:

host – the specified host of the connection

port – the port where the connection is made

o **connect**

```
protected abstract void connect(InetAddress address,
                                int port) throws IOException
```

Connects the socket to the specified address on the specified port.

Parameters:

address – the specified address of the connection

port – the specified port where connection is made

o **bind**

```
protected abstract void bind(InetAddress host,
                             int port) throws IOException
```

Binds the socket to the specified port on the specified host.

Parameters:

host – the host

port – the port

o **listen**

```
protected abstract void listen(int count) throws IOException
```

Listens for connections over a specified amount of time.

Parameters:

count – the amount of time this socket will listen for connections

o **accept**

```
protected abstract void accept(SocketImpl s) throws IOException
```

Accepts a connection.
Parameters:
s – the accepted connection

o **getInputStream**

```
protected abstract InputStream getInputStream() throws IOException
```

Gets an InputStream for this socket.

o **getOutputStream**

```
protected abstract OutputStream getOutputStream() throws IOException
```

Gets an OutputStream for this socket.

o **close**

```
protected abstract void close() throws IOException
```

Closes the socket.

o **toString**

```
public String toString()
```

Returns the address and port of this Socket as a String.
Overrides:
toString in class Object