

# JSocket Tango Java Class

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## JSocket Class Identification :

Contact : at esrf.fr - accelerator-control  
Class Family : Communication  
Platform : Unix Like  
Bus : Socket  
Manufacturer : none  
Manufacturer ref. :

## JSocket Class Inheritance :

- o [Tango::DeviceImpl](#)
  - JSocket

## JSocket Class Description :

This class implements basic `socket` IPC.

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## JSocket Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
Hostname	This is the hostname of the host to connect to.	String	none
Port	This is the port number to connect to.	int	none
Readtimeout	Read timeout in milliseconds.	short	none
AutoReconnect	If true, the server try to re-create and re-connect to the socket after a failure. NOTE : The default values is false.	boolean	false
DisableNagle	Enable/disable TCP_NODELAY (disable/enable Nagle`s algorithm).  true is disable Nagle`s algorithm or TcpNoDelay Enable. false is enable Nagle`s algorithm or TcpnoDelay Disable.	boolean	true

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JSocket Class Commands				
Name	Input type	Output type	Level	Description
<a href="#">State</a>	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its <i>device_state</i> data member) and returns it to the caller.
				This command gets the

<a href="#">Status</a>	DEV_VOID	CONST_DEV_STRING	OPERATOR	device status (stored in its <i>device_status</i> data member) and returns it to the caller.
<a href="#">Reconnect</a>	DEV_VOID	DEV_VOID	OPERATOR	Attempts to re-establish the socket connection.
<a href="#">Write</a>	DEV_STRING	DEV_VOID	OPERATOR	Command used to send a string to the socket.
<a href="#">WriteAndRead</a>	DEV_STRING	DEV_STRING	OPERATOR	Write to the socket and waits for the answer. The end of the answer is triggered by the new line character!
<a href="#">WriteReadUntil</a>	DEVVAR_STRINGARRAY	DEV_STRING	OPERATOR	Write to the socket and waits for the answer. The answer is triggered by select() which indicates that the the anser has arrived.
<a href="#">WriteShortArray</a>	DEVVAR_SHORTARRAY	DEV_VOID	OPERATOR	write on socket input Argument.
<a href="#">Read</a>	DEV_VOID	DEV_STRING	OPERATOR	Command used to read a string from the socket.
<a href="#">Readln</a>	DEV_VOID	DEV_STRING	OPERATOR	Reads from a socket until a `` `` has been received.
				This command

<a href="#">ReadUntil</a>	DEV_STRING	DEV_STRING	OPERATOR	read data from the socket until the terminator has been reached.
<a href="#">ReadShortArray</a>	DEV_LONG	DEVVAR_SHORTARRAY	OPERATOR	read on socket and return output Argument.

### **Command State :**

This command gets the device state (stored in its *device\_state* data member) and returns it to the caller.

State Definition		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::DEV_STATE	State Code
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

### **Command Status :**

This command gets the device status (stored in its *device\_status* data member) and returns it to the caller.

Status Definition
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Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::CONST_DEV_STRING	Status description
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **Command Reconnect :**

Attempts to re-establish the socket connection.

<b>Reconnect Definition</b>		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• ON	..

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### **Command Write :**

Command used to send a string to the socket.

<b>Write Definition</b>	
Input Argument	Tango::DEV_STRING

Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• OFF	..

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### **Command WriteAndRead :**

Write to the socket and waits for the answer.  
The end of the answer is triggered by the new line character!

<b>WriteAndRead Definition</b>		
Input Argument	Tango::DEV_STRING	Command string.
Output Argument	Tango::DEV_STRING	Answer string.
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• OFF	..

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### **Command WriteReadUntil :**

Write to the socket and waits for the answer.  
The answer is triggered by select() which indicates that the the anser has arrived.

<b>WriteReadUntil</b>
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Definition		
Input Argument	Tango::DEVVAR_STRINGARRAY	[0] = Command string to be send, [1] = end of message character
Output Argument	Tango::DEV_STRING	Answer string.
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	<ul style="list-style-type: none"> <li>• OFF</li> </ul>	..

### **Command WriteShortArray :**

write on socket input Argument.

WriteShortArray Definition		
Input Argument	Tango::DEVVAR_SHORTARRAY	array to write
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

### **Command Read :**

Command used to read a string from the socket.

Read Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_STRING	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• OFF	..

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### **Command ReadIn :**

Reads from a socket until a ``  
`` has been received.

ReadIn Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_STRING	argout
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• OFF	..

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### **Command ReadUntil :**

This command read data from the socket until the terminator has been reached.

<b>ReadUntil Definition</b>		
Input Argument	Tango::DEV_STRING	This is the terminator
Output Argument	Tango::DEV_STRING	This is the read string.
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• OFF	..

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### **Command ReadShortArray :**

read on socket and return output Argument.

<b>ReadShortArray Definition</b>		
Input Argument	Tango::DEV_LONG	number of char to read
Output Argument	Tango::DEVVAR_SHORTARRAY	char read on socket
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

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**There is no attribute defined.**

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There is no dynamic attribute defined.

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<b>JSocket Class States</b>	
<b>Name</b>	<b>Description</b>
ON	Normal state when everything is OK.
OFF	Disconnected from socket (or not yet connected to).