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CTS	Clear To Send	Port Discovery and Enumeration	34
DTR	Data Terminal Ready	Port Ownership Management	37
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RI	Ring Indicate	Encapsulation of Underlying	
CD	Carrier Detect	Native Ports	43
OE	Overrun Error	Java Communication API's Event Based Architecture	43
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PE	Parity Error	Java Communications API	46
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Troubleshooting Problems with RCXPort

There are several things that could potentially go wrong when trying to run RCXPort. The more common mistakes are listed below:

- Make sure your RCX is turned on and within range of the IR tower.
- Make sure the IR tower is properly connected to the correct serial port.
- Make sure that another program (possibly running in the background) isn't using the serial port.
- Make sure you have named the correct serial port (COM1, for instance) in the command line.
- If you are downloading byte code from a file, make sure that file is in the same directory as RCXPort.
- Make sure you have downloaded the Java Communications API, and that it is correctly installed.
- Make sure that your classpath references both *rcxport.jar* and *comm.jar*.

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RCXLoader



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Create Custom Components

Q: What happens if more than ten programs are downloaded to the RCX at once?

A: The 11th (and further) programs will appear in the program list, represented using blanks.

Q: What if I have a LEGO tower connected to the USB port?

A: Set the RCXTTY environment variable to the value USB, instead of to a serial port value.

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Debugging leJOS Programs

- The best way to debug a leJOS program is to use the Sound and LCD classes in unison to provide you with feedback of the robot's state.
- Normal Java exception handling applies to leJOS, allowing you to separate code for normal operation and code for error situations.

Dialog to Create a New Simulator Run



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**Encoding of Java
Types in Signatures**

Java Type	Encoding
void	V
boolean	Z
char	C
byte	B
short	S
int	I
long	J
float	F
double	D
package.....	Lpackage/
package.Class	.../package/ Class;
array	[(type of elements follows)

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Overview of Jini

- Jini is a Java technology built on top of RMI, enabling clients and services to interact in a network with little administrative overhead.
- One feature of Jini is that it is very applicable to embedded devices, including devices like the RCX.
- The Jini Technology Starter Kit (TSK) includes all of the required jar files as well as some service implementations such as reggie, an implementation of a lookup service.

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