User manual for `fireup`.

Need for `fireup`.

The SE system we were developing was distributed and someone was needed for managing processes in the machines that were involved. The human operators are one of the inefficient way doing it as it requires to remember a lot of commands and arguments which is quite difficult. In the way to ease this process we developed a standalone application called `Fireup` in Java.

`Fireup` is an application used as a proxy to human operator for our SE system. It provides a programmable interface to manage processes in the machines that it runs (ofcourse with some privilages). `Fireup` also provides the GUI to allow user to manually operate it.

Prerequisites.

1. Java

How to use.

1. Booting up

Just run the command to start `fireup` from your commandline.

```
java -jar `fireup`.jar
```

2. Running programs:

After start you can run the programs of your choice in your local machine by specifying them in the textbox `executable` with conmmandline arguments in the `cmd args` textbox. [ofcourse hit Run]. First thing in SE you wish to run is your master. So choose the application and run it with the required args.

3. Registering to a master.

`Fireup` support a protocol where you can register your machine as a slave to master machine. By which you give previlages to the master to run commands on that machine. The registration process is manual hence you need to know the hostname/ip and port on which master is running. Enter the fields and hit enter.

4. Whoa! You are ready to acccept commands.

Now your `fireup` is up and running and your master can specify commands to execute.

The programming interface.

The `fireup` provides a simple programming interface where a master can specify commands to execute on the machine. This requires the `fireup` to be registered to the master which is done done in previsous step.

The `fireup` uses ***json*** as a standard to communicate as it's easy to read and understand. The fields of the protocol is given in below table.

1. Connect request.

The connect request is sent by the `fireup` to the master with the the hostname/ip and port on which `fireup` is listening. You need these to communicate with `fireup`, so better save them. This request also sends you a `key` which is used for security purposes. You need to save this as you are supposed to send this key in next communications with `fireup`.

2. Commands

The commands are sent by the master to `fireup` to execute. This includes 4 important fields

a. Key //secret key given to you
b. Command //one of the commands described below.
c. Executable //executable file name/path.
d. Arguments //arguments to the executable.

Fields in the PDU.

Field	Possible Values
Key*	A number 65536
Command	CREATE, KILL,CONNECT
Executable	A valid executable file path
Argument	A string of arguments
Host	Host on which `fireup` is running
Port	Port on which `fireup` is listening.