

## 7 Distant running commands

We already know how to send and receive the messages. So far we were sending only simple messages, which we printed to the text screen or the turtle printed them to the graphic screen. In this chapter we will learn how to send the messages, which the turtle or Imagine can run.

1. Connect two or more Imagines (either locally or through the Internet).

If we know, that other participants will send only instructions for the turtle, we can progress in next steps.

2. Specify the **onReceive** event as `t1'run message` in **Change net1** dialogue box in all Imagines



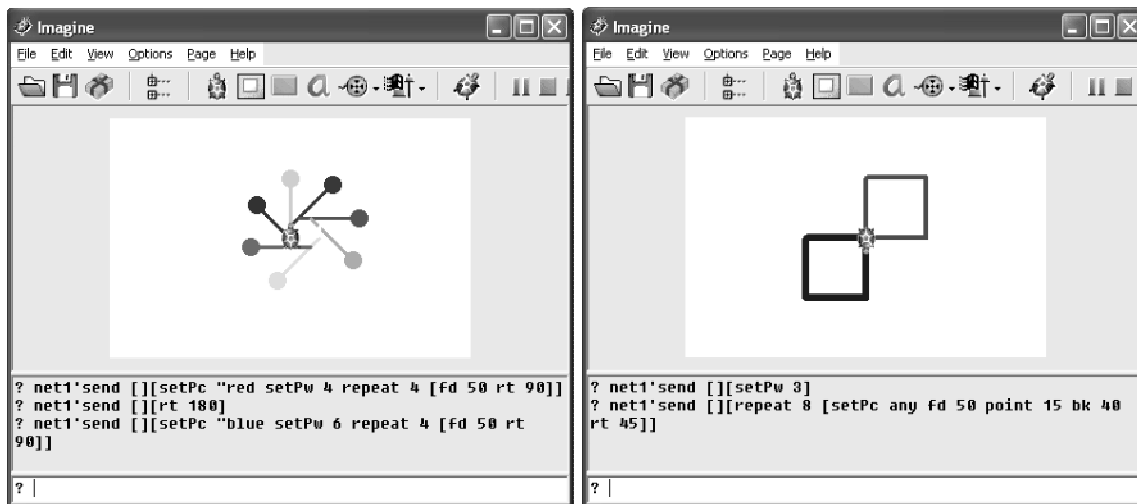
or by `net1'setEvent "onReceive [t1'run message]` in command line.

3. Now, we can write in command line instructions, which the turtle can run, for example in one Imagine

```
? net1'send [][setPc "red setPw 4 repeat 4 [fd 50 rt 90]]
? net1'send [][rt 180]
? net1'send [][setPc "blue setPw 6 repeat 4 [fd 50 rt 90]]
```

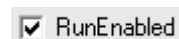
in other Imagine

```
? net1'send [][setPw 3]
? net1'send [][repeat 8 [setPc any fd 50 point 15 bk 40 rt 45]]
```



If we do not know, what kind of messages other participant will send, we can specify the **onReceive** event as `run message` or we must progress in next steps.

4. Check the **RunEnabled** setting in **Change net1** dialogue box in all Imagines



or type next instruction to the command line:

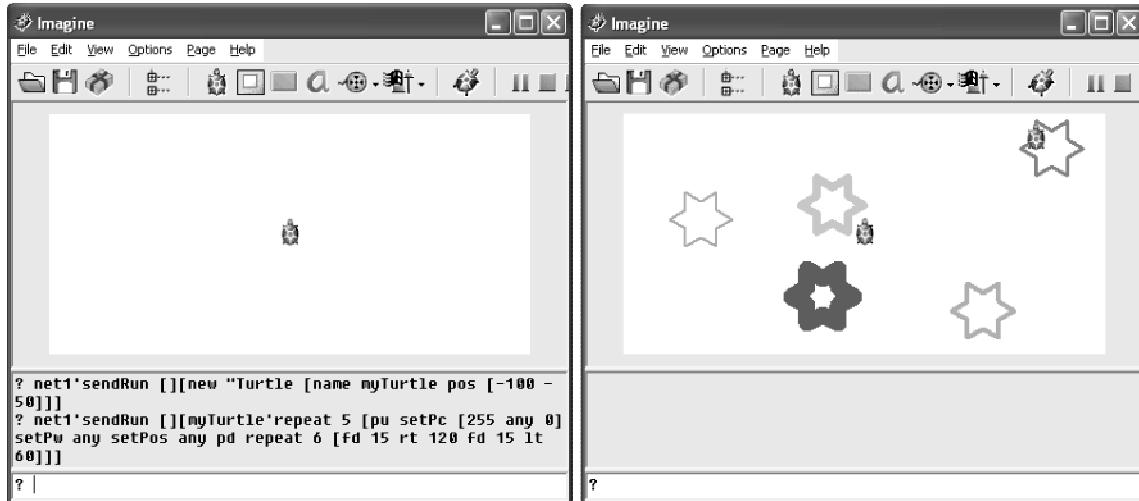
```
§ net1'setRunEnabled "true
```

This setting allows or does not allow sending list of instructions using **sendRun**. This list of instructions will be run directly in the Imagine environment.

Note: This setting allows other users to send instructions, which can erase your object, procedures, files...

5. Now, we can type in command line instructions with list of instructions, for example:

```
? net1'sendRun [][new "Turtle [name myTurtle pos [-100 -50]]]
? net1'sendRun [][myTurtle'repeat 5 [pu setPc [255 any 0] setPw any
setPos any pd repeat 6 [fd 15 rt 120 fd 15 lt 60]]]
```



We can use both **send** and **sendRun** commands.

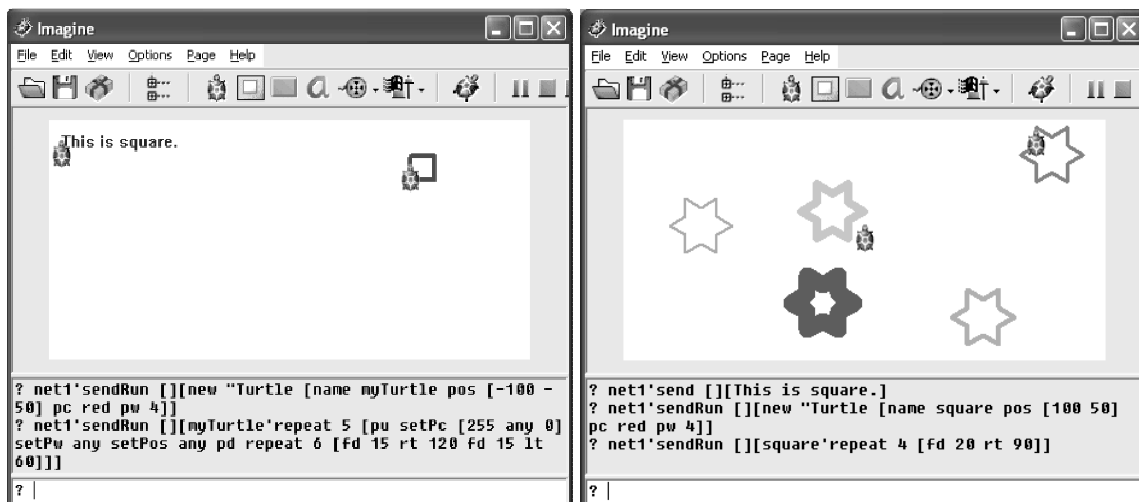
6. Specify the **onReceive** event for **net1** object as:

```
$ t1'label message t1'back 20
```

Then set the turtle (position, pen – pu, colour, width...).

7. Type in command line for example next instructions:

```
? net1'send [][This is a square.]
? net1'sendRun [][new "Turtle [name square pos [100 50] pc red pw
4]]
? net1'sendRun [][square'repeat 4 [fd 20 rt 90]]
```



## Conclusion

We learned how to send messages, which Imagine or turtle in other Imagine can run. We must correctly set **onReceive** event and then use **send** command. This way we can send instruction for one object, which defined our participant. Or we must set **RunEnabled** setting on **true** and then use **sendRun** command. Imagine of other participant runs sent commands automatically.