Proxy server for Docker container management

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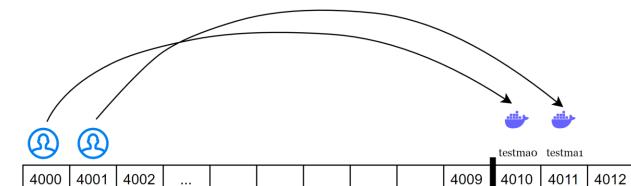
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Progress report

- Developed
- In testing phase internally at Marand

Recap of features

- Configurable on start and (partially) at runtime

- Forwards data to containers

- Manages containers

- Executes remote commands

- Logging system

Configuration

ports-config.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<ports>
    <server name="test">
        <range start="4000" end="4020" remap="10"/>
    </server>
    <server name="prod">
        <range start="5000" end="5400" remap="200"/>
    </server>
</ports>
```

broccoli-config.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<broccoli>
    <host name="test" url="zajec-docker-test.marand.si">
        <auth username="zajec" keyfile=" path_to_key_file "/>
    </host>

    <user_interface>
        <command_interface enable="true" port="777"/>
        <logging_interface enable="true" log4jPort="888"
        clientPort="999"/>
    </user_interface>

    <default_container_timeout/>1d<default_container_timeout/>
    <container_resume_timeout>2s</container_resume_timeout>

    <container containerPort="4000" timeout="5m"/>
    <container containerPort="4001" timeout="5m"/>
    <container containerPort="4002" timeout="5m"/>
</broccoli>
```

testma0   testma1

| 4000 | 4001 | 4002 | ... | | | | | | 4009 | 4010 | 4011 | 4012 | ... | | | | | | 4019 |

◄─────Listening (proxy) ports─────►   ◄─────Forwarding (container) ports─────►

k-proxy

docker

Commands

- *start*   starts a proxy server on given port pair

- *disconnect*   disconnects all clients on given port

- *stop*   shuts down a proxy server running on given port

- *info*   prints information and state of server

- *log*   connects to server to receive a stream of logs

- More about commands in demonstration