



# BuildBot



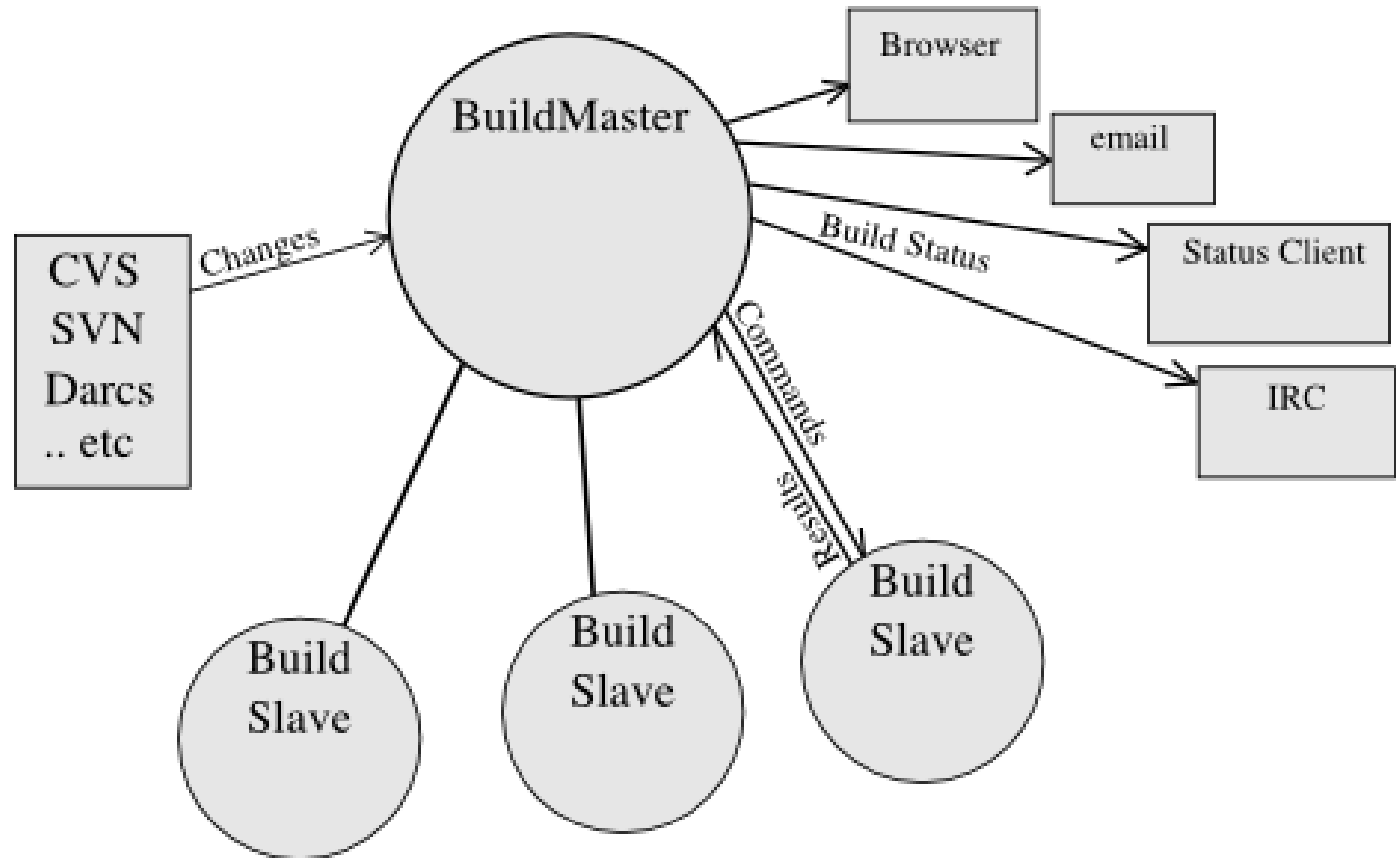
**Gábor Rapcsányi**  
**(rgabor)**

# Introduction

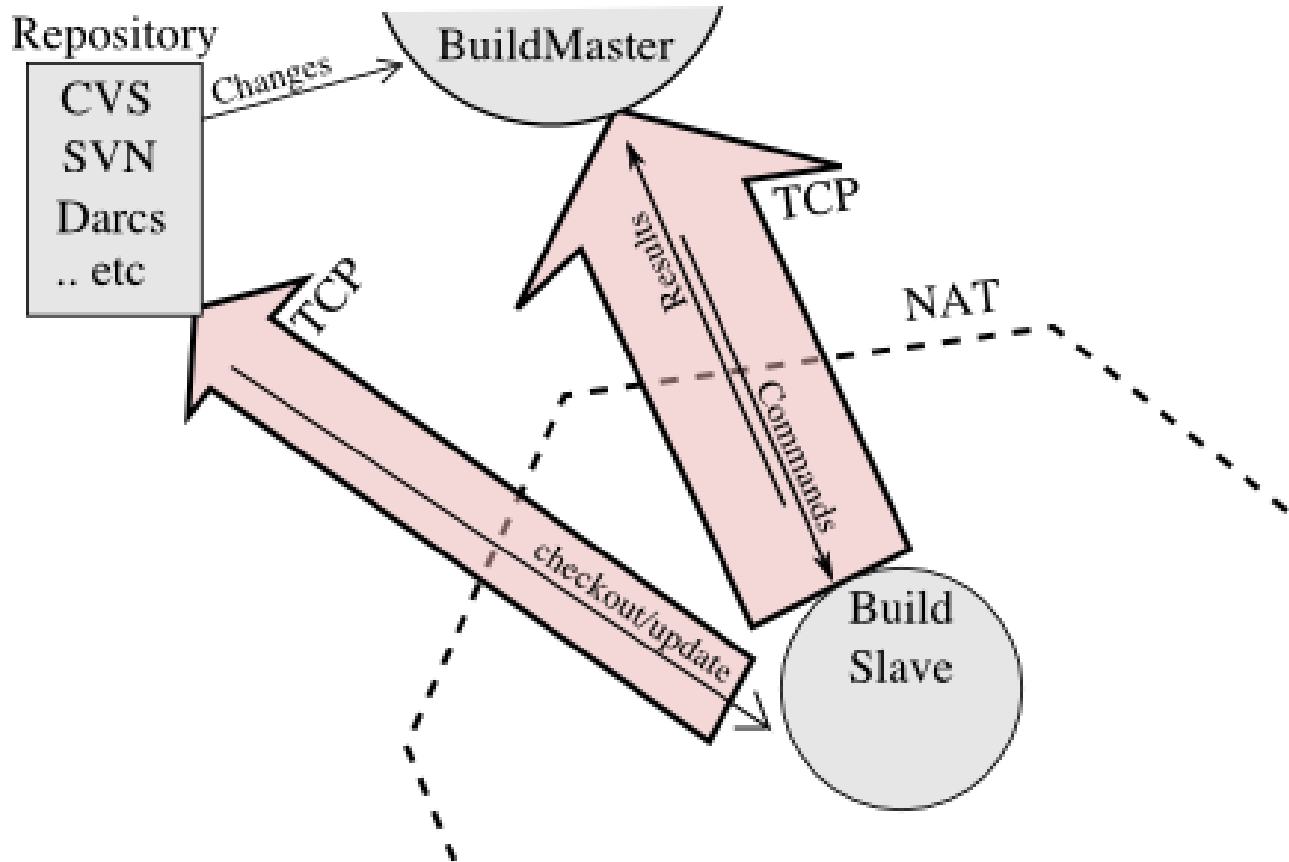
- ▶ BuildBot is a build and test automatization tool
- ▶ Very usefull for cross-platform development
- ▶ Opensource project (GPL)
- ▶ Written in Python



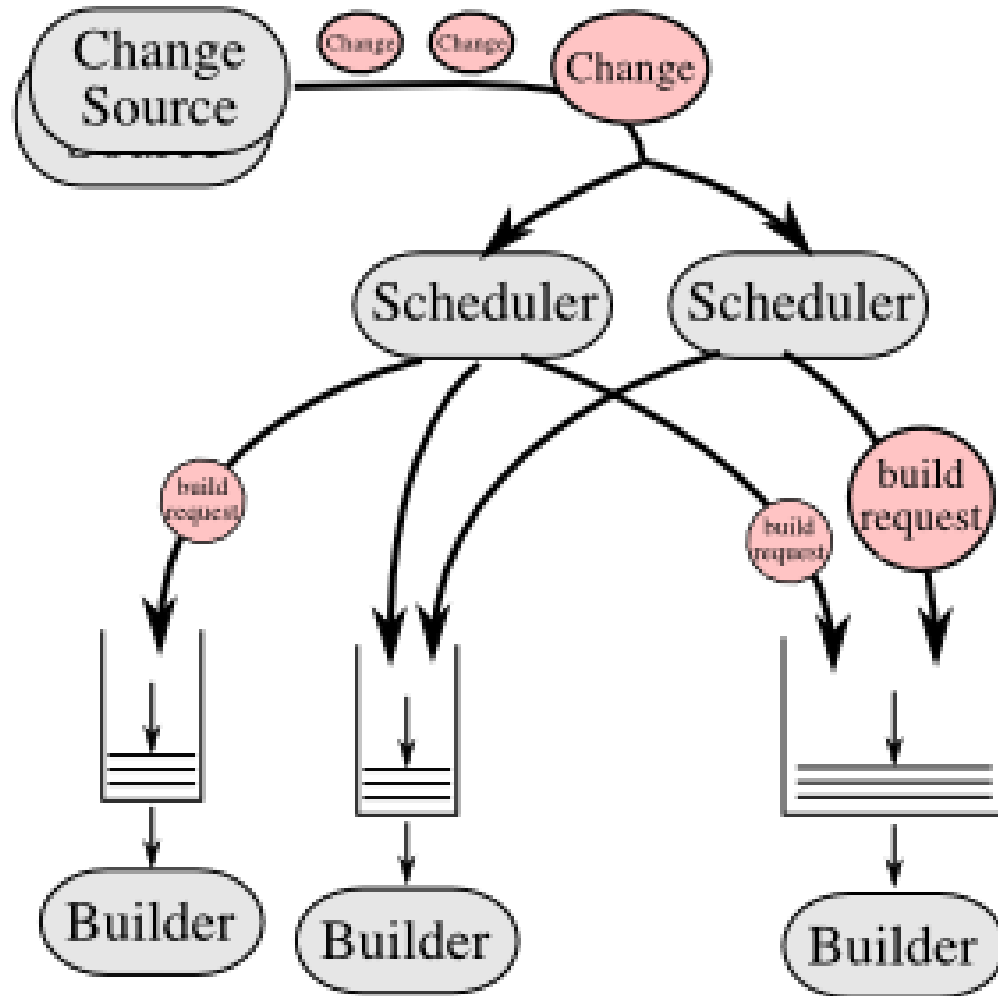
# Architecture



# Architecture(2)



# Architecture(3)



# Create master and slave

- ▶ Create master:

```
buildbot create-master BASEDIR  
(provide master.cfg.sample)
```

- ▶ Create slave:

```
buildbot create-slave BASEDIR \  
MASTERHOST:PORT SLAVENAME PASSWORD
```



# Launch, stop, restart

- ▶ Start, stop the master or slave:

```
buildbot start BASEDIR
```

```
buildbot stop BASEDIR
```

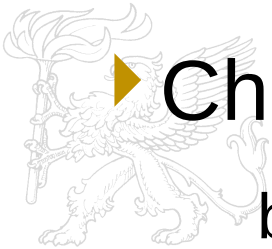
```
buildbot restart BASEDIR
```

- ▶ Load new config on master:

```
buildbot reconfig BASEDIR
```

- ▶ Check master config file:

```
buildbot checkconfig master.cfg
```



# Configure the master

## ▶ master.cfg:

```
c = BuildmasterConfig = {}
```

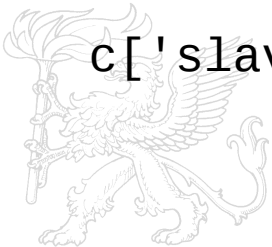
```
c['projectName'] = "Buildbot"
```

```
c['projectURL'] = "http://buildbot.sourceforge.net/"
```

```
c['buildbotURL'] = "http://localhost:8010/"
```

```
c['slavePortnum'] = 10000
```

```
c['slaves'] = [BuildSlave('bot-solaris', 'solarispasswd')  
               BuildSlave('bot-bsd', 'bsdpasswd')  
               ]
```





# Build factory

## ▶ Factory:

```
f = factory.BuildFactory()  
f.addStep(source.SVN(svnurl="http://svn.example.org/Trunk/")  
)  
f.addStep(shell.ShellCommand(command=["make", "all"]))  
f.addStep(shell.ShellCommand(command=["make", "test"]))
```

## ▶ Some steps

- Source Checkout
- ShellCommand
- Transferring Files
- Triggering Schedulers



# Builders

```
c['builders'] = [  
    {'name': 'test-solaris',  
     'slavename': 'bot-soalris',  
     'builddir': 'test-solaris',  
     'factory': f }  
  
    {'name': 'test-bsd',  
     'slavename': 'bot-bsd',  
     'builddir': 'test-bsd',  
     'factory': f }  
]
```



# Schedulers

```
c['change_source'] =  
  [ SVNPoller("http://svn.example.org/Trunk")  
  ]  
c['schedulers'] = [  
  Scheduler(name="quick", builderNames=['test-solaris',  
    'test-bsd'])  
  ]
```

## ► Some type of schedulers:

- Scheduler Scheduler
- AnyBranchScheduler
- Dependent Scheduler
- Periodic Scheduler
- Nightly Scheduler
- Try Schedulers
- Triggerable Scheduler



# Status delivery

```
c['status'] = []  
c['status'].append(html.WebStatus(http_port=8010))
```

## ► Status:

- WebStatus
- MailNotifier
- IRC Bot



# Configure the slave

## ▶ Create the slave

```
buildbot create-slave BASEDIR \  
    MASTERHOST:PORT SLAVENAME PASSWORD
```

## ▶ Set up environment

- Commands come from master
- We "can not" change them :)



# Future plans

- ▶ Linux Qt WebKit x86 Debug
- ▶ Linux ARM Qt WebKit
- ▶ Linux ARM WebkitGTK+
- ▶ Windows Qt WebKit
- ▶ QtWebKit Mac port

