DAY 5

NODE.JS

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nomades.ch

TODAY

- Back on yesterday's exercise
- Deployment
  - Nginx front
  - Git
  - PM2
- Tips and tricks
  - Image upload
  - SocketIO
- Questions

BACK ON YESTERDAY’S EXERCISE

HOW TO

User creation

```
% curl -H "$CTYPE" -d’{"name": "john"}’ "$HOST/api/users"
```

Set password

```
% curl -H "$CTYPE" -d'{"password": "O"}' "$HOST/api/users/set-password"
```

Reset password

```
% curl -H "$CTYPE" -d'{"password": "new"}' –user cas:O "$HOST/api/users/reset-password"
```

Note the ***–user cas:O*** used for HTTP Basic Authentication

DEPLOYMENT

NGINX

We use a web server like Nginx or Apache in front of NodeJS applications:

- Cache mechanism
- Load balancing
- SSL certificates …

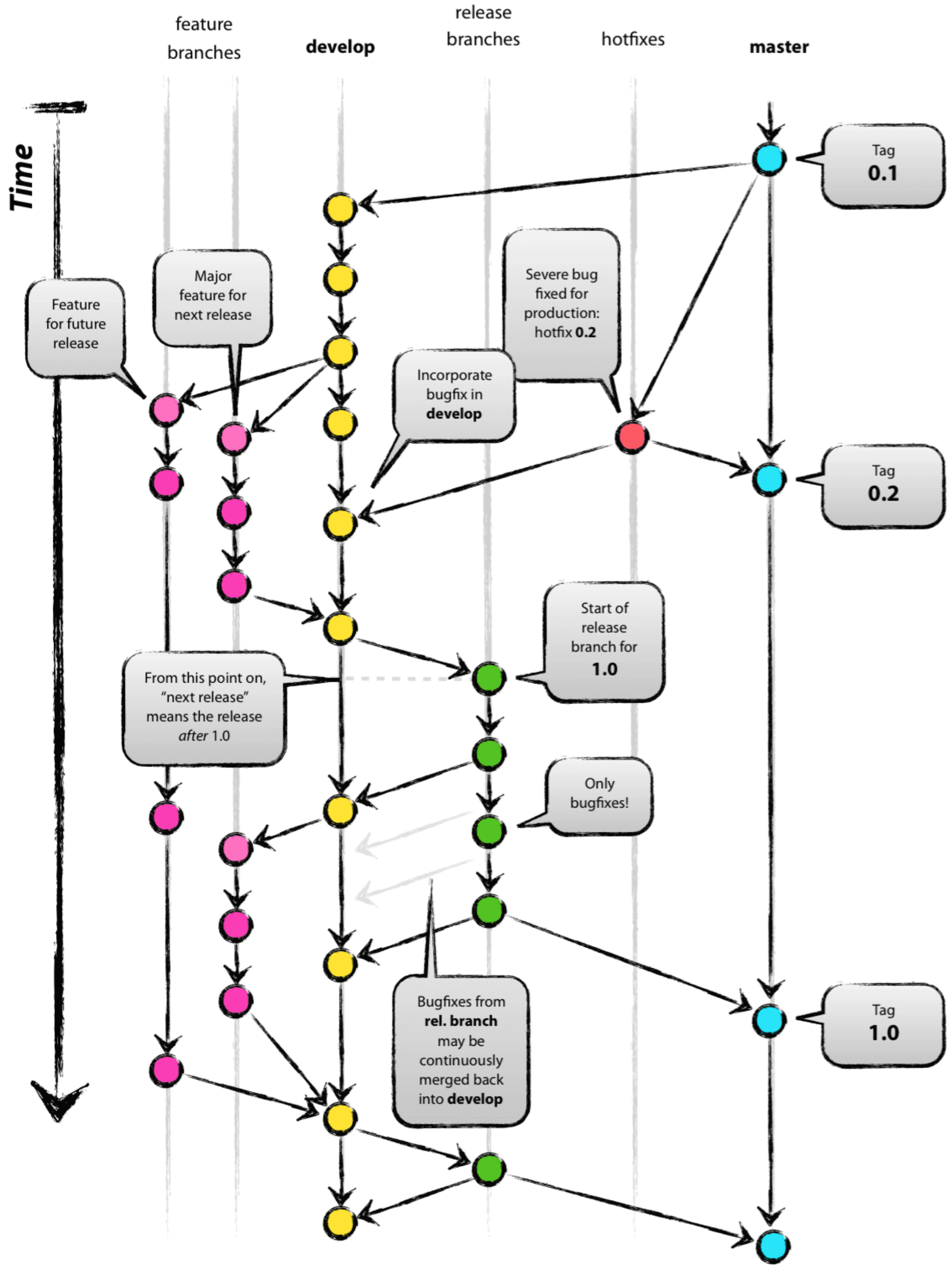
GIT

On dev server

```
% git add .
% git commit -m "My new feature"
% git push
```

On production server

```
% git pull
```


feature branches
develop
release branches
hotfixes
master
Time
Tag 0.1
Severe bug fixed for production: hotfix 0.2
Major feature for next release
Feature for future release
Incorporate bugfix in develop
Tag 0.2
Start of release branch for 1.0
From this point on, "next release" means the release after 1.0
Only bugfixes!
Bugfixes from rel. branch may be continuously merged back into develop
Tag 1.0

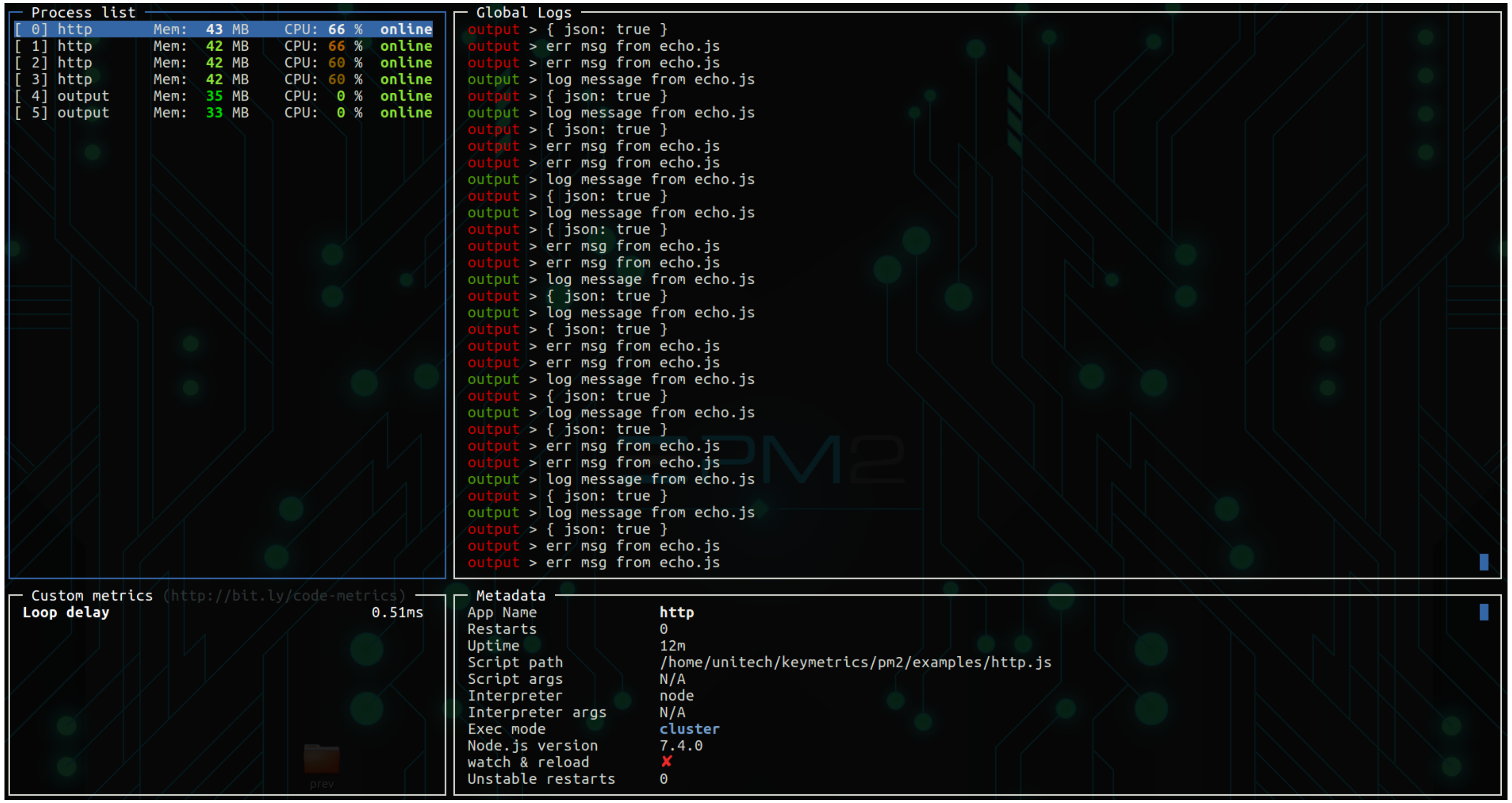
PM2

PM2 is a NodeJS process manager

```
% pm2 start app.js
% pm2 stop
% pm2 restart
% pm2 delete
```

Features

- Monitoring
- Watch
- Clustering



```
Process list
[ 0] http      Mem:  43 MB   CPU: 66 %  online
[ 1] http      Mem:  42 MB   CPU: 66 %  online
[ 2] http      Mem:  42 MB   CPU: 60 %  online
[ 3] http      Mem:  42 MB   CPU: 60 %  online
[ 4] output    Mem:  35 MB   CPU:  0 %  online
[ 5] output    Mem:  33 MB   CPU:  0 %  online
```

```
Global Logs
output > { json: true }
output > err msg from echo.js
output > err msg from echo.js
output > log message from echo.js
output > { json: true }
output > log message from echo.js
output > { json: true }
output > err msg from echo.js
output > err msg from echo.js
output > log message from echo.js
output > { json: true }
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output > { json: true }
output > log message from echo.js
output > { json: true }
output > err msg from echo.js
output > err msg from echo.js
```

```
Custom metrics (http://bit.ly/code-metrics)
Loop delay                                  0.51ms
```

```
Metadata
App Name              http
Restarts              0
Uptime                12m
Script path           /home/unitech/keymetrics/pm2/examples/http.js
Script args           N/A
Interpreter           node
Interpreter args      N/A
Exec mode             cluster
Node.js version       7.4.0
watch & reload        ✗
Unstable restarts     0
```

TIPS AND TRICKS

IMAGE UPLOAD

We use the Multer Middleware module for image uploads

```
var express = require('express')
var multer  = require('multer')
var upload  = multer({ dest: 'uploads/' })

var app = express()

app.post('/profile', upload.single('avatar'), function (req, res, next) {
  // req.file is the `avatar` file
  // req.body will hold the text fields, if there were any
})
```

SOCKET IO

```
var app = require(‘http').createServer(handler);
var io = require('socket.io')(app);

app.listen(80);

io.on('connection', function (socket) {
  socket.emit('news', { hello: 'world' });
  socket.on('my other event', function (data) {
    console.log(data);
  });
});
```

QUESTIONS ?