



THE PROCESS OBJECT

Andrew Sheehan
MET CS602

GLOBALS

In a browser, the **Window** Object is available in any scope.

Does not exist in Node.

GLOBALS (NOT NODE)

The Document and Window
(browser Objects) do not exist in
Node.

THE PROCESS OBJECT

You do not need to use `require()` to access or use the Process object

BROWSER GLOBALS & NODE

Node does not allow globals.

Everything is local to the module

You need to export.

GLOBALS

Process

console

module.exports | exports

require

GLOBALS

`module.exports`

Is used for defining what a module makes available to others to use.

GLOBALS

The Process Object

Only works with Node JS

NODE PROCESS OBJECT

Every execution that runs by node

A screenshot of a macOS terminal window. The title bar shows the user '1. azat.mardanov@DSA002579' and the directory '~/'. The terminal has three tabs: '(node)', '..xpressjsgui...', and '(bash)'. The '(node)' tab is active. The terminal shows four commands being executed in a shell, each preceded by a blue cursor icon and the prompt 'code \$'. The commands are: 'node -e "console.log(process.pid)"', 'node -e "console.log(process.cwd())"', 'node -e "console.log(process.pid)"', and 'node -e "console.log(process.pid)"'. The outputs are: '41270', '/Users/azat.mardanov/code', '41280', and '41284'. The prompt 'code \$' is followed by a vertical bar '|' on the last line.

```
1. azat.mardanov@DSA002579: ~/
(node) ..xpressjsgui... (bash)
code $ node -e "console.log(process.pid)"
41270
code $ node -e "console.log(process.cwd())"
/Users/azat.mardanov/code
code $ node -e "console.log(process.pid)"
41280
code $ node -e "console.log(process.pid)"
41284
code $ |
```

__DIRNAME

The absolute path to the resource
relative to your current file

Not a true global – it will be automatic to each module that
it is used within.

```
console.log( `You are in ${__dirname}`);
```

__DIRNAME EXAMPLE

Instead of doing this

```
const messages = require(`./routes/messages`);
```

Do this

```
const messages = require(__dirname, `routes`, `messages`);
```

PROCESS.CWD

Process.cwd

Is an absolute path of the process that is running the script, which may not be the same as where you invoked it.

For example:

```
C:/node ../scripts/prod/program.js
```

PROCESS.CWD

Command-line arguments

Process.**argv**[{*indice value goes here*}] || 'default goes here'

To read or know what was used when
executing your script.

PROCESS.ENV

Injected (configured) at launch.

To read your environment values.

Think about that... db connections, usernames, tokens

```
COMPUTERNAME=L-H5CG7300WSF
ComSpec=C:\WINDOWS\system32\cmd.exe
COR_ENABLE_PROFILING=0x01
COR_PROFILER={DA7CFC47-3E35-4c4e-B495-534F93B28683}
DB2INSTANCE=DB2
FP_NO_HOST_CHECK=NO
HOMEDRIVE=C:
HOMEPATH=\Users\asheehan
INCLUDE=C:\PROGRA~1\IBM\SQLLIB\INCLUDE;C:\PROGRA~1\
JAVA_HOME=C:\Java\jdk1.8.0_131
LIB=;C:\PROGRA~1\IBM\SQLLIB\LIB
LOCALAPPDATA=C:\Users\asheehan\AppData\Local
LOGONSERVER=\\NE7ADCWP03
NUMBER_OF_PROCESSORS=4
OS=Windows_NT
Path=C:\Program Files (x86)\RSA SecurID Token Commo
```

PROCESS EVENTS

- ☰ beforeExit
- ☰ disconnect
- ☰ exit
- ☰ message
- ☰ uncaughtException



PROCESS EVENTS EXAMPLES

```
process.on('message', (msg) => {  
  // coding goes here...  
});
```

```
process.on('uncaughtException', (err) => {  
  // coding goes here...  
});
```