



## INSTALLATION

Install the latest Express.js locally

```
$ sudo npm install express
```

Install Express.js v4.2.0 locally and save to *package.json*

```
$ sudo npm install express@4.2.0 --save
```

Install Express.js command-line generator v4.0.0

```
$ sudo npm install -g express-generator@4.0.0
```

## GENERATOR

Usage

```
$ express [options] [dir]
```

Print the usage information

```
-h
```

Print the express-generator version number

```
-V
```

Add ejs engine support, defaults to jade if omitted

```
-e
```

Add hogan.js engine support

```
-H
```

Add CSS support for (less|stylus|compass), defaults to plain CSS if omitted

```
-c <library>
```

Generate into a non-empty directory

```
-f
```

## BASICS

Include the module

```
var express = require('express')
```

Create an instance

```
var app = express()
```

Start the Express.js server

```
app.listen(portNumber, callback)
```

Start the Express.js server

```
http.createServer(app).listen(portNumber, callback)
```

Set a property value by the key

```
app.set(key, value)
```

Get a property value by the key

```
app.get(key)
```

## ROUTES AND MIDDLEWARE

```
app.get(url, requestHandler, [requestHandler2, ...])
```

```
app.post(url, requestHandler, [requestHandler2, ...])
```

```
app.put(url, requestHandler, [requestHandler2, ...])
```

```
app.del(url, requestHandler, [requestHandler2, ...])
```

```
app.all([url,] requestHandler, [requestHandler2, ...])
```

```
app.param([name,] callback)
```

```
app.use([url,] requestHandler, [requestHandler2, ...])
```

## REQUEST

Parameters middleware

```
request.params
```

Extract one parameter

```
request.param
```

Extract query string parameter

```
request.query
```

Return route string

```
request.route
```

Cookies, requires cookieParser

```
request.cookies
```

Signed cookies, requires cookie-parser -c <library>

```
request.signedCookies
```

Payload, requires body-parser

```
request.body
```

## RESPONSE

Redirect request

```
response.redirect(status, url)
```

Send response

```
response.send(status, data)
```

Send JSON and force proper headers

```
response.json(status, data)
```

Send a file

```
response.sendFile(path, options, callback)
```

Render a template

```
response.render(templateName, locals, callback)
```

Pass data to template

```
response.locals
```

## REQUEST HEADER SHORTCUTS

Value for the header key

```
request.get(headerKey)
```

Checks if the type is accepted

```
request.accepts(type)
```

Checks language

```
request.acceptsLanguage(language)
```

Checks charset

```
request.acceptsCharset(charset)
```

Checks the type

```
request.is(type)
```

IP address

```
request.ip
```

IP addresses (with trust-proxy on)

```
request.ips
```

URL path

```
request.path
```

Host without port number

```
request.host
```

Checks freshness

```
request.fresh
```

Checks staleness

```
request.stale
```

True for AJAX-y requests

```
request.xhr
```

Returns HTTP protocol

```
request.protocol
```

Checks if protocol is https

```
request.secure
```

Array of subdomains

```
request.subdomains
```

Original URL

```
request.originalUrl
```

## HANDLERS SIGNATURES

Request handler signature

```
function(request, response, next) {}
```

Error handler signature

```
function(error, request, response, next) {}
```



## STYLUS AND JADE

```
app.set('views', path.join(__dirname, 'views'))
app.set('view engine', 'jade')
```

```
app.use(require('stylus').middleware(path.join(__dirname, 'public')))
```

## BODY

```
var bodyParser = require('body-parser')
app.use(bodyParser.json())
app.use(bodyParser.urlencoded())
```

## STATIC

```
app.use(express.static(path.join(__dirname, 'public')))
```

## OTHER POPULAR MIDDLEWARE

Analogous to *cookieParser*  
`cookies` and `keygrip`

Raw body  
`raw-body`

Connect middleware for multipart, connect middleware for busboy  
`connect-multipart`, `connect-busboy`

Analogous to *query*  
`qs`

Analogous to *staticCache*  
`st`, `connect-static`

Validation  
`express-validator`

LESS CSS  
`less`

Authentication library  
`passport`

Security headers  
`helmet`

CORS  
`connect-cors`

Connect Redis  
`connect-redis`

## CONNECT MIDDLEWARE

```
$ sudo npm install <package_name> --save
```

Request payload  
`body-parser`

Gzip  
`compression`

Times out the request in *ms*, defaulting to *5000*.  
`connect-timeout`

Cookies  
`cookie-parser`

Session via Cookies store  
`cookie-session`

CSRF  
`csurf`

Error handler  
`errorhandler`

Session via in-memory or other store  
`express-session`

HTTP method override  
`method-override`

Server logs  
`morgan`

Response time middleware  
`response-time`

Favicon  
`serve-favicon`

Serves pages that contain directory listings  
`serve-index`

Static content  
`serve-static`

Virtual Host  
`vhost`