

Search

## Resource

### Online

Official Website

### Related

JavaScript

## Domain

### Domain

Additions to Error objects  
Implicit Binding  
Explicit Binding  
domain.create()  
Class: Domain  
domain.run(fn)  
domain.members  
domain.add(emitter)  
domain.remove(emitter)  
domain.bind(cb)  
Example  
domain.intercept(cb)  
Example  
domain.dispose()

### Crypto

crypto.createCredentials(detail s)  
crypto.createHash(algorithm)  
Class: Hash  
hash.update(data, [input\_enco ding])  
hash.digest([encoding])  
crypto.createHmac(algorithm, k ey)  
Class: Hmac  
hmac.update(data)  
hmac.digest([encoding])  
crypto.createCipher(algorithm, password)  
crypto.createCipheriv(algorithm , key, iv)  
Class: Cipher  
cipher.update(data, [input\_enco ding], [output\_encoding])  
cipher.final([output\_encoding])  
cipher.setAutoPadding(auto\_pa dding=true)  
crypto.createDecipher(algorith m, password)  
crypto.createDecipheriv(algorit hm, key, iv)  
Class: Decipher  
decipher.update(data, [input\_e ncoding], [output\_encoding])  
decipher.final([output\_encoding ])  
decipher.setAutoPadding(auto\_ padding=true)  
crypto.createSign(algorithm)  
Class: Signer  
signer.update(data)  
signer.sign(private\_key, [output \_format])  
crypto.createVerify(algorithm)  
Class: Verify  
verifier.update(data)  
verifier.verify(object, signature, [signature\_format])  
crypto.createDiffieHellman(prim e\_length)  
crypto.createDiffieHellman(prim e, [encoding])  
Class: DiffieHellman  
diffieHellman.generateKeys([en coding])  
diffieHellman.computeSecret(ot her\_public\_key, [input\_encodin g], [output\_encoding])  
diffieHellman.getPrime([encodin g])

## Basic

### Global Objects

global  
process  
console  
Class: Buffer  
require()  
require.resolve()  
require.cache  
require.extensions  
\_\_filename  
\_\_dirname  
module  
exports  
setTimeout(cb, ms)  
clearTimeout(t)  
setInterval(cb, ms)  
clearInterval(t)

### console

console.log([data], [...])  
console.info([data], [...])  
console.error([data], [...])  
console.warn([data], [...])  
console.dir(obj)  
console.time(label)  
console.timeEnd(label)  
console.trace(label)  
console.assert(expression, [me ssage])

### Timers

setTimeout(callback, delay, [ar g], [...])  
clearTimeout(timeoutId)  
setInterval(callback, delay, [arg ], [...])  
clearInterval(intervalId)

### Util

util.format(format, [...])  
util.debug(string)  
util.error([...])  
util.puts([...])  
util.print([...])  
util.log(string)  
util.inspect(object, [showHidden ], [depth], [colors])  
util.isArray(object)  
util.isRegExp(object)  
util.isDate(object)  
util.isError(object)  
util.pump(readableStream, writa bleStream, [callback])  
util.inherits(constructor, superC onstructor)

### Path

path.normalize(p)  
path.join([path1], [path2], [...])  
path.resolve([from ...], to)  
path.relative(from, to)  
path.dirname(p)  
path.basename(p, [ext])  
path.extname(p)  
path.sep

### Query String

querystring.stringify(obj, [sep], [ eq])  
querystring.parse(str, [sep], [eq ], [options])  
querystring.escape  
querystring.unescape

### punyncode

punyncode.decode(string)  
punyncode.encode(string)  
punyncode.toUnicode(domain)

## Module

### Modules

Cycles  
Core Modules  
File Modules  
Loading from node\_modules F olders  
Folders as Modules  
Caching  
Module Caching Caveats  
The module Object  
module.exports  
module.require(id)  
module.id  
module.filename  
module.loaded  
module.parent  
module.children  
All Together...  
Loading from the global folders  
Accessing the main module  
Addenda: Package Manager Ti ps

### Addons

Addons  
Hello world  
Addon patterns  
Function arguments  
Callbacks  
Object factory  
Function factory  
Wrapping C++ objects  
Factory of wrapped objects  
Passing wrapped objects aroun d

## File

### File System

fs.rename(oldPath, newPath, [c allback])  
fs.renameSync(oldPath, newPa th)  
fs.truncate(fd, len, [callback])  
fs.truncateSync(fd, len)  
fs.chown(path, uid, gid, [callbac k])  
fs.chownSync(path, uid, gid)  
fs.fchown(fd, uid, gid, [callback ])  
fs.fchownSync(fd, uid, gid)  
fs.lchown(path, uid, gid, [callba ck])  
fs.lchownSync(path, uid, gid)  
fs.chmod(path, mode, [callback])  
fs.chmodSync(path, mode)  
fs.fchmod(fd, mode, [callback])  
fs.fchmodSync(fd, mode)  
fs.lchmod(path, mode, [callback ])  
fs.lchmodSync(path, mode)  
fs.stat(path, [callback])  
fs.lstat(path, [callback])  
fs.fstat(fd, [callback])  
fs.statSync(path)  
fs.lstatSync(path)  
fs.fstatSync(fd)  
fs.link(srcpath, dstpath, [callbac k])  
fs.linkSync(srcpath, dstpath)  
fs.symlink(destination, path, [ty pe], [callback])  
fs.symlinkSync(destination, pat h, [type])  
fs.readlink(path, [callback])  
fs.readlinkSync(path)  
fs.realpath(path, [cache], callba ck)  
fs.realpathSync(path, [cache])  
fs.unlink(path, [callback])

## Buffer/Stream

### Buffer

Buffer  
Class: Buffer  
new Buffer(size)  
new Buffer(array)  
new Buffer(str, [encoding])  
buf.write(string, [offset], [length] , [encoding])  
buf.toString([encoding], [start], [ end])  
buf[index]  
Class Method: Buffer.isBuffer(o bj)  
Class Method: Buffer.byteLengt h(string, [encoding])  
Class Method: Buffer.concat(list , [totalLength])  
buf.length  
buf.copy(targetBuffer, [targetSt art], [sourceStart], [sourceEnd])  
buf.slice([start], [end])  
buf.readUInt8(offset, [noAssert] )  
buf.readUInt16LE(offset, [noAs sert])  
buf.readUInt16BE(offset, [noAs sert])  
buf.readUInt32LE(offset, [noAs sert])  
buf.readUInt32BE(offset, [noAs sert])  
buf.readInt8(offset, [noAssert])  
buf.readInt16LE(offset, [noAsse rt])  
buf.readInt16BE(offset, [noAss ert])  
buf.readInt32LE(offset, [noAsse rt])  
buf.readInt32BE(offset, [noAss ert])  
buf.readFloatLE(offset, [noAss ert])  
buf.readFloatBE(offset, [noAss ert])  
buf.readDoubleLE(offset, [noAs sert])  
buf.readDoubleBE(offset, [noAs sert])  
buf.writeUInt8(value, offset, [no Assert])  
buf.writeUInt16LE(value, offset, [noAssert])  
buf.writeUInt16BE(value, offset, [noAssert])  
buf.writeUInt32LE(value, offset, [noAssert])  
buf.writeUInt32BE(value, offset, [noAssert])  
buf.writeInt8(value, offset, [noA ssert])  
buf.writeInt16LE(value, offset, [ noAssert])  
buf.writeInt16BE(value, offset, [ noAssert])  
buf.writeInt32LE(value, offset, [ noAssert])  
buf.writeInt32BE(value, offset, [ noAssert])  
buf.writeFloatLE(value, offset, [ noAssert])  
buf.writeFloatBE(value, offset, [ noAssert])  
buf.writeDoubleLE(value, offset , [noAssert])  
buf.writeDoubleBE(value, offset , [noAssert])  
buf.fill(value, [offset], [end])  
buffer.inspect\_MAX\_BYTES  
Class: SlowBuffer

### Stream

Readable Stream  
Event: 'data'  
Event: 'end'

## Process

### Process

Event: 'exit'  
Event: 'uncaught'  
Signal Events  
process.stdout  
process.stderr  
process.stdin  
process.argv  
process.execPa t  
process.abort()  
process.chdir(di rectory)  
process.cwd()  
process.env  
process.exit([co de])  
process.getgid()  
process.setgid(i d)  
process.getuid()  
process.setuid(i d)  
process.version  
process.version: process.config  
process.kill(pid, process.pid)  
process.title  
process.arch  
process.platform  
process.memory  
process.nextTick()  
process.umask()  
process.uptime()  
process.hrtime()

### Events

Class: events.Ev emitter.addListe ner)  
emitter.on(event emitter.once(ev emitter.removeL stener)  
emitter.removeA nt()  
emitter.setMaxLi steners)  
emitter.emit(eve ], [...])  
Event: 'newListe ner'

### net

net.createServer nctionListener)  
net.connect(optio nListener)  
net.createConne ctionListener)  
net.connect(port ctListener)  
net.createConne st])  
net.connectListe ner)  
net.connect(pat hner])  
net.createConne nnectListener)  
Class: net.Serve server.listen(port og), [listeningLis server.listen(pat ener])  
server.listen(har stener])  
server.close([cb server.address(  
server.maxConn server.connecti Event: 'listening'  
Event: 'connecti Event: 'close'  
Event: 'error'  
Class: net.Socke

```
diffieHellman.getGenerator([en
coding])
diffieHellman.getPublicKey([enc
oding])
diffieHellman.getPrivateKey([en
coding])
diffieHellman.setPublicKey(publi
c_key, [encoding])
diffieHellman.setPrivateKey(pub
lic_key, [encoding])
crypto.getDiffieHellman(group_
name)
crypto.pbkdf2(password, salt, it
erations, keylen, callback)
crypto.randomBytes(size, [callb
ack])
```

### TSL(SSL)

```
Client-initiated renegotiation att
ack mitigation
NPN and SNI
tls.createServer(options, [secur
eConnectionListener])
tls.connect(options, [secureCon
nectListener])
tls.connect(port, [host], [options
], [secureConnectListener])
tls.createSecurePair([credential
s], [isServer], [requestCert], [rej
ectUnauthorized])
Class: SecurePair
Event: 'secure'
Class: tls.Server
Event: 'secureConnection'
Event: 'clientError'
server.listen(port, [host], [callba
ck])
server.close()
server.address()
server.addContext(hostname, c
redentials)
server.maxConnections
server.connections
Class: tls.CleartextStream
Event: 'secureConnect'
cleartextStream.authorized
cleartextStream.authorizationEr
ror
cleartextStream.getPeerCertific
ate()
cleartextStream.getCipher()
cleartextStream.address()
cleartextStream.remoteAddress
cleartextStream.remotePort
```

### StringDecoder

```
Class: StringDecoder
StringDecoder.write(buffer)
```

## System

#### Zlib

```
Examples
zlib.createGzip([options])
zlib.createGunzip([options])
zlib.createDeflate([options])
zlib.createInflate([options])
zlib.createDeflateRaw([options])
zlib.createInflateRaw([options])
zlib.createUnzip([options])
Class: zlib.Gzip
Class: zlib.Gunzip
Class: zlib.Deflate
Class: zlib.Inflate
Class: zlib.DeflateRaw
Class: zlib.InflateRaw
Class: zlib.Unzip
Convenience Methods
zlib.deflate(buf, callback)
zlib.deflateRaw(buf, callback)
zlib.gzip(buf, callback)
zlib.gunzip(buf, callback)
zlib.inflate(buf, callback)
zlib.inflateRaw(buf, callback)
zlib.unzip(buf, callback)
Options
Memory Usage Tuning
Constants
```

```
punycode.toASCII(domain)
punycode.ucs2
punycode.ucs2.decode(string)
punycode.ucs2.encode(codePo
ints)
punycode.version
```

### Readline

```
readline.createInterface(option
s)
Class: Interface
rl.setPrompt(prompt, length)
rl.prompt([preserveCursor])
rl.question(query, callback)
rl.pause()
rl.resume()
rl.close()
rl.write(data, [key])
Events
Event: 'line'
Event: 'pause'
Event: 'resume'
Event: 'close'
Event: 'SIGINT'
Event: 'SIGTSTP'
Event: 'SIGCONT'
Example: Tiny CLI
```

### REPL

```
repl.start(options)
Event: 'exit'
REPL Features
```

## HTTP

#### http

```
http.STATUS_CODES
http.createServer([requestListener])
http.createClient([port], [host])
http.request(options, callback)
http.get(options, callback)
http.globalAgent
```

#### Class: http.Server

```
Event: 'request'
Event: 'connection'
Event: 'close'
Event: 'checkContinue'
Event: 'connect'
Event: 'upgrade'
Event: 'clientError'
server.listen(port, [hostname], [
backlog], [callback])
server.listen(path, [callback])
server.listen(handle, [listeningLi
stener])
server.close([cb])
server.maxHeadersCount
```

#### Class: http.ServerRequest

```
Event: 'data'
Event: 'end'
Event: 'close'
request.method
request.url
request.headers
request.trailers
request.httpVersion
request.setEncoding([encoding])
request.pause()
request.resume()
request.connection
```

#### Class: http.ServerResponse

```
Event: 'close'
response.writeContinue()
response.writeHead(statusCod
e, [reasonPhrase], [headers])
response.statusCode
response.setHeader(name, val
ue)
response.sendDate
response.getHeader(name)
```

```
fs.unlinkSync(path)
fs.rmdir(path, [callback])
fs.rmdirSync(path)
fs.mkdir(path, [mode], [callback]
)
fs.mkdirSync(path, [mode])
fs.readdir(path, [callback])
fs.readdirSync(path)
fs.close(fd, [callback])
fs.closeSync(fd)
fs.open(path, flags, [mode], [ca
llback])
fs.openSync(path, flags, [mode]
)
fs.utimes(path, atime, mtime, [c
allback])
fs.utimesSync(path, atime, mtim
e)
fs.futimes(fd, atime, mtime, [ca
llback])
fs.futimesSync(fd, atime, mtime)
fs.fsync(fd, [callback])
fs.fsyncSync(fd)
fs.write(fd, buffer, offset, length,
position, [callback])
fs.writeSync(fd, buffer, offset, le
ngth, position)
fs.read(fd, buffer, offset, length,
position, [callback])
fs.readSync(fd, buffer, offset, le
ngth, position)
fs.readFile(filename, [encoding]
, [callback])
fs.readFileSync(filename, [enco
ding])
fs.writeFile(filename, data, [enc
oding], [callback])
fs.writeFileSync(filename, data,
[encoding])
fs.appendFile(filename, data, e
ncoding='utf8', [callback])
fs.appendFileSync(filename, da
ta, encoding='utf8')
fs.watchFile(filename, [options],
listener)
fs.unwatchFile(filename)
fs.watch(filename, [options], [list
ener])
Caveats
Availability
Filename Argument
fs.exists(path, [callback])
fs.existsSync(path)
Class: fs.Stats
fs.createReadStream(path, [opt
ions])
Class: fs.ReadStream
Event: 'open'
fs.createWriteStream(path, [opt
ions])
fs.WriteStream
Event: 'open'
file.bytesWritten
Class: fs.FSWatcher
watcher.close()
Event: 'change'
Event: 'error'
```

## 3rd Party

### Third Party Modules

```
Module Installer:
npm
HTTP Middleware:
Connect
Web Framework:
Express
Web Sockets:
Socket.IO
HTML Parsing:
HTML5
mDNS/Zeroconf/Bonjour
/li>
RabbitMQ, AMQP
mysql
Serialization:
msgpack
```

```
Event: 'error'
Event: 'close'
stream.readable
stream.setEncoding([encoding]
)
stream.pause()
stream.resume()
stream.destroy()
stream.pipe(destination, [option
s])
Writable Stream
Event: 'drain'
Event: 'error'
Event: 'close'
Event: 'pipe'
stream.writable
stream.write(string, [encoding],
[fd])
stream.write(buffer)
stream.end()
stream.end(string, encoding)
stream.end(buffer)
stream.destroy()
stream.destroySoon()
```

### TTY

```
tty.isatty(fd)
tty.setRawMode(mode)
Class: ReadStream
rs.isRaw
rs.setRawMode(mode)
Class: WriteStream
ws.columns
ws.rows
Event: 'resize'
```

```
new net.Socket()
socket.connect([
nnectListener])
socket.connect([
istener])
socket.bufferSiz
socket.setEncod
socket.write(dat
allback])
socket.end([dat
socket.destroy()
socket.pause()
socket.resume()
socket.setTimeo
back])
socket.setNoDel
socket.setKeep/
nitialDelay])
socket.address(
socket.remoteAc
socket.remotePc
socket.bytesRea
socket.bytesWri
Event: 'connect'
Event: 'data'
Event: 'end'
Event: 'timeout'
Event: 'drain'
Event: 'error'
Event: 'close'
net.isIP(input)
net.isIPv4(input)
net.isIPv6(input)
```

### UDP / Datagram

```
dgram.createSo
ack])
Class: Socket
Event: 'message'
Event: 'listening'
Event: 'close'
Event: 'error'
dgram.send(buf,
port, address, [c
dgram.bind(port
dgram.close()
dgram.address()
dgram.setBroad
dgram.setTTL(tt
dgram.setMultic
dgram.setMultic
g)
dgram.addMemt
stAddress, [mult
dgram.dropMemr
stAddress, [mult
```

### DNS

```
dns.lookup(dom
lback)
dns.resolve(don
lback)
dns.resolve4(do
dns.resolve6(do
dns.resolveMx(d
)
dns.resolveTxt(c
k)
dns.resolveSrv(c
k)
dns.resolveNs(d
)
dns.resolveCnair
back)
dns.reverse(ip, c
Error codes
```

## Supp

**os**

```

os.tmpDir()
os.hostname()
os.type()
os.platform()
os.arch()
os.release()
os.uptime()
os.loadavg()
os.totalmem()
os.freemem()
os.cpus()
os.networkInterfaces()
os.EOL

```

**Debugger**

```

Watchers
Commands reference
Stepping
Breakpoints
Info
Execution control
Various
Advanced Usage

```

**Cluster**

```

How It Works
cluster.settings
cluster.isMaster
cluster.isWorker
Event: 'fork'
Event: 'online'
Event: 'listening'
Event: 'disconnect'
Event: 'exit'
Event: 'setup'
cluster.setupMaster([settings])
cluster.fork([env])
cluster.settings
cluster.disconnect([callback])
cluster.workers
Class: Worker
worker.id
worker.process
worker.suicide
worker.send(message, [sendHandle])
worker.destroy()
worker.disconnect()
Event: 'message'
Event: 'online'
Event: 'listening'
Event: 'disconnect'
Event: 'exit'

```

```

response.removeHeader(name)
response.write(chunk, [encoding])
response.addTrailers(headers)
response.end([data], [encoding])

```

**Class: http.Agent**

```

agent.maxSockets
agent.sockets
agent.requests

```

**Class: http.ClientRequest**

```

Event: 'response'
Event: 'socket'
Event: 'connect'
Event: 'upgrade'
Event: 'continue'
request.write(chunk, [encoding])
request.end([data], [encoding])
request.abort()
request.setTimeout(timeout, [callback])
request.setNoDelay([noDelay])
request.setSocketKeepAlive([enable], [initialDelay])

```

**http.ClientResponse**

```

Event: 'data'
Event: 'end'
Event: 'close'
response.statusCode
response.httpVersion
response.headers
response.trailers
response.setEncoding([encoding])
response.pause()
response.resume()

```

**HTTPS**

```

Class: https.Server
https.createServer(options, [requestListener])
https.request(options, callback)
https.get(options, callback)
Class: https.Agent
https.globalAgent

```

**URL**

```

url.parse(urlStr, [parseQueryString], [slashesDenoteHost])
url.format(urlObj)
url.resolve(from, to)

```

**Scraping:**

```

Apricot

```

**Debugger:**

```

ndb
is a CLI debugger
inspector
is a web based tool.

```

```

pcap binding
ncurses

```

**Testing/TDD/BDD:**

```

vows
,
mocha
,
mjsunit.runner

```

```

d, [message])
assert.deepEqual(actual, expected, [message])
assert.notDeepEqual(actual, expected, [message])
assert.strictEqual(actual, expected, [message])
assert.notStrictEqual(actual, expected, [message])
assert.throws(block, [error], [message])
assert.doesNotThrow(block, [error], [message])
assert.ifError(value)

```