
JPHP Documentation

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JPHP group

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CHAPTER 1

API (English)

php - The general namespace of JPHP's Standart Library.

1.1 BaseException

```
class BaseException
    abstract class
        extends: Exception
```

Children

- class *EngineException*
- class *ParseException*

1.2 EngineException

```
class EngineException
    extends: BaseException
```

Methods

`EngineException::getErrorCode()`

Returns int

1.3 ParseException

```
class ParseException  
    extends: BaseException
```

1.4 php

1.4.1 android

Android

```
php\android\Android  
Class Android
```

Methods

```
static startActivity ($class)
```

Parameters

- \$class – string

app

Activity

```
php\android\app\Activity
```

Methods

```
__construct ()
```

```
setContentView ($view)
```

Parameters

- \$view – *php\android\view\View*

```
getContentView ()
```

Returns *php\android\view\View*

```
setTitle ($title)
```

Parameters

- \$title – string

```
findViewById ($id)
```

Parameters

- \$id – int

Returns *php\android\view\View*

```
isChild ()
```

Returns bool
getParent ()
 Returns *php\android\app\Activity*
onCreate ()

Application

php\android\app\Application
 Class Application

BootstrapActivity

php\android\app\BootstrapActivity
 extends: *php\android\app\Activity*

The general launcher activity must be inherited by this class.

Class BootstrapActivity

R

php\android\R
 final class

Methods

__construct ()
 private
static id (\$name)

Parameters

- **\$name** – string

Returns int

static string (\$name)

Parameters

- **\$name** –

Returns int

text

InputType

php\android\text\InputType

Constants

```
constant TYPE_MASK_CLASS
constant TYPE_MASK_VARIATION
constant TYPE_MASK_FLAGS
constant TYPE_NULL
constant TYPE_CLASS_TEXT
constant TYPE_TEXT_FLAG_CAP_CHARACTERS
constant TYPE_TEXT_FLAG_CAP_WORDS
constant TYPE_TEXT_FLAG_CAP_SENTENCES
constant TYPE_TEXT_FLAG_AUTO_CORRECT
constant TYPE_TEXT_FLAG_AUTO_COMPLETE
constant TYPE_TEXT_FLAG_MULTI_LINE
constant TYPE_TEXT_FLAG ime_MULTI_LINE
constant TYPE_TEXT_FLAG_NO_SUGGESTIONS
constant TYPE_TEXT_VARIATION_NORMAL
constant TYPE_TEXT_VARIATION_URI
constant TYPE_TEXT_VARIATION_EMAIL_ADDRESS
constant TYPE_TEXT_VARIATION_EMAIL_SUBJECT
constant TYPE_TEXT_VARIATION_SHORT_MESSAGE
constant TYPE_TEXT_VARIATION_LONG_MESSAGE
constant TYPE_TEXT_VARIATION_PERSON_NAME
constant TYPE_TEXT_VARIATION_POSTAL_ADDRESS
constant TYPE_TEXT_VARIATION_PASSWORD
constant TYPE_TEXT_VARIATION_VISIBLE_PASSWORD
constant TYPE_TEXT_VARIATION_WEB_EDIT_TEXT
constant TYPE_TEXT_VARIATION_FILTER
constant TYPE_TEXT_VARIATION_PHONETIC
constant TYPE_TEXT_VARIATION_WEB_EMAIL_ADDRESS
constant TYPE_TEXT_VARIATION_WEB_PASSWORD
constant TYPE_CLASS_NUMBER
constant TYPE_NUMBER_FLAG_SIGNED
constant TYPE_NUMBER_FLAG_DECIMAL
constant TYPE_NUMBER_VARIATION_NORMAL
constant TYPE_NUMBER_VARIATION_PASSWORD
constant TYPE_CLASS_PHONE
constant TYPE_CLASS_DATETIME
constant TYPE_DATETIME_VARIATION_NORMAL
```

```
constant TYPE_DATETIME_VARIATION_DATE
constant TYPE_DATETIME_VARIATION_TIME
```

view

View

```
php\android\view\View
```

Methods

```
__construct ($context)
```

Parameters

- **\$context** – *php\android\app\Activity*

```
on ($event, $callback)
```

Parameters

- **\$event** – string
- **\$callback** – callable

```
off ($event)
```

Parameters

- **\$event** – string

```
trigger ($event)
```

Parameters

- **\$event** – string

ViewGroup

```
php\android\view\ViewGroup
extends: php\android\view\View
```

Children

- class *php\android\widget\FrameLayout*
- class *php\android\widget\LinearLayout*
- class *php\android\widget\RelativeLayout*

Methods

```
addView ($view, $indexOrWidth, $height)
```

Parameters

- **\$view** – *php\android\view\View*

- **\$indexOrWidth** – int - (optional)
- **\$height** – int - (optional)

widget

Button

```
php\android\widget\Button
extends: php\android\widget\TextView
```

Class Button

EditText

```
php\android\widget\EditText
extends: php\android\widget\TextView
```

Class EditText

FrameLayout

```
php\android\widget\FrameLayout
extends: php\android\view\ViewGroup
```

Class FrameLayout

ImageView

```
php\android\widget\ImageView
extends: php\android\view\View
```

Methods

setImageAsset (\$fileName)

Loads image from assets.

throws php\io\IOException

Parameters

- **\$fileName** – string

LinearLayout

```
php\android\widget\LinearLayout
extends: php\android\view\ViewGroup
```

Class LinearLayout

RelativeLayout

```
php\android\widget\RelativeLayout
```

```
extends: php\android\view\ViewGroup
```

Class LinearLayout

TextView

```
php\android\widget\TextView
```

```
extends: php\android\view\View
```

Children

- class *php\android\widget\Button*
- class *php\android\widget\EditText*

Class TextView

Methods

```
setText ($text)
```

Parameters

- **\$text** – string

```
getText ()
```

Returns

string

```
setInputType ($type)
```

Parameters

- **\$type** – int - see `phpandroidtextInputType` constants

```
getInputType ()
```

Returns

int

Toast

```
php\android\widget\Toast
```

Class Toast

Constants

```
constant LENGTH_SHORT
```

```
constant LENGTH_LONG
```

Methods

```
show ()
```

```
cancel()
setText ($text)

Parameters
    • $text – string

setDuration ($duration)

Parameters
    • $duration – int

getDuration()

Returns int

static makeText ($text, $duration = ::)
    Show text

Parameters
    • $text – string
    • $duration – int

Returns php\android\widget\Toast
```

1.4.2 compress

ArchiveEntry

```
php\compress\ArchiveEntry
    jphp-compress-ext
```

Class ArchiveEntry

Methods

```
getName()
    Returns string

isDirectory()
    Returns bool

getSize()
    Returns int

setSize ($size)

    Parameters
        • $size – int

getLastModifiedDate()

    Returns int
```

ArchiveInputStream

```
php\compress\ArchiveInputStream
extends: php\io\MiscStream

jphp-compress-ext

Class ArchiveInputStream for reading archive
```

Methods

__construct (\$format, \$source)

Parameters

- **\$format** – string - zip, tar, jar
- **\$source** – *php\io\File, php\io\Stream*

nextEntry ()

Returns *php\compress\ArchiveEntry*

ArchiveOutputStream

```
php\compress\ArchiveOutputStream
extends: php\io\MiscStream

jphp-compress-ext

Class ArchiveOutputStream for creating archives
```

Methods

__construct (\$format, \$source)

Parameters

- **\$format** – string - zip, tar, jar, ar
- **\$source** – *php\io\File, php\io\Stream*

createEntry (\$file, \$name)

Parameters

- **\$file** – string
- **\$name** – string

Returns *php\compress\ArchiveEntry*

addFile (\$file, \$name)

Parameters

- **\$file** – string
- **\$name** – string

Returns *php\compress\ArchiveEntry*

addEntry (\$entry)

Parameters

- **\$entry** – *php\compress\ArchiveEntry*

canAddEntry (\$entry)

Parameters

- **\$entry** – *php\compress\ArchiveEntry*

closeEntry ()

1.4.3 concurrent

Future

php\concurrent\Future

Class Future

Methods

__construct ()
private

isCancelled ()

Returns bool

isDone ()

Returns bool

cancel (\$mayInterruptIfRunning)

Parameters

- **\$mayInterruptIfRunning** – bool

Returns bool

get (\$timeout = null)

throws *php\concurrent\\Exception*

Parameters

- **\$timeout** – null, int -- in milliseconds

Returns mixed

TimeoutException

php\concurrent\TimeoutException

extends: *php\lang\JavaException*

Class TimeoutException

1.4.4 format

JsonProcessor

```
php\format\JsonProcessor
    extends: php\format\Processor
```

Class JsonProcessor

Constants

```
constant SERIALIZE_PRETTY_PRINT
constant DESERIALIZE_AS_ARRAYS
```

Methods

__construct (\$flags = 0)

Parameters

- **\$flags** – int

parse (\$json)

throws php\format\ProcessorException

Parameters

- **\$json** – string, *php\io\Stream*

Returns mixed

format (\$value)

throws php\format\ProcessorException

Parameters

- **\$value** – mixed

Returns string

formatTo (\$value, \$output)

throws php\format\ProcessorException

Parameters

- **\$value** – mixed
- **\$output** – *php\io\Stream*

onSerialize (\$nameOfType, \$handler = null)

Parameters

- **\$nameOfType** – string - - null, int, float, string, bool, object, array
- **\$handler** – callable - (mixed \$value) -> mixed

onClassSerialize (\$className, \$handler = null)

Parameters

- **\$className** – string
- **\$handler** – callable

Processor

```
php\format\Processor  
    abstract class
```

Children

- class *php\format\JsonProcessor*
- class *php\xml\XmlProcessor*

Methods

```
format ($value)  
    abstract
```

Parameters

- **\$value** –

```
formatTo ($value, $output)  
    abstract
```

Parameters

- **\$value** –
- **\$output** – *php\io\Stream*

```
parse ($string)  
    abstract
```

Parameters

- **\$string** –

ProcessorException

```
php\format\ProcessorException  
    extends: Exception
```

Class ProcessorException

1.4.5 gdx

Application

```
php\gdx\Application  
    abstract class
```

Children

- class *php\gdx\LwjglApplication*

Constants

```
constant LOG_NONE  
constant LOG_DEBUG  
constant LOG_INFO  
constant LOG_ERROR
```

Methods

getGraphics ()

Returns *php\gdx\Graphics*

getFiles ()

Returns *php\gdx\Files*

getInput ()

Returns *php\gdx\Input*

getAudio ()

Returns *php\gdx\Audio*

log (\$tag, \$message)

Parameters

- **\$tag** – string
- **\$message** – string

error (\$tag, \$message)

Parameters

- **\$tag** – string
- **\$message** – string

debug (\$tag, \$message)

Parameters

- **\$tag** – string
- **\$message** – string

setLogLevel (\$level)

Parameters

- **\$level** – int

getLogLevel ()

Returns int

getType ()

Returns string - Android, Desktop, HeadlessDesktop, Applet, WebGL, iOS

getVersion ()

Returns int the Android API level on Android, the major OS version on iOS (5, 6, 7, ..), or 0 on the desktop.

```
getJavaHeap()  
    Returns int the Java heap memory use in bytes  
getNativeHeap()  
    Returns int the Native heap memory use in bytes  
halt()  
getClipboard()  
    Returns php\gdx\Clipboard
```

ApplicationListener

php\gdx\ApplicationListener

Methods

```
create()  
resize($width, $height)  
    Parameters  
        • $width –  
        • $height –  
render()  
pause()  
resume()  
dispose()
```

assets

AssetManager

php\gdx\assets\AssetManager

Methods

```
__construct($resolver)  
    Parameters  
        • $resolver – callable - (optional) - function($fileName): FileHandle  
get($fileName)  
    Parameters  
        • $fileName – string  
    Returns php\gdx\graphics\Texture, php\gdx\graphics\Pixmap, php\gdx\audio\Music,  
          php\gdx\audio\Sound  
loadTexture($fileName)
```

Parameters

- **\$fileName** – string

loadPixmap (*\$fileName*)

Parameters

- **\$fileName** – string

loadMusic (*\$fileName*)

Parameters

- **\$fileName** – string

loadSound (*\$fileName*)

Parameters

- **\$fileName** – string

unload (*\$fileName*)

Parameters

- **\$fileName** – string

isLoaded (*\$fileName*)

Parameters

- **\$fileName** – string

containsAsset (*\$asset*)

Parameters

- **\$asset** – object, mixed

getAssetFileName (*\$asset*)

Parameters

- **\$asset** – object, mixed

disposeDependencies (*\$fileName*)

Parameters

- **\$fileName** – string

update (*\$millis*)

Parameters

- **\$millis** – int - (optional)

finishLoading ()

getLoadedAssets ()

Returns int

getQueuedAssets ()

Returns int

getProgress ()

Returns float

```
dispose()
clear()
getRefCount ($fileName)

Parameters
• $fileName – string

Returns int

setRefCount ($fileName, $refCount)

Parameters
• $fileName – string
• $refCount – int

getDiagnostics()

Returns string
```

audio

AudioDevice

`php\gdx\audio\AudioDevice`
Class AudioDevice

Methods

```
__construct()
private

isMono()

Returns bool

writeSamples ($samples, $offset, $numSamples)
Writes the array of 16-bit signed PCM samples to the audio device and blocks until they have been
processed.

Parameters
• $samples – array
• $offset – int
• $numSamples – int

writeFloatSamples ($samples, $offset, $numSamples)
Writes the array of float PCM samples to the audio device and blocks until they have been processed.

Parameters
• $samples – array
• $offset – int
• $numSamples – int

getLatency()
```

Returns int

dispose()

setVolume(\$volume)

Sets the volume in the range [0,1].

Parameters

- **\$volume** – double

AudioRecorder

php\gdx\audio\AudioRecorder

Class AudioRecorder

Methods

__construct()

private

read(\$samples, \$offset, \$numSamples)

Reads in numSamples samples into the array samples starting at offset. If the recorder is in stereo you have to multiply numSamples by 2.

Parameters

- **\$samples** – array
- **\$offset** – int
- **\$numSamples** – int

dispose()

Music

php\gdx\audio\Music

Class Music

Methods

__construct()

private

play()

pause()

stop()

isPlaying()

Returns bool whether this music stream is playing

setLooping(\$isLooping)

Parameters

- **\$isLooping** – bool

```
isLooping()  
    Returns bool  
setVolume ($volume)  
    Parameters  
        • $volume – double
```

```
getVolume()  
    Returns double  
setPan ($pan, $volume)  
    Sets the panning and volume of this music stream.  
    Parameters  
        • $pan – double - panning in the range -1 (full left) to 1 (full right). 0 is center position.  
        • $volume – double
```

```
getPosition()  
    Returns the playback position in milliseconds.  
    Returns double  
dispose()  
setOnCompletionListener ($listener)  
    Register a callback to be invoked when the end of a music stream has been reached during playback.  
    Parameters  
        • $listener – callable - (Music $music)
```

Sound

`php\gdx\audio\Sound`
Class Sound

Methods

```
__construct()  
private  
play ($volume, $pitch, $pan)
```

Plays the sound. If the sound is already playing, it will be played again, concurrently.

Parameters

- \$volume – double - (optional)
- \$pitch – double - (optional)
- \$pan – double - (optional)

Returns int the id of the sound instance if successful, or -1 on failure.

```
loop ($volume, $pitch, $pan)
```

Plays the sound, looping. If the sound is already playing, it will be played again, concurrently. You need to stop the sound via a call to stop(long) using the returned id.

Parameters

- **\$volume** – double - (optional)
- **\$pitch** – double - (optional)
- **\$pan** – double - (optional)

Returns int the id of the sound instance if successful, or -1 on failure.

stop (\$soundId)

Stops playing all or \$soundId instance(s) of this sound.

Parameters

- **\$soundId** – int - (optional)

pause (\$soundId)

Pauses the sound instance with the given id as returned by play() or all sounds. If the sound is no longer playing, this has no effect.

Parameters

- **\$soundId** – int - (optional)

resume (\$soundId)**Parameters**

- **\$soundId** – int - (optional)

setLooping (\$soundId, \$looping)

Sets the sound instance with the given id to be looping. If the sound is no longer playing this has no effect

Parameters

- **\$soundId** – int
- **\$looping** – bool

setPitch (\$soundId, \$pitch)

Changes the pitch multiplier of the sound instance with the given id as returned by play(). If the sound is no longer playing, this has no effect.

Parameters

- **\$soundId** – int
- **\$pitch** – float

setPan (\$soundId, \$pan, \$volume)

Sets the panning and volume of the sound instance with the given id as returned by play(). If the sound is no longer playing, this has no effect.

Parameters

- **\$soundId** – int
- **\$pan** – float
- **\$volume** – float

setPriority (\$soundId, \$priority)

Sets the priority of a sound currently being played back. Higher priority sounds will be considered last if the maximum number of concurrently playing sounds is exceeded. This is only a hint and might not be honored by a backend implementation.

Parameters

- **\$soundId** – int
- **\$priority** – int - the priority (0 == lowest)

dispose()

Audio

php\gdx\Audio

Class Audio

Methods

__construct()

private

newAudioDevice(\$samplingRate, \$isMono)

Creates a new AudioDevice either in mono or stereo mode. The AudioDevice has to be disposed via its AudioDevice->dispose() method when it is no longer used.

throws *php\gdx\GdxRuntimeException* in case the device could not be created

Parameters

- **\$samplingRate** – int
- **\$isMono** – boolean

Returns *php\gdx\audio\AudioDevice*

newAudioRecorder(\$samplingRate, \$isMono)

Creates a new AudioRecorder. The AudioRecorder has to be disposed after it is no longer used.

throws *php\gdx\GdxRuntimeException* in case the recorder could not be created

Parameters

- **\$samplingRate** – int
- **\$isMono** – bool

Returns *php\gdx\audio\AudioRecorder*

newSound(\$fileHandle)

Creates a new Sound which is used to play back audio effects such as gun shots or explosions. The Sound's audio data is retrieved from the file specified via the FileHandle. Note that the complete audio data is loaded into RAM. You should therefore not load big audio files with this methods. The current upper limit for decoded audio is 1 MB.

Currently supported formats are WAV, MP3 and OGG.

The Sound has to be disposed if it is no longer used via the {@link Sound#dispose()} method.

throws *php\gdx\GdxRuntimeException* in case the sound could not be loaded

Parameters

- **\$fileHandle** – *php\gdx\files\FileHandle*

Returns *php\gdx\audio\Sound*

newMusic (\$fileHandle)

Creates a new Music instance which is used to play back a music stream from a file. Currently supported formats are WAV, MP3 and OGG. The Music instance has to be disposed if it is no longer used via the Music->dispose() method. Music instances are automatically paused when ApplicationListener->pause() is called and resumed when ApplicationListener->resume() is called.

throws *php\gdx\GdxRuntimeException* in case the music could not be loaded

Parameters

- **\$fileHandle** – *php\gdx\files\FileHandle*

Returns *php\gdx\audio\Music*

Clipboard**php\gdx\Clipboard**

Class Clipboard

Methods**__construct ()**

private

getContent ()

gets the current content of the clipboard if it contains text

Returns string the clipboard content or null

setContent (\$content)

Sets the content of the system clipboard.

Parameters

- **\$content** – string

files**FileHandle****php\gdx\files\FileHandle**

Class FileHandle

Methods**__construct (\$path)****Parameters**

- **\$path** – string, *php\io\File*

path ()

Returns string

name ()

Returns string

extension()

Returns string

nameWithoutExtension()

Returns string

pathWithoutExtension()

Returns string

type()

Returns string

file()

Returns *php\io\File*

read()

Returns *php\io\Stream*

readString(\$charset)

Parameters

- **\$charset** – string - (optional)

Returns string

readBytes()

Returns string binary

write(\$append, \$bufferSize)

Parameters

- **\$append** – bool
- **\$bufferSize** – int - (optional)

Returns *php\io\Stream*

writeString(\$string, \$append, \$charset)

Parameters

- **\$string** – string
- **\$append** – bool
- **\$charset** – string - (optional)

writeBytes(\$binaryString, \$append)

Parameters

- **\$binaryString** – string
- **\$append** – bool

getList(\$suffix)

Parameters

- **\$suffix** – string - (optional)

Returns *php\gdx\files\FileHandle[]*

```
isDirectory()
    Returns bool

child($name)
    Parameters
        • $name – string
    Returns php\gdx\files\FileHandle

sibling($name)
    Parameters
        • $name –
    Returns php\gdx\files\FileHandle

parent()
    Returns php\gdx\files\FileHandle

mkdirs()
    throws php\gdx\files\Exception

exists()
    Returns bool

delete()
    Returns bool

deleteDirectory()
    Returns bool

emptyDirectory($preserveTree)
    Parameters
        • $preserveTree – bool - (optional)

copyTo($fileHandle)
    Parameters
        • $fileHandle – php\gdx\files\FileHandle

moveTo($fileHandle)
    Parameters
        • $fileHandle – php\gdx\files\FileHandle

length()
    Returns int

lastModified()
    Returns int

static tempFile($suffix)
    Parameters
        • $suffix – string
```

Returns `php\gdx\files\FileHandle`

static tempDirectory (`$suffix`)

Parameters

- `$suffix` – string

Returns `php\gdx\files\FileHandle`

Files

php\gdx\Files
Class Files

Methods

getFileHandle (`$path, $type`)

Parameters

- `$path` – string
- `$type` – string - - Classpath, Internal, External, Absolute, Local

Returns `php\gdx\files\FileHandle`

classpath (`$path`)

Parameters

- `$path` – string

Returns `php\gdx\files\FileHandle`

internal (`$path`)

Parameters

- `$path` –

Returns `php\gdx\files\FileHandle`

external (`$path`)

Parameters

- `$path` –

Returns `php\gdx\files\FileHandle`

absolute (`$path`)

Parameters

- `$path` –

Returns `php\gdx\files\FileHandle`

local (`$path`)

Parameters

- `$path` –

Returns `php\gdx\files\FileHandle`

```
getExternalStoragePath()
    Returns string
isExternalStorageAvailable()
    Returns bool
getLocalStoragePath()
    Returns string
isLocalStorageAvailable()
    Returns string
```

Gdx

php\gdx\Gdx

Methods

```
static app
    Returns php\gdx\Application
static files
    Returns php\gdx\Files
static graphics
    Returns php\gdx\Graphics
static input
    Returns php\gdx\Input
static audio
    Returns php\gdx\Audio
```

GdxRuntimeException

php\gdx\GdxRuntimeException

graphics

Batch

php\gdx\graphics\Batch

Methods

```
begin()
end()
```

DisplayMode

`php\gdx\graphics\DisplayMode`
Class DisplayMode

Methods

```
__construct()  
    private  
  
getWidth()  
    Returns int  
  
getHeight()  
    Returns int  
  
getBitsPerPixel()  
    Returns int  
  
getRefreshRate()  
    Returns int  
  
__toString()  
    Returns string
```

Pixmap

`php\gdx\graphics\Pixmap`
Class Pixmap

Methods

```
__construct($width, $height, $format)  
    Parameters  
        • $width – int  
        • $height – int  
        • $format – string - - Alpha, Intensity, LuminanceAlpha, RGB565, RGBA4444,  
                    RGB888, RGBA8888  
  
static ofFile($fileHandle)  
    Parameters  
        • $fileHandle – php\gdx\files\FileHandle  
    Returns string  
  
setColor($redOrColor, $g, $b, $a)  
    Parameters  
        • $redOrColor – double, int  
        • $g – double - (optional)
```

- **\$b** – double - (optional)
- **\$a** – double - (optional)

fill()

drawLine (\$x, \$y, \$x2, \$y2)

Parameters

- **\$x** – int
- **\$y** – int
- **\$x2** – int
- **\$y2** – int

drawRectangle (\$x, \$y, \$width, \$height)

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

drawPixmap (\$pixmap, \$x, \$y, \$srcx, \$srcy, \$srcWidth, \$srcHeight)

Parameters

- **\$pixmap** – *php\gdx\graphics\Pixmap*
- **\$x** – int
- **\$y** – int
- **\$srcx** – int - (optional)
- **\$srcy** – int - (optional)
- **\$srcWidth** – int - (optional)
- **\$srcHeight** – int - (optional)

fillRectangle (\$x, \$y, \$width, \$height)

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

drawCircle (\$x, \$y, \$radius)

Parameters

- **\$x** – int
- **\$y** – int
- **\$radius** – int

fillCircle (\$x, \$y, \$radius)

Parameters

- **\$x** – int
- **\$y** – int
- **\$radius** – int

fillTriangle (\$x1, \$y1, \$x2, \$y2, \$x3, \$y3)

Parameters

- **\$x1** – int
- **\$y1** – int
- **\$x2** – int
- **\$y2** – int
- **\$x3** – int
- **\$y3** – int

getPixel (\$x, \$y)

Parameters

- **\$x** – int
- **\$y** – int

Returns int The pixel color in RGBA8888 format.

getWidth ()

Returns int

getHeight ()

Returns int

dispose ()

drawPixel (\$x, \$y, \$color)

Parameters

- **\$x** – int
- **\$y** – int
- **\$color** – int - (optional)

getGLFormat ()

Returns int one of GL_ALPHA, GL_RGB, GL_RGBA, GL_LUMINANCE, or GL_LUMINANCE_ALPHA.

getGLInternalFormat ()

Returns int one of GL_ALPHA, GL_RGB, GL_RGBA, GL_LUMINANCE, or GL_LUMINANCE_ALPHA.

getGLType ()

Returns int one of GL_UNSIGNED_BYTE, GL_UNSIGNED_SHORT_5_6_5, GL_UNSIGNED_SHORT_4_4_4

getFormat ()

Returns string

getBlending()

Returns string None, SourceOver

static setBlending(\$blending)
Sets the type of Blending to be used for all operations. Default is ‘SourceOver’

Parameters

- **\$blending** – string

static setFilter(\$filter)
Filters to be used with Pixmap.drawPixmap(Pixmap, int, int, int, int, int, int, int).
Parameters

- **\$filter** – string - NearestNeighbour, BiLinear

Sprite

php\gdx\graphics\Sprite
Class Sprite

Methods

__construct (\$texture, \$width, \$height, \$x, \$y)

Parameters

- **\$texture** – *php\gdx\graphics\Texture* - (optional)
- **\$width** – int - (optional)
- **\$height** – int - (optional)
- **\$x** – int - (optional)
- **\$y** – int - (optional)

setBounds (\$x, \$y, \$width, \$height)

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

setSize (\$width, \$height)

Parameters

- **\$width** – int
- **\$height** – int

setPosition (\$x, \$y)

Parameters

- **\$x** – int

- **\$y** – int

setX (\$x)

Parameters

- **\$x** – int

getX ()

Returns int

setY (\$y)

Parameters

- **\$y** – int

getY ()

Returns int

translateX (\$xAmount)

Parameters

- **\$xAmount** – double

translateY (\$yAmount)

Parameters

- **\$yAmount** – double

translate (\$xAmount, \$yAmount)

Parameters

- **\$xAmount** – double

- **\$yAmount** – double

setAlpha (\$alpha)

Parameters

- **\$alpha** – double

setOrigin (\$originX, \$originY)

Parameters

- **\$originX** – int

- **\$originY** – int

setOriginCenter ()

setRotation (\$degrees)

Parameters

- **\$degrees** – double

getRotation ()

Returns double

rotate (\$degrees)

Parameters

- **\$degrees** – double

rotate90 (\$clockwise)

Parameters

- **\$clockwise** – bool

setScale (\$scaleXY, \$scaleY)

Parameters

- **\$scaleXY** – double
- **\$scaleY** – double - (optional)

scale (\$amount)

Parameters

- **\$amount** – double

flip (\$x, \$y)

Parameters

- **\$x** – int
- **\$y** – int

scroll (\$xAmount, \$yAmount)

Parameters

- **\$xAmount** – double
- **\$yAmount** – double

draw (\$batch, \$alphaModulation)

Parameters

- **\$batch** – *php\gdx\graphics\SpriteBatch*
- **\$alphaModulation** – double - (optional)

SpriteBatch

php\gdx\graphics\SpriteBatch
 extends: *php\gdx\graphics\Batch*

Texture

php\gdx\graphics\Texture
 Class Texture

Methods

static ofFile (\$fileHandle, \$useMipMaps = false, \$format)

Parameters

- **\$fileHandle** – *php\gdx\files\FileHandle*

- **\$useMipMaps** – bool - (optional)
- **\$format** – string - (optional)

Returns `php\gdx\graphics\Texture`

__construct (`$pixmap, $useMipMaps = false, $format`)

Parameters

- **\$pixmap** – `php\gdx\graphics\Pixmap`
- **\$useMipMaps** – bool - (optional)
- **\$format** – string - (optional)

getWidth()

Returns int

getHeight()

Returns int

getDepth()

Returns int

isManaged()

Returns bool

Graphics

`php\gdx\Graphics`

Class Graphics

Methods

isGL30Available()

Returns bool

getWidth()

Returns int

getHeight()

Returns int

getDeltaTime()

Returns double

getRawDeltaTime()

Returns double

getFramesPerSecond()

Returns int

getDensity()

Returns float

```

supportsDisplayModeChange ()
    Returns bool

getDisplayModes ()
    Returns php\gdx\DisplayMode[] the supported fullscreen DisplayMode(s)

getDesktopDisplayMode ()
    Returns php\gdx\graphics\DisplayMode

setDisplayMode ($widthOrDisplayMode, $height, $fullscreen)
    Parameters
        • $widthOrDisplayMode – php\gdx\graphics\DisplayMode, int
        • $height – int - (optional)
        • $fullscreen – int - (optional)

setTitle ($title)
    Parameters
        • $title – string

setVSync ($vsync)
    Parameters
        • $vsync – bool

supportsExtension ($extension)
    Parameters
        • $extension – string
    Returns bool

setContinuousRendering ($value)
    Parameters
        • $value – bool

isContinuousRendering ()
    Returns bool

requestRendering ()

isFullscreen ()
    Returns bool

```

Input

```

php\gdx\Input
    final class

```

Methods

```

__construct ()
    private

```

getAccelerometerX()

Returns double The value of the accelerometer on its x-axis. ranges between [-10,10].

getAccelerometerY()

Returns double The value of the accelerometer on its y-axis. ranges between [-10,10].

getAccelerometerZ()

Returns double The value of the accelerometer on its z-axis. ranges between [-10,10].

getX(\$pointer)

Returns the x coordinate of the last touch on touch screen devices and the current mouse position on desktop for the first pointer in screen coordinates. The screen origin is the top left corner.

Parameters

- **\$pointer** – int - (optional) the pointer id. Returns the x coordinate in screen coordinates of the given pointer.

Returns int

getDeltaX(\$pointer)

Parameters

- **\$pointer** – int - (optional) the pointer id.

Returns int the different between the current pointer location and the last pointer location on the x-axis.

getY(\$pointer)

Returns the y coordinate of the last touch on touch screen devices and the current mouse position on desktop for the first pointer in screen coordinates. The screen origin is the top left corner.

Parameters

- **\$pointer** – int - (optional) the pointer id. Returns the y coordinate in screen coordinates of the given pointer.

Returns int

getDeltaY(\$pointer)

Parameters

- **\$pointer** – int - (optional) the pointer id.

Returns int the different between the current pointer location and the last pointer location on the y-axis.

isTouched(\$pointer)

Parameters

- **\$pointer** – int - (optional)

Returns bool whether the screen is currently touched.

justTouched()

Returns bool whether a new touch down event just occurred.

isButtonPressed(\$button)

Whether a given button is pressed or not. Button constants can be found in {@link Buttons}. On Android only the Button#LEFT constant is meaningful.

Parameters

- **\$button** – int

Returns bool**isKeyPressed** (\$key)

Returns whether the key is pressed.

Parameters

- **\$key** – int

setOnscreenKeyboardVisible (\$visible)

Sets the on-screen keyboard visible if available.

Parameters

- **\$visible** – bool

vibrate (\$millis)

Vibrates for the given amount of time. Note that you'll need the permission <code> <uses-permission android:name="android.permission.VIBRATE" /></code> in your manifest file in order for this to work.

Parameters

- **\$millis** – int - the number of milliseconds to vibrate.

cancelVibrate ()**getAzimuth** ()

The azimuth is the angle of the device's orientation around the z-axis. The positive z-axis points towards the earths center.

Returns double**getPitch** ()

The pitch is the angle of the device's orientation around the x-axis. The positive x-axis roughly points to the west and is orthogonal to the z- and y-axis.

Returns double**getRoll** ()

The roll is the angle of the device's orientation around the y-axis. The positive y-axis points to the magnetic north pole of the earth.

Returns double**getCurrentEventTime** ()

Returns int the time of the event currently reported to the InputProcessor.

setCatchBackKey (\$catchBack)

Sets whether the BACK button on Android should be caught. This will prevent the app from being paused. Will have no effect on the desktop.

Parameters

- **\$catchBack** – bool

setCatchMenuKey (\$catchMenu)

Sets whether the MENU button on Android should be caught. This will prevent the onscreen keyboard to show up. Will have no effect on the desktop.

Parameters

- **\$catchMenu** – bool

getRotation()

Returns int the rotation of the device with respect to its native orientation.

getNativeOrientation()

Returns string the native orientation of the device.

setCursorCatched(\$caught)

Only viable on the desktop. Will confine the mouse cursor location to the window and hide the mouse cursor.

Parameters

- **\$caught** – bool - whether to catch or not to catch the mouse cursor

isCursorCatched()

Returns bool whether the mouse cursor is caught.

setCursorPosition(\$x, \$y)

Only viable on the desktop. Will set the mouse cursor location to the given window coordinates (origin top-left corner).

Parameters

- **\$x** – int
- **\$y** – int

setCursorImage (\$pixmap, \$xHotspot, \$yHotspot)

Only viable on the desktop. Will set the mouse cursor image to the image represented by the Pixmap. The Pixmap must be in RGBA8888 format, width & height must be powers-of-two greater than zero (not necessarily equal), and alpha transparency must be single-bit (i.e., 0x00 or 0xFF only). To revert to the default operating system cursor, pass in a null Pixmap; xHotspot & yHotspot are ignored in this case.

Parameters

- **\$pixmap** – *php\gdx\graphics\Pixmap*
- **\$xHotspot** – int
- **\$yHotspot** – int

LwjglApplication

php\gdx\LwjglApplication
extends: *php\gdx\Application*

Methods

__construct (\$listener, \$configuration)

Parameters

- **\$listener** – *php\gdx\ApplicationListener*
- **\$configuration** – *php\gdx\LwjglApplicationConfiguration*

LwjglApplicationConfiguration

`php\gdx\LwjglApplicationConfiguration`
Class ApplicationConfiguration

Properties

```
property useGL30
    bool

property depth
    int

property samples
    int

property width
    int

property height
    int

property x
    int

property y
    :doc:`</api_en/.types/>` 

property fullscreen
    bool

property vSyncEnabled
    bool

property title
    string

property forceExit
    bool

property resizable
    bool

property audioDeviceSimultaneousSources
    int

property audioDeviceBufferSize
    int

property audioDeviceBufferCount
    int

property foregroundFPS
    int

property backgroundFPS
    int

property allowSoftwareMode
    bool
```

```
property preferencesDirectory  
string
```

Methods

```
setFromDisplayMode ($displayMode)
```

Parameters

- **\$displayMode** – *php\gdx\graphics\DisplayMode*

```
static getDesktopDisplayMode
```

Returns

php\gdx\graphics\DisplayMode

```
static getDisplayModes
```

Returns

php\gdx\DisplayMode[]

```
static addIcon ($path, $type)
```

Adds a window icon. Icons are tried in the order added, the first one that works is used. Typically three icons should be provided: 128x128 (for Mac), 32x32 (for Windows and Linux), and 16x16 (for Windows).

Parameters

- **\$path** – string
- **\$type** – string - - Classpath, Internal, External, Absolute, Local

math

Polygon

```
php\gdx\math\Polygon
```

Class Polygon

Methods

```
__construct ($vertices)
```

Parameters

- **\$vertices** – array - (optional)

```
getVertices ()
```

Returns the polygon's local vertices without scaling or rotation and without being offset by the polygon position.

Returns

float[]

```
getTransformedVertices ()
```

Returns *float[]* vertices scaled, rotated, and offset by the polygon position.

```
setOrigin ($originX, $originY)
```

Sets the origin point to which all of the polygon's local vertices are relative to.

Parameters

- **\$originX** – float

- **\$originY** – float

setPosition (\$x, \$y)

Sets the polygon's position within the world.

Parameters

- **\$x** – float
- **\$y** – float

setVertices (\$vertices)

Parameters

- **\$vertices** – array

translate (\$x, \$y)

Translates the polygon's position by the specified horizontal and vertical amounts.

Parameters

- **\$x** – float
- **\$y** – float

setRotation (\$degrees)

Sets the polygon to be rotated by the supplied degrees.

Parameters

- **\$degrees** – float

rotate (\$degrees)

Applies additional rotation to the polygon by the supplied degrees.

Parameters

- **\$degrees** – float

setScale (\$scaleX, \$scaleY)

Sets the amount of scaling to be applied to the polygon.

Parameters

- **\$scaleX** – float
- **\$scaleY** – float

scale (\$amount)

Applies additional scaling to the polygon by the supplied amount.

Parameters

- **\$amount** – float

dirty ()

area ()

Returns the area contained within the polygon.

Returns float

contains (\$x, \$y)

Parameters

- **\$x** – float

- **\$y** – float

Returns bool

getX()

Returns float

getY()

Returns float

getOriginX()

Returns float

getOriginY()

Returns float

getRotation()

Returns float

getScaleX()

Returns float

getScaleY()

Returns float

Polyline

php\gdx\math\Polyline
Class Polyline

Methods

__construct (\$vertices)

Parameters

- **\$vertices** – array - (optional)

getVertices()

Returns the polyline's local vertices without scaling or rotation and without being offset by the polyline position.

Returns float[]

getTransformedVertices()

Returns float[] vertices scaled, rotated, and offset by the polyline position.

getLength()

Returns float Returns the euclidean length of the polyline without scaling

getScaledLength()

Returns float Returns the euclidean length of the polyline

calculateLength()

calculateScaledLength()

dirty()

setOrigin(\$originX, \$originY)

Sets the origin point to which all of the polyline's local vertices are relative to.

Parameters

- **\$originX** – float
- **\$originY** – float

setPosition(\$x, \$y)

Sets the polyline's position within the world.

Parameters

- **\$x** – float
- **\$y** – float

setVertices(\$vertices)

Parameters

- **\$vertices** – array

translate(\$x, \$y)

Translates the polyline's position by the specified horizontal and vertical amounts.

Parameters

- **\$x** – float
- **\$y** – float

setRotation(\$degrees)

Sets the polyline to be rotated by the supplied degrees.

Parameters

- **\$degrees** – float

rotate(\$degrees)

Applies additional rotation to the polyline by the supplied degrees.

Parameters

- **\$degrees** – float

setScale(\$scaleX, \$scaleY)

Sets the amount of scaling to be applied to the polyline.

Parameters

- **\$scaleX** – float
- **\$scaleY** – float

scale(\$amount)

Applies additional scaling to the polyline by the supplied amount.

Parameters

- **\$amount** – float

getX()

Returns float

```
getY()
    Returns float

getOriginX()
    Returns float

getOriginY()
    Returns float

getRotation()
    Returns float

getScaleX()
    Returns float

getScaleY()
    Returns float
```

Vector2

`php\gdx\math\Vector2`
Class Vector2

Methods

```
__construct ($x, $y)
    Parameters
        • $x – float, php\gdx\math\Vector2 - (optional)
        • $y – float - (optional)

x ()
    Returns float

y ()
    Returns float

len ()
    Returns float The euclidean length

len2 ()
    Returns float The squared euclidean length

set ($x, $y)
    Sets this vector from the given vector or x, y

    Parameters
        • $x – float, php\gdx\math\Vector2
        • $y – float - (optional)

    Returns php\gdx\math\Vector2
```

sub (\$x, \$y)

Subtracts the given vector from this vector.

Parameters

- **\$x** – float, *php\gdx\math\Vector2*
- **\$y** – float - (optional)

Returns *php\gdx\math\Vector2***nor** ()

Normalizes this vector. Does nothing if it is zero.

Returns *php\gdx\math\Vector2***add** (\$x, \$y)

Adds the given vector to this vector

Parameters

- **\$x** – float, *php\gdx\math\Vector2*
- **\$y** – float - (optional)

dot (\$ox, \$oy)**Parameters**

- **\$ox** – float, *php\gdx\math\Vector2*
- **\$oy** – float - (optional)

Returns float The dot product between this and the other vector**scl** (\$x, \$y)

Scales this vector by a scalar

Parameters

- **\$x** – float
- **\$y** – float - (optional)

Returns *php\gdx\math\Vector2***mulAdd** (\$vec, \$scalar)

First scale a supplied vector, then add it to this vector.

Parameters

- **\$vec** – *php\gdx\math\Vector2*
- **\$scalar** – float

Returns *php\gdx\math\Vector2***dst** (\$x, \$y)**Parameters**

- **\$x** – float, *php\gdx\math\Vector2*
- **\$y** – float - (optional)

Returns float the distance between this and the other vector**dst2** (\$x, \$y)**Parameters**

- **\$x** – float, *php\gdx\math\Vector2*
- **\$y** – float - (optional)

Returns float the squared distance between this and the other vector

limit (*\$limit*)

Parameters

- **\$limit** – float

Returns *php\gdx\math\Vector2*

clamp (*\$min*, *\$max*)

Parameters

- **\$min** – float
- **\$max** – float

Returns *php\gdx\math\Vector2*

crs (*\$x*, *\$y*)

Parameters

- **\$x** – float, *php\gdx\math\Vector2*
- **\$y** – float - (optional)

Returns float

angle ()

Returns float

getAngleRad ()

Returns float

setAngle (*\$degrees*)

Parameters

- **\$degrees** – float

Returns *php\gdx\math\Vector2*

setAngleRad (*\$radians*)

Parameters

- **\$radians** – float

Returns *php\gdx\math\Vector2*

rotate (*\$degrees*)

Parameters

- **\$degrees** – float

Returns *php\gdx\math\Vector2*

rotateRad (*\$radians*)

Parameters

- **\$radians** – float

Returns `php\gdx\math\Vector2`

rotate90 (`$dir`)

Parameters

- `$dir` – int

Returns `php\gdx\math\Vector2`

lerp (`$target, $alpha`)

Linearly interpolates between this vector and the target vector by alpha which is in the range [0,1].
The result is stored in this vector.

Parameters

- `$target` – `php\gdx\math\Vector2`
- `$alpha` – float

Returns `php\gdx\math\Vector2`

epsilonEquals (`$other, $epsilon`)

Compares this vector with the other vector, using the supplied epsilon for fuzzy equality testing.

Parameters

- `$other` – `php\gdx\math\Vector2`
- `$epsilon` – float

Returns bool

isUnit (`$margin`)

Whether this vector is a unit length vector

Parameters

- `$margin` – float - (optional)

Returns bool

isZero (`$margin`)

Parameters

- `$margin` – float - (optional)

isOnLine (`$other, $epsilon`)

Parameters

- `$other` – `php\gdx\math\Vector2`
- `$epsilon` – float - (optional)

Returns bool

isCollinear (`$other, $epsilon`)

Parameters

- `$other` – `php\gdx\math\Vector2`
- `$epsilon` – float - (optional)

Returns bool

isCollinearOpposite (`$other, $epsilon`)

Parameters

- **\$other** – *php\gdx\math\Vector2*
- **\$epsilon** – float - (optional)

Returns bool

isPerpendicular (*\$vector*, *\$epsilon*)

Parameters

- **\$vector** – *php\gdx\math\Vector2*
- **\$epsilon** – float - (optional)

hasSameDirection (*\$vector*)

Parameters

- **\$vector** – *php\gdx\math\Vector2*

Returns bool

hasOppositeDirection (*\$vector*)

Parameters

- **\$vector** – *php\gdx\math\Vector2*

Returns bool

1.4.6 io

File

php\io\File
Class File

Constants

constant PATH_SEPARATOR
constant DIRECTORY_SEPARATOR
constant PATH_NAME_CASE_INSENSITIVE

Methods

__construct (*\$path*, *\$child* = *NULL*)

Parameters

- **\$path** – string
- **\$child** – null, string

exists ()

Returns bool

canExecute ()

Returns bool

```
canWrite()
    Returns bool

canRead()
    Returns bool

getName()
    Returns string

getAbsolutePath()
    Returns string

getCanonicalPath()
    throws php\io\IOException
    Returns string

getParent()
    Returns string

getPath()
    Returns string

getAbsoluteFile()
    Returns php\io\File

getCanonicalFile()
    throws php\io\IOException
    Returns php\io\File

getParentFile()
    Returns php\io\File

mkdir()
    Returns bool

mkdirs()
    Returns bool

isFile()
    Returns bool

isDirectory()
    Returns bool

isAbsolute()
    Returns bool

isHidden()
    Returns bool

matches ($pattern)
```

Parameters

- **\$pattern** – string - the “glob” and “regex” syntaxes, and may support others.

Returns bool

delete()

Returns bool

deleteOnExit()

Returns void

createNewFile (\$withDirs = *false*)

Parameters

- **\$withDirs** – bool

Returns bool

lastModified()

Returns int

length()

Returns int

crc32()

Returns int, null if not exists or io exception

hash (\$algorithm = ‘MD5’)

Parameters

- **\$algorithm** – string

Returns string, null if not exists or io exception

renameTo (\$newName)

Parameters

- **\$newName** – string

Returns bool

setExecutable (\$value, \$ownerOnly = *true*)

Parameters

- **\$value** – bool
- **\$ownerOnly** – bool

Returns bool

setWritable (\$value, \$ownerOnly = *true*)

Parameters

- **\$value** – bool
- **\$ownerOnly** – bool

Returns bool

setReadable (\$value, \$ownerOnly = *true*)

Parameters

- **\$value** – bool

- **\$ownerOnly** – bool

Returns bool

setReadOnly()

Returns bool

setLastModified(\$time)

Parameters

- **\$time** – int

Returns bool

compareTo(\$file)

Parameters

- **\$file** – string, *php\io\File*

Returns int

find(\$filter = null)
throws *php\io\IOException*

Parameters

- **\$filter** – callable

Returns string[]

findFiles(\$filter = null)
throws *php\io\IOException*

Parameters

- **\$filter** – callable - (File \$directory, \$name)

Returns *php\io\File[]*

static createTemp(\$prefix, \$suffix, \$directory = null)

Parameters

- **\$prefix** – string
- **\$suffix** – string
- **\$directory** – null, *php\io\File*, string

Returns *php\io\File*

static listRoots

List the available filesystem roots. Returns an array of objects denoting the available filesystem roots, or empty array if the set of roots could not be determined. The array will be empty if there are no filesystem roots.

Returns *php\io\File[]*

static of(\$path)

Parameters

- **\$path** – string

Returns *php\io\File*

FileStream

`php\io\FileStream`
extends: `php\io\Stream`

Methods

read (\$length)
throws `php\io\IOException`

Parameters

- `$length` – int - - count of bytes

Returns mixed

readFully ()
throws `php\io\IOException`

Returns mixed

write (\$value, \$length = null)
throws `php\io\IOException`

Parameters

- `$value` – string
- `$length` – null, int

Returns int

eof ()

Returns bool

seek (\$position)
throws `php\io\IOException`

Parameters

- `$position` – int

Returns mixed

getPosition ()
throws `php\io\IOException`

Returns int

close ()

Returns mixed

length ()

Returns int

getFilePointer ()
throws `php\io\IOException`

Returns int

truncate (\$size)
throws `php\io\IOException`

Parameters

- **\$size** – int

IOException

```
php\io\IOException
  extends: php\lang\JavaException

  Class IOException
```

MemoryStream

```
php\io\MemoryStream
  extends: php\io\MiscStream

  Class MemoryStream
```

Methods

__construct ()

MiscStream

```
php\io\MiscStream
  extends: php\io\Stream
```

Children

- **class** *php\compress\ArchiveInputStream*
- **class** *php\compress\ArchiveOutputStream*
- **class** *php\io\MemoryStream*

Class MiscStream

Methods

read (\$length)
throws *php\io\IOException*

Parameters

- **\$length** – int -- count of bytes

Returns mixed

readFully ()
throws *php\io\IOException*

Returns mixed

write (\$value, \$length = null)
throws *php\io\IOException*

Parameters

- **\$value** – string
- **\$length** – null, int

Returns int

eof()

Returns bool

seek(\$position)
throws *php\io\IOException*

Parameters

- **\$position** – int

Returns mixed

getPosition()
throws *php\io\IOException*

Returns int

close()

Returns mixed

length()

Returns int

flush()
throws *php\io\IOException*

ResourceStream

php\io\ResourceStream
extends: *php\io\Stream*

Class ResourceStream

Methods

__construct(\$path)

Parameters

- **\$path** – string

read(\$length)
throws *php\io\IOException*

Parameters

- **\$length** – int -- count of bytes

Returns mixed

readFully()
throws *php\io\IOException*

Returns mixed

write (\$value, \$length = null)
throws *php\io\IOException*

Parameters

- **\$value** – string
- **\$length** – null, int

Returns int

eof ()

Returns bool

seek (\$position)
throws *php\io\IOException*

Parameters

- **\$position** – int

Returns mixed

getPosition ()
throws *php\io\IOException*

Returns int

close ()

Returns mixed

toExternalForm ()

Returns string

static getResources (\$name)

Parameters

- **\$name** – string

Returns *php\io\ResourceStream[]*

Stream

php\io\Stream
abstract class

Children

- **class** *php\io\FileStream*
- **class** *php\io\MiscStream*
- **class** *php\io\ResourceStream*
- **class** *php\net\NetStream*

Properties

property path
string

private

property mode
string

private

Methods

getPath()

Returns string

getMode()

Returns string

read(\$length)

abstract

throws *php\io\IOException*

Parameters

- **\$length** – int -- count of bytes

Returns mixed

readFully()

abstract

throws *php\io\IOException*

Returns mixed

write(\$value, \$length = null)

abstract

throws *php\io\IOException*

Parameters

- **\$value** – string
- **\$length** – null, int

Returns int

eof()

abstract

Returns bool

seek(\$position)

abstract

throws *php\io\IOException*

Parameters

- **\$position** – int

Returns mixed

```
getPosition()  
abstract  
throws php\io\IOException
```

Returns int

```
close()  
abstract
```

Returns mixed

```
__construct ($path, $mode = null)
```

Parameters

- **\$path** – string
- **\$mode** – null, string

Returns *php\io\Stream*

```
setContext ($context)
```

Parameters

- **\$context** –

Returns void

```
getContext()
```

Returns mixed

```
static of ($path, $mode = 'r')  
throws php\io\IOException
```

Parameters

- **\$path** – string
- **\$mode** – string

Returns *php\io\Stream*

```
static getContents ($path, $mode = 'r')
```

Create a stream, call and return the result of the readFully() method, finally call the close() method.

```
throws php\io\IOException
```

Parameters

- **\$path** – string
- **\$mode** – string

Returns string binary

```
static putContents ($path, $data, $mode = 'w+')
```

Create a stream, call and return the result of the write() method, finally call the close() method.

```
throws php\io\IOException
```

Parameters

- **\$path** – string
- **\$data** – string
- **\$mode** – string

static tryAccess (\$path, \$onAccess, \$mode = 'r')

Open a stream and close it after calling \$onAccess automatically.

throws *php\io\IOException*

Parameters

- **\$path** – string
- **\$onAccess** – callable - (Stream \$stream)
- **\$mode** – string

static exists (\$path)

Checks stream is exists. It tries to open a stream and if all is ok, returns true and closes it.

throws *php\io\Exception* if you check external streams like http or ftp

Parameters

- **\$path** – string

Returns bool

static register (\$protocol, \$className)

Parameters

- **\$protocol** – string
- **\$className** – string

static unregister (\$protocol)

Parameters

- **\$protocol** –

1.4.7 jsoup

Connection

php\jsoup\Connection
abstract class

Constants

constant METHOD_POST

constant METHOD_GET

Methods

data (\$data)

Parameters

- **\$data** – array

Returns *php\jsoup\Connection*

cookies (\$data)

Parameters

- **\$data** – array

Returns *php\jsoup\Connection***headers** (*\$data*)**Parameters**

- **\$data** – array

Returns *php\jsoup\Connection***header** (*\$name*, *\$value*)**Parameters**

- **\$name** – string
- **\$value** – string

Returns *php\jsoup\Connection***url** (*\$url*)**Parameters**

- **\$url** – string

Returns *php\jsoup\Connection***method** (*\$method*)**Parameters**

- **\$method** – string - POST or GET

Returns *php\jsoup\Connection***userAgent** (*\$userAgent*)**Parameters**

- **\$userAgent** – string

Returns *php\jsoup\Connection***maxBodySize** (*\$bytes*)**Parameters**

- **\$bytes** – int

Returns *php\jsoup\Connection***timeout** (*\$millis*)**Parameters**

- **\$millis** – int

Returns *php\jsoup\Connection***referrer** (*\$referrer*)**Parameters**

- **\$referrer** – string

Returns *php\jsoup\Connection*

```
followRedirects ($enable)
Parameters
  • $enable – bool

Returns php\jsoup\Connection

ignoreHttpErrors ($enable)
Parameters
  • $enable – bool

Returns php\jsoup\Connection

ignoreContentType ($enable)
Parameters
  • $enable – bool

Returns php\jsoup\Connection

execute ()
Returns php\jsoup\ConnectionResponse

get ()
Returns php\jsoup\Document

post ()
Returns php\jsoup\Document

request ()
Returns php\jsoup\ConnectionRequest

response ()
Returns php\jsoup\ConnectionResponse
```

ConnectionRequest

php\jsoup\ConnectionRequest
abstract class

Methods

```
timeout ($millis)
Setter and getter for timeout.

Parameters
  • $millis – int - (optional)

Returns int, php\jsoup\ConnectionRequest

maxBodySize ($bytes)
Setter and getter for max of body size.

Parameters
  • $bytes – int - (optional)
```

Returns int, `php\jsoup\ConnectionRequest`

followRedirects (`$enable`)
Setter and getter.

Parameters

- `$enable` – bool - (optional)

Returns bool, `php\jsoup\ConnectionRequest`

ignoreHttpErrors (`$enable`)

Parameters

- `$enable` – bool - (optional)

Returns bool, `php\jsoup\ConnectionRequest`

ignoreContentType (`$enable`)

Parameters

- `$enable` – bool - (optional)

Returns bool, `php\jsoup\ConnectionRequest`

ConnectionResponse

`php\jsoup\ConnectionResponse`
abstract class

Methods

headers ()
Returns array

cookies ()
Returns array

statusCode ()
Get the status code of the response.
Returns int

statusMessage ()
Get the status message of the response.
Returns string

charset ()
Returns string

body ()
Returns string

bodyAsBytes ()
Returns string binary string

contentType ()
Get the response content type (e.g. “text/html”);

Returns string

parse()

Returns *php\jsoup\Document*

Document

php\jsoup\Document
abstract class

Methods

location()

Returns string

title(\$value)

Parameters

- **\$value** – string - (optional)

Returns string

head()

Returns *php\jsoup\Element*

body()

Returns *php\jsoup\Element*

select(\$cssQuery)

Parameters

- **\$cssQuery** – string

Returns *php\jsoup\Elements*

Element

php\jsoup\Element
abstract class

Methods

html(\$html)

Parameters

- **\$html** – string - (optional)

Returns string

text()

Returns string

nodeName()

Returns string

tagName (\$tagName)

Parameters

- **\$tagName** – string - (optional)

Returns string

isBlock()

Returns bool

id()

Returns string

attr (\$attributeKey, \$attributeValue)

Parameters

- **\$attributeKey** –
- **\$attributeValue** –
– (optional)

Returns `php\jsoup\$this`

dataset()

Returns array

parent()

Returns `php\jsoup\Element`

parents()

Returns `php\jsoup\Elements`

child(\$index)

Parameters

- **\$index** – int

Returns `php\jsoup\Element`

children()

Returns `php\jsoup\Elements`

select(\$cssQuery)

Parameters

- **\$cssQuery** – string

Returns `php\jsoup\Elements`

Elements

`php\jsoup\Elements`

abstract class

implements: Iterator

Methods

text ()

Returns string

hasText ()

Returns bool

html (\$html)

Parameters

- **\$html** – string - (optional)

Returns string

outerHtml ()

Returns string

attr (\$attributeKey, \$value)

Parameters

- **\$attributeKey** – string
- **\$value** –
– (optional)

Returns string, *php\jsoup\\$this*

hasAttr (\$attributeKey)

Parameters

- **\$attributeKey** – string

Returns bool

removeAttr (\$attributeKey)

Parameters

- **\$attributeKey** – string

Returns *php\jsoup\Elements*

addClass (\$class)

Parameters

- **\$class** – string

Returns *php\jsoup\Elements*

removeClass (\$class)

Parameters

- **\$class** – string

Returns *php\jsoup\Elements*

hasClass (\$class)

Parameters

- **\$class** – string

Returns bool

toggleClass (\$class)

Parameters

- **\$class** – string

Returns bool

val (\$value)

Parameters

- **\$value** – string - (optional)

Returns php\jsoup\\$this

prepend (\$html)

Parameters

- **\$html** – string

Returns *php\jsoup\Elements*

append (\$html)

Parameters

- **\$html** – string

Returns *php\jsoup\Elements*

before (\$html)

Parameters

- **\$html** – string

Returns *php\jsoup\Elements*

after (\$html)

Parameters

- **\$html** – string

Returns *php\jsoup\Elements*

select (\$query)

Parameters

- **\$query** – string

Returns *php\jsoup\Elements*

first ()

Returns *php\jsoup\Element*

last ()

Returns *php\jsoup\Element*

not (\$query)

Parameters

- **\$query** – string

Returns *php\jsoup\Elements*

is (*\$query*)

Parameters

- **\$query** – string

Returns bool

parents ()

Returns *php\jsoup\Elements*

Jsoup

php\jsoup\Jsoup
final class

Methods

__construct ()
private

static connect (*\$url*)

Parameters

- **\$url** – string

Returns *php\jsoup\Connection*

static parse (*\$source*, *\$encoding*, *\$baseUri*)

Parameters

- **\$source** – string, *php\io\File*, *php\io\Stream*
- **\$encoding** – string
- **\$baseUri** – string

Returns *php\jsoup\Document*

static parseText (*\$text*, *\$baseUri*)

Parameters

- **\$text** – string
- **\$baseUri** – string - (optional)

Returns *php\jsoup\Document*

1.4.8 lang

ClassLoader

php\lang\ClassLoader
abstract class

Children

- **class** *php\util\LauncherClassLoader*

Methods

loadClass (\$name)
abstract

Parameters

- **\$name** – string

register ()

unregister ()

Environment

php\lang\Environment
 Class Environment

Constants

constant CONCURRENT

constant HOT_RELOAD

Methods

__construct (\$parent = NULL, \$flags = 0)

Parameters

- **\$parent** – *php\lang\Environment*
- **\$flags** – int - Environment::HOT_RELOAD, Environment::CONCURRENT

registerSourceMap (\$sourceMap)

Parameters

- **\$sourceMap** – *php\lang\SourceMap*

unregisterSourceMap (\$sourceMap)

Parameters

- **\$sourceMap** – *php\lang\SourceMap*

execute (\$runnable)

Executes \$runnable in the environment

Parameters

- **\$runnable** – callable -- in new environment

Returns mixed

```
importClass ($className)
Imports the $className to the environment

throws php\lang\Exception - if class not found or already registered
```

Parameters

- **\$className** – string

```
exportClass ($className)
Exports the $className from th environment

throws php\lang\Exception - if class not found or already registered
```

Parameters

- **\$className** – string

```
importFunction ($functionName)
Imports the $functionName to the environment

throws php\lang\Exception - if function not found or already registered
```

Parameters

- **\$functionName** – string

```
exportFunction ($functionName)
Exports the $functionName from the environment

throws php\lang\Exception - if function not found or already registered
```

Parameters

- **\$functionName** – string

```
importAutoLoaders ()

defineConstant ($name, $value, $caseSensitive = true)
throws php\lang\Exception - if constant already registered or value is not scalar type
```

Parameters

- **\$name** – string
- **\$value** – mixed - - scalar value
- **\$caseSensitive** – bool

```
onMessage ($callback)
Handles messages that sent to the environment
```

Parameters

- **\$callback** – callable

```
onOutput ($callback)
```

Parameters

- **\$callback** – callable

```
sendMessage ($message)
Send message to the environment
```

Parameters

- **\$message** – mixed

Returns mixed

findModule (\$path)

Parameters

- **\$path** – string

Returns *php\lang\Module*, null

static current

Get environment of current execution

Returns *php\lang\Environment*

IllegalArgumentException

php\lang\IllegalArgumentException
extends: *php\lang\JavaException*

Class IllegalArgumentException

IllegalStateException

php\lang\IllegalStateException
extends: *php\lang\JavaException*

Class IllegalStateException

InterruptedException

php\lang\InterruptedException
extends: *php\lang\JavaException*

Class InterruptedException

Invoker

php\lang\Invoker

Class for calling methods/functions/etc.

Methods

__construct (\$callback)

Parameters

- **\$callback** – callable

callArray (\$args)

Call with array arguments

Parameters

- **\$args** – array

Returns mixed

```
call()
    Call the current callback
    Returns int, mixed

__invoke()

canAccess()
    Check access to invoke the method at a moment
    Returns bool

getDescription()
    Returns description of the method - name + argument info
    Returns string

getArgumentCount()
    Returns argument count of the method
    Returns int

isClosure()
    Checks it is a closure
    Returns bool

isNamedFunction()
    Checks it is a named function
    Returns bool

isStaticCall()
    Checks it is a static call
    Returns bool

isDynamicCall()
    Checks it is a dynamic call
    Returns bool

static of ($callback)
    Parameters
        • $callback – mixed, callable
    Returns php\lang\Invoker, null - returns null if passed is not callable
```

JavaClass

```
php\lang\JavaClass
    final class
```

Methods

```
__construct ($className)
    throws php\lang\JavaException if not found class
    Parameters
        • $className – string -- full name of java class
```

```
isStatic()
    Returns bool

isFinal()
    Returns bool

isAbstract()
    Returns bool

isInterface()
    Returns bool

isEnum()
    Returns bool

isAnnotation()
    Returns bool

isArray()
    Returns bool

isPrimitive()
    Returns bool

isAnonymousClass()
    Returns bool

isMemberClass()
    Returns bool

getName()
    Returns string

get SimpleName()
    Returns string

get CanonicalName()
    Returns string

get SuperClass()
    Returns php\lang\JavaClass, null

get Modifiers()
    Returns int

is AnnotationPresent ($annotationClassName)
    throws php\lang\JavaException if class not found

Parameters
    • $annotationClassName – string

Returns bool

get Interfaces()
```

Returns `php\lang\JavaClass[]`
getDeclaredMethod (`$name, $types`)
throws `php\lang\JavaException`

Parameters

- `$name` – string
- `$types` – array

Returns `php\lang\JavaMethod`
getDeclaredMethods ()
Returns `php\lang\JavaMethod[]`
getDeclaredField (`$name`)
throws `php\lang\JavaException`

Parameters

- `$name` –

Returns `php\lang\JavaField`
getDeclaredFields ()
Returns `php\lang\JavaField[]`
newInstance ()
throws `php\lang\JavaException`
Returns `php\lang\JavaObject`
newInstanceArgs (`$types, $arguments`)
throws `php\lang\JavaException`

Parameters

- `$types` – array
- `$arguments` – array

Returns `php\lang\JavaObject`
isAssignableFrom (`$class`)
Parameters

- `$class` – `php\lang\JavaClass`

Returns bool
isSubClass (`$className`)
throws `php\lang\JavaException`

Parameters

- `$className` – string

Returns bool
getEnumConstants ()
Returns `php\lang\JavaObject[]`
getResource (`$name`)
Parameters

- **\$name** – string

Returns string, null - filename

static primitive (\$name)

Parameters

- **\$name** – string -- [int, byte, short, char, float, double, boolean, long]

JavaException

```
php\lang\JavaException
extends: Exception
```

Children

- **class** *php\concurrent\TimeoutException*
- **class** *php\io\IOException*
- **class** *php\lang\IllegalArgumentException*
- **class** *php\lang\IllegalStateException*
- **class** *php\lang\InterruptedException*
- **class** *php\lang\NumberFormatException*
- **class** *php\net\SocketException*
- **class** *php\sq\SQLException*
- **class** *php\util\RegexException*

Class JavaException

Methods

isRuntimeException()
Check exception instance of java.lang.RuntimeException

Returns bool

isNullPointerException()
Check exception instance of java.lang.NullPointerException

Returns bool

isIllegalArgumentException()
Check exception instance of java.lang.IllegalArgumentException

Returns bool

isNumberFormatException()
Check exception instance of java.lang.NumberFormatException

Returns bool

getExceptionClass()

Returns *php\lang\JavaClass*

getJavaException()

Returns *php\lang\JavaObject*
printJVMStackTrace()

JavaField

php\lang\JavaField
final class
extends: *php\lang\JavaReflection*

Methods

get (*\$object* = null)
throws *php\lang\JavaException*

Parameters

- **\$object** – *php\lang\JavaObject*

Returns mixed

set (*\$object* = null, *\$value*)
throws *php\lang\JavaException*

Parameters

- **\$object** – *php\lang\JavaObject*
- **\$value** –

isStatic()

Returns bool

isFinal()

Returns bool

isPublic()

Returns bool

isProtected()

Returns bool

isPrivate()

Returns bool

isTransient()

Returns bool

isVolatile()

Returns bool

getModifiers()

Returns int

getName()

Returns string

```
getDeclaringClass()  
    Returns php\lang\JavaClass
```

JavaMethod

```
php\lang\JavaMethod  
final class  
extends: php\lang\JavaReflection
```

Methods

```
invoke ($object = null)  
    Invoke method
```

Parameters

- **\$object** – *php\lang\JavaObject*

```
invokeArgs ($object = null, $arguments)
```

Parameters

- **\$object** – *php\lang\JavaObject*
- **\$arguments** – array

```
getName()
```

Returns string

```
isStatic()
```

Returns bool

```
isFinal()
```

Returns bool

```
isAbstract()
```

Returns bool

```
isPublic()
```

Returns bool

```
isProtected()
```

Returns bool

```
isPrivate()
```

Returns bool

```
isNative()
```

Returns bool

```
isSynchronized()
```

Returns bool

```
isVarArgs()
```

Returns bool

```
getDeclaringClass ()  
    Returns php\lang\JavaClass  
getReturnedType ()  
    Returns php\lang\JavaClass  
isAnnotationPresent ($annotationClassName)  
    throws php\lang\JavaException  
Parameters  
    • $annotationClassName – string  
Returns bool  
getParameterTypes ()  
    Returns php\lang\JavaClass[]  
getParameterCount ()  
    Returns int
```

JavaObject

php\lang\JavaObject
final class

Methods

```
getClass ()  
    Get class of object  
    Returns php\lang\JavaClass  
getClassName ()  
    Get name of class of object  
    Returns string
```

JavaReflection

php\lang\JavaReflection
abstract class

Children

- final class *php\lang\JavaField*
- final class *php\lang\JavaMethod*

Module

php\lang\Module
Class Module

Methods

__construct (\$source, \$compiled = false, \$debugInformation = true)
Register all functions and classes of module in current environment

Parameters

- **\$source** – *php\io\File, php\io\Stream*, string
- **\$compiled** – bool
- **\$debugInformation** – bool

getName ()

>Returns string

call (\$variables = null)

Include module and return result

Parameters

- **\$variables** – array

>Returns mixed

dump (\$target, \$saveDebugInfo = true)

throws >

Parameters

- **\$target** – *php\io\File, php\io\Stream*, string
- **\$saveDebugInfo** – bool

NotImplementedException

php\lang\NotImplementedException
extends: Exception

Class NotImplementedException

NumberFormatException

php\lang\NumberFormatException
extends: *php\lang\JavaException*

Class NumberFormatException

Process

php\lang\Process
Class Process

Methods

__construct (\$commands, \$directory = null, \$environment = null)

Parameters

- **\$commands** – array
- **\$directory** – null, string, *php\io\File*
- **\$environment** – array

start ()

throws *php\lang\IllegalStateException*

Returns *php\lang\Process*

startAndWait ()

Causes the current thread to wait, if necessary, until the process represented by this *Process* object has terminated. This method returns immediately if the subprocess has already terminated. If the subprocess has not yet terminated, the calling thread will be blocked until the subprocess exits.

throws *php\lang\IllegalStateException*

Returns *php\lang\Process*

getExitValue ()

Returns the exit value for the subprocess.

throws *php\lang\IllegalStateException*

Returns int, null - null if process is working

destroy ()

Kills the subprocess. The subprocess represented by this *Process* object is forcibly terminated.

throws *php\lang\IllegalStateException*

getInput ()

Returns the input stream connected to the normal output of the subprocess. The stream obtains data piped from the standard output of the process represented by this *Process* object.

throws *php\lang\IllegalStateException*

Returns *php\io\Stream*

getOutput ()

Returns the output stream connected to the normal input of the subprocess. Output to the stream is piped into the standard input of the process represented by this *Process* object.

throws *php\lang\IllegalStateException*

Returns *php\io\Stream*

getError ()

Returns the input stream connected to the error output of the subprocess. The stream obtains data piped from the error output of the process represented by this *Process* object.

throws *php\lang\IllegalStateException*

Returns `php\io\Stream`

SourceMap

`php\lang\SourceMap`
Class SourceMap

Methods

`__construct ($moduleName)`

Parameters

- `$moduleName` – string

`getModuleName ()`

Returns

`getSourceLine ($compiledLine)`

Parameters

- `$compiledLine` – int

Returns

`getCompiledLine ($sourceLine)`

Parameters

- `$sourceLine` – int

Returns

`insertLines ($inserts, $allCountLines)`

Parameters

- `$inserts` – array - int[][2] [[line, lineCount], [line, lineCount], ...]
- `$allCountLines` – int - original source line count.

`addLine ($sourceLine, $compiledLine)`

Parameters

- `$sourceLine` – int
- `$compiledLine` – int

`clear ()`

`toArray ()`

Returns

System

`php\lang\System`
final class

Methods

```
__construct()
private

static halt ($status)
    Exit from program with status globally
```

Parameters

- \$status – int

static gc

static getEnv

Returns string[]

static getProperty (\$name, \$def = '')

Gets a system property by name

Parameters

- \$name –
- \$def – string

Returns string

Thread

`php\lang\Thread`

Class Thread

Constants

```
constant MAX_PRIORITY
constant MIN_PRIORITY
constant NORM_PRIORITY
```

Methods

```
__construct ($runnable, $env = null, $group = null)
```

Parameters

- \$runnable – callable
- \$env – `php\lang\Environment`
- \$group – `php\lang\ThreadGroup`

getId ()

Returns int

getName ()

Returns string

setName (\$value)

Parameters

- **\$value** – string

getGroup()

Returns *php\lang\ThreadGroup*

isDaemon()

Returns bool

setDaemon (\$value)

Parameters

- **\$value** – bool

isInterrupted()

Returns bool

isAlive()

Returns bool

start()

run()

interrupt()

join (\$millis = 0, \$nanos = 0)

Waits at most \$millis milliseconds plus \$nanos nanoseconds for this thread to die.

Parameters

- **\$millis** – int
- **\$nanos** – int

static doYield

static sleep (\$millis, \$nanos = 0)

Causes the currently executing thread to sleep (temporarily cease execution)

Parameters

- **\$millis** – int
- **\$nanos** – int

static getActiveCount

Returns int

static current

Get current thread

Returns *php\lang\Thread*

ThreadGroup

php\lang\ThreadGroup

Class ThreadGroup

Methods

__construct (\$name, \$parent = null)

Parameters

- **\$name** –
- **\$parent** – *php\lang\ThreadGroup*

getName ()

Returns string

getParent ()

Returns *php\lang\ThreadGroup*, null

getActiveCount ()

Returns int

getActiveGroupCount ()

Returns int

isDaemon ()

Returns bool

setDaemon (\$value)

Parameters

- **\$value** – bool

isDestroyed ()

Returns bool

getMaxPriority ()

Returns int

setMaxPriority (\$value)

Parameters

- **\$value** – int

destroy ()

checkAccess ()

Determines if the currently running thread has permission to modify this thread group.

throws *php\lang\JavaException*

interrupt ()

ThreadPool

php\lang\ThreadPool

Class ThreadPool

Methods

```

__construct()
private

isScheduled()
Is Scheduled ?

    Returns bool

isShutdown()
Is Shutdown?

    Returns bool

isTerminated()
    Returns bool

execute ($runnable, $env = null)
Execute some $runnable via the Executor Service

    Parameters
        • $runnable – callable
        • $env – php\lang\Environment

submit ($runnable, $env = null)
    Parameters
        • $runnable – callable
        • $env – php\lang\Environment

    Returns php\concurrent\Future

schedule ($runnable, $delay, $env = null)
    Parameters
        • $runnable – callable
        • $delay – int
        • $env – php\lang\Environment

    Returns php\concurrent\Future

shutdown()
shutdownNow()

awaitTermination ($timeout)
Blocks until all tasks have completed execution after a shutdown request, or the timeout occurs, or
the current thread is interrupted, whichever happens first.

throws php\lang\Exception

    Parameters
        • $timeout – int -- in milliseconds

    Returns bool

static create ($coreSize, $maxSize, $keepAliveTime = 0)

    Parameters
        • $coreSize – int - the number of threads to keep in the pool, even if they are idle

```

- **\$maxSize** – int - the maximum number of threads to allow in the pool
- **\$keepAliveTime** – int - in millis

Returns *php\lang\ThreadPool*

static createFixed (\$max)

Parameters

- **\$max** – int

Returns *php\lang\ThreadPool*

static createCached

Returns *php\lang\ThreadPool*

static createSingle

Creates an Executor that uses a single worker thread operating off an unbounded queue.

Returns *php\lang\ThreadPool*

static createScheduled (\$corePoolSize)

Creates a thread pool that can schedule commands to run after a given delay, or to execute periodically.

Parameters

- **\$corePoolSize** – int

Returns *php\lang\ThreadPool*

1.4.9 lib

arr

php\lib\arr

Library for working with collections - arrays, iterators, etc.

Methods

__construct ()
private

static count (\$collection)

Returns element count of the collection

Warning: for iterators it will iterate all elements to return the result

Parameters

- **\$collection** – array, Countable, Iterator

Returns int element count

static has (\$collection, \$value, \$strict = false)

Parameters

- **\$collection** – array, Traversable
- **\$value** – mixed
- **\$strict** – bool

Returns bool

static toArray (\$collection, \$withKeys = false)

Converts \$collection to array

Parameters

- **\$collection** – array, Iterator
- **\$withKeys** – bool

Returns array

static of (\$collection, \$withKeys = false)

Alias of toArray()

Parameters

- **\$collection** – array, Iterator
- **\$withKeys** – bool, php\lib\false

Returns array

static toList (\$collection)

Example: items::toList(['x' => 10, 20], 30, ['x' => 50, 60]) -> [10, 20, 30, 50, 60]

Parameters

- **\$collection** –

Returns array

static keys (\$collection)

Returns all keys of collection

Parameters

- **\$collection** – array, Iterator

Returns array

static combine (\$keys, \$values)

Combines two collections to array.

Parameters

- **\$keys** – array, Iterator
- **\$values** – array, Iterator

Returns array, null returns null if size of arrays is not equals.

static map (\$collection, \$callback)

Parameters

- **\$collection** – array, Iterator
- **\$callback** – callable

static flatten (*\$collection*, *\$maxLevel* = -1)

Returns a new array that is a one-dimensional flattening of this collection (recursively). That is, for every element that is a collection, extract its elements into the new array. If the optional *\$maxLevel* argument > -1 the level of recursion to flatten.

Parameters

- **\$collection** – array, Iterator
- **\$maxLevel** – int

Returns array

static sort (*\$collection*, *\$comparator* = null, *\$saveKeys* = false)

Sorts the specified list into ascending order

Parameters

- **\$collection** – array, Iterator
- **\$comparator** – callable - (\$o1, \$o2) -> int where -1 smaller, 0 equal, 1 greater
- **\$saveKeys** – bool

Returns array

static sortByKeys (*\$collection*, *\$comparator* = null, *\$saveKeys* = false)

Sorts the specified list into ascending order by keys

Parameters

- **\$collection** – array, Iterator
- **\$comparator** – callable - (\$key1, \$key2)
- **\$saveKeys** – bool

Returns array

static peak (*\$array*)

Returns the last element of array.

Parameters

- **\$array** –

Returns mixed last value of array

static push (*\$array*, *\$values*)

Parameters

- **\$array** – array, ArrayAccess
- **\$values** –

static pop (*\$array*)

Parameters

- **\$array** – array

Returns mixed

static shift (*\$array*)

Parameters

- **\$array** – array

Returns mixed

static unshift (\$array, \$values)

Parameters

- **\$array** – array
- **\$values** –

static first (\$collection)

Parameters

- **\$collection** – Traversable, array

Returns mixed

static firstKey (\$collection)

Parameters

- **\$collection** – Traversable, array

Returns string, int, null

static reverse (\$array)

Parameters

- **\$array** – array

Returns array

bin

php\lib\bin

Methods

__construct ()
 private

static of (\$string)

Parameters

- **\$string** – string, array

Returns string - binary string

fs

php\lib\fs

File System class.

Class fs

Methods

static separator

Return the local filesystem's name-separator character.

Returns string

static pathSeparator

Return the local filesystem's path-separator character.

Returns string

static valid (\$name)

Validate file name.

Parameters

- **\$name** –

Returns bool

static abs (\$path)

Returns absolute real path.

Parameters

- **\$path** –

Returns string

static name (\$path)

Parameters

- **\$path** –

Returns string

static nameNoExt (\$path)

Parameters

- **\$path** –

Returns string

static pathNoExt (\$path)

Returns path without extension.

Parameters

- **\$path** – string

Returns string

static ext (\$path)

Returns extension of path.

Parameters

- **\$path** –

Returns string

static hasExt (\$path, \$extensions = null, \$ignoreCase = true)

Check that \$path has an extension from the extension set.

Parameters

- **\$path** – string
- **\$extensions** – string, array
- **\$ignoreCase** – bool

Returns bool

static parent (\$path)
Returns parent directory.

Parameters

- **\$path** –

Returns string

static ensureParent (\$path)
Checks parent of path and if it is not exists, tries to create parent directory. See makeDir().

Parameters

- **\$path** – string

Returns bool

static normalize (\$path)
Normalizes file path for current OS.

Parameters

- **\$path** –

Returns string

static exists (\$path)
Parameters

- **\$path** –

Returns string

static size (\$path)
Returns size of file in bytes.

Parameters

- **\$path** –

Returns int

static isFile (\$path)
Parameters

- **\$path** –

Returns bool

static isDir (\$path)
Parameters

- **\$path** –

Returns bool

static isHidden (\$path)
Parameters

- **\$path** –

Returns bool

static time (\$path)

Returns last modification time of file or directory.

Parameters

- **\$path** –

Returns int

static makeDir (\$path)

Creates empty directory (mkdirs) if not exists.

Parameters

- **\$path** –

Returns bool

static makeFile (\$path)

Creates empty file, if file already exists then rewrite it.

Parameters

- **\$path** –

Returns bool

static delete (\$path)

Deletes file or empty directory.

Parameters

- **\$path** –

Returns bool

static clean (\$path, \$checker = null)

Deletes all files in path. This method does not delete the \$path directory. Returns array with error, success and skip file list.

Parameters

- **\$path** – string
- **\$checker** – callable - (File \$file, \$depth) optional, must return true to delete the file.

Returns array [success => [], error => [], skip = []]

static scan (\$path, \$onProgress, \$maxDepth = 0, \$subIsFirst = false)

Parameters

- **\$path** – string
- **\$onProgress** – callable - (File \$file, \$depth)
- **\$maxDepth** – int - if 0 then unlimited.
- **\$subIsFirst** – bool

static hash (\$source, \$algo = 'MD5')

Calculates hash of file or stream.

Parameters

- **\$source** – string, *php\io\Stream*
- **\$algo** – string - MD5, MD2, SHA-1, SHA-256, SHA-512

Returns string

static copy (\$source, \$dest, \$onProgress = null)

Copies \$source stream to \$dest stream.

Parameters

- **\$source** – string, *php\io\File*, *php\io\Stream*
- **\$dest** – string, *php\io\File*, *php\io\Stream*
- **\$onProgress** – callable - (\$copiedBytes)

Returns int copied bytes.

static get (\$source, \$charset = null, \$mode = 'r')

Reads fully data from source and returns it as binary string.

Parameters

- **\$source** – string
- **\$charset** – null, string - UTF-8, windows-1251, etc.
- **\$mode** – string

Returns string

num

php\lib\num

Utils for numbers

Class num

Methods

__construct()

private

static compare (\$num1, \$num2)

Compare two numbers

Note: it can be used as comparator for number sorting

Parameters

- **\$num1** – int, double
- **\$num2** – int, double

Returns int 0 if are equal, 1 if \$num1 > \$num2, -1 if \$num1 < \$num2

static toBin (\$number)

Returns a string representation of the \$number argument as an unsigned integer in base 2.

Parameters

- **\$number** – int

Returns string

static `toOctal` (\$number)

Returns a string representation of the \$number argument as an unsigned integer in base 8.

Parameters

- **\$number** – int

Returns string

static `toHex` (\$number)

Returns a string representation of the \$number argument as an unsigned integer in base 16.

Parameters

- **\$number** – int

Returns string

static `toString` (\$number, \$radix)

Returns a string representation of the first argument in the radix specified by the second argument.

Parameters

- **\$number** – int

- **\$radix** – int

Returns string

static `reverse` (\$number)

Returns the value obtained by reversing the order of the bits in the two's complement binary representation of the specified {@code long} value.

Parameters

- **\$number** – int

Returns int

static `decode` (\$string)

Decodes a string into a integer. Accepts decimal, hexadecimal, and octal numbers

Parameters

- **\$string** – string

Returns string or false if invalid number format

static `format` (\$number, \$pattern, \$decSep = '.', \$groupSep = ',', ',')

Parameters

- **\$number** – int, double
- **\$pattern** –
- **\$decSep** – string
- **\$groupSep** – string

Returns string

reflect

php\lib\reflect

Class reflect

Methods

```
__construct()
private

static typeOf ($object, $isLowerCase = false)

Parameters

- $object – object
- $isLowerCase – bool - (optional)

Returns php\lib\false, string

static typeModule ($typeName)

Parameters

- $typeName – string

Returns php\lang\Module, null

static functionModule ($funcName)

Parameters

- $funcName – string

Returns php\lang\Module, null

static newInstance ($className, $args = null, $withConstruct = true)

Parameters

- $className – string
- $args – array
- $withConstruct – bool

Returns object
```

str

php\lib\str
Class str

Methods

```
__construct()
private

static pos ($string, $search, $fromIndex = 0)
Returns the index within this string of the first occurrence of the specified substring, starting at the
specified index.

Parameters

- $string – string
- $search – string - the substring to search for
- $fromIndex – int - the index from which to start the search.

```

Returns int - returns -1 if not found

static posIgnoreCase (\$string, \$search, \$fromIndex = 0)

The same method as `pos()` only with ignoring case characters

Parameters

- **\$string** – string
- **\$search** – string - the substring to search for.
- **\$fromIndex** – int - the index from which to start the search.

Returns int - returns -1 if not found

static lastPos (\$string, \$search, \$fromIndex = null)

Returns the index within this string of the last occurrence of the specified substring. The last occurrence of the empty string “” is considered to occur at the index value `$string.length`.

Parameters

- **\$string** – string
- **\$search** – string - the substring to search for.
- **\$fromIndex** – null, int - - null means `$fromIndex` will be equal `$string.length`

Returns int - returns -1 if not found

static lastPosIgnoreCase (\$string, \$search, \$fromIndex = null)

The same method as `lastPos()` only with ignoring case characters

Parameters

- **\$string** – string
- **\$search** – string - the substring to search for.
- **\$fromIndex** – null, int - - null means `$fromIndex` will be equal `$string.length`

Returns int

static sub (\$string, \$beginIndex, \$endIndex = null)

Returns a new string that is a substring of this string. The substring begins at the specified `$beginIndex` and extends to the character at index `$endIndex - 1`. Thus the length of the substring is `endIndex - beginIndex`.

Parameters

- **\$string** – string
- **\$beginIndex** – int
- **\$endIndex** – null, int - When `$endIndex` equals to null then it will be equal `$string.length`

Returns string - return false if params are invalid

static compare (\$string1, \$string2)

Compares two strings lexicographically. The comparison is based on the Unicode value of each character in the strings.

The character sequence represented by `$string1` String is compared lexicographically to the character sequence represented by `$string2`. The result is a negative integer if `$string1` lexicographically precedes `$string2`. The result is a positive integer if `$string1` lexicographically follows `$string2`. The result is zero if the strings are equal; `compare` returns **0** exactly when the strings are equal

Parameters

- **\$string1** – string – first string
- **\$string2** – string – second string

Returns int**static compareIgnoreCase** (\$string1, \$string2)The same method as `compare()` only with ignoring case characters**Parameters**

- **\$string1** – string
- **\$string2** – string

Returns int**static equalsIgnoreCase** (\$string1, \$string2)

Checks that the strings are equal with ignoring case characters

Parameters

- **\$string1** – string
- **\$string2** – string

Returns bool**static startsWith** (\$string, \$prefix, \$offset = 0)

Tests if the substring of this string beginning at the specified index starts with the specified prefix.

Returns `true` if the character sequence represented by the argument is a prefix of the substring of this object starting at index `offset`; `false` otherwise. The result is `false` if `offset` is negative or greater than the length of this `$string`; otherwise the result is the same as the result of the expression

startsWith(sub(\$offset), \$prefix)

Parameters

- **\$string** – string
- **\$prefix** – string
- **\$offset** – int – where to begin looking in this string

Returns bool**static endsWith** (\$string, \$suffix)

Tests if this string ends with the specified suffix.

Parameters

- **\$string** – string
- **\$suffix** – string

Returns bool**static lower** (\$string)Converts all of the characters in `$string` to lower case using the rules of the default locale.**Parameters**

- **\$string** – string

Returns string

static upper (\$string)

Converts all of the characters in \$string to upper case using the rules of the default locale.

Parameters

- **\$string** – string

Returns string

static length (\$string)

Returns the length of \$string. The length is equal to the number of *Unicode code units* in the string.

Parameters

- **\$string** – string

Returns int

static replace (\$string, \$target, \$replacement)

Replaces each substring of this string that matches the literal target sequence with the specified literal replacement sequence. The replacement proceeds from the beginning of the string to the end, for example, replacing “aa” with “b” in the string “aaa” will result in “ba” rather than “ab”.

Parameters

- **\$string** – string
- **\$target** – string - The sequence of char values to be replaced
- **\$replacement** – string - The replacement sequence of char values

Returns string

static repeat (\$string, \$amount)

Return s a new string consisting of the original \$string repeated

Parameters

- **\$string** – string
- **\$amount** – int - number of times to repeat str

Returns string

```
trim($string, $charList = ''')
```

Returns a copy of the string, with leading and trailing whitespace omitted.

param \$string string

param \$charList string

returns string

```
trimRight($string, $charList = '')
```

param \$string string

param \$charList string

```

returns string

trimLeft ($string, $charList = '')

)

param $string string
param $charList string
returns string
static reverse ($string)

Parameters

- $string – string

Returns string

static shuffle ($string)
>Returns a randomized string based on chars in $string

Parameters

- $string – string

Returns string

static random ($length = 16, $set = 'qwertyuiopasdfghjklzxcvbnmQWERTYUIOPASDFGHJK-
LZXCVBNM0123456789')
>Returns a randomized string based on chars in $string

Parameters

- $length – int
- $set – string

Returns string

static split ($string, $separator, $limit = 0)
>The method like explode() in Zend PHP

Parameters

- $string – string
- $separator – string
- $limit – int

Returns array

static join ($iterable, $separator, $limit = 0)
>The method like implode() in Zend PHP

Parameters

- $iterable – array, php\lib\Iterator
- $separator – string
- $limit – int

Returns string

static encode ($string, $charset)
>Converts $string by using $charset and returns a binary string

Parameters

```

- **\$string** – string
- **\$charset** – string - e.g. UTF-8, Windows-1251, etc.

Returns string binary string

static decode (\$string, \$charset)

Decodes \$string by using \$charset to UNICODE, returns a unicode string

Parameters

- **\$string** – string
- **\$charset** – string - e.g. UTF-8, Windows-1251, etc.

Returns string binary string

static isNumber (\$string, \$bigNumbers = true)

Returns *true* if \$string is integer number (e.g. ‘12893’, ‘3784’, ‘0047’)

- for 123 - true
- for 00304 - true
- for 3389e4 - false
- for 3 . 49 - false
- for ““23 “ - false

Parameters

- **\$string** – string
- **\$bigNumbers** – bool

Returns bool

static isLower (\$string)

Parameters

- **\$string** –

Returns bool

static isUpper (\$string)

Parameters

- **\$string** –

Returns bool

static lowerFirst (\$string)

Parameters

- **\$string** – string

Returns string

static upperFirst (\$string)

Parameters

- **\$string** – string

Returns string

static format (\$string, \$args)

Parameters

- **\$string** – string
- **\$args** –

Returns string

static contains (\$string, \$search)

Parameters

- **\$string** – string
- **\$search** – string

Returns bool

static count (\$string, \$subString, \$offset = 0)

Parameters

- **\$string** – string
- **\$subString** – string
- **\$offset** – int

Returns int

static uuid (\$value = null)

Parameters

- **\$value** – null, string

Returns string uuid of \$value if it is not null, else random uuid

static hash (\$string, \$algorithm = 'SHA-1')

throws php\lib\Exception if the algorithm is not supported

Parameters

- **\$string** – string
- **\$algorithm** – string - MD5, SHA-1, SHA-256, etc.

Returns string

1.4.10 mail

Email

php\mail\Email

Class Email

Methods

setFrom (\$email, \$name, \$charset)

Parameters

- **\$email** – string

- **\$name** – string - (optional)
- **\$charset** – string - (optional)

Returns `php\mail\$this`

setCharset (`$charset`)

Parameters

- **\$charset** – string

Returns `php\mail\$this`

setSubject (`$subject`)

Parameters

- **\$subject** – string

Returns `php\mail\$this`

setTo (`$addresses`)

Parameters

- **\$addresses** – array

Returns `php\mail\$this`

setCc (`$addresses`)

Parameters

- **\$addresses** – array

Returns `php\mail\$this`

setBcc (`$addresses`)

Parameters

- **\$addresses** – array

Returns `php\mail\$this`

setBounceAddress (`$email`)

Parameters

- **\$email** – array

Returns `php\mail\$this`

setHeaders (`$headers`)

Parameters

- **\$headers** – array

Returns `php\mail\$this`

setMessage (`$message`)

Parameters

- **\$message** – string

Returns `php\mail\$this`

setHtmlMessage (`$message`)

Parameters

- **\$message** – string

Returns `php\mail\$this`

setTextMessage (`$message`)

Parameters

- **\$message** – string

Returns `php\mail\$this`

attach (`$content, $contentType, $name, $description = ''`)

Parameters

- **\$content** – string, `php\io\File`, `php\io\Stream`
- **\$contentType** – string
- **\$name** – string
- **\$description** – string

Returns `php\mail\$this`

send (`$backend`)

Sends the email. Internally we build a MimeMessage which is afterwards sent to the SMTP server.

Parameters

- **\$backend** – `php\mail\EmailBackend`

Returns string the message id of the underlying MimeMessage

EmailBackend

php\mail\EmailBackend

Class EmailBackend

Properties

property hostName

string

The host name of the SMTP server.

property smtpPort

string

The listening port of the SMTP server.

property sslSmtpPort

string

The current SSL port used by the SMTP transport.

property sendPartial

bool

Sending partial email.

property socketTimeout
int

The socket I/O timeout value in milliseconds.

property socketConnectionTimeout
int

The socket connection timeout value in milliseconds.

property sslOnConnect
bool

Whether SSL/TLS encryption for the transport is currently enabled (SMTPS/POPS).

property sslCheckServerIdentity
bool

Whether the server identity is checked as specified by RFC 2595.

Methods

getHostName ()
protected

Returns string

setHostName (\$hostName)
protected

Parameters

- **\$hostName** – string

getSmtpPort ()
protected

Returns string

setSmtpPort (\$smtpPort)
protected

Parameters

- **\$smtpPort** – string

getSslSmtpPort ()
protected

Returns string

setSslSmtpPort (\$sslSmtpPort)
protected

Parameters

- **\$sslSmtpPort** – string

isSendPartial ()
protected

Returns boolean

setSendPartial (\$sendPartial)
protected

Parameters

- **\$sendPartial** – boolean

getSocketTimeout ()
protected

Returns int

setSocketTimeout (\$socketTimeout)
protected

Parameters

- **\$socketTimeout** – int

getSocketConnectionTimeout ()
protected

Returns int

setSocketConnectionTimeout (\$socketConnectionTimeout)
protected

Parameters

- **\$socketConnectionTimeout** – int

isSslOnConnect ()
protected

Returns boolean

setSslOnConnect (\$sslOnConnect)
protected

Parameters

- **\$sslOnConnect** – boolean

isSslCheckServerIdentity ()
protected

Returns boolean

setSslCheckServerIdentity (\$sslCheckServerIdentity)
protected

Parameters

- **\$sslCheckServerIdentity** – boolean

setAuthentication (\$login, \$password)
Sets the userName and password if authentication is needed. If this method is not used, no authentication will be performed.

Parameters

- **\$login** – string
- **\$password** – string

clearAuthentication ()

1.4.11 net

NetStream

`php\Net\NetStream`
extends: `php\io\Stream`

http, ftp protocols

Class NetStream

Methods

read (\$length)

Parameters

- **\$length** –

readFully (\$bufferSize = 4096)

Parameters

- **\$bufferSize** – int

Returns mixed, void

readFullyWithCallback (\$bufferSize, \$callback)

Parameters

- **\$bufferSize** – int
- **\$callback** – callable - (NetStream \$this, \$len)

write (\$value, \$length = null)

Parameters

- **\$value** –
- **\$length** –

eof ()

seek (\$position)

Parameters

- **\$position** –

getPosition ()

close ()

getUrl ()

Returns `php\ne\URL`

setProxy (\$proxy)

Parameters

- **\$proxy** – `php\ne\Proxy`

getProxy ()

Returns `php\ne\Proxy`

getUrlConnection()
Returns *php\ne\URLConnection*

Proxy

php\ne\Proxy
Class Proxy

Methods

__construct (\$type, \$host, \$port)

Parameters

- **\$type** – string - - DIRECT, HTTP or SOCKS
- **\$host** – string
- **\$port** – int

address ()

Returns string host with port

type ()

Returns string DIRECT, HTTP or SOCKS

ServerSocket

php\ne\ServerSocket
Class SocketServer

Methods

__construct (\$port = null, \$backLog = 50)

Parameters

- **\$port** – int
- **\$backLog** – int

accept ()

throws *php\io\IOException*

Returns *php\ne\Socket*

bind (\$hostname, \$port, \$backLog = 50)

throws *php\ne\SocketException*

Parameters

- **\$hostname** – string
- **\$port** – int
- **\$backLog** – int

close ()

throws *php\io\IOException*

isClosed()

Returns bool

isBound()

Returns the binding state of the ServerSocket.

Returns bool

setSoTimeout (\$timeout)

Enable/disable SO_TIMEOUT with the specified timeout, in milliseconds.

throws *php\socket\Exception*

Parameters

- **\$timeout** – int

setReuseAddress (\$on)

Enable/disable the SO_REUSEADDR socket option.

throws *php\socket\Exception*

Parameters

- **\$on** – bool

setReceiveBufferSize (\$size)

throws *php\socket\Exception*

Parameters

- **\$size** – int

setPerformancePreferences (\$connectTime, \$latency, \$bandWidth)

Sets performance preferences for this ServerSocket.

! Not implemented yet for TCP/IP

Parameters

- **\$connectTime** – int
- **\$latency** – int
- **\$bandWidth** – int

static findAvailableLocalPort

Returns int

Socket

php\socket

Class Socket

Methods

__construct (\$host = null, \$port = null)

Parameters

- **\$host** – null, string
- **\$port** – null, int

```
getOutput()
throws php\io\IOException
>Returns php\io\MiscStream

getInput()
throws php\io\IOException
>Returns php\io\MiscStream

getLocalAddress()
>Returns string

getAddress()
>Returns string

getLocalPort()
>Returns int

getPort()
>Returns int

close()
throws php\io\IOException

shutdownInput()
throws php\io\IOException

shutdownOutput()
throws php\io\IOException

isConnected()
>Returns bool

isClosed()
>Returns bool

isBound()
>Returns bool

isInputShutdown()
>Returns bool

isOutputShutdown()
>Returns bool

connect ($hostname, $port, $timeout = null)
Connects this socket to the server
```

Parameters

- **\$hostname** – string
- **\$port** – int
- **\$timeout** – null, int

bind (\$hostname, \$port)

Binds the socket to a local address.

throws *php\socket\SocketException*

Parameters

- **\$hostname** – string
- **\$port** – int

bindDefault ()

setSoTimeout (\$timeout)

Enable/disable SO_TIMEOUT with the specified timeout, in milliseconds.

throws *php\socket\SocketException*

Parameters

- **\$timeout** – int

setSoLinger (\$on, \$linger)

throws *php\socket\SocketException*

Parameters

- **\$on** – bool
- **\$linger** – int

setReuseAddress (\$on)

Enable/disable the SO_REUSEADDR socket option.

throws *php\socket\SocketException*

Parameters

- **\$on** – bool

setReceiveBufferSize (\$size)

throws *php\socket\SocketException*

Parameters

- **\$size** – int

setTcpNoDelay (\$on)

throws *php\socket\SocketException*

Parameters

- **\$on** – bool

setKeepAlive (\$on)

throws *php\socket\SocketException*

Parameters

- **\$on** – bool

setOOBInline (\$on)

throws *php\socket\SocketException*

Parameters

- **\$on** – bool

```
setSendBufferSize ($size)
throws php\ net\ SocketException
```

Parameters

- **\$size** – int

```
setTrafficClass ($tc)
```

Sets traffic class or type-of-service octet in the IP header for packets sent from this Socket.

Parameters

- **\$tc** – int

```
setPerformancePreferences ($connectTime, $latency, $bandWidth)
```

Sets performance preferences for this ServerSocket.

! Not implemented yet for TCP/IP

Parameters

- **\$connectTime** – int
- **\$latency** – int
- **\$bandWidth** – int

```
sendUrgentData ($data)
```

Send one byte of urgent data on the socket. The byte to be sent is the lowest eight bits of the data parameter.

```
throws php\ net\ SocketException
```

Parameters

- **\$data** – int

SocketException

```
php\ net\ SocketException
extends: php\ lang\ JavaException
```

Class SocketException

URL

```
php\ net\ URL
Class URL
```

Methods

```
__construct ($uri)
```

Parameters

- **\$uri** – string

```
openConnection ($proxy)
```

Parameters

- **\$proxy** – *php\ net\ Proxy* - (optional)

Returns `php\ne\URLConnection`

getAuthority()
Gets the authority part of this URL

Returns string

getPort()

Returns int

getDefaultPort()
Gets the default port number of the protocol associated with this URL. If the URL scheme or the URLStreamHandler for the URL do not define a default port number, then -1 is returned.

Returns int

getProtocol()
Gets the protocol name of this URL

Returns string

getHost()

Returns string

getFile()
Gets the file name of this <code>URL</code>. The returned file portion will be the same as `getPath()`, plus the concatenation of the value of `getQuery()`, if any. If there is no query portion, this method and `getPath()` will return identical results.

Returns string

getPath()

Returns string

getQuery()

Returns string

getRef()
Gets the anchor (also known as the “reference”) of this URL

Returns string

sameFile(\$url)
Compares two URLs, excluding the fragment component.

Parameters

- `$url` – `php\ne\URL`

Returns bool

toString()

Returns string

toExternalForm()
Constructs a string representation of this URL. The string is created by calling the `toExternalForm` method of the stream protocol handler for this object.

Returns string

openStream()

Returns `php\io\Stream`

__toString()
Returns string

URLConnection

php\ne\URLConnection
 Class URLConnection

Properties

property doOutput
 bool

property doInput
 bool

property requestMethod
 string
 POST, GET, PUT, etc.

property connectTimeout
 php\ne\int millis
 that specifies the connect timeout value in milliseconds

property readTimeout
 php\ne\int millis
 the read timeout to a specified timeout, in milliseconds.

property useCaches
 bool

property ifModifiedSince
 php\ne\int millis

property followRedirects
 bool

property url
php\ne\URL
read-only

property responseCode
 int
read-only

property responseMessage
 int
read-only

property contentLength
 php\ne\int bytes
read-only
 int the content length of the resource that this connection's URL references, -1 if the content length is not known, or if the content length is greater than Integer.MAX_VALUE.

```
property contentType
    string
    read-only

property contentEncoding
    string
    read-only

property expiration
    int
    read-only

property lastModified
    int
    read-only

property usingProxy
    bool
    read-only
```

Methods

```
__construct ($parent)
protected
```

Parameters

- **\$parent** – *php\Net\URLConnection*

```
connect ()
```

```
getHeaderField ($name)
```

Parameters

- **\$name** – string

```
getHeaderFields ()
```

Returns array

```
getInputStream ()
```

Returns *php\io\Stream*

```
getErrorStream ()
```

Returns *php\io\Stream*

```
getOutputStream ()
```

Returns *php\io\Stream*

```
setRequestProperty ($name, $value)
```

Parameters

- **\$name** – string
- **\$value** – string

```
getRequestProperty ($name)
```

Parameters

- **\$name** – string

getProperties ()**Returns** array**disconnect ()****setChunkedStreamingMode (\$chunklen)**

This method is used to enable streaming of a HTTP request body without internal buffering, when the content length is **not** known in advance. In this mode, chunked transfer encoding is used to send the request body. Note, not all HTTP servers support this mode.

Parameters

- **\$chunklen** – int - The number of bytes to write in each chunk.

If chunklen is less than or equal to zero, a default value will be used.

static guessContentTypeFromStream (\$stream)

Tries to determine the type of an input stream based on the characters at the beginning of the input stream. This method can be used by subclasses that override the `<code>getContentType</code>` method.

Parameters

- **\$stream** – *php\io\Stream*

Returns string**static guessContentTypeFromName (\$name)****Parameters**

- **\$name** – string

static create (\$url, \$proxy = null)**Parameters**

- **\$url** – string
- **\$proxy** – *php\net\Proxy*

Returns *php\net\URLConnection*

1.4.12 orientdb

ODatabase

php\orientdb\ODatabase

Class ODatabase

Properties

property name

string

read-only

```
property url
    string
        read-only
property size
    int
        read-only
property status
    string
        read-only
OPEN, CLOSED, IMPORTING
property type
    string
```

Methods

```
__construct ($uri)
    Parameters
        • $uri – string
setUser ($name)
    Parameters
        • $name – string
setUserAndPassword ($name, $password)
    Parameters
        • $name – string
        • $password – string
exists ()
    Returns bool
create ()
drop ()
open ($username, $password)
    Open database
    Parameters
        • $username – string
        • $password – string
close ()
reload ()
freeze ()
release ()
begin ()
```

commit (*\$force = false*)

Parameters

- **\$force** – bool

rollback (*\$force = false*)

Parameters

- **\$force** – bool

getDocuments (*\$className*)

Parameters

- **\$className** –

Returns *php\util\NFlow* of ODocument

query (*\$query, \$limit = -1*)

Parameters

- **\$query** – string - like sql.
- **\$limit** – int

Returns *php\util\NFlow* of ODocument

command (*\$query*)

Parameters

- **\$query** – string

Returns int

ODocument

php\orientdb\ODocument

Class ODocument

Properties

property id

string

read-only

Methods

__construct (*\$className*)

Parameters

- **\$className** – string

isNew()

Returns bool

resetId()

save()

delete()

clear()

reset()

undo (\$field)

Undo changes.

Parameters

- **\$field** –

– (optional)

load()

reload()

toJson()

Returns string

fromJson (\$json)

Parameters

- **\$json** – string

__set (\$name, \$value)

Parameters

- **\$name** –

- **\$value** –

__get (\$name)

Parameters

- **\$name** –

__isset (\$name)

Parameters

- **\$name** –

__unset (\$name)

Parameters

- **\$name** –

__clone()

1.4.13 sql

SqlConnection

php\sql\SqlConnection
abstract class

Constants

```
constant TRANSACTION_READ_UNCOMMITTED
constant TRANSACTION_READ_COMMITTED
constant TRANSACTION_REPEATABLE_READ
constant TRANSACTION_NONE
constant TRANSACTION_SERIALIZABLE
```

Properties

```
property autoCommit
    bool
    Disable this to use transaction mode.

property readOnly
    bool

property transactionIsolation
    int
    See SqlConnection::TRANSACTION_* constants

property catalog
    string

property schema
    string
```

Methods

```
identifier ($name)
throws php\sql\SqlException
```

Parameters

- **\$name** – string

Returns

string

```
query ($sql, $arguments = null)
Parameters
    • $sql – string
    • $arguments – array
Returns php\sql\SqlStatement
```

commit ()

Makes all changes made since the previous commit/rollback permanent and releases any database locks currently held by this Connection object.

throws php\sql\SqlException

rollback ()

Undoes all changes made in the current transaction and releases any database locks currently held by this Connection object.

throws php\sql\SqlException

```
close()
throws php\sql\SqlException

getCatalogs()
>Returns array

getSchemas()
>Returns array

getMetaData()
>Returns array
```

SqlConnectionPool

`php\sql\SqlConnectionPool`
Class SqlConnectionPool

Methods

```
__construct ($parent)
protected

Parameters
• $parent – php\sql\SqlConnectionPool

getConnection()
>Returns php\sql\SqlConnection

setUser ($username)
Parameters
• $username – string
>Returns php\sql\$this

setPassword ($password)
Parameters
• $password – string
>Returns php\sql\$this

setMaxPoolSize ($value)
Parameters
• $value – int
>Returns php\sql\$this

 setIdleTimeout ($millis)
Parameters
• $millis – int
>Returns php\sql\$this

setMaxLifetime ($millis)
```

Parameters

- **\$millis** – int

Returns `php\sql\$this`

setMinimumIdle (`$millis`)

Parameters

- **\$millis** – int

Returns `php\sql\$this`

SqlDriverManager

php\sql\SqlDriverManager

Class DriverManager

Methods

static install (`$driverName`)

throws `php\sql\SqlException` if cannot install or find driver.

Parameters

- **\$driverName** – string – mysql, pgsql, postgres, mssql, firebird, sybase, sqlite, etc.

static getConnection (`$url, $options`)

throws `php\sql\SqlException` if a database access error occurs

Parameters

- **\$url** – string
- **\$options** – array - (optional) username, password, etc.

Returns `php\sql\SqlConnection`

static getPool (`$url, $driverName, $options`)

Parameters

- **\$url** – string
- **\$driverName** – string – mysql, pgsql, postgres, mssql, firebird, sybase, sqlite, etc.
- **\$options** – array - (optional)

Returns `php\sql\SqlConnectionPool`

SQLException

php\sql\SQLException

extends: `php\lang\JavaException`

Class SQLException

SqlResult

`php\sql\SqlResult`
abstract class

Methods

isLast()
throws `php\sql\SqlException`

Returns bool

isFirst()
throws `php\sql\SqlException`

Returns bool

delete()
Deletes current row.

throws `php\sql\SqlException`

isDeleted()
throws `php\sql\SqlException`

Returns bool

refresh()
throws `php\sql\SqlException`

get(\$column)
throws `php\sql\SqlException`

Parameters

- **\$column** – string

Returns mixed, `php\io\Stream, php\time\Time`

toArray(\$assoc = true)
throws `php\sql\SqlException`

Parameters

- **\$assoc** – bool

Returns array

SqlStatement

`php\sql\SqlStatement`
abstract class

implements: Iterator

Methods

bind(\$index, \$value)

Parameters

- **\$index** – int

- **\$value** – mixed

bindDate (\$index, \$time)

Parameters

- **\$index** – int
- **\$time** – *php\time\Time*

bindTime (\$index, \$time)

Parameters

- **\$index** – int
- **\$time** – *php\time\Time*

bindTimestamp (\$index, \$time)

Parameters

- **\$index** – int
- **\$time** – *php\time\Time*, int

bindBlob (\$index, \$blob)

Parameters

- **\$index** – int
- **\$blob** – string, *php\io\File*, *php\io\Stream*

fetch()
throws *php\sql\SqlException*

Returns *php\sql\SqlResult*

update()
throws *php\sql\SqlException*

Returns int

getLastInsertId()

Returns mixed

getGeneratedKeys()

Returns *php\sql\SqlResult*

current()

Returns *php\sql\SqlResult*

next()

key()

valid()

rewind()

1.4.14 swing

Border

`php\swing\Border`

Class Border

Methods

isOpaque ()

Returns bool

static createEmpty (\$top, \$left, \$bottom, \$right)

Parameters

- **\$top** – int
- **\$left** – int
- **\$bottom** – int
- **\$right** – int

Returns `php\swing\Border`

static createBevel (\$type, \$highlightColor, \$shadowColor)

Parameters

- **\$type** – string -- RAISED or LOWERED
- **\$highlightColor** – `php\swing\Color`, array, int
- **\$shadowColor** – `php\swing\Color`, array, int

Returns `php\swing\Border`

static createSoftBevel (\$type, \$highlightColor, \$shadowColor)

Parameters

- **\$type** – string -- RAISED or LOWERED
- **\$highlightColor** – `php\swing\Color`, array, int
- **\$shadowColor** – `php\swing\Color`, array, int

Returns `php\swing\Border`

static createEtchedBevel (\$type, \$highlightColor, \$shadowColor)

Parameters

- **\$type** – string -- RAISED or LOWERED
- **\$highlightColor** – `php\swing\Color`, array, int
- **\$shadowColor** – `php\swing\Color`, array, int

Returns `php\swing\Border`

static createTitledBorder (\$title, \$border = null, \$titleFont = null, \$titleColor = null)

Parameters

- **\$title** – string

- **\$border** – *php\swing\Border*
- **\$titleFont** – *php\swing\Font*
- **\$titleColor** – *php\swing\Color*, array, int

Returns *php\swing\Border*

static createLine (\$color, \$size = 1, \$rounded = false)

Parameters

- **\$color** – *php\swing\Color*, array, int
- **\$size** – int
- **\$rounded** – bool

Returns *php\swing\Border*

static createDashed (\$color, \$thickness = 1, \$length = 2, \$spacing = 1, \$rounded = false)

Parameters

- **\$color** – *php\swing\Color*, array, int
- **\$thickness** – int
- **\$length** – int
- **\$spacing** – int
- **\$rounded** – bool

Returns *php\swing\Border*

Color

php\swing\Color

Properties

```

property rgb
    int
    read-only

property alpha
    int
    read-only

property red
    int
    read-only

property green
    int
    read-only

property blue
    int
    read-only

```

Methods

__construct (\$rgb, \$hasAlpha = false)

Parameters

- **\$rgb** – int
- **\$hasAlpha** – bool

darker ()

Creates a new Color that is a darker version of this

Returns *php\swing\Color*

brighter ()

Creates a new Color that is a brighter version of this

Returns *php\swing\Color*

static rgb (\$r, \$g, \$b, \$alpha = 255)

Parameters

- **\$r** – int - - 0 .. 255
- **\$g** – int - - 0 .. 255
- **\$b** – int - - 0 .. 255
- **\$alpha** – int - - 0 .. 255

Returns *php\swing\Color*

static floatRgb (\$r, \$g, \$b, \$alpha = 1.0)

Parameters

- **\$r** – double - - between 0 and 1
- **\$g** – double - - between 0 and 1
- **\$b** – double - - between 0 and 1
- **\$alpha** – double - - between 0 and 1

Returns *php\swing\Color*

static decode (\$nm)

Decode color from a hex string (#RGB, 0xRGB, etc...)

Parameters

- **\$nm** –

Returns *php\swing\Color*

event

CaretEvent

php\swing\event\CaretEvent

Events:

- caretUpdate

Class CaretEvent

Properties

```
property dot
    int
read-only

property mark
    int
read-only

property target
    php\swing\UIElement
read-only
```

ComponentEvent

php\swing\event\ComponentEvent
abstract class

Children

- **class** *php\swing\event\FocusEvent*
- **class** *php\swing\event\KeyEvent*
- **class** *php\swing\event\MouseEvent*
- **class** *php\swing\event\WindowEvent*

Properties

```
property target
    php\swing\UIElement
read-only
```

FocusEvent

php\swing\event\FocusEvent
extends: *php\swing\event\ComponentEvent*

Events:

- focus
- blur

Class FocusEvent

Properties

```
property temporary
    bool
read-only

property paramString
    string
read-only
```

HyperlinkEvent

```
php\swing\event\HyperlinkEvent
extends: php\swing\event\SimpleEvent
```

Class HyperlinkEvent

Properties

```
property url
    string
read-only

property description
    string
read-only

property attributes
    string[]
read-only
```

ItemEvent

```
php\swing\event\ItemEvent
Events:
```

- changed

Class CaretEvent

Properties

```
property item
    string
read-only

property target
    php\swing\UIElement
read-only
```

Methods

```
isSelected()  
    Returns bool  
isDeselected()  
    Returns bool
```

KeyEvent

```
php\swing\event\KeyEvent  
extends: php\swing\event\ComponentEvent
```

Events:

- keyUp
- keyDown
- keyPress

Class KeyEvent

Properties

```
property keyChar  
    string  
    read-only  
property keyCode  
    int  
    read-only  
property keyLocation  
    int  
    read-only  
property actionKey  
    bool  
    read-only
```

MouseEvent

```
php\swing\event\MouseEvent  
extends: php\swing\event\ComponentEvent
```

Children

- class php\swing\event\MouseWheelEvent

Events:

- click
- mousePress

- mouseRelease
- mouseEnter
- mouseExit
- mouseDrag
- mouseMove

Class MouseEvent

Properties

```
property x
    int
    read-only

property y
    int
    read-only

property screenX
    int
    read-only

property screenY
    int
    read-only

property button
    int
    read-only

property clickCount
    int
    read-only

property popupTrigger
    bool
    read-only
```

MouseWheelEvent

```
php\swing\event\MouseWheelEvent
extends: php\swing\event\MouseEvent
```

Events:

- mouseWheel

Class MouseWheelEvent

Properties

```
property scrollAmount
    int
    read-only

property scrollType
    int
    read-only

property wheelRotation
    int
    read-only

property unitsToScroll
    int
    read-only
```

SimpleEvent

```
php\swing\event\SimpleEvent
    Class SimpleEvent
```

Properties

```
property target
    php\swing\UIElement
    read-only
```

WindowEvent

```
php\swing\event\WindowEvent
    extends: php\swing\event\ComponentEvent
```

Events:

- windowOpen
- windowClose
- windowClosing
- windowActive

Class WindowEvent

Properties

```
property oldState
    int
    read-only

property newState
    int
    read-only
```

```
property oppositeWindow  
    php\swing\UIWindow  
        read-only
```

Font

php\swing\Font

Constants

```
constant PLAIN  
constant BOLD  
constant ITALIC
```

Properties

```
property family  
    string  
        read-only  
    Family name of font  
property fontName  
    string  
        read-only  
property name  
    string  
        read-only  
property psName  
    string  
        read-only  
    PostScript name of font  
property size  
    int  
        read-only  
property size2D  
    int  
        read-only  
property style  
    int  
        read-only  
property italicAngle  
    double  
        read-only
```

property attributes

string[]

read-only

property numGlyphs

int

read-only

Methods

__construct (\$name, \$style, \$size)

Parameters

- **\$name** – string
- **\$style** – int - - PLAIN, BOLD, ITALIC
- **\$size** – int

isBold()

Returns bool

isItalic()

Returns bool

isPlain()

Returns bool

isTransformed()

Returns bool

getBaselineFor (\$symbol)

Parameters

- **\$symbol** – string - - one char

Returns int

canDisplay (\$symbol)

Parameters

- **\$symbol** – string - - one char

Returns bool

canDisplayUpTo (\$string)

Indicates whether or not this Font can display a specified String.

Parameters

- **\$string** – string

Returns int - an offset into \$string that points to the first character in \$string that this

Font cannot display; or -1 if this Font can display all characters in \$string.

static decode (\$str)

Decode font by using a specified string

Parameters

- **\$str** – string

Returns *php\swing\Font*

static create (*\$source, \$trueType = true*)

Create new font by using Stream or File

throws *php\io\IOException*

throws *php\swing\Exception*

Parameters

- **\$source** – string, *php\io\Stream*

- **\$trueType** – bool

Returns *php\swing\Font*

static get (*\$name*)

Get font by name

Parameters

- **\$name** – string

Returns *php\swing\Font*, null - return null if not exists

Graphics

php\swing\Graphics

Class Graphics

Properties

property color

php\swing\Color

Foreground color

property font

php\swing\Font

Font of text

Methods

__construct()

private

getTextWidth (*\$str*)

Return width of str for drawText + current font

Parameters

- **\$str** –

Returns int

getTextHeight ()

Return height of one line text with current font

Returns int

setPaintMode ()

drawLine (\$x1, \$y1, \$x2, \$y2)
Draw line

Parameters

- **\$x1** – int
- **\$y1** – int
- **\$x2** – int
- **\$y2** – int

drawRect (\$x, \$y, \$width, \$height)
Draw rect

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

fillRect (\$x, \$y, \$width, \$height)

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

draw3DRect (\$x, \$y, \$width, \$height, \$raised)
Draws a 3-D highlighted outline of the specified rectangle.

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int
- **\$raised** –

fill3DRect (\$x, \$y, \$width, \$height, \$raised)

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int
- **\$raised** –

drawOval (\$x, \$y, \$width, \$height)

Draw oval

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

fillOval (\$x, \$y, \$width, \$height)

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

drawArc (\$x, \$y, \$width, \$height, \$startAngle, \$arcAngle)

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int
- **\$startAngle** – int
- **\$arcAngle** – int

fillArc (\$x, \$y, \$width, \$height, \$startAngle, \$arcAngle)

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int
- **\$startAngle** – int
- **\$arcAngle** – int

drawPolygon (\$xy)

Parameters

- **\$xy** – array – – [[x1, y1], [x2, y2], ...]

fillPolygon (\$xy)

Parameters

- **\$xy** – array – – [[x1, y1], [x2, y2], ...]

drawPolyline (\$xy)

Parameters

- **\$xy** – array – – [[x1, y1], [x2, y2], ...]

drawImage (\$image, \$x = 0, \$y = 0, \$newWidth = null, \$newHeight = null)

Parameters

- **\$image** – *php\swing\Image*
- **\$x** – int
- **\$y** – int
- **\$newWidth** – null, int
- **\$newHeight** – null, int

drawText (\$text, \$x, \$y)

Parameters

- **\$text** – string
- **\$x** – int
- **\$y** – int

clipRect (\$x, \$y, \$width, \$height)

Intersects the current clip with the specified rectangle.

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

clearRect (\$x, \$y, \$width, \$height)

Clears the specified rectangle by filling it with the background color of the current drawing surface.

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int

setXORMode (\$color)

Parameters

- **\$color** – *php\swing\Color*, int, array

translate (\$x, \$y)

Translates the origin of the graphics context to the point (x, y) in the current coordinate system.

Parameters

- **\$x** – int
- **\$y** – int

copyArea (\$x, \$y, \$width, \$height, \$dx, \$dy)

Copies an area of the component by a distance specified by \$dx and \$dy

Parameters

- **\$x** – int
- **\$y** – int
- **\$width** – int
- **\$height** – int
- **\$dx** – int
- **\$dy** – int

create (\$x = null, \$y = null, \$w = null, \$h = null)

Create new copy Graphics from this

Parameters

- **\$x** – int, null
- **\$y** – int, null
- **\$w** – int, null
- **\$h** – int, null

Returns *php\swing\Graphics*

dispose()

Image

php\swing\Image

Constants

```
constant TYPE_INT_RGB  
constant TYPE_INT_ARGB  
constant TYPE_INT_ARGB_PRE  
constant TYPE_INT_BGR  
constant TYPE_3BYTE_BGR  
constant TYPE_4BYTE_ABGR  
constant TYPE_4BYTE_ABGR_PRE  
constant TYPE USHORT_565_RGB  
constant TYPE USHORT_555_RGB  
constant TYPE_BYTE_GRAY  
constant TYPE USHORT_GRAY  
constant TYPE_BYTE_BINARY  
constant TYPE_BYTE_INDEXED
```

Properties

property type

int

read-only

property width

int

read-only

property height

int

read-only

Methods

__construct (\$width, \$height, \$type = ::)

Parameters

- **\$width** – int
- **\$height** – int
- **\$type** – int

getSubimage (\$x, \$y, \$w, \$h)

Parameters

- **\$x** – int
- **\$y** – int
- **\$w** – int
- **\$h** – int

Returns *php\swing\Image*

getRGB (\$x, \$y)

Parameters

- **\$x** – int
- **\$y** – int

Returns int

setRGB (\$x, \$y, \$rgb)

Parameters

- **\$x** – int
- **\$y** – int
- **\$rgb** – int - - color

getGraphics ()

Returns *php\swing\Graphics*

getProperty (\$name)

Parameters

- \$name –

Returns *php\lang\JavaObject*, null

static read (\$stream)

throws *php\io\IOException*

Parameters

- \$stream – *php\io\Stream*, *php\io\File*, string - - file path or stream

Returns *php\swing\Image*

static write (\$image, \$format, \$stream)

throws *php\io\IOException*

Parameters

- \$image – *php\swing\Image*

- \$format –

- \$stream – *php\io\Stream*, *php\io\File*, string - - file path or stream

Scope

php\swing\Scope

Class Scope

Methods

static getDefault

Returns *php\swing\Scope*

ScopeValue

php\swing\ScopeValue

final class

Methods

__construct ()

private

getValue ()

Returns mixed

setValue (\$value)

Parameters

- \$value –

bind (\$object, \$property)

Parameters

- **\$object** – object
- **\$property** – string

static of (*\$name*)

Parameters

- **\$name** – string

Returns *php\swing\ScopeValue*

SwingUtilities

php\swing\SwingUtilities
final class

Methods

__construct()
private

static getScreenSize

Returns screen size as an array [width, height]

Returns array

static setExceptionHandler (*\$handler*)

Parameters

- **\$handler** – callable - (Exception|JavaObject \$exception)

static invokeLater (*\$runner*)

Parameters

- **\$runner** – callable

SwingWorker

php\swing\SwingWorker
abstract class

Methods

doInBackground()
abstract

protected

Returns mixed

get (*\$timeout = -1*)

throws *php\concurrent\TimeoutException*

throws *php\lang\InterruptedException*

Parameters

- **\$timeout** – int

Returns mixed

getProgress ()

Returns int

setProgress (\$val)

protected

Parameters

- **\$val** – int

publish (\$values)

protected

Parameters

- **\$values** – array

process (\$values)

protected

Parameters

- **\$values** – array

isDone ()

Returns bool

isCanceled ()

Returns bool

getState ()

Returns string PENDING, STARTED, DONE

cancel (\$mayInterruptIfRunning)

Parameters

- **\$mayInterruptIfRunning** – bool

run ()

execute ()

text

Style

php\swing\text\Style
Class TextStyle

Properties

property background
php\swing\Color

property foreground
php\swing\Color

```
property bold
    bool
```

Timer

`php\swing\Timer`

Properties

```
property repeat
    bool
```

```
property delay
    int
```

Delay in milliseconds for repeats

```
property initDelay
    int
```

Initial Delay in milliseconds for first trigger

```
property actionCommand
    string
```

User data

Methods

```
__construct ($delay, $callback)
```

Parameters

- `$delay` – int
- `$callback` – callable

```
start()
```

```
stop()
```

```
restart()
```

```
isRunning()
```

Returns bool

tree

TreeModel

`php\swing\tree\TreeModel`
Class TreeModel

Properties

```
property root
    php\swing\tree\TreeNode
```

Methods

__construct (\$root, \$askAllowsChildren = false)

Parameters

- **\$root** – *php\swing\tree\TreeNode*
- **\$askAllowsChildren** – bool

nodeChanged (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

nodeStructureChanged (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

removeNodeFromParent (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

reload (\$node = null)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

TreeNode

php\swing\tree\TreeNode

Class TreeNode

Properties

property index

int

read-only

property depth

int

read-only

property level

int

read-only

property allowsChildren

bool

property parent

php\swing\tree\TreeNode

property userData
mixed

Methods

__construct (\$object = null, \$allowsChildren = true)

Parameters

- **\$object** – mixed
- **\$allowsChildren** – bool

isRoot ()

Returns bool

isLeaf ()

Returns bool

getRoot ()

Returns *php\swing\tree\TreeNode*

isNodeChild (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

Returns bool

isNodeAncestor (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

Returns bool

isNodeDescendant (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

Returns bool

isNodeRelated (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

Returns bool

isNodeSibling (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

Returns bool

getNextNode ()

Returns *php\swing\tree\TreeNode*, null

getNextLeaf()

Returns *php\swing\tree\TreeNode*, null

getNextSibling()

Returns *php\swing\tree\TreeNode*, null

getPreviousNode()

Returns *php\swing\tree\TreeNode*, null

getPreviousLeaf()

Returns *php\swing\tree\TreeNode*, null

getPreviousSibling()

Returns *php\swing\tree\TreeNode*, null

getFirstChild()

Returns *php\swing\tree\TreeNode*, null

getFirstLeaf()

Returns *php\swing\tree\TreeNode*, null

getLastChild()

Returns *php\swing\tree\TreeNode*, null

getLastLeaf()

Returns *php\swing\tree\TreeNode*, null

add(\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

insert(\$childIndex, \$node)

Parameters

- **\$childIndex** – int
- **\$node** – *php\swing\tree\TreeNode*

insertAfter(\$child, \$node)

throws >

Parameters

- **\$child** – *php\swing\tree\TreeNode*
- **\$node** – *php\swing\tree\TreeNode*

insertBefore(\$child, \$node)

throws >

Parameters

- **\$child** – *php\swing\tree\TreeNode*
- **\$node** – *php\swing\tree\TreeNode*

remove(\$child)

Parameters

- **\$child** – *php\swing\tree\TreeNode*

removeByIndex (\$childIndex)

Parameters

- **\$childIndex** – int

removeAllChildren ()

removeFromParent ()

getIndex (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

Returns int

getChild (\$index)

Parameters

- **\$index** – int

Returns *php\swing\tree\TreeNode*, null

getChildCount ()

Returns int

duplicate ()

Returns *php\swing\tree\TreeNode*

UIAbstractIButton

php\swing\UIAbstractIButton
extends: *php\swing\UIContainer*

Children

- **class** *php\swing\UIButton*
- **class** *php\swing\UICheckbox*
- **class** *php\swing\UIMenuItem*
- **class** *php\swing\UIToggleButton*

Class UIAbstractIButton

Properties

property **text**

string

Text of button

property **selected**

bool

```
property verPosition
    int
    Direction

property horPosition
    int
    Direction

property verAlignment
    int
    Direction

property horAlignment
    php\swing\intlstring
    Direction

property iconTextGap
    int

property borderPainted
    bool

property focusPainted
    bool

property rolloverEnabled
    bool

property contentAreaFilled
    bool

property buttonGroup
    string
```

Methods

```
setIcon ($icon)
```

Parameters

- **\$icon** – *php\swing\Image*, string - - filename or Image

```
setDisabledIcon ($icon)
```

Parameters

- **\$icon** – *php\swing\Image*, string

```
setSelectedIcon ($icon)
```

Parameters

- **\$icon** – *php\swing\Image*, string

```
setPressedIcon ($icon)
```

Parameters

- **\$icon** – *php\swing\Image*, string

```
setRolloverIcon ($icon)
```

Parameters

- **\$icon** – *php\swing\Image*, string

setDisabledSelectedIcon (\$icon)**Parameters**

- **\$icon** – *php\swing\Image*, string

setRolloverSelectedIcon (\$icon)**Parameters**

- **\$icon** – *php\swing\Image*, string

doClick (\$pressTime = 68)**Parameters**

- **\$pressTime** – int - the time to “hold down” the button, in milliseconds

static getButtons (\$buttonGroup)**Parameters**

- **\$buttonGroup** – string

Returns *php\swing\UIAbstractIButton[]***static getSelectedButtons** (\$buttonGroup)**Parameters**

- **\$buttonGroup** – string

Returns *php\swing\UIAbstractIButton[]***UIButton****php\swing\UIButton****extends:** *php\swing\UIAbstractIButton*

Class UIButton

UICheckbox**php\swing\UICheckbox****extends:** *php\swing\UIAbstractIButton*

Class UICheckbox

UICheckboxMenuItem**php\swing\UICheckboxMenuItem****extends:** *php\swing\UIMenuItem*

Class UICheckboxMenuItem

UIColorChooser

```
php\swing\UIColorChooser  
extends: php\swing\UIContainer
```

Class UIColorChooser

Properties

```
property color  
    php\swing\Color  
  
property dragEnabled  
    bool
```

UICombobox

```
php\swing\UICombobox  
extends: php\swing\UIContainer
```

Properties

```
property readOnly  
    bool  
  
property popupVisible  
    bool  
  
property lightweightPopup  
    bool  
  
property itemCount  
    int  
  
    read-only  
  
property selectedIndex  
    int  
  
property maxRowCount  
    int
```

Methods

setItems (\$items)

Parameters

- **\$items** – array

getItem (\$index)

Parameters

- **\$index** – int

Returns string, null

addItem (\$item)

Parameters

- **\$item** – string

insertItem (\$index, \$item)**Parameters**

- **\$index** – int
- **\$item** – string

removeItem (\$index)**Parameters**

- **\$index** – int

removeAllItems ()**onCellRender** (\$callback = null)**Parameters**

- **\$callback** – callable - (UICombobox \$self, UILabel \$template, \$value, int \$index, bool isSelected, bool cellHasFocus)

UIContainer**php\swing\UIContainer**

abstract class

extends: *php\swing\UIElement***Children**

- abstract class *php\swing\UITextElement*
- abstract class *php\swing\UIWindow*
- class *php\swing\UIAbstractButton*
- class *php\swing\UIColorChooser*
- class *php\swing\UICombobox*
- class *php\swing\UIDesktopPanel*
- class *php\swing\UIFileChooser*
- class *php\swing\UIImage*
- class *php\swing\UIInternalForm*
- class *php\swing\UILabel*
- class *php\swing\UIListbox*
- class *php\swing\UIMenuBar*
- class *php\swing\UIPanel*
- class *php\swing\UIPopupMenu*
- class *php\swing\UIProgress*
- class *php\swing\UIScrollView*

- **class** *php\swing\UISlider*
- **class** *php\swing\UITable*
- **class** *php\swing\UITabs*
- **class** *php\swing\UIToolBar*
- **class** *php\swing\UITree*
- **class** *php\swing\UIUnknown*

Methods

add (*\$component*, *\$index = null*, *\$constraints = null*)

Add child component

Parameters

- **\$component** – *php\swing\UIElement*
- **\$index** – null, int
- **\$constraints** – null, int

setLayout (*\$type*)

Parameters

- **\$type** – string - - absolute, grid, flow, grid-bag, border, card

remove (*\$component*)

Parameters

- **\$component** – *php\swing\UIElement*

removeByIndex (*\$index*)

throws >

Parameters

- **\$index** – int

removeAll ()

getComponentCount ()

Returns

int

getComponent (*\$index*)

throws >

Parameters

- **\$index** – int

Returns *php\swing\UIElement*

getComponents ()

Returns *php\swing\UIElement[]*

getComponentByGroup (*\$group*)

Find first component by group

Parameters

- **\$group** – string

Returns *php\swing\UIElement*, NULL

getComponentsByGroup (*\$group*)

Find all components in group

Parameters

- **\$group** – string

Returns *php\swing\UIElement[]*

UIDesktopPanel

php\swing\UIDesktopPanel
extends: *php\swing\UIContainer*

Class UIDesktopPanel

UIDialog

php\swing\UIDialog
extends: *php\swing\UIWindow*

Class UIDialog

Constants

```
constant PLAIN_MESSAGE  
constant ERROR_MESSAGE  
constant INFORMATION_MESSAGE  
constant WARNING_MESSAGE  
constant QUESTION_MESSAGE  
constant DEFAULT_OPTION  
constant OK_CANCEL_OPTION  
constant YES_NO_CANCEL_OPTION  
constant YES_NO_OPTION  
constant YES_OPTION  
constant NO_OPTION  
constant CANCEL_OPTION  
constant OK_OPTION  
constant CLOSED_OPTION
```

Properties

```
property modal  
bool
```

property modalType
php\swing\string - modeless or document_modal or application_modal or toolkit_modal

Methods

__construct (\$owner = null)

Parameters

- \$owner – *php\swing\UIWindow*

showModal ()

static message (\$text, \$title, \$type = ::)

Show basic message

Parameters

- \$text – string
- \$title – string
- \$type – int

static confirm (\$text, \$title, \$optionType = ::, \$type = ::)

Parameters

- \$text – string
- \$title – string
- \$optionType – int
- \$type – int

Returns

int

static input (\$message, \$initialValue = '')

Parameters

- \$message – string
- \$initialValue – string

Returns

string

UIEdit

php\swing\UIEdit
extends: *php\swing\UITextElement*

Class UIEdit

Properties

property columns
int

property scrollOffset
int

UIEditorArea

```
php\swing\UIEditorArea  
extends: php\swing\UITextElement
```

Class UIEditorArea

Properties

```
property contentType  
string
```

Example: text/html or text/plain

UIElement

```
php\swing\UIElement  
abstract class
```

Children

- abstract class *php\swing\UIContainer*

Properties

```
property uid  
string
```

read-only

```
property group  
string
```

```
property x  
int
```

Position X

```
property y  
int
```

Position Y

```
property w  
int
```

Width

```
property h  
int
```

Height

```
property size  
array
```

Size (width and height), [int, int]

```
property preferredSize
    php\swing\array [int, int]

property minSize
    array
        Min Size (width and height) [int, int]

property autosize
    bool

property position
    array
        Position (x and y), [int, int]

property screenPosition
    array
        Screen Position (x and y), [int, int]

property absolutePosition
    array
read-only
        Absolute Position (x and y), [int, int]

property visible
    bool

property enabled
    bool

property focusable
    bool

property align
    php\swing\string - NONE, LEFT, RIGHT, TOP, BOTTOM, CLIENT

property anchors
    array
        [LEFT, TOP, RIGHT, BOTTOM]

property font
    php\swing\Font

property border
    php\swing\Border

property background
    php\swing\Color

property foreground
    php\swing\Color

property tooltipText
    string

property doubleBuffered
    bool

property opaque
    bool
```

```

property ignoreRepaint
    bool

property autoscrolls
    bool

property uiClassId
    string

read-only

property popupMenu
    php\swing\UIPopupMenu

property cursor
    string

property padding
    php\swing\array [int, int, int, int]

property owner
    php\swing\UIContainer

property parent
    php\swing\UIContainer

property firstParent
    php\swing\UIContainer

```

Methods

```

__construct ()
getGraphics ()
    Get graphic canvas object

    Returns php\swing\Graphics

on ($name, $callback, $group = 'general')
    Events - Mouse: click mousePress mouseRelease mouseEnter mouseExit mouseMove mouseDrag
    Keyboard: keyDown keyUp keyPress
    Focus: focus blur
    Add callback for event

```

Parameters

- **\$name** –
 - * name of event
- **\$callback** – callable
- **\$group** – string

```

off ($name, $group = NULL)
    Remove all event callbacks (if group == null), or only group

```

Parameters

- **\$name** –
- **\$group** – null, string

Returns bool

trigger (\$name)
Trigger callback by event name

Parameters

- **\$name** –

addAllowedEventType (\$name)
protected

Parameters

- **\$name** – string

setAction (\$name, \$callback = null)

Parameters

- **\$name** – string
- **\$callback** – callable

setInputKey (\$keyString, \$actionName)

Parameters

- **\$keyString** – string
- **\$actionName** – string

hasFocus ()

Returns bool

add (\$component, \$index = null)
Add child component

Parameters

- **\$component** – *php\swing\UIElement*
- **\$index** – null, int

getComponentAt (\$x, \$y)

Determines if this component or one of its immediate subcomponents contains the (x, y) location, and if so, returns the containing component. This method only looks one level deep.

Parameters

- **\$x** –
- **\$y** –

Returns *php\swing\UIElement*

printOne (\$canvas)
Prints this component.

Parameters

- **\$canvas** – *php\swing\Graphics*

printAll (\$canvas)
Prints this component and all of its subcomponents.

Parameters

- **\$canvas** – *php\swing\Graphics*

paintOne (*\$canvas*)
Paints this component.

Parameters

- **\$canvas** – *php\swing\Graphics*

paintAll (*\$canvas*)
Paints this component and all of its subcomponents.

Parameters

- **\$canvas** – *php\swing\Graphics*

updateUI ()
invalidate ()
repaint ()
revalidate ()
repaintRegion (*\$x*, *\$y*, *\$w*, *\$h*)

Parameters

- **\$x** – int
- **\$y** – int
- **\$w** – int
- **\$h** – int

grabFocus ()
getTextWidth (*\$str*)
Return width of str for drawText + current font

Parameters

- **\$str** –

Returns

 int

getTextHeight ()
Return height of one line text with current font

Returns

 int

show ()
hide ()
toggle ()
removeSelf ()
static getByUid (*\$uid*)
Get component by unique id

Parameters

- **\$uid** – string

Returns

php\swing\UIElement

UIFileChooser

```
php\swing\UIFileChooser  
extends: php\swing\UIContainer
```

Class UIFileChooser

Constants

```
constant FILES_ONLY  
constant DIRECTORIES_ONLY  
constant FILES_AND_DIRECTORIES
```

Properties

```
property dialogTitle  
    string  
property approveButtonText  
    string  
property selectedFile  
    php\io\File  
property selectedFiles  
    php\swing\File[]  
property multiSelection  
    bool  
property selectionMode  
    int
```

Example: FILES_AND_DIRECTORIES, FILES_ONLY or DIRECTORIES_ONLY

```
property dragEnabled  
    bool  
property fileHiding  
    bool  
property controlButtonVisible  
    bool  
property acceptAllFileFilterUsed  
    bool
```

Methods

```
showDialog ($approveButtonText, $parent = null)
```

Parameters

- **\$approveButtonText** – string
- **\$parent** – *php\swing\UIWindow*

Returns bool

showSaveDialog (\$parent = null)

Parameters

- **\$parent** – *php\swing\UIWindow*

Returns bool

showOpenDialog (\$parent = null)

Parameters

- **\$parent** – *php\swing\UIWindow*

Returns bool

addChoosableFilter (\$filter, \$description)

Parameters

- **\$filter** – callable - (File \$file) -> bool
- **\$description** – string

addChoosableExtensions (\$extensions, \$description, \$showDirectories = true)

Parameters

- **\$extensions** – array - ['jpg', 'gif', 'png', ... etc]
- **\$description** – string
- **\$showDirectories** – bool

resetChoosableFilters ()

isTraversable (\$file)

Parameters

- **\$file** – string, *php\io\File*

Returns bool

ensureFileIsVisible (\$file)

Parameters

- **\$file** – string, *php\io\File*

approveSelection ()

cancelSelection ()

changeToParentDirectory ()

onFileView (\$field, \$callback = null)

Parameters

- **\$field** – string - - name (string), description (string), icon (Image), traversable (bool)
- **\$callback** – callable - (File \$file)

UIForm

```
php\swing\UIForm
extends: php\swing\UIWindow
```

Constants

```
constant NOTHING_ON_CLOSE
constant HIDE_ON_CLOSE
constant DISPOSE_ON_CLOSE
constant EXIT_ON_CLOSE
```

Properties

```
property maximized
bool
```

Methods

```
setDefaultCloseOperation($action)
```

Parameters

- **\$action** – int

```
setIconImage ($image = null)
```

Parameters

- **\$image** – *php\swing\Image*

UIImage

```
php\swing\UIImage
extends: php\swing\UIContainer
```

Class UIImage

Properties

```
property stretch
bool

property centered
bool

property proportional
bool

property smooth
bool

property mosaic
bool
```

Methods**setImage** (\$image)**Parameters**

- **\$image** – *php\swing\Image*

UIInternalForm

```
php\swing\UIInternalForm
  extends: php\swing\UIContainer
```

Class UIInternalForm

Properties**property title**

string

property selected

bool

property resizable

bool

Methods**setLayeredPanel** (\$panel)**Parameters**

- **\$panel** – *php\swing\UIDesktopPanel*

setContent (\$content)**Parameters**

- **\$content** – *php\swing\UIContainer*

UILabel

```
php\swing\UILabel
  extends: php\swing\UIContainer
```

Properties**property text**

string

Text of label

property verPosition

int

Direction

property horPosition
int

Direction

property verAlignment
int

Direction

property horAlignment
php\swing\intString

Direction

property iconTextGap
int

Methods

setLabelFor (\$component)

Parameters

- **\$component** – *php\swing\UIElement*

setIcon (\$icon)

Parameters

- **\$icon** – *php\swing\Image*, string -- filename or Image

setDisabledIcon (\$icon)

Parameters

- **\$icon** – *php\swing\Image*, string

UIListbox

php\swing\UIListbox
extends: *php\swing\UIContainer*

Class UIListbox

Properties

property multiple
bool

property selectedIndex
int

property selectedIndexes
int[]

property maxSelectionIndex
int

property minSelectionIndex
int

```

property visibleRowCount
    int

property selectionBackground
    php\swing\Color

property selectionForeground
    php\swing\Color

property horScrollPolicy
    php\swing\string - ALWAYS, HIDDEN, AUTO

property verScrollPolicy
    php\swing\string - ALWAYS, HIDDEN, AUTO

property itemCount
    int

read-only

```

Methods

setItems (\$items)

Parameters

- **\$items** – array

getItem (\$index)

Parameters

- **\$index** – int

Returns string, null

addItem (\$item)

Parameters

- **\$item** – string

insertItem (\$index, \$item)

Parameters

- **\$index** – int
- **\$item** – string

removeItem (\$index)

Parameters

- **\$index** – int

removeAllItems ()

onCellRender (\$callback = null)

Parameters

- **\$callback** – callable - (UIListbox \$self, UILabel \$template, \$value, int \$index, bool isSelected, bool cellHasFocus)

UIManager

```
php\swing\UIManager
final class
```

Methods

```
__construct()
private
```

```
static setLookAndFeel ($name)
Set look and feel globally
```

Parameters

- **\$name** –
– * name of theme

```
static getSystemLookAndFeel()
Get name of OS native look and feel
```

Returns

string

UIMenu

```
php\swing\UIMenu
extends: php\swing\UIMenuItem
```

Class UIMenu events: *select, deselect, cancel*

Properties

```
property itemCount
int
```

read-only

```
property delay
int
```

```
property popupVisible
bool
```

Methods

```
getItem ($pos)
```

Parameters

- **\$pos** – int

Returns

php\swing\UIMenuItem

```
addSeparator ()
```

```
setMenuPosition ($x, $y)
```

Parameters

- **\$x** – int
- **\$y** – int

isTopLevelMenu ()

Returns bool

UIMenuBar

php\swing\UIMenuBar
extends: *php\swing\UIContainer*

Class UIMenuBar

Properties

property borderPainted
bool

UIMenuItem

php\swing\UIMenuItem
extends: *php\swing\UIAbstractIButton*

Children

- class *php\swing\UICheckboxMenuItem*
- class *php\swing\UIMenu*

Class UIMenuItem

Properties

property accelerator
string

Examples: “control DELETE”, “alt shift X”, “alt shift released X”, “typed a”

UIPanel

php\swing\UIPanel
extends: *php\swing\UIContainer*

Class UIPanel

UIPopupMenu

```
php\swing\UIPopupMenu
extends: php\swing\UIContainer
```

Class UIPopupMenu

Events: open, close, cancel

Properties

```
property borderPainted
    bool

property lightweightPopup
    bool

property label
    string
```

Methods

```
addSeparator()
setPopupSize($width, $height)
```

Parameters

- **\$width** – int
- **\$height** – int

```
setSelected($component)
```

Parameters

- **\$component** – *php\swing\UIElement*

```
show($invoker, $x, $y)
```

Parameters

- **\$invoker** – *php\swing\UIElement*
- **\$x** – int
- **\$y** – int

UIProgress

```
php\swing\UIProgress
extends: php\swing\UIContainer
```

Class UIProgress

Properties

```
property value
    int
```

```
property max
    int

property min
    int

property text
    string

property textPainted
    bool

property borderPainted
    bool
```

UIRadioButton

```
php\swing\UIRadioButton
extends: php\swing\UIToggleButton

Class UIRadioButton
```

UIReader

```
php\swing\UIReader
Class XmlUIReader
```

Properties

```
property useInternalForms
    bool

Enables that the reader will create instances of UIInternalForm insteadof UIForm and UIDialog
```

Methods

```
read ($stream)
```

Parameters

- **\$stream** – *php\io\Stream, php\io\File*, string

Returns *php\swing\UIElement*

```
onRead ($handle = NULL)
```

Parameters

- **\$handle** – callable - (UIElement \$el, \$var)

```
onTranslate ($handle = NULL)
```

Parameters

- **\$handle** – callable - (UIElement \$el, \$value) -> mixed

UIRichTextArea

`php\swing\UIRichTextArea`
extends: `php\swing\UITextElement`

Class UIRichTextArea

Properties

property logicalStyle
`php\swing\text\Style`

property horScrollPolicy
`php\swing\string - ALWAYS, HIDDEN, AUTO`

property verScrollPolicy
`php\swing\string - ALWAYS, HIDDEN, AUTO`

Methods

addStyle (`$name, $parent = null`)

Parameters

- **\$name** – string
- **\$parent** – `php\swing\text\Style`

Returns `php\swing\text\Style`

getStyle (`$name`)

Parameters

- **\$name** – string

Returns `php\swing\text\Style`

appendText (`$text, $style`)

Parameters

- **\$text** – string
- **\$style** – `php\swing\text\Style`

UIScrollPane

`php\swing\UIScrollPane`
extends: `php\swing\UIContainer`

Class UIScrollPanel

Properties

property horScrollPolicy
`php\swing\string - ALWAYS, HIDDEN, AUTO`

property verScrollPolicy
`php\swing\string - ALWAYS, HIDDEN, AUTO`

UISlider

```
php\swing\UISlider
  extends: php\swing\UIContainer
```

Class UISlider

Properties

```
property value
  int

property min
  int

property max
  int

property extent
  int

property valueIsAdjusting
  bool

property inverted
  bool

property paintLabels
  bool

property paintTicks
  bool

property paintTrack
  bool

property snapToTicks
  bool

property labelTable
  string[]

property majorTickSpacing
  int

property minorTickSpacing
  int
```

UITable

```
php\swing\UITable
  extends: php\swing\UIContainer
```

Class UITable

Properties

```
property dragEnabled
  bool
```

```
property selectionBackground  
    php\swing\Color  
property selectionForeground  
    php\swing\Color  
property gridColor  
    php\swing\Color  
property editingColumn  
    int  
property editingRow  
    int  
property rowMargin  
    int
```

Methods

setRowHeight (\$height, \$row = null)

Parameters

- **\$height** – int
- **\$row** – null, int

getRowHeight (\$row = null)

Parameters

- **\$row** – null, int

Returns

int

setValueAt (\$value, \$row, \$column)

Parameters

- **\$value** – string, null
- **\$row** – int
- **\$column** – int

getValueAt (\$row, \$column)

Parameters

- **\$row** – int
- **\$column** – int

Returns

string, null

columnAtPoint (\$x, \$y)

Parameters

- **\$x** – int
- **\$y** – int

Returns

int

rowAtPoint (\$x, \$y)

Parameters

- **\$x** – int
- **\$y** – int

Returns int**editCellAt** (\$row, \$column)**Parameters**

- **\$row** – int
- **\$column** – int

Returns bool**addColumnSelectionInterval** (\$index0, \$index1)**Parameters**

- **\$index0** – int
- **\$index1** – int

addRowSelectionInterval (\$index0, \$index1)**Parameters**

- **\$index0** – int
- **\$index1** – int

getColumnName (\$column)**Parameters**

- **\$column** – int

Returns string**setEditingColumn** (\$column)**Parameters**

- **\$column** – int

setEditingRow (\$row)**Parameters**

- **\$row** – int

UITabs

```
php\swing\UITabs
  extends: php\swing\UIContainer
```

Class UITabs

Events: change

Properties

```
property selectedIndex
    int
```

```
property selectedComponent  
    php\swing\UIElement  
  
property tabPlacement  
    php\swing\string - left, right, top, bottom  
  
property tabCount  
    int  
  
    read-only
```

Methods

addTab (\$title, \$component, \$icon = null)

Parameters

- **\$title** – string
- **\$component** – *php\swing\UIElement*
- **\$icon** – *php\swing\Image*

getTitleAt (\$index)

Parameters

- **\$index** – int

Returns string

setTitleAt (\$index, \$value)

Parameters

- **\$index** – int
- **\$value** – string

getToolTipTextAt (\$index)

Parameters

- **\$index** – int

Returns string

setToolTipTextAt (\$index, \$value)

Parameters

- **\$index** – int
- **\$value** – string

getTabIconAt (\$index)

Parameters

- **\$index** – int

Returns *php\swing\Image*

setTabIconAt (\$index, \$image)

Parameters

- **\$index** – int

- **\$image** – *php\swing\Image*

getTabComponentAt (\$index)

Parameters

- **\$index** – int

Returns *php\swing\UIElement*

setTabComponentAt (\$index, \$component)

Parameters

- **\$index** – int
- **\$component** – *php\swing\UIElement*

removeTabAt (\$index)

Parameters

- **\$index** – int

removeAll ()

indexAtPosition (\$x, \$y)

Parameters

- **\$x** – int
- **\$y** – int

Returns int

isEnabledAt (\$index)

Parameters

- **\$index** – int

Returns bool

setEnabledAt (\$index, \$enabled)

Parameters

- **\$index** – int
- **\$enabled** – bool

UITextArea

php\swing\UITextArea
extends: *php\swing\UITextElement*

Class UITextArea

Properties

```
property lineWrap
    bool

property wrapStyleWord
    bool
```

```
property rows
    int

property columns
    int

property tabSize
    int

property lineCount
    int

    read-only

property horScrollPolicy
    php\swing\string - ALWAYS, HIDDEN, AUTO

property verScrollPolicy
    php\swing\string - ALWAYS, HIDDEN, AUTO
```

UITextElement

```
php\swing\UITextElement
    abstract class

    extends: php\swing\UIContainer
```

Children

- class *php\swing\UIEdit*
- class *php\swing\UIEditorArea*
- class *php\swing\UIRichTextArea*
- class *php\swing\UITextArea*

Properties

```
property text
    string

property readOnly
    bool

property caretPos
    int

property caretColor
    php\swing\Color

property selectedStart
    int

property selectedEnd
    int

property selectedText
    int

    read-only
```

```
property selectionColor  
    php\swing\Color  
  
property selectionTextColor  
    php\swing\Color  
  
property disabledTextColor  
    php\swing\Color  
  
property margin  
    php\swing\array [top, left, bottom, right]  
    int[]
```

Methods

```
copy()  
cut()  
paste()  
select($selStart, $selEnd)
```

Parameters

- **\$selStart** – int
- **\$selEnd** – int

```
selectAll()
```

```
replaceSelection($content)
```

Parameters

- **\$content** – string

```
printDialog()
```

A convenience print method that displays a print dialog, and then prints this element in interactive mode with no header or footer text. Note: this method blocks until printing is done.

Returns

bool

UIToggleButton

```
php\swing\UIToggleButton  
extends: php\swing\UIAbstractIButton
```

Children

- class *php\swing\UIRadioButton*

Class UIToggleButton

UIToolBar

```
php\swing\UIToolBar  
extends: php\swing\UIContainer
```

Class UIToolBar

Properties

```
property vertical  
    bool  
  
property borderPainted  
    bool  
  
property rollover  
    bool  
  
property floatable  
    bool
```

Methods

```
addSeparator ($w = null, $h = null)
```

Parameters

- **\$w** – null, int
- **\$h** – null, int

UITree

```
php\swing\UITree  
extends: php\swing\UIContainer
```

Class UITree

Properties

```
property model  
    php\swing\tree\TreeModel  
  
property root  
    php\swing\tree\TreeNode  
  
property rootVisible  
    bool  
  
property editable  
    bool  
  
property visibleRowCount  
    int  
  
property dragEnabled  
    bool
```

```

property expandsSelectedPaths
    bool

property invokesStopCellEditing
    bool

property scrollsOnExpand
    bool

property maxSelectionRow
    int

read-only

property minSelectionRow
    int

read-only

property leadSelectionRow
    int

read-only

property selectionRows
    int[]

property rowCount
    int

read-only

property selectionCount
    int

read-only

property rowHeight
    int

property selectedNode
    php\swing\tree\TreeNode

property selectedNodes
    php\swing\TreeNode[]

property editingNode
    php\swing\tree\TreeNode

read-only

property horScrollPolicy
    php\swing\string - ALWAYS, HIDDEN, AUTO

property verScrollPolicy
    php\swing\string - ALWAYS, HIDDEN, AUTO

```

Methods

onCellRender (\$renderer)

Parameters

- **\$renderer** – callable

addSelectionNode (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

removeSelectionNode (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

expandNode (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

expandRow (\$row)

Parameters

- **\$row** – int

collapseNode (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

collapseRow (\$row)

Parameters

- **\$row** – int

expandNodeAll (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

collapseNodeAll (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

isExpandedRow (\$row)

Parameters

- **\$row** – int

>Returns bool

isExpandedNode (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

>Returns bool

isNodeSelected (\$node)

Parameters

- **\$node** – *php\swing\tree\TreeNode*

>Returns bool

```
isNodeEditable ($node)
Parameters
• $node - php\swing\tree\TreeNode
>Returns bool

isVisible ($node)
Parameters
• $node - php\swing\tree\TreeNode
>Returns bool

hasBeenExpanded ($node)
Parameters
• $node - php\swing\tree\TreeNode
>Returns bool

fireTreeExpanded ($node)
Parameters
• $node - php\swing\tree\TreeNode

fireTreeCollapsed ($node)
Parameters
• $node - php\swing\tree\TreeNode

fireTreeWillExpand ($node)
throws >
Parameters
• $node - php\swing\tree\TreeNode

fireTreeWillCollapse ($node)
throws >
Parameters
• $node - php\swing\tree\TreeNode

makeVisible ($node)
Parameters
• $node - php\swing\tree\TreeNode

scrollToNode ($node)
Parameters
• $node - php\swing\tree\TreeNode

cancelEditing ()
clearSelection ()
```

UIUnknown

```
php\swing\UIUnknown
    extends: php\swing\UIContainer
```

Class UIUnknown

UIWindow

```
php\swing\UIWindow
    abstract class

    extends: php\swing\UIContainer
```

Children

- class [php\swing\UIDialog](#)
- class [php\swing\UIForm](#)

Properties

```
property title
    string

property opacity
    php\swing\float - 0 .. 1

property alwaysOnTop
    bool

property resizable
    bool

property undecorated
    bool
```

Methods

```
isActive()
    Returns bool

isAlwaysOnTopSupported()
    Returns bool

moveToCenter()
```

1.4.15 time

Time

```
php\time\Time
    Class Time, Immutable
```

Methods

__construct (\$date, \$timezone = null)

Parameters

- **\$date** – int - unix long timestamp (in millis)
- **\$timezone** – *php\time\TimeZone* -- if null then gets default timezone

getTime()

Returns the number of milliseconds since January 1, 1970, 00:00:00 GMT represented by this Time object.

Returns int

getTimeZone()

Get timezone of the time object

Returns *php\time\TimeZone*

year()

Get the current year

Returns int

month()

Get the current month of the year, 1 - Jan, 12 - Dec

Returns int

week()

Get week of year

Returns int

weekOfMonth()

Get week of month

Returns int

day()

Get day of year

Returns int

dayOfMonth()

Get day of month

Returns int

dayOfWeek()

Get day of week

Returns int

dayOfWeekInMonth()

Returns int

hour()

Get hour, indicating the hour of the morning or afternoon. hour() is used for the 12-hour clock (0 - 11). Noon and midnight are represented by 0, not by 12.

Returns int

hourOfDay()

Get hour of the day

Returns int

minute()

Get minute of the hour

Returns int

second()

Get second of the minute

Returns int

millisecond()

Get millisecond of the second

Returns int

compare(\$time)

C.compares the time values

Returns the value 0 if the time represented by the argument is equal to the time represented by this Time; a value less than 0 if the time of this Time is before the time represented by the argument; and a value greater than 0 if the time of this Time is after the time represented by the argument.

Parameters

- **\$time** – *php\time\Time*

Returns int

withTimeZone(\$timeZone)

Parameters

- **\$timeZone** – *php\time\TimeZone*

Returns *php\time\Time*

add(\$args)

Get a new time + \$args

use negative values to minus

Parameters

- **\$args** – array - [millis, sec, min, hour, day, month, year]

Returns *php\time\Time*

replace(\$args)

Clones the current datetime and replaces some fields to new values \$args

Parameters

- **\$args** – array - [millis, sec, min, hour, day, month, year]

Returns *php\time\Time*

toString(\$format)

Format the current datetime to string with \$format

- G Era designator Text AD
- y Year Year 1996; 96

- M Month in year Month July; Jul; 07
- w Week in year Number 27
- W Week in month Number 2
- D Day in year Number 189
- d Day in month Number 10
- F Day of week in month Number 2
- E Day in week Text Tuesday; Tue
- a Am/pm marker Text PM
- H Hour in day (0-23) Number 0
- k Hour in day (1-24) Number 24
- K Hour in am/pm (0-11) Number 0
- h Hour in am/pm (1-12) Number 12
- m Minute in hour Number 30
- s Second in minute Number 55
- S Millisecond Number 978
- z Time zone General time zone Pacific Standard Time; PST; GMT-08:00
- Z Time zone RFC 822 time zone -0800

Parameters

- **\$format** – string - date time format

Returns string**__toString()**

Format the time to yyyy-MM-dd'T'HH:mm:ss

Returns string**__clone()****private****static now (\$timeZone = null)**

Returns now time object (date + time)

Parameters

- **\$timeZone** – *php\time\TimeZone*

Returns *php\time\Time***static today (\$timeZone = null)**

Returns today date (without time)

Parameters

- **\$timeZone** – *php\time\TimeZone*

Returns *php\time\Time***static of (\$args, \$timeZone = null)**

Create a new time by using the \$args arrays that can contain the sec, min, hour and other keys:

```
$time = Time::of(['year' => 2013, 'month' => 1, 'day' => 1]) // 01 Jan  
→2013
```

Parameters

- **\$args** – array - [millis, sec, min, hour, day, month, year]
- **\$timeZone** – *php\time\TimeZone* - if null then it uses the default timezone

Returns *php\time\Time***static seconds**

Returns the current time in seconds (like the `millis()` method only in seconds)

Returns int**static millis**

Returns the current time in milliseconds. Note that while the unit of time of the return value is a millisecond, the granularity of the value depends on the underlying operating system and may be larger. For example, many operating systems measure time in units of tens of milliseconds.

Returns int**static nanos**

Returns the current value of the running Java Virtual Machine's high-resolution time source, in nanoseconds.

This method can only be used to measure elapsed time and is not related to any other notion of system or wall-clock time. The value returned represents nanoseconds since some fixed but arbitrary *origin* time (perhaps in the future, so values may be negative). The same origin is used by all invocations of this method in an instance of a Java virtual machine; other virtual machine instances are likely to use a different origin

Returns int**TimeFormat**

php\time\TimeFormat
Class TimeFormat, Immutable

Methods

__construct (\$format, \$locale = null, \$formatSymbols = null)**Parameters**

- **\$format** – string
- **\$locale** – *php\util\Locale* - if null then it uses the default locale
- **\$formatSymbols** – array - [months => [...], short_months, eras, weekdays, short_weekdays, local_pattern_chars]

format (\$time)**Parameters**

- **\$time** – *php\time\Time*

Returns string

parse (\$string, \$timeZone = null)

Parameters

- **\$string** – string
- **\$timeZone** – *php\time\TimeZone*

Returns *php\time\Time*, null if parse error then returns null

__clone()

private

TimeZone

php\time\TimeZone

Class TimeZone, Immutable

Methods

__construct (\$rawOffset, \$ID, \$options = null)

Parameters

- **\$rawOffset** – int
- **\$ID** – string
- **\$options** – array

Returns *php\time\TimeZone*

getId()

Get id of the timezone

Returns string

getRawOffset()

Get raw offset of the timezone

Returns string

__clone()

private

static UTC

Returns UTC Time zone

Returns *php\time\TimeZone*

static of (\$ID)

Parameters

- **\$ID** – string - code of timezone, e.g.: ‘UTC’

Returns *php\time\TimeZone*

static setDefault (\$zone, \$globally = false)

Set default time zone for Time objects, by default - the default timezone is UTC

Parameters

- **\$zone** – *php\time\TimeZone*

- **\$globally** – bool

static getDefault (*\$globally = false*)
Get default timezone

Parameters

- **\$globally** – bool - if `false` - only for the current environment

Returns *php\time\TimeZone*

static getAvailableIDs (*\$rawOffset = null*)
Returns all available ids of timezones

Parameters

- **\$rawOffset** – int, null

Returns string[]

1.4.16 util

Configuration

php\util\Configuration
Class Configuration

Methods

__construct (*\$source = null, \$encoding = 'UTF-8'*)

Parameters

- **\$source** – string, *php\io\Stream*
- **\$encoding** – string

has (*\$key*)

Parameters

- **\$key** – string

Returns bool

get (*\$key, \$def = null*)

Parameters

- **\$key** – string
- **\$def** – null, string

Returns string

getArray (*\$key, \$def = []*)

Parameters

- **\$key** – string
- **\$def** – array

Returns string[]

getBoolean (\$key, \$def = false)

Parameters

- **\$key** – string
- **\$def** – bool

Returns bool

getNumber (\$key, \$def = 0)

Parameters

- **\$key** – string
- **\$def** – int, float

Returns int, float

getInteger (\$key, \$def = 0)

Parameters

- **\$key** – string
- **\$def** – int

Returns int

set (\$key, \$value)

Parameters

- **\$key** – string
- **\$value** – string, array

Returns string old value

put (\$values)

Parameters

- **\$values** – array, Traversable

clear ()

load (\$in, \$encoding = 'UTF-8')

Parameters

- **\$in** – string, *php\io\Stream*
- **\$encoding** – string

save (\$out, \$encoding = 'UTF-8')

Parameters

- **\$out** – string, *php\io\Stream*
- **\$encoding** – string

toArray ()

Returns array

Flow

`php\util\Flow`
implements: Iterator

A special class to work with arrays and iterators under flows. Flows are used for the lazy array/iterator operations, to save the RAM memory.

Class Flow, Immutable

Methods

__construct (*\$collection*)

Create a new flow, you can also use `of()` method

Parameters

- `$collection` – array, Iterator

withKeys ()

Enables to save keys for the next operation

Returns `php\util\Flow`

onlyKeys (*\$keys*, *\$ignoreCase = false*)

Parameters

- `$keys` – array, Traversable
- `$ignoreCase` – bool

Returns `php\util\Flow`

append (*\$collection*)

Appends a new collection to the current flow, do not remember that you can pass a flow to this method

Parameters

- `$collection` – array, Iterator

Returns `php\util\Flow`

find (*\$filter = null*)

Finds elements by using the `$filter` callback, elements - for each iteration that returns `true`

Parameters

- `$filter` – callable

Returns `php\util\Flow`

findOne (*\$filter = null*)

Finds the first element by using the `$filter` callback, when `$filter` will return the first `true`

Parameters

- `$filter` – callable

Returns mixed

findValue (*\$value*, *\$strict = false*)

Parameters

- **\$value** –

- **\$strict** – bool

Returns int, null, string return null if not found, else - key of value

group (\$callback)

Parameters

- **\$callback** – callable

Returns *php\util\Flow*

each (\$callback)

Iterates elements. It will break if \$callback returns `false` strongly

Parameters

- **\$callback** – callable - (\$el[, \$key]): bool

Returns int - iteration count

eachSlice (\$sliceSize, \$callback, \$withKeys = *false*)

Iterates elements as slices (that are passing as arrays to \$callback). It will break if \$callback returns `false` strongly

Parameters

- **\$sliceSize** – int
- **\$callback** – callable - (array \$items): bool
- **\$withKeys** – bool

Returns int - slice iteration count

map (\$callback)

Iterates elements and returns a new flow of the result Example:

```
$newFlow = Flow::of([1, 2, 3])->map(function($el) { return $el * 10 });
```

// the new flow will contain 10, 20 and 30

Parameters

- **\$callback** – callable - (\$el[, \$key])

Returns *php\util\Flow*

keys ()

Create a new flow by using the keys of the current flow

Returns *php\util\Flow*

skip (\$n)

Skips \$n elements in the current collection

Parameters

- **\$n** – int - skip count

Returns *php\util\Flow*

limit (\$count)

Limits collection with \$count

Parameters

- **\$count** – int - count of limit

Returns `php\util\Flow`

reduce (`$callback`)

Iterates elements and gets a result of this operation It can be used for calculate some results, for example:

```
// calculates a sum of elements
```

```
$sum = .. ->reduce(function($result, $el){ $result = $result + $el });
```

Parameters

- **\$callback** – callable - (`$result, $el[, $key]`)

Returns int

sort (`$comparator = null`)

Sort the last result of the flow, also see: `php\\lib\\items::sort()`

Note: use the `withKeys()` method to save keys

Parameters

- **\$comparator** – callable - (`$o1, $o2`) -> int, where -1 smaller, 0 equal, 1 greater

Returns array

sortByKeys (`$comparator = null`)

The same method as `sort()` only based on keys instead of values

Note: use the `withKeys()` method to save keys

Parameters

- **\$comparator** – callable - (`$key1, $key2`) -> int

Returns array

toArray ()

Convert elements to an array

Note: use the `withKeys()` method to save keys

Returns array

toString (`$separator`)

Join elements to a string similar to `implode()` in PHP

Parameters

- **\$separator** – string

Returns string

```

count()
    Returns int

current()
    Returns mixed

next()
    Returns void

key()
    Returns mixed

valid()
    Returns bool

rewind()
    Returns void

__clone()
    private

static ofEmpty
    Returns php\util\Flow

static of ($collection)
    Creates a new flow for an array of Iterator

    Parameters
        • $collection – array, Traversable

    Returns php\util\Flow

static ofRange ($from, $to, $step = 1)
    Creates a new flow for a number range

    Parameters
        • $from – int
        • $to – int
        • $step – int

    Returns php\util\Flow

static ofString ($string, $chunkSize = 1)
    Creates a new flow for the string

    Parameters
        • $string – string
        • $chunkSize – int - how many characters to combine for one item ?

    Returns php\util\Flow

static ofStream ($stream, $chunkSize = 1)
    Creates a new flow for the Stream object

    Parameters
        • $stream – php\io\Stream - stream object

```

- **\$chunkSize** – int - size for Stream.read(\$size) method

Returns *php\util\Flow*

LauncherClassLoader

php\util\LauncherClassLoader

extends: *php\lang\ClassLoader*

Class LauncherClassLoader

Methods

loadClass (\$name)

Parameters

- **\$name** – string

Locale

php\util\Locale

Class Locale, Immutable

Methods

__construct (\$lang, \$country = '', \$variant = '')

Parameters

- **\$lang** – string
- **\$country** – string
- **\$variant** – string

getLanguage ()

Returns string

getDisplayLanguage (\$locale = null)

Parameters

- **\$locale** – *php\util\Locale*

Returns string

getCountry ()

Returns string

getDisplayCountry (\$locale = null)

Parameters

- **\$locale** – *php\util\Locale*

Returns string

getVariant ()

Returns string
getDisplayVariant (*\$locale = null*)
Parameters

- **\$locale** – *php\util\Locale*

Returns string
getISO3Country ()
Returns string
getISO3Language ()
Returns string
__toString ()
Returns a string representation of this Locale object, consisting of language, country, variant, script, and extensions as below:
language + “_” + country + “_” + (variant + “_#” | “#”) + script + “-” + extensions
Returns string
__clone ()
 private
static ENGLISH
 Returns *php\util\Locale*
static US
 Returns *php\util\Locale*
static UK
 Returns *php\util\Locale*
static CANADA
 Returns *php\util\Locale*
static CANADA_FRENCH
 Returns *php\util\Locale*
static FRENCH
 Returns *php\util\Locale*
static FRANCE
 Returns *php\util\Locale*
static ITALIAN
 Returns *php\util\Locale*
static ITALY
 Returns *php\util\Locale*
static GERMAN
 Returns *php\util\Locale*
static GERMANY

Returns `php\util\Locale`

static JAPAN

Returns `php\util\Locale`

static JAPANESE

Returns `php\util\Locale`

static KOREA

Returns `php\util\Locale`

static KOREAN

Returns `php\util\Locale`

static CHINA

Returns `php\util\Locale`

static CHINESE

Returns `php\util\Locale`

static TAIWAN

Returns `php\util\Locale`

static RUSSIAN

Returns `php\util\Locale`

static RUSSIA

Returns `php\util\Locale`

static ROOT

Returns `php\util\Locale`

static getDefault (`$globally = false`)

Get default locale (if `globally = false` - only for the current environment)

Parameters

- `$globally` – bool

Returns `php\util\Locale`

static setDefault (`$locale, $globally = false`)

Set default locale

Parameters

- `$locale` – `php\util\Locale`
- `$globally` – bool - if `false` - only for the current environment

static getAvailableLocales

Returns an array of all installed locales. The returned array represents the union of locales supported by the Java runtime environment

Returns `php\util\Locale[]` An array of installed locales.

Promise

`php\util\Promise`

Methods

`__construct()`

`private`

`static create ($initialValue, $callback)`

Parameters

- `$initialValue` – mixed - (optional)
- `$callback` – callable - (`$value`) - assign callback

`Returns` mixed

Regex

`php\util\Regex`

`implements:` Iterator

<http://www.regular-expressions.info/java.html>

Class Regex, Immutable

Constants

`constant CANON_EQ`

`constant CASE_INSENSITIVE`

`constant UNICODE_CASE`

`constant COMMENTS`

`constant DOTALL`

`constant LITERAL`

`constant MULTILINE`

`constant UNIX_LINES`

Methods

`__construct()`

`private`

`getPattern()`

Get the current pattern

`Returns` string

`getFlags()`

Get the current flags

`Returns` int

static of (\$pattern, \$flag = 0)

Creates a new Regex of regex with \$string and \$flag

throws *php\util\RegexException*

Parameters

- **\$pattern** – string - regular expression

- **\$flag** – int - Regex::CASE_INSENSITIVE and other constants

Returns *php\util\Regex*

matches ()

Attempts to match the entire region against the pattern.

Returns bool

find (\$start = null)

Resets this matcher and then attempts to find the next subsequence of the input sequence that matches the pattern, starting at the specified index.

throws *php\util\RegexException*

Parameters

- **\$start** – int, null

Returns bool

replace (\$replacement)

Replaces every subsequence of the input sequence that matches the pattern with the given replacement string.

This method first resets this matcher. It then scans the input sequence looking for matches of the pattern. Characters that are not part of any match are appended directly to the result string; each match is replaced in the result by the replacement string.

throws *php\util\RegexException*

Parameters

- **\$replacement** – string

Returns string

replaceFirst (\$replacement)

Replaces the first subsequence of the input sequence that matches the pattern with the given replacement string.

throws *php\util\RegexException*

Parameters

- **\$replacement** – string

Returns string

replaceGroup (\$group, \$replacement)

throws *php\util\RegexException*

Parameters

- **\$group** – int

- **\$replacement** – string

Returns string

replaceWithCallback (\$callback)
throws *php\util\RegexException*

Parameters

- **\$callback** – callable - (Regex \$pattern) -> string

Returns string**with** (\$string)

Duplicates this pattern with a new \$string

Parameters

- **\$string** – string

Returns *php\util\Regex***withFlags** (\$flags)

Clone this object with the new \$flags

Parameters

- **\$flags** – int

Returns *php\util\Regex***group** (\$group = null)

Returns the input subsequence captured by the given group during the previous match operation.

throws *php\util\RegexException***Parameters**

- **\$group** – null, int

Returns string**getGroupCount** ()

Returns the number of capturing groups in this matcher's pattern.

Returns int**start** (\$group = null)

Returns the start index of the previous match.

throws *php\util\RegexException***Parameters**

- **\$group** – null, int

Returns int**end** (\$group = null)

Returns the offset after the last character matched.

throws *php\util\RegexException***Parameters**

- **\$group** – null, int

Returns int**hitEnd** ()

Returns true if the end of input was hit by the search engine in the last match operation performed by this matcher.

Returns bool

requireEnd()

Returns true if more input could change a positive match into a negative one.

If this method returns true, and a match was found, then more input could cause the match to be lost. If this method returns false and a match was found, then more input might change the match but the match won't be lost. If a match was not found, then requireEnd has no meaning.

Returns bool

lookingAt()

Attempts to match the input sequence, starting at the beginning of the region, against the pattern.

Returns bool

region(\$start, \$end)

Sets the limits of this matcher's region. The region is the part of the input sequence that will be searched to find a match. Invoking this method resets the matcher, and then sets the region to start at the index specified by the \$start parameter and end at the index specified by the \$end parameter.

throws *php\util\RegexException*

Parameters

- **\$start** – int
- **\$end** – int

Returns *php\util\Regex*

regionStart()

Reports the start index of this matcher's region. The searches this matcher conducts are limited to finding matches within regionStart() (inclusive) and regionEnd() (exclusive).

Returns int

regionEnd()

Reports the end index (exclusive) of this matcher's region. The searches this matcher conducts are limited to finding matches within regionStart() (inclusive) and regionEnd() (exclusive).

Returns int

reset(\$string = null)

Resets this matcher.

Resetting a matcher discards all of its explicit state information and sets its append position to zero. The matcher's region is set to the default region, which is its entire character sequence. The anchoring and transparency of this matcher's region boundaries are unaffected.

Parameters

- **\$string** – null, string - The new input character sequence

Returns *php\util\$this*

current()

Returns null, string

next()

key()

Returns int

valid()

Returns bool**rewind()****__clone()**
private**static match (\$pattern, \$string, \$flags = 0)**

Tells whether or not this string matches the given regular expression. See also java.lang.String.matches()

Parameters

- **\$pattern** – string - regular expression
- **\$string** – string
- **\$flags** – int

Returns bool**static split (\$pattern, \$string, \$limit = 0)**

Splits this string around matches of the given regular expression. See also java.lang.String.split()

throws *php\util\RegexException***Parameters**

- **\$pattern** – string - the delimiting regular expression
- **\$string** – string
- **\$limit** – int - the result threshold

Returns array the array of strings computed by splitting this string around matches of the given regular expression**static quote (\$string)**

Returns a literal pattern String for the specified String.

This method produces a String that can be used to create a Regex that would match the string \$string as if it were a literal pattern. Metacharacters or escape sequences in the input sequence will be given no special meaning.

Parameters

- **\$string** – string - The string to be literalized

Returns string A literal string replacement**static quoteReplacement (\$string)**

Returns a literal replacement String for the specified String.

This method produces a String that will work as a literal replacement \$string in the replaceWithCallback() method of the php\util\Regex class. The String produced will match the sequence of characters in \$string treated as a literal sequence. Slashes ('') and dollar signs ('\$') will be given no special meaning.

Parameters

- **\$string** – string

Returns string

RegexException

```
php\util\RegexException
    extends: php\lang\JavaException

Class RegexException
```

Scanner

```
php\util\Scanner
    implements: Iterator
```

A simple text scanner which can parse primitive types and strings using regular expressions.

Class Scanner

Methods

```
__construct ($source, $charset = null)
    throws php\lang\IllegalArgumentException if $charset is invalid
```

Parameters

- **\$source** – string, *php\io\Stream*
- **\$charset** – string, null - e.g.: UTF-8, windows-1251, etc., only for Stream objects

```
hasNext ($pattern = null)
```

Parameters

- **\$pattern** – *php\util\Regex*

Returns

bool

```
next ($pattern = null)
```

Parameters

- **\$pattern** – *php\util\Regex*

Returns

string, null null if doesn't has the next pattern

```
nextLine ()
```

Returns

string, null null if doesn't has the next line

```
hasNextLine ()
```

Returns

bool

```
nextInt ($radix = null)
```

Parameters

- **\$radix** – null, int - if null then uses the default radix

Returns

int, null null if doesn't has the next int

```
hasNextInt ($radix = null)
```

Parameters

- **\$radix** – null, int - if null then uses the default radix

Returns bool

nextDouble()

Returns float, null null if does not has the next double

hasNextDouble()

Returns bool

skip(\$pattern)

Parameters

- **\$pattern** – *php\util\Regex*

Returns bool true on success, false on fail

useDelimiter(\$delimiter)

Parameters

- **\$delimiter** – *php\util\Regex*

Returns *php\util\Scanner*

useLocale(\$locale)

Parameters

- **\$locale** – *php\util\Locale*

Returns *php\util\Scanner*

useRadix(\$value)

Parameters

- **\$value** – int

Returns *php\util\Scanner*

getIOException()

Get the last io exception (if does not occur then returns null)

Returns *php\io\IOException*, null

reset()

current()

Uses the result of the last called `next()` method

Returns string

key()

Returns int

valid()

Returns bool

rewind()

__clone()

private

Shared

php\util\Shared

Class to work with shared memory of Environments

Class Shared

Methods

__construct()
private

static value (\$name, \$creator = null)

Get or create if does not exist and get a shared value

Parameters

- **\$name** – string
- **\$creator** – callable - returns init value

Returns *php\util\SharedValue*

static reset (\$name)

Removes the value by \$name.

Parameters

- **\$name** – *php\util\String*

Returns *php\util\SharedValue* removed value

static resetAll

SharedCollection

php\util\SharedCollection

abstract class

extends: *php\util\SharedMemory*

implements: Countable, Traversable

Children

- **class** *php\util\SharedMap*
- **class** *php\util\SharedQueue*
- **class** *php\util\SharedStack*

Methods

isEmpty()
abstract

Returns bool

count()
abstract

Returns int

clear()
abstract

Remove all elements.

Returns void

SharedMap

php\util\SharedMap
extends: *phputil\SharedCollection*

Class SharedMap

Methods

__construct (\$array)

Parameters

- **\$array** – array, Traversable - (optional)

get (\$key, \$default = null)

Parameters

- **\$key** – string
- **\$default** – mixed

Returns mixed

getOrCreate (\$key, \$createCallback)

Parameters

- **\$key** – string
- **\$createCallback** – callable

Returns mixed

has (\$key)

Parameters

- **\$key** – string

Returns bool

count ()

Returns int

set (\$key, \$value, \$override = true)

Parameters

- **\$key** – string
- **\$value** – mixed
- **\$override** – bool

Returns mixed previous value

remove (\$key)

Parameters

- **\$key** – string

Returns mixed

clear()

isEmpty()

Returns bool

SharedMemory

php\util\SharedMemory
abstract class

Children

- abstract class [php\util\SharedCollection](#)
- class [php\util\SharedValue](#)

Methods

synchronize (\$callback)

You can use a shared value as a mutex

Parameters

- **\$callback** – callable - (SharedValue \$this)

Returns mixed result of execution of \$callback

SharedQueue

php\util\SharedQueue
extends: [php\util\SharedCollection](#)

Class SharedQueue

Methods

__construct (\$array)

Parameters

- **\$array** – array, Traversable - (optional)

isEmpty()

Returns bool

count()

Returns int

clear()

Remove all elements.

Returns void

add (\$value)

Parameters

- **\$value** – mixed

Returns bool

peek()

Returns mixed

poll()

Retrieves and removes the head of this queue.

Returns mixed

SharedStack

php\util\SharedStack
extends: *php\util\SharedCollection*

Class SharedStack

Methods

__construct (\$array)

Parameters

- **\$array** – array, Traversable - (optional)

push (\$value)

Parameters

- **\$value** – mixed

Returns mixed peek value

pop()

Returns mixed peek value

peek()

Returns mixed

count()

Returns int

clear()**isEmpty()**

Returns bool

SharedValue

`php\util\SharedValue`
extends: `php\util\SharedMemory`

Class SharedValue

Methods

`__construct ($value)`

Parameters

- `$value` – mixed - (optional)

`get ()`

Returns mixed

`set ($value, $override = true)`

Parameters

- `$value` – mixed
- `$override` – bool

Returns mixed

`remove ()`

Returns mixed

`isEmpty ()`

Returns bool

`getAndSet ($updateCallback)`

Parameters

- `$updateCallback` – callable - (\$oldValue) returns a new value

Returns mixed

`setAndGet ($updateCallback)`

Parameters

- `$updateCallback` – callable - (\$oldValue) returns a new value

Returns mixed

1.4.17 webserver

WebRequest

`php\webserver\WebRequest`
Class WebRequest

Properties

```

property method
    string
    read-only

property scheme
    string
    read-only

property pathInfo
    string
    read-only

property servletPath
    string
    read-only

property queryString
    string
    read-only

property authType
    string
    read-only

property url
    string
    read-only

property port
    int
    read-only

property ip
    string
    read-only

property cookies
    array
    read-only

    Array of arrays [name, value, path, domain, httpOnly, secure, maxAge, comment]

```

Methods

```

__construct ($parent)
    protected

```

Parameters

- **\$parent** – *php\webservice\WebRequest*

getBody ()

Returns string

getBodyStream ()

```
    Returns php\io\Stream
getMethod()
    protected

        Returns string

getPathInfo()
    protected

        Returns string

getAuthType()
    protected

        Returns string

getQueryString()
    protected

        Returns string

getUrl()
    protected

        Returns string

getScheme()
    protected

        Returns string

getPort()
    protected

        Returns int

getIp()
    protected

        Returns string

static current

    Returns php\webserver\WebRequest
```

WebResponse

php\webserver\WebResponse
Class WebResponse

Properties

```
property status
    int

property contentType
    string

property characterEncoding
    string
```

```
property bufferSize  
    int
```

Methods

```
__construct ($parent)  
protected
```

Parameters

- **\$parent** – *php\webservice\WebResponse*

```
setHeader ($name, $value)
```

Parameters

- **\$name** – string
- **\$value** – string

```
getHeader ($name)
```

Parameters

- **\$name** – string

Returns string

```
getHeaders ($name)
```

Parameters

- **\$name** – string

Returns string[]

```
getHeaderNames ()
```

Returns string[]

```
addHeader ($name, $value)
```

Parameters

- **\$name** – string
- **\$value** – string

```
redirect ($location, $httpStatus = 301)
```

Parameters

- **\$location** – string
- **\$httpStatus** – int

```
encodeRedirectURL ($url)
```

Parameters

- **\$url** – string

```
writeToBody ($content)
```

Parameters

- **\$content** – string

```
setContentLength ($length)
```

Parameters

- **\$length** – int

addCookie (\$cookie)

Parameters

- **\$cookie** – array - [name, value, maxAge, path, domain, httpOnly, secure, comment]

getStatus ()

protected

Returns int

setStatus (\$status)

protected

Parameters

- **\$status** – int

getContentType ()

protected

Returns string

setContentType (\$contentType)

protected

Parameters

- **\$contentType** – string

getCharacterEncoding ()

protected

Returns string

setCharacterEncoding (\$characterEncoding)

protected

Parameters

- **\$characterEncoding** – string

getBufferSize ()

protected

Returns int

setBufferSize (\$bufferSize)

protected

Parameters

- **\$bufferSize** – int

static current

Returns *php\webserver\WebResponse*

WebServer

php\webserver\WebServer
Embedded http web server.

Class WebServer

Properties

```
property id
    string
    read-only

property port
    int

property isolated
    bool

property importAutoloaders
    bool

property hotReload
    bool
```

Methods

__construct (\$onRequest)

Parameters

- **\$onRequest** – callable

run ()

addStaticHandler (\$handler)

Parameters

- **\$handler** – array - [path, location, cache, cachePeriod, gzip]

Returns *php\webserver\WebServer*

getId ()

protected

Returns string

getPort ()

protected

Returns int

setPort (\$port)

protected

Parameters

- **\$port** – int

isIsolated ()

protected

Returns boolean

setIsolated (\$isolated)
protected

Parameters

- **\$isolated** – boolean

isImportAutoloaders ()
protected

Returns boolean

setImportAutoloaders (\$importAutoloaders)
protected

Parameters

- **\$importAutoloaders** – boolean

isHotReload ()
protected

Returns boolean

setHotReload (\$hotReload)
protected

Parameters

- **\$hotReload** – boolean

__clone ()
private

static current

Returns *php\webserver\WebServer*

1.4.18 xml

DomDocument

php\xml\DomDocument
abstract class

extends: *php\xml\DomElement*

Methods

getDocumentElement ()

Returns *php\xml\DomDocument*

getElementById (\$id)

Parameters

- **\$id** – string

Returns *php\xml\DomElement*

getInputEncoding ()

```
    Returns string
getXmlEncoding()
    Returns string
getXmlVersion()
    Returns string
getXmlStandalone()
    Returns bool
setXmlStandalone($value)
    Parameters
        • $value – bool
getStrictErrorChecking()
    Returns bool
setStrictErrorChecking($value)
    Parameters
        • $value – bool
getDocumentURI()
    Returns string
setDocumentURI($value)
    Parameters
        • $value – string
createElement($tagName, $model)
    Parameters
        • $tagName – string
        • $model – Traversable, array - (optional)
    Returns php\xm\DomElement
createElementNS($namespaceURI, $qualifiedName)
    Parameters
        • $namespaceURI – string
        • $qualifiedName – string
    Returns php\xm\DomElement
createProcessingInstruction($name, $value)
    Parameters
        • $name – string
        • $value – string
    Returns php\xm\DomNode
importNode($importedNode, $deep)
```

Parameters

- **\$importedNode** – *php\xm\DomNode*
- **\$deep** – bool

Returns *php\xm\DomNode*

adoptNode (*\$source*)

Parameters

- **\$source** – *php\xm\DomNode*

Returns *php\xm\DomNode*

renameNode (*\$node*, *\$namespaceURI*, *\$qualifiedName*)

Parameters

- **\$node** – *php\xm\DomNode*
- **\$namespaceURI** – string
- **\$qualifiedName** – string

normalizeDocument ()

DomElement

php\xml\DomElement

abstract class

extends: *php\xm\DomNode*

Children

- abstract class *php\xm\DomDocument*

Methods

__get (*\$name*)

Parameters

- **\$name** – string

Returns string Value of attribute by \$name

__set (*\$name*, *\$value*)

Set attribute value

Parameters

- **\$name** – string
- **\$value** – string

__unset (*\$name*)

Remove attribute by name

Parameters

- **\$name** – string

```
__isset ($name)
Check attribute exists by name

Parameters
• $name – string

Returns bool

getTagName ()

Returns string

getAttribute ($name)

Parameters
• $name – string

Returns string

hasAttribute ($name)

Parameters
• $name – string

Returns bool

hasAttributeNS ($namespaceURI, $localName)

Parameters
• $namespaceURI – string
• $localName – string

Returns bool

setAttribute ($name, $value)

Parameters
• $name – string
• $value – string

setAttributes ($attributes)

Parameters
• $attributes – array, Traversable

getAttributes ()

Returns array

removeAttribute ($name)

Parameters
• $name – string

getElementsByTagName ($name)

Parameters
• $name – string

Returns php\xm\DomNodeList
```

getElementsByTagNameNS (*\$namespaceURI*, *\$localName*)

Parameters

- **\$namespaceURI** – string
- **\$localName** – string

Returns *php\xml\DomNodeList*

getAttributeNS (*\$namespaceURI*, *\$localName*)

Parameters

- **\$namespaceURI** – string
- **\$localName** – string

Returns string

setAttributeNS (*\$namespaceURI*, *\$qualifiedName*, *\$value*)

Parameters

- **\$namespaceURI** – string
- **\$qualifiedName** – string
- **\$value** – string

removeAttributeNS (*\$namespaceURI*, *\$localName*)

Parameters

- **\$namespaceURI** – string
- **\$localName** – string

setIdAttribute (*\$name*, *\$isId*)

Parameters

- **\$name** – string
- **\$isId** – bool

setIdAttributeNS (*\$namespaceURI*, *\$localName*, *\$isId*)

Parameters

- **\$namespaceURI** – string
- **\$localName** – string
- **\$isId** – string

DomNode

php\xml\DomNode
abstract class

Children

- abstract class *php\xml\DomElement*

Methods

get (\$xpathExpression)

Parameters

- **\$xpathExpression** – string

Returns string

find (\$xpathExpression)

Parameters

- **\$xpathExpression** – string

Returns *php\XmlNode*

findAll (\$xpathExpression)

Parameters

- **\$xpathExpression** – string

Returns *php\XmlNodeList*

getBaseURI ()

Returns string

getNamespaceURI ()

Returns string

getLocalName ()

Returns string

getNodeType ()

Returns int

getNodeName ()

Returns string

getNodeValue ()

Returns string

getPrefix ()

Returns string

getTextContent ()

Returns string

getFirstChild ()

Returns *php\XmlNode*

getLastChild ()

Returns *php\XmlNode*

getNextSibling ()

Returns *php\XmlNode*

```
getPreviousSibling()
    Returns php\XmlNode
getparentNode()
    Returns php\XmlNode
getOwnerDocument()
    Returns php\XmlDomDocument
hasAttributes()
    Returns bool
hasChildNodes()
    Returns bool
isDefaultNamespace($namespace)
    Parameters
        • $namespace – string
isEqualNode($node)
    Parameters
        • $node – php\XmlNode
    Returns bool
isSameNode($node)
    Parameters
        • $node – php\XmlNode
    Returns bool
isSupported($feature, $version)
    Parameters
        • $feature – string
        • $version – string
    Returns bool
lookupNamespaceURI($prefix)
    Parameters
        • $prefix – string
    Returns string
lookupPrefix($namespaceURI)
    Parameters
        • $namespaceURI – string
    Returns string
normalize()
setTextContent($content)
```

Parameters

- **\$content** – string

setPrefix (\$prefix)

Parameters

- **\$prefix** – string

cloneNode (\$deep)

Parameters

- **\$deep** – bool

Returns *php\xml\DomNode*

appendChild (\$node)

Parameters

- **\$node** – *php\xml\DomNode*

Returns *php\xml\\$this*

removeChild (\$node)

Parameters

- **\$node** – *php\xml\DomNode*

Returns *php\xml\\$this*

replaceChild (\$newNode, \$oldNode)

Parameters

- **\$newNode** – *php\xml\DomNode*
- **\$oldNode** – *php\xml\DomNode*

Returns *php\xml\\$this*

insertBefore (\$newNode, \$refNode)

Parameters

- **\$newNode** – *php\xml\DomNode*
- **\$refNode** – *php\xml\DomNode*

Returns *php\xml\\$this*

toModel ()

Returns array

DomNodeList

php\xml\DomNodeList
abstract class

implements: ArrayAccess, Iterator, Countable

XmIProcessor

`php\xml\XmIProcessor`
extends: `php\format\Processor`

Class XmIProcessor

Methods

format (\$value)
throws `php\format\ProcessorException`

Parameters

- **\$value** – `php\xml\DomDocument`

Returns string xml

formatTo (\$value, \$output)
throws `php\format\ProcessorException`

Parameters

- **\$value** – `php\xml\DomDocument`
- **\$output** – `php\io\Stream`

parse (\$string)
throws `php\format\ProcessorException`

Parameters

- **\$string** – `php\io\Stream`, string - stream of string of xml

Returns `php\xml\DomDocument`

createDocument ()

Returns `php\xml\DomDocument`

JPHP is a new implementation for PHP which uses the Java VM. It supports many features of the PHP language (5.4+). How does it work? JPHP is a compiler like `javac`, it compiles php sources to JVM bytecode and then can execute the result on the Java VM.

Note: Supports: JDK 1.6+ (OpenJDK, Oracle), Linux, Windows, MacOS, etc.

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