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# 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.

## BaseException

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

### Children

---

- class *EngineException*
- class *ParseException*

## EngineException

```
class EngineException
    extends: BaseException
```

### Methods

---

EngineException::getErrorCode()

**Returns** int

## ParseException

```
class ParseException  
    extends: BaseException
```

php

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 ()**  
    **Returns** *php\android\app\Activity*

## 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\widge\TextView
```

Class Button

### EditText

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

## concurrent

### ExecutorService

```
php\concurrent\ExecutorService
    Class ExecutorService
```

#### 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\concurrent\\Exception*

**Parameters**

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

**Returns** bool

**static newFixedThreadPool** (\$max)

**Parameters**

- **\$max** – int

**Returns** *php\concurrent\ExecutorService*

**static newCachedThreadPool**

**Returns** *php\concurrent\ExecutorService*

**static newSingleThreadExecutor**

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

**Returns** *php\concurrent\ExecutorService*

**static newScheduledThreadPool** (\$corePoolSize)

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

**Parameters**

- **\$corePoolSize** – int

**Returns** *php\concurrent\ExecutorService*

## 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

## 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)
Parameters
  • $json – string, php\io\Stream

Returns mixed

format ($value)
Parameters
  • $value – mixed

Returns string

formatTo ($value, $output)
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** –

## 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** ()

**getReferenceCount** (\$fileName)

Parameters

- **\$fileName** – string

Returns int

**setReferenceCount** (\$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 earth's 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 (\$catched)**

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

**Parameters**

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

**isCursorCatched()**

**Returns** bool whether the mouse cursor is catched.

**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

## 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
delete()
    Returns bool
deleteOnExit()
    Returns void
createNewFile ($withDirs = false)
    Parameters
        • $withDirs – bool
    Returns bool
lastModified()
    Returns int
length()
    Returns int
renameTo ($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\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

```
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 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

**static register (\$protocol, \$className)**

#### Parameters

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

**static unregister (\$protocol)**

#### Parameters

- **\$protocol** –

## 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*

**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

---

**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
```

## lang

### ClassLoader

```
php\lang\ClassLoader
    abstract class
```

## 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

**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

**sendMessage** (\$message)

Send message to the environment

**Parameters**

- **\$message** – mixed

**Returns** mixed**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

```
getCanonicalName()
    Returns string

getSuperClass()
    Returns php\lang\JavaClass, null

getModifiers()
    Returns int

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

Parameters
    • $annotationClassName – string

Returns bool

getInterfaces()
    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\sql\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

## 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*

## 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
```

---

```
static sync ($object, $runnable)
```

**Parameters**

- **\$object** – object
- **\$runnable** – callable

**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 ()**

## lib

### Binary

**php\lib\Binary**

Class for working with binary strings

Class Binary

#### Methods

---

**\_\_construct ()**

**private**

**static of (\$string)**

#### Parameters

- **\$string** – string, array

**Returns** string - binary string

### Number

**php\lib\Number**

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

## String

**php\lib\String**  
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 toffset 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')
```

**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** – string

**Returns** bool

```
static isUpper ($string)
```

**Parameters**

- **\$string** –

**Returns** bool

## 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()**

**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\Net\URL*

**setProxy(\$proxy)**

### Parameters

- **\$proxy** – *php\Net\Proxy*

**getProxy()**

**Returns** *php\Net\Proxy*

**getUrlConnection()**

**Returns** *php\Net\URLConnection*

## Proxy

**php\Net\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\Net\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\Net\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\Net\SocketException*

#### Parameters

- **\$timeout** – int

**setReuseAddress (\$on)**

Enable/disable the SO\_REUSEADDR socket option.

**throws** *php\Net\SocketException*

#### Parameters

- **\$on** – bool

**setReceiveBufferSize (\$size)**

**throws** *php\Net\SocketException*

#### 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\ net \ 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\net\SocketException

    Parameters
        • $hostname – string
        • $port – int

bindDefault()

setSoTimeout ($timeout)
    Enable/disable SO_TIMEOUT with the specified timeout, in milliseconds.

    throws php\net\SocketException

    Parameters
        • $timeout – int

setSoLinger ($on, $linger)
    throws php\net\SocketException

    Parameters
        • $on – bool
        • $linger – int

setReuseAddress ($on)
    Enable/disable the SO_REUSEADDR socket option.

    throws php\net\SocketException

```

**Parameters**

- **\$on** – bool

**setReceiveBufferSize** (*\$size*)  
throws *php\win\SocketException*

**Parameters**

- **\$size** – int

**setTcpNoDelay** (*\$on*)  
throws *php\win\SocketException*

**Parameters**

- **\$on** – bool

**setKeepAlive** (*\$on*)  
throws *php\win\SocketException*

**Parameters**

- **\$on** – bool

**setOOBInline** (*\$on*)  
throws *php\win\SocketException*

**Parameters**

- **\$on** – bool

**setSendBufferSize** (*\$size*)  
throws *php\win\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\win\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\net\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\net\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\ net\ int millis

property followRedirects
    bool

property url
    php\ net\ URL

read-only

property responseCode
    int

read-only

property responseMessage
    int

read-only

property contentLength
    php\ net\ 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

**getRequestProperties ()**

**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 **<b>not</b>** 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

## 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

## SqIConnectionPool

**php\sql\SqlConnectionPool**

Class SqIConnectionPool

### 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`

## SqIDriverManager

`php\sql\SqIDriverManager`

Class DriverManager

### Methods

---

**static install** (`$driverName`)

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

**Parameters**

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

**static getConnection** (`$url, $options`)

**throws** `php\sq\SqlException` if a database access error occurs

**Parameters**

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

**Returns** `php\sq\SqlConnection`

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

**Parameters**

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

**Returns** `php\sq\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()**

## 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
        bool

property verPosition
    int
        Direction

property horPosition
    int
        Direction

property verAlignment
    int
        Direction

property horAlignment
    php\swing\int|string
        Direction

property iconTextGap
    int
        int

property borderPainted
    bool
        bool

property focusPainted
    bool
        bool

property rolloverEnabled
    bool
        bool

property contentAreaFilled
    bool
        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\UIAbstractIButton`
- **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\UIScrollPane`
- **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\int\string*

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 UIPanel

### 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 ()
```

## 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)**

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[]

## util

### 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**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 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`

## 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

**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()**

**Returns** null, string

**key()**

**Returns** int

**valid()**

**Returns** bool

**rewind()**

**Returns** bool

---

```
__clone()
private
```

**static match (\$pattern, \$string)**

Tells whether or not this string matches the given regular expression. See also java.lang.String.matches()

**throws** *php\util\RegexException*

**Parameters**

- **\$pattern** – string - regular expression
- **\$string** – string

**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: php\util\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

## webserver

### WebRequest

**php\webserver\WebRequest**

Class WebRequest

#### Properties

---

**property method**

string

**read-only**

**property scheme**

string

**read-only**

**property pathInfo**

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  
            • $parent – php\webserver\WebResponse  
setHeader ($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
```

## 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\xmldomElement*

**createElementNS (\$namespaceURI, \$qualifiedName)**

**Parameters**

- **\$namespaceURI** – string
- **\$qualifiedName** – string

**Returns** *php\xmldomElement*

**importNode (\$importedNode, \$deep)**

**Parameters**

- **\$importedNode** – *php\xmldomNode*
- **\$deep** – bool

**Returns** *php\xmldomNode*

**adoptNode (\$source)**

**Parameters**

- **\$source** – *php\xmldomNode*

**Returns** *php\xmldomNode*

**renameNode (\$node, \$namespaceURI, \$qualifiedName)**

**Parameters**

- **\$node** – *php\xmldomNode*
- **\$namespaceURI** – string
- **\$qualifiedName** – string

**normalizeDocument ()**

## DomElement

`php\xml\DomElement`  
abstract class  
extends: `php\xml\DomNode`

### Children

---

- abstract class `php\xml\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` –

**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

**removeAttribute** (\$name)

Parameters

- **\$name** – string

**getElementsByTagName** (\$name)

Parameters

- **\$name** – string

Returns *php\XmlNodeList*

**getElementsByTagNameNS** (\$namespaceURI, \$localName)

Parameters

- **\$namespaceURI** – string
- **\$localName** – string

Returns *php\XmlNodeList*

**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\xml\DomNode*

**findAll** (\$xpathExpression)

Parameters

- **\$xpathExpression** – string

Returns *php\xml\DomNodeList*

**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

**appendChild** (\$node)

**Parameters**

- **\$node** – *php\XmlNode*

**Returns** *php\xml\\$this*

**removeChild** (\$node)

**Parameters**

- **\$node** – *php\XmlNode*

**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

## XmlProcessor

**php\xml\XmlProcessor**

extends: *php\format\Processor*

### Methods

---

**format** (*\$value*)

**Parameters**

- **\$value** – *php\xml\DomDocument*

**Returns** string xml

**formatTo** (*\$value*, *\$output*)

**Parameters**

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

**parse** (*\$string*)

**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.

---

### Symbols

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