

Chapter 81

UrlLoader class

Inherits: Nothing

Supported platforms

- All platforms

Available since version: Gideros 2012.2.2

Description

The `UrlLoader` class is used to download data from an URL. It can be used to download (and optionally save) text files, XML files, JSON files, image files or binary files, etc. Downloaded data is delivered at `event.data` field of `Event.COMPLETE` event as string. Lua is eight-bit clean and so strings may contain characters with any numeric value, including embedded zeros. That means that you can store any binary data into a string. HTTP Request Methods `UrlLoader` supports GET, POST, PUT and DELETE methods. These are defined by these string constants: `UrlLoader.GET = "get"` `UrlLoader.POST = "post"` `UrlLoader.PUT = "put"` `UrlLoader.DELETE = "delete"`

Common uses and examples

The example below shows downloading an image file from an URL, saving it to the documents folder and displaying it on the stage. This example also shows downloading progress and handling errors.

```
local loader = UrlLoader.new("http://example.com/image.png")

local function onComplete(event)
    local out = io.open("|D|image.png", "wb")
    out:write(event.data)
    out:close()

    local b = Bitmap.new(Texture.new("|D|image.png"))
    stage:addChild(b)
end

local function onError()
    print("error")
end
```

```

local function onProgress(event)
    print("progress: " .. event.bytesLoaded .. " of "
        .. event.bytesTotal)
end

loader:addEventListener(Event.COMPLETE, onComplete)
loader:addEventListener(Event.ERROR, onError)
loader:addEventListener(Event.PROGRESS, onProgress)

```

Uploading a file

```

local filename = "crate.png"
local file = io.open(filename, "rb")
local contents = file:read( "*a" )
local boundary = "somerndstring"

local send = "--"..boundary..
    "\r\nContent-Disposition: form-data; "..
    "name="..filename..""; filename="..filename..
    "\r\nContent-type: image/png"..
    "\r\n\r\n"..contents..
    "\r\n--"..boundary.."--\r\n";

local headers = {
    ["Content-Type"] = "multipart/form-data; boundary="..boundary,
    ["Content-Length"] = #send,
}

local loader = UrlLoader.new("http://localhost/gideros.php",
    UrlLoader.POST, headers, send)

loader:addEventListener(Event.COMPLETE, function(e)
    print(e.data)
end)

```

81.1 UrlLoader.new

Available since version: Gideros 2012.2.2

Description

Creates a new `UrlLoader` object. `url` parameter specifies the URL to download. This parameter is optional and if specified loading starts immediately. `method` parameter specifies the HTTP request method. It can be one of the values of `UrlLoader.GET`, `UrlLoader.POST`, `UrlLoader.PUT` or `UrlLoader.DELETE`. The default HTTP method is `UrlLoader.GET`. `body` parameter specifies the HTTP body data. This parameter is used only when the HTTP method is `UrlLoader.POST` or or `UrlLoader.PUT`. After loading is finished, loaded data is stored at `event.data` field of `Event.COMPLETE` event as string.

Syntax:

```
UrlLoader.new(url, method, headers, body)
```

Parameters:

- url: (string, optional) URL to download. This parameter is optional and if specified loading starts immediately.
- method: (string, default = "get") HTTP request method.
- headers: (table, optional) HTTP headers.
- body: (string, optional) HTTP body data. This data is sent as the message body of a request.

Examples:

```
local url = "http://www.[yourDomain].com/application.php?userid=gideros&login=guest"

local loader1 = UrlLoader.new(url)
local loader2 = UrlLoader.new(url, UrlLoader.GET) -- same as the previous line
local loader3 = UrlLoader.new(url, UrlLoader.POST, "my post data")
local loader4 = UrlLoader.new(url, UrlLoader.PUT, "my put data")
local loader5 = UrlLoader.new(url, UrlLoader.DELETE)

local headers = {
    ["Content-Type"] = "application/x-www-form-urlencoded",
    ["User-Agent"] = "Gideros Browser",
}
local loader6 = UrlLoader.new(url, UrlLoader.PUT, headers, "key=value")
```

81.2 UrlLoader:close

Available since version: Gideros 2012.2.2

Description

Terminates the current loading operation.

Syntax:

```
UrlLoader:close()
```

81.3 UrlLoader:load

Available since version: Gideros 2012.2.2

Description

Loads data from the specified URL. If there is any load operation in progress, it is terminated and new progress starts. Please refer to `UrlLoader.new` (Section 81.1) for more detailed description of `url`, `method` and `body` parameters.

Syntax:

```
UrlLoader:load(url, method, headers, body)
```

Parameters:

- url: (string, optional) URL to download. This parameter is optional and if specified loading starts immediately.
- method: (string, default = "get") HTTP request method.
- headers: (table, optional) HTTP headers.
- body: (string, optional) HTTP body data. This data is sent as the message body of a request.

81.4 Event.COMPLETE

Available since version: Gideros 2011.6

Description

This event is dispatched when UrlLoader has reached the host and loading is complete.

Value:

Event.COMPLETE = "complete"

Event properties:

- data: (string) The downloaded data.
- statusCode: (number) HTTP Response Code from server

81.5 Event.ERROR

Available since version: Gideros 2011.6

Description

This event is dispatched when UrlLoader can't reach the provided host.

Value:

Event.ERROR = "error"

81.6 Event.PROGRESS

Available since version: Gideros 2011.6

Description

This event is dispatched to notify of how far the download has progressed.

Value:

Event.PROGRESS = "progress"

Event properties:

- bytesLoaded: (number) The number of bytes loaded.
- bytesTotal: (number) The total number of bytes that will be loaded or -1 if the length can't be determined.

81.7 UrlLoader.DELETEE

Available since version: Gideros 2011.6

Description**Value:**

UrlLoader.DELETEE = "delete"

81.8 UrlLoader.GET

Available since version: Gideros 2011.6

Description**Value:**

UrlLoader.GET = "get"

81.9 UrlLoader.POST

Available since version: Gideros 2011.6

Description**Value:**

UrlLoader.POST = "post"

81.10 UrlLoader.PUT

Available since version: Gideros 2011.6

Description**Value:**

UrlLoader.PUT = "put"