## Brook framework

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## Unit BrookAction

## 1.1 Description

Brook Action unit.

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## 1.2 Uses

- BrookClasses(4)
- BrookException(11)
- BrookMessages(15)
- BrookUtils(23)
- BrookHTTPUtils(13)
- BrookConsts(6)
- BrookHTTPConsts(12)
- HTTPDefs
- FPJSON
- Classes
- SysUtils
- Variants

## 1.3 Overview

EBrookAction Class Handles exceptions for TBrookAction(1.4).

TBrookAction Class Provides features to handle with HTTP requests and responses.

## 1.4 Classes, Interfaces, Objects and Records

#### EBrookAction Class \_

### Hierarchy

EBrookAction > EBrook(11.4) > Exception

#### Description

Handles exceptions for TBrookAction(1.4).

#### TBrookAction Class \_\_\_\_\_

#### Hierarchy

TBrookAction > TBrookObject(4.4) > TObject

### Description

Provides features to handle with HTTP requests and responses.

#### **Properties**

Fields public property Fields: TJSONObject read FFields;

The list of variables coming from a request called by the POST method.

Params public property Params: TJSONObject read FParams;

The list of variables coming from a request called by the GET method.

Values public property Values: TJSONObject read FValues;

The list of variables received from parametrized URLs.

#### Methods

#### Create

Declaration public constructor Create; virtual;

**Description** Creates an instance of a TBrookAction(1.4) class.

#### Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookAction(1.4) class.

#### **FillFields**

Declaration public procedure FillFields(ARequest: TRequest); virtual;

**Description** Fills the Fields(1.4) with data coming from a request called by means of POST method.

#### **FillParams**

Declaration public procedure FillParams(ARequest: TRequest); virtual;

**Description** Fills the Params(1.4) with data coming from a request called by means of GET method.

#### **FillValues**

Declaration public procedure FillValues(ANames, AValues: TBrookArrayOfString); virtual;

**Description** Fills the Values (1.4) with variables passed through the URL.

#### Register

Declaration public class procedure Register(const APattern: string; const ADefault: Boolean = False); overload;

**Description** Registers an action.

Parameters APattern Is an expression defining which URLs is allowed to call an action.

\* - Represents one single level in the current path. Examples:

TMyAction.Register('\*');

Can be called as:

http://localhost/cgi-bin/cgi1

http://localhost/cgi-bin/cgi1/foo/etc;

TMyAction.Register('/home/\*/download');

Means that between "home" and "download", there is one level. The following replacements could be done:

http://localhost/cgi-bin/cgi1/home/file/download

http://localhost/cgi-bin/cgi1/home/news/download

\*\* - Represents one or more levels in the current path. Example:

TMyAction.Register('/home/\*\*/download');

Means that between "home" and "download", one or more levels can be set. The following replacements can be done:

```
http://localhost/cgi-bin/cgi1/home/file/download
http://localhost/cgi-bin/cgi1/home/file/id/25/download
/ - Adds an slash to the end of the URL if does not exist. Example:
TMyAction.Register('/foo/');
Can be called as http://localhost/cgi-bin/cgi1/foo or http://localhost/cgi-bin/cgi1/foo/.
When called as http://localhost/cgi-bin/cgi1/foo, it will automatically redirected to http://localhost/cgi-bin/cgi1/foo/. If the pathinfo is different from /foo a 404 page is returned;
: - Creates variables URL. Their values can be read from the property Values(1.4). Example:
TMyAction.Register('/foo/:myvar');
Creates the "myvar", that can be read from the property Values(1.4), e.g:
Write(Values['myvar'].AsString);
NOTE: Two actions can't be registered with the same pattern except when they are called by means of different HTTP methods.
```

**ADefault** A action registered as *Default* will be called automatically if the URL does not match with *Pattern* of any registered actions. It is not allowed to register more than one action as default. A typical example of use is:

```
TMyAction.Register('*', True);
```

#### Register

Declaration public class procedure Register(const APattern: string; const AMethod: TBrookRequestMethods; const ADefault: Boolean = False); overload;

**Description** Registers an action specifying the HTTP request method.

Parameters AMethod Informs the HTTP request method being valid the following options: rmAll, rmGet, rmHead, rmOptions, rmPost, rmPut or rmDelete. The only way to register two actions with the same pattern is differentiating the value of this parameter. If at least one action has this parameter changed, the route mapping is enabled in Mapped(23.4). A typical example of use is:

```
procedure TMyAction1.Get(ARequest: TBrookRequest; AResponse: TBrookResponse);
begin
    Write('GET');
end;

procedure TMyAction1.Put(ARequest: TBrookRequest; AResponse: TBrookResponse);
begin
    Write('PUT');
end;

procedure TMyAction2.Post(ARequest: TBrookRequest; AResponse: TBrookResponse);
begin
```

```
Write('POST');
                 end;
                 initialization
                   TMyAction1.Register('/foo1', rmGet);
                   TMyAction1.Register('/foo1', rmPut);
                   TMyAction2.Register('/foo1', rmPost)
GetPath
Declaration public class function GetPath: string;
Description Returns the path of action. Exemple:
            /cgi-bin/cgi1/myaction.
DoRequest
Declaration public procedure DoRequest(ARequest: TRequest; AResponse: TResponse);
            virtual;
Description Calls the method Request(1.4).
UrlFor
Declaration public function UrlFor(AActionClass: TBrookActionClass): string; overload;
Description Creates an URL for action.
UrlFor
Declaration public function UrlFor(AActionClass: TBrookActionClass; const AParams:
            array of string): string; overload;
Description Creates an URL for an action informing an array of parameters. Exemple:
                   procedure TMyAction.Get(ARequest: TBrookRequest; AResponse: TBrookResponse);
                   begin
                      // When calling with http://localhost/cgi-bin/cgi1/foo/myvalue
                      // the output will be /cqi-bin/cqi1/foo/myvalue
                      Write(UrlFor(TMyAction, ['myvalue']));
                   end;
                   initialization
                      TMyAction.Register('/foo/:myvar')
```

#### UrlFor

Declaration public function UrlFor(AClassName: string; const AParams: array of string): string; overload;

**Description** Creates an URL for an action passing an array of parameters however informing the class name as string

#### UrlFor

Declaration public function UrlFor(AClassName: string): string; overload;

**Description** Creates an URL for an action informing the class name as string.

#### UrlFor

Declaration public function UrlFor(AActionClass: TBrookActionClass; const AParams: TJSONData): string; overload;

**Description** Creates an URL for an action passing a JSON data.

#### UrlFor

Declaration public function UrlFor(AClassName: string; const AParams: TJSONData): string; overload;

**Description** Creates an URL for an action passing a JSON data however informing the class name as string.

#### Request

Declaration public procedure Request(ARequest: TRequest;AResponse: TResponse); virtual;

**Description** Is triggered by a request of any HTTP method.

#### $\mathbf{Get}$

Declaration public procedure Get; virtual;

**Description** Is triggered by a GET HTTP request method.

#### Post

Declaration public procedure Post; virtual;

**Description** Is triggered by a POST HTTP request method.

#### Put

Declaration public procedure Put; virtual;

**Description** Is triggered by a PUT HTTP request method.

#### Delete

Declaration public procedure Delete; virtual;

**Description** Is triggered by a DELETE HTTP request method.

#### Head

Declaration public procedure Head; virtual;

**Description** Is triggered by a HEAD HTTP request method.

#### **Options**

Declaration public procedure Options; virtual;

**Description** Is triggered by a OPTIONS HTTP request method.

#### Redirect

Declaration public procedure Redirect(const AUrl: string); overload;

**Description** Redirects to an URL.

#### Redirect

Declaration public procedure Redirect(const AUrl: string; const AStatusCode: Word);

overload;

**Description** Redirects to an URL informing the (302, 307) status code.

#### Redirect

Declaration public procedure Redirect(const AUrl: string; const AUseScriptName:

Boolean); overload;

**Description** Redirects to an URL informing the ScriptName.

#### Redirect

Declaration public procedure Redirect(const AUrl: string; const AUseScriptName:

Boolean; const AStatusCode: Word); overload;

**Description** Redirects to an URL informing the (302, 307) status code and the ScriptName.

#### Error

Declaration public procedure Error(const AMsg: string); overload;

**Description** Raises a message for action exceptions.

#### Error

Declaration public procedure Error(const AMsg: string; const AArgs: array of const); overload;

**Description** Raises a formated message for action exceptions.

#### Render

Declaration public procedure Render(const AFileName: TFileName); overload;

**Description** Writes the content of a file.

#### Render

Declaration public procedure Render(const AFileName: TFileName; const AArgs: array of const); overload;

**Description** Writes the content of a file passing parameters to the output.

#### Clear

Declaration public procedure Clear;

Description Clears all written content with Write(), WriteLn(), Render() etc.

#### Write

Declaration public procedure Write(const AString: string); overload;

**Description** Writes a string.

#### Write

Declaration public procedure Write(const ABoolean: Boolean); overload;

**Description** Writes a boolean.

#### Write

Declaration public procedure Write(const ABoolean: Boolean; const ATrueStr, AFalseStr: string); overload;

**Description** Writes a boolean formating output.

#### Write

Declaration public procedure Write(const AInteger: Integer); overload;

**Description** Writes an integer.

Write

Declaration public procedure Write(const AFloat: Double); overload;

**Description** Writes a float.

Write

Declaration public procedure Write(const AFloat: Double; const AFormatSettings:

TFormatSettings); overload;

**Description** Writes a float formatting output.

Write

Declaration public procedure Write(AStream: TStream); overload;

**Description** Writes a content of stream.

Write

Declaration public procedure Write(const AFmt: string; const AArgs: array of const);

overload;

**Description** Writes a formatted string.

Write

Declaration public procedure Write(const AFmt: string; const AArgs: array of const;

const AFormatSettings: TFormatSettings); overload;

**Description** Writes a formatted string.

Write

Declaration public procedure Write(AJSON: TJSONObject); overload;

**Description** Writes the content of a JSONObject.

Write

Declaration public procedure Write(AJSON: TJSONArray); overload;

**Description** Writes the content of a TJSONArray.

#### Write

Declaration public procedure Write(S: TStrings); overload;

**Description** Writes the content of a TStrings.

#### Write

Declaration public procedure Write(const AArgs: array of const); overload;

**Description** Writes value of any type. Exemple:

Write([1, 3.14, False, 'ABC']).

#### Write

Declaration public procedure Write(const AValue: Variant); overload;

**Description** Writes a variant.

#### WriteLn

Declaration public procedure WriteLn(const AString: string = ES); overload;

**Description** Writes a string adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(const ABoolean: Boolean); overload;

**Description** Writes a boolean adding the BR HTML tag to the end.

#### WriteLn

 $\textbf{Declaration} \ \ \texttt{public} \ \ \texttt{procedure} \ \ \texttt{WriteLn} (\texttt{const} \ \ \texttt{ABoolean}; \ \ \texttt{const} \ \ \texttt{ATrueStr},$ 

AFalseStr: string); overload;

**Description** Writes a boolean formating output and adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(const AInteger: Integer); overload;

**Description** Writes an integer adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(const AFloat: Double); overload;

**Description** Writes a float adding the BR HTML tag to the end.

#### WriteLn

 ${\bf Declaration\ public\ procedure\ WriteLn(const\ AFloat:\ Double;\ const\ AFormatSettings:}$ 

TFormatSettings); overload;

**Description** Writes a float formatting output and adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(const AFmt: string; const AArgs: array of const);

overload;

**Description** Writes a formatted string adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(const AFmt: string; const AArgs: array of const;

const AFormatSettings: TFormatSettings); overload;

**Description** Writes a formatted string adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(const AArgs: array of const); overload;

**Description** Writes value of any type adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(const AValue: Variant); overload;

**Description** Writes a variant adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(AJSON: TJSONObject); overload;

Description Writes the content of a JSONObject adding the BR HTML tag to the end.

#### WriteLn

Declaration public procedure WriteLn(AJSON: TJSONArray); overload;

**Description** Writes the content of a JSONArray adding the BR HTML tag to the end.

#### ${\bf WriteLn}$

Declaration public procedure WriteLn(S: TStrings); overload;

**Description** Writes the content of a TStrings adding, for each item, the BR HTML tag to the end.

## 1.5 Types

TBrookActionClass \_\_\_\_\_

Declaration TBrookActionClass = class of TBrookAction;

 $\begin{tabular}{ll} \textbf{Description} & Is a metaclass for $\tt TBrookAction (1.4) class. \end{tabular}$ 

# Unit BrookActionHelper

## 2.1 Description

Brook Action Helper unit. Copyright (C) 2012 Silvio Clecio. http://brookframework.org

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## 2.2 Uses

- BrookAction(1)
- BrookConsts(6)
- SysUtils
- HTTPDefs
- FPJSON

### 2.3 Overview

TBrookActionHelper Class Adds features to TBrookAction class.

## 2.4 Classes, Interfaces, Objects and Records

### TBrookActionHelper Class helper for TBrookAction

### Hierarchy

 ${\bf TBrookAction Helper} > {\bf TObject}$ 

### Description

Adds features to TBrookAction class.

#### Methods

#### Alert

Declaration public procedure Alert(const S: string);

**Description** Shows a dialog with a information message.

#### Confirm

Declaration public function Confirm(const S: string): Boolean;

**Description** Shows a dialog with a confirmation message.

#### Prompt

Declaration public function Prompt(const S, ADefaultValue: string): string;

**Description** Shows a dialog with a question message.

#### **SetCookie**

Declaration public procedure SetCookie(const AName, AValue: string; const AExpires:

TDateTime = NullDate; const APath: string = ES; const ADomain: string = ES;

const ASecure: Boolean = False; const AHttpOnly: Boolean = False);

**Description** Creates a cookie.

#### **GetCookie**

Declaration public function GetCookie(const AName: string): string;

**Description** Get a cookie value.

#### DeleteCookie

Declaration public procedure DeleteCookie(const AName: string; const APath: string = ES; const ADomain: string = ES);

**Description** Deletes a cookie.

#### Link

Declaration public function Link(ACaption: string; const AUrl: string = ES; const AClass: string = ES): string;

**Description** Creates a link HTML tag.

#### LinkTo

**Description** Creates a link HTML tag for an action passing an array of parameters however informing the class name as string

#### LinkTo

**Description** Creates an link HTML tag for an action passing a JSON data.

#### LinkTo

Declaration public function LinkTo(const ACaption: string; AActionClass: TBrookActionClass; const AClass: string = ES): string;

**Description** Creates an link HTML tag for an action.

#### LinkTo

Declaration public function LinkTo(const ACaption, AClassName: string; const AParams: array of string; const AClass: string = ES): string;

**Description** Creates an link HTML tag for an action passing an array of parameters however informing the class name as string

#### LinkTo

Declaration public function LinkTo(const ACaption, AClassName: string; const AParams: TJSONData; const AClass: string = ES): string;

**Description** Creates an link HTML tag for an action passing a JSON data however informing the class name as string.

#### LinkTo

Declaration public function LinkTo(const ACaption, AClassName, AClass: string): string;

**Description** Creates an link HTML tag for an action informing the class name as string.

#### ButtonTo

Declaration public function ButtonTo(const ACaption: string; AActionClass: TBrookActionClass; const AParams: array of string; const AValue: ShortString = 'delete'): string;

**Description** Creates a button HTML tag for an action passing an array of parameters.

#### ButtonTo

Declaration public function ButtonTo(const ACaption: string; AActionClass:

TBrookActionClass; const AParams: TJSONData; const AValue: ShortString =
'delete'): string;

**Description** Creates an button HTML tag for an action passing a JSON data.

#### ButtonTo

Declaration public function ButtonTo(const ACaption: string; AActionClass: TBrookActionClass; const AValue: ShortString = 'delete'): string;

**Description** Creates an button HTML tag for an action.

#### ButtonTo

Declaration public function ButtonTo(const ACaption, AClassName: string; const AParams: array of string; const AValue: ShortString = 'delete'): string;

**Description** Creates a button HTML tag for an action passing an array of parameters however informing the class name as string

#### ButtonTo

Declaration public function ButtonTo(const ACaption, AClassName: string; const AParams: TJSONData; const AValue: ShortString = 'delete'): string;

**Description** Creates an button HTML tag for an action passing a JSON data however informing the class name as string.

#### ButtonTo

Declaration public function ButtonTo(const ACaption, AClassName: string; const AValue: ShortString = 'delete'): string;

**Description** Creates an button HTML tag for an action informing the class name as string.

# Unit BrookApplication

#### Description 3.1

Brook Application unit. Copyright (C) 2012 Silvio Clecio.

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#### 3.2 Uses

- BrookConsts(6)
- BrookClasses(4)
- BrookException(11)
- BrookMessages(15)

#### 3.3 Overview

EBrookApplication Class Handles exceptions for application.

IBrookApplication Interface Interface of the application.

BrookApp Returns the application instance.

BrookRegisterApp Register the application.

BrookUnregisterApp Unregister the application.

3.4 Classes, Interfaces, Objects and Records
EBrookApplication Class
Hierarchy
$\operatorname{EBrookApplication} > \operatorname{EBrook}(11.4) > \operatorname{Exception}$
Description
Handles exceptions for application.
IBrookApplication Interface
Hierarchy
${\tt IBrookInterface}(4.4) > {\tt IInterface}$
Description
Interface of the application.
Methods
Instance
Declaration public function Instance: TObject;
<b>Description</b> Returns the instance of broker application.
Run
Declaration public procedure Run;
<b>Description</b> Initializes and runs the application.
3.5 Functions and Procedures
BrookApp
Declaration function BrookApp: IBrookApplication;
<b>Description</b> Returns the application instance.
BrookRegisterApp
Declaration procedure BrookRegisterApp(AApp: IBrookApplication);
<b>Description</b> Register the application.

BrookUnregisterApp		
Declaration	<pre>procedure BrookUnregisterApp;</pre>	
Description	Unregister the application.	

## Unit BrookClasses

## 4.1 Description

Brook Classes unit.

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### 4.2 Uses

• BrookConsts(6)

#### 4.3 Overview

IBrookInterface Interface Is the main interface for Brook.

TBrookObject Class Is the main object for Brook.

TBrookInterfacedObject Class Is the main interfaced object for Brook.

## 4.4 Classes, Interfaces, Objects and Records

IBrookInterface Interface	

#### Hierarchy

IBrookInterface > IInterface

Description	
s the main interface for Brook.	
TBrookObject Class	
Hierarchy	
${ m CBrookObject} > { m TObject}$	
Description	
s the main object for Brook.	
TBrookInterfacedObject Class	
Hierarchy	
BrookInterfacedObject > TInterfacedObject	

Description

Is the main interfaced object for Brook.

# Unit BrookConfigurator

## 5.1 Description

Brook Configurator unit. Copyright (C) 2012 Silvio Clecio.

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### 5.2 Uses

- BrookClasses(4)
- BrookUtils(23)
- BrookException(11)
- BrookMessages(15)
- BrookConsts(6)
- Classes
- SysUtils
- TypInfo

#### 5.3 Overview

EBrookConfigurator Class Handles exceptions for TBrookConfigurator(5.4).

TBrookConfigurator Class Configures objects by means of string or file.

#### **5.4** Classes, Interfaces, Objects and Records

#### EBrookConfigurator Class \_

### Hierarchy

EBrookConfigurator > EBrook(11.4) > Exception

#### Description

Handles exceptions for TBrookConfigurator(5.4).

### TBrookConfigurator Class \_

### Hierarchy

TBrookConfigurator > TBrookObject(4.4) > TObject

### Description

Configures objects by means of string or file.

#### **Properties**

AutoLoaded

public property AutoLoaded: Boolean read FAutoLoaded write FAutoLoaded;

Defines if the configuration is read automatically.

Configuration public property Configuration: string read FConfiguration write FConfiguration;

Defines the configuration using one of the following formats. Exemple:

cfg.Configuration := 'param1=value1;param2=value2;param3=value2';

cfg.Configuration := 'cgi1.cfg';

This option requires the following file format:

param1=value1 param2=value2 param3=value2

NOTE: If a configuration is passed to BrookSettings.Configuration, the data informed

in this property will be disregarded.

**Target** public property Target: TObject read FTarget write FTarget;

Defines the object to be configured.

Values public property Values[AName: string]: string read GetValues;

Devolve o valor de um parmetro.

# ClassChecking public property ClassChecking: Boolean read FClassChecking write FClassChecking;

Enables the class name checking, i.e., if the class of the configuring object is a 'TObject1', the following string will be informed as configuration:

'tobject1.param1=value1;tobject1.param2=value2;tobject1.param3=value3'

This feature is useful when more then one object will be configured in one or more configurator objects.

#### Methods

#### Create

Declaration public constructor Create;

**Description** Creates an instance of a TBrookConfigurator(5.4) class.

#### Create

Declaration public constructor Create(const AConfiguration: string); reintroduce;

**Description** Creates an instance of a TBrookConfigurator(5.4) class passing the configuration in its parameter.

#### Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookConfigurator(5.4) class.

#### Load

Declaration public function Load: TBrookConfigurator; virtual;

**Description** Loads the configuration file to the memory.

#### Clear

Declaration public procedure Clear;

**Description** Clears the internal configuration.

#### Configure

Declaration public procedure Configure;

**Description** Configures the object informed in the Target property.

## 5.5 Types

## TBrookConfiguratorClass \_\_\_\_\_

Declaration TBrookConfiguratorClass = class of TBrookConfigurator;

 $\textbf{Description} \ \ \text{Is a metaclass for $\tt TBrookConfigurator} (5.4) \ class.$ 

## Unit BrookConsts

## 6.1 Description

Brook Consts unit.

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## 6.2 Constants

ES	
Declaration	
Description	Empty string.
BR	
	BR = ' ';
Description	BR HTML tag.
HS	
Declaration	HS = ': ';
Description	Param separator.

LE	
Declaration	<pre>LE = LineEnding;</pre>
Description	Line ending.
NU	
Declaration	NU = #0;
Description	NULL
HT	
Declaration	HT = #9;
Description	TAB
LF	
Declaration	LF = #10;
Description	LF
CR	
Declaration	CR = #13;
Description	CR
CRLF	
Declaration	CRLF = CR + LF;
Description	CRLF
NullDate .	
Declaration	<pre>NullDate = 0;</pre>
Description	Null date.
SP	
Declaration	SP = #32;
Description	Space.

DQ	
Declaration	
Description	"
PO	
Declaration	PO = #35;
Description	#
PT	
Declaration	PT = #37;
Description	%
AM	
Declaration	AM = #38;
Description	&
AP	
Declaration	AP = #39;
Description	,
PS	
Declaration	PS = #40;
Description	
PE	
Declaration	PE = #41;
Description	
AK	
Declaration	AK = #42;
Description	*

CS	
Declaration 0	CS = #44;
Description ,	
DT	
Declaration D	OT = #46;
Description .	
US	
Declaration U	JS = #47;
Description /	
СО	
Declaration C	CO = #58;
Description :	
SC	
Declaration S	SC = #59;
Description ;	
LT	
Declaration L	T = #60;
Description <	
EQ	
Declaration E	EQ = #61;
Description =	=
GT	
Declaration G	GT = #62;
Description	

QU
Declaration QU = #63;
Description ?
AT
Declaration AT = #64;
Description @
DS
Declaration DS = #92;
$\textbf{Description} \ \setminus \\$
BROOK_GUID
<pre>Declaration BROOK_GUID = '{D2BDD8EF-78C0-47CD-95C3-664CDFFDAA9E}';</pre>
BROOK_APP_GUID
Declaration BROOK_APP_GUID = '{669B03B7-AA2D-4B64-AAFC-4FBD4A41267E}';
BROOK_ERROR_MASK
Declaration BROOK_ERROR_MASK = '%s: %s';
BROOK_GMT_FRMT
Declaration BROOK_GMT_FRMT = '%s, %.2d %s %d %.2d:%.2d:%.2d GMT';
BROOK_UUID_MASK
Declaration BROOK_UUID_MASK = '%.8x%.4x%.4x%.2x%.2x%.2x%.2x%.2x%.2x%.2x%.2x%.2x%;
BROOK_UUID_SEP_MASK
Declaration BROOK_UUID_SEP_MASK = '%.8x-%.4x-%.4x-%.2x%.2x%.2x%.2x%.2x%.2x%.2x%.2x';
BROOK_OVERRIDDEN_METHOD
Declaration BROOK_OVERRIDDEN_METHOD = '_METHOD';
BROOK_DEFAULT_LANGUAGE
Declaration BROOK_DEFAULT_LANGUAGE = 'en-US';

#### BROOK\_SESS\_ID \_\_\_\_\_

Declaration BROOK\_SESS\_ID = 'BRKSESSID';

#### BROOK\_SESS\_PREFIX \_\_\_\_\_

Declaration BROOK\_SESS\_PREFIX = 'brook\_sess\_';

#### BROOK\_SESS\_DEFAULT\_TIMEOUT \_\_\_\_\_

Declaration BROOK\_SESS\_DEFAULT\_TIMEOUT = 3 \* 60;

**Description** 3 minutes.

#### BROOK\_HTTP\_DAEMON\_NAME \_\_\_\_\_

Declaration BROOK\_HTTP\_DAEMON\_NAME = 'BrookHTTPDaemon';

#### BROOK\_MAX\_MIME\_TYPE \_\_\_

Declaration BROOK\_MAX\_MIME\_TYPE = 682;

#### BROOK\_MIME\_TYPE \_

Declaration BROOK\_MIME\_TYPE: array[0..BROOK\_MAX\_MIME\_TYPE, 0..2] of string = ( ('3D Crossword Plugin', 'application/vnd.hzn-3d-crossword', '.x3d'), ('3GP', 'video/3gpp', '.3gp'), ('3GP2', 'video/3gpp2', '.3g2'), ('3GPP MSEQ File', 'application/vnd.mseq', '.mseq'), ('3M Post It Notes', 'application/vnd.3m.post-it-notes', '.pwn'), ('3rd Generation Partnership Project - Pic Large', 'application/vnd.3gpp.pic-bw-large', '.plb'), ('3rd Generation Partnership Project - Pic Small', 'application/vnd.3gpp.pic-bw-small', '.psb'), ('3rd Generation Partnership Project - Pic Var', 'application/vnd.3gpp.pic-bw-var', '.pvb'), ('3rd Generation Partnership Project - Transaction Capabilities Application Part', 'application/vnd.3gpp2.tcap', '.tcap'), ('7-Zip', 'application/x-7z-compressed', '.7z'), ('AbiWord', 'application/x-abiword', '.abw'), ('Ace Archive', 'application/x-ace-compressed', '.ace'), ('Active Content Compression', 'application/vnd.americandynamics.acc', '.acc'), ('ACU Cobol', 'application/vnd.acucobol', '.acu'), ('ACU Cobol', 'application/vnd.acucorp', '.atc'), ('Adaptive differential pulse-code modulation', 'audio/adpcm', '.adp'), ('Adobe (Macropedia) Authorware - Binary File', 'application/x-authorware-bin', '.aab'), ('Adobe (Macropedia) Authorware - Map', 'application/x-authorware-map', '.aam'), ('Adobe (Macropedia) Authorware - Segment File', 'application/x-authorware-seg', '.aas'), ('Adobe AIR Application',

'application/vnd.adobe.air-application-installer-package+zip', '.air'), ('Adobe Flash', 'application/x-shockwave-flash', '.swf'), ('Adobe Flex Project', 'application/vnd.adobe.fxp', '.fxp'), ('Adobe Portable Document

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Format', 'application/pdf', '.pdf'), ('Adobe PostScript Printer Description
File Format', 'application/vnd.cups-ppd', '.ppd'), ('Adobe Shockwave Player',
'application/x-director', '.dir'), ('Adobe XML Data Package',
'application/vnd.adobe.xdp+xml', '.xdp'), ('Adobe XML Forms Data Format',
'application/vnd.adobe.xfdf', '.xfdf'), ('Advanced Audio Coding (AAC)',
'audio/x-aac', '.aac'), ('Ahead AIR Application',
'application/vnd.ahead.space', '.ahead'), ('AirZip FileSECURE',
'application/vnd.airzip.filesecure.azf', '.azf'), ('AirZip FileSECURE',
'application/vnd.airzip.filesecure.azs', '.azs'), ('Amazon Kindle eBook
format', 'application/vnd.amazon.ebook', '.azw'), ('AmigaDE',
'application/vnd.amiga.ami', '.ami'), ('Andrew Toolkit',
'application/andrew-inset', 'N/A'), ('Android Package Archive',
'application/vnd.android.package-archive', '.apk'), ('ANSER-WEB Terminal
Client - Certificate Issue',
'application/vnd.anser-web-certificate-issue-initiation', '.cii'),
('ANSER-WEB Terminal Client - Web Funds Transfer',
'application/vnd.anser-web-funds-transfer-initiation', '.fti'), ('Antix Game
Player', 'application/vnd.antix.game-component', '.atx'), ('Apple Installer
Package', 'application/vnd.apple.installer+xml', '.mpkg'), ('Applixware',
'application/applixware', '.aw'), ('Archipelago Lesson Player',
'application/vnd.hhe.lesson-player', '.les'), ('Arista Networks Software
Image', 'application/vnd.aristanetworks.swi', '.swi'), ('Assembler Source
File', 'text/x-asm', '.s'), ('Atom Publishing Protocol',
\verb|'application/atomcat+xml', '.atomcat'|, (\verb|'Atom Publishing Protocol Service||) \\
Document', 'application/atomsvc+xml', '.atomsvc'), ('Atom Syndication
Format', 'application/atom+xml', '.atom, .xml'), ('Attribute Certificate',
'application/pkix-attr-cert', '.ac'), ('Audio Interchange File Format',
'audio/x-aiff', '.aif'), ('Audio Video Interleave (AVI)', 'video/x-msvideo',
'.avi'), ('Audiograph', 'application/vnd.audiograph', '.aep'), ('AutoCAD
DXF', 'image/vnd.dxf', '.dxf'), ('Autodesk Design Web Format (DWF)',
'model/vnd.dwf', '.dwf'), ('Binary CPIO Archive', 'application/x-bcpio',
'.bcpio'), ('Binary Data', 'application/octet-stream', '.bin'), ('Bitmap
Image File', 'image/bmp', '.bmp'), ('BitTorrent', 'application/x-bittorrent',
'.torrent'), ('Blackberry COD File', 'application/vnd.rim.cod', '.cod'),
('Blueice Research Multipass', 'application/vnd.blueice.multipass', '.mpm'),
('BMI Drawing Data Interchange', 'application/vnd.bmi', '.bmi'), ('Bourne
Shell Script', 'application/x-sh', '.sh'), ('BTIF', 'image/prs.btif',
'.btif'), ('BusinessObjects', 'application/vnd.businessobjects', '.rep'),
('Bzip Archive', 'application/x-bzip', '.bz'), ('Bzip2 Archive',
'application/x-bzip2', '.bz2'), ('C Shell Script', 'application/x-csh',
'.csh'), ('C Source File', 'text/x-c', '.c'), ('CambridgeSoft Chem Draw',
'application/vnd.chemdraw+xml', '.cdxml'), ('Cascading Style Sheets (CSS)',
'text/css', '.css'), ('ChemDraw eXchange file', 'chemical/x-cdx', '.cdx'),
('Chemical Markup Language', 'chemical/x-cml', '.cml'), ('Chemical Style
Markup Language', 'chemical/x-csml', '.csml'), ('CIM Database',
'application/vnd.contact.cmsg', '.cdbcmsg'), ('Claymore Data Files',
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'application/vnd.claymore', '.cla'), ('Clonk Game',
'application/vnd.clonk.c4group', '.c4g'), ('Close Captioning - Subtitle',
'image/vnd.dvb.subtitle', '.sub'), ('Cloud Data Management Interface (CDMI) -
Capability', 'application/cdmi-capability', '.cdmia'), ('Cloud Data
Management Interface (CDMI) - Contaimer', 'application/cdmi-container',
'.cdmic'), ('Cloud Data Management Interface (CDMI) - Domain',
'application/cdmi-domain', '.cdmid'), ('Cloud Data Management Interface
(CDMI) - Object', 'application/cdmi-object', '.cdmio'), ('Cloud Data
Management Interface (CDMI) - Queue', 'application/cdmi-queue', '.cdmiq'),
('ClueTrust CartoMobile - Config',
'application/vnd.cluetrust.cartomobile-config', '.c11amc'), ('ClueTrust
CartoMobile - Config Package',
'application/vnd.cluetrust.cartomobile-config-pkg', '.c11amz'), ('CMU Image',
'image/x-cmu-raster', '.ras'), ('COLLADA', 'model/vnd.collada+xml', '.dae'),
('Comma-Seperated Values', 'text/csv', '.csv'), ('Compact Pro',
'application/mac-compactpro', '.cpt'), ('Compiled Wireless Markup Language
(WMLC)', 'application/vnd.wap.wmlc', '.wmlc'), ('Computer Graphics Metafile',
'image/cgm', '.cgm'), ('CoolTalk', 'x-conference/x-cooltalk', '.ice'),
('Corel Metafile Exchange (CMX)', 'image/x-cmx', '.cmx'), ('CorelXARA',
'application/vnd.xara', '.xar'), ('CosmoCaller',
'application/vnd.cosmocaller', '.cmc'), ('CPIO Archive',
'application/x-cpio', '.cpio'), ('CrickSoftware - Clicker',
'application/vnd.crick.clicker', '.clkx'), ('CrickSoftware - Clicker -
Keyboard', 'application/vnd.crick.clicker.keyboard', '.clkk'),
('CrickSoftware - Clicker - Palette',
'application/vnd.crick.clicker.palette', '.clkp'), ('CrickSoftware - Clicker
- Template', 'application/vnd.crick.clicker.template', '.clkt'),
('CrickSoftware - Clicker - Wordbank',
'application/vnd.crick.clicker.wordbank', '.clkw'), ('Critical Tools - PERT
Chart EXPERT', 'application/vnd.criticaltools.wbs+xml', '.wbs'),
('CryptoNote', 'application/vnd.rig.cryptonote', '.cryptonote'),
('Crystallographic Interchange Format', 'chemical/x-cif', '.cif'),
('CrystalMaker Data Format', 'chemical/x-cmdf', '.cmdf'), ('CU-SeeMe',
'application/cu-seeme', '.cu'), ('CU-Writer', 'application/prs.cww', '.cww'),
('Curl - Applet', 'text/vnd.curl', '.curl'), ('Curl - Detached Applet',
'text/vnd.curl.dcurl', '.dcurl'), ('Curl - Manifest File',
'text/vnd.curl.mcurl', '.mcurl'), ('Curl - Source Code',
'text/vnd.curl.scurl', '.scurl'), ('CURL Applet', 'application/vnd.curl.car',
'.car'), ('CURL Applet', 'application/vnd.curl.pcurl', '.pcurl'),
('CustomMenu', 'application/vnd.yellowriver-custom-menu', '.cmp'), ('Data
Structure for the Security Suitability of Cryptographic Algorithms',
'application/dssc+der', '.dssc'), ('Data Structure for the Security
Suitability of Cryptographic Algorithms', 'application/dssc+xml', '.xdssc'),
('Debian Package', 'application/x-debian-package', '.deb'), ('DECE Audio',
'audio/vnd.dece.audio', '.uva'), ('DECE Graphic', 'image/vnd.dece.graphic',
'.uvi'), ('DECE High Definition Video', 'video/vnd.dece.hd', '.uvh'), ('DECE
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Mobile Video', 'video/vnd.dece.mobile', '.uvm'), ('DECE MP4',
'video/vnd.uvvu.mp4', '.uvu'), ('DECE PD Video', 'video/vnd.dece.pd',
'.uvp'), ('DECE SD Video', 'video/vnd.dece.sd', '.uvs'), ('DECE Video',
'video/vnd.dece.video', '.uvv'), ('Device Independent File Format (DVI)',
'application/x-dvi', '.dvi'), ('Digital Siesmograph Networks - SEED
Datafiles', 'application/vnd.fdsn.seed', '.seed'), ('Digital Talking Book',
'application/x-dtbook+xml', '.dtb'), ('Digital Talking Book - Resource File',
'application/x-dtbresource+xml', '.res'), ('Digital Video Broadcasting',
'application/vnd.dvb.ait', '.ait'), ('Digital Video Broadcasting',
'application/vnd.dvb.service', '.svc'), ('Digital Winds Music',
'audio/vnd.digital-winds', '.eol'), ('DjVu', 'image/vnd.djvu', '.djvu'),
('Document Type Definition', 'application/xml-dtd', '.dtd'), ('Dolby Meridian
Lossless Packing', 'application/vnd.dolby.mlp', '.mlp'), ('Doom Video Game',
'application/x-doom', '.wad'), ('DPGraph', 'application/vnd.dpgraph',
'.dpg'), ('DRA Audio', 'audio/vnd.dra', '.dra'), ('DreamFactory',
'application/vnd.dreamfactory', '.dfac'), ('DTS Audio', 'audio/vnd.dts',
'.dts'), ('DTS High Definition Audio', 'audio/vnd.dts.hd', '.dtshd'), ('DWG
Drawing', 'image/vnd.dwg', '.dwg'), ('DynaGeo', 'application/vnd.dynageo',
'.geo'), ('ECMAScript', 'application/ecmascript', '.es'), ('EcoWin Chart',
'application/vnd.ecowin.chart', '.mag'), ('EDMICS 2000',
'image/vnd.fujixerox.edmics-mmr', '.mmr'), ('EDMICS 2000',
'image/vnd.fujixerox.edmics-rlc', '.rlc'), ('Efficient XML Interchange',
'application/exi', '.exi'), ('EFI Proteus',
'application/vnd.proteus.magazine', '.mgz'), ('Electronic Publication',
'application/epub+zip', '.epub'), ('Email Message', 'message/rfc822',
'.eml'), ('Enliven Viewer', 'application/vnd.enliven', '.nml'), ('Express by
Infoseek', 'application/vnd.is-xpr', '.xpr'), ('eXtended Image File Format
(XIFF)', 'image/vnd.xiff', '.xif'), ('Extensible Forms Description Language',
'application/vnd.xfdl', '.xfdl'), ('Extensible MultiModal Annotation',
'application/emma+xml', '.emma'), ('EZPix Secure Photo Album',
'application/vnd.ezpix-album', '.ez2'), ('EZPix Secure Photo Album',
'application/vnd.ezpix-package', '.ez3'), ('FAST Search & Transfer ASA',
'image/vnd.fst', '.fst'), ('FAST Search & Transfer ASA', 'video/vnd.fvt',
'.fvt'), ('FastBid Sheet', 'image/vnd.fastbidsheet', '.fbs'), ('FCS Express
Layout Link', 'application/vnd.denovo.fcselayout-link', '.fe_launch'),
('Flash Video', 'video/x-f4v', '.f4v'), ('Flash Video', 'video/x-flv',
'.flv'), ('FlashPix', 'image/vnd.fpx', '.fpx'), ('FlashPix',
'image/vnd.net-fpx', '.npx'), ('FLEXSTOR', 'text/vnd.fmi.flexstor', '.flx'),
('FLI/FLC Animation Format', 'video/x-fli', '.fli'), ('FluxTime Clip',
'application/vnd.fluxtime.clip', '.ftc'), ('Forms Data Format',
'application/vnd.fdf', '.fdf'), ('Fortran Source File', 'text/x-fortran',
'.f'), ('FrameMaker Interchange Format', 'application/vnd.mif', '.mif'),
('FrameMaker Normal Format', 'application/vnd.framemaker', '.fm'), ('FreeHand
MX', 'image/x-freehand', '.fh'), ('Friendly Software Corporation',
'application/vnd.fsc.weblaunch', '.fsc'), ('Frogans Player',
'application/vnd.frogans.fnc', '.fnc'), ('Frogans Player',
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'application/vnd.frogans.ltf', '.ltf'), ('Fujitsu - Xerox 2D CAD Data',
'application/vnd.fujixerox.ddd', '.ddd'), ('Fujitsu - Xerox DocuWorks',
'application/vnd.fujixerox.docuworks', '.xdw'), ('Fujitsu - Xerox DocuWorks
Binder', 'application/vnd.fujixerox.docuworks.binder', '.xbd'), ('Fujitsu
Oasys', 'application/vnd.fujitsu.oasys', '.oas'), ('Fujitsu Oasys',
'application/vnd.fujitsu.oasys2', '.oa2'), ('Fujitsu Oasys',
'application/vnd.fujitsu.oasys3', '.oa3'), ('Fujitsu Oasys',
'application/vnd.fujitsu.oasysgp', '.fg5'), ('Fujitsu Oasys',
'application/vnd.fujitsu.oasysprs', '.bh2'), ('FutureSplash Animator',
'application/x-futuresplash', '.spl'), ('FuzzySheet',
'application/vnd.fuzzysheet', '.fzs'), ('G3 Fax Image', 'image/g3fax',
'.g3'), ('GameMaker ActiveX', 'application/vnd.gmx', '.gmx'), ('Gen-Trix
Studio', 'model/vnd.gtw', '.gtw'), ('Genomatix Tuxedo Framework',
'application/vnd.genomatix.tuxedo', '.txd'), ('GeoGebra',
'application/vnd.geogebra.file', '.ggb'), ('GeoGebra',
'application/vnd.geogebra.tool', '.ggt'), ('Geometric Description Language
(GDL)', 'model/vnd.gdl', '.gdl'), ('GeoMetry Explorer',
'application/vnd.geometry-explorer', '.gex'), ('GEONExT and JSXGraph',
'application/vnd.geonext', '.gxt'), ('GeoplanW', 'application/vnd.geoplan',
'.g2w'), ('GeospacW', 'application/vnd.geospace', '.g3w'), ('Ghostscript
Font', 'application/x-font-ghostscript', '.gsf'), ('Glyph Bitmap Distribution
Format', 'application/x-font-bdf', '.bdf'), ('GNU Tar Files',
'application/x-gtar', '.gtar'), ('GNU Texinfo Document',
'application/x-texinfo', '.texinfo'), ('Gnumeric', 'application/x-gnumeric',
'.gnumeric'), ('Google Earth - KML', 'application/vnd.google-earth.kml+xml',
'.kml'), ('Google Earth - Zipped KML', 'application/vnd.google-earth.kmz',
'.kmz'), ('GrafEq', 'application/vnd.grafeq', '.gqf'), ('Graphics Interchange
Format', 'image/gif', '.gif'), ('Graphviz', 'text/vnd.graphviz', '.gv'),
('Groove - Account', 'application/vnd.groove-account', '.gac'), ('Groove -
Help', 'application/vnd.groove-help', '.ghf'), ('Groove - Identity Message',
'application/vnd.groove-identity-message', '.gim'), ('Groove - Injector',
'application/vnd.groove-injector', '.grv'), ('Groove - Tool Message',
'application/vnd.groove-tool-message', '.gtm'), ('Groove - Tool Template',
'application/vnd.groove-tool-template', '.tpl'), ('Groove - Vcard',
'application/vnd.groove-vcard', '.vcg'), ('H.261', 'video/h261', '.h261'),
('H.263', 'video/h263', '.h263'), ('H.264', 'video/h264', '.h264'), ('Hewlett
Packard Instant Delivery', 'application/vnd.hp-hpid', '.hpid'),
('Hewlett-Packard''s WebPrintSmart', 'application/vnd.hp-hps', '.hps'),
('Hierarchical Data Format', 'application/x-hdf', '.hdf'), ('Hit''n'', Mix',
'audio/vnd.rip', '.rip'), ('Homebanking Computer Interface (HBCI)',
'application/vnd.hbci', '.hbci'), ('HP Indigo Digital Press - Job Layout
Languate', 'application/vnd.hp-jlyt', '.jlt'), ('HP Printer Command
Language', 'application/vnd.hp-pcl', '.pcl'), ('HP-GL/2 and HP RTL',
'application/vnd.hp-hpgl', '.hpgl'), ('HV Script',
'application/vnd.yamaha.hv-script', '.hvs'), ('HV Voice Dictionary',
'application/vnd.yamaha.hv-dic', '.hvd'), ('HV Voice Parameter',
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'application/vnd.yamaha.hv-voice', '.hvp'), ('Hydrostatix Master Suite',
'application/vnd.hydrostatix.sof-data', '.sfd-hdstx'), ('Hyperstudio',
'application/hyperstudio', '.stk'), ('Hypertext Application Language',
'application/vnd.hal+xml', '.hal'), ('HyperText Markup Language (HTML)',
'text/html', '.html'), ('IBM DB2 Rights Manager',
'application/vnd.ibm.rights-management', '.irm'), ('IBM Electronic Media
Management System - Secure Container',
'application/vnd.ibm.secure-container', '.sc'), ('iCalendar',
'text/calendar', '.ics'), ('ICC profile', 'application/vnd.iccprofile',
'.icc'), ('Icon Image', 'image/x-icon', '.ico'), ('igLoader',
'application/vnd.igloader', '.igl'), ('Image Exchange Format', 'image/ief',
'.ief'), ('ImmerVision PURE Players', 'application/vnd.immervision-ivp',
'.ivp'), ('ImmerVision PURE Players', 'application/vnd.immervision-ivu',
'.ivu'), ('IMS Networks', 'application/reginfo+xml', '.rif'), ('In3D - 3DML',
'text/vnd.in3d.3dml', '.3dml'), ('In3D - 3DML', 'text/vnd.in3d.spot',
'.spot'), ('Initial Graphics Exchange Specification (IGES)', 'model/iges',
'.igs'), ('Interactive Geometry Software', 'application/vnd.intergeo',
'.i2g'), ('Interactive Geometry Software Cinderella',
'application/vnd.cinderella', '.cdy'), ('Intercon FormNet',
'application/vnd.intercon.formnet', '.xpw'), ('International Society for
Advancement of Cytometry', 'application/vnd.isac.fcs', '.fcs'), ('Internet
Protocol Flow Information Export', 'application/ipfix', '.ipfix'), ('Internet
Public Key Infrastructure - Certificate', 'application/pkix-cert', '.cer'),
('Internet Public Key Infrastructure - Certificate Management Protocole',
'application/pkixcmp', '.pki'), ('Internet Public Key Infrastructure -
Certificate Revocation Lists', 'application/pkix-crl', '.crl'), ('Internet
Public Key Infrastructure - Certification Path', 'application/pkix-pkipath',
'.pkipath'), ('IOCOM Visimeet', 'application/vnd.insors.igm', '.igm'), ('IP
Unplugged Roaming Client', 'application/vnd.ipunplugged.rcprofile',
'.rcprofile'), ('iRepository / Lucidoc Editor',
'application/vnd.irepository.package+xml', '.irp'), ('J2ME App Descriptor',
'text/vnd.sun.j2me.app-descriptor', '.jad'), ('Java Archive',
'application/java-archive', '.jar'), ('Java Bytecode File',
'application/java-vm', '.class'), ('Java Network Launching Protocol',
'application/x-java-jnlp-file', '.jnlp'), ('Java Serialized Object',
'application/java-serialized-object', '.ser'), ('Java Source File',
'text/x-java-source, java', '.java'), ('JavaScript', 'application/javascript',
'.js'), ('JavaScript Object Notation (JSON)', 'application/json', '.json'),
('Joda Archive', 'application/vnd.joost.joda-archive', '.joda'), ('JPEG 2000
Compound Image File Format', 'video/jpm', '.jpm'), ('JPEG Image',
'image/jpeg', '.jpeg, .jpg'), ('JPGVideo', 'video/jpeg', '.jpgv'),
('Kahootz', 'application/vnd.kahootz', '.ktz'), ('Karaoke on Chipnuts
Chipsets', 'application/vnd.chipnuts.karaoke-mmd', '.mmd'), ('KDE KOffice
Office Suite - Karbon', 'application/vnd.kde.karbon', '.karbon'), ('KDE
KOffice Office Suite - KChart', 'application/vnd.kde.kchart', '.chrt'), ('KDE
KOffice Office Suite - Kformula', 'application/vnd.kde.kformula', '.kfo'),
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('KDE KOffice Office Suite - Kivio', 'application/vnd.kde.kivio', '.flw'),
('KDE KOffice Office Suite - Kontour', 'application/vnd.kde.kontour',
'.kon'), ('KDE KOffice Office Suite - Kpresenter',
'application/vnd.kde.kpresenter', '.kpr'), ('KDE KOffice Office Suite -
Kspread', 'application/vnd.kde.kspread', '.ksp'), ('KDE KOffice Office Suite
- Kword', 'application/vnd.kde.kword', '.kwd'), ('Kenamea App',
'application/vnd.kenameaapp', '.htke'), ('Kidspiration',
'application/vnd.kidspiration', '.kia'), ('Kinar Applications',
'application/vnd.kinar', '.kne'), ('Kodak Storyshare',
'application/vnd.kodak-descriptor', '.sse'), ('Laser App Enterprise',
'application/vnd.las.las+xml', '.lasxml'), ('LaTeX', 'application/x-latex',
'.latex'), ('Life Balance - Desktop Edition',
'application/vnd.llamagraphics.life-balance.desktop', '.lbd'), ('Life Balance
- Exchange Format',
'application/vnd.llamagraphics.life-balance.exchange+xml', '.lbe'),
('Lightspeed Audio Lab', 'application/vnd.jam', '.jam'), ('Lotus 1-2-3',
'application/vnd.lotus-1-2-3', '.123'), ('Lotus Approach',
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('Unity 3d', 'application/vnd.unity', '.unityweb'), ('Universal Forms
Description Language', 'application/vnd.ufdl', '.ufd'), ('URI Resolution
Services', 'text/uri-list', '.uri'), ('User Interface Quartz - Theme
(Symbian)', 'application/vnd.uiq.theme', '.utz'), ('Ustar (Uniform Standard
Tape Archive)', 'application/x-ustar', '.ustar'), ('UUEncode',
'text/x-uuencode', '.uu'), ('vCalendar', 'text/x-vcalendar', '.vcs'),
```

```
('vCard', 'text/x-vcard', '.vcf'), ('Video CD', 'application/x-cdlink',
'.vcd'), ('Viewport+', 'application/vnd.vsf', '.vsf'), ('Virtual Reality
Modeling Language', 'model/vrml', '.wrl'), ('VirtualCatalog',
'application/vnd.vcx', '.vcx'), ('Virtue MTS', 'model/vnd.mts', '.mts'),
('Virtue VTU', 'model/vnd.vtu', '.vtu'), ('Visionary',
'application/vnd.visionary', '.vis'), ('Vivo', 'video/vnd.vivo', '.viv'),
('Voice Browser Call Control', 'application/ccxml+xml,', '.ccxml'),
('VoiceXML', 'application/voicexml+xml', '.vxml'), ('WAIS Source',
'application/x-wais-source', '.src'), ('WAP Binary XML (WBXML)',
'application/vnd.wap.wbxml', '.wbxml'), ('WAP Bitamp (WBMP)',
'image/vnd.wap.wbmp', '.wbmp'), ('Waveform Audio File Format (WAV)',
'audio/x-wav', '.wav'), ('Web Distributed Authoring and Versioning',
'application/davmount+xml', '.davmount'), ('Web Open Font Format',
'application/x-font-woff', '.woff'), ('Web Services Policy',
'application/wspolicy+xml', '.wspolicy'), ('WebP Image', 'image/webp',
'.webp'), ('WebTurbo', 'application/vnd.webturbo', '.wtb'), ('Widget
Packaging and XML Configuration', 'application/widget', '.wgt'), ('WinHelp',
'application/winhlp', '.hlp'), ('Wireless Markup Language (WML)',
'text/vnd.wap.wml', '.wml'), ('Wireless Markup Language Script (WMLScript)',
'text/vnd.wap.wmlscript', '.wmls'), ('WMLScript',
'application/vnd.wap.wmlscriptc', '.wmlsc'), ('Wordperfect',
'application/vnd.wordperfect', '.wpd'), ('Worldtalk',
'application/vnd.wt.stf', '.stf'), ('WSDL - Web Services Description
Language', 'application/wsdl+xml', '.wsdl'), ('X BitMap', 'image/x-xbitmap',
'.xbm'), ('X PixMap', 'image/x-xpixmap', '.xpm'), ('X Window Dump',
'image/x-xwindowdump', '.xwd'), ('X.509 Certificate',
'application/x-x509-ca-cert', '.der'), ('Xfig', 'application/x-xfig',
'.fig'), ('XHTML - The Extensible HyperText Markup Language',
'application/xhtml+xml', '.xhtml'), ('XML - Extensible Markup Language',
'application/xml', '.xml'), ('XML Configuration Access Protocol - XCAP Diff',
'application/xcap-diff+xml', '.xdf'), ('XML Encryption Syntax and
Processing', 'application/xenc+xml', '.xenc'), ('XML Patch Framework',
\verb|'application/patch-ops-error+xml', '.xer'|, ('XML Resource Lists',
'application/resource-lists+xml', '.rl'), ('XML Resource Lists',
'application/rls-services+xml', '.rs'), ('XML Resource Lists Diff',
'application/resource-lists-diff+xml', '.rld'), ('XML Transformations',
'application/xslt+xml', '.xslt'), ('XML-Binary Optimized Packaging',
'application/xop+xml', '.xop'), ('XPInstall - Mozilla',
'application/x-xpinstall', '.xpi'), ('XSPF - XML Shareable Playlist Format',
'application/xspf+xml', '.xspf'), ('XUL - XML User Interface Language',
'application/vnd.mozilla.xul+xml', '.xul'), ('XYZ File Format',
'chemical/x-xyz', '.xyz'), ('YANG Data Modeling Language',
'application/yang', '.yang'), ('YIN (YANG - XML)', 'application/yin+xml',
'.yin'), ('Z.U.L. Geometry', 'application/vnd.zul', '.zir'), ('Zip Archive',
'application/zip', '.zip'), ('ZVUE Media Manager',
'application/vnd.handheld-entertainment+xml', '.zmm'), ('Zzazz Deck',
```

'application/vnd.zzazz.deck+xml', '.zaz') );

# Unit BrookDataBase

## 7.1 Description

Brook DataBase unit.

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## **7.2** Uses

- BrookClasses(4)
- BrookException(11)
- BrookConsts(6)
- BrookDBConsts(9)
- BrookMessages(15)
- BrookConfigurator(5)
- Classes
- SysUtils

## 7.3 Overview

EBrookDataBase Class Handles exceptions for TBrookDataBase(7.4).

EBrookDataBases Class Handles exceptions for TBrookDataBases(7.4).

TBrookDataBase Class Offers general abstract features for databases handling.

TBrookDataBases Class Registers and configure database classes.

## 7.4 Classes, Interfaces, Objects and Records

## EBrookDataBase Class \_

## Hierarchy

EBrookDataBase > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookDataBase(7.4).

### EBrookDataBases Class \_\_\_\_\_

## Hierarchy

EBrookDataBases > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookDataBases(7.4).

## TBrookDataBase Class \_

### Hierarchy

TBrookDataBase > TBrookObject(4.4) > TObject

### Description

Offers general abstract features for databases handling.

## **Properties**

Connected public property Connected: Boolean read GetConnected;

Checks if the database is connected.

Driver public property Driver: string read GetDriver write SetDriver;

Defines the driver name. In Zeos driver is know as "Protocol"; in Unidac, "Provider", etc.

Database public property Database: string read GetDatabase write SetDatabase;

Defines the database name or the database path.

User public property User: string read GetUser write SetUser;

Defines the database user.

Password public property Password: string read GetPassword write SetPassword;

Defines the database password.

Host public property Host: string read GetHost write SetHost;

Defines the database host.

Port public property Port: Integer read GetPort write SetPort;

Defines the database port.

Connection public property Connection: TObject read GetConnection;

Is the instance of the database broker.

#### Methods

Init

Declaration public constructor Init; virtual;

**Description** Creates an instance of a TBrookDataBase(7.4) class.

Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookDataBase(7.4) class.

Create

Declaration public class function Create: TBrookDataBase;

**Description** Creates an instance of a TBrookDataBase(7.4) class.

Register

Declaration public class procedure Register;

**Description** Register the broker class.

Unregister

Declaration public class procedure Unregister;

**Description** Unregister the broker class.

## AddObject

Declaration public procedure AddObject(AObject: TObject);

**Description** Adds objects that will be automatically freed when the database object is destroyed.

### GetLibrary

Declaration public class function GetLibrary: string; virtual; abstract;

**Description** Get the broker library name, exemple: SQLdb, Zeos, UniDAC etc.

#### Connect

Declaration public procedure Connect; virtual; abstract;

**Description** Connects to the data base.

#### Disconnect

Declaration public procedure Disconnect; virtual; abstract;

**Description** Disconnects from the data base.

#### InTransaction

Declaration public function InTransaction: Boolean; virtual; abstract;

**Description** Checks if a transaction is active.

#### **StartTransaction**

Declaration public procedure StartTransaction; virtual; abstract;

**Description** Starts a transaction.

### Commit

Declaration public procedure Commit; virtual; abstract;

 ${\bf Description} \quad {\bf Commits} \ {\bf a} \ {\bf transaction}.$ 

#### Rollback

Declaration public procedure Rollback; virtual; abstract;

 ${\bf Description} \quad {\bf Rollbacks} \ {\bf a} \ {\bf transaction}.$ 

#### TBrookDataBases Class \_\_\_\_

## Hierarchy

TBrookDataBases > TBrookObject(4.4) > TObject

## Description

Registers and configure database classes.

## **Properties**

Current public property Current: TBrookDataBase read FCurrent write FCurrent;

The current database item.

Items public property Items[const AIndex: Integer]: TBrookDataBaseClass read

GetItems write SetItems;

The list of database items.

 ${\bf Configurator}\ \ {\tt public\ property\ Configurator:}\ \ {\tt TBrookConfigurator\ read\ FConfigurator;}$ 

A configurator for database items.

#### Methods

Create

Declaration public constructor Create;

**Description** Creates an instance of a TBrookDataBases(7.4) class.

Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookDataBases(7.4) class.

RegisterService

Declaration public class procedure RegisterService;

**Description** Registers the service provided by this class.

UnregisterService

Declaration public class procedure UnregisterService;

**Description** Unregisters the service provided by this class.

#### Service

Declaration public class function Service: TBrookDataBases;

**Description** Return a instance of this class.

#### CreateDataBase

Declaration public function CreateDataBase: TBrookDataBase;

**Description** Creates an database item.

#### **FreeCurrent**

Declaration public procedure FreeCurrent;

**Description** Frees the current database item.

#### Count

Declaration public function Count: Integer;

**Description** Returns the number of registered databases.

#### Find

Declaration public function Find(const ALibrary: string): TBrookDataBaseClass;

**Description** Finds a database item by its library name.

### **ItemByLibrary**

Declaration public function ItemByLibrary(const ALibrary: string):

TBrookDataBaseClass;

**Description** Returns a database item by its library name.

#### $\mathbf{Add}$

Declaration public procedure Add(AClass: TBrookDataBaseClass);

**Description** Adds a database item.

#### Remove

Declaration public procedure Remove(AClass: TBrookDataBaseClass);

**Description** Removes a database item.

# 7.5 Types

## TBrookDataBaseClass \_\_\_\_\_

Declaration TBrookDataBaseClass = class of TBrookDataBase;

**Description** Is a metaclass for TBrookDataBase(7.4) class.

## TBrookDataBasesClass \_\_\_\_\_

Declaration TBrookDataBasesClass = class of TBrookDataBases;

 $\textbf{Description} \ \ \text{Is a metaclass for $\tt TBrookDataBases} (7.4) \ class.$ 

# Unit BrookDBAction

# 8.1 Description

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## 8.2 Uses

- BrookAction(1)
- BrookException(11)
- BrookDataBase(7)
- BrookTable(22)
- BrookUtils(23)
- BrookMessages(15)
- BrookConsts(6)
- Classes
- SysUtils

### 8.3 Overview

EBrookDBAction Class Handles exceptions for TBrookDBAction(8.4).

TBrookCustomDBAction Class Custom class for manages HTTP requests and responses when data persistance is required.

TBrookDBAction Class Manages HTTP requests and responses when data persistance is required.

## 8.4 Classes, Interfaces, Objects and Records

## EBrookDBAction Class

## Hierarchy

EBrookDBAction > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookDBAction(8.4).

## TBrookCustomDBAction Class \_\_\_\_\_

## Hierarchy

TBrookCustomDBAction > TBrookAction(1.4) > TBrookObject(4.4) > TObject

## Description

Custom class for manages HTTP requests and responses when data persistance is required.

#### Methods

#### Register

Declaration public class procedure Register(const ATableName, APattern: string; const ADefault: Boolean = False); overload;

**Description** Registers an action linking the request to a database table.

### Register

Declaration public class procedure Register(const ATableName, APattern: string; const AMethod: TBrookRequestMethods; const ADefault: Boolean = False); overload;

**Description** Registers an action linking the request to a database table.

### SetTableName

Declaration public class procedure SetTableName(const ATableName: string);

**Description** Defines the table name.

#### GetTableName

Declaration public class function GetTableName: string;

**Description** Returns the table name.

#### TBrookDBAction Class \_\_\_\_

## Hierarchy

TBrookDBAction > TBrookCustomDBAction(8.4) > TBrookAction(1.4) > TBrookObject(4.4) > TObject

## Description

Manages HTTP requests and responses when data persistance is required.

## **Properties**

DataBase public property DataBase: TBrookDataBase read GetDataBase write SetDataBase;

Defines the current database or return it.

Table public property Table: TBrookTable read GetTable write SetTable;

Get de table linked to the action.

#### Methods

#### Create

Declaration public constructor Create; override;

Description Creates an instance of TBrookDBAction.

# 8.5 Types

## TBrookDBActionClass \_\_\_\_\_

Declaration TBrookDBActionClass = class of TBrookDBAction;

**Description** Is a metaclass for TBrookDBAction(8.4) class.

# Unit BrookDBConsts

## 9.1 Description

Brook DB Consts unit.

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## 9.2 Uses

• BrookConsts(6)

## 9.3 Constants

Declaration BROOK\_FT\_DATE = 'date';

BROOK_FT_NULL
Declaration BROOK_FT_NULL = 'null';
BROOK_FT_STRING
Declaration BROOK_FT_STRING = 'string';
BROOK_FT_BOOLEAN
Declaration BROOK_FT_BOOLEAN = 'boolean';
BROOK_FT_DATE

BROOK_FT_FLOAT
<pre>Declaration BROOK_FT_FLOAT = 'float';</pre>
BROOK_FT_INT
<pre>Declaration BROOK_FT_INT = 'int';</pre>
BROOK_SQL_SELECT_TOKEN
<pre>Declaration BROOK_SQL_SELECT_TOKEN = 'select';</pre>
BROOK_SQL_FROM_TOKEN
<pre>Declaration BROOK_SQL_FROM_TOKEN = 'from';</pre>
BROOK_SQL_WHERE_TOKEN
Declaration BROOK_SQL_WHERE_TOKEN = 'where';
BROOK_SQL_NOTHING_WHERE_TOKEN
Declaration BROOK_SQL_NOTHING_WHERE_TOKEN = BROOK_SQL_WHERE_TOKEN + SP + '1=2';
BROOK_SQL_ORDER_BY_TOKEN
Declaration BROOK_SQL_ORDER_BY_TOKEN = 'order by';
BROOK_SQL_INSERT_TOKEN
Declaration BROOK_SQL_INSERT_TOKEN = 'insert into';
BROOK_SQL_VALUES_TOKEN
Declaration BROOK_SQL_VALUES_TOKEN = 'values';
BROOK_SQL_UPDATE_TOKEN
·
<pre>Declaration BROOK_SQL_UPDATE_TOKEN = 'update';</pre>
BROOK_SQL_SET_TOKEN
<pre>Declaration BROOK_SQL_SET_TOKEN = 'set';</pre>
BROOK_SQL_DELETE_TOKEN
<pre>Declaration BROOK_SQL_DELETE_TOKEN = 'delete';</pre>

BROOK_SQL_EQ_PARAM_TOKEN
Declaration BROOK_SQL_EQ_PARAM_TOKEN = ' = :';
BROOK_SQL_LOWER_TOKEN
Declaration BROOK_SQL_LOWER_TOKEN = 'lower';
BROOK_SQL_LIKE_TOKEN
<pre>Declaration BROOK_SQL_LIKE_TOKEN = 'like';</pre>
BROOK_SQL_AND_TOKEN
·
<pre>Declaration BROOK_SQL_AND_TOKEN = 'and';</pre>
9.4 Variables
BROOK_DEFAULT_LIBRARY_PARAM
Declaration BROOK_DEFAULT_LIBRARY_PARAM: string = 'library';
BROOK_DEFAULT_KEY_NAME
<pre>Declaration BROOK_DEFAULT_KEY_NAME: string = 'id';</pre>
Decial ation Differ Noti Tel Marie. Stiff - Id ,

# Unit BrookDBUtils

# 10.1 Description

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## 10.2 Uses

- BrookConsts(6)
- DB
- SysUtils
- StrUtils

## 10.3 Overview

BrookDataSetToHTMLTable Converts dataset into HTML table.

BrookDataSetToHTML5Table Converts dataset into HTML-5 table.

BrookFieldDefsToHTMLForm Converts FieldDefs into HTML form.

## 10.4 Functions and Procedures

#### BrookDataSetToHTMLTable \_\_

Declaration function BrookDataSetToHTMLTable( ADataSet: TDataSet; const ATitles: array of string; const AClass: string = ES; const ABorderWidth: Integer = 1; const AUnavailableFields: TBrookUnavailableFields = []; ACallback: TBrookDataSetToHTML5TableCallback = nil): string;

**Description** Converts dataset into HTML table.

### $BrookDataSetToHTML5Table \_$

Declaration function BrookDataSetToHTML5Table( ADataSet: TDataSet; const ATitles:

array of string; const ACaption: string = ES; const AFoot: string = ES; const AClass: string = ES; const ABorderWidth: Integer = 1; const

AUnavailableFields: TBrookUnavailableFields = []; ACallback:

TBrookDataSetToHTML5TableCallback = nil): string;

**Description** Converts dataset into HTML-5 table.

#### BrookFieldDefsToHTMLForm \_\_\_\_\_

Declaration function BrookFieldDefsToHTMLForm( AFieldDefs: TFieldDefs; const AAction: string = '#'; const AMethod: string = 'post'; const ALineBreak: Boolean = False; const AClass: string = ES; const ALabelAbove: Boolean = False): string:

**Description** Converts FieldDefs into HTML form.

## 10.5 Types

#### TBrookUnavailableFields \_\_\_\_\_

Declaration TBrookUnavailableFields = set of TFieldType;

Description Set of data types for BrookDataSetToHTMLTable and BrookDataSetToHTML5Table.

## TBrookHTMLTableWritingState \_\_\_\_\_

Declaration TBrookHTMLTableWritingState = (...);

**Description** Informs the writing stage of the table.

Values wtHeadTR wtHeadTD wtBodyTR wtBodyTD

## TBrookDataSetToHTMLTableCallback \_\_\_\_\_

Declaration TBrookDataSetToHTMLTableCallback = function(ADataSet: TDataSet; const

AWritingType: TBrookHTMLTableWritingState; const APosition, AMax: Integer;

var AData: string): string of object;

Description Callback for BrookDataSetToHTMLTable.

## TBrookDataSetToHTML5TableCallback \_\_\_\_\_

Declaration TBrookDataSetToHTML5TableCallback = TBrookDataSetToHTMLTableCallback;

Description Callback for BrookDataSetToHTML5Table.

# Unit BrookException

## 11.1 Description

Brook Exception unit.

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## 11.2 Uses

- BrookConsts(6)
- SysUtils

## 11.3 Overview

EBrook Class Handles general exception in Brook.

EBrookHTTP404 Class Handles the exception for 404 error.

 ${\tt EBrookHTTP500}$  Class Handles the exception for  $500~{\rm error.}$ 

# 11.4 Classes, Interfaces, Objects and Records

EBrook Class	

## Hierarchy

EBrook > Exception

## Description

Handles general exception in Brook.

#### Methods

#### Create

Description Creates an instance of EBrook .

#### Create

Declaration public constructor Create(AClass: TClass; const AMsg: string); overload;

**Description** Creates an instance of EBrook .

#### Create

Declaration public constructor Create(AName: string; const AMsg: string); overload;

Description Creates an instance of EBrook .

#### CreateFmt

Declaration public constructor CreateFmt(AInstance: TObject; const AMsg: string; const AArgs: array of const); overload;

**Description** Creates an instance of EBrook with a formated message.

## ${\bf CreateFmt}$

Declaration public constructor CreateFmt(AClass: TClass; const AMsg: string; const AArgs: array of const); overload;

**Description** Creates an instance of EBrook with a formated message.

#### CreateFmt

Declaration public constructor CreateFmt(AName: string; const AMsg: string; const AArgs: array of const); overload;

**Description** Creates an instance of EBrook with a formated message.

### EBrookHTTP404 Class \_

### Hierarchy

EBrookHTTP404 > EBrook(11.4) > Exception

## Description

Handles the exception for 404 error.

## EBrookHTTP500 Class \_\_\_\_\_

## Hierarchy

EBrookHTTP500 > EBrook(11.4) > Exception

## Description

Handles the exception for 500 error.

## 11.5 Types

EBrookClass \_

Declaration EBrookClass = class of EBrook;

**Description** Is a metaclass for  $\mathtt{EBrook}(11.4)$  class.

# Unit BrookHTTPConsts

Declaration BROOK\_HTTP\_STATUS\_CODE\_ACCEPTED = 202;

## 12.1 Description

Brook HTTP consts. Copyright (C) 2012 Silvio Clecio.

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## 12.2 Constants

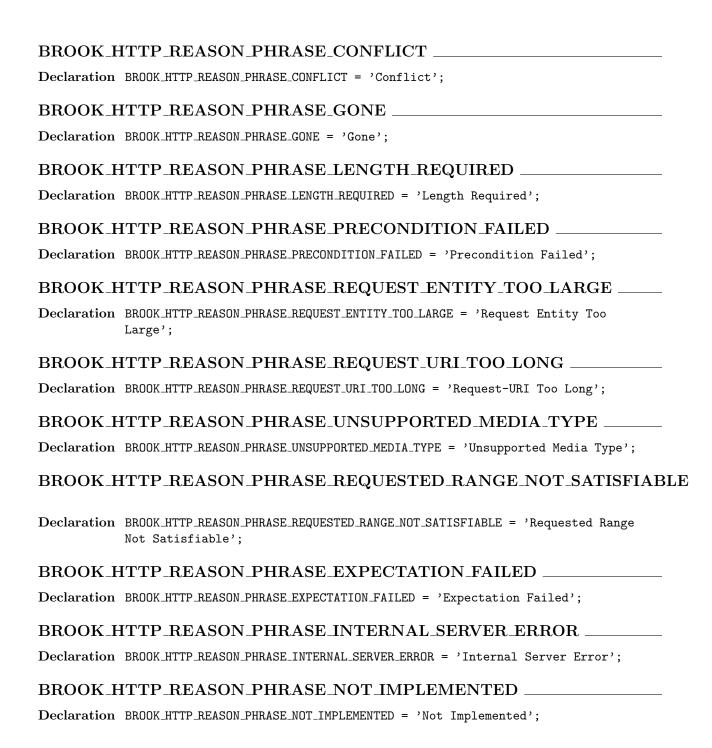
${\tt BROOK\_HTTP\_STATUS\_CODE\_NON\_AUTHORITATIVE\_INFORMATION\_}$
Declaration BROOK_HTTP_STATUS_CODE_NON_AUTHORITATIVE_INFORMATION = 203;
BROOK_HTTP_STATUS_CODE_NO_CONTENT
Declaration BROOK_HTTP_STATUS_CODE_NO_CONTENT = 204;
BROOK_HTTP_STATUS_CODE_RESET_CONTENT
Declaration BROOK_HTTP_STATUS_CODE_RESET_CONTENT = 205;
BROOK_HTTP_STATUS_CODE_PARTIAL_CONTENT
Declaration BROOK_HTTP_STATUS_CODE_PARTIAL_CONTENT = 206;
BROOK_HTTP_STATUS_CODE_MULTIPLE_CHOICES
Declaration BROOK_HTTP_STATUS_CODE_MULTIPLE_CHOICES = 300;
BROOK_HTTP_STATUS_CODE_MOVED_PERMANENTLY
Declaration BROOK_HTTP_STATUS_CODE_MOVED_PERMANENTLY = 301;
BROOK_HTTP_STATUS_CODE_FOUND
Declaration BROOK_HTTP_STATUS_CODE_FOUND = 302;
BROOK_HTTP_STATUS_CODE_SEE_OTHER
Declaration BROOK_HTTP_STATUS_CODE_SEE_OTHER = 303;
BROOK_HTTP_STATUS_CODE_NOT_MODIFIED
Declaration BROOK_HTTP_STATUS_CODE_NOT_MODIFIED = 304;
BROOK_HTTP_STATUS_CODE_USE_PROXY
Declaration BROOK_HTTP_STATUS_CODE_USE_PROXY = 305;
BROOK_HTTP_STATUS_CODE_TEMPORARY_REDIRECT
Declaration BROOK_HTTP_STATUS_CODE_TEMPORARY_REDIRECT = 307;
BROOK_HTTP_STATUS_CODE_BAD_REQUEST
Declaration BROOK_HTTP_STATUS_CODE_BAD_REQUEST = 400;

BROOK_HTTP_STATUS_CODE_UNAUTHORIZED
Declaration BROOK_HTTP_STATUS_CODE_UNAUTHORIZED = 401;
BROOK_HTTP_STATUS_CODE_PAYMENT_REQUIRED
Declaration BROOK_HTTP_STATUS_CODE_PAYMENT_REQUIRED = 402;
BROOK_HTTP_STATUS_CODE_FORBIDDEN
Declaration BROOK_HTTP_STATUS_CODE_FORBIDDEN = 403;
BROOK_HTTP_STATUS_CODE_NOT_FOUND
Declaration BROOK_HTTP_STATUS_CODE_NOT_FOUND = 404;
BROOK_HTTP_STATUS_CODE_METHOD_NOT_ALLOWED
Declaration BROOK_HTTP_STATUS_CODE_METHOD_NOT_ALLOWED = 405;
BROOK_HTTP_STATUS_CODE_NOT_ACCEPTABLE
Declaration BROOK_HTTP_STATUS_CODE_NOT_ACCEPTABLE = 406;
BROOK_HTTP_STATUS_CODE_PROXY_AUTHENTICATION_REQUIRED _
Declaration BROOK_HTTP_STATUS_CODE_PROXY_AUTHENTICATION_REQUIRED = 407;
Declaration brook_hitp_status_code_proxi_authentication_required = 407;
BROOK_HTTP_STATUS_CODE_REQUEST_TIMEOUT
Declaration BROOK_HTTP_STATUS_CODE_REQUEST_TIMEOUT = 408;
BROOK_HTTP_STATUS_CODE_CONFLICT
Declaration BROOK_HTTP_STATUS_CODE_CONFLICT = 409;
BROOK_HTTP_STATUS_CODE_GONE
Declaration BROOK_HTTP_STATUS_CODE_GONE = 410;
BROOK_HTTP_STATUS_CODE_LENGTH_REQUIRED
Declaration BROOK_HTTP_STATUS_CODE_LENGTH_REQUIRED = 411;
BROOK_HTTP_STATUS_CODE_PRECONDITION_FAILED
Declaration BROOK_HTTP_STATUS_CODE_PRECONDITION_FAILED = 412;

BROOK_HTTP_STATUS_CODE_REQUEST_ENTITY_TOO_LARGE
Declaration BROOK_HTTP_STATUS_CODE_REQUEST_ENTITY_TOO_LARGE = 413;
BROOK_HTTP_STATUS_CODE_REQUEST_URI_TOO_LONG
Declaration BROOK_HTTP_STATUS_CODE_REQUEST_URI_TOO_LONG = 414;
BROOK_HTTP_STATUS_CODE_UNSUPPORTED_MEDIA_TYPE
Declaration BROOK_HTTP_STATUS_CODE_UNSUPPORTED_MEDIA_TYPE = 415;
BROOK_HTTP_STATUS_CODE_REQUESTED_RANGE_NOT_SATISFIABLE
Declaration BROOK_HTTP_STATUS_CODE_REQUESTED_RANGE_NOT_SATISFIABLE = 416;
BROOK_HTTP_STATUS_CODE_EXPECTATION_FAILED
Declaration BROOK_HTTP_STATUS_CODE_EXPECTATION_FAILED = 417;
BROOK_HTTP_STATUS_CODE_INTERNAL_SERVER_ERROR
Declaration BROOK_HTTP_STATUS_CODE_INTERNAL_SERVER_ERROR = 500;
BROOK_HTTP_STATUS_CODE_NOT_IMPLEMENTED
Declaration BROOK_HTTP_STATUS_CODE_NOT_IMPLEMENTED = 501;
BROOK_HTTP_STATUS_CODE_BAD_GATEWAY
Declaration BROOK_HTTP_STATUS_CODE_BAD_GATEWAY = 502;
BROOK_HTTP_STATUS_CODE_SERVICE_UNAVAILABLE
Declaration BROOK_HTTP_STATUS_CODE_SERVICE_UNAVAILABLE = 503;
BROOK_HTTP_STATUS_CODE_GATEWAY_TIMEOUT
Declaration BROOK_HTTP_STATUS_CODE_GATEWAY_TIMEOUT = 504;
BROOK_HTTP_STATUS_CODE_HTTP_VERSION_NOT_SUPPORTED
Declaration BROOK_HTTP_STATUS_CODE_HTTP_VERSION_NOT_SUPPORTED = 505;
BROOK_HTTP_REASON_PHRASE_CONTINUE
<pre>Declaration BROOK_HTTP_REASON_PHRASE_CONTINUE = 'Continue';</pre>

BROOK_HTTP_REASON_PHRASE_SWITCHING_PROTOCOLS
Declaration BROOK_HTTP_REASON_PHRASE_SWITCHING_PROTOCOLS = 'Switching Protocols';
BROOK_HTTP_REASON_PHRASE_OK
Declaration BROOK_HTTP_REASON_PHRASE_OK = 'OK';
BROOK_HTTP_REASON_PHRASE_CREATED
<pre>Declaration BROOK_HTTP_REASON_PHRASE_CREATED = 'Created';</pre>
BROOK_HTTP_REASON_PHRASE_ACCEPTED
Declaration BROOK_HTTP_REASON_PHRASE_ACCEPTED = 'Accepted';
${\tt BROOK\_HTTP\_REASON\_PHRASE\_NON\_AUTHORITATIVE\_INFORMATIC}$
Declaration BROOK_HTTP_REASON_PHRASE_NON_AUTHORITATIVE_INFORMATION = 'Non-Authoritative Information';
BROOK_HTTP_REASON_PHRASE_NO_CONTENT
<pre>Declaration BROOK_HTTP_REASON_PHRASE_NO_CONTENT = 'No Content';</pre>
BROOK_HTTP_REASON_PHRASE_RESET_CONTENT
<pre>Declaration BROOK_HTTP_REASON_PHRASE_RESET_CONTENT = 'Reset Content';</pre>
BROOK_HTTP_REASON_PHRASE_PARTIAL_CONTENT
Declaration BROOK_HTTP_REASON_PHRASE_PARTIAL_CONTENT = 'Partial Content';
BROOK_HTTP_REASON_PHRASE_MULTIPLE_CHOICES
Declaration BROOK_HTTP_REASON_PHRASE_MULTIPLE_CHOICES = 'Multiple Choices';
BROOK_HTTP_REASON_PHRASE_MOVED_PERMANENTLY
Declaration BROOK_HTTP_REASON_PHRASE_MOVED_PERMANENTLY = 'Moved Permanently';
BROOK_HTTP_REASON_PHRASE_FOUND
<pre>Declaration BROOK_HTTP_REASON_PHRASE_FOUND = 'Found';</pre>
BROOK_HTTP_REASON_PHRASE_SEE_OTHER
Declaration BROOK_HTTP_REASON_PHRASE_SEE_OTHER = 'See Other';

BROOK_HTTP_REASON_PHRASE_NOT_MODIFIED
Declaration BROOK_HTTP_REASON_PHRASE_NOT_MODIFIED = 'Not Modified';
BROOK_HTTP_REASON_PHRASE_USE_PROXY
Declaration BROOK_HTTP_REASON_PHRASE_USE_PROXY = 'Use Proxy';
BROOK_HTTP_REASON_PHRASE_TEMPORARY_REDIRECT
Declaration BROOK_HTTP_REASON_PHRASE_TEMPORARY_REDIRECT = 'Temporary Redirect';
BROOK_HTTP_REASON_PHRASE_BAD_REQUEST
Declaration BROOK_HTTP_REASON_PHRASE_BAD_REQUEST = 'Bad Request';
BROOK_HTTP_REASON_PHRASE_UNAUTHORIZED
Declaration BROOK_HTTP_REASON_PHRASE_UNAUTHORIZED = 'Unauthorized';
BROOK_HTTP_REASON_PHRASE_PAYMENT_REQUIRED
Declaration BROOK_HTTP_REASON_PHRASE_PAYMENT_REQUIRED = 'Payment Required';
BROOK_HTTP_REASON_PHRASE_FORBIDDEN
<pre>Declaration BROOK_HTTP_REASON_PHRASE_FORBIDDEN = 'Forbidden';</pre>
BROOK_HTTP_REASON_PHRASE_NOT_FOUND
<pre>Declaration BROOK_HTTP_REASON_PHRASE_NOT_FOUND = 'Not Found';</pre>
BROOK_HTTP_REASON_PHRASE_METHOD_NOT_ALLOWED
Declaration BROOK_HTTP_REASON_PHRASE_METHOD_NOT_ALLOWED = 'Method Not Allowed';
BROOK_HTTP_REASON_PHRASE_NOT_ACCEPTABLE
Declaration BROOK_HTTP_REASON_PHRASE_NOT_ACCEPTABLE = 'Not Acceptable';
$BROOK\_HTTP\_REASON\_PHRASE\_PROXY\_AUTHENTICATION\_REQUIRED$
Declaration BROOK_HTTP_REASON_PHRASE_PROXY_AUTHENTICATION_REQUIRED = 'Proxy Authentication Required';
BROOK_HTTP_REASON_PHRASE_REQUEST_TIMEOUT
Declaration BROOK_HTTP_REASON_PHRASE_REQUEST_TIMEOUT = 'Request Timeout';



BROOK_HTTP_REASON_PHRASE_BAD_GATEWAY
Declaration BROOK_HTTP_REASON_PHRASE_BAD_GATEWAY = 'Bad Gateway';
BROOK_HTTP_REASON_PHRASE_SERVICE_UNAVAILABLE
Declaration BROOK_HTTP_REASON_PHRASE_SERVICE_UNAVAILABLE = 'Service Unavailable';
DDOOK HEED DEAGON DIDAGE CAMENAN MIMEOLE
BROOK_HTTP_REASON_PHRASE_GATEWAY_TIMEOUT
Declaration BROOK_HTTP_REASON_PHRASE_GATEWAY_TIMEOUT = 'Gateway Timeout';
${\tt BROOK\_HTTP\_REASON\_PHRASE\_HTTP\_VERSION\_NOT\_SUPPORTED} \ \_$
<pre>Declaration BROOK_HTTP_REASON_PHRASE_HTTP_VERSION_NOT_SUPPORTED = 'HTTP Version Not</pre>
BROOK_HTTP_REQUEST_METHOD_GET
<pre>Declaration BROOK_HTTP_REQUEST_METHOD_GET = 'GET';</pre>
BROOK_HTTP_REQUEST_METHOD_POST
<pre>Declaration BROOK_HTTP_REQUEST_METHOD_POST = 'POST';</pre>
BROOK_HTTP_REQUEST_METHOD_PUT
<pre>Declaration BROOK_HTTP_REQUEST_METHOD_PUT = 'PUT';</pre>
BROOK_HTTP_REQUEST_METHOD_DELETE
Declaration BROOK_HTTP_REQUEST_METHOD_DELETE = 'DELETE';
BROOK_HTTP_REQUEST_METHOD_HEAD
Declaration BROOK_HTTP_REQUEST_METHOD_HEAD = 'HEAD';
BROOK_HTTP_REQUEST_METHOD_OPTIONS
<pre>Declaration BROOK_HTTP_REQUEST_METHOD_OPTIONS = 'OPTIONS';</pre>
BROOK_HTTP_REQUEST_METHOD_PATCH
Declaration BROOK_HTTP_REQUEST_METHOD_PATCH = 'PATCH';
BROOK_HTTP_REQUEST_METHOD_PROPFIND
Declaration BROOK_HTTP_REQUEST_METHOD_PROPFIND = 'PROPFIND';

BROOK_HTTP_REQUEST_METHOD_PROPPATCH
Declaration BROOK_HTTP_REQUEST_METHOD_PROPPATCH = 'PROPPATCH';
BROOK_HTTP_REQUEST_METHOD_COPY
<pre>Declaration BROOK_HTTP_REQUEST_METHOD_COPY = 'COPY';</pre>
BROOK_HTTP_REQUEST_METHOD_MOVE
Declaration BROOK_HTTP_REQUEST_METHOD_MOVE = 'MOVE';
BROOK_HTTP_REQUEST_METHOD_MKCOL
Declaration BROOK_HTTP_REQUEST_METHOD_MKCOL = 'MKCOL';
BROOK_HTTP_REQUEST_METHOD_TRACE
Declaration BROOK_HTTP_REQUEST_METHOD_TRACE = 'TRACE';
BROOK_HTTP_REQUEST_METHOD_LOCK
Declaration BROOK_HTTP_REQUEST_METHOD_LOCK = 'LOCK';
BROOK_HTTP_REQUEST_METHOD_UNLOCK
Declaration BROOK_HTTP_REQUEST_METHOD_UNLOCK = 'UNLOCK';
BROOK_HTTP_HEADER_CACHE_CONTROL
<pre>Declaration BROOK_HTTP_HEADER_CACHE_CONTROL = 'Cache-Control';</pre>
BROOK_HTTP_HEADER_CONTENT_DESCRIPTION
Declaration BROOK_HTTP_HEADER_CONTENT_DESCRIPTION = 'Content-Description';
BROOK_HTTP_HEADER_CONTENT_DISPOSITION
Declaration BROOK_HTTP_HEADER_CONTENT_DISPOSITION = 'Content-Disposition';
BROOK_HTTP_HEADER_ETAG
Declaration BROOK_HTTP_HEADER_ETAG = 'ETag';
BROOK_HTTP_HEADER_STATUS
Declaration BROOK_HTTP_HEADER_STATUS = 'Status';

# BROOK\_HTTP\_HEADER\_TRANSFER\_ENCODING \_\_\_\_\_ Declaration BROOK\_HTTP\_HEADER\_TRANSFER\_ENCODING = 'Transfer-Encoding'; BROOK\_HTTP\_HEADER\_X\_POWERED\_BY \_\_\_\_\_ Declaration BROOK\_HTTP\_HEADER\_X\_POWERED\_BY = 'X-Powered-By'; BROOK\_HTTP\_HEADER\_CHARSET \_\_\_\_ Declaration BROOK\_HTTP\_HEADER\_CHARSET = '; charset='; BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_PLAIN \_\_\_\_\_ Declaration BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_PLAIN = 'text/plain'; BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_HTML \_\_\_\_ Declaration BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_HTML = 'text/html'; BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_CSS \_\_\_\_\_ Declaration BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_CSS = 'text/css'; BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_XML \_\_\_\_\_ Declaration BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_XML = 'text/xml'; BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_CVS \_\_\_\_\_ Declaration BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_CVS = 'text/cvs'; BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_RICHTEXT \_\_\_\_ Declaration BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_RICHTEXT = 'text/richtext'; BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_RTF Declaration BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_RTF = 'text/rtf'; BROOK\_HTTP\_CONTENT\_TYPE\_MULTIPART\_FORM\_DATA \_\_\_\_\_ Declaration BROOK\_HTTP\_CONTENT\_TYPE\_MULTIPART\_FORM\_DATA = 'multipart/form-data'; BROOK\_HTTP\_CONTENT\_TYPE\_MULTIPART\_FORM\_DATA\_BOUNDARY Declaration BROOK\_HTTP\_CONTENT\_TYPE\_MULTIPART\_FORM\_DATA\_BOUNDARY =

BROOK\_HTTP\_CONTENT\_TYPE\_MULTIPART\_FORM\_DATA + '; boundary=';

BROOK_HTTP_CONTENT_TYPE_APP_JSON
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_APP_JSON = 'application/json';</pre>
BROOK_HTTP_CONTENT_TYPE_APP_XML
Declaration BROOK_HTTP_CONTENT_TYPE_APP_XML = 'application/xml';
BROOK_HTTP_CONTENT_TYPE_APP_RDF_XML
Declaration BROOK_HTTP_CONTENT_TYPE_APP_RDF_XML = 'application/rdf+xml';
BROOK_HTTP_CONTENT_TYPE_APP_X_WWW_FORM_URLENCODED
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_APP_X_WWW_FORM_URLENCODED =</pre>
BROOK_HTTP_CONTENT_TYPE_APP_JAVASCRIPT
Declaration BROOK_HTTP_CONTENT_TYPE_APP_JAVASCRIPT = 'application/javascript';
BROOK_HTTP_CONTENT_TYPE_APP_OCTET_STREAM
Declaration BROOK_HTTP_CONTENT_TYPE_APP_OCTET_STREAM = 'application/octet-stream';
BROOK_HTTP_CONTENT_TYPE_APP_PDF
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_APP_PDF = 'application/pdf';</pre>
BROOK_HTTP_CONTENT_TYPE_APP_ZIP
Declaration BROOK_HTTP_CONTENT_TYPE_APP_ZIP = 'application/zip';
BROOK_HTTP_CONTENT_TYPE_APP_MSWORD
Declaration BROOK_HTTP_CONTENT_TYPE_APP_MSWORD = 'application/msword';
BROOK_HTTP_CONTENT_TYPE_APP_MS_EXCEL
Declaration BROOK_HTTP_CONTENT_TYPE_APP_MS_EXCEL = 'application/vnd.ms-excel';
BROOK_HTTP_CONTENT_TYPE_APP_MS_POWERPOINT
Declaration BROOK_HTTP_CONTENT_TYPE_APP_MS_POWERPOINT = 'application/vnd.ms-powerpoint';
BROOK_HTTP_CONTENT_TYPE_APP_MP4

Declaration BROOK\_HTTP\_CONTENT\_TYPE\_APP\_MP4 = 'application/mp4';

BROOK_HTTP_CONTENT_TYPE_APP_MPEG4_GENERIC
Declaration BROOK_HTTP_CONTENT_TYPE_APP_MPEG4_GENERIC = 'application/mpeg4-generic';
BROOK_HTTP_CONTENT_TYPE_IMAGE_PNG
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_IMAGE_PNG = 'image/png';</pre>
BROOK_HTTP_CONTENT_TYPE_IMAGE_JPEG
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_IMAGE_JPEG = 'image/jpeg';</pre>
BROOK_HTTP_CONTENT_TYPE_IMAGE_GIF
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_IMAGE_GIF = 'image/gif';</pre>
BROOK_HTTP_CONTENT_TYPE_IMAGE_TIFF
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_IMAGE_TIFF = 'image/tiff';</pre>
BROOK_HTTP_CONTENT_TYPE_AUDIO_MPEG
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_AUDIO_MPEG = 'audio/mpeg';</pre>
BROOK_HTTP_CONTENT_TYPE_VIDEO_MPEG
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_VIDEO_MPEG = 'video/mpeg';</pre>
BROOK_HTTP_CONTENT_TYPE_VIDEO_QUICKTIME
<pre>Declaration BROOK_HTTP_CONTENT_TYPE_VIDEO_QUICKTIME = 'video/quicktime';</pre>
BROOK_HTTP_CACHE_CONTROL_NO_CACHE
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_NO_CACHE = 'no-cache';</pre>
BROOK_HTTP_CACHE_CONTROL_NO_STORE
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_NO_STORE = 'no-store';</pre>
BROOK_HTTP_CACHE_CONTROL_MAX_AGE
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_MAX_AGE = 'max-age=';</pre>
BROOK_HTTP_CACHE_CONTROL_MAX_STALE
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_MAX_STALE = 'max-stale';</pre>

BROOK_HTTP_CACHE_CONTROL_MIN_FRESH
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_MIN_FRESH = 'min-fresh';</pre>
BROOK_HTTP_CACHE_CONTROL_NO_TRANSFORM
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_NO_TRANSFORM = 'no-transform';</pre>
BROOK_HTTP_CACHE_CONTROL_ONLY_IF_CACHED
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_ONLY_IF_CACHED = 'only-if-cached';</pre>
BROOK_HTTP_CACHE_CONTROL_CACHE_EXTENSION
Declaration BROOK_HTTP_CACHE_CONTROL_CACHE_EXTENSION = 'cache-extension';
BROOK_HTTP_CACHE_CONTROL_PUBLIC
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_PUBLIC = 'public';</pre>
BROOK_HTTP_CACHE_CONTROL_PRIVATE
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_PRIVATE = 'private';</pre>
BROOK_HTTP_CACHE_CONTROL_MUST_REVALIDATE
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_MUST_REVALIDATE = 'must-revalidate';</pre>
BROOK_HTTP_CACHE_CONTROL_PROXY_REVALIDATE
Declaration BROOK_HTTP_CACHE_CONTROL_PROXY_REVALIDATE = 'proxy-revalidate';
BROOK_HTTP_CACHE_CONTROL_S_MAXAGE
<pre>Declaration BROOK_HTTP_CACHE_CONTROL_S_MAXAGE = 's-maxage';</pre>
BROOK_HTTP_CONTENT_DISPOSITION_INLINE
<pre>Declaration BROOK_HTTP_CONTENT_DISPOSITION_INLINE = 'inline';</pre>
BROOK_HTTP_CONTENT_DISPOSITION_ATTACHMENT
<pre>Declaration BROOK_HTTP_CONTENT_DISPOSITION_ATTACHMENT = 'attachment';</pre>
BROOK_HTTP_CONTENT_ENCODING_DEFLATE
<pre>Declaration BROOK_HTTP_CONTENT_ENCODING_DEFLATE = 'deflate';</pre>

BROOK_HTTP_CONTENT_ENCODING_GZIP
Declaration BROOK_HTTP_CONTENT_ENCODING_GZIP = 'gzip';
BROOK_HTTP_CONTENT_ENCODING_SDCH
<pre>Declaration BROOK_HTTP_CONTENT_ENCODING_SDCH = 'sdch';</pre>
BROOK_HTTP_CONTENT_ENCODING_X_GZIP
Declaration BROOK_HTTP_CONTENT_ENCODING_X_GZIP = 'x-gzip';
BROOK_HTTP_TRANSFER_ENCODING_CHUNKED
Declaration BROOK_HTTP_TRANSFER_ENCODING_CHUNKED = 'chunked';
BROOK_HTTP_CHARSET_ISO_8859_1
Declaration BROOK_HTTP_CHARSET_ISO_8859_1 = 'iso-8859-1';
BROOK_HTTP_CHARSET_UTF_8
Declaration BROOK_HTTP_CHARSET_UTF_8 = 'utf-8';
BROOK SRV ENV DOCUMENT ROOT
Declaration BROOK_SRV_ENV_DOCUMENT_ROOT = 'DOCUMENT_ROOT';
BROOK_SRV_ENV_SERVER_ADDR
Declaration BROOK_SRV_ENV_SERVER_ADDR = 'SERVER_ADDR';
BROOK_SRV_ENV_SERVER_ADMIN
Declaration BROOK_SRV_ENV_SERVER_ADMIN = 'SERVER_ADMIN';
BROOK_SRV_ENV_SERVER_SOFTWARE
Declaration BROOK_SRV_ENV_SERVER_SOFTWARE = 'SERVER_SOFTWARE';
BROOK_SRV_ENV_SERVER_NAME
Declaration BROOK_SRV_ENV_SERVER_NAME = 'SERVER_NAME';
BROOK_SRV_ENV_GATEWAY_INTERFACE
Declaration BROOK_SRV_ENV_GATEWAY_INTERFACE = 'GATEWAY_INTERFACE';

BROOK_SRV_ENV_SERVER_PROTOCOL
Declaration BROOK_SRV_ENV_SERVER_PROTOCOL = 'SERVER_PROTOCOL';
BROOK_SRV_ENV_SERVER_PORT
<pre>Declaration BROOK_SRV_ENV_SERVER_PORT = 'SERVER_PORT';</pre>
BROOK_SRV_ENV_REQUEST_METHOD
<pre>Declaration BROOK_SRV_ENV_REQUEST_METHOD = 'REQUEST_METHOD';</pre>
BROOK_SRV_ENV_REQUEST_URI
<pre>Declaration BROOK_SRV_ENV_REQUEST_URI = 'REQUEST_URI';</pre>
BROOK_SRV_ENV_PATH_INFO
<pre>Declaration BROOK_SRV_ENV_PATH_INFO = 'PATH_INFO';</pre>
BROOK_SRV_ENV_PATH_TRANSLATED
Declaration BROOK_SRV_ENV_PATH_TRANSLATED = 'PATH_TRANSLATED';
BROOK_SRV_ENV_SCRIPT_FILENAME
Declaration BROOK_SRV_ENV_SCRIPT_FILENAME = 'SCRIPT_FILENAME';
BROOK_SRV_ENV_SCRIPT_NAME
<pre>Declaration BROOK_SRV_ENV_SCRIPT_NAME = 'SCRIPT_NAME';</pre>
BROOK_SRV_ENV_QUERY_STRING
<pre>Declaration BROOK_SRV_ENV_QUERY_STRING = 'QUERY_STRING';</pre>
BROOK_SRV_ENV_REMOTE_HOST
<pre>Declaration BROOK_SRV_ENV_REMOTE_HOST = 'REMOTE_HOST';</pre>
BROOK_SRV_ENV_REMOTE_ADDR
Declaration BROOK_SRV_ENV_REMOTE_ADDR = 'REMOTE_ADDR';
Declaration BROOK_SRV_ENV_REMOTE_ADDR = 'REMOTE_ADDR';  BROOK_SRV_ENV_REMOTE_PORT

BROOK_SRV_ENV_AUTH_TYPE
Declaration BROOK_SRV_ENV_AUTH_TYPE = 'AUTH_TYPE';
BROOK_SRV_ENV_REMOTE_USER
Declaration BROOK_SRV_ENV_REMOTE_USER = 'REMOTE_USER';
DDOOK CDV ENV DEMOTE IDENT
BROOK_SRV_ENV_REMOTE_IDENT
Declaration BROOK_SRV_ENV_REMOTE_IDENT = 'REMOTE_IDENT';
BROOK_SRV_ENV_CONTENT_TYPE
<pre>Declaration BROOK_SRV_ENV_CONTENT_TYPE = 'CONTENT_TYPE';</pre>
BROOK_SRV_ENV_CONTENT_LENGTH
Declaration BROOK_SRV_ENV_CONTENT_LENGTH = 'CONTENT_LENGTH';
Declaration Brook_Srv_Env_Content_Length - Content_Length ,
BROOK_SRV_ENV_X_FORWARDED_FOR
Declaration BROOK_SRV_ENV_X_FORWARDED_FOR = 'X_FORWARDED_FOR';
BROOK_CLT_ENV_HTTP_COOKIE
Declaration BROOK_CLT_ENV_HTTP_COOKIE = 'HTTP_COOKIE';
BROOK_CLT_ENV_HTTP_REFERER
Declaration BROOK_CLT_ENV_HTTP_REFERER = 'HTTP_REFERER';
Decide detail Brook_off Environ Environ
BROOK_CLT_ENV_HTTP_USER_AGENT
Declaration BROOK_CLT_ENV_HTTP_USER_AGENT = 'HTTP_USER_AGENT';
BROOK_CLT_ENV_HTTP_IF_MODIFIED_SINCE
Declaration BROOK_CLT_ENV_HTTP_IF_MODIFIED_SINCE = 'HTTP_IF_MODIFIED_SINCE';
BROOK_CLT_ENV_HTTP_HOST
Declaration BROOK_CLT_ENV_HTTP_HOST = 'HTTP_HOST';
BROOK_CLT_ENV_HTTP_CONNECTION
Declaration BROOK_CLT_ENV_HTTP_CONNECTION = 'HTTP_CONNECTION';

BROOK_CLT_ENV_HTTP_CACHE_CONTROL
Declaration BROOK_CLT_ENV_HTTP_CACHE_CONTROL = 'HTTP_CACHE_CONTROL';
BROOK_CLT_ENV_HTTP_ACCEPT
<pre>Declaration BROOK_CLT_ENV_HTTP_ACCEPT = 'HTTP_ACCEPT';</pre>
BROOK_CLT_ENV_HTTP_ACCEPT_ENCODING
Declaration BROOK_CLT_ENV_HTTP_ACCEPT_ENCODING = 'HTTP_ACCEPT_ENCODING';
BROOK_CLT_ENV_HTTP_ACCEPT_LANGUAGE
Declaration BROOK_CLT_ENV_HTTP_ACCEPT_LANGUAGE = 'HTTP_ACCEPT_LANGUAGE';
BROOK_CLT_ENV_HTTP_ACCEPT_CHARSET
Declaration BROOK_CLT_ENV_HTTP_ACCEPT_CHARSET = 'HTTP_ACCEPT_CHARSET';
BROOK_CLT_ENV_HTTP_IF_NONE_MATCH
Declaration BROOK_CLT_ENV_HTTP_IF_NONE_MATCH = 'HTTP_IF_NONE_MATCH';
BROOK_CLT_ENV_HTTP_X_REQUESTED_WITH
Declaration BROOK CIT ENV HTTD Y REGULECTED WITH = 'HTTD Y REGULECTED WITH'.

## Unit BrookHTTPUtils

## 13.1 Description

Brook HTTP Utils unit.

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## 13.2 Uses

- BrookHTTPConsts(12)
- BrookConsts(6)
- HTTPDefs
- SysUtils

## 13.3 Overview

BrookDateTimeToGMT Converts TDateTime to a GMT format.

BrookSameURL Compare two URLs ignoring a possible final slash.

BrookStatusCodeToReasonPhrase Returns the reason phrase corresponding to a status code.

BrookReasonPhraseToStatusCode Returns the status code corresponding to a reason phrase.

BrookGetAcceptEncodingSet Returns a set of HTTP AceptEnconding header.

 ${\tt BrookGetAcceptEncoding}\ \ {\tt Returns}\ \ a\ string\ \ of\ \ HTTP\ \ AcceptEnconding.$ 

 ${\tt BrookMimeTypeFromFileExt} \ \ {\rm Returns} \ \ {\rm a} \ \ {\rm MIME} \ \ {\rm type} \ \ {\rm by \ file} \ \ {\rm extension}.$ 

 ${\tt BrookMimeTypeFromFileName}\ \ {\rm Returns}\ a\ {\rm MIME}\ type\ by\ file\ name.$ 

 ${\tt BrookFileExtFromMimeType} \ \ {\tt Returns} \ a \ {\tt file} \ {\tt extension} \ {\tt by} \ {\tt MIME} \ {\tt type}.$ 

## 13.4 Functions and Procedures

BrookDate	eTimeToGMT
Declaration	<pre>function BrookDateTimeToGMT(const ADateTime: TDateTime): string;</pre>
Description	Converts TDateTime to a GMT format.
BrookSam	eURL
Declaration	function BrookSameURL(AURL1, AURL2: string): Boolean;
Description	Compare two URLs ignoring a possible final slash.
BrookStat	usCodeToReasonPhrase
Declaration	<pre>function BrookStatusCodeToReasonPhrase(const AStatusCode: Word): string;</pre>
Description	Returns the reason phrase corresponding to a status code.
BrookReas	sonPhraseToStatusCode
Declaration	function BrookReasonPhraseToStatusCode(const AReasonPhrase: string): Word;
Description	Returns the status code corresponding to a reason phrase.
BrookGet	AcceptEncodingSet
Declaration	<pre>function BrookGetAcceptEncodingSet( const AAcceptEncoding: ShortString): TBrookAcceptEncodingSet;</pre>
Description	Returns a set of HTTP AceptEnconding header.
BrookGet	AcceptEncoding
Declaration	<pre>function BrookGetAcceptEncoding( const AAcceptEncoding: TBrookAcceptEncodingSet): string;</pre>
Description	Returns a string of HTTP AcceptEnconding.

BrookMimeTypeFromFileExt
Declaration function BrookMimeTypeFromFileExt(const AValue: string): string;
<b>Description</b> Returns a MIME type by file extension.
BrookMimeTypeFromFileName
Declaration function BrookMimeTypeFromFileName(const AValue: string): string;
<b>Description</b> Returns a MIME type by file name.
BrookFileExtFromMimeType
Declaration function BrookFileExtFromMimeType(const AValue: string): string;
<b>Description</b> Returns a file extension by MIME type.
13.5 Types
$TBrookAcceptEncodingSet \_\_\_\_$
Declaration TBrookAcceptEncodingSet = set of (aeDeflate, aeGzip, aeSdch, aeXGzip);
<b>Description</b> Defines a set to represent the AcceptEncoding HTTP header.

# Unit BrookJSONHelper

## 14.1 Description

Brook JSON Helper unit. Copyright (C) 2012 Silvio Clecio.

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## 14.2 Uses

- BrookConsts(6)
- FPJSON
- SysUtils

## 14.3 Overview

TBrookJSONDataHelper Class Adds features to the TJSONData class.

 ${\tt TBrookJSONObjectHelper\ Class\ Adds\ features\ to\ the\ TJSONObject\ class.}$ 

## 14.4 Classes, Interfaces, Objects and Records

TBrookJSONDataHelper Class helper for TJSONData \_\_\_\_\_\_Hierarchy

TBrookJSONDataHelper > TObject

## Description

Adds features to the TJSONData class.

## **Properties**

AsChar public property AsChar: Char read GetAsChar write SetAsChar;

Get or set the JSONData as a Char.

AsSmallInt public property AsSmallInt: SmallInt read GetAsSmallInt write

SetAsSmallInt;

Get or set the JSONData as a SmallInt.

AsTime public property AsTime: TTime read GetAsTime write SetAsTime;

Get or set the JSONData as a TTime.

AsDate public property AsDate: TDate read GetAsDate write SetAsDate;

Get or set the JSONData as a TDate.

AsDateTime public property AsDateTime: TDateTime read GetAsDateTime write

SetAsDateTime;

Get or set the JSONData as a TDateTime.

AsTrimStr public property AsTrimStr: string read GetAsTrimStr write SetAsTrimStr;

Get or set the JSONData as a trimmed string.

AsTrimJS public property AsTrimJS: string read GetAsTrimJS write SetAsTrimJS;

Get or set the JSONData as a trimmed JSON string.

AsLowerStr public property AsLowerStr: string read GetAsLowerStr write SetAsLowerStr;

Get or set the JSONData as a lower string.

AsLowerJS public property AsLowerJS: string read GetAsLowerJS write SetAsLowerJS;

Get or set the JSONData as a lower JSON string.

AsUpperStr public property AsUpperStr: string read GetAsUpperStr write SetAsUpperStr;

Get or set the JSONData as a upper string.

AsUpperJS public property AsUpperJS: string read GetAsUpperJS write SetAsUpperJS;

Get or set the JSONData as a upper JSON string.

AsQuotedStr public property AsQuotedStr: string read GetAsQuotedStr write

SetAsQuotedStr;

Get or set the JSONData as a quoted string.

## TBrookJSONObjectHelper Class helper for TJSONObject \_\_\_\_\_

## Hierarchy

 ${\bf TBrookJSONObjectHelper} > {\bf TObject}$ 

## Description

Adds features to the TJSONObject class.

## **Properties**

Times public property Times[AName: string]: TTime read GetTimes write SetTimes;

Get or set a value as TTime.

Dates public property Dates[AName: string]: TTime read GetDates write SetDates;

Get or set a value as TDate.

DateTimes public property DateTimes[AName: string]: TTime read GetDateTimes write

SetDateTimes;

Get or set a value as TDateTime.

#### Methods

#### Exists

Declaration public function Exists(const AName: string): Boolean;

**Description** Checks if a name exists.

# Unit BrookMessages

## 15.1 Description

Brook Messages unit.

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## 15.2 Uses

- BrookClasses(4)
- BrookConsts(6)
- BrookException(11)
- Classes
- SysUtils

#### 15.3 Overview

EBrookMessage Class Handles exceptions for TBrookMessage(15.4).

EBrookMessages Class Handles exceptions for TBrookMessages (15.4).

TBrookMessage Class Handles strings for translation of messages.

TBrookMessages Class Registers the available language in the framework.

BrookSetDefaultLanguage Translates the framework messages according to the default language.

## 15.4 Classes, Interfaces, Objects and Records

## EBrookMessage Class \_\_\_\_

## Hierarchy

EBrookMessage > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookMessage(15.4).

### EBrookMessages Class \_

## Hierarchy

EBrookMessages > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookMessages(15.4).

## TBrookMessage Class \_\_\_\_

## Hierarchy

TBrookMessage > TBrookObject(4.4) > TObject

## Description

Handles strings for translation of messages.

## Methods

#### Register

Declaration public class procedure Register;

**Description** Register the broker class.

#### Translate

Declaration public class procedure Translate; virtual; abstract;

**Description** Translates the framework messages.

## ${\bf Country Code}$

Declaration public class function CountryCode: ShortString; virtual; abstract;

**Description** Returns the country code, exemple: en-US.

## CountryName

Declaration public class function CountryName: string; virtual; abstract;

**Description** Returns the country name, exemple: United States.

#### TBrookMessages Class

### Hierarchy

TBrookMessages > TBrookObject(4.4) > TObject

### Description

Registers the available language in the framework.

## **Properties**

Items public property Items[const AIndex: Integer]: TBrookMessageClass read GetItems
 write SetItems;

The list of translation items.

#### Methods

#### Create

Declaration public constructor Create;

**Description** Creates an instance of a TBrookMessages(15.4) class.

#### Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookMessages(15.4) class.

#### RegisterService

Declaration public class procedure RegisterService;

**Description** Registers the service provided by this class.

#### UnregisterService

Declaration public class procedure UnregisterService;

**Description** Unregisters the service provided by this class.

#### Service

Declaration public class function Service: TBrookMessages;

**Description** Return a instance of this class.

#### Count

Declaration public function Count: Integer;

**Description** Returns the number of registered translations.

#### SetLanguage

Declaration public procedure SetLanguage(const ACountryCode: ShortString);

**Description** Translates the framework messages according to the country code.

#### Find

Declaration public function Find(const ACountryCode: ShortString): TBrookMessageClass;

**Description** Finds a translation item by its country code.

#### **ItemByCountryCode**

 ${\bf Declaration\ public\ function\ ItemBy Country Code(\ const\ A Country Code:\ Short String):}$ 

TBrookMessageClass;

**Description** Returns a translation item by its country code.

#### $\mathbf{Add}$

Declaration public procedure Add(AClass: TBrookMessageClass);

**Description** Adds a translation item.

#### Remove

Declaration public procedure Remove(AClass: TBrookMessageClass);

**Description** Removes a translation item.

## 15.5 Functions and Procedures

## BrookSetDefaultLanguage \_

Declaration procedure BrookSetDefaultLanguage;

**Description** Translates the framework messages according to the default language.

## **15.6** Types

TBrookMessageClass
Declaration TBrookMessageClass = class of TBrookMessage;
<b>Description</b> Is a metaclass for TBrookMessage(15.4) class.
TBrookMessagesClass
Declaration TBrookMessagesClass = class of TBrookMessages;
<b>Description</b> Is a metaclass for TBrookMessages(15.4) class.
15.7 Variables
SBrookFileNotFoundError
Declaration SBrookFileNotFoundError: string = ES;
${\bf SBrookNoRequestMethodError}$
Declaration SBrookNoRequestMethodError: string = ES;
SBrookNoApplicationRegisteredError
Declaration SBrookNoApplicationRegisteredError: string = ES;
${\bf SBrook Application Already Registered Error} \ \_\_\_$
Declaration SBrookApplicationAlreadyRegisteredError: string = ES;
SBrookRegiterTBrookActionError
Declaration SBrookRegiterTBrookActionError: string = ES;
SBrookActionAlreadyRegisteredError
Declaration SBrookActionAlreadyRegisteredError: string = ES;
${\bf SBrookDefaultActionAlreadyRegisteredError\ \_\_\_$
Declaration SBrookDefaultActionAlreadyRegisteredError: string = ES;
${\bf SBrookPatternAlreadyRegisteredError} \ \_\_\_$
Declaration SBrookPatternAlreadyRegisteredError: string = ES;

${\bf SBrook Router Already Registered Error} \ \_\_\_$
Declaration SBrookRouterAlreadyRegisteredError: string = ES;
SBrookNoRouterRegisteredError
Declaration SBrookNoRouterRegisteredError: string = ES;
$S Brook Messages Already Registered Error \\ \_\_\_$
Declaration SBrookMessagesAlreadyRegisteredError: string = ES;
$SBrook No Messages Registered Error \\ \_\_\_$
Declaration SBrookNoMessagesRegisteredError: string = ES;
SBrookNoRouteRegisteredError
Declaration SBrookNoRouteRegisteredError: string = ES;
SBrookDataBaseItemNotFound
<pre>Declaration SBrookDataBaseItemNotFound: string = ES;</pre>
SBrookMessageItemNotFound
Declaration SBrookMessageItemNotFound: string = ES;
Declaration SBrookMessageItemNotFound: string = ES; SBrookCfgFileNotFoundError
SBrookCfgFileNotFoundError
SBrookCfgFileNotFoundError  Declaration SBrookCfgFileNotFoundError: string = ES;
SBrookCfgFileNotFoundError  Declaration SBrookCfgFileNotFoundError: string = ES;  SBrookNilJSONParamError
SBrookCfgFileNotFoundError  Declaration SBrookCfgFileNotFoundError: string = ES;  SBrookNilJSONParamError  Declaration SBrookNilJSONParamError: string = ES;
SBrookCfgFileNotFoundError  Declaration SBrookCfgFileNotFoundError: string = ES;  SBrookNilJSONParamError  Declaration SBrookNilJSONParamError: string = ES;  SBrookNilParamError
SBrookCfgFileNotFoundError  Declaration SBrookCfgFileNotFoundError: string = ES;  SBrookNilJSONParamError  Declaration SBrookNilJSONParamError: string = ES;  SBrookNilParamError  Declaration SBrookNilParamError: string = ES;
SBrookCfgFileNotFoundError: string = ES;  SBrookNilJSONParamError  Declaration SBrookNilJSONParamError: string = ES;  SBrookNilParamError  Declaration SBrookNilParamError: string = ES;  SBrookDataBaseAlreadyRegisteredError

SBrookNoQueryBrokerClassRegisteredError
Declaration SBrookNoQueryBrokerClassRegisteredError: string = ES;
SBrookEmptyTableNameError
Declaration SBrookEmptyTableNameError: string = ES;
SBrookEmptyLibraryNameError
Declaration SBrookEmptyLibraryNameError: string = ES;
SBrookEmptyCountryCodeError
<pre>Declaration SBrookEmptyCountryCodeError: string = ES;</pre>
$SBrook Method Not Allowed Error \\ \_\_\_$
Declaration SBrookMethodNotAllowedError: string = ES;
SBrookIncompatibleTypesError
Designation Chroniting and this of the stranger at this are a first
Hodgration SkrookIncompatibleTupodError: string = FS:

# Unit BrookQuery

## 16.1 Description

Brook Query unit.

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## 16.2 Uses

- BrookClasses(4)
- BrookDataBase(7)
- BrookException(11)
- BrookMessages(15)
- BrookConsts(6)
- BrookDBConsts(9)
- DB
- SQLdb
- FPJSON
- JSONParser
- SysUtils

- Classes
- Variants

## 16.3 Overview

EBrookQuery Class Handles exceptions for TBrookQuery(16.4).

TBrookQuery Class Handles database queries.

## 16.4 Classes, Interfaces, Objects and Records

## EBrookQuery Class \_

## Hierarchy

EBrookQuery > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookQuery(16.4).

## TBrookQuery Class \_

## Hierarchy

TBrookQuery > TBrookObject(4.4) > TObject

## Description

Handles database queries.

## **Properties**

SQL public property SQL: TStrings read GetSQL;

Is the SQL statement.

Fields public property Fields: TFields read GetFields;

Are the query fields.

Params public property Params: TParams read GetParams;

Are the query parameters.

BOF public property BOF: Boolean read GetBOF;

Checks if the cursor is at the first register.

EOF public property EOF: Boolean read GetEOF;

Checks if the cursor is at the last register.

Bookmark public property Bookmark: TBookmark read GetBookmark write GotoBookmark;

Returns or creates a bookmark.

Modified public property Modified: Boolean read GetModified;

Returns True if the content of the query has changed.

State public property State: TDataSetState read GetState;

Get the current query state.

Active public property Active: Boolean read GetActive write SetActive;

Checks if the query is active.

DataSet public property DataSet: TDataSet read GetDataSet;

Get the dataset of the query.

FieldDefs public property FieldDefs: TFieldDefs read GetFieldDefs;

Get the fielders of the query.

DataSource public property DataSource: TDataSource read GetDataSource write

SetDataSource;

Get or set a master query datasource.

DataBase public property DataBase: TBrookDataBase read GetDataBase write

SetDataBase;

Get or set a query database.

DateAsString public property DateAsString: Boolean read FDateAsString write

FDateAsString;

Enables the date saving as string.

AsJSON public property AsJSON: TJSONStringType read GetAsJSON write SetAsJSON;

Returns a JSON string with the query registers.

Rows public property Rows: TJSONArray read GetRows;

Returns a JSON array with the query registers.

Row public property Row: TJSONObject read GetRow;

Returns the current register in a JSON object.

#### Methods

Init

Declaration public constructor Init(ADataBase: TBrookDataBase); virtual; abstract;

**Description** Creates an instance of a TBrookQuery(16.4) class.

#### Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookQuery(16.4) class.

#### Create

Declaration public class function Create(ADataBase: TBrookDataBase): TBrookQuery;

**Description** Creates an instance of a TBrookQuery(16.4) class.

#### **InitBrokerClass**

Declaration public class procedure InitBrokerClass;

**Description** Initializes the class broker.

#### **BrokerClass**

Declaration public class function BrokerClass: TBrookQueryClass; virtual;

**Description** Registers the broker class.

#### GetJSONType

Declaration public class function GetJSONType(const AFieldClass: TFieldClass):
ShortString;

**Description** Returns a JSON type according to a field class.

### GetJSONType

Declaration public class function GetJSONType(const AField: TField): ShortString;

**Description** Returns a JSON type according to a field type.

#### **JSONToFields**

Declaration public class procedure JSONToFields(AJSON: TJSONObject; AFields: TFields; const ADateAsString: Boolean);

**Description** Set the content of a JSON object to fields.

#### FieldsToJSON

Declaration public class procedure FieldsToJSON(AFields: TFields; AJSON: TJSONObject; const ADateAsString: Boolean);

**Description** Set the content of fields to a JSON object.

#### DataSetToJSON

**Description** Set the content of a dataset to a JSON array.

#### **JSONToParams**

Declaration public class procedure JSONToParams(AJSON: TJSONObject; AParams: TParams; AFieldDefs: TFieldDefs; const ADateAsString, AAutoCreateParams: Boolean);

**Description** Set the content of a JSON object to params.

#### FieldDefsToSchema

Declaration public class procedure FieldDefsToSchema(AFieldDefs: TFieldDefs; ASchema: TJSONObject); overload;

**Description** Set the content of fieldsdefs to a JSON object.

#### FieldDefsToSchema

Declaration public class procedure FieldDefsToSchema(AFieldDefs: TFieldDefs; out ASchema: TJSONStringType); overload;

**Description** Set the content of fieldsdefs to a JSON string.

#### **GetJSONAttributes**

Declaration public class procedure GetJSONAttributes(AJSON: TJSONObject; out ANames: string; out AValues: Variant; const ADelimiter: Char = SC);

**Description** Get the attributes of a JSON object and converts into a variant.

#### GetSchema

Declaration public procedure GetSchema(out ASchema: TJSONObject); overload;

**Description** Returns a JSON object with the query columns.

## $\mathbf{GetSchema}$

Declaration public function GetSchema: TJSONStringType; overload;

**Description** Returns a JSON string with the query columns.

#### Locate

Declaration public class function Locate(ADataSet: TDataSet; const AJSON: TJSONObject; const AOptions: TLocateOptions): Boolean; overload;

**Description** Locates a register from a JSON object.

#### **GetRows**

Declaration public function GetRows(out AJSON: TJSONArray): TBrookQuery;

**Description** Get all the rows of a query in a JSON array.

#### GetRow

Declaration public function GetRow(out AJSON: TJSONObject): TBrookQuery;

**Description** Get the current register in a JSON object.

#### **SetRows**

Declaration public function SetRows(AJSON: TJSONArray): TBrookQuery;

**Description** Inserts registers from a JSON array.

#### $\mathbf{Set}\mathbf{Row}$

Declaration public function SetRow(AJSON: TJSONObject): TBrookQuery;

**Description** Inserts one register from a JSON object.

#### Bind

Declaration public function Bind(AJSON: TJSONObject): TBrookQuery;

**Description** Binds a JSON object to the parameters.

### **ApplyUpdates**

Declaration public function ApplyUpdates: TBrookQuery; virtual; abstract;

**Description** Applies all the changes stored in the buffer.

#### CancelUpdates

Declaration public function CancelUpdates: TBrookQuery; virtual; abstract;

**Description** Cancels all the updates stored in the buffer.

## Apply

Declaration public function Apply(const ARetaining: Boolean = False): TBrookQuery; virtual; abstract;

**Description** Applies the updates stored in the buffer and commits the transaction.

#### Undo

Declaration public function Undo(const ARetaining: Boolean = False): TBrookQuery; virtual; abstract;

**Description** Undoes the updates stored in the buffer and rollbacks the transaction.

#### Commit

**Description** Commits the transaction.

#### Rollback

Declaration public function Rollback(const ARetaining: Boolean = False): TBrookQuery; virtual; abstract;

**Description** Rollbacks the transaction.

#### Append

Declaration public function Append(AJSON: TJSONObject): TBrookQuery;

**Description** Adds a JSON object to the end of registers.

#### Insert

Declaration public function Insert(AJSON: TJSONObject): TBrookQuery;

**Description** Inserts a JSON object in the current position.

#### Edit

Declaration public function Edit(AJSON: TJSONObject): TBrookQuery;

**Description** Edits the current register by means of a JSON object.

#### Cancel

Declaration public function Cancel: TBrookQuery;

**Description** Cancels editions in the query.

# Delete Declaration public function Delete: TBrookQuery; **Description** Deletes the current register. Open Declaration public function Open: TBrookQuery; **Description** Opens the query. Close Declaration public function Close: TBrookQuery; **Description** Closes the query. Refresh Declaration public function Refresh: TBrookQuery; **Description** Refreshes the query. First Declaration public function First: TBrookQuery; **Description** Goes to the query first register. Prior Declaration public function Prior: TBrookQuery; **Description** Goes to the query previous register. Next Declaration public function Next: TBrookQuery; **Description** Goes to the query next register.

Declaration public function Last: TBrookQuery;

**Description** Goes to the query last register.

Last

#### Post

Declaration public function Post: TBrookQuery;

**Description** Applies editions to the query.

#### Execute

Declaration public function Execute: TBrookQuery; virtual; abstract;

**Description** Executes the query.

#### RowsAffected

Declaration public function RowsAffected: TRowsCount; virtual; abstract;

**Description** Get the number of changed registers.

#### Locate

Declaration public function Locate(const AJSON: TJSONObject; const AOptions:

TLocateOptions = []): Boolean; overload;

**Description** Locates a register by means of JSON object.

#### Locate

 ${\bf Declaration\ public\ function\ Locate(const\ AKeyFields:\ string;\ const\ AKeyValues:$ 

Variant; const AOptions: TLocateOptions = []): Boolean; overload;

**Description** Locates a register passing a key and a value.

#### Param

Declaration public function Param(const AName: string): TParam; virtual; abstract;

**Description** Get a query parameter.

#### Field

Declaration public function Field(const AName: string): TField; virtual; abstract;

**Description** Get a query field.

#### FieldDef

Declaration public function FieldDef(const AName: string): TFieldDef; virtual;

abstract;

**Description** Get a query fielddef.

#### Count

Declaration public function Count: Int64;

**Description** Get the number of registers.

Position

Declaration public function Position: Int64;

**Description** Get the position of the current register.

GetBookmark

Declaration public function GetBookmark: TBookmark;

**Description** Creates a bookmark.

#### GotoBookmark

Declaration public procedure GotoBookmark(ABookmark: TBookmark);

**Description** Goes to a bookmark.

# **16.5** Types

# $TBrookQueryClass \_$

Declaration TBrookQueryClass = class of TBrookQuery;

**Description** Is a metaclass for TBrookQuery(16.4) class.

# Chapter 17

# Unit BrookRequestHelper

# 17.1 Description

Brook Request Helper unit. Copyright (C) 2012 Silvio Clecio.

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# 17.2 Uses

- BrookUtils(23)
- BrookConsts(6)
- BrookHTTPConsts(12)
- HttpDefs
- SysUtils
- Classes
- CustWeb

## 17.3 Overview

TBrookRequestHelper Class Adds features to TRequest class.

# 17.4 Classes, Interfaces, Objects and Records

## TBrookRequestHelper Class helper for TRequest

## Hierarchy

TBrookRequestHelper > TObject

### Description

Adds features to TRequest class.

# **Properties**

```
Path public property Path[const AIndex: Integer]: string read GetPath; Get the current path, script name and pathinfo included.
```

#### Methods

#### SetScheme

```
Declaration public class procedure SetScheme(const AScheme: ShortString);
```

 ${\bf Description} \ \ {\bf Set \ the \ URL \ scheme \ (HTTP \ or \ HTTPs) \ in \ {\bf GetFullURL \ function}. }$ 

#### GetScheme

```
Declaration public class function GetScheme: ShortString;
```

**Description** Get the current URL scheme (HTTP or HTTPs).

#### GetPath

```
Declaration public function GetPath(const AIndex: Integer): string;
```

**Description** Get the path level passing the respective index. Exemple:

BrookGetPathLavel('/a/b/c/', 1) = b.

#### IsGet

```
Declaration public function IsGet: Boolean;
```

**Description** Checks if the request was done under the GET method.

#### **IsPost**

```
Declaration public function IsPost: Boolean;
```

**Description** Checks if the request was done under the POST method.

#### **IsPut**

Declaration public function IsPut: Boolean;

**Description** Checks if the request was done under the PUT method.

**IsDelete** 

Declaration public function IsDelete: Boolean;

**Description** Checks if the request was done under the DELETE method.

**IsHead** 

Declaration public function IsHead: Boolean;

**Description** Checks if the request was done under the HEAD method.

**IsOptions** 

Declaration public function IsOptions: Boolean;

**Description** Checks if the request was done under the OPTIONS method.

**IsAjax** 

Declaration public function IsAjax: Boolean;

**Description** Checks if the request was done by means of Ajax.

IsXhr

Declaration public function IsXhr: Boolean;

**Description** Checks if the request was done by means of Xhr.

**IsForm** 

Declaration public function IsForm: Boolean;

**Description** Checks if the request was done by means of a HTML form.

IsFormData

Declaration public function IsFormData: Boolean;

**Description** Checks if the request was done by means of a HTML data form.

#### ${\bf Overridden Method}$

Declaration public function OverriddenMethod: ShortString;

**Description** Get X-HTTP-Method-Override header

#### GetHostWithPort

Declaration public function GetHostWithPort: string;

**Description** Get the URL and the port separated by a ":", exemple: http://localhost:80

#### GetPath

Declaration public function GetPath: string;

**Description** Get the current path.

#### GetFullURL

Declaration public function GetFullURL: string;

**Description** Get the full URL, schema included.

#### GetURLWithScriptName

Declaration public function GetURLWithScriptName: string;

**Description** Get the full URL, schema and script name included.

#### GetIP

Declaration public function GetIP: ShortString;

**Description** Get the IP of the requester.

#### GetDocumentRoot

Declaration public function GetDocumentRoot: string;

**Description** Get the server path where HTML documents can be placed.

#### Variable

Declaration public function Variable(const AName: string): string;

**Description** Get a environment variable given its name.

### Variables

Declaration public procedure Variables(out AValues: TStrings);

**Description** Get a list with all environment variables.

# Chapter 18

# Unit BrookResponseHelper

#### Description 18.1

Brook Response Helper unit. Copyright (C) 2012 Silvio Clecio.

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#### Uses 18.2

- BrookMessages(15)
- BrookConsts(6)
- BrookHTTPConsts(12)
- BrookHTTPUtils(13)
- BrookException(11)
- HTTPDefs
- Classes
- SysUtils

#### 18.3 Overview

EBrookResponseHelper Class Handles exceptions for TBrookResponseHelper(18.4).

TBrookResponseHelper Class Adds features to TResponse class.

# 18.4 Classes, Interfaces, Objects and Records

### EBrookResponseHelper Class \_\_\_\_\_

## Hierarchy

EBrookResponseHelper > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookResponseHelper(18.4).

# TBrookResponseHelper Class helper for TResponse \_\_\_\_\_

## Hierarchy

 ${\it TBrookResponse Helper} > {\it TObject}$ 

# Description

Adds features to TResponse class.

### **Properties**

```
Header public property Header[AName: string]: string read GetHeader write SetHeader; Get or set a HTTP header.
```

```
Status public property Status: Integer read GetStatus write SetStatus;

Get or set a HTTP status code.
```

#### Methods

#### **IsEmpty**

```
Declaration public function IsEmpty: Boolean;
```

**Description** Is this a empty response?

#### **IsInformational**

```
Declaration public function IsInformational: Boolean;
```

**Description** Is this an informational response?

#### **IsOK**

```
Declaration public function IsOK: Boolean;
```

**Description** Is this a 200 OK response?

#### IsSuccessful

Declaration public function IsSuccessful: Boolean;

**Description** Is this a 2xx successful response?

#### IsRedirection

Declaration public function IsRedirection: Boolean;

**Description** Is this a 3xx redirection response?

#### **IsRedirect**

Declaration public function IsRedirect: Boolean;

**Description** Is this a specific redirect response? (301, 302, 303, 307)

#### IsForbidden

Declaration public function IsForbidden: Boolean;

**Description** Is this a forbidden response?

#### **IsNotFound**

Declaration public function IsNotFound: Boolean;

**Description** Is this a 404 not found response?

#### **IsClientError**

Declaration public function IsClientError: Boolean;

**Description** Is this a client error response?

#### **IsServerError**

Declaration public function IsServerError: Boolean;

**Description** Is this a server error response?

### AddContentDisposition

 $\textbf{Declaration} \ \ \textbf{public procedure AddContentDisposition(const AContentType: ShortString;}$ 

const AFileName: TFileName = ES; const ADispositionType: ShortString =
BROOK\_HTTP\_CONTENT\_DISPOSITION\_ATTACHMENT; const AContentDescription:
ShortString = ES; const AModificationDate: TDateTime = NullDate);

**Description** Defines a content disposition for a file.

# Chapter 19

# Unit BrookRESTActions

#### Description 19.1

Brook REST Actions unit. Copyright (C) 2012 Silvio Clecio.

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#### 19.2Uses

- BrookDBAction(8)
- BrookUtils(23)
- BrookHTTPConsts(12)
- HTTPDefs
- FPJSON
- SysUtils

#### 19.3 Overview

TBrookOptionsAction Class Displays the schema of the resource.

TBrookRetrieveAction Class Displays all the contents of the resource.

TBrookShowAction Class Displays the content of a specific resource.

TBrookCreateAction Class Creates a new resource.

TBrookUpdateAction Class Updates a specific resource.

TBrookDestroyAction Class Destroy a specific resource.

# 19.4 Classes, Interfaces, Objects and Records

## TBrookOptionsAction Class \_\_\_\_\_

# Hierarchy

 $\label{eq:thm:decomp} TBrookOptionsAction > TBrookDBAction(8.4) > TBrookCustomDBAction(8.4) > TBrookAction(1.4) > TBrookObject(4.4) > TObject$ 

## Description

Displays the schema of the resource.

#### Methods

### Options

Declaration public procedure Options; override;

**Description** Is triggered by a OPTIONS HTTP request method.

#### Execute

Declaration public function Execute: Boolean; virtual;

**Description** Executes the action. If there are schema in the resource, they are returned, if not, it returns a '{ "error": "No schema." }' JSON.

#### TBrookRetrieveAction Class \_

## Hierarchy

 $\label{eq:thm:condition} TBrookDescript{RetrieveAction} > \texttt{TBrookDescript{BAction}}(8.4) > \texttt{TBrookCustomDescript{BAction}}(8.4) > \texttt{TBrookAction}(1.4) > \texttt{TBrookObject}(4.4) > \texttt{TObject}$ 

#### Description

Displays all the contents of the resource.

#### Methods

#### Request

Declaration public procedure Request(ARequest: TRequest; AResponse: TResponse);

override;

**Description** Is triggered by a request of any HTTP method.

Execute

Declaration public function Execute: Boolean; virtual;

Description Executes the action. If there are contents in the resource, they are returned, if not, it returns

a 404 status code.

## TBrookShowAction Class \_\_\_\_\_

## Hierarchy

$$\label{eq:thm:bound} \begin{split} & TBrookShowAction > TBrookDBAction(8.4) > TBrookCustomDBAction(8.4) > TBrookAction(1.4) > TBrookObject(4.4) \\ & > TObject \end{split}$$

### Description

Displays the content of a specific resource.

#### Methods

#### Request

 $\textbf{Declaration} \ \ \texttt{public procedure Request} (\texttt{ARequest: TRequest}; \ \ \texttt{AResponse: TResponse});$ 

override:

**Description** Is triggered by a request of any HTTP method.

Execute

Declaration public function Execute: Boolean; virtual;

**Description** Executes the action. If there are contents in the resource, they are returned, if not, it returns

a 404 status code.

## TBrookCreateAction Class \_\_\_\_

## Hierarchy

 $\label{eq:tombbaction} TBrookCreateAction > TBrookDBAction(8.4) > TBrookCustomDBAction(8.4) > TBrookAction(1.4) > TBrookObject(4.4) > TObject$ 

## Description

Creates a new resource.

#### Methods

#### Request

Declaration public procedure Request(ARequest: TRequest; AResponse: TResponse);

override;

**Description** Is triggered by a request of any HTTP method.

#### Execute

Declaration public function Execute: Boolean; virtual;

**Description** Executes the action. The 201 status code is always returned.

## TBrookUpdateAction Class \_\_\_\_

### Hierarchy

$$\label{eq:thm:decomp} \begin{split} & TBrookUpdateAction > TBrookDBAction(8.4) > TBrookCustomDBAction(8.4) > TBrookAction(1.4) > TBrookObject(4.4) \\ & > TObject \end{split}$$

# Description

Updates a specific resource.

### Methods

#### Request

Declaration public procedure Request(ARequest: TRequest; AResponse: TResponse); override;

**Description** Is triggered by a request of any HTTP method.

#### Execute

Declaration public function Execute: Boolean; virtual;

**Description** Executes the action. If the edition is successful, the 204 status code is returned, if not, the code is 201.

## TBrookDestroyAction Class \_

#### Hierarchy

 $\label{eq:tookDestroyAction} TBrookDBAction(8.4) > TBrookCustomDBAction(8.4) > TBrookAction(1.4) > TBrookObject(4.4) > TObject$ 

# Description

Destroy a specific resource.

# ${\bf Methods}$

## Request

```
Declaration public procedure Request(ARequest: TRequest; AResponse: TResponse); override;
```

**Description** Is triggered by a request of any HTTP method.

#### Execute

Declaration public function Execute: Boolean; virtual;

**Description** Executes the action. If the deletion is successful, the 204 status code is returned, if not, the code is 404.

# Chapter 20

# Unit BrookRouter

# 20.1 Description

Brook Router unit.

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# **20.2** Uses

- BrookClasses(4)
- BrookException(11)
- BrookAction(1)
- BrookUtils(23)
- BrookConsts(6)
- BrookMessages(15)
- BrookHTTPConsts(12)
- HTTPDefs
- FPJSON
- Classes
- SysUtils
- StrUtils

## 20.3 Overview

EBrookRoutes Class Handles exceptions for TBrookRoutes(20.4).

EBrookRouter Class Handles exceptions for TBrookRouter(20.4).

TBrookRoute record Defines a route item.

TBrookRoutes Class Defines a list of routes.

TBrookRouter Class Provides features for the route handling.

# 20.4 Classes, Interfaces, Objects and Records

## EBrookRoutes Class

## Hierarchy

EBrookRoutes > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookRoutes(20.4).

### EBrookRouter Class \_

### Hierarchy

EBrookRouter > EBrook(11.4) > Exception

#### Description

Handles exceptions for TBrookRouter(20.4).

## TBrookRoute record \_\_\_\_

#### Description

Defines a route item.

#### **Fields**

ActionClass ActionClass: TBrookActionClass;

Specifies the class of the action to be called.

Method: TBrookRequestMethods;

Specifies a HTTP request method of the action to be called.

Pattern Pattern: string;

Specifies the patter of the action to be called.

#### TBrookRoutes Class \_\_\_\_\_

# Hierarchy

TBrookRoutes > TBrookObject(4.4) > TObject

## Description

Defines a list of routes.

# **Properties**

```
Items public property Items[const AIndex: Integer]: PBrookRoute read GetItems write
    SetItems;
    The list of routes.

List public property List: TFPList read FList;
    The router pointers list.
```

#### Methods

#### Create

Declaration public constructor Create;

**Description** Creates an instance of a TBrookRoutes(20.4) class.

#### Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookRoutes(20.4) class.

#### Count

Declaration public function Count: Integer;

**Description** Returns the number of registered routes.

#### $\mathbf{Add}$

Declaration public function Add(AActionClass: TBrookActionClass; const APattern: string; const AMethod: TBrookRequestMethods; const ADefault: Boolean): Integer;

**Description** Adds a route item.

#### ${\bf GetDefaultActionClass}$

Declaration public procedure GetDefaultActionClass(out AClass: TBrookActionClass; out AIndex: Integer);

**Description** Get the default action class.

#### ${\bf Pattern By Action Class}$

Declaration public function PatternByActionClass(AClass: TBrookActionClass): string;

**Description** Get the registered pattern of a class.

#### ActionClassByPattern

Declaration public function ActionClassByPattern(const APattern: string):

TBrookActionClass;

**Description** Get the action class from a patter.

#### ActionClassByClassName

Declaration public function ActionClassByClassName(const AName: string):

TBrookActionClass;

**Description** Get an action class from its class name.

#### TBrookRouter Class \_\_\_\_\_

## Hierarchy

TBrookRouter > TBrookObject(4.4) > TObject

#### Description

Provides features for the route handling.

## **Properties**

Routes public property Routes: TBrookRoutes read FRoutes write FRoutes;

List of available routes.

CurrentAction public property CurrentAction: TBrookAction read FCurrentAction;

The current action.

 $Current Route \quad \hbox{public property Current Route:} \quad \hbox{TBrook Route read FCurrent Route;}$ 

The current route.

#### Methods

#### Create

Declaration public constructor Create; virtual;

**Description** Creates an instance of a TBrookRouter(20.4) class.

#### Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookRouter(20.4) class.

#### RegisterService

Declaration public class procedure RegisterService;

**Description** Registers the service provided by this class.

#### UnregisterService

Declaration public class procedure UnregisterService;

**Description** Unregisters the service provided by this class.

#### Service

Declaration public class function Service: TBrookRouter;

**Description** Return a instance of this class.

#### ${\bf MethodNotAllowed}$

Declaration public class procedure MethodNotAllowed(AResponse: TResponse);

**Description** Sends the HTTP "NotAllowed" status code to the response.

### UrlFor

Declaration public function UrlFor(AActionClass: TBrookActionClass; const AParams: array of string): string; overload;

**Description** Creates an URL for an action informing an array of parameters. Exemple:

```
procedure TMyAction.Get(ARequest: TBrookRequest; AResponse: TBrookResponse);
begin
    // When calling with http://localhost/cgi-bin/cgi1/foo/myvalue
    // the output will be /cgi-bin/cgi1/foo/myvalue
    Write(UrlFor(TMyAction, ['myvalue']));
end;
initialization
    TMyAction.Register('/foo/:myvar')
```

#### UrlFor

Declaration public function UrlFor(AClassName: string; const AParams: array of string): string; overload;

**Description** Creates an URL for an action passing an array of parameters however informing the class name as string

#### UrlFor

Declaration public function UrlFor(AActionClass: TBrookActionClass; const AParams: TJSONData): string; overload;

**Description** Creates an URL for an action passing a JSON data.

#### UrlFor

Declaration public function UrlFor(AClassName: string; const AParams: TJSONData): string; overload;

**Description** Creates an URL for an action passing a JSON data however informing the class name as string.

#### Canonicalize

Declaration public function Canonicalize(ARequest: TRequest; AResponse: TResponse):
Boolean;

**Description** Adds an slash to the end of the URL if does not exist.

#### MatchPattern

Declaration public function MatchPattern(APattern, APathInfo: string; out ARedirect: Boolean; out ANames, AValues: TBrookArrayOfString): Boolean; virtual;

**Description** Checks if the given parameters match with a registered route.

#### Route

Declaration public procedure Route(ARequest: TRequest; AResponse: TResponse); virtual; Description Runs the route processing.

# 20.5 Types

## TBrookRoutesClass \_\_\_\_\_

Declaration TBrookRoutesClass = class of TBrookRoutes;

 $\textbf{Description} \ \ \text{Is a metaclass for $\tt TBrookRoutes}(20.4) \ class.$ 

# TBrookRouterClass \_\_\_\_

Declaration TBrookRouterClass = class of TBrookRouter;

**Description** Is a metaclass for TBrookRouter(20.4) class.

## PBrookRoute \_\_\_\_

Declaration PBrookRoute = ^TBrookRoute;

**Description** Defines a pointer to the route item.

# Chapter 21

# Unit BrookSession

# 21.1 Description

Brook Session unit.

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# 21.2 Uses

- BrookClasses(4)
- BrookUtils(23)
- BrookException(11)
- BrookConsts(6)
- FPJSON
- JSONParser
- Classes
- SysUtils
- HTTPDefs
- DateUtils

## 21.3 Overview

EBrookSession Class Handles exceptions for TBrookSession(21.4).

TBrookSession Class Defines features to the section handling.

# 21.4 Classes, Interfaces, Objects and Records

# EBrookSession Class \_

### Hierarchy

EBrookSession > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookSession(21.4).

# TBrookSession Class \_\_\_\_\_

### Hierarchy

TBrookSession > TBrookObject(4.4) > TObject

# Description

Defines features to the section handling.

### **Properties**

CookieName public property CookieName: string read FCookieName write FCookieName;

Set the session cookie name.

Directory public property Directory: string read FDirectory write FDirectory;

Set the name of directory session.

Expired public property Expired: Boolean read IsExpired;

Returns True if the session has expired.

SID public property SID: string read FSID;

Get the ID session.

Started public property Started: Boolean read IsStarted;

Checks if the session has started.

FileName public property FileName: TFileName read FFileName write FFileName;

The session file name.

FilePrefix public property FilePrefix: ShortString read FFilePrefix write

FFilePrefix;

The session file prefix.

Fields public property Fields: TJSONObject read FFields;

The fields session.

TimeOut public property TimeOut: Integer read FTimeOut write FTimeOut;

The remaining seconds for the session end.

HttpOnly public property HttpOnly: Boolean read FHttpOnly write FHttpOnly;

Informs if the session cookie is accessible only by HTTP requests, if True, the JavaScript

access is not allowed.

#### Methods

#### Create

Declaration public constructor Create; virtual;

**Description** Creates an instance of a TBrookSession(21.4) class.

#### Destroy

Declaration public destructor Destroy; override;

**Description** Frees an instance of TBrookSession(21.4) class.

#### **IsExpired**

Declaration public function IsExpired: Boolean; virtual;

**Description** Returns True if the session has expired.

#### GenerateID

Declaration public function GenerateID: string; virtual;

**Description** Creates an ID for the session.

#### Start

Declaration public procedure Start(ARequest: TRequest); virtual;

**Description** Starts the session.

#### Finish

Declaration public procedure Finish(AResponse: TResponse); virtual;

**Description** Terminates the session.

Expire

Declaration public procedure Expire(ARequest: TRequest; AResponse: TResponse);

virtual;

**Description** Expires the session.

DeleteFiles

Declaration public procedure DeleteFiles;

**Description** Deletes the session files.

Exists

Declaration public function Exists(const AName: string): Boolean;

**Description** Checks if a name exists in fields.

DeleteOldFiles

Declaration public procedure DeleteOldFiles(const ABeforeOf: TDateTime);

**Description** Deletes the session files except for the current session file.

# **21.5** Types

#### TBrookSessionClass \_\_\_\_\_

Declaration TBrookSessionClass = class of TBrookSession;

**Description** Is a metaclass for  $\mathtt{TBrookSession}(21.4)$  class.

# Chapter 22

# Unit BrookTable

# 22.1 Description

Brook Table unit.

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# **22.2** Uses

- BrookClasses(4)
- BrookDataBase(7)
- BrookQuery(16)
- BrookException(11)
- BrookMessages(15)
- BrookConsts(6)
- BrookDBConsts(9)
- DB
- SQLdb
- FPJSON
- SysUtils

## 22.3 Overview

EBrookTable Class Handles exceptions for TBrookTable(22.4).

TBrookTable Class Handles database tables.

# 22.4 Classes, Interfaces, Objects and Records

#### EBrookTable Class \_

## Hierarchy

EBrookTable > EBrook(11.4) > Exception

## Description

Handles exceptions for TBrookTable(22.4).

#### TBrookTable Class \_\_\_\_

## Hierarchy

TBrookTable > TBrookObject(4.4) > TObject

# Description

Handles database tables.

## **Properties**

Name public property Name: string read FName write FName;

Defines the table name.

BOF public property BOF: Boolean read GetBOF;

Checks if the cursor is at the first register.

EOF public property EOF: Boolean read GetEOF;

Checks if the cursor is at the last register.

Bookmark public property Bookmark: TBookmark read GetBookmark write GotoBookmark;

Returns or creates a bookmark.

Modified public property Modified: Boolean read GetModified;

Returns True if the content of the table has changed.

State public property State: TDataSetState read GetState;

Get the current table state.

Active public property Active: Boolean read GetActive write SetActive;

Checks if the table is active.

DataSet public property DataSet: TDataSet read GetDataSet;

Get the dataset of the table.

FieldDefs public property FieldDefs: TFieldDefs read GetFieldDefs;

Get the fieldefs of the table.

DataSource public property DataSource: TDataSource read GetDataSource write

SetDataSource;

Get or set a master table datasource.

DataBase public property DataBase: TBrookDataBase read GetDataBase write

SetDataBase:

Get or set a table database.

DateAsString public property DateAsString: Boolean read GetDateAsString write

SetDateAsString;

Enables the date saving as string.

AsJSON public property AsJSON: TJSONStringType read GetAsJSON write SetAsJSON;

Returns a JSON string with the table registers.

Rows public property Rows: TJSONArray read GetRows;

Returns a JSON array with the table registers.

Row public property Row: TJSONObject read GetRow;

Returns the current register in a JSON object.

Columns public property Columns[const AName: string]: TField read GetColumns;

The list of table columns.

Prepared public property Prepared: Boolean read IsPrepared;

Checks if a statement preparation is set.

Fields public property Fields: TFields read GetFields;

Are the table fields.

Params public property Params: TParams read GetParams;

Are the table parameters.

#### Methods

#### Create

**Description** Creates an instance of a TBrookTable(22.4) class.

#### Create

Declaration public constructor Create(const ATableName: string = ES); reintroduce;

**Description** Creates an instance of a TBrookTable(22.4) class.

#### GetConditions

Declaration public class procedure GetConditions(AJSON: TJSONObject; out AConditions: string);

**Description** Receives an JSON object with parameters and creates a "SQL where" condition.

#### GetSchema

Declaration public procedure GetSchema(out ASchema: TJSONObject); overload;

**Description** Returns a JSON object with the table columns.

#### GetSchema

Declaration public function GetSchema: TJSONStringType; overload;

**Description** Returns a JSON string with the table columns.

#### CreateFields

Declaration public function CreateFields(AJSON: TJSONObject): TBrookTable;

**Description** Creates fielddefs from a JSON Object.

#### **GetRows**

Declaration public function GetRows(out AJSON: TJSONArray): TBrookTable;

**Description** Get all the rows of a query in a JSON array.

#### GetRow

Declaration public function GetRow(out AJSON: TJSONObject): TBrookTable;

**Description** Get the current register in a JSON object.

#### SetRows

Declaration public function SetRows(AJSON: TJSONArray): TBrookTable;

**Description** Inserts registers from a JSON array.

#### SetRow

Declaration public function SetRow(AJSON: TJSONObject): TBrookTable;

**Description** Inserts one register from a JSON object.

#### Bind

Declaration public function Bind(AJSON: TJSONObject): TBrookTable;

**Description** Binds a JSON object to the parameters.

### **ApplyUpdates**

Declaration public function ApplyUpdates: TBrookTable;

**Description** Applies all the changes stored in the buffer.

#### CancelUpdates

Declaration public function CancelUpdates: TBrookTable;

**Description** Cancels all the updates stored in the buffer.

#### Apply

Declaration public function Apply(const ARetaining: Boolean = False): TBrookTable;

**Description** Applies the updates stored in the buffer and commits the transaction.

#### Undo

Declaration public function Undo(const ARetaining: Boolean = False): TBrookTable;

**Description** Undoes the updates stored in the buffer and rollbacks the transaction.

#### Commit

Declaration public function Commit(const ARetaining: Boolean = False): TBrookTable;

**Description** Commits the transaction.

#### Rollback

Declaration public function Rollback(const ARetaining: Boolean = False): TBrookTable;

**Description** Rollbacks the transaction.

#### Append

Declaration public function Append(AJSON: TJSONObject): TBrookTable;

**Description** Adds a JSON object to the end of registers.

#### Insert

Declaration public function Insert(AJSON: TJSONObject): TBrookTable;

**Description** Inserts a JSON object in the current position.

#### Edit

Declaration public function Edit(AJSON: TJSONObject): TBrookTable;

**Description** Edits the current register by means of a JSON object.

#### Cancel

Declaration public function Cancel: TBrookTable;

**Description** Cancels editions in the table.

#### Delete

Declaration public function Delete: TBrookTable;

**Description** Deletes the current register.

#### Open

Declaration public function Open: TBrookTable;

**Description** Opens the table.

#### Close

Declaration public function Close: TBrookTable;

**Description** Closes the table.

# Refresh Declaration public function Refresh: TBrookTable; **Description** Refreshes the table. First Declaration public function First: TBrookTable; **Description** Goes to the table first register. Prior Declaration public function Prior: TBrookTable; **Description** Goes to the table previous register. Next Declaration public function Next: TBrookTable; **Description** Goes to the table next register. Last Declaration public function Last: TBrookTable; **Description** Goes to the table last register. Clear Declaration public function Clear: TBrookTable; **Description** Clears the SQL statements and close the table. Reset Declaration public function Reset: TBrookTable; **Description** Clears the SQL statements, close the table and clears the fielddefs.

Declaration public function Post: TBrookTable;

**Description** Applies editions to the query.

Post

#### Locate

Declaration public function Locate(AJSON: TJSONObject; const AOptions: TLocateOptions = []): Boolean; overload;

**Description** Locates a register by means of JSON object.

#### Locate

Declaration public function Locate(const AKeyFields: string; const AKeyValues: Variant; const AOptions: TLocateOptions = []): Boolean; overload;

**Description** Locates a register passing a key and a value.

#### Find

**Description** Finds a register by means of JSON object.

#### Get

Declaration public function Get(const AKeyValue: Variant): TBrookTable; overload;

**Description** Gets a register passing a key value.

#### $\mathbf{Get}$

Declaration public function Get(const AKeyName: string; const AKeyValue: Variant): TBrookTable; overload;

**Description** Gets a register passing a key and a value.

#### Field

Declaration public function Field(const AName: string): TField;

**Description** Get a table field.

#### Param

Declaration public function Param(const AName: string): TParam;

**Description** Get a table parameter.

#### FieldDef

Declaration public function FieldDef(const AName: string): TFieldDef;

**Description** Get a table fielddef.

#### Conditions

Declaration public function Conditions(AJSON: TJSONObject): TBrookTable;

**Description** Receives an JSON object with parameters and creates a "SQL where" condition.

#### Count

Declaration public function Count: Int64;

**Description** Get the number of registers.

#### Position

Declaration public function Position: Int64;

**Description** Get the position of the current register.

#### RowsAffected

Declaration public function RowsAffected: TRowsCount;

**Description** Get the number of changed registers.

#### **Prepare**

Declaration public function Prepare: TBrookTable;

**Description** Composes a SQL statement.

#### Unprepare

Declaration public function Unprepare: TBrookTable;

**Description** Clears a SQL statement preparation.

#### Select

Declaration public function Select(const AFields: string): TBrookTable;

**Description** Composes a "SELECT" statement.

#### Where

Declaration public function Where(const AConditions: string): TBrookTable; overload;

**Description** Composes a "WHERE" statement.

#### Where

Declaration public function Where(const AConditions: string; const AArgs: array of const): TBrookTable; overload;

**Description** Composes a parametrized "WHERE" statement.

#### OrderBy

Declaration public function OrderBy(const AFields: string): TBrookTable;

**Description** Composes a "ORDER BY" statement.

### **Empty**

Declaration public function Empty: Boolean;

**Description** Checks if table is empty.

#### GetBookmark

Declaration public function GetBookmark: TBookmark;

**Description** Creates a bookmark.

#### GotoBookmark

Declaration public procedure GotoBookmark(ABookmark: TBookmark);

**Description** Goes to a bookmark.

# 22.5 Types

#### TBrookTableClass \_\_\_\_\_

Declaration TBrookTableClass = class of TBrookTable;

**Description** Is a metaclass for TBrookTable(22.4) class.

# Chapter 23

# Unit BrookUtils

# 23.1 Description

Brook Utils unit.

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# 23.2 Uses

- BrookException(11)
- BrookMessages(15)
- BrookConsts(6)
- $\bullet$  BrookHTTPConsts(12)
- HTTPDefs
- FPJSON
- CustWeb
- SysUtils

## 23.3 Overview

TBrookSettings record Stores the Brook configurations.

BrookExtractPathLevels Get the next pathinfo level.

BrookGetPathLevel Get the path level passing the respective index.

BrookGetPathLevels Get the path from the level correspondent to the index to the last level.

BrookMatchMethod Checks if a string is equivalent a enumerator representing a HTTP request method.

BrookDeleteFiles Deletes files according to their creation dates and file names.

BrookFileDate Get the datetime of a file.

BrookFileSetDate Set the datetime of a file.

BrookJSONCopy Copy the content of a JSON Object to another.

BrookDumpStack Writes a backtrace of the current exception.

# 23.4 Classes, Interfaces, Objects and Records

# TBrookSettings record \_

## Description

Stores the Brook configurations.

#### **Fields**

Mapped Mapped: Boolean;

Enables the mapping of HTTP request methods.

Charset: ShortString;

Set the default application Charset.

ContentType ContentType: ShortString;

Set the default application Content-Type.

Language: ShortString;

Set the default application Language.

Page404: string;

Set the 404 HTML page. It can be a HTML string, a file pack, a JSON string, etc.

Page500 Page500: string;

Set the 500 HTML page. It can be a HTML string, a file pack, a JSON string, etc.

DirectoryForUploads DirectoryForUploads: string;

Set the default directory for uploads.

 $Delete Uploaded Files \quad {\tt DeleteUploaded Files:} \quad {\tt Boolean;}$ 

Defines if the temporary uploaded files will be deleted.

AcceptsJSONContent AcceptsJSONContent: Boolean;

Defines if the application allows JSON formated requests.

Configuration Configuration: string;

Set a configuration for the application or for its object members.

OnError: TOnShowRequestException;

Handles the application exceptions.

# 23.5 Functions and Procedures

# BrookExtractPathLevels \_

Declaration procedure BrookExtractPathLevels(S: string; var R: string; out ALv1:

string; out AEndDelim: Boolean; const ADelimiter: Char = US);

**Description** Get the next pathinfo level.

#### BrookGetPathLevel \_\_\_\_

Declaration function BrookGetPathLevel(const APath: string; const AIndex: SizeInt = 0;

const ADelimiter: Char = US): string;

**Description** Get the path level passing the respective index. Exemple:

BrookGetPathLavel('/a/b/c/', 1) = b.

#### BrookGetPathLevels \_

Declaration function BrookGetPathLevels(const APath: string; const AIndex: SizeInt =

0; const ADelimiter: Char = US): string;

**Description** Get the path from the level correspondent to the index to the last level. Exemple:

BrookGetPathLevels('/a/b/c/', 1) = b/c/.

#### BrookMatchMethod \_\_

 $\textbf{Declaration} \quad \texttt{function BrookMatchMethod} (\texttt{const ABrookMethod} \colon \quad \texttt{TBrookRequestMethods}; \quad \texttt{const} \\$ 

AMethod: string): Boolean;

**Description** Checks if a string is equivalent a enumerator representing a HTTP request method.

BrookDeleteFiles	
Declaration	<pre>procedure BrookDeleteFiles(APath: string; const ABeforeOf: TDateTime; const ASkippedFile: TFileName = ES; const AContains: string = ES);</pre>
Description	Deletes files according to their creation dates and file names.
BrookFileDate	
Declaration	<pre>function BrookFileDate(const AFileName: TFileName): TDateTime;</pre>
Description	Get the datetime of a file.
BrookFileSetDate	
Declaration	<pre>function BrookFileSetDate(const AFileName: TFileName; const ADateTime: TDateTime): LongInt;</pre>
Description	Set the datetime of a file.
BrookJSONCopy	
Declaration	<pre>procedure BrookJSONCopy(ASrc, ADest: TJSONObject);</pre>
Description	Copy the content of a JSON Object to another.
BrookDumpStack	
Declaration	<pre>function BrookDumpStack(const AEOL: ShortString = BR): string;</pre>
Description	Writes a backtrace of the current exception.
23.6 Ty	rpes
TBrookArrayOfString	
Declaration	<pre>TBrookArrayOfString = array of string;</pre>
Description	Defines a array of strings.
TBrookRequestMethods	
Declaration	<pre>TBrookRequestMethods = ();</pre>
Description	Defines an enumerator to represent the HTTP request methods.
Values	rmAll
	rmGet
	rmHead

rmOptions
rmPost
rmPut
rmDelete

# 23.7 Variables

# BrookSettings \_\_\_\_

Declaration BrookSettings: TBrookSettings = ( Mapped: False; Charset:

BROOK\_HTTP\_CHARSET\_UTF\_8; ContentType: BROOK\_HTTP\_CONTENT\_TYPE\_TEXT\_HTML;

Language: BROOK\_DEFAULT\_LANGUAGE; Page404: ES; Page500: ES;

DirectoryForUploads: ES; DeleteUploadedFiles: False; AcceptsJSONContent:

False; Configuration: ES; OnError: nil; );

**Description** Global variable to store Brook settings.