#### KARLSRUHE INSTITUTE OF TECHNOLOGY

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# rootJS

Node.js bindings for ROOT 6

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# $1. \ \ Node Application. tex$

describe class NodeApplication.tex here

#### 1.1. ctorCallback

Name	NodeApplication.tex::ctorCallback(args:	FunctionCallbackInfo <value>)</value>
Visibility	public	
Parameters	$args:\ Function CallbackInfo\!<\!Value\!>$	
Return value	none	
behavior	describe beahviour	



#### 1.2. staticCtorCallback

Name	NodeApplication.tex::staticCtorCallback(args:FunctionCallbackInfo <value>)</value>
Visibility	public
Parameters	$args \colon Function Callback Info < Value >$
Return value	none
behavior	describe beahviour



#### 1.3. memberGetterCallback

Name	NodeApplication.tex::memberGetterCallback(property: Local <string>, info: PropertyCallbackInfo<value>)</value></string>
Visibility	public
Parameters	$property:\ Local {<} String {>},\ info:\ Property\ CallbackInfo {<} Value {>}$
Return value	none
behavior	describe beahviour



#### 1.4. memberSetterCallback

Name	NodeApplication.tex::memberSetterCallback(property: Local <string>, value: Local<value>, info: PropertyCallbackInfo<value>)</value></value></string>	
Visibility	public	
Parameters	$property: \ \ Local < String>, \ \ value: \ \ \ Local < Value>, \ \ info: \ \ Property Callback-Info< Value>$	
Return value	none	
behavior	describe beahviour	



#### $1.5.\ member Function Callback$

Name	NodeApplication.tex::memberFunctionCallback(args:FunctionCallbackInfo <value>)</value>
Visibility	public
Parameters	$args \colon Function Callback Info < Value >$
Return value	none
behavior	describe beahviour



#### 1.6. staticGetterCallback

Name	<pre>NodeApplication.tex::staticGetterCallback(property: Local<string>, info: PropertyCallbackInfo<value>)</value></string></pre>
Visibility	public
Parameters	$property:\ Local {<} String {>},\ info:\ PropertyCallbackInfo {<} Value {>}$
Return value	none
behavior	describe beahviour



#### 1.7. staticSetterCallback

Name	NodeApplication.tex::staticSetterCallback(property: Local <string>, value: Local<value>, info: PropertyCallbackInfo<value>)</value></value></string>	
Visibility	public	
Parameters	$property: \ Local < String>, \ value: \ Local < Value>, \ info: \ Property Callback-Info< Value>$	
Return value	none	
behavior	describe beahviour	



#### 1.8. staticFunctionCallback

Name	NodeApplication.tex::staticFunctionCallback(args:FunctionCallbackInfo <value>)</value>
Visibility	public
Parameters	$args\colon Function Callback Info < Value>$
Return value	none
behavior	describe beahviour



#### 1.9. Initialize

Name	<pre>NodeApplication.tex::Initialize(exports: Local<object>, module: Local<object>)</object></object></pre>
Visibility	public
Parameters	$exports:\ Local < Object >,\ module:\ Local < Object >$
Return value	none
behavior	describe beahviour



#### 1.10. Instance

Name	NodeApplication.tex::Instance()
Visibility	public
-	none
Return value	NodeApplication describe return value
behavior	describe beahviour



## 1.11. getIsolate

Name	NodeApplication.tex::getIsolate()
Visibility	public
- $Parameters$	none
Return value	Isolate* describe return value
behavior	describe beahviour



## 1.12. getExports

Name	NodeApplication.tex::getExports()
Visibility	public
-	none
Return value	Local <object> describe return value</object>
behavior	describe beahviour



## 1.13. getTemplateFactory

Name	NodeApplication.tex::getTemplateFactory()
Visibility	public
Parameters	none
Return value	TemplateFactory describe return value
behavior	describe beahviour



## 1.14. getFunctionFactory

Name	NodeApplication.tex::getFunctionFactory()
Visibility	public
-	none
Return value	ProxyFunctionFactory describe return value
behavior	describe beahviour



## 1.15. getObjectFactory

Name	NodeApplication.tex::getObjectFactory()
Visibility	public
Parameters	none
Return value	ProxyObjectFactory describe return value
behavior	describe beahviour



# 2. TemplateFactory

describe class TemplateFactory here

## 2.1. createTemplate

Name	TemplateFactory::createTemplate(clazz: TClassRef)
Visibility	public
Parameters	clazz: TClassRef
Return value	Local <functiontemplate> describe return value</functiontemplate>
behavior	describe beahviour



# 3. TemplateCache.tex

 ${\it describe\ class\ TemplateCache.tex\ here}$ 

#### 3.1. contains

Name	TemplateCache.tex::contains(type: TClassRef)
Visibility	public
Parameters	$type:\ TClassRef$
Return value	bool describe return value
behavior	describe beahviour



## 3.2. get

Name	TemplateCache.tex::get(type: TClassRef)
Visibility	public
-	type: TClassRef
Return value	Local <functiontemplate> describe return value</functiontemplate>
behavior	describe beahviour



#### **3.3.** store

Name	<pre>TemplateCache.tex::store(type: TClassRef, tpl: Local<functiontemplate>)</functiontemplate></pre>
Visibility	public
Parameters	$type:\ TClassRef,\ tpl:\ Local{<} FunctionTemplate{>}$
Return value	none
behavior	describe beahviour



# 4. ProxyFunctionFactory.tex

 ${\it describe\ class\ ProxyFunctionFactory.tex\ here}$ 

## 4.1. createProxyFunction

Name	ProxyFunctionFactory.tex::createProxyFunction(info:	TMethod)
Visibility	public	
Parameters	info: TMethod	
Return value	ProxyFunciton describe return value	
behavior	describe beahviour	



## 4.2. from Args

Name	ProxyFunctionFactory.tex::fromArgs(name: string, clazz: TClassRef, args: FunctionCallbackInfo)
Visibility	public
Parameters	$name:\ string,\ clazz:\ TC lass Ref,\ args:\ Function Callback Info$
Return value	ProxyFunction describe return value
behavior	describe beahviour



# 5. ProxyFunction.tex

describe class ProxyFunction.tex here

## 5.1. ProxyFunction

Name	ProxyFunction.tex::ProxyFunction(address: void*, info: TFunction)
Visibility	public
Parameters	$address:\ void*,\ info:\ TFunction$
Return value	«constructor» describe return value
behavior	describe beahviour



## 5.2. convertArgs

Name	ProxyFunction.tex::convertArgs(args:	FunctionCallbackInfo)
Visibility	public	
- $Parameters$	$args \colon Function Call back Info$	
Return value	ProxyObject[] describe return value	
behavior	describe beahviour	



#### 5.3. call

Name	ProxyFunction.tex::call(args: ProxyObject[])
Visibility	public
-	args: ProxyObject[]
Return value	ProxyObject describe return value
behavior	describe beahviour



## 5.4. isTemplateFunction

Name	ProxyFunction.tex::isTemplateFunction()
Visibility	public
- $Parameters$	none
Return value	bool describe return value
behavior	describe beahviour



# ${\bf 6.\ ProxyObjectFactory.tex}$

describe class ProxyObjectFactory.tex here

# 6.1. createProxyObject

Name	<pre>ProxyObjectFactory.tex::createProxyObject(type: TDataMember, holder: ProxyObject)</pre>
Visibility	public
Parameters	type: TDataMember, holder: ProxyObject
Return value	ProxyObject describe return value
behavior	describe beahviour



# 7. ProxyObject.tex

describe class ProxyObject.tex here

## 7.1. ProxyObject

Name	ProxyObject.tex::ProxyObject(address:	void*, type:	TDataMember)
Visibility	protected		
Parameters	address: void*, type: TDataMember		
Return value	«constructor» describe return value		
behavior	describe beahviour		



## $7.2. \ getAddress$

Name	ProxyObject.tex::getAddress()
Visibility	public
- $Parameters$	none
Return value	void* describe return value
behavior	describe beahviour



## 7.3. getType

Name	ProxyObject.tex::getType()
Visibility	public
Parameters	none
Return value	TDataMember describe return value
behavior	describe beahviour



#### 7.4. set

Name	ProxyObject.tex::set(value: ProxyObject)
Visibility	public
Parameters	value: ProxyObject
Return value	none
behavior	describe beahviour



## 7.5. get

Name	ProxyObject.tex::get()
Visibility	public
Parameters	none
Return value	Local <value> describe return value</value>
behavior	describe beahviour



#### 7.6. isPrimitive

Name	ProxyObject.tex::isPrimitive()
Visibility	public
Parameters	none
Return value	bool describe return value
behavior	describe beahviour



# 8. FunctionHelper.tex

describe class FunctionHelper.tex here

## 8.1. GetCallFunc

Name	FunctionHelper.tex::GetCallFunc(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	CallFunc* describe return value
behavior	describe beahviour



### 8.2. copyArgs

Name	FunctionHelper.tex::copyArgs(args: void*, vargs: void**)
Visibility	public
Parameters	args: void*, vargs: void**
Return value	void describe return value
behavior	describe beahviour



#### 8.3. FastCall

Name	<pre>FunctionHelper.tex::FastCall(method: TCppMethod, args: void*, self: void*, result: void*)</pre>
Visibility	public
Parameters	$method: \ TCppMethod, \ args: \ void*, \ self: \ void*, \ result: \ void*$
Return value	bool describe return value
behavior	describe beahviour



### 8.4. CallV

Name	<pre>FunctionHelper.tex::CallV(method: TCppMethod, self: TCppObject, args: void*)</pre>
Visibility	public
Parameters	$method: \ TCppMethod, \ self: \ TCppObject, \ args: \ void*$
Return value	void describe return value
behavior	describe beahviour



#### 8.5. CallR

Name	FunctionHelper.tex::CallR(method: TCppMethod, self: TCppObject, args: void*)
Visibility	public
Parameters	$method: \ TCppMethod, \ self: \ TCppObject, \ args: \ void*$
Return value	void* describe return value
behavior	describe beahviour



### 8.6. CallS

Name	<pre>FunctionHelper.tex::CallS(method: TCppMethod, self: TCppObject, args: void*)</pre>
Visibility	public
Parameters	$method: \ TCppMethod, \ self: \ TCppObject, \ args: \ void*$
Return value	Char* describe return value
behavior	describe beahviour



### 8.7. CallO

Name	FunctionHelper.tex::CallO(method: TCppMethod, self: TCppObject, args: void*, resultype: TCppType)
Visibility	public
Parameters	$method:\ TCppMethod,\ self:\ TCppObject,\ args:\ void*,\ resultype:\ TCppType$
Return value	TCppObject describe return value
behavior	describe beahviour



### 8.8. CallConstructor

Name	<pre>FunctionHelper.tex::CallConstructor(method: TCppMethod, klass: TCppType, args: void*)</pre>
Visibility	public
Parameters	$method: \ TCppMethod, \ klass: \ TCppType, \ args: \ void*$
Return value	TCppObject describe return value
behavior	describe beahviour



### 8.9. CallDestructor

Name	FunctionHelper.tex::CallDestructor(type: TCppObject)	TCppType, self:
Visibility	public	
Parameters	type: TCppType, self: TCppObject	
Return value	void describe return value	
behavior	describe beahviour	



### 8.10. IsConstructor

Name	FunctionHelper.tex::IsConstructor(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	bool describe return value
behavior	describe beahviour



### 8.11. IsPublicMethod

Name	FunctionHelper.tex::IsPublicMethod(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	bool describe return value
behavior	describe beahviour



### 8.12. IsStaticMethod

Name	FunctionHelper.tex::IsStaticMethod(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	bool describe return value
behavior	describe beahviour



### 8.13. IsConstMethod

Name	FunctionHelper.tex::IsConstMethod(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	bool describe return value
behavior	describe beahviour



# 8.14. IsMethodTemplate

Name	FunctionHelper.tex::IsMethodTemplate(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	bool describe return value
behavior	describe beahviour



# $\bf 8.15. \ Get Method Num Template Args$

Name	FunctionHelper.tex::GetMethodNumTemplateArgs(scope: imeth: TCppIndex)	TCppScope,
Visibility	public	
Parameters	$scope:\ TCppScope,\ imeth:\ TCppIndex$	
Return value	TCppIndex describe return value	
behavior	describe beahviour	



# $\bf 8.16. \ Get Method Template Arg Name$

Name	FunctionHelper.tex::GetMethodTemplateArgName(scope: TCppScope, imeth: TCppIndex, iarg: TCppIndex)	
Visibility	public	
Parameters	$scope:\ TCppScope,\ imeth:\ TCppIndex,\ iarg:\ TCppIndex$	
Return value	string describe return value	
behavior	describe beahviour	



### 8.17. GetNumMethods

Name	FunctionHelper.tex::GetNumMethods(scope: TCppScope)
Visibility	public
Parameters	$scope:\ TCppScope$
Return value	TCppIndex describe return value
behavior	describe beahviour



### $\bf 8.18. \ Get Method Index At$

Name	FunctionHelper.tex::GetMethodIndexAt(scope: TCppIndex)	TCppScope,	imeth:
Visibility	public		
Parameters	$scope:\ TCppScope,\ imeth:\ TCppIndex$		
Return value	TCppIndex describe return value		
behavior	describe beahviour		



### $8.19.~{ m GetMethodsFromName}$

Name	FunctionHelper.tex::GetMethodsFromName(scope: string)	TCppScope, name:
Visibility	public	
Parameters	$scope:\ TCppScope,\ name:\ string$	
Return value	vector <tcppmethod> describe return value</tcppmethod>	
behavior	describe beahviour	



### 8.20. GetMethod

Name	FunctionHelper.tex::GetMethod(scope: TCppIndex)	TCppScope, imeth:
Visibility	public	
Parameters	$scope:\ TCppScope,\ imeth:\ TCppIndex$	
Return value	TCppMethod describe return value	
behavior	describe beahviour	



### $8.21. \ GetMethodName$

Name	FunctionHelper.tex::GetMethodName(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	string describe return value
behavior	describe beahviour



# $\bf 8.22. \ Get Method Result Type$

Name	FunctionHelper.tex::GetMethodResultType(method: TCppMethod)	)
Visibility	public	
-	method: TCppMethod	
Return value	string describe return value	
behavior	describe beahviour	



# $\bf 8.23. \ Get Method Num Args$

Name	FunctionHelper.tex::GetMethodNumArgs(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	TCppIndex describe return value
behavior	describe beahviour



# $\bf 8.24. \ Get Method Req Args$

Name	FunctionHelper.tex::GetMethodReqArgs(method: TCppMethod)
Visibility	public
Parameters	$method:\ TCppMethod$
Return value	TCppIndex describe return value
behavior	describe beahviour



# $\bf 8.25. \ Get Method Arg Name$

Name	FunctionHelper.tex::GetMethodArgName(method: TCppMethod, iarg: int)
Visibility	public
Parameters	method: TCppMethod, iarg: int
$Return\ value$	string describe return value
behavior	describe beahviour



# $\bf 8.26. \ Get Method Arg Type$

Name	<pre>FunctionHelper.tex::GetMethodArgType(method: TCppMethod, iarg: int)</pre>
Visibility	public
Parameters	$method:\ TCppMethod,\ iarg:\ int$
Return value	string describe return value
behavior	describe beahviour



# $\bf 8.27. \ Get Method Arg Default$

Name	FunctionHelper.tex::GetMethodArgDefault(method: TCppMetiarg: int)	hod,
Visibility	public	
Parameters	$method:\ TCppMethod,\ iarg:\ int$	
Return value	string describe return value	
behavior	describe beahviour	



# $\bf 8.28. \ Get Method Signature$

Name	<pre>FunctionHelper.tex::GetMethodSignature(scope: TCppIndex)</pre>	TCppScope, imeth:
Visibility	public	
Parameters	$scope:\ TCppScope,\ imeth:\ TCppIndex$	
Return value	string describe return value	
behavior	describe beahviour	



# 9. ClassHelper.tex

describe class ClassHelper.tex here

# 9.1. IsNamespace

Name	ClassHelper.tex::IsNamespace(scope: TCppScope)
Visibility	public
Parameters	$scope:\ TCppScope$
Return value	bool Returns a boolean which checks if the scope represents a namespace.
behavior	Checks if scope represents a namespace.



#### 9.2. IsAbstract

Name	ClassHelper.tex::IsAbstract(klass: TCppType)
Visibility	public
Parameters	$klass:\ TCppType$
Return value	bool describe return value
behavior	Checks if klass is an abstract class, and hence can be instantiated or not.



#### 9.3. IsEnum

Name	ClassHelper.tex::IsEnum(typename: string)
Visibility	public
Parameters	typename: string
Return value	bool describe return value
behavior	Checks if string represents a enum.



### 9.4. IsStruct

Name	ClassHelper.tex::IsStruct(typename: string)
Visibility	public
Parameters	typename: string
Return value	bool describe return value
behavior	describe beahviour



### 9.5. GetFinalName

Name	ClassHelper.tex::GetFinalName(klass: TCppType)
Visibility	public
-	klass: TCppType
Return value	string describe return value
behavior	describe beahviour



# $9.6. \ {\bf GetScopedFinalName}$

Name	ClassHelper.tex::GetScopedFinalName(klass: TCppType)
Visibility	public
Parameters	$klass:\ TCppType$
Return value	string describe return value
behavior	describe beahviour



### 9.7. GetNumBases

Name	ClassHelper.tex::GetNumBases(klass: TCppType)
Visibility	public
Parameters	klass: TCppType
Return value	TCppIndex describe return value
behavior	describe beahviour



### 9.8. GetBaseName

Name	ClassHelper.tex::GetBaseName(klass:	TCppType, ibase:	TCppIndex)
Visibility	public		
Parameters	klass: TCppType, ibase: TCppIndex		
Return value	string describe return value		
behavior	describe beahviour		



# 9.9. IsSubtype

Name	ClassHelper.tex::IsSubtype(derived:	TCppType, base:	TCppType)
Visibility	public		
Parameters	derived: TCppType, base: TCppType		
Return value	bool describe return value		
behavior	describe beahviour		



### 9.10.~Get Num Datamembers

Name	ClassHelper.tex::GetNumDatamembers(scope: TCppScope)
Visibility	public
- $Parameters$	$scope:\ TCppScope$
Return value	TCppIndex describe return value
behavior	describe beahviour



### 9.11. GetDatamemberName

Name	<pre>ClassHelper.tex::GetDatamemberName(scope: TCppIndex)</pre>	TCppScope, idata:
Visibility	public	
Parameters	$scope:\ TCppScope,\ idata:\ TCppIndex$	
Return value	string describe return value	
behavior	describe beahviour	



# $9.12. \ {\bf Get Datamember Type}$

Name	<pre>ClassHelper.tex::GetDatamemberType(scope: TCppIndex)</pre>	TCppScope, idata:
Visibility	public	
Parameters	$scope:\ TCppScope,\ idata:\ TCppIndex$	
Return value	string describe return value	
behavior	describe beahviour	



### $9.13.~{ m GetDatamemberOffset}$

Name	<pre>ClassHelper.tex::GetDatamemberOffset(scope: TCppIndex)</pre>	TCppScope, idata:
Visibility	public	
Parameters	$scope:\ TCppScope,\ idata:\ TCppIndex$	
Return value	ptrdiff describe return value	
behavior	describe beahviour	



### $9.14.~{ m GetDatamemberIndex}$

Name	<pre>ClassHelper.tex::GetDatamemberIndex(scope:     string)</pre>	TCppScope, name:
Visibility	public	
Parameters	$scope:\ TCppScope,\ name:\ string$	
Return value	TCppIndex describe return value	
behavior	describe beahviour	



#### 9.15. IsPublicData

Name	ClassHelper.tex::IsPublicData(scope: TCppIndex)	TCppScope, idata:
Visibility	public	
Parameters	$scope:\ TCppScope,\ idata:\ TCppIndex$	
Return value	<b>bool</b> describe return value	
behavior	describe beahviour	



### 9.16. IsStaticData

Name	ClassHelper.tex::IsStaticData(scope: TCppIndex)	TCppScope, idata:
Visibility	public	
Parameters	$scope:\ TCppScope,\ idata:\ TCppIndex$	
Return value	<b>bool</b> describe return value	
behavior	describe beahviour	



### 9.17. IsConstData

Name	<pre>ClassHelper.tex::IsConstData(scope: TCppIndex)</pre>	TCppScope, idata:
Visibility	public	
Parameters	$scope:\ TCppScope,\ idata:\ TCppIndex$	
Return value	<b>bool</b> describe return value	
behavior	describe beahviour	



### 9.18. IsEnumData

Name	ClassHelper.tex::IsEnumData(scope:	TCppScope, idata:	TCppIndex)
Visibility	public		
-	scope: TCppScope, idata: TCppIndex		
Return value	<b>bool</b> describe return value		
behavior	describe beahviour		



### 9.19. resolveAddress

Name	ClassHelper.tex::resolveAddress(staticMember: clazz: TClassRef)	TDataMember,
Visibility	public	
Parameters	$static Member:\ TD at a Member,\ clazz:\ TC lass Ref$	
Return value	void* describe return value	
behavior	describe beahviour	



### 9.20. resolveAddress

Name	ClassHelper.tex::resolveAddress(staticMember: clazz: TClassRef)	TDataMember,
Visibility	public	
Parameters	$static Member:\ TD at a Member,\ clazz:\ TC lass Ref$	
Return value	void* describe return value	
behavior	describe beahviour	