class FB JSAPIAuto

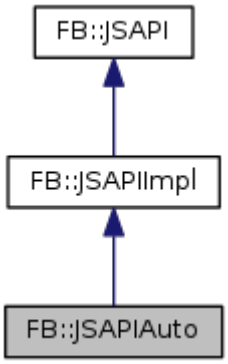
FB::JSAPIAuto Class Reference

Public Member Functions | List of all members

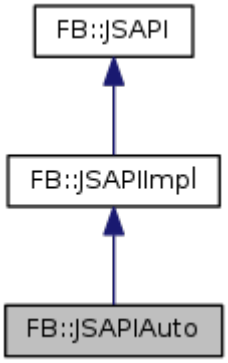
JSAPI class with automatic argument type enforcement. More...

`#include "JSAPIAuto.h"`

Inheritance diagram for FB::JSAPIAuto:



Collaboration diagram for FB::JSAPIAuto:



Public Member Functions

	JSAPIAuto (const std::string &description="<JSAPI-Auto Javascript Object>") Description is used by **ToString()**. More...
virtual void	**registerAttribute** (const std::string &name, const **FB::variant** &value, bool readonly=false) Registers an attribute *name* and sets the value to _value. Optionally read-only. More...
virtual void	**setReserved** (const std::string &name) Prevents attributes from being created from JavaScript with the specified name. More...
bool	**isReserved** (const std::string &propertyName) const Returns true if the specified propertyName is a reserved attribute. More...
virtual void	**getMemberNames** (std::vector< std::string > &nameVector) const Called by the browser to enumerate the members of this **JSAPI** object. More...
virtual size_t	**getMemberCount** () const Gets the member count. More...
virtual **variant**	**Invoke** (const std::string &methodName, const std::vector< **variant** > &args) Called by the browser to invoke a method on the **JSAPI** object. More...
virtual **variant**	**Construct** (const std::vector< **variant** > &args) Called by the browser to construct the **JSAPI** object. More...
virtual **JSAPIPtr**	**GetMethodObject** (const std::string &methodObjName)

	Gets a method object (**JSAPI** object that has a default method) More...
virtual void	**unregisterMethod** (const std::string &name) Unregisters a method that has been exposed to javascript. More...
virtual void	**registerMethod** (const std::string &name, const **CallMethodFunctor** &func) Registers a method to be exposed to javascript. More...
virtual bool	**HasMethod** (const std::string &methodName) const Query if the **JSAPI** object has the 'methodName' method. More...
virtual bool	**HasMethodObject** (const std::string &methodObjName) const Query if 'methodObjName' is a valid methodObj. More...
virtual bool	**HasProperty** (const std::string &propertyName) const Query if 'propertyName' is a valid property. More...
virtual bool	**HasProperty** (int idx) const Query if the property at "idx" exists. More...
virtual void	**registerProperty** (const std::string &name, const **PropertyFunctors** &propFuncs) Register property to be exposed to javascript. More...
virtual void	**unregisterProperty** (const std::string &name) Unregisters a property that has been exposed to javascript. More...
virtual **variant**	**GetProperty** (const std::string &propertyName) Gets a property value. More...
virtual void	**SetProperty** (const std::string &propertyName, const **variant** &value) Sets the value of a property. More...
virtual void	**RemoveProperty** (const std::string &propertyName) Removes a property. More...
virtual **variant**	**GetProperty** (int idx) Gets the value of an indexed property. More...
virtual void	**SetProperty** (int idx, const **variant** &value) Sets the value of an indexed property. More...
virtual void	**RemoveProperty** (int idx) Removes an indexed property. More...
virtual void	**FireJSEvent** (const std::string &eventName, const **FB::VariantMap** &members, const **FB::VariantList** &arguments) Fires an event into javascript asynchronously using a W3C-compliant event parameter. More...
virtual std::string	**ToString** () Default method called when a string value is requested for the scriptable object. More...
virtual bool	**get_valid** () Property exposed by default to javascript useful for checking to make sure that the **JSAPI** is working. More...
virtual **FB::variant**	**getAttribute** (const std::string &name) Returns the attribute with the given name, empty variant if none. More...
virtual void	**setAttribute** (const std::string &name, const **FB::variant** &value) Assigns a value to the specified attribute, if it is not reserved or read-only. More...

Public Member Functions inherited from **FB::JSAPIImpl**

	JSAPIImpl (void) Default constructor. More...
virtual	**~JSAPIImpl** (void)

	Finaliser. More...
void	**invalidate** () Invalidates this object. More...
virtual void	**shutdown** () Called to notify the object that the plugin is shutting down. More...
virtual void	**pushZone** (const **SecurityZone** &securityLevel) Pushes a new security level and locks a mutex (for every Push there *must* be a Pop!) More...
virtual void	**popZone** () Pops off a security level and unlocks the mutex (for every Push there *must* be a Pop!) More...
virtual void	**setDefaultZone** (const **SecurityZone** &securityLevel) Sets the default zone (the zone the class operates on before a push) More...
virtual **SecurityZone**	**getDefaultZone** () const Gets the default zone (the zone the class operates on before a push) More...
virtual **SecurityZone**	**getZone** () const Gets the currently active zone. More...
virtual void	**registerEvent** (const std::string &name) Register event so that event listeners can be added/attached from javascript. More...
virtual void	**registerEvent** (const std::wstring &name)
virtual void	**registerEventMethod** (const std::string &name, **JSObjectPtr** &event) Called by the browser to register an event handler method. More...
virtual void	**registerEventMethod** (const std::wstring &name, **JSObjectPtr** &event)
virtual void	**unregisterEventMethod** (const std::string &name, **JSObjectPtr** &event) Called by the browser to unregister an event handler method. More...
virtual void	**unregisterEventMethod** (const std::wstring &name, **JSObjectPtr** &event)
virtual void	**registerEventInterface** (const **JSObjectPtr** &event) Called by the browser to register a **JSObject** interface that handles events. This is primarily used by IE. Objects provided to this method are called when events are fired by calling a method of the event name on the event interface. More...
virtual void	**unregisterEventInterface** (const **JSObjectPtr** &event) Called by the browser to unregister a **JSObject** interface that handles events. More...

Public Member Functions inherited from **FB::JSAPI**

	JSAPI (void) Default constructor. More...
virtual	**~JSAPI** (void) Finaliser. More...
virtual bool	**HasMethod** (const std::wstring &methodName) const
virtual bool	**HasMethodObject** (const std::wstring &methodObjName) const
virtual bool	**HasProperty** (const std::wstring &propertyName) const
virtual **JSAPIPtr**	**GetMethodObject** (const std::wstring &methodObjName)
virtual **variant**	**GetProperty** (const std::wstring &propertyName)
virtual void	**SetProperty** (const std::wstring &propertyName, const **variant** &value)
virtual void	**RemoveProperty** (const std::wstring &propertyName)

```
virtual variant  Invoke (const std::wstring &methodName, const std::vector< variant > &args)
```

Additional Inherited Members

Protected Member Functions inherited from **FB::JSAPIImpl**

```
virtual void  FireEvent (const std::wstring &eventName, const std::vector< variant > &args)
```

```
virtual void  FireEvent (const std::string &eventName, const std::vector< variant > &args)
```
Fires an event into javascript asynchronously. More...

```
virtual void  FireJSEvent (const std::string &eventName, const FB::VariantMap &params)
```

```
virtual void  FireJSEvent (const std::string &eventName, const FB::VariantList &arguments)
```

Detailed Description

JSAPI class with automatic argument type enforcement.

Most of the time when implementing a **JSAPI** class for your plugin you will want to extend **JSAPIAuto**. **JSAPIAuto** implements all abstract functions from **JSAPI** and provides an automatic function map and type conversion for methods that you create.

For example, to provide a property called "IsFinished" that javascript can access, you need two methods:

```
bool get_IsFinished();
void set_IsFinished(bool newVal);
```

Then in the constructor of your class that extends **JSAPIAuto** (we'll call it MyPluginAPI), you register it like so:

```
registerProperty("IsFinished",
make_property(this,
&MyPluginAPI::get_IsFinished,
&MyPluginAPI::set_IsFinished));
```

To register a property that is read–only, use the second form:

```
registerProperty("IsFinished", make_property(this, &MyPluginAPI::get_IsFinished));
```

Similarly, to provide a method called "add" that accepts two integers and returns an integer, you need one method on your class:

```
int add(int a, int b);
```

Then in the constructor of your class that extends **JSAPIAuto** (still calling it MyPluginAPI), you register it like so:

```
registerMethod("add", make_method(this, &MyPluginAPI::add));
```

If arguments are passed that cannot be converted to an int, a javascript exception will be thrown.

See Also

JSAPI
PluginCore

Author

Georg Fritzsche

Definition at line **94** of file **JSAPIAuto.h**.

The documentation for this class was generated from the following files:

- **JSAPIAuto.h**
- **JSAPIAuto.cpp**