
iSync JavaScript Reference

[Apple Applications](#) > iSync



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Contents

Introduction **Introduction 7**

Part I **Classes 9**

Chapter 1 **Application 11**

Overview 11

Tasks 11

Properties 12

Methods 12

Chapter 2 **Channel 15**

Overview 15

Tasks 15

Properties 16

Methods 16

Chapter 3 **Error 19**

Overview 19

Tasks 20

Properties 21

Document Revision History 23

Index 25

Tables

Chapter 3

Error 19

Table 3-1	AT device error codes	19
Table 3-2	AT generic error codes	20
Table 3-3	AT parsing error codes	20
Table 3-4	AT carrier error codes	20

Introduction

Technology area:	iSync
Companion guide	iSync Plug-in Maker User Guide

The JavaScript classes, properties, and methods described in this document are used by iSync application and iSync Plug-in Maker developer tool to communicate with devices. iSync allows you to sync your devices with your data on the computer, and iSync Plug-in Maker allows you to build, test, and release iSync device plug-ins. When developing an iSync plug-in, you might need to write some device-specific JavaScript functions to open and close connections to your device. You use the JavaScript API described in this document to write these functions.

For example, below is a typical JavaScript function used by plug-ins to send custom AT commands to a device before iSync establishes the SyncML connection.

Note: The Open Mobile Alliance (OMA) Data Synchronization Working Group is developing specifications for data synchronization that includes SyncML technology. This book refers to the data synchronization technology as SyncML.

```
function prepareChannelForProtocol()
{
    channel.startAT();
    application.log("Sending AT+CPR0T=0");
    // we need to send AT+CPR0T=0 to the phone to activate SyncML
    channel.sendATCommand("AT+CPR0T=0")
    channel.stopAT();
}
```

Read Editing Plug-ins in *iSync Plug-in Maker User Guide* to learn more about where JavaScript functions might be needed.

The iSync JavaScript API is available in iSync 2.3 and later.

Classes

Application

Technology area:	iSync
Availability	Available with iSync 2.3 and later.
Companion guide	iSync Plug-in Maker User Guide

Overview

`Application` objects represent the application that is executing the JavaScript functions. There is only one instance of `Application`. You access this instance in JavaScript using the `application` global variable.

Tasks

Accessing Properties

`name` (page 12)

The name of the application running the script—for example, iSync Plug-in Maker or iSync.

`version` (page 12)

The version of the PhoneConduit bundle inside iSync.

`isISync` (page 12)

A Boolean value set to `true` if the application is iSync; otherwise, `false` (typically when the application is iSync Plug-in Maker).

Logging Messages

`log` (page 12)

Prints a string to the iSync Plug-in Maker log window.

Properties

isISync

A Boolean value set to `true` if the application is iSync; otherwise, `false` (typically when the application is iSync Plug-in Maker).

```
readonly attribute boolean isISync;
```

Availability

Available with iSync 2.3 and later.

name

The name of the application running the script—for example, iSync Plug-in Maker or iSync.

```
readonly attribute String name;
```

Availability

Available with iSync 2.3 and later.

version

The version of the PhoneConduit bundle inside iSync.

```
readonly attribute String version;
```

Availability

Available with iSync 2.3 and later.

Methods

log

Prints a string to the iSync Plug-in Maker log window.

```
log(string)
```

Parameters

string

The string to print to the log.

Discussion

The string appears in the iSync Plug-in Maker log window when the JavaScript function is executed during a test. When the JavaScript function is executed by iSync, this method does nothing if the device plug-in is exported and installed.

Availability

Available with iSync 2.3 and later.

Channel

Technology area:	iSync
Availability	Available with iSync 2.3 and later.
Companion guide	iSync Plug-in Maker User Guide

Overview

Channel objects represent the connection with the device. There is only one instance of `Channel` per application. You access this instance in JavaScript using the `channel` global variable.

Tasks

Accessing Properties

`lastError` (page 16)

An instance of `Error` that indicates the last error encountered while using the channel.

Error Handling

`hasError` (page 16)

Returns a Boolean value indicating whether the channel encountered is an error.

`resetLastError` (page 16)

Sets the last error to `nil`.

AT Commands

`startAT` (page 17)

Opens the AT connection to the device.

`stopAT` (page 17)

Closes the AT connection to the device.

`sleep` (page 17)

Puts the channel to sleep for the specified time interval.

[sendATCommand](#) (page 16)

Sends the specified AT command and returns the results.

Properties

lastError

An instance of `Error` that indicates the last error encountered while using the channel.

readonly attribute `Error` `lastError`;

Availability

Available with iOS 2.3 and later.

Methods

hasError

Returns a Boolean value indicating whether the channel encountered is an error.

`hasError()`

Discussion

Use the `lastError` property to get the error.

Availability

Available with iOS 2.3 and later.

resetLastError

Sets the last error to `nil`.

`resetLastError()`

sendATCommand

Sends the specified AT command and returns the results.

`sendATCommand(command[, looseOnPrefix])`

Parameters

command

A string containing the AT command that begins with the AT+ prefix

LooseOnPrefix

If `true`, the behavior is not as strict and the `+XXX` prefix is not enforced. If `false`, then an error occurs if the device doesn't send a reply beginning with the correct `+XXX` prefix. If not specified, then the default behavior is strict parsing.

Return Value

Returns the result of the AT command minus the AT prefix—for example, if the device returns a string with a `+GMM:` prefix, it doesn't appear in the return value of this method.

Discussion

Invoke this method after invoking the `startAT` method and before invoking the `stopAT` method.

Availability

Available with iSync 2.3 and later.

sleep

Puts the channel to sleep for the specified time interval.

```
sleep(seconds)
```

Parameters

seconds

The number of seconds to sleep.

Discussion

Any commands sent while the channel is sleeping are discarded.

Availability

Available with iSync 2.3 and later.

startAT

Opens the AT connection to the device.

```
startAT()
```

Discussion

Invoke this method before sending any other AT commands—specifically, before invoking the `sendATCommand` method.

Availability

Available with iSync 2.3 and later.

See Also

`stopAT`

stopAT

Closes the AT connection to the device.

```
stopAT()
```

Discussion

Invoke this function after all AT commands are sent to the device. You cannot invoke the `sendATCommand` method after invoking this method.

Availability

Available with iSync 2.3 and later.

See Also

`startAT`

Error

Technology area:	iSync
Availability	Available with iSync 2.3 and later.
Companion guide	iSync Plug-in Maker User Guide

Overview

Error objects encapsulate information about AT command or communication errors that may occur when executing JavaScript. Use the [isATError](#) (page 21) property to determine whether an error is an AT error or a non-AT error. If it is an AT error, it contains an error domain and a domain-specific error code that you can use for debugging. The types of error codes that might occur are described in the following tables.

Table 3-1 AT device error codes

Error code	Name
300	Phone Failure
301	SMS Service Of Phone Reserved
302	Operation Not Allowed
303	Operation Not Supported
304	Invalid PDU Mode Parameter
305	Invalid Text Mode Parameter
310	SIM Not Inserted
311	SIM PIN Necessary
312	PH-SIM PIN Necessary
313	SIM Failure
314	SIM Busy
315	SIM Wrong
320	Memory Failure
321	Invalid Memory Index

Error code	Name
322	Memory Full
330	SMS-C Address Unknown
331	No Network Service
332	Network Timeout
500	Unknown Error
512	Manufacturer Specific

Table 3-2 AT generic error codes

Error code	Name
1000	Controller Shutdown
1001	No Correct ResponseReceived
1002	Prepare Channel command has Bad Properties

Table 3-3 AT parsing error codes

Error code	Name
1500	AT Response Parse Error

Table 3-4 AT carrier error codes

Error code	Name
2000	No Carrier
2001	No Answer

Tasks

Accessing Properties

`domain` (page 21)

A string indicating the error domain that is, the subsystem that originated the error.

`code` (page 21)

An integer that identifies a particular error in a particular domain.

[isATError](#) (page 21)

A Boolean value that if `true` indicates that the error is an AT error sent by the device; otherwise, it indicates a communications error, possibly generated by the client.

Properties

code

An integer that identifies a particular error in a particular domain.

```
readonly attribute integer code;
```

Availability

Available with iSync 2.3 and later.

domain

A string indicating the error domain that is, the subsystem that originated the error.

```
readonly attribute String domain;
```

Availability

Available with iSync 2.3 and later.

isATError

A Boolean value that if `true` indicates that the error is an AT error sent by the device; otherwise, it indicates a communications error, possibly generated by the client.

```
readonly attribute boolean isATError;
```

Availability

Available with iSync 2.3 and later.

Document Revision History

This table describes the changes to *iSync JavaScript Reference*.

Date	Notes
2009-01-09	Updated format.
2008-12-16	New document that describes the iSync JavaScript classes, properties, and methods used to communicate with devices.

REVISION HISTORY

Document Revision History

Index

C

code [property 21](#)

D

domain [property 21](#)

H

hasError [method 16](#)

I

isATError [property 21](#)

isISync [property 12](#)

L

lastError [property 16](#)

log [method 12](#)

N

name [property 12](#)

R

resetLastError [method 16](#)

S

sendATCommand [method 16](#)

sleep [method 17](#)

startAT [method 17](#)

stopAT [method 17](#)

V

version [property 12](#)