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# ISyncUIHelper Protocol Reference

[Cocoa](#) > [Syncing](#)



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Apple Inc.  
1 Infinite Loop  
Cupertino, CA 95014  
408-996-1010

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# ISyncUIHelper Protocol Reference

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<b>Framework</b>	/System/Library/Frameworks/SyncServices.framework
<b>Declared in</b>	SyncServices/ISyncUIHelper.h
<b>Availability</b>	Available in Mac OS X v10.5 and later.
<b>Companion guide</b>	Sync Services Programming Guide

## Overview

`ISyncUIHelper` is an informal protocol that an object implements to provide presentation details for custom schemas to the iSync user interface. If you created a custom sync schema and want more control over the display of your records in the iSync user interface—specifically, the data change alert and conflict resolver user interfaces—then add a class that implements this protocol to your schema bundle.

You specify the class that conforms to this protocol in the sync schema using the `UIHelperClass` key. When the sync schema bundle is loaded, an instance of the `UIHelperClass` class is created to handle the presentation requests. The `UIHelperClass` class must inherit from `NSObject` or one of its subclasses. The methods in this protocol are optional.

Implement the `attributedStringForPropertiesWithNames:... method to change the presentation of individual records. Implement the attributedStringForIdentityPropertiesWithNames:... method to change the presentation of a custom schema above the record in the user interface. For example, return an NSAttributedString object with a picture using NSTextAttachment or color the text.`

Read *Creating a Sync Schema* in *Sync Services Programming Guide* for a complete description of a sync schema.

## Tasks

### Customizing the Presentation of Schemas and Records

- [attributedStringForPropertiesWithNames:inRecord:comparisonRecords:defaultAttributes:](#) (page 7)  
Provides a custom presentation of a record to the data change alert and conflict resolver user interfaces.
- [attributedStringForIdentityPropertiesWithNames:inRecord:comparisonRecords:firstLineAttributes:secondLineAttributes:](#) (page 6)  
Provides a custom presentation of a schema to the data change alert and conflict resolver user interfaces.

## Instance Methods

### **attributedStringForIdentityPropertiesWithNames:inRecord:comparisonRecords: firstLineAttributes:secondLineAttributes:**

Provides a custom presentation of a schema to the data change alert and conflict resolver user interfaces.

```
- (NSAttributedString *)attributedStringForIdentityPropertiesWithNames:(NSArray
    *)propertyNames inRecord:(NSDictionary *)record comparisonRecords:(NSArray
    *)comparisonRecords firstLineAttributes:(NSDictionary *)firstLineAttributes
    secondLineAttributes:(NSDictionary *)secondLineAttributes
```

#### **Parameters**

*propertyNames*

The names of the identity properties of *record*.

*record*

The record to be displayed.

*comparisonRecords*

An array of record dictionaries. The records are those displayed alongside this record in the user interface. If the data change alert invokes this method, this array always contains 0 or 1 records—0 if the type of change is an add or delete and 1 if the type of change is a modify. If the conflict resolver invokes this method, the array contains  $n-1$  records where  $n$  is the number of clients involved in the conflict including this client.

*firstLineAttributes*

The recommended `NSAttributedString` attributes to apply to the first line of the returned attributed string.

*secondLineAttributes*

The recommended `NSAttributedString` attributes to apply to the second line of the returned attributed string.

#### **Return Value**

An `NSAttributedString` object for display of a schema in the data change alert or conflict resolver user interface.

The object returned should contain two lines. The first line should have the recommended attributes specified by *firstLineAttributes*, and the second line should have the attributes specified by *secondLineAttributes*.

If this method returns a value other than `nil` when multiple names are in *propertyNames*, the returned string is used to represent all the identity properties. Only one value is displayed for all the properties, next to the localized display name of the first property.

If this method returns `nil` when *propertyNames* contains more than one property, this method is invoked once for each identity property in *propertyNames*.

#### **Availability**

Available in Mac OS X v10.5 and later.

## attributedStringForPropertiesWithNames:inRecord:comparisonRecords:defaultAttributes:

Provides a custom presentation of a record to the data change alert and conflict resolver user interfaces.

```
- (NSAttributedString *)attributedStringForPropertiesWithNames:(NSArray
*)propertyNames inRecord:(NSDictionary *)record comparisonRecords:(NSArray
*)comparisonRecords defaultAttributes:(NSDictionary *)defaultAttributes
```

### Parameters

*propertyNames*

The names of the properties of *record* to be displayed.

This array contains only one property name unless the property has dependent properties as defined in the schema. If it has dependent properties, the property along with its dependent property names is in this array.

*record*

The record to be displayed.

*comparisonRecords*

An array of record dictionaries. The records are those displayed along side this record in the user interface. If the data change alert invokes this method, this array always contains 0 or 1 records—0 if the type of change is an add or delete and 1 if the type of change is a modify. If the conflict resolver invokes this method, the array contains  $n-1$  records where  $n$  is the number of clients involved in the conflict including this client.

*defaultAttributes*

The recommended `NSAttributedString` attributes that should be applied to the returned `NSAttributedString` object.

### Return Value

An `NSAttributedString` object for display of a record in the data change alert or conflict resolver user interface.

If the length of the `NSAttributedString` object is greater than 0, the string is displayed as is. If the length of the `NSAttributedString` object equals 0, the standard localized string for properties with no value is displayed. If this method returns `nil`, the default string is used.

If this method returns a value other than `nil` when multiple names are in *propertyNames*, the returned string is used to represent all the dependent properties. Only one value is displayed for all the properties, next to the localized display name of the first property.

If this method returns `nil` when *propertyNames* contains more than one property, this method is invoked once for each dependent property in *propertyNames*.

### Availability

Available in Mac OS X v10.5 and later.





# Document Revision History

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This table describes the changes to *iSyncUIHelper Protocol Reference*.

Date	Notes
2007-10-31	New document that describes the informal protocol of an object that provides user interface attributes to the iSync user interface.

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