

---

# SFCertificateView Class Reference

[Security](#) > [Cocoa](#)



2006-05-23



Apple Inc.  
© 2006 Apple Computer, Inc.  
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

The Apple logo is a trademark of Apple Inc.

Use of the "keyboard" Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Every effort has been made to ensure that the information in this document is accurate. Apple is not responsible for typographical errors.

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

Apple, the Apple logo, Cocoa, Mac, and Mac OS are trademarks of Apple Inc., registered in the United States and other countries.

Simultaneously published in the United States and Canada.

**Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED "AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.**

**IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY**

**DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.**

**THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.**

**Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.**

# Contents

---

## **SFCertificateView Class Reference 7**

---

Overview 7

Tasks 8

    Specifying the Certificate to Display 8

    Customizing the Appearance and Behavior of the View 8

    Getting Information About the View 9

    Saving User Trust Settings 9

Instance Methods 9

    certificate 9

    detailsDisplayed 9

    isEditable 10

    isTrustDisplayed 10

    policies 10

    saveTrustSettings 11

    setCertificate: 11

    setDisplayDetails: 11

    setDisplayTrust: 12

    setEditableTrust: 12

    setPolicies: 13

---

## **Document Revision History 15**

---

## **Index 17**

---



# Figures

## SFCertificateView Class Reference 7

---

Figure 1 Certificate view 8



# SFCertificateView Class Reference

---

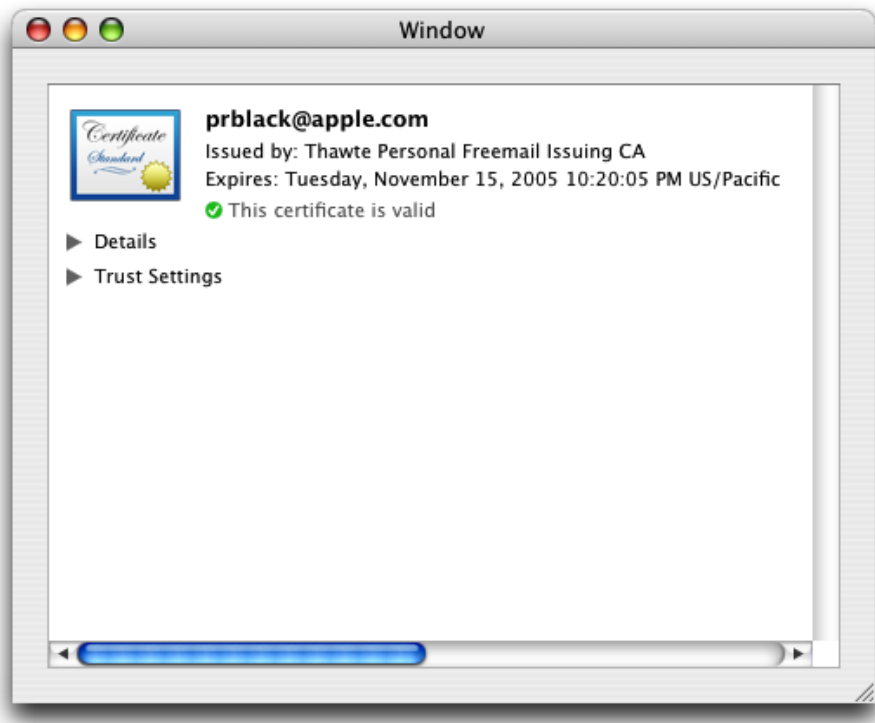
<b>Inherits from</b>	NSView : NSResponder : NSObject
<b>Conforms to</b>	NSAnimatablePropertyContainer (NSView) NSCoding (NSResponder) NSObject (NSObject)
<b>Framework</b>	/System/Library/Frameworks/SecurityInterface.framework
<b>Availability</b>	Available in Mac OS X v10.3 and later
<b>Companion guide</b>	Certificate, Key, and Trust Services Programming Guide
<b>Declared in</b>	SFCertificateView.h

## Overview

The `SFCertificateView` class displays the contents of a certificate. It includes options to display certificate details, display trust settings, and allow users to edit a certificate's trust settings.

The following figure shows a certificate view that includes editable trust settings and certificate details.

Figure 1 Certificate view



## Tasks

### Specifying the Certificate to Display

- `setCertificate:` (page 11)  
Specifies the certificate that's displayed in the view.

### Customizing the Appearance and Behavior of the View

- `setDisplayDetails:` (page 11)  
Specifies whether the user can see the certificate details.
- `setDisplayTrust:` (page 12)  
Specifies whether the user can see the certificate's trust settings.
- `setEditableTrust:` (page 12)  
Specifies whether the user can edit the certificate's trust settings.
- `setPolicies:` (page 13)  
Specifies the policies to use when evaluating this certificate's status.



## Getting Information About the View

- [certificate](#) (page 9)  
Returns the certificate currently displayed in the view.
- [detailsDisplayed](#) (page 9)  
Indicates if the view currently shows the certificate's details.
- [isTrustDisplayed](#) (page 10)  
Indicates if the view currently shows the certificate's trust settings.
- [isEditable](#) (page 10)  
Indicates if the view allows the user to edit the certificate's trust.
- [policies](#) (page 10)  
Returns an array of policies used to evaluate the status of the displayed certificate.

## Saving User Trust Settings

- [saveTrustSettings](#) (page 11)  
Saves the user's current trust settings for the displayed certificate.

## Instance Methods

### certificate

Returns the certificate currently displayed in the view.

- (SecCertificateRef)certificate

#### Availability

Available in Mac OS X v10.3 and later.

#### See Also

- [setCertificate:](#) (page 11)

#### Declared In

SFCertificateView.h

### detailsDisplayed

Indicates if the view currently shows the certificate's details.

- (BOOL)detailsDisplayed

#### Availability

Available in Mac OS X v10.4 and later

#### See Also

- [setDisplayDetails:](#) (page 11)

**Declared In**

SFCertificateView.h

**isEditable**

Indicates if the view allows the user to edit the certificate's trust.

- (BOOL)isEditable

**Availability**

Available in Mac OS X v10.3 and later.

**See Also**- [setEditableTrust:](#) (page 12)**Declared In**

SFCertificateView.h

**isTrustDisplayed**

Indicates if the view currently shows the certificate's trust settings.

- (BOOL)isTrustDisplayed

**Availability**

Available in Mac OS X v10.3 and later.

**See Also**- [setDisplayTrust:](#) (page 12)**Declared In**

SFCertificateView.h

**policies**

Returns an array of policies used to evaluate the status of the displayed certificate.

- (NSArray \*)policies

**Discussion**

This method returns an autoreleased NSArray containing one or more instances of `SecPolicyRef`. The array always contains at least one item (the Apple X.509 Basic policy, if you have never called the `setPolicies:` method).

**Availability**

Available in Mac OS X v10.4 and later

**See Also**- [setPolicies:](#) (page 13)**Declared In**

SFCertificateView.h

## saveTrustSettings

Saves the user's current trust settings for the displayed certificate.

- (void)saveTrustSettings

### Discussion

If trust settings are not editable, this method effectively does nothing. You can use `SecTrustGetUserTrust` to subsequently retrieve the trust settings.

### Availability

Available in Mac OS X v10.3 and later.

### See Also

- [setEditableTrust](#): (page 12)

### Declared In

SFCertificateView.h

## setCertificate:

Specifies the certificate that's displayed in the view.

- (void)setCertificate:(SecCertificateRef)*certificate*

### Parameters

*certificate*

The new certificate for the view.

### Availability

Available in Mac OS X v10.3 and later.

### See Also

- [certificate](#) (page 9)

### Declared In

SFCertificateView.h

## setDisplayDetails:

Specifies whether the user can see the certificate details.

- (void)setDisplayDetails:(BOOL)*display*

### Parameters

*display*

Pass YES to display the certificate details, or NO to hide them.

### Discussion

For behavioral compatibility with Mac OS X v10.3, certificate details are displayed by default. To hide the details of a certificate, you must explicitly set the display value to NO.

### Availability

Available in Mac OS X v10.4 and later

**See Also**

- [detailsDisplayed](#) (page 9)

**Declared In**

SFCertificateView.h

**setDisplayTrust:**

Specifies whether the user can see the certificate's trust settings.

```
- (void)setDisplayTrust:(BOOL)display
```

**Parameters**

*display*

Pass YES to display the trust settings, or NO to hide them.

**Discussion**

Certificate trust settings are not displayed by default. To show the certificate's trust settings, you must explicitly set the display value to YES, with either this method or the `setEditableTrust` method.

**Availability**

Available in Mac OS X v10.3 and later.

**See Also**

- [setEditableTrust:](#) (page 12)

- [isTrustDisplayed](#) (page 10)

**Declared In**

SFCertificateView.h

**setEditableTrust:**

Specifies whether the user can edit the certificate's trust settings.

```
- (void)setEditableTrust:(BOOL)editable
```

**Parameters**

*editable*

Pass YES if the trust settings should be editable.

**Discussion**

For behavioral compatibility with Mac OS X v10.3, this method causes the certificate trust settings to be displayed if they are not currently visible (that is, if `setDisplayTrust:` is set to NO).

**Availability**

Available in Mac OS X v10.3 and later.

**See Also**

- [setDisplayTrust:](#) (page 12)

- [isEditable](#) (page 10)

**Declared In**

SFCertificateView.h

## setPolicies:

Specifies the policies to use when evaluating this certificate's status.

```
- (void)setPolicies:(id)policies
```

### Parameters

*policies*

The policy or policies to use. You can pass either a `SecPolicyRef` object or an `NSArray` (containing one or more objects of type `SecPolicyRef`) in this parameter. If *policies* is set to `nil`, the Apple X.509 Basic Policy is used. See "AppleX509TP Trust Policies" for a list of policies and object identifiers provided by the AppleX509TP module.

### Discussion

Applications typically display a certificate view in the context of a specific use, such as SSL or S/MIME. You should set only the policy references that apply to your intended use.

### Availability

Available in Mac OS X v10.4 and later.

### See Also

- [policies](#) (page 10)

### Declared In

SFCertificateView.h



# Document Revision History

---

This table describes the changes to *SFCertificateView Class Reference*.

Date	Notes
2006-05-23	First publication of this content as a separate document.

**REVISION HISTORY**

Document Revision History



# Index

---

## C

---

certificate [instance method 9](#)

## D

---

detailsDisplayed [instance method 9](#)

## I

---

isEditable [instance method 10](#)

isTrustDisplayed [instance method 10](#)

## P

---

policies [instance method 10](#)

## S

---

saveTrustSettings [instance method 11](#)

setCertificate: [instance method 11](#)

setDisplayDetails: [instance method 11](#)

setDisplayTrust: [instance method 12](#)

setEditableTrust: [instance method 12](#)

setPolicies: [instance method 13](#)