

[Address Book](#) / AddressBook Functions

API Collection

# AddressBook Functions

Find the C functions and function-like macros you use to manipulate Address Book data.

## Topics

### Address Book

```
func ABGetSharedAddressBook() -> Unmanaged<ABAddressBookRef>!
```

Returns the unique shared ABAddressBook object.

```
func ABCopyDefaultCountryCode(ABAddressBookRef!) -> Unmanaged<CFString>!
```

Returns the default country code for records with unspecified country codes.

```
func ABHasUnsavedChanges(ABAddressBookRef!) -> Bool
```

Returns whether if there are unsaved changes in the address book.

```
func ABSave(ABAddressBookRef!) -> Bool
```

Saves all the changes made since the last save.

### People

```
func ABCopyArrayOfAllPeople(ABAddressBookRef!) -> Unmanaged<CFArray>!
```

Returns an array of all the people in the Address Book database.

```
func ABGetMe(ABAddressBookRef!) -> Unmanaged<ABPersonRef>!
```

Returns the ABPerson object for the logged-in user.

~~func ABPersonCopyImageData(ABRecord!) -> Unmanaged<CFData>!~~

Returns data that contains a picture of a person.

Deprecated

func ABPersonCopyParentGroups(ABPersonRef!) -> Unmanaged<CFArray>!

Returns an array of groups that a person belongs to.

func ABPersonCopyVCardRepresentation(ABPersonRef!) -> Unmanaged<CFData>!

Returns the vCard representation of the person as a data object in vCard format.

~~func ABPersonCreate() -> Unmanaged<ABRecord>!~~

Returns a newly created person object.

Deprecated

func ABPersonCreateSearchElement(CFString!, CFString!, CFString!, CFStringRef!, ABSearchComparison) -> Unmanaged<ABSearchElementRef>!

Returns a search element object that specifies a query for records of this type.

func ABPersonCreateWithVCardRepresentation(CFData!) -> Unmanaged<ABPersonRef>!

Returns a new ABPerson object initialized with the given data in vCard format.

~~func ABPersonSetImageData(ABRecord!, CFData!, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Bool~~

Sets the image for this person to the given data.

Deprecated

func ABSetMe(ABAddressBookRef!, ABPersonRef!)

Sets the record that represents the logged-in user.

## Groups

func ABCopyArrayOfAllGroups(ABAddressBookRef!) -> Unmanaged<CFArray>!

Returns an array of all the groups in the Address Book database.

func ABGroupAddGroup(ABGroupRef!, ABGroupRef!) -> Bool

Adds a subgroup to another group.

~~func ABGroupAddMember(ABRecord!, ABRecord!, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Bool~~

Adds a person to a group.

Deprecated

~~func ABGroupCopyArrayOfAllMembers(ABRecord!) -> Unmanaged<CFArray>!~~

Returns an array of persons in a group.

Deprecated

func ABGroupCopyArrayOfAllSubgroups(ABGroupRef!) -> Unmanaged<CFArray>!

Returns an array containing a group's subgroups.

func ABGroupCopyDistributionIdentifier(ABGroupRef!, ABPersonRef!, CFString!) -> Unmanaged<CFString>!

Returns the distribution identifier for the given property and person.

func ABGroupCopyParentGroups(ABGroupRef!) -> Unmanaged<CFArray>!

Returns an array containing a group's parents—the groups that a group belongs to.

~~func ABGroupCreate() -> Unmanaged<ABRecord>!~~

Returns a new ABGroup object.

Deprecated

func ABGroupCreateSearchElement(CFString!, CFString!, CFString!, CTypeRef!, ABSearchComparison) -> Unmanaged<ABSearchElementRef>!

Creates an ABSearchElement object that specifies a query for ABGroup records.

func ABGroupRemoveGroup(ABGroupRef!, ABGroupRef!) -> Bool

Removes a subgroup from a group.

~~func ABGroupRemoveMember(ABRecord!, ABRecord!, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Bool~~

Removes a person from a group.

Deprecated

func ABGroupSetDistributionIdentifier(ABGroupRef!, ABPersonRef!, CFString!, CFString!) -> Bool

Assigning a specific distribution identifier for a person's multi-value list property so that the group can be used as a distribution list (mailing list, in the case of an email property).

## Multi Values

```
func ABMultiValueAdd(ABMutableMultiValueRef!, CTypeRef!, CFString!,
UnsafeMutablePointer<Unmanaged<CFString>?>!) -> Bool
```

Adds a value and its label to a multi-value list.

```
func ABMultiValueCopyIdentifierAtIndex(ABMultiValueRef!, CFIndex) ->
Unmanaged<CFString>!
```

Returns the identifier at the given index.

```
func ABMultiValueCopyLabelAtIndex(ABMultiValue!, CFIndex) -> Unmanaged<
CFString>!
```

Returns the label for the given index.

Deprecated

```
func ABMultiValueCopyPrimaryIdentifier(ABMultiValueRef!) -> Unmanaged<
CFString>!
```

Returns the identifier for the primary value.

```
func ABMultiValueCopyValueAtIndex(ABMultiValue!, CFIndex) -> Unmanaged<
CTypeRef>!
```

Returns the value for the given index.

Deprecated

```
func ABMultiValueCount(ABMultiValueRef!) -> CFIndex
```

Returns the number of entries in a multi-value list.

```
func ABMultiValueCreate() -> Unmanaged<ABMultiValueRef>!
```

Returns a new ABMultiValue object.

```
func ABMultiValueCreateCopy(ABMultiValueRef!) -> Unmanaged<ABMultiValue
Ref>!
```

Returns a copy of a multi-value object.

```
func ABMultiValueCreateMutable(ABPropertyType) -> Unmanaged<ABMutable
MultiValue>!
```

Returns a newly created mutable multi-value list object.

Deprecated

```
func ABMultiValueCreateMutableCopy(ABMultiValue!) -> Unmanaged<
ABMutableMultiValue>!
```

Returns a mutable copy of a multi-value object.

Deprecated

```
func ABMultiValueIndexForIdentifier(ABMultiValueRef!, CFString!) -> CFIndex
```

Returns the index for the given identifier.

```
func ABMultiValueInsert(ABMutableMultiValueRef!, CTypeRef!, CFString!, CFIndex, UnsafeMutablePointer<Unmanaged<CFString>?>!) -> Bool
```

Inserts a value and its label at the given index in a multi-value list.

```
func ABMultiValuePropertyType(ABMultiValueRef!) -> ABPropertyType
```

Returns the type for the values in a multi-value list.

```
func ABMultiValueRemove(ABMutableMultiValueRef!, CFIndex) -> Bool
```

Removes the value and label at the given index.

```
func ABMultiValueReplaceLabel(ABMutableMultiValueRef!, CFString!, CFIndex) -> Bool
```

Replaces the label at the given index.

```
func ABMultiValueReplaceValue(ABMutableMultiValueRef!, CTypeRef!, CFIndex) -> Bool
```

Replaces the value at the given index.

```
func ABMultiValueSetPrimaryIdentifier(ABMutableMultiValueRef!, CFString!) -> Bool
```

Sets the primary value to be the value for the given identifier.

## Images

```
func ABBeginLoadingImageDataForClient(ABPersonRef!, ABImageClient Callback!, UnsafeMutableRawPointer!) -> CFIndex
```

Starts an asynchronous fetch for image data in all locations, and returns a non-zero tag for tracking.

```
func ABCancelLoadingImageDataForTag(CFIndex)
```

Cancels an asynchronous fetch of an image for the given tag.

## Search Elements

```
func ABCopyArrayOfMatchingRecords(ABAddressBookRef!, ABSearchElementRef!) -> Unmanaged<CFArray>!
```

Returns an array of records that match the given search element, or an empty array if no records match the search element.

```
func ABSearchElementCreateWithConjunction(ABSearchConjunction, CFArray!) -> Unmanaged<ABSearchElementRef>!
```

Returns a compound search element created by combining the search elements in an array with the given conjunction.

```
func ABSearchElementMatchesRecord(ABSearchElementRef!, ABRecordRef!) -> Bool
```

Tests whether or not a record matches a search element.

## Properties

```
func ABAddPropertiesAndTypes(ABAddressBookRef!, CFString!, CFDictionary!) -> CFIndex
```

Adds the given properties to all the records of the specified type in the Address Book database, and returns the number of properties successfully added.

```
func ABCopyArrayOfPropertiesForRecordType(ABAddressBookRef!, CFString!) -> Unmanaged<CFArray>!
```

Returns an array containing the names of all the properties for the specified record type.

```
func ABCopyLocalizedPropertyOrLabel(CFString!) -> Unmanaged<CFString>!
```

Returns the localized version of a built in property, label, or key.

```
func ABLocalizedPropertyOrLabel(String!) -> String!
```

Returns the localized version of a built in property, label, or key.

```
func ABRemoveProperties(ABAddressBookRef!, CFString!, CFArray!) -> CFIndex
```

Removes the given properties from all the records of this type in the Address Book database, and returns the number of properties successfully removed.

```
func ABTypeOfProperty(ABAddressBookRef!, CFString!, CFString!) -> ABPropertyType
```

Returns the type of a given property for a given record.

## Records

```
func ABAddRecord(ABAddressBookRef!, ABRecordRef!) -> Bool
```

Adds a record of the specified type to the Address Book database.

```
func ABCopyRecordForUniqueId(ABAddressBookRef!, CFString!) -> Unmanaged<ABRecordRef>!
```

Returns the record that matches the given unique ID.

```
func ABCopyRecordTypeFromUniqueId(ABAddressBookRef!, CFString!) -> Unmanaged<CFString>!
```

Returns the type name of the record that matches a given unique ID.

```
func ABCreateFormattedAddressFromDictionary(ABAddressBookRef!, CFDictionary!) -> Unmanaged<CFString>!
```

Returns a string containing the formatted address.

```
func ABRecordCopyRecordType(ABRecordRef!) -> Unmanaged<CFString>!
```

Returns the type of the given record.

```
func ABRecordCopyUniqueId(ABRecordRef!) -> Unmanaged<CFString>!
```

Returns the unique ID of the receiver.

```
func ABRecordCopyValue(ABRecord!, ABPropertyID) -> Unmanaged<CTypeRef>!
```

Returns the value of the given property.

Deprecated

```
func ABRecordCreateCopy(ABRecordRef!) -> Unmanaged<ABRecordRef>!
```

Returns a copy of the given record.

```
func ABRecordIsReadOnly(ABRecordRef!) -> Bool
```

Returns whether or not the record is read-only.

```
func ABRecordRemoveValue(ABRecord!, ABPropertyID, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Bool
```

Removes the value of the given property.

Deprecated

```
func ABRecordSetValue(ABRecord!, ABPropertyID, CTypeRef!, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Bool
```

Sets the value of a given property for a record.

Deprecated

```
func ABRemoveRecord(ABAddressBookRef!, ABRecordRef!) -> Bool
```

Removes the specified record from the Address Book database.

## Deprecated

```
func ABAddressBookAddRecord(ABAddressBook!, ABRecord!, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Bool
```

Adds a record to an address book.

Deprecated

```
func ABAddressBookCopyArrayOfAllGroups(ABAddressBook!) -> Unmanaged<CFArray>!
```

Returns an array with all the groups in an address book.

Deprecated

```
func ABAddressBookCopyArrayOfAllGroupsInSource(ABAddressBook!, ABRecord!) -> Unmanaged<CFArray>!
```

Returns an array of all groups from a particular source.

Deprecated

```
func ABAddressBookCopyArrayOfAllPeople(ABAddressBook!) -> Unmanaged<CFArray>!
```

Returns all the person records in an address book.

Deprecated

```
func ABAddressBookCopyArrayOfAllPeopleInSource(ABAddressBook!, ABRecord!) -> Unmanaged<CFArray>!
```

Returns an array of all person records from a particular source.

Deprecated

```
func ABAddressBookCopyArrayOfAllPeopleInSourceWithSortOrdering(ABAddressBook!, ABRecord!, ABPersonSortOrdering) -> Unmanaged<CFArray>!
```

Returns an array of all person records in the address book, sorted with the specified order.

Deprecated

```
func ABAddressBookCopyArrayOfAllSources(ABAddressBook!) -> Unmanaged<CFArray>!
```

Returns an array of all sources in the address book.

Deprecated

```
func ABAddressBookCopyDefaultSource(ABAddressBook!) -> Unmanaged<ABRecord>!
```



Returns the default source.

Deprecated

~~func ABAddressBookCopyLocalizedLabel(CFString!) -> Unmanaged<CFString>!~~

Returns a localized version of a record-property label.

Deprecated

~~func ABAddressBookCopyPeopleWithName(ABAddressBook!, CFString!) -> Unmanaged<CFArray>!~~

Performs a prefix search on the composite names of people in an address book and returns an array of persons that match the search criteria.

Deprecated

~~func ABAddressBookCreate() -> Unmanaged<ABAddressBook>!~~

Creates a new address book object with data from the Address Book database.

Deprecated

~~func ABAddressBookCreateWithOptions(CFDictionary!, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Unmanaged<ABAddressBook>!~~

Creates a new address book object with data from the Address Book database.

Deprecated

~~func ABAddressBookGetAuthorizationStatus() -> ABAuthorizationStatus~~

Returns the authorization status of your app for accessing address book data.

Deprecated

~~func ABAddressBookGetGroupCount(ABAddressBook!) -> CFIndex~~

Returns the number of groups in an address book.

Deprecated

~~func ABAddressBookGetGroupWithRecordID(ABAddressBook!, ABRecordID) -> Unmanaged<ABRecord>!~~

Returns the group with a given record ID.

Deprecated

~~func ABAddressBookGetPersonCount(ABAddressBook!) -> CFIndex~~

Returns the number of person records in an address book.

Deprecated

~~func ABAddressBookGetPersonWithRecordID(ABAddressBook!, ABRecordID) -> Unmanaged<ABRecord>!~~

Returns the person record with a given record ID.

Deprecated

```
func ABAddressBookGetSourceWithRecordID(ABAddressBook!, ABRecordID) -> Unmanaged<ABRecord>!
```

Returns the source record with the given record ID.

Deprecated

```
func ABAddressBookHasUnsavedChanges(ABAddressBook!) -> Bool
```

Indicates whether an address book has changes that have not been saved to the Address Book database.

Deprecated

```
func ABAddressBookRegisterExternalChangeCallback(ABAddressBook!, ABExternalChangeCallback!, UnsafeMutableRawPointer!)
```

Registers a callback to receive notifications when the Address Book database is modified.

Deprecated

```
func ABAddressBookRemoveRecord(ABAddressBook!, ABRecord!, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Bool
```

Removes a record from an address book.

Deprecated

```
func ABAddressBookRequestAccessWithCompletion(ABAddressBook!, ABAddressBookRequestAccessCompletionHandler!)
```

Requests access to address book data from the user.

Deprecated

```
func ABAddressBookRevert(ABAddressBook!)
```

Discards unsaved changes in an address book.

Deprecated

```
func ABAddressBookSave(ABAddressBook!, UnsafeMutablePointer<Unmanaged<CFError>?>!) -> Bool
```

Saves any unsaved changes to the Address Book database.

Deprecated

```
func ABAddressBookUnregisterExternalChangeCallback(ABAddressBook!, ABExternalChangeCallback!, UnsafeMutableRawPointer!)
```

Unregisters a callback.

Deprecated

~~func ABGroupCopyArrayOfAllMembersWithSortOrdering(ABRecord!, ABPersonSortOrdering) -> Unmanaged<CFArray>!~~

Returns the records in a group, using a sort ordering.

Deprecated

~~func ABGroupCopySource(ABRecord!) -> Unmanaged<ABRecord>!~~

Returns the source that the group is from.

Deprecated

~~func ABGroupCreateInSource(ABRecord!) -> Unmanaged<ABRecord>!~~

Creates a group in a particular source.

Deprecated

~~func ABMultiValueAddValueAndLabel(ABMutableMultiValue!, CTypeRef!, CFString!, UnsafeMutablePointer<ABMultiValueIdentifier>!) -> Bool~~

Adds a value and its corresponding label to a multivalue property.

Deprecated

~~func ABMultiValueCopyArrayOfAllValues(ABMultiValue!) -> Unmanaged<CFArray>!~~

Returns an array with the values in a multivalue property.

Deprecated

~~func ABMultiValueGetCount(ABMultiValue!) -> CFIndex~~

Returns the number of values in a multivalue property.

Deprecated

~~func ABMultiValueGetFirstIndexOfValue(ABMultiValue!, CTypeRef!) -> CFIndex~~

Returns the first location of a value in a multivalue property.

Deprecated

~~func ABMultiValueGetIdentifierAtIndex(ABMultiValue!, CFIndex) -> ABMultiValueIdentifier~~

Returns the identifier of a value in a multivalue property.

Deprecated

~~func ABMultiValueGetIndexForIdentifier(ABMultiValue!, ABMultiValueIdentifier) -> CFIndex~~

Returns the location (within a multivalue property) of a value with a given identifier.

Deprecated

~~func ABMultiValueGetPropertyType(ABMultiValue!) -> ABPropertyType~~

Returns the type of the values contained in a multivalue property.

Deprecated

~~func ABMultiValueInsertValueAndLabelAtIndex(ABMutableMultiValue!,  
CTypeRef!, CFString!, CFIndex, UnsafeMutablePointer<ABMultiValue  
Identifier>!) -> Bool~~

Inserts a value and a label into a multivalue property.

Deprecated

~~func ABMultiValueRemoveValueAndLabelAtIndex(ABMutableMultiValue!,  
CFIndex) -> Bool~~

Removes a value from a multivalue property.

Deprecated

~~func ABMultiValueReplaceLabelAtIndex(ABMutableMultiValue!, CFString!,  
CFIndex) -> Bool~~

Replaces a label in a multivalue property with another label.

Deprecated

~~func ABMultiValueReplaceValueAtIndex(ABMutableMultiValue!, CTypeRef!,  
CFIndex) -> Bool~~

Replaces a value in a multivalue property with another value.

Deprecated

~~func ABPersonComparePeopleByName(ABRecord!, ABRecord!, ABPersonSort  
Ordering) -> CFComparisonResult~~

Indicates how two person records get sorted.

Deprecated

~~func ABPersonCopyArrayOfAllLinkedPeople(ABRecord!) -> Unmanaged<CFArray  
>!~~

Returns an array of all person records in the address book database that are linked to the given person record.

Deprecated

~~func ABPersonCopyCompositeNameDelimiterForRecord(ABRecord!) ->  
Unmanaged<CFString>!~~

Returns the delimiter to use between name components.

Deprecated

~~func ABPersonCopyImageDataWithFormat(ABRecord!, ABPersonImageFormat) → Unmanaged<CFData>!~~

Returns the picture for a person record in the given format.

Deprecated

~~func ABPersonCopyLocalizedPropertyName(ABPropertyID) → Unmanaged<CFString>!~~

Returns the localized name of a person property

Deprecated

~~func ABPersonCopySource(ABRecord!) → Unmanaged<ABRecord>!~~

Returns the source that the person record is from.

Deprecated

~~func ABPersonCreateInSource(ABRecord!) → Unmanaged<ABRecord>!~~

Creates a new person record in a particular source.

Deprecated

~~func ABPersonCreatePeopleInSourceWithVCardRepresentation(ABRecord!, CFData!) → Unmanaged<CFArray>!~~

Creates person records from the given vCard representation.

Deprecated

~~func ABPersonCreateVCardRepresentationWithPeople(CFArray!) → Unmanaged<CFData>!~~

Returns the vCard representation of the given person records.

Deprecated

~~func ABPersonGetCompositeNameFormat() → ABPersonCompositeNameFormat~~

Returns the person-name display format.

Deprecated

~~func ABPersonGetCompositeNameFormatForRecord(ABRecord!) → ABPersonCompositeNameFormat~~

Returns the person-name display format to use for the given record.

Deprecated

~~func ABPersonGetSortOrdering() → ABPersonSortOrdering~~

Returns the user's sort-ordering preference for lists of persons.

Deprecated

~~func ABPersonGetTypeOfProperty(ABPropertyID) → ABPropertyType~~

Returns the type of a person property.

Deprecated

~~func ABPersonHasImageData(ABRecord!) → Bool~~

Indicates whether a person has a picture.

Deprecated

~~func ABPersonRemoveImageData(ABRecord!, UnsafeMutablePointer<Unmanaged<CLError>?>!) → Bool~~

Removes a person's picture.

Deprecated

~~func ABRecordCopyCompositeName(ABRecord!) → Unmanaged<CFString>!~~

Returns an appropriate, human-friendly name for the record.

Deprecated

~~func ABRecordGetRecordID(ABRecord!) → ABRecordID~~

Returns the unique ID of a record.

Deprecated

~~func ABRecordGetRecordType(ABRecord!) → ABRecordType~~

Returns the type of a record.

Deprecated

## See Also

### C Interfaces

#### ☰ C Types

Identify the C types that correspond to Address Book objects.

#### ☰ Address Book Constants

Get the constants you use to specify Address Book information.

#### ☰ AddressBook Enumerations

Get the enumerations you use to specify Address Book information.

## ☰ AddressBook Data Types

Get the data types you use to specify Address Book information.