

# ActiveSpaces C++ API

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## Namespace Index

### 1.1 Namespace List

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# Class Index

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# Class Index

### 3.1 Class List

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## Chapter 5

# Namespace Documentation

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#### Namespaces

- namespace [Common](#)

#### Classes

- class [Action](#)
- class [ActionResult](#)
- class [Admin](#)
- class [AlterAction](#)
- class [AuthenticationCallback](#)
- class [AuthenticationInfo](#)
- class [Browser](#)
- class [BrowserDef](#)
- class [CloseAction](#)
- class [EventBrowser](#)
- class [EventBrowserDef](#)
- class [EvictEvent](#)
- class [Exception](#)
- class [ExpireEvent](#)
- class [FieldDef](#)
- class [FieldDefList](#)
- class [Filter](#)
- class [GetOptions](#)
- class [IndexDef](#)
- class [Invocable](#)
- class [InvokeOptions](#)
- class [InvokeResult](#)

- class [InvokeResultList](#)
- class [KeyDef](#)
- class [Listener](#)
- class [ListenerBase](#)
- class [ListenerDef](#)
- class [ListenerTemplate](#)
- class [LoadAction](#)
- class [LockOptions](#)
- class [Member](#)
- class [MemberDef](#)
- class [MemberInvocable](#)
- class [Metaspace](#)
- class [MetaspaceMemberListener](#)
- class [MetaspaceRemoteMemberListener](#)
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- class [SpaceMemberListener](#)
- class [SpaceOptions](#)
- class [SpaceRemoteMemberListener](#)
- class [SpaceResult](#)
- class [SpaceResultHandler](#)
- class [SpaceResultList](#)
- class [SpaceStateListener](#)
- class [TakeEvent](#)
- class [TakeOp](#)
- class [TakeOptions](#)
- class [Tuple](#)
- class [Deleter](#)
- class [UnlockOptions](#)
- class [UnseedEvent](#)
- class [WriteAction](#)
- class [WriteOp](#)

## Typedefs

- typedef std::mutex [Mutex](#)
- typedef tibas\_status [Status](#)
- typedef tibas\_distributionScope [DistributionScope](#)
- typedef tibas\_timeScope [TimeScope](#)
- typedef tibas\_logLevel [LogLevel](#)
- typedef tibas\_indexType [IndexType](#)
- typedef tibas\_managementRole [ManagementRole](#)
- typedef tibas\_distributionRole [DistributionRole](#)
- typedef tibas\_browserType [BrowserType](#)
- typedef tibas\_spaceState [SpaceState](#)
- typedef tibas\_distributionPolicy [DistributionPolicy](#)
- typedef tibas\_persistenceType [PersistenceType](#)
- typedef tibas\_persistencePolicy [PersistencePolicy](#)
- typedef tibas\_evictionPolicy [EvictionPolicy](#)

## Functions

- std::vector< std::string > [asStringListToVector](#) (const tibasStringList &stringList)
- [SharedPtr](#)< tibasTupleList > [tuplesToAsTupleList](#) (const std::vector< [Tuple](#) > &tuples)
- [SharedPtr](#)< tibasMemberList > [membersToAsMemberList](#) (const std::vector< [Member](#) > &members, const [Metaspace](#) &metaspace)
- std::vector< [Member](#) > [asMemberListToVector](#) (tibasMemberList &memberList)

### 5.1.1 Typedef Documentation

#### 5.1.1.1 typedef tibas\_browserType ASApi::BrowserType

Definition at line 23 of file Types.h.

#### 5.1.1.2 typedef tibas\_distributionPolicy ASApi::DistributionPolicy

Definition at line 27 of file Types.h.

#### 5.1.1.3 typedef tibas\_distributionRole ASApi::DistributionRole

Definition at line 22 of file Types.h.

#### 5.1.1.4 typedef tibas\_distributionScope ASApi::DistributionScope

Definition at line 17 of file Types.h.

**5.1.1.5    typedef tibas\_evictionPolicy ASApi::EvictionPolicy**

Definition at line 30 of file Types.h.

**5.1.1.6    typedef tibas\_indexType ASApi::IndexType**

Definition at line 20 of file Types.h.

**5.1.1.7    typedef tibas\_logLevel ASApi::LogLevel**

Definition at line 19 of file Types.h.

**5.1.1.8    typedef tibas\_managementRole ASApi::ManagementRole**

Definition at line 21 of file Types.h.

**5.1.1.9    typedef std::mutex ASApi::Mutex**

Definition at line 61 of file Mutex.h.

**5.1.1.10    typedef tibas\_persistencePolicy ASApi::PersistencePolicy**

Definition at line 29 of file Types.h.

**5.1.1.11    typedef tibas\_persistenceType ASApi::PersistenceType**

Definition at line 28 of file Types.h.

**5.1.1.12    typedef tibas\_spaceState ASApi::SpaceState**

Definition at line 24 of file Types.h.

**5.1.1.13    typedef tibas\_status ASApi::Status**

Definition at line 16 of file Types.h.

**5.1.1.14    typedef tibas\_timeScope ASApi::TimeScope**

Definition at line 18 of file Types.h.

### 5.1.2 Function Documentation

#### 5.1.2.1 `vector< Member > ASApi::asMemberListToVector (tibasMemberList & memberList)`

Definition at line 58 of file Utils.cpp.

#### 5.1.2.2 `vector< string > ASApi::asStringListToVector (const tibasStringList & stringList)`

Definition at line 9 of file Utils.cpp.

#### 5.1.2.3 `SharedPtr< tibasMemberList > ASApi::membersToAsMemberList (const std::vector< Member > & members, const Metaspaces & metaspaces)`

Definition at line 41 of file Utils.cpp.

#### 5.1.2.4 `SharedPtr< tibasTupleList > ASApi::tuplesToAsTupleList (const std::vector< Tuple > & tuples)`

Definition at line 25 of file Utils.cpp.

## 5.2 ASApi::Common Namespace Reference

### Functions

- void AS\_CPP\_API [setLogLevel](#) (const [LogLevel](#) &logLevel)
- void AS\_CPP\_API [setSecurityLogLevel](#) (const [LogLevel](#) &logLevel)
- [LogLevel](#) AS\_CPP\_API [getLogLevel](#) ()
- [LogLevel](#) AS\_CPP\_API [getSecurityLogLevel](#) ()
- void AS\_CPP\_API [setFileLogging](#) (const [LogLevel](#) &logLevel)
- void AS\_CPP\_API [setFileLogging](#) (const std::string &fileName, const [LogLevel](#) &logLevel)
- void AS\_CPP\_API [setFileLogging](#) (const std::string &logDir, const std::string &fileName, const [LogLevel](#) &logLevel)
- void AS\_CPP\_API [setEventLogging](#) (const std::string &fileName, const [LogLevel](#) &logLevel)
- [Metaspace](#) AS\_CPP\_API [getMetaspace](#) (const std::string &metaspaceName)
- [Metaspace](#) AS\_CPP\_API [connectMetaspace](#) (const std::string &metaspaceName, const [MemberDef](#) &memberDef)
- std::vector< std::string > AS\_CPP\_API [getMetaspaceNames](#) ()
- void AS\_CPP\_API [setInvocable](#) (const std::string &alias, [Invocable::Creator](#) creator)
- void AS\_CPP\_API [setInvocable](#) (const std::string &alias, [SharedPtr](#)< [Invocable](#) > invocable)
- void AS\_CPP\_API [setMemberInvocable](#) (const std::string &alias, [MemberInvocable::Creator](#) creator)
- void AS\_CPP\_API [setMemberInvocable](#) (const std::string &alias, [SharedPtr](#)< [MemberInvocable](#) > memberInvocable)
- std::vector< std::string > AS\_CPP\_API [getInvocableAliases](#) ()
- std::vector< std::string > AS\_CPP\_API [getMemberInvocableAliases](#) ()
- void AS\_CPP\_API [removeInvocable](#) (const std::string &alias)
- void AS\_CPP\_API [removeMemberInvocable](#) (const std::string &alias)

### 5.2.1 Function Documentation

#### 5.2.1.1 [Metaspace ASApi::Common::connectMetaspace \(const std::string &metaspaceName, const MemberDef &memberDef\)](#)

Definition at line 59 of file Common.cpp.

#### 5.2.1.2 [vector< string > ASApi::Common::getInvocableAliases \(\)](#)

Definition at line 97 of file Common.cpp.

#### 5.2.1.3 [LogLevel ASApi::Common::getLogLevel \(\)](#)

Definition at line 22 of file Common.cpp.

**5.2.1.4** `vector< string > ASApi::Common::getMemberInvocableAliases ()`

Definition at line 105 of file Common.cpp.

**5.2.1.5** `Metaspace ASApi::Common::getMetaspace (const std::string & metaspaceName)`

Definition at line 51 of file Common.cpp.

**5.2.1.6** `vector< string > ASApi::Common::getMetaspaceNames ()`

Definition at line 65 of file Common.cpp.

**5.2.1.7** `LogLevel ASApi::Common::getSecurityLogLevel ()`

Definition at line 30 of file Common.cpp.

**5.2.1.8** `void ASApi::Common::removeInvocable (const std::string & alias)`

Definition at line 113 of file Common.cpp.

**5.2.1.9** `void ASApi::Common::removeMemberInvocable (const std::string & alias)`

Definition at line 119 of file Common.cpp.

**5.2.1.10** `void ASApi::Common::setEventLogging (const std::string & fileName, const LogLevel & logLevel)`

Definition at line 44 of file Common.cpp.

**5.2.1.11** `void AS_CPP_API ASApi::Common::setFileLogging (const std::string & logDir, const std::string & fileName, const LogLevel & logLevel)`**5.2.1.12** `void AS_CPP_API ASApi::Common::setFileLogging (const std::string & fileName, const LogLevel & logLevel)`**5.2.1.13** `void ASApi::Common::setFileLogging (const LogLevel & logLevel)`

Definition at line 38 of file Common.cpp.

**5.2.1.14** void ASApi::Common::setInvocable (const std::string & *alias*,  
SharedPtr< Invocable > *invocable*)

Definition at line 79 of file Common.cpp.

**5.2.1.15** void ASApi::Common::setInvocable (const std::string & *alias*,  
Invocable::Creator *creator*)

Definition at line 73 of file Common.cpp.

**5.2.1.16** void ASApi::Common::setLogLevel (const LogLevel & *logLevel*)

Definition at line 10 of file Common.cpp.

**5.2.1.17** void ASApi::Common::setMemberInvocable (const std::string & *alias*,  
SharedPtr< MemberInvocable > *memberInvocable*)

Definition at line 91 of file Common.cpp.

**5.2.1.18** void ASApi::Common::setMemberInvocable (const std::string & *alias*,  
MemberInvocable::Creator *creator*)

Definition at line 85 of file Common.cpp.

**5.2.1.19** void ASApi::Common::setSecurityLogLevel (const LogLevel &  
*logLevel*)

Definition at line 16 of file Common.cpp.



# Chapter 6

## Class Documentation

### 6.1 ASApi::Action Class Reference

```
#include <Action.h>
```

Inherited by [ASApi::AlterAction](#), [ASApi::CloseAction](#), [ASApi::LoadAction](#), [ASApi::OpenAction](#), [ASApi::ReadAction](#), and [ASApi::WriteAction](#).

#### Public Member Functions

- `std::string getSpaceName () const`
- `std::string getMetaspaceName () const`

#### Protected Member Functions

- `Action (const tibasAction &action)`

#### Protected Attributes

- `const tibasAction & m\_action`

#### 6.1.1 Detailed Description

Definition at line 14 of file Action.h.

#### 6.1.2 Constructor & Destructor Documentation

##### 6.1.2.1 `Action::Action (const tibasAction & action)` `[protected]`

Definition at line 9 of file Action.cpp.

### 6.1.3 Member Function Documentation

#### 6.1.3.1 `string Action::getMetaspaceName () const`

Definition at line 24 of file Action.cpp.

#### 6.1.3.2 `string Action::getSpaceName () const`

Definition at line 16 of file Action.cpp.

### 6.1.4 Member Data Documentation

#### 6.1.4.1 `const tibasAction& ASApi::Action::m_action [protected]`

Definition at line 23 of file Action.h.

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

- [Action.h](#)
- [Action.cpp](#)

## 6.2 ASApi::ActionResult Class Reference

```
#include <ActionResult.h>
```

### Public Member Functions

- [ActionResult](#) (tibasActionResult &actionResult)
- [ActionResult](#) & [setFailed](#) ()
- [ActionResult](#) & [setFailed](#) (const [Status](#) &status)
- [Status](#) [getStatus](#) () const
- [ActionResult](#) & [setTuple](#) (const [Tuple](#) &tuple)
- [Tuple](#) [getTuple](#) () const

### 6.2.1 Detailed Description

Definition at line 12 of file ActionResult.h.

### 6.2.2 Constructor & Destructor Documentation

#### 6.2.2.1 ActionResult::ActionResult (tibasActionResult & *actionResult*) [explicit]

Definition at line 9 of file ActionResult.cpp.

### 6.2.3 Member Function Documentation

#### 6.2.3.1 ASApi::Status ActionResult::getStatus () const

Definition at line 29 of file ActionResult.cpp.

#### 6.2.3.2 Tuple ActionResult::getTuple () const

Definition at line 44 of file ActionResult.cpp.

#### 6.2.3.3 ActionResult & ActionResult::setFailed (const Status & *status*)

Definition at line 22 of file ActionResult.cpp.

#### 6.2.3.4 ActionResult & ActionResult::setFailed ()

Definition at line 15 of file ActionResult.cpp.

#### 6.2.3.5 `ActionResult` & `ActionResult::setTuple (const Tuple & tuple)`

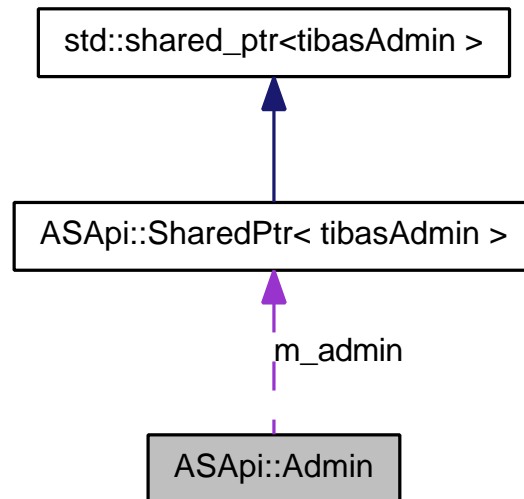
Definition at line 37 of file `ActionResult.cpp`.

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

- [ActionResult.h](#)
- [ActionResult.cpp](#)

## 6.3 ASApi::Admin Class Reference

#include <Admin.h> Collaboration diagram for ASApi::Admin:



### Public Member Functions

- [Admin \(\)](#)
- [~Admin \(\)](#)
- [Metaspace connect](#) (const std::string &command)
- std::string [execute](#) (const [Metaspace](#) &metasace, const std::string &command)

#### 6.3.1 Detailed Description

Definition at line 11 of file Admin.h.

#### 6.3.2 Constructor & Destructor Documentation

##### 6.3.2.1 Admin::Admin ()

Definition at line 8 of file Admin.cpp.

##### 6.3.2.2 Admin::~~Admin ()

Definition at line 15 of file Admin.cpp.

### 6.3.3 Member Function Documentation

#### 6.3.3.1 Metaspace Admin::connect (const std::string & *command*)

Definition at line 21 of file Admin.cpp.

#### 6.3.3.2 string Admin::execute (const Metaspace & *metaspace*, const std::string & *command*)

Definition at line 29 of file Admin.cpp.

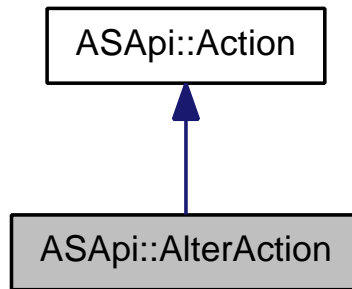
The documentation for this class was generated from the following files:

- [Admin.h](#)
- [Admin.cpp](#)

## 6.4 ASApi::AlterAction Class Reference

```
#include <AlterAction.h>
```

Inherits [ASApi::Action](#). Collaboration diagram for ASApi::AlterAction:



### Public Member Functions

- [AlterAction](#) (const tibasAction &action)
- [SpaceDef getSpaceDef](#) () const
- [SpaceDef getOldSpaceDef](#) () const

### 6.4.1 Detailed Description

Definition at line 9 of file AlterAction.h.

### 6.4.2 Constructor & Destructor Documentation

#### 6.4.2.1 AlterAction::AlterAction (const tibasAction & *action*)

Definition at line 7 of file AlterAction.cpp.

### 6.4.3 Member Function Documentation

#### 6.4.3.1 SpaceDef AlterAction::getOldSpaceDef () const

Definition at line 14 of file AlterAction.cpp.

#### 6.4.3.2 SpaceDef AlterAction::getSpaceDef () const

Definition at line 22 of file AlterAction.cpp.

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

- [AlterAction.h](#)
- [AlterAction.cpp](#)



## 6.5 ASApi::AuthenticationCallback Class Reference

```
#include <AuthenticationCallback.h>
```

### Classes

- struct [CClosure](#)

### Public Member Functions

- virtual [Status](#) [createUserCredential](#) ([AuthenticationInfo](#) &info)=0

### Static Public Member Functions

- static [tibas\\_status](#) [callback](#) ([tibasAuthenticationInfo](#) authInfo, void \*closure)

#### 6.5.1 Detailed Description

Definition at line 12 of file AuthenticationCallback.h.

#### 6.5.2 Member Function Documentation

##### 6.5.2.1 [tibas\\_status AuthenticationCallback::callback](#) ([tibasAuthenticationInfo](#) *authInfo*, void \* *closure*) [[static](#)]

Definition at line 6 of file AuthenticationCallback.cpp.

##### 6.5.2.2 [virtual Status ASApi::AuthenticationCallback::createUserCredential](#) ([AuthenticationInfo](#) & *info*) [[pure virtual](#)]

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

- [AuthenticationCallback.h](#)
- [AuthenticationCallback.cpp](#)

## 6.6 ASApi::AuthenticationInfo Class Reference

```
#include <AuthenticationInfo.h>
```

### Public Types

- typedef tibas\_authenticationMethod [Method](#)

### Public Member Functions

- [AuthenticationInfo](#) (const tibasAuthenticationInfo &authInfo)
- std::string [getMetaspaceName](#) () const
- std::string [getHint](#) () const
- std::string [getDomain](#) () const
- void [setDomain](#) (const std::string &domain)
- std::string [getUserName](#) () const
- void [setUserName](#) (const std::string &userName)
- std::string [getPassword](#) () const
- void [setPassword](#) (const std::string &password)

#### 6.6.1 Detailed Description

Definition at line 13 of file AuthenticationInfo.h.

#### 6.6.2 Member Typedef Documentation

##### 6.6.2.1 typedef tibas\_authenticationMethod AS- Api::AuthenticationInfo::Method

Definition at line 16 of file AuthenticationInfo.h.

#### 6.6.3 Constructor & Destructor Documentation

##### 6.6.3.1 AuthenticationInfo::AuthenticationInfo (const tibasAuthenticationInfo & authInfo)

Definition at line 12 of file AuthenticationInfo.cpp.

#### 6.6.4 Member Function Documentation

##### 6.6.4.1 string AuthenticationInfo::getDomain () const

Definition at line 31 of file AuthenticationInfo.cpp.

**6.6.4.2 string AuthenticationInfo::getHint () const**

Definition at line 25 of file AuthenticationInfo.cpp.

**6.6.4.3 string AuthenticationInfo::getMetaspaceName () const**

Definition at line 19 of file AuthenticationInfo.cpp.

**6.6.4.4 string AuthenticationInfo::getPassword () const**

Definition at line 55 of file AuthenticationInfo.cpp.

**6.6.4.5 string AuthenticationInfo::getUserName () const**

Definition at line 43 of file AuthenticationInfo.cpp.

**6.6.4.6 void AuthenticationInfo::setDomain (const std::string & *domain*)**

Definition at line 37 of file AuthenticationInfo.cpp.

**6.6.4.7 void AuthenticationInfo::setPassword (const std::string & *password*)**

Definition at line 61 of file AuthenticationInfo.cpp.

**6.6.4.8 void AuthenticationInfo::setUserName (const std::string & *userName*)**

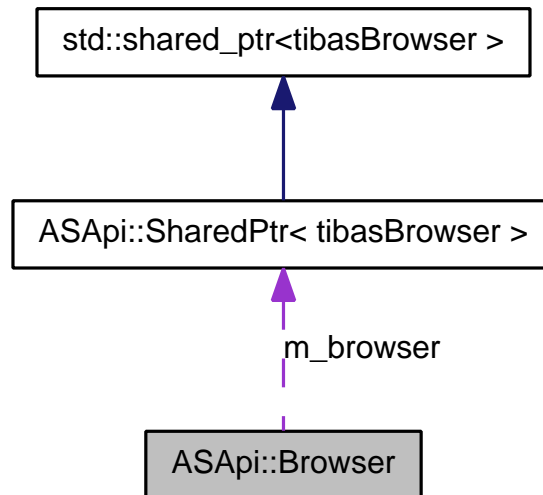
Definition at line 49 of file AuthenticationInfo.cpp.

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

- [AuthenticationInfo.h](#)
- [AuthenticationInfo.cpp](#)

## 6.7 ASApi::Browser Class Reference

`#include <Browser.h>` Collaboration diagram for ASApi::Browser:



### Public Member Functions

- [Browser \(\)](#)
- [~Browser \(\)](#)
- `const tibasBrowser & get \(\) const`
- `tibasBrowser & get \(\)`
- [Tuple next \(\)](#) const

#### 6.7.1 Detailed Description

Definition at line 13 of file `Browser.h`.

#### 6.7.2 Constructor & Destructor Documentation

##### 6.7.2.1 Browser::Browser ()

Definition at line 8 of file `Browser.cpp`.

##### 6.7.2.2 Browser::~~Browser ()

Definition at line 15 of file `Browser.cpp`.

### 6.7.3 Member Function Documentation

#### 6.7.3.1 `tibasBrowser & Browser::get ()`

Definition at line 27 of file Browser.cpp.

#### 6.7.3.2 `const tibasBrowser & Browser::get () const`

Definition at line 21 of file Browser.cpp.

#### 6.7.3.3 `Tuple Browser::next () const`

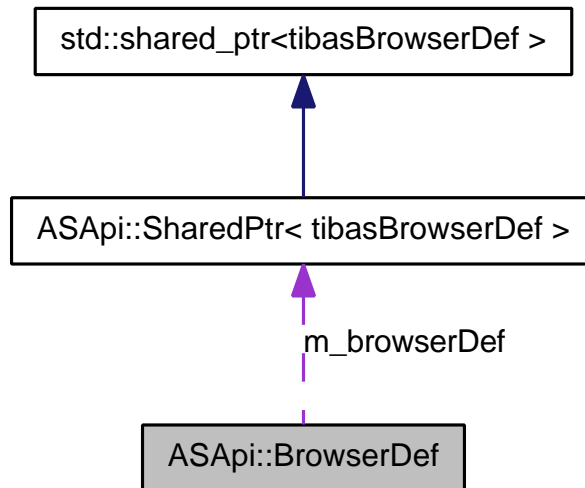
Definition at line 32 of file Browser.cpp.

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

- [Browser.h](#)
- [Browser.cpp](#)

## 6.8 ASApi::BrowserDef Class Reference

#include <BrowserDef.h> Collaboration diagram for ASApi::BrowserDef:



### Public Member Functions

- [BrowserDef \(\)](#)
- [~BrowserDef \(\)](#)
- const tibasBrowserDef & [get \(\)](#) const
- tibasBrowserDef & [get \(\)](#)
- [DistributionScope](#) [getDistributionScope \(\)](#) const
- long long [getTimeout \(\)](#) const
- [TimeScope](#) [getTimeScope \(\)](#) const
- [BrowserDef](#) & [setDistributionScope](#) (const [DistributionScope](#) &distribution-  
Scope)
- [BrowserDef](#) & [setTimeout](#) (long long timeout)
- [BrowserDef](#) & [setTimeScope](#) (const [TimeScope](#) &timescope)

### 6.8.1 Detailed Description

Definition at line 13 of file BrowserDef.h.

### 6.8.2 Constructor & Destructor Documentation

#### 6.8.2.1 BrowserDef::BrowserDef ()

Definition at line 9 of file BrowserDef.cpp.

### 6.8.2.2 BrowserDef::~~BrowserDef ()

Definition at line 17 of file BrowserDef.cpp.

## 6.8.3 Member Function Documentation

### 6.8.3.1 tibasBrowserDef & BrowserDef::get ()

Definition at line 29 of file BrowserDef.cpp.

### 6.8.3.2 const tibasBrowserDef & BrowserDef::get () const

Definition at line 23 of file BrowserDef.cpp.

### 6.8.3.3 DistributionScope BrowserDef::getDistributionScope () const

Definition at line 35 of file BrowserDef.cpp.

### 6.8.3.4 long long BrowserDef::getTimeout () const

Definition at line 43 of file BrowserDef.cpp.

### 6.8.3.5 TimeScope BrowserDef::getTimeScope () const

Definition at line 51 of file BrowserDef.cpp.

### 6.8.3.6 BrowserDef & BrowserDef::setDistributionScope (const DistributionScope & *distributionScope*)

Definition at line 59 of file BrowserDef.cpp.

### 6.8.3.7 BrowserDef & BrowserDef::setTimeout (long long *timeout*)

Definition at line 66 of file BrowserDef.cpp.

### 6.8.3.8 BrowserDef & BrowserDef::setTimeScope (const TimeScope & *timescope*)

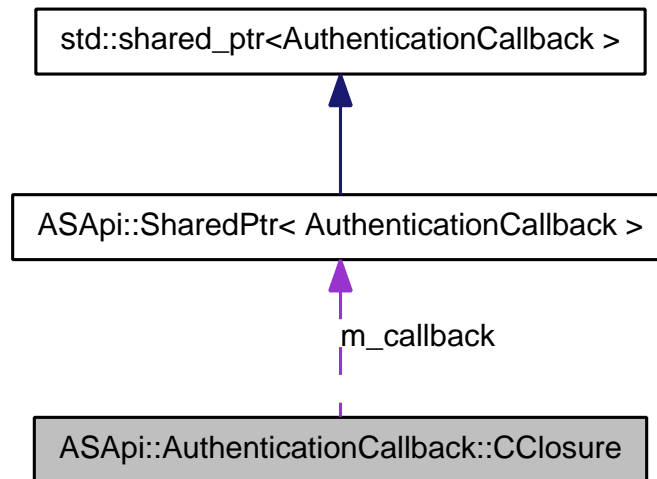
Definition at line 73 of file BrowserDef.cpp.

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

- [BrowserDef.h](#)
- [BrowserDef.cpp](#)

## 6.9 ASApi::AuthenticationCallback::CClosure Struct Reference

`#include <AuthenticationCallback.h>` Collaboration diagram for AS-Api::AuthenticationCallback::CClosure:



### Public Attributes

- [SharedPtr< AuthenticationCallback >](#) `m_callback`

### 6.9.1 Detailed Description

Definition at line 15 of file `AuthenticationCallback.h`.

### 6.9.2 Member Data Documentation

#### 6.9.2.1 SharedPtr<AuthenticationCallback> ASApi::AuthenticationCallback::CClosure::m\_callback

Definition at line 17 of file `AuthenticationCallback.h`.

The documentation for this struct was generated from the following file:

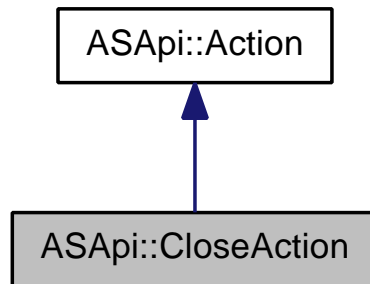
- [AuthenticationCallback.h](#)



## 6.10 ASApi::CloseAction Class Reference

```
#include <CloseAction.h>
```

Inherits [ASApi::Action](#). Collaboration diagram for ASApi::CloseAction:



### Public Member Functions

- [CloseAction](#) (const tibasAction &action)

#### 6.10.1 Detailed Description

Definition at line 9 of file CloseAction.h.

#### 6.10.2 Constructor & Destructor Documentation

##### 6.10.2.1 CloseAction::CloseAction (const tibasAction & action)

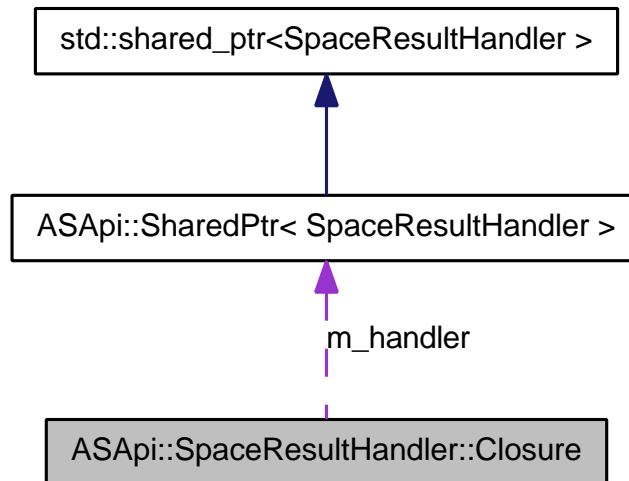
Definition at line 6 of file CloseAction.cpp.

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

- [CloseAction.h](#)
- [CloseAction.cpp](#)

## 6.11 ASApi::SpaceResultHandler::Closure Struct Reference

`#include <SpaceResultHandler.h>` Collaboration diagram for AS-Api::SpaceResultHandler::Closure:



### Public Attributes

- [SharedPtr<SpaceResultHandler>](#) [m\\_handler](#)
- void \* [m\\_closure](#)

### 6.11.1 Detailed Description

Definition at line 13 of file SpaceResultHandler.h.

### 6.11.2 Member Data Documentation

#### 6.11.2.1 void\* ASApi::SpaceResultHandler::Closure::m\_closure

Definition at line 16 of file SpaceResultHandler.h.

#### 6.11.2.2 SharedPtr<SpaceResultHandler> ASApi::SpaceResultHandler::Closure::m\_handler

Definition at line 15 of file SpaceResultHandler.h.

The documentation for this struct was generated from the following file:

- [SpaceResultHandler.h](#)

## 6.12 ASApi::Deleter< T > Class Template Reference

```
#include <Types.h>
```

### Public Member Functions

- [Deleter](#) (Function fn=NULL)
- void [operator\(\)](#) (T \*ptr)
- void [reset](#) ()

#### 6.12.1 Detailed Description

**template<typename T> class ASApi::Deleter< T >**

Definition at line 33 of file Types.h.

#### 6.12.2 Constructor & Destructor Documentation

**6.12.2.1 template<typename T > ASApi::Deleter< T >::Deleter (Function *fn* = NULL) [inline]**

Definition at line 49 of file Types.h.

#### 6.12.3 Member Function Documentation

**6.12.3.1 template<typename T> void ASApi::Deleter< T >::operator() (T \**ptr*) [inline]**

Definition at line 57 of file Types.h.

**6.12.3.2 template<typename T> void ASApi::Deleter< T >::reset () [inline]**

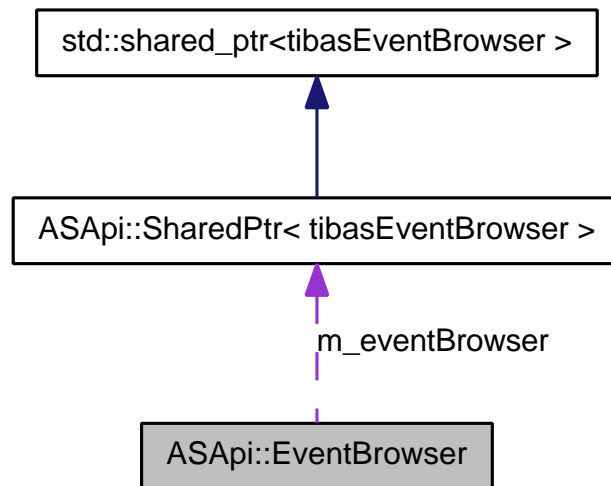
Definition at line 44 of file Types.h.

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

- [Types.h](#)

## 6.13 ASApi::EventBrowser Class Reference

`#include <EventBrowser.h>` Collaboration diagram for AS-Api::EventBrowser:



### Public Member Functions

- [EventBrowser \(\)](#)
- [~EventBrowser \(\)](#)
- `const tibasEventBrowser & get \(\) const`
- `tibasEventBrowser & get \(\)`

#### 6.13.1 Detailed Description

Definition at line 13 of file EventBrowser.h.

#### 6.13.2 Constructor & Destructor Documentation

##### 6.13.2.1 EventBrowser::EventBrowser ()

Definition at line 9 of file EventBrowser.cpp.

##### 6.13.2.2 EventBrowser::~~EventBrowser ()

Definition at line 16 of file EventBrowser.cpp.

### 6.13.3 Member Function Documentation

#### 6.13.3.1 `tibasEventBrowser & EventBrowser::get ()`

Definition at line 28 of file EventBrowser.cpp.

#### 6.13.3.2 `const tibasEventBrowser & EventBrowser::get () const`

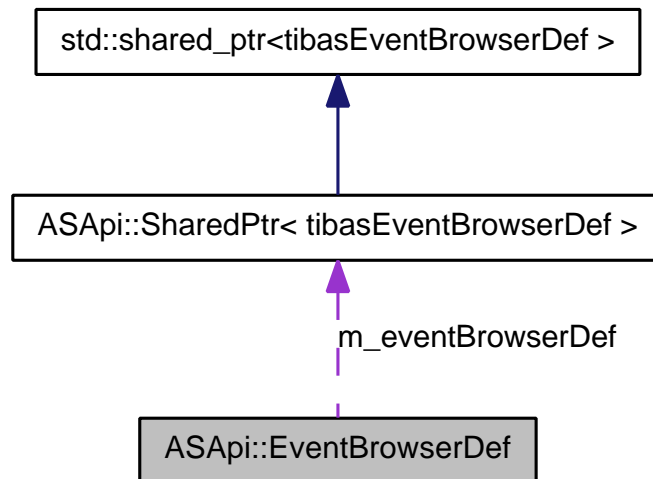
Definition at line 22 of file EventBrowser.cpp.

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

- [EventBrowser.h](#)
- [EventBrowser.cpp](#)

## 6.14 ASApi::EventBrowserDef Class Reference

`#include <EventBrowserDef.h>` Collaboration diagram for AS-Api::EventBrowserDef:



### Public Member Functions

- [EventBrowserDef \(\)](#)
- [~EventBrowserDef \(\)](#)
- `const tibasEventBrowserDef & get () const`
- `tibasEventBrowserDef & get ()`
- `DistributionScope getDistributionScope () const`
- `long long getTimeout () const`
- `TimeScope getTimeScope () const`
- `EventBrowserDef & setDistributionScope (const DistributionScope &distributionScope)`
- `EventBrowserDef & setTimeout (long long timeout)`
- `EventBrowserDef & setTimeScope (const TimeScope &timescope)`

#### 6.14.1 Detailed Description

Definition at line 13 of file EventBrowserDef.h.

#### 6.14.2 Constructor & Destructor Documentation

##### 6.14.2.1 EventBrowserDef::EventBrowserDef ()

Definition at line 9 of file EventBrowserDef.cpp.

#### 6.14.2.2 EventBrowserDef::~~EventBrowserDef ()

Definition at line 17 of file EventBrowserDef.cpp.

### 6.14.3 Member Function Documentation

#### 6.14.3.1 tibasEventBrowserDef & EventBrowserDef::get ()

Definition at line 29 of file EventBrowserDef.cpp.

#### 6.14.3.2 const tibasEventBrowserDef & EventBrowserDef::get () const

Definition at line 23 of file EventBrowserDef.cpp.

#### 6.14.3.3 DistributionScope EventBrowserDef::getDistributionScope () const

Definition at line 35 of file EventBrowserDef.cpp.

#### 6.14.3.4 long long EventBrowserDef::getTimeout () const

Definition at line 43 of file EventBrowserDef.cpp.

#### 6.14.3.5 TimeScope EventBrowserDef::getTimeScope () const

Definition at line 51 of file EventBrowserDef.cpp.

#### 6.14.3.6 EventBrowserDef & EventBrowserDef::setDistributionScope (const DistributionScope & *distributionScope*)

Definition at line 59 of file EventBrowserDef.cpp.

#### 6.14.3.7 EventBrowserDef & EventBrowserDef::setTimeout (long long *timeout*)

Definition at line 66 of file EventBrowserDef.cpp.

#### 6.14.3.8 EventBrowserDef & EventBrowserDef::setTimeScope (const TimeScope & *timescope*)

Definition at line 73 of file EventBrowserDef.cpp.

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

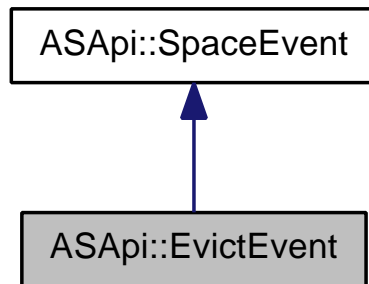
- [EventBrowserDef.h](#)
- [EventBrowserDef.cpp](#)



## 6.15 ASApi::EvictEvent Class Reference

```
#include <EvictEvent.h>
```

Inherits [ASApi::SpaceEvent](#). Collaboration diagram for ASApi::EvictEvent:



### Public Member Functions

- [EvictEvent](#) (const tibasSpaceEvent &event)
- [~EvictEvent](#) ()

### 6.15.1 Detailed Description

Definition at line 10 of file EvictEvent.h.

### 6.15.2 Constructor & Destructor Documentation

#### 6.15.2.1 EvictEvent::EvictEvent (const tibasSpaceEvent & *event*)

Definition at line 8 of file EvictEvent.cpp.

#### 6.15.2.2 EvictEvent::~~EvictEvent ()

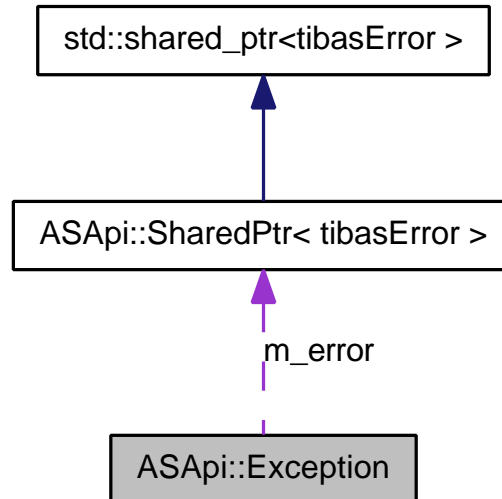
Definition at line 14 of file EvictEvent.cpp.

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

- [EvictEvent.h](#)
- [EvictEvent.cpp](#)

## 6.16 ASApi::Exception Class Reference

#include <Exception.h> Collaboration diagram for ASApi::Exception:



### Public Member Functions

- [Exception](#) (const `tibas_status` &status)
- [Exception](#) (const `tibasError` &error)
- [Exception](#) ([SharedPtr](#)< `tibasError` > &error)
- const `tibas_status` & [getStatus](#) () const
- `tibas_status` [getCode](#) () const
- std::string [getMessage](#) () const
- std::string [getStackTrace](#) () const

### 6.16.1 Detailed Description

Definition at line 20 of file `Exception.h`.

### 6.16.2 Constructor & Destructor Documentation

#### 6.16.2.1 Exception::Exception (const `tibas_status` & status)

Definition at line 8 of file `Exception.cpp`.

#### 6.16.2.2 Exception::Exception (const `tibasError` & error)

Definition at line 16 of file `Exception.cpp`.

**6.16.2.3 Exception::Exception (SharedPtr< tibasError > & error)**

Definition at line 29 of file Exception.cpp.

**6.16.3 Member Function Documentation****6.16.3.1 tibas\_status Exception::getCode () const**

Definition at line 43 of file Exception.cpp.

**6.16.3.2 string Exception::getMessage () const**

Definition at line 52 of file Exception.cpp.

**6.16.3.3 string Exception::getStackTrace () const**

Definition at line 61 of file Exception.cpp.

**6.16.3.4 const tibas\_status & Exception::getStatus () const**

Definition at line 37 of file Exception.cpp.

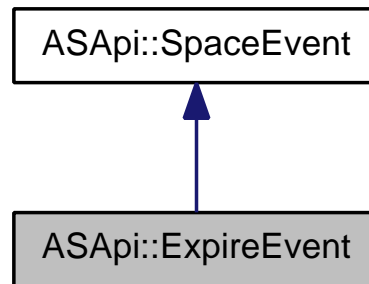
The documentation for this class was generated from the following files:

- [Exception.h](#)
- [Exception.cpp](#)

## 6.17 ASApi::ExpireEvent Class Reference

```
#include <ExpireEvent.h>
```

Inherits [ASApi::SpaceEvent](#). Collaboration diagram for ASApi::ExpireEvent:



### Public Member Functions

- [ExpireEvent](#) (const tibasSpaceEvent &event)
- [~ExpireEvent](#) ()

#### 6.17.1 Detailed Description

Definition at line 10 of file ExpireEvent.h.

#### 6.17.2 Constructor & Destructor Documentation

##### 6.17.2.1 ExpireEvent::ExpireEvent (const tibasSpaceEvent & *event*)

Definition at line 8 of file ExpireEvent.cpp.

##### 6.17.2.2 ExpireEvent::~~ExpireEvent ()

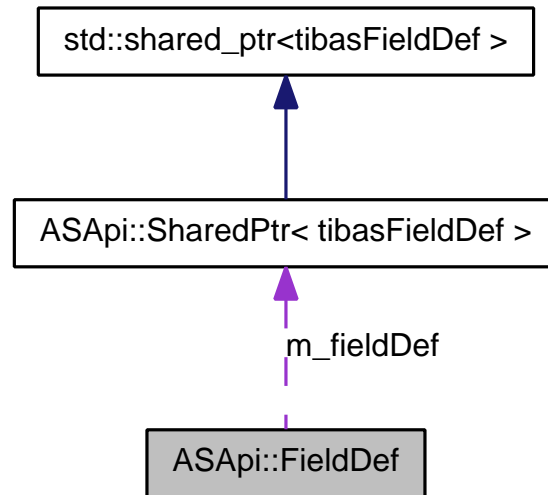
Definition at line 14 of file ExpireEvent.cpp.

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

- [ExpireEvent.h](#)
- [ExpireEvent.cpp](#)

## 6.18 ASApi::FieldDef Class Reference

#include <FieldDef.h> Collaboration diagram for ASApi::FieldDef:



### Public Types

- typedef `tibas_type` [Type](#)

### Public Member Functions

- [FieldDef](#) ()
- [FieldDef](#) (const std::string &fieldName, `tibas_type` fieldType)
- [~FieldDef](#) ()
- const `tibasFieldDef` & [get](#) () const
- `tibasFieldDef` & [get](#) ()
- std::string [getName](#) () const
- [Type](#) [getType](#) () const
- bool [isNullable](#) () const
- [FieldDef](#) & [setNullable](#) (bool nullable)
- [FieldDef](#) & [setEncrypted](#) (bool secured)
- bool [isEncrypted](#) ()

### Static Public Member Functions

- static [FieldDef](#) [create](#) (const std::string &fieldName, `tibas_type` fieldType)

### 6.18.1 Detailed Description

Definition at line 12 of file FieldDef.h.

### 6.18.2 Member Typedef Documentation

#### 6.18.2.1 `typedef tibas_type ASApi::FieldDef::Type`

Definition at line 15 of file FieldDef.h.

### 6.18.3 Constructor & Destructor Documentation

#### 6.18.3.1 `FieldDef::FieldDef ()`

Definition at line 9 of file FieldDef.cpp.

#### 6.18.3.2 `FieldDef::FieldDef (const std::string & fieldName, tibas_type fieldType)`

Definition at line 15 of file FieldDef.cpp.

#### 6.18.3.3 `FieldDef::~~FieldDef ()`

Definition at line 23 of file FieldDef.cpp.

### 6.18.4 Member Function Documentation

#### 6.18.4.1 `FieldDef FieldDef::create (const std::string & fieldName, tibas_type fieldType) [static]`

Definition at line 29 of file FieldDef.cpp.

#### 6.18.4.2 `tibasFieldDef & FieldDef::get ()`

Definition at line 42 of file FieldDef.cpp.

#### 6.18.4.3 `const tibasFieldDef & FieldDef::get () const`

Definition at line 36 of file FieldDef.cpp.

#### 6.18.4.4 `string FieldDef::getName () const`

Definition at line 48 of file FieldDef.cpp.

**6.18.4.5 FieldDef::Type FieldDef::getType () const**

Definition at line 55 of file FieldDef.cpp.

**6.18.4.6 bool FieldDef::isEncrypted ()**

Definition at line 102 of file FieldDef.cpp.

**6.18.4.7 bool FieldDef::isNullable () const**

Definition at line 62 of file FieldDef.cpp.

**6.18.4.8 FieldDef & FieldDef::setEncrypted (bool *secured*)**

Definition at line 89 of file FieldDef.cpp.

**6.18.4.9 FieldDef & FieldDef::setNullable (bool *nullable*)**

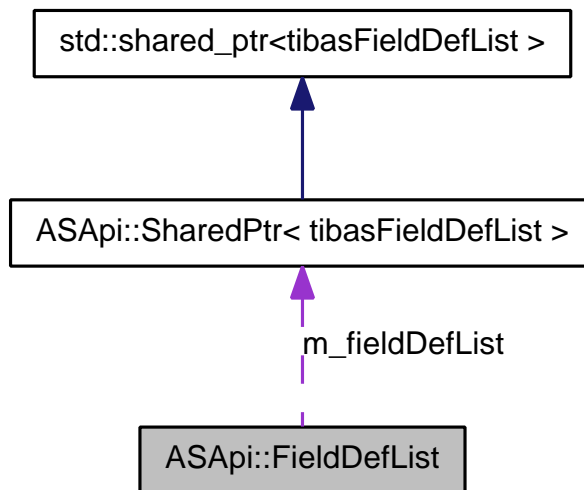
Definition at line 75 of file FieldDef.cpp.

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

- [FieldDef.h](#)
- [FieldDef.cpp](#)

## 6.19 ASApi::FieldDefList Class Reference

`#include <FieldDefList.h>` Collaboration diagram for AS-Api::FieldDefList:



### Public Member Functions

- [FieldDefList \(\)](#)
- [~FieldDefList \(\)](#)
- `const tibasFieldDefList & get \(\) const`
- `tibasFieldDefList & get \(\)`
- [FieldDef get \(int index\)](#)
- `int size \(\) const`

### 6.19.1 Detailed Description

Definition at line 13 of file FieldDefList.h.

### 6.19.2 Constructor & Destructor Documentation

#### 6.19.2.1 FieldDefList::FieldDefList ()

Definition at line 9 of file FieldDefList.cpp.

#### 6.19.2.2 FieldDefList::~~FieldDefList ()

Definition at line 17 of file FieldDefList.cpp.



### 6.19.3 Member Function Documentation

#### 6.19.3.1 FieldDef FieldDefList::get (int *index*)

Definition at line 35 of file FieldDefList.cpp.

#### 6.19.3.2 tibasFieldDefList & FieldDefList::get ()

Definition at line 29 of file FieldDefList.cpp.

#### 6.19.3.3 const tibasFieldDefList & FieldDefList::get () const

Definition at line 23 of file FieldDefList.cpp.

#### 6.19.3.4 int FieldDefList::size () const

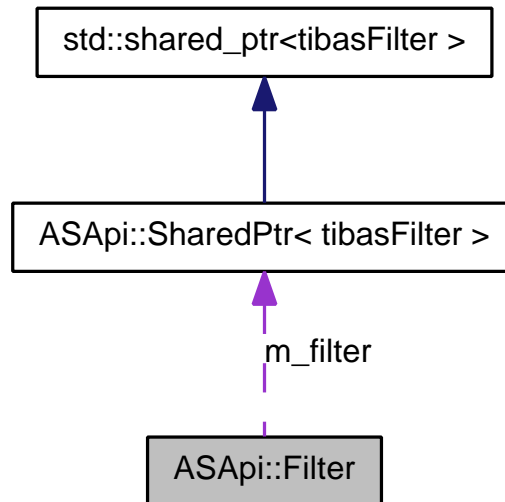
Definition at line 43 of file FieldDefList.cpp.

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

- [FieldDefList.h](#)
- [FieldDefList.cpp](#)

## 6.20 ASApi::Filter Class Reference

`#include <Filter.h>` Collaboration diagram for ASApi::Filter:



### Public Member Functions

- [Filter](#) (const std::string &filterString)
- [~Filter](#) ()
- const tibasFilter & [get](#) () const
- tibasFilter & [get](#) ()
- bool [eval](#) (const [Tuple](#) &tuple) const

#### 6.20.1 Detailed Description

Definition at line 13 of file Filter.h.

#### 6.20.2 Constructor & Destructor Documentation

##### 6.20.2.1 Filter::Filter (const std::string &filterString)

Definition at line 9 of file Filter.cpp.

##### 6.20.2.2 Filter::~~Filter ()

Definition at line 17 of file Filter.cpp.

### 6.20.3 Member Function Documentation

#### 6.20.3.1 `bool Filter::eval (const Tuple & tuple) const`

Definition at line 35 of file Filter.cpp.

#### 6.20.3.2 `tibasFilter & Filter::get ()`

Definition at line 29 of file Filter.cpp.

#### 6.20.3.3 `const tibasFilter & Filter::get () const`

Definition at line 23 of file Filter.cpp.

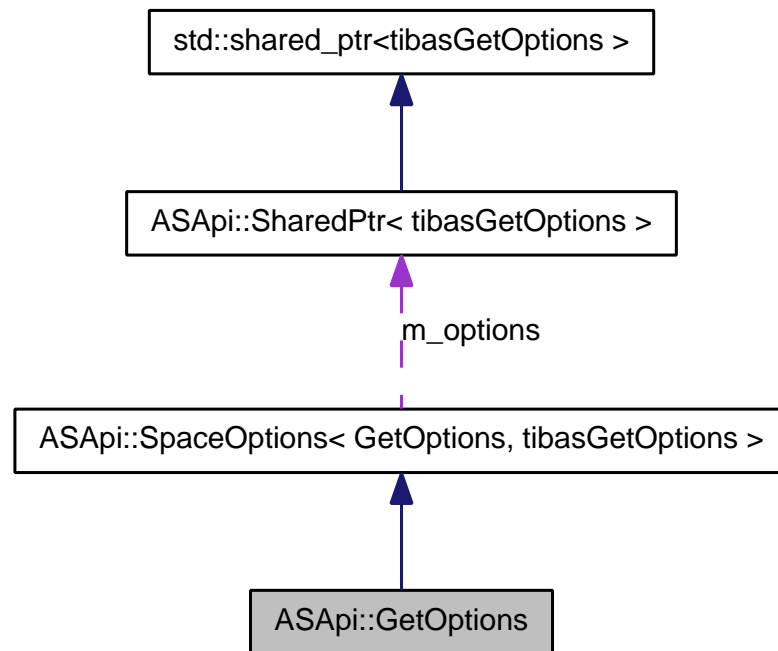
The documentation for this class was generated from the following files:

- [Filter.h](#)
- [Filter.cpp](#)

## 6.21 ASApi::GetOptions Class Reference

```
#include <GetOptions.h>
```

Inherits [SpaceOptions< GetOptions, tibasGetOptions >](#). Collaboration diagram for ASApi::GetOptions:



### Public Member Functions

- [GetOptions \(\)](#)

#### 6.21.1 Detailed Description

Definition at line 10 of file [GetOptions.h](#).

#### 6.21.2 Constructor & Destructor Documentation

##### 6.21.2.1 GetOptions::GetOptions ()

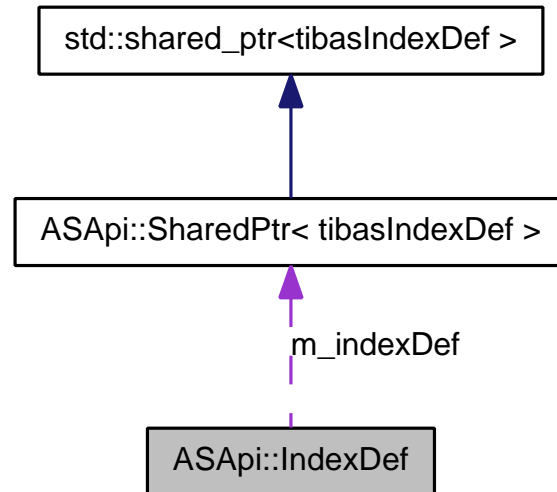
Definition at line 10 of file [GetOptions.cpp](#).

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

- [GetOptions.h](#)
- [GetOptions.cpp](#)

## 6.22 ASApi::IndexDef Class Reference

#include <IndexDef.h> Collaboration diagram for ASApi::IndexDef:



### Public Member Functions

- [IndexDef](#) ()
- [IndexDef](#) (std::string &indexName, std::string &fieldNames)
- [~IndexDef](#) ()
- const tibasIndexDef & [get](#) () const
- tibasIndexDef & [get](#) ()
- [IndexDef](#) & [setName](#) (const std::string &indexName)
- std::string [getName](#) () const
- [IndexDef](#) & [setIndexType](#) (const [IndexType](#) &indexType)
- [IndexType](#) [getIndexType](#) () const
- std::vector< std::string > [getFieldNames](#) () const
- [IndexDef](#) & [setFieldNames](#) (const std::string &fieldNames)
- [IndexDef](#) & [setFieldNames](#) (int numFields,...)

### 6.22.1 Detailed Description

Definition at line 15 of file IndexDef.h.

### 6.22.2 Constructor & Destructor Documentation

#### 6.22.2.1 IndexDef::IndexDef ()

Definition at line 10 of file IndexDef.cpp.

**6.22.2.2 IndexDef::IndexDef (std::string & *indexName*, std::string & *fieldNames*)**

Definition at line 16 of file IndexDef.cpp.

**6.22.2.3 IndexDef::~~IndexDef ()**

Definition at line 25 of file IndexDef.cpp.

**6.22.3 Member Function Documentation****6.22.3.1 tibasIndexDef & IndexDef::get ()**

Definition at line 37 of file IndexDef.cpp.

**6.22.3.2 const tibasIndexDef & IndexDef::get () const**

Definition at line 31 of file IndexDef.cpp.

**6.22.3.3 vector< string > IndexDef::getFieldNames () const**

Definition at line 74 of file IndexDef.cpp.

**6.22.3.4 IndexType IndexDef::getIndexType () const**

Definition at line 66 of file IndexDef.cpp.

**6.22.3.5 string IndexDef::getName () const**

Definition at line 51 of file IndexDef.cpp.

**6.22.3.6 IndexDef & IndexDef::setFieldNames (int *numFields*, ...)**

Definition at line 90 of file IndexDef.cpp.

**6.22.3.7 IndexDef & IndexDef::setFieldNames (const std::string & *fieldNames*)**

Definition at line 82 of file IndexDef.cpp.

**6.22.3.8 IndexDef & IndexDef::setIndexType (const IndexType & *indexType*)**

Definition at line 59 of file IndexDef.cpp.

### 6.22.3.9 IndexDef & IndexDef::setName (const std::string & *indexName*)

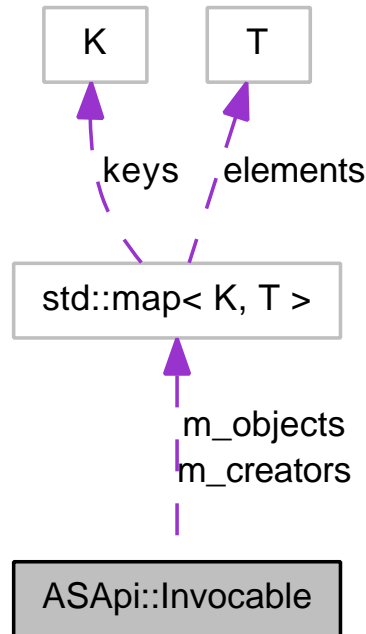
Definition at line 43 of file IndexDef.cpp.

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

- [IndexDef.h](#)
- [IndexDef.cpp](#)

## 6.23 ASApi::Invocable Class Reference

#include <Invocable.h> Collaboration diagram for ASApi::Invocable:



### Public Types

- typedef [SharedPtr](#)< [Invocable](#) >(\* [Creator](#) )()

### Public Member Functions

- virtual void [invoke](#) (const [Space](#) &space, const [Tuple](#) &tuple, const [Tuple](#) &context, [Tuple](#) &result)=0

### Static Public Member Functions

- static void [set](#) (const std::string &alias, [Creator](#) creator)
- static void [set](#) (const std::string &alias, [SharedPtr](#)< [Invocable](#) > object)
- static void [remove](#) (const std::string &alias)
- static void [invokeByObject](#) (tibasSpace space, tibasTuple tuple, tibasTuple context, tibasTuple c\_result, const char \*invocable)
- static void [invokeByCreator](#) (tibasSpace space, tibasTuple tuple, tibasTuple context, tibasTuple c\_result, const char \*invocable)
- static void [populateAliases](#) (std::vector< std::string > &aliases)



### 6.23.1 Detailed Description

Definition at line 14 of file Invocable.h.

### 6.23.2 Member Typedef Documentation

#### 6.23.2.1 `typedef SharedPtr<Invocable>(* ASApi::Invocable::Creator)()`

Definition at line 17 of file Invocable.h.

### 6.23.3 Member Function Documentation

#### 6.23.3.1 `virtual void ASApi::Invocable::invoke (const Space & space, const Tuple & tuple, const Tuple & context, Tuple & result) [pure virtual]`

#### 6.23.3.2 `void Invocable::invokeByCreator (tibasSpace space, tibasTuple tuple, tibasTuple context, tibasTuple c_result, const char * invocable) [static]`

Definition at line 74 of file Invocable.cpp.

#### 6.23.3.3 `void Invocable::invokeByObject (tibasSpace space, tibasTuple tuple, tibasTuple context, tibasTuple c_result, const char * invocable) [static]`

Definition at line 55 of file Invocable.cpp.

#### 6.23.3.4 `void Invocable::populateAliases (std::vector< std::string > & aliases) [static]`

Definition at line 42 of file Invocable.cpp.

#### 6.23.3.5 `void Invocable::remove (const std::string & alias) [static]`

Definition at line 33 of file Invocable.cpp.

#### 6.23.3.6 `void Invocable::set (const std::string & alias, SharedPtr< Invocable > object) [static]`

Definition at line 23 of file Invocable.cpp.

#### 6.23.3.7 void Invocable::set (const std::string & *alias*, Creator *creator*) [static]

Definition at line 13 of file Invocable.cpp.

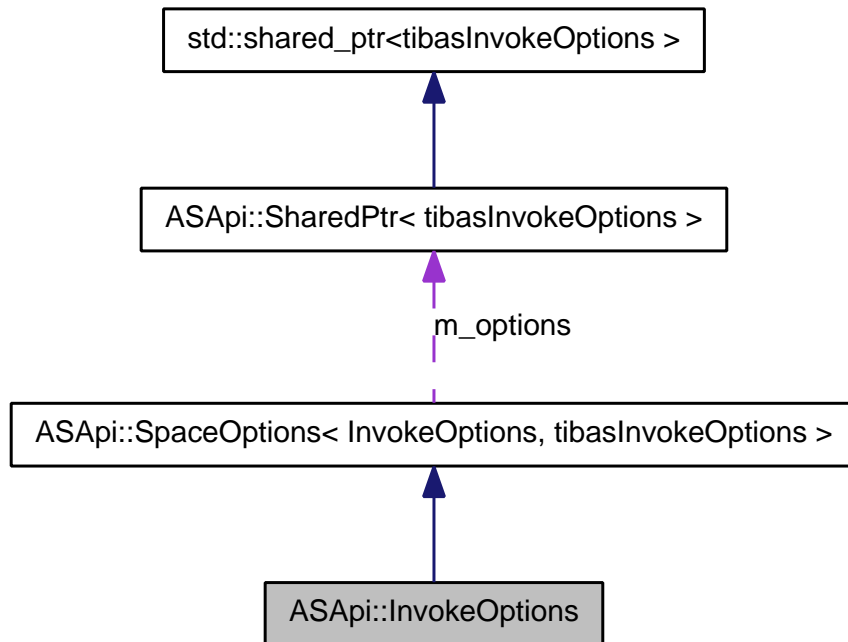
The documentation for this class was generated from the following files:

- [Invocable.h](#)
- [Invocable.cpp](#)

## 6.24 ASApi::InvokeOptions Class Reference

```
#include <InvokeOptions.h>
```

Inherits [SpaceOptions< InvokeOptions, tibasInvokeOptions >](#). Collaboration diagram for ASApi::InvokeOptions:



### Public Member Functions

- [InvokeOptions](#) ()
- [InvokeOptions](#) & [setContext](#) (const [Tuple](#) &context)

#### 6.24.1 Detailed Description

Definition at line 11 of file `InvokeOptions.h`.

#### 6.24.2 Constructor & Destructor Documentation

##### 6.24.2.1 InvokeOptions::InvokeOptions ()

Definition at line 10 of file `InvokeOptions.cpp`.

### 6.24.3 Member Function Documentation

#### 6.24.3.1 InvokeOptions & InvokeOptions::setContext (const Tuple & *context*)

Definition at line 17 of file InvokeOptions.cpp.

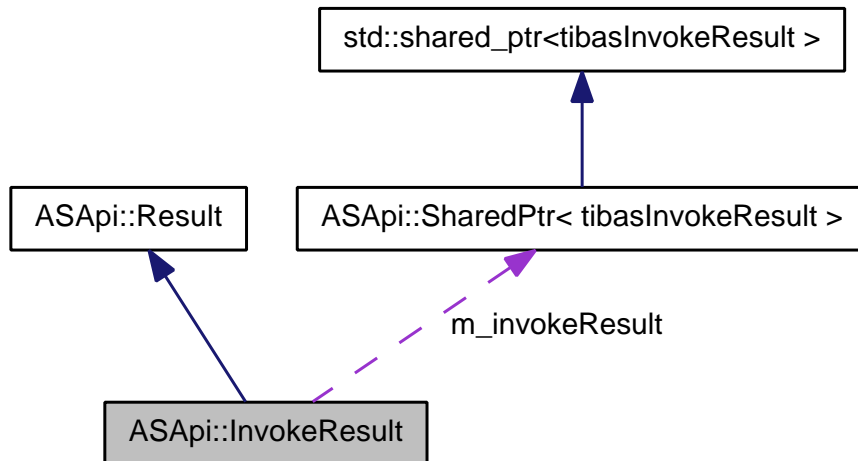
The documentation for this class was generated from the following files:

- [InvokeOptions.h](#)
- [InvokeOptions.cpp](#)

## 6.25 ASApi::InvokeResult Class Reference

```
#include <InvokeResult.h>
```

Inherits [ASApi::Result](#). Collaboration diagram for ASApi::InvokeResult:



### Public Member Functions

- [InvokeResult](#) ([SharedPtr](#)< tibasInvokeResult > &invokeResult)
- [InvokeResult](#) (tibasInvokeResult &invokeResult)
- [~InvokeResult](#) ()
- const tibasInvokeResult & [get](#) () const
- tibasInvokeResult & [get](#) ()
- bool [hasError](#) () const
- [Exception](#) [getError](#) () const
- [Status](#) [getStatus](#) () const
- [Tuple](#) [getReturn](#) () const
- [Member](#) [getMember](#) () const

### 6.25.1 Detailed Description

Definition at line 14 of file InvokeResult.h.

### 6.25.2 Constructor & Destructor Documentation

#### 6.25.2.1 InvokeResult::InvokeResult (SharedPtr< tibasInvokeResult > & invokeResult)

Definition at line 7 of file InvokeResult.cpp.

### 6.25.2.2 `InvokeResult::InvokeResult (tibasInvokeResult & invokeResult)`

Definition at line 14 of file `InvokeResult.cpp`.

### 6.25.2.3 `InvokeResult::~~InvokeResult ()`

Definition at line 20 of file `InvokeResult.cpp`.

## 6.25.3 Member Function Documentation

### 6.25.3.1 `tibasInvokeResult & InvokeResult::get ()`

Definition at line 32 of file `InvokeResult.cpp`.

### 6.25.3.2 `const tibasInvokeResult & InvokeResult::get () const`

Definition at line 26 of file `InvokeResult.cpp`.

### 6.25.3.3 Exception `InvokeResult::getError () const` `[virtual]`

Implements [ASApi::Result](#).

Definition at line 62 of file `InvokeResult.cpp`.

### 6.25.3.4 Member `InvokeResult::getMember () const`

Definition at line 78 of file `InvokeResult.cpp`.

### 6.25.3.5 Tuple `InvokeResult::getReturn () const`

Definition at line 70 of file `InvokeResult.cpp`.

### 6.25.3.6 Status `InvokeResult::getStatus () const` `[virtual]`

Implements [ASApi::Result](#).

Definition at line 54 of file `InvokeResult.cpp`.

### 6.25.3.7 `bool InvokeResult::hasError () const` `[virtual]`

Implements [ASApi::Result](#).

Definition at line 38 of file `InvokeResult.cpp`.

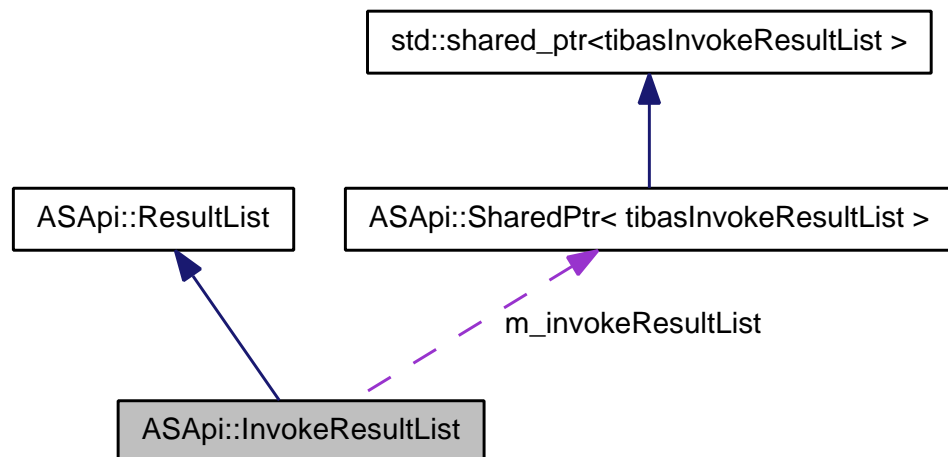
The documentation for this class was generated from the following files:

- [InvokeResult.h](#)
- [InvokeResult.cpp](#)

## 6.26 ASApi::InvokeResultList Class Reference

```
#include <InvokeResultList.h>
```

Inherits [ASApi::ResultList](#). Collaboration diagram for ASApi::InvokeResultList:



### Public Member Functions

- [InvokeResultList](#) (const [SharedPtr](#)< tibasInvokeResultList > &invokeResultList)
- [~InvokeResultList](#) ()
- bool [hasError](#) () const
- [Exception](#) [getError](#) (int index) const
- [Status](#) [getStatus](#) (int index) const
- [Tuple](#) [getReturn](#) (int index) const
- int [size](#) () const
- void [getReturns](#) (std::vector< [Tuple](#) > &tuples) const
- [InvokeResult](#) [get](#) (int index) const
- void [put](#) (const [InvokeResult](#) &result) const

### 6.26.1 Detailed Description

Definition at line 14 of file `InvokeResultList.h`.

### 6.26.2 Constructor & Destructor Documentation

#### 6.26.2.1 `InvokeResultList::InvokeResultList (const SharedPtr< tibasInvokeResultList > & invokeResultList) [explicit]`

Definition at line 8 of file `InvokeResultList.cpp`.



### 6.26.2.2 InvokeResultList::~~InvokeResultList ()

Definition at line 15 of file InvokeResultList.cpp.

## 6.26.3 Member Function Documentation

### 6.26.3.1 InvokeResult InvokeResultList::get (int *index*) const

Definition at line 85 of file InvokeResultList.cpp.

### 6.26.3.2 Exception InvokeResultList::getError (int *index*) const [virtual]

Implements [ASApi::ResultList](#).

Definition at line 35 of file InvokeResultList.cpp.

### 6.26.3.3 Tuple InvokeResultList::getReturn (int *index*) const

Definition at line 51 of file InvokeResultList.cpp.

### 6.26.3.4 void InvokeResultList::getReturns (std::vector< Tuple > & *tuples*) const

Definition at line 67 of file InvokeResultList.cpp.

### 6.26.3.5 Status InvokeResultList::getStatus (int *index*) const [virtual]

Implements [ASApi::ResultList](#).

Definition at line 43 of file InvokeResultList.cpp.

### 6.26.3.6 bool InvokeResultList::hasError () const [virtual]

Implements [ASApi::ResultList](#).

Definition at line 21 of file InvokeResultList.cpp.

### 6.26.3.7 void InvokeResultList::put (const InvokeResult & *result*) const

Definition at line 93 of file InvokeResultList.cpp.

### 6.26.3.8 int InvokeResultList::size () const [virtual]

Implements [ASApi::ResultList](#).

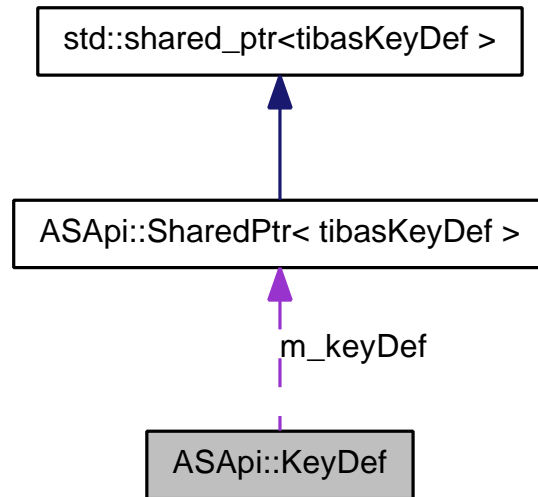
Definition at line 59 of file InvokeResultList.cpp.

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

- [InvokeResultList.h](#)
- [InvokeResultList.cpp](#)

## 6.27 ASApi::KeyDef Class Reference

#include <KeyDef.h> Collaboration diagram for ASApi::KeyDef:



### Public Member Functions

- [KeyDef](#) ()
- [KeyDef](#) (const std::vector< std::string > &fieldNames)
- [KeyDef](#) (const std::string &fieldNames)
- [~KeyDef](#) ()
- const tibasKeyDef & [get](#) () const
- tibasKeyDef & [get](#) ()
- [IndexType](#) [getIndexType](#) () const
- [KeyDef](#) & [setIndexType](#) (const [IndexType](#) &indexType)
- const std::vector< std::string > [getFieldNames](#) () const
- [KeyDef](#) & [setFieldNames](#) (const std::vector< std::string > &fieldNames)
- [KeyDef](#) & [setFieldNames](#) (const std::string &fieldNames)
- [KeyDef](#) & [setFieldNames](#) (int numFields,...)

### Static Public Member Functions

- static [KeyDef](#) [create](#) ()

#### 6.27.1 Detailed Description

Definition at line 14 of file KeyDef.h.

## 6.27.2 Constructor & Destructor Documentation

### 6.27.2.1 KeyDef::KeyDef ()

Definition at line 10 of file KeyDef.cpp.

### 6.27.2.2 KeyDef::KeyDef (const std::vector< std::string > &fieldNames)

Definition at line 17 of file KeyDef.cpp.

### 6.27.2.3 KeyDef::KeyDef (const std::string &fieldNames)

Definition at line 27 of file KeyDef.cpp.

### 6.27.2.4 KeyDef::~KeyDef ()

Definition at line 35 of file KeyDef.cpp.

## 6.27.3 Member Function Documentation

### 6.27.3.1 KeyDef KeyDef::create () [static]

Definition at line 41 of file KeyDef.cpp.

### 6.27.3.2 tibasKeyDef & KeyDef::get ()

Definition at line 54 of file KeyDef.cpp.

### 6.27.3.3 const tibasKeyDef & KeyDef::get () const

Definition at line 48 of file KeyDef.cpp.

### 6.27.3.4 const vector< string > KeyDef::getFieldNames () const

Definition at line 104 of file KeyDef.cpp.

### 6.27.3.5 IndexType KeyDef::getIndexType () const

Definition at line 66 of file KeyDef.cpp.

### 6.27.3.6 KeyDef & KeyDef::setFieldNames (int numFields, ...)

Definition at line 81 of file KeyDef.cpp.

**6.27.3.7 KeyDef & KeyDef::setFieldNames (const std::string & *fieldNames*)**

Definition at line 97 of file KeyDef.cpp.

**6.27.3.8 KeyDef & KeyDef::setFieldNames (const std::vector< std::string > & *fieldNames*)**

Definition at line 74 of file KeyDef.cpp.

**6.27.3.9 KeyDef & KeyDef::setIndexType (const IndexType & *indexType*)**

Definition at line 60 of file KeyDef.cpp.

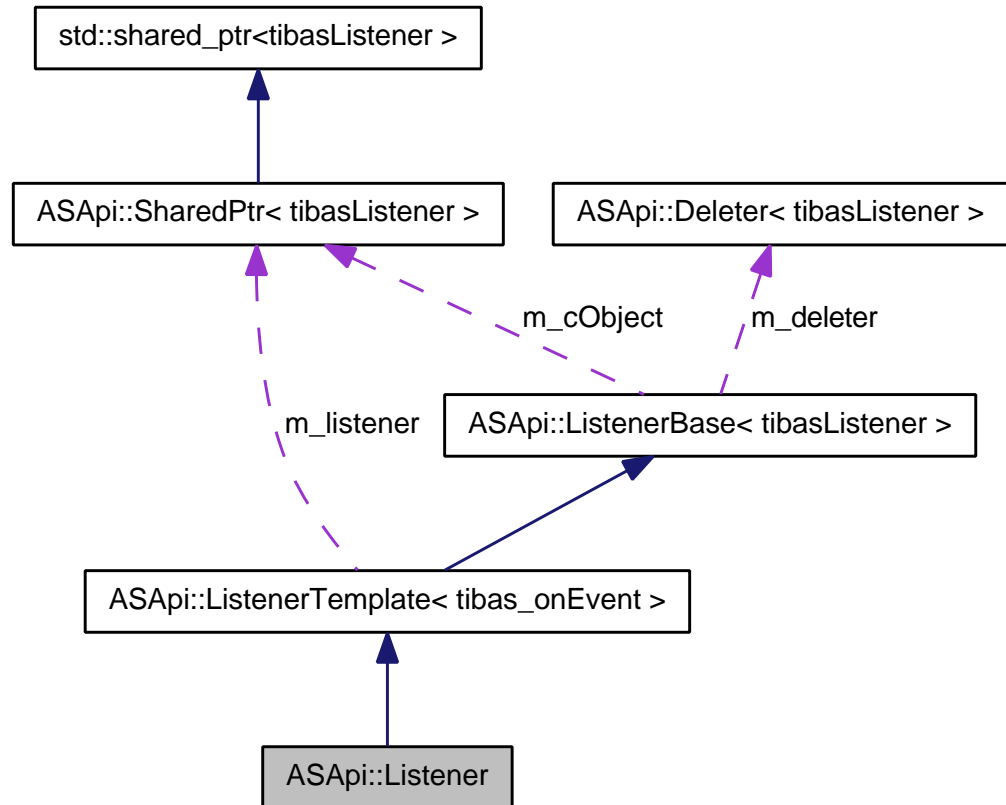
The documentation for this class was generated from the following files:

- [KeyDef.h](#)
- [KeyDef.cpp](#)

## 6.28 ASApi::Listener Class Reference

```
#include <Listener.h>
```

Inherits [ListenerTemplate< tibas\\_onEvent >](#). Collaboration diagram for AS-Api::Listener:



### Public Member Functions

- [Listener](#) ()
- virtual [~Listener](#) ()
- virtual void [onPut](#) (const [PutEvent](#) &putEvent)
- virtual void [onTake](#) (const [TakeEvent](#) &takeEvent)
- virtual void [onExpire](#) (const [ExpireEvent](#) &expireEvent)
- virtual void [onSeed](#) (const [SeedEvent](#) &seedEvent)
- virtual void [onUnseed](#) (const [UnseedEvent](#) &[UnseedEvent](#))
- virtual void [onEvict](#) (const [EvictEvent](#) &evictEvent)

### Static Public Member Functions

- static void [onEvent](#) (tibasSpaceEvent event, void \*closure)

### 6.28.1 Detailed Description

Definition at line 17 of file Listener.h.

### 6.28.2 Constructor & Destructor Documentation

#### 6.28.2.1 Listener::Listener ()

Definition at line 7 of file Listener.cpp.

#### 6.28.2.2 Listener::~Listener () [virtual]

Definition at line 14 of file Listener.cpp.

### 6.28.3 Member Function Documentation

#### 6.28.3.1 void Listener::onEvent (tibasSpaceEvent *event*, void \* *closure*) [static]

Definition at line 20 of file Listener.cpp.

#### 6.28.3.2 virtual void ASApi::Listener::onEvict (const EvictEvent & *evictEvent*) [inline, virtual]

Definition at line 31 of file Listener.h.

#### 6.28.3.3 virtual void ASApi::Listener::onExpire (const ExpireEvent & *expireEvent*) [inline, virtual]

Definition at line 28 of file Listener.h.

#### 6.28.3.4 virtual void ASApi::Listener::onPut (const PutEvent & *putEvent*) [inline, virtual]

Definition at line 26 of file Listener.h.

#### 6.28.3.5 virtual void ASApi::Listener::onSeed (const SeedEvent & *seedEvent*) [inline, virtual]

Definition at line 29 of file Listener.h.

**6.28.3.6 virtual void ASApi::Listener::onTake (const TakeEvent & *takeEvent*)  
[inline, virtual]**

Definition at line 27 of file Listener.h.

**6.28.3.7 virtual void ASApi::Listener::onUnseed (const UnseedEvent &  
*UnseedEvent*) [inline, virtual]**

Definition at line 30 of file Listener.h.

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

- [Listener.h](#)
- [Listener.cpp](#)



## 6.29 ASApi::ListenerBase< T > Class Template Reference

```
#include <ListenerBase.h>
```

### Public Member Functions

- virtual [~ListenerBase](#) ()
- const T & [get](#) () const
- T & [get](#) ()
- void [start](#) ()
- void [stop](#) ()

### Protected Types

- typedef [Status](#)(\* [ListenerFree](#) )(T \*listener)

### Protected Member Functions

- [ListenerBase](#) ([ListenerFree](#) deleter)
- virtual void [create](#) ()=0

### Protected Attributes

- [SharedPtr](#)< T > [m\\_cObject](#)
- [Deleter](#)< T > [m\\_deleter](#)

#### 6.29.1 Detailed Description

```
template<typename T> class ASApi::ListenerBase< T >
```

Definition at line 13 of file ListenerBase.h.

#### 6.29.2 Member Typedef Documentation

**6.29.2.1** `template<typename T> typedef Status(* ASApi::ListenerBase< T >::ListenerFree)(T *listener) [protected]`

Definition at line 25 of file ListenerBase.h.

## 6.29.3 Constructor & Destructor Documentation

**6.29.3.1** `template<typename T> virtual ASApi::ListenerBase< T  
>::~~ListenerBase () [inline, virtual]`

Definition at line 16 of file ListenerBase.h.

**6.29.3.2** `template<typename T > ASApi::ListenerBase< T >::~ListenerBase  
(ListenerFree deleter) [inline, protected]`

Definition at line 36 of file ListenerBase.h.

## 6.29.4 Member Function Documentation

**6.29.4.1** `template<typename T> virtual void ASApi::ListenerBase< T  
>::create () [protected, pure virtual]`

Implemented in [ASApi::ListenerTemplate< T >](#), [ASApi::Persister](#), [ASApi::Router](#), [ASApi::SpaceDefListener](#), [ASApi::ListenerTemplate< tibas\\_onRemoteMemberEvent >](#), [ASApi::ListenerTemplate< tibas\\_onSpaceRemoteMemberEvent >](#), [ASApi::ListenerTemplate< tibas\\_onSpaceStateChange >](#), [ASApi::ListenerTemplate< tibas\\_onSpaceMemberEvent >](#), [ASApi::ListenerTemplate< tibas\\_onMemberEvent >](#), and [ASApi::ListenerTemplate< tibas\\_onEvent >](#).

**6.29.4.2** `template<typename T > T & ASApi::ListenerBase< T >::get ()  
[inline]`

Definition at line 55 of file ListenerBase.h.

**6.29.4.3** `template<typename T > const T & ASApi::ListenerBase< T >::get ()  
const [inline]`

Definition at line 44 of file ListenerBase.h.

**6.29.4.4** `template<typename T > void ASApi::ListenerBase< T >::start ()  
[inline]`

Definition at line 66 of file ListenerBase.h.

**6.29.4.5** `template<typename T > void ASApi::ListenerBase< T >::stop ()  
[inline]`

Definition at line 77 of file ListenerBase.h.

## 6.29.5 Member Data Documentation

### 6.29.5.1 `template<typename T> SharedPtr<T> ASApi::ListenerBase< T >::m_cObject` `[protected]`

Definition at line 30 of file ListenerBase.h.

### 6.29.5.2 `template<typename T> Deleter<T> ASApi::ListenerBase< T >::m_deleter` `[protected]`

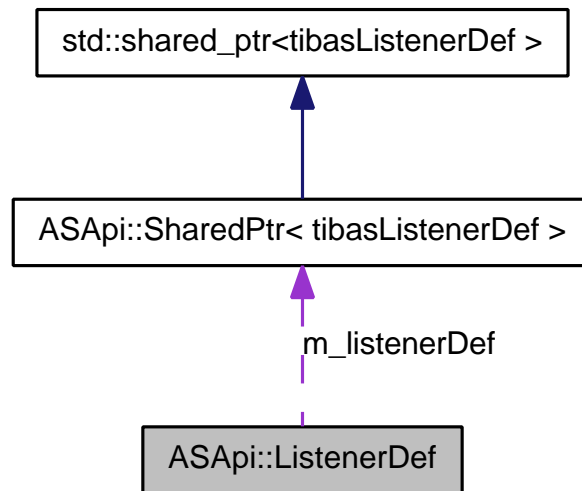
Definition at line 31 of file ListenerBase.h.

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

- [ListenerBase.h](#)

## 6.30 ASApi::ListenerDef Class Reference

#include <ListenerDef.h> Collaboration diagram for ASApi::ListenerDef:



### Public Member Functions

- [ListenerDef \(\)](#)
- [~ListenerDef \(\)](#)
- `const tibasListenerDef & get \(\) const`
- `DistributionScope getDistributionScope \(\) const`
- `ListenerDef & setDistributionScope (DistributionScope distributionScope)`
- `TimeScope getTimeScope \(\) const`
- `ListenerDef & setTimeScope (TimeScope timeScope)`
- `long long getQueryLimit \(\) const`
- `ListenerDef & setQueryLimit (long long limit)`

### 6.30.1 Detailed Description

Definition at line 11 of file `ListenerDef.h`.

### 6.30.2 Constructor & Destructor Documentation

#### 6.30.2.1 ListenerDef::ListenerDef ()

Definition at line 8 of file `ListenerDef.cpp`.

### 6.30.2.2 ListenerDef::~~ListenerDef ()

Definition at line 15 of file ListenerDef.cpp.

## 6.30.3 Member Function Documentation

### 6.30.3.1 const tibasListenerDef & ListenerDef::get () const

Definition at line 21 of file ListenerDef.cpp.

### 6.30.3.2 DistributionScope ListenerDef::getDistributionScope () const

Definition at line 27 of file ListenerDef.cpp.

### 6.30.3.3 long long ListenerDef::getQueryLimit () const

Definition at line 57 of file ListenerDef.cpp.

### 6.30.3.4 TimeScope ListenerDef::getTimeScope () const

Definition at line 42 of file ListenerDef.cpp.

### 6.30.3.5 ListenerDef & ListenerDef::setDistributionScope (DistributionScope *distributionScope*)

Definition at line 35 of file ListenerDef.cpp.

### 6.30.3.6 ListenerDef & ListenerDef::setQueryLimit (long long *limit*)

Definition at line 65 of file ListenerDef.cpp.

### 6.30.3.7 ListenerDef & ListenerDef::setTimeScope (TimeScope *timeScope*)

Definition at line 50 of file ListenerDef.cpp.

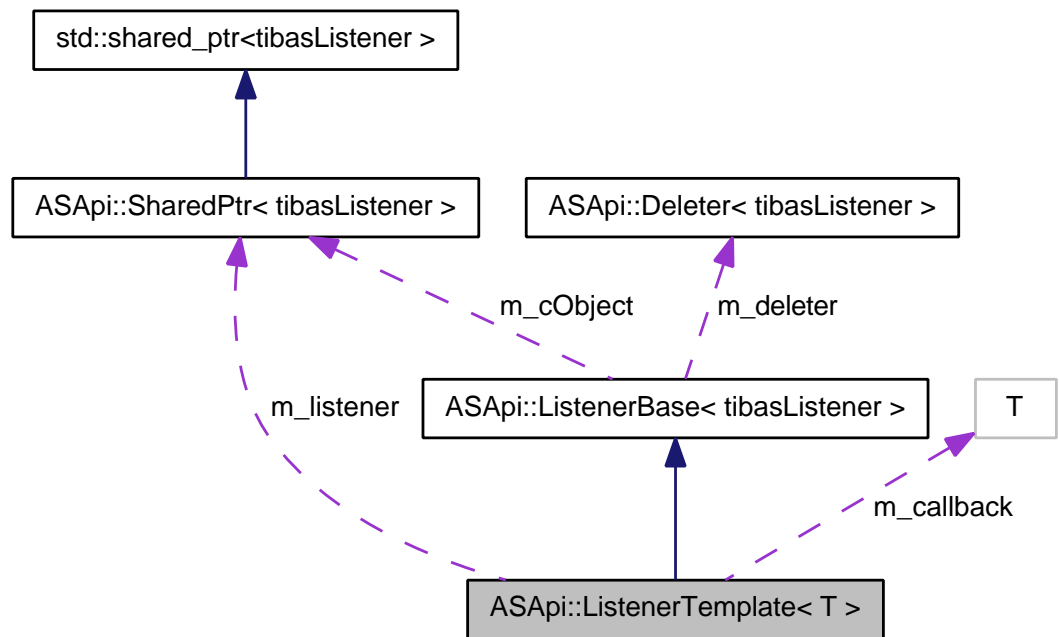
The documentation for this class was generated from the following files:

- [ListenerDef.h](#)
- [ListenerDef.cpp](#)

## 6.31 ASApi::ListenerTemplate< T > Class Template Reference

```
#include <ListenerTemplate.h>
```

Inherits [ListenerBase< tibasListener >](#). Collaboration diagram for ASApi::ListenerTemplate< T >:



### Public Member Functions

- virtual [~ListenerTemplate](#) ()
- virtual void [create](#) ()

### Protected Member Functions

- [ListenerTemplate](#) (Creator creator, T callback)

### Protected Attributes

- [SharedPtr< tibasListener >](#) [m\\_listener](#)
- Creator [m\\_creator](#)
- T [m\\_callback](#)

### 6.31.1 Detailed Description

**template<typename T> class ASApi::ListenerTemplate< T >**

Definition at line 10 of file ListenerTemplate.h.

### 6.31.2 Constructor & Destructor Documentation

**6.31.2.1 template<typename T> virtual ASApi::ListenerTemplate< T >::~~ListenerTemplate () [inline, virtual]**

Definition at line 15 of file ListenerTemplate.h.

**6.31.2.2 template<typename T> ASApi::ListenerTemplate< T >::~ListenerTemplate (Creator *creator*, T *callback*) [inline, protected]**

Definition at line 29 of file ListenerTemplate.h.

### 6.31.3 Member Function Documentation

**6.31.3.1 template<typename T > void ASApi::ListenerTemplate< T >::create () [inline, virtual]**

Implements [ASApi::ListenerBase< tibasListener >](#).

Definition at line 39 of file ListenerTemplate.h.

### 6.31.4 Member Data Documentation

**6.31.4.1 template<typename T> T ASApi::ListenerTemplate< T >::m\_callback [protected]**

Definition at line 24 of file ListenerTemplate.h.

**6.31.4.2 template<typename T> Creator ASApi::ListenerTemplate< T >::m\_creator [protected]**

Definition at line 23 of file ListenerTemplate.h.

**6.31.4.3 template<typename T> SharedPtr<tibasListener> ASApi::ListenerTemplate< T >::m\_listener [protected]**

Definition at line 22 of file ListenerTemplate.h.

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

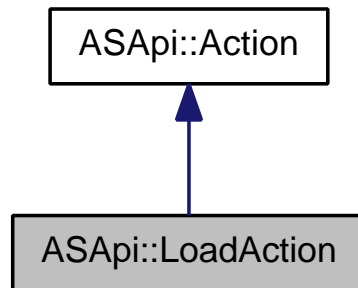
- [ListenerTemplate.h](#)



## 6.32 ASApi::LoadAction Class Reference

```
#include <LoadAction.h>
```

Inherits [ASApi::Action](#). Collaboration diagram for ASApi::LoadAction:



### Public Member Functions

- [LoadAction](#) (const tibasAction &action)

#### 6.32.1 Detailed Description

Definition at line 9 of file LoadAction.h.

#### 6.32.2 Constructor & Destructor Documentation

##### 6.32.2.1 LoadAction::LoadAction (const tibasAction & *action*)

Definition at line 6 of file LoadAction.cpp.

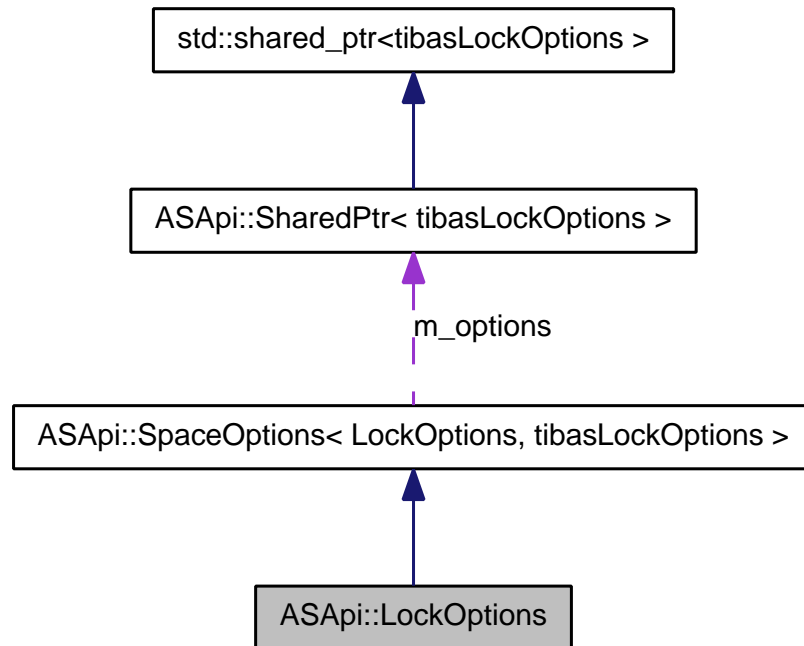
The documentation for this class was generated from the following files:

- [LoadAction.h](#)
- [LoadAction.cpp](#)

## 6.33 ASApi::LockOptions Class Reference

```
#include <LockOptions.h>
```

Inherits [SpaceOptions< LockOptions, tibasLockOptions >](#). Collaboration diagram for ASApi::LockOptions:



### Public Member Functions

- [LockOptions](#) ()
- [LockOptions](#) & [setLockWait](#) (long long wait)
- long long [getLockWait](#) () const
- [LockOptions](#) & [setUnlock](#) (bool doLock)
- bool [isUnlock](#) () const
- [LockOptions](#) & [setForget](#) (bool doForget)
- bool [isForget](#) () const

### 6.33.1 Detailed Description

Definition at line 10 of file LockOptions.h.

## 6.33.2 Constructor & Destructor Documentation

### 6.33.2.1 LockOptions::LockOptions ()

Definition at line 10 of file LockOptions.cpp.

## 6.33.3 Member Function Documentation

### 6.33.3.1 long long LockOptions::getLockWait () const

Definition at line 24 of file LockOptions.cpp.

### 6.33.3.2 bool LockOptions::isForget () const

Definition at line 36 of file LockOptions.cpp.

### 6.33.3.3 bool ASApi::LockOptions::isUnlock () const

### 6.33.3.4 LockOptions & LockOptions::setForget (bool *doForget*)

Definition at line 29 of file LockOptions.cpp.

### 6.33.3.5 LockOptions & LockOptions::setLockWait (long long *wait*)

Definition at line 17 of file LockOptions.cpp.

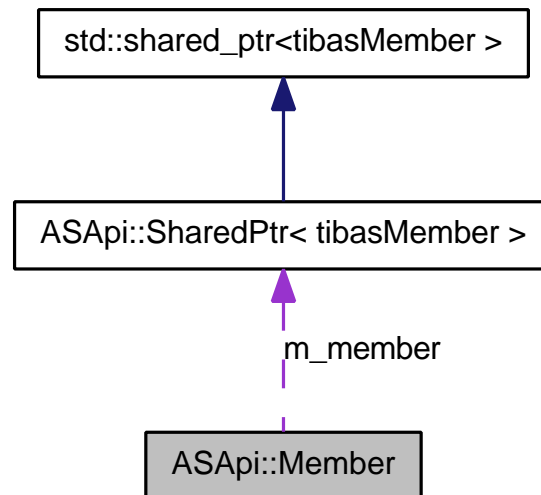
### 6.33.3.6 LockOptions& ASApi::LockOptions::setUnlock (bool *doLock*)

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

- [LockOptions.h](#)
- [LockOptions.cpp](#)

## 6.34 ASApi::Member Class Reference

#include <Member.h> Collaboration diagram for ASApi::Member:



### Public Member Functions

- [Member](#) (const [Metaspace](#) &metaspace, const std::string &memberId, const std::string &memberName)
- [Member](#) ([SharedPtr](#)< [tibasMember](#) > &member)
- [~Member](#) ()
- const [tibasMember](#) & [get](#) () const
- [tibasMember](#) & [get](#) ()
- std::string [getName](#) () const
- [ManagementRole](#) [getManagementRole](#) () const
- [DistributionRole](#) [getDistributionRole](#) (const std::string &spaceName) const
- [Tuple](#) [getContext](#) () const
- std::string [getHostAddress](#) () const
- int [getPort](#) () const
- time\_t [getJoinTime](#) () const
- std::string [getId](#) () const
- std::vector< [Member](#) > [getProxies](#) () const

### 6.34.1 Detailed Description

Definition at line 16 of file Member.h.

## 6.34.2 Constructor & Destructor Documentation

### 6.34.2.1 Member::Member (const Metaspace & *metaspace*, const std::string & *memberId*, const std::string & *memberName*)

Definition at line 11 of file Member.cpp.

### 6.34.2.2 Member::Member (SharedPtr< tibasMember > & *member*)

Definition at line 18 of file Member.cpp.

### 6.34.2.3 Member::~~Member ()

Definition at line 24 of file Member.cpp.

## 6.34.3 Member Function Documentation

### 6.34.3.1 tibasMember & Member::get ()

Definition at line 36 of file Member.cpp.

### 6.34.3.2 const tibasMember & Member::get () const

Definition at line 30 of file Member.cpp.

### 6.34.3.3 Tuple Member::getContext () const

Definition at line 67 of file Member.cpp.

### 6.34.3.4 DistributionRole Member::getDistributionRole (const std::string & *spaceName*) const

Definition at line 58 of file Member.cpp.

### 6.34.3.5 string Member::getHostAddress () const

Definition at line 75 of file Member.cpp.

### 6.34.3.6 string Member::getId () const

Definition at line 99 of file Member.cpp.

**6.34.3.7    time\_t Member::getJoinTime () const**

Definition at line 91 of file Member.cpp.

**6.34.3.8    ManagementRole Member::getManagementRole () const**

Definition at line 50 of file Member.cpp.

**6.34.3.9    string Member::getName () const**

Definition at line 42 of file Member.cpp.

**6.34.3.10   int Member::getPort () const**

Definition at line 83 of file Member.cpp.

**6.34.3.11   vector< Member > Member::getProxies () const**

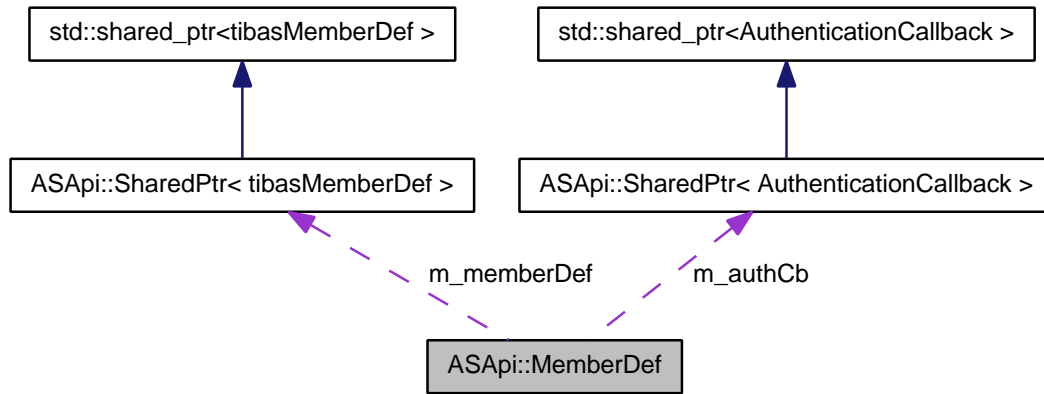
Definition at line 107 of file Member.cpp.

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

- [Member.h](#)
- [Member.cpp](#)

## 6.35 ASApi::MemberDef Class Reference

#include <MemberDef.h> Collaboration diagram for ASApi::MemberDef:



### Public Member Functions

- [MemberDef](#) ()
- [~MemberDef](#) ()
- const [MemberDef](#) & [operator=](#) ([SharedPtr](#)< [tibasMemberDef](#) > &memberDef)
- const [tibasMemberDef](#) & [get](#) () const
- [tibasMemberDef](#) & [get](#) ()
- [MemberDef](#) & [setMemberName](#) (const std::string &name)
- std::string [getMemberName](#) () const
- [MemberDef](#) & [setDataStore](#) (const std::string &dataStor)
- std::string [getDataStore](#) () const
- [MemberDef](#) & [setRxBufferSize](#) (long long bufferSize)
- long long [getRxBufferSize](#) () const
- [MemberDef](#) & [setWorkerThreadCount](#) (int count)
- int [getWorkerThreadCount](#) () const
- [MemberDef](#) & [setTransportThreadCount](#) (int count)
- int [getTransportThreadCount](#) () const
- [MemberDef](#) & [setConnectTimeout](#) (long long timeout)
- long long [getConnectTimeout](#) () const
- [MemberDef](#) & [setMemberTimeout](#) (long long timeout)
- long long [getMemberTimeout](#) () const
- [MemberDef](#) & [setClientTimeout](#) (long long timeout)
- long long [getClientTimeout](#) () const
- [MemberDef](#) & [setClusterSuspendThreshold](#) (int threshold)
- int [getClusterSuspendThreshold](#) () const
- [MemberDef](#) & [setListen](#) (const std::string &listen)
- std::string [getListen](#) () const
- [MemberDef](#) & [setRemoteListen](#) (const std::string &remoteListen)

- `std::string getRemoteListen () const`
- `MemberDef & setDiscovery (const std::string &discovery)`
- `std::string getDiscovery () const`
- `MemberDef & setRemoteDiscovery (const std::string &discovery)`
- `std::string getRemoteDiscovery () const`
- `MemberDef & setContext (const Tuple &context)`
- `Tuple getContext () const`
- `MemberDef & setSecurityPolicyFile (const std::string &fileName)`
- `std::string getSecurityPolicyFile () const`
- `MemberDef & setSecurityTokenFile (const std::string &fileName)`
- `std::string getSecurityTokenFile () const`
- `MemberDef & setIdentityPassword (const std::string &identityPassword)`
- `std::string getIdentityPassword () const`
- `MemberDef & setAuthenticationCallback (SharedPtr< AuthenticationCallback > &authCb)`
- `const SharedPtr< AuthenticationCallback > & getAuthenticationCallback () const`

### 6.35.1 Detailed Description

Definition at line 12 of file MemberDef.h.

### 6.35.2 Constructor & Destructor Documentation

#### 6.35.2.1 MemberDef::MemberDef ()

Definition at line 10 of file MemberDef.cpp.

#### 6.35.2.2 MemberDef::~MemberDef ()

Definition at line 17 of file MemberDef.cpp.

### 6.35.3 Member Function Documentation

#### 6.35.3.1 tibasMemberDef & MemberDef::get ()

Definition at line 36 of file MemberDef.cpp.

#### 6.35.3.2 const tibasMemberDef & MemberDef::get () const

Definition at line 30 of file MemberDef.cpp.



**6.35.3.3   const SharedPtr< AuthenticationCallback > & MemberDef::getAuthenticationCallback () const**

Definition at line 260 of file MemberDef.cpp.

**6.35.3.4   long long MemberDef::getClientTimeout () const**

Definition at line 288 of file MemberDef.cpp.

**6.35.3.5   int MemberDef::getClusterSuspendThreshold () const**

Definition at line 303 of file MemberDef.cpp.

**6.35.3.6   long long MemberDef::getConnectTimeout () const**

Definition at line 124 of file MemberDef.cpp.

**6.35.3.7   Tuple MemberDef::getContext () const**

Definition at line 199 of file MemberDef.cpp.

**6.35.3.8   string MemberDef::getDataStore () const**

Definition at line 64 of file MemberDef.cpp.

**6.35.3.9   string MemberDef::getDiscovery () const**

Definition at line 169 of file MemberDef.cpp.

**6.35.3.10   string MemberDef::getIdentityPassword () const**

Definition at line 244 of file MemberDef.cpp.

**6.35.3.11   string MemberDef::getListen () const**

Definition at line 139 of file MemberDef.cpp.

**6.35.3.12   string MemberDef::getMemberName () const**

Definition at line 49 of file MemberDef.cpp.

**6.35.3.13 long long MemberDef::getMemberTimeout () const**

Definition at line 273 of file MemberDef.cpp.

**6.35.3.14 string MemberDef::getRemoteDiscovery () const**

Definition at line 184 of file MemberDef.cpp.

**6.35.3.15 string MemberDef::getRemoteListen () const**

Definition at line 154 of file MemberDef.cpp.

**6.35.3.16 long long MemberDef::getRxBufferSize () const**

Definition at line 79 of file MemberDef.cpp.

**6.35.3.17 string MemberDef::getSecurityPolicyFile () const**

Definition at line 214 of file MemberDef.cpp.

**6.35.3.18 string MemberDef::getSecurityTokenFile () const**

Definition at line 229 of file MemberDef.cpp.

**6.35.3.19 int MemberDef::getTransportThreadCount () const**

Definition at line 109 of file MemberDef.cpp.

**6.35.3.20 int MemberDef::getWorkerThreadCount () const**

Definition at line 94 of file MemberDef.cpp.

**6.35.3.21 const MemberDef & MemberDef::operator= (SharedPtr< tibasMemberDef > & *memberDef*)**

Definition at line 23 of file MemberDef.cpp.

**6.35.3.22 MemberDef & MemberDef::setAuthenticationCallback (SharedPtr< AuthenticationCallback > & *authCb*)**

Definition at line 252 of file MemberDef.cpp.

**6.35.3.23 MemberDef & MemberDef::setClientTimeout (long long *timeout*)**

Definition at line 281 of file MemberDef.cpp.

**6.35.3.24 MemberDef & MemberDef::setClusterSuspendThreshold (int *threshold*)**

Definition at line 296 of file MemberDef.cpp.

**6.35.3.25 MemberDef & MemberDef::setConnectTimeout (long long *timeout*)**

Definition at line 117 of file MemberDef.cpp.

**6.35.3.26 MemberDef & MemberDef::setContext (const Tuple & *context*)**

Definition at line 192 of file MemberDef.cpp.

**6.35.3.27 MemberDef & MemberDef::setDataStore (const std::string & *dataStor*)**

Definition at line 57 of file MemberDef.cpp.

**6.35.3.28 MemberDef & MemberDef::setDiscovery (const std::string & *discovery*)**

Definition at line 162 of file MemberDef.cpp.

**6.35.3.29 MemberDef & MemberDef::setIdentityPassword (const std::string & *identityPassword*)**

Definition at line 237 of file MemberDef.cpp.

**6.35.3.30 MemberDef & MemberDef::setListen (const std::string & *listen*)**

Definition at line 132 of file MemberDef.cpp.

**6.35.3.31 MemberDef & MemberDef::setMemberName (const std::string & *name*)**

Definition at line 42 of file MemberDef.cpp.

**6.35.3.32 MemberDef & MemberDef::setMemberTimeout (long long *timeout*)**

Definition at line 266 of file MemberDef.cpp.

**6.35.3.33 MemberDef & MemberDef::setRemoteDiscovery (const std::string & *discovery*)**

Definition at line 177 of file MemberDef.cpp.

**6.35.3.34 MemberDef & MemberDef::setRemoteListen (const std::string & *remoteListen*)**

Definition at line 147 of file MemberDef.cpp.

**6.35.3.35 MemberDef & MemberDef::setRxBufferSize (long long *bufferSize*)**

Definition at line 72 of file MemberDef.cpp.

**6.35.3.36 MemberDef & MemberDef::setSecurityPolicyFile (const std::string & *fileName*)**

Definition at line 207 of file MemberDef.cpp.

**6.35.3.37 MemberDef & MemberDef::setSecurityTokenFile (const std::string & *fileName*)**

Definition at line 222 of file MemberDef.cpp.

**6.35.3.38 MemberDef & MemberDef::setTransportThreadCount (int *count*)**

Definition at line 102 of file MemberDef.cpp.

**6.35.3.39 MemberDef & MemberDef::setWorkerThreadCount (int *count*)**

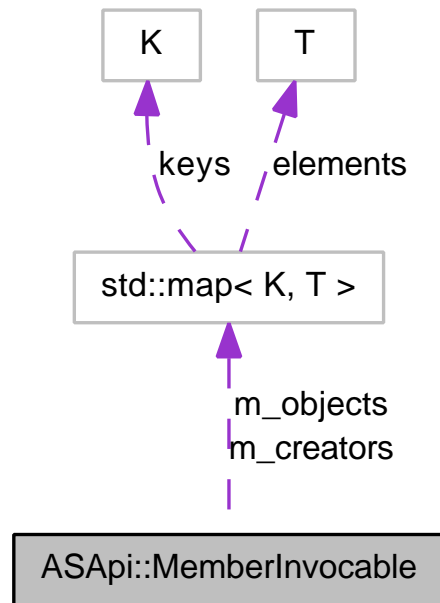
Definition at line 87 of file MemberDef.cpp.

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

- [MemberDef.h](#)
- [MemberDef.cpp](#)

## 6.36 ASApi::MemberInvocable Class Reference

`#include <MemberInvocable.h>` Collaboration diagram for AS-Api::MemberInvocable:



### Public Types

- typedef [SharedPtr](#)< [MemberInvocable](#) >(\* [Creator](#) )()

### Public Member Functions

- virtual void [invoke](#) (const [Space](#) &space, const [Tuple](#) &context, [Tuple](#) &result)=0

### Static Public Member Functions

- static void [set](#) (const std::string &alias, [Creator](#) creator)
- static void [set](#) (const std::string &alias, [SharedPtr](#)< [MemberInvocable](#) > object)
- static void [remove](#) (const std::string &alias)
- static void [invokeByObject](#) (tibasSpace space, tibasTuple context, tibasTuple c\_result, const char \*invocable)
- static void [invokeByCreator](#) (tibasSpace space, tibasTuple context, tibasTuple c\_result, const char \*invocable)
- static void [populateAliases](#) (std::vector< std::string > &aliases)

### 6.36.1 Detailed Description

Definition at line 13 of file MemberInvocable.h.

### 6.36.2 Member Typedef Documentation

#### 6.36.2.1 `typedef SharedPtr<MemberInvocable>(* ASApi::MemberInvocable::Creator)()`

Definition at line 16 of file MemberInvocable.h.

### 6.36.3 Member Function Documentation

#### 6.36.3.1 `virtual void ASApi::MemberInvocable::invoke (const Space & space, const Tuple & context, Tuple & result) [pure virtual]`

#### 6.36.3.2 `void MemberInvocable::invokeByCreator (tibasSpace space, tibasTuple context, tibasTuple c_result, const char * invocable) [static]`

Definition at line 74 of file MemberInvocable.cpp.

#### 6.36.3.3 `void MemberInvocable::invokeByObject (tibasSpace space, tibasTuple context, tibasTuple c_result, const char * invocable) [static]`

Definition at line 55 of file MemberInvocable.cpp.

#### 6.36.3.4 `void MemberInvocable::populateAliases (std::vector< std::string > & aliases) [static]`

Definition at line 42 of file MemberInvocable.cpp.

#### 6.36.3.5 `void MemberInvocable::remove (const std::string & alias) [static]`

Definition at line 33 of file MemberInvocable.cpp.

#### 6.36.3.6 `void MemberInvocable::set (const std::string & alias, SharedPtr< MemberInvocable > object) [static]`

Definition at line 23 of file MemberInvocable.cpp.

### 6.36.3.7 void MemberInvocable::set (const std::string & *alias*, Creator *creator*) [static]

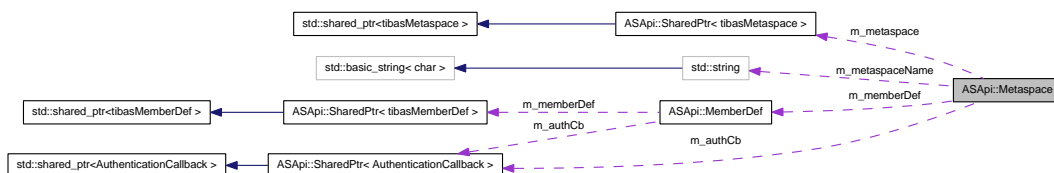
Definition at line 13 of file MemberInvocable.cpp.

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

- [MemberInvocable.h](#)
- [MemberInvocable.cpp](#)

## 6.37 ASApi::Metaspace Class Reference

#include <Metaspace.h> Collaboration diagram for ASApi::Metaspace:



### Public Member Functions

- [Metaspace](#) ()
- [Metaspace](#) ([SharedPtr](#)< [tibasMetaspace](#) > &metaspace)
- [Metaspace](#) ([tibasMetaspace](#) &metaspace)
- [~Metaspace](#) ()
- const [tibasMetaspace](#) & [get](#) () const
- [tibasMetaspace](#) & [get](#) ()
- void [closeAll](#) ()
- std::vector< std::string > [getMetaspaceNames](#) () const
- [Space](#) [getSpace](#) (const std::string &spaceName, const [DistributionRole](#) &distributionRole) const
- [Space](#) [getSystemSpace](#) (const std::string &spaceName) const
- [SpaceState](#) [getSpaceState](#) (const std::string &spaceName) const
- std::vector< std::string > [getUserSpaceNames](#) () const
- void [defineSpace](#) (const [SpaceDef](#) &spaceDef) const
- void [dropSpace](#) (const std::string &spaceName) const
- void [alterSpace](#) (const [SpaceDef](#) &spaceDef) const
- void [recoverSpace](#) (const std::string &spaceName) const
- void [recoverSpace](#) (const std::string &spaceName, const [RecoveryOptions](#) &recoveryOptions) const
- [SpaceDef](#) [getSpaceDef](#) (const std::string &spaceName) const
- void [listen](#) (const std::string &spaceName, [Listener](#) &listener, const [ListenerDef](#) &listenerDef, const std::string &filter)
- void [listenSpaceMemberEvents](#) (const std::string &spaceName, [SpaceMemberListener](#) &listener)
- void [listenMemberEvents](#) ([MetaspaceMemberListener](#) &listener)
- void [listenSpaceRemoteMemberEvents](#) (const std::string &spaceName, [SpaceRemoteMemberListener](#) &listener)
- void [listenRemoteMemberEvents](#) ([MetaspaceRemoteMemberListener](#) &listener)
- void [listenSpaceState](#) (const std::string &spaceName, [SpaceStateListener](#) &listener)
- void [listenSpaceDefs](#) ([SpaceDefListener](#) &listener)
- std::string [getRemoteListen](#) () const



- [Browser browse](#) (const std::string &spaceName, const [BrowserType](#) &browserType, const [BrowserDef](#) &browserDef, const std::string &filter) const
- [EventBrowser browseEvents](#) (const std::string &spaceName, const [EventBrowserDef](#) &eventBrowserDef, const std::string &filter)
- void [beginTransaction](#) ()
- void [commitTransaction](#) ()
- void [rollbackTransaction](#) ()
- std::vector< [Member](#) > [getRemoteMembers](#) () const
- std::vector< [Member](#) > [getMembers](#) () const
- std::vector< [Member](#) > [getSpaceMembers](#) (const std::string &spaceName) const
- [Member](#) [getSelfMember](#) () const
- std::string [getDiscovery](#) () const
- std::string [getListen](#) () const
- std::string [getRemoteDiscovery](#) () const
- const [MemberDef](#) & [getMemberDef](#) () const
- [Metaspace](#) & [setMemberDef](#) (const [MemberDef](#) &memberDef)

## Static Public Member Functions

- static [Metaspace connect](#) (const std::string &msName, const [MemberDef](#) &memberDef)
- static [Metaspace connect](#) (const std::string &args)
- static [Metaspace connect](#) (int numArgs,...)

### 6.37.1 Detailed Description

Definition at line 31 of file Metaspace.h.

### 6.37.2 Constructor & Destructor Documentation

#### 6.37.2.1 Metaspace::Metaspace ()

Definition at line 10 of file Metaspace.cpp.

#### 6.37.2.2 Metaspace::Metaspace (SharedPtr< [tibasMetaspace](#) > & *metaspace*)

Definition at line 16 of file Metaspace.cpp.

#### 6.37.2.3 Metaspace::Metaspace ([tibasMetaspace](#) & *metaspace*)

Definition at line 22 of file Metaspace.cpp.

#### 6.37.2.4 Metaspace::~~Metaspace ()

Definition at line 30 of file Metaspace.cpp.

### 6.37.3 Member Function Documentation

#### 6.37.3.1 void Metaspace::alterSpace (const SpaceDef & *spaceDef*) const

Definition at line 159 of file Metaspace.cpp.

#### 6.37.3.2 void Metaspace::beginTransaction ()

Definition at line 258 of file Metaspace.cpp.

#### 6.37.3.3 Browser Metaspace::browse (const std::string & *spaceName*, const BrowserType & *browserType*, const BrowserDef & *browserDef*, const std::string & *filter*) const

Definition at line 242 of file Metaspace.cpp.

#### 6.37.3.4 EventBrowser Metaspace::browseEvents (const std::string & *spaceName*, const EventBrowserDef & *eventBrowserDef*, const std::string & *filter*)

Definition at line 250 of file Metaspace.cpp.

#### 6.37.3.5 void Metaspace::closeAll ()

Definition at line 92 of file Metaspace.cpp.

#### 6.37.3.6 void Metaspace::commitTransaction ()

Definition at line 264 of file Metaspace.cpp.

#### 6.37.3.7 Metaspace Metaspace::connect (int *numArgs*, ...) [static]

Definition at line 75 of file Metaspace.cpp.

#### 6.37.3.8 Metaspace Metaspace::connect (const std::string & *args*) [static]

Definition at line 66 of file Metaspace.cpp.

**6.37.3.9 Metaspace Metaspace::connect (const std::string & *msName*, const MemberDef & *memberDef*) [static]**

Definition at line 48 of file Metaspace.cpp.

**6.37.3.10 void Metaspace::defineSpace (const SpaceDef & *spaceDef*) const**

Definition at line 146 of file Metaspace.cpp.

**6.37.3.11 void Metaspace::dropSpace (const std::string & *spaceName*) const**

Definition at line 153 of file Metaspace.cpp.

**6.37.3.12 tibasMetaspace & Metaspace::get ()**

Definition at line 42 of file Metaspace.cpp.

**6.37.3.13 const tibasMetaspace & Metaspace::get () const**

Definition at line 36 of file Metaspace.cpp.

**6.37.3.14 string Metaspace::getDiscovery () const**

Definition at line 308 of file Metaspace.cpp.

**6.37.3.15 string Metaspace::getListen () const**

Definition at line 316 of file Metaspace.cpp.

**6.37.3.16 const MemberDef & Metaspace::getMemberDef () const**

Definition at line 332 of file Metaspace.cpp.

**6.37.3.17 vector< Member > Metaspace::getMembers () const**

Definition at line 284 of file Metaspace.cpp.

**6.37.3.18 vector< string > Metaspace::getMetaspaceNames () const**

Definition at line 106 of file Metaspace.cpp.

**6.37.3.19 string Metaspace::getRemoteDiscovery () const**

Definition at line 324 of file Metaspace.cpp.

**6.37.3.20 string Metaspace::getRemoteListen () const**

Definition at line 234 of file Metaspace.cpp.

**6.37.3.21 vector< Member > Metaspace::getRemoteMembers () const**

Definition at line 276 of file Metaspace.cpp.

**6.37.3.22 Member Metaspace::getSelfMember () const**

Definition at line 300 of file Metaspace.cpp.

**6.37.3.23 Space Metaspace::getSpace (const std::string & *spaceName*, const DistributionRole & *distributionRole*) const**

Definition at line 114 of file Metaspace.cpp.

**6.37.3.24 SpaceDef Metaspace::getSpaceDef (const std::string & *spaceName*) const**

Definition at line 177 of file Metaspace.cpp.

**6.37.3.25 vector< Member > Metaspace::getSpaceMembers (const std::string & *spaceName*) const**

Definition at line 292 of file Metaspace.cpp.

**6.37.3.26 SpaceState Metaspace::getSpaceState (const std::string & *spaceName*) const**

Definition at line 130 of file Metaspace.cpp.

**6.37.3.27 Space Metaspace::getSystemSpace (const std::string & *spaceName*) const**

Definition at line 122 of file Metaspace.cpp.

**6.37.3.28 vector< string > Metaspace::getUserSpaceNames () const**

Definition at line 138 of file Metaspace.cpp.

**6.37.3.29** void Metaspace::listen (const std::string & *spaceName*, Listener & *listener*, const ListenerDef & *listenerDef*, const std::string & *filter*)

Definition at line 185 of file Metaspace.cpp.

**6.37.3.30** void Metaspace::listenMemberEvents (MetaspaceMemberListener & *listener*)

Definition at line 199 of file Metaspace.cpp.

**6.37.3.31** void Metaspace::listenRemoteMemberEvents (MetaspaceRemoteMemberListener & *listener*)

Definition at line 213 of file Metaspace.cpp.

**6.37.3.32** void Metaspace::listenSpaceDefs (SpaceDefListener & *listener*)

Definition at line 227 of file Metaspace.cpp.

**6.37.3.33** void Metaspace::listenSpaceMemberEvents (const std::string & *spaceName*, SpaceMemberListener & *listener*)

Definition at line 192 of file Metaspace.cpp.

**6.37.3.34** void Metaspace::listenSpaceRemoteMemberEvents (const std::string & *spaceName*, SpaceRemoteMemberListener & *listener*)

Definition at line 206 of file Metaspace.cpp.

**6.37.3.35** void Metaspace::listenSpaceState (const std::string & *spaceName*, SpaceStateListener & *listener*)

Definition at line 220 of file Metaspace.cpp.

**6.37.3.36** void Metaspace::recoverSpace (const std::string & *spaceName*, const RecoveryOptions & *recoveryOptions*) const

Definition at line 171 of file Metaspace.cpp.

**6.37.3.37** void Metaspace::recoverSpace (const std::string & *spaceName*) const

Definition at line 165 of file Metaspace.cpp.

**6.37.3.38 void Metaspace::rollbackTransaction ()**

Definition at line 270 of file Metaspace.cpp.

**6.37.3.39 Metaspace& ASApi::Metaspace::setMemberDef (const MemberDef  
& *memberDef*)**

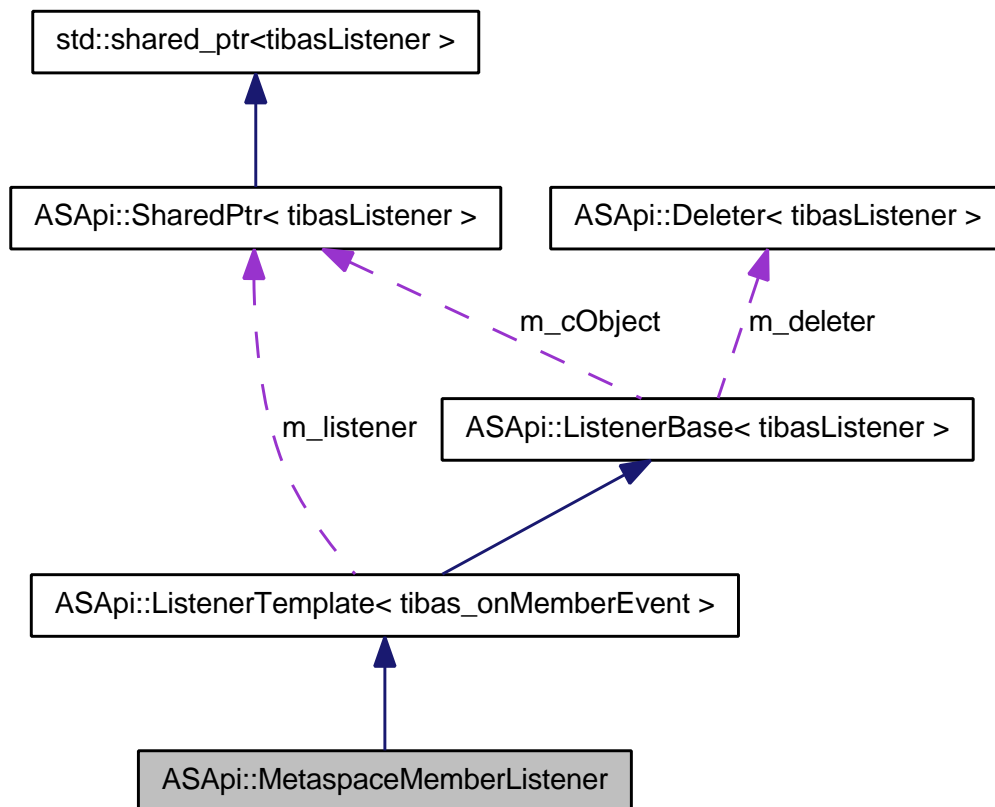
The documentation for this class was generated from the following files:

- [Metaspace.h](#)
- [Metaspace.cpp](#)

## 6.38 ASApi::MetaspaceMemberListener Class Reference

```
#include <MetaspaceMemberListener.h>
```

Inherits [ListenerTemplate< tibas\\_onMemberEvent >](#). Collaboration diagram for AS-Api::MetaspaceMemberListener:



### Public Member Functions

- [MetaspaceMemberListener](#) ()
- virtual [~MetaspaceMemberListener](#) ()
- virtual void [onJoin](#) (const [Member](#) &member, [ManagementRole](#) role)
- virtual void [onUpdate](#) (const [Member](#) &member, [ManagementRole](#) role)
- virtual void [onLeave](#) (const [Member](#) &member)

### Static Public Member Functions

- static void [onEvent](#) (tibasMemberEvent memberEvent, void \*closure)

### 6.38.1 Detailed Description

Definition at line 14 of file MetaspaceMemberListener.h.

### 6.38.2 Constructor & Destructor Documentation

#### 6.38.2.1 MetaspaceMemberListener::MetaspaceMemberListener ()

Definition at line 8 of file MetaspaceMemberListener.cpp.

#### 6.38.2.2 MetaspaceMemberListener::~MetaspaceMemberListener () [virtual]

Definition at line 15 of file MetaspaceMemberListener.cpp.

### 6.38.3 Member Function Documentation

#### 6.38.3.1 void MetaspaceMemberListener::onEvent (tibasMemberEvent *memberEvent*, void \* *closure*) [static]

Definition at line 21 of file MetaspaceMemberListener.cpp.

#### 6.38.3.2 virtual void ASApi::MetaspaceMemberListener::onJoin (const Member & *member*, ManagementRole *role*) [inline, virtual]

Definition at line 22 of file MetaspaceMemberListener.h.

#### 6.38.3.3 virtual void ASApi::MetaspaceMemberListener::onLeave (const Member & *member*) [inline, virtual]

Definition at line 24 of file MetaspaceMemberListener.h.

#### 6.38.3.4 virtual void ASApi::MetaspaceMemberListener::onUpdate (const Member & *member*, ManagementRole *role*) [inline, virtual]

Definition at line 23 of file MetaspaceMemberListener.h.

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

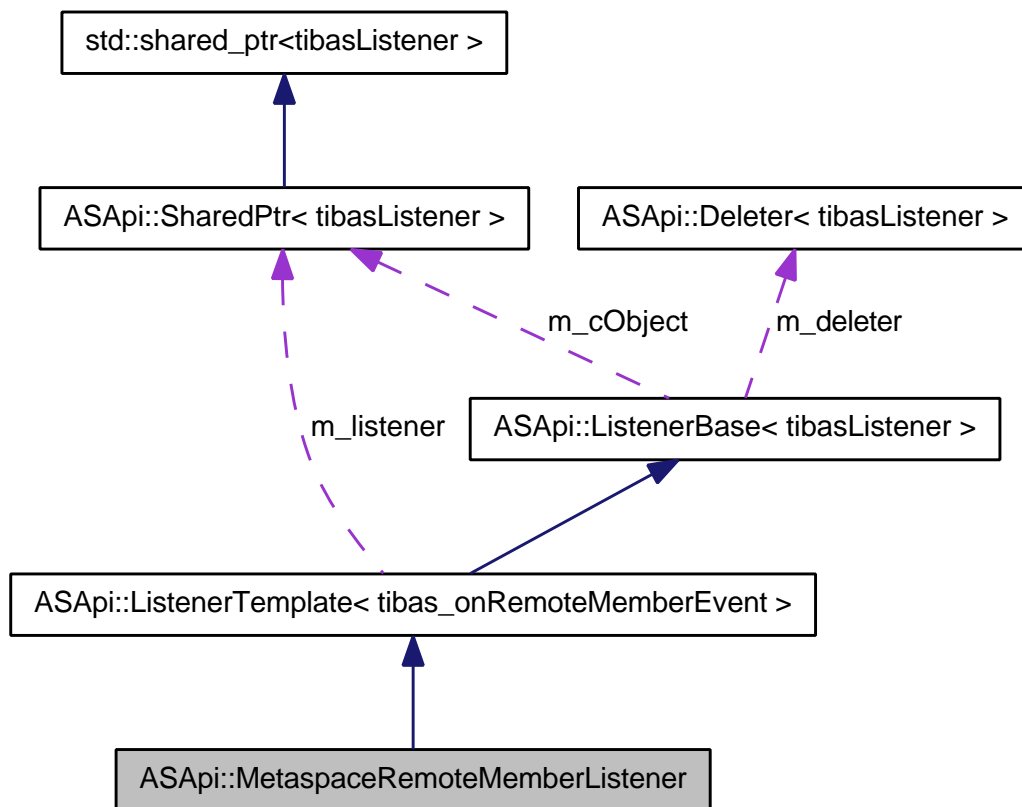
- [MetaspaceMemberListener.h](#)
- [MetaspaceMemberListener.cpp](#)



## 6.39 ASApi::MetaspaceRemoteMemberListener Class Reference

```
#include <MetaspaceRemoteMemberListener.h>
```

Inherits [ListenerTemplate< tibas\\_onRemoteMemberEvent >](#). Collaboration diagram for ASApi::MetaspaceRemoteMemberListener:



### Public Member Functions

- [MetaspaceRemoteMemberListener](#) ()
- virtual [~MetaspaceRemoteMemberListener](#) ()
- virtual void [onJoin](#) (const [Member](#) &member, const [Member](#) &proxyMember)
- virtual void [onLeave](#) (const [Member](#) &member, const [Member](#) &proxyMember)

### Static Public Member Functions

- static void [onEvent](#) (tibasRemoteMemberEvent remoteMemberEvent, void \*closure)

### 6.39.1 Detailed Description

Definition at line 13 of file MetaspaceRemoteMemberListener.h.

### 6.39.2 Constructor & Destructor Documentation

#### 6.39.2.1 MetaspaceRemoteMemberListener::MetaspaceRemoteMemberListener() ()

Definition at line 8 of file MetaspaceRemoteMemberListener.cpp.

#### 6.39.2.2 MetaspaceRemoteMemberListener::~MetaspaceRemoteMemberListener() () [virtual]

Definition at line 15 of file MetaspaceRemoteMemberListener.cpp.

### 6.39.3 Member Function Documentation

#### 6.39.3.1 void MetaspaceRemoteMemberListener::onEvent (tibasRemoteMemberEvent *remoteMemberEvent*, void \* *closure*) [static]

Definition at line 20 of file MetaspaceRemoteMemberListener.cpp.

#### 6.39.3.2 virtual void ASApi::MetaspaceRemoteMemberListener::onJoin (const Member & *member*, const Member & *proxyMember*) [inline, virtual]

Definition at line 21 of file MetaspaceRemoteMemberListener.h.

#### 6.39.3.3 virtual void ASApi::MetaspaceRemoteMemberListener::onLeave (const Member & *member*, const Member & *proxyMember*) [inline, virtual]

Definition at line 22 of file MetaspaceRemoteMemberListener.h.

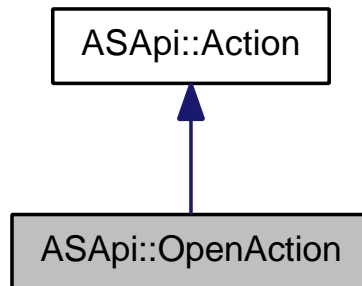
The documentation for this class was generated from the following files:

- [MetaspaceRemoteMemberListener.h](#)
- [MetaspaceRemoteMemberListener.cpp](#)

## 6.40 ASApi::OpenAction Class Reference

```
#include <OpenAction.h>
```

Inherits [ASApi::Action](#). Collaboration diagram for ASApi::OpenAction:



### Public Member Functions

- [OpenAction](#) (const tibasAction &action)

#### 6.40.1 Detailed Description

Definition at line 9 of file OpenAction.h.

#### 6.40.2 Constructor & Destructor Documentation

##### 6.40.2.1 OpenAction::OpenAction (const tibasAction & *action*)

Definition at line 6 of file OpenAction.cpp.

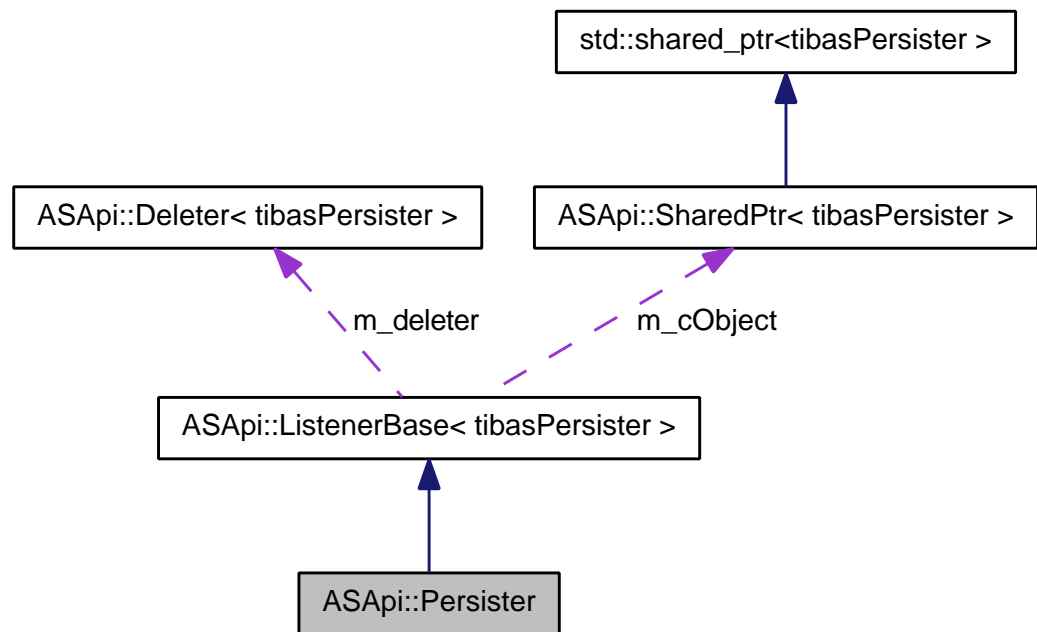
The documentation for this class was generated from the following files:

- [OpenAction.h](#)
- [OpenAction.cpp](#)

## 6.41 ASApi::Persister Class Reference

```
#include <Persister.h>
```

Inherits [ListenerBase< tibasPersister >](#). Collaboration diagram for ASApi::Persister:



### Public Member Functions

- [Persister](#) ()
- virtual [~Persister](#) ()
- void [create](#) ()
- virtual void [onOpen](#) (const [OpenAction](#) &openAction, [ActionResult](#) &actionResult)
- virtual void [onClose](#) (const [CloseAction](#) &closeAction, [ActionResult](#) &actionResult)
- virtual void [onRead](#) (const [ReadAction](#) &readAction, [ActionResult](#) &actionResult)
- virtual void [onWrite](#) (const [WriteAction](#) &writeAction, [ActionResult](#) &actionResult)
- virtual void [onLoad](#) (const [LoadAction](#) &loadAction, [ActionResult](#) &actionResult)
- virtual void [onAlter](#) (const [AlterAction](#) &alterAction, [ActionResult](#) &actionResult)

## Static Public Member Functions

- static void [onCOpen](#) (tibasPersister persister, tibasAction action, tibasActionResult result)
- static void [onCClose](#) (tibasPersister persister, tibasAction action, tibasActionResult result)
- static void [onCRead](#) (tibasPersister persister, tibasAction action, tibasActionResult result)
- static void [onCWrite](#) (tibasPersister persister, tibasAction action, tibasActionResult result)
- static void [onCLoad](#) (tibasPersister persister, tibasAction action, tibasActionResult result)
- static void [onCAAlter](#) (tibasPersister persister, tibasAction action, tibasActionResult result)

### 6.41.1 Detailed Description

Definition at line 20 of file Persister.h.

### 6.41.2 Constructor & Destructor Documentation

#### 6.41.2.1 Persister::Persister ()

Definition at line 8 of file Persister.cpp.

#### 6.41.2.2 Persister::~~Persister () [virtual]

Definition at line 15 of file Persister.cpp.

### 6.41.3 Member Function Documentation

#### 6.41.3.1 void Persister::create () [virtual]

Implements [ASApi::ListenerBase< tibasPersister >](#).

Definition at line 21 of file Persister.cpp.

#### 6.41.3.2 virtual void ASApi::Persister::onAlter (const AlterAction & alterAction, ActionResult & actionResult) [inline, virtual]

Definition at line 44 of file Persister.h.

#### 6.41.3.3 void Persister::onCAAlter (tibasPersister *persister*, tibasAction *action*, tibasActionResult *result*) [static]

Definition at line 82 of file Persister.cpp.

**6.41.3.4** `void Persister::onCClose (tibasPersister persister, tibasAction action, tibasActionResult result) [static]`

Definition at line 38 of file Persister.cpp.

**6.41.3.5** `void Persister::onCLoad (tibasPersister persister, tibasAction action, tibasActionResult result) [static]`

Definition at line 71 of file Persister.cpp.

**6.41.3.6** `virtual void ASApi::Persister::onClose (const CloseAction & closeAction, ActionResult & actionResult) [inline, virtual]`

Definition at line 32 of file Persister.h.

**6.41.3.7** `void Persister::onCOpen (tibasPersister persister, tibasAction action, tibasActionResult result) [static]`

Definition at line 27 of file Persister.cpp.

**6.41.3.8** `void Persister::onCRead (tibasPersister persister, tibasAction action, tibasActionResult result) [static]`

Definition at line 49 of file Persister.cpp.

**6.41.3.9** `void Persister::onCWrite (tibasPersister persister, tibasAction action, tibasActionResult result) [static]`

Definition at line 60 of file Persister.cpp.

**6.41.3.10** `virtual void ASApi::Persister::onLoad (const LoadAction & loadAction, ActionResult & actionResult) [inline, virtual]`

Definition at line 41 of file Persister.h.

**6.41.3.11** `virtual void ASApi::Persister::onOpen (const OpenAction & openAction, ActionResult & actionResult) [inline, virtual]`

Definition at line 29 of file Persister.h.

**6.41.3.12** `virtual void ASApi::Persister::onRead (const ReadAction & readAction, ActionResult & actionResult) [inline, virtual]`

Definition at line 35 of file Persister.h.

**6.41.3.13** `virtual void ASApi::Persister::onWrite (const WriteAction &  
writeAction, ActionResult & actionResult) [inline, virtual]`

Definition at line 38 of file Persister.h.

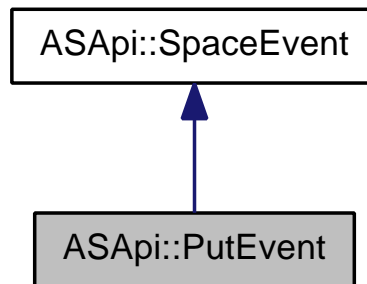
The documentation for this class was generated from the following files:

- [Persister.h](#)
- [Persister.cpp](#)

## 6.42 ASApi::PutEvent Class Reference

```
#include <PutEvent.h>
```

Inherits [ASApi::SpaceEvent](#). Collaboration diagram for ASApi::PutEvent:



### Public Member Functions

- [PutEvent](#) (const tibasSpaceEvent &event)
- [~PutEvent](#) ()
- bool [hasOldTuple](#) () const
- [Tuple](#) [getOldTuple](#) () const

### 6.42.1 Detailed Description

Definition at line 10 of file PutEvent.h.

### 6.42.2 Constructor & Destructor Documentation

#### 6.42.2.1 PutEvent::PutEvent (const tibasSpaceEvent & event)

Definition at line 9 of file PutEvent.cpp.

#### 6.42.2.2 PutEvent::~~PutEvent ()

Definition at line 15 of file PutEvent.cpp.

### 6.42.3 Member Function Documentation

#### 6.42.3.1 Tuple PutEvent::getOldTuple () const

Definition at line 35 of file PutEvent.cpp.



**6.42.3.2 bool PutEvent::hasOldTuple () const**

Definition at line 21 of file PutEvent.cpp.

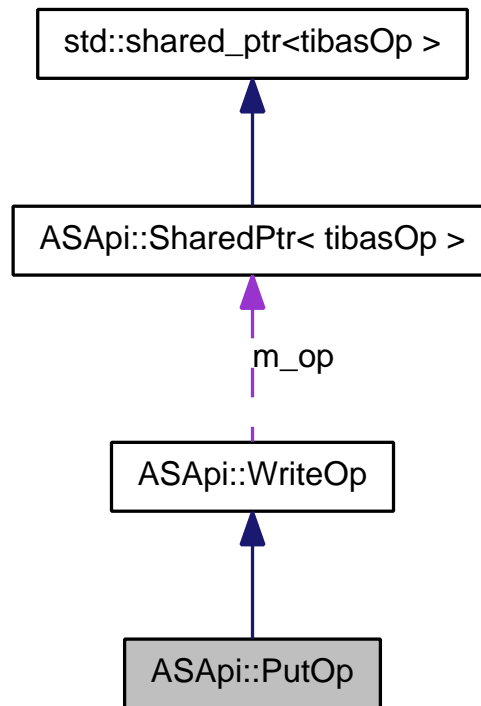
The documentation for this class was generated from the following files:

- [PutEvent.h](#)
- [PutEvent.cpp](#)

## 6.43 ASApi::PutOp Class Reference

```
#include <PutOp.h>
```

Inherits [ASApi::WriteOp](#). Collaboration diagram for ASApi::PutOp:



### Public Member Functions

- [PutOp](#) ([SharedPtr](#)< tibasOp > &op)
- bool [hasOldTuple](#) () const
- [Tuple](#) [getOldTuple](#) () const
- long long [getTTL](#) () const

#### 6.43.1 Detailed Description

Definition at line 9 of file PutOp.h.

#### 6.43.2 Constructor & Destructor Documentation

##### 6.43.2.1 PutOp::PutOp (SharedPtr< tibasOp > & op)

Definition at line 9 of file PutOp.cpp.

### 6.43.3 Member Function Documentation

#### 6.43.3.1 Tuple PutOp::getOldTuple () const

Definition at line 30 of file PutOp.cpp.

#### 6.43.3.2 long long PutOp::getTTL () const

Definition at line 38 of file PutOp.cpp.

#### 6.43.3.3 bool PutOp::hasOldTuple () const

Definition at line 16 of file PutOp.cpp.

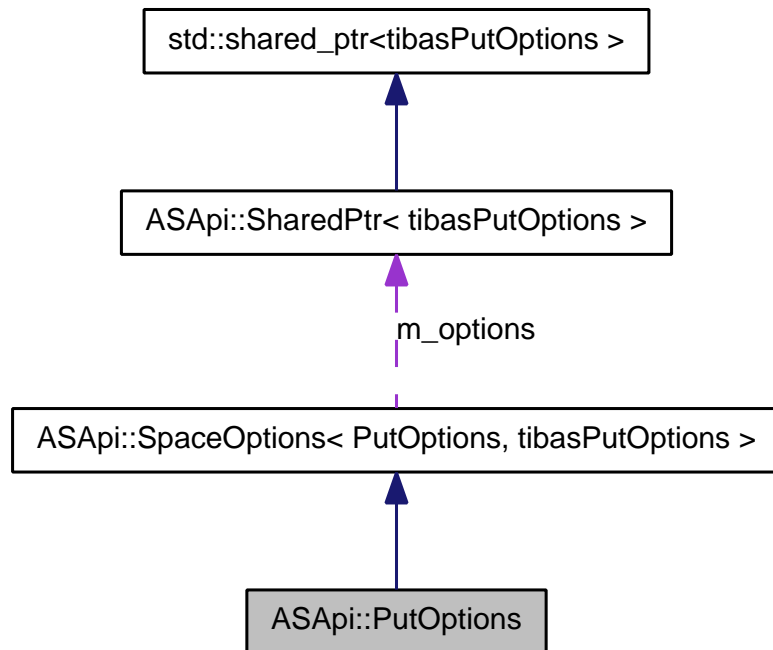
The documentation for this class was generated from the following files:

- [PutOp.h](#)
- [PutOp.cpp](#)

## 6.44 ASApi::PutOptions Class Reference

```
#include <PutOptions.h>
```

Inherits [SpaceOptions< PutOptions, tibasPutOptions >](#). Collaboration diagram for AS-Api::PutOptions:



### Public Member Functions

- [PutOptions](#) ()
- [PutOptions](#) & [setLockWait](#) (long long wait)
- long long [getLockWait](#) () const
- [PutOptions](#) & [setLock](#) (bool doLock)
- bool [isLock](#) () const
- [PutOptions](#) & [setForget](#) (bool doForget)
- bool [isForget](#) () const
- [PutOptions](#) & [setRoute](#) (bool doRoute)
- bool [isRoute](#) () const
- [PutOptions](#) & [setTTL](#) (long long ttl)
- long long [getTTL](#) ()

#### 6.44.1 Detailed Description

Definition at line 10 of file `PutOptions.h`.

## 6.44.2 Constructor & Destructor Documentation

### 6.44.2.1 PutOptions::PutOptions ()

Definition at line 10 of file PutOptions.cpp.

## 6.44.3 Member Function Documentation

### 6.44.3.1 long long PutOptions::getLockWait () const

Definition at line 24 of file PutOptions.cpp.

### 6.44.3.2 long long PutOptions::getTTL ()

Definition at line 100 of file PutOptions.cpp.

### 6.44.3.3 bool PutOptions::isForget () const

Definition at line 58 of file PutOptions.cpp.

### 6.44.3.4 bool PutOptions::isLock () const

Definition at line 37 of file PutOptions.cpp.

### 6.44.3.5 bool PutOptions::isRoute () const

Definition at line 79 of file PutOptions.cpp.

### 6.44.3.6 PutOptions & PutOptions::setForget (bool *doForget*)

Definition at line 51 of file PutOptions.cpp.

### 6.44.3.7 PutOptions & PutOptions::setLock (bool *doLock*)

Definition at line 30 of file PutOptions.cpp.

### 6.44.3.8 PutOptions & PutOptions::setLockWait (long long *wait*)

Definition at line 17 of file PutOptions.cpp.

### 6.44.3.9 PutOptions & PutOptions::setRoute (bool *doRoute*)

Definition at line 72 of file PutOptions.cpp.

#### 6.44.3.10 PutOptions & PutOptions::setTTL (long long *ttl*)

Definition at line 93 of file PutOptions.cpp.

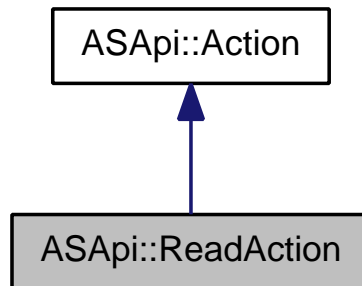
The documentation for this class was generated from the following files:

- [PutOptions.h](#)
- [PutOptions.cpp](#)

## 6.45 ASApi::ReadAction Class Reference

```
#include <ReadAction.h>
```

Inherits [ASApi::Action](#). Collaboration diagram for ASApi::ReadAction:



### Public Member Functions

- [ReadAction](#) (const tibasAction &action)
- [Tuple getTuple](#) () const

#### 6.45.1 Detailed Description

Definition at line 10 of file ReadAction.h.

#### 6.45.2 Constructor & Destructor Documentation

##### 6.45.2.1 ReadAction::ReadAction (const tibasAction & *action*)

Definition at line 7 of file ReadAction.cpp.

#### 6.45.3 Member Function Documentation

##### 6.45.3.1 Tuple ReadAction::getTuple () const

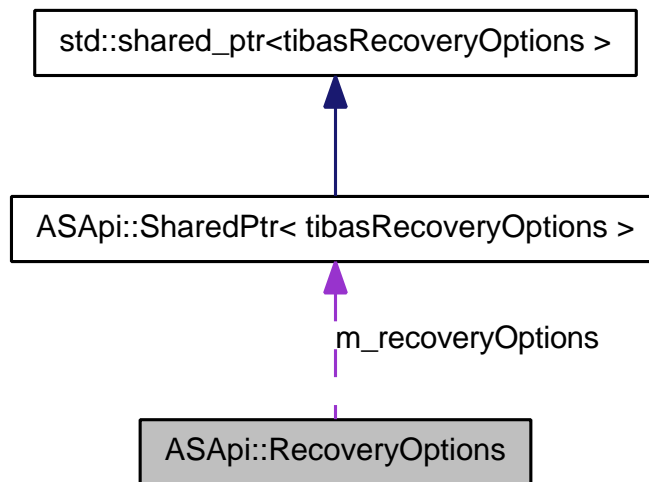
Definition at line 14 of file ReadAction.cpp.

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

- [ReadAction.h](#)
- [ReadAction.cpp](#)

## 6.46 ASApi::RecoveryOptions Class Reference

`#include <RecoveryOptions.h>` Collaboration diagram for AS-Api::RecoveryOptions:



### Public Member Functions

- [RecoveryOptions \(\)](#)
- `const tibasRecoveryOptions & get \(\) const`
- `tibasRecoveryOptions & get \(\)`

#### 6.46.1 Detailed Description

Definition at line 11 of file RecoveryOptions.h.

#### 6.46.2 Constructor & Destructor Documentation

##### 6.46.2.1 RecoveryOptions::RecoveryOptions ()

Definition at line 10 of file RecoveryOptions.cpp.

#### 6.46.3 Member Function Documentation

##### 6.46.3.1 tibasRecoveryOptions & RecoveryOptions::get ()

Definition at line 21 of file RecoveryOptions.cpp.



**6.46.3.2 const tibasRecoveryOptions & RecoveryOptions::get () const**

Definition at line 15 of file RecoveryOptions.cpp.

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

- [RecoveryOptions.h](#)
- [RecoveryOptions.cpp](#)

## 6.47 ASApi::Result Class Reference

```
#include <Result.h>
```

Inherited by [ASApi::InvokeResult](#), and [ASApi::SpaceResult](#).

### Public Member Functions

- virtual bool [hasError](#) () const =0
- virtual [Status](#) [getStatus](#) () const =0
- virtual [Exception](#) [getError](#) () const =0

#### 6.47.1 Detailed Description

Definition at line 10 of file Result.h.

#### 6.47.2 Member Function Documentation

##### 6.47.2.1 virtual Exception ASApi::Result::getError () const [pure virtual]

Implemented in [ASApi::InvokeResult](#), and [ASApi::SpaceResult](#).

##### 6.47.2.2 virtual Status ASApi::Result::getStatus () const [pure virtual]

Implemented in [ASApi::InvokeResult](#), and [ASApi::SpaceResult](#).

##### 6.47.2.3 virtual bool ASApi::Result::hasError () const [pure virtual]

Implemented in [ASApi::InvokeResult](#), and [ASApi::SpaceResult](#).

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

- [Result.h](#)

## 6.48 ASApi::ResultList Class Reference

```
#include <ResultList.h>
```

Inherited by [ASApi::InvokeResultList](#), and [ASApi::SpaceResultList](#).

### Public Member Functions

- virtual bool [hasError](#) () const =0
- virtual [Exception](#) [getError](#) (int *index*) const =0
- virtual [Status](#) [getStatus](#) (int *index*) const =0
- virtual int [size](#) () const =0

#### 6.48.1 Detailed Description

Definition at line 11 of file ResultList.h.

#### 6.48.2 Member Function Documentation

**6.48.2.1** virtual [Exception](#) ASApi::ResultList::getError (int *index*) const  
[pure virtual]

Implemented in [ASApi::InvokeResultList](#), and [ASApi::SpaceResultList](#).

**6.48.2.2** virtual [Status](#) ASApi::ResultList::getStatus (int *index*) const [pure virtual]

Implemented in [ASApi::InvokeResultList](#), and [ASApi::SpaceResultList](#).

**6.48.2.3** virtual bool ASApi::ResultList::hasError () const [pure virtual]

Implemented in [ASApi::InvokeResultList](#), and [ASApi::SpaceResultList](#).

**6.48.2.4** virtual int ASApi::ResultList::size () const [pure virtual]

Implemented in [ASApi::InvokeResultList](#), and [ASApi::SpaceResultList](#).

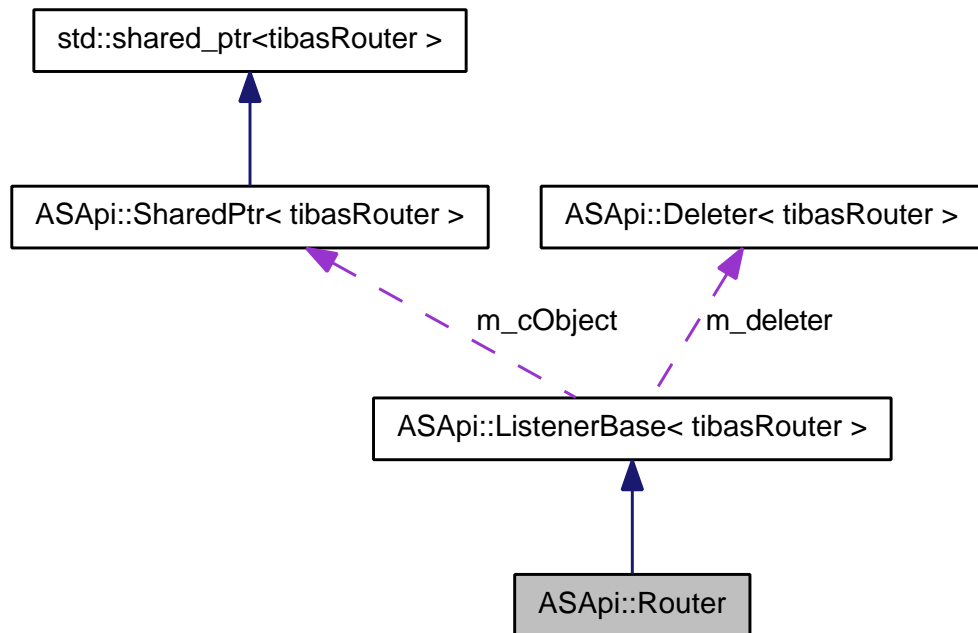
The documentation for this class was generated from the following file:

- [ResultList.h](#)

## 6.49 ASApi::Router Class Reference

```
#include <Router.h>
```

Inherits [ListenerBase< tibasRouter >](#). Collaboration diagram for ASApi::Router:



### Public Member Functions

- [Router](#) ()
- virtual [~Router](#) ()
- virtual void [create](#) ()
- virtual void [onOpen](#) (const [OpenAction](#) &openAction, [ActionResult](#) &actionResult)
- virtual void [onClose](#) (const [CloseAction](#) &closeAction, [ActionResult](#) &actionResult)
- virtual void [onWrite](#) (const [WriteAction](#) &writeAction, [ActionResult](#) &actionResult)
- virtual void [onAlter](#) (const [AlterAction](#) &alterAction, [ActionResult](#) &actionResult)

### Static Public Member Functions

- static void [onCOpen](#) (tibasRouter router, tibasAction action, tibasActionResult result)
- static void [onCClose](#) (tibasRouter router, tibasAction action, tibasActionResult result)

- static void [onCWrite](#) (tibasRouter router, tibasAction action, tibasActionResult result)
- static void [onCAlter](#) (tibasRouter router, tibasAction action, tibasActionResult result)

### 6.49.1 Detailed Description

Definition at line 19 of file Router.h.

### 6.49.2 Constructor & Destructor Documentation

#### 6.49.2.1 Router::Router ()

Definition at line 8 of file Router.cpp.

#### 6.49.2.2 Router::~~Router () [virtual]

Definition at line 15 of file Router.cpp.

### 6.49.3 Member Function Documentation

#### 6.49.3.1 void Router::create () [virtual]

Implements [ASApi::ListenerBase< tibasRouter >](#).

Definition at line 21 of file Router.cpp.

#### 6.49.3.2 virtual void ASApi::Router::onAlter (const AlterAction & *alterAction*, ActionResult & *actionResult*) [inline, virtual]

Definition at line 37 of file Router.h.

#### 6.49.3.3 void Router::onCAlter (tibasRouter *router*, tibasAction *action*, tibasActionResult *result*) [static]

Definition at line 60 of file Router.cpp.

#### 6.49.3.4 void Router::onCClose (tibasRouter *router*, tibasAction *action*, tibasActionResult *result*) [static]

Definition at line 38 of file Router.cpp.

**6.49.3.5** `virtual void ASApi::Router::onClose (const CloseAction & closeAction,  
ActionResult & actionResult) [inline, virtual]`

Definition at line 31 of file Router.h.

**6.49.3.6** `void Router::onCOpen (tibasRouter router, tibasAction action,  
tibasActionResult result) [static]`

Definition at line 27 of file Router.cpp.

**6.49.3.7** `void Router::onCWrite (tibasRouter router, tibasAction action,  
tibasActionResult result) [static]`

Definition at line 49 of file Router.cpp.

**6.49.3.8** `virtual void ASApi::Router::onOpen (const OpenAction & openAction,  
ActionResult & actionResult) [inline, virtual]`

Definition at line 28 of file Router.h.

**6.49.3.9** `virtual void ASApi::Router::onWrite (const WriteAction &  
writeAction, ActionResult & actionResult) [inline, virtual]`

Definition at line 34 of file Router.h.

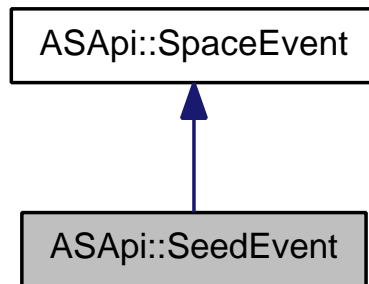
The documentation for this class was generated from the following files:

- [Router.h](#)
- [Router.cpp](#)

## 6.50 ASApi::SeedEvent Class Reference

```
#include <SeedEvent.h>
```

Inherits [ASApi::SpaceEvent](#). Collaboration diagram for ASApi::SeedEvent:



### Public Member Functions

- [SeedEvent](#) (const tibasSpaceEvent &event)
- [~SeedEvent](#) ()

#### 6.50.1 Detailed Description

Definition at line 10 of file SeedEvent.h.

#### 6.50.2 Constructor & Destructor Documentation

##### 6.50.2.1 SeedEvent::SeedEvent (const tibasSpaceEvent & *event*)

Definition at line 8 of file SeedEvent.cpp.

##### 6.50.2.2 SeedEvent::~SeedEvent ()

Definition at line 14 of file SeedEvent.cpp.

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

- [SeedEvent.h](#)
- [SeedEvent.cpp](#)

## 6.51 shared\_ptr Class Reference

Inherited by [ASApi::SharedPtr< AuthenticationCallback >](#), [ASApi::SharedPtr< SpaceResultHandler >](#), [ASApi::SharedPtr< tibasAdmin >](#), [ASApi::SharedPtr< tibasBrowser >](#), [ASApi::SharedPtr< tibasBrowserDef >](#), [ASApi::SharedPtr< tibasError >](#), [ASApi::SharedPtr< tibasEventBrowser >](#), [ASApi::SharedPtr< tibasEventBrowserDef >](#), [ASApi::SharedPtr< tibasFieldDef >](#), [ASApi::SharedPtr< tibasFieldDefList >](#), [ASApi::SharedPtr< tibasFilter >](#), [ASApi::SharedPtr< tibasGetOptions >](#), [ASApi::SharedPtr< tibasIndexDef >](#), [ASApi::SharedPtr< tibasInvokeOptions >](#), [ASApi::SharedPtr< tibasInvokeResult >](#), [ASApi::SharedPtr< tibasInvokeResultList >](#), [ASApi::SharedPtr< tibasKeyDef >](#), [ASApi::SharedPtr< tibasListener >](#), [ASApi::SharedPtr< tibasListenerDef >](#), [ASApi::SharedPtr< tibasLockOptions >](#), [ASApi::SharedPtr< tibasMember >](#), [ASApi::SharedPtr< tibasMemberDef >](#), [ASApi::SharedPtr< tibasMetaspace >](#), [ASApi::SharedPtr< tibasOp >](#), [ASApi::SharedPtr< tibasPersister >](#), [ASApi::SharedPtr< tibasPutOptions >](#), [ASApi::SharedPtr< tibasRecoveryOptions >](#), [ASApi::SharedPtr< tibasRouter >](#), [ASApi::SharedPtr< tibasSpace >](#), [ASApi::SharedPtr< tibasSpaceDef >](#), [ASApi::SharedPtr< tibasSpaceResultList >](#), [ASApi::SharedPtr< tibasTakeOptions >](#), [ASApi::SharedPtr< tibasTuple >](#), [ASApi::SharedPtr< tibasType >](#), and [ASApi::SharedPtr< tibasUnlockOptions >](#).

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

- [SharedPtr.h](#)



## 6.52 ASApi::SharedPtr< T > Class Template Reference

```
#include <SharedPtr.h>
```

### Public Member Functions

- [SharedPtr](#) ()
- [SharedPtr](#) (T \*ptr, [Deleter](#)< T > deleter)
- [SharedPtr](#) (T \*ptr)
- [SharedPtr](#) (const [SharedPtr](#)< T > &other)

### 6.52.1 Detailed Description

```
template<typename T> class ASApi::SharedPtr< T >
```

Definition at line 168 of file SharedPtr.h.

### 6.52.2 Constructor & Destructor Documentation

**6.52.2.1** `template<typename T> ASApi::SharedPtr< T >::SharedPtr ()  
[inline]`

Definition at line 171 of file SharedPtr.h.

**6.52.2.2** `template<typename T> ASApi::SharedPtr< T >::SharedPtr (T * ptr,  
Deleter< T > deleter) [inline]`

Definition at line 173 of file SharedPtr.h.

**6.52.2.3** `template<typename T> ASApi::SharedPtr< T >::SharedPtr (T * ptr)  
[inline]`

Definition at line 175 of file SharedPtr.h.

**6.52.2.4** `template<typename T> ASApi::SharedPtr< T >::SharedPtr (const  
SharedPtr< T > & other) [inline]`

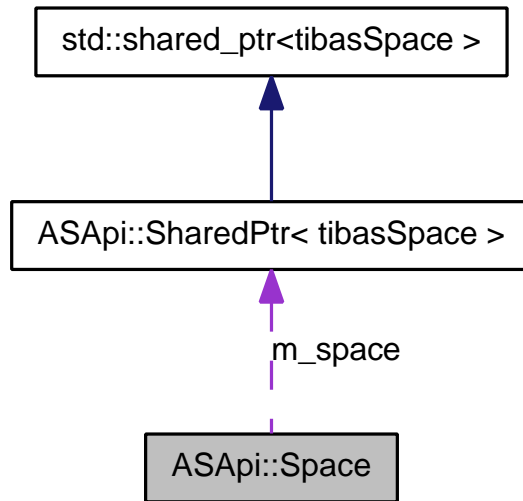
Definition at line 177 of file SharedPtr.h.

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

- [SharedPtr.h](#)

## 6.53 ASApi::Space Class Reference

#include <Space.h> Collaboration diagram for ASApi::Space:



### Public Member Functions

- [Space](#) ([SharedPtr](#)< [tibasSpace](#) > space=[SharedPtr](#)< [tibasSpace](#) >(NULL))
- [Space](#) ([tibasSpace](#) &space)
- [~Space](#) ()
- std::string [getName](#) () const
- bool [isReady](#) () const
- bool [waitForReady](#) (long long timeout) const
- [SpaceState](#) [getState](#) () const
- [Tuple](#) [compareAndPut](#) (const [Tuple](#) &oldValue, const [Tuple](#) &newValue)
- [Tuple](#) [compareAndPut](#) (const [Tuple](#) &oldValue, const [Tuple](#) &newValue, const [PutOptions](#) &putOptions)
- [SpaceResultList](#) [compareAndPutAll](#) (const std::vector< [Tuple](#) > &oldValue, const std::vector< [Tuple](#) > &newValue)
- [SpaceResultList](#) [compareAndPutAll](#) (const std::vector< [Tuple](#) > &oldValue, const std::vector< [Tuple](#) > &newValue, const [PutOptions](#) &putOptions)
- [Tuple](#) [compareAndTake](#) (const [Tuple](#) &oldValue) const
- [Tuple](#) [compareAndTake](#) (const [Tuple](#) &oldValue, const [TakeOptions](#) &takeOptions) const
- [SpaceResultList](#) [compareAndTakeAll](#) (const std::vector< [Tuple](#) > &oldValueList)
- [SpaceResultList](#) [compareAndTakeAll](#) (const std::vector< [Tuple](#) > &oldValueList, const [TakeOptions](#) &takeOptions)
- [Tuple](#) [put](#) (const [Tuple](#) &newValue)
- [Tuple](#) [put](#) (const [Tuple](#) &newValue, const [PutOptions](#) &putOptions)

- [SpaceResultList putAll](#) (const std::vector< [Tuple](#) > &tuples)
- [SpaceResultList putAll](#) (const std::vector< [Tuple](#) > &tuples, const [PutOptions](#) &putOptions)
- [Tuple take](#) (const [Tuple](#) &key) const
- [Tuple take](#) (const [Tuple](#) &key, const [TakeOptions](#) &takeOptions) const
- [SpaceResultList takeAll](#) (const std::vector< [Tuple](#) > &tuples) const
- [SpaceResultList takeAll](#) (const std::vector< [Tuple](#) > &tuples, const [TakeOptions](#) &takeOptions) const
- void [load](#) (const [Tuple](#) &newValue)
- [SpaceResultList loadAll](#) (const std::vector< [Tuple](#) > &valueList)
- [SpaceDef getSpaceDef](#) () const
- std::string [getMetaspaceName](#) () const
- [Metaspace getMetaspace](#) () const
- long long [size](#) (const std::string &filter) const
- long long [size](#) () const
- void [clear](#) (const std::string &filter) const
- void [clear](#) () const
- [Tuple lock](#) (const [Tuple](#) &key) const
- [Tuple lock](#) (const [Tuple](#) &key, const [LockOptions](#) lockOptions)
- [SpaceResultList lockAll](#) (const std::vector< [Tuple](#) > &keyList) const
- [SpaceResultList lockAll](#) (const std::vector< [Tuple](#) > &keyList, const [LockOptions](#) lockOptions) const
- void [unlock](#) (const [Tuple](#) &key) const
- void [unlock](#) (const [Tuple](#) &key, const [UnlockOptions](#) unlockOptions) const
- [SpaceResultList unlock](#) (const std::vector< [Tuple](#) > &keyList) const
- [Browser browse](#) (const [BrowserType](#) &browserType, const [BrowserDef](#) &browserDef, const std::string &filter) const
- [Tuple get](#) (const [Tuple](#) &keyTuple) const
- [Tuple get](#) (const [Tuple](#) &keyTuple, const [GetOptions](#) &getOptions) const
- [SpaceResultList getAll](#) (const std::vector< [Tuple](#) > &keyList) const
- void [listen](#) ([Listener](#) &listener, const [ListenerDef](#) &listenerDef, const std::string &filter)
- [Space & setDistributionRole](#) (const [DistributionRole](#) &distributionRole)
- [InvokeResult invoke](#) (const [Tuple](#) &tuple, const std::string &invocable, const [InvokeOptions](#) &invokeOptions=[InvokeOptions](#)()) const
- [InvokeResult invokeMember](#) (const [Member](#) &member, const std::string &invocable, const [InvokeOptions](#) &invokeOptions=[InvokeOptions](#)()) const
- [InvokeResultList invokeMembers](#) (const std::vector< [Member](#) > &memberList, const std::string &invocable, const [InvokeOptions](#) &invokeOptions=[InvokeOptions](#)()) const
- [InvokeResultList invokeRemoteMembers](#) (const std::string &invocable, const [InvokeOptions](#) &invokeOptions=[InvokeOptions](#)()) const
- [InvokeResultList invokeSeeders](#) (const std::string &invocable, const [InvokeOptions](#) &invokeOptions=[InvokeOptions](#)()) const
- void [setPersister](#) ([Persister](#) &persister)
- void [setRouter](#) ([Router](#) &router)

### 6.53.1 Detailed Description

Definition at line 29 of file Space.h.

### 6.53.2 Constructor & Destructor Documentation

#### 6.53.2.1 Space::Space (SharedPtr< tibasSpace > *space* = SharedPtr<tibasSpace> (NULL) )

Definition at line 10 of file Space.cpp.

#### 6.53.2.2 Space::Space (tibasSpace & *space*)

Definition at line 17 of file Space.cpp.

#### 6.53.2.3 Space::~Space ()

Definition at line 23 of file Space.cpp.

### 6.53.3 Member Function Documentation

#### 6.53.3.1 Browser Space::browse (const BrowserType & *browserType*, const BrowserDef & *browserDef*, const std::string & *filter*) const

Definition at line 409 of file Space.cpp.

#### 6.53.3.2 void Space::clear () const

Definition at line 347 of file Space.cpp.

#### 6.53.3.3 void Space::clear (const std::string & *filter*) const

Definition at line 341 of file Space.cpp.

#### 6.53.3.4 Tuple Space::compareAndPut (const Tuple & *oldValue*, const Tuple & *newValue*, const PutOptions & *putOptions*)

Definition at line 103 of file Space.cpp.

#### 6.53.3.5 Tuple Space::compareAndPut (const Tuple & *oldValue*, const Tuple & *newValue*)

Definition at line 85 of file Space.cpp.

**6.53.3.6 SpaceResultList Space::compareAndPutAll (const std::vector< Tuple > & *oldValue*, const std::vector< Tuple > & *newValue*, const PutOptions & *putOptions*)**

Definition at line 136 of file Space.cpp.

**6.53.3.7 SpaceResultList Space::compareAndPutAll (const std::vector< Tuple > & *oldValue*, const std::vector< Tuple > & *newValue*)**

Definition at line 124 of file Space.cpp.

**6.53.3.8 Tuple Space::compareAndTake (const Tuple & *oldValue*, const TakeOptions & *takeOptions*) const**

Definition at line 290 of file Space.cpp.

**6.53.3.9 Tuple Space::compareAndTake (const Tuple & *oldValue*) const**

Definition at line 271 of file Space.cpp.

**6.53.3.10 SpaceResultList Space::compareAndTakeAll (const std::vector< Tuple > & *oldValueList*, const TakeOptions & *takeOptions*)**

Definition at line 242 of file Space.cpp.

**6.53.3.11 SpaceResultList Space::compareAndTakeAll (const std::vector< Tuple > & *oldValueList*)**

Definition at line 230 of file Space.cpp.

**6.53.3.12 Tuple Space::get (const Tuple & *keyTuple*, const GetOptions & *getOptions*) const**

Definition at line 425 of file Space.cpp.

**6.53.3.13 Tuple Space::get (const Tuple & *keyTuple*) const**

Definition at line 417 of file Space.cpp.

**6.53.3.14 SpaceResultList Space::getAll (const std::vector< Tuple > & *keyList*) const**

Definition at line 436 of file Space.cpp.

**6.53.3.15 Metaspace Space::getMetaspace () const**

Definition at line 317 of file Space.cpp.

**6.53.3.16 string Space::getMetaspaceName () const**

Definition at line 309 of file Space.cpp.

**6.53.3.17 string Space::getName () const**

Definition at line 40 of file Space.cpp.

**6.53.3.18 SpaceDef Space::getSpaceDef () const**

Definition at line 301 of file Space.cpp.

**6.53.3.19 SpaceState Space::getState () const**

Definition at line 77 of file Space.cpp.

**6.53.3.20 InvokeResult Space::invoke (const Tuple & *tuple*, const std::string & *invocable*, const InvokeOptions & *invokeOptions* = InvokeOptions ()) const**

Definition at line 459 of file Space.cpp.

**6.53.3.21 InvokeResult Space::invokeMember (const Member & *member*, const std::string & *invocable*, const InvokeOptions & *invokeOptions* = InvokeOptions ()) const**

Definition at line 468 of file Space.cpp.

**6.53.3.22 InvokeResultList Space::invokeMembers (const std::vector< Member > & *memberList*, const std::string & *invocable*, const InvokeOptions & *invokeOptions* = InvokeOptions ()) const**

Definition at line 477 of file Space.cpp.

**6.53.3.23 InvokeResultList Space::invokeRemoteMembers (const std::string & *invocable*, const InvokeOptions & *invokeOptions* = InvokeOptions ()) const**

Definition at line 487 of file Space.cpp.

**6.53.3.24 InvokeResultList Space::invokeSeeders (const std::string & *invocable*, const InvokeOptions & *invokeOptions* = InvokeOptions ()) const**

Definition at line 496 of file Space.cpp.

**6.53.3.25 bool Space::isReady () const**

Definition at line 47 of file Space.cpp.

**6.53.3.26 void Space::listen (Listener & *listener*, const ListenerDef & *listenerDef*, const std::string & *filter*)**

Definition at line 445 of file Space.cpp.

**6.53.3.27 void Space::load (const Tuple & *newValue*)**

Definition at line 256 of file Space.cpp.

**6.53.3.28 SpaceResultList Space::loadAll (const std::vector< Tuple > & *valueList*)**

Definition at line 262 of file Space.cpp.

**6.53.3.29 Tuple Space::lock (const Tuple & *key*, const LockOptions *lockOptions*)**

Definition at line 361 of file Space.cpp.

**6.53.3.30 Tuple Space::lock (const Tuple & *key*) const**

Definition at line 353 of file Space.cpp.

**6.53.3.31 SpaceResultList Space::lockAll (const std::vector< Tuple > & *keyList*, const LockOptions *lockOptions*) const**

Definition at line 381 of file Space.cpp.

**6.53.3.32 SpaceResultList Space::lockAll (const std::vector< Tuple > & *keyList*) const**

Definition at line 372 of file Space.cpp.

**6.53.3.33 Tuple Space::put (const Tuple & *newValue*, const PutOptions & *putOptions*)**

Definition at line 158 of file Space.cpp.

**6.53.3.34 Tuple Space::put (const Tuple & *newValue*)**

Definition at line 150 of file Space.cpp.

**6.53.3.35 SpaceResultList Space::putAll (const std::vector< Tuple > & *tuples*, const PutOptions & *putOptions*)**

Definition at line 178 of file Space.cpp.

**6.53.3.36 SpaceResultList Space::putAll (const std::vector< Tuple > & *tuples*)**

Definition at line 169 of file Space.cpp.

**6.53.3.37 Space & Space::setDistributionRole (const DistributionRole & *distributionRole*)**

Definition at line 452 of file Space.cpp.

**6.53.3.38 void Space::setPersister (Persister & *persister*)**

Definition at line 505 of file Space.cpp.

**6.53.3.39 void Space::setRouter (Router & *router*)**

Definition at line 512 of file Space.cpp.

**6.53.3.40 long long Space::size () const**

Definition at line 333 of file Space.cpp.

**6.53.3.41 long long Space::size (const std::string & *filter*) const**

Definition at line 325 of file Space.cpp.

**6.53.3.42 Tuple Space::take (const Tuple & *key*, const TakeOptions & *takeOptions*) const**

Definition at line 198 of file Space.cpp.



**6.53.3.43 Tuple Space::take (const Tuple & *key*) const**

Definition at line 190 of file Space.cpp.

**6.53.3.44 SpaceResultList Space::takeAll (const std::vector< Tuple > & *tuples*, const TakeOptions & *takeOptions*) const**

Definition at line 218 of file Space.cpp.

**6.53.3.45 SpaceResultList Space::takeAll (const std::vector< Tuple > & *tuples*) const**

Definition at line 209 of file Space.cpp.

**6.53.3.46 SpaceResultList ASApi::Space::unlock (const std::vector< Tuple > & *keyList*) const****6.53.3.47 void Space::unlock (const Tuple & *key*, const UnlockOptions *unlockOptions*) const**

Definition at line 400 of file Space.cpp.

**6.53.3.48 void Space::unlock (const Tuple & *key*) const**

Definition at line 394 of file Space.cpp.

**6.53.3.49 bool Space::waitForReady (long long *timeout*) const**

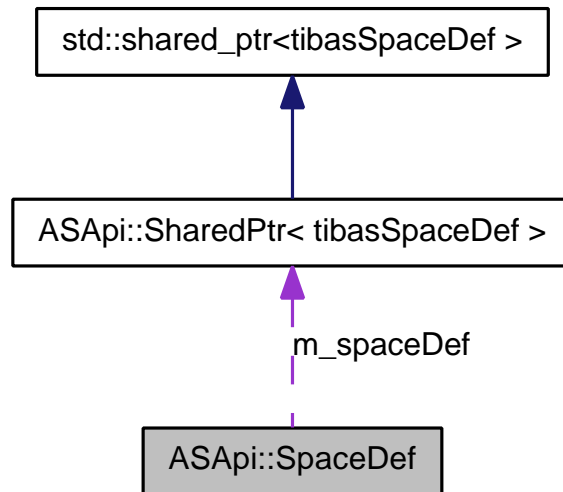
Definition at line 62 of file Space.cpp.

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

- [Space.h](#)
- [Space.cpp](#)

## 6.54 ASApi::SpaceDef Class Reference

#include <SpaceDef.h> Collaboration diagram for ASApi::SpaceDef:



### Public Types

- typedef `tibas_distributionPolicy` [DistributionPolicy](#)
- typedef `tibas_persistenceType` [PersistenceType](#)
- typedef `tibas_evictionPolicy` [EvictionPolicy](#)
- typedef `tibas_lockScope` [LockScope](#)
- typedef `tibas_updateTransport` [UpdateTransport](#)
- typedef `tibas_persistencePolicy` [PersistencePolicy](#)

### Public Member Functions

- [SpaceDef](#) ()
- [SpaceDef](#) ([SharedPtr](#)< `tibasSpaceDef` > &spaceDef)
- [SpaceDef](#) (const `tibasSpaceDef` &spaceDef)
- [~SpaceDef](#) ()
- const `tibasSpaceDef` & [get](#) () const
- `tibasSpaceDef` & [get](#) ()
- [SpaceDef](#) & [setName](#) (const std::string &name)
- std::string [getName](#) () const
- [SpaceDef](#) & [putFieldDef](#) (const [FieldDef](#) &fieldDef)
- [FieldDef](#) [getFieldDef](#) (const std::string &fieldName) const
- [FieldDefList](#) [getFieldDefs](#) () const
- void [takeFieldDef](#) ([FieldDef](#) fieldDef) const
- [SpaceDef](#) & [setKey](#) (const std::string &fieldNames)

- [SpaceDef](#) & [setKeyDef](#) (const [KeyDef](#) &keyDef)
- [KeyDef](#) [getKeyDef](#) () const
- [SpaceDef](#) & [setDistributionPolicy](#) (const [DistributionPolicy](#) &distributionPolicy)
- [DistributionPolicy](#) [getDistributionPolicy](#) () const
- [SpaceDef](#) & [setPersistenceType](#) (const [PersistenceType](#) &persistenceType)
- [PersistenceType](#) [getPersistenceType](#) () const
- [SpaceDef](#) & [setMinSeederCount](#) (int seederCount)
- int [getMinSeederCount](#) () const
- [SpaceDef](#) & [setReplicationCount](#) (int replicationCount)
- int [getReplicationCount](#) () const
- [SpaceDef](#) & [setHostAwareReplication](#) (bool flag)
- bool [isHostAwareReplication](#) () const
- [SpaceDef](#) & [setCapacity](#) (long long capacity)
- long long [getCapacity](#) () const
- [SpaceDef](#) & [setEvictionPolicy](#) ([EvictionPolicy](#) evictionPolicy)
- [EvictionPolicy](#) [getEvictionPolicy](#) () const
- [LockScope](#) [getLockScope](#) () const
- [SpaceDef](#) & [setLockScope](#) (const [LockScope](#) &lockScope)
- int [getNumFields](#) () const
- std::vector< std::string > [getIndex](#) (const std::string &indexName) const
- void [removeIndexDef](#) (const std::string &indexName) const
- [UpdateTransport](#) [getUpdateTransport](#) () const
- [SpaceDef](#) & [setUpdateTransport](#) (const [UpdateTransport](#) &updateTransport)
- [SpaceDef](#) & [setDistributionFields](#) (const std::string &fieldNames)
- std::vector< std::string > [getDistributionFields](#) () const
- void [addIndexDef](#) (const [IndexDef](#) &indexDef)
- bool [isSyncreplicated](#) () const
- [SpaceDef](#) & [setSyncReplicated](#) (bool syncReplicated)
- long long [getSpaceWait](#) () const
- [SpaceDef](#) & [setSpaceWait](#) (long long spaceWait)
- long long [getWriteTimeout](#) () const
- [SpaceDef](#) & [setWriteTimeout](#) (long long spaceWait)
- int [getReadTimeout](#) () const
- [SpaceDef](#) & [setReadTimeout](#) (long long spaceWait)
- long long [getTTL](#) () const
- [SpaceDef](#) & [setTTL](#) (long long ttl)
- long long [getLockTTL](#) () const
- [SpaceDef](#) & [setLockTTL](#) (long long lockTTL)
- long long [getLockWait](#) () const
- [SpaceDef](#) & [setLockWait](#) (long long lockWait)
- [SpaceDef](#) & [setPersisted](#) (bool persisted)
- bool [isPersisted](#) ()
- [PersistencePolicy](#) [getPersistencePolicy](#) () const
- [SpaceDef](#) & [setPersistencePolicy](#) (const [PersistencePolicy](#) &persistencePolicy)

### 6.54.1 Detailed Description

Definition at line 15 of file SpaceDef.h.

### 6.54.2 Member Typedef Documentation

#### 6.54.2.1 `typedef tibas_distributionPolicy ASApi::SpaceDef::DistributionPolicy`

Definition at line 18 of file SpaceDef.h.

#### 6.54.2.2 `typedef tibas_evictionPolicy ASApi::SpaceDef::EvictionPolicy`

Definition at line 20 of file SpaceDef.h.

#### 6.54.2.3 `typedef tibas_lockScope ASApi::SpaceDef::LockScope`

Definition at line 21 of file SpaceDef.h.

#### 6.54.2.4 `typedef tibas_persistencePolicy ASApi::SpaceDef::PersistencePolicy`

Definition at line 23 of file SpaceDef.h.

#### 6.54.2.5 `typedef tibas_persistenceType ASApi::SpaceDef::PersistenceType`

Definition at line 19 of file SpaceDef.h.

#### 6.54.2.6 `typedef tibas_updateTransport ASApi::SpaceDef::UpdateTransport`

Definition at line 22 of file SpaceDef.h.

### 6.54.3 Constructor & Destructor Documentation

#### 6.54.3.1 `SpaceDef::SpaceDef ()`

Definition at line 9 of file SpaceDef.cpp.

#### 6.54.3.2 `SpaceDef::SpaceDef (SharedPtr< tibasSpaceDef > & spaceDef)`

Definition at line 16 of file SpaceDef.cpp.

#### 6.54.3.3 `SpaceDef::SpaceDef (const tibasSpaceDef & spaceDef)`

Definition at line 23 of file SpaceDef.cpp.

#### 6.54.3.4 SpaceDef::~~SpaceDef ()

Definition at line 36 of file SpaceDef.cpp.

### 6.54.4 Member Function Documentation

#### 6.54.4.1 void SpaceDef::addIndexDef (const IndexDef & *indexDef*)

Definition at line 300 of file SpaceDef.cpp.

#### 6.54.4.2 tibasSpaceDef & SpaceDef::get ()

Definition at line 48 of file SpaceDef.cpp.

#### 6.54.4.3 const tibasSpaceDef & SpaceDef::get () const

Definition at line 42 of file SpaceDef.cpp.

#### 6.54.4.4 long long SpaceDef::getCapacity () const

Definition at line 207 of file SpaceDef.cpp.

#### 6.54.4.5 vector< string > SpaceDef::getDistributionFields () const

Definition at line 292 of file SpaceDef.cpp.

#### 6.54.4.6 SpaceDef::DistributionPolicy SpaceDef::getDistributionPolicy () const

Definition at line 127 of file SpaceDef.cpp.

#### 6.54.4.7 SpaceDef::EvictionPolicy SpaceDef::getEvictionPolicy () const

Definition at line 223 of file SpaceDef.cpp.

#### 6.54.4.8 FieldDef SpaceDef::getFieldDef (const std::string & *fieldName*) const

Definition at line 76 of file SpaceDef.cpp.

#### 6.54.4.9 FieldDefList SpaceDef::getFieldDefs () const

Definition at line 84 of file SpaceDef.cpp.

**6.54.4.10** `vector< string > SpaceDef::getIndex (const std::string & indexName) const`

Definition at line 254 of file SpaceDef.cpp.

**6.54.4.11** `KeyDef SpaceDef::getKeyDef () const`

Definition at line 112 of file SpaceDef.cpp.

**6.54.4.12** `SpaceDef::LockScope SpaceDef::getLockScope () const`

Definition at line 231 of file SpaceDef.cpp.

**6.54.4.13** `long long SpaceDef::getLockTTL () const`

Definition at line 387 of file SpaceDef.cpp.

**6.54.4.14** `long long SpaceDef::getLockWait () const`

Definition at line 402 of file SpaceDef.cpp.

**6.54.4.15** `int SpaceDef::getMinSeederCount () const`

Definition at line 157 of file SpaceDef.cpp.

**6.54.4.16** `string SpaceDef::getName () const`

Definition at line 61 of file SpaceDef.cpp.

**6.54.4.17** `int SpaceDef::getNumFields () const`

Definition at line 246 of file SpaceDef.cpp.

**6.54.4.18** `SpaceDef::PersistencePolicy SpaceDef::getPersistencePolicy () const`

Definition at line 439 of file SpaceDef.cpp.

**6.54.4.19** `SpaceDef::PersistenceType SpaceDef::getPersistenceType () const`

Definition at line 142 of file SpaceDef.cpp.

**6.54.4.20 int SpaceDef::getReadTimeout () const**

Definition at line 357 of file SpaceDef.cpp.

**6.54.4.21 int SpaceDef::getReplicationCount () const**

Definition at line 171 of file SpaceDef.cpp.

**6.54.4.22 long long SpaceDef::getSpaceWait () const**

Definition at line 327 of file SpaceDef.cpp.

**6.54.4.23 long long SpaceDef::getTTL () const**

Definition at line 372 of file SpaceDef.cpp.

**6.54.4.24 SpaceDef::UpdateTransport SpaceDef::getUpdateTransport () const**

Definition at line 270 of file SpaceDef.cpp.

**6.54.4.25 long long SpaceDef::getWriteTimeout () const**

Definition at line 342 of file SpaceDef.cpp.

**6.54.4.26 bool SpaceDef::isHostAwareReplication () const**

Definition at line 186 of file SpaceDef.cpp.

**6.54.4.27 bool SpaceDef::isPersisted ()**

Definition at line 425 of file SpaceDef.cpp.

**6.54.4.28 bool SpaceDef::isSyncreplicated () const**

Definition at line 306 of file SpaceDef.cpp.

**6.54.4.29 SpaceDef & SpaceDef::putFieldDef (const FieldDef & *fieldDef*)**

Definition at line 69 of file SpaceDef.cpp.

**6.54.4.30 void SpaceDef::removeIndexDef (const std::string & *indexName*) const**

Definition at line 262 of file SpaceDef.cpp.

**6.54.4.31 SpaceDef & SpaceDef::setCapacity (long long *capacity*)**

Definition at line 200 of file SpaceDef.cpp.

**6.54.4.32 SpaceDef & SpaceDef::setDistributionFields (const std::string & *fieldNames*)**

Definition at line 285 of file SpaceDef.cpp.

**6.54.4.33 SpaceDef & SpaceDef::setDistributionPolicy (const DistributionPolicy & *distributionPolicy*)**

Definition at line 120 of file SpaceDef.cpp.

**6.54.4.34 SpaceDef & SpaceDef::setEvictionPolicy (EvictionPolicy *evictionPolicy*)**

Definition at line 216 of file SpaceDef.cpp.

**6.54.4.35 SpaceDef & SpaceDef::setHostAwareReplication (bool *flag*)**

Definition at line 179 of file SpaceDef.cpp.

**6.54.4.36 SpaceDef & SpaceDef::setKey (const std::string & *fieldNames*)**

Definition at line 98 of file SpaceDef.cpp.

**6.54.4.37 SpaceDef & SpaceDef::setKeyDef (const KeyDef & *keyDef*)**

Definition at line 105 of file SpaceDef.cpp.

**6.54.4.38 SpaceDef & SpaceDef::setLockScope (const LockScope & *lockScope*)**

Definition at line 239 of file SpaceDef.cpp.

**6.54.4.39 SpaceDef & SpaceDef::setLockTTL (long long *lockTTL*)**

Definition at line 395 of file SpaceDef.cpp.



**6.54.4.40 SpaceDef & SpaceDef::setLockWait (long long *lockWait*)**

Definition at line 410 of file SpaceDef.cpp.

**6.54.4.41 SpaceDef & SpaceDef::setMinSeederCount (int *seederCount*)**

Definition at line 150 of file SpaceDef.cpp.

**6.54.4.42 SpaceDef & SpaceDef::setName (const std::string & *name*)**

Definition at line 54 of file SpaceDef.cpp.

**6.54.4.43 SpaceDef & SpaceDef::setPersisted (bool *persisted*)**

Definition at line 417 of file SpaceDef.cpp.

**6.54.4.44 SpaceDef & SpaceDef::setPersistencePolicy (const PersistencePolicy & *persistencePolicy*)**

Definition at line 447 of file SpaceDef.cpp.

**6.54.4.45 SpaceDef & SpaceDef::setPersistenceType (const PersistenceType & *persistenceType*)**

Definition at line 135 of file SpaceDef.cpp.

**6.54.4.46 SpaceDef & SpaceDef::setReadTimeout (long long *spaceWait*)**

Definition at line 365 of file SpaceDef.cpp.

**6.54.4.47 SpaceDef & SpaceDef::setReplicationCount (int *replicationCount*)**

Definition at line 165 of file SpaceDef.cpp.

**6.54.4.48 SpaceDef & SpaceDef::setSpaceWait (long long *spaceWait*)**

Definition at line 335 of file SpaceDef.cpp.

**6.54.4.49 SpaceDef & SpaceDef::setSyncReplicated (bool *syncReplicated*)**

Definition at line 320 of file SpaceDef.cpp.

**6.54.4.50 SpaceDef & SpaceDef::setTTL (long long *tTl*)**

Definition at line 380 of file SpaceDef.cpp.

**6.54.4.51 SpaceDef & SpaceDef::setUpdateTransport (const UpdateTransport & *updateTransport*)**

Definition at line 278 of file SpaceDef.cpp.

**6.54.4.52 SpaceDef & SpaceDef::setWriteTimeout (long long *spaceWait*)**

Definition at line 350 of file SpaceDef.cpp.

**6.54.4.53 void SpaceDef::takeFieldDef (FieldDef *fieldDef*) const**

Definition at line 92 of file SpaceDef.cpp.

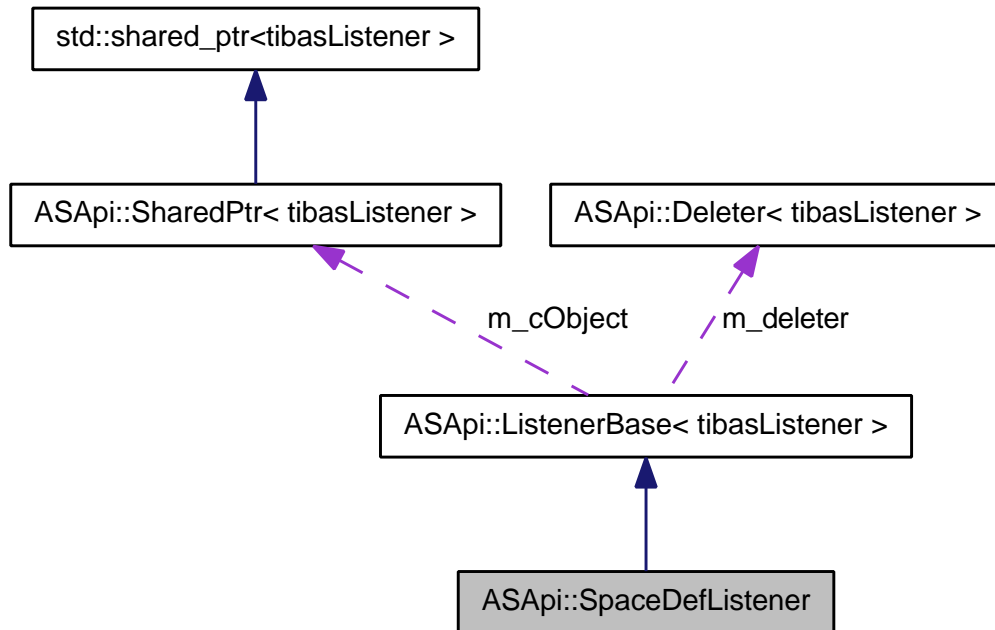
The documentation for this class was generated from the following files:

- [SpaceDef.h](#)
- [SpaceDef.cpp](#)

## 6.55 ASApi::SpaceDefListener Class Reference

```
#include <SpaceDefListener.h>
```

Inherits [ListenerBase< tibasListener >](#). Collaboration diagram for AS-Api::SpaceDefListener:



### Public Member Functions

- [SpaceDefListener](#) ()
- virtual [~SpaceDefListener](#) ()
- virtual void [onDefine](#) (const [SpaceDef](#) &spaceDef)
- virtual void [onAlter](#) (const [SpaceDef](#) &oldSpaceDef, const [SpaceDef](#) &newSpaceDef)
- virtual void [onDrop](#) (const [SpaceDef](#) &spaceDef)
- void [create](#) ()

### Static Public Member Functions

- static void [onSpaceDefine](#) (tibasSpaceDef spaceDef, void \*closure)
- static void [onSpaceAlter](#) (tibasSpaceDef oldSpaceDef, tibasSpaceDef newSpaceDef, void \*closure)
- static void [onSpaceDrop](#) (tibasSpaceDef spaceDef, void \*closure)

### 6.55.1 Detailed Description

Definition at line 12 of file SpaceDefListener.h.

### 6.55.2 Constructor & Destructor Documentation

#### 6.55.2.1 SpaceDefListener::SpaceDefListener ()

Definition at line 7 of file SpaceDefListener.cpp.

#### 6.55.2.2 SpaceDefListener::~SpaceDefListener () [virtual]

Definition at line 14 of file SpaceDefListener.cpp.

### 6.55.3 Member Function Documentation

#### 6.55.3.1 void SpaceDefListener::create () [virtual]

Implements [ASApi::ListenerBase< tibasListener >](#).

Definition at line 20 of file SpaceDefListener.cpp.

#### 6.55.3.2 virtual void ASApi::SpaceDefListener::onAlter (const SpaceDef & *oldSpaceDef*, const SpaceDef & *newSpaceDef*) [inline, virtual]

Definition at line 21 of file SpaceDefListener.h.

#### 6.55.3.3 virtual void ASApi::SpaceDefListener::onDefine (const SpaceDef & *spaceDef*) [inline, virtual]

Definition at line 18 of file SpaceDefListener.h.

#### 6.55.3.4 virtual void ASApi::SpaceDefListener::onDrop (const SpaceDef & *spaceDef*) [inline, virtual]

Definition at line 24 of file SpaceDefListener.h.

#### 6.55.3.5 void SpaceDefListener::onSpaceAlter (tibasSpaceDef *oldSpaceDef*, tibasSpaceDef *newSpaceDef*, void \* *closure*) [static]

Definition at line 37 of file SpaceDefListener.cpp.

**6.55.3.6 void SpaceDefListener::onSpaceDefine (tibasSpaceDef *spaceDef*, void \* *closure*) [static]**

Definition at line 26 of file SpaceDefListener.cpp.

**6.55.3.7 void SpaceDefListener::onSpaceDrop (tibasSpaceDef *spaceDef*, void \* *closure*) [static]**

Definition at line 49 of file SpaceDefListener.cpp.

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

- [SpaceDefListener.h](#)
- [SpaceDefListener.cpp](#)

## 6.56 ASApi::SpaceEvent Class Reference

```
#include <SpaceEvent.h>
```

Inherited by [ASApi::EvictEvent](#), [ASApi::ExpireEvent](#), [ASApi::PutEvent](#), [ASApi::SeedEvent](#), [ASApi::TakeEvent](#), and [ASApi::UnseedEvent](#).

### Public Types

- typedef tibas\_eventType [EventType](#)

### Public Member Functions

- [SpaceEvent](#) (const tibasSpaceEvent &event)
- [~SpaceEvent](#) ()
- [Tuple](#) [getTuple](#) () const
- std::string [getMetaspaceName](#) () const
- std::string [getSpaceName](#) () const
- [EventType](#) [getType](#) () const

### Protected Attributes

- const tibasSpaceEvent & [m\\_event](#)

#### 6.56.1 Detailed Description

Definition at line 11 of file SpaceEvent.h.

#### 6.56.2 Member Typedef Documentation

##### 6.56.2.1 typedef tibas\_eventType ASApi::SpaceEvent::EventType

Definition at line 14 of file SpaceEvent.h.

#### 6.56.3 Constructor & Destructor Documentation

##### 6.56.3.1 SpaceEvent::SpaceEvent (const tibasSpaceEvent & event)

Definition at line 8 of file SpaceEvent.cpp.

##### 6.56.3.2 SpaceEvent::~SpaceEvent ()

Definition at line 15 of file SpaceEvent.cpp.

## 6.56.4 Member Function Documentation

### 6.56.4.1 string SpaceEvent::getMetaspaceName () const

Definition at line 37 of file SpaceEvent.cpp.

### 6.56.4.2 string SpaceEvent::getSpaceName () const

Definition at line 45 of file SpaceEvent.cpp.

### 6.56.4.3 Tuple SpaceEvent::getTuple () const

Definition at line 29 of file SpaceEvent.cpp.

### 6.56.4.4 SpaceEvent::EventType SpaceEvent::getType () const

Definition at line 21 of file SpaceEvent.cpp.

## 6.56.5 Member Data Documentation

### 6.56.5.1 const tibasSpaceEvent& ASApi::SpaceEvent::m\_event [protected]

Definition at line 28 of file SpaceEvent.h.

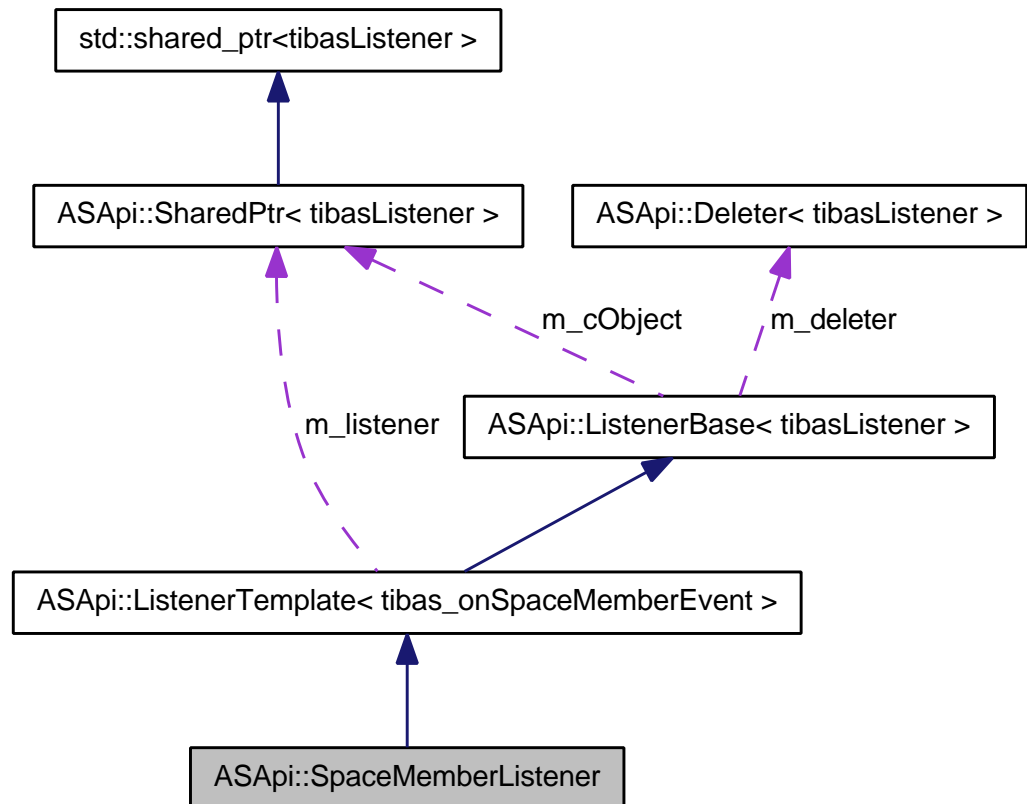
The documentation for this class was generated from the following files:

- [SpaceEvent.h](#)
- [SpaceEvent.cpp](#)

## 6.57 ASApi::SpaceMemberListener Class Reference

```
#include <SpaceMemberListener.h>
```

Inherits [ListenerTemplate< tibas\\_onSpaceMemberEvent >](#). Collaboration diagram for ASApi::SpaceMemberListener:



### Public Member Functions

- [SpaceMemberListener](#) ()
- virtual [~SpaceMemberListener](#) ()
- virtual void [onJoin](#) (const std::string &spaceName, const [Member](#) &member, [DistributionRole](#) role)
- virtual void [onUpdate](#) (const std::string &spaceName, const [Member](#) &member, [DistributionRole](#) role)
- virtual void [onLeave](#) (const std::string &spaceName, const [Member](#) &member)

### Static Public Member Functions

- static void [onEvent](#) (tibasSpaceMemberEvent spaceMemberEvent, void \*closure)



### 6.57.1 Detailed Description

Definition at line 13 of file SpaceMemberListener.h.

### 6.57.2 Constructor & Destructor Documentation

#### 6.57.2.1 SpaceMemberListener::SpaceMemberListener ()

Definition at line 6 of file SpaceMemberListener.cpp.

#### 6.57.2.2 SpaceMemberListener::~SpaceMemberListener () [virtual]

Definition at line 13 of file SpaceMemberListener.cpp.

### 6.57.3 Member Function Documentation

#### 6.57.3.1 void SpaceMemberListener::onEvent (tibasSpaceMemberEvent *spaceMemberEvent*, void \* *closure*) [static]

Definition at line 18 of file SpaceMemberListener.cpp.

#### 6.57.3.2 virtual void ASApi::SpaceMemberListener::onJoin (const std::string & *spaceName*, const Member & *member*, DistributionRole *role*) [inline, virtual]

Definition at line 21 of file SpaceMemberListener.h.

#### 6.57.3.3 virtual void ASApi::SpaceMemberListener::onLeave (const std::string & *spaceName*, const Member & *member*) [inline, virtual]

Definition at line 23 of file SpaceMemberListener.h.

#### 6.57.3.4 virtual void ASApi::SpaceMemberListener::onUpdate (const std::string & *spaceName*, const Member & *member*, DistributionRole *role*) [inline, virtual]

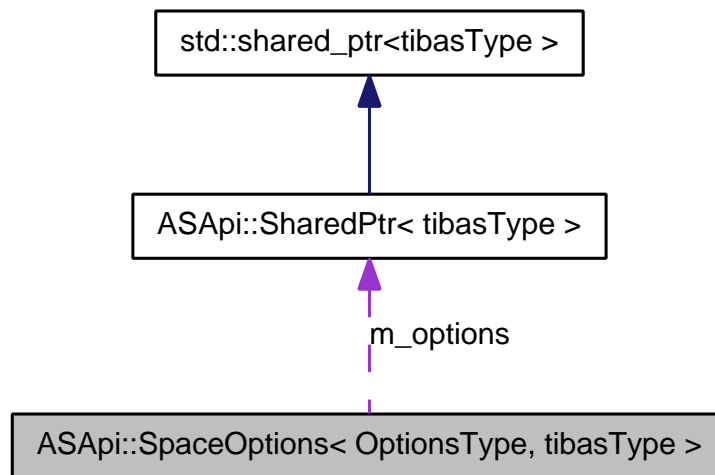
Definition at line 22 of file SpaceMemberListener.h.

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

- [SpaceMemberListener.h](#)
- [SpaceMemberListener.cpp](#)

## 6.58 ASApi::SpaceOptions< OptionsType, tibasType > Class Template Reference

#include <SpaceOptions.h> Collaboration diagram for ASApi::SpaceOptions< OptionsType, tibasType >:



### Public Member Functions

- virtual [~SpaceOptions](#) ()
- tibasType & [get](#) () const
- [SpaceOptions](#) & [setResultHandler](#) ([SharedPtr](#)< [SpaceResultHandler](#) > handler)
- [SharedPtr](#)< [SpaceResultHandler](#) > [getResultHandler](#) () const
- [SpaceOptions](#) & [setClosure](#) (void \*closure)
- void \* [getClosure](#) () const

### Protected Member Functions

- [SpaceOptions](#) (Initializer init)

### Protected Attributes

- [SharedPtr](#)< tibasType > [m\\_options](#)

#### 6.58.1 Detailed Description

template<typename OptionsType, typename tibasType> class ASApi::SpaceOptions< OptionsType, tibasType >

Definition at line 11 of file SpaceOptions.h.

## 6.58.2 Constructor & Destructor Documentation

**6.58.2.1** `template<typename OptionsType , typename tibasType >  
ASApi::SpaceOptions< OptionsType, tibasType >::~~SpaceOptions ()  
[inline, virtual]`

Definition at line 40 of file SpaceOptions.h.

**6.58.2.2** `template<typename OptionsType , typename tibasType >  
ASApi::SpaceOptions< OptionsType, tibasType >::SpaceOptions  
(Initializer init) [inline, protected]`

Definition at line 33 of file SpaceOptions.h.

## 6.58.3 Member Function Documentation

**6.58.3.1** `template<typename OptionsType , typename tibasType > tibasType  
& ASApi::SpaceOptions< OptionsType, tibasType >::get () const  
[inline]`

Definition at line 46 of file SpaceOptions.h.

**6.58.3.2** `template<typename OptionsType , typename tibasType > void *  
ASApi::SpaceOptions< OptionsType, tibasType >::getClosure () const  
[inline]`

Definition at line 88 of file SpaceOptions.h.

**6.58.3.3** `template<typename OptionsType , typename tibasType > SharedPtr<  
SpaceResultHandler > ASApi::SpaceOptions< OptionsType,  
tibasType >::getResultHandler () const [inline]`

Definition at line 66 of file SpaceOptions.h.

**6.58.3.4** `template<typename OptionsType , typename tibasType >  
SpaceOptions< OptionsType, tibasType > & ASApi::SpaceOptions<  
OptionsType, tibasType >::setClosure (void * closure) [inline]`

Definition at line 74 of file SpaceOptions.h.

**6.58.3.5** `template<typename OptionsType , typename tibasType >  
SpaceOptions< OptionsType, tibasType > & ASApi::SpaceOptions<  
OptionsType, tibasType >::setResultHandler (SharedPtr<  
SpaceResultHandler > handler) [inline]`

Definition at line 52 of file SpaceOptions.h.

## 6.58.4 Member Data Documentation

**6.58.4.1** `template<typename OptionsType, typename tibasType>  
SharedPtr<tibasType> ASApi::SpaceOptions< OptionsType,  
tibasType >::m_options [protected]`

Definition at line 29 of file SpaceOptions.h.

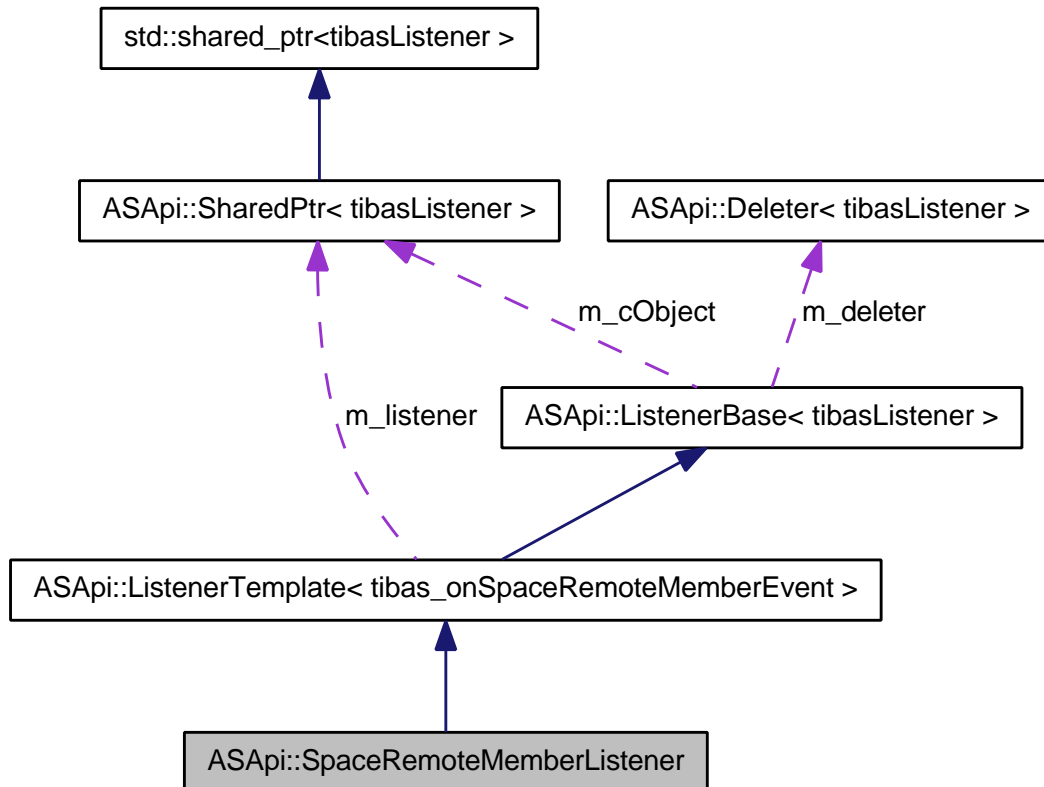
The documentation for this class was generated from the following file:

- [SpaceOptions.h](#)

## 6.59 ASApi::SpaceRemoteMemberListener Class Reference

```
#include <SpaceRemoteMemberListener.h>
```

Inherits [ListenerTemplate< tibas\\_onSpaceRemoteMemberEvent >](#). Collaboration diagram for ASApi::SpaceRemoteMemberListener:



### Public Member Functions

- [SpaceRemoteMemberListener](#) ()
- virtual [~SpaceRemoteMemberListener](#) ()
- virtual void [onJoin](#) (const std::string &spaceName, const [Member](#) &member, const [Member](#) &proxyMember)
- virtual void [onLeave](#) (const std::string &spaceName, const [Member](#) &member, const [Member](#) &proxyMember)

### Static Public Member Functions

- static void [onEvent](#) (tibasSpaceRemoteMemberEvent spaceRemoteMemberEvent, void \*closure)

### 6.59.1 Detailed Description

Definition at line 13 of file SpaceRemoteMemberListener.h.

### 6.59.2 Constructor & Destructor Documentation

#### 6.59.2.1 SpaceRemoteMemberListener::SpaceRemoteMemberListener ()

Definition at line 6 of file SpaceRemoteMemberListener.cpp.

#### 6.59.2.2 SpaceRemoteMemberListener::~SpaceRemoteMemberListener () [virtual]

Definition at line 13 of file SpaceRemoteMemberListener.cpp.

### 6.59.3 Member Function Documentation

#### 6.59.3.1 void SpaceRemoteMemberListener::onEvent (tibasSpaceRemoteMemberEvent *spaceRemoteMemberEvent*, void \* *closure*) [static]

Definition at line 18 of file SpaceRemoteMemberListener.cpp.

#### 6.59.3.2 virtual void ASApi::SpaceRemoteMemberListener::onJoin (const std::string & *spaceName*, const Member & *member*, const Member & *proxyMember*) [inline, virtual]

Definition at line 21 of file SpaceRemoteMemberListener.h.

#### 6.59.3.3 virtual void ASApi::SpaceRemoteMemberListener::onLeave (const std::string & *spaceName*, const Member & *member*, const Member & *proxyMember*) [inline, virtual]

Definition at line 22 of file SpaceRemoteMemberListener.h.

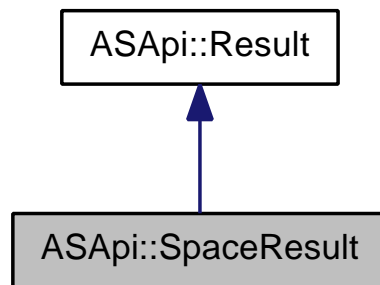
The documentation for this class was generated from the following files:

- [SpaceRemoteMemberListener.h](#)
- [SpaceRemoteMemberListener.cpp](#)

## 6.60 ASApi::SpaceResult Class Reference

```
#include <SpaceResult.h>
```

Inherits [ASApi::Result](#). Collaboration diagram for ASApi::SpaceResult:



### Public Member Functions

- [SpaceResult](#) (const tibasSpaceResult &spaceResult)
- [~SpaceResult](#) ()
- bool [hasError](#) () const
- [Status](#) [getStatus](#) () const
- [Exception](#) [getError](#) () const
- [Tuple](#) [getTuple](#) () const

### 6.60.1 Detailed Description

Definition at line 13 of file SpaceResult.h.

### 6.60.2 Constructor & Destructor Documentation

#### 6.60.2.1 SpaceResult::SpaceResult (const tibasSpaceResult & *spaceResult*)

Definition at line 7 of file SpaceResult.cpp.

#### 6.60.2.2 SpaceResult::~SpaceResult ()

Definition at line 14 of file SpaceResult.cpp.

### 6.60.3 Member Function Documentation

#### 6.60.3.1 Exception SpaceResult::getError () const [virtual]

Implements [ASApi::Result](#).

Definition at line 42 of file SpaceResult.cpp.

#### **6.60.3.2 Status SpaceResult::getStatus () const [virtual]**

Implements [ASApi::Result](#).

Definition at line 34 of file SpaceResult.cpp.

#### **6.60.3.3 Tuple SpaceResult::getTuple () const**

Definition at line 50 of file SpaceResult.cpp.

#### **6.60.3.4 bool SpaceResult::hasError () const [virtual]**

Implements [ASApi::Result](#).

Definition at line 20 of file SpaceResult.cpp.

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

- [SpaceResult.h](#)
- [SpaceResult.cpp](#)



## 6.61 ASApi::SpaceResultHandler Class Reference

```
#include <SpaceResultHandler.h>
```

### Classes

- struct [Closure](#)

### Public Member Functions

- virtual void [onComplete](#) (const [SpaceResult](#) &spaceResult, void \*closure)=0

### Static Public Member Functions

- static void [onCComplete](#) (tibasSpaceResult result, void \*closure)

#### 6.61.1 Detailed Description

Definition at line 10 of file SpaceResultHandler.h.

#### 6.61.2 Member Function Documentation

**6.61.2.1** void SpaceResultHandler::onCComplete (tibasSpaceResult *result*, void \* *closure*) [**static**]

Definition at line 6 of file SpaceResultHandler.cpp.

**6.61.2.2** virtual void ASApi::SpaceResultHandler::onComplete (const SpaceResult & *spaceResult*, void \* *closure*) [**pure virtual**]

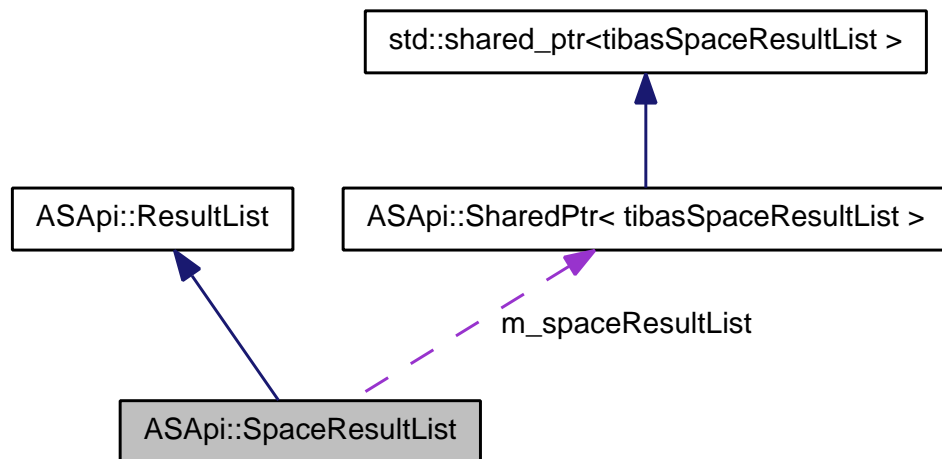
The documentation for this class was generated from the following files:

- [SpaceResultHandler.h](#)
- [SpaceResultHandler.cpp](#)

## 6.62 ASApi::SpaceResultList Class Reference

```
#include <SpaceResultList.h>
```

Inherits [ASApi::ResultList](#). Collaboration diagram for ASApi::SpaceResultList:



### Public Member Functions

- [SpaceResultList](#) (const [SharedPtr](#)< tibasSpaceResultList > &spaceResultList)
- [~SpaceResultList](#) ()
- bool [hasError](#) () const
- [Exception](#) [getError](#) (int index) const
- [Status](#) [getStatus](#) (int index) const
- [Tuple](#) [getTuple](#) (int index) const
- int [size](#) () const
- void [getTuples](#) (std::vector< [Tuple](#) > &tuples) const

### 6.62.1 Detailed Description

Definition at line 14 of file SpaceResultList.h.

### 6.62.2 Constructor & Destructor Documentation

#### 6.62.2.1 SpaceResultList::SpaceResultList (const SharedPtr< tibasSpaceResultList > &spaceResultList) [explicit]

Definition at line 7 of file SpaceResultList.cpp.

### 6.62.2.2 SpaceResultList::~~SpaceResultList ()

Definition at line 14 of file SpaceResultList.cpp.

## 6.62.3 Member Function Documentation

### 6.62.3.1 Exception SpaceResultList::getError (int *index*) const [virtual]

Implements [ASApi::ResultList](#).

Definition at line 34 of file SpaceResultList.cpp.

### 6.62.3.2 Status SpaceResultList::getStatus (int *index*) const [virtual]

Implements [ASApi::ResultList](#).

Definition at line 42 of file SpaceResultList.cpp.

### 6.62.3.3 Tuple SpaceResultList::getTuple (int *index*) const

Definition at line 50 of file SpaceResultList.cpp.

### 6.62.3.4 void SpaceResultList::getTuples (std::vector< Tuple > & *tuples*) const

Definition at line 66 of file SpaceResultList.cpp.

### 6.62.3.5 bool SpaceResultList::hasError () const [virtual]

Implements [ASApi::ResultList](#).

Definition at line 20 of file SpaceResultList.cpp.

### 6.62.3.6 int SpaceResultList::size () const [virtual]

Implements [ASApi::ResultList](#).

Definition at line 58 of file SpaceResultList.cpp.

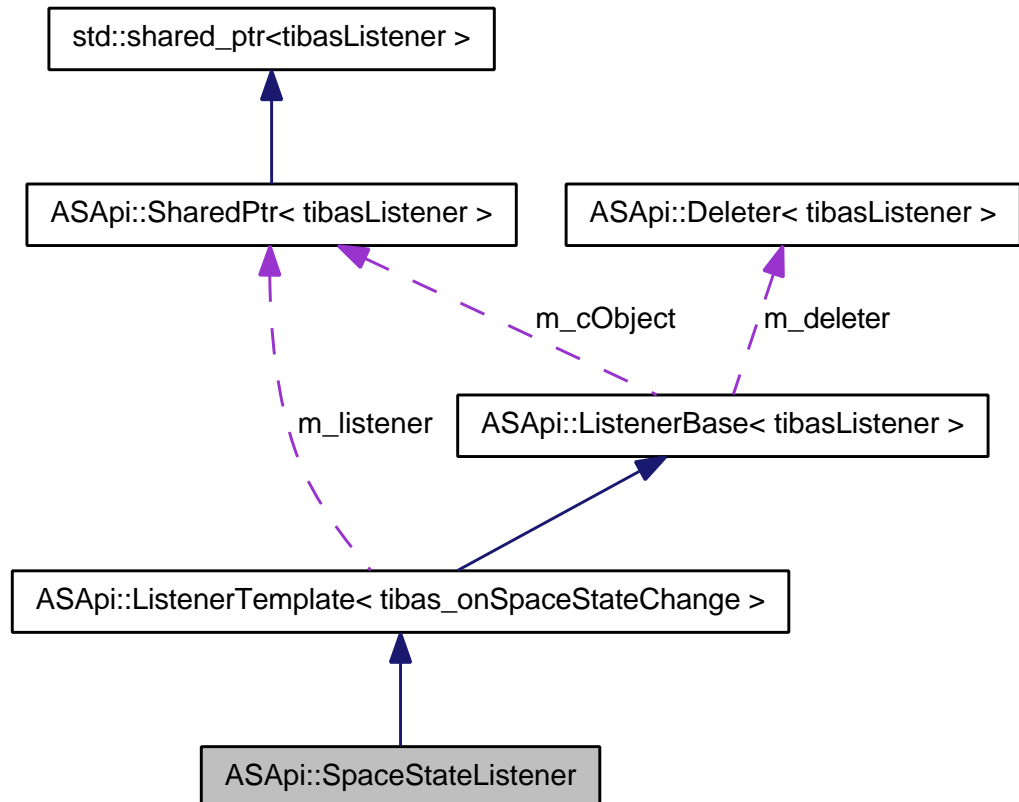
The documentation for this class was generated from the following files:

- [SpaceResultList.h](#)
- [SpaceResultList.cpp](#)

## 6.63 ASApi::SpaceStateListener Class Reference

```
#include <SpaceStateListener.h>
```

Inherits [ListenerTemplate< tibas\\_onSpaceStateChange >](#). Collaboration diagram for ASApi::SpaceStateListener:



### Public Types

- typedef tibas\_spaceState [SpaceState](#)

### Public Member Functions

- [SpaceStateListener](#) ()
- virtual [~SpaceStateListener](#) ()
- virtual void [onStateChange](#) (const std::string &spaceName, const [SpaceState](#) &spaceState)=0

## Static Public Member Functions

- static void [onCStateChage](#) (const char \*spaceName, tibas\_spaceState spaceState, void \*closure)

### 6.63.1 Detailed Description

Definition at line 12 of file SpaceStateListener.h.

### 6.63.2 Member Typedef Documentation

#### 6.63.2.1 typedef tibas\_spaceState ASApi::SpaceStateListener::SpaceState

Definition at line 15 of file SpaceStateListener.h.

### 6.63.3 Constructor & Destructor Documentation

#### 6.63.3.1 SpaceStateListener::SpaceStateListener ()

Definition at line 9 of file SpaceStateListener.cpp.

#### 6.63.3.2 SpaceStateListener::~SpaceStateListener () **[virtual]**

Definition at line 16 of file SpaceStateListener.cpp.

### 6.63.4 Member Function Documentation

#### 6.63.4.1 void SpaceStateListener::onCStateChage (const char \* *spaceName*, tibas\_spaceState *spaceState*, void \* *closure*) **[static]**

Definition at line 22 of file SpaceStateListener.cpp.

#### 6.63.4.2 virtual void ASApi::SpaceStateListener::onStateChange (const std::string & *spaceName*, const SpaceState & *spaceState*) **[pure virtual]**

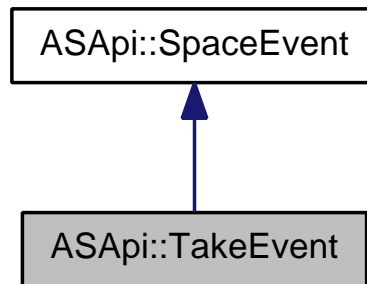
The documentation for this class was generated from the following files:

- [SpaceStateListener.h](#)
- [SpaceStateListener.cpp](#)

## 6.64 ASApi::TakeEvent Class Reference

```
#include <TakeEvent.h>
```

Inherits [ASApi::SpaceEvent](#). Collaboration diagram for ASApi::TakeEvent:



### Public Member Functions

- [TakeEvent](#) (const tibasSpaceEvent &event)
- [~TakeEvent](#) ()

#### 6.64.1 Detailed Description

Definition at line 10 of file TakeEvent.h.

#### 6.64.2 Constructor & Destructor Documentation

##### 6.64.2.1 TakeEvent::TakeEvent (const tibasSpaceEvent & *event*)

Definition at line 8 of file TakeEvent.cpp.

##### 6.64.2.2 TakeEvent::~~TakeEvent ()

Definition at line 14 of file TakeEvent.cpp.

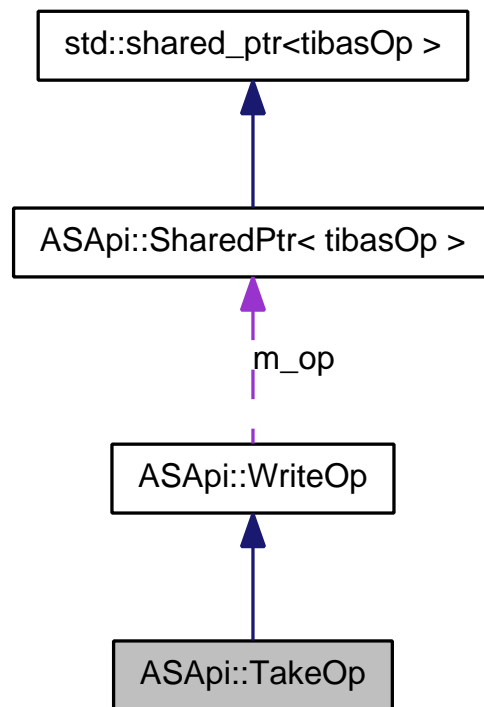
The documentation for this class was generated from the following files:

- [TakeEvent.h](#)
- [TakeEvent.cpp](#)

## 6.65 ASApi::TakeOp Class Reference

```
#include <TakeOp.h>
```

Inherits [ASApi::WriteOp](#). Collaboration diagram for ASApi::TakeOp:



### Public Member Functions

- [TakeOp](#) ([SharedPtr](#)< `tibasOp` > &`op`)

#### 6.65.1 Detailed Description

Definition at line 9 of file `TakeOp.h`.

#### 6.65.2 Constructor & Destructor Documentation

##### 6.65.2.1 TakeOp::TakeOp (SharedPtr< `tibasOp` > &*op*)

Definition at line 6 of file `TakeOp.cpp`.

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

- [TakeOp.h](#)

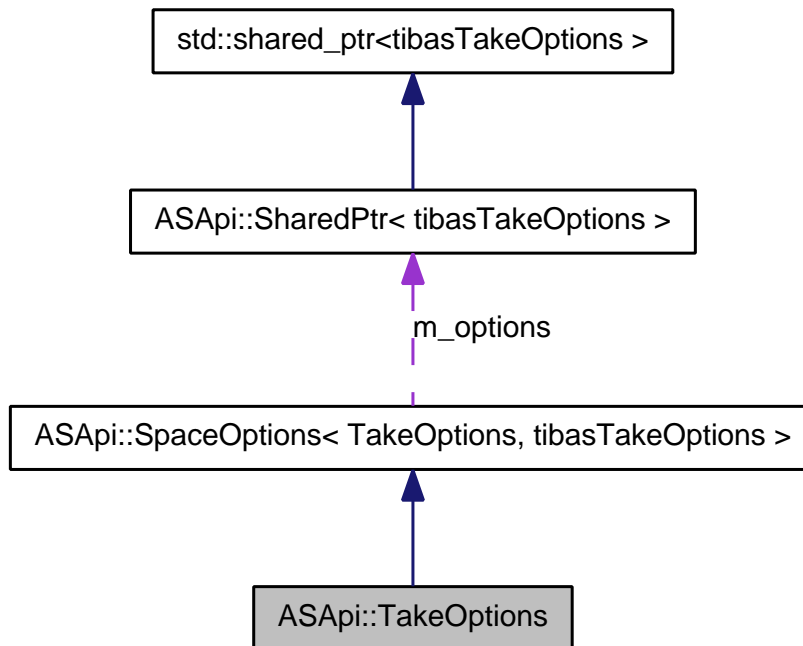
- [TakeOp.cpp](#)



## 6.66 ASApi::TakeOptions Class Reference

```
#include <TakeOptions.h>
```

Inherits [SpaceOptions< TakeOptions, tibasTakeOptions >](#). Collaboration diagram for ASApi::TakeOptions:



### Public Member Functions

- [TakeOptions](#) ()
- [TakeOptions](#) & [setLockWait](#) (long long wait)
- long long [getLockWait](#) () const
- [TakeOptions](#) & [setLock](#) (bool doLock)
- [TakeOptions](#) & [setUnlock](#) (bool doLock)
- bool [isLock](#) () const
- bool [isUnlock](#) () const
- [TakeOptions](#) & [setForget](#) (bool doForget)
- bool [isForget](#) () const
- [TakeOptions](#) & [setRoute](#) (bool doRoute)
- bool [isRoute](#) () const

### 6.66.1 Detailed Description

Definition at line 10 of file TakeOptions.h.

## 6.66.2 Constructor & Destructor Documentation

### 6.66.2.1 TakeOptions::TakeOptions ()

Definition at line 10 of file TakeOptions.cpp.

## 6.66.3 Member Function Documentation

### 6.66.3.1 long long TakeOptions::getLockWait () const

Definition at line 24 of file TakeOptions.cpp.

### 6.66.3.2 bool TakeOptions::isForget () const

Definition at line 82 of file TakeOptions.cpp.

### 6.66.3.3 bool TakeOptions::isLock () const

Definition at line 44 of file TakeOptions.cpp.

### 6.66.3.4 bool TakeOptions::isRoute () const

Definition at line 104 of file TakeOptions.cpp.

### 6.66.3.5 bool TakeOptions::isUnlock () const

Definition at line 60 of file TakeOptions.cpp.

### 6.66.3.6 TakeOptions & TakeOptions::setForget (bool *doForget*)

Definition at line 75 of file TakeOptions.cpp.

### 6.66.3.7 TakeOptions & TakeOptions::setLock (bool *doLock*)

Definition at line 30 of file TakeOptions.cpp.

### 6.66.3.8 TakeOptions & TakeOptions::setLockWait (long long *wait*)

Definition at line 17 of file TakeOptions.cpp.

### 6.66.3.9 TakeOptions & TakeOptions::setRoute (bool *doRoute*)

Definition at line 97 of file TakeOptions.cpp.

**6.66.3.10 TakeOptions & TakeOptions::setUnlock (bool *doLock*)**

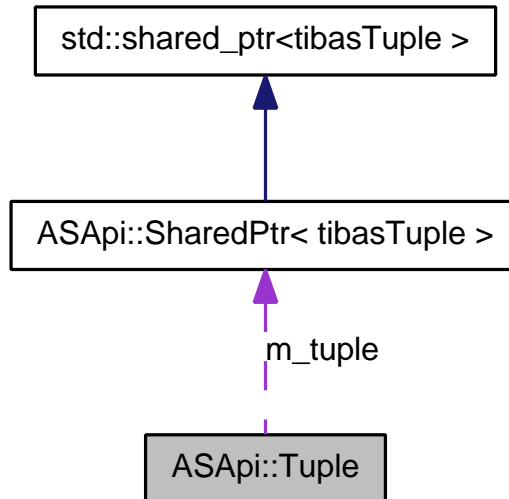
Definition at line 37 of file TakeOptions.cpp.

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

- [TakeOptions.h](#)
- [TakeOptions.cpp](#)

## 6.67 ASApi::Tuple Class Reference

#include <Tuple.h> Collaboration diagram for ASApi::Tuple:



### Public Member Functions

- [Tuple](#) ()
- [Tuple](#) ([SharedPtr](#)< tibasTuple > &tuple)
- [Tuple](#) (const tibasTuple &tuple)
- [~Tuple](#) ()
- tibasTuple & [get](#) ()
- const tibasTuple & [get](#) () const
- bool [getBoolean](#) (const std::string &fieldName) const
- char [getChar](#) (const std::string &fieldName) const
- short [getShort](#) (const std::string &fieldName) const
- int [getInt](#) (const std::string &fieldName) const
- long long [getLong](#) (const std::string &fieldName) const
- float [getFloat](#) (const std::string &fieldName) const
- double [getDouble](#) (const std::string &fieldName) const
- std::string [getString](#) (const std::string &fieldName) const
- struct timeval [getDateTime](#) (const std::string &fieldName) const
- char \* [getBlob](#) (const std::string &fieldName, int &length) const
- bool [isNull](#) (const std::string &fieldName) const
- bool [isNull](#) () const
- [Tuple](#) & [putBoolean](#) (const std::string &fieldName, bool value)
- [Tuple](#) & [putChar](#) (const std::string &fieldName, char value)
- [Tuple](#) & [putShort](#) (const std::string &fieldName, short value)
- [Tuple](#) & [putInt](#) (const std::string &fieldName, int value)

- [Tuple](#) & [putLong](#) (const std::string &fieldName, long long value)
- [Tuple](#) & [putFloat](#) (const std::string &fieldName, float value)
- [Tuple](#) & [putDouble](#) (const std::string &fieldName, double value)
- [Tuple](#) & [putString](#) (const std::string &fieldName, const std::string &value)
- [Tuple](#) & [putDateTime](#) (const std::string &fieldName, const struct timeval &date-Time)
- void [remove](#) (const std::string &fieldName) const
- int [size](#) () const
- void [clear](#) ()
- std::string [toString](#) () const
- void [serialize](#) (char \*\*data, int \*length) const
- void [deserialize](#) (char \*data, int length) const
- bool [exists](#) (const std::string &fieldName) const
- std::vector< std::string > [getFieldNames](#) () const
- [FieldDef::Type](#) [getFieldType](#) (const std::string &fieldName) const
- [Tuple](#) & [putAll](#) (const [Tuple](#) &otherTuple)
- bool [eval](#) (const std::string &filter) const
- bool [operator==](#) (const [Tuple](#) &tuple)

### 6.67.1 Detailed Description

Definition at line 22 of file Tuple.h.

### 6.67.2 Constructor & Destructor Documentation

#### 6.67.2.1 Tuple::Tuple ()

Definition at line 15 of file Tuple.cpp.

#### 6.67.2.2 Tuple::Tuple (SharedPtr< [tibasTuple](#) > & *tuple*)

Definition at line 22 of file Tuple.cpp.

#### 6.67.2.3 Tuple::Tuple (const [tibasTuple](#) & *tuple*)

Definition at line 28 of file Tuple.cpp.

#### 6.67.2.4 Tuple::~~Tuple ()

Definition at line 38 of file Tuple.cpp.

## 6.67.3 Member Function Documentation

### 6.67.3.1 void Tuple::clear ()

Definition at line 248 of file Tuple.cpp.

### 6.67.3.2 void Tuple::deserialize (char \* *data*, int *length*) const

Definition at line 268 of file Tuple.cpp.

### 6.67.3.3 bool Tuple::eval (const std::string & *filter*) const

Definition at line 312 of file Tuple.cpp.

### 6.67.3.4 bool Tuple::exists (const std::string & *fieldName*) const

Definition at line 274 of file Tuple.cpp.

### 6.67.3.5 const tibasTuple & Tuple::get () const

Definition at line 44 of file Tuple.cpp.

### 6.67.3.6 tibasTuple & Tuple::get ()

Definition at line 50 of file Tuple.cpp.

### 6.67.3.7 char \* Tuple::getBlob (const std::string & *fieldName*, int & *length*) const

Definition at line 137 of file Tuple.cpp.

### 6.67.3.8 bool Tuple::getBoolean (const std::string & *fieldName*) const

Definition at line 56 of file Tuple.cpp.

### 6.67.3.9 char Tuple::getChar (const std::string & *fieldName*) const

Definition at line 71 of file Tuple.cpp.

### 6.67.3.10 struct timeval Tuple::getDateTime (const std::string & *fieldName*) const [read]

Definition at line 126 of file Tuple.cpp.

**6.67.3.11 double Tuple::getDouble (const std::string & *fieldName*) const**

Definition at line 111 of file Tuple.cpp.

**6.67.3.12 vector< string > Tuple::getFieldNames () const**

Definition at line 289 of file Tuple.cpp.

**6.67.3.13 FieldDef::Type Tuple::getFieldType (const std::string & *fieldName*) const**

Definition at line 297 of file Tuple.cpp.

**6.67.3.14 float Tuple::getFloat (const std::string & *fieldName*) const**

Definition at line 103 of file Tuple.cpp.

**6.67.3.15 int Tuple::getInt (const std::string & *fieldName*) const**

Definition at line 87 of file Tuple.cpp.

**6.67.3.16 long long Tuple::getLong (const std::string & *fieldName*) const**

Definition at line 95 of file Tuple.cpp.

**6.67.3.17 short Tuple::getShort (const std::string & *fieldName*) const**

Definition at line 79 of file Tuple.cpp.

**6.67.3.18 string Tuple::getString (const std::string & *fieldName*) const**

Definition at line 119 of file Tuple.cpp.

**6.67.3.19 bool Tuple::isNull () const**

Definition at line 160 of file Tuple.cpp.

**6.67.3.20 bool Tuple::isNull (const std::string & *fieldName*) const**

Definition at line 145 of file Tuple.cpp.

**6.67.3.21** `bool Tuple::operator==(const Tuple & tuple)`

Definition at line 328 of file Tuple.cpp.

**6.67.3.22** `Tuple & Tuple::putAll(const Tuple & otherTuple)`

Definition at line 305 of file Tuple.cpp.

**6.67.3.23** `Tuple & Tuple::putBoolean(const std::string & fieldName, bool value)`

Definition at line 166 of file Tuple.cpp.

**6.67.3.24** `Tuple & Tuple::putChar(const std::string & fieldName, char value)`

Definition at line 173 of file Tuple.cpp.

**6.67.3.25** `Tuple & Tuple::putDateTime(const std::string & fieldName, const struct timeval & dateTime)`

Definition at line 223 of file Tuple.cpp.

**6.67.3.26** `Tuple & Tuple::putDouble(const std::string & fieldName, double value)`

Definition at line 208 of file Tuple.cpp.

**6.67.3.27** `Tuple & Tuple::putFloat(const std::string & fieldName, float value)`

Definition at line 201 of file Tuple.cpp.

**6.67.3.28** `Tuple & Tuple::putInt(const std::string & fieldName, int value)`

Definition at line 187 of file Tuple.cpp.

**6.67.3.29** `Tuple & Tuple::putLong(const std::string & fieldName, long long value)`

Definition at line 194 of file Tuple.cpp.

**6.67.3.30** `Tuple & Tuple::putShort(const std::string & fieldName, short value)`

Definition at line 180 of file Tuple.cpp.



**6.67.3.31 Tuple & Tuple::putString (const std::string & *fieldName*, const std::string & *value*)**

Definition at line 215 of file Tuple.cpp.

**6.67.3.32 void Tuple::remove (const std::string & *fieldName*) const**

Definition at line 234 of file Tuple.cpp.

**6.67.3.33 void Tuple::serialize (char \*\* *data*, int \* *length*) const**

Definition at line 262 of file Tuple.cpp.

**6.67.3.34 int Tuple::size () const**

Definition at line 240 of file Tuple.cpp.

**6.67.3.35 string Tuple::toString () const**

Definition at line 254 of file Tuple.cpp.

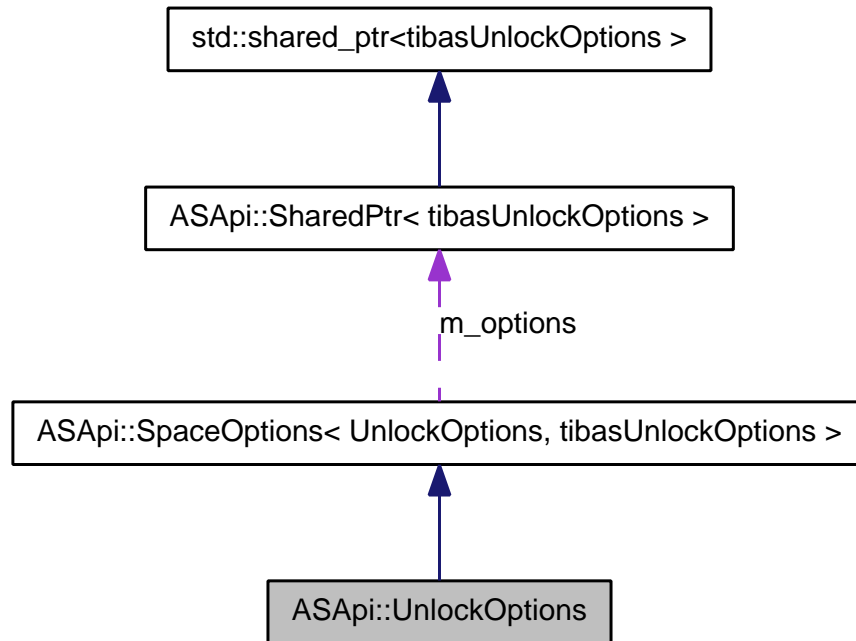
The documentation for this class was generated from the following files:

- [Tuple.h](#)
- [Tuple.cpp](#)

## 6.68 ASApi::UnlockOptions Class Reference

```
#include <UnlockOptions.h>
```

Inherits [SpaceOptions< UnlockOptions, tibasUnlockOptions >](#). Collaboration diagram for ASApi::UnlockOptions:



### Public Member Functions

- [UnlockOptions](#) ()
- [UnlockOptions](#) & [setLockWait](#) (long long wait)
- long long [getLockWait](#) () const

### 6.68.1 Detailed Description

Definition at line 10 of file `UnlockOptions.h`.

### 6.68.2 Constructor & Destructor Documentation

#### 6.68.2.1 UnlockOptions::UnlockOptions ()

Definition at line 10 of file `UnlockOptions.cpp`.

### 6.68.3 Member Function Documentation

#### 6.68.3.1 long long UnlockOptions::getLockWait () const

Definition at line 24 of file UnlockOptions.cpp.

#### 6.68.3.2 UnlockOptions & UnlockOptions::setLockWait (long long *wait*)

Definition at line 17 of file UnlockOptions.cpp.

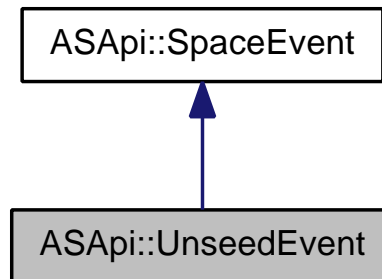
The documentation for this class was generated from the following files:

- [UnlockOptions.h](#)
- [UnlockOptions.cpp](#)

## 6.69 ASApi::UnseedEvent Class Reference

```
#include <UnseedEvent.h>
```

Inherits [ASApi::SpaceEvent](#). Collaboration diagram for ASApi::UnseedEvent:



### Public Member Functions

- [UnseedEvent](#) (const tibasSpaceEvent &event)
- [~UnseedEvent](#) ()

#### 6.69.1 Detailed Description

Definition at line 10 of file UnseedEvent.h.

#### 6.69.2 Constructor & Destructor Documentation

##### 6.69.2.1 UnseedEvent::UnseedEvent (const tibasSpaceEvent & *event*)

Definition at line 8 of file UnseedEvent.cpp.

##### 6.69.2.2 UnseedEvent::~~UnseedEvent ()

Definition at line 14 of file UnseedEvent.cpp.

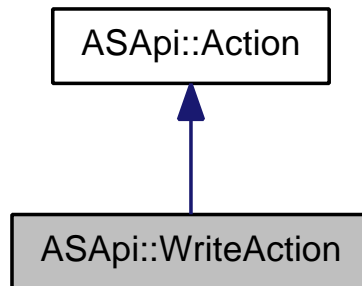
The documentation for this class was generated from the following files:

- [UnseedEvent.h](#)
- [UnseedEvent.cpp](#)

## 6.70 ASApi::WriteAction Class Reference

```
#include <WriteAction.h>
```

Inherits [ASApi::Action](#). Collaboration diagram for ASApi::WriteAction:



### Public Member Functions

- [WriteAction](#) (const tibasAction &action)
- std::vector< [WriteOp](#) > [getOps](#) () const

### 6.70.1 Detailed Description

Definition at line 12 of file WriteAction.h.

### 6.70.2 Constructor & Destructor Documentation

#### 6.70.2.1 WriteAction::WriteAction (const tibasAction & *action*)

Definition at line 9 of file WriteAction.cpp.

### 6.70.3 Member Function Documentation

#### 6.70.3.1 vector< WriteOp > WriteAction::getOps () const

Definition at line 16 of file WriteAction.cpp.

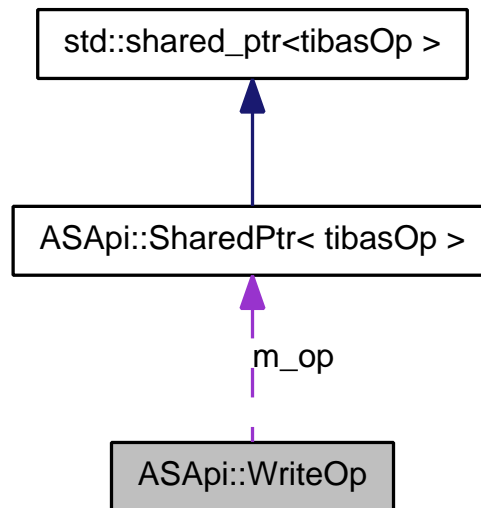
The documentation for this class was generated from the following files:

- [WriteAction.h](#)
- [WriteAction.cpp](#)

## 6.71 ASApi::WriteOp Class Reference

```
#include <WriteOp.h>
```

Inherited by [ASApi::PutOp](#), and [ASApi::TakeOp](#). Collaboration diagram for AS-Api::WriteOp:



### Public Types

- typedef tibas\_opType [Type](#)

### Public Member Functions

- [WriteOp](#) ([SharedPtr](#)< tibasOp > &op)
- [~WriteOp](#) ()
- [Type](#) [getType](#) () const
- [Tuple](#) [getTuple](#) () const

### Protected Attributes

- [SharedPtr](#)< tibasOp > [m\\_op](#)

#### 6.71.1 Detailed Description

Definition at line 11 of file `WriteOp.h`.

## 6.71.2 Member Typedef Documentation

### 6.71.2.1 typedef tibas\_opType ASApi::WriteOp::Type

Definition at line 14 of file WriteOp.h.

## 6.71.3 Constructor & Destructor Documentation

### 6.71.3.1 WriteOp::WriteOp (SharedPtr< tibasOp > & op)

Definition at line 10 of file WriteOp.cpp.

### 6.71.3.2 WriteOp::~WriteOp ()

Definition at line 17 of file WriteOp.cpp.

## 6.71.4 Member Function Documentation

### 6.71.4.1 Tuple WriteOp::getTuple () const

Definition at line 30 of file WriteOp.cpp.

### 6.71.4.2 WriteOp::Type WriteOp::getType () const

Definition at line 22 of file WriteOp.cpp.

## 6.71.5 Member Data Documentation

### 6.71.5.1 SharedPtr<tibasOp> ASApi::WriteOp::m\_op [protected]

Definition at line 22 of file WriteOp.h.

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

- [WriteOp.h](#)
- [WriteOp.cpp](#)





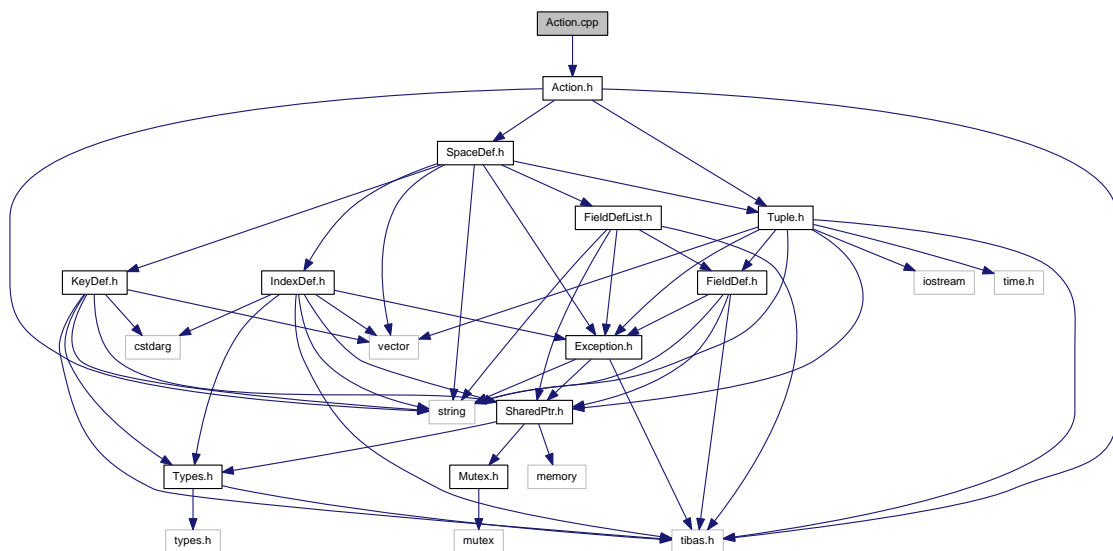
# Chapter 7

## File Documentation

### 7.1 Action.cpp File Reference

```
#include "Action.h"
```

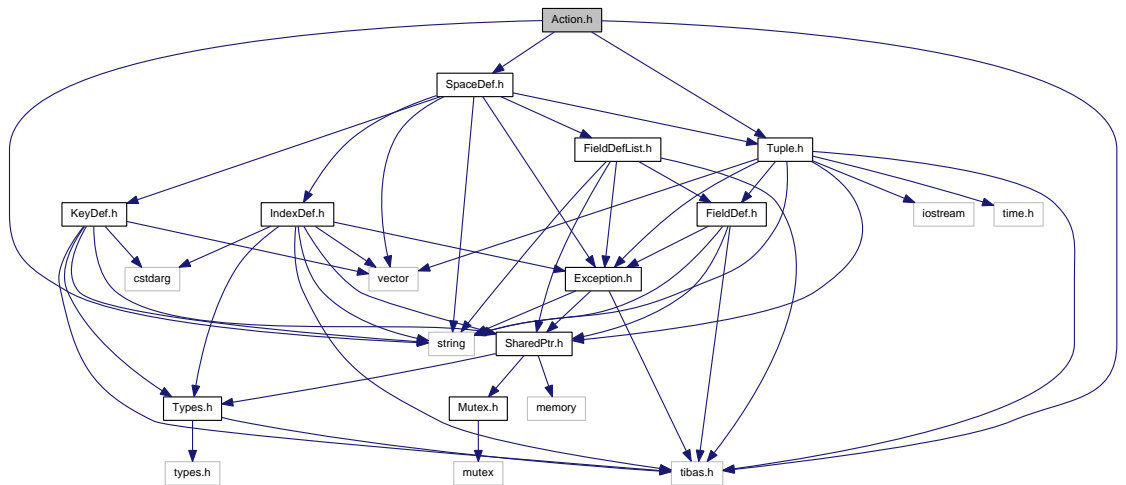
Include dependency graph for Action.cpp:



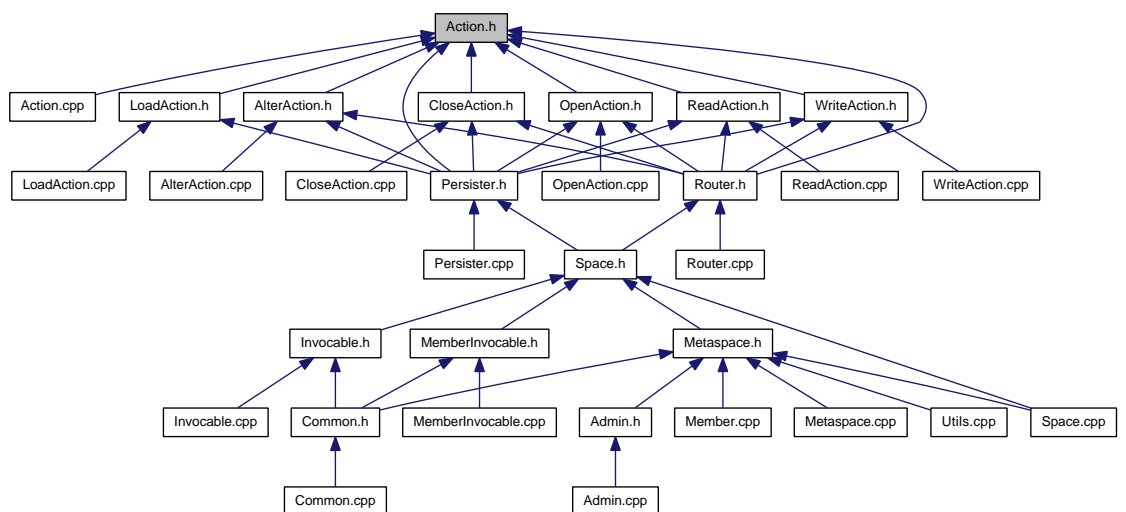
## 7.2 Action.h File Reference

```
#include <string>
#include "tibas.h"
#include "Tuple.h"
#include "SpaceDef.h"
```

Include dependency graph for Action.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::Action](#)

## Namespaces

- namespace [ASApi](#)

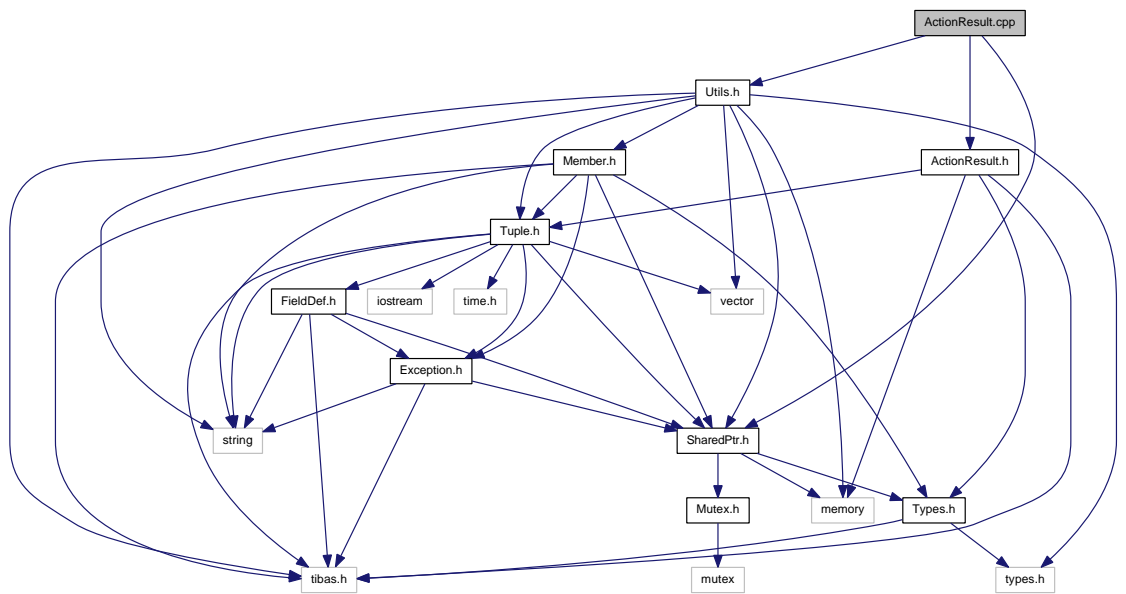
### 7.3 ActionResult.cpp File Reference

```
#include "ActionResult.h"
```

```
#include "Utils.h"
```

```
#include "SharedPtr.h"
```

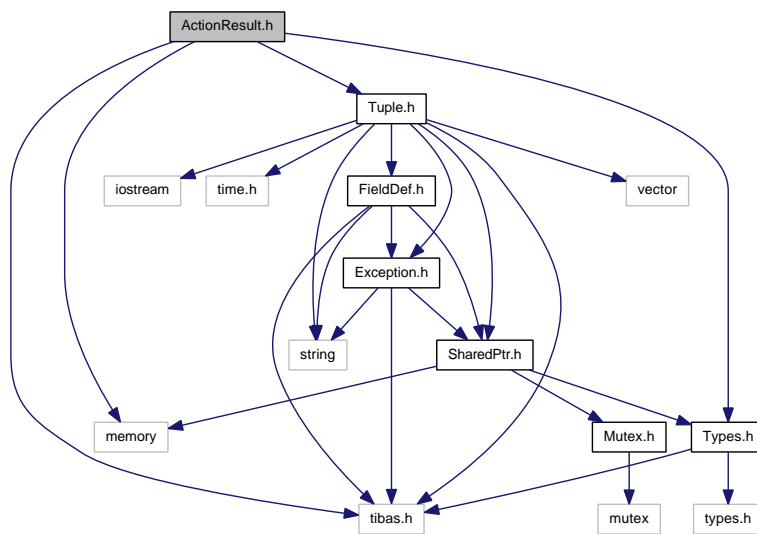
Include dependency graph for ActionResult.cpp:



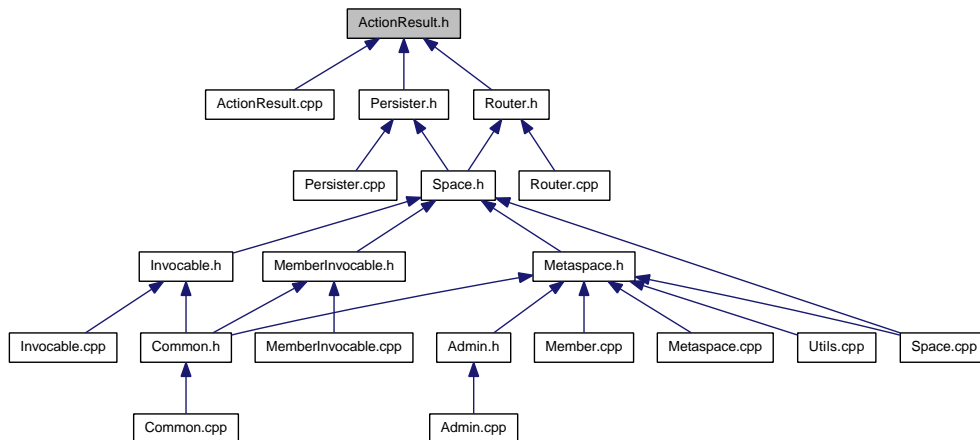
## 7.4 ActionResult.h File Reference

```
#include <memory>
#include "tibas.h"
#include "Tuple.h"
#include "Types.h"
```

Include dependency graph for ActionResult.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::ActionResult](#)

## Namespaces

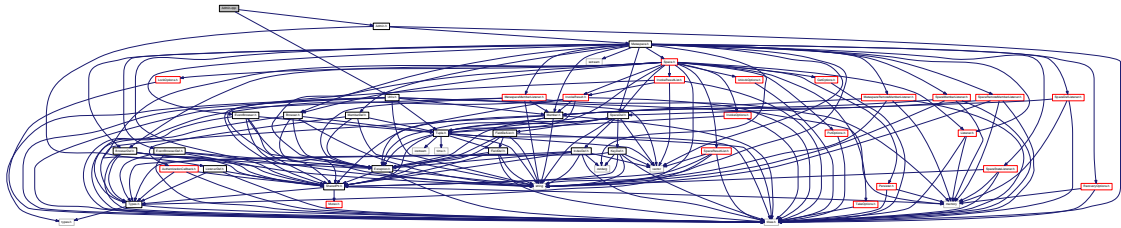
- namespace [ASApi](#)

## 7.5 Admin.cpp File Reference

```
#include "Admin.h"
```

```
#include "Utils.h"
```

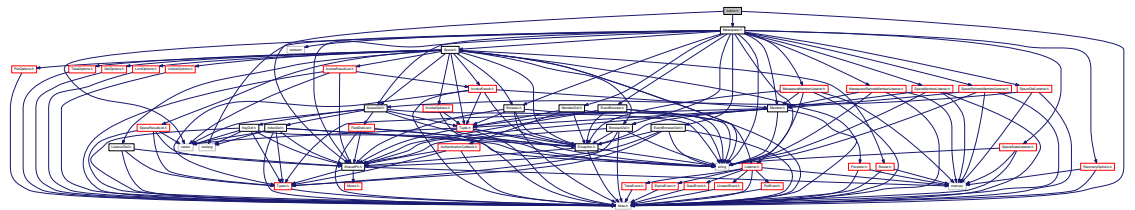
Include dependency graph for Admin.cpp:



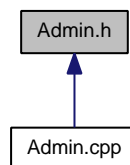
## 7.6 Admin.h File Reference

```
#include "tibas.h"  
#include "Metaspace.h"  
#include "SharedPtr.h"
```

Include dependency graph for Admin.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::Admin](#)

### Namespaces

- namespace [ASApi](#)

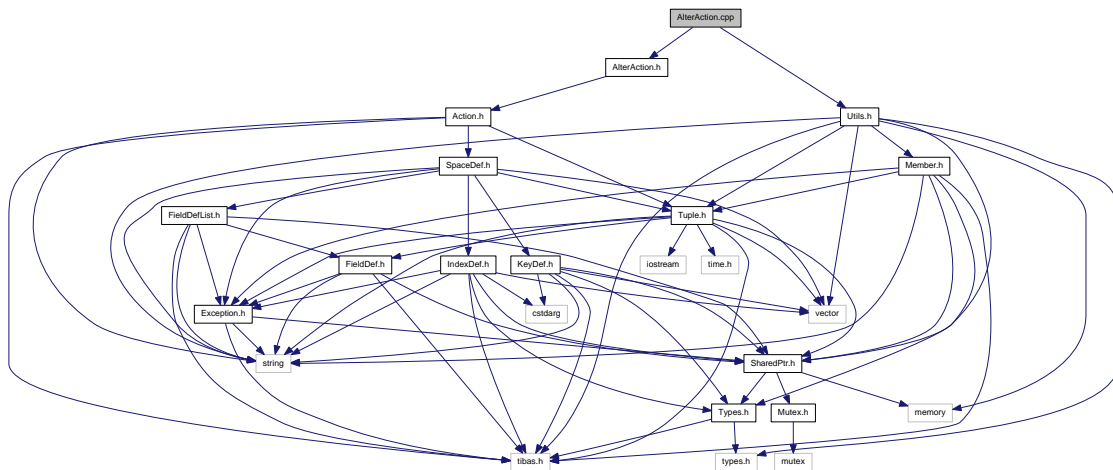


## 7.7 AlterAction.cpp File Reference

```
#include "AlterAction.h"
```

```
#include "Utils.h"
```

Include dependency graph for AlterAction.cpp:



```
#include "Action.h"
```

```

graph BT
    AlterAction.h[AlterAction.h] --> AlterAction.cpp[AlterAction.cpp]
    AlterAction.h --> Persister.h[Persister.h]
    AlterAction.h --> Router.h[Router.h]
    Persister.h --> Persister.cpp[Persister.cpp]
    Persister.h --> Space.h[Space.h]
    Router.h --> Space.h
    Router.h --> Router.cpp[Router.cpp]
    Space.h --> Invocable.h[Invocable.h]
    Space.h --> MemberInvocable.h[MemberInvocable.h]
    Space.h --> Metaspace.h[Metaspace.h]
    Invocable.h --> Invocable.cpp[Invocable.cpp]
    Invocable.h --> Common.h[Common.h]
    MemberInvocable.h --> Common.h
    MemberInvocable.h --> MemberInvocable.cpp[MemberInvocable.cpp]
    Metaspace.h --> Admin.h[Admin.h]
    Metaspace.h --> Member.cpp[Member.cpp]
    Metaspace.h --> Metaspace.cpp[Metaspace.cpp]
    Metaspace.h --> Utils.cpp[Utils.cpp]
    Metaspace.h --> Space.cpp[Space.cpp]
    Common.h --> Common.cpp[Common.cpp]
    Admin.h --> Admin.cpp[Admin.cpp]
  
```

- class `ASApi::AlterAction`

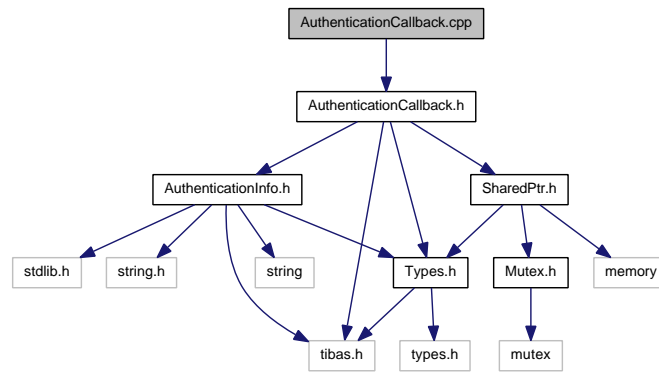
## Namespaces

- namespace [ASApi](#)

## 7.9 AuthenticationCallback.cpp File Reference

```
#include "AuthenticationCallback.h"
```

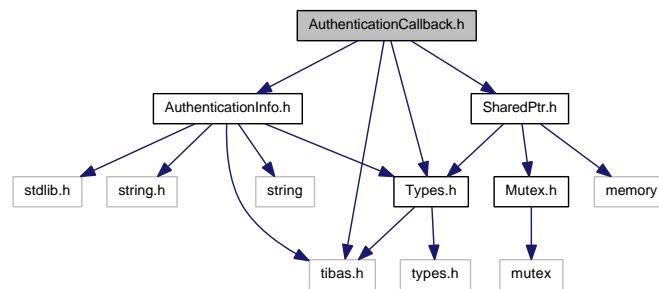
Include dependency graph for AuthenticationCallback.cpp:



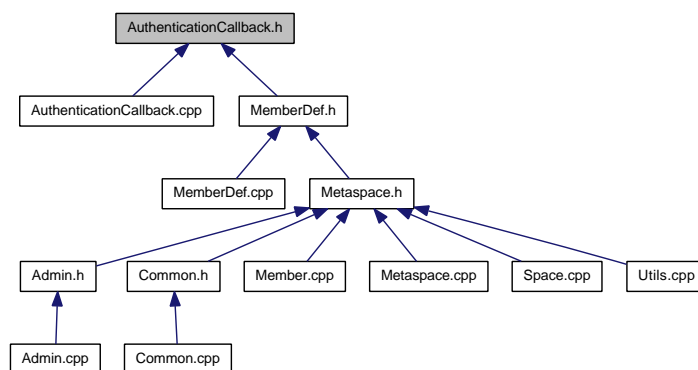
## 7.10 AuthenticationCallback.h File Reference

```
#include "SharedPtr.h"
#include "tibas.h"
#include "AuthenticationInfo.h"
#include "Types.h"
```

Include dependency graph for AuthenticationCallback.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::AuthenticationCallback](#)
- struct [ASApi::AuthenticationCallback::CClosure](#)

### Namespaces

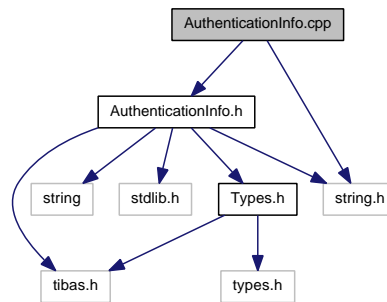
- namespace [ASApi](#)

## 7.11 AuthenticationInfo.cpp File Reference

```
#include "AuthenticationInfo.h"
```

```
#include <string.h>
```

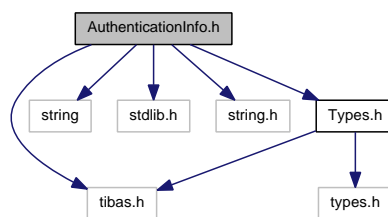
Include dependency graph for AuthenticationInfo.cpp:



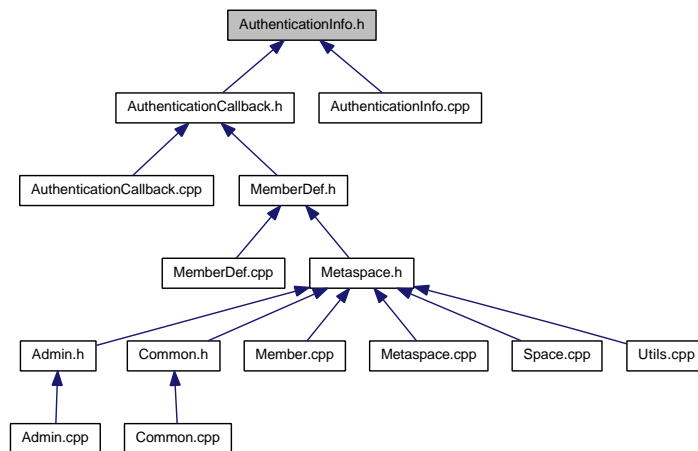
## 7.12 AuthenticationInfo.h File Reference

```
#include "tibas.h"
#include <string>
#include <stdlib.h>
#include <string.h>
#include "Types.h"
```

Include dependency graph for AuthenticationInfo.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::AuthenticationInfo](#)

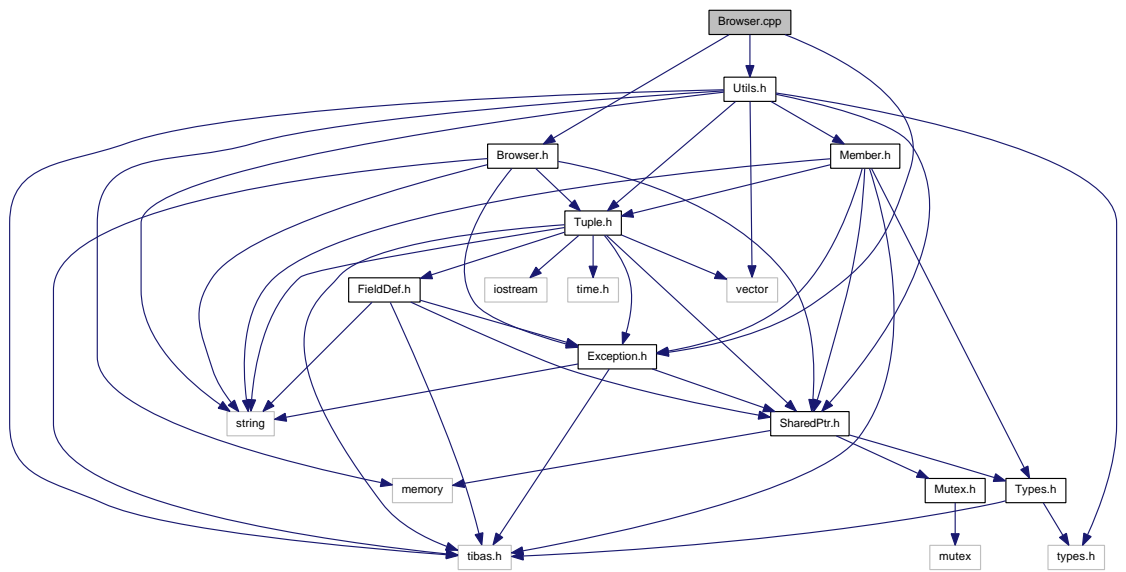
### Namespaces

- namespace [ASApi](#)

## 7.13 Browser.cpp File Reference

```
#include "Browser.h"
#include "Exception.h"
#include "Utils.h"
```

Include dependency graph for Browser.cpp:

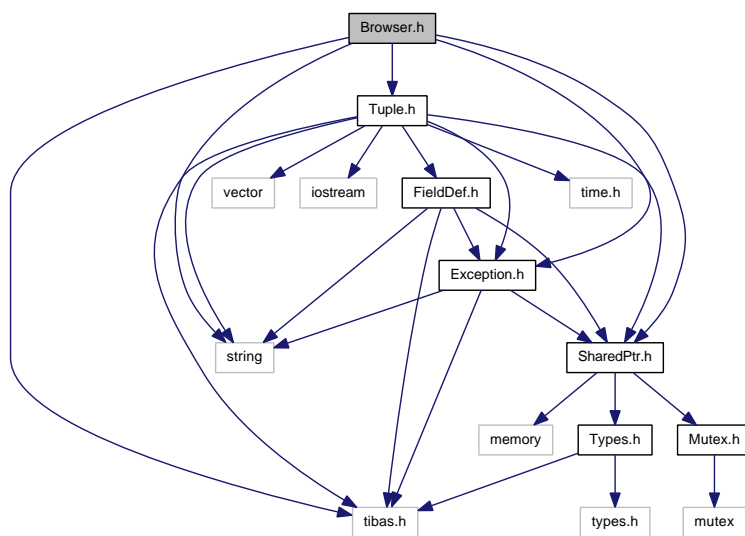




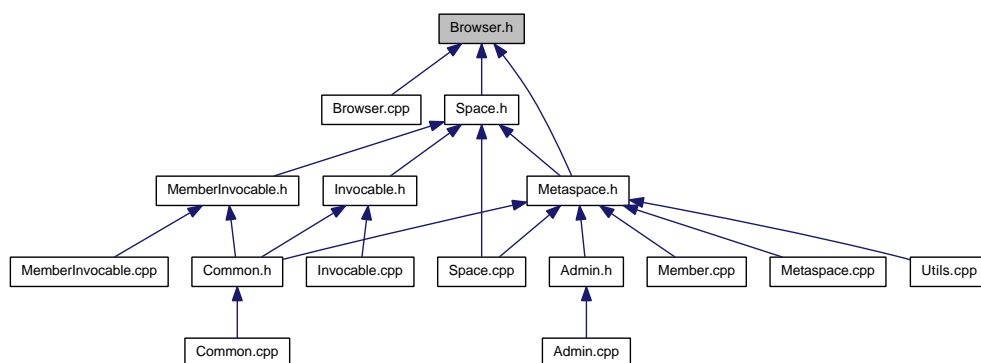
## 7.14 Browser.h File Reference

```
#include <string>
#include "SharedPtr.h"
#include "tibas.h"
#include "Exception.h"
#include "Tuple.h"
```

Include dependency graph for Browser.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::Browser](#)

## Namespaces

- namespace [ASApi](#)

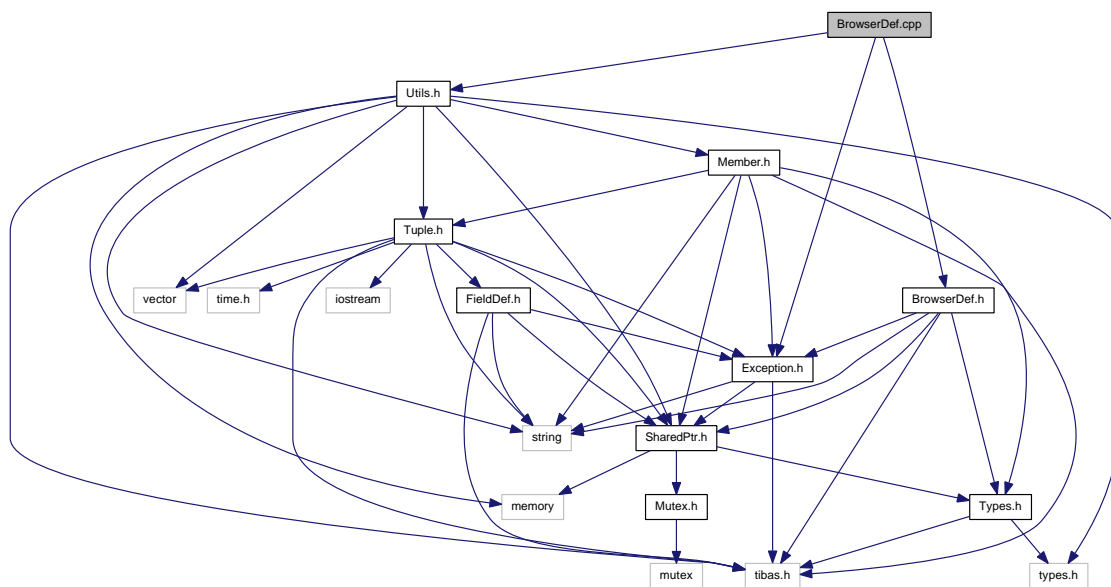
## 7.15 BrowserDef.cpp File Reference

```
#include "BrowserDef.h"
```

```
#include "Exception.h"
```

```
#include "Utils.h"
```

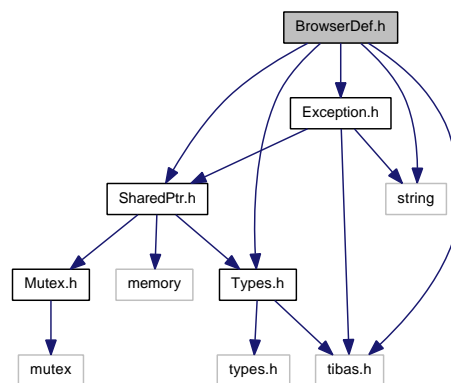
Include dependency graph for BrowserDef.cpp:



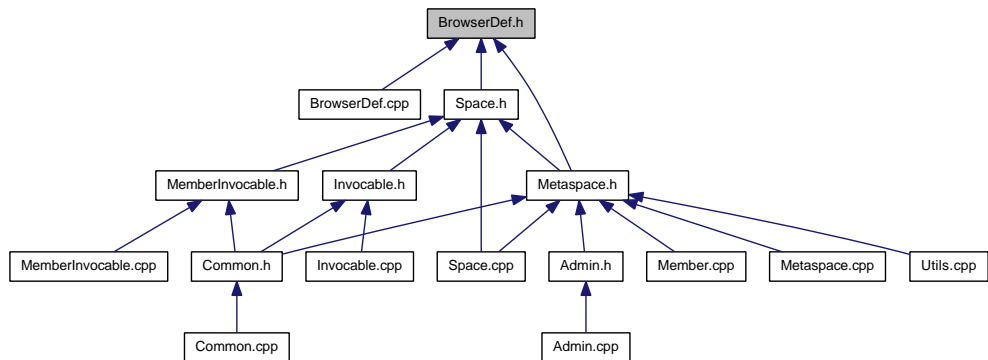
## 7.16 BrowserDef.h File Reference

```
#include <string>
#include "SharedPtr.h"
#include "tibas.h"
#include "Exception.h"
#include "Types.h"
```

Include dependency graph for BrowserDef.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::BrowserDef](#)

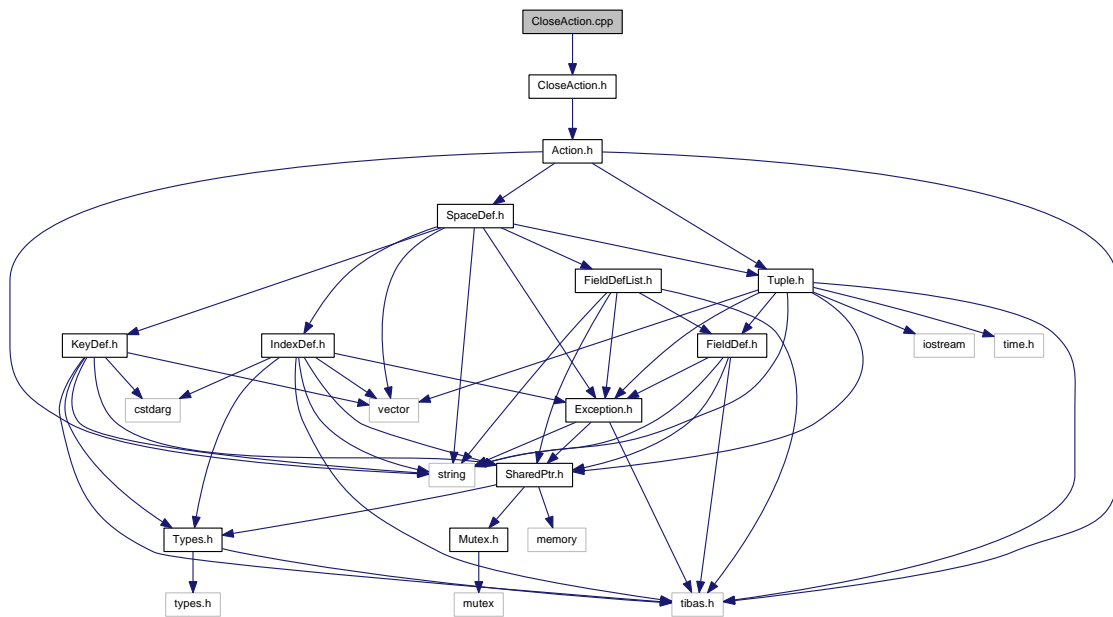
### Namespaces

- namespace [ASApi](#)

## 7.17 CloseAction.cpp File Reference

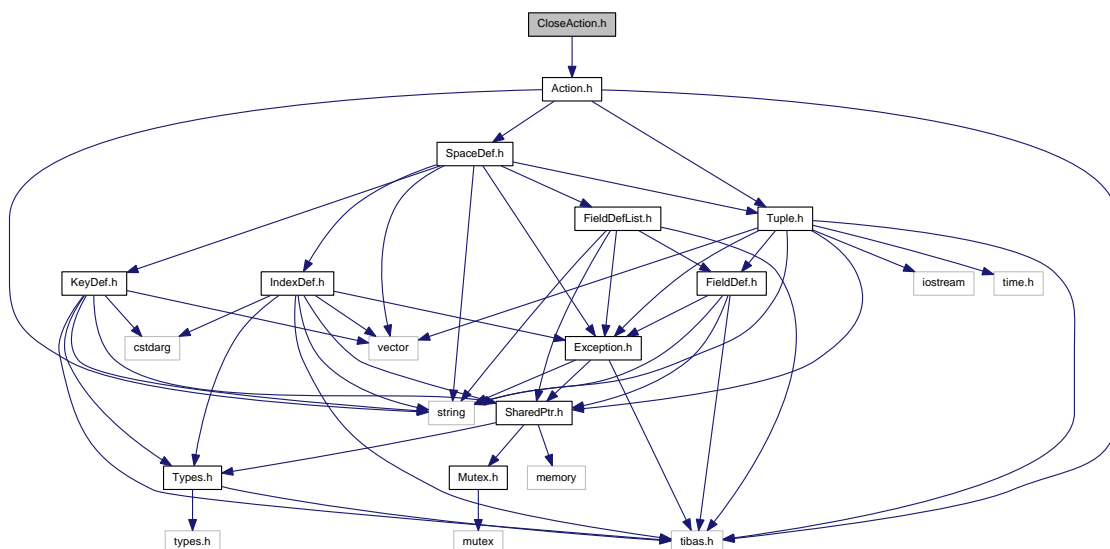
```
#include "CloseAction.h"
```

Include dependency graph for CloseAction.cpp:

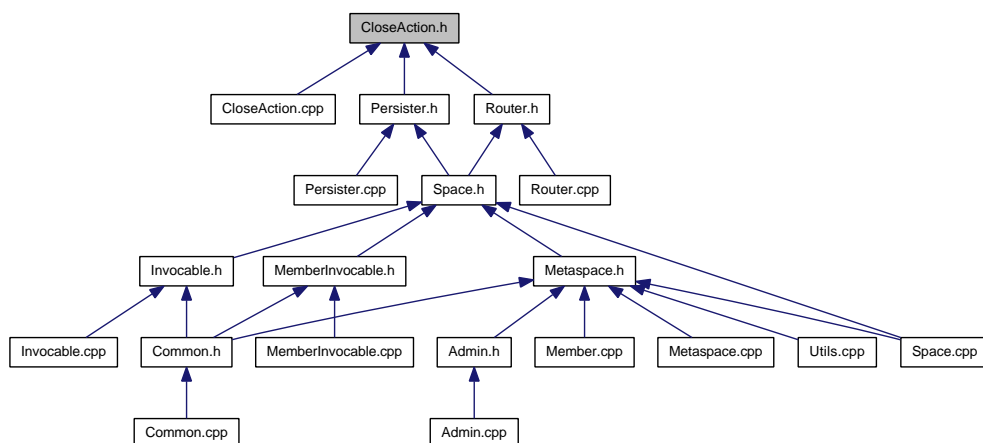


```
#include "Action.h"
```

Include dependency graph for CloseAction.h:



This graph shows which files directly or indirectly include this file:



- class `ASApi::CloseAction`

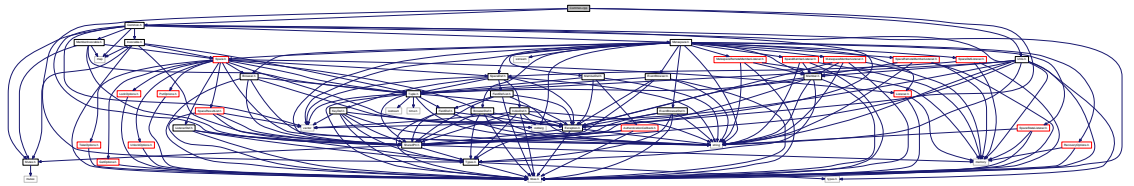
## Namespaces

- namespace [ASApi](#)

## 7.19 Common.cpp File Reference

```
#include "Common.h"  
#include "Exception.h"  
#include "Utils.h"  
#include "Types.h"
```

Include dependency graph for Common.cpp:

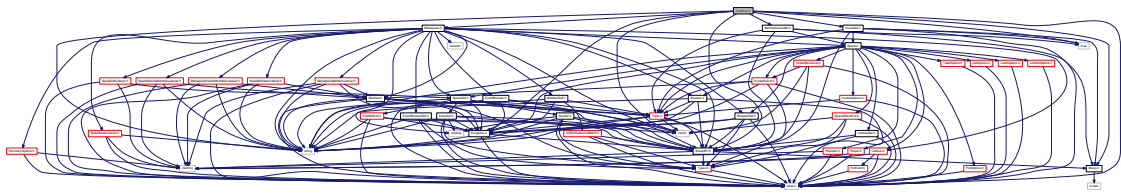




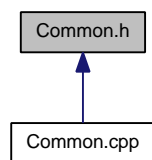
## 7.20 Common.h File Reference

```
#include <string>
#include <vector>
#include <map>
#include "tibas.h"
#include "Exception.h"
#include "Metaspace.h"
#include "Invocable.h"
#include "MemberInvocable.h"
#include "Mutex.h"
#include "SharedPtr.h"
```

Include dependency graph for Common.h:



This graph shows which files directly or indirectly include this file:



### Namespaces

- namespace [ASApi](#)
- namespace [ASApi::Common](#)

### Functions

- void AS\_CPP\_API [ASApi::Common::setLogLevel](#) (const LogLevel &logLevel)
- void AS\_CPP\_API [ASApi::Common::setSecurityLogLevel](#) (const LogLevel &logLevel)
- LogLevel AS\_CPP\_API [ASApi::Common::getLogLevel](#) ()

- LogLevel AS\_CPP\_API [ASApi::Common::getSecurityLogLevel](#) ()
- void AS\_CPP\_API [ASApi::Common::setFileLogging](#) (const LogLevel &logLevel)
- void AS\_CPP\_API [ASApi::Common::setFileLogging](#) (const std::string &fileName, const LogLevel &logLevel)
- void AS\_CPP\_API [ASApi::Common::setFileLogging](#) (const std::string &logDir, const std::string &fileName, const LogLevel &logLevel)
- void AS\_CPP\_API [ASApi::Common::setEventLogging](#) (const std::string &fileName, const LogLevel &logLevel)
- Metaspaces AS\_CPP\_API [ASApi::Common::getMetaspaces](#) (const std::string &metaspacesName)
- Metaspaces AS\_CPP\_API [ASApi::Common::connectMetaspaces](#) (const std::string &metaspacesName, const MemberDef &memberDef)
- std::vector< std::string > AS\_CPP\_API [ASApi::Common::getMetaspacesNames](#) ()
- void AS\_CPP\_API [ASApi::Common::setInvocable](#) (const std::string &alias, Invocable::Creator creator)
- void AS\_CPP\_API [ASApi::Common::setInvocable](#) (const std::string &alias, SharedPtr< Invocable > invocable)
- void AS\_CPP\_API [ASApi::Common::setMemberInvocable](#) (const std::string &alias, MemberInvocable::Creator creator)
- void AS\_CPP\_API [ASApi::Common::setMemberInvocable](#) (const std::string &alias, SharedPtr< MemberInvocable > memberInvocable)
- std::vector< std::string > AS\_CPP\_API [ASApi::Common::getInvocableAliases](#) ()
- std::vector< std::string > AS\_CPP\_API [ASApi::Common::getMemberInvocableAliases](#) ()
- void AS\_CPP\_API [ASApi::Common::removeInvocable](#) (const std::string &alias)
- void AS\_CPP\_API [ASApi::Common::removeMemberInvocable](#) (const std::string &alias)

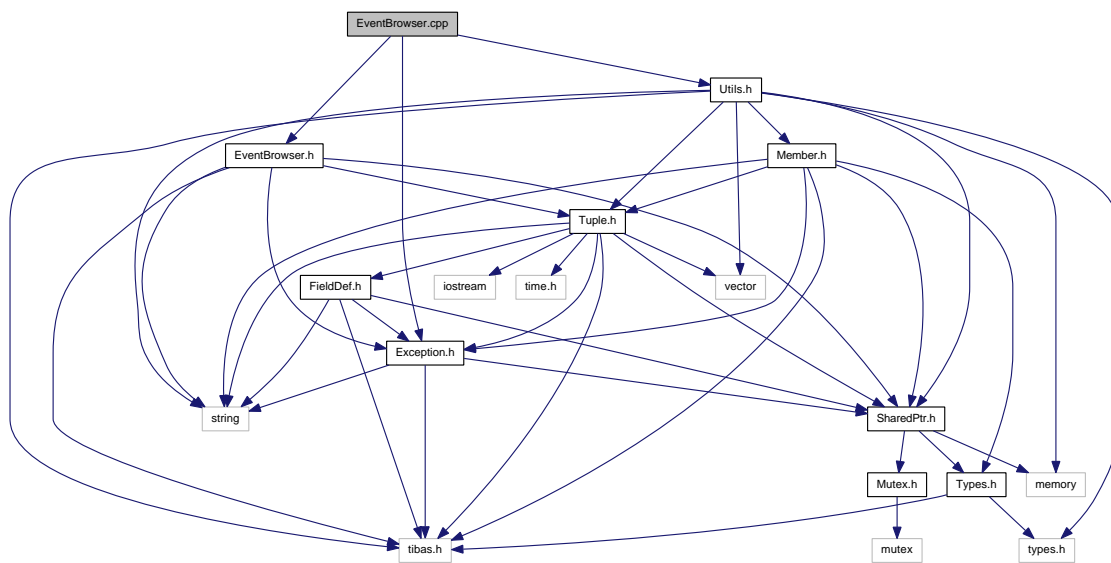
## 7.21 EventBrowser.cpp File Reference

```
#include "EventBrowser.h"
```

```
#include "Exception.h"
```

```
#include "Utils.h"
```

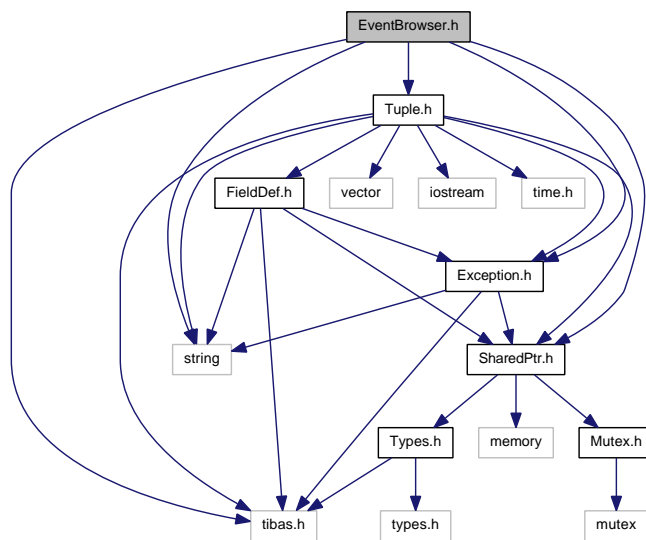
Include dependency graph for EventBrowser.cpp:



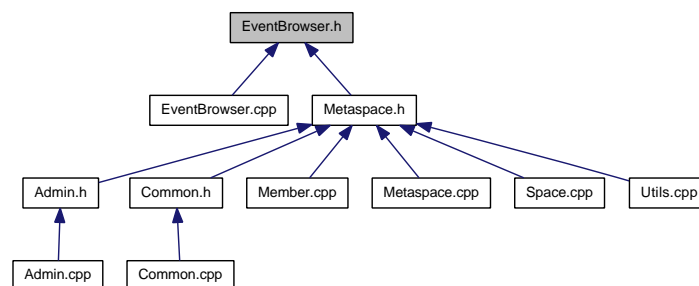
## 7.22 EventBrowser.h File Reference

```
#include <string>
#include "tibas.h"
#include "Exception.h"
#include "Tuple.h"
#include "SharedPtr.h"
```

Include dependency graph for EventBrowser.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::EventBrowser](#)

## Namespaces

- namespace [ASApi](#)

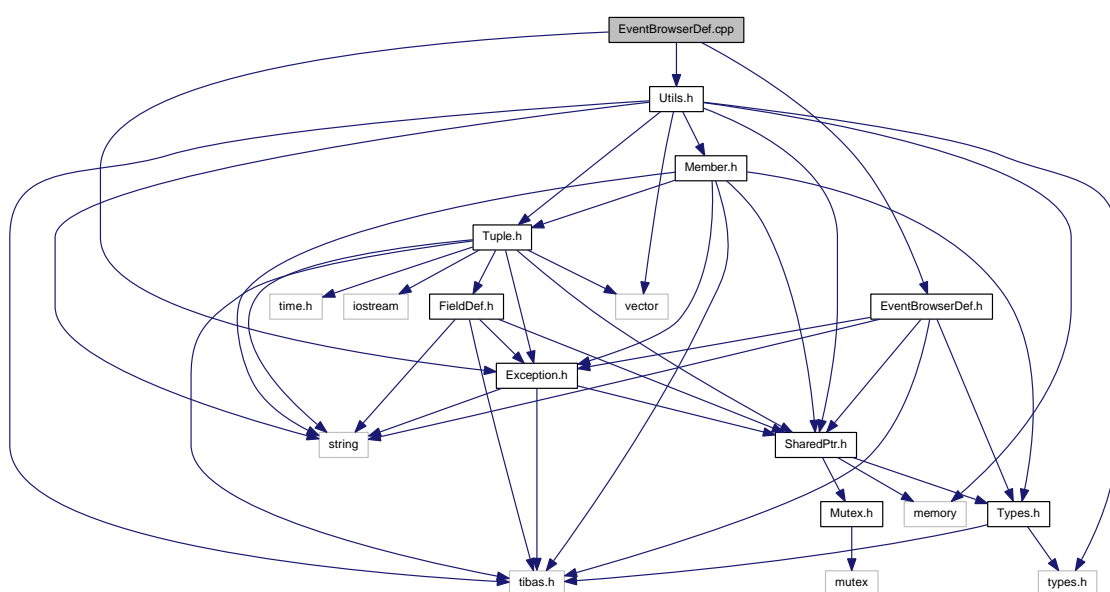
## 7.23 EventBrowserDef.cpp File Reference

```
#include "EventBrowserDef.h"
```

```
#include "Exception.h"
```

```
#include "Utils.h"
```

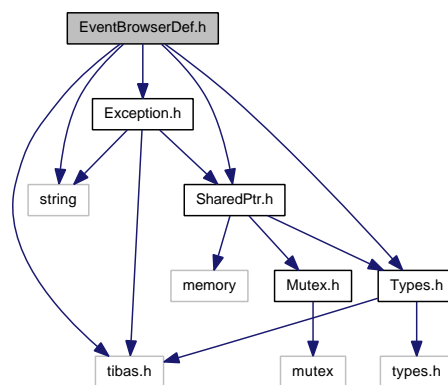
Include dependency graph for EventBrowserDef.cpp:



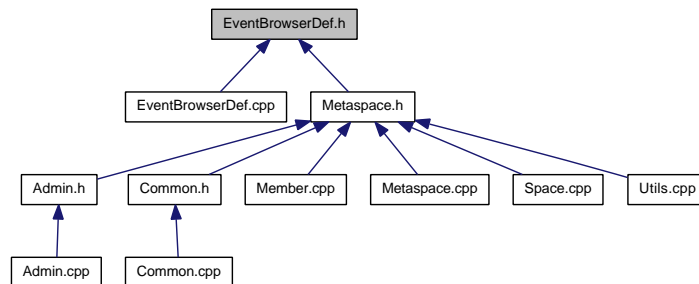
## 7.24 EventBrowserDef.h File Reference

```
#include <string>
#include "tibas.h"
#include "Exception.h"
#include "Types.h"
#include "SharedPtr.h"
```

Include dependency graph for EventBrowserDef.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::EventBrowserDef](#)

### Namespaces

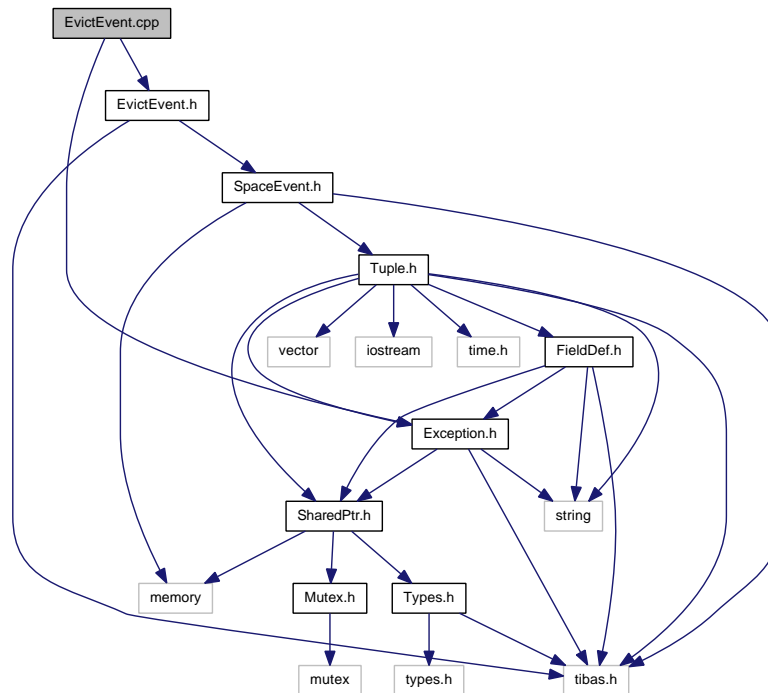
- namespace [ASApi](#)

## 7.25 EvictEvent.cpp File Reference

```
#include "EvictEvent.h"
```

```
#include "Exception.h"
```

Include dependency graph for EvictEvent.cpp:



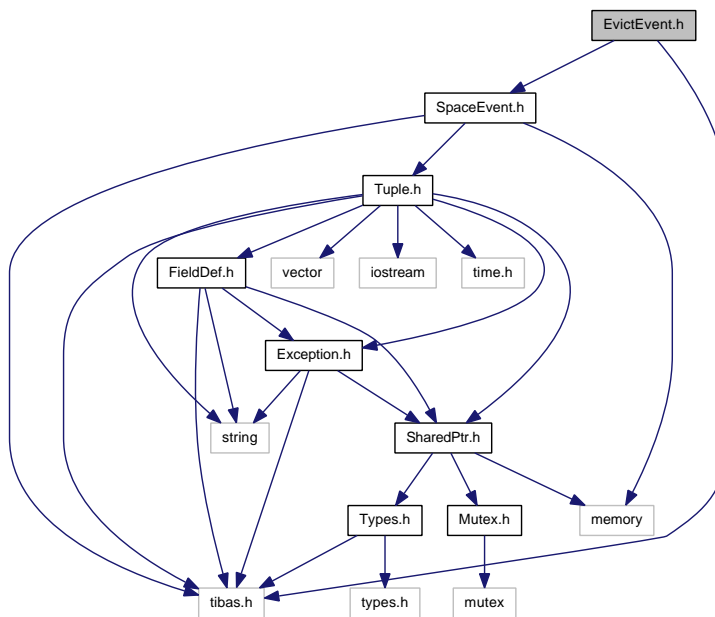


## 7.26 EvictEvent.h File Reference

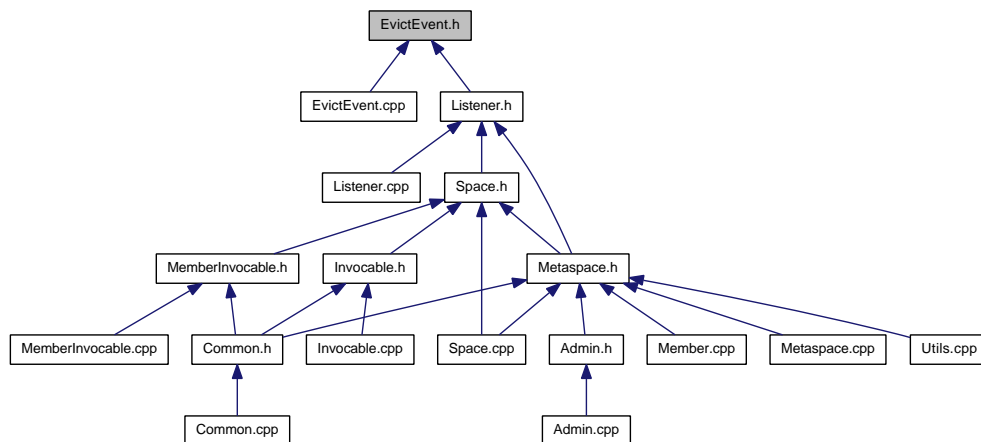
```
#include "tibas.h"
```

```
#include "SpaceEvent.h"
```

Include dependency graph for EvictEvent.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::EvictEvent](#)

## Namespaces

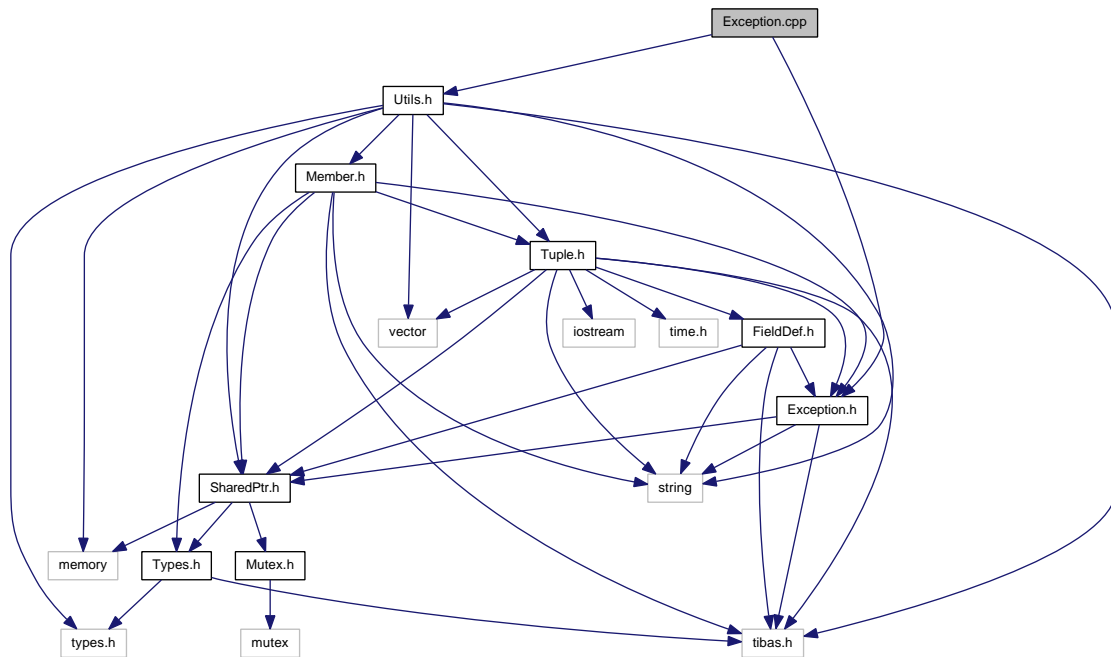
- namespace [ASApi](#)

## 7.27 Exception.cpp File Reference

```
#include "Exception.h"
```

```
#include "Utils.h"
```

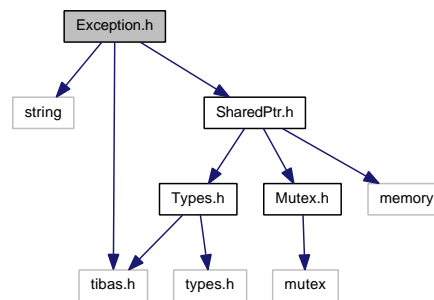
Include dependency graph for Exception.cpp:



## 7.28 Exception.h File Reference

```
#include <string>
#include "tibas.h"
#include "SharedPtr.h"
```

Include dependency graph for Exception.h:



### Classes

- class [ASApi::Exception](#)

### Namespaces

- namespace [ASApi](#)

### Defines

- #define [AS\\_CALL](#)(statement)

#### 7.28.1 Define Documentation

##### 7.28.1.1 #define AS\_CALL(statement)

**Value:**

```
{ \
    tibas_status status = statement; \
    if (status != TIBAS_OK) \
    { \
        throw ASApi::Exception(status); \
    } \
}
```

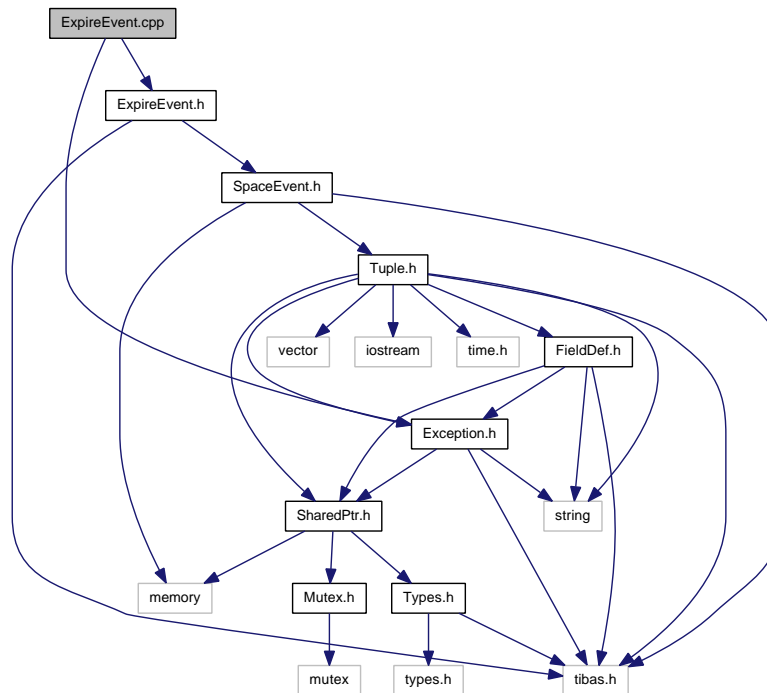
Definition at line 9 of file Exception.h.

## 7.29 ExpireEvent.cpp File Reference

```
#include "ExpireEvent.h"
```

```
#include "Exception.h"
```

Include dependency graph for ExpireEvent.cpp:

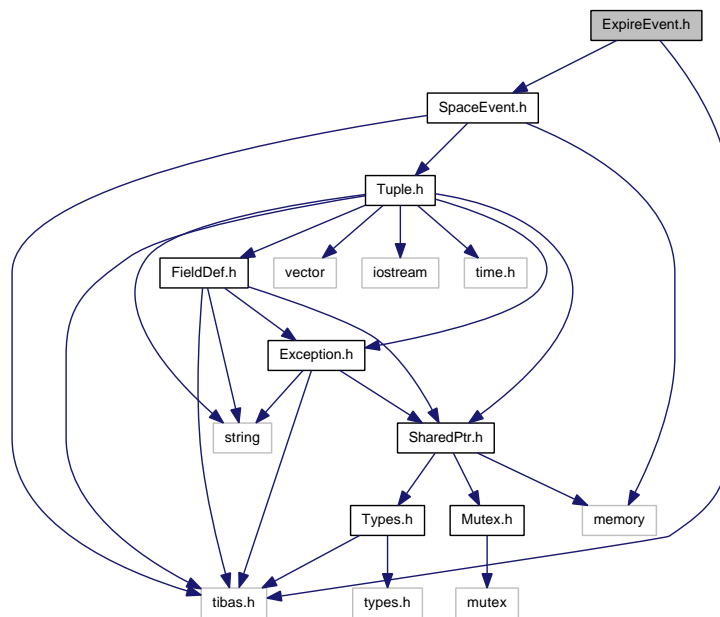


## 7.30 ExpireEvent.h File Reference

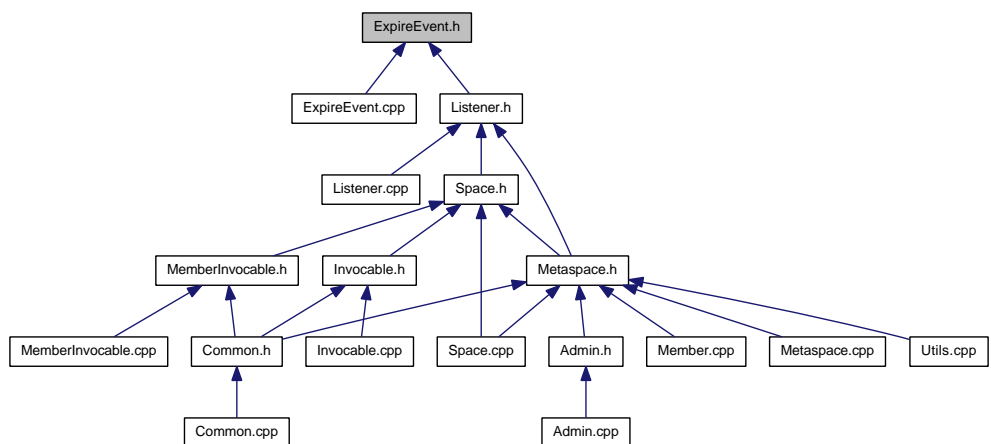
```
#include "tibas.h"
```

```
#include "SpaceEvent.h"
```

Include dependency graph for ExpireEvent.h:



This graph shows which files directly or indirectly include this file:



**Classes**

- class [ASApi::ExpireEvent](#)

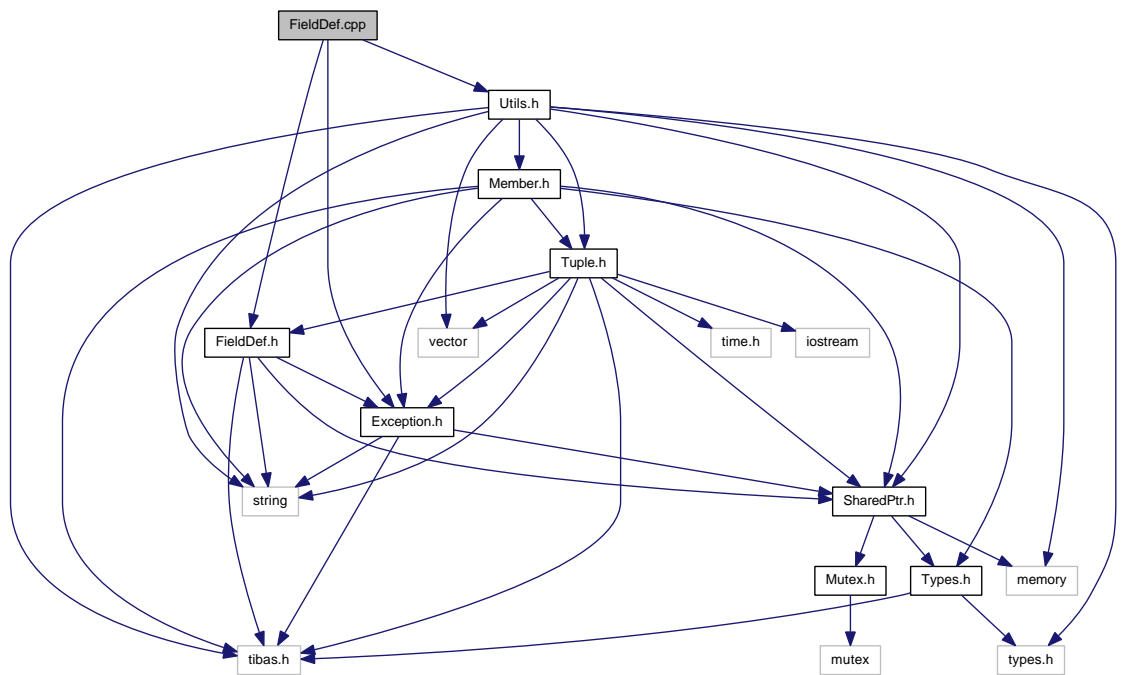
**Namespaces**

- namespace [ASApi](#)

## 7.31 FieldDef.cpp File Reference

```
#include "FieldDef.h"
#include "Exception.h"
#include "Utils.h"
```

Include dependency graph for FieldDef.cpp:

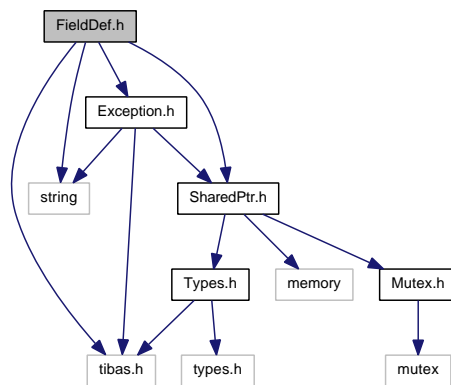




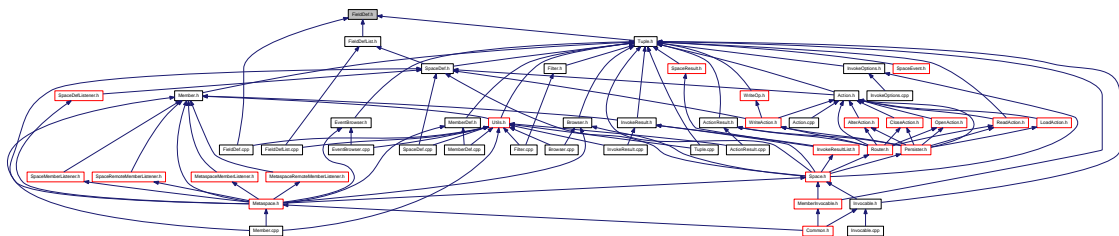
## 7.32 FieldDef.h File Reference

```
#include <string>
#include "tibas.h"
#include "Exception.h"
#include "SharedPtr.h"
```

Include dependency graph for FieldDef.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::FieldDef](#)

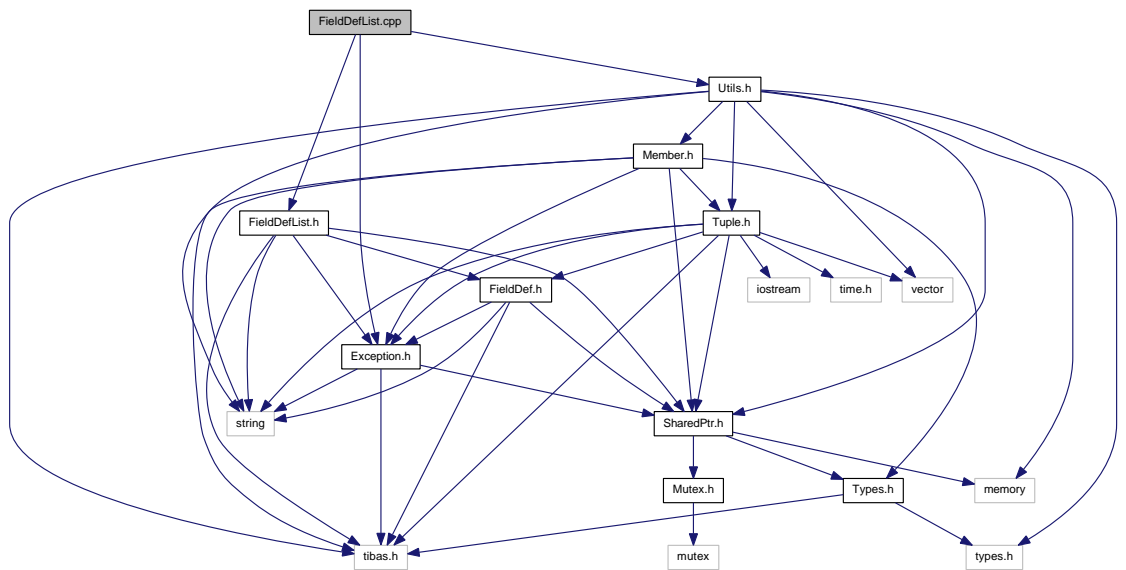
### Namespaces

- namespace [ASApi](#)

### 7.33 FieldDefList.cpp File Reference

```
#include "FieldDefList.h"
#include "Exception.h"
#include "Utils.h"
```

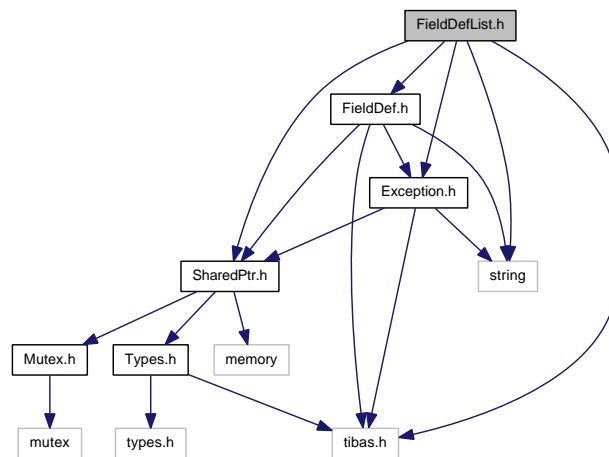
Include dependency graph for FieldDefList.cpp:



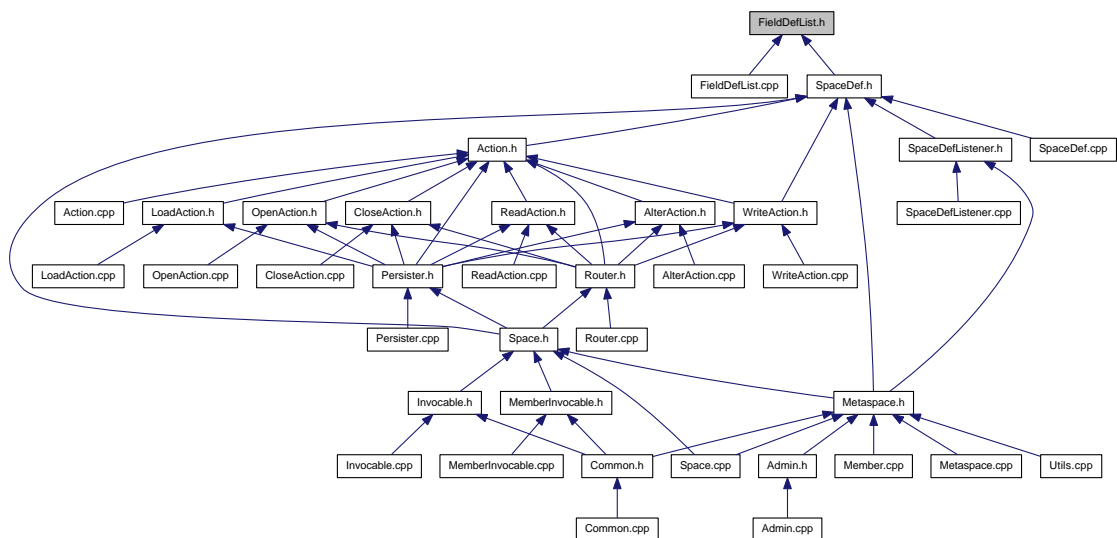
## 7.34 FieldDefList.h File Reference

```
#include <string>
#include "tibas.h"
#include "Exception.h"
#include "FieldDef.h"
#include "SharedPtr.h"
```

Include dependency graph for FieldDefList.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::FieldDefList](#)

## Namespaces

- namespace [ASApi](#)

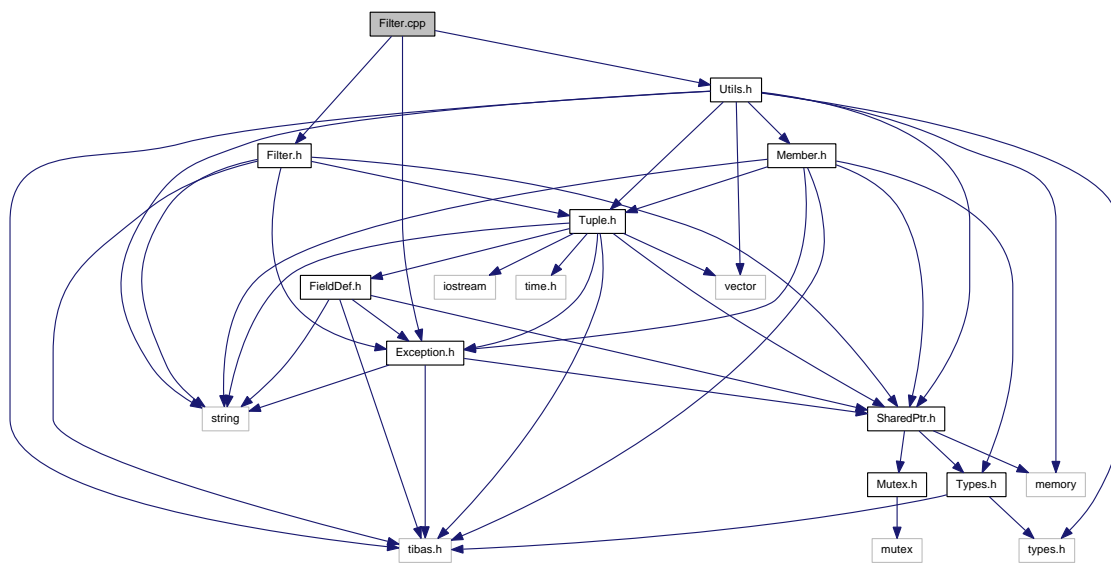
## 7.35 Filter.cpp File Reference

```
#include "Filter.h"
```

```
#include "Exception.h"
```

```
#include "Utils.h"
```

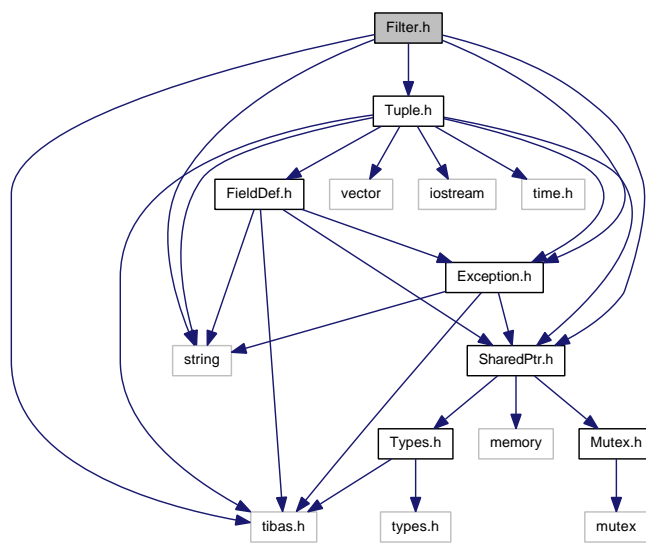
Include dependency graph for Filter.cpp:



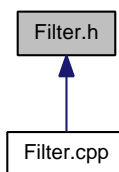
## 7.36 Filter.h File Reference

```
#include <string>
#include "tibas.h"
#include "Exception.h"
#include "Tuple.h"
#include "SharedPtr.h"
```

Include dependency graph for Filter.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::Filter](#)

### Namespaces

- namespace [ASApi](#)

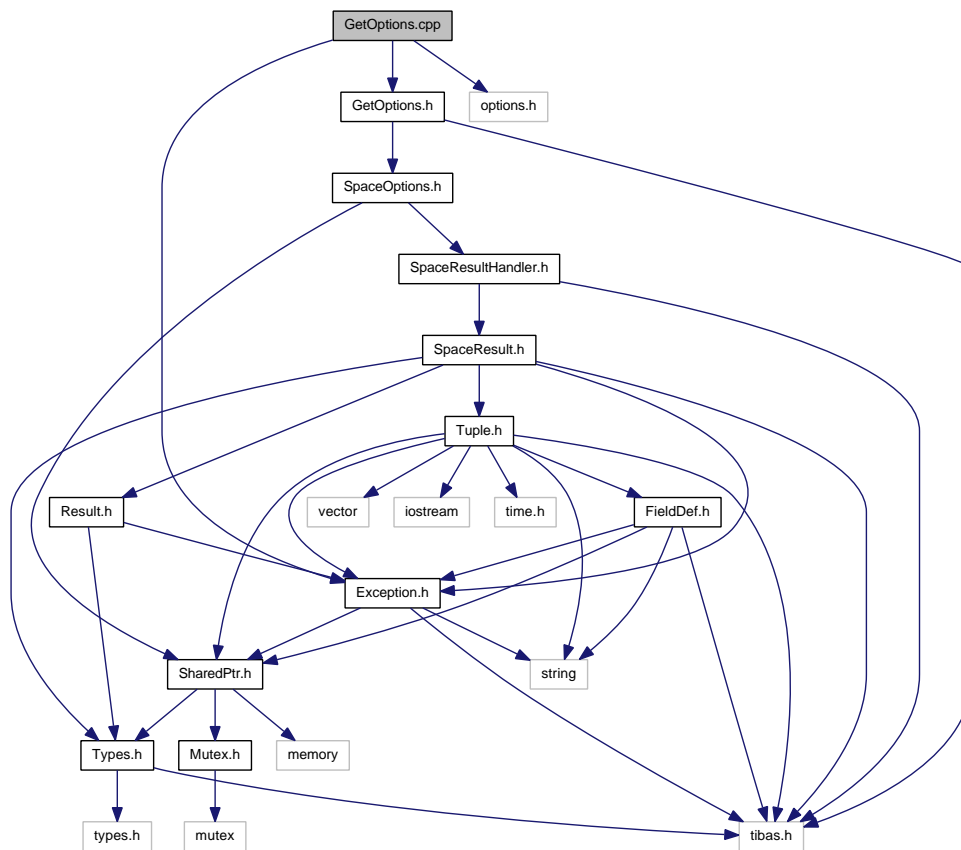
## 7.37 GetOptions.cpp File Reference

```
#include "GetOptions.h"
```

```
#include "options.h"
```

```
#include "Exception.h"
```

Include dependency graph for GetOptions.cpp:

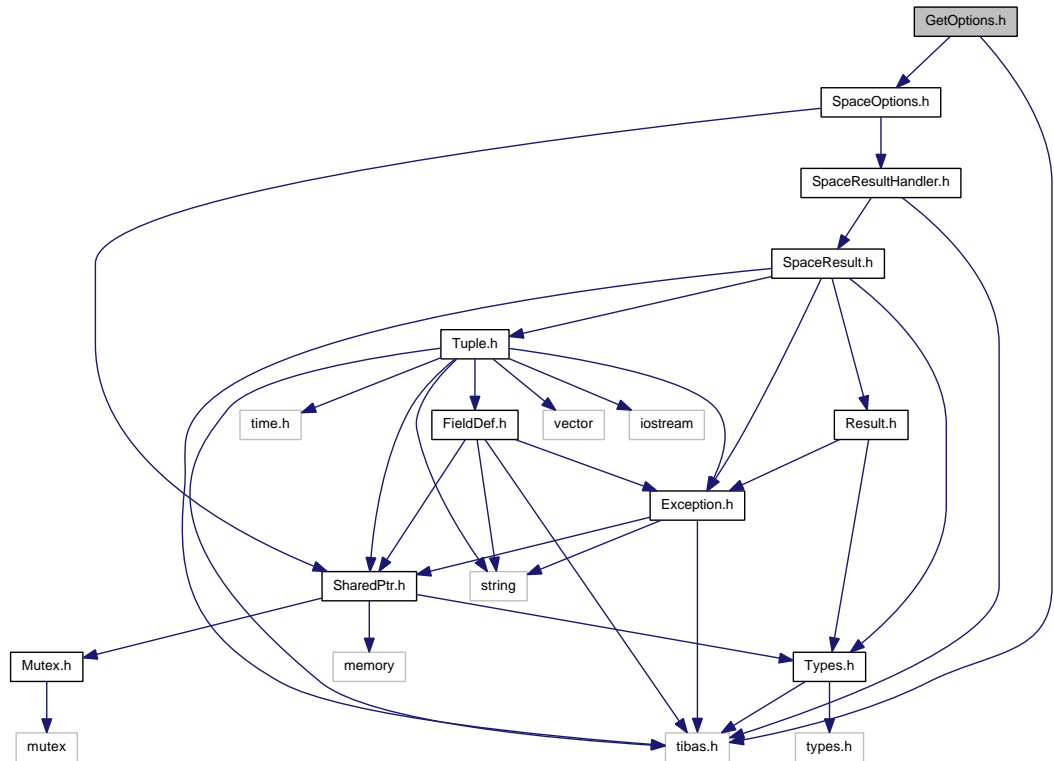


## 7.38 GetOptions.h File Reference

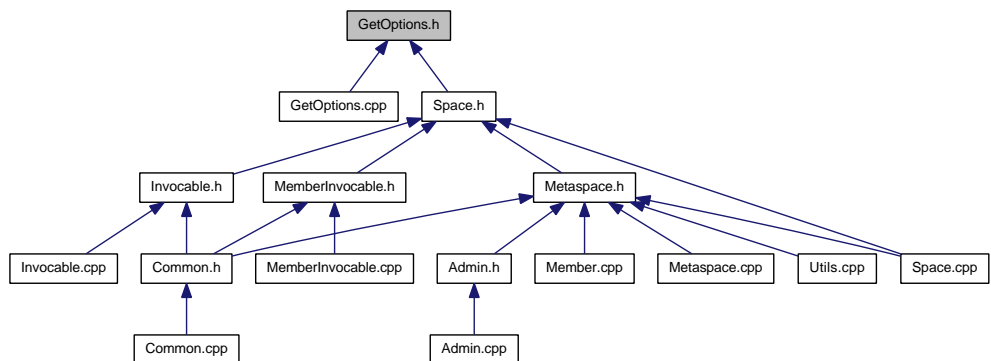
```
#include "tibas.h"
```

```
#include "SpaceOptions.h"
```

Include dependency graph for GetOptions.h:



This graph shows which files directly or indirectly include this file:





## Classes

- class [ASApi::GetOptions](#)

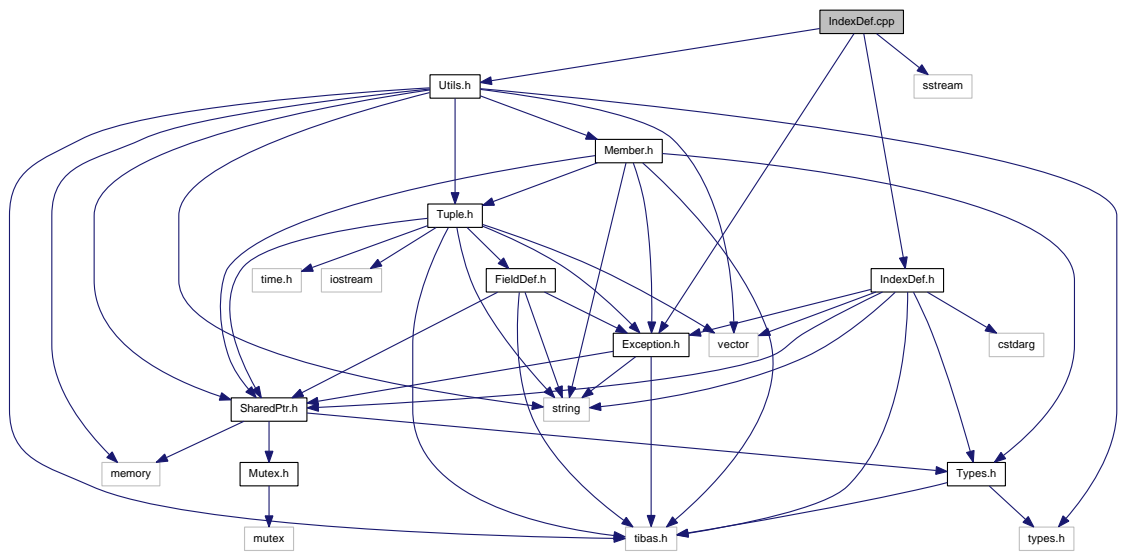
## Namespaces

- namespace [ASApi](#)

## 7.39 IndexDef.cpp File Reference

```
#include "IndexDef.h"
#include "Exception.h"
#include "Utils.h"
#include <sstream>
```

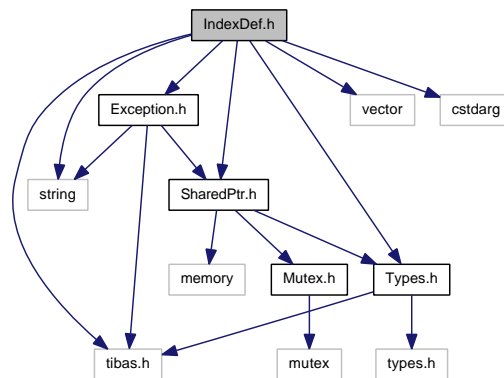
Include dependency graph for IndexDef.cpp:



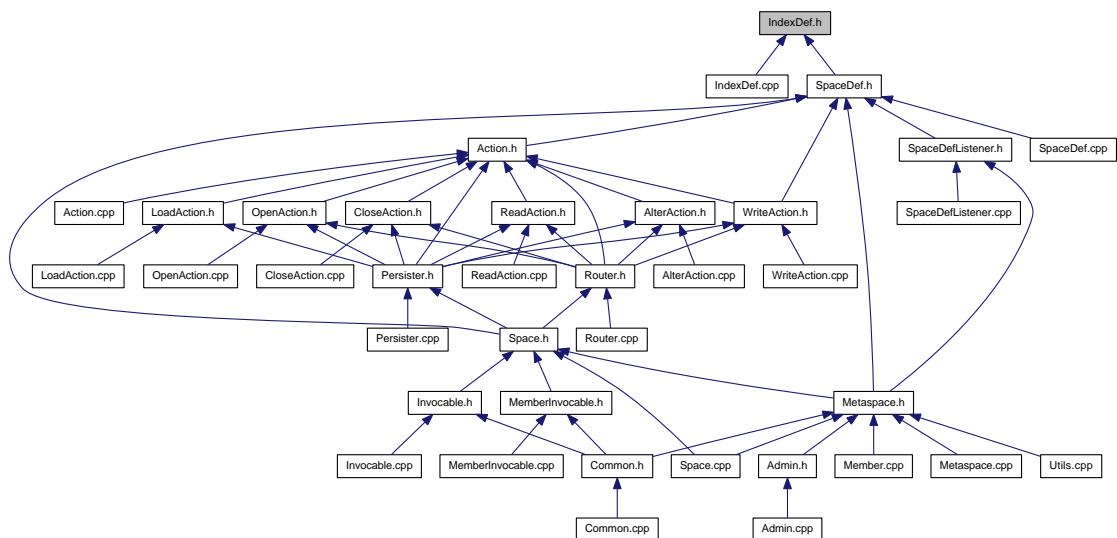
## 7.40 IndexDef.h File Reference

```
#include <string>
#include <vector>
#include <cstdarg>
#include "tibas.h"
#include "Exception.h"
#include "Types.h"
#include "SharedPtr.h"
```

Include dependency graph for IndexDef.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::IndexDef](#)

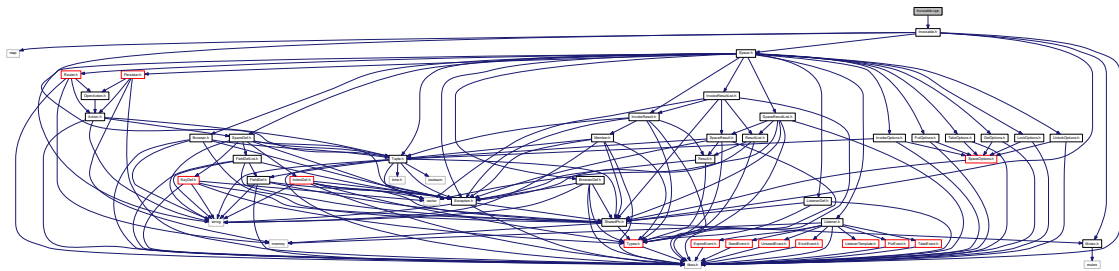
## Namespaces

- namespace [ASApi](#)

## 7.41 Invocable.cpp File Reference

```
#include "Invocable.h"
```

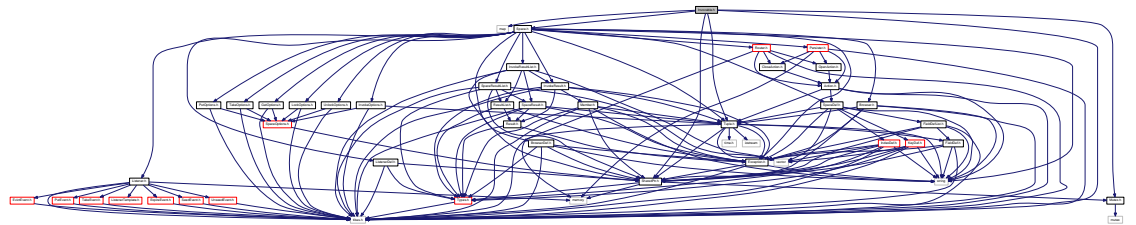
Include dependency graph for Invocable.cpp:



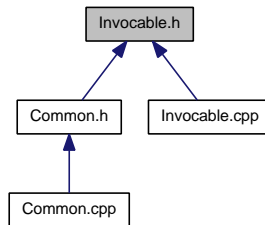
## 7.42 Invocable.h File Reference

```
#include <map>
#include "Space.h"
#include "Tuple.h"
#include "Mutex.h"
#include "tibas.h"
#include "SharedPtr.h"
```

Include dependency graph for Invocable.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::Invocable](#)

### Namespaces

- namespace [ASApi](#)

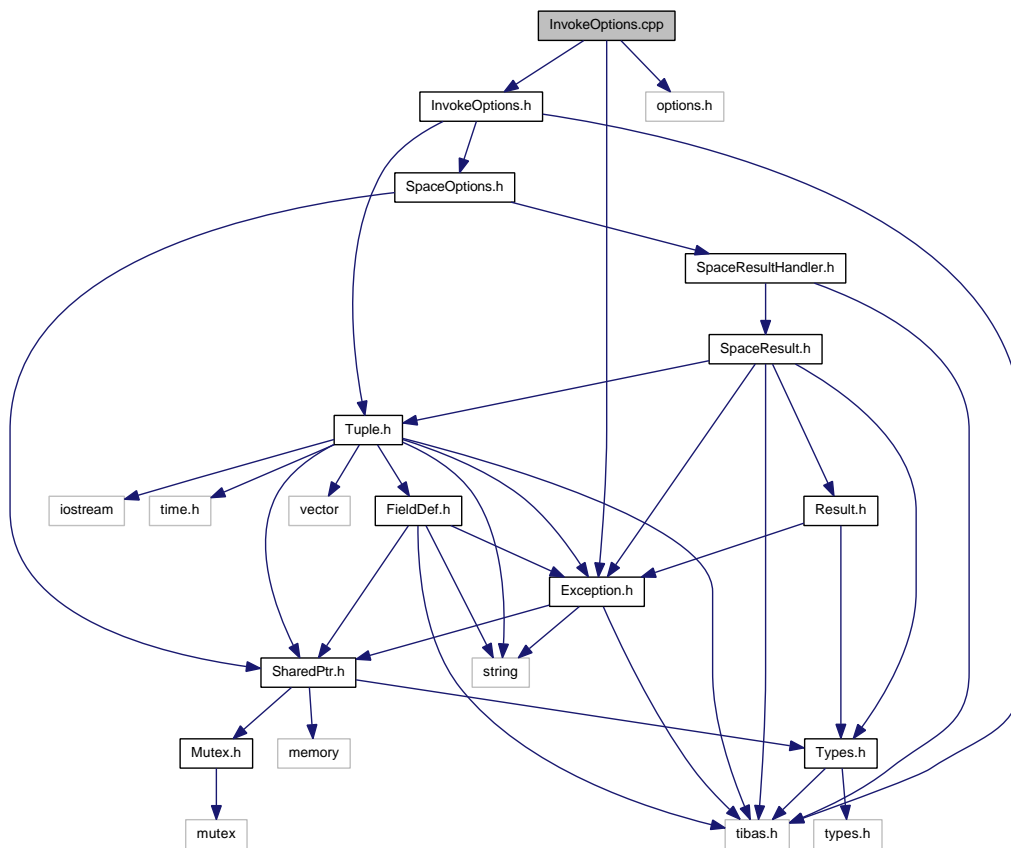
## 7.43 InvokeOptions.cpp File Reference

```
#include "InvokeOptions.h"
```

```
#include "options.h"
```

```
#include "Exception.h"
```

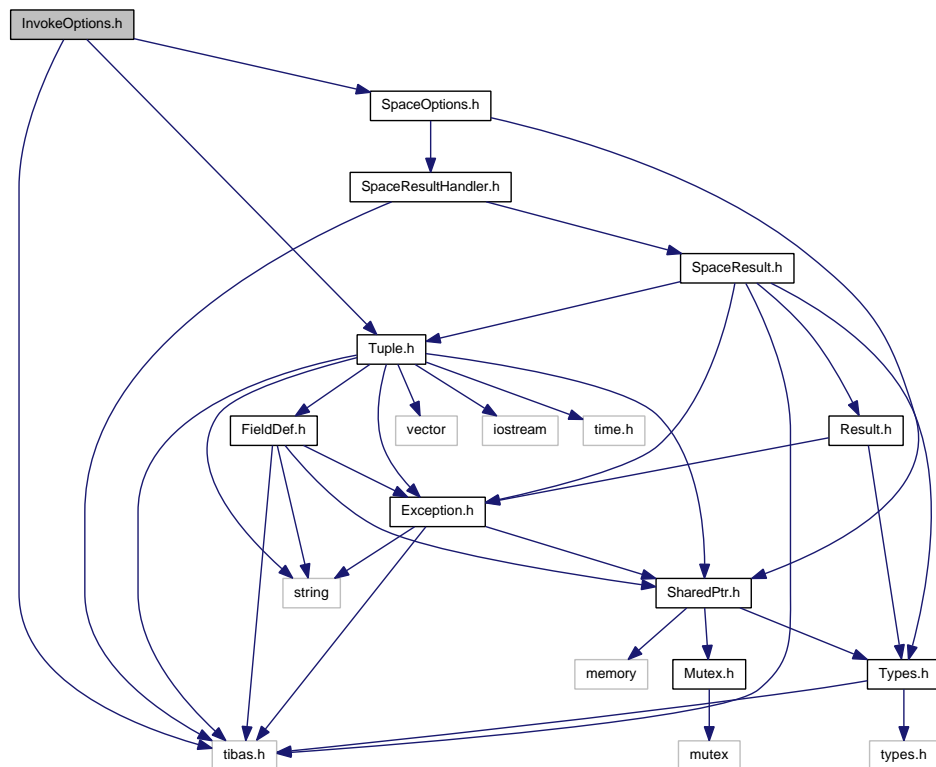
Include dependency graph for InvokeOptions.cpp:



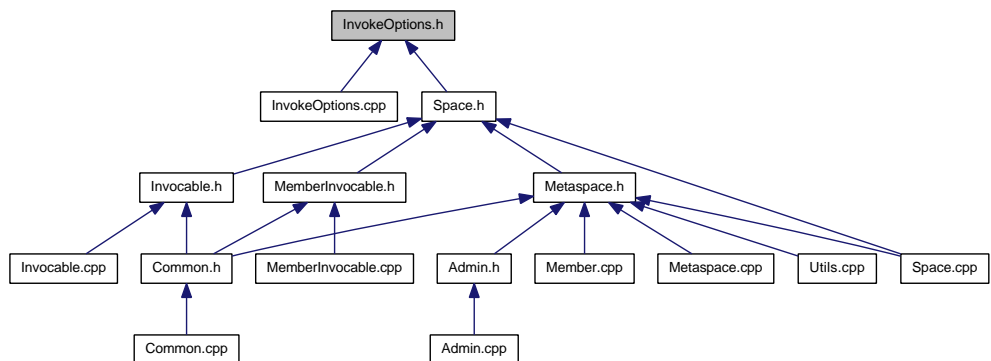
## 7.44 InvokeOptions.h File Reference

```
#include "tibas.h"
#include "SpaceOptions.h"
#include "Tuple.h"
```

Include dependency graph for InvokeOptions.h:



This graph shows which files directly or indirectly include this file:





**Classes**

- class [ASApi::InvokeOptions](#)

**Namespaces**

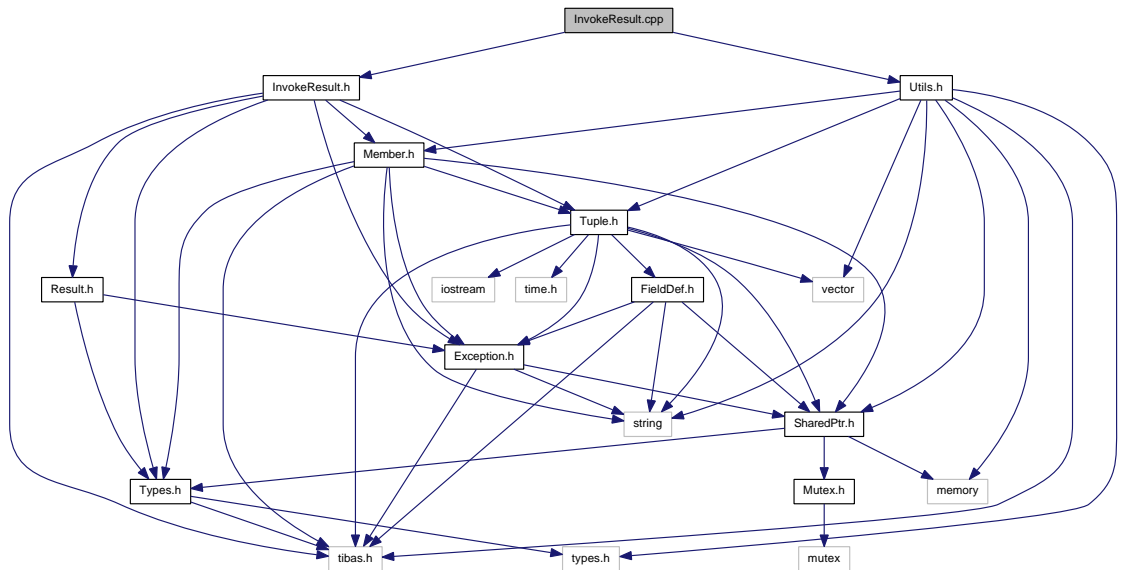
- namespace [ASApi](#)

## 7.45 InvokeResult.cpp File Reference

```
#include "InvokeResult.h"
```

```
#include "Utils.h"
```

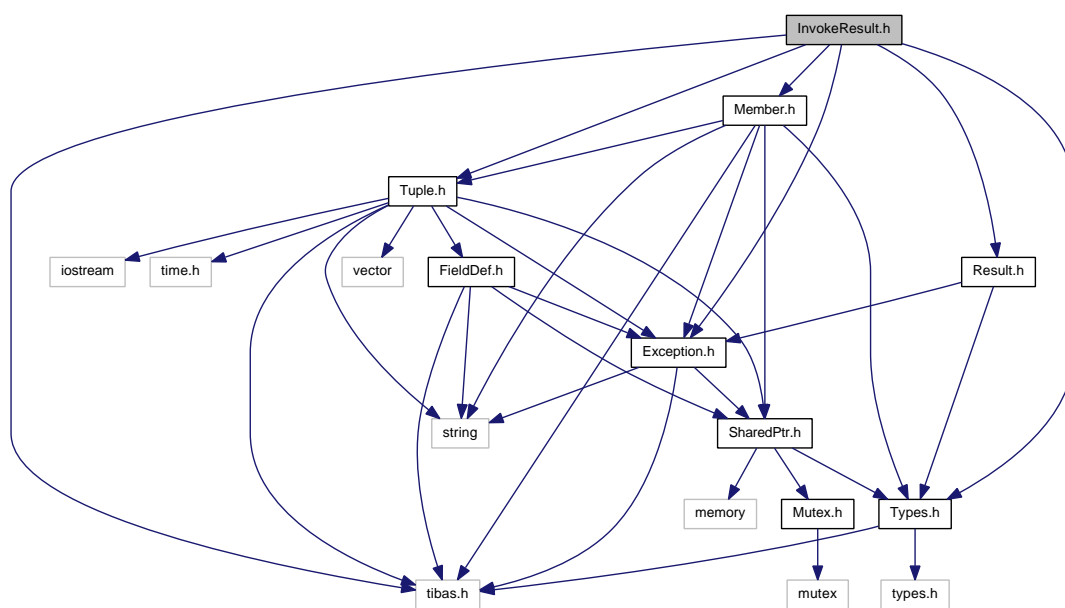
Include dependency graph for InvokeResult.cpp:



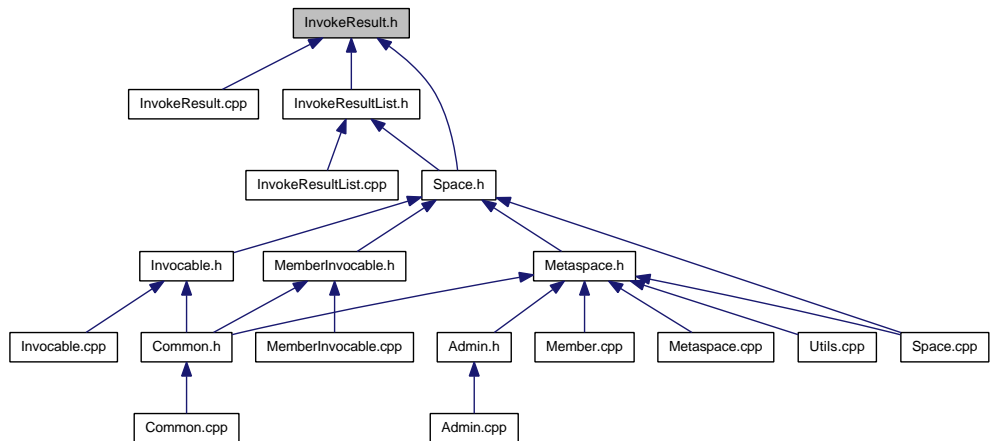
## 7.46 InvokeResult.h File Reference

```
#include "tibas.h"  
#include "Exception.h"  
#include "Tuple.h"  
#include "Types.h"  
#include "Result.h"  
#include "Member.h"
```

Include dependency graph for InvokeResult.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::InvokeResult](#)

## Namespaces

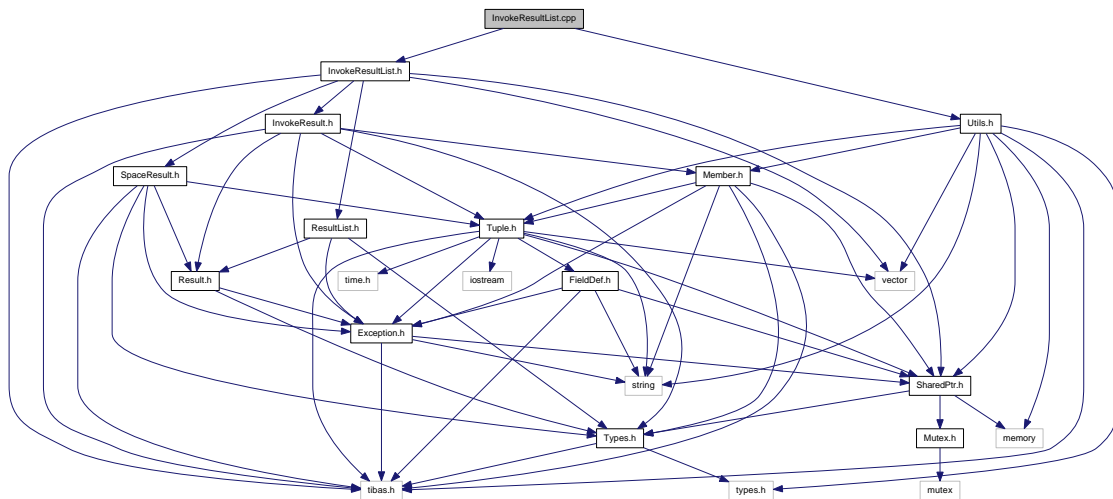
- namespace [ASApi](#)

## 7.47 InvokeResultList.cpp File Reference

```
#include "InvokeResultList.h"
```

```
#include "Utils.h"
```

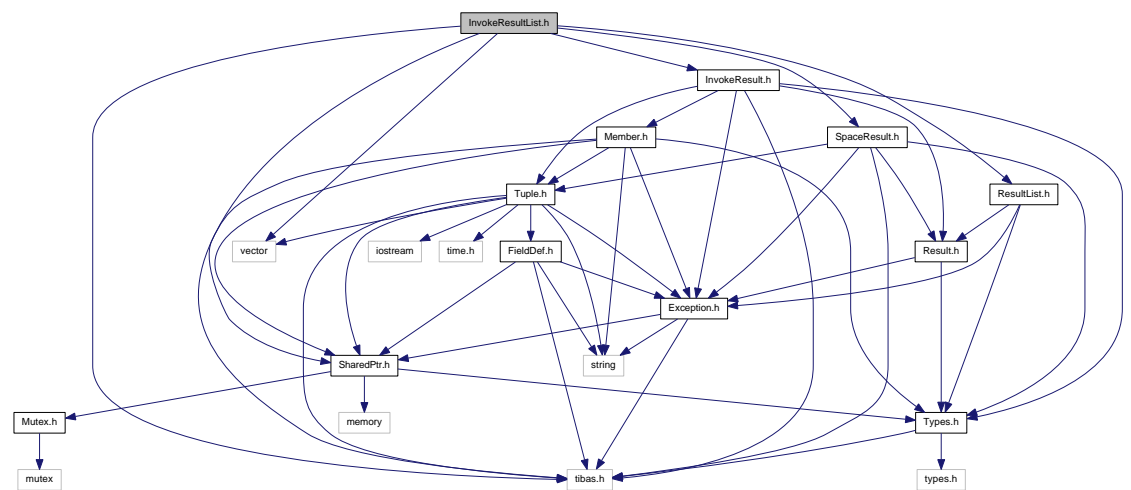
Include dependency graph for InvokeResultList.cpp:



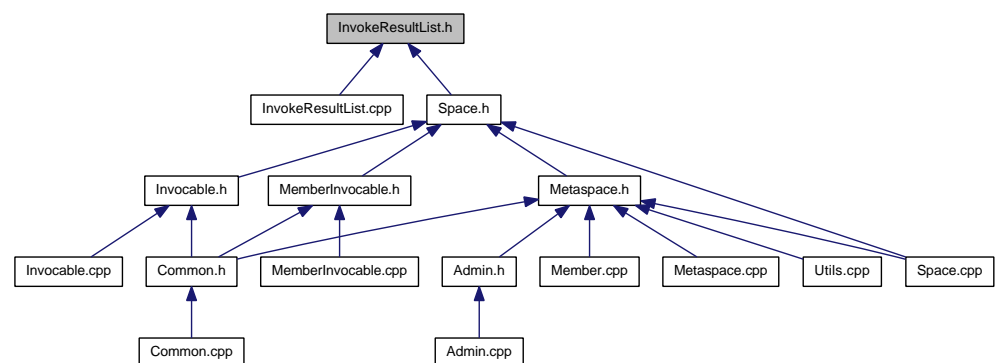
## 7.48 InvokeResultList.h File Reference

```
#include <vector>
#include "tibas.h"
#include "SpaceResult.h"
#include "ResultList.h"
#include "InvokeResult.h"
#include "SharedPtr.h"
```

Include dependency graph for InvokeResultList.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::InvokeResultList](#)

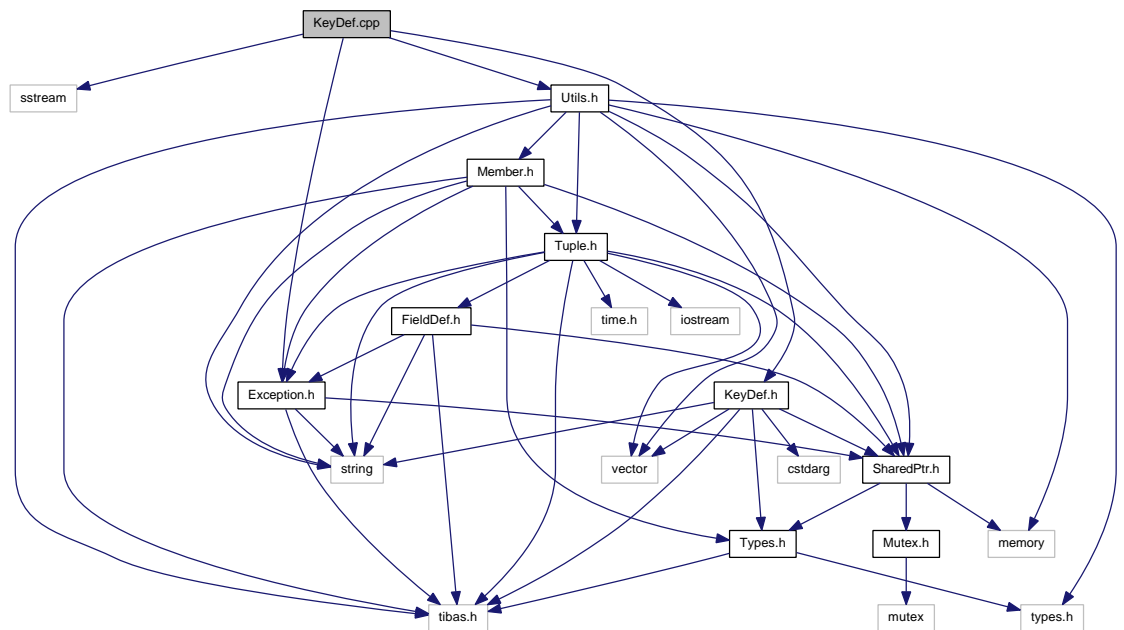
## Namespaces

- namespace [ASApi](#)

## 7.49 KeyDef.cpp File Reference

```
#include <sstream>
#include "KeyDef.h"
#include "Exception.h"
#include "Utils.h"
```

Include dependency graph for KeyDef.cpp:

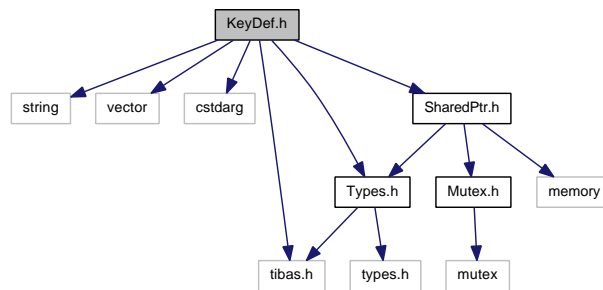




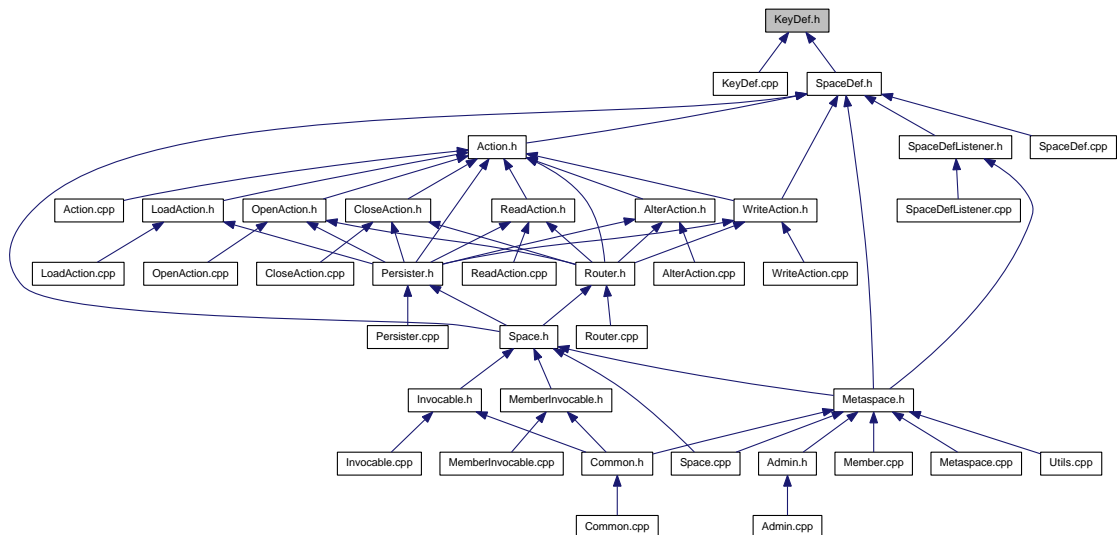
## 7.50 KeyDef.h File Reference

```
#include <string>
#include <vector>
#include <cstdarg>
#include "tibas.h"
#include "Types.h"
#include "SharedPtr.h"
```

Include dependency graph for KeyDef.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::KeyDef](#)

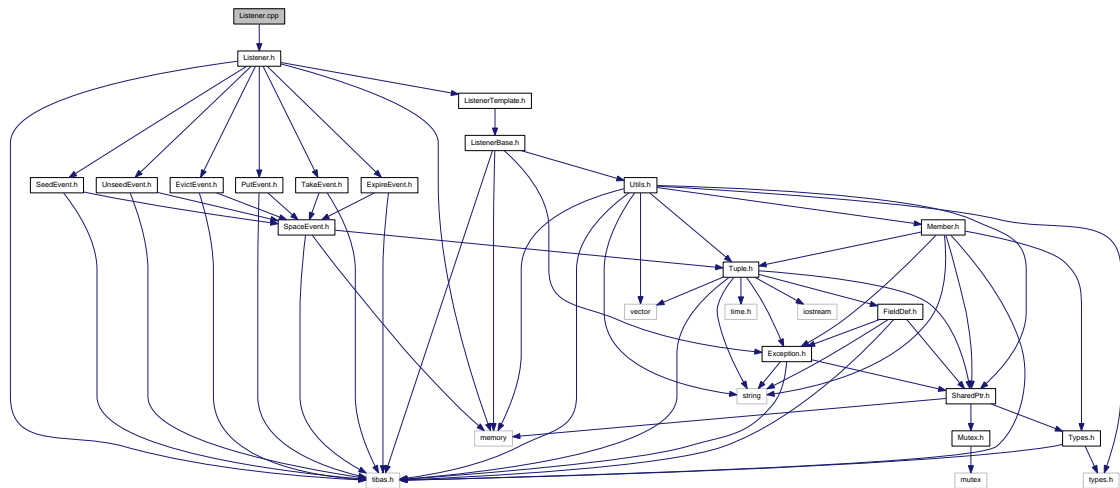
## Namespaces

- namespace [ASApi](#)

## 7.51 Listener.cpp File Reference

```
#include "Listener.h"
```

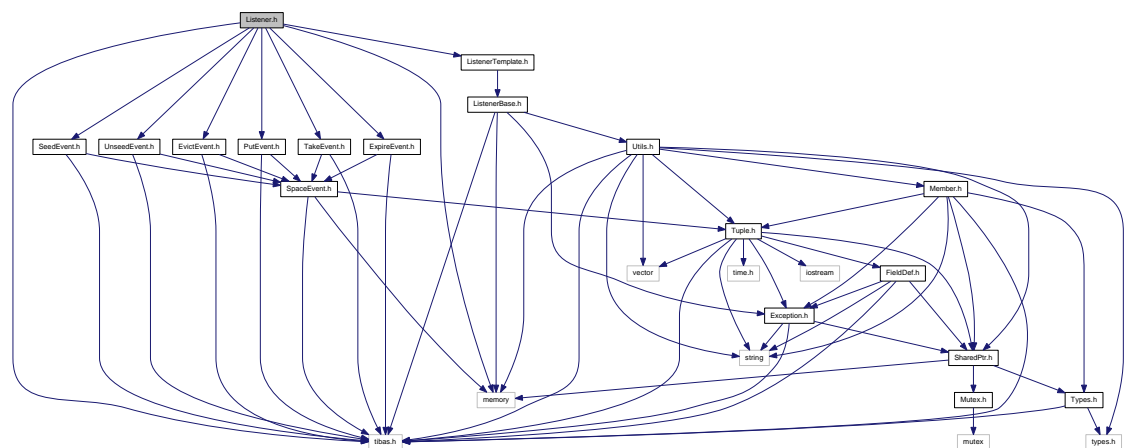
Include dependency graph for Listener.cpp:



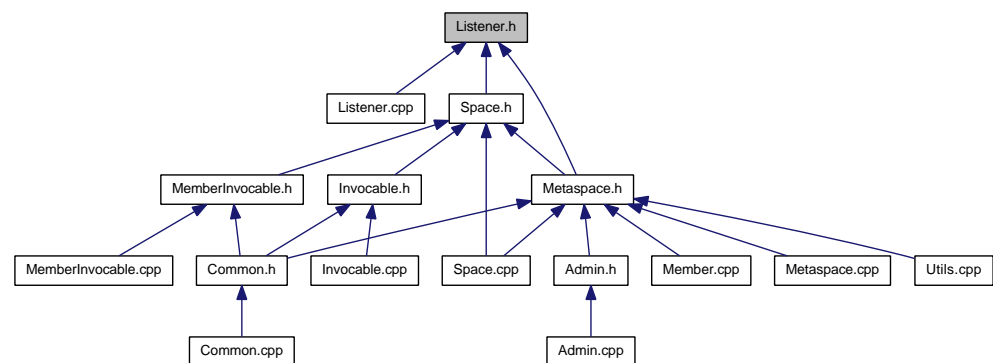
## 7.52 Listener.h File Reference

```
#include "tibas.h"
#include <memory>
#include "PutEvent.h"
#include "TakeEvent.h"
#include "ExpireEvent.h"
#include "SeedEvent.h"
#include "UnseedEvent.h"
#include "EvictEvent.h"
#include "ListenerTemplate.h"
```

Include dependency graph for Listener.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::Listener](#)

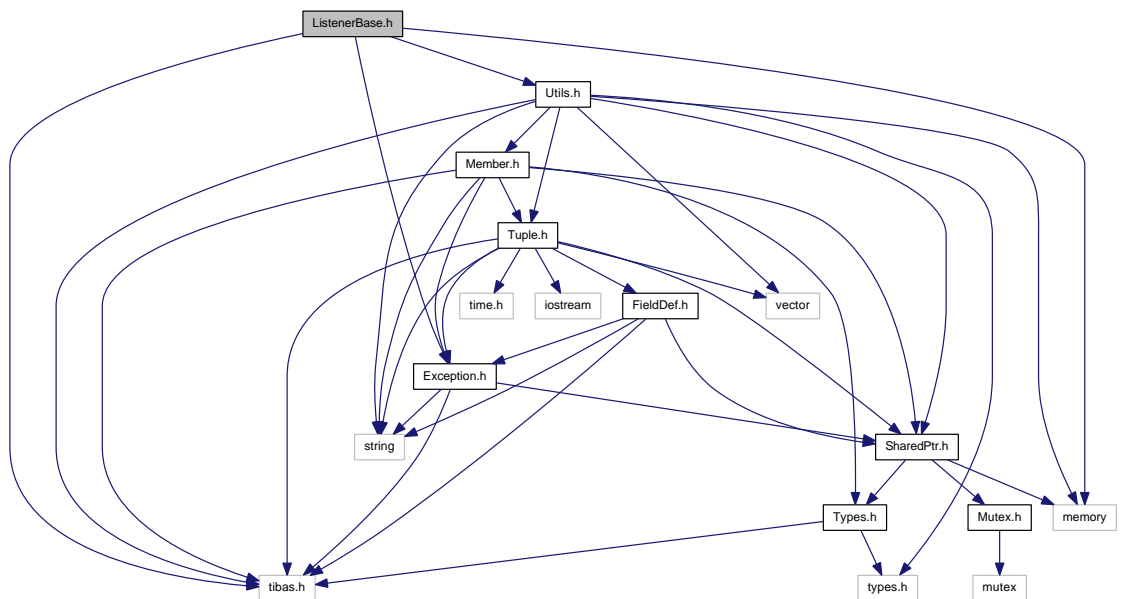
## Namespaces

- namespace [ASApi](#)

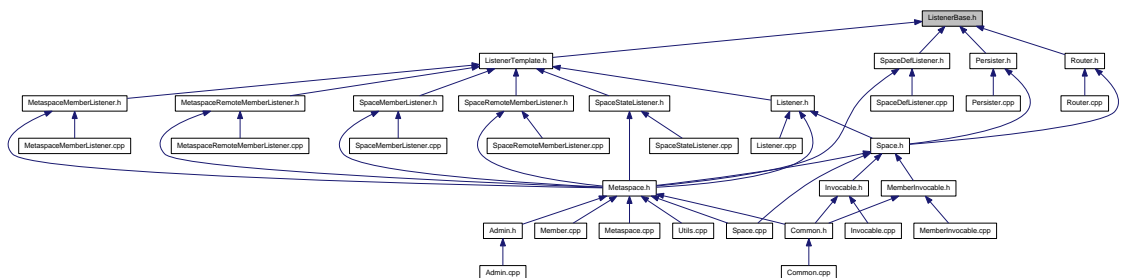
## 7.53 ListenerBase.h File Reference

```
#include "tibas.h"
#include "Utils.h"
#include "Exception.h"
#include <memory>
```

Include dependency graph for ListenerBase.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class `ASApi::ListenerBase< T >`

## Namespaces

- namespace [ASApi](#)

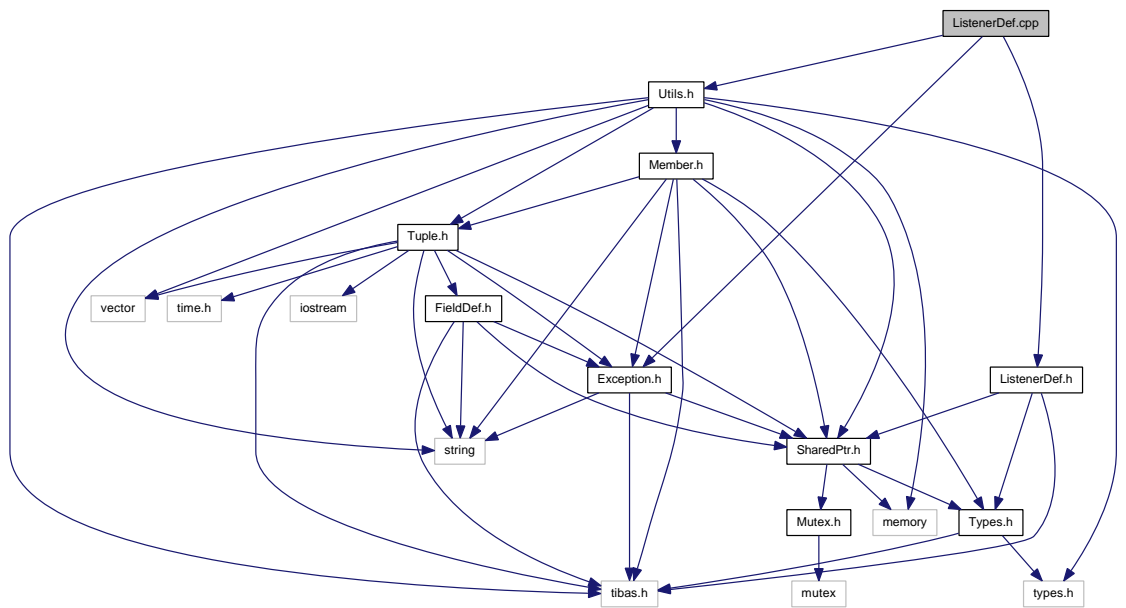
## 7.54 ListenerDef.cpp File Reference

```
#include "ListenerDef.h"
```

```
#include "Exception.h"
```

```
#include "Utils.h"
```

Include dependency graph for ListenerDef.cpp:

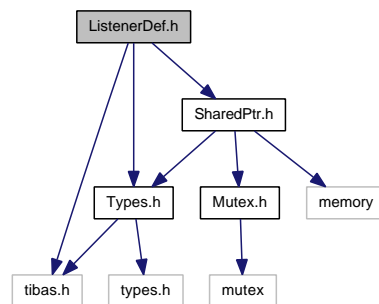




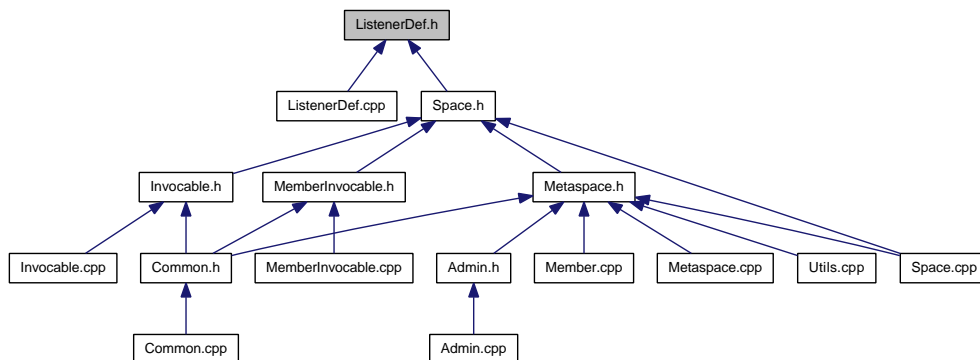
## 7.55 ListenerDef.h File Reference

```
#include "tibas.h"
#include "Types.h"
#include "SharedPtr.h"
```

Include dependency graph for ListenerDef.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::ListenerDef](#)

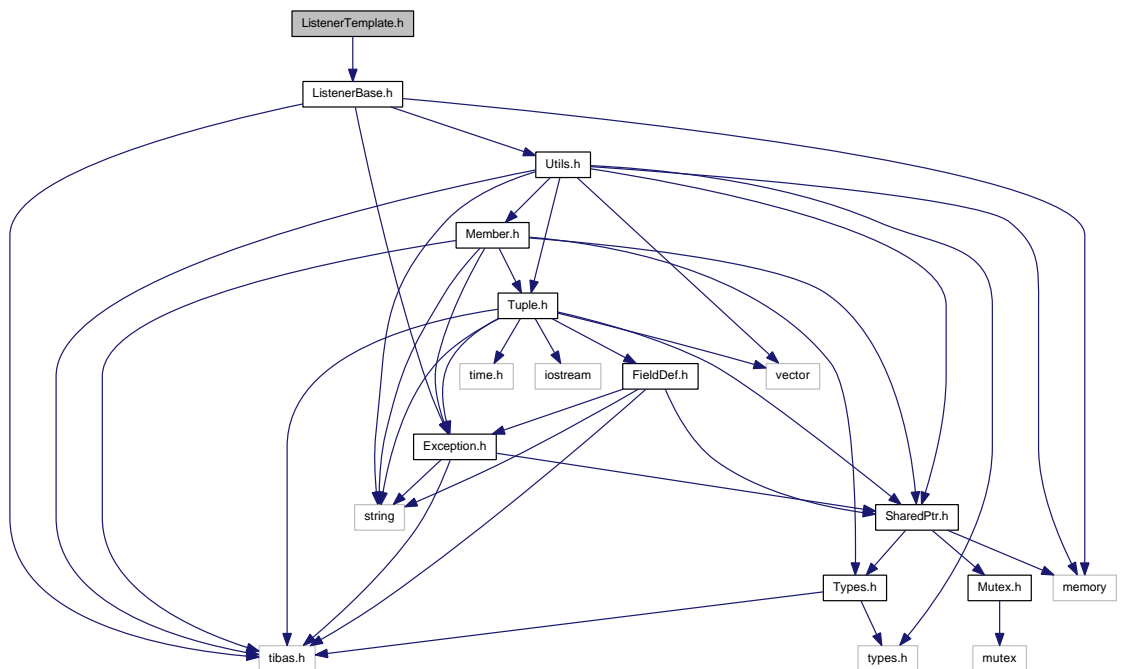
### Namespaces

- namespace [ASApi](#)

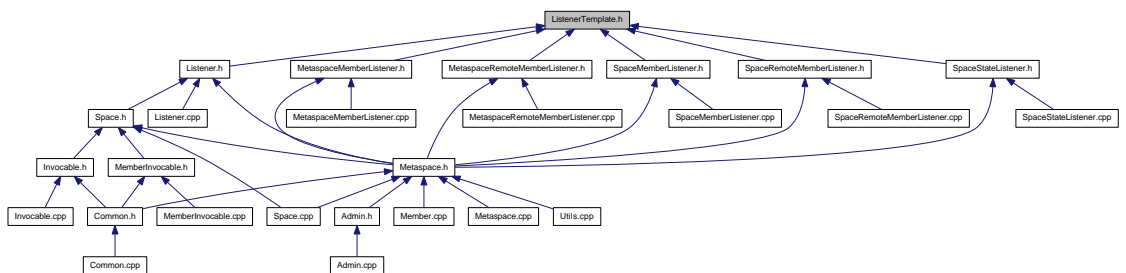
## 7.56 ListenerTemplate.h File Reference

```
#include "ListenerBase.h"
```

Include dependency graph for ListenerTemplate.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::ListenerTemplate< T >](#)

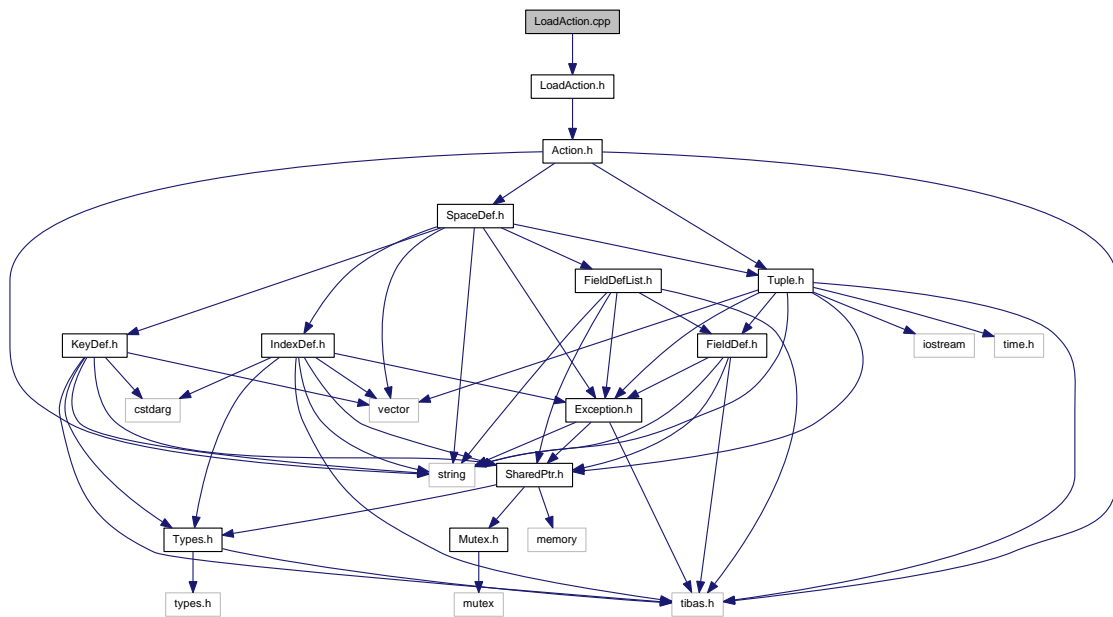
### Namespaces

- namespace [ASApi](#)

## 7.57 LoadAction.cpp File Reference

```
#include "LoadAction.h"
```

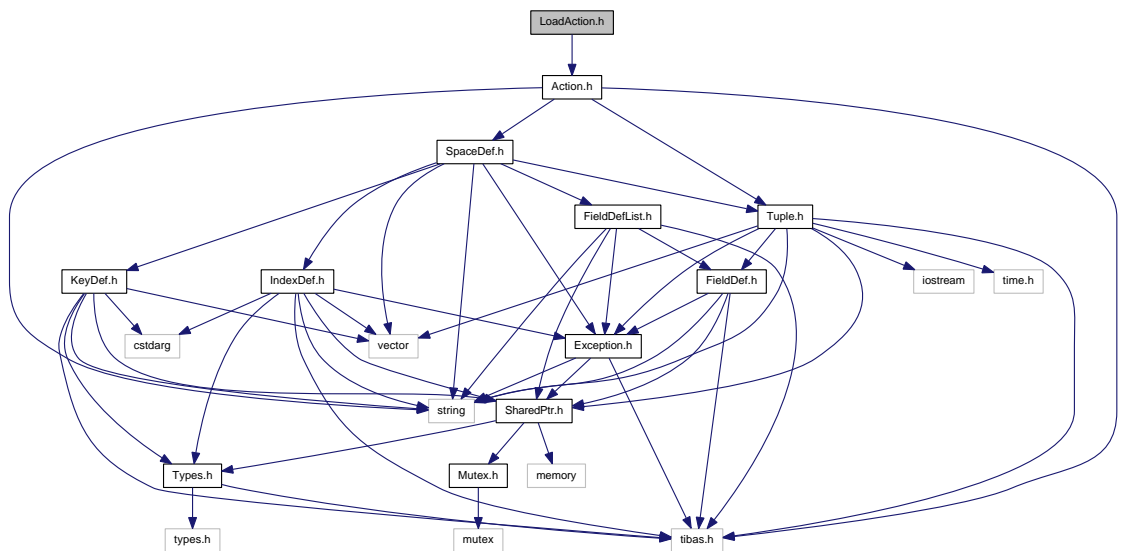
Include dependency graph for LoadAction.cpp:



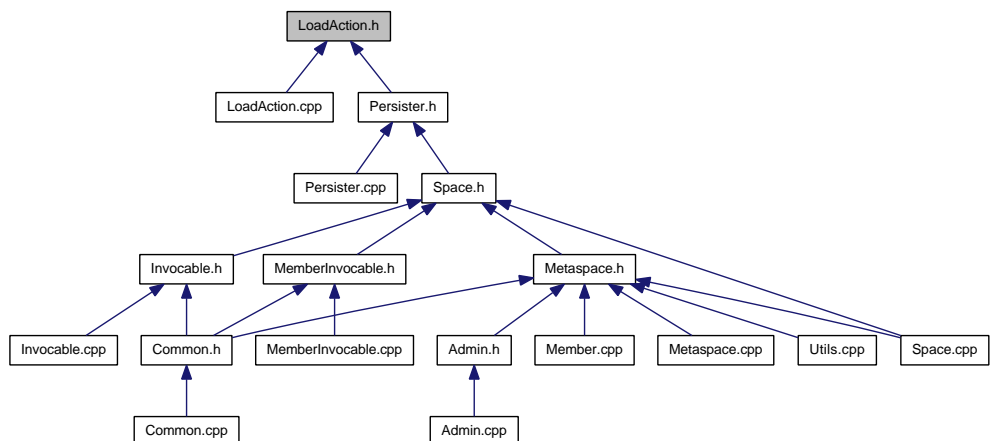
## 7.58 LoadAction.h File Reference

```
#include "Action.h"
```

Include dependency graph for LoadAction.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::LoadAction](#)

## Namespaces

- namespace [ASApi](#)

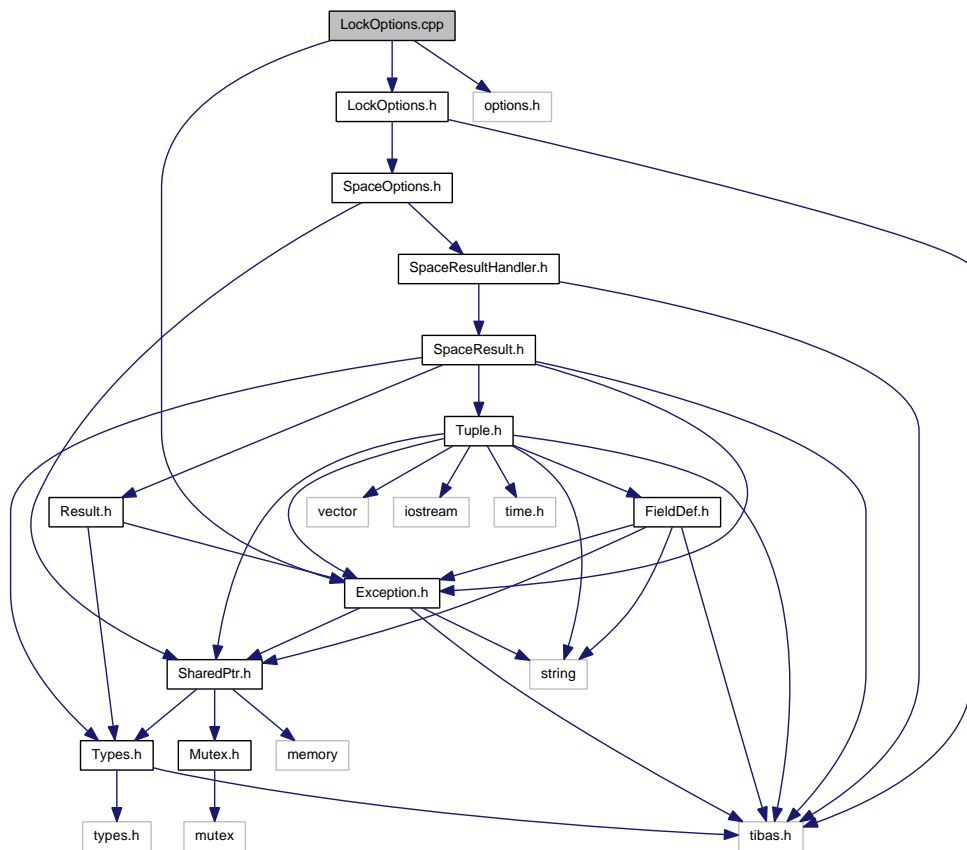
## 7.59 LockOptions.cpp File Reference

```
#include "LockOptions.h"
```

```
#include "options.h"
```

```
#include "Exception.h"
```

Include dependency graph for LockOptions.cpp:

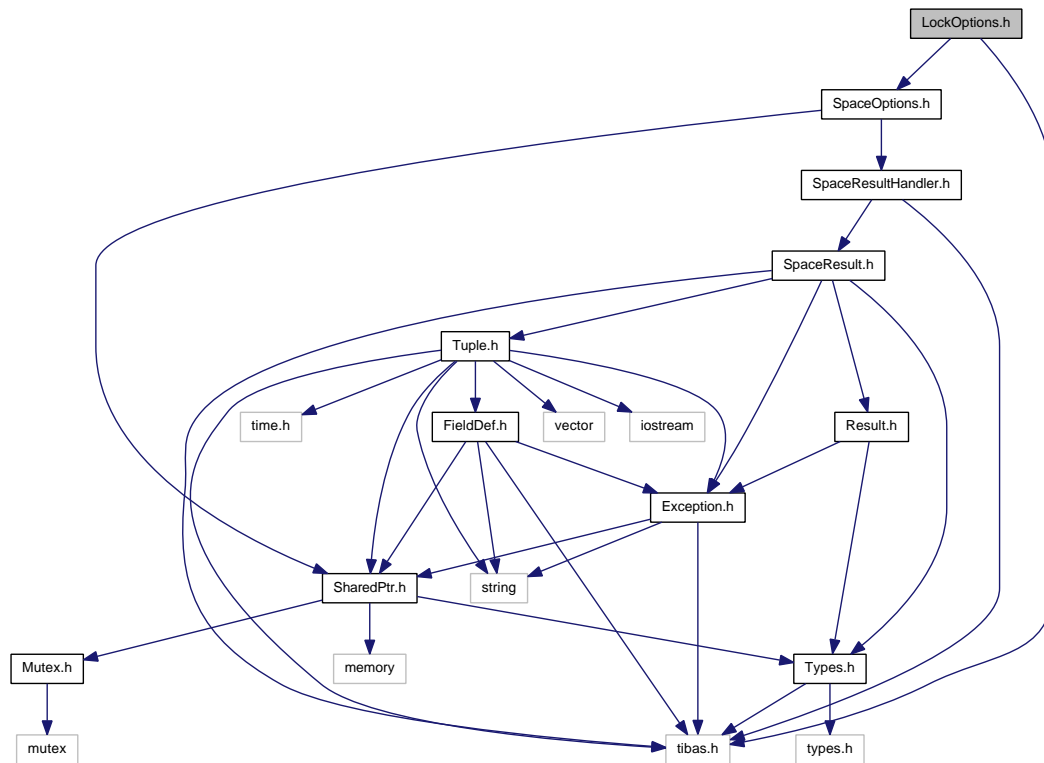


## 7.60 LockOptions.h File Reference

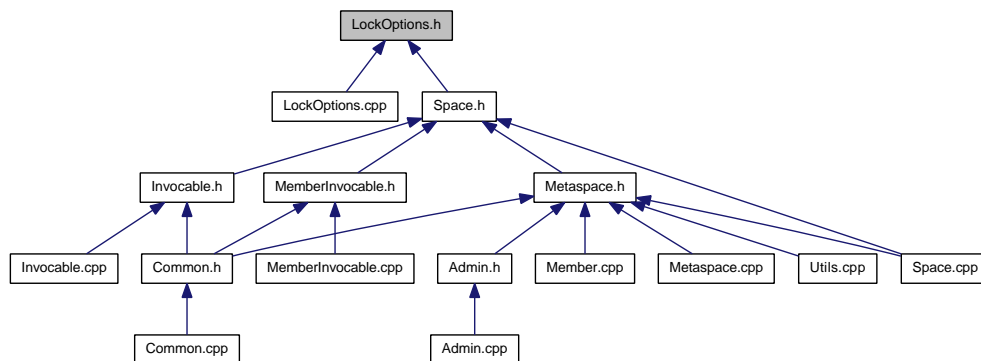
```
#include "tibas.h"
```

```
#include "SpaceOptions.h"
```

Include dependency graph for LockOptions.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::LockOptions](#)

## Namespaces

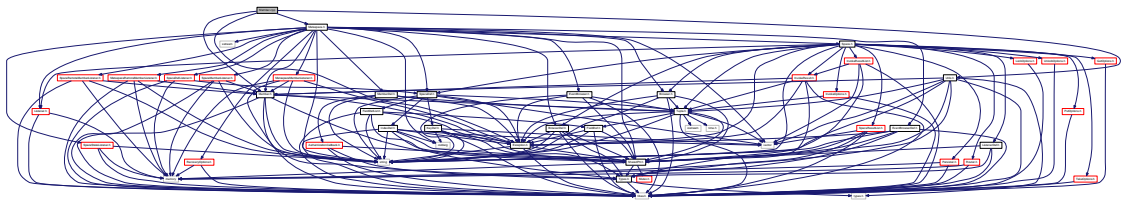
- namespace [ASApi](#)



## 7.61 Member.cpp File Reference

```
#include "Member.h"  
#include "Exception.h"  
#include "Metaspace.h"  
#include "Utils.h"
```

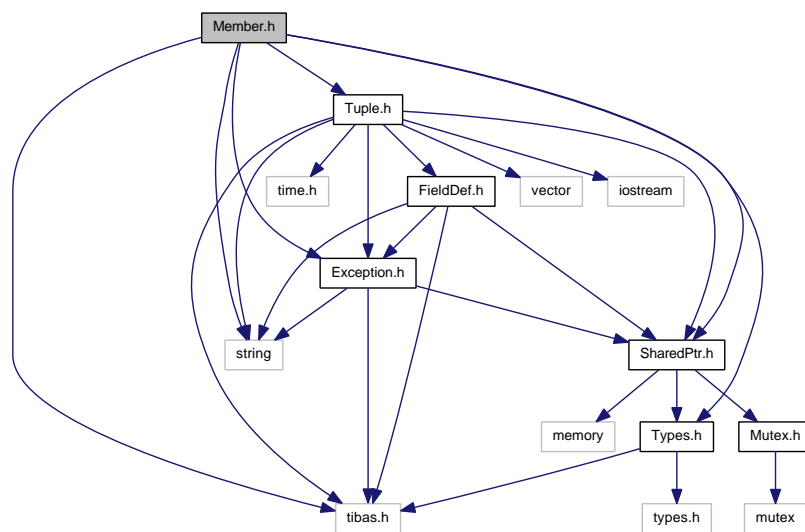
Include dependency graph for Member.cpp:



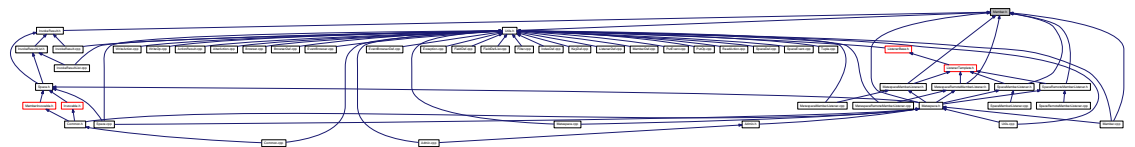
## 7.62 Member.h File Reference

```
#include <string>
#include "tibas.h"
#include "Exception.h"
#include "Tuple.h"
#include "Types.h"
#include "SharedPtr.h"
```

Include dependency graph for Member.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::Member](#)

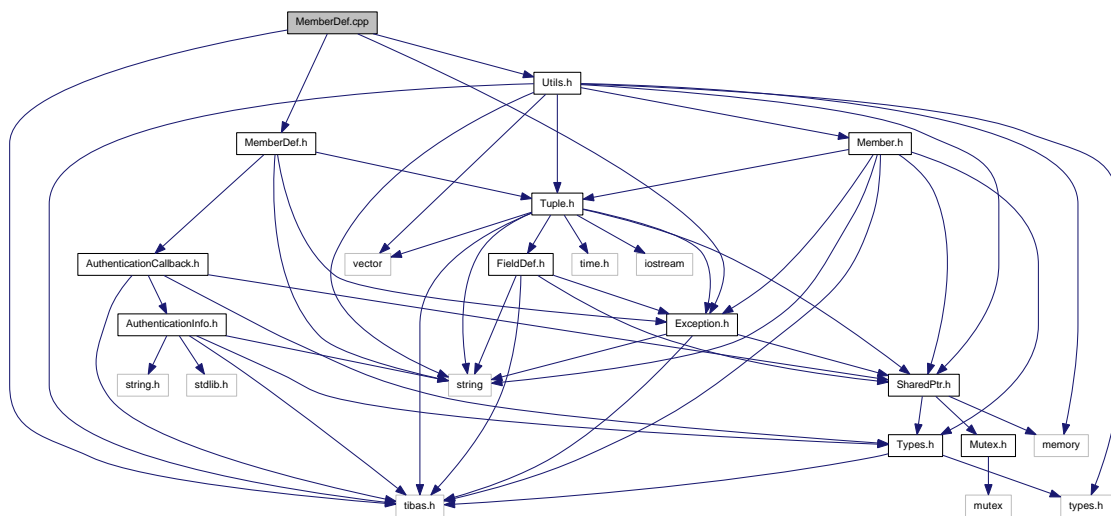
### Namespaces

- namespace [ASApi](#)

## 7.63 MemberDef.cpp File Reference

```
#include "MemberDef.h"  
#include "Exception.h"  
#include "Utils.h"  
#include "tibas.h"
```

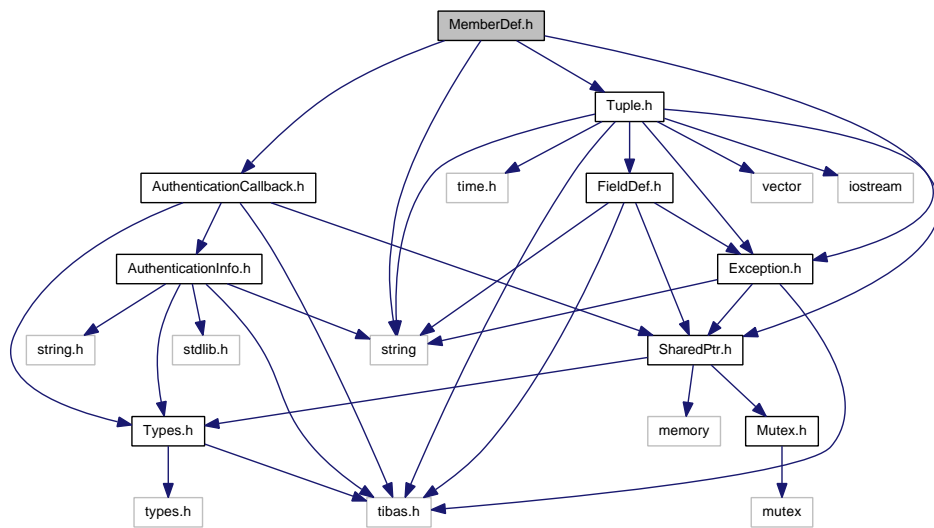
Include dependency graph for MemberDef.cpp:



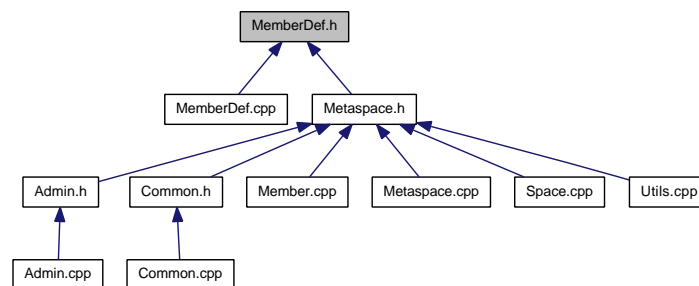
## 7.64 MemberDef.h File Reference

```
#include <string>
#include "Tuple.h"
#include "Exception.h"
#include "AuthenticationCallback.h"
```

Include dependency graph for MemberDef.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::MemberDef](#)

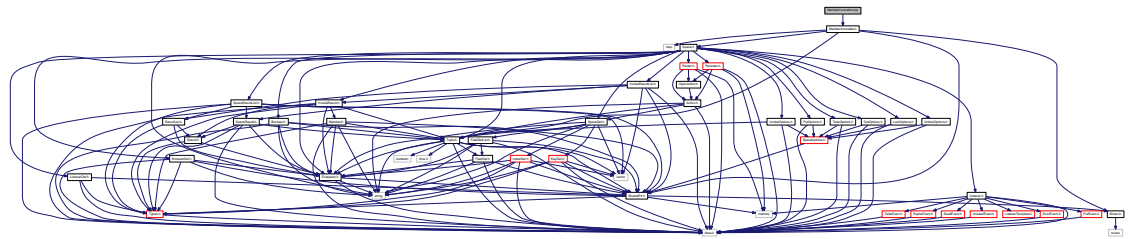
## Namespaces

- namespace [ASApi](#)

## 7.65 MemberInvocable.cpp File Reference

```
#include "MemberInvocable.h"
```

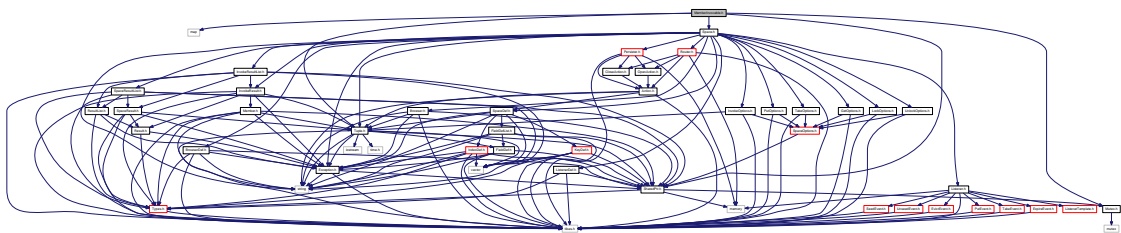
Include dependency graph for MemberInvocable.cpp:



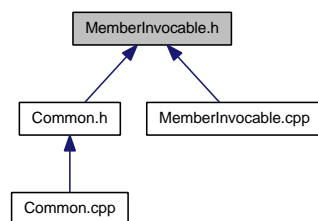
## 7.66 MemberInvocable.h File Reference

```
#include <map>
#include "Tuple.h"
#include "Space.h"
#include "Mutex.h"
#include "SharedPtr.h"
```

Include dependency graph for MemberInvocable.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::MemberInvocable](#)

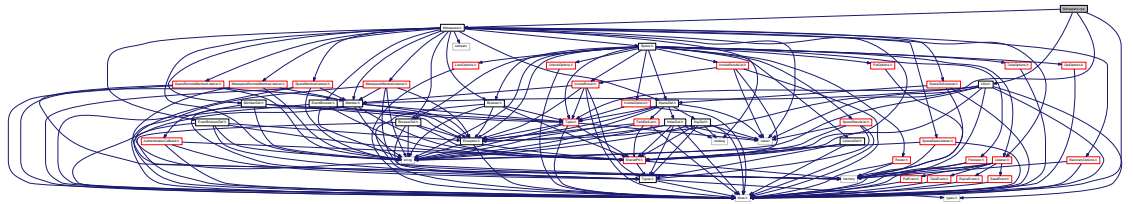
### Namespaces

- namespace [ASApi](#)

## 7.67 Metaspace.cpp File Reference

```
#include "Metaspace.h"  
#include "Exception.h"  
#include "Utils.h"  
#include "tibas.h"
```

Include dependency graph for Metaspace.cpp:

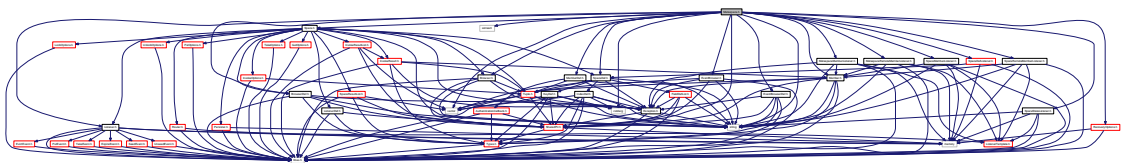




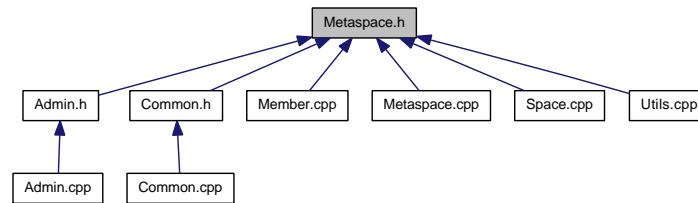
## 7.68 Metaspace.h File Reference

```
#include <string>
#include <cstdarg>
#include <vector>
#include <sstream>
#include "Member.h"
#include "MemberDef.h"
#include "SpaceDef.h"
#include "Space.h"
#include "Browser.h"
#include "BrowserDef.h"
#include "EventBrowser.h"
#include "EventBrowserDef.h"
#include "Listener.h"
#include "MetaspaceMemberListener.h"
#include "MetaspaceRemoteMemberListener.h"
#include "SpaceMemberListener.h"
#include "SpaceRemoteMemberListener.h"
#include "SpaceStateListener.h"
#include "SpaceDefListener.h"
#include "RecoveryOptions.h"
#include "SharedPtr.h"
```

Include dependency graph for Metaspace.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::Metaspace](#)

## Namespaces

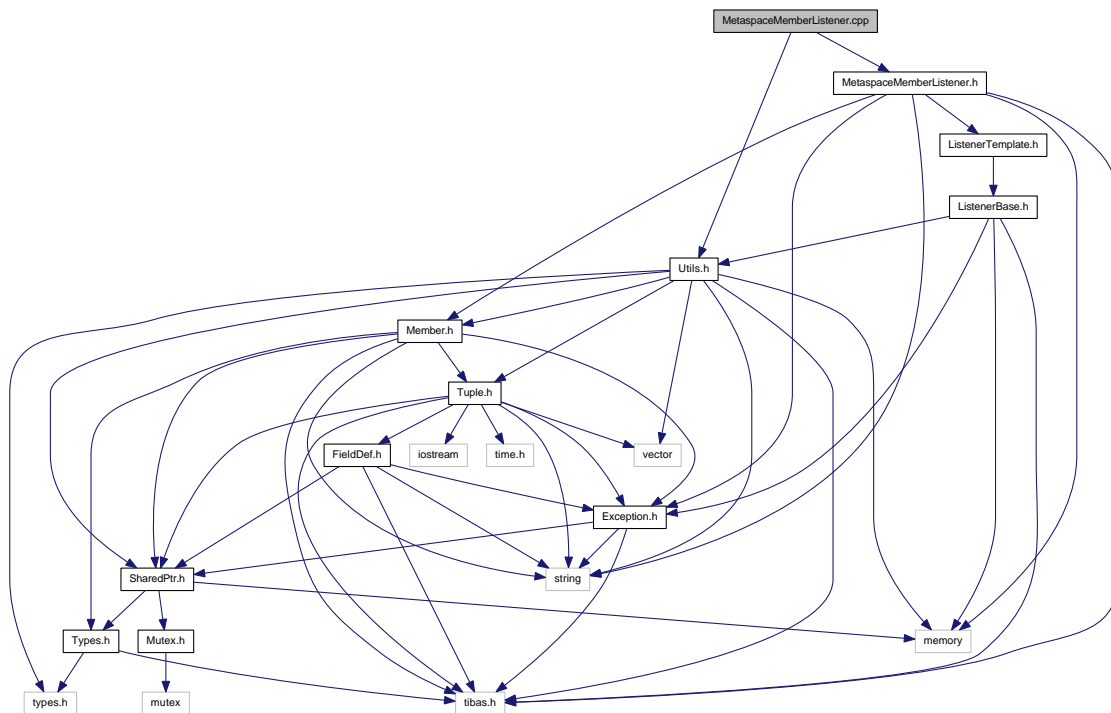
- namespace [ASApi](#)

## 7.69 MetaspaceMemberListener.cpp File Reference

```
#include "MetaspaceMemberListener.h"
```

```
#include "Utils.h"
```

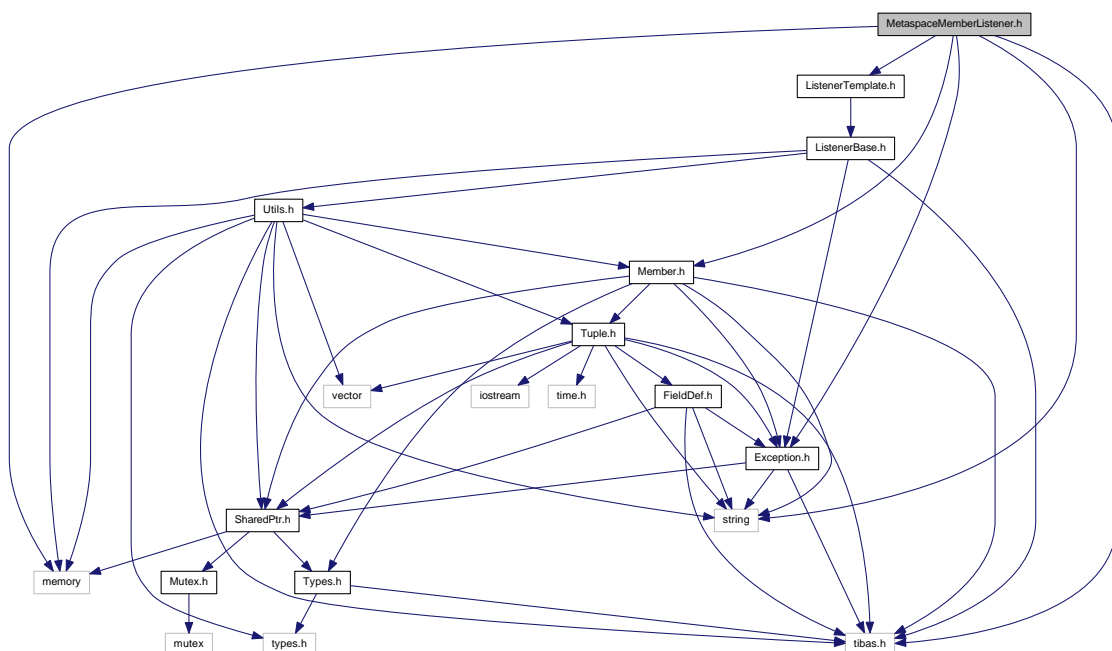
Include dependency graph for MetaspaceMemberListener.cpp:



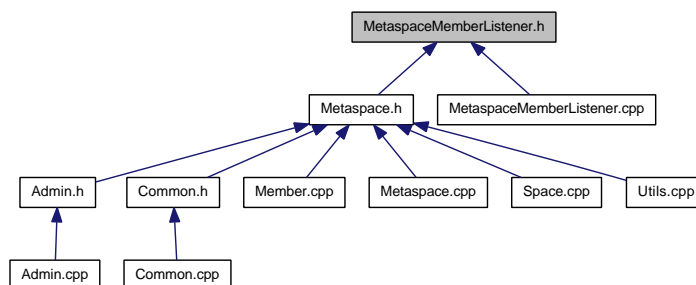
## 7.70 MetaspaceMemberListener.h File Reference

```
#include "tibas.h"
#include "Exception.h"
#include <memory>
#include <string>
#include "ListenerTemplate.h"
#include "Member.h"
```

Include dependency graph for MetaspaceMemberListener.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::MetaspaceMemberListener](#)

## Namespaces

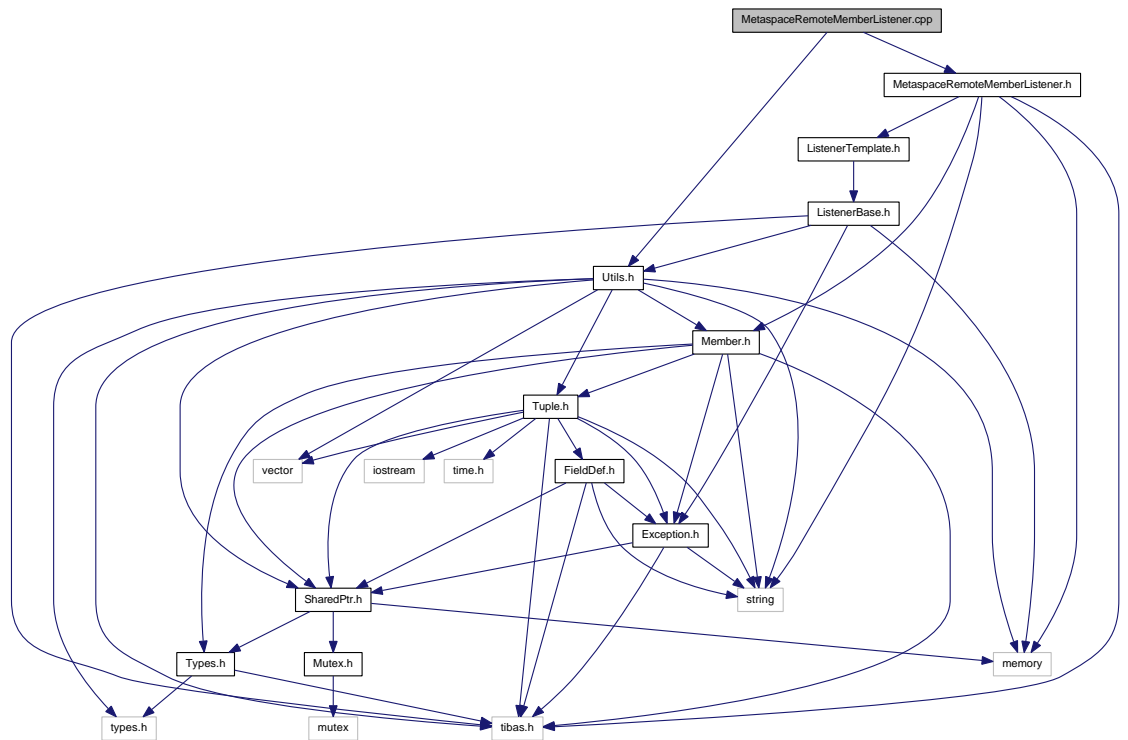
- namespace [ASApi](#)

## 7.71 MetaspaceRemoteMemberListener.cpp File Reference

```
#include "MetaspaceRemoteMemberListener.h"
```

```
#include "Utils.h"
```

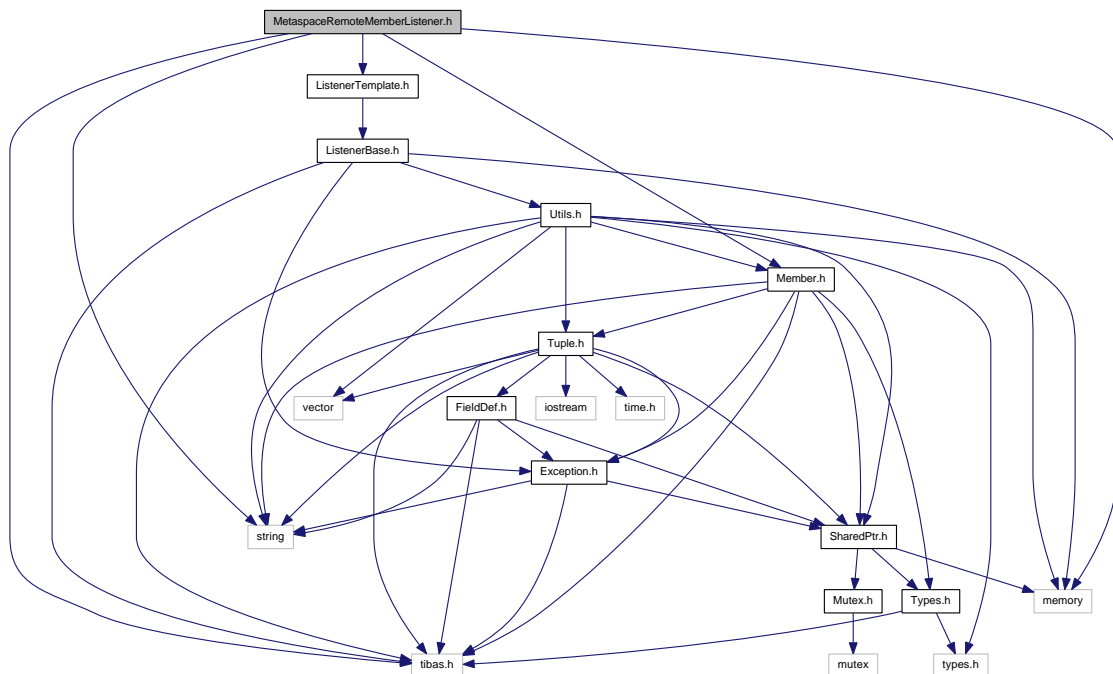
Include dependency graph for MetaspaceRemoteMemberListener.cpp:



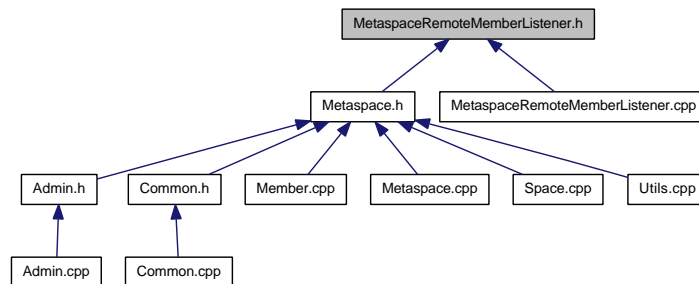
## 7.72 MetaspaceRemoteMemberListener.h File Reference

```
#include "tibas.h"
#include <memory>
#include <string>
#include "ListenerTemplate.h"
#include "Member.h"
```

Include dependency graph for MetaspaceRemoteMemberListener.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::MetaspaceRemoteMemberListener](#)

## Namespaces

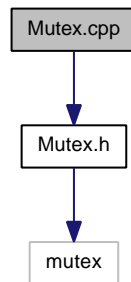
- namespace [ASApi](#)



## 7.73 Mutex.cpp File Reference

```
#include "Mutex.h"
```

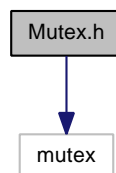
Include dependency graph for Mutex.cpp:



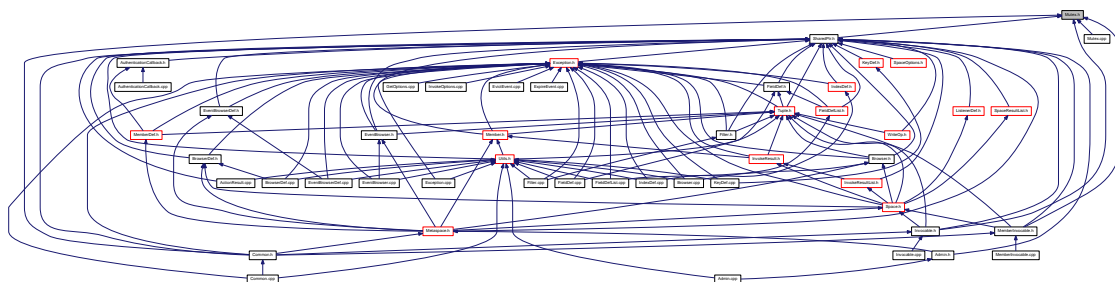
## 7.74 Mutex.h File Reference

```
#include <mutex>
```

Include dependency graph for Mutex.h:



This graph shows which files directly or indirectly include this file:



### Namespaces

- namespace [ASApi](#)

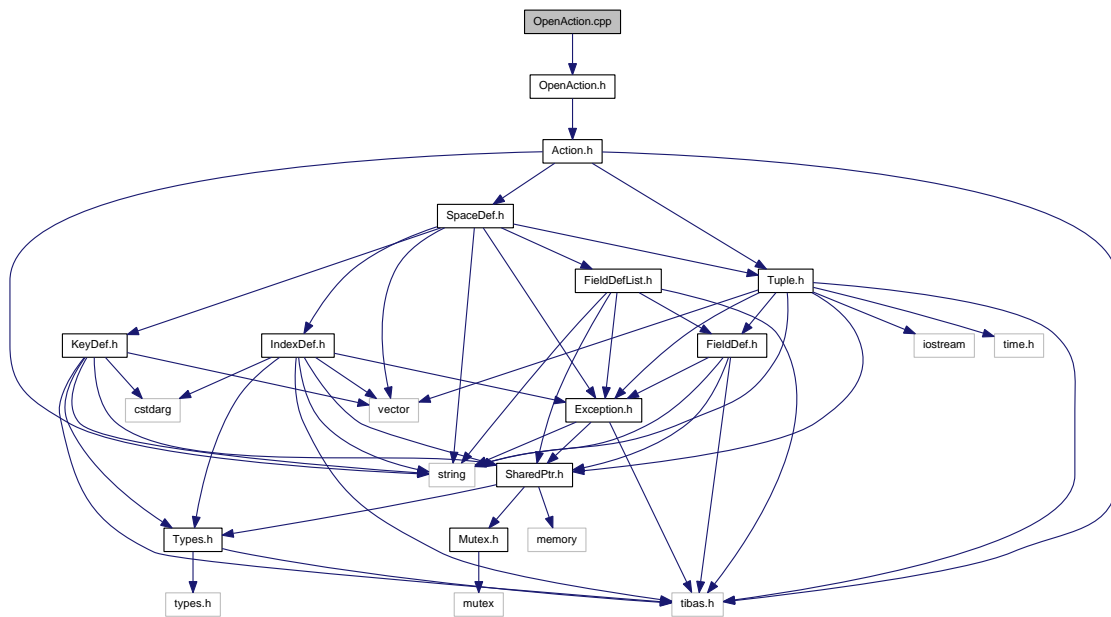
### Typedefs

- typedef std::mutex [ASApi::Mutex](#)

## 7.75 OpenAction.cpp File Reference

```
#include "OpenAction.h"
```

Include dependency graph for OpenAction.cpp:



```
#include "Action.h"
```

```

graph TD
    OpenAction.h[OpenAction.h] --> Action.h[Action.h]
    Action.h --> SpaceDef.h[SpaceDef.h]
    Action.h --> Tuple.h[Tuple.h]
    SpaceDef.h --> KeyDef.h[KeyDef.h]
    SpaceDef.h --> IndexDef.h[IndexDef.h]
    SpaceDef.h --> FieldDefList.h[FieldDefList.h]
    SpaceDef.h --> FieldDef.h[FieldDef.h]
    SpaceDef.h --> Exception.h[Exception.h]
    SpaceDef.h --> string[string]
    SpaceDef.h --> SharedPtr.h[SharedPtr.h]
    SpaceDef.h --> Mutex.h[Mutex.h]
    SpaceDef.h --> memory[memory]
    SpaceDef.h --> types.h[types.h]
    SpaceDef.h --> tibas.h[tibas.h]
    Tuple.h --> iostream[iostream]
    Tuple.h --> time.h[time.h]
    Tuple.h --> tibas.h[tibas.h]
    KeyDef.h --> cstdint[cstdint]
    KeyDef.h --> vector[vectord]
    IndexDef.h --> cstdint[cstdint]
    IndexDef.h --> vector[vectord]
    FieldDefList.h --> Exception.h[Exception.h]
    FieldDefList.h --> SharedPtr.h[SharedPtr.h]
    FieldDefList.h --> tibas.h[tibas.h]
    FieldDef.h --> Exception.h[Exception.h]
    FieldDef.h --> SharedPtr.h[SharedPtr.h]
    FieldDef.h --> tibas.h[tibas.h]
    Exception.h --> SharedPtr.h[SharedPtr.h]
    Exception.h --> tibas.h[tibas.h]
    string --> SharedPtr.h[SharedPtr.h]
    string --> tibas.h[tibas.h]
    SharedPtr.h --> Mutex.h[Mutex.h]
    SharedPtr.h --> memory[memory]
    SharedPtr.h --> tibas.h[tibas.h]
    Mutex.h --> memory[memory]
    Mutex.h --> tibas.h[tibas.h]
    memory --> tibas.h[tibas.h]
    types.h --> tibas.h[tibas.h]
    tibas.h --> tibas.h[tibas.h]

```

```

graph BT
    OpenAction.h[OpenAction.h] --> OpenAction.cpp[OpenAction.cpp]
    OpenAction.h --> Persister.h[Persister.h]
    OpenAction.h --> Router.h[Router.h]
    Persister.h --> Persister.cpp[Persister.cpp]
    Persister.h --> Space.h[Space.h]
    Router.h --> Router.cpp[Router.cpp]
    Router.h --> Space.h
    Space.h --> Invocable.h[Invocable.h]
    Space.h --> MemberInvocable.h[MemberInvocable.h]
    Space.h --> Metaspaces.h[Metaspaces.h]
    Invocable.h --> Invocable.cpp[Invocable.cpp]
    Invocable.h --> Common.h[Common.h]
    MemberInvocable.h --> MemberInvocable.cpp[MemberInvocable.cpp]
    MemberInvocable.h --> Common.h
    Metaspaces.h --> Admin.h[Admin.h]
    Metaspaces.h --> Member.cpp[Member.cpp]
    Metaspaces.h --> Metaspaces.cpp[Metaspaces.cpp]
    Metaspaces.h --> Utils.cpp[Utils.cpp]
    Metaspaces.h --> Space.cpp[Space.cpp]
    Common.h --> Common.cpp[Common.cpp]
    Admin.h --> Admin.cpp[Admin.cpp]
  
```

- class `ASApi::OpenAction`

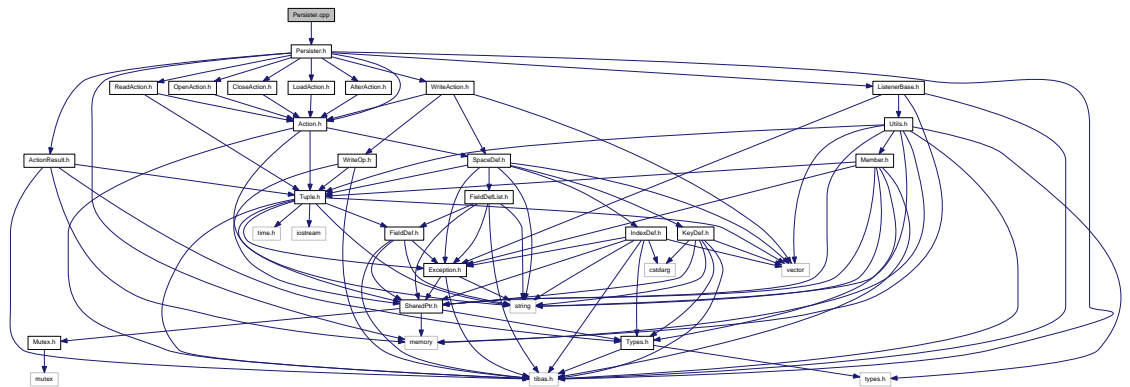
## Namespaces

- namespace [ASApi](#)

## 7.77 Persister.cpp File Reference

```
#include "Persister.h"
```

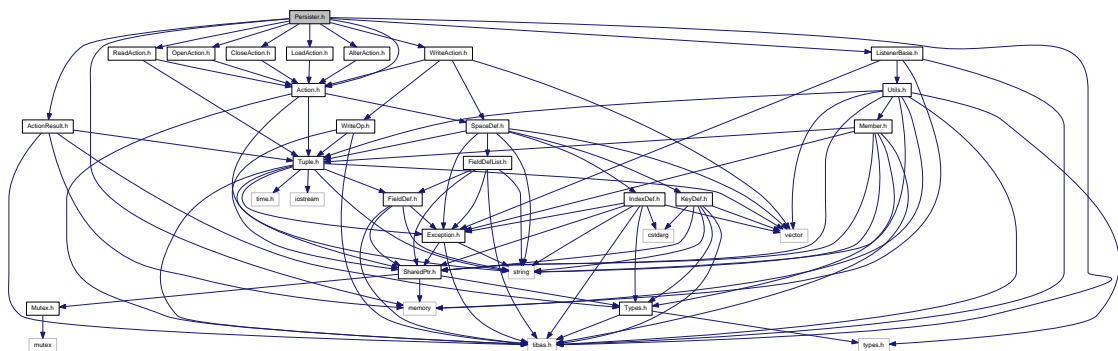
Include dependency graph for Persister.cpp:



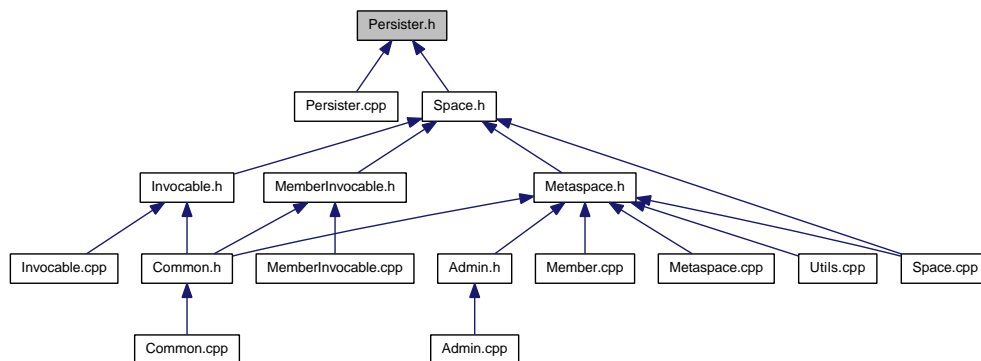
## 7.78 Persister.h File Reference

```
#include "tibas.h"
#include <memory>
#include "Action.h"
#include "OpenAction.h"
#include "CloseAction.h"
#include "LoadAction.h"
#include "ReadAction.h"
#include "WriteAction.h"
#include "AlterAction.h"
#include "ActionResult.h"
#include "ListenerBase.h"
```

Include dependency graph for Persister.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::Persister](#)

## Namespaces

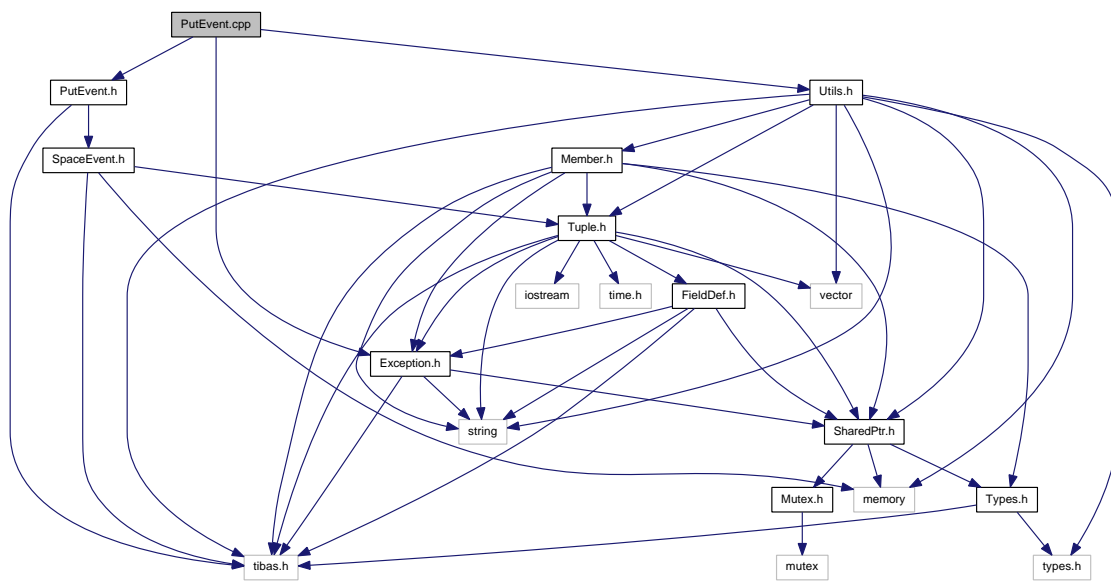
- namespace [ASApi](#)



## 7.79 PutEvent.cpp File Reference

```
#include "PutEvent.h"  
#include "Exception.h"  
#include "Utils.h"
```

Include dependency graph for PutEvent.cpp:

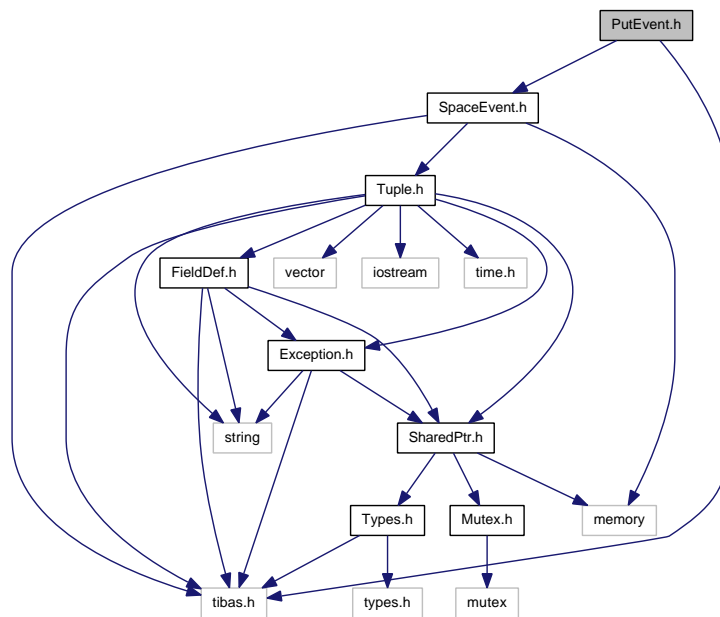


## 7.80 PutEvent.h File Reference

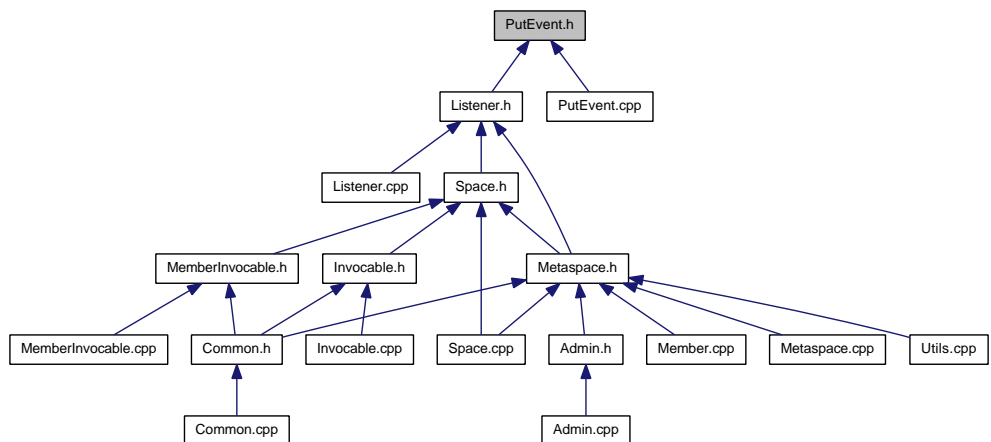
```
#include "tibas.h"
```

```
#include "SpaceEvent.h"
```

Include dependency graph for PutEvent.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::PutEvent](#)

## Namespaces

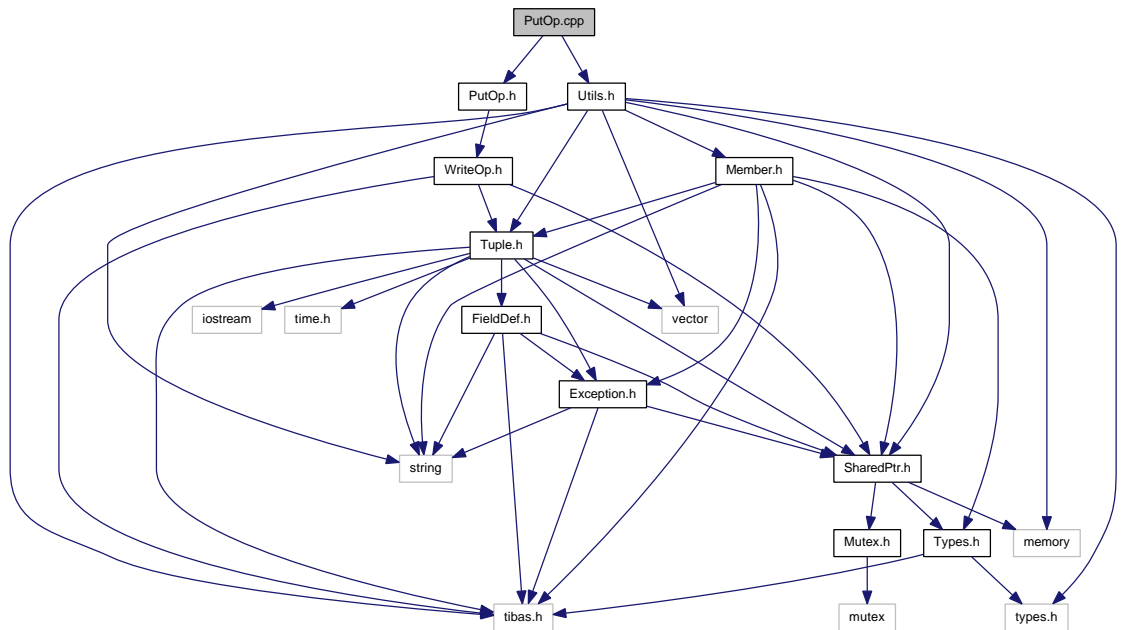
- namespace [ASApi](#)

## 7.81 PutOp.cpp File Reference

```
#include "PutOp.h"
```

```
#include "Utils.h"
```

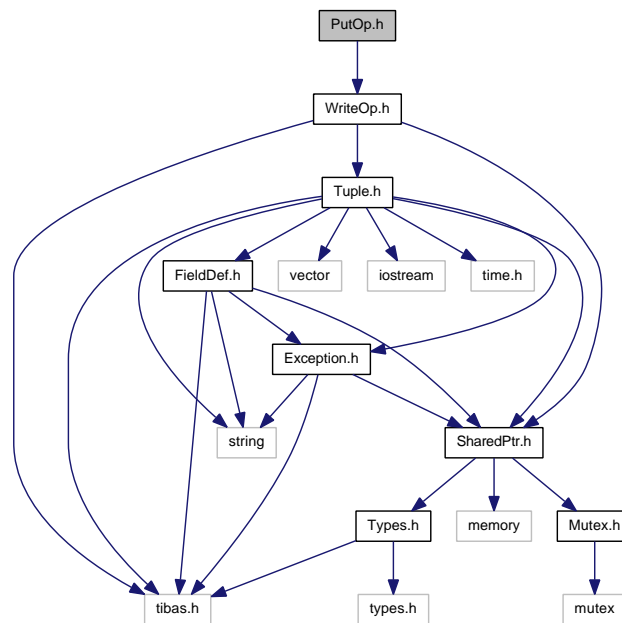
Include dependency graph for PutOp.cpp:



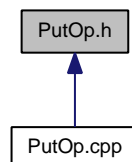
## 7.82 PutOp.h File Reference

```
#include "WriteOp.h"
```

Include dependency graph for PutOp.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::PutOp](#)

### Namespaces

- namespace [ASApi](#)

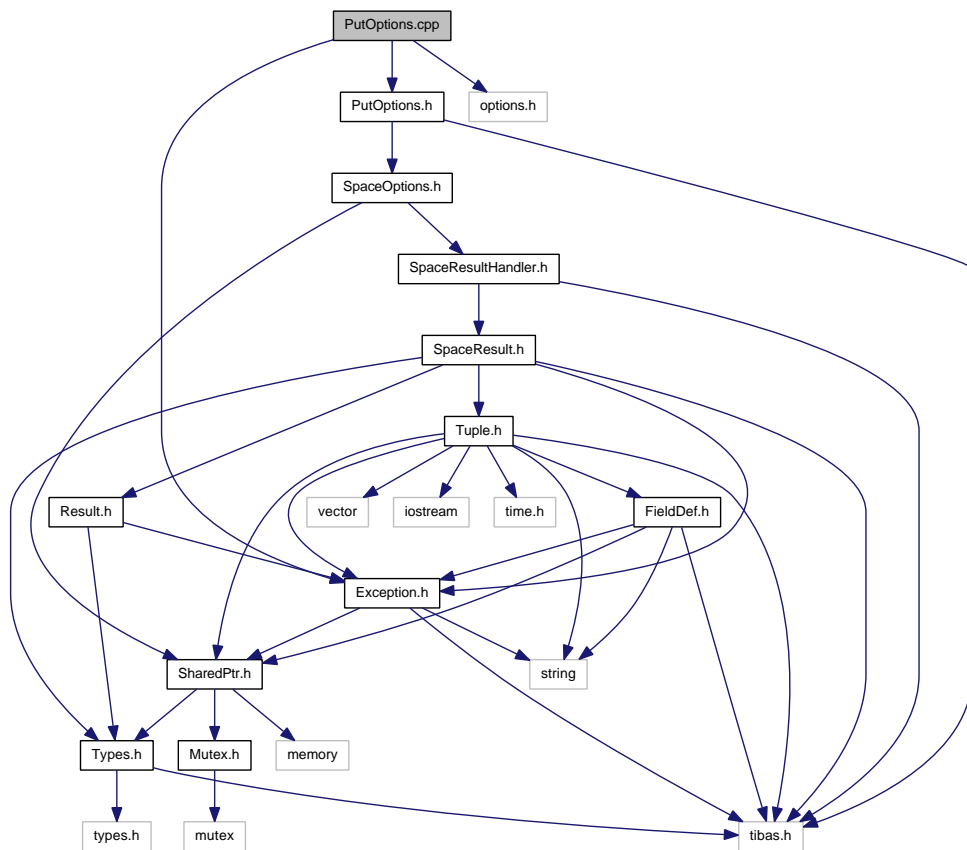
## 7.83 PutOptions.cpp File Reference

```
#include "PutOptions.h"
```

```
#include "options.h"
```

```
#include "Exception.h"
```

Include dependency graph for PutOptions.cpp:

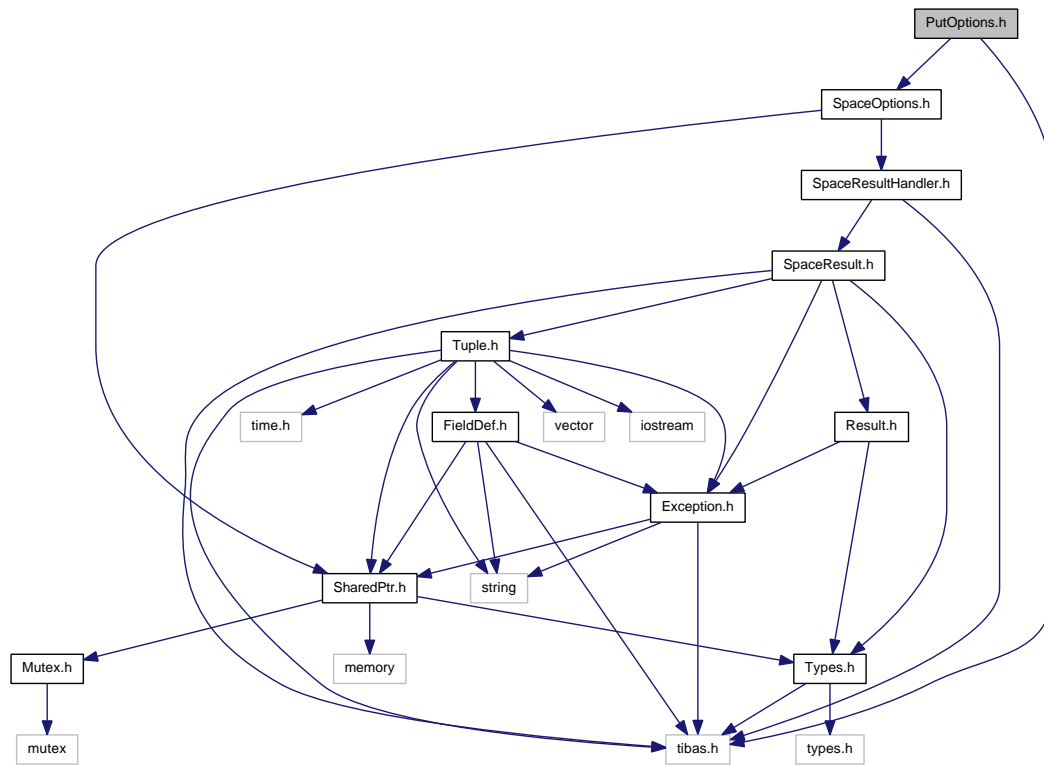


## 7.84 PutOptions.h File Reference

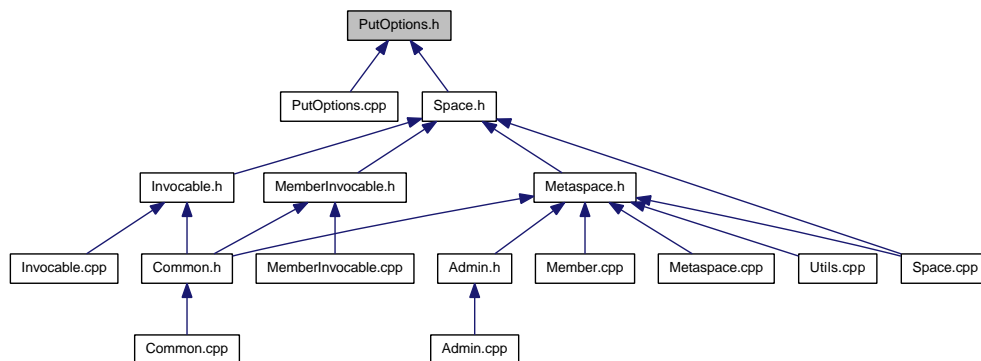
```
#include "tibas.h"
```

```
#include "SpaceOptions.h"
```

Include dependency graph for PutOptions.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::PutOptions](#)

## Namespaces

- namespace [ASApi](#)

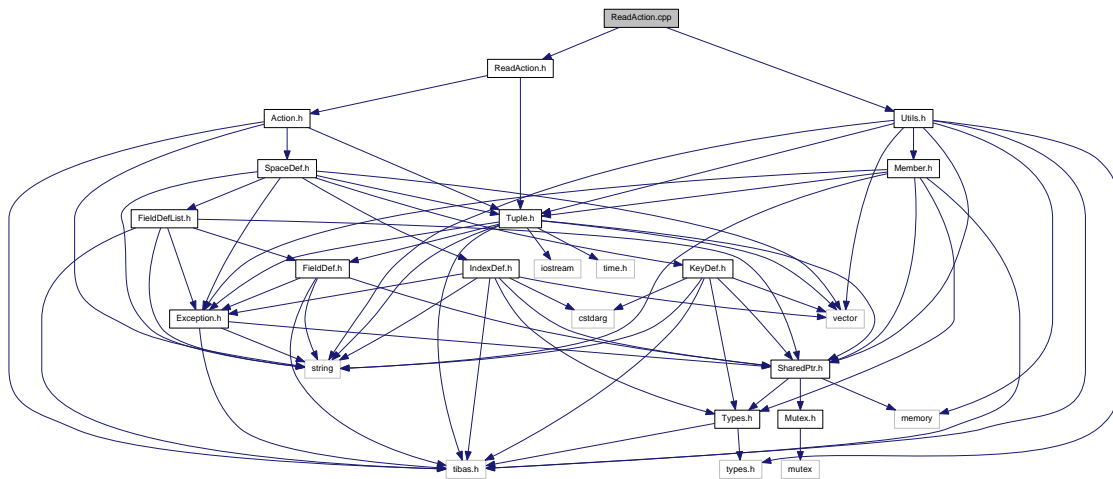


## 7.85 ReadAction.cpp File Reference

```
#include "ReadAction.h"
```

```
#include "Utils.h"
```

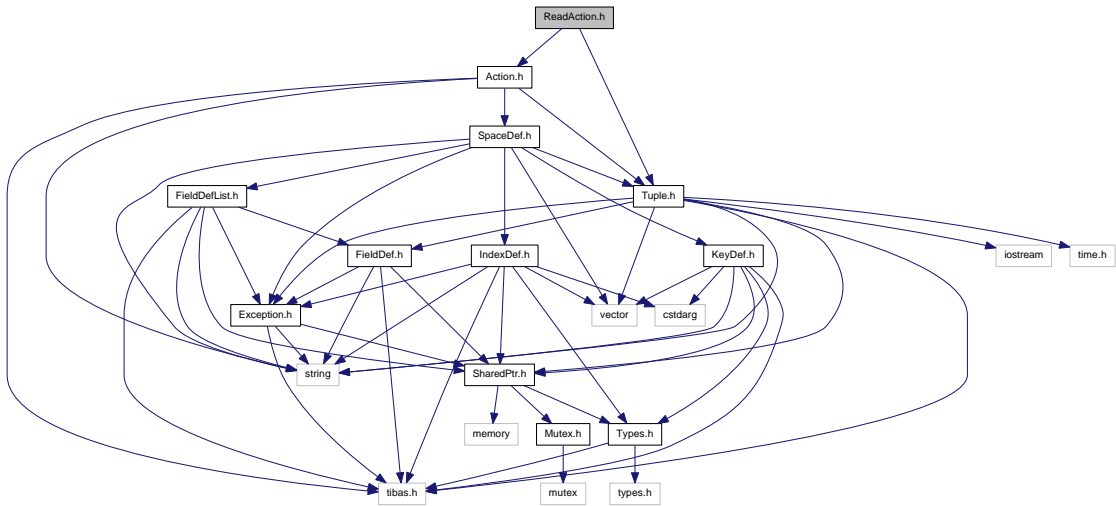
Include dependency graph for ReadAction.cpp:



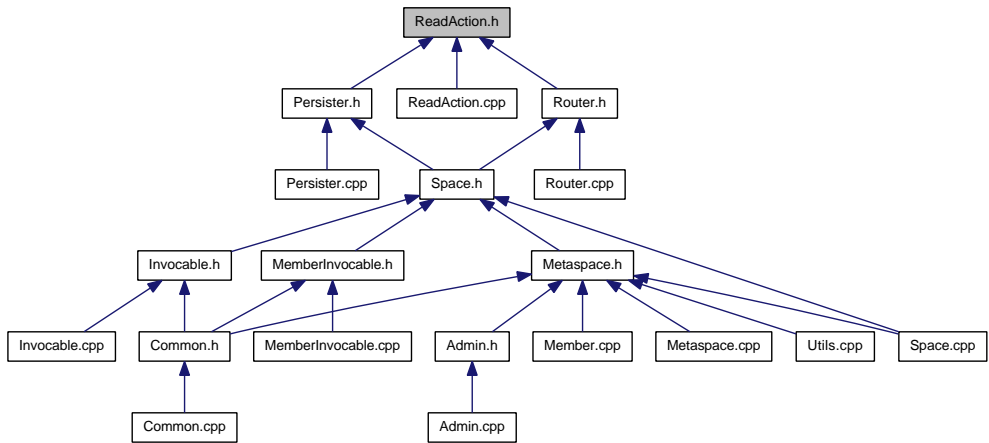
7.86 ReadAction.h File Reference

```
#include "Action.h"
#include "Tuple.h"

Include dependency graph for ReadAction.h:
```



This graph shows which files directly or indirectly include this file:



Classes

- class [ASApi::ReadAction](#)

## Namespaces

- namespace [ASApi](#)

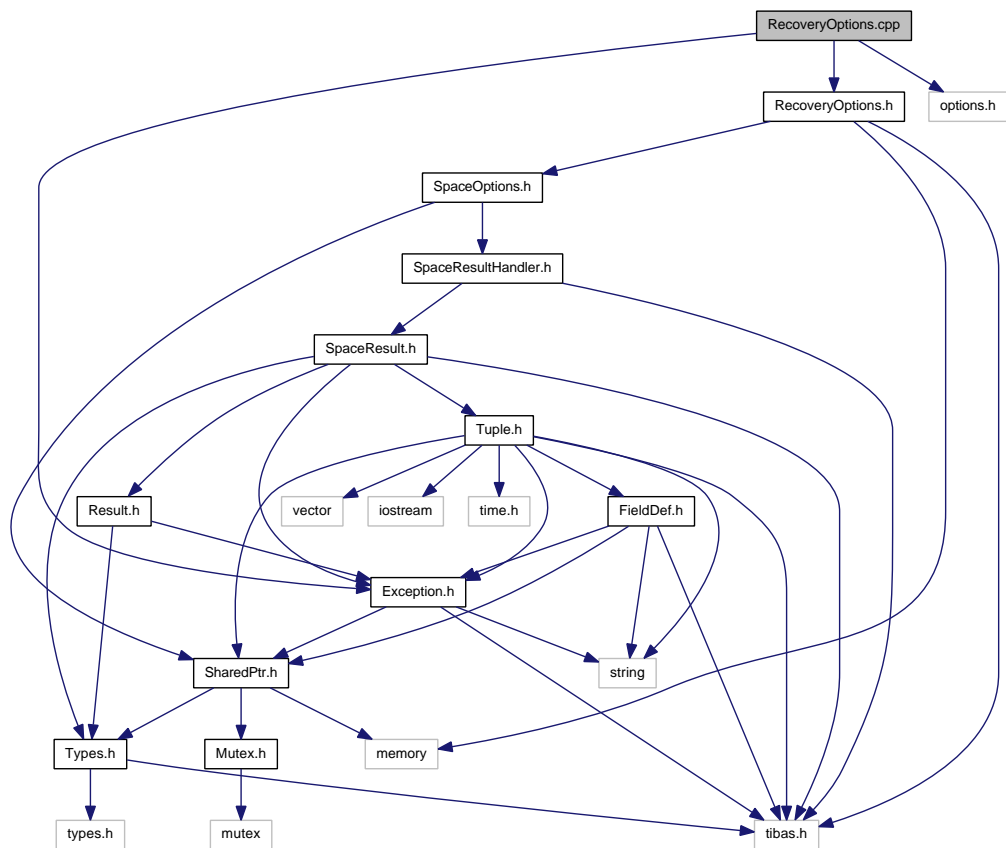
## 7.87 RecoveryOptions.cpp File Reference

```
#include "RecoveryOptions.h"
```

```
#include "options.h"
```

```
#include "Exception.h"
```

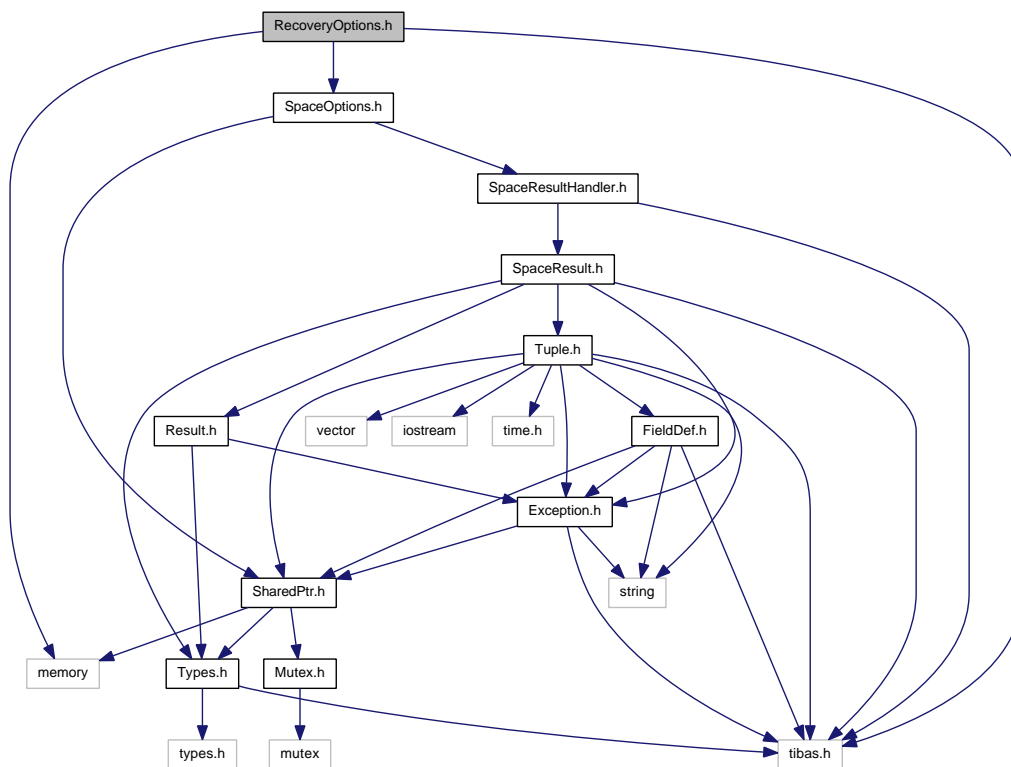
Include dependency graph for RecoveryOptions.cpp:



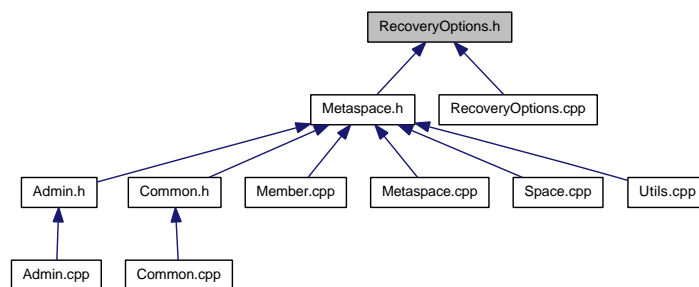
## 7.88 RecoveryOptions.h File Reference

```
#include <memory>
#include "tibas.h"
#include "SpaceOptions.h"
```

Include dependency graph for RecoveryOptions.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::RecoveryOptions](#)

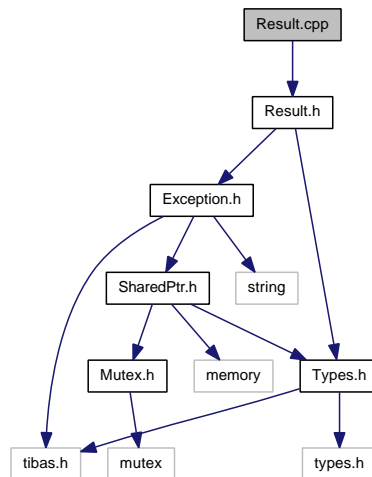
## Namespaces

- namespace [ASApi](#)

## 7.89 Result.cpp File Reference

```
#include "Result.h"
```

Include dependency graph for Result.cpp:



```
#include "Exception.h"
#include "Types.h"
```

```

graph TD
    Result.h --> Exception.h
    Result.h --> Types.h
    Exception.h --> SharedPtr.h
    Exception.h --> string
    Exception.h --> tibas.h
    SharedPtr.h --> Mutex.h
    SharedPtr.h --> memory
    Mutex.h --> mutex
    memory --> Types.h
    Types.h --> types.h
  
```

```

graph TD
    Result_h[Result.h] --> InvokeResult_h[InvokeResult.h]
    Result_h --> ResultList_h[ResultList.h]
    Result_h --> SpaceResult_h[SpaceResult.h]
    Result_h --> Result_cpp[Result.cpp]
    
    InvokeResult_h --> InvokeResult_cpp[InvokeResult.cpp]
    InvokeResult_h --> InvokeResultList_h[InvokeResultList.h]
    InvokeResultList_h --> InvokeResultList_cpp[InvokeResultList.cpp]
    
    ResultList_h --> ResultList_cpp[ResultList.cpp]
    
    SpaceResult_h --> SpaceResultList_h[SpaceResultList.h]
    SpaceResultList_h --> SpaceResultList_cpp[SpaceResultList.cpp]
    SpaceResult_h --> SpaceResult_cpp[SpaceResult.cpp]
    SpaceResult_h --> SpaceResultHandler_h[SpaceResultHandler.h]
    SpaceResultHandler_h --> SpaceOptions_h[SpaceOptions.h]
    SpaceOptions_h --> SpaceOptions_cpp[SpaceOptions.cpp]
    
    TakeOptions_h[TakeOptions.h] --> TakeOptions_cpp[TakeOptions.cpp]
    UnlockOptions_h[UnlockOptions.h] --> UnlockOptions_cpp[UnlockOptions.cpp]
    GetOptions_h[GetOptions.h] --> GetOptions_cpp[GetOptions.cpp]
    InvokeOptions_h[InvokeOptions.h] --> InvokeOptions_cpp[InvokeOptions.cpp]
    LockOptions_h[LockOptions.h] --> LockOptions_cpp[LockOptions.cpp]
    RecoveryOptions_h[RecoveryOptions.h] --> RecoveryOptions_cpp[RecoveryOptions.cpp]
    
    Space_h[Space.h] --> PutOptions_h[PutOptions.h]
    PutOptions_h --> PutOptions_cpp[PutOptions.cpp]
    Space_h --> TakeOptions_h
    Space_h --> UnlockOptions_h
    Space_h --> GetOptions_h
    Space_h --> InvokeOptions_h
    Space_h --> LockOptions_h
    Space_h --> RecoveryOptions_h
    
    Invocable_h[Invocable.h] --> Invocable_cpp[Invocable.cpp]
    Invocable_h --> Common_h[Common.h]
    Common_h --> Common_cpp[Common.cpp]
    MemberInvocable_h[MemberInvocable.h] --> MemberInvocable_cpp[MemberInvocable.cpp]
    Space_cpp[Space.cpp] --> Space_h
    Admin_h[Admin.h] --> Admin_cpp[Admin.cpp]
    Member_cpp[Member.cpp] --> MemberInvocable_h
    Metaspase_cpp[Metaspase.cpp] --> Metaspase_h[Metaspase.h]
    Utils_cpp[Utils.cpp] --> Metaspase_h
    Metaspase_h --> Space_h
    Metaspase_h --> TakeOptions_h
    Metaspase_h --> UnlockOptions_h
    Metaspase_h --> GetOptions_h
    Metaspase_h --> InvokeOptions_h
    Metaspase_h --> LockOptions_h
    Metaspase_h --> RecoveryOptions_h
  
```

- class `ASApi::Result`



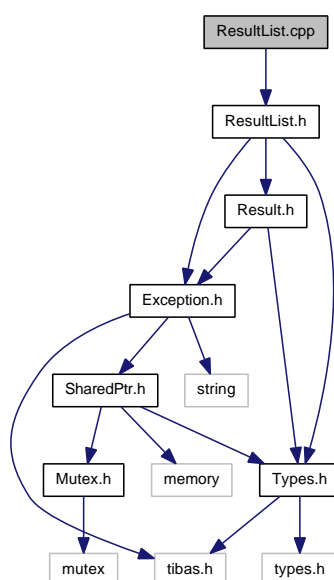
## Namespaces

- namespace [ASApi](#)

## 7.91 ResultList.cpp File Reference

```
#include "ResultList.h"
```

Include dependency graph for ResultList.cpp:



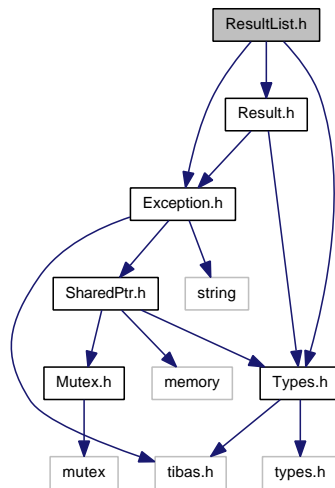
## 7.92 ResultList.h File Reference

```
#include "Exception.h"
```

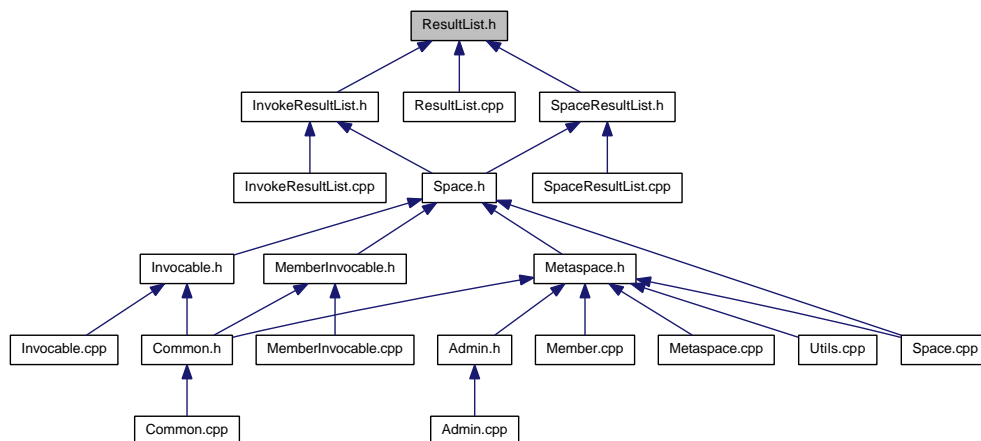
```
#include "Result.h"
```

```
#include "Types.h"
```

Include dependency graph for ResultList.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::ResultList](#)

## Namespaces

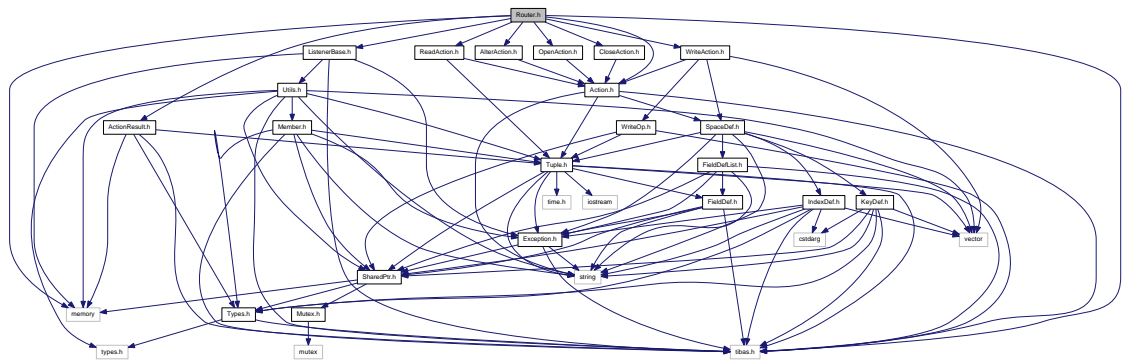
- namespace [ASApi](#)

```
#include "Router.h"
```

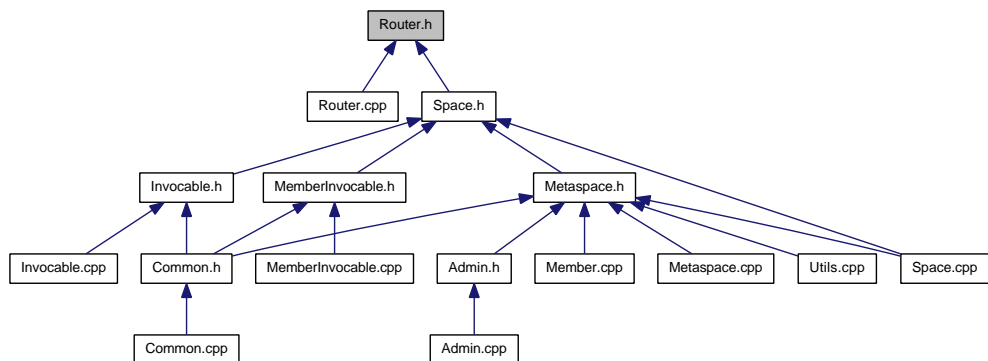
## 7.94 Router.h File Reference

```
#include "tibas.h"
#include <memory>
#include "Action.h"
#include "ReadAction.h"
#include "WriteAction.h"
#include "AlterAction.h"
#include "ActionResult.h"
#include "ListenerBase.h"
#include "OpenAction.h"
#include "CloseAction.h"
```

Include dependency graph for Router.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::Router](#)

## Namespaces

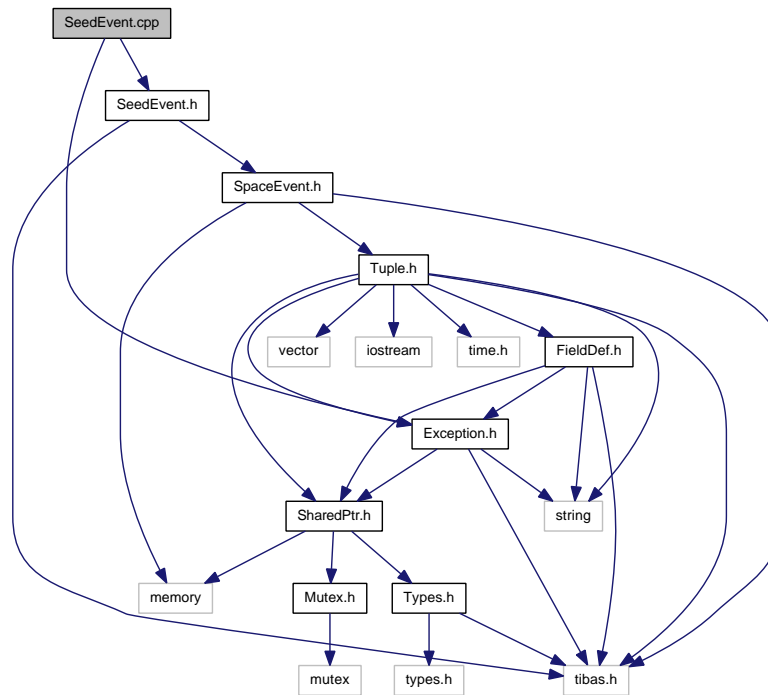
- namespace [ASApi](#)

## 7.95 SeedEvent.cpp File Reference

```
#include "SeedEvent.h"
```

```
#include "Exception.h"
```

Include dependency graph for SeedEvent.cpp:



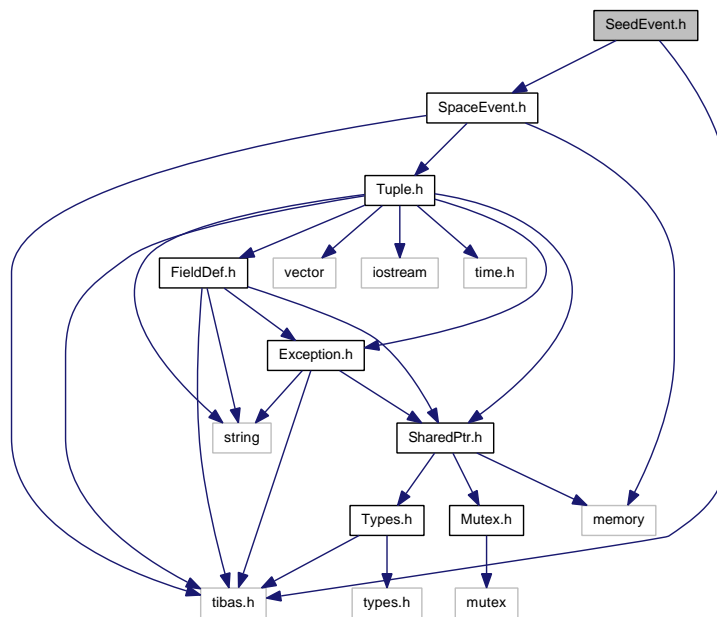


## 7.96 SeedEvent.h File Reference

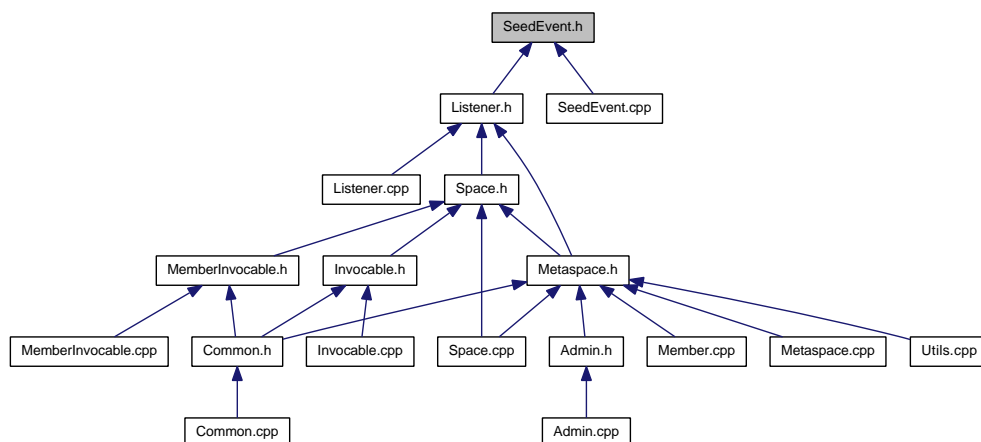
```
#include "tibas.h"
```

```
#include "SpaceEvent.h"
```

Include dependency graph for SeedEvent.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::SeedEvent](#)

## Namespaces

- namespace [ASApi](#)

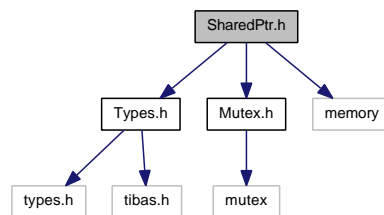
## 7.97 SharedPtr.h File Reference

```
#include "Types.h"
```

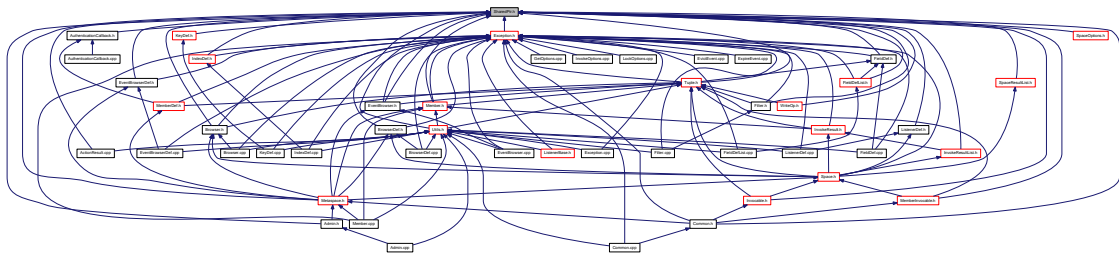
```
#include "Mutex.h"
```

```
#include <memory>
```

Include dependency graph for SharedPtr.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::SharedPtr< T >](#)

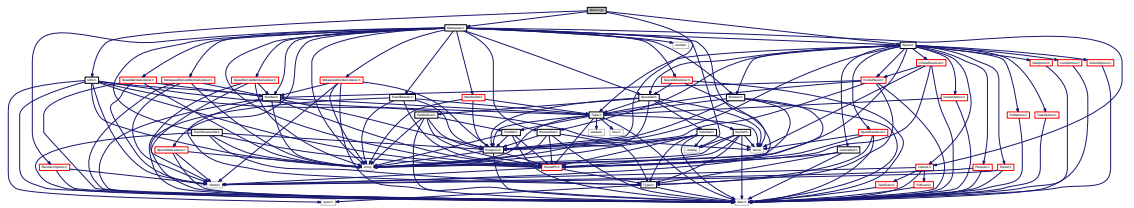
### Namespaces

- namespace [ASApi](#)

## 7.98 Space.cpp File Reference

```
#include "Space.h"  
#include "Exception.h"  
#include "Utils.h"  
#include "Metaspace.h"
```

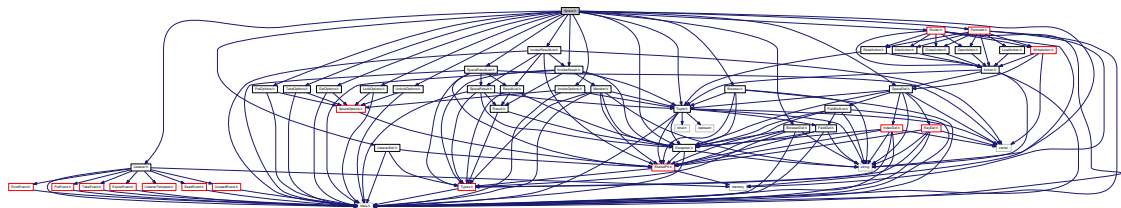
Include dependency graph for Space.cpp:



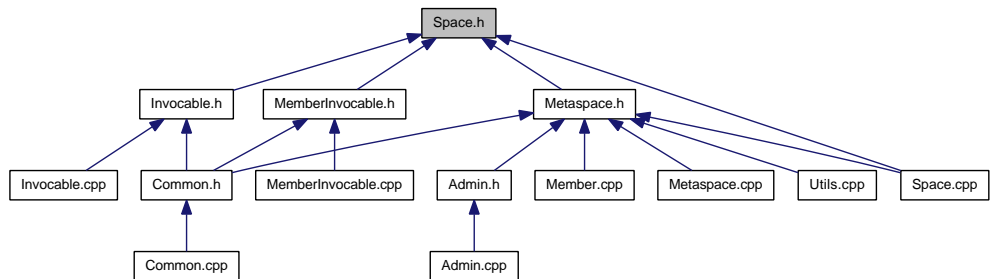
## 7.99 Space.h File Reference

```
#include <string>
#include "Exception.h"
#include "Tuple.h"
#include "SpaceDef.h"
#include "Browser.h"
#include "BrowserDef.h"
#include "Listener.h"
#include "ListenerDef.h"
#include "PutOptions.h"
#include "TakeOptions.h"
#include "GetOptions.h"
#include "LockOptions.h"
#include "UnlockOptions.h"
#include "SpaceResultList.h"
#include "InvokeOptions.h"
#include "InvokeResult.h"
#include "InvokeResultList.h"
#include "Persister.h"
#include "Router.h"
```

Include dependency graph for Space.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::Space](#)

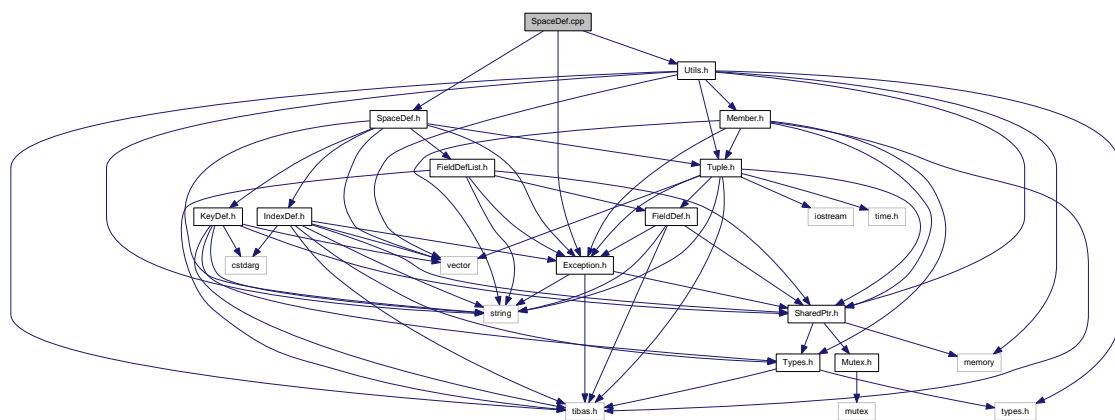
## Namespaces

- namespace [ASApi](#)

## 7.100 SpaceDef.cpp File Reference

```
#include "SpaceDef.h"
#include "Exception.h"
#include "Utils.h"
```

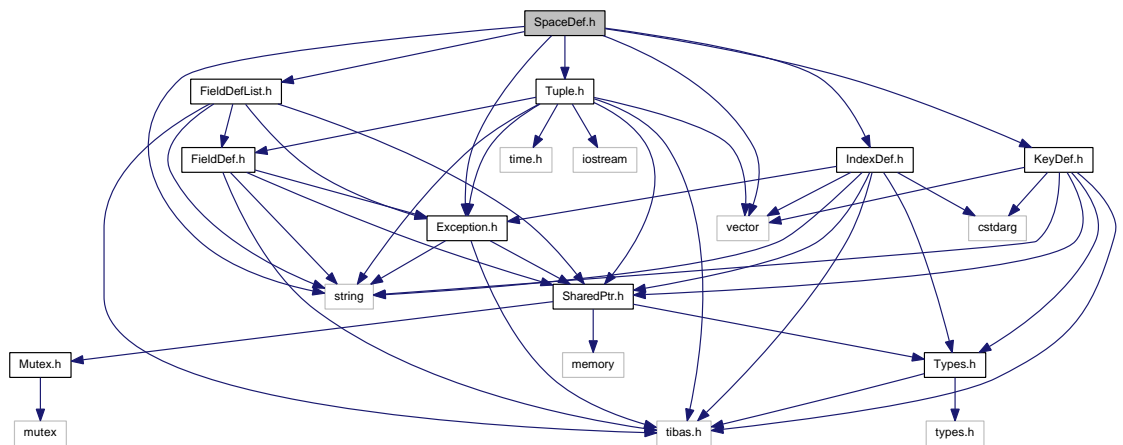
Include dependency graph for SpaceDef.cpp:



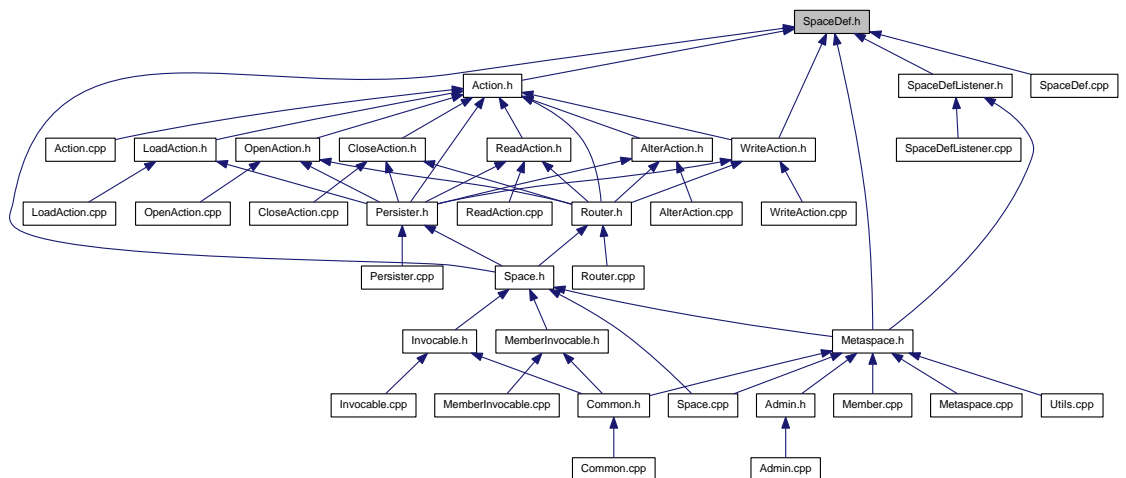
## 7.101 SpaceDef.h File Reference

```
#include <string>
#include <vector>
#include "Tuple.h"
#include "FieldDefList.h"
#include "KeyDef.h"
#include "IndexDef.h"
#include "Exception.h"
```

Include dependency graph for SpaceDef.h:



This graph shows which files directly or indirectly include this file:





## Classes

- class [ASApi::SpaceDef](#)

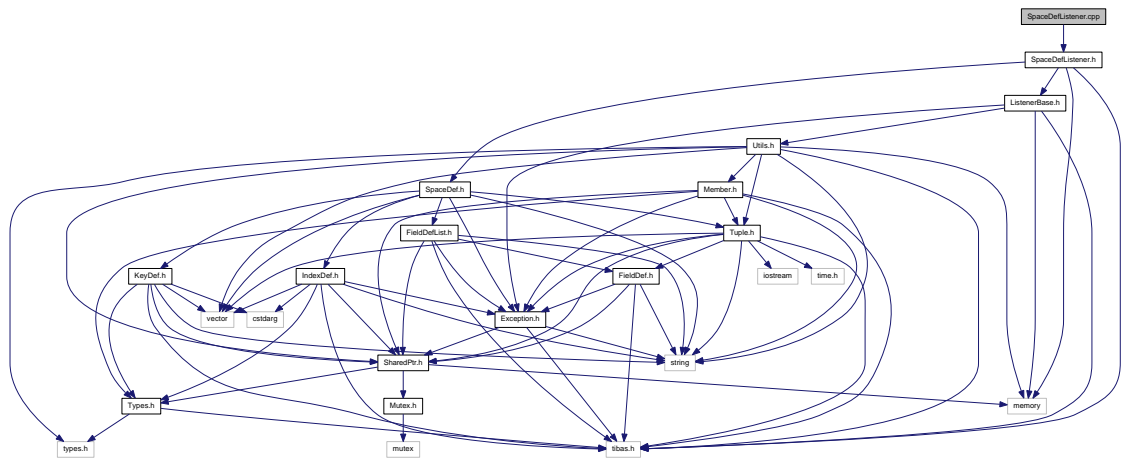
## Namespaces

- namespace [ASApi](#)

## 7.102 SpaceDefListener.cpp File Reference

```
#include "SpaceDefListener.h"
```

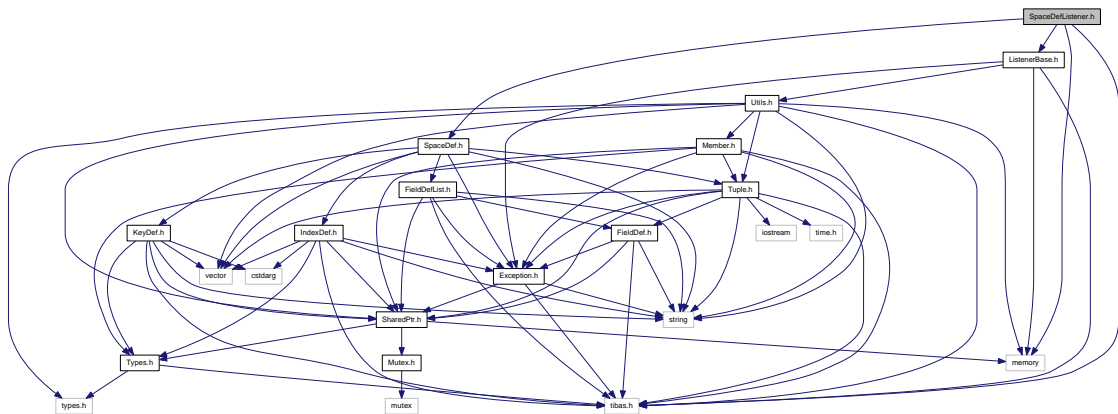
Include dependency graph for SpaceDefListener.cpp:



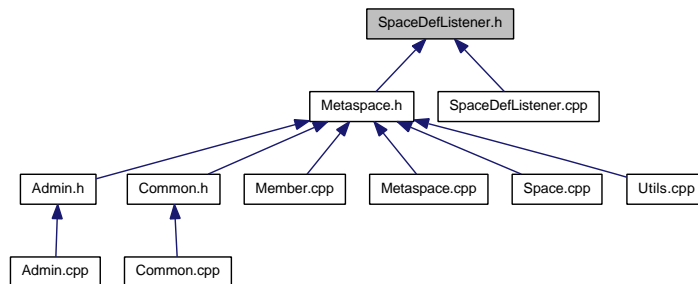
## 7.103 SpaceDefListener.h File Reference

```
#include "tibas.h"
#include "SpaceDef.h"
#include "ListenerBase.h"
#include <memory>
```

Include dependency graph for SpaceDefListener.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::SpaceDefListener](#)

### Namespaces

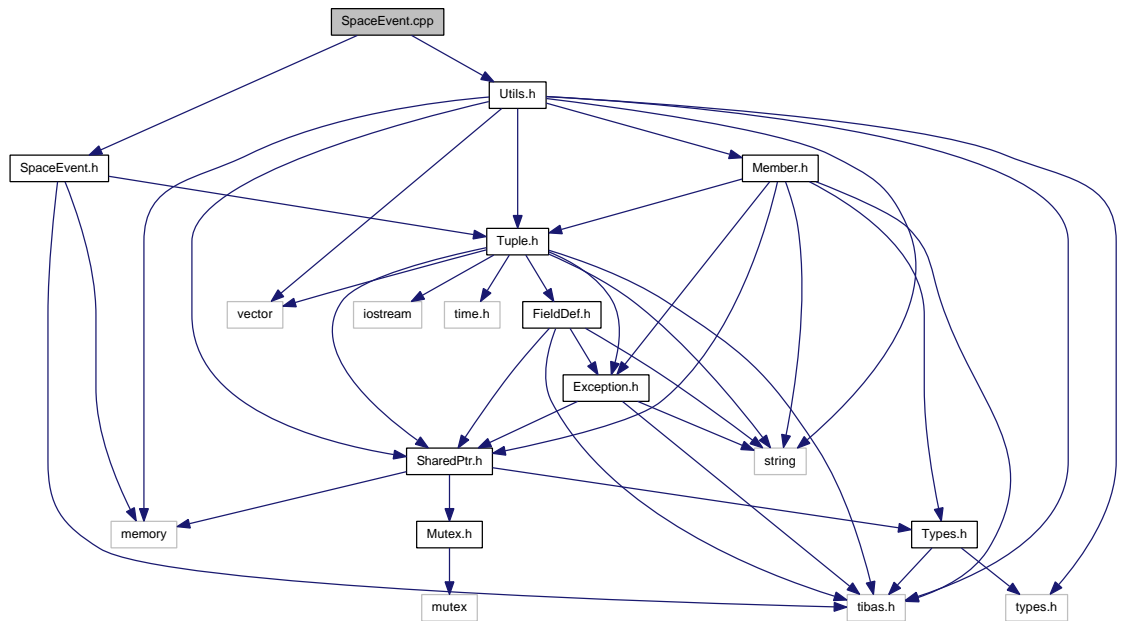
- namespace [ASApi](#)

## 7.104 SpaceEvent.cpp File Reference

```
#include "SpaceEvent.h"
```

```
#include "Utils.h"
```

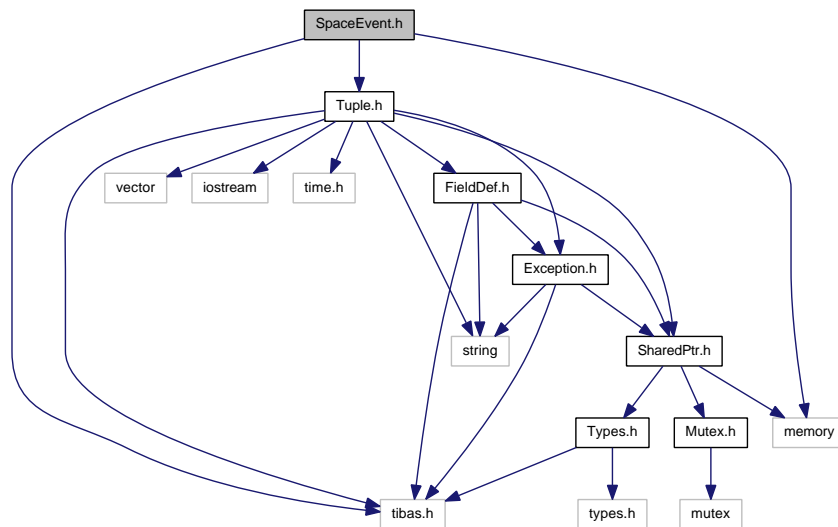
Include dependency graph for SpaceEvent.cpp:



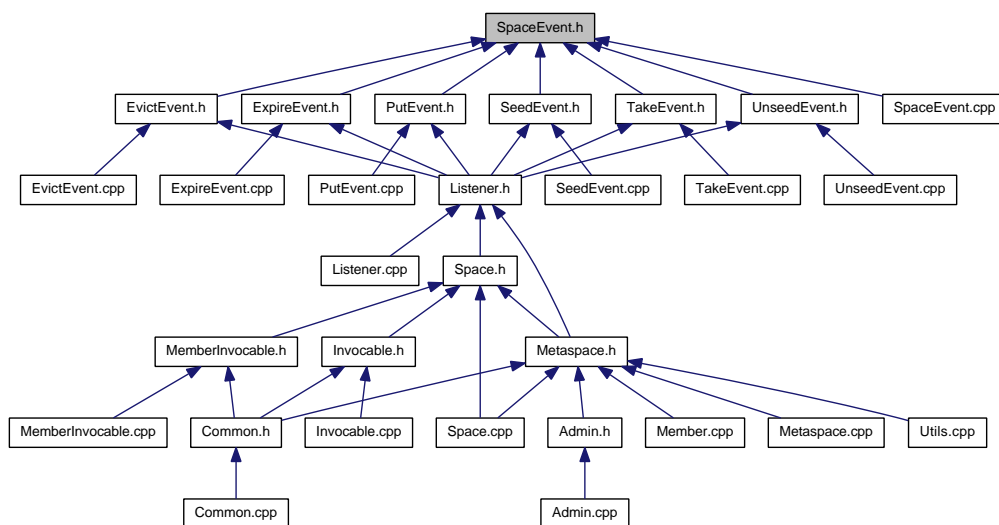
## 7.105 SpaceEvent.h File Reference

```
#include "tibas.h"
#include "Tuple.h"
#include <memory>
```

Include dependency graph for SpaceEvent.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::SpaceEvent](#)

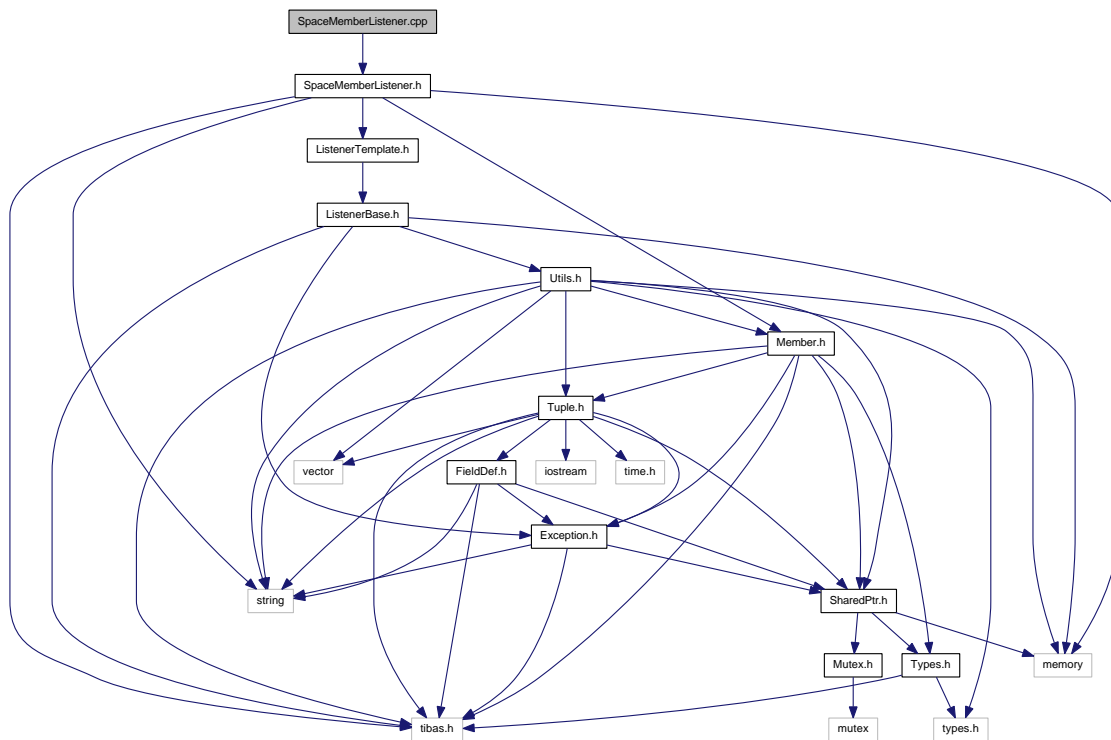
## Namespaces

- namespace [ASApi](#)

## 7.106 SpaceMemberListener.cpp File Reference

```
#include "SpaceMemberListener.h"
```

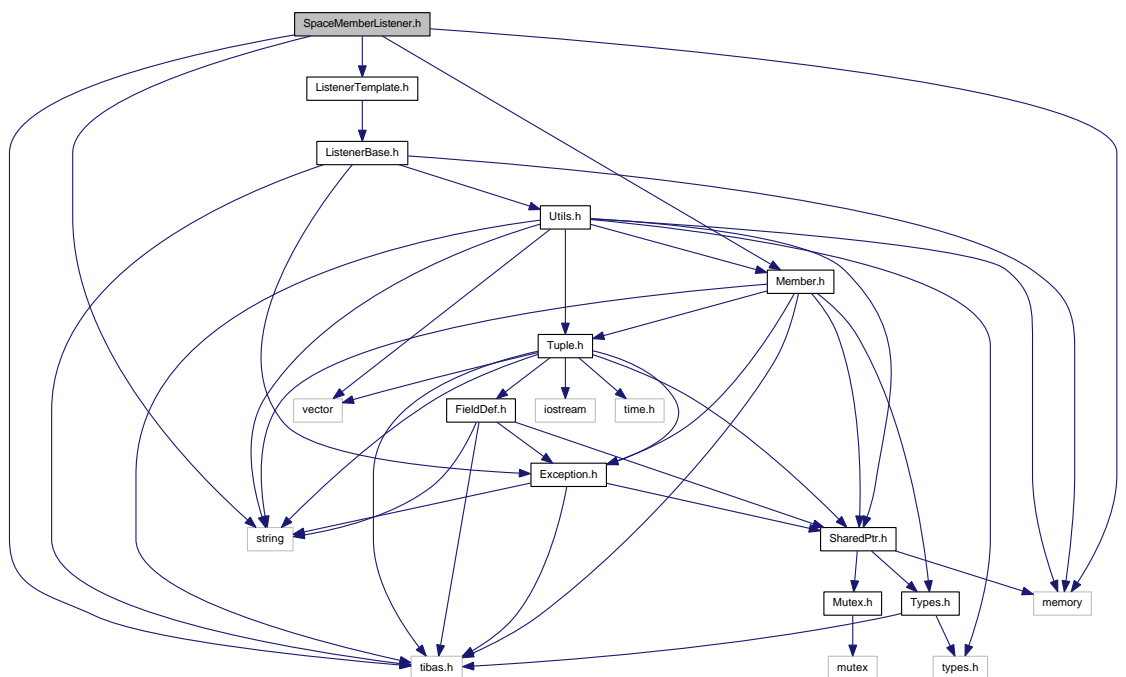
Include dependency graph for SpaceMemberListener.cpp:



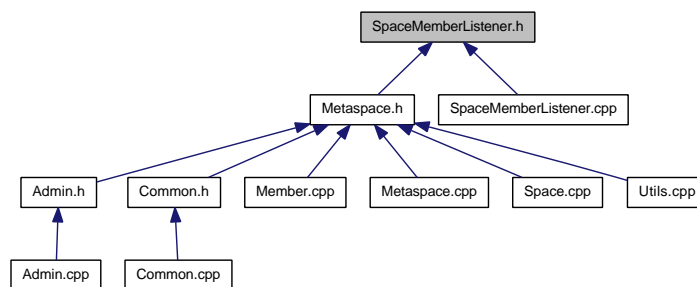
## 7.107 SpaceMemberListener.h File Reference

```
#include "tibas.h"
#include <memory>
#include <string>
#include "ListenerTemplate.h"
#include "Member.h"
```

Include dependency graph for SpaceMemberListener.h:



This graph shows which files directly or indirectly include this file:





## Classes

- class [ASApi::SpaceMemberListener](#)

## Namespaces

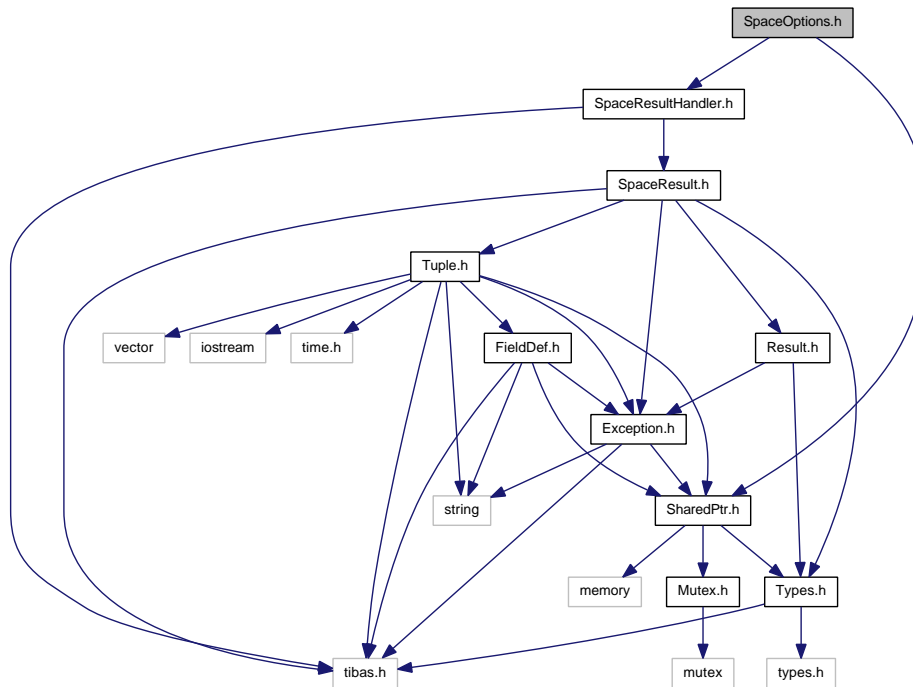
- namespace [ASApi](#)

## 7.108 SpaceOptions.h File Reference

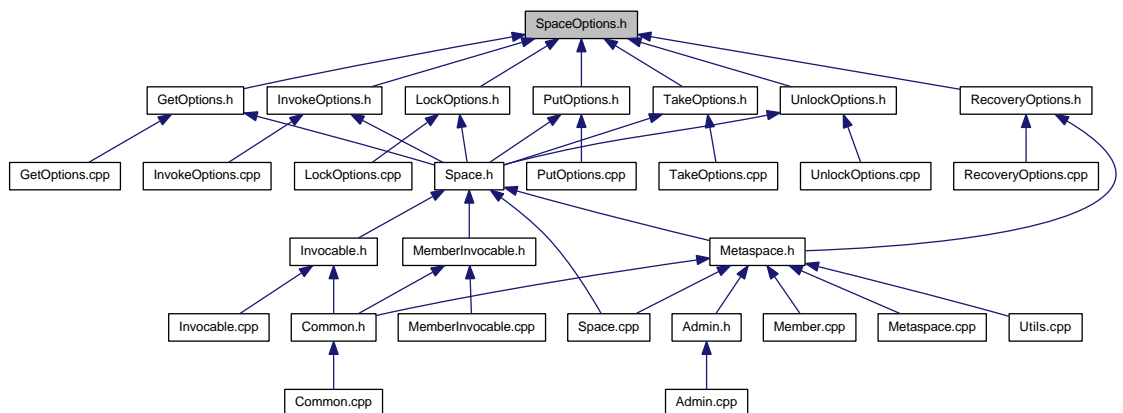
```
#include "SpaceResultHandler.h"
```

```
#include "SharedPtr.h"
```

Include dependency graph for SpaceOptions.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::SpaceOptions< OptionsType, tibasType >](#)

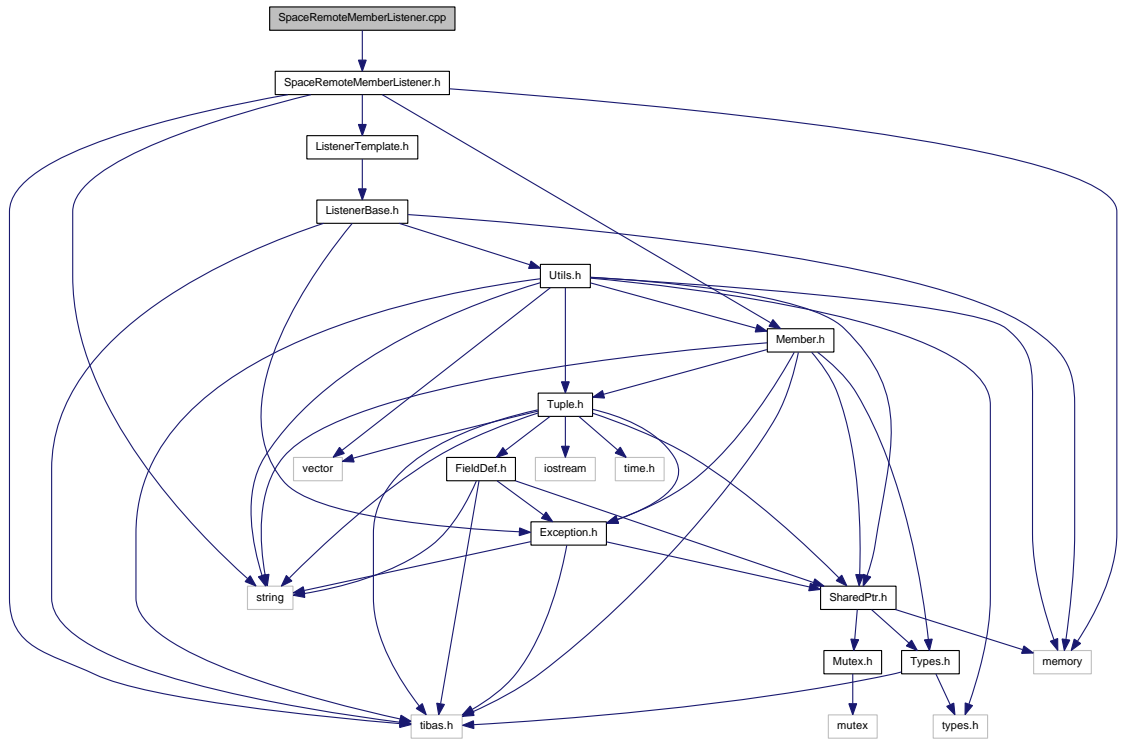
## Namespaces

- namespace [ASApi](#)

## 7.109 SpaceRemoteMemberListener.cpp File Reference

```
#include "SpaceRemoteMemberListener.h"
```

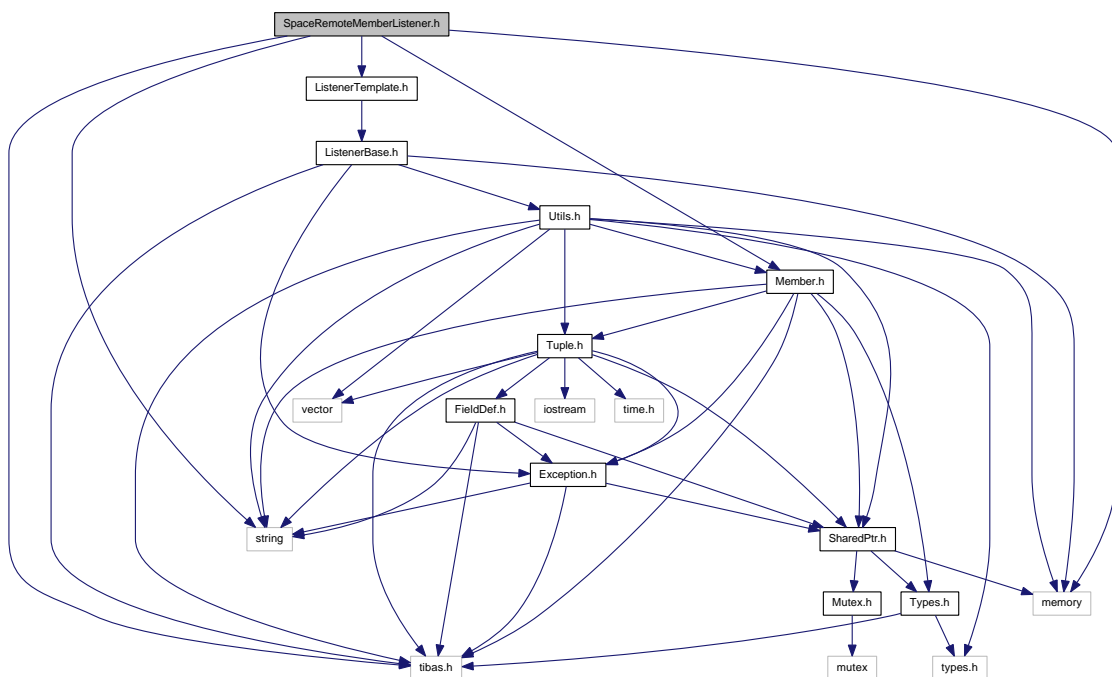
Include dependency graph for SpaceRemoteMemberListener.cpp:



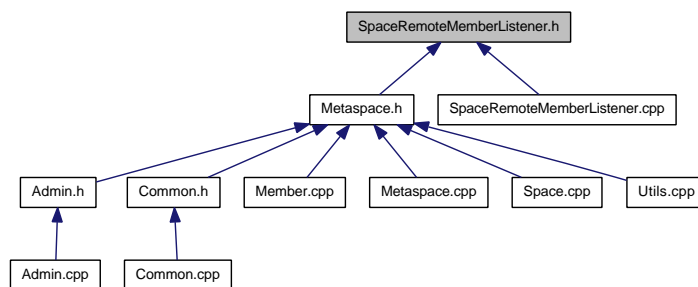
## 7.110 SpaceRemoteMemberListener.h File Reference

```
#include "tibas.h"
#include <memory>
#include <string>
#include "ListenerTemplate.h"
#include "Member.h"
```

Include dependency graph for SpaceRemoteMemberListener.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::SpaceRemoteMemberListener](#)

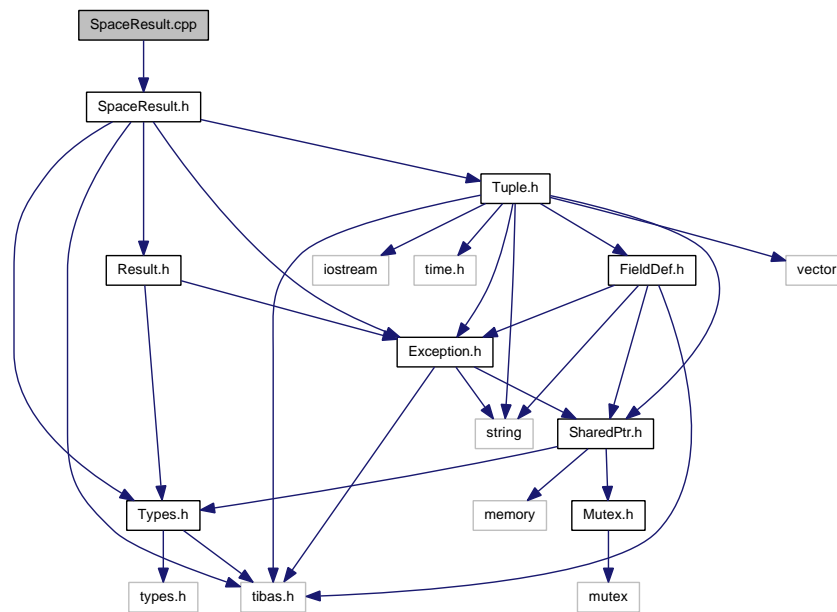
## Namespaces

- namespace [ASApi](#)

## 7.111 SpaceResult.cpp File Reference

```
#include "SpaceResult.h"
```

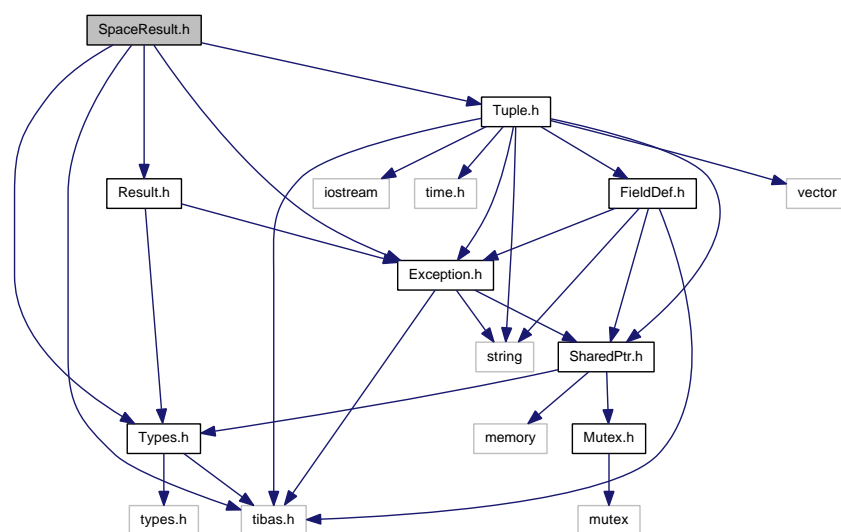
Include dependency graph for SpaceResult.cpp:



## 7.112 SpaceResult.h File Reference

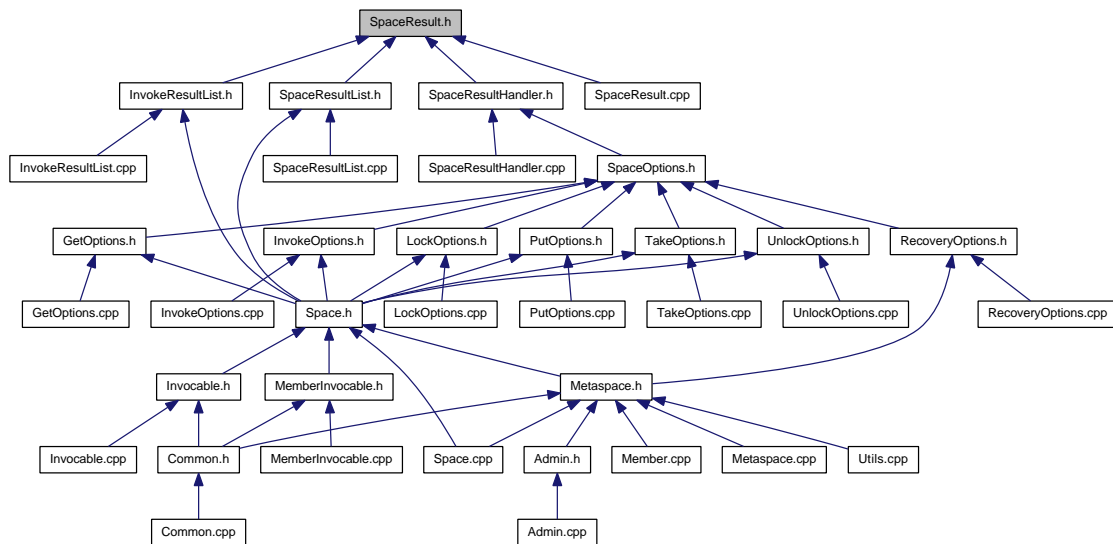
```
#include "tibas.h"  
#include "Exception.h"  
#include "Tuple.h"  
#include "Result.h"  
#include "Types.h"
```

Include dependency graph for SpaceResult.h:





This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::SpaceResult](#)

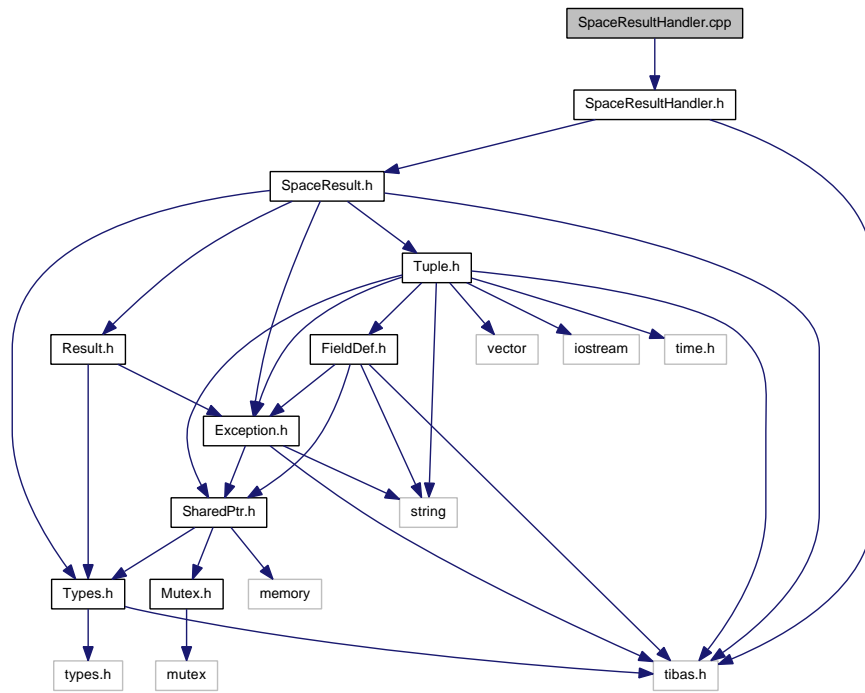
## Namespaces

- namespace [ASApi](#)

## 7.113 SpaceResultHandler.cpp File Reference

```
#include "SpaceResultHandler.h"
```

Include dependency graph for SpaceResultHandler.cpp:

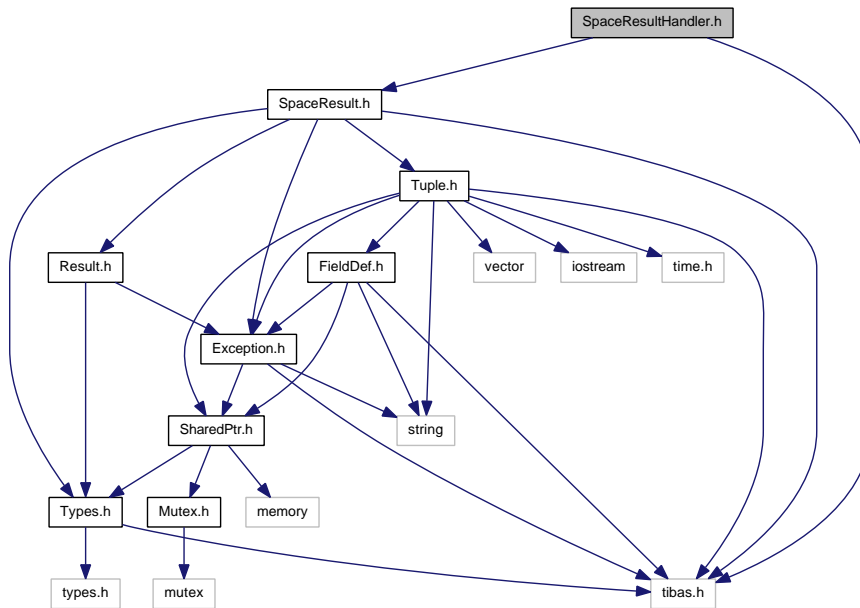


## 7.114 SpaceResultHandler.h File Reference

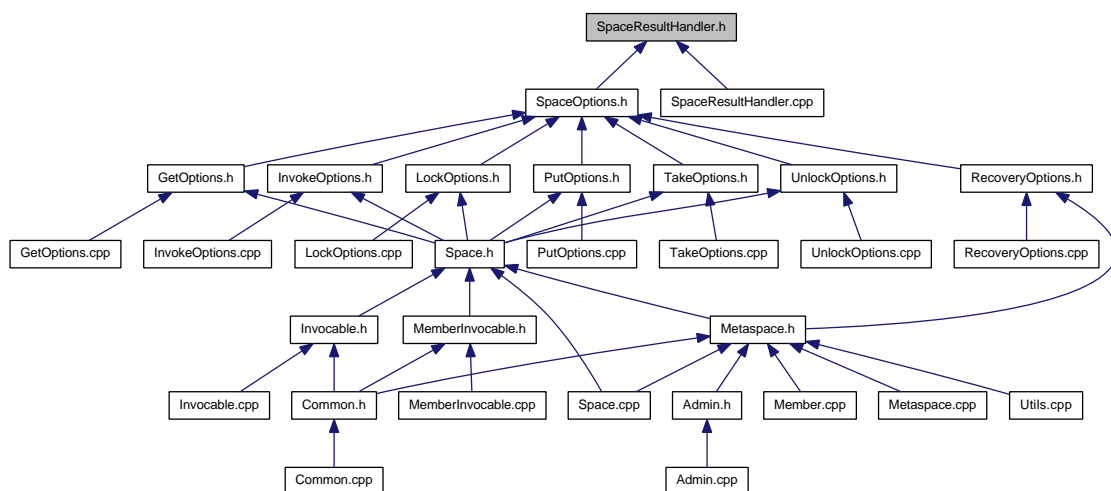
```
#include "SpaceResult.h"
```

```
#include "tibas.h"
```

Include dependency graph for SpaceResultHandler.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::SpaceResultHandler](#)
- struct [ASApi::SpaceResultHandler::Closure](#)

## Namespaces

- namespace [ASApi](#)

```
#include "SpaceResultList.h"
```

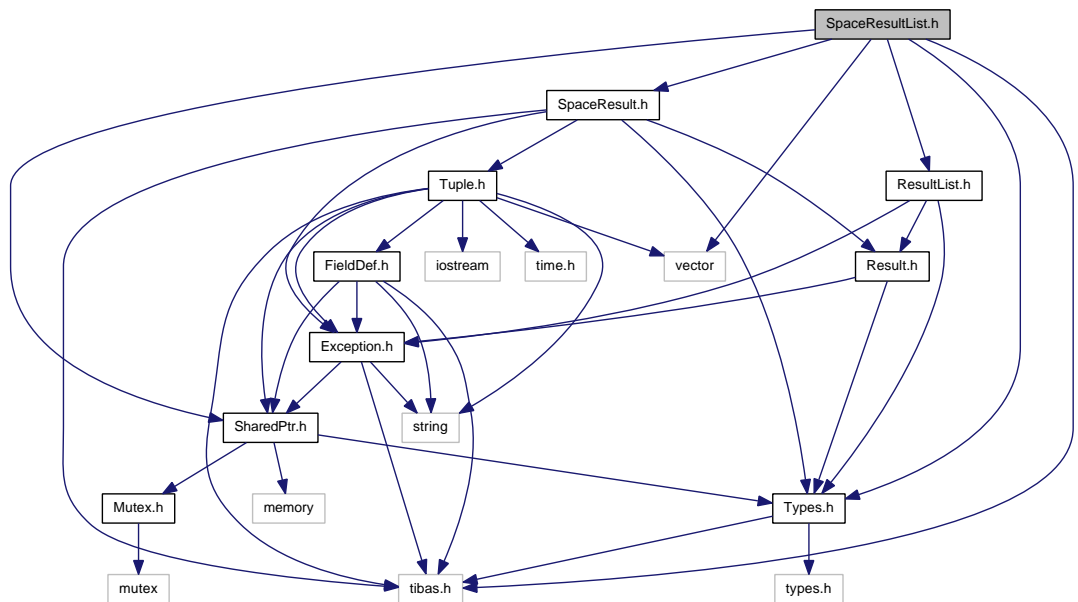
```

graph TD
    SpaceResultListCpp[SpaceResultList.cpp] --> SpaceResultListH[SpaceResultList.h]
    SpaceResultListH --> SpaceResultH[SpaceResult.h]
    SpaceResultListH --> ResultListH[ResultList.h]
    SpaceResultListH --> ResultH[Result.h]
    SpaceResultListH --> TypesH[Types.h]
    SpaceResultListH --> ExceptionH[Exception.h]
    SpaceResultListH --> SharedPtrH[SharedPtr.h]
    SpaceResultListH --> MutexH[Mutex.h]
    SpaceResultListH --> memory[memory]
    SpaceResultListH --> string[string]
    SpaceResultListH --> vector[vector]
    SpaceResultListH --> tupleH[tuple.h]
    SpaceResultListH --> FieldDefH[FieldDef.h]
    SpaceResultListH --> iostream[iostream]
    SpaceResultListH --> timeH[time.h]
    SpaceResultListH --> mutex[mutex]
    SpaceResultListH --> typesH[types.h]
    SpaceResultListH --> tibasH[tibas.h]
    SpaceResultListH --> mutex[mutex]
    SpaceResultH --> ResultListH
    ResultListH --> ResultH
    ResultH --> TypesH
    TypesH --> ExceptionH
    ExceptionH --> SharedPtrH
    SharedPtrH --> MutexH
    MutexH --> memory
    memory --> string
    string --> vector
    vector --> tupleH
    tupleH --> FieldDefH
    FieldDefH --> iostream
    iostream --> timeH
    timeH --> mutex
    mutex --> typesH
    typesH --> tibasH
    tibasH --> mutex
    
```

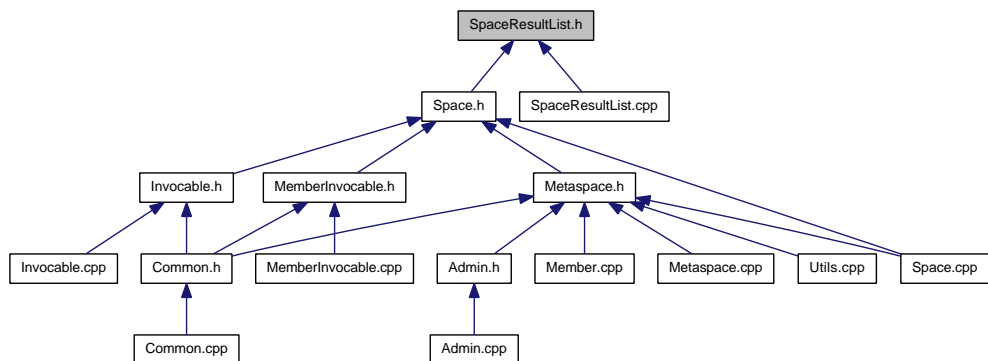
## 7.116 SpaceResultList.h File Reference

```
#include "tibas.h"
#include "SpaceResult.h"
#include "ResultList.h"
#include "Types.h"
#include <vector>
#include "SharedPtr.h"
```

Include dependency graph for SpaceResultList.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::SpaceResultList](#)

## Namespaces

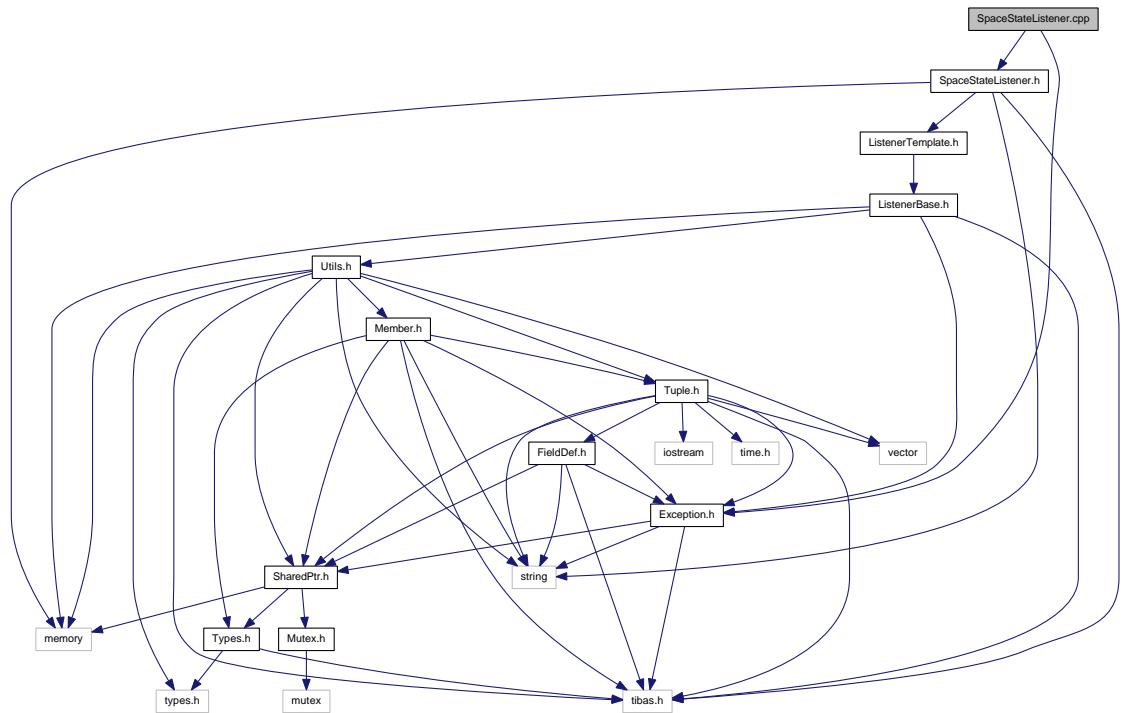
- namespace [ASApi](#)

## 7.117 SpaceStateListener.cpp File Reference

```
#include "Exception.h"
```

```
#include "SpaceStateListener.h"
```

Include dependency graph for SpaceStateListener.cpp:

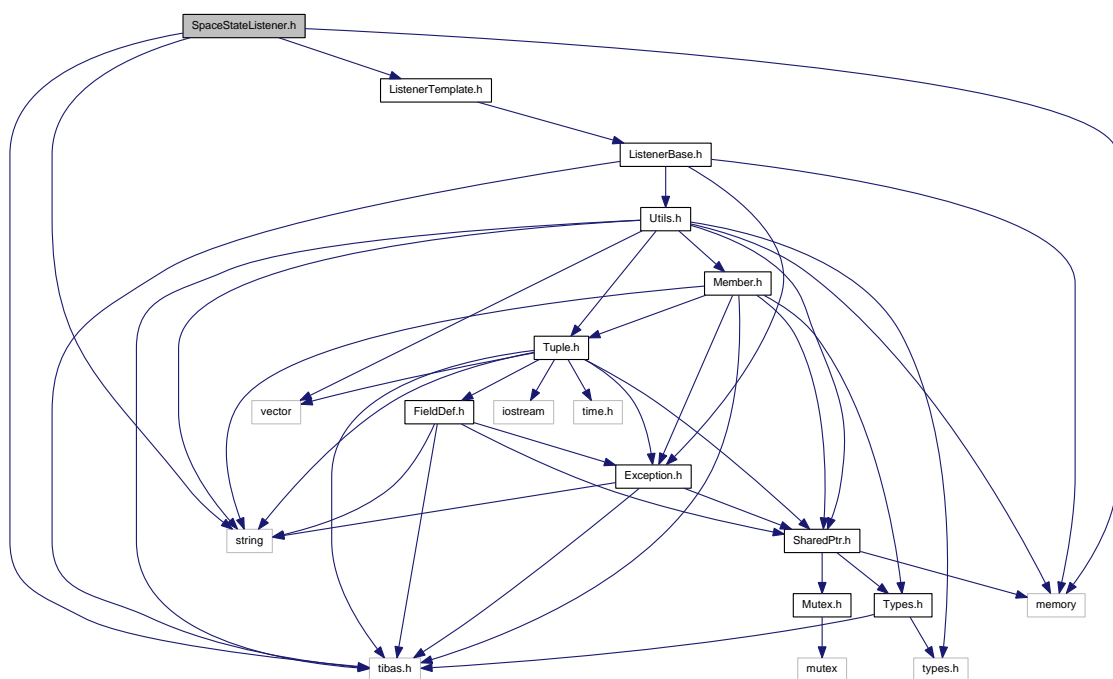




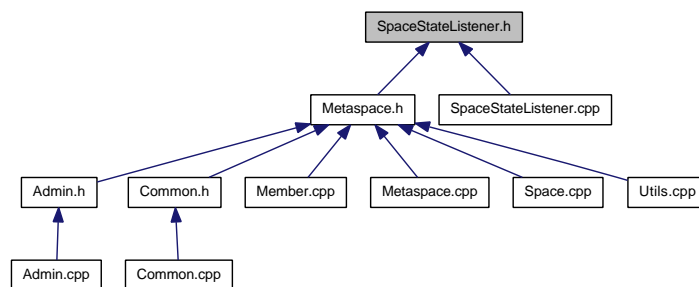
## 7.118 SpaceStateListener.h File Reference

```
#include <memory>
#include <string>
#include "tibas.h"
#include "ListenerTemplate.h"
```

Include dependency graph for SpaceStateListener.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::SpaceStateListener](#)

## Namespaces

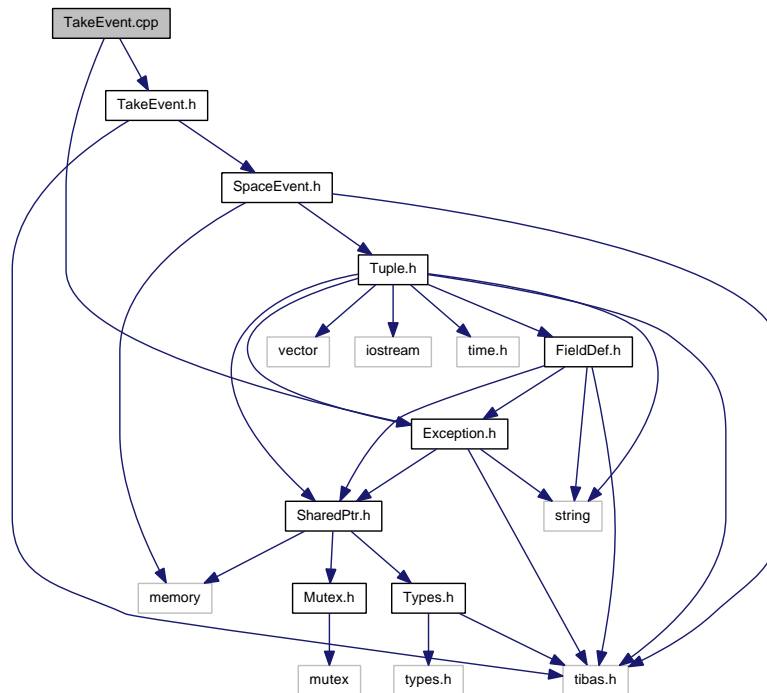
- namespace [ASApi](#)

## 7.119 TakeEvent.cpp File Reference

```
#include "TakeEvent.h"
```

```
#include "Exception.h"
```

Include dependency graph for TakeEvent.cpp:

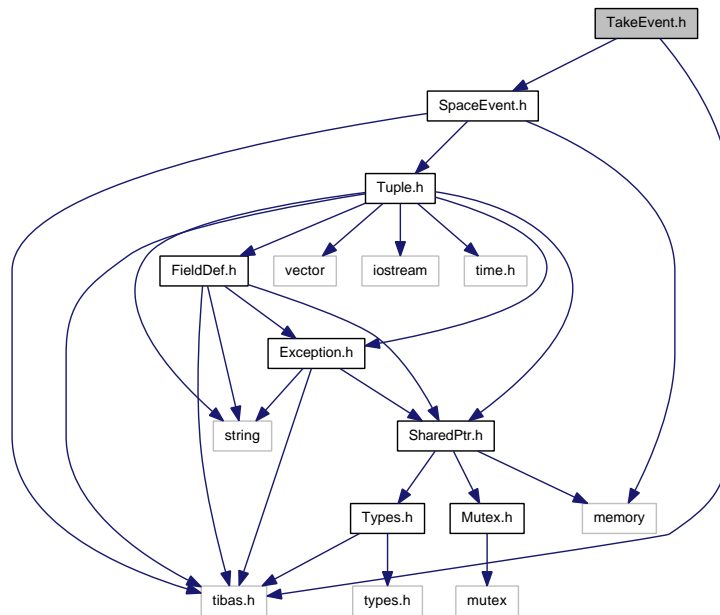


## 7.120 TakeEvent.h File Reference

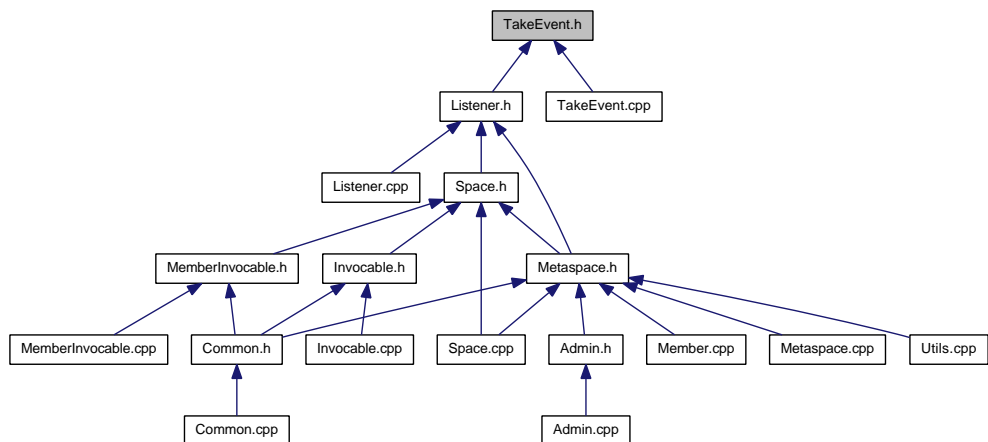
```
#include "tibas.h"
```

```
#include "SpaceEvent.h"
```

Include dependency graph for TakeEvent.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::TakeEvent](#)

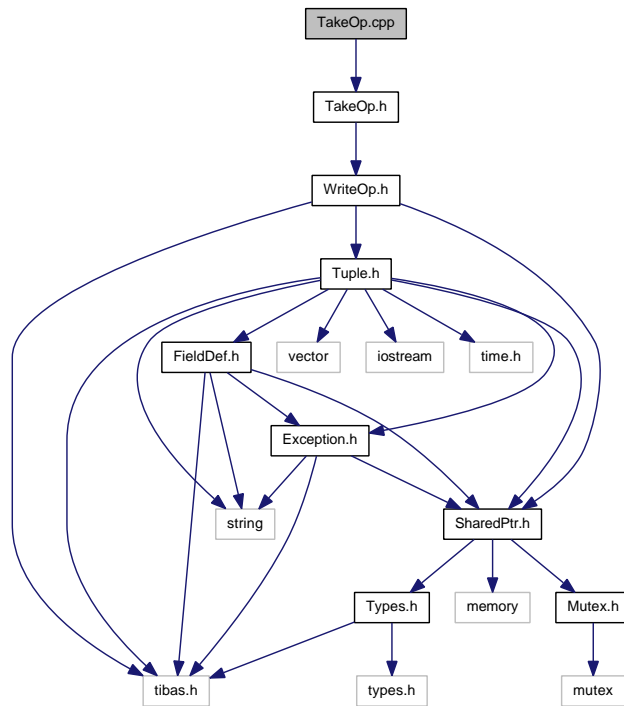
## Namespaces

- namespace [ASApi](#)

## 7.121 TakeOp.cpp File Reference

```
#include "TakeOp.h"
```

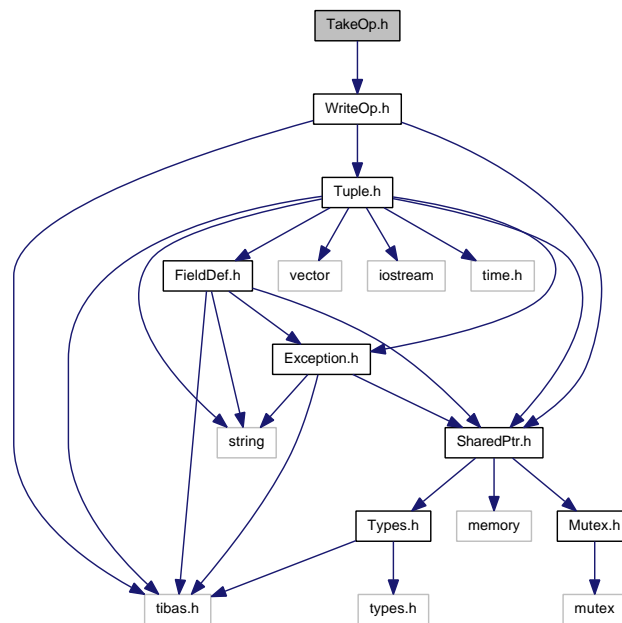
Include dependency graph for TakeOp.cpp:



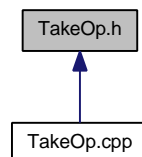
## 7.122 TakeOp.h File Reference

```
#include "WriteOp.h"
```

Include dependency graph for TakeOp.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::TakeOp](#)

### Namespaces

- namespace [ASApi](#)

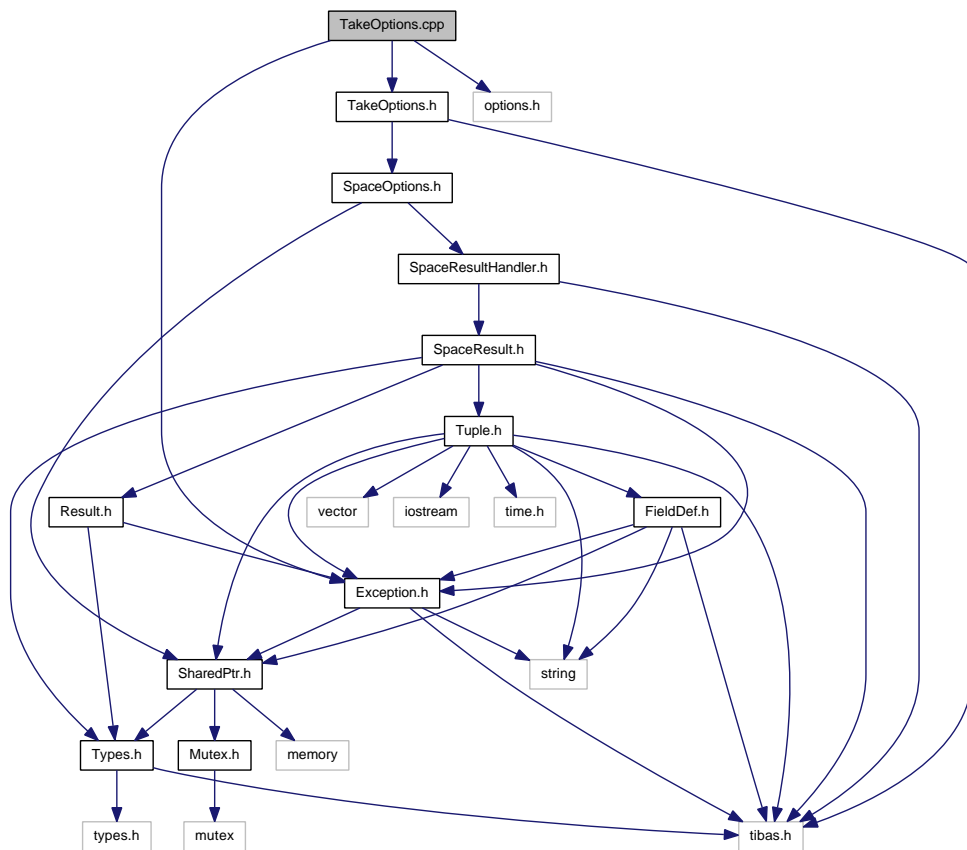
## 7.123 TakeOptions.cpp File Reference

```
#include "TakeOptions.h"
```

```
#include "options.h"
```

```
#include "Exception.h"
```

Include dependency graph for TakeOptions.cpp:



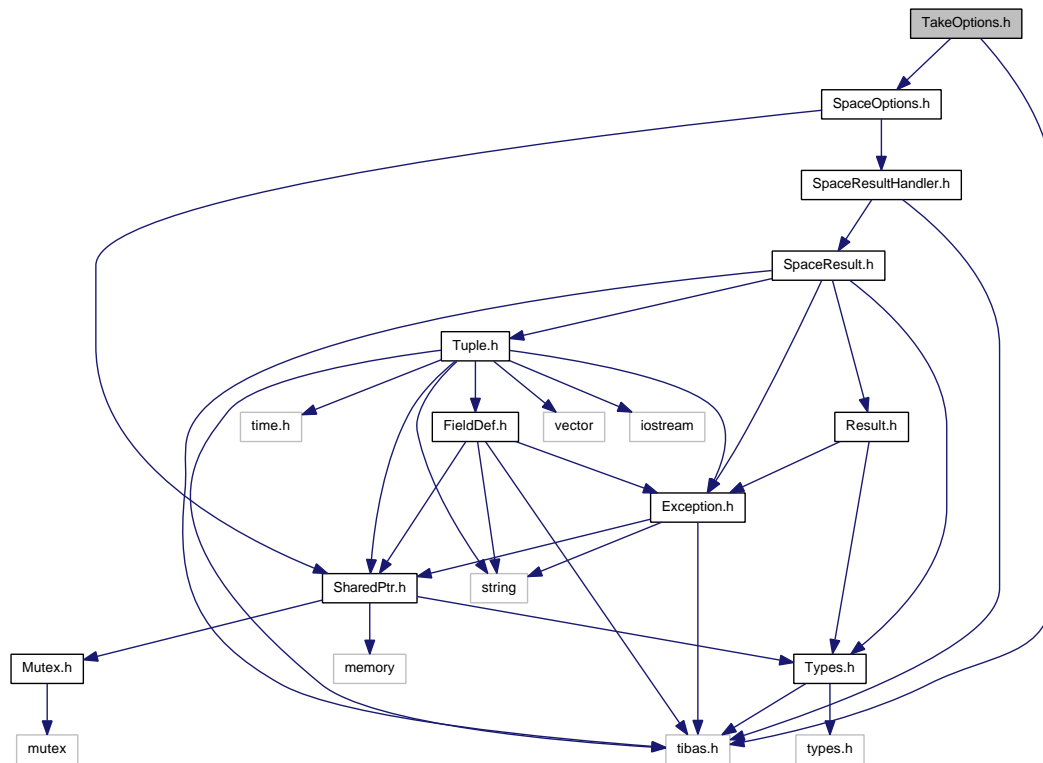


## 7.124 TakeOptions.h File Reference

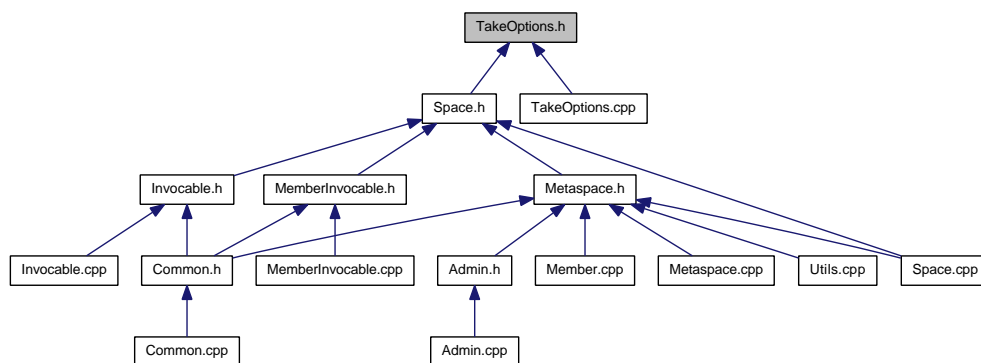
```
#include "tibas.h"
```

```
#include "SpaceOptions.h"
```

Include dependency graph for TakeOptions.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::TakeOptions](#)

## Namespaces

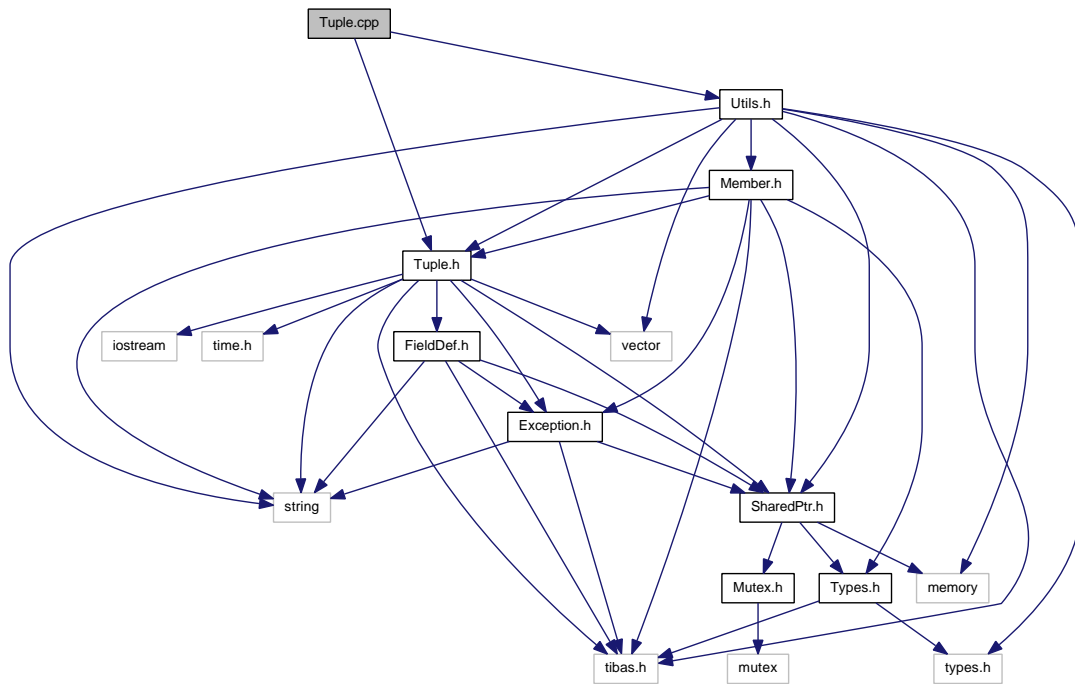
- namespace [ASApi](#)

## 7.125 Tuple.cpp File Reference

```
#include "Tuple.h"
```

```
#include "Utils.h"
```

Include dependency graph for Tuple.cpp:



### Functions

- void [deleter](#) (tibasTuple \*tuple)
- ostream & [operator<<](#) (ostream &os, const [Tuple](#) &tuple)

#### 7.125.1 Function Documentation

##### 7.125.1.1 void [deleter](#) (tibasTuple \* *tuple*)

Definition at line 8 of file Tuple.cpp.

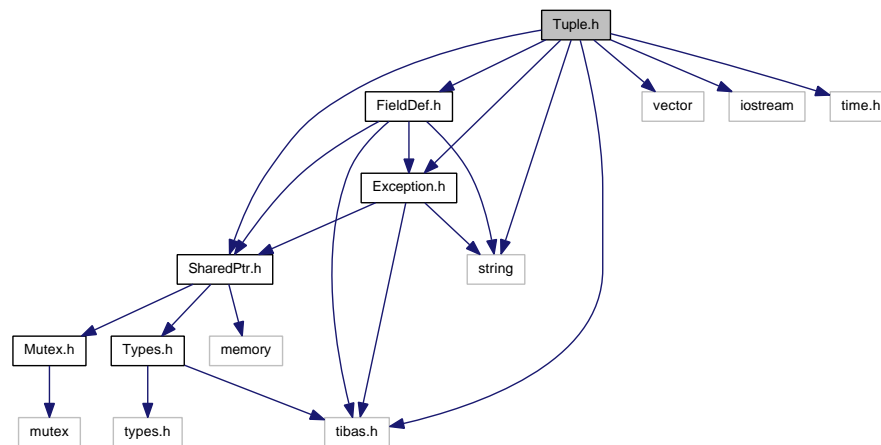
##### 7.125.1.2 ostream& [operator<<](#) (ostream & *os*, const [Tuple](#) & *tuple*)

Definition at line 334 of file Tuple.cpp.

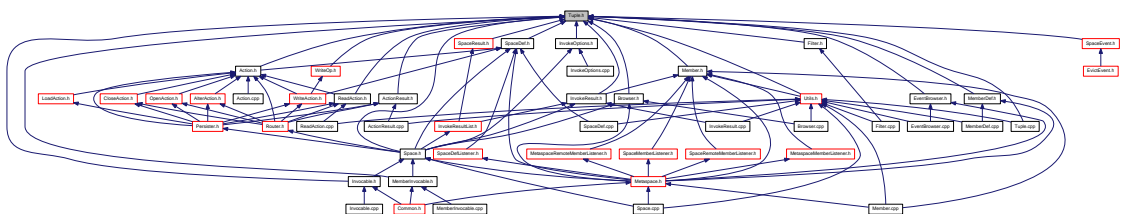
## 7.126 Tuple.h File Reference

```
#include <string>
#include <vector>
#include <iostream>
#include <time.h>
#include "tibas.h"
#include "Exception.h"
#include "FieldDef.h"
#include "SharedPtr.h"
```

Include dependency graph for Tuple.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class `ASApi::Tuple`

## Namespaces

- namespace [ASApi](#)

## Functions

- `AS_CPP_API std::ostream & operator<< (std::ostream &os, const ASApi::Tuple &tuple)`

### 7.126.1 Function Documentation

#### 7.126.1.1 `AS_CPP_API std::ostream& operator<< (std::ostream &os, const ASApi::Tuple &tuple)`

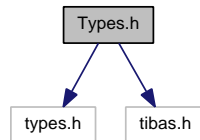
Definition at line 334 of file Tuple.cpp.

## 7.127 Types.h File Reference

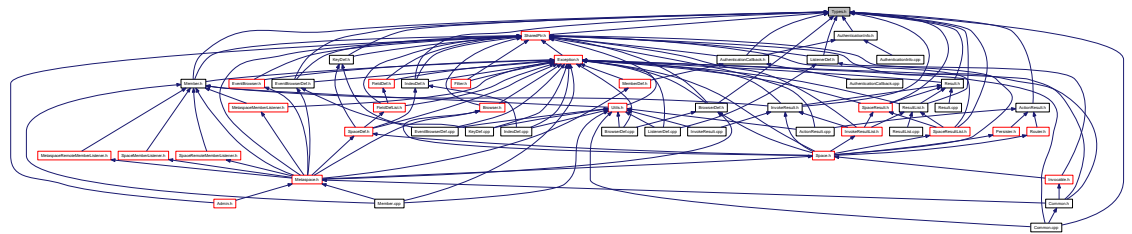
```
#include "types.h"
```

```
#include <tibas.h>
```

Include dependency graph for Types.h:



This graph shows which files directly or indirectly include this file:



### Classes

- class [ASApi::Deleter< T >](#)

### Namespaces

- namespace [ASApi](#)

### Defines

- #define [AS\\_CPP\\_API](#)

### Typedefs

- typedef tibas\_status [ASApi::Status](#)
- typedef tibas\_distributionScope [ASApi::DistributionScope](#)
- typedef tibas\_timeScope [ASApi::TimeScope](#)
- typedef tibas\_logLevel [ASApi::LogLevel](#)
- typedef tibas\_indexType [ASApi::IndexType](#)
- typedef tibas\_managementRole [ASApi::ManagementRole](#)

- typedef tibas\_distributionRole [ASApi::DistributionRole](#)
- typedef tibas\_browserType [ASApi::BrowserType](#)
- typedef tibas\_spaceState [ASApi::SpaceState](#)
- typedef tibas\_distributionPolicy [ASApi::DistributionPolicy](#)
- typedef tibas\_persistenceType [ASApi::PersistenceType](#)
- typedef tibas\_persistencePolicy [ASApi::PersistencePolicy](#)
- typedef tibas\_evictionPolicy [ASApi::EvictionPolicy](#)

### 7.127.1 Define Documentation

#### 7.127.1.1 #define AS\_CPP\_API

Definition at line 11 of file Types.h.

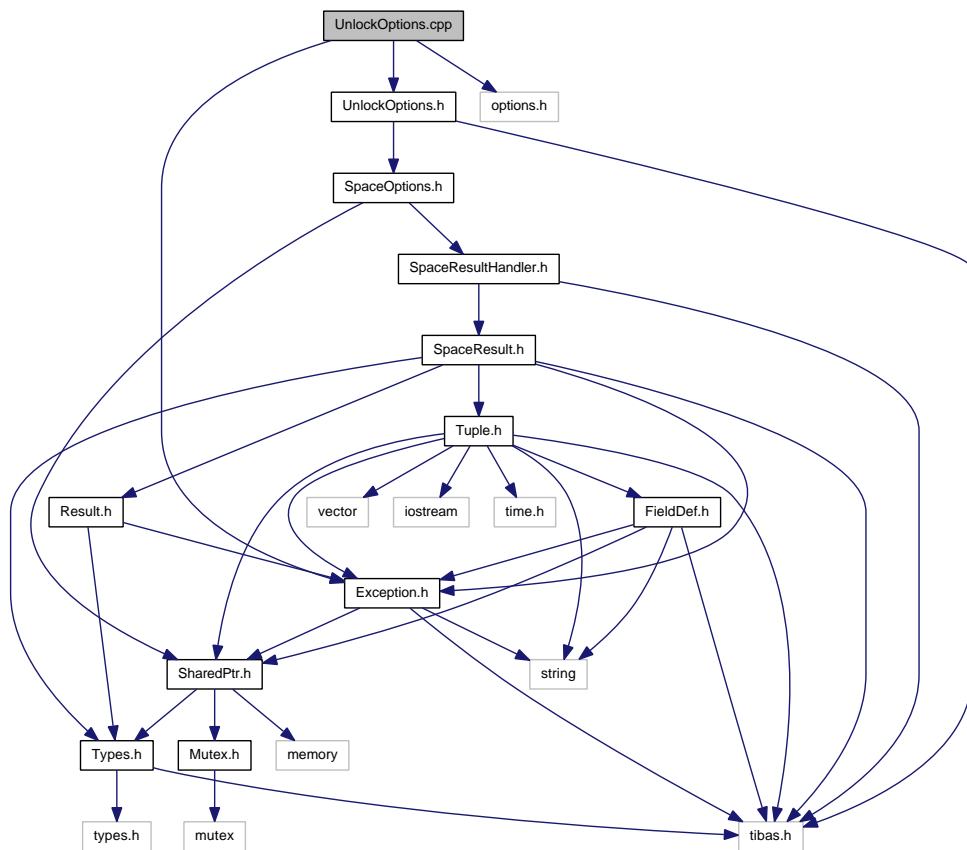
## 7.128 UnlockOptions.cpp File Reference

```
#include "UnlockOptions.h"
```

```
#include "options.h"
```

```
#include "Exception.h"
```

Include dependency graph for UnlockOptions.cpp:



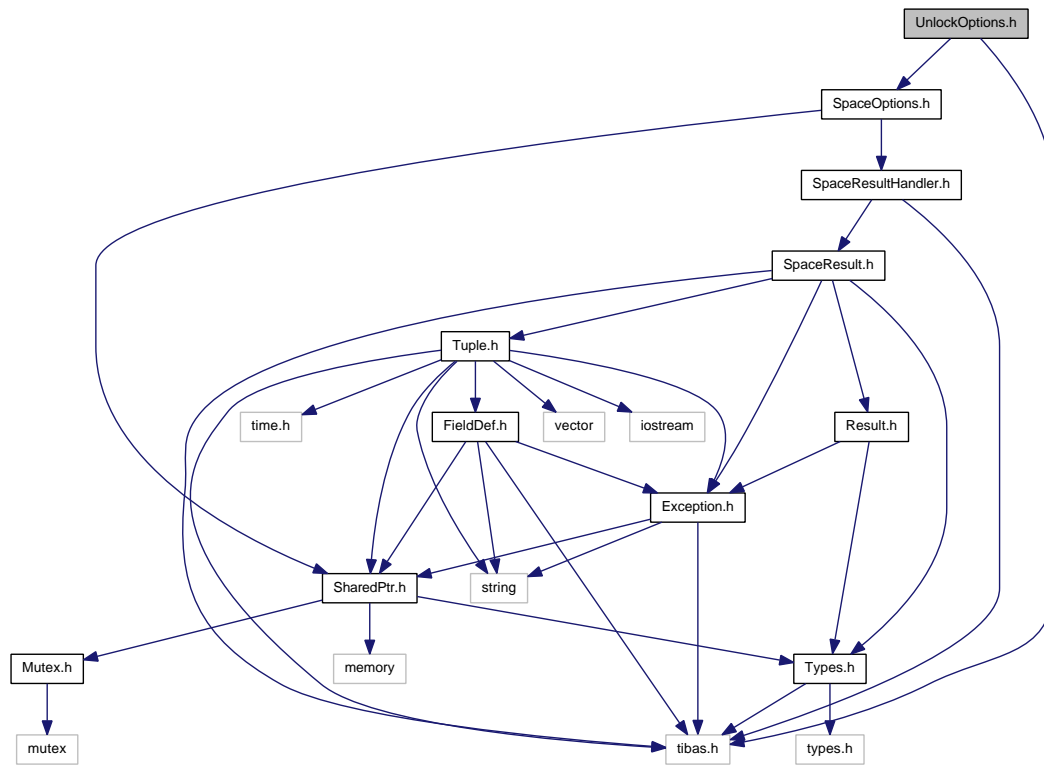


## 7.129 UnlockOptions.h File Reference

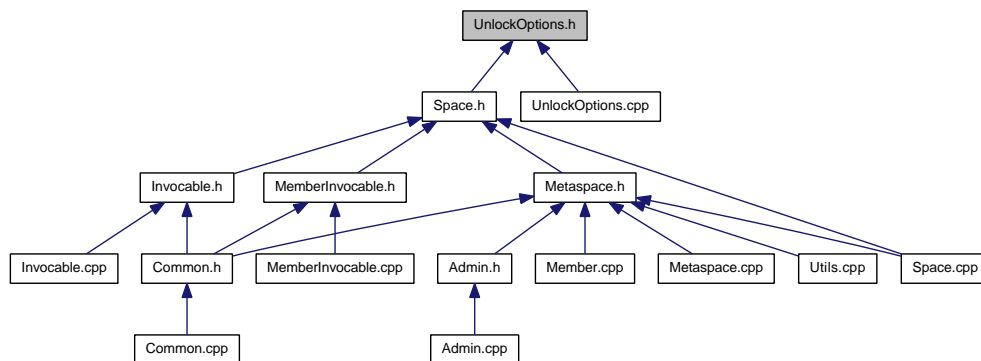
```
#include "tibas.h"
```

```
#include "SpaceOptions.h"
```

Include dependency graph for UnlockOptions.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::UnlockOptions](#)

## Namespaces

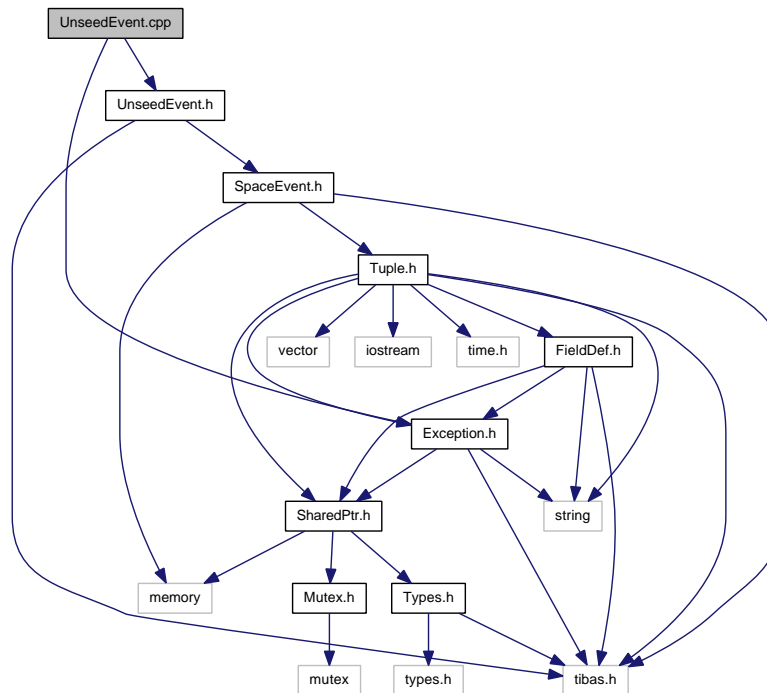
- namespace [ASApi](#)

## 7.130 UnseedEvent.cpp File Reference

```
#include "UnseedEvent.h"
```

```
#include "Exception.h"
```

Include dependency graph for UnseedEvent.cpp:

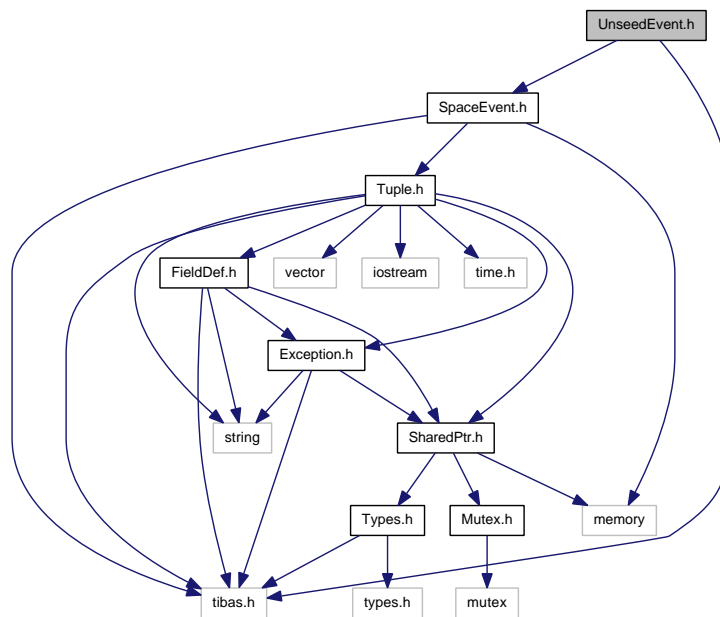


## 7.131 UnseedEvent.h File Reference

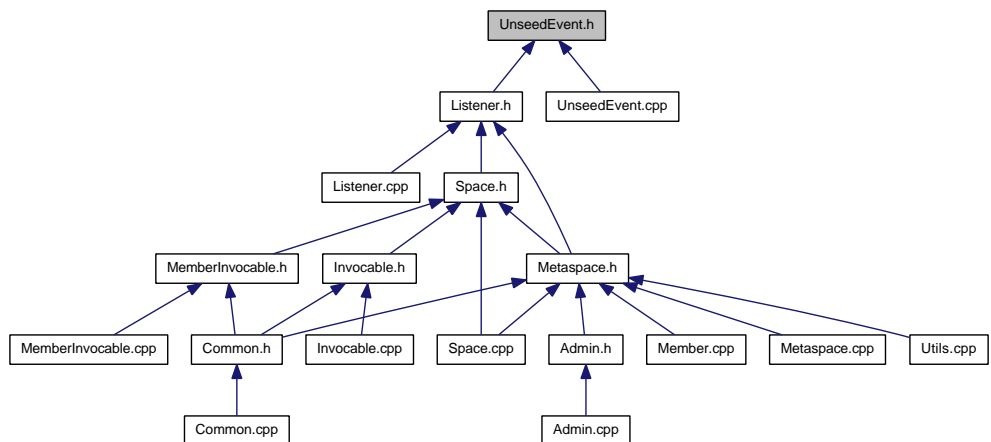
```
#include "tibas.h"
```

```
#include "SpaceEvent.h"
```

Include dependency graph for UnseedEvent.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::UnseedEvent](#)

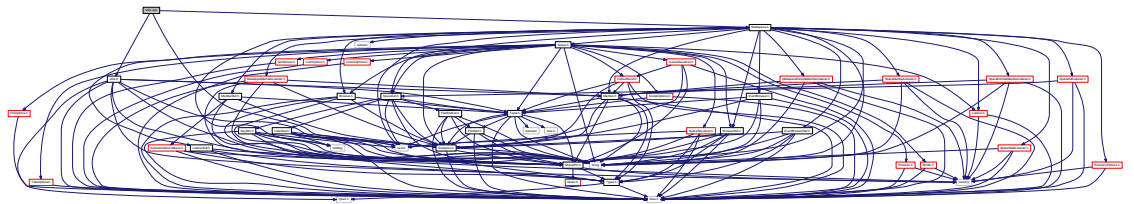
## Namespaces

- namespace [ASApi](#)

## 7.132 Utils.cpp File Reference

```
#include "Utils.h"  
#include "Exception.h"  
#include "Metaspace.h"
```

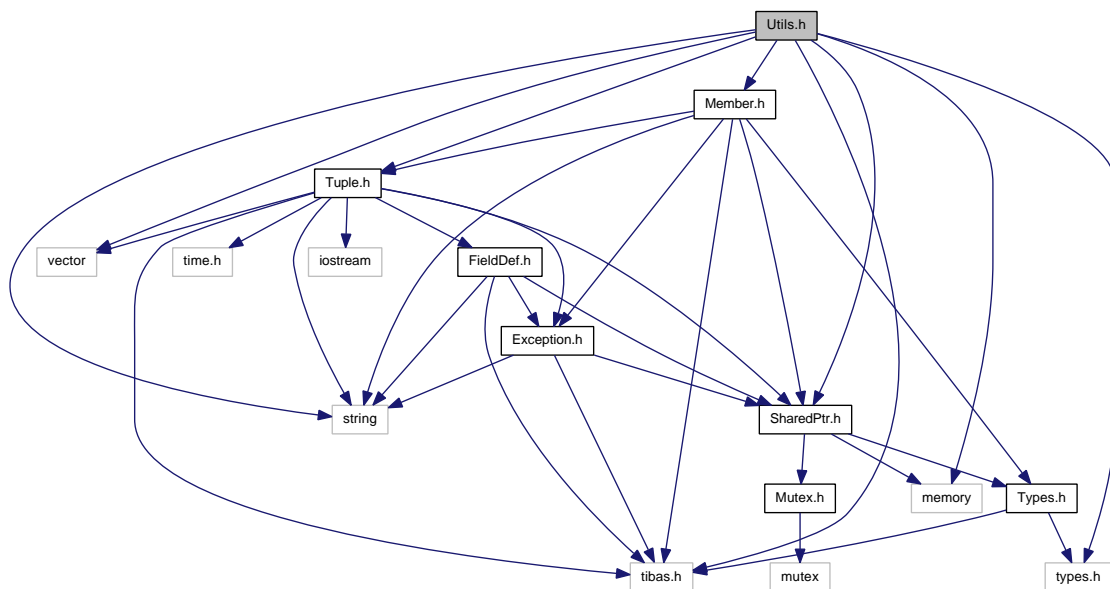
Include dependency graph for Utils.cpp:



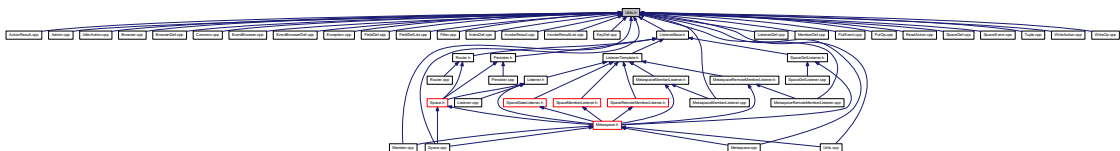
## 7.133 Utils.h File Reference

```
#include <vector>
#include <string>
#include <memory>
#include "tibas.h"
#include "types.h"
#include "Tuple.h"
#include "Member.h"
#include "SharedPtr.h"
```

Include dependency graph for Utils.h:



This graph shows which files directly or indirectly include this file:



## Namespaces

- namespace [ASApi](#)

## Functions

- `std::vector< std::string > ASApi::asStringListToVector` (const `tibasStringList` &`stringList`)
- `SharedPtr< tibasTupleList > ASApi::tuplesToAsTupleList` (const `std::vector< Tuple >` &`tuples`)
- `SharedPtr< tibasMemberList > ASApi::membersToAsMemberList` (const `std::vector< Member >` &`members`, const `Metaspace` &`metaspace`)
- `std::vector< Member > ASApi::asMemberListToVector` (`tibasMemberList` &`memberList`)

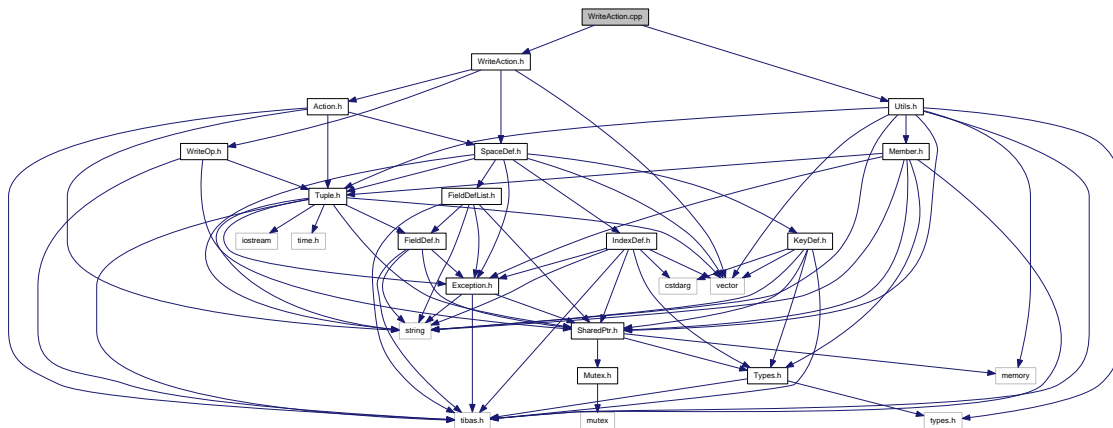


### 7.134 WriteAction.cpp File Reference

```
#include "WriteAction.h"
```

```
#include "Utils.h"
```

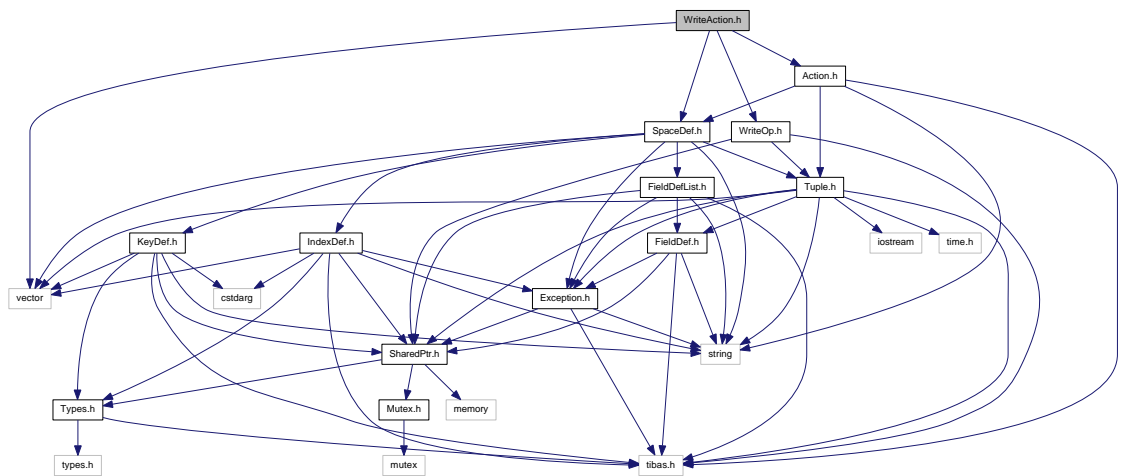
Include dependency graph for WriteAction.cpp:



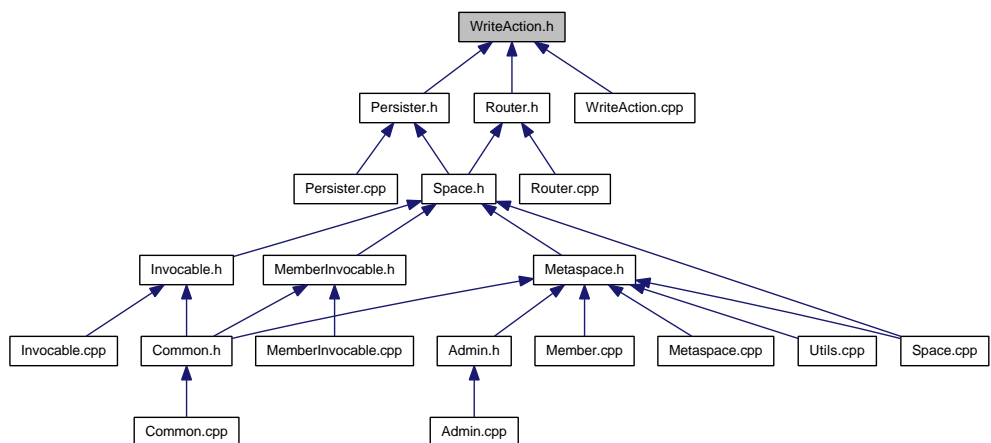
## 7.135 WriteAction.h File Reference

```
#include <vector>
#include "Action.h"
#include "SpaceDef.h"
#include "WriteOp.h"
```

Include dependency graph for WriteAction.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::WriteAction](#)

## Namespaces

- namespace [ASApi](#)

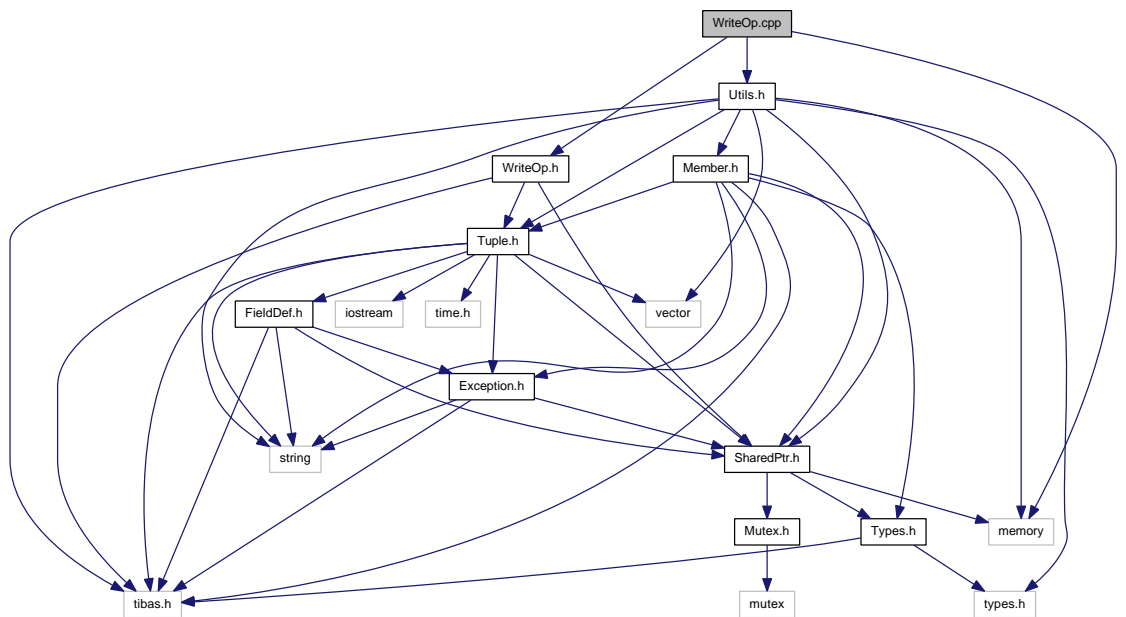
## 7.136 WriteOp.cpp File Reference

```
#include "WriteOp.h"
```

```
#include "Utils.h"
```

```
#include <memory>
```

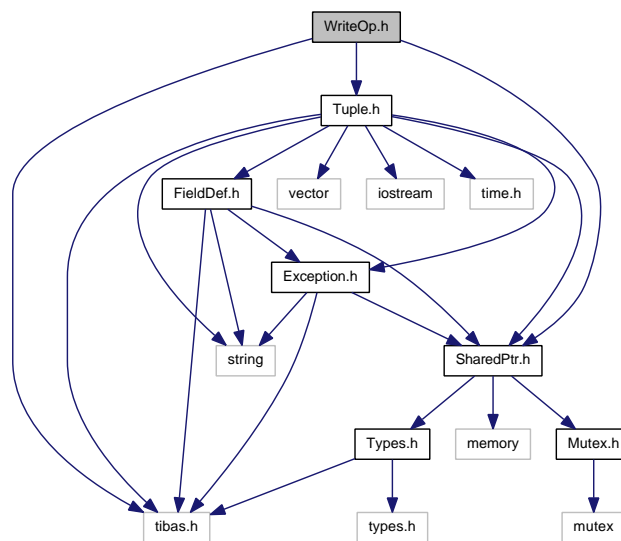
Include dependency graph for WriteOp.cpp:



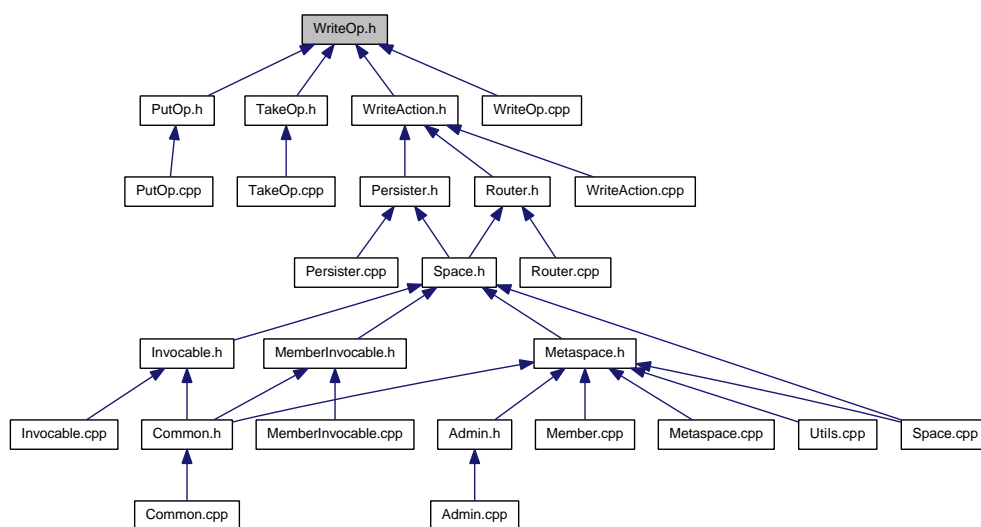
## 7.137 WriteOp.h File Reference

```
#include "tibas.h"
#include "Tuple.h"
#include "SharedPtr.h"
```

Include dependency graph for WriteOp.h:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ASApi::WriteOp](#)

## Namespaces

- namespace [ASApi](#)

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