

Model Report

common

Version 1.0 • Proposed



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common

Package in package 'Frameworks'

common

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common diagram

Class diagram in package 'common'

common

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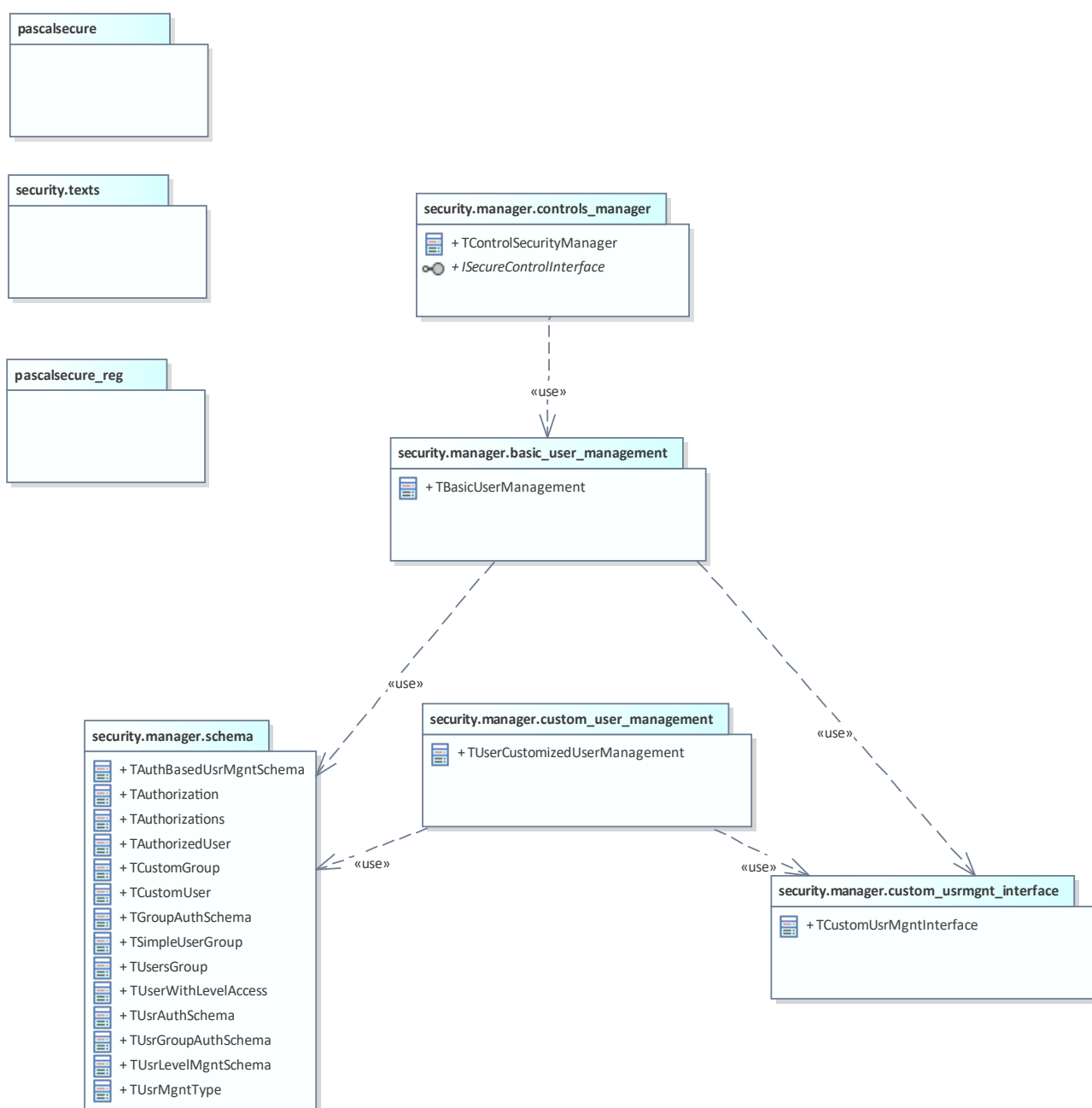


Figure 1: common

pascalsecure

Package in package 'common'

pascalsecure
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pascalsecure_reg

Package in package 'common'

pascalsecure_reg
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security.manager.basic_user_management

Package in package 'common'

security.manager.basic_user_management
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ASSOCIATED FILES



Local File. C:\data\Pascal\pascalsecure\src\common\security.manager.basic_user_management.pas

[Size of 8 k.]

CONNECTORS



Dependency «use» Source -> Destination

From: security.manager.basic_user_management : Package, Public

To: security.manager.custom_usrmgnt_interface : Package, Public



Usage Source -> Destination

From: security.manager.basic_user_management : Package, Public

To: security.manager.schema : Package, Public



Usage Source -> Destination

From: security.manager.controls_manager : Package, Public


To: security.manager.basic_user_management : Package, Public

security.manager.controls_manager

Package in package 'common'

security.manager.controls_manager
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CONNECTORS

 **Usage** Source -> Destination
 From: security.manager.controls_manager : Package, Public
 To: security.manager.basic_user_management : Package, Public

security.manager.custom_user_management


Package in package 'common'


security.manager.custom_user_management

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CONNECTORS

 **Dependency** «use» Source -> Destination
 From: security.manager.custom_user_management : Package, Public
 To: security.manager.custom_usrmgmt_interface : Package, Public

 **Dependency** «use» Source -> Destination
 From: security.manager.custom_user_management : Package, Public
 To: security.manager.schema : Package, Public

security.manager.custom_usrmgmt_interface


Package in package 'common'


security.manager.custom_usrmgmt_interface

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CONNECTORS

 **Dependency** «use» Source -> Destination
 From: security.manager.basic_user_management : Package, Public
 To: security.manager.custom_usrmgmt_interface : Package, Public

 **Dependency** «use» Source -> Destination
 From: security.manager.custom_user_management : Package, Public
 To: security.manager.custom_usrmgmt_interface : Package, Public

security.manager.schema

Package in package 'common'

security.manager.schema

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CONNECTORS

CONNECTORS**Usage**

Source -> Destination

From: security.manager.basic_user_management : Package, Public
To: security.manager.schema : Package, Public

**Dependency**

«use» Source -> Destination

From: security.manager.custom_user_management : Package, Public
To: security.manager.schema : Package, Public

security.texts

Package in package 'common'

security.texts

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pascalsecure

Package in package 'common'

pascalsecure

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pascalsecure diagram

Class diagram in package 'pascalsecure'

pascalsecure

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Figure 2: pascalsecure

pascalsecure_reg

Package in package 'common'

pascalsecure_reg

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pascalsecure_reg diagram

Class diagram in package 'pascalsecure_reg'

pascalsecure_reg

Version 1.0

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Figure 3: pascalsecure_reg

security.exceptions

Package in package 'common'

security.exceptions

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security.exceptions diagram

Class diagram in package 'security.exceptions'

security.exceptions

Version 1.0

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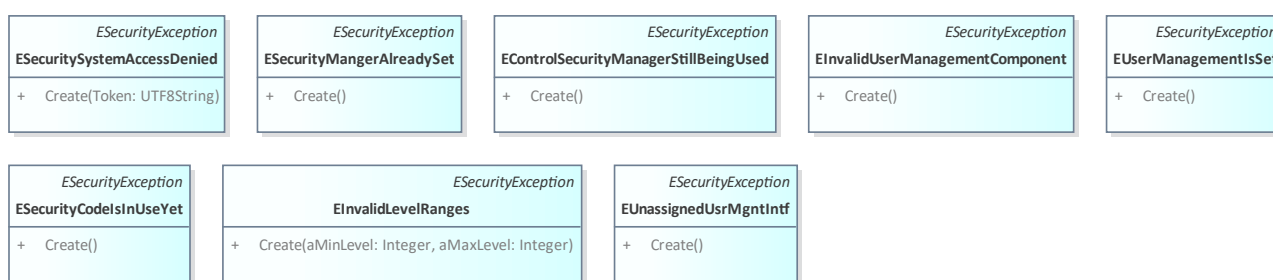


Figure 4: security.exceptions

EControlSecurityManagerStillBeingUsed

Class in package 'security.exceptions'

EControlSecurityManagerStillBeingUsed

EControlSecurityManagerStillBeingUsed

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Extends ESecurityException

| OPERATIONS | |
|----------------------------------|---|
| <div> Create () : Public </div> | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |

EInvalidLevelRanges

Class in package 'security.exceptions'

EInvalidLevelRanges

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Extends ESecurityException

| OPERATIONS |
|------------|
|------------|

OPERATIONS

 Create (aMinLevel : Integer , aMaxLevel : Integer) : Public
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

EInvalidUserManagementComponent

Class in package 'security.exceptions'

EInvalidUserManagementComponent

EInvalidUserManagementComponent

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Extends ESecurityException

OPERATIONS

 Create () : Public
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ESecurityCodeIsInUseYet

Class in package 'security.exceptions'

ESecurityCodeIsInUseYet

ESecurityCodeIsInUseYet

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Extends ESecurityException

OPERATIONS

 Create () : Public
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ESecurityMangerAlreadySet

Class in package 'security.exceptions'

ESecurityMangerAlreadySet

ESecurityMangerAlreadySet

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Extends ESecurityException

OPERATIONS

 Create () : Public
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ESecuritySystemAccessDenied

Class in package 'security.exceptions'

ESecuritySystemAccessDenied

ESecuritySystemAccessDenied

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Extends ESecurityException

OPERATIONS

 Create (Token : UTF8String) : Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

EUnassignedUsrMgntIntf

Class in package 'security.exceptions'

EUnassignedUsrMgntIntf

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Extends ESecurityException

OPERATIONS

 Create () : Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

EUserManagementIsSet

Class in package 'security.exceptions'

EUserManagementIsSet

EUserManagementIsSet

Version 1.0 Phase 1.0 Proposed

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Extends ESecurityException

OPERATIONS

 Create () : Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

security.manager.basic_user_management

Package in package 'common'

security.manager.basic_user_management

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ASSOCIATED FILES



Local File. C:\data\Pascal\pascalsecure\src\common\security.manager.basic_user_management.pas

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LINKS TO OTHER PACKAGES



Dependency from 'security.manager.basic_user_management' Package to 'security.manager.custom_usrmgmt_interface' Package

Direction: Source -> Destination



Usage from 'security.manager.basic_user_management' Package to 'security.manager.schema' Package

Direction: Source -> Destination



Usage from 'security.manager.controls_manager' Package to 'security.manager.basic_user_management' Package

Direction: Source -> Destination

security.manager.basic_user_management diagram

Class diagram in package 'security.manager.basic_user_management'

security.manager.basic_user_management

Version 1.0

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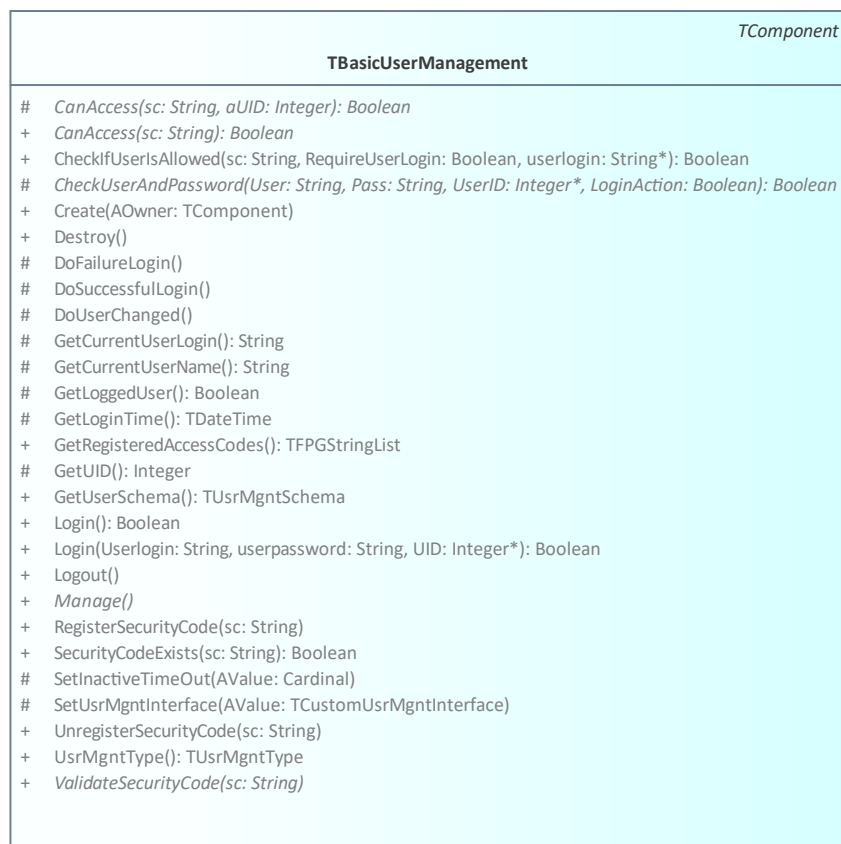


Figure 5: security.manager.basic_user_management

TBasicUserManagement

Class in package 'security.manager.basic_user_management'

TpSCADABasicUserManagement

TBasicUserManagement
 Version 1.0 Phase 1.0 Proposed
 Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
 Extends TComponent

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from TUserCustomizedUserManagement to TBasicUserManagement
 [Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination)

Source: Public (Class) TBasicUserManagement














Target: Protected FUsrMgntInterface (Class)
 TCustomUsrMgntInterface

✎ Association (direction: Source -> Destination)

Source: Public (Class) TControlSecurityManager

Target: Private FUserManagement (Class)
 TBasicUserManagement

| OPERATIONS | |
|---|--|
|  CanAccess (sc : String , aUID : Integer) : Boolean Protected Properties: overload = true [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  CanAccess (sc : String) : Boolean Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  CheckIfUserIsAllowed (sc : String , RequireUserLogin : Boolean , userlogin : String) : Boolean Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  CheckUserAndPassword (User : String , Pass : String , UserID : Integer , LoginAction : Boolean) : Boolean Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  Create (AOwner : TComponent) : Public Properties: override = true [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  Destroy () : Public Properties: override = true [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  DoFailureLogin () : Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  DoSuccessfulLogin () : Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  DoUserChanged () : Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  GetCurrentUserLogin () : String Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  GetCurrentUserName () : String Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  GetLoggedUser () : Boolean Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  GetLoginTime () : TDateTime Protected [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  GetRegisteredAccessCodes () : TFPGStringList Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |

| OPERATIONS | |
|---|--|
|  GetUID () : Integer Protected [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  GetUserSchema () : TUsrMgmtSchema Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  Login () : Boolean Public Properties: overload = true [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  Login (Userlogin : String , userpassword : String , UID : Integer) : Boolean Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  Logout () : Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  Manage () : Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  RegisterSecurityCode (sc : String) : Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  SecurityCodeExists (sc : String) : Boolean Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  SetInactiveTimeOut (AValue : Cardinal) : Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  SetUsrMgmtInterface (AValue : TCustomUsrMgmtInterface) : Protected [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  UnregisterSecurityCode (sc : String) : Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  UsrMgmtType () : TUsrMgmtType Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  ValidateSecurityCode (sc : String) : Public Security codes management [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |

security.manager.controls_manager

Package in package 'common'

security.manager.controls_manager

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LINKS TO OTHER PACKAGES



Usage from 'security.manager.controls_manager' Package to 'security.manager.basic_user_management' Package

Direction:

Source -> Destination

security.manager.controls_manager diagram

Class diagram in package 'security.manager.controls_manager'

security.manager.controls_manager

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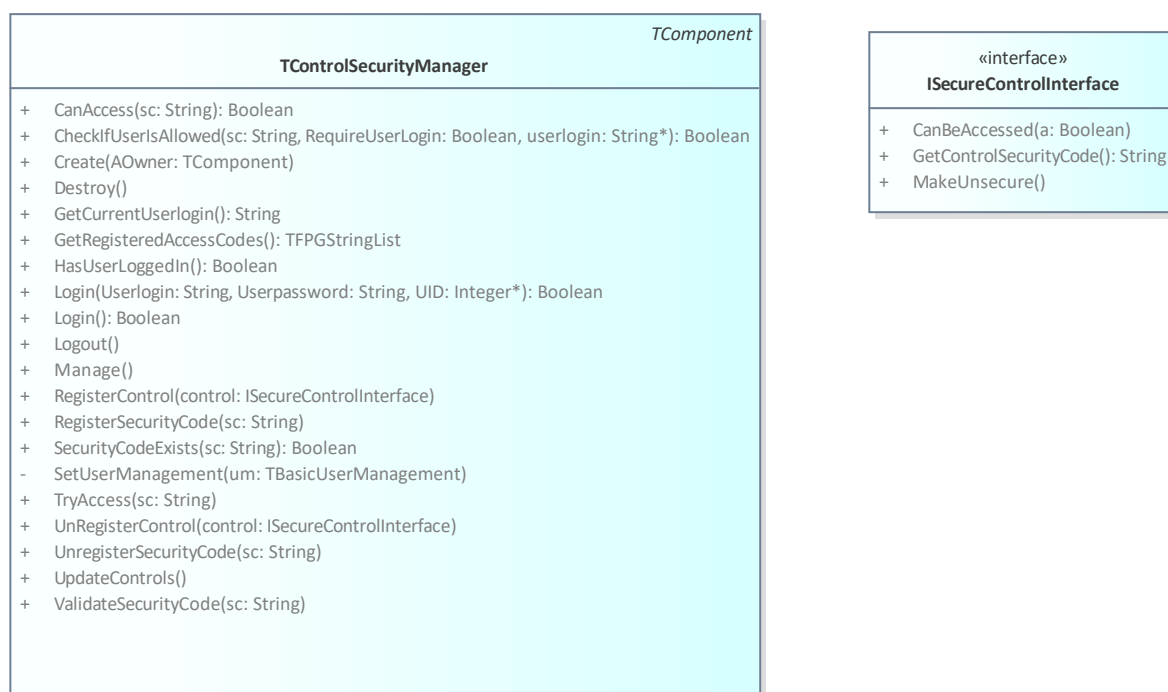


Figure 6: security.manager.controls_manager

ISecureControlInterface




Interface in package 'security.manager.controls_manager'

ISecureControlInterface

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OPERATIONS

| OPERATIONS | |
|---|---|
|  CanBeAccessed (a : Boolean) : Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  GetControlSecurityCode () : String Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  MakeUnsecure () : Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |

TControlSecurityManager















Class in package 'security.manager.controls_manager'

TControlSecurityManager

TControlSecurityManager
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
Extends TComponent

| ASSOCIATIONS | |
|--|---|
|  Association (direction: Source -> Destination) | |
| Source: Public (Class) TControlSecurityManager | Target: Private FUserManagement (Class) TBasicUserManagement |

| OPERATIONS | |
|---|---|
|  CanAccess (sc : String) : Boolean Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  CheckIfUserIsAllowed (sc : String , RequireUserLogin : Boolean , userlogin : String) : Boolean Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  Create (AOwner : TComponent) : Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
| Properties: override = true | |
|  Destroy () : Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
| Properties: override = true | |
|  GetCurrentUserlogin () : String Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  GetRegisteredAccessCodes () : TFPGStringList Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |

| OPERATIONS | |
|--|--|
|  HasUserLoggedIn () : Boolean Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  Login (Userlogin : String , Userpassword : String , UID : Integer) : Boolean Public Properties: overload = true [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  Login () : Boolean Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  Logout () : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  Manage () : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  RegisterControl (control : ISecureControlInterface) : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  RegisterSecurityCode (sc : String) : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  SecurityCodeExists (sc : String) : Boolean Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  SetUserManagement (um : TBasicUserManagement) : Private [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  TryAccess (sc : String) : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  UnRegisterControl (control : ISecureControlInterface) : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  UnregisterSecurityCode (sc : String) : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  UpdateControls () : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  ValidateSecurityCode (sc : String) : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |

security.manager.custom_user_management

Package in package 'common'

security.manager.custom_user_management

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| LINKS TO OTHER PACKAGES | |
|--|---------------------------------------|
|  Dependency from 'security.manager.custom_user_management' Package to 'security.manager.custom_usrmgnt_interface' Package | Direction: Source -> Destination |
|  Dependency from 'security.manager.custom_user_management' Package to 'security.manager.schema' Package | Direction: Source -> Destination |

security.manager.custom_user_management diagram

Class diagram in package 'security.manager.custom_user_management'

security.manager.custom_user_management

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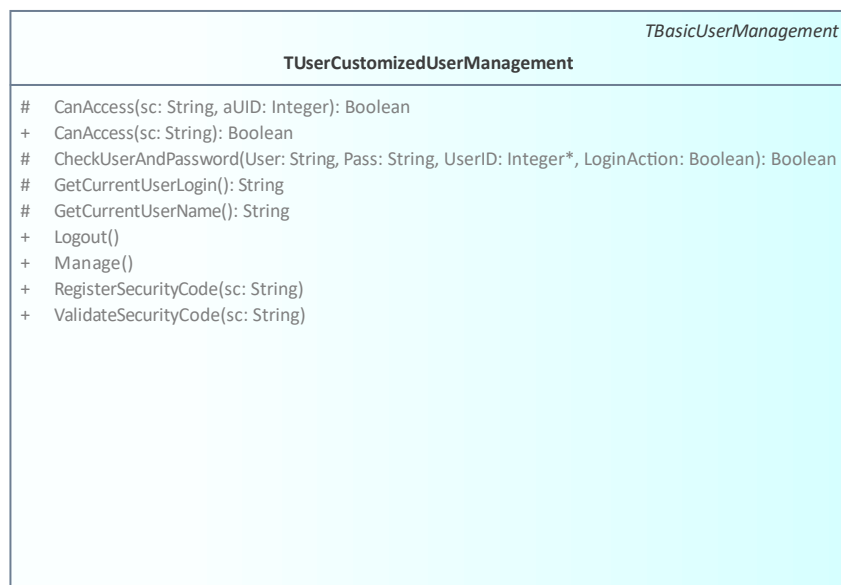


Figure 7: security.manager.custom_user_management

TUserCustomizedUserManagement

Class in package 'security.manager.custom_user_management'

TpSCADACustomizedUserManagement

TUserCustomizedUserManagement

Version 1.0 Phase 1.0 Proposed

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from TUserCustomizedUserManagement to TBasicUserManagement

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ CanAccess (sc : String , aUID : Integer) : Boolean Protected

Properties:

override = true

overload = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ CanAccess (sc : String) : Boolean Public

Properties:

override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ CheckUserAndPassword (User : String , Pass : String , UserID : Integer , LoginAction : Boolean) : Boolean Protected

Properties:

override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ GetCurrentUserLogin () : String Protected

Properties:

override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ GetCurrentUserName () : String Protected

Properties:

override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ Logout () : Public

Properties:

override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ Manage () : Public

Properties:

override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ RegisterSecurityCode (sc : String) : Public

Properties:

override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

OPERATIONS

💎 ValidateSecurityCode (sc : String) : Public

Security codes management

Properties:

override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]



security.manager.custom_usrmgt_interface

Package in package 'common'

security.manager.custom_usrmgt_interface

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| LINKS TO OTHER PACKAGES | |
|---|----------------------------------|
|  Dependency from 'security.manager.basic_user_management' Package to 'security.manager.custom_usrmgt_interface' Package | Direction: Source -> Destination |
|  Dependency from 'security.manager.custom_user_management' Package to 'security.manager.custom_usrmgt_interface' Package | Direction: Source -> Destination |

security.manager.custom_usrmgt_interface diagram

Class diagram in package 'security.manager.custom_usrmgt_interface'

security.manager.custom_usrmgt_interface

Version 1.0

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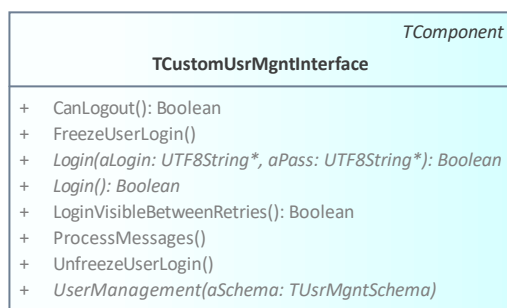


Figure 8: security.manager.custom_usrmgt_interface

TCustomUsrMgtInterface

Class in package 'security.manager.custom_usrmgt_interface'

TCustomUsrMgtInterface

Version 1.0 Phase 1.0 Proposed

Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

Extends TComponent

| ASSOCIATIONS | |
|--|--|
|  Association (direction: Source -> Destination) | |
| Source: Public (Class) TBasicUserManagement | Target: Protected FUsrMgtInterface (Class) TCustomUsrMgtInterface |

| OPERATIONS | |
|--|--|
|  CanLogout () : Boolean Public | [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] |
|  FreezeUserLogin () : Public | [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] |
|  Login (aLogin : UTF8String , aPass : UTF8String) : Boolean Public | [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] |
|  Login () : Boolean Public | [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] |
|  LoginVisibleBetweenRetries () : Boolean Public | [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] |
|  ProcessMessages () : Public | [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] |
|  UnfreezeUserLogin () : Public | [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] |
|  UserManagement (aSchema : TUsrMgntSchema) : Public | [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] |



security.manager.schema

Package in package 'common'

security.manager.schema

Version 1.0 Phase 1.0 Proposed

Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

| LINKS TO OTHER PACKAGES | |
|--|----------------------------------|
|  Usage from 'security.manager.basic_user_management' Package to 'security.manager.schema' Package | Direction: Source -> Destination |
|  Dependency from 'security.manager.custom_user_management' Package to 'security.manager.schema' Package | Direction: Source -> Destination |

security.manager.schema diagram

Class diagram in package 'security.manager.schema'

security.manager.schema

Version 1.0

Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

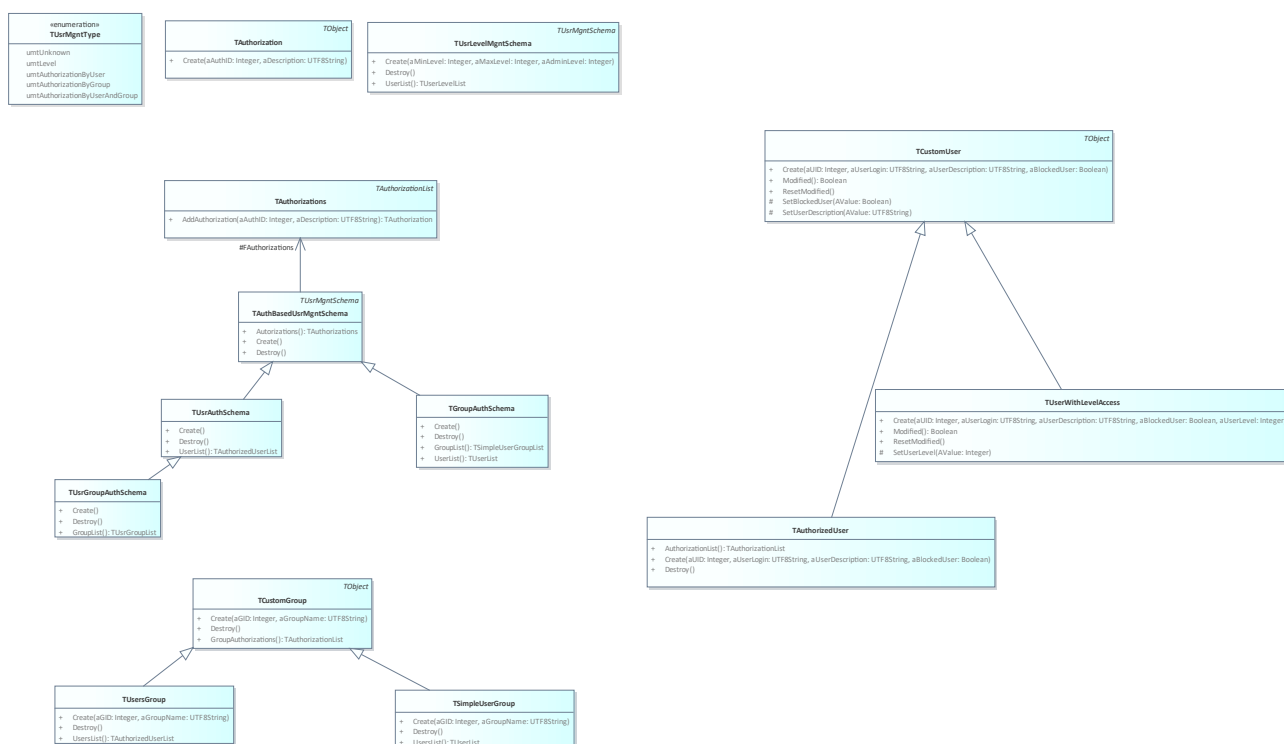


Figure 9: security.manager.schema

TAuthBasedUsrMgmtSchema

Class in package 'security.manager.schema'


: Implements a user management that uses authorizations to allow/deny access. This serve as base for TUsrAuthSchema, TGroupAuthSchema and TUsrGroupAuthSchema.

TAuthBasedUsrMgntSchema
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
Extends TUsrMgntSchema




INCOMING STRUCTURAL RELATIONSHIPS

- ⇒ Generalization from TGroupAuthSchema to TAuthBasedUsrMgntSchema [Direction is 'Source -> Destination'.]
- ⇒ Generalization from TUsrAuthSchema to TAuthBasedUsrMgntSchema [Direction is 'Source -> Destination'.]

ASSOCIATIONS

-  Association (direction: Source -> Destination)
Source: Public (Class) TAuthBasedUsrMgntSchema Target: Protected FAuthorizations (Class) TAuthorizations

OPERATIONS

-  Authorizations () : TAuthorizations Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
-  Create () : Public
[Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.]
-  Destroy () : Public
Properties:
 override = true
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]


TAuthorization

Class in package 'security.manager.schema'

: Implements a simple authorization code

TAuthorization
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
Extends TObject

OPERATIONS

-  Create (aAuthID : Integer , aDescription : UTF8String) : Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

TAuthorizations

Class in package 'security.manager.schema'

: Implements a list with all authorization codes

TAuthorizations

Version 1.0 Phase 1.0 Proposed

Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

Extends TAuthorizationList

ASSOCIATIONS

 Association (direction: Source -> Destination)

Source: Public (Class) TAuthBasedUsrMgntSchema

Target: Protected FAuthorizations (Class)
TAuthorizations

OPERATIONS

 AddAuthorization (aAuthID : Integer , aDescription : UTF8String) : TAuthorization Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

TAuthorizedUser

Class in package 'security.manager.schema'

: Implements a user with user allowed authorizations

TAuthorizedUser

Version 1.0 Phase 1.0 Proposed

Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

Extends TCustomUser

OUTGOING STRUCTURAL RELATIONSHIPS


 Generalization from TAuthorizedUser to TCustomUser

[Direction is 'Source -> Destination'.]

OPERATIONS

 AuthorizationList () : TAuthorizationList Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 Create (aUID : Integer , aUserLogin : UTF8String , aUserDescription : UTF8String , aBlockedUser : Boolean) : Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

 Destroy () : Public

Properties:
override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]




TCustomGroup

Class in package 'security.manager.schema'

: Implements a simple usergroup with group-authorizations

TCustomGroup
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
Extends TObject

| INCOMING STRUCTURAL RELATIONSHIPS | |
|--|---|
| ⇒ Generalization from TSimpleUserGroup to TCustomGroup | [Direction is 'Source -> Destination'.] |
| ⇒ Generalization from TUsersGroup to TCustomGroup | [Direction is 'Source -> Destination'.] |

| OPERATIONS | |
|--|--|
|  Create (aGID : Integer , aGroupName : UTF8String) : Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  Destroy () : Public Properties: override = true [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  GroupAuthorizations () : TAuthorizationList Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |

TCustomUser






Class in package 'security.manager.schema'

: Implements a simple user, with UID, Login, Description and enable/disable option.

TCustomUser
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
Extends TObject

| INCOMING STRUCTURAL RELATIONSHIPS | |
|---|---|
| ⇒ Generalization from TAuthorizedUser to TCustomUser | [Direction is 'Source -> Destination'.] |
| ⇒ Generalization from TUserWithLevelAccess to TCustomUser | [Direction is 'Source -> Destination'.] |

| OPERATIONS | |
|------------|--|
|------------|--|

| OPERATIONS | |
|---|--|
|  Create (aUID : Integer , aUserLogin : UTF8String , aUserDescription : UTF8String , aBlockedUser : Boolean) : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  Modified () : Boolean Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  ResetModified () : Public [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  SetBlockedUser (AValue : Boolean) : Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |
|  SetUserDescription (AValue : UTF8String) : Protected [Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False.] | |




TGroupAuthSchema

Class in package 'security.manager.schema'

: Implements a user management that uses authorizations to allow/deny access, where each user inherits the authorizations assigned to the group which it belongs. On this model, users CAN NOT HAVE SPECIFIC PERMISSIONS. This schema consists in: A list of simple users. A list of groups, where each group has a list of allowed authorizations, where the users of each group will inherit the authorizations assigned to the group. A list with all authorizations available on the security manager.

TGroupAuthSchema
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
Extends TAuthBasedUsrMgntSchema

| OUTGOING STRUCTURAL RELATIONSHIPS | |
|--|--|
|  Generalization from TGroupAuthSchema to TAuthBasedUsrMgntSchema [Direction is 'Source -> Destination'.] | |

| OPERATIONS | |
|--|--|
|  Create () : Public Properties: override = true [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  Destroy () : Public Properties: override = true [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |
|  GroupList () : TSimpleUserGroupList Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] | |

OPERATIONS

◆ **UserList () : TUserList Public**
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

TSimpleUserGroup

Class in package 'security.manager.schema'

: Implements a group were users hence the group authorizations, without user specific authorizations.

TSimpleUserGroup
 Version 1.0 Phase 1.0 Proposed
 Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
 Extends TCustomGroup

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from TSimpleUserGroup to TCustomGroup
 [Direction is 'Source -> Destination'.]

OPERATIONS

◆ **Create (aGID : Integer , aGroupName : UTF8String) : Public**
 Properties:
 override = true
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ **Destroy () : Public**
 Properties:
 override = true
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ **UsersList () : TUserList Public**
 [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

TUserWithLevelAccess

Class in package 'security.manager.schema'

: Implements a user with access level.

TUserWithLevelAccess
 Version 1.0 Phase 1.0 Proposed
 Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
 Extends TCustomUser

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from TUserWithLevelAccess to TCustomUser
 [Direction is 'Source -> Destination'.]


| OPERATIONS | |
|---|---|
|  Create (aUID : Integer , aUserLogin : UTF8String , aUserDescription : UTF8String , aBlockedUser : Boolean , aUserLevel : Integer) : Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  Modified () : Boolean Public Properties: override = true | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  ResetModified () : Public Properties: override = true | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  SetUserLevel (AValue : Integer) : Protected | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |




TUsersGroup

Class in package 'security.manager.schema'

: Implements a group where users inherit the group authorizations, adding it with user specific authorizations.

TUsersGroup
 Version 1.0 Phase 1.0 Proposed
 Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
 Extends TCustomGroup

| OUTGOING STRUCTURAL RELATIONSHIPS | |
|---|---|
|  Generalization from TUsersGroup to TCustomGroup | [Direction is 'Source -> Destination'.] |

| OPERATIONS | |
|---|---|
|  Create (aGID : Integer , aGroupName : UTF8String) : Public Properties: override = true | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  Destroy () : Public Properties: override = true | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |
|  UsersList () : TAuthorizedUserList Public | [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] |

TUsrAuthSchema

Class in package 'security.manager.schema'

: Implements a user management that uses authorizations to allow/deny access, where each user has a list of allowed authorizations. This schema consists in: A user list where each user has a list of allowed authorizations. A list with all authorizations available on the security manager. This schema is similar to the security system used in Siemens WinCC.

TUsrAuthSchema
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
Extends TAuthBasedUsrMgntSchema

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from TUsrAuthSchema to TAuthBasedUsrMgntSchema

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from TUsrGroupAuthSchema to TUsrAuthSchema

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Create () : Public

Properties:
override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ Destroy () : Public

Properties:
override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ UserList () : TAuthorizedUserList Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

TUsrGroupAuthSchema

Class in package 'security.manager.schema'

: Implements a user management that uses authorizations to allow/deny access, where each user has a list of allowed authorizations and inherits the authorizations assigned to the group which it belongs. This schema consists in: A list of users, where each user has a list of specific allowed authorizations. A list of groups, where each group has a list of allowed authorizations, where the users of each group will inherit the group authorizations. A list with all authorizations available on the security manager. This schema is similar to the security system used in Rockwell FactoryTalk.

TUsrGroupAuthSchema
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017
Extends TUsrAuthSchema

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from TUsrGroupAuthSchema to TUsrAuthSchema

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Create () : Public

Properties:
override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ Destroy () : Public

Properties:
override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ GroupList () : TUsrGroupList Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

TUsrLevelMgntSchema

Class in package 'security.manager.schema'

: Implements a user level based schema. This schema consists in: A user list where each user has a access leve. Level limits (Min and Max). The level that makes a user admin. This schema is similar to the security system used in Elipse SCADA and in Wonderware Intouch.

TUsrLevelMgntSchema

Version 1.0 Phase 1.0 Proposed

Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

Extends TUsrMgntSchema

OPERATIONS

◆ Create (aMinLevel : Integer , aMaxLevel : Integer , aAdminLevel : Integer) : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ Destroy () : Public

Properties:
override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ UserList () : TUserLevelList Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

TUsrMgntType

Enumeration «enumeration» in package 'security.manager.schema'

TUsrMgntType
Version 1.0 Phase 1.0 Proposed
Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

| ATTRIBUTES | |
|---|--|
|  umtUnknown : Public | [Is static False. Containment is Not Specified.] |
|  umtLevel : Public | [Is static False. Containment is Not Specified.] |
|  umtAuthorizationByUser : Public | [Is static False. Containment is Not Specified.] |
|  umtAuthorizationByGroup : Public | [Is static False. Containment is Not Specified.] |
|  umtAuthorizationByUserAndGroup : Public | [Is static False. Containment is Not Specified.] |

security.texts

Package in package 'common'

security.texts

Version 1.0 Phase 1.0 Proposed

Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

security.texts diagram

Class diagram in package 'security.texts'

security.texts

Version 1.0

Andreas Frieß created on 29.07.2017. Last modified 29.07.2017

Figure 10: security.texts