Roger Access Control System

Integration of RACS 5 Through Web Services API

Software version: 2.0.8

Document version: Rev. A

INTEGRATION CONCEPT

The RACS 5 system can be integrated with other systems via RACS Integration Server (RIS). The RACS Integration Server provides access to RACS 5 databases (Event Log, Access Users Management, Access Credentials and Authorizations Management), allow to execute remote command and allow synchronize settings between software and hardware.

Integration is based on Windows Communication Foundation (WCF) framework. WCF implements modern industry standards for Web services interoperability, so it could be used at any platforms that support Web services technology.

CONFIGURATION OF INTEGRATION SERVER

- 1. Install and configure VISO application.
- 2. Install RogerSVC software package. During installation select RACS Communication Server, RACS Licensing Server and RACS Integration Server components.
- 3. Configure RACS Communication Server (use RACS Services Manager for that). Service address, port and VISO database must be specified. Restart service after that.
- 4. Configure RACS Licensing Server (use RACS Services Manager for that). Service address and port must be specified. Licensing file, that allow work with Integration server must be loaded. Restart service after that.
- 5. Configure RACS Integration Server endpoints addresses (use RACS Services Manager for that). By default, the services are listening for requests on the following local addresses:
 - http://127.0.0.1:8892/SessionManagement
 - http://127.0.0.1:8892/ConfigurationQuery
 - http://127.0.0.1:8892/EventLogManagement
 - http://127.0.0.1:8892/SystemSynchronization
 - http://127.0.0.1:8892/Integration
 - http://127.0.0.1:8892/Communication
 - http://127.0.0.1:8892/SystemReporting
- 6. For testing server functionality you can use Roger.Racs.IntegrationServer.TestClient.exe sample application (.NET 4). To log in use VISO Operator login and password. Source code of this sample application is available in RogerSVC main catalog in sub catalog Roger.Racs.IntegrationServer.TestClient.

WEB SERVICES

General rules

To execute any server functionality you must be connected to RACS Integration Server. For that purpose you should use Connect method from Session Management Service. It returns current session token, that must be apply as the last parameter of any other functions.

Common Types

This section contains common types codes and descriptions.

Objects Codes

- 3 Operator ID (Remote Command)
- 1025 Access Credential
- 1026 Access User Group
- 1027 Access User Person
- 1028 Access User Asset
- 1029 Access User Visitor
- 1030 Access Zone
- 1031 Access Point
- 1032 Authentication Policy
- 1034 Calendar
- 1036 Schedule
- 1039 Access Rights
- 1042 Access Door
- 1043 Credential Data Input
- 1045 Time Attendance Mode
- 1049 Input
- 1050 Output
- 1069 Alarm Zone
- 1076 Function Key
- 1077 Automation Node
- 1078 Access Door Group
- 1079 Automation Node Group
- 1082 Control Command
- 1083 Power Supply
- 1084 Main Board
- 16384 Call Type

Commands Codes

- 0 Undefined
- 1 Test
- 2 Show
- 3 Add
- 4 Edit

- 5 Delete
- 6 Refresh
- 7 Report
- 8 Copy
- 9 Paste
- 10 Cut
- 11 Undo
- 12 Open
- 13 Close
- 14 Print
- 15 OK
- 16 Cancel
- 18 Assign
- 19 Remove Assign
- 20 Enable
- 21 Disable
- 22 Find
- 23 Grant
- 24 Revoke
- 25 Merge
- 26 Overwrite
- 27 change
- 28 Continue
- 29 Abort
- 30 Monitore
- 31 Export
- 32 Select
- 33 Read
- 40 Erase
- 50 Grant Permission
- 51 Revoke Permission
- 52 Assign Role
- 53 Remove Assigned Role
- 54 Show Organization
- 55 Show Operator
- 56 Show Role
- 57 Show Operator Activity Log
- 70 Add new Connection

- 71 Change Connection
- 72 Remove Connection
- 100 Login
- 101 Logout
- 102 Next
- 103 Previous
- 104 Import
- 105 Display
- 106 Confirm
- 107 Restore

Session Management

This service allow you to connect and disconnect to/from RACS Integration Server.

Connect

Allow to log in to RACS Integration Server. It must be executed before use of any other function. It should be executed on external system start up.

Method signature:

Guid Connect(string login, string password)

Where,

- login VISO Operator login
- password VISO Operator password

Result:

If valid authorization data are specified, result is current session token – it's required to apply this token to any other function as last parameter.

If invalid authorization data are specified, result is empty guid.

Disconnect

Allow to log out from RACS Integration Server. This operation is not required but is recommended. Function should be executed on external system close down.

Method signature:

bool Disconnect(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

Boolean value. True: if disconnect action was successful, otherwise: false.

GetOperatorBySession

Returns the logged in operator.

Method signature:

OperatorData GetOperatorBySession(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

Logged in operator.

GetOperatorSettingsBySession

Returns the logged in operator settings.

Method signature:

OperatorSettingsData GetOperatorSettingsBySession(Guid sessionToken) Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

Logged in operator settings.

GetRunningSessions

Returns running sessions for Operator by Operator's login and password.

Method signature:

IEnumerable<SessionData> GetRunningSessions(string login, string password)

Where,

- login Operator's login
- password Operator's password

Result:

List of running sessions for Operator.

SessionIsActive

Returns a value that indicates whether session is active.

Method signature:

bool SessionIsActive(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

Boolean value. True: if session is active, otherwise: false.

HasPermissions

Returns information about Operator permission to execute specified command for object.

Method signature:

bool HasPermissions(short systemObjectCode, short commandCode, Guid sessionToken)

Where,

- systemObjectCode code for one of existing system objects
- commandCode code for one of existing <u>commands</u>
- sessionToken Current session token, obtained by Connect method execution

Result:

Boolean value. True: if Operator has permissions, otherwise: false.

Configuration Query

This service allow to query RACS Integration server for specified data. It also contains methods that allow to manage Access User Person data (credentials, authentication factors and permissions).

GetCredentials

Get all Access Credentials existing in the system.

Method signature:

IEnumerable<CredentialData> GetCredentials(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Credentials existing in the system.

GetCredentialsNotAssignedToUsers

Get Access Credentials which are not assigned to users.

Method signature:

IEnumerable<CredentialData> GetCredentialsNotAssignedToUsers(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Credentials not assigned to users.

GetCredentialsBySession

Get Access Credentials belongs to User linked with current logged Operator.

Method signature:

IEnumerable<CredentialData> GetCredentialsBySession(Guid sessionToken)
Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Credentials belongs to User linked with current logged Operator. Empty list is returned if there is no link between User and Operator.

GetFactorTypes

Get all Authentication Factor Types existing in the system.

Method signature:

IEnumerable<FactorTypeData> GetFactorTypes(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Authentication Factor Types existing in the system.

GetAllAuthenticationFactors

Get all Authentication Factors all cards.

Method signature:

IEnumerable<FactorData> GetAllAuthenticationFactors(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Authentication Factors.

GetAuthenticationFactorsByCredentialId

Get Authentication Factors assigned to specified Access Credential.

Method signature:

IEnumerable<FactorData> GetAuthenticationFactorsByCredentialId(int credentialId,
Guid sessionToken)

Where,

- credentialId ID of the Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Authentication Factors assigned to specified Access Credential.

GetAuthenticationFactorsFromCardBox

Get all Authentication Factors all cards that are in the Card Box.

Method signature:

IEnumerable<FactorData> GetAuthenticationFactorsFromCardBox(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Authentication Factors that are in the Card Box.

GetOperatorNames

Get all Authentication Factor Types existing in the system.

Method signature:

IEnumerable<OperatorData> GetOperatorNames(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Operators existing in the system.

GetDoors

Get all Access Doors existing in the system.

Method signature:

IEnumerable<AccessDoorData> GetDoors(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Doors existing in the system.

GetPoints

Get all Access Points existing in the system.

Method signature:

IEnumerable<AccessPointData> GetPoints(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Points existing in the system.

GetRights

Get all Access Rights existing in the system.

Method signature:

IEnumerable<AccessRightsData> GetRights(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Rights existing in the system.

GetAccessRightsByID

Get AccessRights by ID.

Method signature:

AccessRightsData GetAccessRightsByID(int rightId, Guid sessionToken)
Where

- rightId ID of AccessRights
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccessRights exist in the system, then data is returned.

GetRightsGroups

Get all Access Rights Groups existing in the system.

Method signature:

IEnumerable<AccessRightsGroupData> GetRightsGroups(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Rights Groups existing in the system.

GetVisitZones

Get all Visit Zones existing in the system.

Method signature:

IEnumerable<VisitZoneData> GetVisitZones(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Visit Zones existing in the system.

GetAccessZones

Get all Access Zones existing in the system.

Method signature:

IEnumerable<AccessZoneData> GetAccessZones(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Zones existing in the system.

GetAlarmZones

Get all Alarm Zones existing in the system.

Method signature:

IEnumerable<AlarmZoneData> GetAlarmZones(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Alarm Zones existing in the system.

GetAttendanceZones

Get all AttendanceZones existing in the system.

Method signature:

IEnumerable<AttendanceZoneData> GetAttendanceZones(Guid sessionToken)
Where.

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Attendance Zones existing in the system.

GetAutomationPoints

Get all Automation Points existing in the system.

Method signature:

IEnumerable<AutomationPointData> GetAutomationPoints(Guid sessionToken)
Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Automation Points existing in the system.

GetControlCommands

Get all Control Commands existing in the system.

Method signature:

IEnumerable<ControlCommandData> GetControlCommands(Guid sessionToken)
Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Control Commands existing in the system.

GetInputs

Get all Inputs existing in the system.

Method signature:

IEnumerable<InputData> GetInputs(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Inputs existing in the system.

GetFunctionKeys

Get all Function Keys existing in the system.

Method signature:

IEnumerable<FunctionKeyData> GetFunctionKeys(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Function Keys existing in the system.

GetOutputs

Get all Outputs existing in the system.

Method signature:

IEnumerable<OutputData> GetOutputs(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Outputs existing in the system.

GetCommunicationServers

Get all Communication Servers existing in the system.

Method signature:

 $\label{lem:communicationServerData} I Enumerable < CommunicationServer S (Guid sessionToken) \\$ Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Communication Servers existing in the system.

GetCommunicationServerById

Get Communication Server by its ID.

Method signature:

CommunicationServerData GetCommunicationServerById(int communicationServerId, Guid sessionToken)

Where,

- communicationServerId ID of the requested Communication Server
- sessionToken Current session token, obtained by Connect method execution

Result:

If Communication Server exist in the system, then CommunicationServerData is returned. If Communication Server not exist in the system, then NULL is returned.

GetNetworks

Get all Networks existing in the system.

Method signature:

IEnumerable<NetworkData> GetNetworks(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Networks existing in the system.

GetNetworkByld

Get Network by its ID.

Method signature:

NetworkData GetNetworkById(int networkId, Guid sessionToken)
Where,

networkId – ID of the requested Network

sessionToken – Current session token, obtained by Connect method execution

Result:

If Network exist in the system, then NetworkData is returned.

If Network not exist in the system, then NULL is returned.

GetControllers

Get all Access Controllers existing in the system.

Method signature:

IEnumerable<AccessControllerData> GetControllers(Guid sessionToken)
Where

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access Controllers existing in the system.

GetControllerById

Get Controller by its ID.

Method signature:

AccessControllerData GetControllerById(int controllerId, Guid sessionToken) Where,

- controllerId ID of the requested Access Controller
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Controller exist in the system, then AccessControllerData is returned.

If Access Controller not exist in the system, then NULL is returned.

GetGlobalCommands

Get all Global Commands existing in the system.

Method signature:

IEnumerable<GlobalCommandData> GetGlobalCommands(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Global Commands existing in the system.

GetTimeAttendanceModes

Get all Time Attendance Modes existing in the system.

Method signature:

IEnumerable<TimeAttendanceModeData> GetTimeAttendanceModes(Guid sessionToken)
Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Time Attendance Modes existing in the system.

GetCredentialDataInputs

Get all Credential Data Inputs existing in the system.

Method signature:

IEnumerable<CredentialDataInputData> GetCredentialDataInputs(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Credential Data Inputs existing in the system.

GetDevices

Get all physical devices existing in the system.

Method signature:

IEnumerable<DeviceData> GetDevices(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Devices existing in the system.

GetDeviceObjects

Get physical devices objects.

Method signature:

IEnumerable<DeviceObjectData> GetDeviceObjects(int deviceId, Guid sessionToken)
Where.

- deviceId ID of Device
- sessionToken Current session token, obtained by Connect method execution

Result:

List of physical device objects.

GetDeviceObjectById

Get device object by ID.

Method signature:

DeviceObjectData GetDeviceObjectById(int deviceObjectId, Guid sessionToken) Where,

- deviceObjectId ID of Device Object
- sessionToken Current session token, obtained by Connect method execution

Result:

If Device Object exist in the system, then device object data is returned.

If Device Object not exist in the system, then NULL is returned.

GetCredentialById

Get Access Credential by its ID.

Method signature:

CredentialData GetCredentialById(int credentialId, Guid sessionToken)

Where,

- credentialId ID of the requested credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Credential exist in the system, then CredentialData is returned.

If Access Credential not exist in the system, then NULL is returned.

GetCredentialTemplate

Get default values of Access Credential object properties.

Method signature:

IEnumerable<CredentialData> GetCredentialTemplate(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

Default credential data is returned.

GetCredentialRights

Get Access Rights identifiers assigned to specified Access Credential.

Method signature:

IEnumerable<int> GetCredentialRights(int credentialId, Guid sessionToken)
Where,

- credentialId ID of the Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights identifiers assigned to specified Access Credential.

GetCredentialRightsView

Get Access Rights identifiers assigned to specified Access Credential.

Method signature:

IEnumerable<AssignedAccessRightsData> GetCredentialRightsView(int credentialId,
Guid sessionToken)

Where,

- credentialId ID of the Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights identifiers assigned to specified Access Credential.

GetCredentialRightsGroups

Get Access Rights Groups identifiers assigned to specified Access Credential.

Method signature:

IEnumerable<int> GetCredentialRightsGroups(int credentialId, Guid sessionToken)
Where.

- credentialId ID of the Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights Groups identifiers assigned to specified Access Credential.

GetCredentialRightsGroupsView

Get Access Rights Groups identifiers assigned to specified Access Credential.

Method signature:

IEnumerable<AssignedAccessRightsGroupData> GetCredentialRightsGroupsView(int
credentialId, Guid sessionToken)

Where,

- credentialId ID of the Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights Groups identifiers assigned to specified Access Credential.

GetPersons

Get all Access User Persons existing in the system.

Method signature:

IEnumerable<PersonData> GetPersons(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access User Persons existing in the system.

GetPersonByld

Get Access User Person by its ID.

Method signature:

PersonData GetPersonById(int personId, Guid sessionToken)

Where,

- personId ID of the requested Access User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Person exist in the system, then PersonData is returned.

If Access User Person not exist in the system, then NULL is returned.

GetPersonRights

Get Access Rights identifiers assigned to specified Access User Person.

Method signature:

IEnumerable<int> GetPersonRights(int personId, Guid sessionToken)

Where,

- personId ID of the Access User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights identifiers assigned to specified Access User Person.

GetPersonAssetsIds

Get Access User Assets identifiers assigned to specified Access User Person\Visitor.

Method signature:

IEnumerable<int> GetPersonAssetsIds(int personOrVisitorId, Guid sessionToken)
Where,

- personOrVisitorId- ID of the Access User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights identifiers assigned to specified Access User Person\Visitor.

GetPersonRightsView

Get Access Rights assigned to specified Access User Person.

Method signature:

IEnumerable<AssignedAccessRightsData> GetPersonRightsView(int personId, Guid
sessionToken) Where,

- personId ID of the Access User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights assigned to specified Access User Person.

GetPersonCredentialFactorIdsByCardNumber

Get Access User Person ID for giving card number.

Method signature:

IEnumerable<PersonCredentialFactorData>

GetPersonCredentialFactorIdsByCardNumber(string cardNumber, Guid sessionToken)
Where,

- cardNumber Factor value
- sessionToken Current session token, obtained by Connect method execution

Result:

If a factor is found for the given card number then data is returned.

If not found then empty list returned.

GetCustomFieldDefinitions

Get all Custom Field Definitions existing in the system.

Method signature:

IList<CustomFieldDefinitionData> GetCustomFieldDefinitions
(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Custom Field Definitions existing in the system.

CustomFieldDefinitionData Object Type

Custom Field Definition Data Object Type Properties	
ID	Unique ID of Custom Field Definition.
Name	Unique Name of Custom Field Definition.
Description	Text to describe Custom Field Definition.
FieldType	Type of Custom Field Definition (Field Types).
TargetObjectCode	Type of Object (Object Types) for which Custom
	Field Definition is defined.
ScreenLabel	Name under which Custom Field is displayed to
	end-user (for example: on VISO interface)
ScreenToolTip	Text of a Tool Tip that is displayed to end-user
	(for example: on VISO interface)
Values	List of <u>CustomFieldDefinitionValueData</u> objects.
	Applicable for FieldType: List of Values.
Deleted	Boolean value indicating whether Custom Field
	Definition was deleted.
UpdatedDate	Last modification Date Time.

Field Types

• 0: Text

• 1: List of Values

• 2: On/Off

CustomFieldDefinitionValueData Object Type

Custom Field Definition Value Data Object Type Properties	
ID	Unique ID of Custom Field Definition Value. This
	ID should be used as the Value of
	AccessUserCustomFieldValueData not the text
	description.
Value	Text description of the value.

AccessUserCustomFieldValueData Object Type

Access User Custom Field Value Data Object Type Properties	
DefinitionID	ID of one of existing Custom Field Definitions
CustomFieldDefinitionName	Name of Custom Field Definition (this property
	does not autoupdate when you change
	DefinitionID, you need to update it manually)
Value	String value of Custom Field. Accepted values:
	Text: any String (including empty String)
	List of Values: ID of
	<u>CustomFieldDefinitionValueData</u> object (or
	empty String which means: no selection)
	On/Off: string parsable to Boolean value: "True"
	or "False".
	NULLs are not accepted.

GetVisitors

Get all Access User Visitor existing in the system.

Method signature:

IEnumerable<VisitorData> GetVisitors(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access User Visitors existing in the system.

GetVisitorByld

Get Access User Visitor by its ID.

Method signature:

VisitorData GetVisitorById(int visitorId, Guid sessionToken)

Where,

- visitorId ID of the requested Access User Visitor
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Visitor exist in the system, then VisitorData is returned.

If Access User Visitor not exist in the system, then NULL is returned.

GetAssets

Get all Access User Assets existing in the system.

Method signature:

IEnumerable<AssetData> GetAssets(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access User Assets existing in the system.

GetAssetByld

Get Access User Asset by its ID.

Method signature:

AssetData GetAssetById(int assetId, Guid sessionToken)

Where,

- assetId ID of the requested Access User Asset
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Asset exist in the system, then AssetData is returned.

If Access User Asset not exist in the system, then NULL is returned.

GetAssetRightIds

Get Access Rights identifiers assigned to specified Access User Asset.

Method signature:

IEnumerable<int> GetAssetRightIds(int accessUserAssetId, Guid sessionToken)
Where,

- accessUserAssetId ID of the AccessUserAsset
- sessionToken Current session token, obtained by Connect method execution

Result:

List of AccessRights identifiers assigned to specified AccessUserAsset.

GetAssetTypes

Get all Access User Asset Types existing in the system.

Method signature:

IEnumerable<AssetTypeData> GetAssetTypes(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access User Asset Types existing in the system.

GetGroups

Get all Access User Groups existing in the system.

Method signature:

IEnumerable<GroupData> GetGroups(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Access User Groups existing in the system.

GetGroupByld

Get Access User Group by its ID.

Method signature:

GroupData GetGroupById(int groupId, Guid sessionToken)

Where,

- groupId ID of the requested Access User Group
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Group exist in the system, then GroupData is returned.

If Access User Group not exist in the system, then NULL is returned.

GetGroupRights

Get Access Rights identifiers assigned to specified Access User Group.

Method signature:

IEnumerable<int> GetGroupRights(int groupId, Guid sessionToken)

Where.

- groupId ID of the Access User Group
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights identifiers assigned to specified Access User Group.

GetGroupRightsView

Get Access Rights assigned to specified Access User Group.

Method signature:

IEnumerable<AssignedAccessRightsData> GetGroupRightsView(int groupId, Guid
sessionToken)

Where,

- groupId ID of the Access User Group
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Rights identifiers assigned to specified Access User Group.

GetPersonCredentials

Get Access Credentials assigned to specified Access User Person.

Method signature:

IEnumerable<CredentialData> GetPersonCredentials(int personId, Guid
sessionToken)

Where,

- personId ID of the Access User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Credentials assigned to specified Access User Person.

GetVisitorCredentials

Get Access Credentials assigned to specified Access User Visitor.

Method signature:

IEnumerable<CredentialData> GetVisitorCredentials(int visitorId, Guid
sessionToken)

Where,

- visitorId ID of the Access User Visitor
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Credentials assigned to specified Access User Visitor.

GetAssetCredentials

Get Access Credentials assigned to specified Access User Asset.

Method signature:

IEnumerable<CredentialData> GetAssetCredentials(int assetId, Guid sessionToken)
Where,

- assetId ID of the Access User Asset
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Credentials assigned to specified Access User Asset.

GetGroupCredentials

Get Access Credentials assigned to specified Access User Group.

Method signature:

IEnumerable<CredentialData> GetGroupCredentials(int groupId, Guid sessionToken)
Where,

- groupId ID of the Access User Group
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Credentials assigned to specified Access User Group.

GetAuthenticationPolicies

Get all Authentication Policies existing in the system.

Method signature:

IEnumerable<AuthenticationPolicyData> GetAuthenticationPolicies(Guid
sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Authentication Policies existing in the system.

GetKeyDepositorVirtualTerminals

Get all Key Depositor Virtual Terminals existing in the system.

Method signature:

IEnumerable<VirtualTerminalData> GetKeyDepositorVirtualTerminals(Guid
sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of Key Depositor Virtual Terminals existing in the system.

GetHireVirtualTerminals

Get all Hire Virtual Terminals existing in the system.

Method signature:

IEnumerable<VirtualTerminalData> GetHireVirtualTerminals(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of Hire Virtual Terminals existing in the system.

GetUserByCredential

Get information about the user assigned to Access Credential

Method signature:

UserData GetUserByCredential(int credentialId, Guid sessionToken)

Where,

- credentialId ID of the Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

Object containing information about the user.

GetMaxPersonId

Get max Access User Person identifier.

Method signature:

int GetMaxPersonId(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

Max identifier of Access User Person existing in the system.

GetMaxCredentialId

Get max Access User Credential identifier.

Method signature:

int GetMaxCredentialId(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

Max identifier of Access Credential existing in the system.

GetMaxFactorId

Get max Authentication Factor identifier.

Method signature:

int GetMaxFactorId(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

Max identifier of Authentication Factor existing in the system.

GetMaxGroupId

Get max Access User Group identifier.

Method signature:

int GetMaxGroupId(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

Max identifier of Access User Group existing in the system.

InsertPerson

Allow to insert new Access User Person data.

Method signature:

int InsertPerson(PersonData personData, Guid sessionToken)

Where,

- personData Inserted Access User Person data
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Person data is successfully persisted on the database then the last person ID is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

Additional information:

Person custom fields values can be inserted by filling PeronsData.CustomFieldValues list

UpdatePerson

Allow to update existing Access User Person data.

Method signature:

int UpdatePerson(PersonData personData, Guid sessionToken)

Where,

- personData Updated Access User Person data (valid person ID must be specified)
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Person data is successfully persisted on the database then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

Additional information:

Person custom fields values can be inserted by filling PeronsData.CustomFieldValues list

DeletePerson

Allow to delete existing Access User Person.

Method signature:

int DeletePerson(int personId, bool autoUnlinkRelatedObjects, bool
deleteAssignedCredentials, Guid sessionToken)

Where,

- personId ID of the Access User Person to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- deleteAssignedCredentials defines if assigned Access Credentials should be deleted along with Access User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Person data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

RestorePerson

Allow to restore existing (not erased) Access User Person.

Method signature:

int RestorePerson(int personId, Guid sessionToken)

Where

- personId ID of the Access User Person to be deleted
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Person data is successfully restored then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

ErasePerson

Allow to erase existing Access User Person.

Method signature:

int PersonVisitor(int personId, bool deleteWithLinkedData, Guid sessionToken)
Where,

- personId ID of the Access User Person to be deleted
- deleteWithLinkedData determines whether the associated personal data will be deleted
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Person data is successfully erased then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignPersonAssets

Allow to assign Access User Asset to Access User Person\Visitor.

Method signature:

int AssignPersonAssets(int personOrVisitorId, int[] assetsIds, Guid
sessionToken)

Where,

- personOrVisitorId ID of the Access User Person\Visitor to which the assets will be assigned
- assetsIds List of the Assets identifiers that will be assigned to specified Access User Person\Visitor
- sessionToken Current session token, obtained by Connect method execution

Result:

If Assets are successfully assigned to AccessUserPersons\Visitors then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UnassignPersonAsset

Allow to unassign Access User Asset from Access User Person\Visitor.

Method signature:

int UnassignPersonAsset(int personOrVisitorId, int assetId, Guid sessionToken)
Where,

- personOrVisitorId ID of the Access User Person\Visitor from which asset will be removed
- assetsIds List of the Assets identifiers that will be assigned to specified Access User Person\Visitor
- sessionToken Current session token, obtained by Connect method execution

Result:

If Assets are successfully assigned to AccessUserPersons\Visitors then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignPersonRights

Allow to assign Access Rights to Access User Person\Visitor.

Method signature:

int AssignPersonRights(int personOrVisitorId, int[] accessRightsIds, Guid
sessionToken)

Where,

- personOrVisitorId ID of the Access User Person\Visitor to which the rights will be assigned
- accessRigthsIds List of the Access Rights identifiers that will be assigned to specified Access User Person\Visitor
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully assigned to Access User Person\Visitor then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignPersonRightsWithActivateExpiryTime

Allow to assign Access Rights to Access User Person with right Activation/Expiration time.

Method signature:

int AssignPersonRightsWithActivateExpiryTime(int personOrVisitorId, int[]
accessRightsIds, DateTime? activationTime, DateTime? expiryTime, Guid
sessionToken)

Where,

- personOrVisitorId ID of the Access User Person or Visitor to which the rights will be assigned
- accessRigthsIds List of the Access Rights identifiers that will be assigned to specified
 Access User Person
- activationTime DateTime object of activation time, can be null
- expiryTime DateTime object of expiry time, can be null
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully assigned to Access User Person then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UnassignPersonRights

Allow to unassign Access Rights from Access User Person\Visitor.

Method signature:

int UnassignPersonRights(int personOrVisitorId, int accessRightsId, Guid sessionToken)

Where,

- personOrVisitorId ID of the Access User Person\Visitor from which Access Rights will be removed
- accessRightsId unassigned Access Rights ID
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights is successfully unassigned from Access User Person\Visitor then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

EnableAssignedPersonRights

Allow to enable Access Rights in Access User Person\Visitor.

Method signature:

int EnableAssignedPersonRights(int personOrVisitorId, int accessRightsId, Guid
sessionToken)

Where,

- personOrVisitorId ID of the Access User Person\Visitor to which the rights will be enabled
- accessRigthsId ID of the Access Rights identifier that will be enabled to specified Access
 User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully enabled in Access User Person\Visitor then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DisableAssignedPersonRights

Allow to disable Access Rights in Access User Person\Visitor.

Method signature:

int DisableAssignedPersonRights(int personOrVisitorId, int accessRightsId, Guid sessionToken)

Where,

- personOrVisitorId ID of the Access User Person\Visitor to which the rights will be disabled
- accessRigthsId ID of the Access Rights identifier that will be disabled to specified Access
 User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully disabled in Access User Person\Visitor then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

InsertVisitor

Allow to insert new Access User Visitor data.

Method signature:

int InsertVisitor(VisitorData visitorData, Guid sessionToken)

Where,

- visitorData inserted Access User Visitor data
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Visitor data is successfully persisted on the database then the last Visitor ID is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateVisitor

Allow to update existing Access User Visitor data.

Method signature:

int UpdateVisitor(VisitorData visitorData, Guid sessionToken)

Where,

- visitorData updated Access User Visitor data (valid Visitor ID must be specified)
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Visitor data is successfully persisted on the database then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteVisitor

Allow to delete existing Access User Visitor.

Method signature:

int DeleteVisitor(int visitorId, bool autoUnlinkRelatedObjects, bool
deleteAssignedCredentials, Guid sessionToken)

Where,

- visitorId ID of the Access User Visitor to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- deleteAssignedCredentials defines if assigned Access Credentials should be deleted along with Access User Visitor
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Visitor data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

RestoreVisitor

Allow to restore existing (not erased) Access User Visitor.

Method signature:

int RestoreVisitor(int visitorId, Guid sessionToken)

Where,

- visitorId ID of the Access User Visitor to be deleted
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Visitor data is successfully restored then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

EraseVisitor

Allow to erase existing Access User Visitor.

Method signature:

int EraseVisitor(int visitorId, bool deleteWithLinkedData, Guid sessionToken)
Where,

- visitorId ID of the Access User Visitor to be deleted
- deleteWithLinkedData determines whether the associated personal data will be deleted
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Visitor data is successfully erased then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignCredentials

Allow assign Access Credentials to Access User Person\Visitor.

Method signature:

int AssignCredentials(int personOrVisitorId, int[] credentialIds, Guid
sessionToken)

Where,

- personOrVisitorId ID of the Access User Person\Visitor to which the credentials will be assigned
- credentialIds List of the Access Credential identifiers that will be assigned to specified
 Access User Person\Visitor
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Credentials are successfully assigned then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UnassignCredential

Allow to unassign Access Credential from specified Access User Person\Visitor.

Method signature:

int UnassignCredential(int personOrVisitorId, int credentialId, Guid sessionToken)

Where,

- personOrVisitorId ID of the Access User Person\Visitor from which credential will be removed
- credentialId unassigned Access Credential ID
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Credential is successfully unassigned from person 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

InsertCredential

Allow to insert new Access Credential data.

Method signature:

int InsertCredential(CredentialData credentialData, Guid sessionToken)
Where,

- credentialData Inserted Access Credential data
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Credential data is successfully persisted on the database then the last credential ID is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateCredential

Allow to update existing Access Credential data.

Method signature:

int UpdateCredential(CredentialData credentialData, Guid sessionToken)
Where,

- credentialData Updated the Access Credential data (valid credential ID must be specified)
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Credential data is successfully persisted on the database then the last credential ID is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteCredential

Allow to delete existing Access Credential.

Method signature:

int DeleteCredential(int credentialId, bool autoUnlinkRelatedObjects, bool
returnFactorsToCardbox, Guid sessionToken)

Where,

- credentialId ID of the Access Credential to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- returnFactorsToCardbox defines if assigned Authentication Factors (of card type) should be returned to Cardbox or deleted along with Access Credential
- sessionToken Current session token, obtained by Connect method execution
- synchronizeAfterDeletion after deleting, sending to the controller partial configuration

Result:

If Access Credential data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

InsertAuthenticationFactor

Allow to insert new Authentication Factor (e.g. proximity card number) and assign it to specified Access Credential.

Method signature:

int InsertAuthenticationFactor(int credentialId, FactorData factorData, Guid
sessionToken)

Where,

- credentialId ID of the Access Credential to which the factor will be assigned
- factorData Inserted Authentication Factor data
- sessionToken Current session token, obtained by Connect method execution

Result:

If Authentication Factor is successfully persisted on the database then the last factor ID is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateAuthenticationFactor

Allow to updating existing Authentication Factor (e.g. proximity card number) data. Only Name and Disable properties can be updated using this function.

Method signature:

int UpdateAuthenticationFactor(FactorData factorData, Guid sessionToken)
Where,

factorData – Updated Authentication Factor data

sessionToken – Current session token, obtained by Connect method execution

Result:

If Authentication Factor is successfully updated on the database then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

RemoveAuthenticationFactor

Allow to remove Authentication Factor.

Method signature:

int RemoveAuthenticationFactor(int factorId, Guid sessionToken)

Where,

- factorId ID of the Authentication Factor
- sessionToken Current session token, obtained by Connect method execution

Result:

If Authentication Factor is successfully removed then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignRights

Allow to assign Access Rights to Access Credential.

Method signature:

int AssignRights(int credentialId, int[] accessRightsIds, Guid sessionToken)
Where,

- credentialId ID of the Access Credential to which the rights will be assigned
- accessRigthsIds List of the Access Rights identifiers that will be assigned to specified
 Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully assigned to Access Credential then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UnassignRights

Allow to unassign Access Rights from Access Credential.

Method signature:

int UnassignRights(int credentialId, int accessRightsId, Guid sessionToken)
Where,

- credentialId ID of the Access Credential from which Access Rights will be removed
- accessRightsId unassigned Access Rights ID
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights is successfully unassigned from Access Credential then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignRightsGroups

Allow to assign Access Rights Groups to Access Credential.

Method signature:

int AssignRightsGroups(int credentialId, int[] accessRightsGroupsIds, Guid
sessionToken)

Where,

- credentialId ID of the Access Credential to which the rights will be assigned
- accessRigthsGroupsIds List of the Access Rights Groups identifiers that will be assigned to specified Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights Groups are successfully assigned to Access Credential then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UnassignRightsGroup

Allow to unassign Access Rights Group from Access Credential.

Method signature:

int UnassignRights(int credentialId, int accessRightsGroupId, Guid sessionToken)

Where,

- credentialId ID of the Access Credential from which Access Rights will be removed
- accessRightsGroupId unassigned Access Rights Group ID
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights Group is successfully unassigned from Access Credential then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

EnableAssignedCredentialRights

Allow to enable Access Rights in Access Credential.

Method signature:

int EnableAssignedCredentialRights(int credentialId, int accessRightsId, Guid sessionToken)

Where,

- credentialId ID of the Access Credential to which the rights will be enabled
- accessRigthsId ID of the Access Rights identifier that will be enabled to specified Access
 Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully enabled in Access Credential then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DisableAssignedCredentialRights

Allow to enable Access Rights in Access Credential.

Method signature:

int DisableAssignedCredentialRights(int credentialId, int accessRightsId, Guid
sessionToken)

Where,

- credentialId ID of the Access Credential to which the rights will be disabled
- accessRigthsId ID of the Access Rights identifier that will be disabled to specified Access
 Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully disabled in Access Credential then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

EnableAssignedCredentialRightsGroup

Allow to enable Access Rights Group in Access Credential.

Method signature:

int EnableAssignedCredentialRightsGroup(int credentialId, int
accessRightsGroupId, Guid sessionToken)

Where,

- credentialId ID of the Access Credential to which the rights will be enabled
- accessRigthsId ID of the Access Rights Group identifier that will be enabled to specified
 Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights Group are successfully enabled in Access Credential then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DisableAssignedCredentialRightsGroup

Allow to disable Access Rights Group in Access Credential.

Method signature:

int DisableAssignedCredentialRightsGroup(int credentialId, int
accessRightsGroupId, Guid sessionToken)

Where,

- credentialId ID of the Access Credential to which the rights will be disabled
- accessRigthsId ID of the Access Rights Group identifier that will be disabled to specified
 Access Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights Group are successfully disabled in Access Credential then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

InsertAsset

Allow to insert new Asset data.

Method signature:

int InsertAsset(AssetData assetData, Guid sessionToken)

Where,

- assetData Inserted Access User Asset data
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Asset data is successfully persisted on the database then the last asset ID is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateAsset

Allow to update existing Access User Asset data.

Method signature:

int UpdateAsset(AssetData assetData, Guid sessionToken)

Where,

- assetData Updated Access User Asset data (valid group ID must be specified)
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Asset data is successfully persisted on the database then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateAssetStatus

Allow to update Access User Asset hire status.

Method signature:

int UpdateAsset(int assetID, byte hireStatus, int? returnedByID, int? hiredByID, int? lastHireVirtualTerminalID, Guid sessionToken)

Where,

- assetID ID of the Access User Asset
- hiresStatus takes one of the following values :
 - 0 Unknown
 - 1 Available
 - 2 Hired
 - 3 EmergencyHired
 - 4 Locked
- returnedByID ID of the person returning the hired asset
- hiredByID ID of the person hired asset
- lastHireVirtualTerminalID ID of virtual terminal on which the status change occurs
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Asset data is successfully persisted on the database then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteAsset

Allow to delete existing Access User Asset.

Method signature:

int DeleteAsset(int assetId, bool autoUnlinkRelatedObjects, bool
deleteAssignedCredentials, Guid sessionToken)

Where,

- assetId ID of the Access User Asset to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- deleteAssignedCredentials defines if assigned Access Credentials should be deleted along with Access User Asset
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Asset data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignAssetCredentials

Allow to assign Access User Asset to Access Credential.

Method signature:

int AssignAssetCredentials(int accessUserAssetId, int[] credentialIds, Guid
sessionToken)

Where,

- accessUserAssetId ID of the Access User Asset to which the credentials will be assigned
- credentialIds List of the credentials identifiers that will be assigned to specified Access
 User Asset
- sessionToken Current session token, obtained by Connect method execution

Result:

If Credentials were successfully assigned to AccessUserAsset then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UnassignAssetCredential

Allow to unassign Access Credential from Access User Asset.

Method signature:

int UnassignAssetCredential(int accessUserAssetId, int credentialId, Guid sessionToken)

Where,

- accessUserAssetId ID of the Access User Asset to which the credentials will be assigned
- credentialId ID of the Access Credential wich will be unassigned from specified Access
 User Asset
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccessCredential was successfully unassigned from AccessUserAsset then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignAssetRights

Allow to assign Access User Asset to Access Rights.

Method signature:

int AssignAssetRights(int accessUserAssetId, int[] accessRightsIds, Guid
sessionToken)

Where,

- accessUserAssetId ID of the Access User Asset to which the rights will be assigned
- accessRightsIds List of the rights identifiers that will be assigned to specified Access User Asset
- sessionToken Current session token, obtained by Connect method execution

Result:

If Rights were successfully assigned to AccessUserAsset then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UnassignAssetRight

Allow to unassign Access Right from Access User Asset.

Method signature:

int UnassignAssetRight(int accessUserAssetId, int accessRightId, Guid
sessionToken)

Where,

- accessUserAssetId ID of the Access User Asset to which the rights will be assigned
- accessRightId List of the rights identifiers that will be assigned to specified Access User
 Asset
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccesRight was successfully unassigned from AccessUserAsset then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

InsertGroup

Allow to insert new Access User Group data.

Method signature:

int InsertGroup(GroupData groupData, Guid sessionToken)

Where,

groupData – Inserted Access User Group data

sessionToken – Current session token, obtained by Connect method execution

Result:

If Access User Group data is successfully persisted on the database then the last group ID is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateGroup

Allow to update existing Access User Group data.

Method signature:

int UpdateGroup(GroupData groupData, Guid sessionToken)

Where,

- groupData Updated Access User Group data (valid group ID must be specified)
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Group data is successfully persisted on the database then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteGroup

Allow to delete existing Access User Group.

Method signature:

int DeleteGroup(int groupId, bool autoUnlinkRelatedObjects, bool
deleteAssignedCredentials, Guid sessionToken)

Where,

- groupId ID of the Access User Group to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- deleteAssignedCredentials defines if assigned Access Credentials should be deleted along with Access User Group
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access User Group data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignGroupRights

Allow to assign Access Rights to Access User Group.

Method signature:

int AssignGroupRights(int groupId, int[] accessRightsIds, Guid sessionToken)
Where,

- groupId ID of the Access User Group to which the rights will be assigned
- accessRigthsIds List of the Access Rights identifiers that will be assigned to specified
 Access User Group
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully assigned to Access User Group then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UnassignGroupRights

Allow to unassign Access Rights from Access User Group.

Method signature:

int UnassignGroupRights(int groupId, int accessRightsId, Guid sessionToken)
Where,

- groupId ID of the Access User Group from which Access Rights will be removed
- accessRightsId unassigned Access Rights ID
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights is successfully unassigned from Access User Group then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

EnableAssignedGroupRights

Allow to enable Access Rights in Access User Group.

Method signature:

int EnableAssignedGroupRights(int groupId, int accessRightsId, Guid sessionToken)

Where,

- groupId ID of the Access User Group to which the rights will be enabled
- accessRigthsId ID of the Access Rights identifier that will be enabled to specified Access
 User Group
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully enabled in Access User Group then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DisableAssignedGroupRights

Allow to disable Access Rights in Access User Group.

Method signature:

int DisableAssignedGroupRights(int groupId, int accessRightsId, Guid sessionToken)

Where,

- groupId ID of the Access User Group to which the rights will be disabled
- accessRigthsId ID of the Access Rights identifier that will be disabled to specified Access
 User Person
- sessionToken Current session token, obtained by Connect method execution

Result:

If Access Rights are successfully disabled in Access User Group then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

GetPowerSupplies

Get all Power Supplies existing in the system.

Method signature:

IEnumerable<PowerSupplyData> GetPowerSupplies(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Power Supplies existing in the system.

GetDisplays

Get all Displays existing in the system.

Method signature:

IEnumerable<DisplayData> GetDisplays(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Displays existing in the system.

GetFunctions

Get all Functions existing in the system.

Method signature:

IEnumerable<FunctionData> GetFunctions(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Functions existing in the system.

GetFunctionGroups

Get all FunctionGroups existing in the system.

Method signature:

IEnumerable<FunctionGroupData> GetFunctions(Guid sessionToken)

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of all FunctionGroups existing in the system.

GetCalendars

Get all Calendars existing in the system.

Method signature:

IEnumerable<CalendarData> GetCalendars(Guid sessionToken);

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Calendars existing in the system.

GetCalendarByID

Get Calendar for given calendar ID.

Method signature:

CalendarData GetCalendarByID(int calendarId, Guid sessionToken)

Where,

- calendarId ID of Calendar
- sessionToken Current session token, obtained by Connect method execution

Result:

If Calendar exist in the system, then data is returned.

InsertCalendar

Allow to insert new Calendar data.

Method signature:

int InsertCalendar(CalendarData calendarData, Guid sessionToken)
Where,

- calendarData Inserted Calendar data
- sessionToken Current session token, obtained by Connect method execution

Result:

If Calendar data is successfully persisted on the database then the last calendar ID is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateCalendar

Allow to updating existing Calendar data.

Method signature:

int UpdateCalendar(CalendarData calendarData, Guid sessionToken)

Where,

- calendarData Updated Calendar data
- sessionToken Current session token, obtained by Connect method execution

Result:

If Calendar is successfully updated on the database then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteCalendar

Allow to delete existing Calendar.

Method signature:

int DeleteCalendar(int calndarId, bool deleteWithLinkedData, Guid sessionToken)
Where,

- calendarId ID of the Calendar to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- sessionToken Current session token, obtained by Connect method execution

Result:

If Calendar data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

GetCalendarEntries

Get all list of CalendarEntry for given calendar ID.

Method signature:

IEnumerable<CalendarEntryData> GetCalendarEntries(int calendarId, Guid
sessionToken);

Where,

• calendarId - ID of the Calendar

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all CalendarEntryData.

UpdateCalendarEntries

Allow to updating existing CalendarEntries data.

Method signature:

int UpdateCalendarEntries(IEnumerable<CalendarEntryData> calendarEntryDatas,
Guid sessionToken)

Where,

- calendarEntryDatas new calendar entry list
- sessionToken Current session token, obtained by Connect method execution

Result:

If list of CalendarEntryData is successfully updated on the database then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

ClearCalendarEntries

Allow to delete all existing Calendar Entries for given calendar ID.

Method signature:

int ClearCalendarEntries(int calendarId, Guid sessionToken)

Where,

- calendarId ID of the Calendar
- sessionToken Current session token, obtained by Connect method execution

Result:

If CalendarEntries data for given calendarId have been successfully deleted then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

GetSchedules

Get all Schedules existing in the system.

Method signature:

IEnumerable<ScheduleData> GetSchedules(Guid sessionToken);

Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Schedules existing in the system.

GetScheduleByID

Get Schedule for given schedule ID.

Method signature:

ScheduleData GetScheduleByID(int scheduleId, Guid sessionToken)

Where,

- scheduleId ID of Schedule
- sessionToken Current session token, obtained by Connect method execution

Result:

If Schedule exist in the system, then data is returned.

GetScheduleByType

Get Schedule list for given schedule type.

Method signature:

IEnumerable<ScheduleData> GetScheduleByType(int scheduleType, Guid sessionToken)
 Where,

- scheduleType Code of <u>Schedule Type</u>
- sessionToken Current session token, obtained by Connect method execution

Result:

List of schedule data for given schedule type is returned.

Schedule Types

- 0: General Purpose Maintained
- 1: Door Mode
- 2: T&A Mode
- 3: Authentication Policy

- 4: General Purpose Momentary
- 8: Global Command
- 16: Synchronisation

CreateSchedule

Allow to create new Schedule.

Method signature:

int CreateSchedule(ScheduleData scheduleData, Guid sessionToken)

Where,

- scheduleData new Schedule data
- sessionToken Current session token, obtained by Connect method execution

Result:

If Schedule data is successfully persisted on the database then the last schedule ID is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

EditSchedule

Allow to updating existing Schedule.

Method signature:

int EditSchedule(ScheduleData scheduleData, Guid sessionToken)

Where,

- scheduleData Updated Schedule data
- sessionToken Current session token, obtained by Connect method execution

Result:

If ScheduleData is successfully updated on the database then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteSchedule

Allow to delete existing Schedule.

Method signature:

int DeleteSchedule(int id, bool deleteWithLinkedData, Guid sessionToken)

Where,

- id ID of the Schedule to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- sessionToken Current session token, obtained by Connect method execution

Result:

If Schedule data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateWeeklySchedule

Allow to updating Weekly Schedule data for given schedule ID.

Method signature:

int UpdateWeeklySchedule(int scheduleId, IList<DailyScheduleData>
modifiedDailySchedules, Guid sessionToken)

Where,

- scheduleId new calendar entry list
- modifiedDailySchedules new DailySchedule list
- sessionToken Current session token, obtained by Connect method execution

Result:

If list of DailyScheduleData is successfully updated on the database then 0 is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

ClearWeeklySchedule

Allow to delete all existing DailyScheduleData for given schedule ID.

Method signature:

int ClearWeeklySchedule(int scheduleId, Guid sessionToken)

Where,

- scheduleId ID of the Schedule
- sessionToken Current session token, obtained by Connect method execution

Result:

If all DailyScheduleData for given scheduleId have been successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

GetSpecialEventByID

Get SpecialEvent for given SpecialEvent ID.

Method signature:

SpecialEventData GetSpecialEventByID(int specialEventId, Guid sessionToken) Where,

- specialEventId ID of SpecialEvent
- sessionToken Current session token, obtained by Connect method execution

Result:

If SpecialEvent exist in the system, then data is returned.

GetSpecialEventsByScheduleID

Get all SpecialEvents for given schedule ID.

Method signature:

IEnumerable<SpecialEventData> GetSpecialEventsByScheduleID(int scheduleId, Guid sessionToken)

Where,

- scheduleId ID of Schedule
- sessionToken Current session token, obtained by Connect method execution

Result:

List of SpecialEvent data for given scheduleId is returned.

InsertSpecialEvent

Allow to insert new SpecialEvent data.

Method signature:

 $\label{thm:continuous} InsertSpecialEvent(SpecialEventData\ specialEventData\ ,\ Guid\ sessionToken)$ Where,

- specialEventData Inserted SpecialEvent data
- sessionToken Current session token, obtained by Connect method execution

Result:

If SpecialEvent data is successfully persisted on the database then the last SpecialEvent ID is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateSpecialEvent

Allow to updating existing SpecialEvent data.

Method signature:

int UpdateSpecialEvent(SpecialEventData specialEventData, Guid sessionToken)
Where,

- specialEventData Updated SpecialEvent data
- sessionToken Current session token, obtained by Connect method execution

Result:

If SpecialEvent is successfully updated on the database then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteSpecialEvent

Allow to delete existing SpecialEvent.

Method signature:

int DeleteSpecialEvent(int id, bool deleteWithLinkedData, Guid sessionToken)
Where,

- id ID of the SpecialEvent to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- sessionToken Current session token, obtained by Connect method execution

Result:

If SpecialEvent data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

InsertAccessRights

Allow to insert new AccessRights data.

Method signature:

int InsertAccessRights(AccessRightsData accessRightsData, Guid sessionToken)
Where,

- accessRightsData Inserted AccessRigts data
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccessRights data is successfully persisted on the database then the last AccessRigts ID is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateAccessRights

Allow to updating existing AccessRights data.

Method signature:

int UpdateAccessRights(AccessRightsData accessRightsData, Guid sessionToken)
Where,

- accessRightsData Updated AccessRigts data
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccessRights is successfully updated on the database then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteAccessRights

Allow to delete existing AccessRights.

Method signature:

int DeleteAccessRights(int id, bool deleteWithLinkedData, Guid sessionToken)
Where,

- id ID of the AccessRigts to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccessRights data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

GetAccessRuleByID

Get AccessRule for given AccessRule ID.

Method signature:

AccessRuleData GetAccessRuleByID(int ruleId, Guid sessionToken)

Where,

- ruleId ID of AccessRule
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccessRule exist in the system, then data is returned

GetAccessRuleByRightsID

Get all AccessRules for given AccessRights ID.

Method signature:

IEnumerable<AccessRuleData> GetAccessRulesByRightsID(int rightsId, Guid
sessionToken)

Where,

- rightsId ID of AccessRights
- sessionToken Current session token, obtained by Connect method execution

Result:

List of AccessRule data for given rightsId is returned.

InsertAccessRule

Allow to insert new AccessRule data.

Method signature:

int InsertAccessRule(AccessRuleData accessRuleData, Guid sessionToken)
Where,

accessRuleData – Inserted SpecialEvent data



sessionToken – Current session token, obtained by Connect method execution

Result:

If AccessRule data is successfully persisted on the database then the last AccessRule ID is returned. If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

UpdateAccessRule

Allow to updating existing AccessRule data.

Method signature:

int UpdateAccessRule(AccessRuleData accessRuleData, Guid sessionToken)
Where,

- accessRuleData Updated AccessRule data
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccessRule is successfully updated on the database then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

DeleteAccessRule

Allow to delete existing AccessRule.

Method signature:

int DeleteAccessRule(int id, bool deleteWithLinkedData, Guid sessionToken)
Where,

- id ID of the AccessRule to be deleted
- autoUnlinkRelatedObjects defines if related objects should be auto unlinked
- sessionToken Current session token, obtained by Connect method execution

Result:

If AccessRule data is successfully deleted then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

GetVirtualControllers

Get all Virtual Controllers.

Method signature:

IEnumerable<VirtualControllerDto> GetVirtualControllers(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of VirtualControllers data returned.

GetVirtualControllerByld

Get Virtual Controller by its ID.

Method signature:

VirtualControllerDto GetVirtualControllerById(int virtualControllerId, Guid sessionToken)

Where,

- virtualControllerId ID of the requested Virtual Controller
- sessionToken Current session token, obtained by Connect method execution

Result:

If Virtual Controller exist in the system, then VirtualControllerDto is returned.

If Virtual Controller not exist in the system, then NULL is returned.

GetPortProfiles

Get all Port Profiles for given Virtual Controller ID.

Method signature:

IEnumerable<PortProfileData> GetPortProfiles(int virtualControllerId, Guid
sessionToken)

Where,

- virtualControllerId ID of Virtual Controller
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Port Profiles data for given Virtual Controller ID is returned.

GetPortTemplates

Get all Port Templates for given virtual controller ID.

Method signature:

IEnumerable<PortTemplateData> GetPortTemplates(int virtualControllerId, Guid
sessionToken)

Where,

- virtualControllerId ID of Virtual Controller
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Port Templates data for given Virtual Controller ID is returned.

GetPortMasterGroups

Get all Port Masters Groups for given Virtual Controller ID.

Method signature:

IEnumerable<PortMasterGroupData> GetPortMasterGroups(int virtualControllerId, Guid sessionToken)

Where,

- virtualControllerId ID of Virtual Controller
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Port Master Groups data for given Virtual Controller ID is returned.

GetCredentialAssignedPortProfiles

Get all assigned PortProfile Ids for given credential ID.

Method signature:

IEnumerable<int> GetCredentialAssignedPortProfiles(int credentialId, Guid
sessionToken)

Where,

- credentialId ID of AccessCredential
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Port Profile Ids assigned to Access Credential for given credentialId is returned.

GetGroupAssignedPortProfiles

Get all assigned PortProfile Ids for given group ID.

Method signature:

IEnumerable<int> GetGroupAssignedPortProfiles(int groupId, Guid sessionToken)
Where,

- groupId ID of AccessCredential
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Port Profile Ids assigned to a group for given groupId is returned.

AssignPortProfileToCredential

Allow to assign PortProfile to Access Credential.

Method signature:

int AssignPortProfileToCredential(int credentialId, int[] portProfileIds, Guid
sessionToken)

Where,

- credentialId ID of the Access Credential to which the PortProfiles will be assigned
- portProfileIds List of the PortProfile Ids that will be assigned to specified Access
 Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If PortProfiles were successfully assigned to AccessCredential then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

RemovePortProfileFromCredential

Allow to remove PortProfile form Access Credential.

Method signature:

int RemovePortProfileFromCredential(int credentialId, int[] portProfileIds, Guid
sessionToken)

Where,

- credentialId ID of the Access Credential from which the PortProfiles will be removed
- portProfileIds List of the PortProfile Ids that will be remove from specified Access
 Credential
- sessionToken Current session token, obtained by Connect method execution

Result:

If PortProfile was successfully removed from AccessCredential then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

AssignPortProfileToGroup

Allow to assign PortProfile to Access User Group.

Method signature:

int AssignPortProfileToGroup(int groupId, int[] portProfileIds, Guid
sessionToken)

Where,

- groupId ID of the Access User Group to which the PortProfiles will be assigned
- portProfileIds List of the PortProfile Ids that will be assigned to specified Access User
 Group
- sessionToken Current session token, obtained by Connect method execution

Result:

If PortProfiles were successfully assigned to AccessUserGroup then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

RemovePortProfileFromGroup

Allow to remove PortProfile form Access User Group.

Method signature:

int RemovePortProfileFromGroup(int groupId, int[] portProfileIds, Guid
sessionToken)

Where,

- groupId ID of the Access User Group from which the PortProfiles will be removed
- portProfileIds List of the PortProfile Ids that will be remove from specified Access User
 Group

sessionToken – Current session token, obtained by Connect method execution

Result:

If PortProfile was successfully removed from AccessUserGroup then 0 is returned.

If any errors occurs then -1 is returned. You can check last error details by executing method GetLastErrorMessage or by checking system log file.

GetKoneAccessRights

Get all KoneAccessRights existing in the system.

Method signature:

IEnumerable<KoneAccessRightsData> GetKoneAccessRights(Guid sessionToken);

Where

sessionToken – Current session token, obtained by Connect method execution

Result

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetAssignedKoneAccessRightsToAccessCredential

Get all assigned KoneAccessRightses to given AccessCredential ID.

Method signature:

IEnumerable<KoneAssignedAccessRightsData>

GetAssignedKoneAccessRightsToAccessCredential(int credentialId, Guid sessionToken);

Where

- credentialId ID of AccessCredential
- sessionToken Current session token, obtained by Connect method execution

Result:

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetKoneHomeFloors

Get all KoneHomeFloors existing in the system.

Method signature:

IEnumerable<KoneHomeFloorData> GetKoneHomeFloors(Guid sessionToken);

Where

sessionToken – Current session token, obtained by Connect method execution

Result

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetKoneCallTypes

Get all KoneCallTypes existing in the system.

Method signature:

IEnumerable<KoneCallTypeData> GetKoneCallTypes(Guid sessionToken);

Where

• sessionToken – Current session token, obtained by Connect method execution

Result

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetKonePersonCategories

Get all KonePersonCategories existing in the system.

Method signature:

IEnumerable<KonePersonCategoryData> GetKonePersonCategories(Guid sessionToken);
Where

sessionToken – Current session token, obtained by Connect method execution

Result

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetKoneTimeZones

Get all KoneTimeZones existing in the system.

Method signature:

IEnumerable<KoneTimeZoneData> GetKoneTimeZones(Guid sessionToken);

Where

sessionToken – Current session token, obtained by Connect method execution

Result

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

AddKoneAccessRights

Allow to add KoneAccessRightses to AccessCredential.

Method signature:

int AddKoneAccessRights(int credentialId, KoneAssignedAccessRightsData[]
koneRightses, Guid sessionToken);

Where,

- credentialId ID of Access Credential
- koneRightses Kone Access Rightses to assign
- sessionToken Current session token, obtained by Connect method execution

Result

If any errors occurs then error code (less than 0) is returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

RemoveKoneAccessRights

Allow to remove KoneAccessRightses from AccessCredential.

Method signature:

int RemoveKoneAccessRights(int credentialId, int[] rightsId, Guid sessionToken);
Where,

- credentialId ID of Access Credential
- koneRightsIds IDs of Kone Access Rights

sessionToken – Current session token, obtained by Connect method execution

Result

If any errors occurs then error code (less than 0) is returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetLastErrorMessage

Allow to get the last error details.

Method signature:

string GetLastErrorMessage()

Result:

Last error details.

GetLastActivityLogId

Get last registered Operator Activity Log entry ID.

Method signature:

int GetLastActivityLogId(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

If any Operator Activity Log entry exist in the system, then last registered entry ID is returned. Else 0 is returned.

TakeActivityLogsStartingFrom

Take Operator Activity Log entries starting from specified entry ID.

Method signature:

IList<OperatorActivityLogData> TakeActivityLogsStartingFrom(int startingLogId, Guid
sessionToken)

Where,

- startingLogId Starting Operator Activity Log Entry ID
- sessionToken Current session token, obtained by Connect method execution

Result:

List of all Operator Activity Log entries starting from specified entry ID.

OperatorActivityLogData Object Type

Operator Activity Log Data Object Type Properties	
ID	Unique ID of operator log entry.
OperatorID	ID of operator who executted logged command
TimeStamp	TimeStamp of time when command execution occured
CommandCode	Code of executed command. (see: Command Codes)
ObjectCode	Operator Activity Log entry source type. (see: Object Types).
ObjectID	Operator Activity log source object ID. (if available)
ObjectDecription	Operator Activity log source name (if available)
ObjectSnapshotID	Operator Activity log source object snapshot (if available)
HostName	Name of host from which logged command was executed

Event Log Management

This service allow you to search data in the system Event Log.

EventLogEntryData Object Type

Event Log Entry Data Object Type Properties	
ID	Unique ID of Event Log Entry.
EventID	ID of Event Log Entry from Access Controller. It's not unique.
EventCode	Code of event. Detailed event codes list is described below (Event Codes).
LoggedOn	Event Log Entry logging date and time.
SourceType	Event Log Entry source type. Available types are described below (Object Types).
SourceID	Event Log Entry source object ID.
LocationType	Event Log Entry location type. Available types are described below (Object Types).
LocationID	Event Log Entry location object ID.
OptionType	Event Log Entry option type. Available types are described below (Object Types).
OptionID	Event Log Entry option object ID.
Function	Event Log Entry Function.
ActionStatus	Event Log Entry Action Status. Available statutes are described below (<u>Action Statuses</u>).
AccessCredentialID	Event Log Entry Access Credential ID. It can be null.
CategoryID	ID of Event Log Entry Category. It can be null.
NetworkID	Event Log Entry Network ID.
ControllerID	Event Log Entry Controller ID.
PersonID	Event Log Entry Person or Visitor ID. It's only available for entries which Access Credential ID is not empty.
GroupID	Event Log Entry Group ID. It's only available for entries which Access Credential ID is not empty.
AssetID	Event Log Entry Asset ID. It's only available for entries which Access

	Credential ID is not empty.
Details	Event Log Entry details (<u>List of Details</u>).
EventTag	Event Log Entry tag.
Comment	Event Log Entry comment. It can be defined by the system operator.

Event Codes

- 0 Test Event
- 1 Failed Login Attempts Limit Exceeded
- 2 Access Confirmed by Door Open Sensor
- 3 Access Not Confirmed by Door Open Sensor
- 4 Card Inserted
- 5 Card Removed
- 6 Access Point Lockout
- 8 Access Point Lockout Returned
- 13 Authentication Factor Read
- 261 Door Lock Activated
- 262 Door Lock Deactivated
- 302 Unlocked Door Mode
- 321 Forced Door Alarm
- 322 Door Open Too Long Alarm
- 323 Access Door Open Too Long Prealarm
- 601 Door Access Granted
- 602 Door Access Denied
- 603 Event Access Point Entry Random Personal Check
- 604 Pass-back Violation
- 605 Elevator Access Granted
- 606 Elevator Access Denied
- 607 Door Access Disabled
- 608 Disable Door Access Denied
- 609 Door Access Enabled
- 610 Enable Door Access Denied
- 611 Maintained T&A Mode
- 612 Set Maintained T&A Mode Denied
- 613 Momentary T&A Mode
- 614 Set Momentary T&A Mode Denied
- 615 T&A Event
- 616 Register T&A Event Denied

- 617 Authentication Policy Set
- 618 Set Authentication Policy Denied
- 619 Door Bell
- 620 Door Bell Denied
- 621 Duress Event
- 622 Register Duress Event Rejected
- 623 Trace Event
- 624 Register Trace Event Denied
- 625 Guard Tour Event
- 626 Register Guard Tour Event Denied
- 627 Muster Event
- 628 Register Muster Event Denied
- 629 Access Granted
- 630 Access Denied
- 631 Emergency Door Locked Mode
- 632 Emergency Door Locked Mode Denied
- 633 Emergency Door Unlocked Mode
- 634 Emergency Door Unlocked Mode Denied
- 635 Emergency Door Mode Cleared
- 636 Clear Emergency Door Mode Denied
- 637 Normal Door Mode
- 638 Normal Door Mode Denied
- 639 Locked Door Mode
- 640 Locked Door Mode Denied
- 641 Unlocked Door Mode
- 642 Unlocked Door Mode Denied
- 643 Conditional-unlocked Door Mode
- 644 Set Conditional-unlocked Door Mode Denied
- 645 Door Open
- 646 Door Open Denied
- 647 Door Closed
- 648 Door Closed Denied
- 649 Door Open Too Long Alarm Cleared
- 650 Cancel Door Open Too Long Alarm Rejected
- 651 Automation Node Set ON Instant
- 652 Set Automation Node ON Instant Denied
- 653 Automation Node Set ON Timed
- 654 Set Automation Node ON Timed Denied

- 655 Automation Node OFF Instant
- 656 Set Automation Node OFF Instant Denied
- 657 Automation Node Switched ON
- 658 Automation Node Switched OFF
- 663 Access Door Bell
- 664 Access Door Bell Denied
- 671 Armed ON Mode
- 672 Armed ON Mode Denied
- 673 Armed OFF Mode
- 674 Armed OFF Mode Denied
- 675 Automation Nodes Clear Timed Granted
- 676 Automation Nodes Clear Timed Denied
- 677 Main Board Controller Restart Granted
- 678 Main Board Controller Restart Denied
- 681 Postpone Auto-arming
- 682 Postpone Auto-arming Denied
- 683 Armed ON Mode Disabled
- 684 Armed ON Mode Disable Denied
- 685 Armed ON Mode Disable Cleared
- 686 Clear Armed ON Mode Disable Denied
- 687 Armed ON Mode Request
- 688 Armed ON Mode Request Denied
- 689 Armed OFF Mode Request
- 690 Armed OFF Mode Request Denied
- 691 Block Door Toggle ON
- 692 Block Door Toggle ON Denied
- 693 Unblock Door Toggle OFF
- 694 Unblock Door Toggle OFF Denied
- 695 Block Door Toggle OFF
- 696 Block Door Toggle OFF Denied
- 697 Forced Door Alarm Cleared
- 698 Clear Door Forced Alarm Denied
- 701 Occupancy Register Cleared
- 702 Clear Occupancy Register Denied
- 703 Pass-back Register Cleared
- 704 Clear Pass-back Register Denied
- 705 AC Lost
- 706 AC Lost Denied

- 707 AC Lost Returned
- 708 AC Lost Return Denied
- 709 AC Lost Delayed
- 710 AC Lost Delayed Denied
- 711 Delayed AC Lost Returned
- 712 Delayed AC Lost Return Denied
- 713 Low Battery
- 714 Low Battery Denied
- 715 Low Battery Returned
- 716 Low Battery Return Denied
- 717 Battery Failure
- 718 Battery Failure Denied
- 719 Battery Failure Returned
- 720 Battery Failure Return Denied
- 721 TML Power Output Overload
- 722 TML Power Output Overload Denied
- 723 TML Power Output Overload Returned
- 724 TML Power Output Overload Return Denied
- 725 AUX Power Output Overload
- 726 AUX Power Output Overload Rejected
- 727 AUX Power Output Overload Returned
- 728 AUX Power Output Overload Return Denied
- 729 Power Output Failure
- 730 Power Output Failure Denied
- 731 Power Output Failure Returned
- 732 Power Output Failure Return Denied
- 733 Authorisation Mode: Deny All
- 734 Denied to set Authorisation Mode: Deny All
- 735 Authorisation Mode: Grant All
- 736 Denied to set Authorisation Mode: Grant All
- 737 Authorisation Mode: Authorise
- 738 Denied to set Authorisation Mode: Authorise
- 739 Authorisation Mode: External Verification
- 740 Denied to set Authorisation Mode: External Verification
- 741 Authorisation Mode: Authorisation Delayed
- 742 Denied to set Authorisation Mode: Authorisation Delayed
- 743 Authorisation Mode: None
- 744 Denied to set Authorisation Mode: None

- 745 External authorisation access confirmed
- 746 External authorisation denied
- 747 Delayed authorisation access disabled
- 748 Delayed authorisation denied
- 801 Preparing to Start Service Mode
- 802 Preparing to Start Normal Mode
- 803 Controller in Service Mode
- 804 Controller in Normal Mode without Access Control Logic
- 805 Controller in Normal Mode with Access Control Logic
- 807 Output Current Overload
- 808 Output Current Overload Returned
- 809 External Signal Level Normal
- 810 External Signal Level Low
- 811 Controller Restart Request
- 812 Controller Restart Success
- 813 Communication Watchdog Restart
- 814 Communication Key Set
- 815 Elevator Access Trouble
- 816 Elevator Access Trouble Returned
- 817 Communication with External Module Lost
- 818 Communication with External Module Returned
- 819 External Module Operation Discontinued
- 820 External Module Operation Resumed
- 821 Time and Date Change Request
- 822 Time and Date Changed
- 823 Event Subdevice Normal
- 824 Event Subdevice Fail
- 831 Switch to New Configuration Request
- 832 Switch to New Configuration Success
- 833 Switch to New Configuration Error
- 841 Device Discovery Request
- 842 Device Discovery Error
- 843 Device Discovery Start
- 851 Firmware Upgrade Request
- 852 Firmware Upgrade Error
- 853 Firmware Upgrade Start
- 861 Load Main Board Configuration Request
- 862 Load Main Board Configuration Error

863 - Load Main Board Configuration Success

Action Statuses

- 0 OK
- 1 No Authorisation to login on Access Point
- 2 Authentication Factor: Parse error
- 3 Authenticaiton Factor: Unknown
- 4 Authentication Factor: Incorrect,
- 5 Authentication Factor: Disabled,
- 6 Another authentication process in progress,
- 7 Authentication Policy Check: Canceled,
- 8 Authentication Policy Check: Timeout,
- 9 Authentication Policy Check: Failed,
- 10 Access Credential: Diabled,
- 11 Access Credential: Not yet active,
- 12 Access Credential: Expired,
- 13 Access Credential: Before valid time,
- 14 Access Credential: After valid time,
- 15 Access Point: Temporary blocked due to penalty timer,
- 16 Object controlled by other Input,
- 31 Source object beyond activity schedule,
- 32 Destination object beyond activity schedule,
- 33 Authorisation Check: No decision,
- 34 Authorisation Check: Function Denied,
- 35 Authorisation Check: Access Point Denied,
- 36 Authorisation Check: Place of Action Denied,
- 37 Authorisation Check: Function Parameter Denied,
- 41 No Authorisation for Authentication,
- 51 No Authorisation for Action,
- 52 Access Credential: Over Max Usage Rule,
- 53 Access Credential: Not active,
- 54 Access Credential: Over Max Days Rule,
- 55 Passback rule violation,
- 56 Wrong Exit Zone,
- 57 Wrong Last Zone,
- 58 Upper Occupancy Limit,
- 59 Lower Occupancy Limit violation,
- 60 Thread too low,

- 61 Access disabled because zone armed,
- 62 No auhorisation for extended lock pulse time,
- 63 Arming disabled,
- 64 Alarm zone already armed (function arming disabled),
- 65 Alarm zone already armed (function auto-arming delay),
- 66 Too long time to planned arming,
- 67 Elevator call rejected because zone is armed,
- 68 Access disabled by external signal,
- 69 Floor doesn't exist,
- 70 Access Point not ready,
- 71 Access Door taken by another Access Point,
- 72 Access Credential Awaited Elsewhere,
- 91 No Authorisation for Place of Action,
- 92 Lock disabled,
- 101 Object Set,
- 102 Object Already Set,
- 103 Object Cleared,
- 104 Object Already Cleared,
- 111 Lock Pulse Enable: Normal Pulse,
- 112 Lock Pulse Enable: Extended Pulse,
- 113 Lock Pulse Enable: Unlimited Pulse,
- 114 Lock Pulse Enable: In Pulse,
- 115 Lock Pulse Enable: Delay,
- 116 Lock Pulse Enable: Lock On,
- 117 Lock Pulse Enable: Lock Off,
- 118 Lock Pulse Enable: Conditional Unblocked,
- 121 Automation Node Delay: State changed,
- 122 Automation Node Delay: State not changed,
- 123 Automation Node Set Timed: State changed,
- 124 Automation Node Set Timed: State not changed,
- 125 Automation Node Set Permanent: State changed,
- 126 Automation Node Set Permanent: State not changed,
- 127 Automation Node Clear: State changed,
- 128 Automation Node Clear: State not changed,
- 131 Auto-arming Delay: Zone Armed,
- 132 Auto-arming Delay:Time Long Enough,
- 133 No Auto-arming Delay In Progress,
- 134 Auto-arming Delay: Signaling From Parent,

- 135 Auto-arming Local: Timer Changed,
- 136 Auto-arming Delay: Done

List of Details

• Event Code: 13 - Authentication Factor Read

Known Authentication factor:

Authentication factor ID,

Example:

0000000003,

Unknown Authentication factor:

,Authentication factor value

Example:

,0000000B000B8F12

• Event Code: 601 - Door Access Granted

Details:

NO- Normal,

LO- Lock On,

LF- Lock Off.

Event Code: 602 - Door Access Denied

Details:

NO- Normal,

LO- Lock On,

LF- Lock Off.

Event Code: 603 – Event Access Point Entry Random Personal Check

Details: Output ID.

EventFilterData Object Type

Event Log Entry Data Object Type Properties	
ID	Unique ID of Event Filter.
Name	Unique Name of Event Filter.

TimeRangeType	Type of time range (<u>Time Range Types</u>).
	Filtering by time is based on a value of
	LoggedOn property of Event Log Entry.
TimeRangeStart	If TimeRangeType=Custom, Event Log Entries
	are get starting from this DateTime.
TimeRangeEnd	If TimeRangeType=Custom, Event Log Entries
	are get up to this DateTime.
LimitResult	Number indicating how many Event Log Entries
	can be retrieved for one query.
Severities	Comma separated string with Severities Codes.
	(<u>Severities Codes</u>). Empty means: Any.
Events	Comma separated string with Events Codes.
	(<u>Events Codes</u>). Empty means. Any.
Networks	Comma separated string with Networks Ids.
	Empty means: Any.
Controllers	Comma separated string with Access Controllers
	Ids. Empty means: Any.
VirtualControllers	Comma separated string with Virtual Controllers
	Ids. Empty means: Any.
Categories	Comma separated string with Event Categories
	Ids. Empty means: Any.
Locations	Comma separated string with some of Object
	Types (Object Types) that could be a Location
	of Event Log Entry. Empty means: Any.
Points	Comma separated string with Access Points Ids.
	Empty means: Any. (connected with Locations)
Doors	Comma separated string with Access Doors Ids.
	Empty means: Any. (connected with Locations)
AccessZones	Comma separated string with Access Zones Ids.
	Empty means: Any. (connected with Locations)
AlarmZones	Comma separated string with Alarm Zones Ids.
	Empty means: Any. (connected with Locations)
	<u> </u>

AutomationPoints	Comma separated string with Automation Points
	(Automation Nodes) Ids. Empty means: Any.
	(connected with Locations)
Sources	Comma separated string with some of Object
	Types (Object Types) that could be a Source of
	Event Log Entry. Empty means: Any.
PointSources	Comma separated string with Access Points Ids.
	Empty means: Empty means: Any. (connected
	with Sources)
Inputs	Comma separated string with Inputs Ids. Empty
	means: Empty means: Any. (connected with
	Sources)
FunctionKeys	Comma separated string with Function Keys Ids.
	Empty means: Empty means: Any. (connected
	with Sources)
Users	Comma separated string with some of Object
	Types (Object Types) that could be a User for
	Event Log Entry. Empty means: Any.
Persons	Comma separated string with Access User
	Persons Ids. Empty means: Any. (connected
	with Users)
Assets	Comma separated string with Access User
	Assets Ids. Empty means: Any. (connected with
	Users)
Groups	Comma separated string with Access User
	Groups Ids. Empty means: Any. (connected with
	Users)
Details	This property may contain some additional
	information about Event Log Entry.
IsSystemFilter	Indicates whether Event Filter is one of
	predefined filters.
Notify Levels	Comma separated string with Notify Levels
	Codes. (NotifyLevels). Empty means: Any
Notify Levels	,

Filtering logic

[Time] AND Events AND Severities AND NotifyLevels AND Categories AND Details AND (Networks OR Controllers) AND VirtualControllers AND Locations (Points OR Doors OR AccessZones OR AlarmZones OR AutomationPoints) AND Sources (PointSources OR Inputs OR FunctionKeys) AND Users (Persons OR Assets OR Groups)

Time Range Types

- 0: Anytime
- 1: Last hour
- 2: Last 12 hours
- 3: Last 24 hours
- 4: Last 7 days
- 5: Last 30 days
- 6: Custom
- 7: Current Week
- 8: Last Week
- 9: Current Month
- 10: Last Month

Severities

- 0: Low
- 1: Medium
- 2: High
- 3: Critical

Notify Levels

- 0: None
- 1: Info
- 4: Warning
- 8: Fault
- 16: Alarm
- 32: Critical Alarm

GetAllEntries

Function was deleted, please use GetLasEntryId and TakeEntriesStartingFrom instead.

GetEntriesBetweenDates

Get Event Log entries from specified data and time range.

Method signature:

IEnumerable<EventLogEntryData> GetEntriesBetweenDates(DateTime startDateTime,
DateTime endDateTime, Guid sessionToken)

Where,

- startDateTime Start date and time
- endDateTime End date and time
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Event Log entries from specified data and time range. Limit of records that function returns equal 100000.

TakeEntriesStartingFrom

Take Event Log entries starting from specified entry ID.

Method signature:

IEnumerable<EventLogEntryData> TakeEntriesStartingFrom(int entryId, Guid
sessionToken)

Where,

- entryId Starting Event Log Entry ID
- sessionToken Current session token, obtained by Connect method execution

Result:

List of all Event Log entries starting from specified entry ID. Limit of records that function returns equal 100000.

GetEntriesByFilterId

Get Event Log entries by ID of the existing Event Filter.

Method signature:

IEnumerable<EventLogEntryData> GetEntriesByFilterId(int filterId, Guid
sessionToken)

Where,

• filterId – ID of the existing Event Filter

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Event Log entries obtained after filtering.

GetEntriesByFilter

Get Event Log entries by Event Filter Data.

Method signature:

IEnumerable<EventLogEntryData> GetEntriesByFilter(EventFilterData filter, Guid
sessionToken)

Where,

- filter object Event Filter Data
- sessionToken Current session token, obtained by Connect method execution

Result:

List of all Event Log entries obtained after filtering.

GetEntriesViewDataByFilter

Get Event Log entries by Event Filter Data.

Method signature:

IEnumerable<EventLogEntryViewData> GetEntriesViewDataByFilter(
EventFilterData filter, Guid sessionToken)

Where,

- filter object Event Filter Data
- sessionToken Current session token, obtained by Connect method execution

Result:

List of all Event Log entries obtained after filtering.

GetEntryByld

Get Event Log entry by its ID.

Method signature:

EventLogEntryData GetEntryById(int entryId, Guid sessionToken)
Where,

- entryId ID of the requested person
- sessionToken Current session token, obtained by Connect method execution

Result:

If Event Log entry exist in the system, then entry data is returned.

If Event Log entry not exist in the system, then NULL is returned.

GetLastEntryld

Get last registered Event Log entry ID.

Method signature:

int GetLastEntryId(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

If any Event Log entry exist in the system, then last registered entry ID is returned. Else 0 is returned.

GetAllEvents

Get all Event Types existing in the system.

Method signature:

IEnumerable<EventData> GetAllEvents(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Event Types existing in the system.

GetAllEventCategories

Get all Event Categories existing in the system.

Method signature:

IEnumerable<EventLogEntryCategoryData> GetAllEventCategories(Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Event Categories existing in the system.

GetAllEventFilters

Get all Event Filters existing in the system.

Method signature:

IEnumerable<EventFilterData> GetAllEventFilters(Guid sessionToken)
Where,

• sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Event Filters existing in the system.

System Synchronization

Common command results

All of partial Credential synchronization command can return one of below code as a result.

- 000: Synchronization completed successfully.
- 030: There is nothing to synchronize.
- 255: Unspecified error occurred.
- 257: Configuration sending error. It could be caused by communication problems. If occurred, please try again.
- 258: Configuration processing error. If occurred, please try again. If that not help then full system synchronization is required (use VISO application/or RunConfigurationSynchronization command for that).
- 259: Communication server unavailable.
- 261: Partial synchronization not available at this moment. Full synchronization already in progress on other station/process.
- 262: Full system synchronization is required (use VISO application/or RunConfigurationSynchronization command for that).

PartialCredentialSynchronization

Send the specified Access Credential to physical access controllers. This command should be executed after creation or modification Access Credential objects or its dependencies.

Method signature:

int PartialCredentialSynchronization(int credentialId, Guid sessionToken)
Where,

- credentialId ID of the Access Credential to send
- sessionToken Current session token, obtained by Connect method execution

Result:

One of available synchronization command results. Configuration of all required controllers need to ended with success for global success result. Otherwise one of synchronization error result is returned.

PartialCredentialsSynchronization

Send the Access Credentials list to physical access controllers. This command should be executed after creation or modification Access Credential objects or its dependencies.

Method signature:

int PartialCredentialsSynchronization(int[] credentialIds, Guid sessionToken)
Where,

- credentialIds Access Credential identifiers list
- sessionToken Current session token, obtained by Connect method execution

Result:

One of available synchronization command results. Configuration of all required controller need to ended with success for global success result. Otherwise one of synchronization error result is returned.

PartialCredentialsSynchronizationWithDetailResult

Send the Access Credentials list to physical access controllers and get more detailed result (separately for each controller). This command should be executed after creation or modification Access Credential objects or its dependencies.

Method signature:

PartialSynchronizationResult[]

PartialCredentialsSynchronizationWithDetailResult(int[] credentialIds, Guid sessionToken)

Where,

- credentialIds Access Credential identifiers list
- sessionToken Current session token, obtained by Connect method execution

Result:

List of controllers that has been synchronized, with it's separate operation result. If none data is returned, that means that specified credentials not required synchronization of any controller.

PartialSynchronizationResult Object Type

Partial Synchronization Result Object Type Properties		
AccessControllerID	ID of Access Controller.	
ResultCode	One of available synchronization command	

	results (<u>Common command results</u>)
Details	Additional text information

General Integration

This service contains two general methods that allow you to quickly register or disable RACS 5 user credential.

GetAttendanceZoneOccupancy

Get current occupancy of the specified Attendance Zone.

Method signature:

int GetAttendanceZoneOccupancy(int attendanceZoneId, Guid sessionToken)
Where,

- attendanceZoneId ID of Attendance Zone
- sessionToken Current session token, obtained by Connect method execution

Result:

Returns current occupancy of the specified Attendance Zone.

If any errors occurred, then -1 is returned.

GetAttendanceZoneOccupancies

Get list of person present in the specified Attendance Zone.

Method signature:

IList<PersonData> GetAttendanceZoneOccupancies(int attendanceZoneId, Guid
sessionToken)

Where,

- attendanceZoneId ID of Attendance Zone
- sessionToken Current session token, obtained by Connect method execution

Result:

Returns list of person present in the specified Attendance Zone.

GetAccessZoneOccupancy

Get current occupancy of the specified Access Zone.

Method signature:

int GetAccessZoneOccupancy(int accessZoneId, int monitoringTime, Guid
sessionToken)

Where,

- accessZoneId ID of Access Zone
- monitoringTime back monitoring time in hours. E.g. if 24 will be specified, then only
 events from last 24 hours will be used during calculations. If all events should be take into
 account then use 0 as a value of this parameter
- sessionToken Current session token, obtained by Connect method execution

Result:

Returns current occupancy of the specified Access Zone.

If any errors occurred, then -1 is returned.

GetPersonLastAccessPoint

Get the information about last granted physical access on Access Point for specified Person.

Method signature:

AccessData GetPersonLastAccessPoint(int personId, Guid sessionToken)

Where,

- personId ID of Person
- sessionToken Current session token, obtained by Connect method execution

Result:

If any physical access granted event found, AccessData for last Access Point is returned. If none physical access granted found, then NULL is returned.

GetAssetLastAccessPoint

Get the information about last granted physical access on Access Point for specified Asset.

Method signature:

AccessData GetAssetLastAccessPoint(int assetId, Guid sessionToken)

Where,

- assetId ID of Asset
- sessionToken Current session token, obtained by Connect method execution

Result:

If any physical access granted event found, AccessData for last Access Point is returned. If none physical access granted found, then NULL is returned.

Communication

This service allow to communicate with physical access controller.

RemoteCommand

Allow to execute remote command on the access controller.

Method signature:

int RemoteCommand(short objectType, int objectId, int functionCode, string functionParameterValue, bool raiseEvents, bool checkRights, bool checkObjectRights, bool checkParameterRights, int credentialId, Guid sessionToken)

Where,

- objectType type of object on which function will be executed (accessible object types are described below)
- objectId ID of object on which function will be executed
- functionCode code of function that will be executed (accessible function codes for object types are described below)
- functionParameterValue value of function additional parameter (optional)
- raiseEvents defines if events should be raised
- checkRights defines if user authentication is required; this parameter will be automatically set to 'true' if checkObjectRights or checkParameterRights is 'true'
- checkObjectRights defines if authorization for place of action is required
- checkParameterRights defines if authorization for function parameter is required
- credentialId ID of Access Credential that belongs to Access User Person assigned to logged Operator (optional, if 0 will be passed, then first Access Credential will be used)
- sessionToken Session token returned by Connect function

Object types and functions:

- 1030 Access Zone
 - o 111 Clear occupancy register
 - o 112 Reset Pass-back register
- 1031 Access Point
 - o 151 Grant Physical Access with Normal Lock Pulse
 - 152 Grant Physical Access with Extended Lock Pulse
 - 153 Set T&A Mode Momentary (required an parameter: ID of Time Attendance Mode)

- 154 Set T&A Mode Maintained (required an parameter: ID of Time Attendance Mode)
- o 155 Register T&A Event (required an parameter: ID of Time Attendance Mode)
- o 156 Set Authentication Policy (required an parameter: ID of Authentication Policy)
- o 159 Signal Door Bell on Access Point
- o 171 Register Guard Tour Event
- 172 Register Trace Event
- o 173 Register Muster Event
- o 174 Register Duress Event
- 1042 Access Door
 - o 121 Unblock Door in Emergency Mode
 - o 122 Block Door in Emergency Mode
 - o 123 Clear Emergency Door Control Mode
 - 124 Set Blocked Door Mode
 - 125 Set Unblocked Door Mode
 - 126 Set Normal Door Mode
 - o 127 Set Conditional-unblocked Door Mode
 - o 128 Generate Normal Door Lock Pulse
 - 129 Generate Extended Door Lock Pulse
 - o 131 Signal Door Bell on Access Door
 - o 134 Clear Forced Entry Signaling
 - o 135 Clear Door Open Too Long Signaling
- 1069 Alarm Zone
 - 102 Switch Armed Mode ON/OFF
 - 103 Set Armed Mode ON
 - o 104 Set Armed Mode OFF
 - o 106- Postpone Auto-arming
- 1077 Automation Node
 - o 161 Set Automation Node ON Instant
 - 162 Set Automation Node ON Timed
 - o 163 Set Automation Node OFF Instant
 - o 164 Switch Automation Node ON/OFF Instant
 - 165 Switch Automation Node ON/OFF Timed

Result:

- 000 : Remote command was successfully sent to access controller
- 040: Access Controller determined by object type and object ID not exist
- 041: Unknown function code
- 042: Function is not supported at specified context

043: Required function parameter has not been specified

200: Invalid current session token

210: Current logged Operator is not assigned to Access User Person

211: Access User Person to which current logged Operator is assigned does not have Access Credentials

255: Unspecified error occurred (use GetLastErrorMessage function to see details)

257: Communication error

258: Controller processing error (use GetLastErrorMessage function to see details)

259: Communication service is unavailable (run communication service and try again)

SetControllerDateTime

Allow to set clock on selected Access Controller

Method signature:

int SetControllerDateTime(int controllerId, DateTime dateTime, Guid sessionToken)

Where,

- objectType type of object on which function will be executed (accessible object types are described below)
- objectId ID of object on which function will be executed
- sessionToken Session token returned by Connect function

Result:

000: Clock has been successfully set on selected controller

200: Invalid current session token

210: Current logged Operator is not assigned to Access User Person

211: Access User Person to which current logged Operator is assigned does not have Access Credentials

255: Unspecified error occurred (use GetLastErrorMessage function to see details)

257: Communication error or selected controller is unreachable

258 :Controller processing error (use GetLastErrorMessage function to see details)

259: Controller configuration processing error

260: Communication service is unavailable (run communication service and try again)

Communication Process Types

0: Unknown

1: Event download process

4: Controllers time synchronization process

8: Perimeter Zones monitoring process

32: Multi-level task execution process

256: Automation Nodes monitoring process

512: Alarm Zones monitoring process

1028*: External and Machine Authorisation monitoring process

2056*: Hotel Rooms monitoring process 16384: Notifications monitoring process

32768: Visitors monitoring process

65536: Global Access Zone monitoring process

*1028,2056 are correct values, although they do not match the power of 2 schema.

The other processes should not be controlled from Web Api.

RunProcess

Allow to run communication process.

Method signature:

string RunProcess(int processId, Guid sessionToken)

Where,

- processId ID of process type to run
- sessionToken Session token returned by Connect function

Result:

000: Process was successfully run

255: Unspecified error occurred (use GetLastErrorMessage function to see details)

259: Communication service is unavailable (run communication service and try again)

StopProcess

Allow to stop communication process.

Method signature:

string StopProcess(processId, Guid sessionToken)

Where,

processId – ID of process type to stop

sessionToken - Session token returned by Connect function

Result:

000: Process was successfully run

255: Unspecified error occurred (use GetLastErrorMessage function to see details)

259: Communication service is unavailable (run communication service and try again)

IsProcessActive

Allow to check if process is active.

Method signature:

string IsProcessActive(processId, Guid sessionToken)

Where,

- processId ID of process type
- sessionToken Session token returned by Connect function

Result:

000: Process is inactive

001: Process is active

255: Unspecified error occurred (use GetLastErrorMessage function to see details)

259: Communication service is unavailable (run communication service and try again)

RunGlobalCommand

Allow to run Global command.

Method signature:

int RunGlobalCommand(int commandId, int credentialId, Guid sessionToken)
Where,

- commandId ID of Global Command to execute
- credentialId ID of credential that permissions will be used
- sessionToken Session token returned by Connect function

Result:

If Task are successfully registered then it's ID is returned (greater than 0). You can trace the task by this ID.

If any errors occurs or the Task Execution Process is inactive then error code (less than 0) is returned.

Possible error codes:

- -200: Invalid session token
- -210: Session operator is not link with person
- -211: Session operator linked person has not credentials
- -212: Specified credential ID not belongs to current session operator
- -213: Global command not exist or have not any commands to execute
- -255: Unknown error
- -259: Communication service is unavailable

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder.

RegisterGlobalCommand

Allow to register Global command to execute in the future.

Method signature:

int RegisterGlobalCommand(int commandId, int credentialId, DateTime
executionTime, Guid sessionToken)

Where,

- commandId ID of Global Command to execute
- credentialId ID of credential that permissions will be used
- executionTime date and time when Global command will be executed
- sessionToken Session token returned by Connect function

Result:

If Task are successfully registered then it's ID is returned (greater than 0). You can trace the task by this ID.

If any errors occurs or the Task Execution Process is inactive then error code (less than 0) is returned.

Possible error codes:

- -200: Invalid session token
- -210: Session operator is not link with person
- -211: Session operator linked person has not credentials
- -212: Specified credential ID not belongs to current session operator
- -213: Global command not exist or have not any commands to execute
- -255: Unknown error
- -259: Communication service is unavailable

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder.

RunConfigurationSynchronization

Allow to run system configuration synchronization.

Method signature:

 $int \ Run Configuration Synchronization (Guid \ session Token)$

Where,

sessionToken - Session token returned by Connect function

Result:

If Task are successfully registered then it's ID is returned (greater than 0). You can trace the task by this ID.

If any errors occurs or the Task Execution Process is inactive then error code (less than 0) is returned.

Possible error codes:

-255: Unknown error

-259: Communication service is unavailable

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder.

RegisterConfigurationSynchronization

Allow to register system configuration synchronization task to execute in the future.

Method signature:

int RegisterConfigurationSynchronization(DateTime executionTime, Guid sessionToken)

Where,

- executionTime date and time when configuration synchronization will be executed
- sessionToken Session token returned by Connect function

Result

If Task are successfully registered then it's ID is returned (greater than 0). You can trace the task by this ID.

If any errors occurs or the Task Execution Process is inactive then error code (less than 0) is returned.

Possible error codes:

-255: Unknown error

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder.

GetTaskState

Allow to get running or registered task state.

Method signature:

int GetTaskState(int taskId, Guid sessionToken)

Where,

- taskId ID of task
- sessionToken Session token returned by Connect function

Result:

-1: Task with specified ID not exist or other error occurs

000: Registered (wait for execution)

001: In progress

002: Completed with success

004: Completed with error

008: Rejected (process was busy)

016: Expired (task has not been executed and expired)

GetTaskProgress

Allow to get running task progress.

Method signature:

int GetTaskProgress(int taskId, Guid sessionToken)

Where,

- taskId ID of task
- sessionToken Session token returned by Connect function

Result:

-1: Task with specified ID not exist or other error occurs

0 - 100: Task progress (%)

GetTaskLogs

Allow to get detailed task execution log.

Method signature:

IEnumerable<LongRunningTaskLogData> GetTaskLogs(int taskId, Guid sessionToken)
Where,

- taskId ID of task
- sessionToken Session token returned by Connect function

Result:

List of **LongRunningTaskLogData** objects.

LongRunningTaskLogData Properties	
ID	ID of task log entry
Timestamp	Date and time
Туре	Level { 0 – Info, 1 – Warning, 2 – Error, 3 – Critical }
Message	Detailed message

If task with specified ID not exist or error occurs then empty list is returned.

GrantRemoteAuthorization

Grant Remote Authorization request.

Method signature:

bool GrantRemoteAuthorization(int requestId, string processName, Guid
sessionToken)

Where,

- requestId Remote Authorization request ID
- processName name of process that call the service it should be name of client application
- sessionToken Current session token, obtained by Connect method execution

Result:

Return True if operation ends with success. Else return false.

DenyRemoteAuthorization

Deny Remote Authorization request.

Method signature:

bool DenyRemoteAuthorization(int requestId, string processName, Guid sessionToken)

Where,

- requestId Remote Authorization request ID
- processName name of process that call the service it should be name of client application
- sessionToken Current session token, obtained by Connect method execution

Result:

Return True if operation ends with success. Else return false.

TakeRemoteAuthorizationStartingFrom

Take Remote Authorization requests starting from specified ID.

Method signature:

IEnumerable<RemoteAuthorizationRequestData>

TakeRemoteAuthorizationRequestStartingFrom(int requestId, Guid sessionToken) Where,

- requestId Starting Remote Authorization request ID
- sessionToken Current session token, obtained by Connect method execution

Result:

List of all Remote Authorization request starting from specified entry ID.

GetRemoteAuthorizationRequestBetweenDates

Get Remote Authorizationrequests between specified dates.

Method signature:

IEnumerable<RemoteAuthorizationRequestData>

GetRemoteAuthorizationRequestBetweenDates(DateTime startDateTime, DateTime
endDateTime, Guid sessionToken)

Where,

- startDateTime start date and time
- endDateTime end date and time

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Remote Authorization request from specified data and time range.

GetRemoteAuthorizationRequestByState

Get Remote Authorization requests by state.

Method signature:

int GetLastRemoteAuthorizationRequestId (byte state, Guid sessionToken)
Where,

- state state of Remote Authorization request
 - 0 Pending
 - 1 Processed Granted
 - o 2 Processed Denied
 - 4 Not Processed
 - 8 Error
- sessionToken Current session token, obtained by Connect method execution

Result:

List of all Remote Authorization request with specified state.

GetLastRemoteAuthorizationRequestId

Get last Remote Authorization request ID.

Method signature:

int GetLastRemoteAuthorizationRequestId (Guid sessionToken)
Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

If any Remote Authorization request exist in the system, then last registered request ID is returned. Else 0 is returned.

SetCredentialUsesRemaining

Allow to set new value of UsesRemaining.

Method signature:

int SetCredentialUsesRemaining(int zoneId, int credentialId, int? usesRemaining,
Guid sessionToken)

Where,

- zoneId ID of Access Zone
- · credentialId ID of Access Credential
- usesRemaining new value 0-255 (255 means No limit)

Result

If any errors occurs then error code (less than 0) is returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

SetCredentialDaysRemaining

Allow to set new value of DaysRemaining.

Method signature:

int SetCredentialDaysRemaining(int zoneId, int credentialId, int? daysRemaining,
Guid sessionToken)

Where,

- zoneId ID of Access Zone
- credentialId ID of Access Credential
- daysRemaining new value 0-255 (255 means No limit)

Result

If any errors occurs then error code (less than 0) is returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

SetCredentialAbsenteeTime

Allow to set new value of AbsenteeTime.

Method signature:

int SetCredential AbsenteeTime (int zoneId, int credentialId, int? absenteeTime,
Guid sessionToken)

Where,

- zoneId ID of Access Zone
- credentialId ID of Access Credential

AbsenteeTime – new value 0-127 (127 means No limit)

Result

If any errors occurs then error code (less than 0) is returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetCredentialUsesRemaining

Get value of UsesRemaining for given ids of AccessZone and AccessCredential.

Method signature:

int? GetCredentialUsesRemaining(int zoneId, int credentialId, Guid sessionToken)
Where,

- zoneId ID of Access Zone
- credentialId ID of Access Credential

Result

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetCredentialDaysRemaining

Get value of DaysRemaining for given ids of AccessZone and AccessCredential.

Method signature:

int? GetCredentialDaysRemaining(int zoneId, int credentialId, Guid sessionToken)
Where,

- zoneId ID of Access Zone
- credentialId ID of Access Credential

Result

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetCredentialAbsenteeTime

Get value of AbsenteeTime for given ids of AccessZone and AccessCredential.

Method signature:

int? GetCredentialAbsenteeTime (int zoneId, int credentialId, Guid sessionToken)
Where,

- zoneId ID of Access Zone
- credentialId ID of Access Credential

Result

If any errors occurs then result is null returned.

You can check the last error details by executing method GetLastErrorMessage or by checking log file on Logs\Integration folder

GetLastErrorMessage

Allow to get the last error details.

Method signature:

string GetLastErrorMessage()

Result:

Last error details.

System Reporting Service

The service allow to monitor system objects state.

GetAccessDoorStatesWhichLatestUpdateIsSince

Get state of Access Doors that changed its state since the specified date and time.

Method signature:

IEnumerable<AccessDoorStateData> GetAccessDoorStatesWhichLatestUpdateIsSince
 (DateTime sinceTime, Guid sessionToken)

Where,

- sinceTime date and time
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Door states.

GetAccessDoorStatesWhichLatestUpdateIsBetween

Get state of Access Doors that changed its state between the specified date and time range.

Method signature:

IEnumerable<AccessDoorStateData> GetAccessDoorStatesWhichLatestUpdateIsBeetween
(DateTime fromTime, DateTime toTime, Guid sessionToken)

Where,

- fromTime from date and time
- toTime to date and time
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Access Door states.

DoorLockMode values:

- 0 Unknown
- 1 Normal
- 2 Locked
- 3 Emergency Locked
- 4 Unlocked
- 5 Emergency Unlocked

- 6 Conditional Unlocked
- 7 Door Blocked

DoorOpenState values:

- 0 Unknown
- 1 Closed
- 2 Open
- 3 Forced Open

GetAutomationPointStatesWhichLatestUpdateIsSince

Get state of Automation Points that changed its state since the specified date and time.

Method signature:

IEnumerable<AutomationPointStateData>
GetAutomationPointStatesWhichLatestUpdateIsSince
(DateTime sinceTime, Guid sessionToken)

Where,

- sinceTime Since date and time
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Automation Point states.

GetAutomationPointStatesWhichLatestUpdateIsBetween

Get state of Automation Points that changed its state between the specified date and time range.

Method signature:

IEnumerable<AutomationPointStateData>

GetAutomationPointStatesWhichLatestUpdateIsBeetween

(DateTime fromTime, DateTime toTime, Guid sessionToken)

Where,

- fromTime from date and time
- toTime to date and time
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Automation Point states.

SwitchingState values:

- 0 Unknown
- 1 Off
- 2 On

GetAlarmZoneStatesWhichLatestUpdateIsSince

Get state of Alarm Zones that changed its state since the specified date and time.

Method signature:

IEnumerable<AlarmZoneStateData> GetAlarmZoneStatesWhichLatestUpdateIsSince
(DateTime sinceTime, Guid sessionToken)

Where,

- sinceTime date and time
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Alarm Zone states.

GetAlarmZoneStatesWhichLatestUpdateIsBetween

Get state of Alarm Zones that changed its state between the specified date and time.

Method signature:

IEnumerable<AlarmZoneStateData> GetAlarmZoneStatesWhichLatestUpdateIsBeetween
(DateTime fromTime, DateTime toTime, Guid sessionToken)

Where,

- fromTime From date and time
- toTime To date and time
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Alarm Zone states.

ArmingState values:

- 0 Unknown
- 1 Disarmed
- 2 Armed

GetAccessGrantedLogViewDataForUsersInsideAttendanceZone

Get list of users that last access granted was inside the specified Attendance Zone.

Method signature:

IEnumerable<AccessGrantedLogViewData>

GetAccessGrantedLogViewDataForUsersInsideAttendanceZone

(int attendanceZoneId, Guid sessionToken)

Where,

- attendanceZoneId ID of Attendance Zone
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Users inside Attendance Zone.

GetAccessGrantedLogViewDataForUsersOutsideAttendanceZone

Get list of users that last access granted was outside the specified Attendance Zone.

Method signature:

IEnumerable<AccessGrantedLogViewData>

 ${\tt GetAccessGrantedLogViewDataForUsersOutsideAttendanceZone}$

(int attendanceZoneId, Guid sessionToken)

Where,

- attendanceZoneId ID of Attendance Zone
- sessionToken Current session token, obtained by Connect method execution

Result:

List of Users outside Attendance Zone.

GetAccessGrantedLogs

Get information about the last access granted location for all users.

Method signature:

IEnumerable<AccessGrantedLogViewData> GetAccessGrantedLogs
(Guid sessionToken)

Where,

sessionToken – Current session token, obtained by Connect method execution

Result:

List of all Users with last access granted location information.

HTTPS session

By default the connection with Integration Server is http type but it can be configured as https type. In such case configure app.config file which is included in C:\Program Files\ROGER\RogerSVC\Roger.Racs.IntegrationServer.TestClient as below. The example app.config file for https is by default located at C:\Program Files\ROGER\RogerSVC\docs\Integration

1. Enable https in <behaviors> section by adding:

```
<serviceMetadata httpGetEnabled="false" httpsGetEnabled="true"/>
```

2. For each binding in <basicHttpBinding> define security mode as:

```
<security mode="Transport" />
```

3. In <services> section use:

```
<add baseAddress="https://127.0.0.1:8892/EventLogManagement"/>
<endpoint address="mex" binding="mexHttpsBinding" contract="IMetadataExchange"/>
```

4. Create certificate for IIS using Powershell as in example below:

\$rootCert = New-SelfSignedCertificate -CertStoreLocation Cert:\CurrentUser\My -DnsName "localhost" -FriendlyName "RootRogerWcfIntegrationServer" -NotAfter (Get-Date).AddYears(50) - TextExtension @("2.5.29.19={text}CA=true") -KeyUsage CertSign,CrlSign,DigitalSignature

[System.Security.SecureString]\$rootCertPassword = ConvertTo-SecureString -String "password" - Force -AsPlainText

[String]\$rootCertPath = Join-Path 'cert:\CurrentUser\My\' -ChildPath "\$(\$rootCert.Thumbprint)"

Export-PfxCertificate -Cert \$rootCertPath -FilePath 'rootRogerWcfIntegrationServer.pfx' -Password \$rootCertPassword

Export-Certificate -Cert \$rootCertPath -FilePath 'rootRogerWcfIntegrationServer.crt'

 $\label{testCert} $\texttt{testCert} = \texttt{New-SelfSignedCertificate-CertStoreLocation Cert:} \\ \texttt{LocalMachine} \\ \texttt{My-FriendlyName} \\ \texttt{RogerWcfIntegrationServer"-TextExtension} \\$

@("2.5.29.17={text}DNS=localhost&IPAddress=192.168.0.52") -NotAfter (Get-Date).AddYears(50) -KeyExportPolicy Exportable -KeyLength 2048 -KeyUsage DigitalSignature,KeyEncipherment -Signer \$rootCert

[String]\$testCertPath = Join-Path 'cert:\LocalMachine\My\' -ChildPath "\$(\$testCert.Thumbprint)"

Export-PfxCertificate -Cert \$testCertPath -FilePath rogerWcfIntegrationServer.pfx -Password \$rootCertPassword

Export-Certificate -Cert \$testCertPath -FilePath rogerWcfIntegrationServer.crt

- 5. The certificate should be visible in IIS Server Certificates.
- 6. Additionally start netsh command using Windows Command Prompt (CMD) as in example below:

C:\windows\system32>netsh http add sslcert ipport=0.0.0.0:8892 certhash=5eca78ff80240ad1668df5371b6f25d3d02d1d46 appid= $\{47518684-d49f-4ff4-8d5d-7ed282085313\}$

SSL Certificate successfully added

Use adequate port and certhash which can be found in Details tab of the properties of IIS Server Certificate

7. Sign the certificate using certmgr.msc

If VISO WEB is used in RACS 5 system then its web.config file which is by default located at C:\Program Files\ROGER\RogerSVC\VISO_WEB must be modified as below:

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