

The following document presents the methods and classes that were added or changed in the OpenLM Server v4.5 API.

List of contents

## **New Methods**

[AnonymizeUser](#)

[ResetLicenseFileCalculationTime](#)

[GetFullLoggingSettings](#)

[GetTokenFlexVendors](#)

[GetTokenFlexStructure](#)

[ResetTokenFlexTree](#)

[UpdateTokenFlexStructure](#)

[AddTokenFlexProductFamily](#)

[UpdateTokenFlexProductFamily](#)

[DeleteTokenFlexProductFamily](#)

[UpdateTokenFlexTokensSettings](#)

[UpdateTokenRates](#)

[ExportTokenFlexProductsFamilies](#)

[UpdateTokenFlexProductsDefaultFamilies](#)

[GetTokenFlexLicenseServers](#)

[GetTokenFlexUsage](#)

[ChangePassword](#)

[ResetPassword](#)

[GetEmailSettingsTestResult](#)

[GetTokenFlexDoubleConsumption](#)

[UpdateDefaultTimeZoneSettings](#)

[GetEmailNotificationsSettings](#)

[UpdateEmailNotificationsSettings](#)

[ImportUsers](#)

[GetVendorDistinctFamilies](#)

[AddUserEmail](#)

[CheckVerificationCode](#)

[CheckStrongPasswordOn](#)

[CheckUser](#)

[GetDefaultTimeZoneSettings](#)

[GetLicenseServersList](#)

[GetAllSecuritySettings](#)

[UpdateSecuritySettings](#)

[SendSupportSummaryReport](#)

[SetLoggerConfigFile](#)

[SetAdmin](#)

## **New Classes**

[AnonymizeUserRequest](#)

[RecalculateLicenseFileRequest](#)

[FullLoggingSettingsResponse](#)

[ServerFullLoggingDueDate](#)

[TokenFlexVendorsResponse](#)

[TokenFlexVendor](#)

[TokenFlexStructureRequest](#)

[TokenFlexStructureResponse](#)

[ResetTokenFlexTreeRequest](#)

[GetVendorDistinctFamiliesRequest](#)

[VendorDistinctFamiliesResponse](#)

[TokenFlexDistinctFamily](#)

[UpdateTokenFlexStructureRequest](#)

[TokenFlexProductFamily](#)

[TokenFlexProductFamilyFeature](#)

[UpdateTokenFlexProductFamilyRequest](#)

[DeleteTokenFlexProductFamilyRequest](#)

[UpdateTokenFlexProductFamilyResponse](#)

[UpdateTokenFlexTokensSettingsRequest](#)

[UpdateTokenRatesRequest](#)

[ProductFamilyTokenRate](#)

[UpdateTokenRatesResponse](#)

[UpdatedFamilyID](#)

[ExportTokenFlexProductsFamiliesRequest](#)

[UpdateTokenFlexProductsDefaultFamiliesRequest](#)

[TokenFlexLicenseServersRequest](#)

[TokenFlexLicenseServersResponse](#)

[TokenFlexLicenseServer](#)

[TokenFlexUsageRequest](#)

[TokenFlexUsageResponse](#)

[TokenFlexAggregatedUsage](#)

[TokenFlexDoubleConsumptionRequest](#)

[TokenFlexDoubleConsumptionResponse](#)

[TokenFlexDoubleConsumptionResponse](#)

[ChangePasswordRequest](#)

[ResetPasswordRequest](#)

[ResetPasswordResponse](#)

[ResultResponse](#)

[UpdateDefaultTimeZoneSettingRequest](#)

[EmailNotificationsSettingsResponse](#)

[PortCommandConfig](#)

[UserResponse](#)

[CheckVerificationCodeRequest](#)

[AddUserEmailRequest](#)

### **Changed Methods**

[PerformUserAuthentication](#)

### **New error codes for PerformUserAuthentication method:**

### **Changed Classes**

[LicenseUsageReportRequest](#)

[CurrentlyConsumedLicensesRequest](#)

[CurrentlyConsumedLicenses](#)

[LicenseServerHostDetails](#)

[UserAuthenticationRequest](#)

### **Common Classes**

[BaseRequest](#)

[Property](#)

[Type](#)

[Description](#)

[RequestBaseInfo](#)

[SessionRefresh](#)

[Property](#)

[Type](#)

[Description](#)

[PagingData](#)

[Property](#)

[Type](#)

[Description](#)

[UserLocalSettings](#)

[Property](#)

[Type](#)

[Description](#)

[TimeFormat](#)

[TimezoneStandardName](#)

[DecimalSeparator](#)

[ThousandsSeparator](#)

[Thousands separator sign](#)

[BaseResponse](#)

[Property](#)

[Type](#)

[Description](#)

[Error](#)

[Property](#)

[Type](#)

[Description](#)

[KeyValuePair](#)[Property](#)[Type](#)[Description](#)[SlimDateTime](#)

## **Enumeration Classes**

[ExportContentType](#)

## **New Methods**

<b>Name</b>	<b>Request / Response</b>	<b>Description</b>
<b>AnonymizeUser</b>	<a href="#">AnonymizeUserRequest</a> <a href="#">BaseResponse</a>	GDPR Anonymizes user data from the system
<b>ResetLicenseFileCalculationTime</b>	<a href="#">RecalculateLicenseFileRequest</a> <a href="#">BaseResponse</a>	Enforce immediate calculation of license file
<b>GetFullLoggingSettings</b>	<a href="#">BaseRequest</a> <a href="#">FullLoggingSettingsResponse</a>	Returns full logging settings of general and specific license servers logs and their full logging due date.
<b>GetTokenFlexVendors</b>	<a href="#">BaseRequest</a> <a href="#">TokenFlexVendorsResponse</a>	Returns all vendors support TokenFlex
<b>GetTokenFlexStructure</b>	<a href="#">TokenFlexStructureRequest</a> <a href="#">TokenFlexStructureResponse</a>	Returns License Servers, Families and Features by vendor supports TokenFlex
<b>ResetTokenFlexTree</b>	<a href="#">ResetTokenFlexTreeRequest</a> <a href="#">BaseResponse</a>	Resets Families and Features assigned, of vendor supports TokenFlex

<b>UpdateTokenFlexStructure</b>	<a href="#">UpdateTokenFlexStructureRequest</a> <a href="#">BaseResponse</a>	Updates Families and Features of vendor supports TokenFlex
<b>AddTokenFlexProductFamily</b>	<a href="#">UpdateTokenFlexProductFamilyRequest</a> <a href="#">UpdateTokenFlexProductFamilyResponse</a>	Adds Product Family for TokenFlex based vendor
<b>UpdateTokenFlexProductFamily</b>	<a href="#">UpdateTokenFlexProductFamilyRequest</a> <a href="#">BaseResponse</a>	Updates Product Family of TokenFlex based vendor
<b>DeleteTokenFlexProductFamily</b>	<a href="#">DeleteTokenFlexProductFamilyRequest</a> <a href="#">BaseResponse</a>	Deletes Product Family of TokenFlex based vendor
<b>UpdateTokenFlexTokensSettings</b>	<a href="#">UpdateTokenFlexTokensSettingsRequest</a> <a href="#">BaseResponse</a>	Updates Token Settings (Grace Time) of TokenFlex based vendor
<b>UpdateTokenRates</b>	<a href="#">UpdateTokenRatesRequest</a> <a href="#">UpdateTokenRatesResponse</a>	Updates Families' Token Rates of a TokenFlex based vendor
<b>ExportTokenFlexProductsFamilies</b>	<a href="#">ExportTokenFlexProductsFamiliesRequest</a> <a href="#">BaseResponse</a>	Exports TokenFlex Products Families
<b>UpdateTokenFlexProductsDefaultFamilies</b>	<a href="#">UpdateTokenFlexProductsDefaultFamiliesRequest</a> <a href="#">BaseResponse</a>	Updates TokenFlex Product Default Families
<b>GetTokenFlexLicenseServers</b>	<a href="#">TokenFlexLicenseServersRequest</a> <a href="#">TokenFlexLicenseServersResponse</a>	Returns License Servers that support TokenFlex
<b>GetTokenFlexUsage</b>	<a href="#">TokenFlexUsageRequest</a> <a href="#">TokenFlexUsageResponse</a>	Returns usage of TokenFlex families and features
<b>ChangePassword</b>	<a href="#">ChangePasswordRequest</a> <a href="#">BaseResponse</a>	Change password by user
<b>ResetPassword</b>	<a href="#">ResetPasswordRequest</a> <a href="#">ResetPasswordResponse</a>	Reset user password
<b>GetEmailSettingsTestResult</b>	<a href="#">BaseRequest</a> <a href="#">ResultResponse</a>	Gets result of last email settings test

<b>GetTokenFlexDoubleConsumption</b>	<a href="#">TokenFlexDoubleConsumptionRequest</a> <a href="#">TokenFlexDoubleConsumptionResponse</a>	Returns double consumption of TokeFlex features
<b>UpdateDefaultTimeZoneSettings</b>	<a href="#">UpdateDefaultTimeZoneSettingRequest</a> <a href="#">ResultResponse</a>	Updates default time zone settings
<b>GetEmailNotificationsSettings</b>	<a href="#">BaseRequest</a> <a href="#">EmailNotificationsSettingsResponse</a>	Get Email Notifications Settings
<b>UpdateEmailNotificationsSettings</b>	UpdateEmailNotificationsSettingsRequest <a href="#">ResultResponse</a>	Update Email Notifications Settings
<b>ImportUsers</b>	ImportUsersRequest ImportUsersResponse	Import users from file
<b>GetVendorDistinctFamilies</b>	<a href="#">GetVendorDistinctFamiliesRequest</a> <a href="#">VendorDistinctFamiliesResponse</a>	Returns Families of TokenFlex vendor
<b>AddUserEmail</b>	<a href="#">AddUserEmailRequest</a> <a href="#">ResultResponse</a>	Add email to user missing email address
<b>CheckVerificationCode</b>	<a href="#">CheckVerificationCodeRequest</a> UserAuthenticationResponse	Verify verificationCode the user user enters
<b>CheckStrongPasswordOn</b>	<a href="#">BaseRequest</a> <a href="#">ResultResponse</a>	Check if strong password is on
<b>CheckUser</b>	<a href="#">UserAuthenticationRequest</a> <a href="#">UserResponse</a>	Check username for two phase authentication
<b>GetDefaultTimeZoneSettings</b>	<a href="#">BaseRequest</a> DefaultTimeZoneSettingsResponse	Get default time zone settings
<b>GetLicenseServersList</b>	<a href="#">BaseRequest</a> LicenseServersListResponse	Returns List of license servers
<b>GetAllSecuritySettings</b>	<a href="#">BaseRequest</a> SecuritySettingsResponse	Returns all security settings
<b>UpdateSecuritySettings</b>	UpdateSecuritySettingsRequest <a href="#">ResultResponse</a>	Update security settings
<b>SendSupportSummaryReport</b>	SendSupportSummaryReportRequest <a href="#">ResultResponse</a>	Send Support Summary Report by email
<b>SetLoggerConfigFile</b>	SetLoggerConfigFileRequest <a href="#">ResultResponse</a>	Set logger config file
<b>SetAdmin</b>	SetAdminRequest SetAdminResponse	Set admin user

## New Classes

### AnonymizeUserRequest

#### Property Type Description

**UserID** Int32 ID of user to anonymize

### RecalculateLicenseFileRequest

#### Property Type Description

**ServerId** Int32 An ID of License Server

### FullLoggingSettingsResponse

Property	Type	Description
<b>IsGeneralFullLoggingOn</b>	Boolean	Whether general full logging is set
<b>LoggerConfigFile</b>	String	The location of logging configuration file
<b>GeneralFullLoggingDueDate</b>	<a href="#">SlimDateTime</a>	The date when general full logging ends
<b>LMServersFullLoggingDueDates</b>	<a href="#">ServerFullLoggingDueDate[]</a>	The dates of License Servers full logging end.

### ServerFullLoggingDueDate

Property	Type	Description
<b>ServerId</b>	Int32	ID of License Server
<b>ServerDescription</b>	String	The description of License Server
<b>DueDate</b>	<a href="#">SlimDateTime</a>	The date when full logging ends

### TokenFlexVendorsResponse

Property	Type	Description
----------	------	-------------

**TokenFlexVendors** [TokenFlexVendor](#)[] The list of TokenFlex vendors

## TokenFlexVendor

Property	Type	Description
<b>VendorName</b>	String	The name of TokenFlex vendor
<b>Description</b>	String	The description of TokenFlex vendor
<b>IsInitialized</b>	Boolean	Whether TokenFlex wizard was completed for vendor
<b>GraceTime</b>	Int32	The grace time in minutes
<b>DefaultFamiliesURL</b>	String	The URL of default families update file

## TokenFlexStructureRequest

Property	Type	Description
<b>Vendor</b>	String	The name of TokenFlex vendor
<b>ExcludeFamiliesFeatures</b>	Boolean	Whether to exclude families' features in the response

## TokenFlexStructureResponse

Property	Type	Description
<b>LicenseServers</b>	<a href="#">TokenFlexLicenseServer</a> []	A list of TokenFlex License Servers
<b>ProductFamilies</b>	<a href="#">TokenFlexProductFamily</a> []	A list of TokenFlex Product Families and Features

## ResetTokenFlexTreeRequest

Property	Type	Description
<b>Vendor</b>	String	The name of TokenFlex vendor

## GetVendorDistinctFamiliesRequest

Property	Type	Description
----------	------	-------------

**Vendor** String The name of TokenFlex vendor

## VendorDistinctFamiliesResponse

Property	Type	Description
<b>Families</b>	TokenFlexDistinctFamily[]	A list of families

## TokenFlexDistinctFamily

Property	Type	Description
<b>FamilyName</b>	String	The name of family
<b>DeprecatedDate</b>	<a href="#">SlimDateTime</a>	A date when family was deprecated

## UpdateTokenFlexStructureRequest

Property	Type	Description
<b>Vendor</b>	String	The name of TokenFlex vendor
<b>GraceTime</b>	Int32	The grace time in minutes
<b>AddedProductFamilies</b>	<a href="#">TokenFlexProductFamily</a> []	A list of added product families
<b>UpdatedProductFamilies</b>	<a href="#">TokenFlexProductFamily</a> []	A list of updated product families
<b>DeletedProductFamilies</b>	Int32[]	A list of IDs of deleted product families

## TokenFlexProductFamily

Property	Type	Description
<b>ID</b>	String	An ID of family
<b>GraceTime</b>	Int32	A grace time in minutes
<b>FamilyName</b>	String	A name of family
<b>Vendor</b>	String	A name of vendor
<b>TokenRate</b>	Int32	A token rate of family
<b>IsDefault</b>	Boolean	Whether the family is default or custom

<b>IsUnassigned</b>	Boolean	Whether the family is “Unassigned” family
<b>IsPending</b>	Boolean	Whether the family was changed
<b>Features</b>	<a href="#">TokenFlexProductFamilyFeature[]</a>	List of features

## TokenFlexProductFamilyFeature

Property	Type	Description
<b>ID</b>	String	An ID of feature
<b>FeatureName</b>	String	A name of feature
<b>IsPending</b>	Boolean	Whether feature was changed

## UpdateTokenFlexProductFamilyRequest

Property	Type	Description
<b>Vendor</b>	String	A name of vendor
<b>ProductFamily</b>	<a href="#">TokenFlexProductFamily</a>	A product family

## DeleteTokenFlexProductFamilyRequest

Property	Type	Description
<b>Vendor</b>	String	A name of vendor
<b>ProductFamilyID</b>	Int32	An ID of product family

## UpdateTokenFlexProductFamilyResponse

Property	Type	Description
<b>UpdatedFamily</b>	<a href="#">TokenFlexProductFamily</a>	An updated family

## UpdateTokenFlexTokensSettingsRequest

Property	Type	Description
<b>Vendor</b>	String	A name of vendor

**GraceTime** Int32 A grace time in minutes

### UpdateTokenRatesRequest

Property	Type	Description
<b>Vendor</b>	String	A name of vendor
<b>ProductFamiliesTokenRates</b>	<a href="#">ProductFamilyTokenRate</a> []	A list of token rates per product family

### ProductFamilyTokenRate

Property	Type	Description
<b>FamilyID</b>	Int32	An ID of family
<b>TokenRate</b>	Int32	A token rate

### UpdateTokenRatesResponse

Property	Type	Description
<b>FamiliesIDs</b>	<a href="#">UpdatedFamilyID</a> []	A list of Families IDs

### UpdatedFamilyID

Property	Type	Description
<b>OldID</b>	Int32	A previous ID
<b>NewID</b>	Int32	An updated ID

### ExportTokenFlexProductsFamiliesRequest

Property	Type	Description
<b>Vendor</b>	String	A name of vendor

## UpdateTokenFlexProductsDefaultFamiliesRequest

Property	Type	Description
<b>Vendor</b>	String	A name of vendor
<b>FileContent</b>	String	A file content of updated default families
<b>IsOnlineUpdate</b>	Boolean	Whether the file update is online or offline

## TokenFlexLicenseServersRequest

Property	Type	Description
<b>Vendor</b>	String	A name of vendor

## TokenFlexLicenseServersResponse

Property	Type	Description
<b>LicenseServers</b>	<a href="#">TokenFlexLicenseServer</a> []	A list of TokenFlex License Servers

## TokenFlexLicenseServer

Property	Type	Description
<b>ID</b>	Int32	An ID of License Server
<b>Name</b>	String	A description of License Server
<b>Enabled</b>	Boolean	Whether License Server monitoring is enabled
<b>ServerSideSampling</b>	Boolean	Whether a License Server is monitored by OpenLM Server or OpenLM Broker

## TokenFlexUsageRequest

Property	Type	Description
<b>Vendor</b>	String	A name of vendor
<b>LicenseServersIDs</b>	Int32	A list of License Servers IDs
<b>Families</b>	String[]	A list of Families names
<b>UserIDs</b>	Int32[]	A list of user IDs

<b>GroupByType</b>	TokenFlexGroupByType	Type of group by, the values are: Family or User
<b>GroupByPeriod</b>	TokenFlexGroupByPeriod	Group By Period, the values are: Off, Day, Week, Month, Year
<b>StartDate</b>	<a href="#">SlimDateTime</a>	A start date of usage
<b>EndDate</b>	<a href="#">SlimDateTime</a>	An end date of usage
<b>IsChart</b>	Boolean	Whether chart or table data to be retrieved
<b>ChartType</b>	TokenFlexUsageChartType	Type of chart, the values are: MostExpensive, MostUsed

## TokenFlexUsageResponse

Property	Type	Description
<b>Usages</b>	<a href="#">TokenFlexAggregatedUsage[]</a>	A list of token flex usages per page size
<b>TotalCount</b>	Int32	A total count of usages

## TokenFlexAggregatedUsage

Property	Type	Description
<b>Vendor</b>	String	A name of vendor
<b>ProductFamilyName</b>	String	A name of product family
<b>ConsumptionTime</b>	Int64	A number of seconds the tokens were consumed
<b>Tokens</b>	Int64	A number of tokens consumed
<b>UserName</b>	String	A username
<b>FirstName</b>	String	User first name
<b>LastName</b>	String	User last name
<b>Email</b>	String	User email
<b>GroupByPeriod</b>	String	The usage period range
<b>DeprecatedDate</b>	<a href="#">SlimDateTime</a>	A date when family was deprecated

## TokenFlexDoubleConsumptionRequest

Property	Type	Description
----------	------	-------------

<b>Vendor</b>	String	A name of vendor
<b>LicenseServersIDs</b>	Int32[]	A list of license servers IDs
<b>UserIDs</b>	Int32[]	A list of users IDs
<b>StartDate</b>	<a href="#">SlimDateTime</a>	A start date of double consumption
<b>EndDate</b>	<a href="#">SlimDateTime</a>	An end date of double consumption
<b>ReccurencePercentage</b>	Int32	A recurrence percentage

### TokenFlexDoubleConsumptionResponse

Property	Type	Description
<b>DoubleConsumptions</b>	<a href="#">TokenFlexDoubleConsumption</a> []	A list of double consumptions per page size
<b>TotalCount</b>	Int32[]	A total number of consumptions

### TokenFlexDoubleConsumptionResponse

Property	Type	Description
<b>DoubleConsumptions</b>	<a href="#">TokenFlexDoubleConsumption</a> []	A list of double consumptions per page size
<b>TotalCount</b>	Int32[]	A total number of consumptions

### ChangePasswordRequest

Property	Type	Description
<b>UserName</b>	String	
<b>OldPassword</b>	String	
<b>NewPassword</b>	String	
<b>IsInitial</b>	Boolean	Is it first login when the user doesn't have a password

### ResetPasswordRequest

Property	Type	Description
<b>UserName</b>	String	User to reset the password for

## ResetPasswordResponse

Property	Type	Description
<b>Message</b>	String	Message to display if needed
<b>Status</b>	Boolean	Is action succeed

## ResultResponse

Property	Type	Description
<b>Status</b>	Boolean	Is action succeed

## UpdateDefaultTimeZoneSettingRequest

Property	Type	Description
<b>UseDefaultTimeZoneSetting</b>	Boolean	
<b>DefaultTimeZoneSetting</b>	String	

## EmailNotificationsSettingsResponse

Property	Type	Description
<b>EmailNotification</b>	Boolean	Do we send email for notifications
<b>PerformanceImprovement</b>	Boolean	Do we send notifications' email for performance improvement
<b>LicenseViolations</b>	Boolean	Do we send notifications' email for license violations
<b>CheckServerUpdates</b>	Boolean	Do we send notifications' email for new OpenLM server version
<b>UsabilityReport</b>	Boolean	Do we send notifications' email for usability report

## PortCommandConfig

Property	Type	Description
----------	------	-------------

<b>Command</b>	BrokerCommands (Enum Int32)	A command in OpenLM Broker configuration. The options are: start = 3, stop = 4, reread = 5
<b>IsEnabled</b>	Boolean	Whether the command is enabled in OpenLM Broker configuration

## UserResponse

Property	Type	Description
<b>Check</b>	String	OK when the request is legal
<b>AuthenticationID</b>	String	Guid when a legal user found. Empty if user not found

## CheckVerificationCodeRequest

Property	Type	Description
<b>AuthenticationID</b>	String	
<b>VerificationCode</b>	String	

## AddUserEmailRequest

Property	Type	Description
<b>AuthenticationID</b>	String	As returned from the authentication request
<b>Email</b>	String	The email to add to the user. A verification code will be sent to this email. A request to the CheckVerificationCode API must be performed with the verification code sent, to complete authentication.

## Changed Methods

Name	Request / Response	Description
<b>PerformUserAuthentication</b>	<a href="#">UserAuthenticationRequest</a> UserAuthenticationResponse	Perform authentication

## New error codes for PerformUserAuthentication method:

Code	Error	Description
17	IncorrectUsername	User name didn't exist on DB
18	UserBlocked	User blocked after reaching max wrong password attempts twice (On first time the user is temporarily blocked). Only admin can release the user.
19	PasswordExpired	Password expired. User must change password.
20	PasswordCreated	Password created for the user, and sent to him by email.
21	UserTemporaryBlocked	User temporary blocked after reaching max wrong password attempts. The user can try login again in 15 minutes.
22	LoginFailedLastTry	Login failed with the wrong password. If the next attempt will also fail with the wrong password, the user will be blocked.
23	MissingEmail	Login failed because this user email isn't configured, and no password set for this user. Only admin can add email & reset the password for the user.
25	EmailSettingsNotConfiguredClient	If WebAuthentication is false SMTP settings must be set before trying authentication.
26	ChangeEmail	Authentication was successful, but the profile is missing the email, a request to AddUserEmail must be done using the AuthenticationID returned from this request
32	PasswordError	Login failed with the wrong password.

## Changed Classes

### LicenseUsageReportRequest

Used in *GetLicenseUsageReport* API

Property	Type	Description
<b>ExcludedWorkstations</b>	String[]	<b>Added</b> - Workstations to be excluded

## CurrentlyConsumedLicensesRequest

Used in *GetCurrentlyConsumedLicenses* API

Property	Type	Description
<b>Workstations</b>	String	<b>Added</b> - Workstations list to filter by

## CurrentlyConsumedLicenses

Used in *GetCurrentlyConsumedLicenses* API

Property	Type	Description
<b>AgentUserLastHeartbeat</b>	<a href="#">SlimDateTime</a>	<b>Added</b> - Last time Agent User reported
<b>IsAgentUserOnline</b>	Boolean	<b>Added</b> - Indication whether agent user is online

## LicenseServerHostDetails

Used in *GetCurrentlyConsumedLicenses* API

Property	Type	Description
<b>ConfiguredCommands</b>	PortCommandConfig[]	<b>Added</b> - A list of commands configurations in OpenLM Broker

## UserAuthenticationRequest

Used in *PerformUserAuthentication* API

Property	Type	Description
<b>TwoPhaseAuthentication</b>	Boolean	<b>Added</b> -
<b>WebAuthentication</b>	Boolean	<b>Added</b> -
<b>AuthenticationID</b>	String	<b>Added</b> -

## Common Classes

### BaseRequest

Property	Type	Description
<b>BaseInfo</b>	<a href="#">RequestBaseInfo</a>	General request information includes: Session, Paging, User local settings, <b>etc.</b>

### RequestBaseInfo

Property	Type	Description
<b>SessionData</b>	<a href="#">SessionRefresh</a>	Session Data
<b>PagingData</b>	<a href="#">PagingData</a>	Paging Data
<b>UserLocalSettings</b>	<a href="#">UserLocalSettings</a>	User localization settings: Date time format, timezone and etc.
<b>IsExport</b>	Boolean	Whether to get exported to csv results
<b>CustomerId</b>	String	Customer's identifier Relevant to SAAS system only.

### SessionRefresh

Property	Type	Description
<b>SessionID</b>	String	The ID of session
<b>Refresh</b>	Boolean	Is manual refresh

### PagingData

Property	Type	Description
<b>StartRecord</b>	Int32	Number of paging start record
<b>NumOfRecord</b>	Int32	Max result set size
<b>Sort</b>	String[]	Columns by which to sort the results
<b>Search</b>	String	Data to search
<b>SearchColumns</b>	String[]	Columns that will be used for search
<b>Direction</b>	String	Sorting direction ("asc" or "desc")

## UserLocalSettings

Property	Type	Description
<b>TimeFormat</b>	String	For example:: dd/mm/yyyy hh:mm:ss mm/dd/yyyy hh:mm:ss yyyy-mm-dd hh:mm:ss
<b>TimezoneStandardName</b>	String	Timezone standard name, according to System.TimeZoneInfo.Id
<b>DecimalSeparator</b>	String	Decimal separator sign
<b>ThousandsSeparator</b>	String	<b>Thousands separator sign</b>

## BaseResponse

Property	Type	Description
<b>SaaSToken</b>	String	An authentication session ID in <b>SaaS</b> mode.
<b>Error</b>	<a href="#">Error</a>	Error data (if error exists)
<b>ExportString</b>	String	The export response (if export requested)
<b>ExportContentType</b>	<a href="#">ExportContentType</a>	The content type of export: Text or URL

## Error

Property	Type	Description
<b>Code</b>	Int32	The error code
<b>Message</b>	String	The error message
<b>Parameters</b>	<a href="#">KeyValueStringPair</a> []	A list of error parameters

## KeyValueStringPair

Property	Type	Description
<b>Key</b>	String	The key of pair
<b>Value</b>	String	The value of pair

## **SlimDateTime**

<b>Property</b>	<b>Type</b>	<b>Description</b>
-----------------	-------------	--------------------

<b>Year</b>	Int32	
-------------	-------	--

<b>Month</b>	Int32	
--------------	-------	--

<b>Day</b>	Int32	
------------	-------	--

<b>Hour</b>	Int32	
-------------	-------	--

<b>Minute</b>	Int32	
---------------	-------	--

<b>Second</b>	Int32	
---------------	-------	--

## **Enumeration Classes**

### **ExportContentType**

<b>Name</b>	<b>Value</b>	<b>Description</b>
-------------	--------------	--------------------

<b>Text</b>	0	Export Text
-------------	---	-------------

<b>Link</b>	1	Export File URL
-------------	---	-----------------