

Interface Description

ServiceTm_SOAP



Revision date: 24.03.2021

TecAlliance GmbH

Contents

Module Details

1. ServiceTm

ObjectModel

1. GetImageNamesForTmManualMsg
2. GetTmErrorCodeSearchHtmlMsg
3. GetTmImageMsg
4. GetTmLinkedTechnicalManualsForWorkMsg
5. GetTmLinkedTechnicalManualsMsg
6. GetTmManualHtmlMsg
7. GetTmManualListGenArtFilteredMsg
8. GetTmManualListMsg
9. GetTmManualListTextFilteredMsg
10. GetVehicleHasTmMsg
11. KindOfWorkTimeData
12. TmItemMp
13. TmMainGroup
14. TmManual
15. TmSubGroup

Module Details

1. ServiceTm

1.1. General Remarks

The webservice methods uses message classes as parameter value. All these classes are derived from the base class `AisService._40.Messages.BaseMsg` and contains properties for the data which are necessary for calling the web service method. To calling a method create an instance of their message class, set the necessary data to the message class properties and pass it throw the web service method.

All methods require the "**CompanyName**", "**UserName**" and "**Password**" properties, containing the application-specific access parameters.

Some methods require the `LanguageCode` properties, a 2-letter message internationalization language code as defined by ISO 639-1. All text messages will be returned in the defined language. Only language codes returned by `GetLanguages(...)` in the TecRMI common webservice are valid.

Some methods require the `CountryCode` properties, a 2-letter data internationalization country code as defined by ISO 3166-1. All application data will be returned as it is available for this country. Only county codes returned by `GetCountries(...)` in the TecRMI common webservice are valid.

Some methods require the `ConsumerId` property. To this a unique value, which identifiers the customers users which uses the TecRMI webservice by the customers application has to be passed. The length of the `ConsumerId` property value is restricted to 50 characters and is used for access control and billing.

All methods send an error message if an exception occurred or the access to the web service was denied.

All methods that are documented to return a list return an array instead.

Note: Static wiring diagrams are not available through `Manual-Methods` anymore but through `WDMManual-Methods`

1.2. Prerequisites

Some of the html documents could contain graphics in the .SVG format. So the system requirements for viewing html documents are: MS Internet Explorer v. 9.0 and higher

Mozilla Firefox 15 and higher

1.3. Web service URL's

web service URL:

<https://rmi-services.tecalliance.net/soap/ServiceTm.asmx>

URL of WSDL file:

<https://rmi-services.tecalliance.net/soap/ServiceTm.asmx?wsdl>

1.4. Sequence Of Calls

First, check if there are any technical manuals (Tm) available for your car. To do so, call [GetVehicleHasTm](#) passing it your type id. To get all the information of technical manuals for one vehicle call [GetTmManualList](#) , which will provide a list with your requested information. To get a single manual in HTML format, call [GetTmManualHtml](#) .

1.5. Summary

Class ServiceTm provides the web service methods for the part technical manuals.

1.6. Detailed Module Documentation

1.6.1. Methods

- **bool** [GetVehicleHasTm](#)([GetVehicleHasTmMsg](#) input)

Checks whether the vehicle has manual data.

Parameter

input - Instance of the message class GetVehicleHasTmMsg.

Returns

true - if technical manual data exists; otherwise false.

- **List<TmMainGroup>** [GetTmManualList](#)([GetTmManualListMsg](#) input)

Delivers a country specific list to generate a manual tree for the typeId in the selected language. Use method [GetTmManualListTextFiltered](#) to filter by text. Use method [GetTmManualListGenArtFiltered](#) to filter by generic articles.

Parameter

input - Instance of the message class GetTmManualListMsg.

Returns

The topic tree for the part technical manual.

- **List<TmMainGroup>** [GetTmManualListGenArtFiltered](#)([GetTmManualListGenArtFilteredMsg](#) input)

Delivers a country specific list to generate a manual tree for the typeId in the selected language filtered by generic article.

Parameter

input - Instance of the message class GetTmManualListGenArtFilteredMsg.

Returns

The topic tree for the part technical manual.

- **List<TmMainGroup> GetTmManualListTextFiltered(GetTmManualListTextFilteredMsg input)**
Delivers a country specific list to generate a manual tree for the typeld in the selected language filtered by text.

Parameter

input - Instance of the message class GetTmManualListTextFilteredMsg.

Returns

The topic tree for the part technical manual.

- **string GetTmManualHtml(GetTmManualHtmlMsg input)**

Delivers a string which contains HTML-code from which a HTML-file for the manual can be generated.

Remarks

Link elements (hrefs) in the HTML code are enclosed in 'P' (U+00DE LATIN CAPITAL LETTER THORN) characters and consists of a letter followed by an item mount position id (itemMpld), e. g. Pi8683P. Those can be evaluated on the web server before the HTML is sent to the client, or handled in an embedded browser control using the relevant navigation events. Following letters where possible: i - indicates a link to 0..* other technical manual(s) followed by an item mount position id (itemMpld). To resolve the itemMpld and typeld combination to a set of manual ids call. GetTmLinkedTechnicalManuals.
t - indicates a link to a vehicle type, followed by the TecRMI type id..

Parameter

input - Instance of the message class GetTmManualHtmlMsg.

Returns

A string which contains the whole HTML file.

- **string GetTmManualHtml_LinkedOeNo(GetTmManualHtmlMsg input)**

Delivers a string which contains HTML-code from which a HTML-file for the manual can be generated.

Included OE spare part numbers will be displayed as link in case of parameter "printView" is set to "false".

Parameter

input - Instance of the message class GetTmManualHtmlMsg.

Returns

A string which contains the whole HTML file.

- **List<String> GetImageNamesForTmManual(GetImageNamesForTmManualMsg input)**

Delivers a collection of strings which contains the image names necessary for the manual.

Parameter

input - Instance of the message class GetImageNamesForTmManualMsg

Returns

A collection of image names for the manual.

- Byte[] GetTmImage(GetTmImageMsg input)

Returns a byte array which contains the requested technical manual image.

Parameter

input - Instance of the message class GetTmImageMsg.

Returns

An array which contains the image.

- TmItemMp GetTmLinkedTechnicalManuals(GetTmLinkedTechnicalManualsMsg input)

The result of an m-link is an item number. This method checks whether none, one or more manuals are available for the given country.

Parameter

input - Instance of the message class GetTmLinkedTechnicalManualsMsg.

Returns

The linked technical manuals.

- TmItemMp GetTmLinkedTechnicalManualsForWork(GetTmLinkedTechnicalManualsForWorkMsg input)

The result of an m-link is an item number. This method checks whether none, one or more manuals are available for the given country.

Parameter

input - Instance of the message class GetTmLinkedTechnicalManualsForWorkMsg.

Returns

The linked manuals for the selected work.

- string GetTmErrorCodeSearchHtml(GetTmErrorCodeSearchHtmlMsg input)

Generates an HTML-string containing the filtered error codes for the given vehicle.

Remarks

Link elements (hrefs) in the HTML code are enclosed in 'p' (U+00DE LATIN CAPITAL LETTER THORN) characters and consists of a letter followed by an item mount position id (itemMpld), e. g. pi8683p. Those can be evaluated on the web server before the HTML is sent to the client, or handled in an embedded browser control using the relevant navigation events. Following letters where possible: i - indicates a link to 0..* other

technical manual(s) followed by an item mount position id (itemMpld). To resolve the itemMpld and typeId combination to a set of manual ids call. GetTmLinkedTechnicalManuals.

t - indicates a link to a vehicle type, followed by the TecRMI type id..

Parameter

input - Instance of the message class GetTmErrorCodeSearchHtmlMsg.

Returns

A string which contains the whole HTML file.

Object Model

1. GetImageNamesForTmManualMsg

1.1. Summary

Class [AisService._40.Messages.Tm.GetImageNamesForTmManualMsg](#) contains the properties which are necessary to call web service methods [GetImageNamesForTmManual](#) or

1.2. See also

[ServiceTm.GetImageNamesForTmManual\(...\)](#)

1.3. Detailed Module Documentation

1.3.1. Properties

- **string CompanyName**

Gets or sets the name of the company.

Property-Value

The name of the company.

- **string Password**

Gets or sets the password.

Property-Value

The password.

- **int ManualId**

Gets or sets the TecRMI manual id.

The id can be fetched by using the topic tree methods from the respective modules.

Property-Value

The manual id.

- **string UserName**

Gets or sets the name of the user.

Property-Value

The name of the user.

2. GetTmErrorCodeSearchHtmlMsg

2.1. Summary

Class [AisService._40.Messages.Tm.GetTmErrorCodeSearchHtmlMsg](#) contains the properties which are necessary to call web service method [GetTmErrorCodeSearchHtml](#) .

2.2. See also

[ServiceTm.GetTmErrorCodeSearchHtml\(...\)](#)

2.3. Detailed Module Documentation

2.3.1. Properties

- **string** **CompanyName**

Gets or sets the name of the company.

Property-Value

The name of the company.

- **string** **ConsumerId**

Unique identifier for end user which receive the called data.

Property-Value

Unique end user identifier.

- **string** **CountryCode**

Gets or sets the 2-letter international country code as defined by ISO 3166-1.

Property-Value

The ISO country code.

- **string** **ErrorCode**

Gets or sets the error code to search for.

Property-Value

The error code.

- **string** **LanguageCode**

Gets or sets the 2-letter international language code as defined by ISO 639-1.

Property-Value

The ISO language code.

- **string** **LinkURL**

Gets or sets the link url. The actual link information is going to be added at the end of this url.

It is used where documents contains links to other and are shown in custom application.

Property-Value

The link url.

Example

```
LinkURL = "http://localhost/" // -> Generated link in documents:  
http://localhost/Ⓟ1234Ⓟ;
```

- string Password

Gets or sets the password.

Property-Value

The password.

- string UserName

Gets or sets the name of the user.

Property-Value

The name of the user.

- int TypeID

Gets or sets the TecRMI type id which identifies a vehicle unique.

The id can be fetched by using the ServiceVt web service.

Property-Value

The TecRMI type id.

3. GetTmImageMsg

3.1. Summary

Class [AisService._40.Messages.Tm.GetTmImageMsg](#) contains the properties which are necessary to call the web service methods [GetTmImage](#) .

3.2. See also

[ServiceTm.GetTmImage\(...\)](#)

3.3. Detailed Module Documentation

3.3.1. Properties

- string CompanyName

Gets or sets the name of the company.

Property-Value

The name of the company.

- string ImageName

Gets or sets the name of the requested image.

Property-Value

The name of the image.

- string Password

Gets or sets the password.

Property-Value

The password.

- string UserName

Gets or sets the name of the user.

Property-Value

The name of the user.

4. GetTmLinkedTechnicalManualsForWorkMsg

4.1. Summary

Class [AisService._40.Messages.Tm.GetTmLinkedTechnicalManualsForWorkMsg](#) contains the properties which are necessary to call web service method [GetTmLinkedTechnicalManualsForWork](#) .

4.2. See also

[ServiceTm.GetTmLinkedTechnicalManualsForWork\(...\)](#)

4.3. Detailed Module Documentation

4.3.1. Properties

- string CompanyName

Gets or sets the name of the company.

Property-Value

The name of the company.

- string CountryCode

Gets or sets the 2-letter international country code as defined by ISO 3166-1.

Property-Value

The ISO country code.

- string LanguageCode

Gets or sets the 2-letter international language code as defined by ISO 639-1.

Property-Value

The ISO language code.

- string Password

Gets or sets the password.

Property-Value

The password.

- int WorkId

Gets or sets the TecRMI work id which identifies a work position unique.

The id can be fetched by using the topic tree methods from the respective modules.

Property-Value

The work id.

- string UserName

Gets or sets the name of the user.

Property-Value

The name of the user.

5. GetTmLinkedTechnicalManualsMsg

5.1. Summary

Class [AisService._40.Messages.Tm.GetTmLinkedTechnicalManualsMsg](#) contains the properties which are necessary to call web service method [GetTmLinkedTechnicalManuals](#) .

5.2. See also

[ServiceTm.GetTmLinkedTechnicalManuals\(...\)](#)

5.3. Detailed Module Documentation

5.3.1. Properties

- string CompanyName

Gets or sets the name of the company.

Property-Value

The name of the company.

- string CountryCode

Gets or sets the 2-letter international country code as defined by ISO 3166-1.

Property-Value

The ISO country code.

- string LanguageCode

Gets or sets the 2-letter international language code as defined by ISO 639-1.

Property-Value

The ISO language code.

- string Password

Gets or sets the password.

Property-Value

The password.

- int ItemMpld

Gets or sets the TecRMI item mount position id.

The id can be fetched by using the topic tree methods from the respective modules.

Property-Value

The item mount position id.

- **string UserName**

Gets or sets the name of the user.

Property-Value

The name of the user.

- **int TypeID**

Gets or sets the TecRMI type id which identifies a vehicle unique.

The id can be fetched by using the ServiceVt web service.

Property-Value

The TecRMI type id.

6. GetTmManualHtmlMsg

6.1. Summary

Class [AisService._40.Messages.Tm.GetTmManualHtmlMsg](#) contains the properties which are necessary to call web service method [GetTmManualHtml](#) .

6.2. See also

[ServiceTm.GetTmManualHtml\(...\)](#)

6.3. Detailed Module Documentation

6.3.1. Properties

- **string CompanyName**

Gets or sets the name of the company.

Property-Value

The name of the company.

- **string ConsumerId**

Unique identifier for end user which receive the called data.

Property-Value

Unique end user identifier.

- **string CountryCode**

Gets or sets the 2-letter international country code as defined by ISO 3166-1.

Property-Value

The ISO country code.

- KindOfWorkTimeData KindOfWorkTime

Gets or sets an enum value indicates which unit the work time in the result should have.

Property-Value

The kind of unit of the work time.

- string LanguageCode

Gets or sets the 2-letter international language code as defined by ISO 639-1.

Property-Value

The ISO language code.

- string LinkURL

Gets or sets the link url. The actual link information is going to be added at the end of this url.

It is used where documents contains links to other and are shown in custom application.

Property-Value

The link url.

Example

```
LinkURL = "http://localhost/" // -> Generated link in documents:  
http://localhost/12345;
```

- string Password

Gets or sets the password.

Property-Value

The password.

- bool PrintView

Determines whether a document for printing or the normal document should be created.

Property-Value

true if optimised for printing; otherwise, false.

- int ManualId

Gets or sets the TecRMI manual id.

The id can be fetched by using the topic tree methods from the respective modules.

Property-Value

The manual id.

- string UserName

Gets or sets the name of the user.

Property-Value

The name of the user.

- **int TypeId**

Gets or sets the TecRMI type id which identifies a vehicle unique.

The id can be fetched by using the ServiceVt web service.

Property-Value

The TecRMI type id.

7. GetTmManualListGenArtFilteredMsg

7.1. Summary

Class [AisService._40.Messages.Tm.GetTmManualListMsg](#) contains the properties which are necessary to call web service method [GetTmManualListGenArtFiltered](#) .

7.2. See also

[ServiceTm.GetTmManualListGenArtFiltered\(...\)](#)

7.3. Detailed Module Documentation

7.3.1. Properties

- **string CompanyName**

Gets or sets the name of the company.

Property-Value

The name of the company.

- **string CountryCode**

Gets or sets the 2-letter international country code as defined by ISO 3166-1.

Property-Value

The ISO country code.

- **int GenArtNo**

Filters the TM manual list by the given generic article number.

Property-Value

The generic article number.

- **Nullable<Int32> GenCritNo**

Filters the TM manual list by the given generic criterion number (Optional).

Property-Value

The generic criterion number.

- **string GenCritValue**

Filters the TM manual list by the given generic criterion value (Optional).

Property-Value

The generic criterion value.

- string LanguageCode

Gets or sets the 2-letter international language code as defined by ISO 639-1.

Property-Value

The ISO language code.

- string Password

Gets or sets the password.

Property-Value

The password.

- string UserName

Gets or sets the name of the user.

Property-Value

The name of the user.

- int TypeID

Gets or sets the TecRMI type id which identifies a vehicle unique.

The id can be fetched by using the ServiceVt web service.

Property-Value

The TecRMI type id.

8. GetTmManualListMsg

8.1. Summary

Class [AisService._40.Messages.Tm.GetTmManualListMsg](#) contains the properties which are necessary to call web service method [GetTmManualList](#) .

8.2. See also

[ServiceTm.GetTmManualList\(...\)](#)

8.3. Detailed Module Documentation

8.3.1. Properties

- string CompanyName

Gets or sets the name of the company.

Property-Value

The name of the company.

- string CountryCode

Gets or sets the 2-letter international country code as defined by ISO 3166-1.

Property-Value

The ISO country code.

- string LanguageCode

Gets or sets the 2-letter international language code as defined by ISO 639-1.

Property-Value

The ISO language code.

- string Password

Gets or sets the password.

Property-Value

The password.

- string UserName

Gets or sets the name of the user.

Property-Value

The name of the user.

- int TypeID

Gets or sets the TecRMI type id which identifies a vehicle unique.

The id can be fetched by using the ServiceVt web service.

Property-Value

The TecRMI type id.

9. GetTmManualListTextFilteredMsg

9.1. Summary

Class [AisService._40.Messages.Tm.GetTmManualListMsg](#) contains the properties which are necessary to call web service method [GetTmManualListTextFiltered](#) .

9.2. See also

[ServiceTm.GetTmManualListTextFiltered\(...\)](#)

9.3. Detailed Module Documentation

9.3.1. Properties

- string CompanyName

Gets or sets the name of the company.

Property-Value

The name of the company.

- string CountryCode

Gets or sets the 2-letter international country code as defined by ISO 3166-1.

Property-Value

The ISO country code.

- string LanguageCode

Gets or sets the 2-letter international language code as defined by ISO 639-1.

Property-Value

The ISO language code.

- string Password

Gets or sets the password.

Property-Value

The password.

- string SearchText

Filters the TM manual list by the given search text value.

Property-Value

The search text.

- string UserName

Gets or sets the name of the user.

Property-Value

The name of the user.

- int TypeID

Gets or sets the TecRMI type id which identifies a vehicle unique.

The id can be fetched by using the ServiceVt web service.

Property-Value

The TecRMI type id.

10. GetVehicleHasTmMsg

10.1. Summary

Class [AisService._40.Messages.Tm.GetVehicleHasTmMsg](#) contains the properties which are necessary to call the web service module check method [ServiceTm.GetVehicleHasTm](#) .

10.2. See also

[ServiceTm.GetVehicleHasTm\(...\)](#)

10.3. Detailed Module Documentation

10.3.1. Properties

- **string CompanyName**

Gets or sets the name of the company.

Property-Value

The name of the company.

- **string CountryCode**

Gets or sets the 2-letter international country code as defined by ISO 3166-1.

Property-Value

The ISO country code.

- **string Password**

Gets or sets the password.

Property-Value

The password.

- **string UserName**

Gets or sets the name of the user.

Property-Value

The name of the user.

- **int TypeId**

Gets or sets the TecRMI type id which identifies a vehicle unique.

The id can be fetched by using the ServiceVt web service.

Property-Value

The TecRMI type id.

11. KindOfWorkTimeData

11.1. Summary

Enum **KindOfWorkTimeData** specifies the kinds of work time data. In other words this enumeration determines the unit a work time has.

11.2. Detailed Module Documentation

11.2.1. Enums

- **DecimalWorkHours**

The work time is displayed in decimal work hours.

- **ManufacturerWorkPositions**

The work time is displayed in manufacturer work time units.

12. TmItemMp

12.1. Summary

Represents an item mount position for the technical manual topic tree. In the topic tree hierarchy, item mount positions are children of sub groups. The same item mount position might also be a child of several different sub groups making the topic tree rather a directed acyclic graph than a tree.

12.2. Detailed Module Documentation

12.2.1. Properties

- **bool InfoDataExists**

Gets or sets a value indicating whether there are information data existing for this item mount position.

The portal database must be available to provide information data.

Property-Value

true if info data exists; otherwise, false.

- **bool IsLocked**

Gets or sets a value indicating whether access to this item mount position is denied.

Property-Value

true if this item mount position is locked; otherwise, false.

- **int ItemMplId**

Gets or sets the id of the item mount position.

Property-Value

The item mount position id.

- **string ItemMplImageName**

Gets or sets the name of the item mount position image.

Property-Value

The the item mount position image name.

- **string ItemMpText**

Gets or sets the text of the item mount position.

Property-Value

The item mount position text.

- **List<TmManual> Manuals**

Gets or sets a collection of manuals which belongs to the topic item mount position.

Property-Value

The manuals.

- int SortOrder

Gets or sets the order number of this topic item mount position. A collection of topic item mount position will be sorted against this number.

Property-Value

The sort order.

13. TmMainGroup

13.1. Summary

Represents a main group for technical manuals. In the topic tree hierarchy, main groups are on the topmost level. Each main group may have several sub groups as children.

13.2. Detailed Module Documentation

13.2.1. Properties

- bool InfoDataExists

Gets or sets a value indicating whether there are information data existing for this main group. The portal database must be available to provide information data.

Property-Value

true if info data exists; otherwise, false.

- int MainGroupId

Gets or sets the id of the main group.

Property-Value

The main group id.

- string MainGroupImage

Gets or sets the image of the main group.

Property-Value

The main group image.

- string MainGroupName

Gets or sets the name of the main group.

Property-Value

The the main group name.

- int SortOrder

Gets or sets the order number of this main group. A collection of main groups will be sorted against this number.

Property-Value

The sort order.

- **List<TmSubGroup> SubGroups**

Gets or sets a collection of sub groups which belongs to this main group.

Property-Value

The sub groups.

14. TmManual

14.1. Summary

Represents a technical manual in the field of technical manual. A manual belongs to an item mount position.

14.2. Detailed Module Documentation

14.2.1. Properties

- **int ManualId**

Gets or sets the id of the manual.

Property-Value

The manual id.

- **int QualColId**

Gets or sets the id of the qualifier collection.

Property-Value

The qualifier collection id.

- **string QualColText**

Gets or sets the qualifier collection text.

Property-Value

The qualifier collection text.

15. TmSubGroup

15.1. Summary

Represents a sub group for technical manuals. In the topic tree hierarchy, sub groups are children of main groups.

The same sub group might also be a child of several different main groups making the topic tree rather a directed acyclic graph than a tree. Each sub group may have several item mount positions as children.

15.2. Detailed Module Documentation

15.2.1. Properties

- **bool InfoDataExists**

Gets or sets a value indicating whether there are information data existing for this sub group.

The portal database must be available to provide information data.

Property-Value

true if info data exists; otherwise, false.

- **List<TmItemMp> ItemMps**

Gets or sets a collection of item mount positions which belongs to this sub group.

Property-Value

The item mount positions.

- **int SortOrder**

Gets or sets the order number of this sub group. A collection of sub groups will be sorted against this number.

Property-Value

The sort order.

- **int SubGroupId**

Gets or sets the id of the sub group.

Property-Value

The sub group id.

- **string SubGroupImage**

Gets or sets the sub group image.

Property-Value

The sub group image.

- **string SubGroupName**

Gets or sets the name of the sub group.

Property-Value

The sub group name.