

FBO service API

Published by SEGES P/S, Agro Food Park 15, DK-8200 Aarhus N, Denmark on September 12, 2016

The present document describes the application programming interface (API) for connecting feed mixer weighing systems with DMS™ / NorFor™.

The following methods are available:

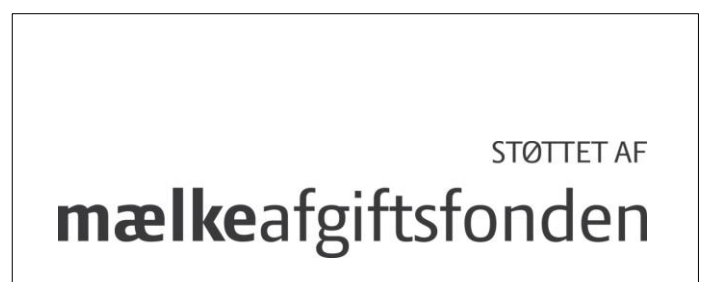
Method	Description / use
GetMixesByagribusinessId	Read list of feed mixes from specified agribusinessID
GetFeedPlansByAgriBusinessId	Read active feed plans from specified agribusinessID and get information on feedstuffs to be fed in feed mix and feedstuffs fed separately.
CreateMix	Create a mix on the server and get a uniqueidentifier string from the FBO database
CreateMixLoad	Store loaded amounts and stock ID's on FBO server
CreateMixUnload	Store unloaded amounts of specified mixes to specified groups of animals in the herd
GetAgriBusiness	Provides a list of AgriBusiness for a particular user
GetFeedsections	Provides a list of feedsections for a particular user

The methods are outlined in detail below.

Security

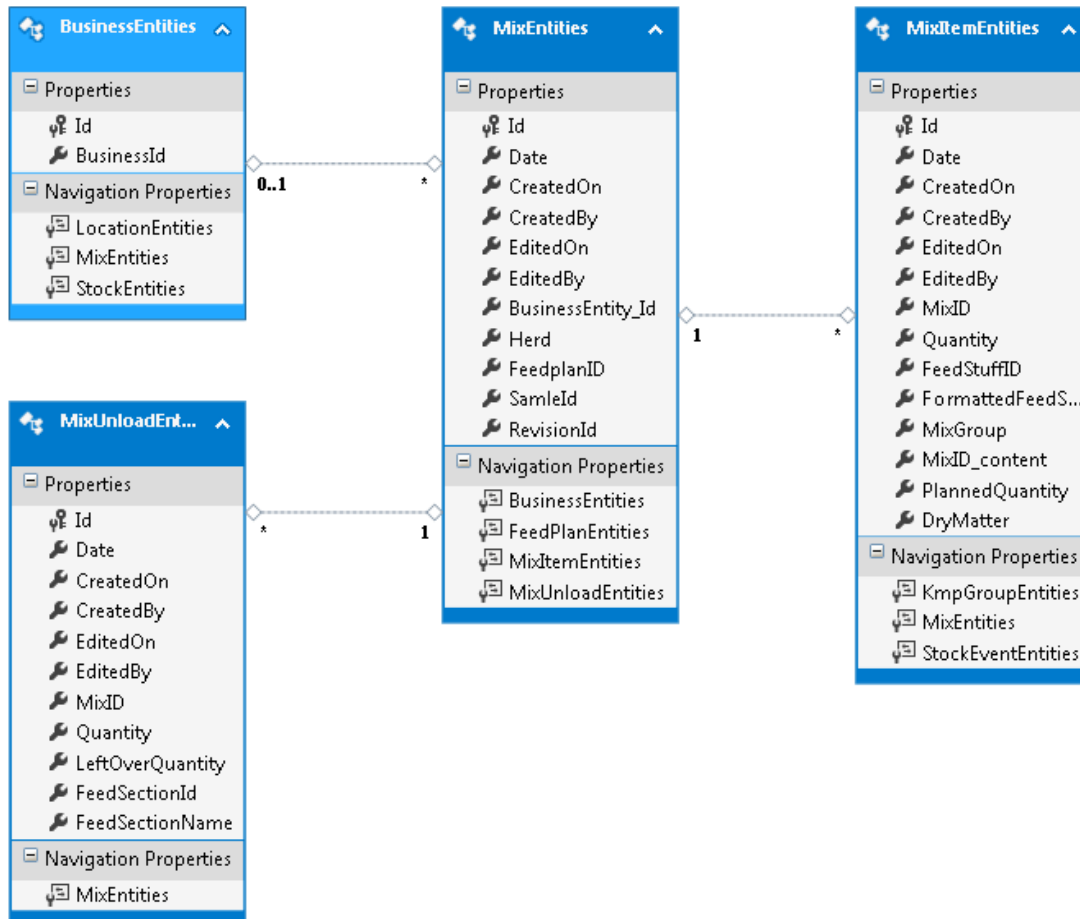
To use the service, add a header called "FboApiKey"

FboApiKey may be obtained by contacting Jesper Mortensen (Jesperm@seges.dk)



Datamodel Mixes:

Mix



METHODS:

Get /Create – Mix

Get/ Create – MixItems (Mix Loads)

Get/ Create – MixUnloads

GetMixesByagribusinessId

Provides a list of mixes including loads and unloads for a particular agribusiness

Base Url

Url: Get #baseaddress#/api/v1/mixes?agriBusinessId=#AgribusinessId#

C# example

```
var client = new RestClient("http://localhost.vfltest.dk/Fbo.Web.Api/api/v1/mixes?agriBusinessId=*****");
var request = new RestRequest(Method.GET);
request.AddHeader("fboapikey", "*****");
IRestResponse response = client.Execute(request);
```

Response:

```
[
  {
    "Id": "cae613b2-8d2e-44ab-abe3-00846a2d8e2c",
    "Date": "2016-06-06T12:48:17.963",
    "CreatedOn": "2016-06-06T12:48:19.057",
    "CreatedBy": "FBO",
    "EditedOn": "2016-06-06T12:57:58.923",
    "EditedBy": "FBO",
    "AgriBusinessId": 24476,
    "Herd": 9999,
    "FeedplanId": 142872,
    "SampleId": null,
    "RevisionId": null,
    "DmsKmpld": null,
    "IsSupplementMix": false,
    "IsOpen": false,
    "Business": {
      "Id": 678,
      "AgriBusinessId": 24476,
      "ManagementUnitId": 31176,
      "Mixes": []
    },
    "FeedPlan": null,
    "MixItems": [
      {
        "Id": "3b1901da-51d3-4963-a991-098a043680fc",
        "Date": "2016-06-06T12:48:19.667",
        "CreatedOn": "2016-06-06T12:48:24.937",
        "CreatedBy": "FBO",
        "EditedOn": "2016-06-06T12:48:24.937",
        "EditedBy": "FBO",
        "MixId": "cae613b2-8d2e-44ab-abe3-00846a2d8e2c",
        "Quantity": 65,
        "FeedStuffId": 316874,
        "FormattedFeedStuffId": "001-0008-001",
        "MixGroup": 1,
        "MixIdContent": null,
        "PlannedQuantity": 60,
        "DryMatter": 85, .....
```

CreateMix

Base Url
Url: Post #baseadress#/api/v1/mixes
Body
<pre>{ "Date": "2016-09-07", "AgriBusinessId": 24476, "FeedplanId": 138309, "IsSupplementMix": false }</pre>
C# example
<pre>var client = new RestClient("http://localhost.vfltest.dk/Fbo.Web.Api/api/v1/mixes"); var request = new RestRequest(Method.POST); request.AddHeader("cache-control", "no-cache"); request.AddHeader("content-type", "application/json"); request.AddHeader("fboapikey", "*****"); request.AddParameter("application/json", "{\n \"Date\": \"2016-09-07\", \n \"AgriBusinessId\": 24476, \n \"FeedplanId\": 138309, \n \"IsSupplementMix\": false\n}", ParameterType.RequestBody); IRestResponse response = client.Execute(request);</pre>

Response:

```
{
  "Id": "decdc17e-4f81-4072-9365-b97646e5b5e0",
  "Date": "2016-09-07T00:00:00",
  "CreatedOn": "2016-09-07T11:19:29.3746065+02:00",
  "CreatedBy": "MCM",
  "EditedOn": "2016-09-07T11:19:29.3766067+02:00",
  "EditedBy": "MCM",
  "AgriBusinessId": 24476,
  "Herd": null,
  "FeedplanId": 138309,
  "SampleId": null,
  "RevisionId": null,
  "DmsKmpld": null,
  "IsSupplementMix": false,
  "IsOpen": null,
  "Business": {
    "Id": 678,
    "AgriBusinessId": 24476,
    "ManagementUnitId": 31176,
    "Mixes": []
  },
  "FeedPlan": null,
  "MixItems": [],
  "MixUnloads": []
}
```

CreateMixLoad

Base Url
Url: Post #baseadress#/api/v1/mixitems
Body
<pre>{ "Date": "2016-09-07", "MixId": "e48a59aa-bec4-464b-9262-008c8a8f4cc5", "Quantity": 123, "FeedStuffId": "500910", "FormattedFeedStuffId": "", "PlannedQuantity": "100", "DryMatter": "83" }</pre>
C# example
<pre>var client = new RestClient("http://localhost.vfltest.dk/Fbo.Web.Api/api/v1/mixitems"); var request = new RestRequest(Method.POST); request.AddHeader("cache-control", "no-cache"); request.AddHeader("content-type", "application/json"); request.AddHeader("fboapikey", "*****"); request.AddParameter("application/json", "{\n \"Date\": \"2016-09-07\", \n \"MixId\": \"e48a59aa-bec4-464b-9262-008c8a8f4cc5\", \n \"Quantity\": 123, \n \"FeedStuffId\": \"500910\", \n \"FormattedFeedStuffId\": \"\", \n \"PlannedQuantity\": \"100\", \n \"DryMatter\": \"83\"\n}", ParameterType.RequestBody); IRestResponse response = client.Execute(request);</pre>

Response

```
{
  "Id": "b8f2f139-4888-4306-bbfc-1569bb4e1789",
  "Date": "2016-09-07T00:00:00",
  "CreatedOn": "2016-09-07T14:34:55.8981416+02:00",
  "CreatedBy": "MCM",
  "EditedOn": "2016-09-07T14:34:55.8991417+02:00",
  "EditedBy": "MCM",
  "MixId": "e48a59aa-bec4-464b-9262-008c8a8f4cc5",
  "Quantity": 123,
  "FeedStuffId": 500910,
  "FormattedFeedStuffId": "",
  "MixGroup": null,
  "MixIdContent": null,
  "PlannedQuantity": 100,
  "DryMatter": 83.0,
  "Mix": null
}
```

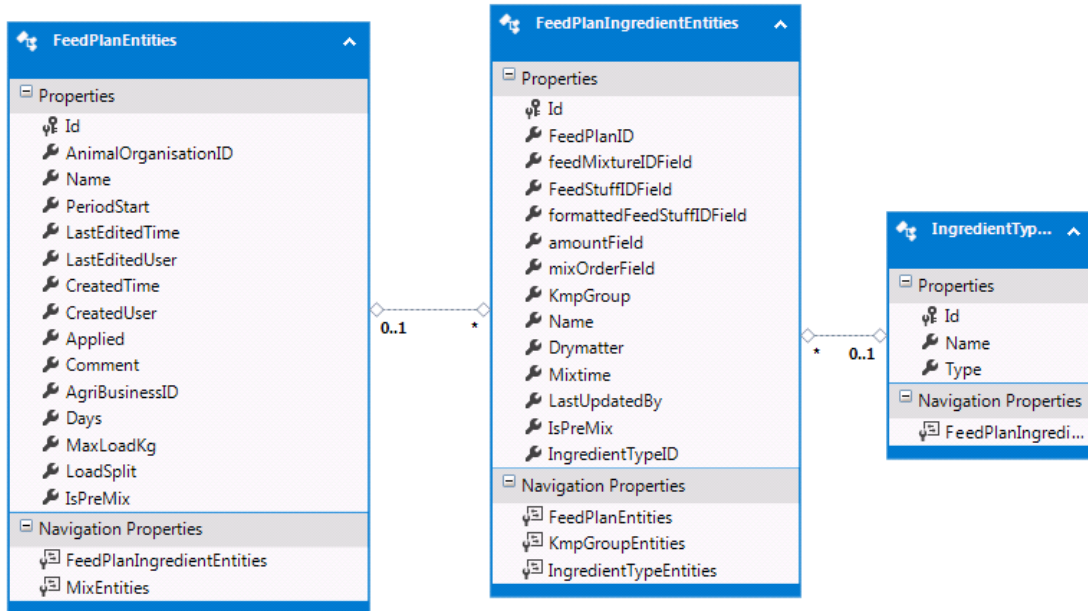
CreateMixUnload

Base Url
Url: Post #baseadress#/api/v1/mixUnloads
Body
<pre>{ "Date": "2016-09-07 00:00:00", "MixId": "e48a59aa-bec4-464b-9262-008c8a8f4cc5", "Quantity": 123, "LeftOverQuantity": 0, "FeedSectionId": "1012", "FeedSectionName": "" }</pre>
C# example
<pre>var client = new RestClient("http://localhost.vfltest.dk/Fbo.Web.Api/api/v1/mixunloads"); var request = new RestRequest(Method.POST); request.AddHeader("cache-control", "no-cache"); request.AddHeader("content-type", "application/json"); request.AddHeader("fboapikey", "***"); request.AddParameter("application/json", "{\n \"Date\": \"2016-09-07 00:00:00\",\n \"MixId\": \"e48a59aa-bec4-464b-9262-008c8a8f4cc5\",\n \"Quantity\": 123,\n \"LeftOverQuantity\": 0,\n \"FeedSectionId\": \"1012\",\n \"FeedSectionName\": \"\"\n}", ParameterType.RequestBody); IRestResponse response = client.Execute(request);</pre>

Response

```
{
  "Id": "b744ebe2-401f-4900-9923-5944df4eb17b",
  "Date": "2016-09-07T00:00:00",
  "CreatedOn": "2016-09-07T15:37:26.737188+02:00",
  "CreatedBy": "MCM",
  "EditedOn": "2016-09-07T15:37:26.737188+02:00",
  "EditedBy": "MCM",
  "MixId": "e48a59aa-bec4-464b-9262-008c8a8f4cc5",
  "Quantity": 123,
  "LeftOverQuantity": 0,
  "FeedSectionId": 1012,
  "FeedSectionName": "",
  "Mix": null
}
```

Feedplans



METHODS:

Get (incl FeedPlanIngredient)

GetFeedPlansByAgriBusinessId

Provides a list of feedplans including ingredients for a particular agribusiness

Base Url

Url: Get #baseaddress#/api/v1/feedplans?agriBusinessId=#AgribusinessId#

C# example

```
var client = new RestClient("http://localhost.vfltest.dk/Fbo.Web.Api/api/v1/
feedplans?agriBusinessId=*****");
var request = new RestRequest(Method.GET);
request.AddHeader("fboapikey", "*****");
IRestResponse response = client.Execute(request);
```

Response:

```
[
  {
    "Id": 138309,
    "AnimalOrganisationId": 138326,
    "Name": "TEST_PD_20150911_Goldkøer",
    "PeriodStart": "2015-09-12T06:21:09.963",
    "LastEditedTime": "2015-09-15T07:12:17.077",
    "LastEditedUser": "dyrpeterd",
    "CreatedTime": "2015-09-12T06:48:32.607",
    "CreatedUser": "dyrpeterd",
    "Applied": true,
    "Comment": "",
    "AgriBusinessId": 24476,
    "BusinessEntityId": 678,
    "Days": 1,
    "MaxLoadKg": null,
    "LoadSplit": 1,
    "IsPreMix": null,
    "Business": {
      "Id": 678,
      "AgriBusinessId": 24476,
      "ManagementUnitId": 31176,
      "Mixes": []
    },
    "FeedPlanIngredients": [],
    "Mixes": []
  },
  {
    "Id": 142859,
    "AnimalOrganisationId": 142876,
    "Name": "TestNy6", .....
```


GetAgriBusiness

Provides a list of AgriBusiness for a particular user

Base Uri

Url: Get #baseaddress#/api/v1/businesses

C# example

```
var client = new RestClient("http://localhost.vfltest.dk/Fbo.Web.Api/api/v1/businesses");
var request = new RestRequest(Method.GET);
request.AddHeader("cache-control", "no-cache");
request.AddHeader("fboapikey", "*****");
IRestResponse response = client.Execute(request);
```

Response

```
[
  {
    "Id": 678,
    "AgriBusinessId": 24476,
    "ManagementUnitId": 31176,
    "Name": null,
    "Address": null,
    "FeedSections": [],
    "FeedPlans": [],
    "Mixes": []
  }
]
```

GetFeedsections

Provides a list of feedsections for a particular user

Base Url

Url: Get #baseaddress#/api/v1/feedsections

C# example

```
var client = new RestClient("http://localhost.vfltest.dk/Fbo.Web.Api/api/v1/feedsections");
var request = new RestRequest(Method.GET);
request.AddHeader("postman-token", "8af82522-00a2-c0bc-c49b-1184d51aef06");
request.AddHeader("cache-control", "no-cache");
request.AddHeader("fboapikey", "*****");
IRestResponse response = client.Execute(request);
```

Response

```
[
  {
    "Id": 1,
    "Name": "Cows ",
    "BusinessEntityId": 678,
    "Business": {
      "Id": 678,
      "AgriBusinessId": 24476,
      "ManagementUnitId": 31176,
      "Name": null,
      "Address": null,
      "FeedSections": [],
      "FeedPlans": [],
      "Mixes": []
    }
  }
]
```