



Overview

Please find below details about the example API application and the information needed to use the API from any REST-capable application.

Further information is also available at <http://www.agvance.net/api>.

Any application that would like to use the API will first need to login using a specific set of credentials. The response to that request will include a SessionID value. Subsequent requests to the API for that session will need to include the SessionID value in the header of the requests.

The process begins with a GET request to the UserCoded URI including an Authorization header to login:

URI GET:

<https://api.agvance.net/UserCoded/Login>

Header:

Authorization

Header value:

U2FuZGJTVFNn____EXAMPLE____C9BUEkv2YQSS8=

The algorithm to calculate the Authorization header value is discussed below and provided in the example application, which is available at https://apidocumentation.agvance.net/Agvance_API_Tester.zip. The Authorization header is calculated from the following three distinct pieces of information:

APIKey

The first API key received is the developer key for testing. Use this same API key to access any Agvance database anytime new code is being developed or tested. Whenever the application moves to production, SSI will provide a different key to use in production environments. There will not be a charge for calls made with the testing API key. For more information, please review the document at

http://community.agvance.net/media/uploads/API_Documents/API_Production_vs_Testing_Keys.pdf.

CompanySN (aka Database ID or API DB ID)

This key describes a connection to an Agvance customer's specific Agvance database. Initially, a key will be provided that points to an Agvance database running in a sandbox on one of SSI's testing servers. Eventually, the application will use a unique DB ID for each customer's Agvance dataset that it connects to. Note that the test DB ID points to a Sandbox that multiple developers may be accessing and which will be periodically reset with fresh data. Also note that when starting to work with live customer data, a customer's DB ID that contains only numbers may be received. This ID should still always be treated as a character string and never as a numeric

value. If this ID is treated as a numeric value, it is possible that leading zeros will be omitted, which will lead to errors when logging into the API system.

UserID: API

UserPassword: AgvanceAPI

These are the credentials for an Agvance user in the customer's Agvance database. Each customer will setup a new Agvance user in their database for the application to use when connecting to their data.

In the example application, the code to calculate the Authorization header value is:

```
Dim toEncodeAsBytes As Byte() = System.Text.Encoding.UTF8.GetBytes(txtDBID.Text.Trim & "/" & txtAPIKey.Text.Trim & "/" & txtUser.Text.Trim & "/" & txtPassword.Text.Trim & "/" & txtEmail.Text.Trim)
```

```
Dim AuthorizationData As String = System.Convert.ToBase64String(toEncodeAsBytes)
```

Note: If the user has no password, the trailing slash is still required. For example, if there is no password and there is no email, then the string would be: MyDBID/MyAPIKey/MyUserID//. Note that there is never a trailing slash after email, regardless of whether or not it is present.

The response from the server will include a session ID similar to the one below;

```
{
  "Status": "0",
  "Message": "OK",
  "SessionID": "2bac320___EXAMPLE___32-ec91410cfa6d",
  "Users": []
}
```

The returned SessionID is a token that is necessary to include in all subsequent requests sent to the API for that session. Include a parameter in the HTML headers called SessionID and give it the session ID value that was received from the login method. A list of available URIs is available on the help page at <https://api.agvance.net/help>.

This brings up the subject of versioning in Agvance and the API. The current version of the Agvance API available at <https://api.agvance.net/> is designed to work with Agvance database version 6.0.5460 or newer. Please review the following document to understand how the API handles compatibility across multiple versions of Agvance.

http://community.agvance.net/media/uploads/API_Documents/Versioning.pdf

A copy of our example application is provided with this document. To use the application, fill out the connection form with the number of the API version to connect to and the various credentials and keys as shown below.

