



Office of
Environment
& Heritage

BioNet Web Services 1.1

Release Notes

Version 1

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1. Background

The BioNet Web Services initiative is a program of work that will progressively make data held in BioNet open and available to developers via Open Application Programming Interfaces (Open APIs). This enables organisations and individuals to directly integrate biodiversity data into their software systems and unlock the innovation potential of the valuable community owned data asset.

By delivering this data via Open APIs we are aiming to improve environmental decision making through the integration of up to date, consistent and reliable biodiversity data in planning and assessment systems.

Figure 1 below gives an overview of the current and planned web services.

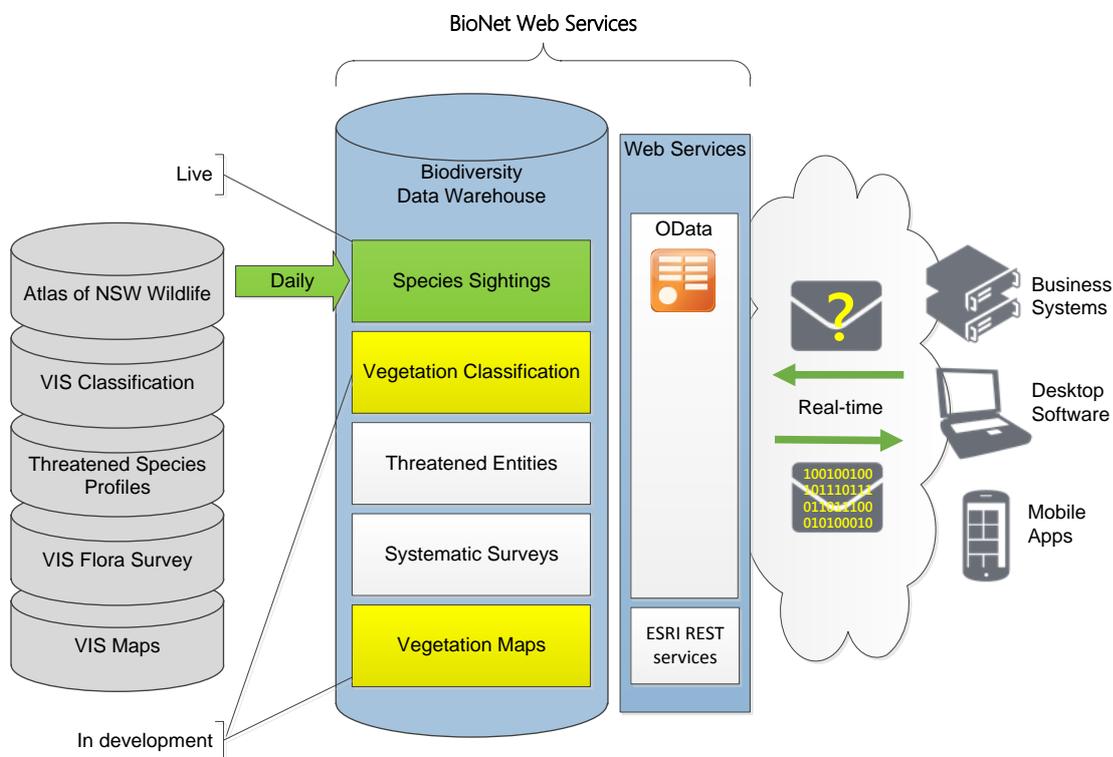


Figure 1: Overview of BioNet Web Service implementation

2. New Features

2.1 Daily updates of species sightings

Release 1.1 of the BioNet Web services introduces daily updates to the species sightings data shared via the web service.

Data from the source BioNet Atlas of NSW Wildlife system will be synced to the Web Service data warehouse each day at 3am AEST.

A two hour window has been allowed for the daily update. The web service may be unavailable during this time.

3. Enhancements and fixes

3.1 Data fix to austConservation field

The web service was not supplying data about Migratory Bird agreements (CAMBA, JAMBA or ROKAMBA) in the austConservation field. This has been fixed.

3.2 Data update to kingdom field

The following updates have been applied to the data supplied in the kingdom field:

- The term *fauna* has been changed to *Animalia*
- The term *flora* has been changed to *Plantae*

3.3 Data update to dterms_modified field

The data in the dterms_modified field has been changed in the OData web service from Type="Edm.String" to Type="Edm.DateTimeOffset". This change allows for date operators to be used to search for data using the date modified field. For instance applications can now request records that have been modified in the last 10 days.

The format of the date has also been fixed and now conforms to the ISO8601 international standard for the exchange of date and time related data. Please refer to the *BioNet Web Services Species Sightings Web Service Data Standard* document for more specific details on the format of this field.

3.4 Data update to dterms_bibliographicCitation field

The timestamp in the dterms_bibliographicCitation field was not correctly reflecting the time at which the data was retrieved from the source BioNet Atlas of NSW Wildlife database. This has been fixed.

The format of the timestamp has also been aligned with the dterms_modified field and now includes the UTC offset. Please refer to the *BioNet Web Services Species Sightings Web Service Data Standard* document for more specific details on the format of this field.

3.5 Data update for measurementType=microhabitat

In release 1.0 when measurementType=microhabitat the following data were supplied in the measurementValue and measurementUnit fields:

- measurementValue = microhabitat code e.g. GR
- measurementUnit = microhabitat description e.g. On ground

In release 1.1 this has been updated to more accurately reflect the data held as follows:

- measurementValue = microhabitat description e.g. On ground
- measurementUnit = N/A

3.6 Data update for measurementType= SurfaceGeology

In release 1.0 when measurementType=microhabitat the following data were supplied in the measurementValue and measurementUnit fields:

- measurementValue = SurfaceGeology code e.g. BA
- measurementUnit = SurfaceGeology description e.g. Basalt

In release 1.1 this has been updated to more accurately reflect the data held as follows:

- measurementValue = SurfaceGeology description e.g. Basalt
- measurementUnit = N/A

3.7 OData API supported filter functions

An update to the OData metadata statement has been made to specify the supported filter functions. Refer to <Annotation Term="Org.OData.Capabilities.V1.FilterFunctions"> in the metadata statement available at [https://data.bionet.nsw.gov.au/biosvcapp/odata/\\$metadata](https://data.bionet.nsw.gov.au/biosvcapp/odata/$metadata)

This enhancement enables client side applications, such as the Microsoft PowerQuery plugin for Excel, to execute these operations on the server side. Previously the plugin would try to download all records to the client and apply the filter operation on the client side causing the search to fail.

3.8 OData API error reporting for incorrect credentials

Users reported that the error message “*remote server error (400) Bad Request*” when an incorrect username or password was supplied to the web service in release 1.0, was unhelpful in diagnosing the problem.

In release 1.1 this error message has been enhanced and now clearly states “*Permission Error: The credentials provided for the OData source are invalid.*”

3.9 OData API error reporting for scientific license issues

An update was made to the error reporting for issues relating to the validation of scientific licenses for licensed users during authentication. In release 1.0 the error reported when there was an issue with the scientific licenses was “*remote server error (400) Bad Request*”

In release 1.1 the error message reporting has been enhanced to give one of 3 messages based on the underlying issue with the scientific license. Possible errors are as follows:

Error message	underlying cause
‘Your BioNet Atlas License has expired’	The current date exceeds the date of expiry of the license
‘Your BioNet Atlas License is not valid’	The status of the scientific license does not equal “Current”
‘There is a problem with your BioNet Atlas License’	General error if there are other issues with the scientific license causing authentication to fail

4. Documentation

Documentation for the web service, including the standards guide and developer guide are available at data.bionet.nsw.gov.au.

The following documents have been updated as a result of changes implemented in Release 1.1:

- *BioNet Web Services Species Sightings Web Service Data Standard* is now at Version 4.0

5. Warnings and Known Issues

5.1 dcterms_modified

The date in dcterms_modified will not be updated when data in the following fields change:

- county
- mapSheetNumber
- dynamicProperties; botanicalDivision
- dynamicProperties; CMA
- dynamicProperties; CMAsubregion
- dynamicProperties; floraReserve
- dynamicProperties; IBRA
- dynamicProperties; reserve
- dynamicProperties; stateForest