

**ECP 2005 GEO 038026 EGN
EGN**

**EGN Web Services profile - specifications for
implementation**

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1 Introduction

1.1 Purpose

This document describes how the EGN web service infrastructure can be implemented. A distinction is made between implementation by a data provider (NMCA) and implementation of the central components by the EGN Central Service host organization. This document is related to D6.4 (EGN Web Services and interfaces), which describes the components of the EGN infrastructure and the WFS interfaces of the EGN Local Service and EGN Central Service.

1.2 Executive summary

This document describes the practical side of the EGN infrastructure: how the EGN web services (EGN Central Service and EGN Local Services) can be implemented. This document does not supply all software documentation that can be used for implementation of the EGN Local Service or the EGN Central Service, but it does give an overview of available documentation.

1.3 Glossary

The terms that the reader might be unfamiliar with are explained here:

EGN: EuroGeoNames.

EVN-DB: The EGN database containing exonyms and variants.

NMCA: National Mapping and Cadastral Agency.

OGC: Open Geospatial Consortium, an organization that provides standards for geographic information.

WFS: The Web Feature Service as defined by the OGC.

2 Implementation of the EGN Local Service

The EGN Local Service is a WFS which should comply with the description in D6.4 (EGN Web Services and interfaces). Data providers are free to set up the WFS as the please, as long as the constraints described in D6.4 are conformed to. Furthermore, administrators of an EGN Local Service are free to allow public access to the server, but at a minimum access should be granted to the EGN Central Server host.

2.1 EGN Local Service set-up provided by the EGN Consortium

To aid NMCA's in implementing the EGN Local Service, the EGN Consortium provides set-up files for the Local Database and the WFS server. The necessary files - including documentation - can be downloaded from the following URI:

ftp://egn_user:egn_user@www.eurogeonames.com/egn_local_service_setup.zip

The one component of the EGN Local Service that is hard to support by provision of general software is the ETL module. NMCA's will have to invest some time in creating an automated (repeatable) procedure for their specific ETL requirements. The EGN Consortium does provide an overview table that can be of help in this process. It is the 'EGN Local Database schema overview table', which is also available on-line:

ftp://egn_user:egn_user@www.eurogeonames.com/local_database_schema_overview.zip

This overview table lists the table and columns that are present in the Local Database if the set-up files from the Consortium are used. For each data element there is an explanation on how to correctly populate it.

2.2 Centrally stored settings

For each EGN Local Service, the following settings are stored at the EGN Central Service host:

Setting	Explanation
<i>name</i>	The name of the gazetteer. Any text is allowed.
<i>country</i>	The ISO-3166 country code of the gazetteer.
<i>polling_interval</i>	The number of seconds for the Data Monitor to wait between contacting the Local Service.
<i>timeout</i>	The number of seconds for the Data Monitor to wait for a response from the Local Service.
<i>url</i>	The base URL of the Local Service.
<i>version</i>	The current version of the Local Service. This value is updated by the Data Monitor.
<i>active</i>	A boolean indicator of whether the Local Service is active or not.
<i>delete_data</i>	A boolean indicator of whether to delete data from the Index Database if the Local Service could not be contacted for a certain amount (<i>delete_wait_interval</i>) of time.
<i>delete_wait_time</i>	The number of seconds to wait after the Local Service could not be

	contacted. After this wait time, all data associated with the Local Service will be deleted from the Index Database if <i>delete_data</i> is TRUE.
<i>contact person first name</i>	The first name(s) of the Local Service administrator.
<i>contact person last name</i>	The last name(s) of the Local Service administrator.
<i>contact person e-mail address</i>	The e-mail address of the Local Service administrator.
(optional) List of table-column combinations for data elements that should not be stored in the Index Database	A list of data elements that should not be stored in the Index Database. These elements can not be found by GetFeature queries, but if they should be present in GetFeature responses the Link Resolver will request the missing values from the Local Service.

When an EGN Local Service is ready to be connected, the EGN Local Service administrator should provide the administrator of the EGN Central Service with these values. The EGN Local Service administrator can ask the administrator of the EGN Central Service to change certain values after the Local Service is connected. This could be necessary if a different contact person has been assigned, for example.

3 Implementation of the EGN Central Service

Several components of the EGN Infrastructure are hosted centrally and are maintained by the EGN Consortium. It is expected that maintenance will be taken over by a single organization after the EC-funded period of EGN. Of the centrally hosted components, the EVN-DB and the access control layer fall outside of the scope of WP 6 and this document. The EVN-DB is described in the documents of WP 5 (Exonyms management), the access control layer (con terra securityManger) is described in the documents of WP 10 (Business model & Marketing concept).

All files required for setting up the Name Updater, the Index Database and the Central Service WFS server - including documentation - are available in a single file archive:
egn_central_service_setup.zip.