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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 30169-2013

Geographic information -- Web feature service

地理信息 基于网络的要素服务

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard uses the translation method identical with the international standard ISO 19142:2010 "Geographic information element Network service." the editorial changes made the following standards.

- Use the "standard" instead of "this International Standard";
- Deleted the international standard "cover", "directory" and "Introduction";
- In 14.2.2, the representatives of Title, Abstract of the Language The default value is set forth in IETF RFC4646 Chinese encoding "zh";
- Increase the informative Appendix G, listed bilingual defined in this standard operation and parameter names.

This standard was proposed by the National Mapping Geographic Information Bureau.

This standard by the National Standardization Technical Committee on Geographical Information (SAC/TC230) centralized.

This standard was drafted. State Key Laboratory of Information Engineering in Surveying, State Information Center, Wu Taiji Austrian Information Technology Limited.

Introduction

Web-based feature services (WebFeatureService, WFS) on behalf of the network through the creation, modification and exchange of geographic information the way Change on. Unlike via File Transfer Protocol (FileTransferProtocol, FTP) file level sharing of geographic information, WFS achieve the characteristic features and feature-level direct access to and sharing of geographic information, allowing users to only obtain or modify the desired data, rather than the required Gets and the entire data file other additional non-required data. These data can be used for many applications of purposes, including data provider does not pre Meter application purposes.

In the services category as defined in ISO 19119, WFS is defined as a major element of access to services, but also includes a feature class Type of service, a variety of coordinate transformation element/conversion services and geographic data format conversion services.

Geographic information element Network Services

1 Scope

This standard specifies the behavior management and access geographic features and services without relying on data storage specification, which defines the discovery, Discover, lock, transaction management and operation parameters stored query expression operation.

Discovery allows inquiry services have the ability to retrieve and define geographic feature type application schema of the service provided.

Query operation allows constraints related elements based on characteristics defined by the client, to obtain the corresponding feature or feature from the data store Value of the property.

Lock operation allows to modify or delete elements, exclusive access to the elements.

Transaction operation allows you to create, modify, delete and replace the specified data storage elements.

Discover Bank allows clients to create, delete, list and description of parameterized query expressions, which are stored in the service Side, you can use different parameter values \u200b\u200brepeated calls these expressions.

NOTE: This standard does not involve content related to access control.

This standard defines eleven operations.

- 1) GetCapabilities (access to services capability) (belongs to the discovery operation);
- 2) DescribeFeatureType (describe feature type) (part of the discovery operation);
- 3) GetPropertyValue (Get characteristic value) (part of query operations);
- 4) GetFeature (Get element) (part of query operations);
- 5) LockFeature (locking element) (part of the locking operation);
- 6) GetFeatureWithLock (Gets elements and lock) (part of the query and locking operations);
- 7) Transaction (Transaction operation) (part of the transaction operation);
- 8) CreateStoredQuery (create stored queries) (part of the stored query);
- 9) DropStoredQuery (delete the stored query) (part of the stored query);
- 10) ListStoredQueries (exemplified stored query) (part of the stored query);
- 11) DescribeStoredQueries (described stored query) (part of the stored query).

2 Conformance

Specified in Table 1 of this standard defines conformance class, in order to ensure consistency with each class shall satisfy the provisions of Appendix A of the test.

Table 1 also lists.

--- Each WFS consistency classes to meet the Filter Encoding (FilterEncoding, FE) (see ISO 19143:2010, Chapter 2) Conformance testing.

--- Each class to meet the WFS consistency of GML (see GB/T 23708-2009) conformance testing.