About This Standard

Current Status *Mandated*

Standard Identifier **WPS 1.0**

Title of Standard

OpenGIS Web Processing Service, 2007-06-08

Standards History

Introduced to Registry	Date Emerging	Date Mandated	Last Status Update	Last Status Review	Inactive/ Retired
2008-04-03	2008-04-03	2009-03-26	2009-03-26	2009-03-26	n/a

Standards Body Other Broken Link?

URL to Access or Acquire http://www.opengeospatial.org

Working Group

Primary Owner Geospatial Intelligence (GWG)

Secondary Interest No Secondary Interest

Service Area GEOINT: Geospatial

KIPs No KIP Found

Standard Applicability

2008-03-27

When a system requires client access across a network to pre-programmed calculations and/or computation models that operate on spatially referenced data over the world wide web.

Standard Abstract

2008-03-27

WPS provides client access across a network to pre-programmed calculations and/or computation models that operate on spatially referenced data. WPS defines a standardized interface that facilitates the publishing of geospatial processes, and the discovery of and binding to those processes by clients. Processes include any algorithm, calculation or model that operates on spatially referenced data. Publishing means making available machine-readable binding information as well as human-readable metadata that allows service discovery and use. The calculation can be extremely simple or highly complex, with any number of data inputs and outputs.

Profiling Questions

GEOINT: Geospatial

- Does your system require client access across a network to pre-programmed calculations and/or computation models that operate on spatially referenced data over the world wide web?

Products Incorporating This Standard

A list of registered implementations can be accessed at http//:www.opengeospatial.org. Products incorporating this standard include EO-1 Hyperion (NASA JBL); Cloud prediction (NASA Draper Lab); deegree3 (Lat/Lon); PyWPS (Python); 52 North (Univ of Muenster); and GeoServer.

More registered implementations can be found at http://www.opengeospatial.org.

Relevant Information

This citation authored by the GWG Information Transfer and Services Architecture (ITSA) Focus Group.

Implementation Guidance

There are no known dependencies, constraints, or backward compatibilities.

Standard Selection Criteria

Interoperability/Supportability

OpenGIS Web Processing Service (WPS), Version 1.0.0, supports client access across a network to pre-programmed calculations and/or computation models that operate on spatially referenced data over the world wide web. WPS defines a standardized interface that facilitates the publishing of geospatial processes, and the discovery of and binding to those processes by clients.

Technical Maturity

The Open Geospatial Consortium began development of the Web Processing Service Implementation Specification in 2005. Version 1.0.0 dated 8 June 2007 went through a 60-day review and was approved by the nembership for publication on 11 August 2007.

Public Availability

The specification is freely available from the Open Geospatial Consortium at http://opengeospatial.org.

Implementability

Products incorporating this standard include EO-1 Hyperion (NASA JBL); Cloud prediction (NASA Draper Lab); deegree3 (Lat/Lon); PyWPS (Python); 52 North (Univ of Muenster); and GeoServer. More registered implementations can be found at http://www.opengeospatial.org.

Authority

The Open Geospatial Consortium is an international organization with members from industry, government and academia which uses an open process for developing an maintaining standards for geospatial information and services.

Standard Type	Non-Military
Standard Classification	Unclassified
Keywords for Search	GeoINT, OGC, Open Geospatial Consortium, WPS, Web Processing System, computation models, geographic, geospatial, pre-programmed calculations