

CEOS OpenSearch

Status of this RFC

This RFC provides information to the NASA Earth Science community. This RFC does not specify an Earth Science Data Systems (ESDS) standard. Distribution of this memo is unlimited.

Change Explanation

This document is not a revision to an earlier version.

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Abstract

CEOS has developed a set of conventions around the Atom syndication specification [4] and OpenSearch ‘query-response’ specification to enable lightweight mechanisms of data discovery and access. These conventions are documented in the CEOS OpenSearch Best Practice Document [1] and are further explained in the CEOS OpenSearch Developer Guide [2].

The purpose of this RFC is to inform the NASA Earth Science Data Systems community about these conventions and to provide a ready reference to these documents.

1 Introduction

CEOS OpenSearch is a collection of simple formats for the sharing of search results. The goal of the CEOS OpenSearch project is to establish a common CEOS interoperability best practice of OpenSearch in order to allow for standardized and harmonized access to metadata and data of CEOS agencies, including CWIC and FedEO communities.

The CEOS OpenSearch project is focused on the following concepts:

- OpenSearch will enable search and access from across CWIC, FedEO, and other CEOS Agency catalogs with the single access standard implemented in CEOS and other Community Portals.
- Agencies & data centers can easily and independently set up a best-practice-compliant OpenSearch server (or use the CWIC/FedEO Data Partner approach) so that their systems support interoperable data access.
- This Project is not an attempt to develop a new OpenSearch standard, but to develop a CEOS OpenSearch “best practice” to fulfill its purpose.
- OpenSearch implementation efforts in Europe, the United States and Japan are diverse. This project provides an opportunity for the CEOS community experts to work together in the development of a common OpenSearch best practice.

2 CEOS OpenSearch Documentation

CEOS WGISS has developed these two documents to inform implementers and users of CEOS OpenSearch:

- CEOS OpenSearch Best Practice Document [1]
- CEOS OpenSearch Developer Guide [2]

3 References

Normative

[1] CEOS OpenSearch Best Practice Document

https://earthdata.nasa.gov/files/CEOS_OpenSearch_Best_Practice_Doc-v.1.0.1_Jun2015.pdf

[2] CEOS OpenSearch Developer Guide

https://earthdata.nasa.gov/files/CEOS_OpenSearch_Developer_Guide_v1.4.pdf

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Appendix A - Glossary

CEOS – Committee on Earth Observing Satellites

CNES – Centre National D’Etudes Spatiales

CWIC – CEOS WGISS Integrated Catalog

ESDS – Earth Science Data Systems

ESDIS – Earth Science Data and Information System project

ESIP – Earth Science Information Partners

FedEO – Federated Earth Observation Missions

JAXA (Japan Aerospace Exploration Agency)

NASA – National Aeronautics and Space Administration

RFC – Request for Comment

WGISS – Working Group on Information Systems and Services