

博士论坛

THREDDS与CS/W地理空间目录服务的互操作研究

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摘要 CS/W是开放式地理信息协会(OGC)所制定的地理空间信息目录服务规范,它被广泛应用于空间信息,土地科学等研究领域之中。THREDDS是由UNIDATA开发的空数据发布查询网络服务系统,其元数据目录服务范围集中于气象、海洋等领域。当前地理信息数据共享与互操作日益重要,然而CS/W和THREDDS之间的这种跨公共团体、跨协议的地理信息互操作研究成果还十分缺乏。针对两者协议之间所存在的互操作障碍进行分析,对比研究了OGC地理空间与气象海洋两个公共团体之间的目录元数据服务CS/W和THREDDS的差异性,提出了信息模型转换的方法与思路,进行了元数据的语义映射,并在此基础之上设计开发了一款连接两者的中间件Ingestor系统,从而有效的增强两者之间的互操作性,促进了跨协议、跨公共团体的目录服务之间的共享。

关键词 [地理信息](#) [网络目录服务](#) [中间件](#) [共享与互操作](#)

分类号

Study of geospatial catalogue interoperability between THREDDS and CS/W

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Abstract

CS/W is a catalogue specification developed by OGC, it has been widely used in the fields of geospatial, land science etc. THREDDS catalog is developed by UNIDATA to bridge the gap between data providers and data users. This metadata catalogue service system is very helpful in the dataset searching and finding within atmosphere, ocean fields. During these days, GIS sharing and interoperability has become more and more important. However cross-protocol and cross-community data access gap is still the challenge within the earth science community. One of such gap is exist between CS/W and THREDDS. The paper compares the difference of CS/W and THREDDS, it proposes the method of information model transformation, develops the metadata mapping table. On the base of that, the paper represents the design and implementation process of the middleware ingestor, promotes sharing and interoperability of cross-protocol and cross-community catalogue service capability.

Key words [Geographic Information Systems \(GIS\)](#) [Catalog Services for Web \(CS/W\)](#) [middleware](#) [GIS interoperability](#)

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