

Introduction

Today's science is data intensive. Full, open and trouble-free access to environment and climate data facilitates new ways to analyze, combine and integrate data from many different sources, supporting interdisciplinary science. Environment Climate Data Sweden, ECDS, is a Swedish service facilitating the search, publication and long-term accessibility of data for research in the fields of environment and climate.

Approach

ECDS helps scientists with:

- collection and dissemination of information on data relevant for environment and climate research.
- search, documentation and publication of data.
- development of information on standards and tools for the documentation and publication of data.
- advice on best practices and recommendations on sharing and long-term storage of data.
- assistance to researchers with data storage needs.

ECDS uses a metadata profile in line with ISO19115 and the European INSPIRE-directive. All metadata entries are reviewed and checked for consistency with the ECDS metadata profile before integration into the ECDS metadata catalogue and publication through the portal.

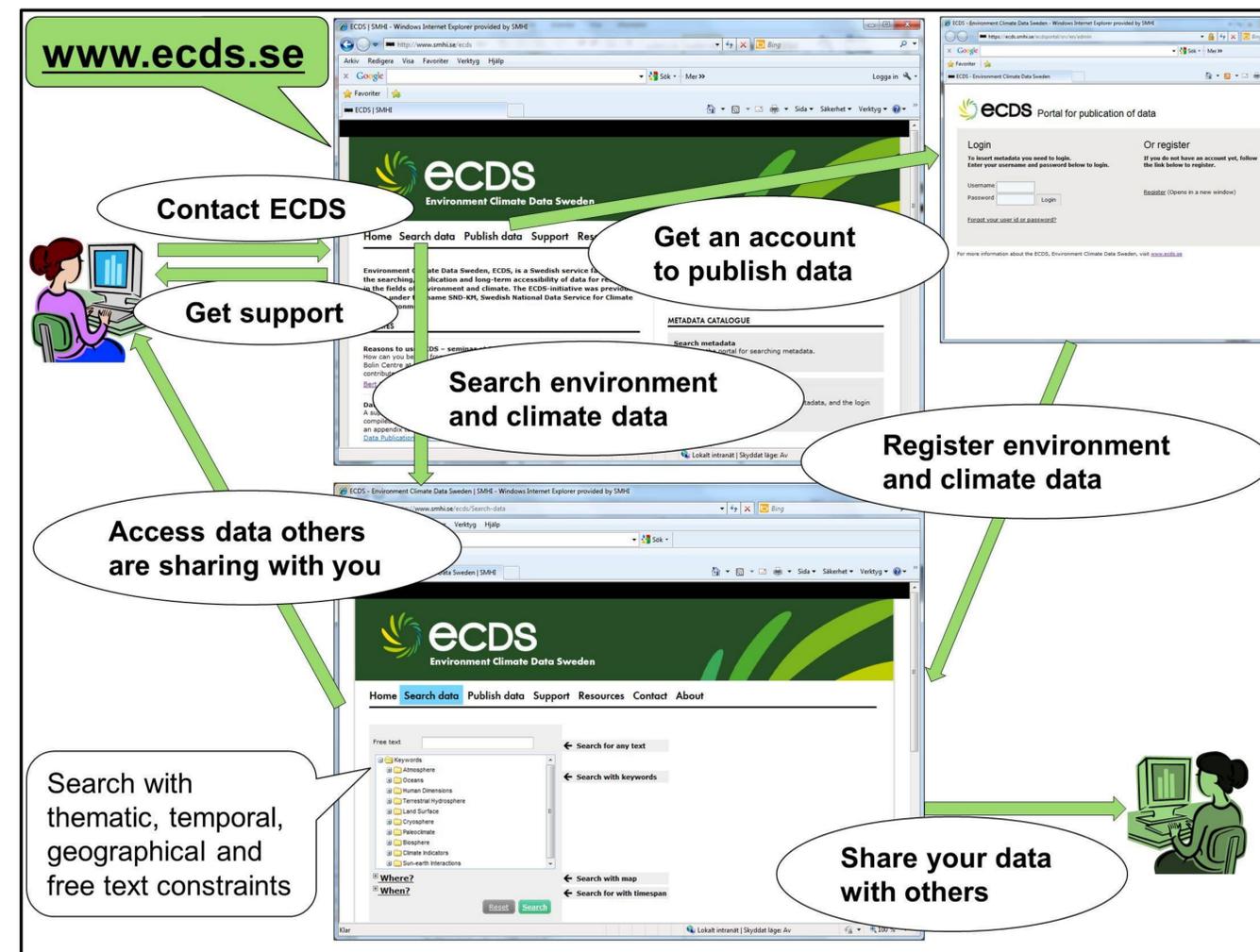


Figure 1: ECDS use cases.

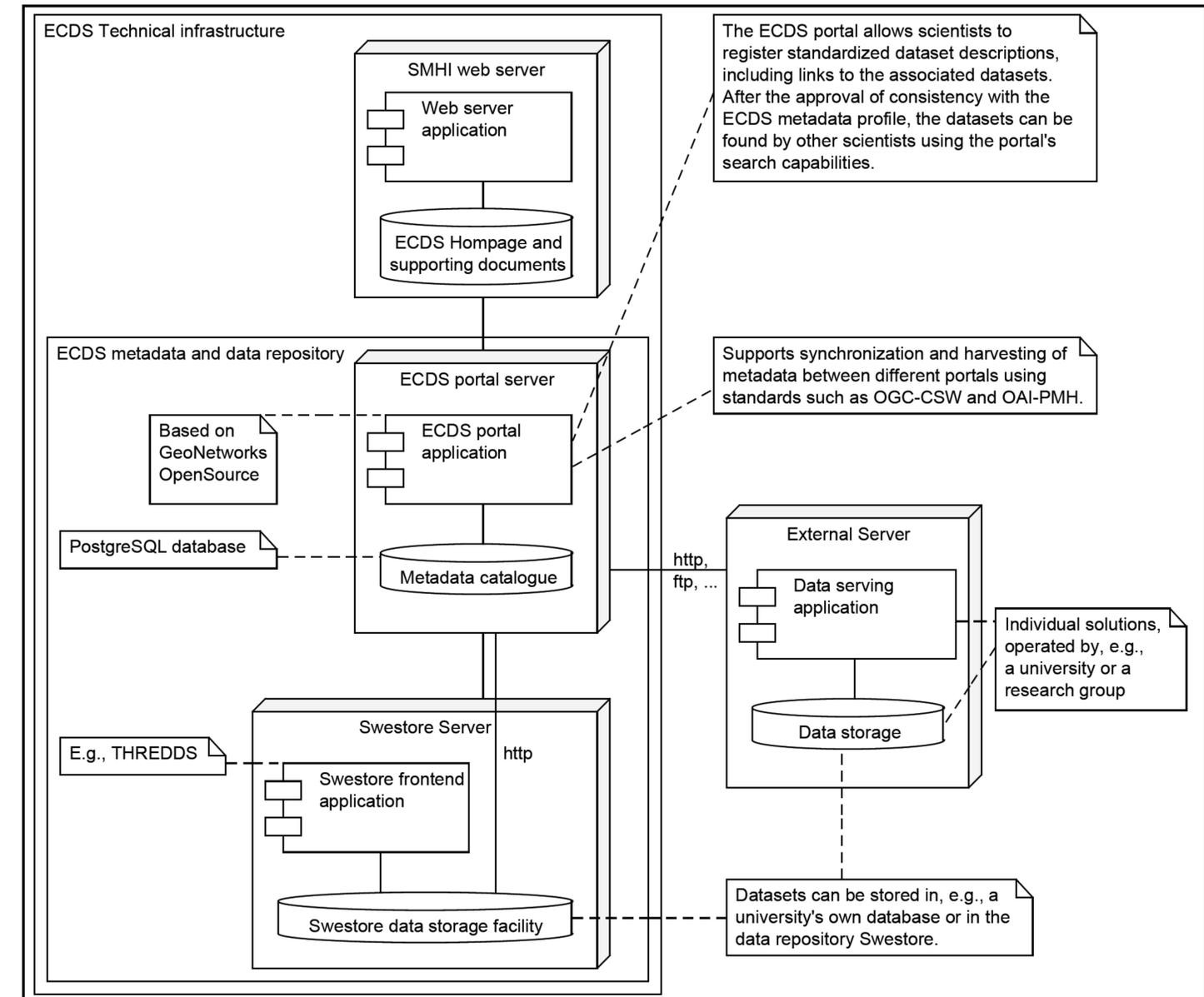


Figure 2: ECDS structure diagram.

Results

ECDS has already gathered about a hundred descriptions of environment and climate data resources, including data collected within Swedish activities and projects connected to the International Polar Year. In addition, major Swedish research funding agencies have recently introduced explicit requirements for data publication in their calls for research proposals. ECDS helps scientists with establishing data publication plans, data documentation and data management, so that data from these projects can easily be reused by other scientists.

Conclusion

Achieving open access to environment and climate data requires a dual approach:

- an infrastructure that allows scientists to easily search, document and share environment and climate datasets, and
- explicit incentives (requirements, credits) for scientists to actively engage in data sharing.

Acknowledgments

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