Best Practices for Software Metadata: A Report from the Software Preservation Network

Presentation

Elizabeth Roke Emory University, U.S.A. elizabeth.roke@emory.edu Daniel Noonan Ohio State University, U.S.A. noonan37@osu.edu

Keywords: Software Preservation Network; survey of metadata practices; crosswalk of software metadata standards

Abstract

Representatives of the Software Preservation Network Metadata Working Group will present preliminary results from its analysis of metadata for software preservation, discussing a survey of existing practices as well as a crosswalk of existing ontologies and schemas in use in libraries, the open source software community, and specialized research communities. The talk will also discuss the activities of the Software Preservation Network, highlighting activities that have a direct impact on metadata practice.

Discussion

The Software Preservation Network (SPN) is an effort to coordinate software preservation efforts to ensure the long-term access to software. This work currently involves legal licensing and information policy research; an international registry of software collections; and software development contributions to technical infrastructures that facilitate long-term access to software. The SPN Metadata Working Group is focused on developing, promoting, and advocating for common metadata frameworks and related metadata standards, vocabularies, and ontologies that support software discovery, preservation, and access.

Currently, there is a wide range of metadata software practice, from descriptive metadata encoded in library-based MARC records to user-created metadata for open source software packages documented in software repositories such as GitHub. Although there have been a few projects that recognize the need to improve metadata standards for software, particularly in the data community, no common framework for thinking about software metadata has emerged that addresses all required metadata semantic elements. This is especially important when we consider the different use cases for software metadata throughout its lifecycle, from creation to preservation and emulation.

This presentation will report on two recent initiatives of the SPN Metadata Working Group: an international survey of metadata practices regarding software and a crosswalk designed to map different software metadata standards together in a single framework. We will summarize the existing metadata landscape for software metadata, including approaches within the library, data research, and open source community, and explore the metadata lifecycle for software with special attention to its unique preservation needs and challenges.