

Basic Concept of Authority Control in NACSIS-CAT

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1. Introduction

NACSIS-CAT is an online shared cataloging system operated by National Institute of Informatics (former National Center for Science Information Systems, or NACSIS) since 1985. It has unique authority control system from the first.

This paper describes basic concept and database design of the authority control system of NACSIS-CAT.

2. Model and database design

NACSIS-CAT database is designed as a database for union catalog. Unlike traditional MARC databases which represents catalog cards, NACSIS-CAT database represents the world which catalog cards aim to represent. In designing the database, we used a conceptual model for the catalog world.

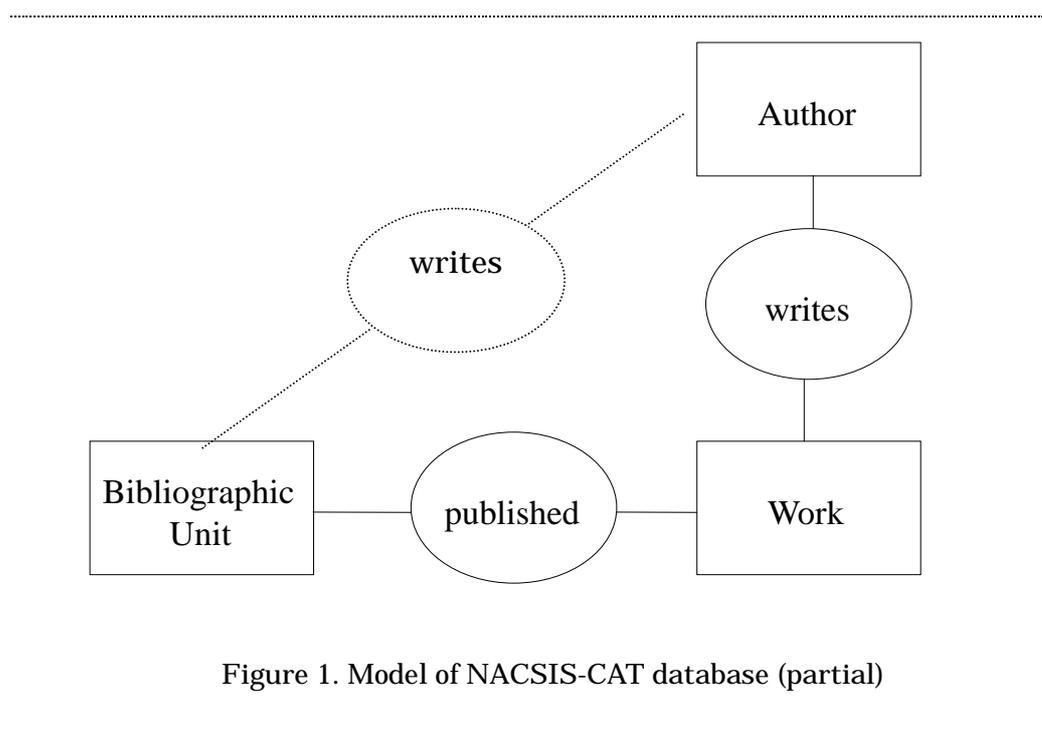


Figure 1. Model of NACSIS-CAT database (partial)

Figure 1 shows a part of the model relating the authority control. An *author* (either personal or corporate) writes (or edits) a *work*, possibly with other *authors*. A *work* is published in a *bibliographic unit*.

But, in the case of monographs, a *work* is almost identical to a *bibliographic unit*, because it is *published* just once as the only contents of the *bibliographic unit*. Classic *works* (or potential classics) are exceptions and they are repeatedly published in various *bibliographic units*, sometimes under different titles. But number of such *works* is limited and most of *works* are published just once. There is another exception. Generally, a journal contains multiple *works* or articles. But article level of journals is not usually handled in library catalogs.

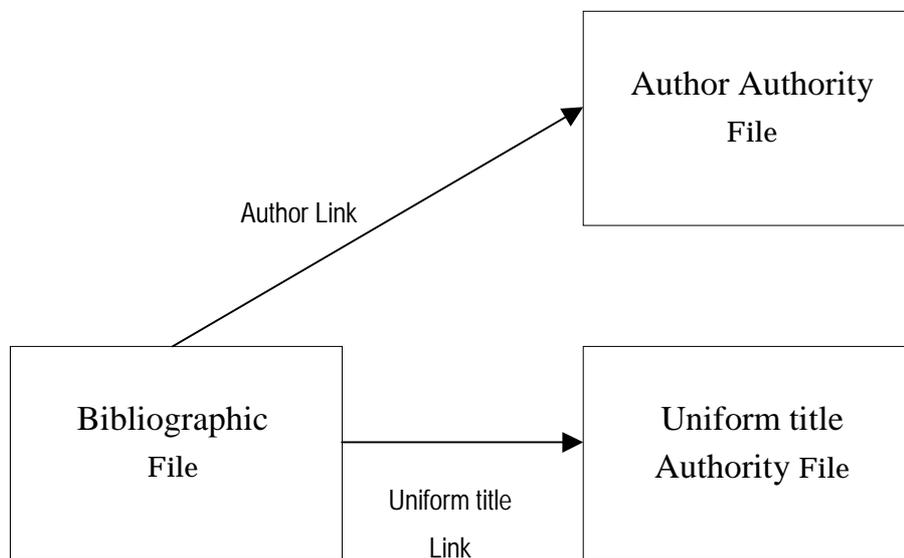


Figure 2. NACISIS-CAT files (partial)

Thus, we can assume direct *write* relation between *author* and *bibliographic unit*, which is shown in dotted line in the figure 1. In this case, *work* is hidden or not explicitly represented. This is not suitable for anonymous classic work which is published under different titles. In such case, the *work* should be distinguished from the *bibliographic unit*.

This model is implemented as the figure 2. A *bibliographic unit* is represented as a record in the bibliographic file. An *author* is represented as a record in the author authority file. The *write* relation between these two entities is represented as the author link from the bibliographic record. When the *work* should be distinguished from the *bibliographic unit*, it is represented as a record in the uniform title authority file, and linked from the bibliographic record. Author link and uniform title link give the author name heading and uniform title heading of the catalog record respectively.

3. Concept of authority control

Authority control in NACSIS-CAT is a part of shared cataloging activity. Two authority files are not given from “authorities”, but maintained cooperatively by the all member libraries.

When a cataloger catalogs a book, she/he checks the authority file and links the record to corresponding authority record. When she/he can't find the author in the authority file, she/he creates a new authority record. When she/he finds an error in authority record, or links (for example, different author with same name was not distinguished), she/he must correct it following appropriate procedure.

Maintenance task and its procedure for uniform title authority file is same as author name authority file maintenance.

These maintenance work is done within the member libraries, including the NII offices. But, they can refer to the MARC authority records, when creating a new authority record. This mechanism is similar to the usage of MARC bibliographic records in cataloging.

4. National/International Control

Authority control activity in NACSIS-CAT is essentially closed work, though it can refer to external resources such as MARC authority files. When a new author is recorded first in NACSIS-CAT authority file, it will not be synchronized with external authority record, such as JAPAN MARC. In this sense, national authority control is not yet realized in Japan.

For such broader range control, appropriate communication system and well established procedure for maintenance work will be essential. The system may be centralized or distributed. But, participants of the control system should be able to access the authority file any time, and report of new name addition should be distributed at once. In addition to these communication systems, procedures for error report and correction will be required, as well as other maintenance rules.

Though environment is not yet matured enough, national and international level authority control is highly desirable. We should seek for the way to international authority control system.