

“WHO IS THIS?”

MOVING FROM AUTHORITY CONTROL TO IDENTITY MANAGEMENT

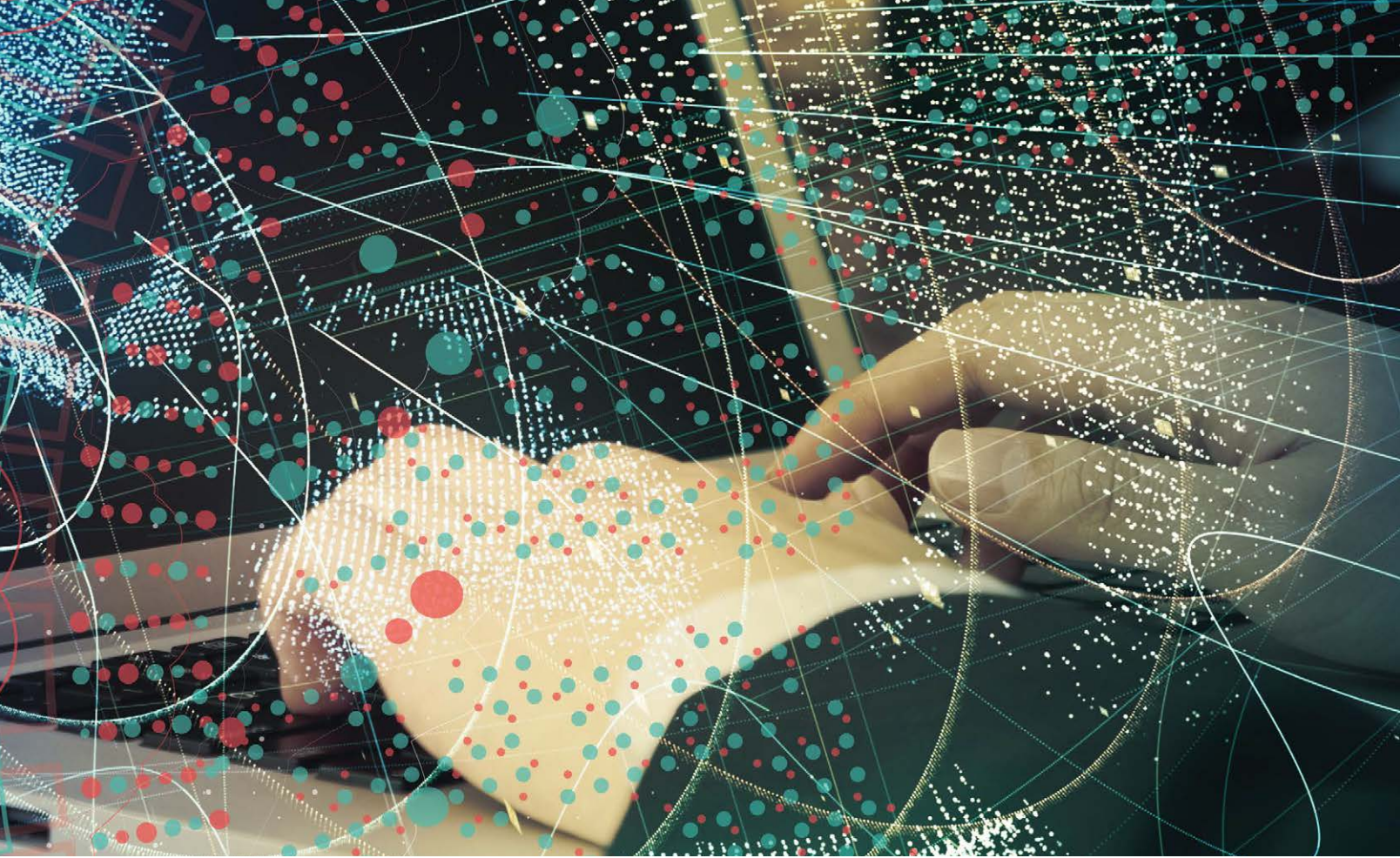
Practical guidance on the successes and challenges from three large institutions.

BY SUZANNE GRAHAM, DONG JOON LEE,
ERIK RADIO & HANNAH TARVER

In addition to cataloging creative and intellectual products, librarians create and maintain records for the people and organizations responsible for those items. This work, known as authority control, distinguishes individuals and provides a means to access their body of work. In past centuries, the library community tightly held on to this task by housing these records in printed physical form, such as card catalogs. More recently, these files moved to online databases, such as the Library of Congress National Authority File (NAF) and Virtual Internet Authority File (VIAF), which have experimented with less library-specific record formats.

This opening up of traditional library work has coincided with the increased ability of individuals to create professional profiles for themselves in a variety of platforms (e.g., ORCID, Scopus, and LinkedIn). Developers of new name registries can use the librarian-curated name authority files to enhance their databases, and librarians can use the registry entries to supplement their catalogs.

Below are brief case studies from three large institutions with evolving projects underway to organize, disambiguate, link, and promote individual creators through linked open registries and apps. Discussion of these projects provides an introduction to, and practical guidance on, the benefits and challenges of leaving the confines of name authority control for the broader world of identity management.



University of North Texas Name App

By Hannah Tarver

Historically, authority control for faculty members' names in the University of North Texas (UNT) Digital Collections was not a priority for several reasons. Nevertheless, metadata editors were encouraged to consult authorities when applicable and to use available authorized forms. As the UNT Digital Library accumulated more scholarly items (both current and historic), concerns grew about maintaining consistency for names of faculty members who did not have established authorized names, including former or deceased faculty. In 2013, the Digital Libraries Division published a brief study, "Implementing Name Authority Control into Institutional Repositories: A Staged Approach," showing that only 30 percent of faculty who had submitted materials to the Digital Library had

authorized forms of their names. (Read the full study at bit.ly/MJ18Digital.)

The study reinforced the growing feeling among library staff that they had to start controlling names locally, particularly for those people associated with UNT, since there was no reasonable expectation that other libraries would assume this responsibility. However, any solution needed to be able to manage names without prior control as well as those with one or more authority records or established identities. To address this issue, staff in the Digital Libraries Division developed the UNT Name App (code is available from the UNT Libraries GitHub account at bit.ly/MJ18UNTgit). The App creates a unique, linkable URL associated with each local authority record, and includes the ability to link to external authority records (Virtual International Authority File (VIAF), NAF, etc.) or identities (ORCID, Twitter, Wikipedia, etc.) when they are available. An initial set of names was imported into the app

from the repository's Scholarly Works collection, and staff manually added subsequent names as needed.

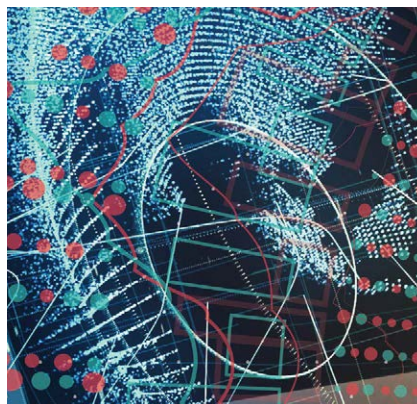
Primarily, the focus is on names related to the UNT community, though other names are included to facilitate metadata creation for selected collections. Since developers created both the system and the app in-house, they were able to connect the app directly to the metadata editing form. As an editor types a name into the creator, contributor, or publisher fields, the app prompts the user with a list of authorized forms of possible matches, along with helpful disambiguation information.

Although there are likely many changes that may be useful, there is at least one area of interest to consider for improvement. While the app has provided more standardization, the names remain stored as character strings within individual metadata records. Ideally, in the future, these metadata records will be able to store hyperlinks that point to a local authority record when one exists.

By Dong Joon Lee

The Texas A&M University (TAMU) Libraries develop and maintain Scholars@TAMU, a faculty profile system, and Research Information Management (RIM) System, which includes the identities and the scholarly records of TAMU's faculty. Scholars@TAMU is based on VIVO, a member-supported, open-source, semantic-web software program. In support of the Libraries' goal of enabling and contextualizing the discovery of scholars and their expertise across disciplines, the scholars' profiles include a faculty member's academic background, publications, teaching activities, grant activities, and related subject headings.

The TAMU Libraries' approach is forged around the four "user tasks" defined in "Functional Requirements for Authority Data" (FRAD), a conceptual model for authority records developed and published in 2009 by the International Federation of Library Associations and Institutions (IFLA). In addition to claiming the user tasks of *Find*, *Identify*, *Contextualize*, and *Justify*, the model specifies the attributes of and the relationships between intellectual entities, including names, to control and/or manage authoritative records.



The *contextualize* task, defined by FRAD as clarification of the relationship between the different entities that appear as access points, has become a major concept for libraries. For example, contextualizing within a university setting entails an understanding of the relationships among the faculty members, their affiliations, their scholarly work, their expertise, their teaching activities, and their grants and awards.

As the need for identity management has grown in recent years due to increased interest in preserving more types of outputs and the proliferation of online works, the limitations of the traditional process of name authority control are more pronounced. The creation of authorized name headings can be too slow and unresponsive as it relies on a body of work and a preferred form of the name. The input process is also too complex, requiring

specialized knowledge of the MARC (Machine-Readable Cataloging Record) format for authority records. In addition, the identification of authoritative records for some entities has become too difficult, or even impossible, because no one regularly updates them to include new fields or works.

In response to the limitations, the TAMU Libraries employ two approaches: (1) the development of a faculty profile system using VIVO ontology representing research information, and (2) the motivation of individual faculty members to increase their involvement in and contributions to their own identities. In a recent article titled "Readers, Personal Record Managers, and Community Members: An Exploratory Study of Researchers' Participation in Online Research Information Management Systems," the authors confirm that increased researcher participation to RIM systems improves the quality of their identity records.

Scholars@TAMU serves as the University's authoritative record of the faculty's scholastic achievements. The system aggregates heterogeneous, authoritative data from internal and external databases and allows the faculty to manage or control their own scholarly narratives by contributing authoritative data (see Figure 1). The library seeks to integrate the traditional library name files with the faculty profile system and with TAMU's multiple institutional repositories (IRs). Currently, Scholars@TAMU automatically collects data from OAKTrust (TAMU's Institutional Digital Repository, built on DSpace repository software), and in the future will collect from two other TAMU IRs, built using Fedora and Dataverse software. The disambiguation of authors' names between Scholars@TAMU and OAKTrust has been implemented by the use of name string search, but TAMU Libraries is conducting multiple pilot tests to make a decision concerning the use of a personal name identifier, such as ORCID, ISNI (International Standard Name Identifier), and local URI (Uniform Resource Identifier).

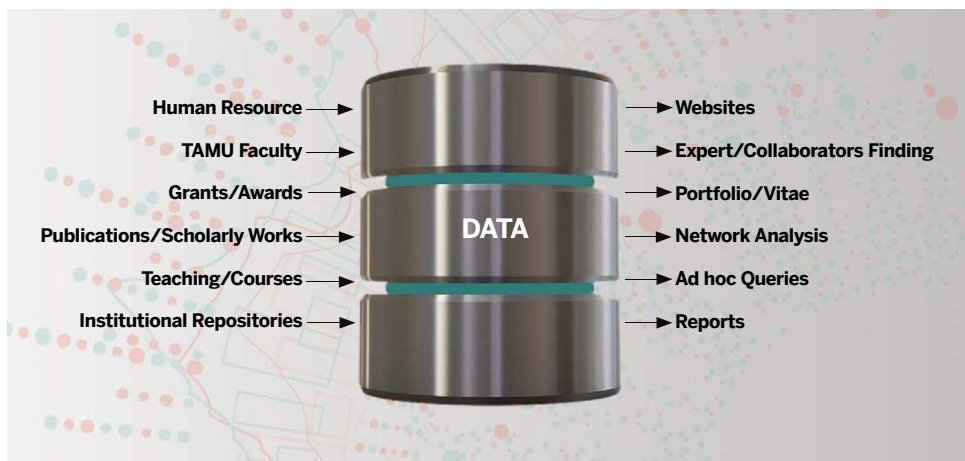
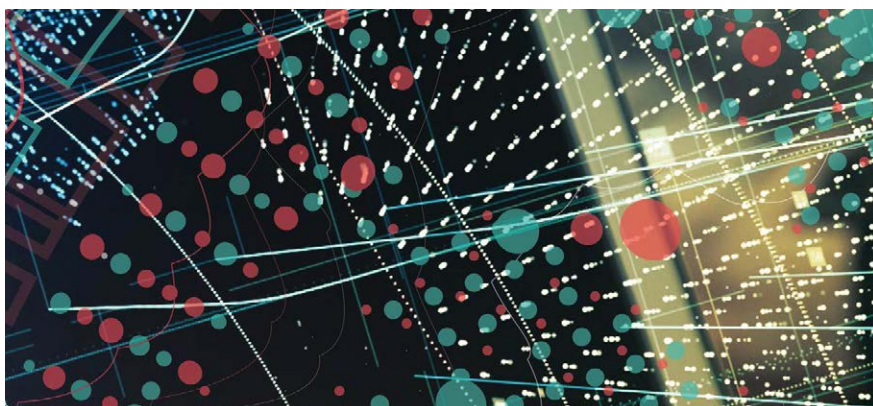


Figure 1. Heterogeneous data sources of TAMU identity management system and its diverse use cases.



Identity Management at the University of Arizona

By Erik Radio

Identity management has long been an area of interest in bibliographic practices. At the University of Arizona (UA), identity management takes different forms based on the context of the work involved, but the goal is the same. Whether the items are digitized archival resources or works in an institutional repository, it is desirable to refer to recognized authority files to ensure consistency for the names of those responsible for them. The digital collections use VIAF to determine name headings, which has the added benefit of supplying URIs for potential linked data integration.

RIM is another area of significant interest at UA, and a recent integration between ORCID and UA's RIM platform facilitates the synchronizing of works shared between the two different systems, lessening the burden on researchers to update them manually. For faculty-produced resources that are ingested into UA's institutional repository, it is possible to align preferred names through ORCID, though the details of this workflow are still in nascent stages. While there are several identity files from which to draw, ORCID is the preeminent one for academic audiences, particularly due to its inclusivity. Although both the Library of Congress Name Authority File and VIAF are much larger sources, they have stricter criteria guiding the creation of new entries.

Consistency allows for greater discoverability. For example, faceted search is really only useful when there are multiple variations of a heading. However, the affordances of linked data suggest that referring to a URI rather than a pre-coordinated string of characters would help avoid the complications caused by having multiple variations coexist, while not negatively affecting retrieval. Yet preparation and curation of metadata for a linked data environment requires varying degrees of remediation work. That is, it is necessary to match existing names with those from linked data providers to insert the appropriate URI, which allows library staff concomitantly to fix existing names. This double benefit allows for greater consistency while also preparing the metadata for linked data integration.

While the specifics of what discovery will look like in the future and what role linked data will have in that process remain to be seen, at a base level, positive effects of more web-friendly name heading projects can be seen through achieving greater consistency in and across digital collections.

The Future

As libraries invest more in identity management solutions to support their digital repositories, staff will need to understand different record formats and how to incorporate data into and from broader registries. Making our authority work discoverable by the larger publishing and research communities will benefit researchers and producers by merging and capitalizing on strengths of the various identity systems.

AALL 2018 ALERT

Don't miss the session "Game Day! It's Librarian Skills vs. eRecords to Demonstrate ROI for the Win!," Sunday, July 15 from 2:30 p.m. – 3:30 p.m. For more information visit bit.ly/AALL18eRecords.

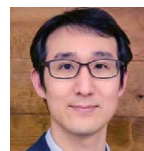
AALL2go EXTRA

Watch the 2017 AALL Annual Meeting program "From Authority Control to Identity Management—Not Controlling," at bit.ly/AM17Authority.



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