Profiles Research Networking Software Read Me First

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Table of Contents

Introduction	. 2
Where to Go Next	
More Information	
Acknowledgements	. 5

Introduction

Profiles Research Networking Software is an open source tool to speed the process of finding researchers with specific areas of expertise for collaboration and professional networking. Profiles RNS imports and analyzes "white pages" information, publications, and other data sources to create and maintain a complete searchable library of web-based electronic CV's. Built-in network analysis and data visualization tools allow administrators to generate research portfolios of their institution, discover connections between parts of their organization, and understand what factors influence collaboration.

With the transition from Profiles RNS Beta to Profiles RNS 1.0, we made the software a Semantic Web application that uses the Resource Description Framework (RDF) data model. In RDF, every entity (e.g., person, publication, concept) is given a unique URI. Entities are linked together using "triples" that contain three URIs--a subject, predicate, and object. For example, the URI of a Person can be connected to the URI of a Concept through a predicate URI of hasResearchArea. An instance of Profiles RNS can have millions of URIs and triples. Semantic Web applications use an ontology, which describes the classes and properties used to define entities and link them together. Profiles RNS uses the VIVO Ontology, which was developed as part of an NIH-funded grant to be a standard for academic and research institutions. A growing number of sites around the world are adopting research networking platforms that use the VIVO Ontology. Because RDF can link different triple-stores that use the same ontology, software developers are able to create tools that span multiple institutions and data sources.

In Profiles RNS 2.0, we added ORNG OpenSocial functionality. OpenSocial helps developers create new features in Profiles RNS as independent application "plug-ins". The OpenSocial applications can be shared with other institutions, including sites using other research networking products that support the OpenSocial standard. Several OpenSocial applications designed for research networking have been built by UCSF, Wake Forest and Baylor. A few of the ones from UCSF have been included in this version of Profiles RNS. ORNG stands for Open Research Networking Gadgets, and is based on merging the OpenSocial API with the Linked Data standard that is now supported by Profiles RNS. If you install the OpenSocial extension, you will also enable Profiles RNS to produce JSON-LD, an emerging standard for serializing RDF as JSON.

Where to Go Next

This document provides a brief introduction to Profiles RNS and information on the resources that are available to help you install and use the software. The other documentation files are:

- <u>ProfilesRNS_InstallGuide.pdf</u> Follow the instructions in this document to install a new instance of Profiles RNS or upgrade from an older version.
- <u>ProfilesRNS_APIGuide.pdf</u> An important feature of Profiles RNS is its ability to share data. The API Guide describes the various types of ways this can be done. It also contains a brief introduction to the ontology used by Profiles RNS. The API_Examples folder contains related files, such as XSDs and example API request messages.
- <u>ProfilesRNS ArchitectureGuide.pdf</u> This document describes how Profiles RNS works and how you can extend the ontology, add custom data feeds, or modify the user interface.
- <u>ProfilesRNS ReleaseNotes.pdf</u> This document lists new features, bug fixes, and known issues with each release of Profiles RNS.

The ORNG folder contains additional files related to installing and using the new ORNG feature in Profiles RNS 2.0.

More Information

For more information about Profiles RNS, please visit

http://profiles.catalyst.harvard.edu

The Harvard development team can be reached at profiles@hms.harvard.edu. We will try to reply promptly, though we cannot guarantee that we will be able to answer all questions.

Commercial support options are available through Recombinant by Deloitte. Harvard has no financial relationship with Deloitte, but we recommend them as an Authorized Service Provider for Profiles RNS. For more information, contact Recombinant by Deloitte at results@recomdata.com or call (617) 243-3700.

<u>Acknowledgements</u>

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Harvard Development Team

The software implementation is led by the Harvard Medical School Information Technology Department. The current and past members of the development team include Nick Benik, Niraj Desai, Paul Gomez, John Halamka, Ken Huling, Shashank Jain, Melissa Kenny, Kevin Laitinen, Kellie Lucy, Krishna Nellutla, James B. Norman, Rob Piscitello, George Rakauskas, Jeff Rosen, Michele Sinunu, Franco Valentino, Marlon Violette, Griffin Weber, and Steve Wimberg.

UCSF Development Team

The UCSF Profiles team includes Mini Kahlon, Eric Meeks, Kristine Moss, Rachael Sak, and Leslie Yuan. UCSF has developed innovative promotional strategies for research networking, assisted with quality assurance, and are adding OpenSocial support to Profiles RNS. Mini Kahlon was the co-chair with Griffin Weber of the National CTSA Research Networking Group, where they led an effort to create a national pilot that demonstrated interoperability among different research networking platforms.

Recombinant Data Corp.

The Profiles RNS team at Recombinant Data Corp. includes Kimber Barton, Nick Brown, Peter Emerson, Dan Housman, Mike Klumpenaar, Mark Mischke, Matvey Palchuk, and Nancy Pickard. Recombinant provides commercial support for Profiles RNS, hosts publication disambiguation services, develops administrative tools for Profiles RNS, and writes documentation (including portions of this install guide) and marketing materials.

Profiles RNS Users Group

We thank the member institutions of the Profiles RNS Users Group for their willingness to be early adopters of the software and their continued feedback. For a list of member sites, please visit the Community page on http://profiles.catalyst.harvard.edu.