



Cornell University
Library

The NISO Standardized Usage Statistics Harvesting Initiative (SUSHI)

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Z39.93-200X: The NISO Standardized Usage Statistics Harvesting Initiative (SUSHI) Protocol

Trial Use Period: September 20, 2006 – May 20, 2007

Abstract: This Standard defines an automated request and response model for the harvesting of electronic resource usage data utilizing a Web services framework that can replace the user-mediated collection of usage data reports. Designed to work with Project COUNTER reports, the protocol is also extensible to other types of usage reports.



Driving factors

- **librarians prefer the data in a central repository**
- **adoption of SUSHI will make customers happier in the short term (less grunt work, more analysis) and save content providers money in the long term (a machine interface is cheaper to develop than a user interface)**



Acknowledgements

SUSHI Committee Members:

- Adam Chandler, co-chair (Cornell University)
- Oliver Pesch, co-chair (Ebsco Information Services)
- Patricia Brennan (Thomson Scientific)
- Ted Fons, (Innovative Interfaces, Inc.)
- Bill Hoffman (Swets Information Services)
- Tim Jewell (University of Washington)
- Ted Koppel (Ex Libris)



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- Matthew Connolly (Cornell University Library)
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- Curt Kohler (Elsevier)
- Joshua Santelli (Project Euclid)
- Rolf van der Tang (Swets Information Services)
- Dennis Vaux (Innovative Interfaces, Inc.)
- Petar Vucetin (EBSCO Information Services)
- Ben Weinstein (Innovative Interfaces, Inc.)
- James Wismer (Thomson Scientific)



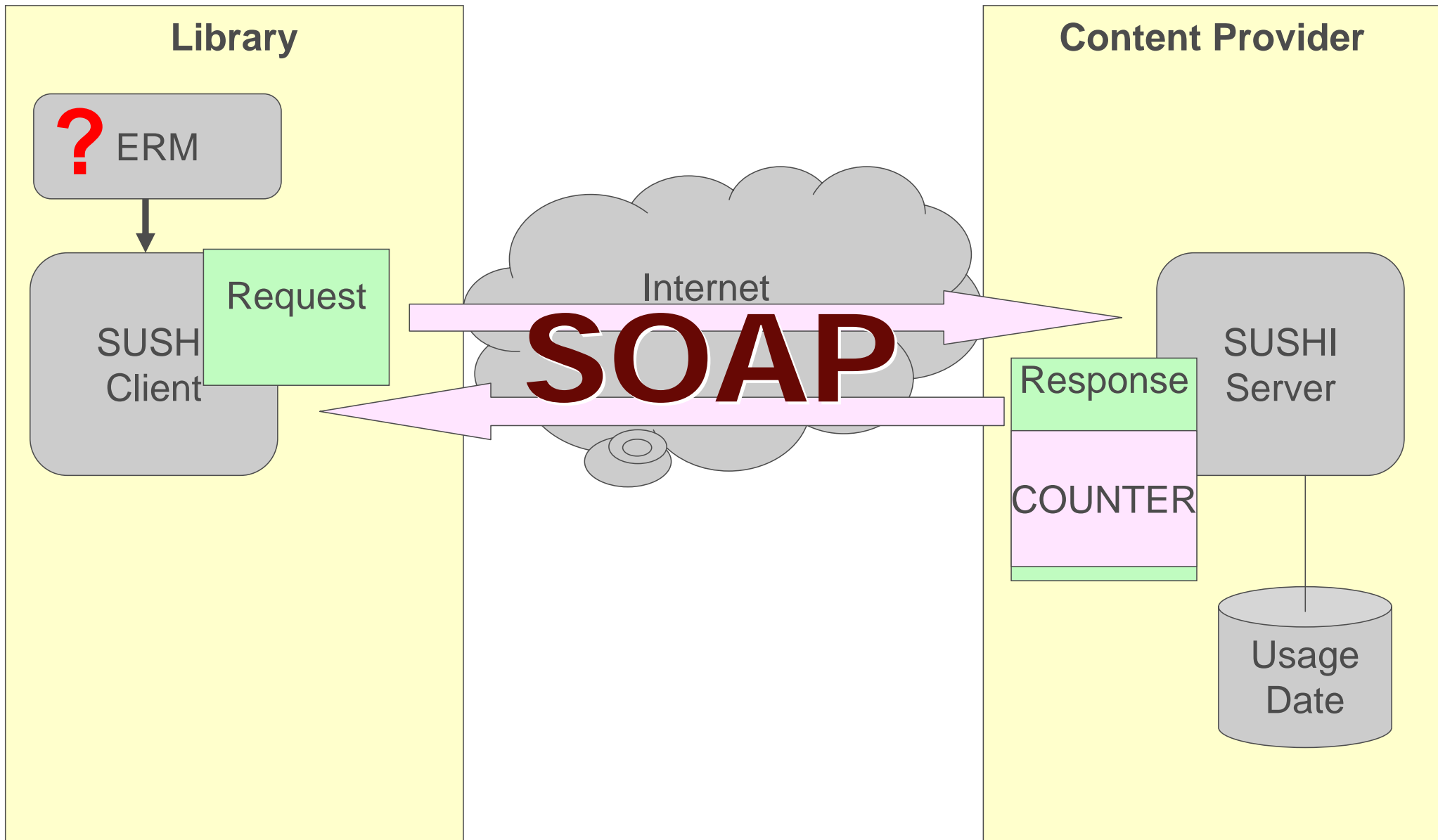
Brief history of SUSHI

"In general, simplicity and small interfaces are to be desired in the design of web services. Small and simple interfaces are easier to document, test, maintain, and understand. Small and simple may also prove to be more robust. Length of time to implementation may be reduced if the service interface is small."

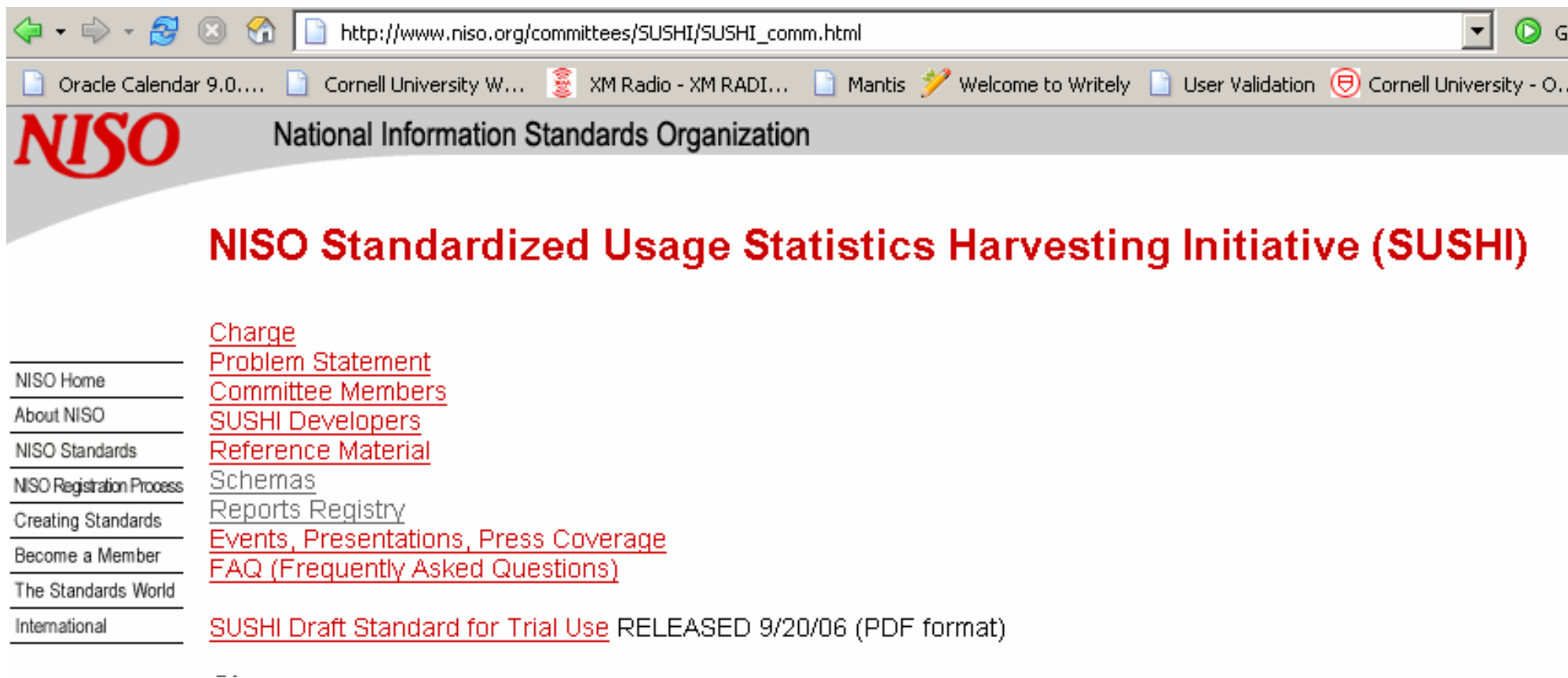
- NISO Web Services and Practices Working Group, "Best Practices for Designing Web Services in the Library Context," July 2006.



SUSHI is a Web Service which sends an XML Request to a content provider to obtain an XML response containing the usage report.



SUSHI project page



The screenshot shows a web browser window with the address bar displaying http://www.niso.org/committees/SUSHI/SUSHI_comm.html. The browser's taskbar at the top shows several open applications: Oracle Calendar 9.0..., Cornell University W..., XM Radio - XM RADI..., Mantis, Welcome to Writely, User Validation, and Cornell University - O... The NISO logo is prominently displayed on the left side of the page header, with the text "National Information Standards Organization" to its right. The main heading of the page is "NISO Standardized Usage Statistics Harvesting Initiative (SUSHI)" in a large, bold, red font. On the left side, there is a vertical navigation menu with links: NISO Home, About NISO, NISO Standards, NISO Registration Process, Creating Standards, Become a Member, The Standards World, and International. To the right of this menu, a list of links is provided: Charge, Problem Statement, Committee Members, SUSHI Developers, Reference Material, Schemas, Reports Registry, Events, Presentations, Press Coverage, and FAQ (Frequently Asked Questions). At the bottom of the page, there is a link for the "SUSHI Draft Standard for Trial Use" followed by the text "RELEASED 9/20/06 (PDF format)".

[NISO](#) National Information Standards Organization

NISO Standardized Usage Statistics Harvesting Initiative (SUSHI)

[Charge](#)
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[FAQ \(Frequently Asked Questions\)](#)

[SUSHI Draft Standard for Trial Use](#) RELEASED 9/20/06 (PDF format)

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SUSHI Schemas

Current SUSHI protocol schema - version 1.0 (September 20, 2006)

Note: This version is in compliance with the Draft Standard for Trial Use, NISO Z39.93-200X

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- [sushi1_0.xsd](#)

Beta test SUSHI protocol - version 0.1 (February 26, 2006)

- [sushi01.xsd](#)
-

SUSHI Web Services Description

Current SUSHI WSDL - version 1.0 (September 20, 2006)

Note: This version is in compliance with the Draft Standard for Trial Use, NISO Z39.93-200X

- [sushi1_0.wsdl](#)

Beta test SUSHI WSDL-- version 0.1 (February 26, 2006)

- [sushi01.wsdl](#)
-

COUNTER Schemas

Payload Schema for Journals and Databases, Release 2 (April 2005)

- [counter-jd02.xsd](#)

Payload Schema for Books and Reference Works, Release 1 (March 2006)

- [forthcoming]



WSDL defines only two messages

```
<message name="GetReportIn">
  <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/" />
  <part name="messagePart" element="import0:ReportRequest" />
</message>

<message name="GetReportOut">
  <wsdl:documentation xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/" />
  <part name="messagePart" element="import0:ReportResponse" />
</message>
```



SUSHI Schema: ReportRequest

```
<xs:complexType name="ReportRequest">
  <xs:sequence>
    <xs:element name="Requestor" type="Requestor">
      <xs:annotation>
        <xs:documentation>Consumer of the service. </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="CustomerReference" type="CustomerReference">
      <xs:annotation>
        <xs:documentation>Customer identity for which data is requested</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="ReportDefinition" type="ReportDefinition">
      <xs:annotation>
        <xs:documentation>Report paramters</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
  <xs:attribute name="Created" type="xs:dateTime"/>
  <xs:attribute name="ID" type="xs:string"/>
</xs:complexType>
```



SUSHI Report Registry

Description	Report Name	Release	Payload Schema
Book Report 1 Number of Successful Title Requests by Month and Title	BR1	1	TBD
Journal Report 1: Number of Successful Full-Text Article Requests by Month and Journal	JR1	2	http://www.niso.org/schemas/sushi/counter-jd02.xsd



SUSHI Schema: ReportResponse

```
<xs:complexType name="ReportResponse">
  <xs:sequence>
    <xs:element name="Exception" type="Exception" nillable="true" minOccurs="0" maxOccurs="unbounded"/>
    <xs:element name="Requestor" type="Requestor"/>
    <xs:element name="CustomerReference" type="CustomerReference"/>
    <xs:element name="ReportDefinition" type="ReportDefinition"/>
    <xs:element name="Report" nillable="true">
      <xs:complexType>
        <xs:sequence>
          <xs:any namespace="##other" processContents="lax"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
  <xs:attribute name="Created" type="xs:dateTime">
    <xs:annotation>
      <xs:documentation>Date and time of when response is created</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="ID" type="xs:string"/>
</xs:complexType>
```



Making it secure

- **Follows Web services conventions**
- **Levels**
 - Secure
 - SSL
 - Trusted
 - Server can profile trusted clients
 - Clients must deliver known customer ID
 - Authorization
 - Information providers can introduce customer level authorization



**So who is building
services with Z93.93-
200X?**



Client Side Support for SUSHI: ERM Vendors

- Innovative Interfaces, Inc. (III): 0.1 support built into 2006 release of ERM client; a 1.0 patch will be distributed in the next few months
- Ex Libris: Next version of Verde, expected Q2 2007
- Serials Solutions: SUSHI support will be available in their COUNTERcounter service, which they plan to release at ALA in 2007.
- Endeavor (Meridian): SUSHI support will be included in the Meridian 2.0 release, scheduled for early 2007.



MPS Technologies and Ex Libris Perform SUSHI Usage Data Transfer for Yale University Library

London, UK and Boston, MA
13 July, 2006

MPS Technologies and the Ex Libris™ Group announce a successful transfer of Yale University usage data between their systems using the automated SUSHI protocol. This test has been made in preparation for future integration of ScholarlyStats usage data into Verde®, the Ex Libris ERM system. This will provide Verde libraries with access to a suite of integrated reports combining usage data with other subscription, holdings, and pricing information.



ScholarlyStats and Thomson Scientific announce successful SUSHI test for University of Melbourne

12th June 2006

MPS Technologies and Thomson Scientific have successfully completed the transfer of data between their two systems, using the SUSHI (Standardized Usage Statistics Harvesting Initiative, sponsored by NISO) protocol. This joint initiative came in response to the growing demand for more in-depth usage analysis, as well as the continuing need to ease the time consuming process of managing vendor usage statistics.

The recent test successfully provided the University of Melbourne with usage data for 21 vendors, automatically transferred by MPS Technologies into Thomson Scientific's *Journal Use Reports (JUR)* system using the XML SUSHI protocol. SUSHI allows completely automated request and delivery of usage reports, saving time and resources for the library. The ScholarlyStats usage statistics will be complemented by local publication and citation activity data from the JUR, providing the University of Melbourne with unique, in-depth analyses of how journals are being used at their library.



PRESS RELEASE

November 2, 2006

Washington State University Libraries Implement SUSHI Standard with Innovative ERM and ScholarlyStats

Emeryville, CA and London, UK—Innovative Interfaces and MPS Technologies today announced that the Washington State University Libraries have achieved real-time acquisition of user statistics from within the Innovative Electronic Resource Management product. Using the Standardized Usage Statistics Harvesting Initiative (SUSHI) model, staff have accessed data provided by ScholarlyStats, eliminating the need to retrieve them on a resource-by-resource basis.

Cooperation between MPS Technologies, the company that provides ScholarlyStats, and Innovative means that the data transfer happens as scheduled and without staff intervention. Access to ScholarlyStats data quickly provides usage information on thousands of e-resource titles to which the Libraries subscribe. Currently, ScholarlyStats collects from 39 e-resource platforms covering over 450 databases, over 70,000 journals, and over 13,500 publishers. Armed with the data, ERM allows libraries to easily see how these resources are used at a granular level, including cost-per-use of specific titles within a e-resource package.



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Outstanding issues

1. Deploy XML schema for the COUNTER Books and Reference Works Code of Practice
2. Administer the Trial Use process
3. Manage librarian expectations (development and adoption take time)
4. Promote SUSHI business case among content providers (so far only EBSCO, Swets, Euclid; but we know others are working on it)



Question for DLF members

Should DLF member libraries consider applying COUNTER Code of Practice rules and reporting methods to library developed digital collections?



Thank you

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