



Mission Statement: Meeting the array of needs for the established IT professional while seeking to develop the IT profession and provide a service to our community and society.

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NEWSLETTER INFORMATION

Published nine times per year (September – June) by the Minnesota Information Professional Society. We welcome materials for publication (articles, news or letters). Submit materials on disk or via email to:

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NOTE MEETING INFORMATION

MEETING PLACE:
Holiday Inn – Bloomington
35W at 94th St.
Phone (952) 884-8211

Meeting Times:

5:00 PM Social Hour
6:00 PM Buffet Dinner
6:45 PM Meeting & Program
8:00 PM Adjourn

For a Dinner and Program Reservation, send email to: reservations@mnips.org

no later than 5 pm on
Thursday, Jan. 11

\$28 Members
\$33 Non-members

Meeting NOTICE

Tuesday, Jan. 16, 2007

Minnesota Information Professional Society

Note: The MnIPS Networking Event has been indefinitely suspended.

Dinner Topic:
“SOA – Service Oriented Architecture”
Speaker:
Cathy Bappe

SPEAKER TOPIC

SOA (Service Oriented Architecture) is considered one of the most significant IT initiatives currently underway. It promises to transform the key IT assets of a business in order to provide flexibility and speed at a lower cost. This overview of SOA will answer the question “What is SOA”, discuss the business drivers for adopting SOA, and review several case studies of successful SOA adoption.

SPEAKER PROFILE

Cathy Bappe has 10+ years of professional experience with all aspects of the software development lifecycle, with a focus on

Web Technologies and automating business processes using technology. She holds a B.A. in Music from Gustavus Adolphus College, and a Master of Science in Software Engineering from the University of Minnesota’s Institute of Technology.

Cathy is currently a Software Information Technology Architect for IBM. Before joining IBM she was a Lead Information Technology Architect for American Express/Ameriprise and also held various Programmer/Analyst positions at Park Nicollet Health Services, McLeod USA, and Decision Systems Incorporated.

President’s Letter

Greetings MnIPS friends -

Welcome 2007! It is the New Year, and for MnIPS that means it is time again to pay membership dues.

Although MnIPS has changed its program year to begin in September we are still transitioning to that status, so dues through August 31, 2007 are a reduced amount of \$35, to consider that they are for less than one year. Next year’s amount will reflect a full year of membership cost.

Notices have recently been sent to existing members but of course we welcome all others to become members by completing the membership form at <http://www.mnips.org/doc/MnIPS-Benefits&App.html> and returning it with dues money payable to MnIPS at the address on the form. You may also pay via PayPal. In that case, do send in the membership form because it helps us collect important contact information.

Please do consider what MnIPS is able to add to your professional and everyday life at the time of this membership drive: an opportunity to gain knowledge of subjects both that you may be able to apply quickly to your current work and ones which you might merely have a curiosity about and an opportunity to network with other IT professionals for ideas and insights on current work or when checking the landscape for new opportunities. Also, paying your dues now helps provide us with the necessary operating funds to continue the organization's activities.

As an additional incentive to join now, in recognition and appreciation of those who sign up as members by February 20, those people will be included in a drawing to win a free membership (actually have their dues money returned). The drawing will be held at the February dinner meeting.

Progress is being made on the Education Seminar for this

spring. The tentative date is Wednesday April 25, with the subject loosely titled Infrastructure: Begone, Old Technology! (or was Looking for the Dumpster the current favorite?). The presentations will cover topics related to upgrading and transitioning technology from old to new. The committee is meeting regularly to discuss topics and leads on presenters and sponsors; new committee members or suggestions are very welcome (contact me).

We did not receive any responses to the Request for Proposal regarding the Golf Outing, so it will not occur in 2007 in the past form. It is possible that it may be done as an affiliation with another group, if an opportunity presents itself.

January 16th's monthly dinner meeting topic is Service Oriented Architecture, being presented by Cathy Bappe. I am interested in hearing her presentation, as that is a topic of significant interest to the management at my employer and maybe yours too. I look forward to the evening and seeing many of you there.

– Chris Retkwa,
MnIPS President
president@mnips.org

Web Services – Architecture and Testability

(Summary of the Nov. 2006 dinner topic presented and written by Tom Igielski of The Thomas Consulting Group)

Web Services have become an important part of technology solutions in today's world. They have become a standardized way of integrating web-based applications using XML, SOAP, WSDL and UDDI open standards over an Internet protocol backbone. They are continually used for B2B and B2C communications, allowing businesses to send and received information with each other without detailed knowledge of each other's business systems.

Some of the characteristics of web services that make them particularly challenging to test are the following:

- There is an emphasis on message content, versus any visual cues.
- The interactions between different web services can be quite complex. The order and sequence of web messages can be hard to predict.
- Most calls can contain concurrent message requests.
- There is an increased dependency on developers during the testing phase.

The XML language is the basis for web services. XML stands for eXtensible Markup Language. Unlike HTML (which was designed to display data and focus on how data looks), XML was designed to describe data, and focus on what data is.

The structure of a typical XML document might look like this:

```
<?XML version="1.0"?>
<note>
  <to>Chris</to>
  <from>Tom</from>
  <subject>Reminder</subject>
  <body>Don't forget about the
trip this weekend</body>
</note>
```

One of the great benefits of using XML is the ability to validate XML documents against a XML Schema. This validation is typically done by a validating XML parser, and essentially ensures that all required elements in a XML document are present, that no undeclared elements have been added, that the hierarchical structure of the elements is maintained, and that values are within the defined guidelines.

SOAP (Simple Object Access Protocol) is a lightweight protocol intended for exchanging structured information in a decentralized, distributed environment. It uses XML technologies to define an extensible messaging framework by providing a messaging construct that can be exchanged over a variety of underlying protocols. SOAP is independent of any particular programming model and other implementation semantics.

In a very simplistic representation, the SOAP architecture can be described as follows:

When an application on an application server makes a SOAP request, the request is processed by a SOAP engine, which translates the request into standard XML, and transmits the request to the receiving application using the

HTTP protocol. On the receiving end of the communication is another application running on an application server. The SOAP engine on that server receives the XML message, and translates the XML to SOAP, where it is processed by the receiving application.

WSDL's (Web Service Description Language) create contracts between a client and a server. WSDL's describe what the web service can do, where it can be found, and how to invoke it. They define the XML grammar that describes Web Services as collections of communication endpoints that are able to exchange messages with each other.

Some of the challenges in testing Web Services can be described as follows:

- The complex logic on the client side causes difficulties in stimulating real client behavior in a testing tool
- The timing and order of calls to Web Services changes from run to run, and sometimes the client behaves like a server.
- There is no user interface displayed that can be tested, so "recording" the business process can be a serious problem.
- The client application can be driven by another application with no user interface.
- There may exist the inability to separate Web Service calls that are a result of a specific business process.

- Finally, performance analysis can be difficult because it may be impossible to determine where the problem is.

Because of the complexity of web services, the solutions for testing these services are limited. Some of the techniques used to test Web Services are:

- Scanning WSDL's
- Using conventional GUI/functional testing tools for testing GUI applications that are connecting to the Web Services and indirectly test the service.
- Develop test programs in-house generating SOAP requests to test the Web Service

Each of these techniques has their pros and cons. Scanning WSDL's does not necessarily represent the true behavior of the web services. Using conventional GUI tools introduces another layer of application in the testing mix, and sometimes it may be difficult to know if the web service is failing or the GUI interface is failing. Developing in-house test programs can be time consuming, and require additional maintenance time to keep them in step with the actual web services themselves.

**University of St. Thomas
to host a
Business Continuity and
Pandemic Planning Conference – Feb. 27, 2007**

University of St. Thomas
CENTER for BUSINESS EXCELLENCE

Program: *Business Continuity and Pandemic Planning Conference*

Offered by: Shenehon Center for Real Estate

Date: Tuesday, February 27, 2007

Time: 8:00 a.m. to 4:00 p.m.

Location: Terrence Murphy Hall, University of St. Thomas Minneapolis Campus
1000 LaSalle Avenue

Ideal Participant: Managers of any business function responsible for business continuity and pandemic planning, including CEOs, CFOs, COOs, and directors and managers of HR, IT, and operations Business continuity planning in preparation for a pandemic health emergency could make the difference between the total loss of a business or a temporary interruption.

At the *Business Continuity and Pandemic Planning Conference*, participants will explore strategies for preparing a business continuity plan, meaningful information on the risks associated with the bird flu and other pandemics, existing resources for support and partnership, and best practices for communication and the protection of employees.

For more information or to register: Contact the University of St. Thomas at (651) 962-4600 or visit <http://www.stthomas.edu/cbe> (keyword: pandemic).

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