



The end-to-end reliability forum.

## Northwest Chapter

WWW.7X24NW.ORG

### Mission Statement

The 7x24 Exchange Northwest Chapter's mission is to provide an open educational forum dedicated to the continuous improvement and increased awareness of data center reliability focusing on the key disciplines of design, construction, maintenance, security and management with the goal of obtaining continuous data center operations.

### Mark Your Calendar

#### February 8, 2005

7x24 Exchange NW Chapter  
Winter Session  
Microsoft Partner  
Solution Center (Bldg 25)  
Redmond, WA  
4:00pm - 7pm

#### Spring 2005

#### National Conference

June 12-15, 2005  
Boca Raton Resort & Club  
Boca Raton, FL

*End-to-End Reliability:  
Today, Tomorrow & Beyond*

[www.7x24exchange.org](http://www.7x24exchange.org)  
(646)486-3818

#### May 10, 2005

7x24 Exchange NW Chapter  
Spring Session

# winter 2005 UPDATE

## Fall Chapter Session

- Dot Com Data Center Re-Certification
- Tour of Nexus Data Center
- Data Center Facility Evaluation: Colo to Enterprise

The colocation data center market has gone from serving the dot com companies to redeploying itself to serve the enterprise customer. The McKinstry Company and Eaton/Powerware presented a discussion on the re-certification of a data center constructed in 1999 and how enterprise levels of service can be achieved. A primary focus was examining the ability to increase levels of capacity to meet higher load demands now being required by enterprise users.

Howard S. Wright Construction and Callison Architecture presented a case study of utilizing existing colocation data center for enterprise users. Understanding the limitations of these facilities and how to reconfigure the critical infrastructure to meet enterprise needs was discussed, along with an examination of the tools and processes used.

Nexus Properties gave attendees a behind the scenes tour of the Nexus data center. Originally constructed for Colo.com, this data center is now being marketed for corporate clients.

The 7x24 Exchange Northwest Chapter thanks all of the presenters, and would like to extend a special thanks to Nexus Properties for hosting the Fall Session.

## Chapter News

- Board of Directors Elections
- New Chapter Affiliate Agreement

The winter session will be the chapter annual business meeting and will include elections for the Board of Directors. This is an excellent opportunity to assist the chapter in continuing to bring the highest level of educational seminars and networking to the Northwest's mission critical community. If you are interested in serving, come to the meeting ready to sign on.

The chapter has also executed a Chapter Affiliate Agreement as requested by the National Organization, which for the first time, spells out the nature of the relationship between the many chapters and National. Copies of the Agreement will be available for review and discussion.

## Date

Tuesday, February 8,  
2005  
4:00 pm - 7 pm

Microsoft  
Partner Solutions  
Center (Bldg. 25)  
Redmond, WA

## Agenda

4:00 pm  
Sign In &  
Networking

4:15 pm  
Chapter Business  
Meeting

4:45 pm  
Availability and Reliability  
Theory

5:30 pm  
Break

5:45 pm  
Bypass Airflow Business  
Case

6:30 pm  
HVAC Design Issues  
in Data Centers and  
ASHRAE Guidelines

## RSVP

by Wednesday, February 2  
to Jon Hessen,  
Performance Power

[jhessen@ppcwa.com](mailto:jhessen@ppcwa.com)

T: 425-638-0340  
F: 425-638-0341

### IMPORTANT

You must be on the  
attendance list to access  
the building and to  
receive your free Microsoft  
Purchase Pass.

# Mission Critical Roundtable

## **Special Offer for 7x24 Exchange Northwest Winter Session Attendees!! Microsoft Online Company Store Purchase Pass**

Have you ever wanted to buy Microsoft hardware and software at company store prices? Attendees who register for the Winter Session on or before February 3, 2005 will receive a Microsoft Online Company Store Hardware/Software Purchase Pass. This pass is only redeemable online. Hardware and software purchase limits apply.

Sign Up Today!

## *Availability and Reliability Theory and the Expectations Behind the Numbers*

Victor Avelar, Availability Engineer  
American Power Conversion

The purpose of this presentation is to provide the audience with a better understanding of reliability and availability in an effort to restore their confidence in these fields and provide them with the knowledge to make better decisions. An overview of the basic reliability and availability elements are discussed. Probabilistic analysis methodologies are described. The presentation concludes with examples of real world failures and their correlation with PRA predictions.

## *Bypass Airflow Business Case*

Dan Gollahon  
Triton Technology

Unsealed openings on the raised floor such as cable cutouts create "bypass airflow" which is wasted conditioned airflow. Bypass airflow creates three undesirable conditions: (1) hot spots, (2) cooling unit incapacity and (3) latent cooling penalty. A variety of methods for sealing these openings are displayed and discussed including their operational and financial advantages and disadvantages. Before and after views of sealing a variety of challenging cable cutouts are also displayed and discussed.

A business case analysis is presented that calculates the financial return from sealing cable cutouts and perimeter penetrations on the raised floor. Business case methodology as well as operational and financial metrics used to justify capital and expense budgets are used. Costs and benefits are described and quantified in a five-year model that lists a variety of financial metrics used in the capital and expense budget approval process—including payback, return on investment, internal rate of return, and discounted cash flow for both a new and existing data center.

## *HVAC Design Issues in Data Centers and the New ASHRAE Guidelines*

John Pappas, PE  
Mazzetti & Associates

This presentation will review the challenges faced by current data centers in providing adequate cooling to ever increasing heat loads generated by newer technologies and will include a discussion regarding the new ASHRAE Thermal Guidelines for Data Processing. John will examine the current limitations of air cooling, new methods for analysis, and what techniques are being used and proposed for the data center environment. John will also discuss the impact of revised energy codes on data center operations and the efficiencies of mechanical systems.

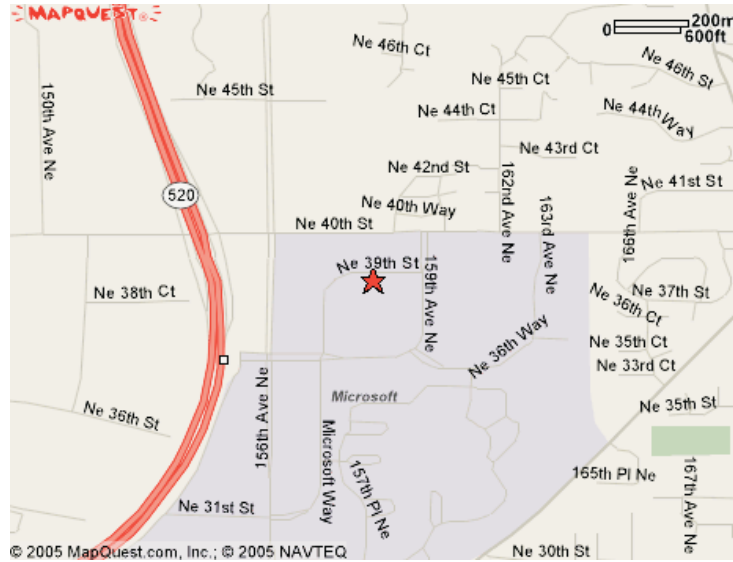
January 18, 2005

# 724 7XChange

Northwest Chapter

## Meeting Location

Microsoft Partner  
Solutions Center - Building 25  
NE 39th Street on the  
Microsoft Campus  
Redmond, WA



Area Map

## Directions

From Highway 520, exit at NE 40th St.  
Turn East on NE 40th St.  
Cross 156th Ave., take next right on  
NE 36th St., into Microsoft Campus.  
Parking is in the lot east of Building 25.  
Please check in at the front desk.

Please make sure you have  
submitted your name to  
Jon Hessen at Performance  
Power prior to the meeting  
date. Jon can be reached at:

[jhessen@ppcwa.com](mailto:jhessen@ppcwa.com)

T: 425-638-0340

F: 425-638-0341

m a p & d i r e c t i o n s

# Board of Directors Elections

We will be holding elections for Board positions for the 2005 through 2007 term. Our current Board Members are:  
President - Doug Bors, Cone Twelve  
Vice President - Ron Hookland, Boeing  
Treasurer - Rob Costa, Boeing  
Secretary - Leonard Ruff, Callison Architecture

Nominations are open for all Board positions, this is great opportunity to serve the chapter and advance the science of Mission Critical Operations. Bring your ideas and nominations for Board members.

## Welcome to New 7x24 Exchange NW Chapter Members

EYP Mission Critical Facilities

The Siemon Company

SMC (System Manufacturing Company)

Smart Works

SASCO

### Officers & Committees

**President**  
Doug Bors  
ConeTwelve

T: 206-963-3077  
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**Vice President**  
Ron Hookland  
Boeing

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**Treasurer**  
Rob Costa  
Boeing Information & Support Services

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**Secretary**  
Leonard Ruff  
Callison Architecture

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**Newsletter - Website**  
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Callison Architecture

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Northwest Chapter

## Membership Application

Membership Type:  Individual \$50 per year  Corporate \$200 per year  
 Renewal  New Member

*For corporate memberships, complete one application for each individual and return the applications together with your membership fee. Corporate memberships may include an unlimited number of members per company. Send applications and payment to: Leonard Ruff, Callison Architecture, 1420 Fifth Avenue, Suite 2400 Seattle, WA 98101. Make checks payable to: 7x24 Exchange Northwest Chapter*

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Country: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email Address: \_\_\_\_\_

Remember, you can register on-line at: [www.7x24nw.org](http://www.7x24nw.org).

January 18, 2005