7x24 Exchange

The end-to end reliability forum.

fall 2004 UPDATE

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

September 14, 2004
7x24 Exchange NW Chapter
Fall Session
Nexus Data Center
Bothell, WA
4:00pm - 7pm

October 17-20, 2004
Hyatt Regency Scottsdale
at Gainey Ranch
Scottsdale, AZ
End-to-End Reliability: Innovation
7x24 Exchange National Conference
www.7x24exchange.org
(646)486-3818

February 8, 2005
7x24 Exchange NW Chapter
Winter Session

Winter Chapter Session

- World Class Research, World Class Facilities
- Tour of Fred Hutchinson Cancer Research Center Labs and New Building

Continuing to explore the varied definitions of Mission Critical Facilities and high availability, the Northwest Chapter examined the critical nature of the Fred Hutchinson Cancer Research Center, one of the world's leading biotechnology companies.

Bob Cowan, Manager of Facilities Engineering at the Day Campus on South Lake Union in Seattle, gave attendees a unique behind the scenes look at the state of the art facilities and the FHCRC facilities engineering team and their approach to keeping this research center running for a wide variety of researchers, scientists and medical staff.

Spring 7x24 Exchange National Conference

- End to End Reliability: High Availability

The Spring National Conference, held at the Ritz-Carlton in Orlando, FL, focused on High Availability issues for the Mission Critical industry. With presentations ranging from network security, to fuel system availability, to data center maintenance, to super computers and heat loading, the conference gave attendees a comprehensive look at the multitude of issues facing the field.

Three Northwest Chapter members, Jim Gylling, Greg Bogard and Leonard Ruff also presented at the conference, detailing their experiences with an Integrated Design/Build Approach to Mission Critical projects.

A highlight of the conference was the vendor sponsored event at the Kennedy Space Center, giving members a deeper understanding of the breadth of the NASA space program.

Over 300 people attended the Spring Conference, making this one of the best attended conferences in the history of the 7x24 Exchange. The Fall Conference is scheduled for October 17 -20, 2004 in Scottsdale, AZ. To get more information and make your reservations, go to: ***www.7x24exchange.org.***

Date

Tuesday, September 14, 2004
4:00 pm - 7 pm

Nexus Data Center
21720 23rd Drive SE
Bothell, WA

Agenda

4:00 pm
Sign In & Networking

4:30 pm
DotCom Data Center Re-Certification

5:15 pm
Break

5:30 pm
Data Center Tour

6:15 pm
Enterprise Data Center Facility Evaluation

7:00 pm
Adjourn

RSVP

by Friday, September 9 to Jon Hessen, Performance Power

jhessen@performancepower.net

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

IMPORTANT
You must be on the attendance list to access the building.

Mission Critical Roundtable

A Focus on the Colocation Data Center and its Role in Today's Enterprise World

DotCom Data Center Re-Certification

McKinstry Company
Eaton/PowerWare

This presentation will focus on the mechanical and electrical systems in a facility that was designed in 1999 at 60 watts per square foot. Currently the marketplace is now looking for 120 watts per square foot and higher. The re-certfication process is therefore not that stratight forward and needs to address not only the re-certification, but also the potential requirement for increased capacity. Can this be accomplished and if so, how? What are clients looking for and how do they evaluate these types of facilities?

Tour of the Nexus Data Center

Originally commissioned in 2001, this 66,568 square foot building provides over 47,000 square feet of data center space. With a full array of critical and essential power systems, this data center is a prime candidate for corporate IT platforms.

For more detailed information on this facility, refer to the brochure included in this edition of the Update.

Data Center Facility Evaluation Colo to Enterprise Roadmap

Jim Gylling, MEPC Manager, Howard S. Wright Construction
Leonard Ruff, Associate Principal, Callison Architecture

Companies attempting to capitalize on the "fire sale" of existing colocation data centers built during the technology boom of the late 1990's are faced with a challenging and sometimes misunderstood task. Utilizing these types of facilities for enterprise levels of computing requires a high level of due diligence to understand the capabilities and limitations of the existing critical infrastructure and how the facility can meet corporate IT requirements. This presentation is a case study of the process of the analysis and reconfiguration of an existing colocation facility for use as an enterprise level data center.

7x24 Exchange
Northwest Chapter

Meeting Location

Nexus Data Center
21720 23rd Drive SE
Bothell, WA

Directions

From I-405, exit on Bothell-Everett Highway.
Turn Right on 220th Street SE.
Turn Left on 23rd Drive SE.

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@performancepower.net
T: 425-638-0340
F: 425-638-0341

Area Map

Nexus Data Center

map & directions

January 23, 2004

Previous Chapter Presentations now Available Online!

Presentations delivered at the Chapter meetings will now be available for download on the website. All presentations will be posted in Adobe Acrobat (pdf) format for ease of use. These presentations are available for public dissemination, however, please respect the original authors and give credit with any reference to the information.

The 7x24 Exchange, Northwest Chapter, does not endorse any product information, companies or practices contained in these presentations and does not accept any liability arising from any use of the information contained therein.

We encourage diverse and spirited discussion about any of the topics presented at our Chapter meetings or posted on the website.

Welcome to New 7x24 Exchange NW Chapter Members

Switch & Data

City of Seattle, Department of Information Technology

Cunningham Engineering

The Halton Company

Renosa Company

InControl, Inc.

7x24 Exchange

Northwest Chapter

membership

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.*

Officers & Committees

officers

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August 19, 2004

NEXUS DATA CENTER

NEW Data Center

I-405 Technology Corridor | Canyon Park Business Center
21720 23rd Drive SE • Bothell, Washington

——— Latest Generation of Data Center Space ———

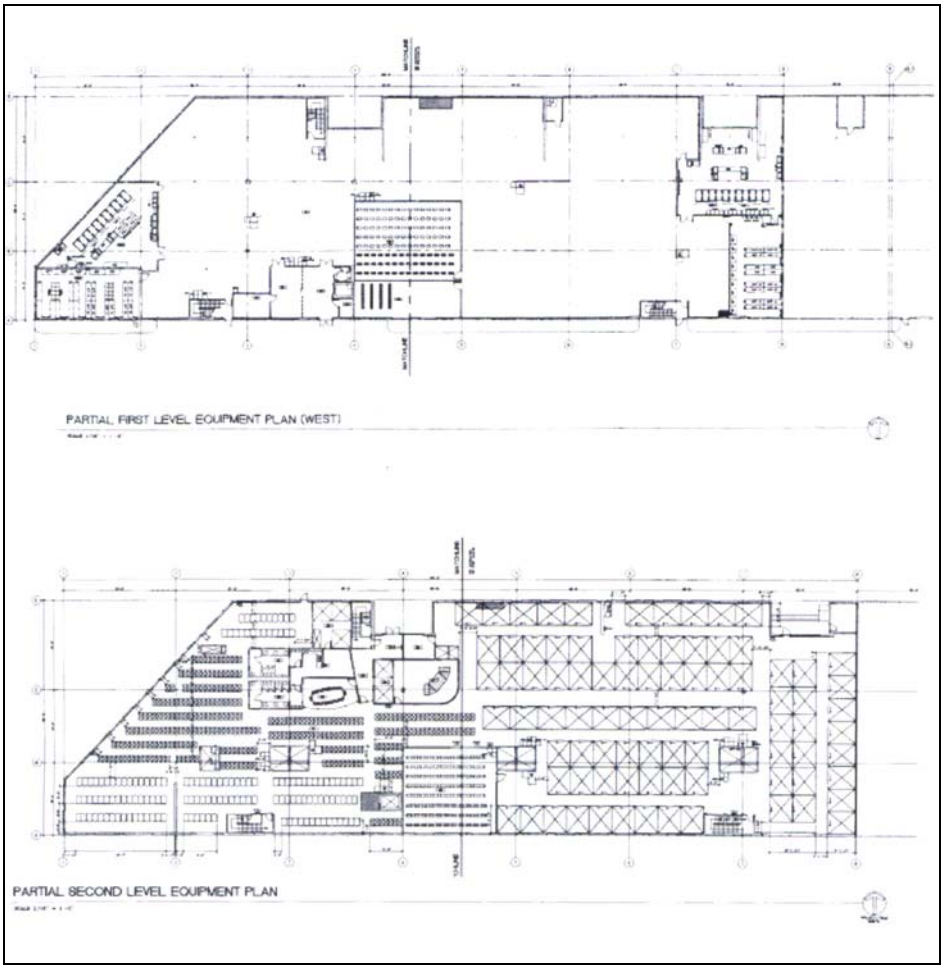
——— Built in 2001 ———

Power Cooling & Fiber Infrastructure
Installed with Robust Expansion Enabled
Ready for Your Custom Build-out

NEXUS

47,500 SQUARE FEET OF USABLE COLO FLOOR SPACE

(floor and administrative areas)



PREMIER DATA CENTER

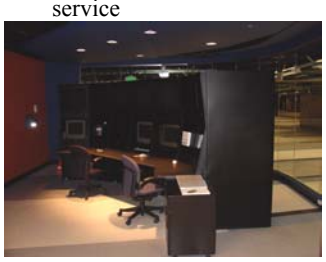
LOCATION
21720 23rd SE
Bothell, Washington 98012

- Heart of Canyon Park
- Superior access to I-405 and I-5 freeways

BUILDING SIZE
- ±66,568 SF building area
- ±47,540 SF Colo Floor Space

BUILDING DESCRIPTION
- Building commissioned in 2001
- Two story precast concrete reinforced concrete structure located on CTU
- Class A built-up roofing over insulated metal deck, satellite platform, rooftop air handling units
- Remote ±4,000 SF backup generator building and ±7,600 SF chiller yard (fully secured)
- Two floors: ±33,284 SF each
- One Carrier class point of presence room and two meet-me-rooms
- Two separate AC/DC electrical rooms
- 1,600 tons of air handling/cooling
- On grade, 61 vehicle parking capacity
- Building main entrance adjacent to available office, conference and administrative amenity spaces
- State-of-the-art OCC *(operations control center)*

SECURITY
- Biometric Palm Scanners at all secure area entrances
- Card access control at all interior and exterior doors
- 48 digital motion detection surveillance cameras with 30 day's storage capacity controlled by Digi Eye software
- State-of-the-art security monitoring center (OCC)
- 24-hour security guard service



ELECTRICAL SYSTEM | POWER UTILITY
- AC power system is fed by two 4,000 amps main switch boards
- DC power plants consist of twin rectifier plants rated at 1,200 amps each, backed by 16 strings of DC batteries.

COMMUNICATIONS CONNECTIVITY
- Fully built POP entrance facilities for multiple carriers.
- Extensive site conduit package with diverse routing, dual entrances, and vaults.
- Facilities and conduit in place for wireless applications.
- Campus multi-carrier conduit system in the street.
- Owner-pre-engineered multi-carrier construction program ready for rapid street build with circuit commitments.

UTILITY POWER
- **Dual 4,000 AMP Switchboards** with dual dedicated feeders running parallel feeds to customer equipment via PDU's on data center floor
- **Four 2000KW CAT Diesel Gensets** 12,000 gallons on-site fuel. Fully synchronized Peterson power parallel switch gear.
- **Four 500KVA UPS modules** in N+1 configuration. Eight racks of DC battery back-up in dual rooms. Fully distributed.

All Systems Fully Operational, Under Continuous Maintenance

EMERGENCY POWER GENERATION
- 4-2000 KW standby generators *(2.0 meg gensets)* located in separate 4,000 SF building
- Fully synchronized by a state-of-the-art touch screen parallel switch gear system
- Fueled by 4 – 3,000 gallon diesel fuel tanks
- 72 hours of fuel set up to refuel 'on the fly' via truck allowing indefinite self power generation.
- Primary and secondary fuel providers.

POWER DISTRIBUTION | UPS SYSTEM
There are currently 4 – 400 KW | 500 KVA UPS cabinets installed in an N+1 configuration, which bridges the switch over of utility power to back up generator power to ensure continuous service in the event of utility service outage.

PREMIER DATA CENTER
continued

BUILDING EQUIPMENT | SYSTEMS MONITORING

- Alerton building management system
- Data Trax building environment monitoring system
- Siemens Fire Alarm monitoring system
- Perm PAL Alert leak detection system
- Digi Eye Security Camera monitoring system

HVAC | MECHANICAL SYSTEMS

- Airside system consists of four 400RT Chillers and six 110K CFM Trane Pace air handling units

FIRE SUPPRESSION

- State-of-the-art pre-action double interlock dry pipe fire suppression system
- Fire alarm system, with both smoke and high temperature heat detectors
- Laser based VESDA (*Very Early Smoke Detection)* air sampling devices will enhance the ability to respond to a situation and control it before a fire.

For further information call:

Mike Reidy
206.949.2667 or 425.398.4190 (On Site)
moreidy@nexusprop.com

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