Presentation Abstracts

Abstracts Submitted before 9-27

Vendor Showcase
10:00 – 4:30 AM

FM Systems: What is new at FM Systems

Saturn/Venus Room

Marty Chobot

Title: V P of Product Management and Strategic Alliances

Company: FM:Systems

FM:Interact

The FM:Interact Workplace Management Suite is a flexible, intuitive, easy-to-learn Web-based software platform that helps facilities and real estate professionals automate processes, monitor performance and improve planning. Key capabilities include: managing space and occupancy; moves, adds and changes; maintenance and operations; strategic planning; real estate and leasing; project management; and sustainability.

Lifecycle BIM: Autodesk Revit integration.

The direct integration with Autodesk® Revit® Architecture software is a key feature of FM:Interact, enabling you to leverage the information in BIM models to improve space, occupancy and maintenance management in the operations phase of the building lifecycle.

Marty Chobot, FM:Systems Vice President, will introduce you to this proven, experienced software company that has helped hundreds of customers deliver better customer service, reduce costs and improve productivity across their entire organization.

he purpose of this session is to introduce..

One Asset Lifecycle, One Asset Management Solution: Providing value and reducing total cost of ownership with Integrated Workplace Management Systems (IWMS)

Saturn/Venus Room

Jeff VanFleet
Title: Business Development
Company: C2C Surveys, BRG

Alan Neil
Title: Vice President
Company: BRG

Abstract: Many campuses continue to manage high value real estate and facility assets using a fragmented and often poorly integrated set of independent point solutions. The result is unreliable data, disjointed processes, and risky integrations. High value assets typically pass through several organizational units each using their own technology, processes and data to manage their part of the Asset Lifecycle. Today's mature IWMS platforms manage assets strategically through the entire lifecycle, reducing the need for multiple point solutions. As a result, data redundancy and IT sustainment costs are dramatically reduced.

Keynote Presentation
Wednesday 8:15 – 9:30 AM

WG1: Collaboration and Modeling: Bringing Back Owner Involvement

Columbia Ballroom

Robert E. Middlebrooks AIA
Title: Industry Program Manager, Buildings
Company: Autodesk

Abstract: As the practice of design and construction has evolved from master builder to a complicated array of specialists, complicated contract documents and the advent of CAD have further removed the owner from the process. While many owners have enjoyed relegating the responsibility and risk to others, the results have not always been satisfying. Liability and change orders had become the currency of modern construction projects.

Whether you cite the NIST reports or the CURT whitepapers as the turning point, we have begun a process change that reinstates the owner as an appropriate participant in the Design and Construction workflow. Collaborative tools such as building information modeling and contracts for Integrated Project Delivery have been catalysts for an entirely new workflow. Whether your project is a building, infrastructure or an entire campus facility, model based design, analysis and visualization, coupled with advances in technology such as rapid energy modeling, photogrammetric reality capture and infinite computing, have changed the way decisions can be made. Properly informed and timely decision making is the critical influence between redesign or change orders, and a well-executed project.

This presentation will provide the background and future glimpse on the process changes in new collaborative workflows and illustrate the advances in how owners make decisions and reinvolve themselves in projects of all scales. Covering the lifecycle from concepts and energy analysis, to building operations and maintenance new workflows provide opportunities for owner engagement that never existed, and leverage the investments in the process, bringing back owner engagement and better-executed projects.

Wednesday Concurrent Sessions
9:45 AM – 4:45 PM

W1A: Lifecycle Facilities Data Management using BIM, BAS and GIS
Discovey I

Steve DeVito
Title: Project Technology Specialist
Company: GSA Public Buildings Service

Phil DeMottie
Title: Director of Business Development-East Coast
Company: EcoDomus, Inc.

Abstract: The U.S. General Services Administration (GSA) is committed to incorporating principles of energy efficiency into its facility management practices. With the use of Building Information Modeling (BIM), GSA hopes to strengthen the reliability, consistency, and usability of predicted energy use and energy cost results.
GSA's Southeast Sunbelt Region (GSA Region 4), located in Atlanta, GA, decided to be proactive and invest in new approaches for managing energy in federal facilities and EcoDomus, Inc. was recruited to implement its industry leading software, EcoDomus FM, as the GSA FM Energy Web Portal. The web based application provides GSA with a GIS-based dashboard reporting energy usage across the whole Southeast region, or by state, city, or individual buildings. The FM Energy Portal also displays BIM models in full 3D so facility managers can virtually navigate to any space within the facilities, and review assets properties: both design-intent and current energy operational values received from building sensors and meters via Building Automation System (BAS).
The presentation will explain how to collect and validate the right data using COBie and owner's Facility Management Program, how to establish business cases for "BIM for FM", and present the best practices for energy management using BIM.

W1B: Document Management and Archiving at MSU and MIT
Discovery II

Lorena Griffin
Company: MSU

Mike Parkin
Company: MIT

Glenn Seehausen
Title: President/CEO
Company: ACAD-Plus, Inc.

Abstract: MSU recently replaced their Filenet based Document Management with BlueCielo
Meridian using the ACAD-Plus' Facilities DM Integration. The new system provides direct integration with their CMMS, CAFM, and GIS solutions. Hundreds of thousands of Archive documents were migrated into the new solution. It is also used to manage all of their master operational drawings. Recently, MSU expanded the system so that all designers and engineers can manage their active project drawings and documents. This presentation will include a live demonstration of their solution.

MIT has been using BlueCielo's products for years. MIT recently upgraded their system using ACAD-Plus' Facilities DM Integration and services. MIT's portion of the presentation will focus on the brand new BlueCielo Explorer, which provides secure and convenient browser access to all of their archives for a large audience of maintenance, projects, and planning personnel. MIT's BlueCielo Explorer solution will also be demonstrated.

ACAD-Plus provided consulting and implementation services for both customers and will contribute their insight to this presentation. Both customers will also discuss their vision for further expanding and utilizing their Meridian systems.

W2B: Mobile Data Capture Tools You Neeed to See(or Rather touch) to Believe!

Discovery II

Brendan C. Molloy
Title: President
Company: INFOQUEST TECHNOLOGIES, L.L.C.

Abstract: presentation of current mobile technology, which will include hardware [tablet pc's, DISTO's, etc.] that will be handed out to the session attendees so that they may experience these products for themselves firsthand. In addition, one lucky session attendee will win a Leica DISTO [with Bluetooth capability]! Brendan will mostly be demonstrating the hardware, its capabilities, their interaction between themselves as well as their interaction with the latest in touch-based software.

W4A: Turning Life Safety Plan Compliance into Facilities Revenue

Discovery I

Scott Friend
Company: MSU

Abstract: With increasing requirements from organizations such as the NFPA, JCAHO and the ADA, growing security concerns for an organization's population, and major liability potential, your organization simply can NOT afford to ignore the importance of clear and accurate Life Safety Plans. Learn how the MSU Engineering and Architectural Services department is turning this important exercise in compliance and floor plan maintenance into a revenue generating venture. In addition, MSU will be explaining how they can utilize their Document Management and CAFM solutions to fully realize their Life Safety and Equipment tracking needs.

W4B: Full BIM Lifecycle Management: Bidirectionally Linking Data with BIM & CAD for Validation Management and Integration with GIS and FM

Discovery II

Cyril Verley
Title: President
Company: CDV Systems, Inc.

Abstract: This lecture outlines how project data based on Access and SQL databases are linked to a BIM and /or CAD files exposing a building's program, equipment, furniture and lifecycle needs using direct links to FM and GIS applications. It is a standalone database that links the project program & equipment requirements to Autodesk Revit Arch, MEP and AutoCAD files.

Key Learning Objectives:
Bidirectional link project program & equipment requirements to Autodesk Revit Arch, MEP and AutoCAD files.

Maintain BIM project/program and design requirements through all lifecycle deliverable stages, from concept through design and construction, to facilities and operations management.

BIM data export to GIS via ESRI/ArcGIS and bidirectionally linked to an IBM Maximo database.

W5A: Integrated Design and Construction Partnership Leverages BIM in Complex Renovations & New Construction Projects with Extreme Completion Requirements

Discovery I

Andy Burg
Title: Executive, Operations Technology Services
Company: Messer Construction

Abstract: It is often said that combining the benefits of working in a BIM environment with a formalized
Integrated Project Delivery System provides the highest value proposition for an Owner. SHP Leading
Design (authors of the IU BIM Guidelines) and Messer Construction (Contractor for The IU
Cyberinfrastructure Building), have operated an Integrated Design and Construction Company for over
twelve years called 2enCompass. Independently SHP and Messer aggressively push the use of BIM in all
that they do. Together they push the applications of BIM in an IPD environment with extraordinary
results. This presentation will examine two higher education projects where the BIM applications in an
Integrated Project Delivery environment were crucial to the success of the projects. In one case we will
examine the applications of BIM in a complex College Addition / Renovation environment; in another
case we'll examine a project in Theological Seminary environment underpinned by an extraordinary
project completion requirement. Benefits and lessons learned in each will be discussed.

W5B: North Carolina State University Boosts Productivity with AERES all-in-one FM System

Discovery II

Rob Yaeger
Title: Executive Assistant Director, FIS
Company: NC State University

Bishop Bettini
Title: Software Engineer and Entrepreneur
Company: Ideacode

Abstract: "How can we store all our facilities information, provide greater access to that info, and keep our data
updated with all the campus changes -- without breaking the budget?"
The answer for NCSU is AERES – the Architectural, Engineering, and Real Estate System – a
comprehensive, web-based repository that packs all the best features of CAFM, IWMS, GIS, and
EDMS software onto a single platform.

This year, ideacode polled NCSU for the most time-saving features in AERES, which we present:

- building and sharing custom reports for capital project management
- mapping capital projects and work orders
- visualizing utilities in GIS, with photos of install and operation
- combining GIS data from campus, vendor, and government sources into multiple views
- importing work orders from FAMIS
- exporting building and room data to Oracle and Sybase
- controlling access to protect sensitive information It

Thursday Concurrent Sessions
8:30 AM – 2:15 PM

T1B: CAFM at Iowa State with Famis
Discovery II

Lola Van Wyk
Title: Design Services
Company: Iowa State University

Abstract: Emphasis on how Facilities Planning and Management at Iowa State University uses FAMIS to meet customer needs. Discussion also includes information on steps that were taken to streamline reporting to FEMA following the flood of 2010 on campus.

T1C: Building Value and Efficiency Through Data Capture and Organization
Discovery I

Daniel Lemmerbrock
Title: Data Hub and Resource Center Manager
Company: Bowling Green State University

Jim McArthur
Title: Director/University Architect
Company: Bowling Green State University

Abstract: Data capture and organization has been essential in transforming the physical state of a university in challenging times. Bowling Green State University in Ohio is in the midst of one of its most aggressive building campaigns in its history. Seven new buildings are coming online in 2011, and many other renovation, utility, and campus improvement projects are in progress. With limited budget and personnel resources, it has been a challenge keeping up with the workload. A key component that has made this effort possible is the availability and awareness of information for the campus infrastructure. This effort started with the creation of the Data Hub and Resource Center Manager position 6 years ago. The concept was to create a repository of electronic and hard copy information that was organized, and better use technology to provide accessibility. The Data Hub and Resource center has been quickly growing and developing since its creation. It started with serving the Campus Design and Construction department with scanned drawings, pictures, and a Campus Cad Map. It now serves the entire campus with a document management system (OnBase), and custom campus maps created for other departments that have generated revenue. A Google Earth 3D Campus was created that reaches out to a worldwide audience. Currently we are developing GIS mapping, selecting a Computerized Maintenance Management System (CMMS), and exploring future uses of BIM.

T3A: Indiana University BIM Case Study (Cyberinfastructure Building)

Discovery I

Theresa Thompson
Title: Director of Space Planning
Company: Indiana University

Andy Burg
Title: Executive, Operations Technology Services
Company: Messer Construction

Abstract: This presentation will focus on Owner and Contractor perspectives on using BIM on the recently occupied Cyberinfrastructure Building project at the IU Bloomington campus. For both Indiana University and Messer Construction, BIM technology is an enabler of innovation, better project delivery, and ultimately better facilities management and operations for the building.

T3B: Making the Most of Indirect Cost Recovery

Discovery II

Roy Davey
Title: Vice President
Company: OFMS, Inc.

Abstract:
Your university's effort to recover the indirect costs associated with Sponsored Research is substantial and the rewards are great. How can you best contribute to that effort and assisting the University in maximizing this revenue?
This session will explore the Indirect Cost Recovery (ICR) effort, will demonstrate the value of your CAFM system in providing supporting information in useful forms, and will discuss the value of your partnership with other University organizations to maximize this important revenue source.
The INSITE Space Management System, used by an international Consortium of users and developed with a primary focus on University-oriented business needs, will be used to demonstrate the principles described in this session.

The ICR Effort

- What is the concept, and what are the important principles?
- What are the Regulatory complexities?
- How is an institution's ICR proposal accomplished?

The Space Database

- Key ICR-related principles
- Structured data – the key to your regulatory response

Collective Updating

- The critical nature of accurate, timely information
- Supporting your University's audit cycle
- The value of an Online Survey to collect review and maintain the data

ICR Cost Models & Reporting

- Providing source information to ICR tools
- Example: Comprehensive Rate Information System (CRIS)
- Key Reports and their benefits

You're the Winner

- Being a good steward of information
- Being a good partner in the ICR effort
- The effort pays for itself…
- You are the Winner!

T4B: BISDM 3.0 Data Model for Facilities Management using GIS

Eric Hrnicek

Title: PE, GISP

Company: Woolpert, Inc.

Abstract: Owners today are appropriately focused on sustainability. But in many cases the sustainability focus is limited – LEED, Energy consumption, minimizing water use, etc. The true focus of sustainability should be to preserve and extend the useful life of a facility while minimizing costs. Additionally substantial attention should be given towards optimization of the space being managed as well as maximizing the utilization of all useable space, especially during challenging economic times.

It's well studied and documented how GIS is used to efficiently manage a variety of assets ranging from natural resources to human constructed infrastructure. To assist in these ventures, ESRI and their business partners have proposed and supplied numerous industry specific GIS data model templates through internet forums and clearinghouses. Until recently these industries have restricted themselves to two dimensional, plan view representations of spatial data. Often this has been appropriate due to the nature of the assets' geographic extent. Occasionally 3D data was avoided due to a lack of software capabilities or because the 3rd dimension added significant complexity to the process, data and resource requirements.

Today both computer graphics and 3D GIS capabilities have been significantly improved and give rise to new opportunities for infrastructure asset management, specifically in

campus environments where multi-floor assets dominate the landscape. The third rendition of the Building and Interior Space Data Model (BISDM 3.0) for GIS is the first industry GIS template specifically designed to address the needs of three dimensional data.

There is a huge opportunity for campus facility managers to leverage the analytical power of GIS to maximize the sustainable life of their facilities and to optimize space utilization. This paper will guide us through the BISDM 3.0 data model and discuss how the various aspects of the model impact a facility manager's ability to:

Visualize maintenance management activities across the campus
Leverage 3D data with proximity analysis and adjacency type inquiries
Associate equipment with locations
Relate GIS asset records with external systems (FM, CMMS)

T4C: Scan to BIM

Saturn/Venus Room

Laura Neri Baebler, Matt
Title: Owner & Principal Architect
Company: Laura Neri Baebler Architect & Associates

Matt Halveland
Company: Laura Neri Baebler Architect & Associates

Brett Kostial
Company: Laura Neri Baebler Architect & Associates

Abstract: How to achieve accurate existing building documents for renovations, additions and adaptive re-use of existing buildings. What format is useful moving into the future?
We know the need for accurate as built documents of buildings including MEP and structure. How do you get them? One solution: Laser scanning in the field (a billion points of accurate reference) and accurate input to AutoDesk Revit for Building Information Modeling (BIM). A case Study: Brentwood City Hall, St. Louis, Missouri.

Friday Concurrent Sessions
8:30 AM – 12:00 PM

F1B: Smithsonian Facilities Information Management
Discovery I

Sylvia Kendra
Title: Office of Engineering Design and Construction
Company: Smithsonian Institution

Barbara Heller, FAIA
Title: CEO
Company: Design + Construction Strategie

Abstract: This presentation will focus on technology efforts made in the areas of Geographic Information Systems, Building Information Modeling, and Document Management in the Smithsonian Institution's Office of Facilities Engineering and Operations (OFEO). We will discuss our current systems and business processes and describe a vision of where we want to be in the next 5 years. Additionally, we will discuss technology and culture in the construction industry, emerging trends, and the challenge of Return on Investment (ROI) analysis for better data management.

About OFEO: OFEO is an organization of 1,800 dedicated employees whose skills and labor enable and sustain facility services for the Smithsonian Institution's array of museums, research laboratories, collections storage and administrative offices by providing a myriad of facility maintenance, revitalization, custodial care, safety and security services.

OFEO's operations constitute a complex environment of interdependent business processes, resources, and technology. OFEO's technology mission has evolved over many years, maturing to a great extent in response to the ever-increasing work demand associated with the SI's aging building inventory. Keeping pace with the change has necessitated an even greater need to orchestrate OFEO-wide resources, business processes and technology to optimize the organization's long-term planning for capital and maintenance programs.

F2A: National CAD Standard V5 and National BIM Standard V2 are the Foundation for Your Success
Discovery II

Deke Smith
Title: Program Manager, Building Seismic Safety Council
Company: Executive Director, buildingSMART alliance

Abstract: The facilities business is undergoing significant change. Design and construction is being done in 3D using BIM and is capable of delivering a

complete model information rich model of the facility for analysis and simulation prior to, during and after delivery. Ensuring that model is usable long into the future and that is compatible with other facility models is only accomplished through standards. The National CAD Standard© V5 (released in May 2011) and the National BIM Standard-United States™ V2 (to be released December 2011) are at the heart of ensuring your university is successful with getting the most out of both your 2D and 3D deliverables. This session will update you on the latest releases of both standards. This session should be a "must see" so that you are making your plans to take advantage of what is available or soon to be available.

F2B: In the Blink of an Eye: The Fast Track Deployment of an IWMS at Murray State University

Discovery II

Jason Youngblood

Title: Engineering Tech/CAD Coordinator

Company: Murray State University

Abstract: This case study will cover the implementation of an IWMS from requirements definition, procurement and selection through Go-Live to current operational state. Murray State University went through a rapid deployment, from written RFP to Phase I Go-Live in 90 days and Phase II Go-Live in an additional 120 days. But time isn't everything; they also met their defined strategic objectives and business requirements working collaboratively with many academic and administrative business units. This session will highlight the partnership with Draper & Associates and the project management approach and tools leveraged to assist MSU in achieving their project implementation goals. The session will also address some valuable lessons learned.

LEARNING OUTCOMES

1. Provide Attendees with best practices in software selection, project management and implementation approach.

2. Provide Attendees with a clear understanding, based upon an MSU's first-hand experience, of the "do's and don'ts" of an IWMS procurement/implementation.

3. Provide Attendees with a Reality Check: What it really takes to successfully implement a new IWMS System.

F3B: A CAFM Archibus Implementation Case Study at Princeton University

Discovery II

Mark Washington

Title: Manager of Facilities Information Technology

Company: Princeton University

Abstract: Princeton University is using Archibus to share information with the University community about site and building based information. "TigerSpace" is the Web Central portal used by Princeton to disseminate site information, building floor plans, utility data as well as fire & safety information. This presentation will focus on the deployment of the Princeton Emergency Response System using technologies from Archibus and ESRI.