

avatech solutions  
building design  
facilities management  
infrastructure design  
product lifecycle management  
mechanical design

## FIRST NATIONAL BUILDINGS SIGNIFICANTLY IMPROVES FACILITIES MANAGEMENT USING COLOR-CODED, GRAPHICAL INTERFACE.

New way of viewing facilities and assets information gives employees the information they need at a glance.

### THE ORGANIZATION

First National of Nebraska is a financial services holding company with nearly \$16 billion in managed assets and over 7,000 employees. One of the fifty largest bank holding companies in the United States, the bank serves over 6.6 million customers in all 50 states. There are more than 90 banking locations in Nebraska, Iowa, Illinois, Colorado, Kansas, South Dakota, and Texas. Headquartered in the heart of downtown Omaha, the bank was started over 150 years ago. First National Buildings (FNBI) is a subsidiary of First National of Nebraska, and holds a real estate portfolio of approximately 3.0M square feet of facilities consisting of owned, leased and commercial properties.

### THE CHALLENGE

“Our initial challenge was keeping floor plate drawings updated in an efficient and cost-effective manner so that staff across our organization, including project managers and construction personnel who needed them to perform their jobs, could share them,” said Curtis Crouch, First National Buildings’ Facility Systems Lead. “We were spending a great amount of manpower converting floor plate drawings to .dwf files and then publishing them to our Intranet so that project managers and others could view information critical to their job. By the time we finally got them published, using our slow manual process, the drawings were often out of date.”

The company had already implemented ARCHIBUS/FM facilities management system for property, project and lease management, space planning and charge-backs, renovations, and new building projects. Integrated with Autodesk® Architectural Desktop, the system was working well, but it was difficult to visually share drawing, space, and occupancy information both within First National Buildings and throughout the greater First National organization.

### THE SOLUTION

On the recommendation of Reeves Davis, Avatech’s Facilities Management Solutions Manager, Crouch and colleagues looked at adopting the Online Spatial Information System (OSIS), technology from Idisis.

“Reeves demonstrated what OSIS could do and how easy it was to share information without having to translate it using manual redrawing techniques,” said Crouch.



“We plan and perform hundreds of move operations a year, ranging from an individual move to entire departments which can cause hundreds of sequential moves.”

—Curtis Crouch  
Facility Systems Lead  
First National Building  
[www.www.fnni.com](http://www.www.fnni.com)



AVATECH  
SOLUTIONS®

OSIS leverages Autodesk MapGuide®, which translates drawing features in Architectural Desktop and publishes them in the OSIS browser interface for anytime anywhere access to the most recent floor plate and other building information.

“We took several weeks up front working with Avatech to plan what kind of information we wanted to share. From there it only took a couple of days to get the system up and running and then another few weeks to build all the layers we wanted in Autodesk MapGuide® Author,” explained Todd Hutton, Director of Operations at Idisis. “Overall we are seeing a payback on the system in about six months,” said Crouch.

“We implemented many custom ‘portlets’ for FNBI.” said Hutton. “Each portlet in OSIS allows a manager or worker to view the information important to them through the browser interface. Portlets exist for project management, lease management, and building maintenance. As staff members use the system, new portlets are identified by FNBI. Avatech and Idisis help to build them as necessary.”

In addition, FNBI had many existing Crystal Reports which gave them information from the ARCHIBUS/FM system, but the lack of visual representation made interpreting the data more challenging. “We took those reports and integrated them into OSIS to leverage the work FNBI had already put into them.”

## SIGNIFICANT REWARDS

### Saving on Redrawing Costs

Any changes made to underlying drawings in Architectural Desktop are automatically published to OSIS through Autodesk MapGuide. This means there is no longer a need to convert floor plate drawings to .dwf files and they are no longer outdated. “This saves us a least a couple of weeks a year in manual conversion and many headaches in the field because accurate as-built drawings are accessible to anyone who needs to view them,” said Crouch.

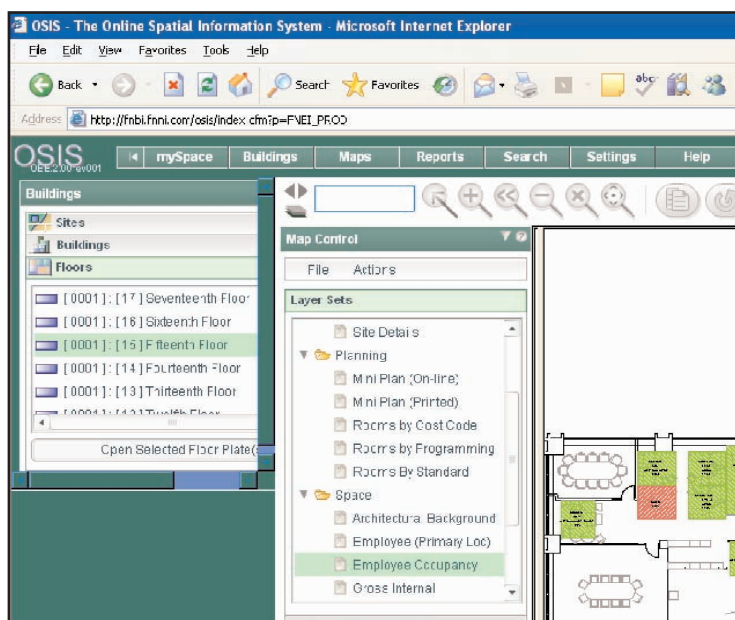
## More Effective Building Maintenance

FNBI’s twenty-five property managers and building engineers can stay on top of their on-demand and preventative

maintenance work requests using the overdue work request maintenance portlet. Each engineer can access the portlet for their buildings and view work requests color-coded red for overdue, green for ongoing, and yellow for in danger of becoming overdue.

## Intelligent Building for the Future

The projects portlets allows project managers to view operational dates, budgets, and other critical operations relevant to capital projects. From this



view, managers can drill down to specific project details as well link to web entry points to change and manipulate schedules, budgets, and furniture availability.

## Keeping Assets and People on the Move

FNBI is keeping track of people, assets, and space usage allocations for more efficient occupancy management. “We plan and perform hundreds of move operations a year, ranging from an individual move to entire departments which can cause hundreds of sequential moves” said Crouch.

## Managing Leases Better

With well over two million square feet under management, FNBI’s real estate group faced multiple day-to-day and long-term planning challenges. The leasing portlet allows the team to identify new leasing opportunities and upcoming lease expirations to proactively begin the renegotiation process.

## THE FUTURE

### Developing the Ability to Plan

Building a new branch represents a significant investment. For new branches, FNBI is looking to integrate spatial information from TeleAtlas for local counties using their new MapGuide and OSIS solution to account for demographics and growth projections from municipalities during the

planning stage. When this effort is complete, First National Buildings will be able to make informed decisions using a dynamic, real-time mapping solution when selecting sites for new branches and ATM locations.

FNBI worked with Avatech to develop a pilot project implementing new security zones. "In banking, security is of paramount importance," said Crouch. "For us to be able to track who in the organization can come and go from one secure zone to another is critical to our security program and OSIS makes this possible." Since FNBI wires and manages networks and communications in their buildings, they are performing a pilot project for computing asset, telecommunications, and cable management.

FNBI personnel can access the information they need, switching views and overlaying information from one system to another, including fire zones, electrical, plumbing, furniture layers, employees, computing, and telecommunications equipment. For example, a user can overlay the HVAC system on a floor plate with usage information embedded. When someone requests to move a wall to make a conference room, the mechanical engineer responsible for HVAC can see where the move will affect the system and plan ahead for any necessary changes.

"The system is unbelievably flexible; FNBI can make our own small customizations or call Avatech and Idisis to make larger or more complex adjustments as necessary. Essentially, if the data is in the system, OSIS can publish it in unique ways that help us to streamline processes and facilitate planning," said Crouch. "The only limitation is our own ability to think in new ways about how we can use the new views to improve the way we do business."



## ABOUT AVATECH

Avatech Solutions is a leading engineering systems integrator, with unique solutions that enable companies to more effectively design, develop, and manage projects, products, and facilities.

We get results with the unique capabilities of our team of industry-experienced professionals—application engineers, consultants and strategists, trainers, software developers, and project managers.

With offices nationwide, we specialize in process optimization, software implementation and integration, standards development and deployment, education, and technical support.

Our expertise is real. And so are the results that we bring to our clients. Avatech can help you succeed, with solutions that align your technology and processes to your organization's goals—for results the way you define them.

To learn more call 1.800.706.1000 // visit [www.avatech.com](http://www.avatech.com)

All trademarks, brands, and names are the property of their respective owners.



**AVATECH**  
SOLUTIONS®

Altogether Smarter Design.

Corporate Office  
10715 Red Run Blvd, Ste 101  
Owings Mills, MD 21117  
Phone: 800-706-1000  
Fax: 410-581-8088  
Web: [avatech.com](http://avatech.com)

**Autodesk**  
Authorized Training Center