USACE, the Omaha District, and the new TriService Workspace

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BIM, a change in the way we design
TriService Workspace

National CAD Standard
A/E/C CAD Standard
National BIM Standard
SDSFIE
UNIFORMAT
OmniClass
MasterFormat
ProjectWise Collaboration Model
Clash Detection and Reporting
Energy Modeling
Bentley integration
Autodesk integration
ESRI integration
Cost Estimation
COBie
It’s been a long time coming

- TriService Workspace:
  - Common working environment
  - Consistent working environment
  - Expansion of software Support

- USACE has signed ELA’s with Bentley, Autodesk, and esri

- We want to integrate all of their related software with the TriService Workspace
Supported Workflows

- CAD (Computer Aided Design)
  - Consistent with the way things have been for the last 20 years
- BIM (Building Information Modeling)
  - Adding to the things we have learned over the last 5 years
- CWIM (Civil Works Information Modeling)
  - Adding the idea that Civil/Site can be BIM too.
Modular Framework

- Leverage modules to provide relevant content/configurations for the specific facility type.
- Establish a ‘local sandbox’ for reuse of data across multiple projects.
- Make it easier to plug-in updates and functionality.
Unified Project Structure

- Single project directory structure to support CAD/BIM/CWIM workflows
- Provide clear project directory structure for project deliverables
  - Document project delivery expectations to avoid differing interpretations of requirements.
Streamline

- Define desired data properties and data format for model elements
- Document processes to identify, plan, and execute project goals.
- Utilize federated configuration to re-use data across multiple projects
Workspace Integration

- Utilize workspace modules necessary for design task – eliminate the extras!
**Workspace Integration**

- **Project Execution Plan (PxP)**
  - Clear communication of goals (sustainability, constructability, conflict resolution, etc.)

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Workspace Integration

- Teamwork never hurts!
  - All about providing (and recognizing) access
Insights

- BIM – Question’s not IF, but HOW it’s valuable?
Insights

- Half the battle is identifying there's an opportunity.
Challenges

- One workspace doesn’t mean one design solution:
  - Must allow for flexibility or the intent will be undermined

- How to transfer resources between projects:
  - with quality
  - over time

- System has to benefit the designer before it will benefit the customer.
Future Direction