Information Exchange Pilot Project at Army Installations

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Objectives

1. Develop understanding about gaps within facility information delivery process.

2. Understand USACE current efforts to improve collection and exchange of facility data.

3. Learn about pilot project conducted on Army Installations.

4. Learn about ERDC projects and efforts regarding data collection and exchange.
The problem

• What?
  – Unnecessary data re-entry.
  – Delay of preparation for routine maintenance activities.
  – Increase operation and maintenance time due to lack of information.

• Where?
  – Federal agencies

• When?
  – Throughout the construction life-cycle

• Why?
  – Lack of standard process for collecting and exchanging project information.
  – Lack of coordination.

• Who?
  – Construction stakeholders
  – Installations’ facility managers
USACE initiative

Facility Data Exchange (FDE) Vision

- Provide policy, guidance, and process for collection and delivery of facility data
- Establish stakeholder-vetted set of assets and attributes required in delivery of projects
- Provide necessary tools to enable data transfer to multiple Army data systems
USACE Facility Data Workbook (FDW) - Version 0.5.51 (NOV-17-2015)

### REQUIRED ASSETS

#### Division 14 - Conveying Equipment
- Elevators

#### Division 21 - Fire Suppression
- Fire Pumps

#### Division 22 - Plumbing
- Domestic Water Pumps
- Backwater Valves
- Sanitary Sewerage Pumps
- Facility Packaged Sewage Pumping Stations
- Sump Pumps
- General Service Packaged Air Compressors and Receivers
- Electric Domestic Water Heaters
- Fuel-fired Domestic Water Heaters
- Domestic Water Heat Exchangers

#### Division 23 - Heating, Ventilating, and Air-Conditioning (HVAC)
- Facility Fuel Pumps
- Fire Dampers
- Smoke-Control Dampers
- HVAC Fans
- Constant-Air-Volume Units
- Variable-Air-Volume Units
- Ventilation Hoods
- Heating Boilers
- Boiler Feedwater Pumps
- Furnaces
- Fuel-fired Heaters
- Refrigerants Condensers
- Refrigerant Compressors
- Refrigerant Heat Exchangers
- Packaged Water Chillers
- Cooling Towers
- Indoor Central-Station Air-Handling Units
- Packaged Outdoor HVAC Equipment
- Custom-Packaged Outdoor HVAC Equipment
- Evaporative Air-Cooling Equipment
- Decentralized Unitary HVAC Equipment
- Convection Heating and Cooling Units
- Radiant Heating Units

#### Division 26 - Electrical
- Medium-Voltage Transformers
- Medium-Voltage Switchgear
- Medium-Voltage Metering
- Low-Voltage Transformers
- Low-Voltage Switchgear
- Switchboards and Panelboards
- Static Uninterruptible Power Supply

#### Division 28 - Electronic Safety and Security
- Fire Detection and Alarm Annunciation Panels and Fire Stations

#### Division 33 - Utilities
- Water Utility Pumping Stations
- Water Supply Wells
- Packaged Utility Lift Stations
- Packaged Utility Wastewater Pumping Stations
- Fuel-Oil Pumps
- Gasoline Pumps
- Diesel Fuel Pumps
- Utility Transformers
- High-Voltage Switchgear and Protection Devices
- Medium-Voltage Switchgear and Protection Devices
Facility Data Exchange Pilot

- **Objective:** Test FDE products
- **Focus:** Army General Fund Enterprise Business System (GFEBS)
- **Three Installations**
  - Ft. Benning
  - Ft. Leonard Wood
  - West Point
- **Recently constructed projects**
- **Development of FDW with available information**
Facility Data Exchange Pilot

- Site Visits
  - Verify and collect additional information
  - Meet with installation’s stakeholders
  - Conduct interviews
Facility Data Exchange Pilot

- Test population of GFEBS with collected data.
- Findings and recommendations
  - Comparison of information flow on installations
  - Sample FDW from real projects
Facility Data Exchange Pilot

Planning → Design → Construction → Operations and Maintenance

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Equipment Data for Transfer of Property

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22 00 00
Facility Data Exchange Pilot

- Findings and recommendations
  - Input to FDE products
  - Technical Report
• Unified Facility Guide Specification (UFGS)
  https://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs/ufgs-01-78-24-00-10

• Facility Data Workbook

• Technical Report
  https://erdc-library.erdc.dren.mil/xmlui/handle/11681/29355E

• Engineering and Construction Bulletin (ECB)
Current and Future Efforts

• Study, test and document population of SMS BUILDER from a Air Force building model.
  – Air Force Civil Engineer Center
  – Status: In process

• Test and demonstrate FDE products targeting population of BUILDER.
  – Installation Technology Transition Program (ITTP)
  – Status: Approved for funding
Information Exchange Pilot Project on Army Installations

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