



BUILDING  
INNOVATION  
2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

# NBIMS-US V3 information exchange ballots

a presentation for bSa information exchange day

by bill.east@us.army.mil



BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO



07-Jan-14

2



BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO



07-Jan-14

3



BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES

CONFERENCE & EXPO

# what's required?

- standards – IDM/MVD
- specs & commentaries
- software implementations
- testing procedures & execution
- transformation rules & tools
- business case analysis
- training and support



BUILDING  
INNOVATION  
2014  
National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

# what's required?

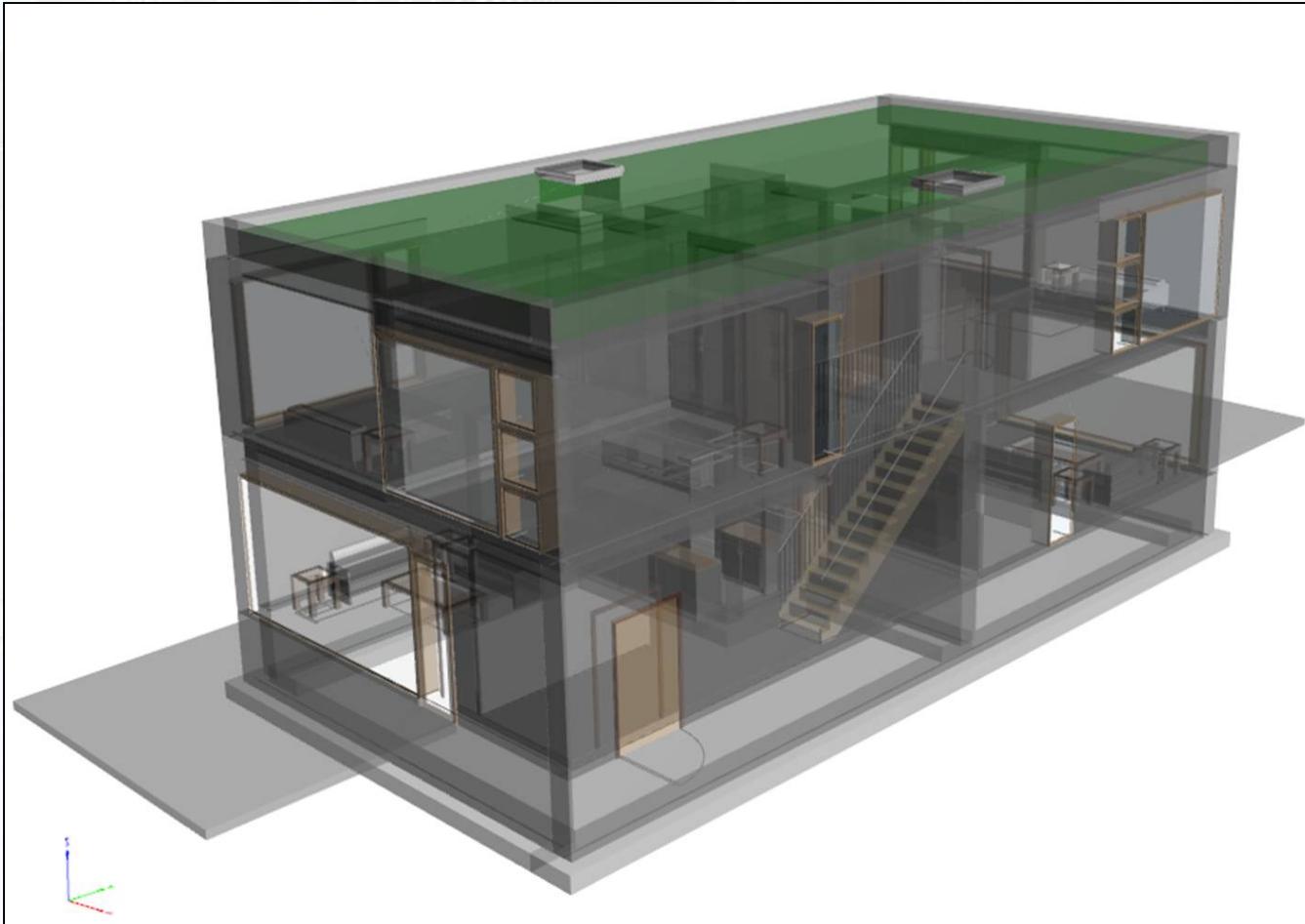
- standards – IDM/MVD
- specs & commentaries
- software implementations
- testing procedures & execution
- transformation rules & tools
- business case analysis
- training and support

an information exchange project



BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO



IFC 2x3 Coordination View – not an “ie”

07-Jan-14

6

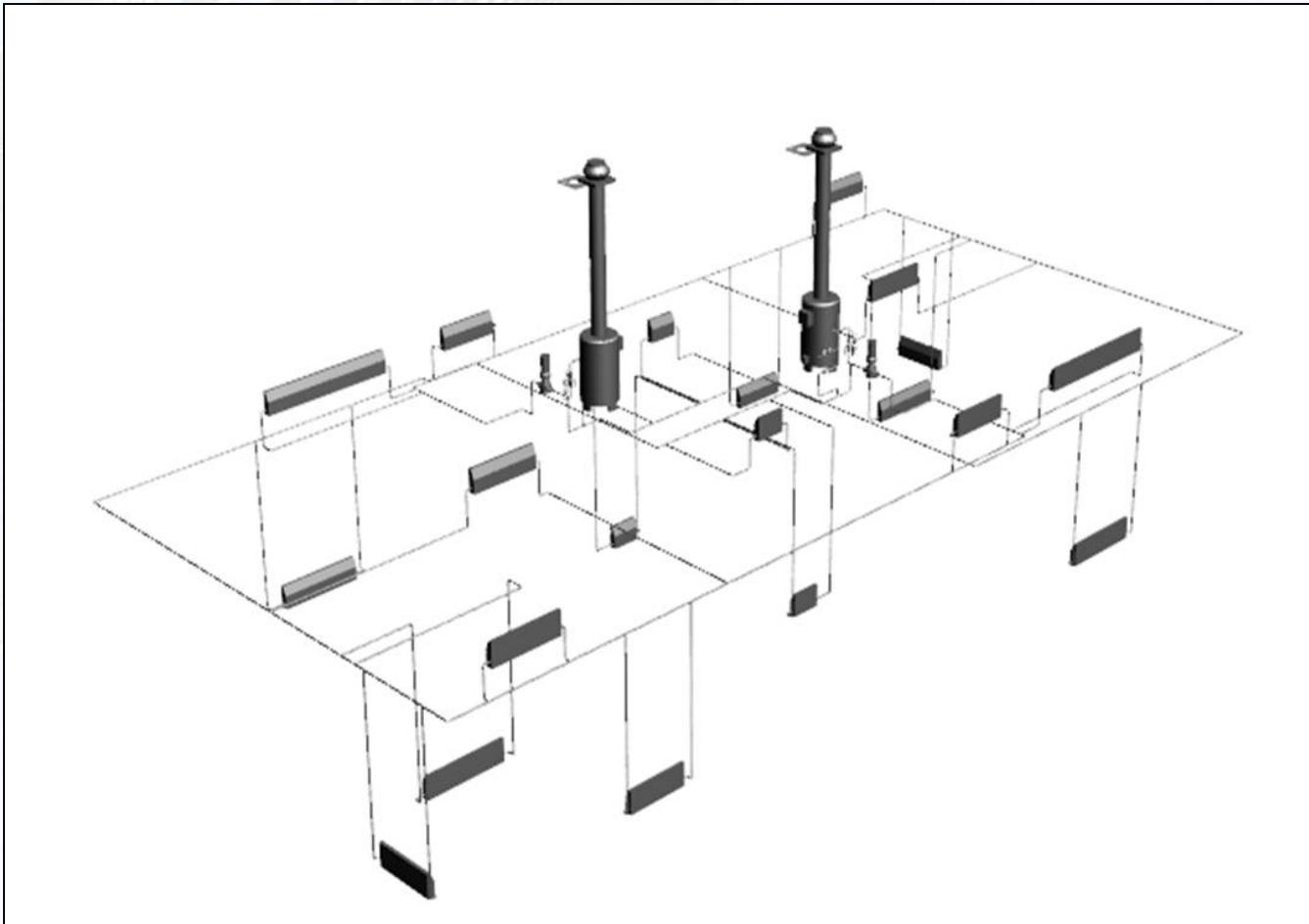




BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES

CONFERENCE & EXPO



07-Jan-14

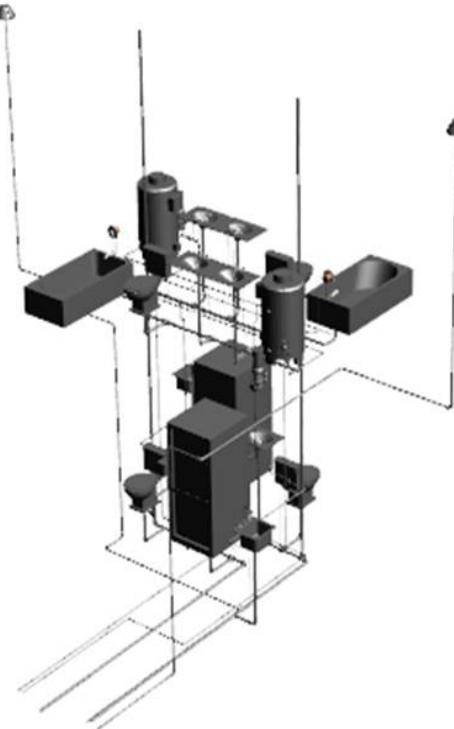
HVACie - [http://www.nibs.org/?page=bsa\\_hvacie](http://www.nibs.org/?page=bsa_hvacie)



BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES

CONFERENCE & EXPO



07-Jan-14

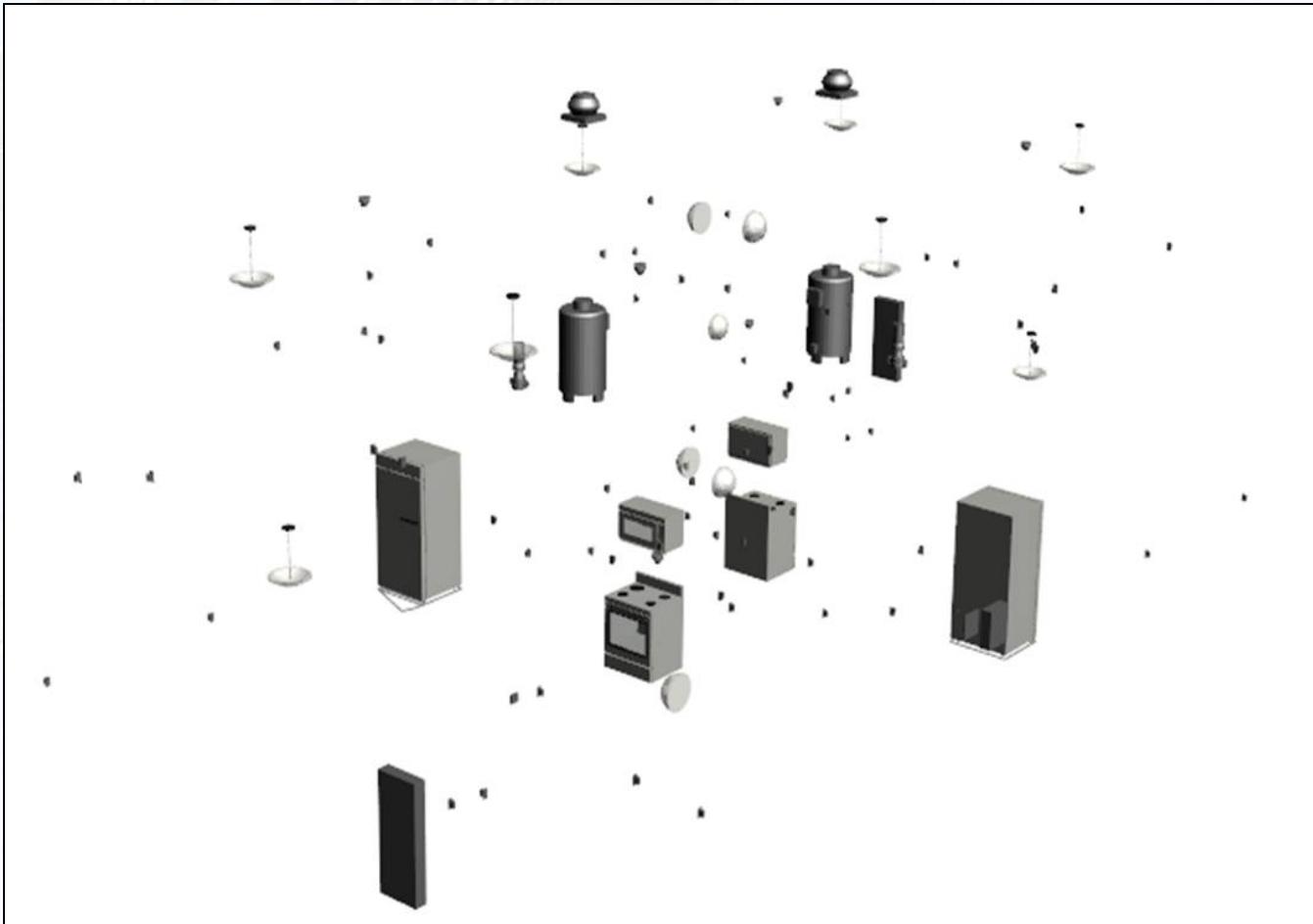
WSIE - [http://www.nibs.org/?page=bsa\\_wsie](http://www.nibs.org/?page=bsa_wsie)



BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES

CONFERENCE & EXPO



07-Jan-14

**Sparkie** - [http://www.nibs.org/?page=bsa\\_sparkie](http://www.nibs.org/?page=bsa_sparkie)

10



BUILDING  
INNOVATION  
2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

# bSa NBIMS-US V3 ie ballots

Content	HVAC	Electrical	Water	Sensor
Design Requirements	<b>BPIe</b>	<b>BPIe</b>	<b>BPIe</b>	-
Components			<b>COBie</b>	
Assemblies	<b>HVACie</b>	<b>Sparkie</b>	<b>WSie</b>	
Connections				
Performance				



BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

# reference standards

- OmniClass
  - 11 - Construction Entities by Function
  - 12 - Construction Entities by Form
  - 22 - Work Results
  - 31 - Phases
  - 33 - Disciplines
  - 34 - Organizational Roles
  - 41 - Materials
  - 49 - Properties
- BIM Collaboration Format
- Level of Development Specification
- National CADD Standard



BUILDING  
INNOVATION  
2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

# bSa ie projects

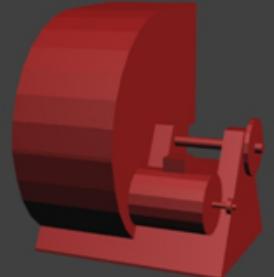
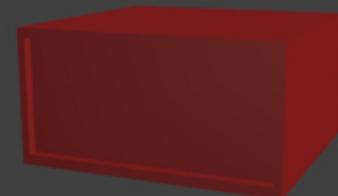
Content	HVAC	Electrical	Water	Sensor
Design Requirements	<b>BPIe</b>	<b>BPIe</b>	<b>BPIe</b>	-
Components			<b>COBie &amp; SPie</b>	
Assemblies	<b>HVACie</b>	<b>Sparkie</b>	<b>WSie</b>	<b>BAMie</b>
Connections				
Performance		<b>BAMie</b>		



BUILDING  
INNOVATION  
2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

## HVAC Products

Object Type	Default Geometry	Property Template
Chiller_AIRCOOLED		<a href="#">Product Guide</a>
Fan_CENTRIFUGAL_AIRFOIL		<a href="#">Product Guide</a>
Pump_CIRCULATOR		<a href="#">Product Guide</a>
UnitaryEquipment_AIRHANDLER		<a href="#">Product Guide</a>

SPie- [http://www.nibs.org/?page=bsa\\_spie](http://www.nibs.org/?page=bsa_spie)

07-Jan-14

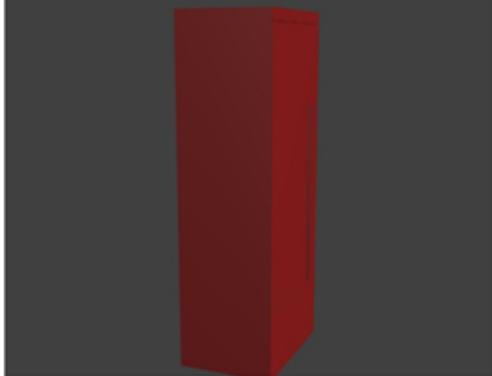
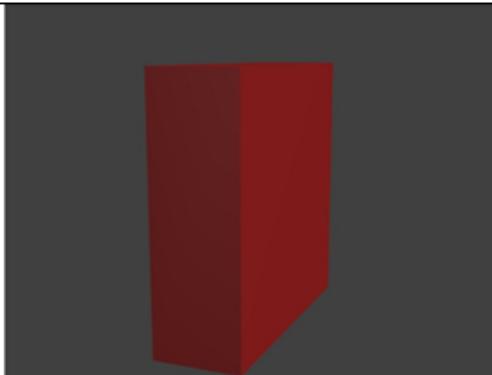
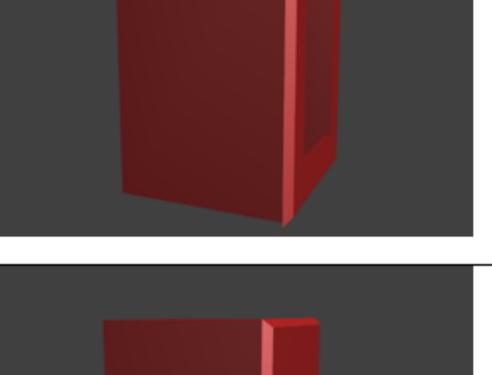
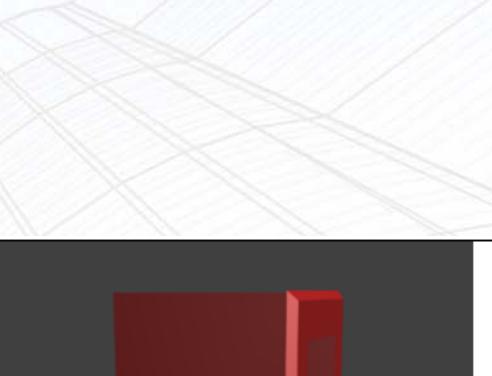


BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES

CONFERENCE & EXPO

## Electrical Products

Object Type	Default Geometry	Property Template
DISTRIBUTIONBOARD RD_DistributionPanel		<a href="#">Product Guide</a>
DIRECTIONALSOURCE LightFixture		<a href="#">Product Guide</a>
SWITCHINGDEVICE IMMERSWITCH		<a href="#">Product Guide</a>
TELEPHONEOUTLET T_Outlet		<a href="#">Product Guide</a>

SPie- [http://www.nibs.org/?page=bsa\\_spie](http://www.nibs.org/?page=bsa_spie)

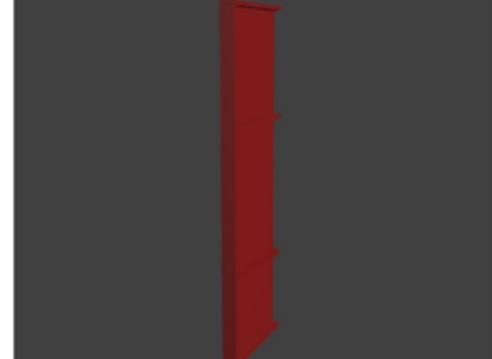
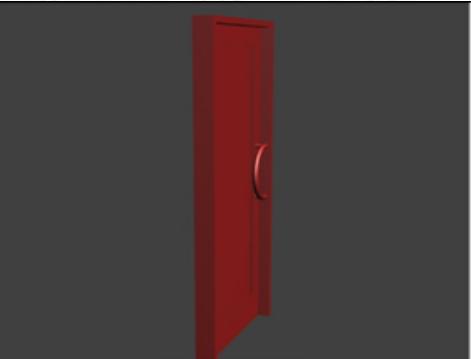
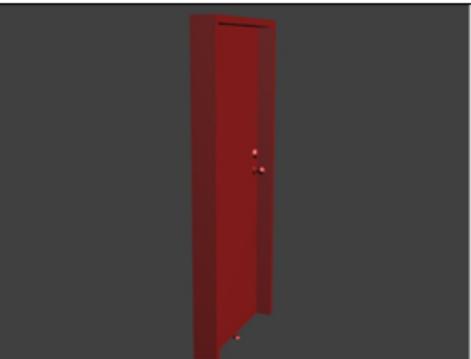
07-Jan-14



BUILDING  
INNOVATION 2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

## Doors and Windows

Object Type	Default Geometry	Property Template
USERDEFINED_AluminumFramedEntrancesandStorefronts		<a href="#">Product Guide</a>
USERDEFINED_GlazedAluminumCurtainWalls		<a href="#">Product Guide</a>
		<a href="#">Product Guide</a>
		<a href="#">Product Guide</a>

SPie- [http://www.nibs.org/?page=bsa\\_spie](http://www.nibs.org/?page=bsa_spie)

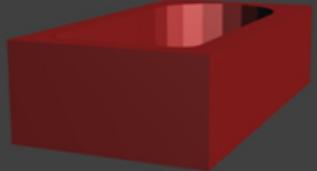
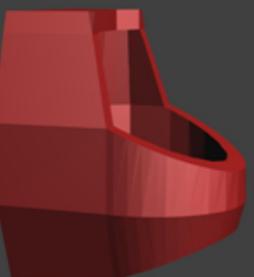
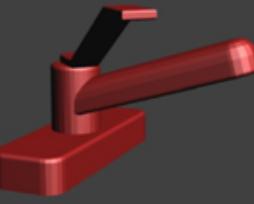
07-Jan-14



BUILDING  
INNOVATION  
2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

## Plumbing Products

Object Type	Default Geometry	Property Template
PipeSegment_RIGIDSEGMENT		<a href="#">Product Guide</a>
BATH_PlumbingFixtures		<a href="#">Product Guide</a>
URINAL_PlumbingFixtures		<a href="#">Product Guide</a>
Valve_FAUCET		<a href="#">Product Guide</a>

SPie- [http://www.nibs.org/?page=bsa\\_spie](http://www.nibs.org/?page=bsa_spie)



# additional “ie” projects

- Quantity Take-off information exchange (QTie)
- WALL information exchange (WALLie)
- BIM Service interface exchange (BIMSie)
- Life-Cycle information exchange (LCie) *for assets*



# NBIMS-US V3 - a major innovation

- **systematic change management**  
documentation of “ie” project requirements
- **standard baseline for testing**  
duplex, office, clinic, barracks
- **open testing procedures**  
developed once, free and repeatable model, bimServer.org
- **business-case methodology**  
predict both direct and indirect multi-party, life-cycle benefit



BUILDING  
INNOVATION  
2014

National Institute of  
BUILDING SCIENCES  
CONFERENCE & EXPO

# NBIMS-US V3 information exchange ballots

a presentation for bSa information exchange day

by bill.east@us.army.mil