Priority Action Plans 4, 3, and 9
Webinar
2010-04-07  4:00pm EST
David Holmberg
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Agenda

• IP Statement and Administrative Issues
• Priority Action Plan 4—Common Schedule
  — Status Reports
  — Discussion
• Priority Action Plan 3—Price and Product Definition
  — Status Reports
  — Discussion
• Priority Action Plan 9—DR and DER Signal Semantics
  — Status Reports
  — Discussion
• General Discussion
  — Meeting Schedule
• Adjourn
IP statement

- Don’t share anything on the call that you don’t want to be public.
- Don’t pass any proprietary documents or put any on the TWiki with implied public disclosure.
- If you do, it shall be deemed to have been disclosed on a non-confidential basis, without any restrictions on use by anyone, except that no valid copyright or patent right shall be deemed to have been waived by such disclosure.

Mailing Lists

- Sign up at SGIP site
  - Self-configuration and signup
  - Web interface
- SGIP Main Page
  - [http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/SGIP](http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/SGIP)
- PAP Main Page
Conceptual Model

- Schedule, Price, DR cross most domains

PAP 4—Common Schedule

- [http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP04Schedules](http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP04Schedules)

- Reports
  - NAESB
  - CalConnect
  - OASIS

- Issues, Schedule, and Discussion
• Report on NAESB PAP 04 Activities
  – Requirements Specification for Common Scheduling Mechanism for Energy Transactions – for NIST PAP04
    • Comments due April 9, 2010
    • http://www.naesb.org/pdf4/weq_2010_ap6b_retail_2010_ap9b_rec.doc
  – Task Force will review comments – April 15, 2010
• NAESB Phase 2 Efforts
  – Ensure that current recommendations are consistent
    • Actors/Definitions
    • Level of Detail
  – Harmonize with other efforts contributing to PAP 04

• Contact Information
  – Mailing list signup or questions: jbooe@naesb.org
  – Smart Grid Standards Task Force Website:
    http://www.naesb.org/smart_grid_standards_strategies_development.asp
• Report on CalConnect activities
  – Report by Dave Thewlis, CalConnect

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**xCaL: The XML format for iCalendar**

• **History**
  - Version 1.0 published June 2009 as “iCalendar XML Representation”
  - Version 1.1 published November 2009
    - Minor edits and updates
    - Added specification for XML property in iCalendar
    - Accommodates updates requested by Toby Considine to support planned OASIS WS-Calendar work
  - Version 1.2 published March 2010
  - Version 1.3 will follow this month; support for external REFERENCE property

• Published to IETF as Internet Draft
• Requires iCalendar RFC 5545 for some capabilities
**CalConnect Specifications (2)**

- Abstract Calendaring API and WS implementation
  - Work began in TC XML in November 2009
  - Standardized API for Calendaring & Scheduling functions on any platform supporting calendaring
  - First instantiation will be web services (probably both REST and SOAP)
  - Serve as input to OASIS WS-Calendar technical committee along with xCal
  - First draft publication targeted for May 2010
  - First in-progress draft publicly available next week for Review & Comment
    - Will be available to OASIS WS Calendar technical committee

**CalConnect and OASIS**

- Reciprocal Membership established
  - Permit flexibility in how we work together
    - Joint efforts
    - Exchange of specifications
    - Protect work on both sides from inadvertent forking; implicit harmonization
    - Focus on work, not liaison mechanisms
  - Two OASIS designees on CalConnect XML technical committee
    - Toby Considine
    - Robin Cover
  - Three CalConnect designees on OASIS WS Calendar
    - Bernard Desruisseaux, Oracle
    - Paul Tischhauser, Microsoft (TC XML Chair)
    - Dave Thewlis, CalConnect
PAP04—OASIS

• Report by Toby Considine, TC9
• Create, Share, Invoke, Adjust, Track coordinated response between domains and organizations
• Creation, scheduling, and invocation of XML contracts

Download Webinar on this work (direct link)

Goals of WS-Calendar

• Challenge of smart energy is to align Time Space and [use of] Energy
• Smart energy aligns the use, generation, storage, and market operations of energy
• Unambiguous and mutually understood communication of schedule and interval is critical to this alignment.
• Compatible with WS functions, including WS-Security, WS-Reliability, WS-Transaction...
OASIS WS-Calendar TC

- Web Services Calendar TC
  - All committee work visible from the link
    - email, documents, minutes, sign up for membership
  - Comment mechanism for public comment
  - Aiming for first public review in May 2010
- To join or for more information contact
  - Toby Considine [toby.considine@gmail.com](mailto:toby.considine@gmail.com)
  - William Cox [wtcox@CoxSoftwareArchitects.com](mailto:wtcox@CoxSoftwareArchitects.com)

PAP04—Issues and Discussion

- Display Issues/Concerns section of the quad chart at
  - [http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP04Schedules](http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP04Schedules)
- Discussion on PAP04
PAP 3—Price and Product Definition

- [http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP03PriceProduct](http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP03PriceProduct)
- Reports
  - NAESB
  - ZigBee
  - OASIS
- Issues, Schedule, and Discussion

NAESB PAP 03 Update

- Report on NAESB PAP 03 Activities
  - Requirements Specification for Common Electricity Product and Pricing Definition – for NIST PAP 03
    - Comments due April 9, 2010
    - Task Force will review comments – April 15, 2010
- NAESB Phase 2 Efforts
  - Ensure that current recommendations are consistent
    - Actors/Definitions
    - Level of Detail
  - Harmonize with other efforts contributing to PAP 03
• Contact Information
  – Mailing list signup or questions: jbooe@naesb.org
  – Smart Grid Standards Task Force Website: http://www.naesb.org/smart_grid_standards_strategies_development.asp

PAP03—ZigBee

• Report on ZigBee Activities
  – http://www.zigbee.org/smartenergy/
  – Report by Robby Simpson, General Electric

• Also applies to PAP09
ZigBee+HomePlug Smart Energy Profile Update: Priority Action Plans 03, 04, and 09

Robby Simpson, PhD
Smart Energy WG Chair
System Architect – Meters, GE Energy
April 7, 2010
Robby.Simpson@GE.com

DRAFT SE 2.0 TRD

• DRAFT Technical Requirements Document publicly available
• Have already received ~1000 comments from members – document is certainly subject to change
• From ZigBee website:

  “The current in-process draft of the ZigBee Smart Energy(TM) 2.0 public application profile Technical Requirements Document, developed in collaboration with the HomePlug Powerline Alliance, is now available for public review. ZigBee Smart Energy version 2.0 is being developed by a global stakeholder community using widely accepted open consensus practices. Given the critical importance of ZigBee Smart Energy to various industry and consumer stakeholders who are working to solidify a HAN strategy, the Alliance is taking this unprecedented step of publicly sharing an in-process document to assist the broader Smart Grid community achieve greater understanding and collaboration in our process. Several public comment periods will be announced by the Alliance.”

Public Comments

• Two methods:
  – Online
  – Public forum
    • May 4, 2010, 7:00 – 9:00pm EDT at the Ritz Carlton in McLean, VA (co-located with OpenSG meetings)

• For more information, please visit:
  http://www.ZigBee.org/SmartEnergy

SE 2.0 Specifications

• IEEE 802.15.4 and ZigBee IP Stack specifications, test specifications, and PICS becoming mature (dependencies on external standards)
• ZigBee IP stack test events ongoing
• SE 2.0 Application Specification designed to be link layer agnostic (ZigBee IP stack is designed for IEEE 802.15.4)
• SE 2.0 Application Specification development proceeding rapidly with a first draft expected in ~1 month
• Expect to begin testing of SE 2.0 Application Specification shortly after first draft to help validate design
Conclusion

Thanks!

For more information, please visit:

http://www.zigbee.org
http://www.homeplug.org

PAP03—OASIS

• Report by William Cox, Cox Software Architects
• OASIS Energy Market Information Exchange TC
  • http://www.oasis-open.org/committees/emix/
    – All committee work visible from the link
      • email, documents, minutes, sign up for membership
    – Comment mechanism for public comment
• To join or for more information contact
  – William Cox wtcox@CoxSoftwareArchitects.com
  – Ed Cazalet ed@cazalet.com
  – Toby Considine toby.considine@gmail.com
OASIS EMIX TC

• Status Early April 2010
  – Information exchange, not a protocol
  – Information model and Schema—Price+Product Definition
  – Recent Working Documents
  – Next complete working draft on schedule for end of April

PAP03—Issues and Discussion

• Display Issues/Concerns section of the quad chart at
  – http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP03PriceProduct

• Discussion on PAP03
PAP 9—DR + DER Signal Semantics

- [http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP09DRDER](http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP09DRDER)
- Reports
  - NAESB
  - ZigBee
  - OASIS
- Issues, Schedule, and Discussion

NAESB PAP 09 Update

- Report on NAESB PAP 09 Activities
  - Requirements Specification for Standard DR Signals – for NIST PAP 09
    - Comments due April 9, 2010
  - Task Force will review comments – April 15, 2010
- NAESB Phase 2 Efforts
  - Ensure that current recommendations are consistent
    - Actors/Definitions
    - Level of Detail
  - Harmonize with other efforts contributing to PAP 09
NAESB PAP 09 Update

• Contact Information
  • See documents for April 8 meeting
    – Mailing list signup or questions: jbooe@naesb.org
    – Smart Grid Standards Task Force Website: http://www.naesb.org/smart_grid_standards_strategies_development.asp

PAP09—ZigBee

• Report on ZigBee Activities
  – http://www.zigbee.org/smartenergy/
  – Report by Robby Simpson, General Electric
• See Slides 21-25
PAP09—OASIS

• Report by William Cox, Cox Software Architects
• OASIS Energy Interoperation TC
  • http://www.oasis-open.org/committees/energyinterop/
    – All committee work visible from the link
      • email, documents, minutes, sign up for membership
    – Comment mechanism for public comment
• To join or for more information contact
  – William Cox wtcox@CoxSoftwareArchitects.com
  – Toby Considine toby.considine@gmail.com

OASIS Energy Interoperation TC (EITC)

• Status Early April 2010
  – Protocol and information model for signals
  – Recent Working Documents
    • Interoperation patterns and service definitions (watch documents—full proposal next week)
    • Most recent Working Draft
  – Next working draft on schedule for end of April
PAP09—Issues and Discussion

• Display Issues/Concerns section of the quad chart at
  – http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/PAP09DRDER

• Discussion on PAP09

General Discussion

• Meeting frequency and time
  – Roughly Monthly—next meeting May 12, 4-6p EDT
  – Combine the three PAPs—PAP04, PAP03, PAP09

• Cross-PAP issues
  – On PAPs 3, 4, and 9
  – Cross-PAP matrix
  – Contribution of requirements PAP07-WS-Calendar
• Meeting has adjourned
• Next PAP03-04-09 meeting on May 12, 2010, 4:00pm-6:00pm Eastern Time
• Register at https://www2.gotomeeting.com/register/554284467
• The meeting after May 12 is at ConnectivityWeek, Santa Clara CA, the week of May 24, 2010