Energy Management (EMAN) Applicability Statement

draft-tychon-eman-applicability-statement-05

Emmanuel Tychon
Brad Schoening
Mouli Chandramouli
Bruce Nordman

82th IETF Meeting, Taipei 2011

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- ## Draft based on Working Charter
  "6. The EMAN WG will develop an applicability statement, …."

- ## Scope of Applicability Statement draft
  - List of use cases that EMAN should solve
    - What are the requirements needed to address those use cases ?
    - MIB modules and Framework are derived from the requirements.
  - Standards that influence EMAN

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- Topics of discussion
  - What is new in version 05 ?
    - Additional use cases
    - Reorganized standards that influence EMAN
    - Consistent with terminology draft
    - Merged content with draft-nordman-eman-energy-perspective-01

  - Open issues – feedback from the WG

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- For every use case
  - Description of the network scenario
    - What are target devices ?
    - How powered ?
    - Reporting mechanism

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- Use case Scenarios & Target devices
    - Network devices - Routers, switches and their components
    - Devices attached to a network - PoE powered devices
    - Smart Meters and PDUs
    - Proxys – mid-level managers
    - Gateways to building networks
    - Home energy gateways
    - Data center devices
    - Multiple power sources
    - Energy Storage devices (battery, UPS)

    - Industrial Automation scenario (ODVA)
    - Demand Response
    - Off-Grid devices
    - Power Capping

New use cases
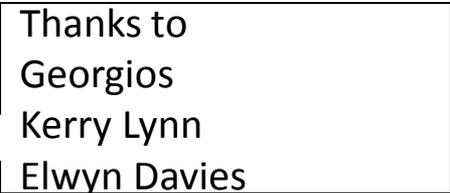
Thanks to
Georgios
Kerry Lynn
Elwyn Davies

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- Use case patterns

  - Metering
  - Metering and control
  - Power supply, metering and control
  - Multiple power sources

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- EMAN <-> other Energy standards
  - 4.1. Data Model and reporting
    - IEC
    - DMTF
    - ODVA
    - ASHRAE SPC 201P
    - Ecma
    - IEEE ITSO PWG
  - 4.2. Measurement
    - ANSI-C12
    - IEC-62301
  - 4.3. Informational
    - Energy star
    - Smart Grid

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- Open Issue – 1

- We have a list of use cases – network scenarios EMAN should solve
  - some overlap between use cases
    - should we drop some of the use cases if there is overlap

- Do we need a list of unique use cases ?
  - Use case patterns – has an abstraction of the use cases

- Any use case not in scope of EMAN ?

- Seeking feedback from WG

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- Open Issue -2

  - IEC Standards
    - IEC 61850 -7-4 - data model for power quality/characteristics
    - IEC 61000-4-30 – is useful for power quality benchmarking
    - IEC 62053-21 - Energy meters, smart PDUs

    - Question to the WG – any other standard to be considered ?

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- Open Issue -3

  - EMAN should consider
    - ASHRAE SPC-201P
      - Use cases
      - Information model
      - Should be released for public review

    - ODVA
      - Information model
      - Should be released for public review

EMAN Applicability Statement

draft-tychon-eman-applicability-statement-05

- Next Steps
  - Trace if there are requirements for each use case
    - Use cases for requirements
      - We have requirements for Power quality/characteristics
      - Need use case for power quality

  - Any other use cases that should be considered by EMAN ?
    - Requirements are baselined

EMAN Applicability Statement
draft-tychon-eman-applicability-statement-05

- Summary

  - Updated draft with additional use cases and the standards section

  - Discussed the feedback from the mailing list

  - Request the document to be a WG item