ENERGY REPORTING FRAMEWORK

draft-nordman-eman-er-framework-01

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IETF 87 EMAN

KEEP IT SIMPLE!

Anything wrong with EMAN framework?

- **Yes.**
- Re-engineered from an implementation
  - Not a bad idea in general, however, in this area (new to the IETF) many initial choices need re-consideration
  - Too many implementation choices moved to the framework
  - Too many new concepts were introduced
    - Some early stage concepts are outdated
  - Too many details (full UML model of all considered data)
  - **Not Simple.**
- Inconsistent sections
  - Coming from different sources, not well aligned in style and terminology
  - Patchwork structure: new parts just added somewhere and not closely integrated

How to make it better?

- Rewrite the framework based on many insights gained in WG and framework author discussions

- Take only necessary concepts (in their most simple version that meets the EMAN requirement)

- Abandon all other concepts that came up during long framework discussions

- Use a clear and simple document structure
  - Introduction of six concepts (Section 2)
  - Discussion of energy-related topologies (Section 3)
  - Detailing the framework using the EMAN requirement structure
    - basic features (Section 4), advanced features (Section 5)
  - Operational considerations (Section 6)

- Write in clear and simple style to address wider audience

Why call it Energy Reporting (ER) Fmwk?

- >95% of the ER and EMAN frameworks are about reporting.

- Configuration items are few

- The ER framework even reduced need for control by simplification:
  - Control only needed for setting power states
    - direct or via proxy
  - For switching power at an outlet, the power state of the outlet is set

Simple Framework

- Concepts used for ER framework
  - Energy Management System
  - Device, power interface, component , energy object, battery
  - All are in EMAN framework as well, use is simpler, more restricted, their meaning is more clear

- Only two topology types to be introduced
  - Power distribution, includes metering topology
  - Reporting (in case of a device reporting for other devices)

- Information model directly derived from EMAN requirements
  - split into basic elements and advanced elements

- This framwork is much shorter and simpler
  but complete and it meets all EMAN requirements

Open Issues

- Explain relation of metering topology and power distribution topology

- Check how to address requirement 7.5

- Incorporate details that are imported from EMAN framework

- Do we need to add reporting of power interface capabilities?

- Choose data representation in section 5.1 (identification alternatives)

Next Steps

- Incorporate feedback from the list

- Address open issues

- Consider as replacement for draft-ietf-eman-framework-08