Architecture

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Outline

- Issues

- Goals

- Planning

Issues

- Currently tries to satisfy several different objectives.
  - At different levels of quality.
  - Overlapping with other documents.
  - Sometimes inconsistent with other documents.
- Some of the normative content is too high level to be testable.
  - Perhaps better handled as requirements or best practice guidelines.
  - Some are "policies" that are part of a deployment, not an implementation.
- Use cases/domains overlap with UC&R document.
  - No direct cross-referencing.
- Can't just "make informative", we need to restructure first.
  - E.g. move some of the normative content elsewhere, address overlaps, etc.

Goals: Discussion

- What should we accomplish with the Architecture document?

- Some suggestions that would be good as "primary goals"
    1. Introduction and starting point – "explainer".
    2. Clear statement of purpose, philosophy, and scope of WoT as a whole.
    3. Abstract system architecture (in support of 2).
    4. High-level description of WoT components (building blocks). (reading guide)

- Document currently also includes these. Are they appropriate?
    1. Terminology definitions and device categories. (global definitions)
    2. Discussion of application domains/general use cases.
    3. Discussion of common deployment/usage patterns; examples.
    4. Abstract servient architecture.
    5. General security and privacy considerations (normative).
    6. Requirements (assertions about properties satisfied by other deliverables).

Planning

- How to address issues?
  - Before we decide "Architecture should be informative" we should clearly define a small number of primary goals and clean it up so it addresses them well.

- A "single entry point" for WoT seems useful.
  - Act as an "explainer and guide" for potential implementers.
  - Motivate design choices globally, e.g. descriptive vs. prescriptive when possible

- A place for global definitions (e.g. terminology) seems useful.
  - However, having a lot of "technical" content at the beginning of the document works against its role as an "explainer", so reorder, move to end.

Plan: Suggested

1. **Restructure**
   - Reorder content so it serves as a good introduction.
   - Remove inconsistencies and overlap with other documents.
     - Detailed domain descriptions and requirements
       - probably better dealt with in UC&R doc.
     - See if some content should be moved to another document
       - e.g. assertions about design principles for TDs could be in TD doc.

2. **Make sure assertions are testable, at least in principle.**
   - Related to how we deal with security and privacy assertions.
     - Figure out handle S&P requirements/assertions across ALL specifications.
   - Identify whether difficult-to-test assertions should be handled in other ways
     - e.g. as best practice guidelines for deployments.

3. **Streamline**
   - Focus on main goals of providing entry point and necessary global definitions

→ *Once cleaned up, only then ascertain if it should be normative.*

Discussion

- Ege: ext have commented that explainer was important. However, we are not explicit that this is a good starting point. TAG has given feedback about normative content. We also have done some work to return many assertions.

- MM: could say goal to "make informative if possible" but we have a lot of work to do still. Note UC would not be place for normative content…

- Ege: we also need some role/process to avoid contradictions.

- MM: Easier to avoid contradictions if docs do not have overlaps.

- Kaz: proposal in line with discussion. Should consider restructuring of all docs.

- Seb: re entry point; in principle, but does it need to be a REC? Or event a Note? Can it just be a web page? May also have different entry points for different kind of users: devs, business decision maker, researcher, etc. They need to know different things.

- Cris: abstract servient, where would this move? Charter says is REC?

- MM: also other things we talk about but don't really use, e.g. hypermedia

- Kaz: should we have a resolution on the plan?

- MM: let's put as a PR under "wot/planning"