WoT Architecture 1.1

New Content and Owners

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Document Structure (arch 1.0)

- 1. Introduction
- 2. Conformance
- 3. Terminology
- 4. Use Cases
- 4.1. Application Domains
- 4.2. Common Patterns
- 4.3. Summary
- 5. Requirements
- 5.1. Functional Requirements
- 5.2. Technical Requirements

Document Structure (arch 1.0)

- 6. WoT Architecture
- 6.1. Overview
- 6.2. Affordances
- 6.3. Web Thing
- 6.4. Interaction Model
- 6.5. Hypermedia Controls
- 6.6. Protocol Bindings
- 6.7. WoT System Components and their Interconnectivity

Document Structure (arch 1.0)

- 7. WoT Building Blocks
- 7.1. WoT Thing Description
- 7.2. WoT Binding Templates
- 7.3. WoT Scripting API
- 7.4. WoT Security and Privacy Guidelines
- 8. Abstract Servient Architecture
- 9. Example WoT Deployments
- 10. Security and Privacy Considerations

Proposed Architecture 1.1 Document Structure

Proposed Document Structure (arch 1.1)

- 1. Introduction
- 2. Conformance
- 3. Terminology (+ delta for discovery, thing templates, profiles, lifecycle)

4. Use Cases

- 4.1. Application Domains -> Level 1 chapter (Verticals)
- 4.2. Common Patterns -> Level 1 chapter: (Horizontals) System Topologies
- new section on edge computing 4.3. placeholder chapter (e.g. System Designs / System Integration) for things that don't fit into 4.1. and 4.2

4.3. Summary

- 5. Requirements
- 5.1. Functional Requirements (+ delta from new requirements)
- 5.2. Technical Requirements (+ delta from new requirements)

Proposed Document Structure (arch 1.1)

- 6. WoT Architecture -> Abstract System Architecture -> see next slide
- 6.1. Overview split into subchapters for each system component, extend with discovery, digital twin, see next slide
- 6.2. Affordances
- 6.3. Web Thing
- 6.4. Interaction Model
- 6.5. Hypermedia Controls
- + Semantic annotations
- + Thing Model Concept Templates
- 6.6. Protocol Bindings
- 6.7. WoT System Components and their Interconnectivity

Abstract System Architecture

Rework existing chapter 6 and improve the structure.

Level two chapter: System Components

Separate subchapter that describes existing system components from arch 1.0:

- Thing
- Intermediate
- Consumer

New sections:

- Digital Twin <MichaelL>
- Discovery <MichaelM>
- Directory <MichaelM>

Lifecycle

- New Subchapter under "Abstract System Architecture"
- Introduction (Zoltan and MichaelL)
- System Lifecycle <MichaelL>
- Thing Lifecycle <Zoltan>
- Information Lifecycle <MichaelM>

Proposed Document Structure (arch 1.1)

- 7. WoT Building Blocks
- 7.1. WoT Thing Description

Thing Model

Discovery

- 7.2. WoT Binding Templates
- 7.3. WoT Scripting API
- 7.4. WoT Security and Privacy Guidelines
- 8. Abstract Servient Architecture
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Bug fixes, Corrigenda items