



Contextualizing

Configuration Management

Conclusions from CM FORUM
workshops 2015-2016



Can CM find common ground for HW and SW development?



How can CM enable business downstream?



How can CM support Requirement Management in a product line environment?



CM Challenges in a networked society



Organizing CM to support the program, project and line relationships



Strategies to establish a stronger mandate for CM



Mastering the art of coordinating configuration ownership

Contextualizing Configuration Management

1. Taking CM into the networked society

2. CM in a lifecycle context:

→ the Concept phase

- → the Development phase

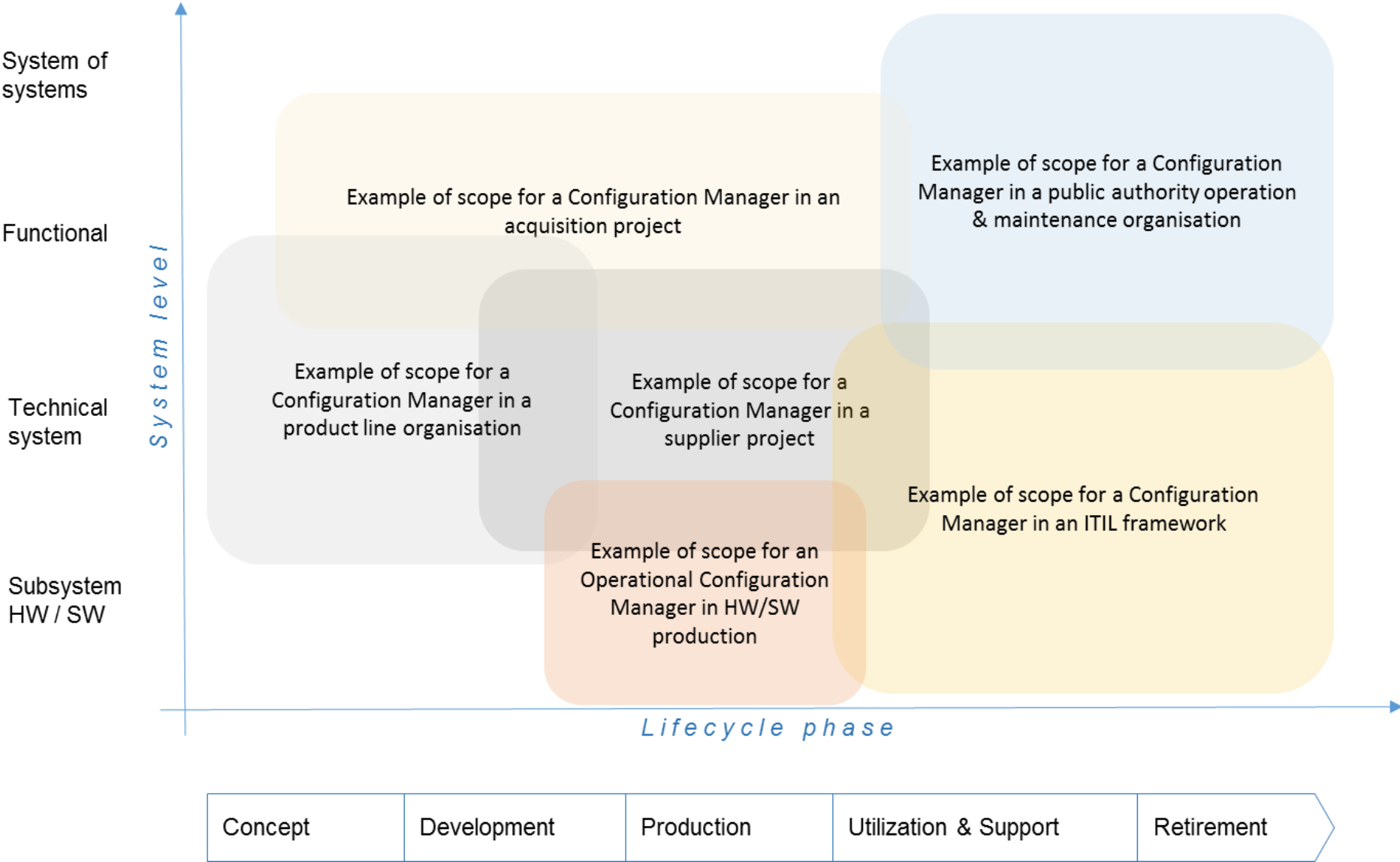
- → the In-operation phase

- → Across phases

3. CM in an organizational context:

- → Configuration ownership

- → Positioning CM responsibilities



The importance of context

In order to make the right strategic decisions, the configuration manager must understand context, and therefore take into account:

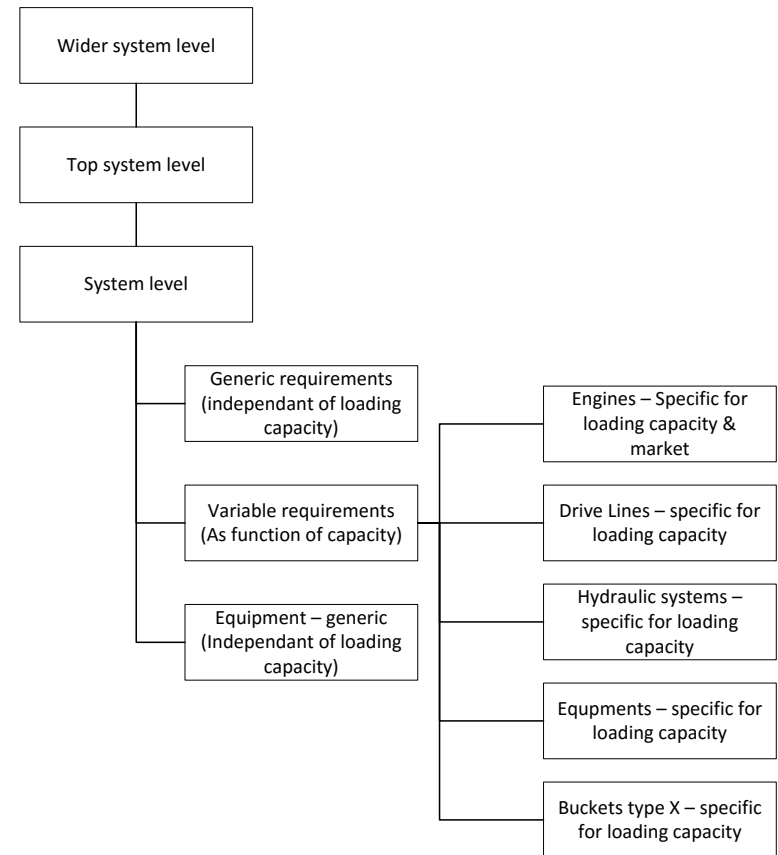
- the system architecture and the system boundaries for the configuration that is within the scope of the organization or project (and which stakeholders that take responsibility for what is outside the scope);*
- the system lifecycle and which phases that are within the scope of the organization or project (and which stakeholder that take responsibility for what is outside the scope);*
- the applied development model and how it is best supported in terms of baselines, status accounting and configuration control.*

Taking these contextual aspects into account, CM activities can be defined, scaled and distributed throughout the organization.

CM in a lifecycle context: the Concept phase

The chapter discusses principles for

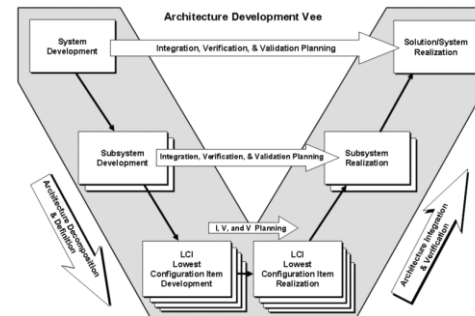
- structuring requirements
- Updating requirements
- Adding new requirements



CM in a lifecycle context: the Development phase

The chapter discusses similarities and differences when applying CM based on

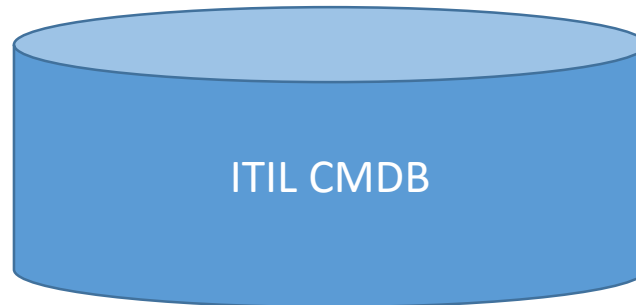
- Agile development
- Development according to the V-model



CM in a lifecycle context: the In-operation phase

The chapter discusses:

- how CM can be applied in accordance to ITIL (Information Technology Infrastructure Library).
- aspects of using an ITIL CMDB (Configuration Management DataBase) to validate and manage all developed Configuration Items.



CM in a lifecycle context: Across phases

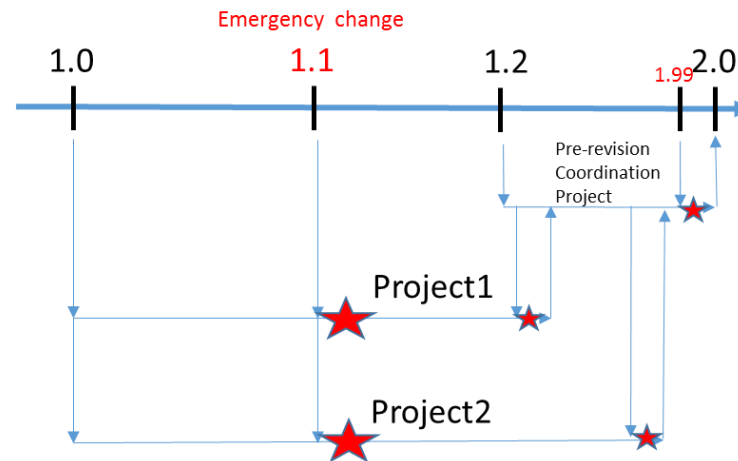
The chapter discusses how CM, if set up properly in early lifecycle phases can support business opportunities in later phases of the lifecycle .

Business opportunity downstream	How to address this opportunity during early lifecycle phases	How CM facilitate addressing this opportunity
Selling breakdown structures, such as As-realized, As-build, Maintenance structures, Individual structures.	Well defined architecture, well integrated workflows, require feedback from customer.	Baseline support including quality assurance of baselines, Identification of CIs and data, establishing traceability between structures, design customer feedback loop.
Selling customer training.	Well-developed Logistic Engineering/ Logistic support, require information concerning the customer's maintenance organization.	Baseline support to for Logistic Engineering/ Logistic support, Identification of CIs and data for the support system.
Offering continuous maintenance support (technical publications, training etc.).	Logistic support analysis as part of the design-process, well defined maintenance structure, modularized technical documentation & training mapped against the maintenance structure.	CI identification, mapping structures, Securing that Logistic Support Analysis, Technical documentation & training involved in change management process.
Offer to retire, reuse or recycle products.	Well defined architecture that enables "modules" to be reused.	CI identification, formal change management, traceability all the way from requirements to the individual.
Full service agreement.	All the aspects mentioned above need to be addressed.	Supplier's CM must define requirements for customer's CM, alternatively the supplier's CM extends to the customer side (status accounting, change management, baseline establishment).

CM in an organizational context: Configuration ownership

The chapter discusses:

- Different aspects and examples of configuration ownership
- How to establish an ownership of the configuration that enables an organization to handle multiple project's changes against the same baseline



One idea is to introduce a Coordination project to collect and coordinate the various concurrent project deliverables before revision time. This has the benefit of allowing more time for individual projects to deliver and to resolve inter-project conflicts, since the coordination project may be started well before the actual revision.

Ideally, the Coordination project shall have access to a validation and verification environment, if at all possible.

CM in an organizational context: Positioning CM responsibilities

The chapter discusses:

- The role of the Configuration Manager (Operative / Strategic)
- Examples of Scope for a Configuration Manager
- CM line organization vs Distributed Configuration Managers

Typical responsibilities for an Operative Configuration Manager:

- Writing CM Plans or Document Plans.
- CI identification and naming.
- Start-up working areas for the project.
- Manage structures.
- Manage baselines.
- CCB and Change control.
- Administration of CM tools.
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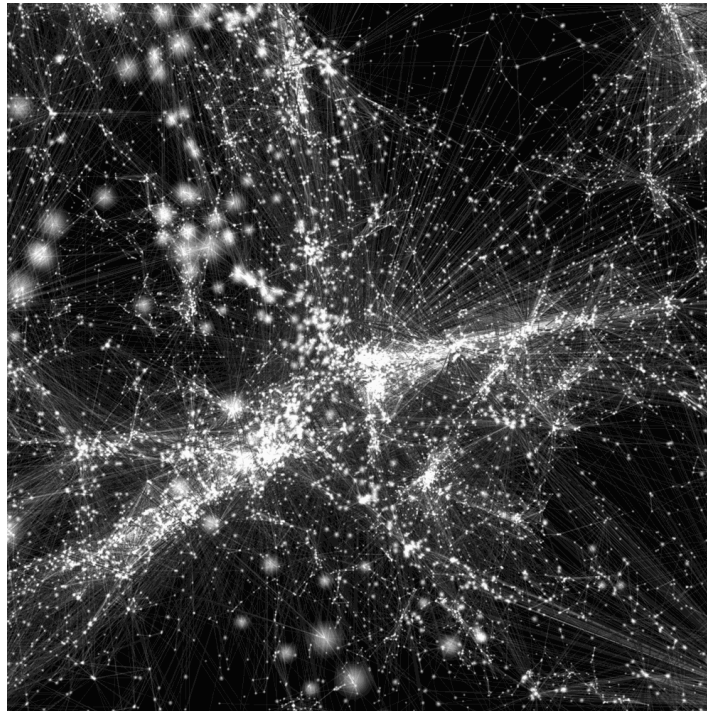
Typical responsibilities for a Strategic Configuration Manager:

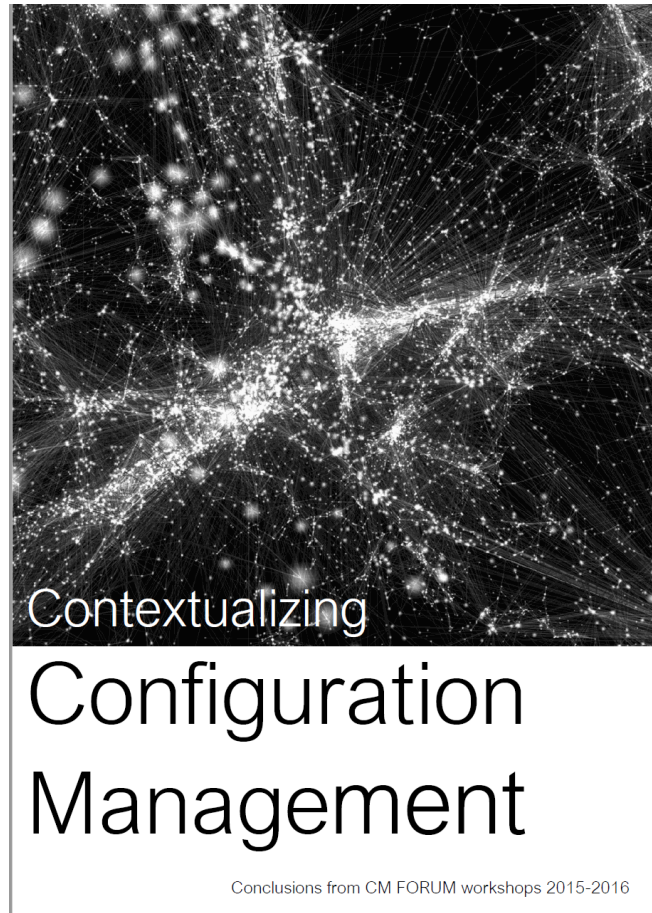
- Process responsibility (improvements and implementation) of change control, release management, document management, etc.
- Maintain the generic CM plan.
- Raise CM awareness within the organization and share CM knowledge.
- Enforce that CM processes and methods are followed.
- Improve CM processes.
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Taking CM into the networked society

The chapter discusses:

- What constitutes a Networked society
- What implications does a networked society have on CM
- How CM can benefit





Version 01.00 is in your inbox!

Some minor improvements will be done during December, a new version will be on the webpage early 2017.

Comments and suggestions are welcome!

What's next for
CM FORUM?