CM FORUM

Workshop 1: Can CM find common ground for HW & SW development?

Configuration Management practices must be adapted to the chosen **development model**: Waterfall, Vee, Spiral, Incremental, Agile etc. But for complex systems that integrate both hardware and software, sticking to one single model might not be possible. Instead, CM will have to manage different sets of lifecycle stages, different needs for iterations and different approaches to baseline planning and release management.

In this session we will explore how **CM practices** differ depending on development model and how CM can be applied to find common ground between development models, in particular methods for integrating HW and SW development.

CM FORUM Common development models













CM FORUM Common CM practices and concepts

- -Configuration Management Planning
- -Configuration Identification
- -Configuration Status Accounting
- -Configuration Change Control
- -Revision control
- -Configuration Audit
- -Build management (SCM)
- -Baseline
- -Configuration Control Board
- -Configuration Item
- -Design authority
- -Etc ...

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From your experience – In what ways do CM practices and concepts differ for different development models? (Give examples)

Group 1&4:

- CM does more than only development! (e.g. life cycle, scope)
- Dependency between processes and tools? Who is steering?

Group 2:

- Agile methods require more CM activities at the start and end of the development process and more focused on <u>interfaces</u> than "inside"
- Traditional development requires more CM activities during the development process

Group 3

- · Formal change control is not within a Scrum team
- · The delivery from a sprint need to bee baselined and change controlled
- The method of documenting
- Motivate the benefits of CM related to the development models used

Group 5

Difference between Waterfall and Agile:

- CM Planning: Mindre behov planering
- Configuration Identification: Ungefär samma behova att identifiera CI
- Configuration Change Control: Mindre behov av CCB hantering
- Configuration Status accounting: Uppföljning skiljer, i agilt vid varje sprint och i vattenfall mellan de olika överlämingsstegen.
- Configuration Audit

Group 6

Mer distribuerat CM-arbete vid agila utvecklingsmodeller. Detta eftersom det blir många små enheter/grupper, där det blir svårt att bemanna med en CM i varje.

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What challenges are imposed on CM, when several development models exist simultaneously? How can these challenges be addressed?

Group 1&4:

- . Multi level baselining/CCBs
- . Terminology
- . Several development models is the norm

Group 2

- Communicate the "complete picture", the goals and common milestones (synchronization points)
 - E.g. launch of a virtual product
- Provide baselines to all development groups
- Assess what should and could be different

Group 3

- Formal change control is not within a Scrum team
- The delivery from a sprint need to bee baselined and change controlled
- The method of documenting
- Motivate the benefits of CM related to the development models used

Group 6

Alla måste förhålla sig till bestämda milstenar

Your groups general thoughts on the question: Can CM find common ground for HW & SW development?

Group 1&4:

- Yes! But CM is CM and shouldn't be related to HW nor SW
- . HW and SW teams work in different contexts with different needs

Group 2

- Goals and principles shall be Common ground
- Methods and tools may be different
 - Sometimes by need
 - Sometimes by legacy (difficult to change)

Group 3

- Different terminology In various development models
- Different delivery steps
- Different life-cycle perspective, how can one compare the results over time
- How to manage documentation
- Descriptions of the CM role within Agile models
- Relationship between different companies / outsourcing

Group 6

Så länge båda processer är samkörda och att gränssnitten är väldefinierade.