

*SYNCHRO PP&Ts*

# **CMMI for DEVELOPMENT V1.3**

***QUICK REFERENCE  
POCKET HANDBOOK***



Mark Amaya

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V1.3**

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**Synchro PP&T**

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## **CONFIGURATION MANAGEMENT**

### **A Support Process Area at Maturity Level 2**

The purpose of Configuration Management (CM) is to establish and maintain the integrity of work products using configuration identification, configuration control, configuration status accounting, and configuration audits.

The Configuration Management process area involves:

- Identifying the configuration of selected work products that compose baselines at given points in time
- Controlling changes to configuration items
- Building or providing specifications to build work products from the configuration management system
- Maintaining the integrity of baselines
- Providing accurate status and current configuration data to developers, end users, and customers [more]

#### **Specific Goal and Practice Summary**

SG 1 Establish Baselines

SP 1.1 Identify Configuration Items

SP 1.2 Establish a Configuration Management System

SP 1.3 Create or Release Baselines

SG 2 Track and Control Changes

SP 2.1 Track Change Requests

SP 2.2 Control Configuration Items

SG 3 Establish Integrity

SP 3.1 Establish Configuration Management Records

SP 3.2 Perform Configuration Audits

## CONFIGURATION MANAGEMENT (CM)

### SG 1 Establish Baselines

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*Baselines of identified work products are established.*

Specific practices to establish baselines are covered by this specific goal. The specific practices under the Track and Control Changes specific goal serve to maintain the baselines. The specific practices of the Establish Integrity specific goal document and audit the integrity of the baselines.

#### SP 1.1 Identify Configuration Items

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*Identify configuration items, components, and related work products to be placed under configuration management.*

Configuration identification is the selection and specification of the following:

- Products delivered to the customer
- Designated internal work products
- Acquired products
- Tools and other capital assets of the project's work environment
- Other items used in creating and describing these work products [more]

#### SP 1.2 Establish a Configuration Management System

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*Establish and maintain a configuration management and change management system for controlling work products.*

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## CONFIGURATION MANAGEMENT (CM)

A configuration management system includes the storage media, procedures, and tools for accessing the system. A configuration management system may consist of multiple subsystems with different implementations that are appropriate for each configuration management environment.

A change management system includes the storage media, procedures, and tools for recording and accessing change requests.

### **SP 1.3 Create or Release Baselines**

*Create or release baselines for internal use and for delivery to the customer.*

A baseline is represented by the assignment of an identifier to a configuration item or a collection of configuration items and associated entities at a distinct point in time. As a product or service evolves, multiple baselines can be used to control development and testing.

Hardware products as well as software and documentation should also be included in baselines for infrastructure related configurations (e.g., software, hardware) and in preparation for system tests that include interfacing hardware and software. [more]

## CONFIGURATION MANAGEMENT (CM)

### **SG 2 Track and Control Changes**

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*Changes to the work products under configuration management are tracked and controlled.*

The specific practices under this specific goal serve to maintain baselines after they are established by specific practices under the Establish Baselines specific goal.

#### **SP 2.1 Track Change Requests**

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*Track change requests for configuration items.*

Change requests address not only new or changed requirements but also failures and defects in work products.

Change requests are analyzed to determine the impact that the change will have on the work product, related work products, the budget, and the schedule.

#### **SP 2.2 Control Configuration Items**

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*Control changes to configuration items.*

Control is maintained over the configuration of the work product baseline. This control includes tracking the configuration of each configuration item, approving a new configuration if necessary, and updating the baseline.

## CONFIGURATION MANAGEMENT (CM)

### SG 3 Establish Integrity

*Integrity of baselines is established and maintained.*

The integrity of baselines, established by processes associated with the Establish Baselines specific goal, and maintained by processes associated with the Track and Control Changes specific goal, is addressed by the specific practices under this specific goal.

#### SP 3.1 Establish Configuration Management Records

*Establish and maintain records describing configuration items.*

#### SP 3.2 Perform Configuration Audits

*Perform configuration audits to maintain the integrity of configuration baselines.*

Configuration audits confirm that the resulting baselines and documentation conform to a specified standard or requirement. Configuration item related records may exist in multiple databases or configuration management systems. In such instances, configuration audits should extend to these other databases as appropriate to ensure accuracy, consistency, and completeness of configuration item information. [more]



## GENERIC GOALS AND PRACTICES

### **GP 2.8 Monitor and Control the Process**

***Monitor and control the process against the plan for performing the process and take appropriate corrective action.***

The purpose of this generic practice is to perform the direct day-to-day monitoring and controlling of the process. Appropriate visibility into the process is maintained so that appropriate corrective action can be taken when necessary. Monitoring and controlling the process can involve measuring appropriate attributes of the process or work products produced by the process.

SAMElaboration (sample)

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Examples of measures and work products used in monitoring and controlling include the following:

- Number of changes made to the requirements for the supplier
  - Cost and schedule variance in accordance with the supplier agreement
  - Schedule for selecting a supplier and establishing an agreement
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## CMMI Model Components

