

Viewpoint – ITIL Configuration Management: The Configuration Management Database (CMDB) – How Does It Compare to an Asset Database (ADB)

A Management White Paper by:

William B. Hesselbaugh



COPYRIGHT NOTICE

Copyright © 2008 by William Brett Hussenbaugh. All rights reserved.

This document is protected by the copyright laws of the United States of America. It may not be reproduced, nor may any of its contents used in whole or in part, without the express written consent of the author.

HIGHLIGHT

Vendors are bringing their current ITAM repositories up to ITIL CMDB compliance. But what does that mean exactly? Also, what gaps might exist between a homegrown repository and the conceptual ITIL CMDB?

DETAILS

At the root of the ITIL CMDB is the concept of a Configuration Item (CI). A CI can be a tangible asset, such as a PC or printer, but it can also be an intangible item such as a business process. Fundamentally, a CI is any item for which change is to be systematically controlled, documented, and applied. Configuration Management, along with both Change and Release Management, are the ITIL disciplines used to manage, control, and document change. The CMDB is the conceptual database used to keep track of CIs.

While there are similarities between a typical ITAM repository and the conceptual ITIL CMDB, there are also differences. For example:

ITAM Repository	ITIL CMDB
May support a parent-child relationship between assets. May also support a many-to-many relationship between assets and components	Supports many-to-many relationships between all CIs along three axes: <ol style="list-style-type: none"><li data-bbox="769 1283 1317 1346">1. Parent-child (actually, each CI can have at most one parent)<li data-bbox="769 1350 1105 1377">2. Connections to other CIs<li data-bbox="769 1381 1117 1409">3. Other CIs used by this CI Relationship maintenance is critical to the ITIL CM and Change Management functions. When planning a change, it is important to know what other CIs will be impacted as a result. Also, as a change is applied, it is important to be able to quickly update all CIs that have dependencies.

ITAM Repository	ITIL CMDB
<p>May support an audit trail about changes to values associated with an asset record. May also support various snapshots of an asset's configuration over time</p>	<p>Allows the construction of a view of a CI "as authorized" (via Change Management) and "as built" via physical audit. Allows a CI to be viewed at any version / revision level since it was placed under change/configuration/release management. Imagine the CMDB as being similar to a document management or code management system such as Microsoft's Visual Source Safe, where any version, present or past, can be retrieved.</p>
<p>Often supports tracking contractual and financial information, as well as procurement.</p>	<p>Much of this is not the mission of CM, with the possible exception of procurement which could be expanded to include handling Requests for Change (RFCs), the start of any modification to a CI.</p>
<p>Seldom tracks incidents or problems – typically the domain of a separate call management system. An ITAM repository may or may not integrate well with a call management system.</p>	<p>The CMDB contains incident history and problem history so that analysis can be performed for determining root causes as well as generating RFCs to implement improvement changes.</p>
<p>May or may not handle change management – actual tracking of submissions of requests for change, scheduling review dates, recording disposition, and tracking change through to actual deployment. Often absent is the concept of treating the ITAM program as a CI, and allowing change to the program to be managed and tracked via the repository. (Such as the addition of a new report distribution to the program, or the addition of a new repository field to now be populated and tracked)</p>	<p>Central to the mission of CM is the tracking and audit of authorized change, therefore the CMDB handles tracking RFCs – from submission through disposition and into release. Even the CMDB might be considered a CI, therefore requiring the ability to track change to itself.</p>
<p>May or may not handle tracking associated asset documentation, such as user manuals, specifications, process definitions, policy, and other free-form documents that may be associated with an asset.</p>	<p>ITIL CM is responsible for managing the Definitive Software Library (DSL), and the CMDB must offer provisions for tracking information in that library. Essentially, the library can contain both electronic and physical documents and code – everything required to express the "as authorized" state of any CI.</p>

By keeping in mind the fundamental mission of ITIL's Change Management, Configuration Management, and Release Management disciplines – to systematically control, document, and apply change – you start to visualize the expected differences between the typical ITAM

repository and the ITIL conceptual CMDB. Visualizing those differences will assist in evaluating an existing ITAM repository for duty as an ITIL CMDB tool – or to evaluate a vendor’s claim that their former ITAM repository is now ITIL CMDB compliant.

About the Author

Brett Husselbaugh has over 20 years of experience primarily in the IT industry. He has consulted with over 25 of the leading Fortune 500 companies on strategies for optimizing the IT investment. With experience as both a CIO and a CEO, Brett brings a unique and practical perspective to IT management, promoting the concept of operating as a "business within a business" to deliver measurable value. Brett is a proven business leader, an innovative thinker, a highly effective writer, and an enthusiastic and motivational public speaker.

Brett has experience as founder and CEO of TOBEK Technical Services, an IT Asset Management firm which he started with no outside investment and grew to 80 people in three years. He then positioned the firm and sold it to Inacom, a Fortune 500 company. Brett also has experience as a CIO, Managing Partner for Managed Services, VP of Strategic Development, VP of Services R&D, Principal Consultant, Industry Analyst, and Program Manager.

Brett has published several magazine articles as well as over 50 industry white and position papers. He has spoken on numerous occasions to audiences of senior and executive management teams on optimizing IT investment, developing strategy, and effective IT management.

Brett holds a Masters of Science in Electrical Engineering from the University of Texas at Arlington and a Bachelors of Science in Electrical Engineering from the University of Maryland at College Park. He is currently a member of American Mensa.

William Brett Husselbaugh
<http://www.husselbaugh.com>