

CA Configuration Management Database (CMDB)

CA CONFIGURATION MANAGEMENT DATABASE (CMDB) HELPS YOU IDENTIFY AND UNDERSTAND THE DEPENDENCIES AND RELATIONSHIPS AMONG — AND BETWEEN —YOUR IT RESOURCES AND OPTIMIZE THE COMPUTING SERVICES THAT MAKE YOUR BUSINESS RUN. BY MAINTAINING CURRENT CONFIGURATION INFORMATION ON IMPORTANT IT ASSETS AND THEIR INTERRELATIONSHIPS, CMDB HELPS YOU IMPROVE YOUR OPERATIONS, MAKING IT AN INDISPENSABLE TOOL FOR MANAGING INFRASTRUCTURE CHANGES, ISOLATING THE SOURCE OF IT PROBLEMS AND SUPPORTING BUSINESS-CRITICAL IT FUNCTIONS. CA CMDB IS AN INTEGRATED COMPONENT ACROSS CA SOLUTIONS THAT PROVIDES A COMMON VIEW OF SERVICE CONFIGURATIONS ACROSS DIFFERENT ORGANIZATIONS, PROCESSES AND TOOLS.

Overview

Controlling your IT infrastructure, managing the configuration item (CI) lifecycle, mitigating risk and improving overall IT processes requires accurate, current configuration information of your hardware and software — as well as a complete picture of their interdependencies. CA CMDB improves business alignment by providing disparate groups across IT with a shared essential view of how IT components are configured together to support your business-critical applications and services, spanning hardware and software, physical and virtual, mainframe and distributed.

Benefits

CA CMDB accelerates time-to-value with a documented recipe for rapid implementation, automated discover of application dependencies, and native integration to service desk change, incident and problem workflows. It helps reduce change and compliance risk with intelligent multi-level visualization of infrastructure and application dependencies, change impact analysis, and comparisons between authorized, current and historical CI states. CA CMDB further improves data accuracy and quality by leveraging existing trusted data sources through multi-source federation and reconciliation, standards-based federated queries and launch-in-context.

The CA Advantage

CMDB delivers greater management control over your IT environment by providing a comprehensive view of IT service configurations, their relationships and interdependencies, helping you improve IT processes and streamline change management. CMDB works in conjunction with CA Service Desk Manager, making it a key element of CA's Service Desk Management Solution, which is designed to integrate seamlessly with CA's Enterprise IT Management (EITM) vision and technology, helping you unify and simplify IT management across your enterprise.

CA CMDB: Managing the CI Lifecycle

Your rapidly growing IT environment makes keeping up with the speed and complexity of change a serious challenge, especially when doing so requires understanding and managing the relationships and interdependencies among configuration items. Yet, you must manage and track modifications to CIs and their relationships, or risk operating an IT infrastructure whose true configuration is unknown.

Industry experts estimate that unplanned changes cause about 80 percent of today's IT infrastructure problems. So, without visibility into the effects of variations within your infrastructure, you are vulnerable to the consequences of uncontrolled change and its impact on your ability to deliver the IT resources vital to business operations. Compounding these challenges is the fact that the very information you need to achieve this visibility typically resides in multiple locations and is stored by different applications using various formats.

To address these potentially serious problems and consolidate the information silos that host key elements of your IT infrastructure, CA Configuration Management Database (CMDB) automatically discovers, inventories and stores CI data and relationship information gathered from multiple sources, regardless of source format.

CA CMDB supports many IT disciplines, including capacity planning, demand management and security, as well as change management and the support of incident and problem management.

Numerous key features found in CMDB enhance your ability to transform data into meaningful and actionable information. These features include:

- Visualization that provides insight into CIs and their relationships, in addition to graphical views and dependency trees illustrating how CIs across the enterprise interact with one another
- Version-management functionality that maintains an audit trail of CI changes, and includes details about who or what made the change — and when
- Federation controls that ensure access to information from complex, multi-vendor IT infrastructures and help consolidate information among and between CMDB and other management data repositories
- A wide breadth of attributes for CI families, classes and relationships, as well as predefined reports and queries
- Support for multiple languages, operating systems and databases
- Role-based user interface that personalizes the user interface with pre-defined, ITIL-aligned roles
- Support for multi-tenancy enables IT organizations to deliver differentiated service with the cost of a single software tool
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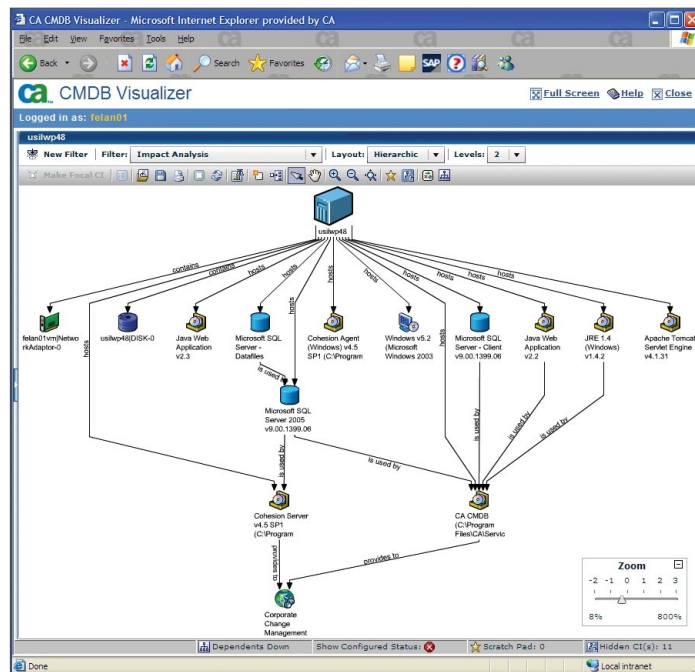
Visualization

A viewing and action tool, CMDB's Visualizer helps you improve visibility into your complete IT infrastructure and gain a thorough understanding of the relationships and dependencies among individual infrastructure components. Through graphical dependency trees that include features to pan, zoom and focus on particular groups of CIs, you can better understand and measure the impact of planned changes — and do so proactively — before the change is made, minimizing unplanned outages. This level of infrastructure visibility helps you anticipate and control the effects of CI change on component relationships and keep business-critical services available. In addition, you can view and edit CI details and add relationships between CIs.

FIGURE A

The CA CMDB Visualizer displays relationships among configuration items, helping to mitigate potential problems by allowing you to quickly and easily see the impact of a proposed change before it occurs.

CA CMDB VISUALIZER



Version Management

Anytime a change is made to a CI, CMDB records it in an audit trail that tracks who or what made the change and when, and also provides a record showing how these changes will affect CI relationships. ITIL® v3-compliant versioning interprets the audit log as a snapshot that presents a list of attributes and relationships for any CI at a given time. In addition, CMDB automatically stamps each log with the day, date and time of the change, providing you with clean, simple log interpretation that improves your ability to track variants to CI attributes or relationships.

Federation

CMDB includes multiple, integrated federations to numerous CA and non-CA products, which aids in the process of importing information into the CMDB database and reconciling multiple occurrences of the same data. CMDB's federation capabilities import the information needed to identify a CI, its attributes and how it fits into the dependency tree into the repository, easing deployment, automating population of data and speeding time to value. This functionality includes support for data from external multi-vendor data sources, such as a management data repository (MDR), which can be imported without replication. In addition, CMDB can also import any assets or relationships defined in a spreadsheet or asset discovery database, and reconcile them with existing CIs.

As a founding member of the CMDB Federations Workgroup (CMDBf) — an initiative developing industry-wide best practices for the sharing of information between configuration databases — CA is committed to providing extensive federation with most products that subscribe to this standard.

Integrated Attributes and Reports

CMDB features predefined attributes for upwards of 60 CI families, 190 CI classes and 90 CI relationship types — each of which represent specifications for popular IT service components that enable you to quickly launch fully functional configuration management processes. Additionally, more than 200 predefined reports and queries provide insight into key configuration statistics, including which CIs have changed within a specific period of time. For enterprises utilizing Crystal Reports, CMDB offers an optional run-time version of Crystal Reports offering a set of CMDB-specific reports.

Support for Multiple Languages and Platforms

To support global outreach, CMDB is localized in Brazilian Portuguese, French, German, Italian, Japanese and Spanish, and has achieved certification on Simplified Chinese operating systems. CMDB also supports Windows, Linux and UNIX operating systems, including Sun Solaris, HP UX and IBM AIX. Database support includes both SQL Server and Oracle.

Multi-Tenancy

Multi-Tenancy segregates data, processes and roles so a single software instance can securely service multiple internal or external customers, enabling IT organizations to deliver differentiated service with the cost of a single software tool.

Role-based User Interface

Role-based User Interface streamlines and personalizes the user interface with pre-defined, ITIL-aligned roles to accelerate implementation and allow each user to get the information they need to perform their job more efficiently and effectively.

CA CMDB: Managing Complexity for Maximum Quality

CMDB delivers greater management control of your IT environment by providing a comprehensive picture of IT service configurations, aggregated views of data from multiple sources and maps of CIs and to the IT services they support. This helps you to greatly improve a wide range of ITIL processes — including change, incident, problem, availability, capacity management and more.

Together, CMDB's set of features gives you unprecedented control over changes within your IT infrastructure — both planned and unplanned. These help you:

- Pinpoint the source of complex IT problems
- Understand which services are affected
- Prioritize problem resolution according to the affect on vital business services

What's more, CMDB reduces risks and helps your IT organization fulfill service commitments more effectively, by helping to:

MINIMIZE CHANGE IMPACT ON KEY SERVICES Aggregate configuration information about software and hardware elements found in your IT infrastructure and achieve an accurate picture of their interdependencies, helping you analyze and anticipate the effects of change to mitigate the risk of interrupting business-critical IT services.

ACCELERATE PROBLEM RESOLUTION Understanding the relationships and dependencies among all elements of your infrastructure provides you with a means to zero in on the faulty system or component and fix or replace it quickly — before it leads to more far-reaching disruptions.

FEDERATE DISPARATE DATA SOURCES Run an open solution that aggregates data from multiple sources, minimizing the number of necessary uploads and including only those attributes you wish to see in CMDB — giving you a single point of contact for the most up-to-date configuration data.

IDENTIFY AND RESPOND TO SECURITY BREACHES Track CIs and their interrelationships to gain access to the accurate information needed to determine which devices are likely to be affected by unauthorized intrusion — and take action before vital business processes are endangered.

The CA Advantage

CA CMDB offers a comprehensive view of all IT service configurations, including internal systems, supply chain providers and customers. By delivering accurate information about the relationships of CIs with the business services they support, CMDB:

- Streamlines management processes
- Expedites problem identification and resolution
- Reduces operational risks
- Helps IT organizations fulfill the critical service commitments the business needs to run more effectively

Unified Service Model

CMDB is the core of CA's Unified Service Model, which provides a complete 360 degree view into the IT services delivered to the business. The Unified Service Model incorporates information that defines the characteristics of each service. This not only includes asset and relationship details, but also service levels, prices, costs, quality, risks and exposures, consumers and more.

Because the Unified Service Model provides insight into the relationships and interdependencies between and among IT assets and the services they support, it can help you make the most efficient use of your assets and resources.

Integrated with CA Service Desk Manager

A fully integrated component of CA Service Desk Manager, CMDB is the foundation of a software suite that helps you build superior incident and problem management processes and consolidate multiple support centers into a unified view of your IT environment — simplifying change management, increasing infrastructure visibility, offering extensive self-help capabilities and delivering timely data for accurate support decisions.

Services to Maximize Configuration Management

CA Services and our partners can help you assess your current IT situation, define your goals and implement solutions to gain measurable results. And to keep your CA solutions operating at peak performance, CA support delivers unparalleled technical and customer support worldwide, and we offer training and certification through CA Education.

Enterprise IT Management Integrations

CA Manage Infrastructure as an IT Service integrates CA CMDB with CA Network and Systems Management and CA SPECTRUM Network Fault Manager to help customers deal with infrastructure management complexity by providing a complete 360-degree view of related services. By automatically populating CA CMDB with configuration items and relationships from the management tools, organizations are able to “see” what supports an IT service and what business process that service supports. It helps customers understand the impact a change on a system will have to a service and it also improves service availability by reducing mean-time-to-repair thanks to a deeper understanding of the relationships among infrastructure and service components.

A Complete Solution

As a component of CA Service Desk Manager, which itself makes up a crucial part of the CA Service Desk Management solution, CMDB is an important piece of Enterprise IT Management (EITM) — CA's overall approach to transforming IT management. With our Enterprise IT Management (EITM) vision and technology, customers can unify IT and simplify the management of complex computing environments.

Next Steps

CA CMDB provides a specialized database of configuration information and current and historical views of CIs, their attributes and relationships. Through graphical views of CI dependencies, you'll gain a stronger understanding of the configurations and interactions within your IT infrastructure — one that helps you ensure the delivery of key services that support your business objectives, track infrastructure relationships and manage change.

To learn more, and see how CA software solutions enable other organizations to unify and simplify IT management for better business results, visit ca.com/customers.