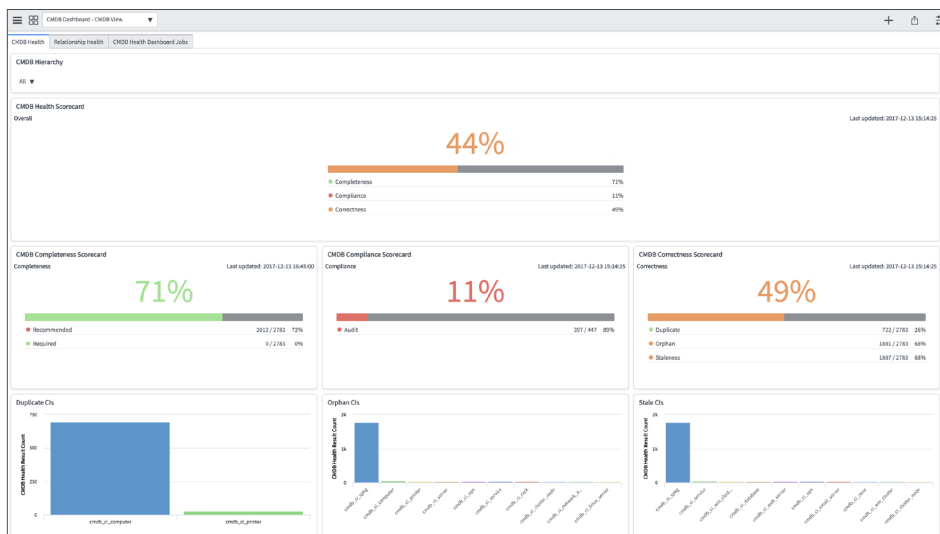


ServiceNow Configuration Management Database

The IT challenge

With so much of the modern enterprise powered by IT, visibility into IT infrastructure is mission critical. This sought-after visibility, however, is remarkably elusive. IT infrastructure continues to grow and become more complex, especially with the proliferation of hardware, software, appliances, virtual machines, cloud services, and mobile devices. This makes visibility into infrastructure a constantly moving target. For IT to gain visibility, it faces the challenge of consolidating, maintaining, and understanding complex data.

IT must first consolidate disparate configuration item (CI) data into a single configuration management database (CMDB), considering unknown CIs, inconsistent data quality, and ill-defined relationships. IT must then regularly maintain this complex data for accuracy. Finally, IT must be able to make sense of this complex data to drive business decisions and services. In general, CMDB projects have a reputation for failed starts, lengthy implementations, and ongoing maintenance challenges—often resulting in limited business value and unrewarded effort.



CMDB Dashboard: Manage health of your CMDB from one place

The ServiceNow solution

ServiceNow® Configuration Management Database is an easy-to-use, cloud-based single system of record for infrastructure and service data. The CMDB helps organizations better understand the IT environment particularly in the areas of business service impact analysis, asset management, compliance, and configuration management. When paired with ServiceNow® Service Mapping, the ServiceNow CMDB becomes service-aware and enables ServiceNow applications to also be service-aware.

Consolidate on a single platform

Leverage a single system of action easily and effectively across all applications and processes on the Now Platform™. Know what assets are in the environment and the dependencies across those assets. Speed up business impact analysis, eliminate service outages, and improve incident and change management processes.

Maintain current and accurate data

A service aware of CMDB maintains current and accurate data through a single system of record to drive business-critical processes. OOTB workflows accelerate the creation of new CI classifications and an intuitive interface for editing existing CI class configurations.

Extensible third party integration

SDKs with APIs to enable third party applications to use the identification and reconciliation engine maintain relationships with CIs.

Visualize complex data to drive better decisions

An intuitive interface for easily managing identification and reconciliation rules and CI relationships for existing CI classes. Easily visualize infrastructure and service configuration information to understand impact and risk, make better decisions, and provide better business services.

Identify performance and user experience improvements

An enhanced query builder with platform reporting gives IT managers insights to improve performance and user experience.

The CMDB features a single data model with easy, accurate data acquisition through agentless auto-discovery of known and unknown CIs, existing integrations to third-party data sources, and additional integrations using web services or other methods. Built-in data reconciliation and normalization features ensure consistently accurate and useful data. A health dashboard provides a holistic view into the quality of CMDB data, and an auto-remediation framework improves data quality.

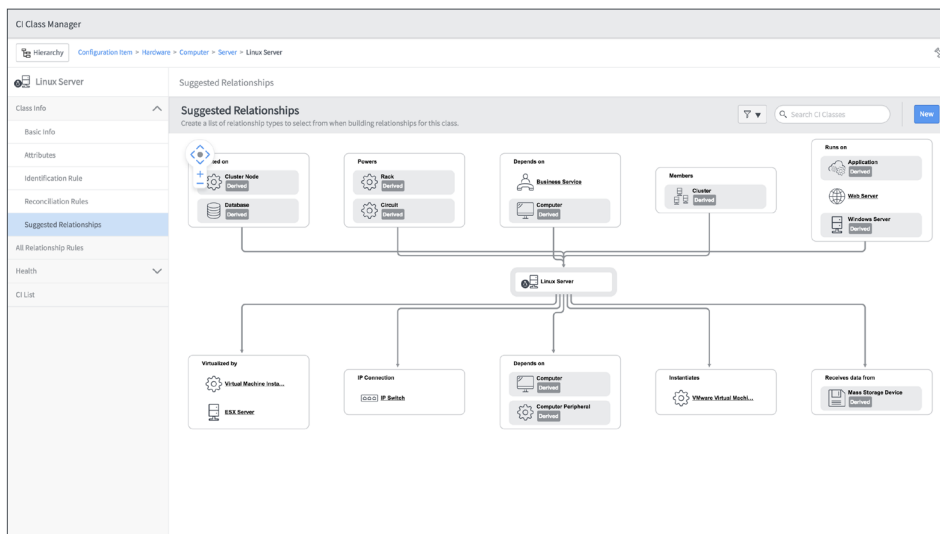
CMDB data certification enables IT to maintain data integrity within the single system of record by federating data administration. Data visualization turns complex data into clear, actionable information, providing insight into configuration items, business services, incidents, problems, and changes. Reporting is fully integrated with all data and tables, and is easily customizable for complex reporting without coding.

The CMDB is automatically integrated with all features, processes, and applications built on the Now Platform™. IT professionals use the ServiceNow CMDB to bring visibility to their IT infrastructure, so they can focus attention on making fact-based decisions and providing business-critical IT services that power the enterprise.

Single data model

ServiceNow CMDB utilizes a single data model, with common processes, standard taxonomy, and pre-negotiated semantics, format, and quality standards for exchanged data. As a result, every table, view, and application built on the Now Platform leverages a consolidated, single system of record. This data model is also easily extensible: out-of-the-box tables and views can be extended with a click; fields from other tables can be referenced and used to drive workflow; and data validation and normalization rules ensure that trusted data can be leveraged across any application, form, or workflow.

“IT professionals use the ServiceNow CMDB to bring visibility to their IT infrastructure, so they can focus attention on making fact-based decisions and providing business-critical IT services that power the enterprise.”



CI Class Manager: Intuitive ways to build CMDB class and dependencies

Easy, accurate data acquisition

CMDB may be easily and accurately populated with CI data through ServiceNow® Discovery and other methods. Fully integrated and agentless, Discovery automatically identifies the type of CI it is interacting with and then launches additional probes and sensors that are appropriate to that device to gather further information and attributes.

CMDB automatically checks the data for errors, normalizes and transforms the data, and then loads the data to ensure the most recent and accurate profile of that CI. ServiceNow® Service Mapping overlays service maps onto existing configuration data to connect CIs underlying a given service, making the CMDB service-aware. The CMDB also integrates with the most common infrastructure platforms such as VMware® vCenter™ and Microsoft® System Center Configuration Manager™, as well as endpoint management products.

Additionally, data may be imported into the CMDB through web services, direct database imports, and Excel® files. Transform maps and business rules enable inbound data to be mapped to target tables and fields, transformed, merged, and coalesced.

Data health and certification

A health dashboard provides a single view of the quality of data at the CMDB, CI class, and CI levels using completeness, correctness, and compliance scores. The CMDB health benchmarks feature provides industry-standard benchmarks across these scores, so IT can measure CMDB health relative to similar ServiceNow customers.

An auto-remediation framework enables IT to take action to improve CMDB data quality. High-quality data may be regularly maintained through a built-in data certification capability, which assigns tasks to people and groups within IT to validate data models, attributes, non-discoverable information, and CI relationships on a scheduled basis.



Transform maps and business rules enable inbound data to be mapped to target tables and fields, transformed, merged, and coalesced.

The screenshot displays the CMDB Query Builder interface. At the top, there are tabs for 'Saved Queries' and 'unix cluster'. Below this, a search bar and a list of 'CMDB Artifacts' are visible. The main area shows a query diagram with nodes for 'UNIX Cluster 1', 'UNIX Cluster Node 1', 'Linux Server 1', 'Oracle Instance 1', and 'UNIX Cluster Resource 1', connected by arrows. A right-hand panel shows the 'Properties' for the selected 'unix cluster' artifact, including fields for Name, Description, Query type, and creation details.

Below the diagram, the 'unix cluster Query Results' section is active, showing a table of results. The table has columns for various CI types and their status. A pie chart on the left indicates the distribution of results across different CI classes.

CI Type	Instance ID	Status	Parent CI	Parent Status	Child CI	Child Status
ora.cdbrc.db	1-1 of 1	ONLINE	ora.cdbrc.db	ONLINE	o17-321-rnc1	o17-321-rnc1
ora.cvu	1-1 of 1	ONLINE	ora.cvu	ONLINE	o17-321-rnc2	o17-321-rnc2
ora.LISTENER.lsnr	1-1 of 1	ONLINE	ora.LISTENER.lsnr	ONLINE	o17-321-rnc1	o17-321-rnc1
ora.LISTENER_SCAN1.lsnr	1-1 of 1	ONLINE	ora.LISTENER_SCAN1.lsnr	ONLINE	o17-321-rnc1	o17-321-rnc1

CMDB Query Builder: Build and run queries instantly visualize CMDB data

Powerful visualization and reporting

The CMDB's business service management mapping functionality provides a clear, graphical view of complex IT infrastructure and service relationships. IT professionals can click through the data map, filtering data, focusing in on specific CIs, and viewing impact and risk alongside in-flight operational activities such as incident, problem, and change requests. A CI and service history timeline provides a visualization of planned and unplanned changes to CIs and alerts over time. A simple and flexible reporting engine enables IT to quickly create dashboards and generate reports, which may be scheduled to be distributed on a regular basis. A query builder provides a simple and intuitive way to query the CMDB for CIs and relationships across multiple CMDB tables, including service maps. Administrators, system owners, and service owners can quickly identify configuration drift, unplanned changes, and incident history to understand the health of CIs they are responsible for and the operational activities directly or indirectly impacting those CIs.

Single system of record on a single platform

The CMDB automatically integrates with all applications and features built on the Now Platform, making it rich in functionality and value. IT can use the CMDB with Discovery, Service Mapping, and other applications to gain an end-to-end, service-aware view of CI lifecycles. CMDB acts as a single system of record for all on-premise, multi-cloud, and serverless infrastructure data. Where desired, IT can control access to CI classes, entire records, individual fields, and attributes to ensure only authorized users can update CI records.

An integrated SLA engine enables IT to track CIs against service levels and operational agreements. Information may be shared in chat channels and the Live Feed social stream. End users may subscribe to the services and CIs they are interested in, choose from several notification options, and receive messages on all types of mobile devices.



A query builder provides a simple and intuitive way to query the CMDB for CIs and relationships across multiple CMDB tables, including service maps.

