CMDB

Basics

Enterprise CMDB

Note: *This article applies to Fuji and earlier releases. For more current information, see Enterprise CMDB* [1] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**'

Note: *This article applies to Fuji and earlier releases. For more current information, see Configuration Management* [2] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**'

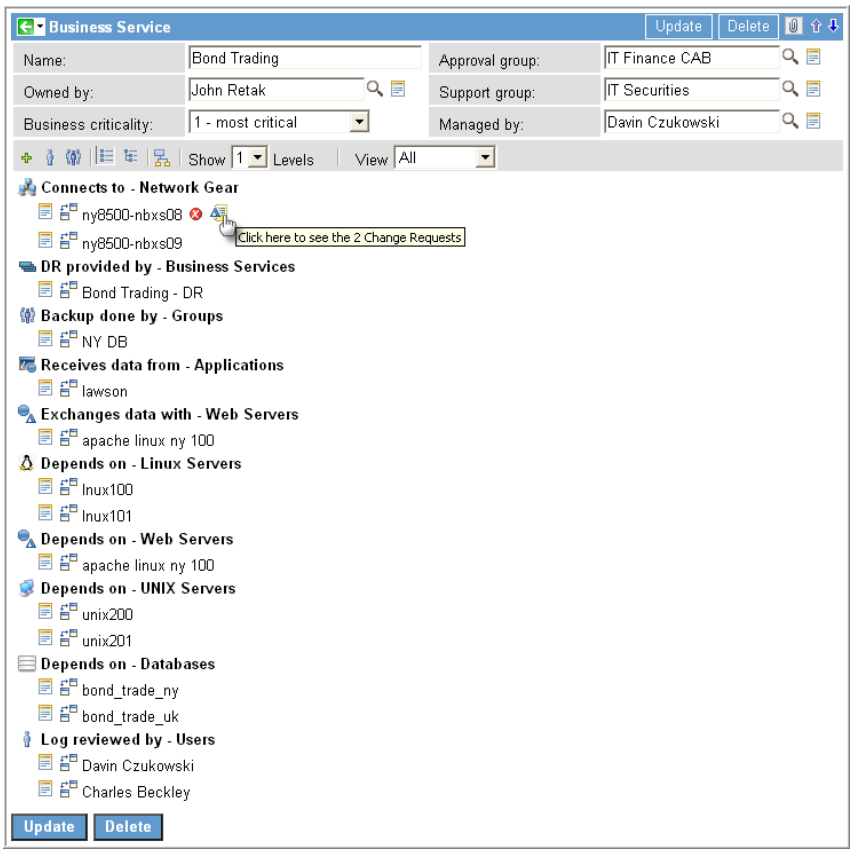
Overview

The Enterprise Configuration Management Database (ECMDB) is targeted toward businesses that want to monitor, manage, measure, track, alert on change, and generally understand business systems that consist of a large number of components, business and support personnel. For example, a Bond Trading service may have multiple Application, and Web Servers, several databases, Linux, UNIX, and Windows Servers. There will be security products, network storage, Disaster Recovery procedures and Hardware, etc. that are necessary for the service to operate properly.

The ECMDB makes it easy to either manually enter the relationships or have them populated automatically by discovery tools. In addition to the hardware, software, network, database, and storage areas, it is beneficial to know which individuals or groups are responsible for the service from both a business perspective as well as an IT perspective. Who are the Line of Business users / managers? Who starts and stops the application or its components? Who monitors the log files? Who is in charge of backup and restore, business continuity, and disaster recovery?

CMDB Relationships

The ECMDB lets you easily track all relationships by relationship type. An abbreviated look at the UI for the Bond Trading application might look like:



The Enterprise CMDB extends the capabilities of the ServiceNow CMDB in the following areas.

Extended Configuration Item Types

- Clusters
- Database Instances (Oracle, DB2, MySQL, MSFT SQL Server, Sybase)
- File Systems (Direct and network attached)
- Linux Servers
- Solaris Servers
- AIX Servers

Extended Relationships

Accurate description of relationships between items and between items and people or groups is important to truly understand the fabric of a business service. ECMDB provides many relationship types out of the box, but it is extremely simple to extend the number of relationship types. Example relationship types:

- Connects to
- Depends on / Provides Service to
- Powered by / Powers
- Protected by / Protects
- Disaster Recovery Provided by / Provides Disaster Recovery for

Visualization

The system can show relationships as a hierarchy using a standard treeview, flattened, or graphically, all in a simple web interface.

Auditing

Auditing of changes to Configuration Items is turned on by default.

Federation

Federation of third party discovery and configuration data is supported through standard synchronization offerings (SMS, LAN Desk, others) and through the CMDB Discovery table.

Configuration Item Modeling (Product Models)

Model driven configuration management allows the definition of CI models up front that can be associated to product maintenance lifecycles, cost centers, support organizations as well as provides a means for capacity and inventory planning. By defining models for CIs (which has a many to one relationship to the model), you can dynamically group actual discovered or imported CIs into logical / operational / financial models, facilitating an organized approach to managing your assets (CIs) in their respective domains.

Changes made to prior versions

- There is an ip_address field in the base cmdb_ci table. This field is most often used as a "context" IP for discovery technology. An upgrade job will move IP addresses in the Printer, Computer, Network Gear tables to the base cmdb_ci table.
- A switchport table has been added to track MAC address and up / down status of switch and router ports.
- Default values for CPU speed, disk space, and computer RAM have been removed.

References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/product/configuration-management/reference/r_EnterpriseCMDB.html

[2] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/product/configuration-management/concept/c_ITILConfigurationManagement.html

CMDB Classifications

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Note: *This article applies to Fuji. For more current information, see CMDB Classifications* [1] *at* http://docs.servicenow.com The Wiki page is no longer being updated. Please refer to http://docs.servicenow.com for the latest product documentation.

Overview

CMDB classifications are groups of CIs that share the same attributes and are stored in their own table. These classifications allow administrators to define the hierarchy of CIs within the CMDB.

As good practice, keep CI classifications as simple as possible.

Introducing CMDB tables

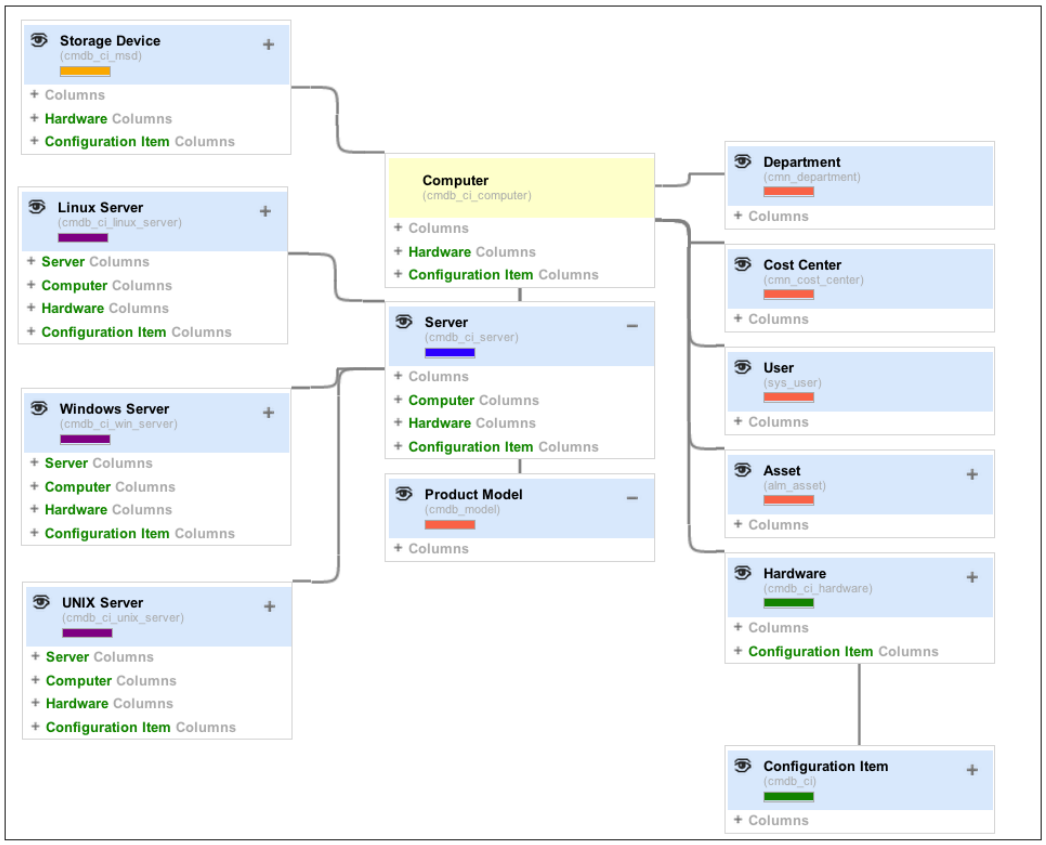
The configuration management database (CMDB) employs the following tables:

- The core Configuration Item [cmdb_ci] table, which stores the basic attributes of all the CIs.
- The CI Relationship [cmdb_rel_ci] table, which defines all relationships between CIs.

The Configuration Item table is extended to other tables, such as Database [cmdb_ci_database] and Computer [cmdb_ci_computer]. The Computer table is extended to the Server [cmdb_ci_server] table, which is extended to the UNIX Server [cmdb_ci_unix_server] table, and so on.

You can use the schema map to view more details of tables and their relationships:

1. Navigate to **System Definition > Tables and Columns**.
2. Select a table and click **Schema Map**.



For more information, see the Schema Map for Tables documentation.

CI Attributes

Attributes apply to all the CIs in a classification. To change attributes for a CI, you must extend the table and create a new classification for that CI.

The position of a CI in the classification hierarchy is determined by the attributes it shares with the CIs below it. Each time a CI has a single different attribute from its parent, the classification hierarchy branches.

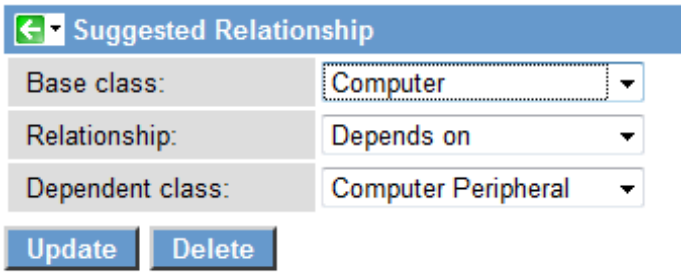
For example, Servers have different attributes from Computers (which includes Workstations and Laptops). Linux Servers and UNIX Servers have different attributes from the parent Server classification and from each other, so they occupy separate branches in the hierarchy.

Relationship Rules

Any time you create a new classification (extend a table), you must create new relationship rules.

ServiceNow relationship rules use separate tables to define the relationships between specific CI *base classes* and *dependent classes*. When you extend a table in the CMDB, you must create a new relationship rule in **Configuration > Suggested Relationships**.

For example, in a default ServiceNow instance, the base class *Computer* has a *Depends on* relationship with the dependent class of *Computer Peripheral*. If you decide to reclassify laptops (classified as *Computer* by default) into their own base class (for example, cmdb_ci_laptop), you must create new rules for the relationships between laptops and other dependent classes, such as peripherals.

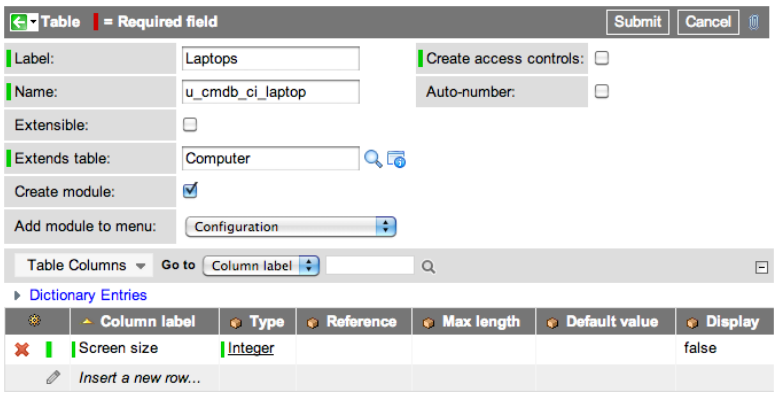


Creating a New CMDB Class

Each CMDB class is its own table, so creating new classes requires creating new tables.

To create a new class (such as **Laptops** or **Thin Clients**):

1. Create a new table (see following table for specific values).
2. [Optional] If you want other CMDB classes to extend the new one, select the **Extensible** check box. You can also select this field after the table is created.
3. Use the **Table Columns** embedded list to add any class-specific columns. For example, the following image shows a way to create a new CMDB class for laptops.



Example: CMDB class for laptops

4. Click **Submit**.
5. Add any related lists. Refer to the existing classes (such as Workstations) for examples.
6. Position the new module in the correct location in the application navigator.

   In the **Laptops** example, the new class belongs next to the **Workstations** module, under the **Base Items** heading.

   1. Right-click **Configuration** in the application navigator and select **Edit Application**.
   2. Locate the **Workstations** module in the list and note the value in the **Order** column.
   3. Open the new **Laptops** module and give it an order value one number greater or less than the order number of the **Workstations** module.
   4. Click **Update**.

Field	Description
Label	Enter the name of the new class (such as **Laptops** or **Thin Clients**).
Name	Preface the name of the table with **u_cmdb_ci_** to make it similar to the other CMDB classes (for example, **u_cmdb_ci_laptop**).
Extensible	Select the check box to allow other tables to extend this table.
Extends Table	Select the parent table for the new class. For example, if the new class is **Laptops**, which is a subclass of **Computers**, select the *cmdb_ci_computer* table. If the new class is a top-level class, select the *cmdb_ci* table.
Add module to menu	Select the check box and then select the **Configuration** application to create a list module for the new class in the same application with the other classes.

Reclassifying a CI

Reclassify a CI by modifying its 'Class' attribute. You can upgrade, downgrade or switch a CI's class. When downgrading or switching a CI's class, attributes that are unique to the current class, and are not defined in the newly reclassified class - are lost.

Each class in the class hierarchy is defined with a unique set of attributes. This set consists of attributes that were inherited from the parent class, and additional attributes specifically defined for the class. When you reclassify a class:

1. The set of attributes is adjusted to match the set of attributes of the newly assigned class. Attributes are added or removed as needed.
2. A new record, with the CI's sys_id, is inserted to the table of the new class, with the appropriate set of attributes for the class.

More specifically, depending on the reclassification that you chose:

- Downgrade : The newly assigned class is a parent of the current class, and has less attributes than the current class. For example, reclassifying a CI from the cmdb_ci_server class to the cmdb_ci_computer class.
- Upgrade: The newly assigned class is a derived child of the current class and has additional attributes. For example, reclassifying a CI from the cmdb_ci_computer class to the cmdb_ci_server.
- Switch: The newly assigned class is in a different branch in the class hierarchy and has a different set of attributes than the current class. For example, reclassifying a CI from the cmdb_ci_linux_server class to the cmdb_ci_win_server class.

In the example above for a reclassification downgrade, the cmdb_ci_server class has attributes that the cmdb_ci_computer class does not have. During the downgrade, these attributes and their respective values are not included in the new CI record that is inserted into the cmdb_ci_computer class.

A switch is a combination of a downgrade and an upgrade. In the example above for a switch, the CI is downgraded to the cmdb_ci_server, and then upgraded to the cmdb_ci_win_server class. Therefore, attributes are lost in the same manner that they do in a downgrade operation.

1. Locate the CI that you want to reclassify. For example, if the CI is a server, then in the navigation search box, type cmdb_ci_server.list to display the CI in the Servers view.
2. Ensure that the Class attribute is displayed in the view. Use Personalize List to personalize the view if you need to.
3. Locate the CI that you want to reclassify, and click on the Class value of the CI.
4. Select the class that you want to reclassify the CI to, and click the green check box to confirm the change request.

In a downgrade or a switch reclassification, some CI data might be lost.

References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/product/configuration-management/concept/c_CMDBClassifications.html

Tables and Classes

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Overview

A table can "extend" another table. A table that extends another table is called a child class, and the table it extends is the parent class.

If a table is extended, but itself is not an extended table, it is then called a base class. For a child class' record, the database stores new fields unique to child class and stores the rest of the fields in the parent class. This means that one record in a child class exists both in the child class and the parent class.

The record in the child class has a corresponding record (with the same sys_id identifier) in both the parent and child classes, which will always be accessed together as one record by the platform. When a record in one class is deleted, the platform automatically deletes its counterpart in its matching class.

Note: *If you edit a field on a child table that is present on the parent table, you will also change it for the parent table and all other child tables.*

To see the relationships between classes, use the schema map.

For the full CMDB hierarchy schema model map for Fuji, in a pdf format, see CMDB Schema Model Map [2].

The following is a list of tables in ServiceNow that extend other tables. If you do not see a table in this list, then it does not extend another table.

Table Name	Label	Extension of	Label
ast_lease	Lease	ast_contract	Contract
ast_license_adobe	Adobe Software License	ast_license_base	Base License Table
ast_license_generic	Generic Software License	ast_license_base	Base License Table
ast_license_msft	Microsoft Software License	ast_license_base	Base License Table
ast_license_symantec	Symantec Software License	ast_license_base	Base License Table
ast_service	Service Contract	ast_contract	Contract
ast_warranty	Warranty	ast_contract	Contract
bsm_action	BSM Map Actions	diagrammer_action	Diagrammer Actions
catalog_script_client	Catalog Client Scripts	sys_script_client	Client Script
catalog_ui_policy	Catalog UI Policy	sys_ui_policy	UI Policy
catalog_ui_policy_action	Catalog UI Policy Action	sys_ui_policy_action	UI Policy Action
change_phase	Change Phase	task	Task
change_request	Change Request	task	Task
change_request_imac	IMAC	change_request	Change Request
change_task	Change Task	task	Task

cmdb_ci_acc	Accessory	cmdb_ci	Configuration Item
cmdb_ci_aix_server	AIX Server	cmdb_ci_unix_server	Unix Server
cmdb_ci_appl	Application	cmdb_ci	Configuration Item
cmdb_ci_application_software	Application Software	cmdb_ci_spkg	Software
cmdb_ci_app_server	Application Server	cmdb_ci_appl	Application
cmdb_ci_app_server_domino	Domino	cmdb_ci_app_server	Application Server
cmdb_ci_app_server_java	Java Server	cmdb_ci_app_server	Application Server
cmdb_ci_app_server_jboss	Jboss	cmdb_ci_app_server	Application
cmdb_ci_app_server_tomcat	Tomcat	cmdb_ci_app_server	Application Server
cmdb_ci_app_server_weblogic	BEA Weblogic	cmdb_ci_app_server	Application Server
cmdb_ci_app_server_websphere	IBM Websphere	cmdb_ci_app_server	Application Server
cmdb_ci_business_process	Business Process	cmdb_ci	Configuration Item
cmdb_ci_circuit	Circuit	cmdb_ci	Configuration Item
cmdb_ci_cluster	Cluster	cmdb_ci	Configuration Item
cmdb_ci_cluster_node	Cluster Node	cmdb_ci	Configuration Item
cmdb_ci_cluster_resource	Cluster Resource	cmdb_ci	Configuration Item
cmdb_ci_cluster_vip	Cluster Virtual IP	cmdb_ci	Configuration Item
cmdb_ci_comm	Communication Device	cmdb_ci	Configuration Item
cmdb_ci_computer	Computer	cmdb_ci	Configuration Item
cmdb_ci_computer_room	Computer Room	cmdb_ci	Configuration Item
cmdb_ci_crac	Computer Room AC	cmdb_ci	Configuration Item
cmdb_ci_database	Database	cmdb_ci	Configuration Item
cmdb_ci_datacenter	Data Center	cmdb_ci	Configuration Item
cmdb_ci_db_catalog	Database Catalog	cmdb_ci	Configuration Item
cmdb_ci_db_db2_catalog	DB2 Catalog	cmdb_ci_db_catalog	Database Catalog
cmdb_ci_db_db2_instance	DB2 Instance	cmdb_ci_db_instance	Database Instance
cmdb_ci_db_instance	Database Instance	cmdb_ci_appl	Application
cmdb_ci_db_mssql_catalog	MSFT SQL Catalog	cmdb_ci_db_catalog	Database Catalog
cmdb_ci_db_mssql_instance	MSFT SQL Instance	cmdb_ci_db_instance	Database Instance
cmdb_ci_db_mysql_catalog	MySQL Catalog	cmdb_ci_db_catalog	Database Catalog
cmdb_ci_db_mysql_instance	MySQL Instance	cmdb_ci_db_instance	Database Instance
cmdb_ci_db_ora_catalog	Oracle Catalog	cmdb_ci_db_catalog	Database Catalog
cmdb_ci_db_ora_instance	Oracle Instance	cmdb_ci_db_instance	Database Instance
cmdb_ci_db_syb_catalog	Sybase Catalog	cmdb_ci_db_catalog	Database Catalog
cmdb_ci_db_syb_instance	Sybase Instance	cmdb_ci_db_instance	Database Instance
cmdb_ci_desktop_software	Desktop Software	cmdb_ci_spkg	Software
cmdb_ci_directory_server	Directory Server	cmdb_ci_infra_service	Infrastructure Service
cmdb_ci_disk	Disk	cmdb_ci	Configuration Item
cmdb_ci_email_server	Email Server	cmdb_ci_infra_service	Infrastructure Service

cmdb_ci_esx_server	ESX Server	cmdb_ci_server	Server
cmdb_ci_file_system	File System	cmdb_ci	Configuration Item
cmdb_ci_file_system_nfs	NFS File System	cmdb_ci_file_system	File System
cmdb_ci_file_system_smb	SMB File System	cmdb_ci_file_system	File System
cmdb_ci_ftp_server	FTP Server	cmdb_ci_infra_service	Infrastructure Service
cmdb_ci_group	Group	cmdb_ci	Configuration Item
cmdb_ci_hpux_server	HPUX Server	cmdb_ci_unix_server	Unix Server
cmdb_ci_infra_service	Infrastructure Service	cmdb_ci_appl	Application
cmdb_ci_infra_service_ldap	LDAP Service	cmdb_ci_infra_service	Infrastructure Service
cmdb_ci_inf_software	Infrastructure Software	cmdb_ci_spkg	Software
cmdb_ci_ip_device	IP Device	cmdb_ci	Configuration Item
cmdb_ci_ip_network	IP Network	cmdb_ci	Configuration Item
cmdb_ci_ip_phone	IP Phone	cmdb_ci	Configuration Item
cmdb_ci_ip_router	IP Router	cmdb_ci_netgear	Network Gear
cmdb_ci_ip_server	IP Server	cmdb_ci_infra_service	Infrastructure Service
cmdb_ci_ip_service	IP Service	cmdb_ci	Configuration Item
cmdb_ci_ip_switch	IP Switch	cmdb_ci_netgear	Network Gear
cmdb_ci_linux_server	Linux Server	cmdb_ci_server	Server
cmdb_ci_mainframe	IBM Mainframe	cmdb_ci_server	Server
cmdb_ci_mainframe_lpar	IBM Mainframe LPAR	cmdb_ci_server	Server
cmdb_ci_msd	Storage Device	cmdb_ci	Configuration Item
cmdb_ci_netgear	Network Gear	cmdb_ci	Configuration Item
cmdb_ci_netware_server	Netware Server	cmdb_ci_server	Server
cmdb_ci_network_adapter	Network Adapter	cmdb_ci	Configuration Item
cmdb_ci_net_traffic	Network Traffic	cmdb_ci	Configuration Item
cmdb_ci_osx_server	OS/X Server	cmdb_ci_server	Server
cmdb_ci_patches	Patch	cmdb_ci	Configuration Item
cmdb_ci_pdu	PDU	cmdb_ci	Configuration Item
cmdb_ci_pdu_outlet	Outlet	cmdb_ci	Configuration Item
cmdb_ci_peripheral	Computer Peripheral	cmdb_ci	Configuration Item
cmdb_ci_printer	Printer	cmdb_ci	Configuration Item
cmdb_ci_print_queue	Print Queue	cmdb_ci	Configuration Item
cmdb_ci_rack	Rack	cmdb_ci	Configuration Item
cmdb_ci_server	Server	cmdb_ci_computer	Computer
cmdb_ci_service	Business Service	cmdb_ci	Configuration Item
cmdb_ci_snc_component	SNC Component	cmdb_ci	Configuration Item
cmdb_ci_solaris_server	Solaris Server	cmdb_ci_unix_server	Unix Server
cmdb_ci_spkg	Software	cmdb_ci	Configuration Item
cmdb_ci_tomcat_connector	Tomcat Connector	cmdb_ci	Configuration Item

cmdb_ci_unix_daemon	Unix Daemon	cmdb_ci_ip_service	IP Service
cmdb_ci_unix_server	Unix Server	cmdb_ci_server	Server
cmdb_ci_ups	UPS	cmdb_ci	Configuration Item
cmdb_ci_ups_alarm	UPS Alarm	cmdb_ci	Configuration Item
cmdb_ci_ups_bypass	UPS Bypass	cmdb_ci	Configuration Item
cmdb_ci_ups_inpu	UPS Input	cmdb_ci	Configuration Item
cmdb_ci_ups_output	UPS Output	cmdb_ci	Configuration Item
cmdb_ci_vm	Virtual Machine	cmdb_ci	Configuration Item
cmdb_ci_vm_parallels	Parallels	cmdb_ci_vm	Virtual Machine
cmdb_ci_vm_vmware	VMware	cmdb_ci_vm	Virtual Machine
cmdb_ci_vm_zones	Zones	cmdb_ci_vm	Virtual Machine
cmdb_ci_vpn	Virtual Private Network	cmdb_ci	Configuration Item
cmdb_ci_websphere_cell	Websphere Cell	cmdb_ci	Configuration Item
cmdb_ci_web_application	Web Application	cmdb_ci_appl	Application
cmdb_ci_web_server	Web Server	cmdb_ci_infra_service	Infrastructure Service
cmdb_ci_web_service	Web Service	cmdb_ci_appl	Application
cmdb_ci_web_site	Web Site	cmdb_ci_appl	Application
cmdb_ci_windows_service	Windows Service	cmdb_ci_ip_service	IP Service
cmdb_ci_win_cluster	Windows Cluster	cmdb_ci_cluster	Cluster
cmdb_ci_win_cluster_node	Windows Cluster Node	cmdb_ci_cluster_node	Cluster Node
cmdb_ci_win_cluster_resource	Windows Cluster Resource	cmdb_ci_cluster_resource	Cluster Resource
cmdb_ci_win_server	Windows Server	cmdb_ci_server	Server
cmdb_ci_zone	Zone	cmdb_ci	Configuration Item
cmdb_metric_cpu	CI CPU Metrics	cmdb_metric	CI Metric
cmdb_metric_db_connections	CI DB Connection Metric	cmdb_metric	CI Metric
cmdb_metric_errors	Errors Logged	cmdb_metric	CI Metric
cmdb_metric_events_processed	Events Processed	cmdb_metric	CI Metric
cmdb_metric_event_logs	Events Logged	cmdb_metric	CI Metric
cmdb_metric_java	CI Java Metric	cmdb_metric	CI Metric
cmdb_metric_linux_memory	Linux Memory Metrics	cmdb_metric	CI Metrics
cmdb_metric_load	CI Load Metrics	cmdb_metric	CI Metrics
cmdb_metric_logs	CI Log Count	cmdb_metric	CI Metric
cmdb_metric_mysql_statements	CI MySQL Metrics	cmdb_metric	CI Metrics
cmdb_metric_oracle	CI Oracle Metrics	cmdb_metric	CI Metrics
cmdb_metric_partition	Partition Read/Write Statistics	cmdb_metric	CI Metrics
cmdb_metric_semaphores	CI Semaphore Metrics	cmdb_metric	CI Metrics
cmdb_metric_service_now	CI Service-Now Metrics	cmdb_metric	CI Metrics
cmdb_metric_sql	SQL Response Metrics	cmdb_metric	CI Metrics
cmdb_metric_transactions	CI Transaction Metrics	cmdb_metric	CI Metrics

discovery_probes_multi	Multiprobe	discovery_probes	Probe
discovery_probes_snmp	SNMP Probe	discovery_probes	Probe
discovery_probes_wmi	WMI Probe	discovery_probes	Probe
ecc_agent_counter_metric	ECC Agent Counter Metric	ecc_agent_metric	ECC Agent Metric
ecc_agent_memory_metric	ECC Agent Memory Metric	ecc_agent_metric	ECC Agent Metric
ecc_agent_rgr_metric	ECC Agent RGR Metric	ecc_agent_metric	ECC Agent Metric
ecc_agent_scalar_metric	ECC Agent Scalar Metric	ecc_agent_metric	ECC Agent Metric
expert_panel_catalog_checkout	Catalog Checkout Panel	expert_panel	Wizard Panel
expert_panel_catalog_order	Catalog Order	expert_panel	Wizard Panel
expert_panel_knowledge	KB Viewer	expert_panel	Wizard Panel
expert_panel_template	Record Generator	expert_panel	Wizard Panel
expert_script_client	Wizard Client Script	sys_script_client	Client Script
expert_variable	Wizard Variable	question	Question
import_log	Import Log	syslog	Log Entry
imp_computer	Computer	sys_import_set_row	Import Set Row
imp_location	Location	sys_import_set_row	Import Set Row
imp_notification	Notification	sys_import_set_row	Import Set Row
imp_user	User	sys_import_set_row	Import Set Row
incident	Incident	task	Task
item_option_new	Variable	question	Question
kb_submission	KB Submission	task	Task
ola	OLA	sla	SLA
plan_mysql	Plan MySQL	plan_execution	Plan Execution
plan_oracle	Plan oracle	plan_execution	Plan Execution
problem	Problem	task	Task
process_step_approval	Approval Steps	process_step	Process Steps
release_phase	Release Phase	task	Task
release_task	Release Task	task	Task
scheduled_data_import	Scheduled Data Import	sysauto	Scheduled Job
scheduled_import_set	Scheduled Data Import	scheduled_data_import	Scheduled Data Import
sc_category_top_n	Dynamic Category	sc_category	Category
sc_cat_item_content	Content Item	sc_cat_item	Catalog item
sc_cat_item_dt_approval	Execution Plan Approval Task	sc_cat_item_delivery_task	Execution Plan Task
sc_cat_item_guide	Order Guide	sc_cat_item	Catalog Item
sc_cat_item_producer	Record Producer	sc_cat_item	Catalog Item
sc_cat_item_wizard	Wizard Launcher	sc_cat_item	Catalog Item
sc_request	Request	task	Task
sc_req_item	Requested Item	task	Task
sc_task	Catalog Task	task	Task

survey_question_new	Question	question	Question
sysapproval_group	Group Approval	task	Task
sysauto_report	Scheduled Email of Report	sysauto	Scheduled Job
sysauto_script	Scheduled Script Extension	sysauto	Scheduled Job
sysauto_template	Scheduled Entity Generation	sysauto	Scheduled Job
sysevent_email_action	Email Notification	sysrule	Rule
sysevent_in_email_action	Inbound Email Actions	sysrule	Rule
sysevent_script_action	Script Action	sysrule	Rule
syslog_transaction	Transaction Log Entry	syslog	Rule
sysrule_approvals	Approval Rules	sysrule	Rule
sysrule_assignment	Assignment Rules	sysrule	Rule
sysrule_escalate	Service Level Agreement	sysrule	Rule
sysrule_escalate_am	Inactivity Monitor	sysrule_escalate	Service Level Agreement
sysrule_view	View Rule	sysrule	Rule
ticket	Ticket	task	Task
var_dictionary	Variables	sys_dictionary	Dictionary
v_field_editor	Edit Field	v_field_creator	Create Field
v_table_editor	Edit Table	v_table_creator	Create Table
v_ws_creator	Create Web Service	v_table_creator	Create Table
v_ws_editor	Edit Web Service	v_ws_creator	Create Web Service
v_ws_field_creator	Create Web Service Field	v_field_creator	Create Field
v_ws_field_editor	Edit Web Service Field	v_field_editor	Edit Field
wf_activity_variable	Activity Variables	var_dictionary	Variables
wf_log	Workflow Log Entry	syslog	Log Entry
wf_variable	Workflow SC Variable	item_option_new	Variable
wf_workflow_schedule	Workflow Schedule	sysauto_script	Scheduled Script Execution

References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/administer/reference-pages/reference/r_TablesAndClasses.html

[2] http://wiki.servicenow.com/images/6/68/CMDB_Schema_Map.pdf

Unique Record Identifier

Note: *This article applies to Fuji and earlier releases. For more current information, see The Unique Record Identifier (sys_id)* [1] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**'

Overview

Each record in ServiceNow is identified by a unique 32-character GUID (Globally Unique ID) called a sys_id. The same sys_id value will never be generated twice, ensuring every record created in every table in every instance of ServiceNow in the world has a unique identifying value.

If two records have the same sys_id value, then one was copied to the other at the database level outside of the ServiceNow application. When created within the application, sys_id values are unique.

The ServiceNow application and database should manage all operations on sys_id values. Typical end users do not see a record's sys_id and database administrators rarely use sys_id values.

Note: *A sys_id of* ***-1*** *is the sys_id of a new record. Once the record is inserted, it will be given a new sys_id.*

Getting the sys_id

Use one of the following methods for locating the sys_id of a record.

Using the Context Menu

To get a sys_id using the right-click context menu:

1. Right-click on a record in a list, or on the header of a form.
2. Select **Copy sys_id**.

   Depending on your browser, an additional dialog may appear allowing you to manually copy the sys_id.

Using the Header Bar

To get a sys_id from the header bar:

1. Navigate to the record whose sys_id is required.
2. Right click the header bar and select **Copy URL**.

   The sys_id is inside of the URL, after the parameter **sys_id=**. For example, the following is a URL for an Incident:

   https://<instance name>.service-now.com/nav_to.do?uri=incident.do?sys_id=9d385017c611228701d22104cc95c371

   Therefore the sys_id is 9d385017c611228701d22104cc95c371.

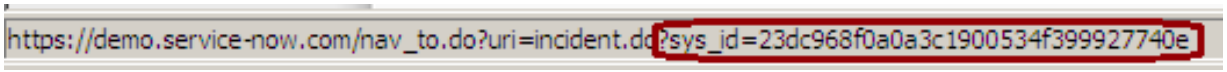
Using the URL

Since the sys_id of a record is always part of the URL for a link to that record, it is possible to retrieve the sys_id by viewing the URL. For example, an Incident with the following URL:

> **https://<instance name>.service-now.com/nav_to.do?url=incident.do?sys_id=23dc968f0a0a3c1900534f399927740e**

Would have this sys_id: 23dc968f0a0a3c1900534f399927740e

The sys_id can be viewed in the information bar of the browser simply by hovering over a link to the record.



Getting the sys_id in a Script

The sys_id value of a record can be found in a business rule (or any other server-side JavaScript) by dot-walking from the GlideRecord:

```
var id = current.sys_id;
```

The sys_id of a record can be found in client-side JavaScript using g_form.getUniqueValue() as shown in the following example:

```
function onLoad() {
    var incSysid = g_form.getUniqueValue();
    alert(incSysid);
}
```

References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/administer/table-administration/concept/c_UniqueRecordIdentifier.html

Understanding the sys audit Table

Note: *This article applies to Fuji and earlier releases. For more current information, see The Sys Audit Table* [1] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**'

Overview

The system tracks inserts and changes to audited records in the Sys Audit [sys_audit] table. The system audits tables where the **Audit** check box is selected on the Dictionary record. By default, the system does not audit records from system tables, such as update sets tables. See Turning on Auditing (History) for a Table.

Note: *To prevent performance issues and infinite loops, the system skips any business rule or workflow triggered by inserts to the Sys Audit table.*

Sys Audit Table

To view the structure of the Sys Audit table:

1. From the left navigation pane, select **System Definition > Tables and Columns**.
2. Scroll to **Sys Audit**.
3. Click the table name.

   The Column names and Column attributes are displayed in the second and third pane.

The following information is stored in a Sys Audit record:

Field	Description
tablename	Table that the audit record is for (for example, "incident")
fieldname	Column in the table that the audit record is for (for example, "assigned_to")
documentkey	**sys_id** (Unique Record Identifier) of the record the audit record is for.
oldvalue	Old value of the field change represented by this **sys_audit** record. For reference fields, this is the unique **sys_id** value of the changed record.
newvalue	New value of the field change represented by this **sys_audit record**. For reference fields, this is the unique **sys_id** value of the changed record.

Enhancements

Dublin

Administrators can see the change history for the Password field on the User [sys_user] table when that table is audited.

References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/administer/security/concept/c_UnderstandingTheSysAuditTable.html

Viewing

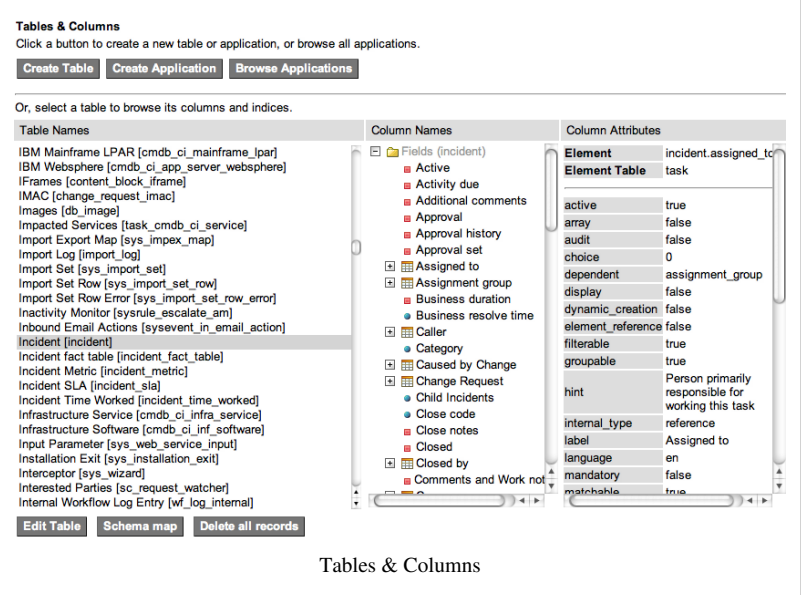
Tables and Columns Module

Note: *This article applies to Fuji and earlier releases. For more current information, see Table Administration* [1] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**

Overview

The **Tables & Columns** module provides a list of all existing tables, with columns, column attributes, and indexes. Administrators can perform the following tasks from this module:

- Browse available tables and columns.
- Launch a schema map for a table. See Schema Map for Tables.
- Create a new table or edit an existing table. See Creating a Custom Table.
- Create a new application or browse existing applications. See Applications.
- Delete all records from a table. See Deleting All Records from a Table.



Tables & Columns

Browsing Tables and Columns

1. Navigate to **System Definition > Tables & Columns**.
2. In the **Table Names** pane, select a table. A list of the columns on the selected table appears in the **Column Names** pane.

   Informational icons indicate field source and type.
3. In the **Column Names** pane, select a column. A list of the attributes of the selected column appears in the **Column Attributes** pane.

Icons

In the **Column Names** pane, informational icons indicate the source and type of a field. Use the plus and minus icons to expand and collapse the index fields. All reference fields are indexed, but not all fields in an index are reference fields.

- The reference field icon indicates that the field references another table. This icon appears if this field is also an index field.
- The element icon indicates that the field resides on the table.
- The foreign field indicates that the field resides on the parent table.
- The index icon indicates that this field is part of an index that resides on the table chosen in the **Table Names** pane.

  Note: The **Column Attributes** pane does not display data for this field.
- The index (non-reference) field icon indicates that this field is part of one or more indexes.

References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/administer/table-administration/concept/c_TableAdministration.html

Table Administration

Note: *This article applies to Fuji and earlier releases. For more current information, see Table Administration* [1] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**'

Overview

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes, such as Incident, Problem, and CMDB. Tables can extend other tables, creating parent tables and child tables (see Tables and Classes).

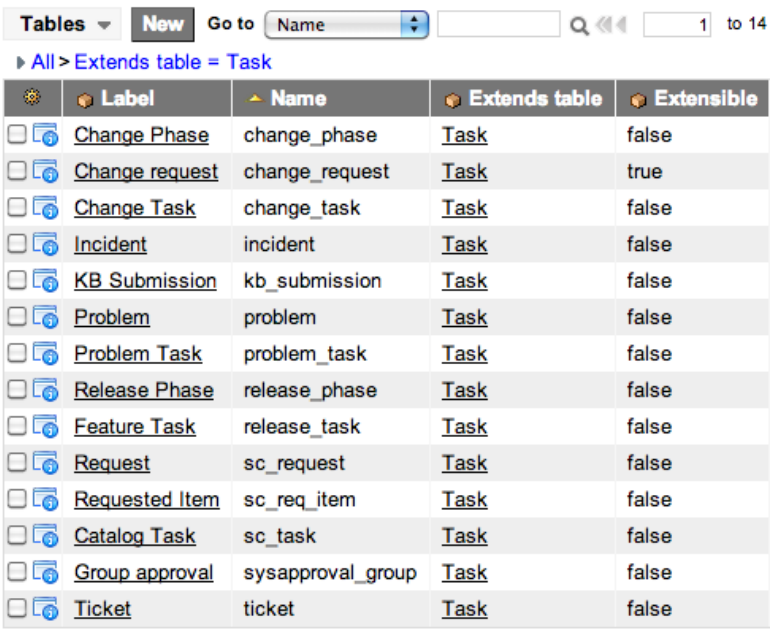
Administrators can use these tools for viewing and modifying the database structure:

- **Tables module:** provides a list of all tables in the database.
- **Tables & Columns module:** provides a list of all existing tables, with columns, column attributes, and indexes. See Tables & Columns Module.
- **Schema map:** provides a graphical representation of the relationships between tables. See Schema Map.
- **Data dictionary tables:** contain additional information that defines database elements. See Data Dictionary Tables.

Tables Module

The Tables [sys_db_object] table contains a record for each table in the database.

To view the list of tables, navigate to **System Definition > Tables**. For example, you can filter the list to see extended table relationships.



Example: filter for tables that extend the Task table

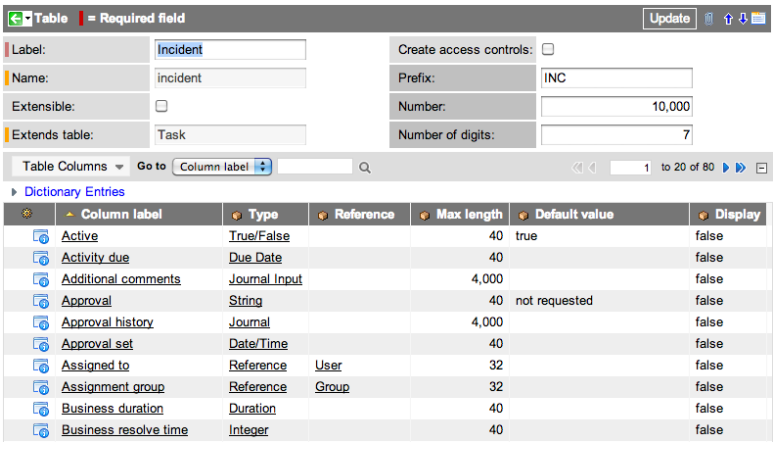
To open the record for an existing table, click a table label. You can:

- View, add, or modify columns with a searchable and sortable embedded list, define the auto-number format, make the table extendable by other tables, and create modules for the table. See Creating a Custom Table.
- Launch a schema map for a table by clicking the **Show Schema Map** related link. See Schema Map for Tables.
- Open the dictionary entries for the table by right-clicking the form header and selecting **Show Dictionary Record**. See System Dictionary.

  In versions prior to the Dublin release, click the **Show Dictionary Collection** related link.
- Navigate directly to the default list or form view for the table by clicking the **Show List** or **Show Form** related link.

  In versions prior to the Dublin release, click the **Show Records in List** or **Show New Record Form** related link.
- Delete all records from a table by clicking the **Delete All Records**. See Deleting All Records from a Table.

  In versions prior to the Dublin release, click the **Delete All Records in Table** related link.



Record for the Incident table

Enhancements

Fuji

- Access controls are added to define scope protection for tables.
- The Table form is reorganized for enhanced usability. The **Application** field is added, related table controls are grouped together into sections, and on-form help annotations are added for several controls.

- When administrators create a table in a scoped application, the table name is prefixed with the scope to indicate that it is part of the application.
- When administrators add a field to a table, the field name is prefixed according to the scope of the table and the scope of the field.
- The **Table Columns** embedded list now has a **New** button that allows administrators to create fields with advanced settings from the Dictionary Entry form.
- Administrators can add database indexes to tables.

Dublin

- Administrators can create service catalog record producers directly from the table record.
- Administrators can enable document feeds for a table from the table record.
- Administrators can customize the form and list layout directly from the table record. Also, buttons and links on the Table form are reorganized for enhanced usability.
- If you choose to create a module when creating a table, the associated application menu and module are available both through the standard browser interface and on mobile devices.
- Administrators can see the change history for the Password field on the User [sys_user] table when that table is audited.

Schema Map for Tables

Note: *This article applies to Fuji and earlier releases. For more current information, see Schema Map for Tables* [1] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**'

Overview

The *schema map* displays the details of tables and their relationships in a visual manner, allowing administrators to view and easily access different parts of the database schema. The schema map can also be printed directly from a browser.

Note: *The schema map is significantly enhanced as of the Calgary release. If you are using an older version, see previous version information.*

Schema relationship types supported, and the colors used for them, are:

Relationship type	Color used
Referenced by	Red
Referencing	Orange
Extended by	Green
Extending	Blue

By default, all these types of relationship are displayed, but you can view or hide each type.

Enhancements

Calgary

The following enhancements have been added as of the Calgary release:

- Relationship types are displayed.
- Relationship views can be customized.
- The color scheme relates to relationship types.
- You can drill down through the table hierarchy.
- Selected tables can be hidden from view.
- The schema map can be printed from the browser.

Generating a Schema Map

To generate a schema map:

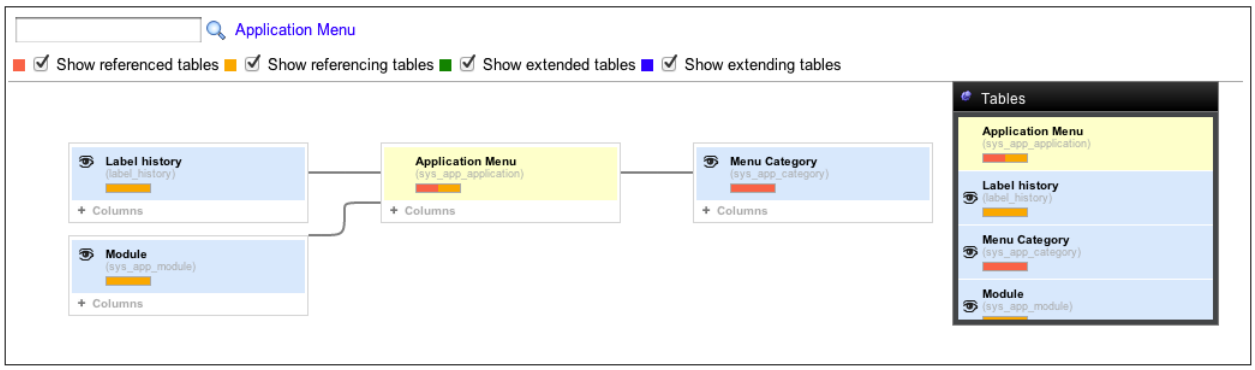
1. Navigate to **System Definition > Tables & Columns**.
2. In the **Table Names** pane, select a table.
3. Click **Schema map**.

   The schema map for the selected table opens in a separate tab or window.

You can print this map from the browser, if required.

Viewing the Schema Map

The schema map shows the selected table in yellow, typically centered, and all tables related to that table, typically shown at the sides.



From this map:

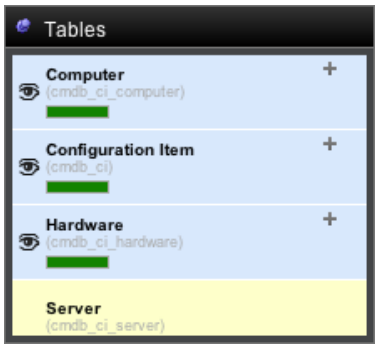
- The check boxes at the top allow you to control which relationships to display. Select or clear a relationship type to display or hide tables with that relationship to the selected table.

- Each related table has a colored bar indicating the relationship to the selected table.
- You can point to the connector lines to display the details of a relationship between the two tables.

Note: *Since relationships are shown as single lines for simplicity, the diagrams rendered are not entity relationship diagrams.*

Using the Table Selector

To view a schema map as a list, point to the table selector in the right corner:



You can:

- Click a table in the list to scroll the schema map to that table.
- Click the eye icon beside a listed table to hide or show that table in the schema map.
- Click the pin icon in the selector to keep the list open.

Using Related Tables

Right-click a table node header to display a context menu with these functions:

- **Focus on this table:** make the selected table the new focus table and redraw the schema map based on the new selection.

  The new focus table is added as a breadcrumb at the top, allowing you to return to the previous table at any time.
- **Go to list:** display the list of records for the table.
- **Go to dictionary:** display the system dictionary, filtered for the selected table.

To hide a related table from view, click the eye icon in the node header (the node can be made visible again with the table selector).

For tables that are part of their own inheritance hierarchy, click the expand button (**+**) in the node header to add their inheritance hierarchy to the schema map.

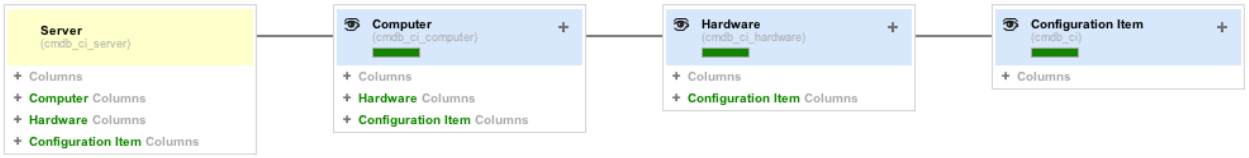
Viewing More Information

Click the expand button (**+**) beside **Columns** to expand the table fields.

Columns -	
Business resolve time:	integer
Caller:	reference to User
Category:	string
Caused by Change:	reference to Change Request
Change Request:	reference to Change Request
Child Incidents:	integer
Close code:	string
Incident state:	integer
Notify:	integer
Parent Incident:	reference to Incident
Problem:	reference to Problem
Reopen count:	integer
Resolve time:	integer
Severity:	integer
Subcategory:	string

The reference fields show a red notation of the table they refer to.

If any tables extend from a table, their columns are displayed in reverse inheritance order. For example:



Here, the Server [cmdb_ci_server] table extends from Computer [cmdb_ci_computer], Hardware [cmdb_ci_hardware], and Configuration Item [cmdb_ci], and displays the columns from those tables.

Similarly, the Computer table displays the columns from the Hardware and Configuration Item tables.

Versions Prior to the Calgary Release

Click the plus to expand previous version information

Legacy Schema Map for Tables

The **Schema Map** provides a graphical representation of the relationships between tables, either through class extension or reference. To view the schema map for a table:

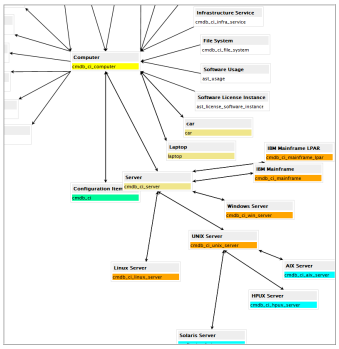
1. Navigate to **System Definition > Tables & Columns**.
2. In the **Table Names** pane, select a table.
3. Click **Schema map**.

To help visually identify extensions, each color represents another level of class extension:

- All entries at a given extension level appear in the same color.
- Tables linked through reference fields appear in gray.

The following image shows an example schema map for the Computer [cmdb_ci_computer] table. In the example, all the tables that extend cmdb_ci_computer directly are the same color. Also, all tables that extend cmdb_ci_server (which itself extends cmdb_ci_computer) appear in another color and are on their own arc.

Each deeper level of nesting within the class hierarchy has its own color and appears on an arc further from the center. In the example, everything brown is one level deep. Orange two levels deep. Blue three levels deep. Anything with a color is an extension of something rather than being related via a reference field.



References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/administer/table-administration/concept/c_SchemaMapForTables.html

CMDB Data Model

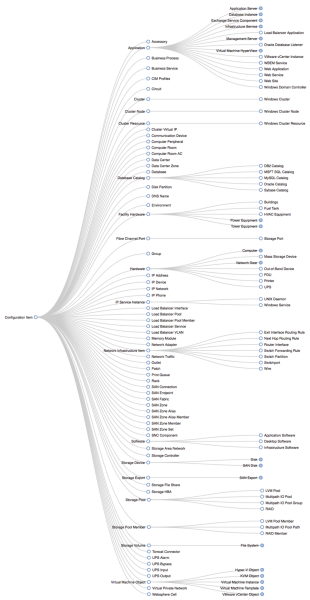
Note: *This article applies to Fuji and earlier releases. For more current information, see Configuration Management* [2] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**

Note: *This article applies to Fuji. For more current information, see Configuration Management Database* [1] *at* http://docs.servicenow.com The Wiki page is no longer being updated. Please refer to http://docs.servicenow.com for the latest product documentation.

The Configuration Management Database (CMDB) [2] is a series of tables containing all the assets and business services controlled by a company and their configurations. Configuration items such as computers and other devices on the network, software contracts and licenses, and business services are represented.

The following figure represents the first few levels of the CMDB tables. These tables represent the class or type of the configuration items.

For the full CMDB hierarchy schema model map for Fuji, in a pdf format, see CMDB Schema Model Map [2].



References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/product/configuration-management/concept/c_ConfigurationManagementDatabase.html

[2] https://docs.servicenow.com/bundle/helsinki-it-service-management/page/product/configuration-management/concept/c_CMDBClassifications.html

Business Service Management Map

Note: *This article applies to Fuji. For more current information, see Service Mapping* [1] *at* http://docs.servicenow.com The Wiki page is no longer being updated. Please refer to http://docs.servicenow.com for the latest product documentation.

ServiceNow has the following Business Service Management (BSM) Map products. Select one of the following options:

- Next Generation Business Service Management Map

  This documentation describes the version of BSM that first appears in the Fuji release. Next Generation BSM (NG-BSM) is built on D3 and Angular technology. It provides an enhanced, modern interactive graphical interface to visualize Configuration Items (CIs) and their relationships. It continues to provide the filtering and related information capabilites available in BSM Eureka release.

- Eureka Business Service Management Map

  This documentation describes the version of BSM that appears in the Eureka release.

- Original Business Service Management Map

  This documentation describes the Business Service Management Map product in versions prior to Eureka.

References

[1] https://docs.servicenow.com/bundle/jakarta-it-operations-management/page/product/service-mapping/reference/c_ServiceMappingOverview.html

Changes and Extensions

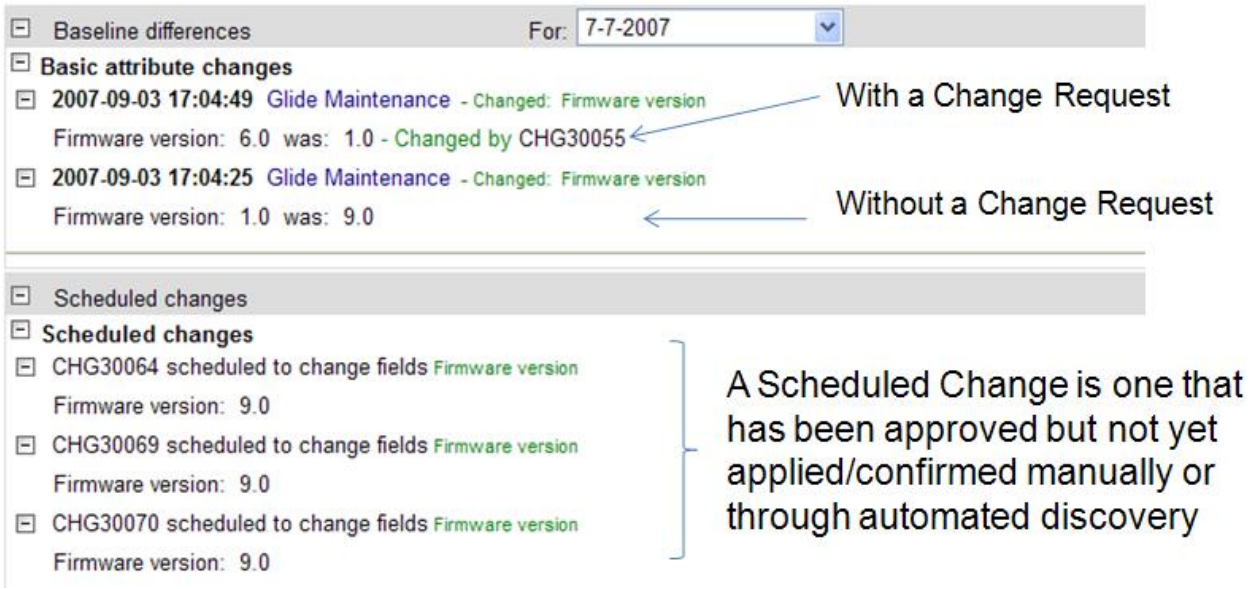
Managing CI Changes

Note: *This article applies to Fuji and earlier releases. For more current information, see Associated CIs on a Change Request* [1] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.'**

Overview

A key component of change management is tracking changes over time and ultimately the entire CI life cycle. Identification of planned and unplanned changes is also highly desirable. This is accomplished through the use of CMDB baselines. Baselines can be scheduled to occur every day, week, or month. Changes made through the change process are linked to the change request, and changes without an associated change request are also displayed. The current state of any CI in the CMDB can be compared against any baseline. Not only are basic attribute changes of a CI tracked, but also all related CIs and CI relationships.

For instructions on performing bulk CI changes, see Best Practice - Bulk CI Changes.
For information on proposed changes, see Configuring Proposed Changes to a Configuration Item.



Affected CIs and Impacted Services

You can also manage CI changes with the related lists at the bottom of the Change Request form: **Affected CIs** and **Impacted Services**. Right-click the header bar on the Change Request form and select **Refresh Impacted Services** to populate the **Impacted Services** related list, based on the currently associated CI.

The **Impacted Services** related list represents a many-to-many relationship between the Task [task] and Business Service [cmdb_ci_service] tables, and displays affected business services. You can add this related list to any task form, such as Incident or Problem, and populate it manually if desired. Adding the related list to a form also adds the **Refresh Impacted Services** option to that form's context menu. Use the menu option to auto-populate the list based on the configuration item on the record. The menu option does not remove manually-added services from the related list, but does add business services related to the CI.

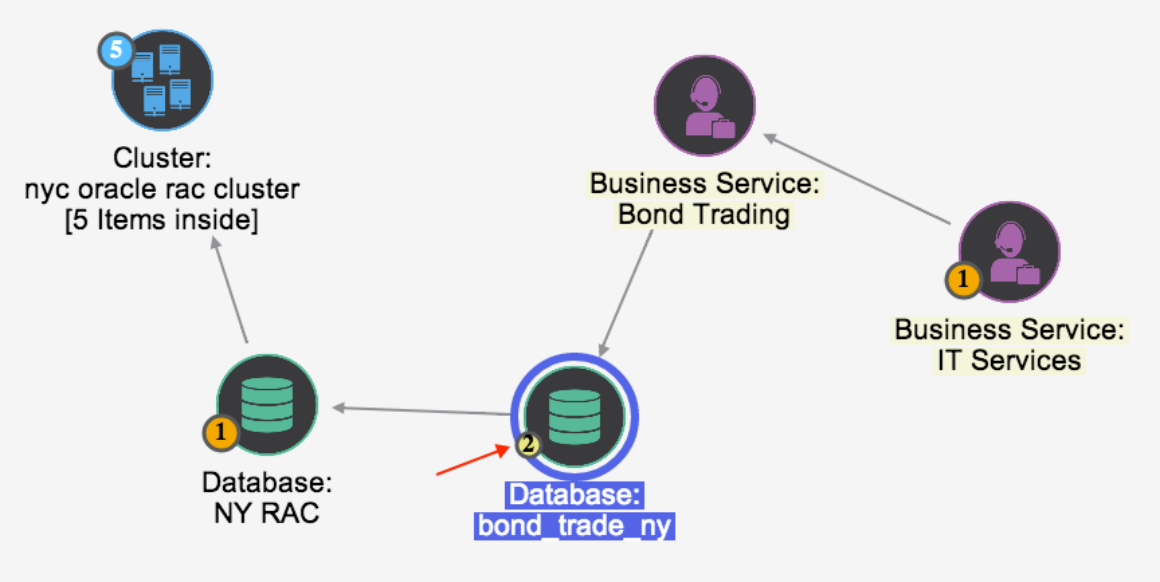
Adding Affected CIs to Change Requests Using the BSM Map

When a change request is associated to a configuration item, the change request record is accessible from the BSM map. This makes the affected services easy to assess. You can use the BSM map to identify dependent CIs affected by the change and then add them to the **Affected CIs** related list on the change request.

Note: *The BSM map shown in this procedure is available starting with the Eureka release. If you are using a version of the ServiceNow platform other than Eureka, see the related documentation in Business Service Management Map.*

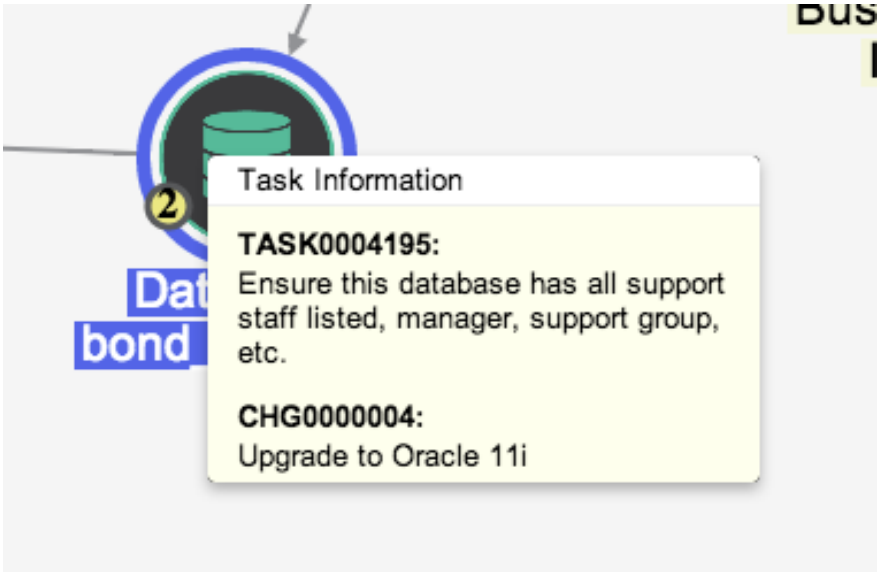
1. In the change request, click the BSM map icon ( ) beside the **Configuration item** field.

   The system displays the configuration item in the map with all its dependent CIs. In this example, there is a critical change attached to the **bond_trade_ny** database. The map includes the business services that rely on the database. The database icon has a blinking glyph on the lower left edge that indicates trouble with the node.



2. Point to the glyph to display a list of tasks and issues with the CI.

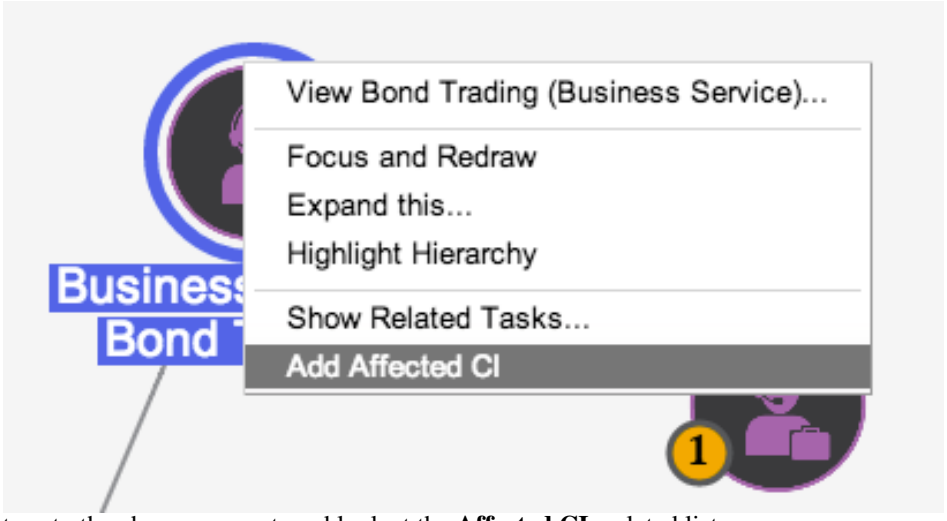
   This database has one change and a follow-on task from a compliance audit. You can open each record from this list.



3. Click either task number to display the complete list of tasks attached to this server.

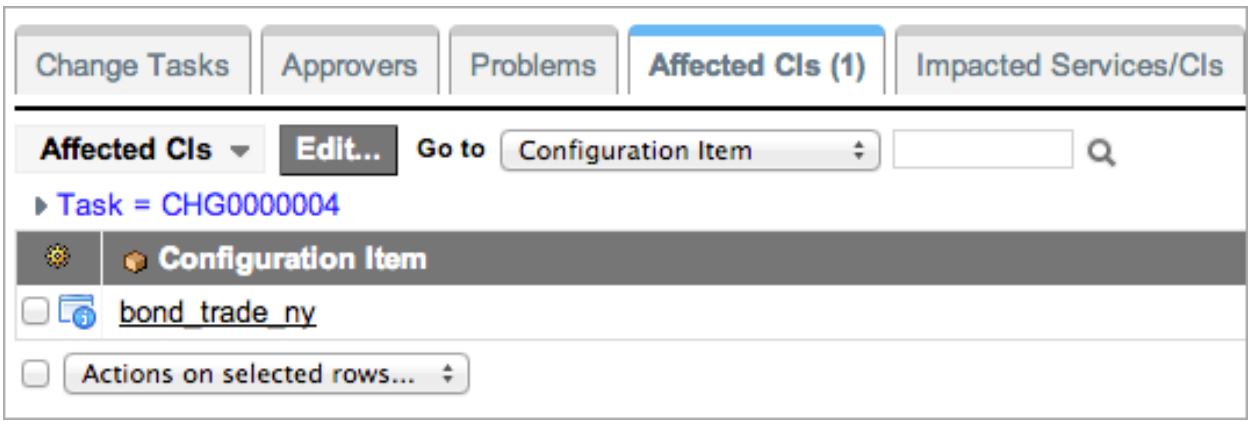
   You can see who is assigned to the change and can open the record for more information.
4. To change the map configuration, select a format from the **Layout** field or use the filter panel to filter the map.

   The BSM map highlights the affected CIs, all of which are dependent on the database.
5. To add an affected CI to the change for the database, right-click a highlighted node and select **Add Affected CI** from the context menu.



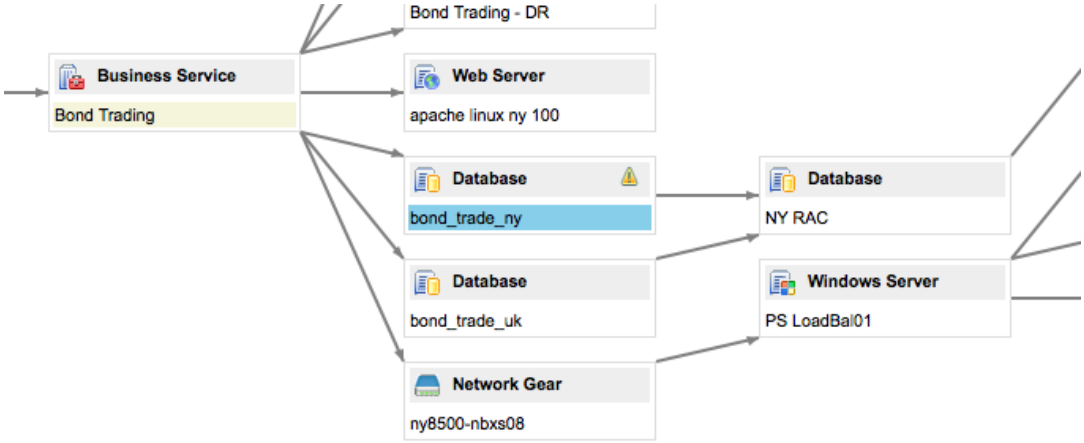
6. Return to the change request, and look at the **Affected CIs** related list.

   If the list is not visible, configure the form to display it.

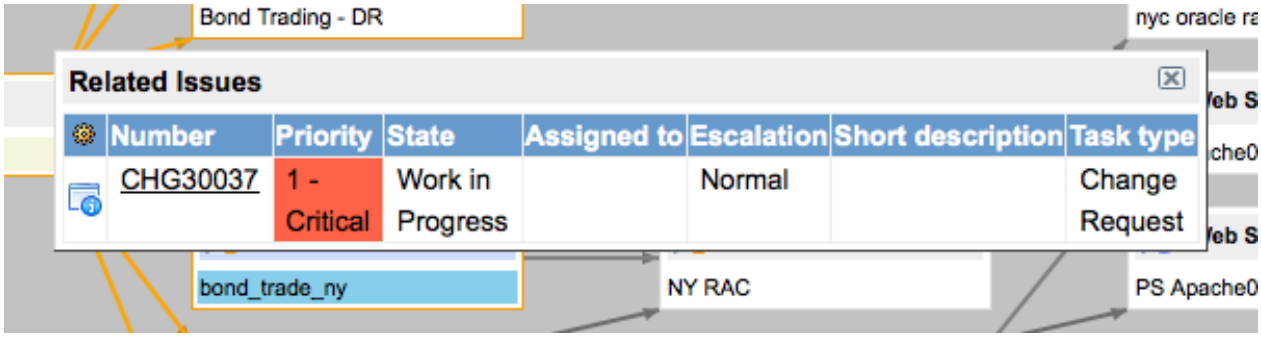


Click the plus to view the procedure for versions prior to Eureka

Once changes are attached to configuration items, they are visible in the business service map. This makes the impacted services easy to assess. The following screenshot shows a critical change attached to the **bond_trade_ny** database.



Clicking on the **Related Issues** icon displays the list of related tasks, including the change.



References

[1] https://docs.servicenow.com/bundle/jakarta-it-service-management/page/product/change-management/concept/c_AffectedCIsAndImpactedServices.html

Baseline CMDB

Note: *This article applies to Fuji and earlier releases. For more current information, see Configuration Management* [2] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**

Note: *This article applies to Fuji. For more current information, see Baseline CMDB* [1] *at* http://docs.servicenow.com The Wiki page is no longer being updated. Please refer to http://docs.servicenow.com for the latest product documentation.

Overview

CMDB baselines provide the following capabilities that help you to understand and control the changes that have been made to your configuration items.

- You can create a snapshot of configuration items, called a baseline. Then, you can review all the changes that have been made to that configuration item since a previous baseline. Multiple baselines may be created and the system tracks the changes made per baseline. Creating a baseline captures the attributes of the CI as well as all first level relationships for the CI. Any changes to the base CI or to any related CI are captured and displayed. Newly created CIs are not automatically added to a baseline.
- You can associate a configuration item with a task, generally a change or change task, and to propose changes that to be made to the CI once the change is complete. You can record changes and these changes are not applied to the CI immediately but are delayed until the change is complete. When the change is complete, you can apply proposed changes, which makes all changes previously proposed and associates the changes with the task.

You need the ecmdb_admin role to create and access baselines.

For information on proposed changes, see Configuring Proposed Changes to a Configuration Item

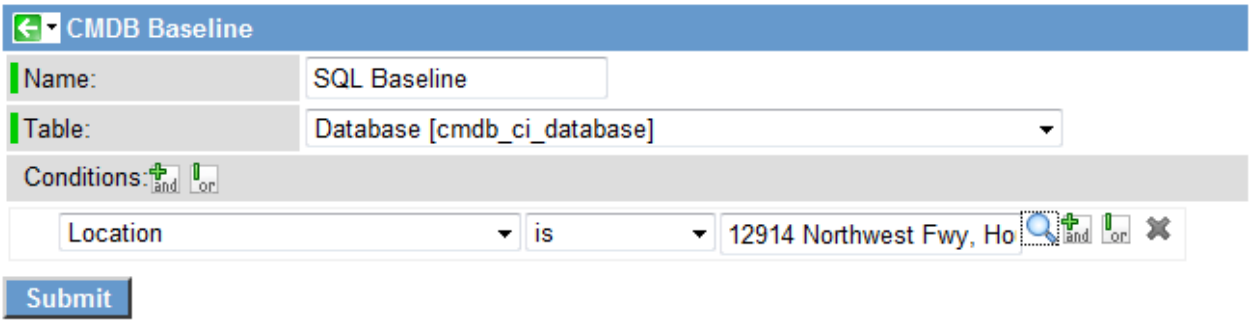
Creating a Baseline

To create a baseline:

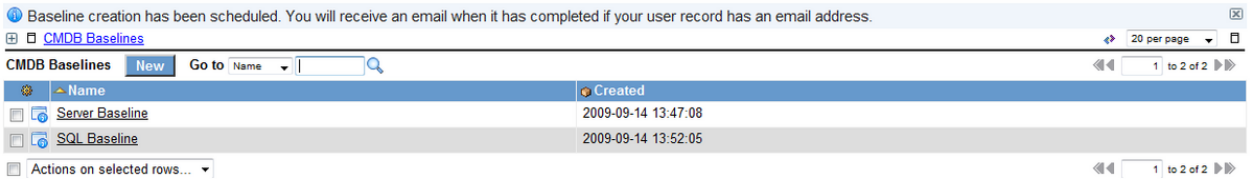
1. Navigate to **Configuration > Baselines > Baselines**. If the **Baselines** module is not visible in the **Configuration** application, it might be inactive. Append '/sys_app_module.do?sys_id=f4463879a9fe3dba01b30bc100cbf404' to the instance URL, and in the **Module - Baselines** form, ensure that the module is **Active**.
2. Click **New**.
3. Enter a baseline **Name**.

   By default, the cmdb_ci table is selected so that the record creates the baseline for all configuration items in the system.
4. To limit the baseline to specific CIs, select a different **Table** or choose **Conditions** that a CI must meet for it to have a baseline entry.

   For example, you might create a baseline for the Database table with the condition **[Location] [is] [*<configured location>*]**.
5. Click **Submit**.



Creating a baseline is time consuming and occurs in the background. A message at the top of the record list notifies you that the baseline has been scheduled and that you will receive an email when the process is complete.

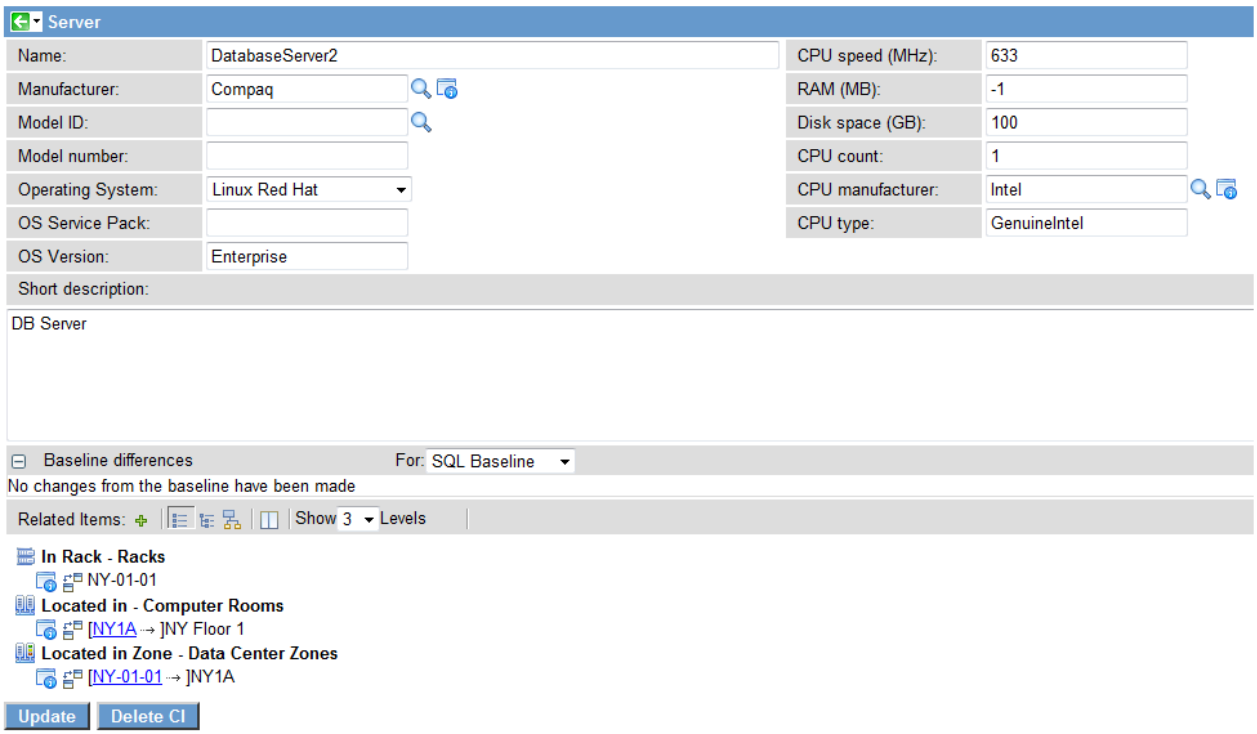


Note: *For instructions on recreating baselines automatically at scheduled intervals, see Scheduling a CMDB Baseline Update.*

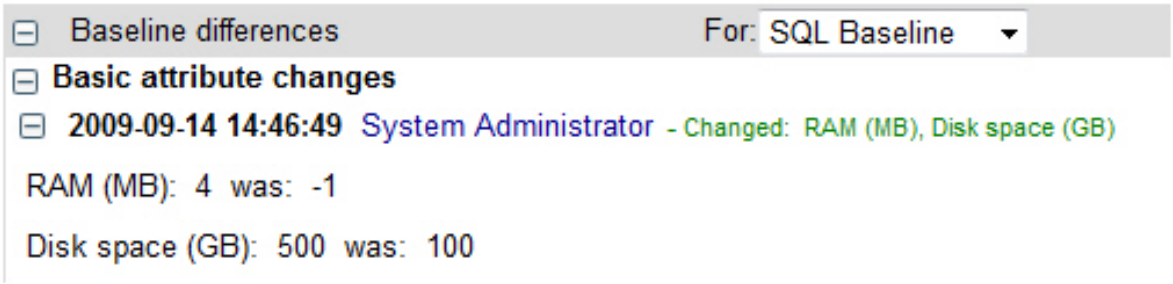
Displaying Baseline Differences

You can see the changes that have been made to a CI or any first level related CI by configuring the CI form to add the **CMDB Baseline diff** field. This field is labeled **Baseline differences** on the form.

1. Select the baseline you want to see for this CI.

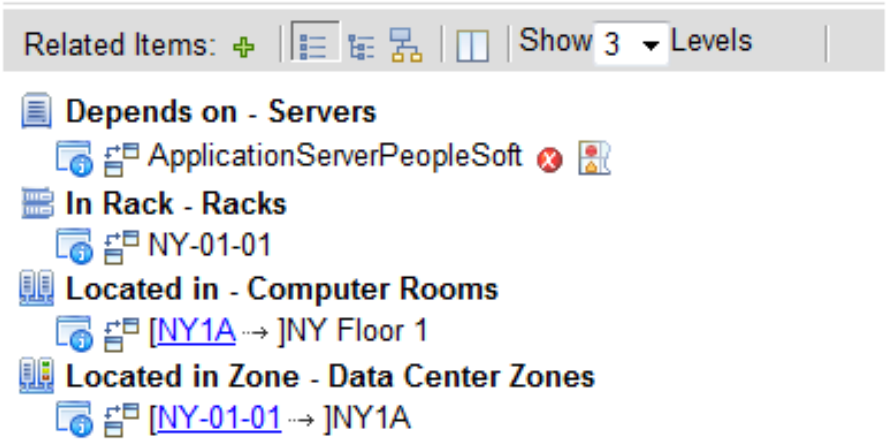


The field displays the details of any changes made to the current record for the selected baseline, or indicates that no changes were made.

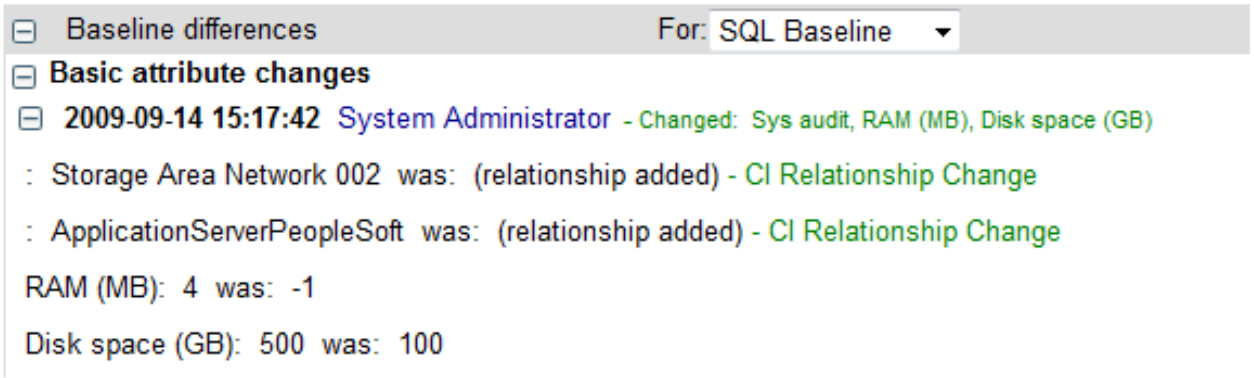


2. Add a relationship to the CI by clicking the green plus icon in the Related Items toolbar.

   The new relationship appears below the toolbar. For more information about the Related Items toolbar and how to control the display, see CI Relations Formatter.



3. Update a related CI and see the changes displayed as **Basic attribute changes** in the current CI record.



References

[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/product/configuration-management/concept/c_BaselineCMDB.html

CMDB and Extended CMDB

Note: *This article applies to Fuji and earlier releases. For more current information, see Configuration Management* [2] *at* http://docs.servicenow.com **The ServiceNow Wiki is no longer being updated. Visit** http://docs.servicenow.com **for the latest product documentation.**'

Note: *This article applies to Fuji. For more current information, see CMDB and Extended CMDB* [1] *at* http://docs.servicenow.com The Wiki page is no longer being updated. Please refer to http://docs.servicenow.com for the latest product documentation.

Overview

The Configuration (CMDB) application provides core functionality for the configuration management database, including modules for hardware and configuration items. This functionality is part of the CMDB plugin, which is available in the Calgary release. Earlier releases used multiple plugins to provide core CDMB functionality.

The separate Extended CMDB plugin includes a collection of modules for specialized configuration items, such as radio hardware, test equipment, and voice system hardware. Activate the Extended CMDB plugin to access those modules.

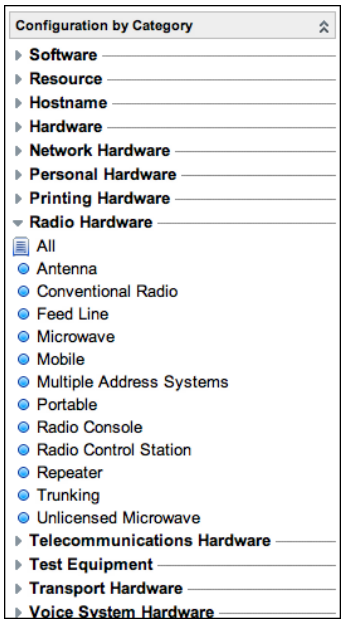
CMDB Plugin

The CMDB plugin is a consolidation of the following existing plugins:

- Baseline CMDB
- Enterprise CMDB
- Enterprise CMDB Categories
- Enterprise CMDB Data Center
- Enterprise CMDB Facilities

Extended CMDB Plugin

When you activate the Extended CMDB plugin, the Configuration by Category application is added to the application navigator.



Activating the Plugin

The CMDB plugin is automatically active for all instances running Calgary and later releases.

You must activate the Extended CMDB plugin to see the modules for specialized configuration items.

Click the plus to expand instructions for activating a plugin.

If you have the admin role, use the following steps to activate the plugin.

1. Navigate to **System Definition > Plugins**.
2. Right-click the plugin name on the list and select **Activate/Upgrade**.

   If the plugin depends on other plugins, these plugins are listed along with their activation status.
3. [Optional] If available, select the **Load demo data** check box.

   Some plugins include demo data—sample records that are designed to illustrate plugin features for common use cases. Loading demo data is a good policy when you first activate the plugin on a development or test instance. You can load demo data after the plugin is activated by repeating this process and selecting the check box.
4. Click **Activate**.

References

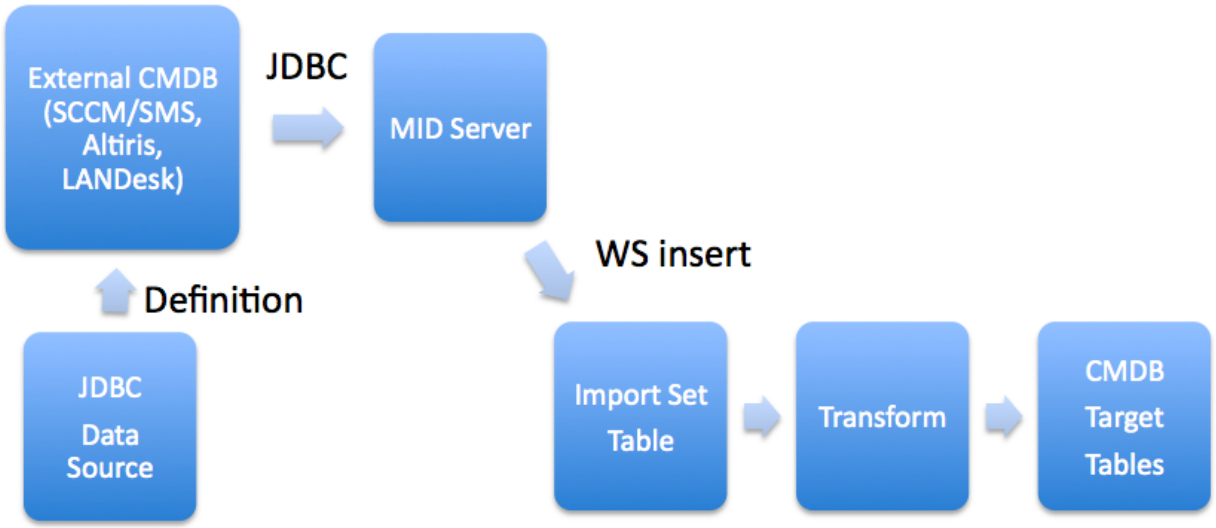
[1] https://docs.servicenow.com/bundle/jakarta-servicenow-platform/page/product/configuration-management/reference/r_CMDBAndExtendedCMDB.html

CMDB Import (plugin)

Overview

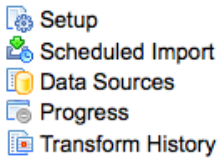
A class of integrations with existing configuration management databases (CMDB) that imports CI's into ServiceNow's CMDB. It is achieved using Import Sets and JDBC data sources defined and executed via the MID server (JDBCProbe). The integrations that fall into this category includes:

- Altiris
- Microsoft SCCM / SMS
- Avocent LANDesk



Configuration

After enabling the plugin for an integration of this type, you will have a new application that consists of the following common modules. Next, install a MID Server in your environment that will be used to execute JDBC queries connecting with your database. This MID server will require port level access to your database, eg. for SQL Server port 1433.



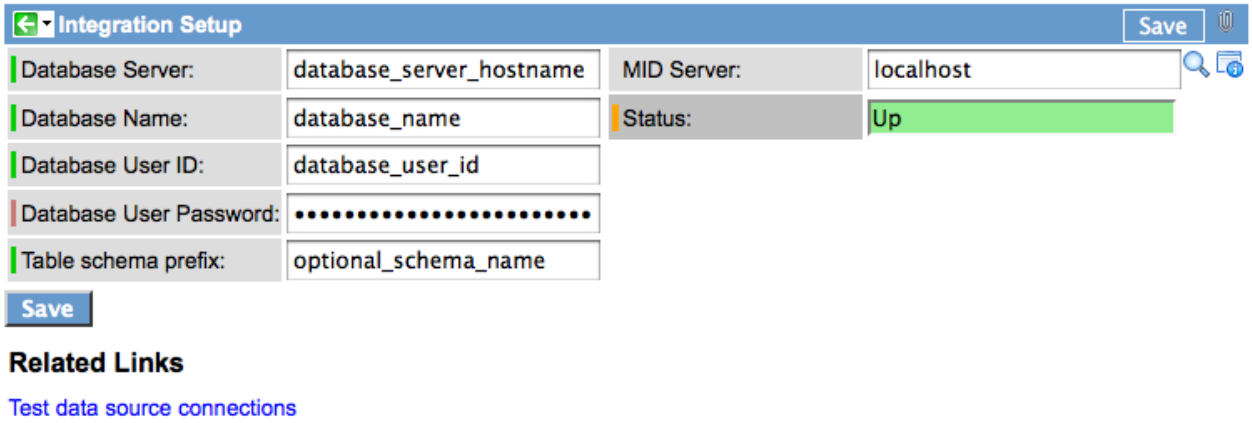
- **Setup**
  - Configure the data sources from one form
  - Specify Database server settings and MID server
  - Test configuration
- **Scheduled Import**
  - Schedule the execution of the import or import immediately
- **Data Sources**
  - A list of the pre-configured data sources defining the external CMDB database
- **Progress**

- A historical list of progress on scheduled imports

- **Transform History**
  - A historical list of transformations performed during scheduled imports

Setup

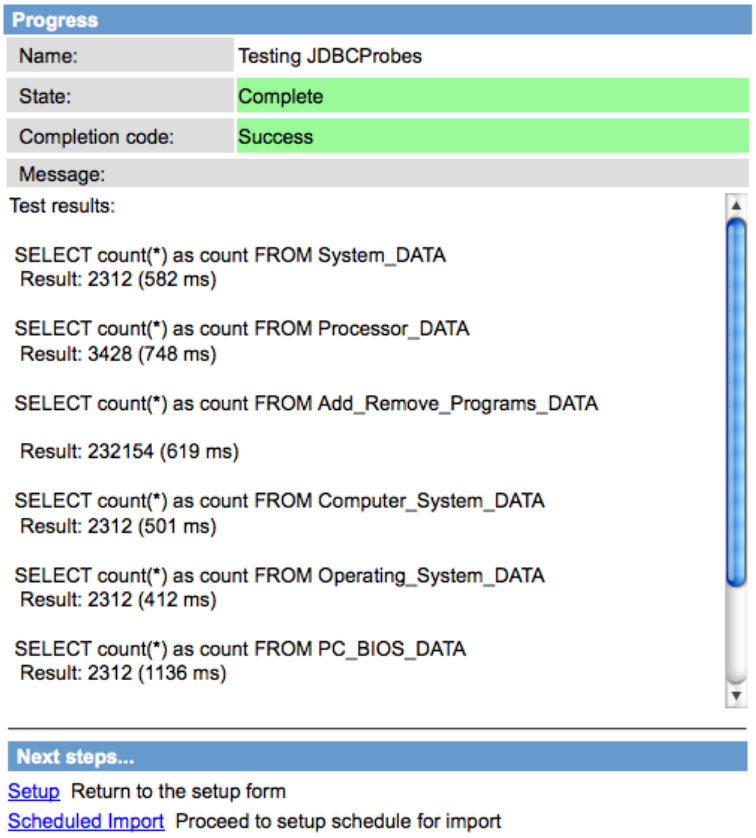
The **Setup** module allows the administrator to configure the JDBC data sources for the external CMDB tables. When you save the form, it will apply the changes to all data sources under this integration. To supply information for this form, you will need the following information.



- **Database Server**
  - The database server host name of IP address, if executed via a MID server you have installed, this server needs to be accessible via your MID server
- **Database Name**
  - The database name for your CMDB
- **Database User ID**
  - The user ID used to connect to your CMDB database, it must have sufficient privileges to access data defined by your data sources. ServiceNow only supports SQL account credentials, you cannot authenticate using a domain user.
- **Database User Password**
  - The user password for the database user ID
- **MID Server**
  - The MID server to use for executing the database query on. You will want to install your own MID server behind your firewall if your ServiceNow instance does not have a direct JDBC connection to your database server
- **Status**
  - The current status of the MID server: Up or Down

Test data source connections

After your setup values are inputted and saved, a *Test data source connections* UI action is available. Executing this action will perform a database table row count on each table and query configured in each data source. The following image shows a successful test.



Import Set Data

This section of the application lists the import set tables that have been predefined for the external CMDB we are integrating with. Selecting the tables will display the data already retrieved from a JDBC data source import, including the import set it is associated with, its state, as well as any information related to the transformation of the import set table data row.

Web Services

This section will list the modules that define the web service import set tables - the schema for the import set tables that are receiving the JDBC import. From each web service, you can add/remove fields as well as access the transform maps to make modifications.

Article Sources and Contributors

Enterprise CMDB *Source*: http://wiki.servicenow.com/index.php?oldid=250565 *Contributors*: CapaJC, David Loo, Fred.luddy, Guy.yedwab, John.ramos, Joseph.messerschmidt, Mark.stanger, Rob.woodbyrne, Steven.wood, Suzanne.smith, Vhearne

CMDB Classifications *Source*: http://wiki.servicenow.com/index.php?oldid=250105 *Contributors*: Anat.kerry, David.Bailey, John.ramos, Joseph.messerschmidt, Rachel.sienko, Steven.wood

Tables and Classes *Source*: http://wiki.servicenow.com/index.php?oldid=250939 *Contributors*: Anat.kerry, CapaJC, Cheryl.dolan, G.yedwab, George.rawlins, Guy.yedwab, Jared.laethem, John.ramos, Joseph.messerschmidt, Neola, Rachel.sienko, Steven.wood, Vhearne

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Table Administration *Source*: http://wiki.servicenow.com/index.php?oldid=250933 *Contributors*: Fuji.publishing.user, Guy.yedwab, John.ramos, Joseph.messerschmidt, Michelle.Corona, Rachel.sienko, Steven.wood, Vaughn.romero

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CMDB and Extended CMDB *Source*: http://wiki.servicenow.com/index.php?oldid=250104 *Contributors*: Cheryl.dolan, John.ramos, Rachel.sienko, Suzanne.smith

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