



Open Source configuration
and management database

Configuring a custom database for asset information to support Service Management

www.cmdbuild.org

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The CMDBuild project

- born in **2005**
 - commissioned by the Municipality of Udine
 - developed and maintained by Tecnoteca Srl
- **GPL** license
- **used**
 - by private companies / public administrations
 - in Italy and abroad
- **10 languages**
Italian, English, German, Spanish, French, Dutch, Russian, Serbian, Japanese, Brazilian, Portuguese
- **1.500 downloads** per month



TECNOTECA



CMDBuild is:

- an **asset management system**

Born to manage IT assets

So flexible that manages also:

- furniture
- security asset for fire prevention, alarm systems
- electrical or heating systems
- ...

- an answer about **asset configuration** questions

Who is using an asset?

Where?

Which are its features?

Who is responsible for it?

Which are its impacts on other assets?

What is its life cycle?

CMDBuild could:

- handle and control the **management process**

Who is in charge of an activity?

Who authorized it?

Are the SLA of the service fulfilled?

Which activities can be planned and automatized?

- **exchange information** with other applications

- *sincronization system with generic databases, LDAP, mails, csv, SOAP ...*
- *SOAP webservice*

CMDBuild configurability

CMDBuild it's **fully configurable**.

Everyone could define his **own**:

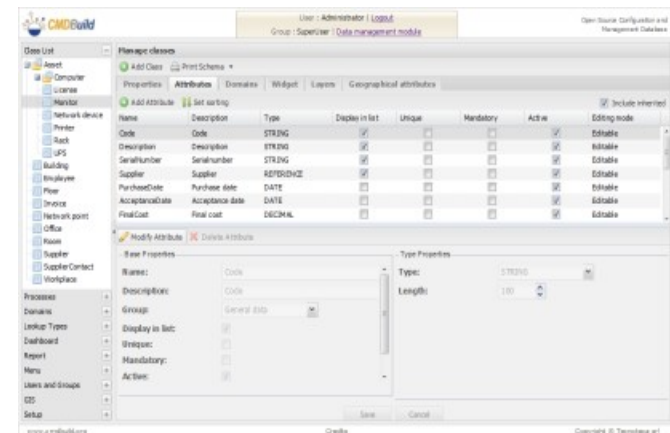
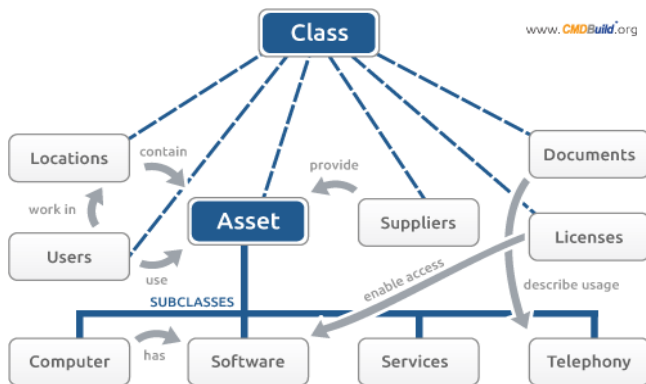
- data model
- workflows
- reports and dashboards
- connectors with external systems
- GIS
- ...

*... just think at it like a **white board** ready to be **filled**...*

Data model (1)

Each user could design his own **customized data model** by:

- 1) analyzing a conceptual model
- 2) obtaining a formal E-R model
- 3) configuring it in CMDBuild Administration Module



Data model (2)

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The screenshot displays the CMDBuild web application interface. At the top, the user is logged in as 'Administrator' with a 'Logout' link. The group is 'SuperUser' and the 'Administration module' is active. The navigation menu on the left includes sections like 'Basic tables', 'Locations', 'Purchases', 'Services', 'Assets', 'Network', and 'Workflows'. The 'Client' item under 'Assets' is selected.

The main area shows a 'List - Client' table with the following data:

Inventory number	Description	Assignee	Location	Brand	Model	Condition	Client type
12345	client 12345				lenovo thinkcenter	To be assigned	Notebook
12344	lenovo 12344	Chiari Walter - 00009	c001 - Sede Centrale - ...		lenovo thinkcenter	Assigned	Desktop
122	PC Acquisti	Scuro Chiara - 00008	c013 - Sede Centrale - ...	IBM	T61	Assigned	
123	PC Acquisti	Bianchi Luca - 00004	c002 - Sede Centrale - ...	IBM	T61	Assigned	
120	PC Amministrazione	Fuxas Andreina - 00010		DELL	Vostro 1500	Assigned	
121	PC Amministrazione	Chiari Walter - 00009		DELL	Vostro 1500	Assigned	
	PC-IG			ACER			

Below the table, the 'Detail' view for inventory number 12344 is shown, displaying the following information:

- Inventory number: 12344
- Description: lenovo 12344
- Serial number: sn 12345
- Model: lenovo thinkcenter
- Condition: Assigned
- Client type: Desktop

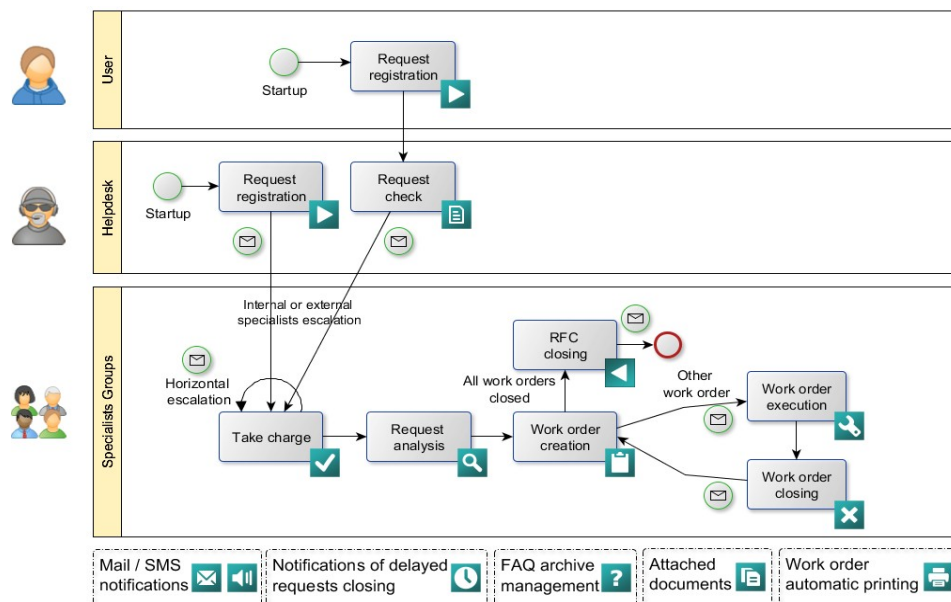
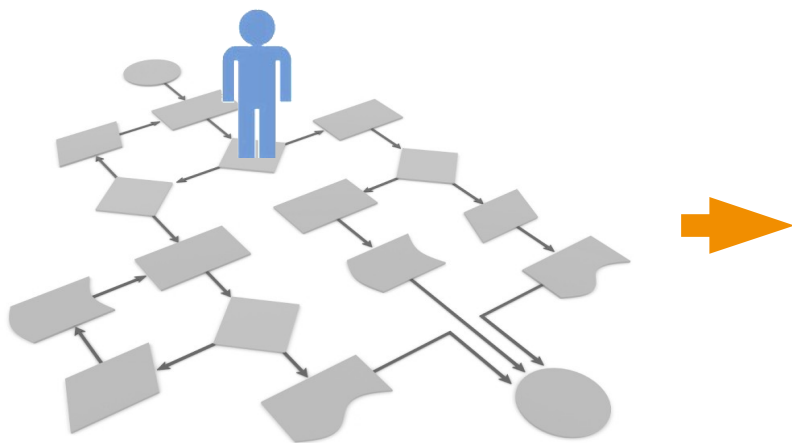
The interface also includes a 'General data' tab, 'Administrative data' and 'Technical data' sub-tabs, and 'Save' and 'Cancel' buttons at the bottom.

Workflows (1)

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Each user could design a **personalized workflow** by:

- 1) analysing a conceptual model
- 2) defining the data structure in CMDBuild Administration Module
- 3) designing the flow in the TWE editor
- 4) uploading the XPDL obtained in CMDBuild



Workflows (2)

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The screenshot displays the CMDBuild web application interface. The top header shows the user is 'Administrator' with a 'Logout' link, and the group is 'SuperUser' with a link to the 'Administration module'. The interface is titled 'List - Asset order and changes' and shows a table of asset orders.

Activity Name	Description	Action date	Action type	Action number	Condition
MV070 - Verify Assignment Item	assignment	27/02/2013	Assignment to user	22	Started
MV060 - Select Item	change 01	20/02/2013	Assignment to user	21	Started

The detailed view of an action shows the following information:

- Action date: 16/04/2013
- Description: Mr John Doe needs one new computer with a printer: no monitor needed.
- Action type: Assignment to user (selected from a dropdown menu with options: Assignment to user, Delivery, Transfer between users, Transfer into the warehouse, Disposal)

The interface also includes a navigation sidebar on the left with categories like Basic tables, Locations, Purchases, Services, FAQ, Assets, Network, Workflows, Ticket management, Asset orders and changes, Reports, Dashboards, and Asset. The bottom of the page shows the website URL 'www.cmdbuild.org', 'Credits', and 'Copyright © Tecnoteca srl'.

Analyzing & Monitoring: reports

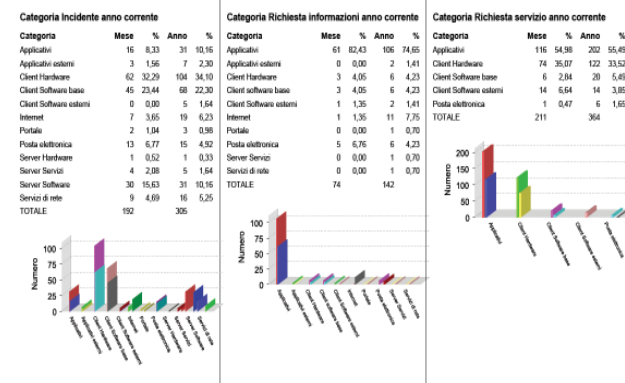
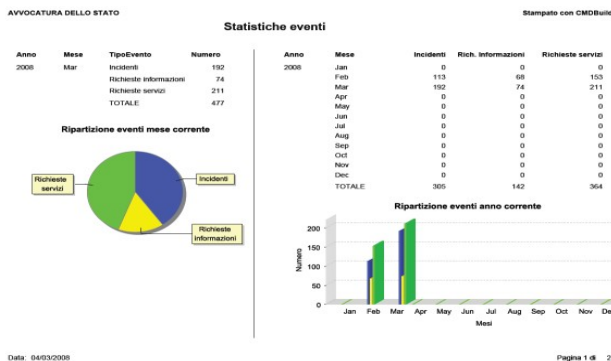
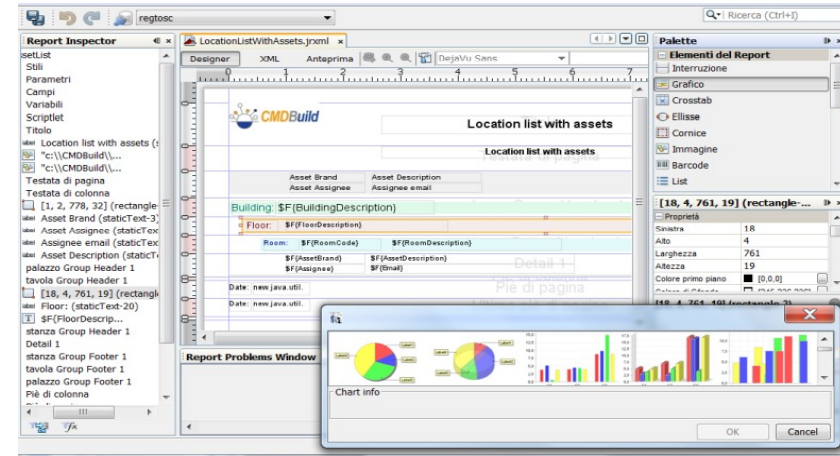
User could design and print out **personalized reports**

How?

- 1) design logic & layout in iReport
- 2) import reports in CMDBuild

What is obtained?

Imported reports are printable from user interface (PDF, ODT, CSV)



Analyzing & Monitoring: dashboards

User could design and print out **personalized dashboards** according to his own **monitoring needs**

How?

- 1) defining in indicators (KPI) to control
- 2) define a database function to calculate it
- 3) associate the function to the wanted graph in the Administration Module

What is obtained?

Dashboards are immediately visible from user interface



Interaction with other systems

CMDBuild could interact through **personalized connectors** according to **company interoperability needs**

Connect to systems using :

- databases (SQL)
- LDAP
- mails (ex. Nagios)
- SOAP

Configured using:

- XML (Base Connector)
- Groovy (Advanced Connector)

Execution mode:

- scheduled, with a customizable frequency
- manually

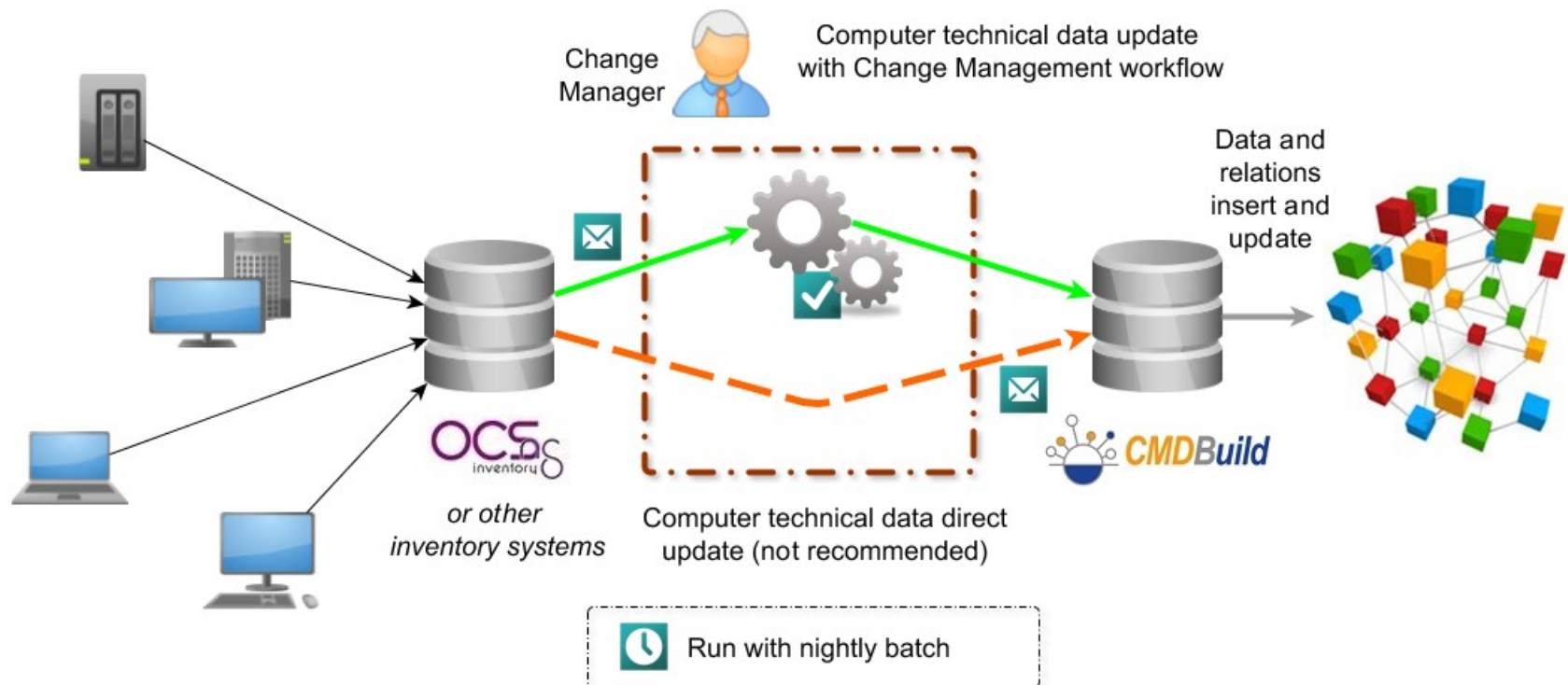
from operating system or CMDBuild interface



Interaction with other systems: example

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Example of connector with Automatic Inventory tools:



Assets could be **georeferenced** using personalized criteria

Each CMDBuild's Class could

- 1) be associated to a **geometrical feature**
- 2) show a **background “shape”** (uploaded in CMDBuild and saved in Geoserver)



Georeference of assets on the territory:

The screenshot displays a GIS application interface. On the left is a sidebar with a navigation tree under 'Dashboard' and 'Navigazione'. The tree includes folders like 'Task', 'Anagrafica', 'Dotazioni', and 'Area client', with sub-items such as 'Apparato di Rete', 'TVCC', 'Punto Hot Spot', and 'Punto Semaforo'. The main area shows a map titled 'Elenco - Punto Semaforo' with numerous blue icons representing traffic lights. Below the map is a details panel for a selected asset with the following information:

- Codice (ID): 00024
- Descrizione: Semaforo Bassini
- Modello: RAD ETX-102
- Matricola:

The details panel also includes tabs for 'Dati generali', 'Dati amministrativi', 'Dati tecnici', and 'Allarmi', and buttons for 'Conferma' and 'Annulla'.

“Open” components

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TOGAF, Archi and CMDBuild

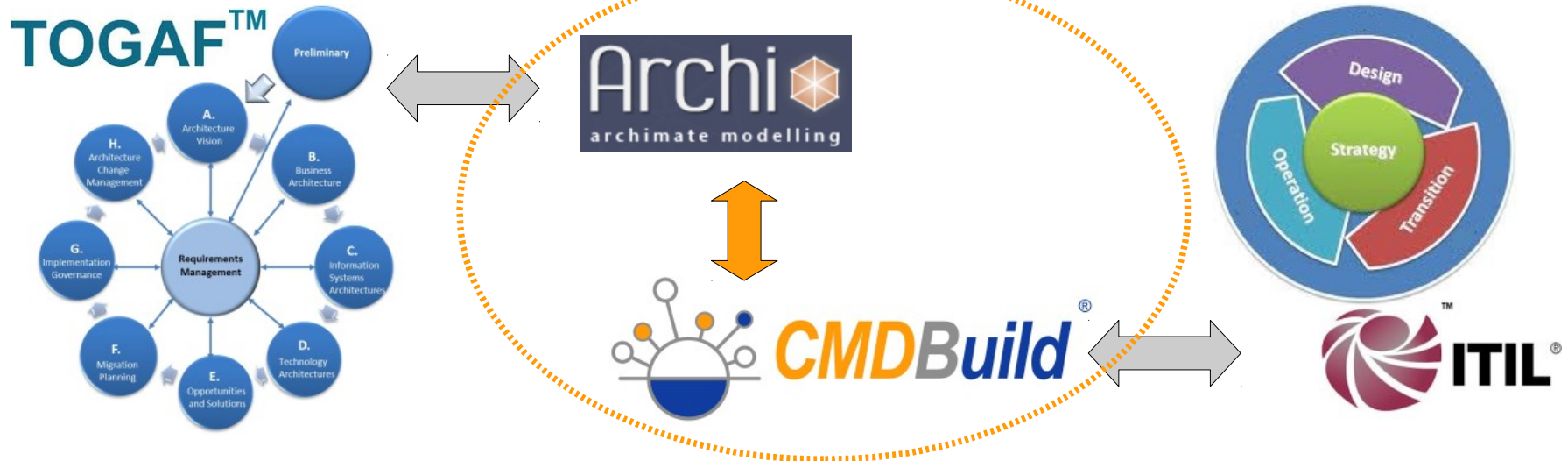
Open source tools for IT Governance

A plugin for two-way synchronization between Archi and CMDBuild

28th May 2013 – Palazzo Bastogi – Firenze

The workshop is organized in collaboration with the Regional Council of Tuscany

The plugin release will be announced directly by the contributors: University of Bologna and SIAE



Web resources for CMDBuild



www.cmdbuild.org



sourceforge.net/projects/cmdbuild/



Atlassian

bitbucket

bitbucket.org/tecnoteca/cmdbuild



twitter.com/cmdbuild



www.linkedin.com/groups/CMDBuild-network-1929617



www.cmdbuild.org/news/aggregator/RSS



www.slideshare.net/cmdbuild

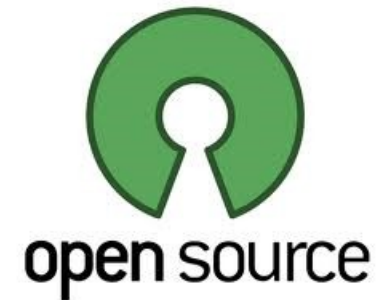


www.youtube.com/tecnotecatv



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Thank you for your attention!



www.cmdbuild.org

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