# iTop 0.8

User guide



Don't hesitate to ask question to support@combodo.com

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# **About iTop**

This document describes release 0.8 of iTop. iTop is a robust Open Source web 2.0 application that will help you to better support your IT. Development of iTop started in March 2006 in order to publish on the internet a completely open solution that would help enterprise to drive ITIL best practices implementation. Goal of the iTop community was to provide an alternative solution to very expensive solutions sold by standard software vendors.

At the early beginning of the project, the development team was focus on building the most complete CMDB (Configuration Management Data Base). One key objective was to make it as flexible as possible in order to allow administrator to add and remove configuration items from the data model and manage as many relationships as they want. The development team also designed a powerful state machine that allows defining life cycle for whatever configuration items in the CMDB.

Realizing that all concepts developed within the CMDB can be applied to all other ITIL best practices, the iTop community decided to extend them to Incident Management, Change Management and Service Management modules. Then iTop became an IT operational portal that helps all IT management team to support their environment by:

Documenting IT infrastructures and their relationships (servers, application, network ...)

Documenting all users service calls.

Documenting IT incident and planned outages, as well as a known error database.

Documenting all IT services and contracts with external providers.

iTop application can be used by different type of profiles:

```
Help Desk
IT support engineers (1<sup>st</sup> level, 2<sup>nd</sup> level, 3<sup>rd</sup> level ...)
IT service managers
IT managers
```

iTop application is relying on Apache, MySQL and PHP, so it can run on whatever operating system supporting those applications. It had been tested already on Windows, Linux Debian and Redhat. As it is a web based application you don't need to install client on user PC. A simple web browser is enough to use it.

# Licensing

iTop is licensed under the terms of the GNU General Public License Version 3 as published by the

Free Software Foundation. This gives you legal permission to copy, distribute and/or modify iTop under certain conditions. Read the 'license.txt' file in the iTop distribution. iTop is provided AS IS with NO WARRANTY OF ANY KIND, INCLUDING THE WARRANTY OF DESIGN, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE.

# Changes since 0.7.2

Goal of this release was to make the application more robust and more professional. To achieve these goals we developed new features that are mandatory for such application and we fixed a large number of bugs. Just remember that some of the improvement depends on the new data model provided with release 0.8. So if you keep former one, you may have some bugs not fixed. We also underline the fact that the new data model is not compatible with the one you currently have. So we recommend you to check "Migration" chapter in *Administrator guide* to use the best practice to migrate.

#### New features

We improve a lot the management of user. Now, the application allows you to create, update or delete users. In this process, administrator can assign one or several profiles to a given user. This feature is fundamental to define roles and responsibilities within your company.

With release 0.8 mandatory fields for a given object are now controlled, so the users are forced to update those fields before committing there changes. Mandatory fields are controlled in the data model either when defining the attribute, or in the state machine when we move from one state to another.

We improve also the way we manage N/N relationships in the UI. Now users can add, update or remove relationships via an easy to use wizard that help them to search objects they would like to link together. This feature decreases significantly time to create relationships between objects and so improve productivity.

In order to make iTop useful without any customization, we improve the data model. We change object lifecycles to make them more reliable, and we add new type of object:

- Subnet, for which we compute automatically IP used and IP free.
- Service calls helping your company to track all end user requests.
- Services that allow you to document all services an organization is providing.

We also improve significantly change tracking for each object in order to make it easier to read in UI when users check what had been modified for a given item.

Deletion of devices had been improved, in order to guarantee consistency of the database. Now, when a user wants to delete an object, the application is checking relationships with other objects. This object won't be removed if it is linked to another object via a 1/n relationship. For instance the application won't delete a server if there is network interfaces or applications still documented for it.

Last but not least, we improve iTop architecture to improve performance of queries in the MySql database, and so display more quickly data in UI.

## Bug fixed

All our bugs are track on sourceforge: <a href="http://sourceforge.net/apps/trac/itop/report/1">http://sourceforge.net/apps/trac/itop/report/1</a>. This current release is fixing 11 critical bugs:

- #4 PHP class name vs class label
- #25 Loosing impacted infrastructure in tickets
- #26 Organization silo not working for Incident/Change and Services
- #28 Import CSV failing
- #30 Run queries example is failing
- #32 Strange error when executing some action.
- #33 OQL: Failing to interpret a JOIN
- #36 Setup fails if "short\_open\_tag" is not enabled
- #37 deprecated function 'session\_is\_registered' in PHP 5.3.0
- #38 Content of Tabs not displayed on Reload
- #39 Setup does not work when installed on IIS

# **Current limitation**

Release 0.8 is not supporting:

- Creation of new user profile.
- Delete all functionality for a list of object
- Cloning an existing device. This feature had been de-activated for the moment as it was not working properly.
- Update all for n/n relationships
- A life cycle is not defined for all CI, only for servers, service calls, incident tickets, change tickets, services, and contracts.

# iTop common usage

# Starting iTop

To use iTop, you just need a simple web browser and enter the following URL: <a href="http://yourserver">http://yourserver</a> or <a href="http://yourserver/<itop">http://yourserver</a> alias> if you have created a particular apache alias for the application.

User is prompt to enter his login and password.

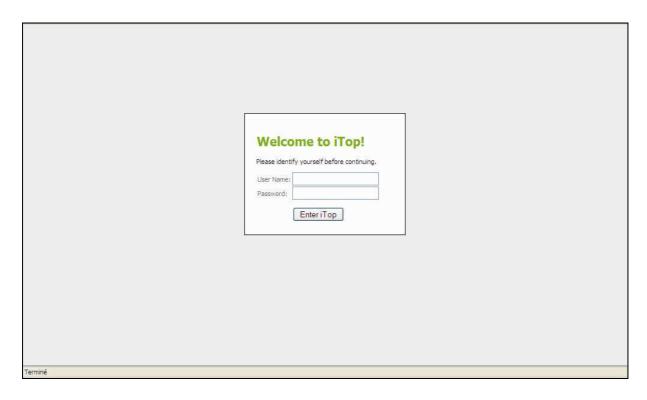


Figure 6

Depending on its profile, the user has more or right to use the application, but this topic will be discussed later in "User Management" chapter.

Once authenticated, the user accesses the main iTop page.

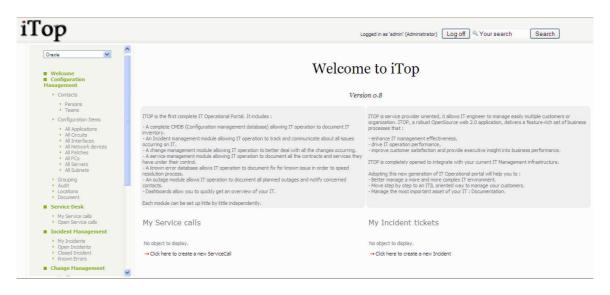


Figure 7

This main page is divided in three parts:

- Left menu (also called explorer menu) to access item from each module (CMDB, Incidents, Changes, Services and contracts)
- Main frame on the right displays list of items from selected module, or details for a given item.

• Top frame to use global search function, and display login information

# Using Explorer menu

#### Filtering on a given organization

This explorer allows you to navigate across all iTop modules. The "drop down" list at the top defines the organization you would like to work with. An organization is a way to group all iTop items into silos. When you have selected a given organization, you will see only items belonging to this one if you are allowed to see them.



Figure 8

## **Accessing dashboards**

The green menu items define each module of iTop application:

- CMDB
- Incident Management
- Change Management
- Service Management

All sub menus are related to one of the corresponding module.

When you click on green menu items, you access a dashboard corresponding to this module. Those dashboards provide an overview of the health of your IT using either pie, bar charts or tables. It is displayed in the Main Frame.

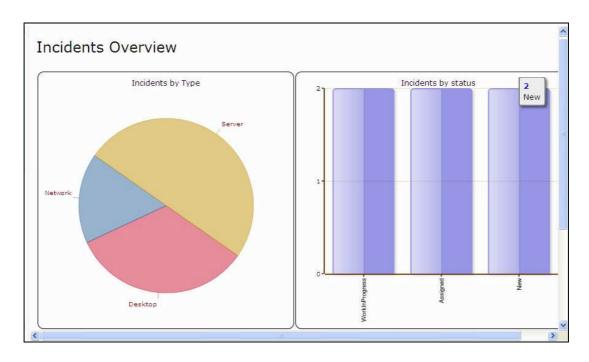


Figure 9

#### **Accessing list of items**

When you click on grey menu item within a given module, you get in Main Frame a list of items corresponding to a predefine query in iTop data model. For instance when clicking on "All server" you get a list of server belonging to selected organization.

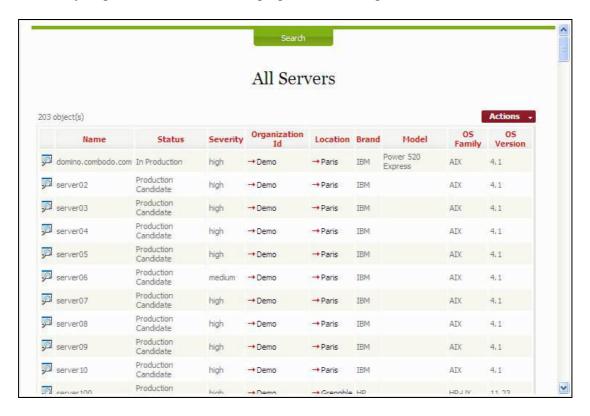


Figure 10

We will describe later description of the sub menus for each module.

## **Navigating within iTop**

You can navigate easily from one object to another by simply clicking on fields led by  $\rightarrow$ . As the application is completely web based, you can right click on you mouse to open this web link into a new window or tab depending on your web browser.

This functionality is really useful in iTop as it allows you to follow relationships between objects

#### **Action on list of items**

The Actions button on the top right corner of a list of items allows you to use predefine actions applicable for this list.



Figure 11

"eMail" allows you to send a mail including a direct web link to the iTop you are currently viewing. This feature is really useful for sharing information with others.

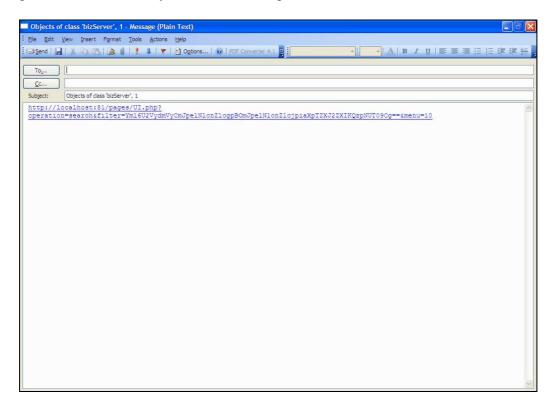


Figure 12

"CSV export" allows you to export list of items you are currently viewing into a csv file in order to use it in Excel for instance.

```
#SELECT biz Sener AS biz Sener WHERE 1
id Name Migmt IP Default Gateway, Status Severity, Organization Id Location Brand, Model, OS Family, OS Version, Serial Number, Shipment number, Model, Number of CPUs, Memory Size HDD Size, Free HDD Size
106. domino.combodo.com, 10: 22: 81. In Production high, 12. IBM. Power 520 Express, AIK. 4. 1, $4523, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
107. server02.10: 22: 82. 11. 10: 22: 28. 1 Production. Candidate high, 12. IBM. AIK. 4. 1, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
108. server03. 10: 22: 82. 11. 10: 22: 28. 1 Production. Candidate high, 12. IBM. AIK. 4. 1, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
110. server06. 10: 22: 82. 11. 10: 22: 28. 1 Production. Candidate high, 12. IBM. AIK. 4. 1, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
110. server06. 10: 22: 82. 11. 10: 22: 28. 1 Production. Candidate high, 12. IBM. AIK. 4. 1, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
111. server06. 10: 22: 82. 15. 10: 22: 28. 1 Production. Candidate high, 12. IBM. AIK. 4. 1, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
112. server07. 10: 22: 82. 15. 10: 22: 28. 1 Production. Candidate high, 12. IBM. AIK. 4. 1, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
113. server09. 10: 22: 88. 15. 10: 22: 28. 1 Production. Candidate high, 1. 2. IBM. AIK. 4. 1, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
114. server09. 10: 22: 88. 15. 10: 22: 28. 1 Production. Candidate high, 1. 2. IBM. AIK. 4. 1, Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
115. server10. 10: 22: 28. 15. 10: 22: 28. 1 Production. Candidate high, 1. 18. IBM. PIR. 4. 11. 12. IBM. AIK. 4. 1. Power 520 Express, 4.8Gb, 4x120Gb, 200Gb
116. server10. 10: 22: 28. 15. 10: 22: 28. 1 Production. Candidate high, 1. 18. IBM. 11. 11. 12. IBM. AIK. 4. 11. 12. IBM. 22. IBM. 21. 12. IBM. 21. IBM. 21. IBM. 21. IBM. 21. IBM
```

Figure 13

"Bookmark" allow you to save as a new sub menu in the Bookmark module the list you are currently viewing. This feature is useful to share with other users a list of items corresponding to a given search criteria.

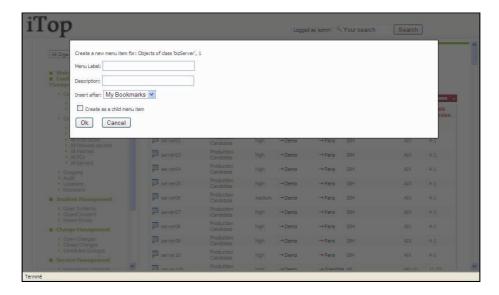


Figure 14

You can define the menu label, as well as a description to document your bookmark.

"New" allow you to create a new item corresponding to the type of object you are viewing, for instance a new server or a new incident ticket. When clicking on this action you get a wizard that helps you to create your item. New item creation will be discuss later for each module.

"Modify all" allow you to modify attributes for the list of item you are currently viewing. This feature is useful when you want to update quickly some attributes with the same value for a given list of items. For instance update the Brand of a list of servers with "Dell".

"Delete all" allow you to delete massively all items you are currently viewing. Be careful in the release 0.72 you are not prompted with a confirmation window.

Other actions may be available, but they depend on type of object you are viewing, and their life cycle. We will describe them later for each module if required.

## Searching a type of object

When you click on button it displays the search criteria bar that allows you to refine list of item you are looking for.

You can define by your self the criteria you are interested in, using either drop down lists, or regular expression for blank fields. Then click on Search button to display a new list of item corresponding to your request.

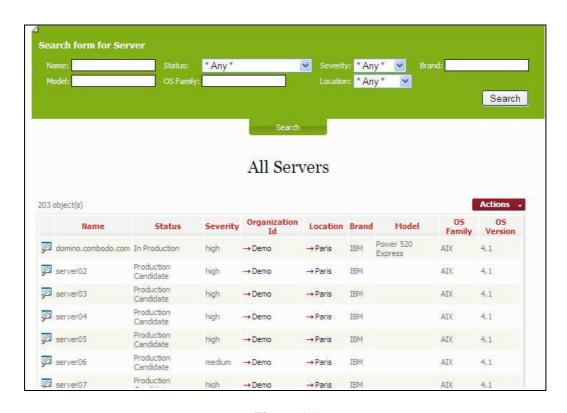


Figure 15

"And" operator is used when you define multiple criteria. This search bar is available for any type of object, but of course search criteria depend on object attributes. The search request is applicable to only one type of object at once.

When you click again on Search bar is hidden.

## Accessing object details

From a list of items, you can click on pen the details page of a given item.

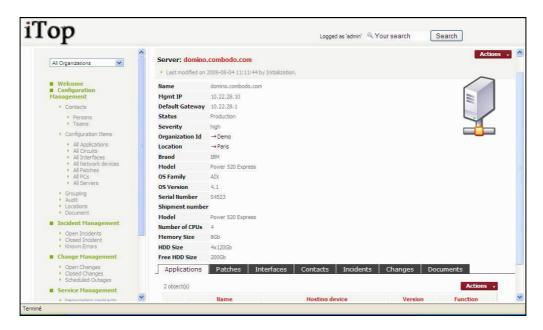


Figure 16

This page displays, in the Main Frame, the attributes for a given item. As for item list, you can click on → to open details page for a related object.

The top banner displays type and name of the selected item, as well as last modification information. When you click on Last modified a drop down list displays all changes that occurred on the corresponding item.



Figure 17

This feature is very important to track when modification where done and by who. When you click again on Last modified, list is hidden.

At the bottom, the tabs display the relationships between the selected item and other objects. For instance applications or patches installed on a server, incidents or changes occurring on a server. The tabs will be described in detail later for each module.

#### Action on a given item

The Actions button on the top right corner allows you to use predefine actions applicable for the item.

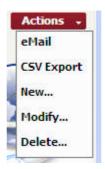


Figure 18

"eMail", "CSV Export", "Bookmark", "New", and "Delete" are similar to action described for a list of item sooner in this document.

"Modify" allow you to modify attributes for the item you are currently viewing. A wizard opens, and lets you modify the attributes and relationships with other items. The wizard will be described later for each module.

"Clone" allow you to create a new item using attributes filled for another one. This feature is really useful when you want to create an item from another one that has similar attributes. The wizard for item creation opens with attributes already filled, and lets you modify them. A new item is created when you close the wizard.

Other actions may be available, but they depend on type of object you are viewing, and their life cycle. We will describe them later for each module if required.

#### Managing relationships between objects

The tabs in "object detail page" are displaying relationships with other objects stored in the data base. iTop allows you to manage either (1,n) or (n,n) relationships. An example of (1,n) relationship is an network interface plugged on a server. An example of (n,n) relationship is a link between several servers and several contacts.

When you click on tabs in "object detail page", the UI displays list of objects linked to the current one. The Actions button on the top right corner of the list allows you to manage the relation.

#### (n,n) relationship management

For such type of relation, you can add, manage or remove all links between objects.



Figure 19

*Add* action opens following wizard to manage new relations to add with current object You can search objects to link using the wizard, and select those you would like to link. You can also update attributes for the relationship, for instance impact for an incident.



Figure 20

For searching object to link you can also OQL query request. (see OQL reference guide for more details on building an OQL query)



Figure 21

*Manage* action allows you to modify attribute for already existing relationships, or add and remove some.



Figure 22

Remove all action suppresses all relationships created for a selected object.

Those wizards don't allow you to create new applications, or contracts. They are used only to build relationships.

## (1,n) relationship management

#### Global search

This feature is really fundamental in iTop. Like in "Google", it allows you to search words or regular expression in the full data model, whatever type of object you are interested in.

Types for instance "Paris" in A Your search and type on Search . You get all objects related to this word:

Contacts on this site Servers, PC, and network devices installed on this site. Incident occurring on items located on this site ...

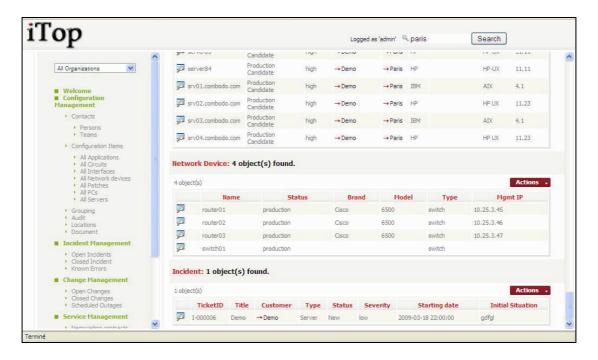


Figure 19

You can also use regular expression like "%sw%" for instance.

Using global search helps you to get quickly information on your IT, without knowing really where to look for. Like in "Google", it is really powerful and straightforward.

#### Using direct URL

As iTop is completely web based you can access directly whatever page using its URL either by copying it from web browser or by using action "eMail". This feature allows you to:

- bookmark you favorite pages
- share pages with other people
- build HTML dashboards
- integrate iTop within a third party application

When accessing directly an iTop URL, you are prompted to enter your login and password if you are not already authenticated.

# **Using CMDB module**

This module is related to Configuration Management Data Base as described in ITIL best practices.

It allows IT operators to describe all items they have under their control. It provides a logical model of the IT infrastructure by identifying, controlling, maintaining and verifying the version of all existing Configuration Items (CIs).

Relationships between CIs are also documented in this CMDB, thus IT engineers can easily analyse dependencies within the infrastructure and impact due to outages.

Release 0.72 of iTop handles:

- Contacts, Team and Workgroups for Incident and Change tickets
- Locations
- Infrastructure (Desktop, Servers, Network devices, Circuits, Interfaces, Applications, Patches)
- Groups of CI
- Documents. Web URL only in this release

All CIs are describes in iTop data model and can be modified. Thus this document describes only data model that has not been customized.

All modifications made on a CI are tracked with modification date, modified attribute values (old and new one), and user who made the change.

# **Managing Contacts**

When you click on "Contacts" in the Explorer bar, you get a dashboard summarizing information about contacts:

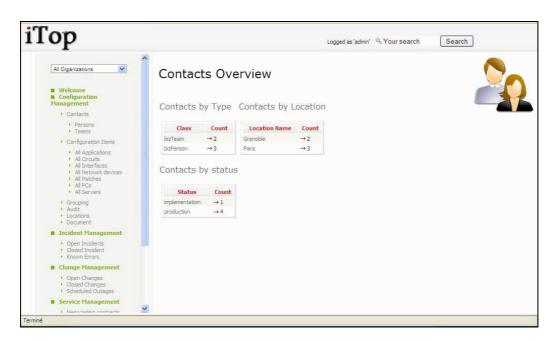


Figure 20

All pages related to Contacts contains picture in top right corner. It allows operator to know where he is when navigating across iTop.

#### **Managing person**

A person is anybody that needs to be documented in the CMDB.

"Persons" menu display all people belonging to selected organization.

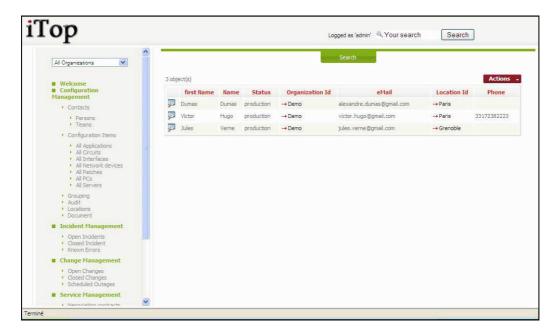


Figure 21

When you click on putton you get details for selected person.

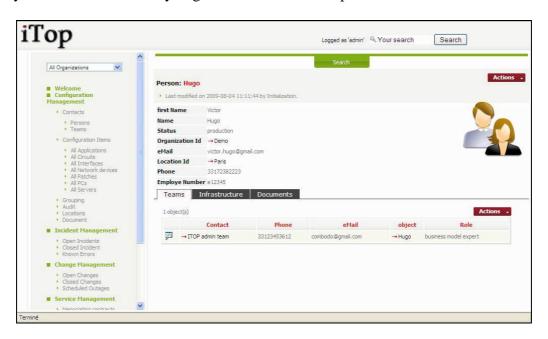


Figure 22

A person belongs to only one location and one organization.

"Teams" tab displays all team this person belongs to, with her role. You can easily manage those relationships as describe in chapter "Managing relationships"

"Infrastructure" tab displays all infrastructures owned by this person. You can easily manage those relationships as describe in chapter "Managing relationships"

"Documents" displays all documents linked to this person. You can easily manage those relationships as describe in chapter "Managing relationships"

There is no specific action related to a person. Only standard one describe sooner are available.

To create a new person you just have to click on "New" in action drop down list, from either person list or a given person detail. Following wizard then appears:

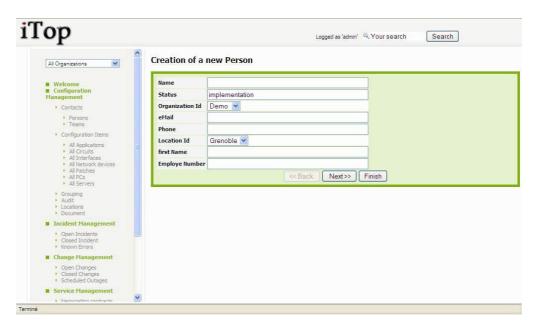


Figure 23

Fill in all fields with needed information and click on Next>>. A confirmation window appears, asking you to create the new person.

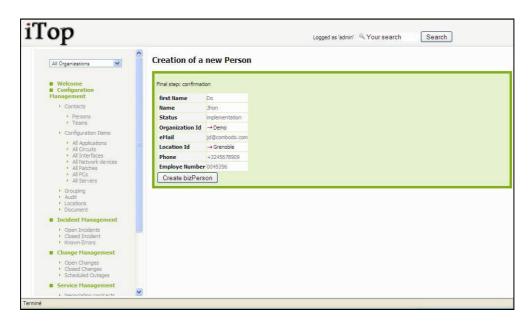


Figure 24

The details page of this new person is automatically displayed.

You can also use "Clone" action if fields to be entered are similar to an already existing person as described in "iTop Common usage" chapter.

To modify a person's attributes, click on "Modify" in Action drop down menu. Following wizard appears to modify attributes:

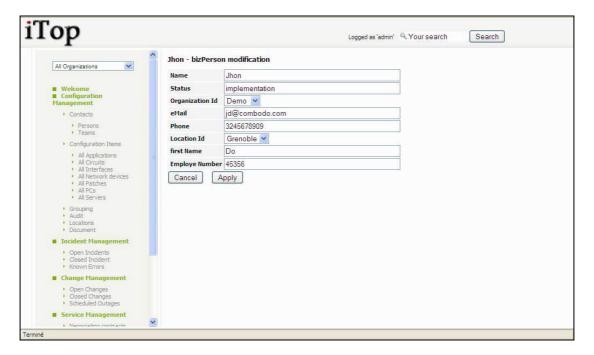


Figure 25

# Managing team

A team is a group of person that needs to be documented in the CMDB. "Teams" menu display all teams belonging to selected organization.

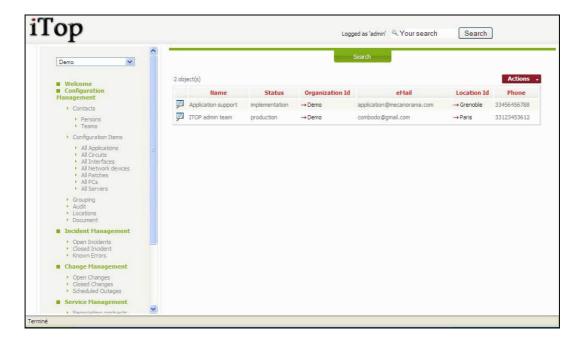


Figure 30

When you click on putton you get details for selected team.

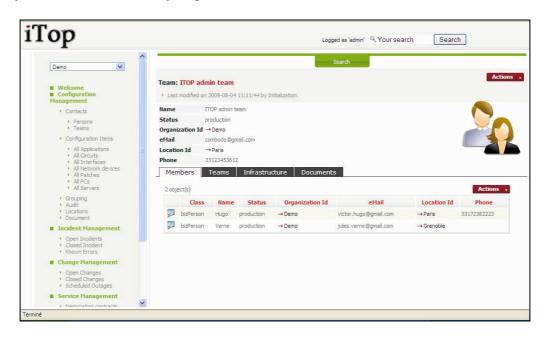


Figure 31

A person belongs to only one location and one organization.

"Members" tab displays all persons belonging to this team. You can easily manage those relationships as describe in chapter "Managing relationships"

"Teams" tab displays all teams this team belongs to, with its role. As a matter of fact we can cascade teams with sub teams if required. You can easily manage those relationships as describe in chapter "Managing relationships"

"Infrastructure" tab displays all infrastructures linked to this team. You can easily manage those relationships as describe in chapter "Managing relationships"

"Documents" displays all documents linked to this team. You can easily manage those relationships as describe in chapter "Managing relationships"

There is no specific action related to a person. Only standard one describe sooner are available.

# **Managing Locations**

A location is a configuration item that allows you to document in the CMDB any geographical location (Site, Building ...).

"Location" menu displays all locations belonging to selected organization.

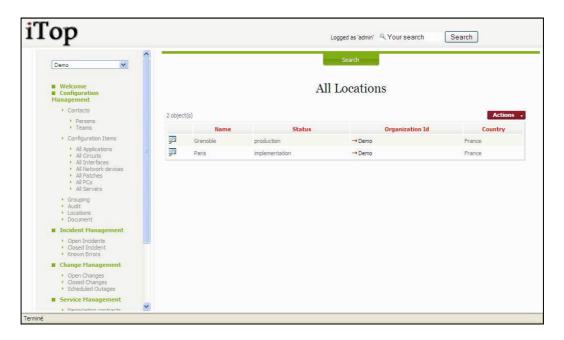


Figure 32

When you click on putton you get details for selected location.

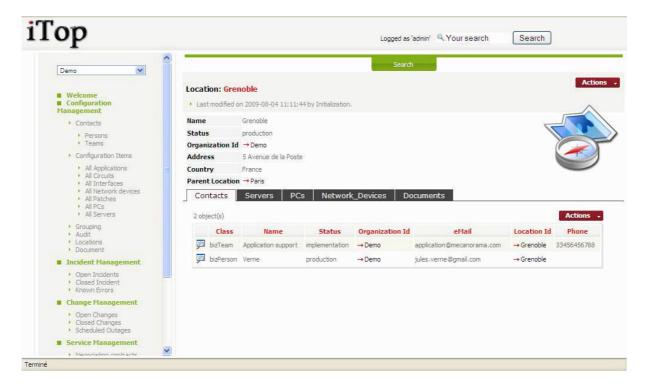


Figure 33

- "Parent Location" field allows you to cascade location in order to model hierarchy. For instance a site is a parent location for a building.
- "Contacts" tab displays all contacts (persons and teams) located on this location.
- "Servers" tab displays all servers located on this location.
- "PCs" tab displays all pcs located on this location.
- "Network Devices" tab displays all network devices located on this location.
- "Documents" tab displays all documents related to this location (network diagram, maps ...)

To create a new location you just have to click on "New" in action drop down list, from either location list or a given location detail. Following wizard then appears:

.

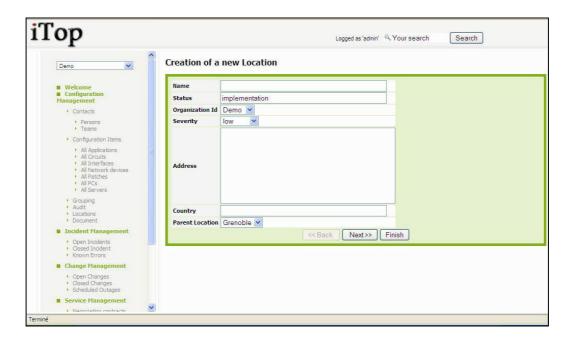


Figure 34

As for creation of other configuration item, you just have to fill required fields, and click on Next>> to get confirmation window and create new location. Once created, details page for this new location automatically appears.

There is no specific action related to a location. Only standard ones described sooner are available

# Managing Infrastructures

An infrastructure represents all hardware or software items installed in your IT. iTop CMDB allows you to manage their life cycle as well as relationships between items. Thus you can document applications installed on server, client/server relationships between two applications, on which port of switch a server is connected too ...

# **Managing PCs**

This type of configuration item is whatever laptop or desktop installed in you IT. "All PCs" menu displays all PCs documented for the selected organization.

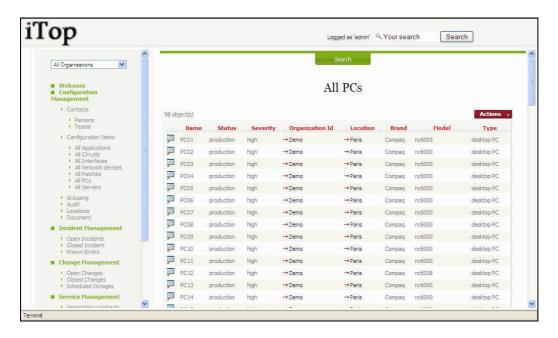


Figure 35

When you click on putton you get details for selected PC.

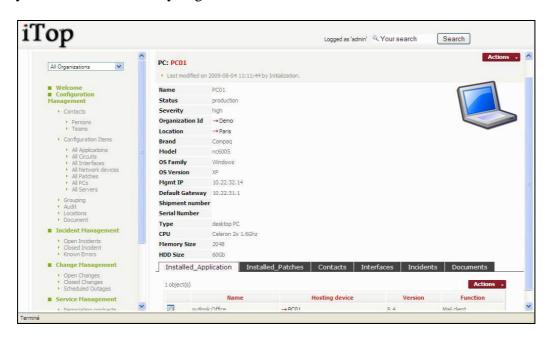


Figure 36

A PC belongs to only one location and one organization.

<sup>&</sup>quot;Installed Application" tab displays a list of application installed on this PC.

<sup>&</sup>quot;Installed Patches" tab displays a list of patches installed on this PC.

<sup>&</sup>quot;Contacts" tab displays all the contacts documented for this PC. You can easily manage those relationships as describe in chapter "Managing relationships"

<sup>&</sup>quot;Interfaces" tab displays all network adaptors documented for this PC.

"Incidents" tab displays all open incidents related to this PC.

"Documents" tab displays all documents related to this PC. You can easily manage those relationships as describe in chapter "Managing relationships"

To create a new PC you just have to click on "New" in action drop down list, from either PC list or a given PC detail. Following wizard then appears:

Figure 37

As for creation of other configuration item, you just have to fill required fields, and click on Next>> to get confirmation window and create new PC. Once created, details page for this new PC automatically appears.

There is no specific action related to a PC. Only standard ones described sooner are available

There are two options to create a new application installed on this PC:

Either by clicking on "Click here to create a new Application" if there is no application currently displayed in "Installed Applications" tab.

Or by clicking on —-> "New", if there are already several applications displayed in "Installed Applications" tab.

In both cases, wizard for creating an application appears. This one is described later in "Managing Applications" chapter.

There are two options to create a new patch installed on this PC:

Either by clicking on "Click here to create a new Patch" if there is no patch currently displayed in "Installed Patches" tab.

Or by clicking on -> "New", if there are already several patches displayed in "Installed Patches" tab.

In both cases, wizard for creating a patch appears. This one is described later in "Managing Patches" chapter.

There are two options to create a new Interface installed on this PC:

Either by clicking on "Click here to create a new Interface" if there is no interface currently displayed in "Interfaces" tab.

Or by clicking on Actions -> "New", if there are already several interfaces displayed in "Interfaces" tab.

In both cases, wizard for creating an interface appears. This one is described later in "Managing Interfaces" chapter.

There are two options to create a new Incident for this PC:

Either by clicking on "Click here to create a new Incident" if there is no incident currently displayed in "Incidents" tab.

Or by clicking on Actions -> "New", if there are already several incidents displayed in "Incidents" tab.

In both cases, wizard for creating an incident appears. This one is described later in "Using Incident management module" chapter.

There is no specific action related to a PC. Only standard ones described sooner are available.

# **Managing Servers**

"All Servers" menu displays all servers documented for the selected organization.

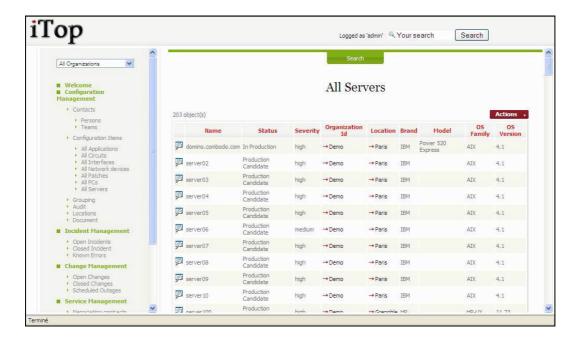


Figure 40

When you click on putton you get details for selected server.

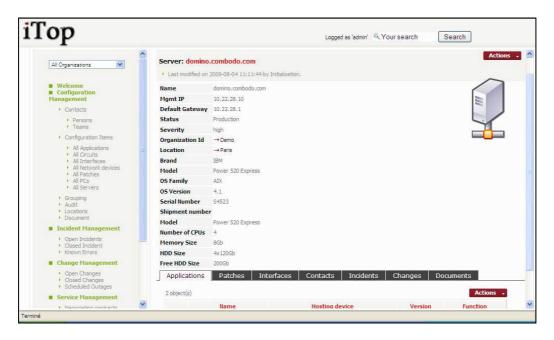


Figure 41

As for a PC, a server belongs to one location and one organization. "Application" tab displays a list of application installed on this server.

"Patches" tab displays a list of patches installed on this server.

"Interfaces" tab displays all network adaptors documented for this server.

"Contacts" tab displays all the contacts documented for this server. You can easily manage those relationships as describe in chapter "Managing relationships"

"Incidents" tab displays all open incidents related to this server.

"Changes" tab displays all open changes related to this server.

"Documents" tab displays all documents related to this server. You can easily manage those relationships as describe in chapter "Managing relationships"

The way to create applications, patches, interfaces, contacts, incidents and documents are the same as the one documented in chapter "Managing PCs".

There are two options to create a new Change for this server:

Either by clicking on "Click here to create a new Change" if there is no change currently displayed in "Incidents" tab.

Or by clicking on Actions -> "New", if there are already several changes displayed in "Changes" tab.

In both cases, wizard for creating a change appears. This one is described later in "Using change management module" chapter.

#### Server life cycle and custom actions

The state machine integrate into iTop allows administrator to define a life cycle for some configuration item. In release 0.72 we created a life cycle for server. By this way we can enforce processes for server management. Thus user cannot perform some actions, if server is not in a given state. More details about life cycle management are describe in the "Administration" chapter.

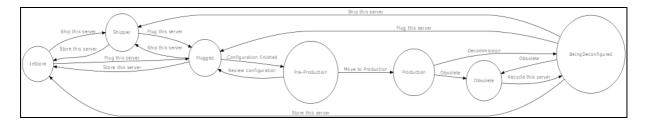


Figure 42

This diagram describes all states corresponding to server life cycle:

- InStore (Device in store)
- Shipped (The device had been shipped to future location)
- Plugged (The device is connected to the network)
- Pre-Production (The device is ready to be move to production)
- Production (The device is on production)
- InChange (A change is being performed on the device)
- BeingDeconfigured (The device is about to be removed from is current location)
- Obsolete (The device is no more used)

Arrows describes custom actions you can perform from one state to another. When a server is in a given state, you can perform only some action.

Transitions (actions) are defined as follow for each state:

- InStore (Device in store)
  - Ship this server => Shipped
  - Plug this server => Plugged
- Shipped (The device had been shipped to future location)
  - Store this server => InStore
  - Plug this server => Plugged
- Plugged (The device is connected to the network)
  - o Ship this server => Shipped
  - Store this server => InStore
  - Configuration finished => Pre-Production
- Pre-Production (The device is ready to be move to production)
  - Review configuration => Plugged
  - o Move to Production => Production
- Production (The device is on production)
  - Change Start [No Click] => InChange
  - Obsolete => Obsolete
  - Decommission => BeingDeconfigured
- InChange (A change is being performed on the device)
  - End Change [No Click] => Production
- BeingDeconfigured (The device is about to be removed from is current location)
  - o Ship this server => Shipped
  - o Plug this server => Plugged
  - Store this server => InStore
  - Obsolete => Obsolete
- Obsolete (The device is no more used)
  - Recycle this server => BeingDeconfigured

Actions corresponding to transition appear in a given state. When you perform a given life cycle action, the state of the server is updated to the new one automatically.

# **Managing Applications**

An application is whatever software installed on either a PC or a server.

"All Applications" menu displays all installed application documented for the selected organization.

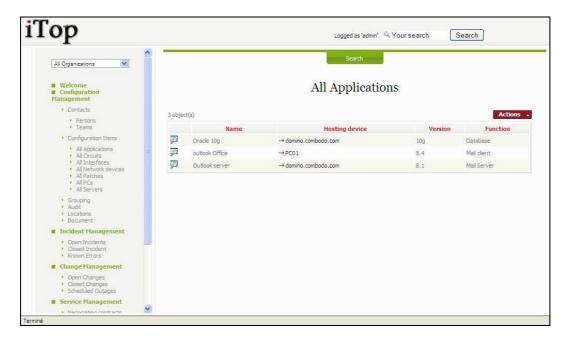


Figure 43

When you click on putton you get details for selected applications.

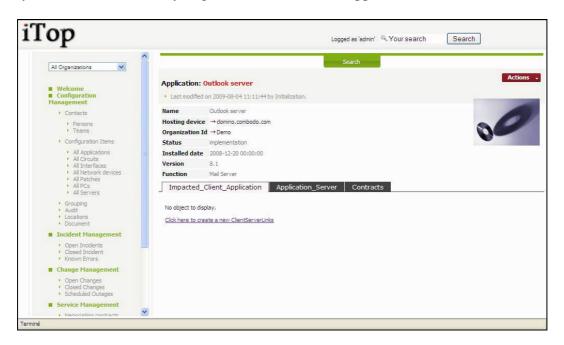


Figure 44

One application CI is related to only one Hosting device. Thus you have a new application for each server or PC it is installed on.

"Impacted Client Application" tab displays all client application that depends on the one you are viewing. You can easily manage those relationships as describe in chapter "Managing relationships"

"Application Server" tab displays all server applications for the one you are viewing. You can easily manage those relationships as describe in chapter "Managing relationships"

"Contracts" tab displays all contracts that cover the application you are viewing (support, license contract ...). You can easily manage those relationships as describe in chapter "Managing relationships"

# **Managing Patches**

"All Patches" menu displays all patches installed on server or PC for the selected organization.

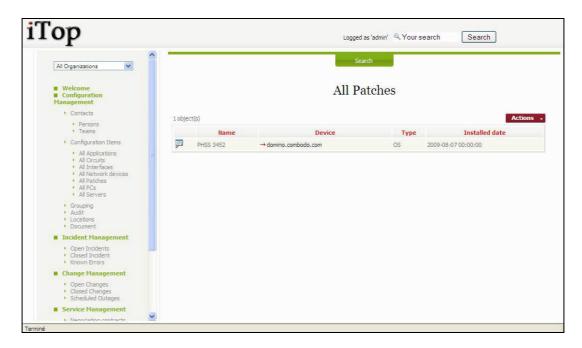


Figure 47

When you click on D button you get details for selected patch.

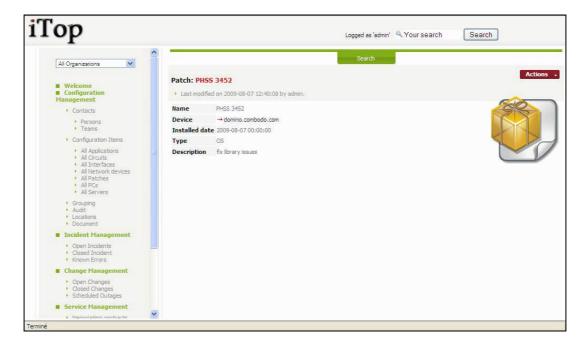


Figure 48

To create a new patch you just have to click on "New" in action drop down list, from either patches list or a given patch detail. Following wizard then appears:

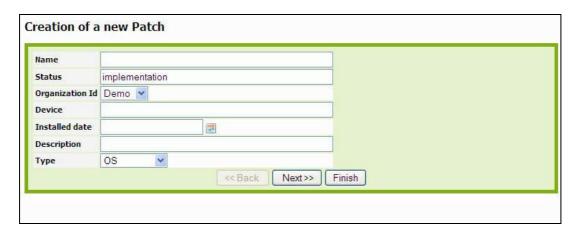


Figure 49

When you click on Next>> you get confirmation window and create new patch. Details for this patch are displayed automatically.

If the same patch is installed on several servers or PC you will have to create it for each one.

# **Managing Network Devices**

The Network device class regroups all routers, switches, firewall, etc, installed in your environment. "All Network device "menu display a list of such objects documented in iTop.



Figure 50

When you click on putton you get details for selected network device



Figure 51

"Interfaces" tab displays a list of network interfaces documented for the selected object. You can add a new one by clicking on button Actions on top right corner of this list. (see Managing Interfaces for more details about Interfaces).

"Contacts" tab displays all contacts related to this object. For example team responsible for providing hardware support for this devices. You can easily manage those relationships as describe in chapter "Managing relationships"

"Incidents" tab displays all incidents having an impact on the network device. You can easily link the network device to a new incident, but this is managed most of the time in the Incident management module.

"Changes" tab displays all changes having an impact on the network device. You can easily link the network device to a new change, but this is managed most of the time in the Change management module.

"Documents" tab displays all the documents that are linked to this device, for example description of the hardware. You can easily manage those relationships as describe in chapter "Managing relationships"

To create a new network device you just have to click on "New" in action drop down list, from either network device list or a given network device detail. Following wizard then appears:

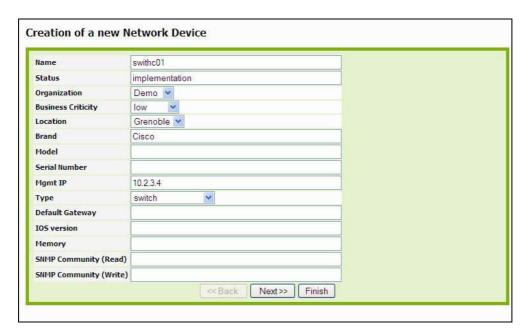


Figure 52

Fill in all fields with needed information and click on Next>> . A confirmation window appears, asking you to create the new network device. Then click on create NetworkDevice.

## **Managing Interfaces**

An interface is representing any card that allows connecting devices to the network. It can be linked to network devices, PCs or servers.

"All Interfaces" menu displays all those CI for a given organization.

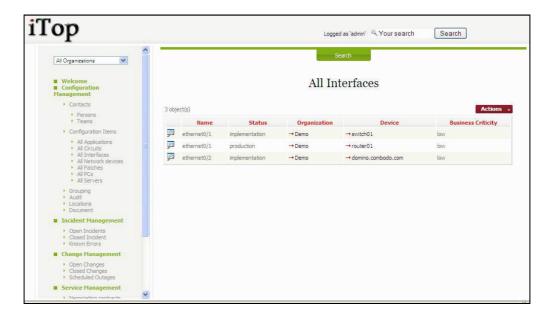


Figure 53

When you click on putton you get details for selected interface.

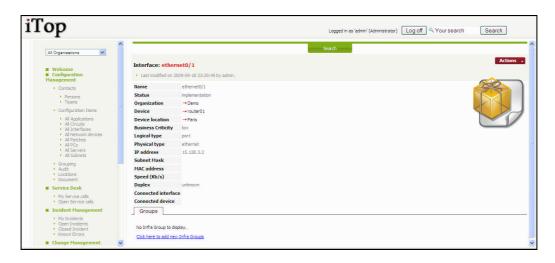


Figure 54

"Linked Interface" tab displays the interface that is connected to the one you are looking at.

To create a new interface you just have to click on "New" in action drop down list, from either interface list or a given interface detail. We recommend doing it in the Interface tab of a Server, PC or Network Device. Following wizard then appears:

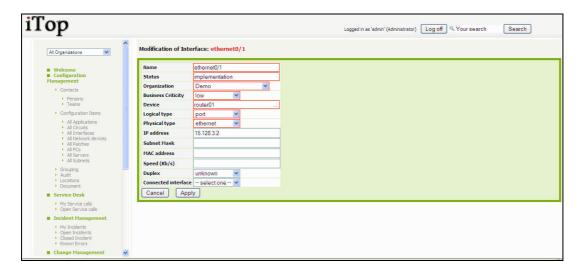


Figure 55

Fill in all fields with needed information and click on Next>>. A confirmation window appears, asking you to create the new interface. Then click on create Interface.

### **Managing Circuits**

Circuits are used to document WAN links between different sites. "All Circuits" menu displays all circuits for a given organization.

Figure 56

When you click on putton you get details for selected circuit.



Figure 57

To create a new circuit you just have to click on "New" in action drop down list, from either circuits list or a given circuit detail. Following wizard then appears:

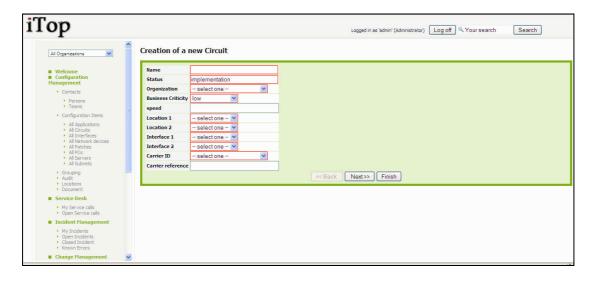


Figure 58

Fill in all fields with needed information and click on Next>>. A confirmation window appears, asking you to create the new circuit. Then click on create Circuit.

# Managing Groups

Using iTop you can group object together. Groups can be used for modeling any operational need. For instance documenting all devices monitored by a given application. The "Grouping" menu displays all groups created for the selected organization.

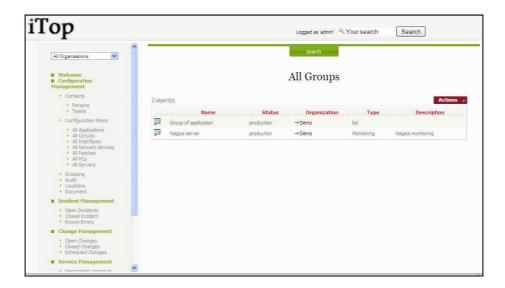


Figure 55

When you click on putton you get details for selected group.

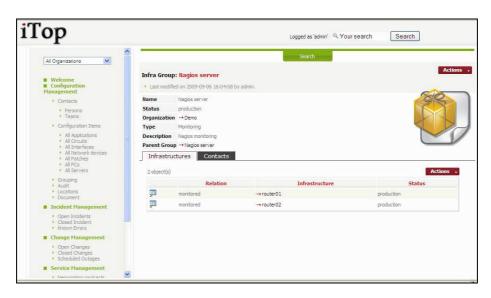


Figure 56

"Infrastructures" tab displays all CI linked to this group. You can easily manage those relationships as describe in chapter "Managing relationships"

"Contacts" tab displays all contacts related to this group, for instance the team or the people responsible for keeping this group up to date. You can easily manage those relationships as describe in chapter "Managing relationships"

To create a new group you just have to click on "New" in action drop down list, from either group list or a given group detail. Following wizard then appears:

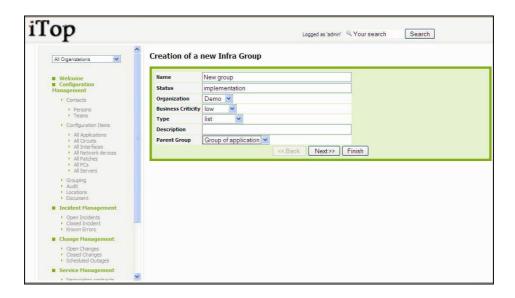


Figure 57

Fill in all fields with needed information and click on Next>> . A confirmation window appears, asking you to create the new group. Then click on create Group.

### **Using Audit**

Audits in iTop are used to track the consistency of information stored in the application. For instance "Do I have servers on production located on a site that is under implementation?" This function is key as it make sure that the process of documenting your IT is well followed. "Audit" menu displays in a table all rules and the result of the audit computed real time.



Figure 57

When you click on "# Errors" for a given rule, you get a list of object that are not documented properly:

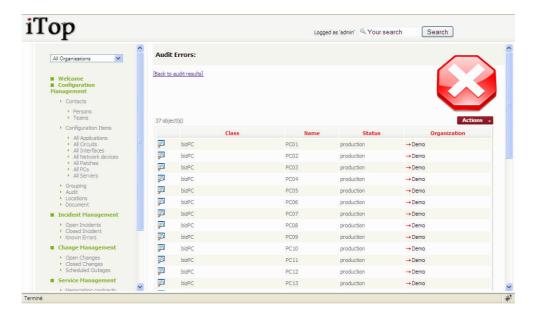


Figure 58

The administrator guide describes how to create a new rule to be checked.

## **Using Service Desk module**

The service desk module allows you to document all service calls coming from end users. Call can by assign to workgroup that would be responsible for making sure request is handled. Those service calls can be linked to infrastructures and related incidents.

## Service call life cycle

In order to enforce service desk processes, iTop includes a life cycle for service call object. Moving from one state to another will require some action from support agent, for example updating action log and resolution code before closing a ticket.

The life cycle is described in following diagram:

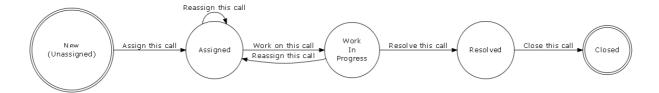


Figure 58

# Viewing Service call

"Open Service calls" menu displays all service call currently open for the selected organization.

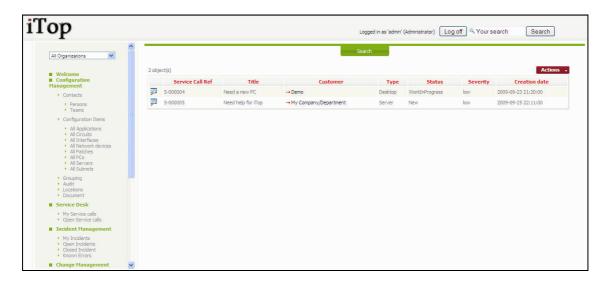


Figure 59

When you click on putton you get details for selected service call.

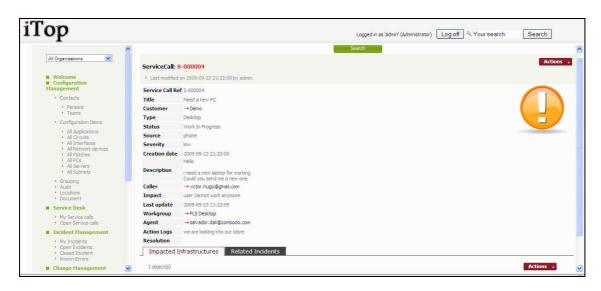


Figure 60

"Impacted Infrastructures" tab displays all infrastructures related to this service call.. You can easily manage those relationships as describe in chapter "Managing relationships"

"Related Incident" tab displays all incident tickets that are linked to this service call. This allows support agent to regroup a list of service call with a ticket that represent the root cause of the issue encountered by end users. You can easily manage those relationships as describe in chapter "Managing relationships"

### Creating Service call

There are several ways to create a service call: either using Actions from a list of service calls and selecting "New", or from the detail page of an other service call and using and selecting "New".

A wizard then helps you to create your service call with several steps:

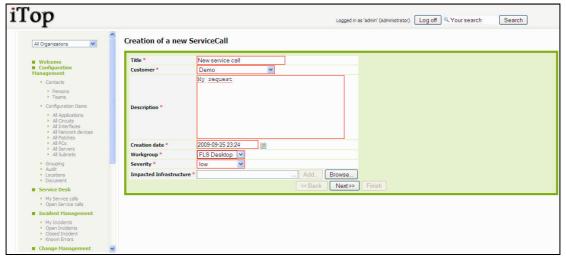


Figure 61

You can add Impacted Infrastructure by filling corresponding field and clicking on many times as you want. You can also use Browse... button.

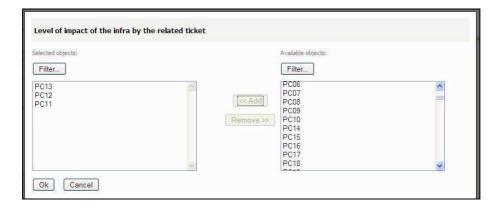


Figure 62

Once selected impacted infra, you are prompt to enter the impact



Figure 63

Once selected all impacted infrastructure click on Next>> to go to next step. You are prompt to enter if needed ticket related to this one and caller:

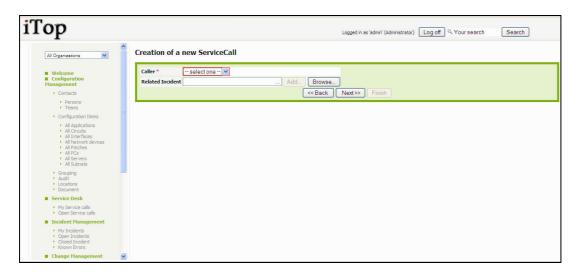


Figure 64

As for management of impacted infrastructure, you can use either Add or Browse...

button to find your related tickets. Then click on Next>>

You are prompt to enter other information for the service call as type, impact, action logs ...

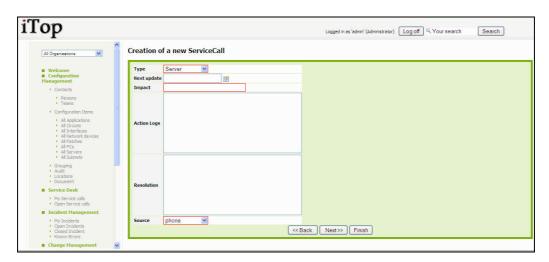


Figure 65

Click on Next>> once done. A confirmation window opens. Click on Create ServiceCall for validating the creation. The details page for the new service call open

# **Updating Service call**

You can update a service call at any time, but fields you can modify depend on status of the ticket.

#### Assigning or re-assigning a ticket to workgroup or agent

Click on Actions button of the details page and select "Assign this call". A wizard opens to let you enter an agent.



Figure 66

Click on Assign this call for validating your change. The status of the service call changes to "assigned"

### Working on a service call

When you are ready to work on a service call you can click on details page and select "Work on this call".



Figure 67

Click on Work on this call to validate status change. New status for this service call is "WorkInProgress".

### Resolving a service call

When the service call is resolved, you can close it. Click on Actions button of the details page and select "Resolve this call". A wizard opens to let you enter either a resolution:



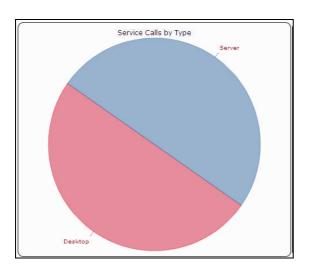
Figure 68

Click on Resolve this call for closing the incident ticket. Status is now "Resolved". You won't be able to change this ticket anymore.

#### Service call Dashboard

The green menu "Service Desk", displays dashboard for service desk module. It help support organization to track:

Service Call by type



Service call by status

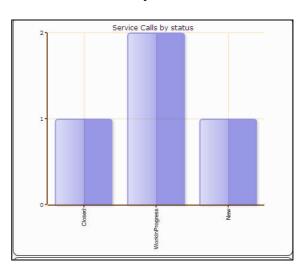
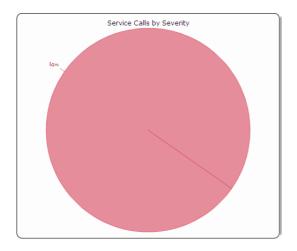


Figure 69

Service call by Severity

Service calls not yet assigned



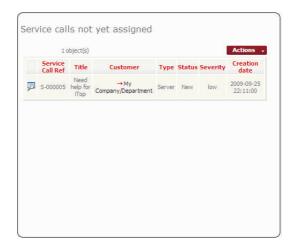


Figure 70

## Using Incident management module

The incident management module allows you to manage any incident ticket occurring in your environment as describe by ITIL best practices.

It allows support agent to create workgroup, and different type of incidents. In order to focus on most critical issues, they can use different level of severity. They can also easily document infrastructures impacted and contact to be notified.

A Known Error data base allows to document resolution procedure for recurring issues and by this way reduces the time to solve them.

## Incident life cycle

In order to enforce incident management process, iTop includes a life cycle for incident object. Moving from one state to another will require some action from support agent, for example updating action log and resolution code before closing a ticket.

The life cycle is described in following diagram:

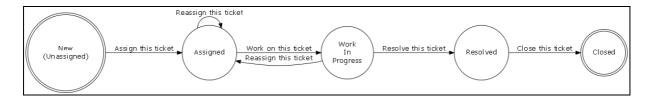


Figure 58

# Viewing Incident

"Open Incidents" menu displays all incident ticket currently open for the selected organization.

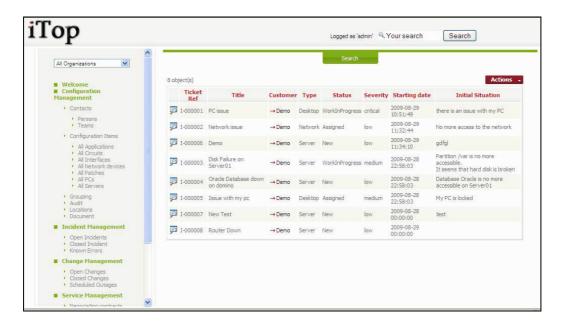


Figure 59

When you click on putton you get details for selected incident.

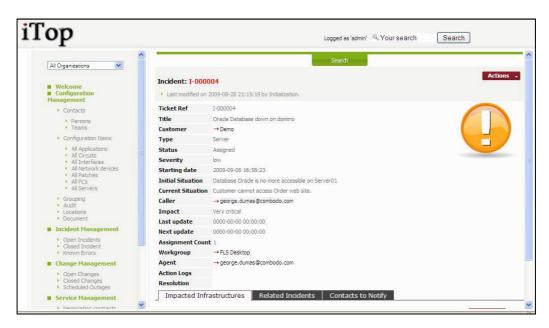


Figure 60

"Impacted Infrastructures" tab displays all infrastructures impacted by this incident. This allows support agent to document how each of them are impacted. You can easily manage those relationships as describe in chapter "Managing relationships"

"Related Incident" tab displays all other incident tickets that are linked to this one. This allows support agent to regroup a list of ticket with a master ticket that represent the root cause of the incident. You can easily manage those relationships as describe in chapter "Managing relationships"

"Contacts to Notify" tab displays all contacts that need to be kept update during the whole life of this ticket. You can easily manage those relationships as describe in chapter "Managing relationships"

### Creating incident

There are several ways to create an incident ticket: either using Actions from a list of incident ticket and selecting "New", or from the detail page of an other incident ticket and using Actions and selecting "New".

A wizard then helps you to create your incident with several steps:

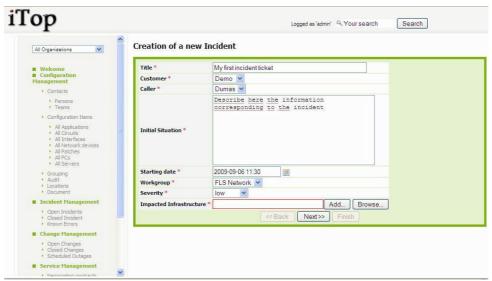


Figure 61

You can add Impacted Infrastructure by filling corresponding field and clicking on Add as many times as you want. You can also use Browse... button.

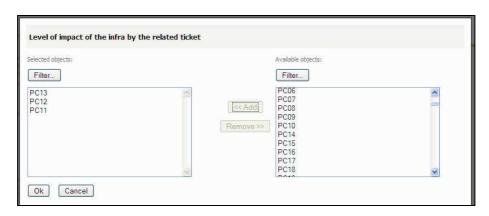


Figure 62

Once selected impacted infra, you are prompt to enter the impact

InkInfraTicket attributes			
Impact Ok Cancel			

Figure 63

Once selected all impacted infrastructure click on Next >> to go to next step. You are prompt to enter if needed ticket related to this one:

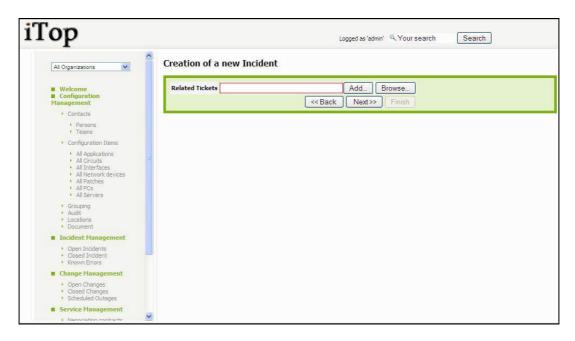


Figure 64

As for management of impacted infrastructure, you can use either Add or Browse...

button to find your related tickets. Then click on Next>>

You are prompt to enter other information for the ticket as type, global impact, action logs ...



Figure 65

Click on Next >> once done. A confirmation window opens. Click on Create IncidentTicket for validating the creation. The details page for the new ticket open

### **Updating incident**

You can update an incident ticket at any time, but fields you can modify depend on status of the ticket.

### Assigning or re-assigning a ticket to workgroup or agent

Click on Actions button of the details page and select "Assign this ticket". A wizard opens to let you enter either a new workgroup and select an agent.



Figure 66

Click on Assign this ticket for validating your change. The status of the ticket changes to "assigned"

### Working on an incident ticket

When you are ready to work on an ticket you can click on Actions button of the details page and select "Work on this ticket".



Figure 67

Click on Work on this ticket to validate status change. New status for this ticket is "WorkInProgress".

### Closing an incident ticket

When the incident is fixed, you can close it. Click on Actions button of the details page and select "Close this ticket". A wizard opens to let you enter either a resolution:

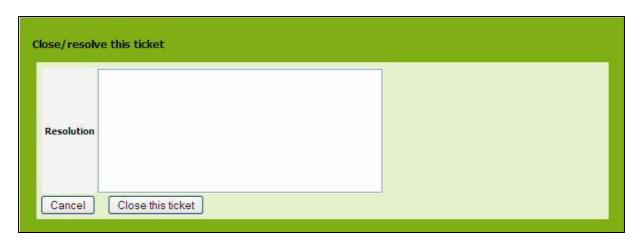


Figure 68

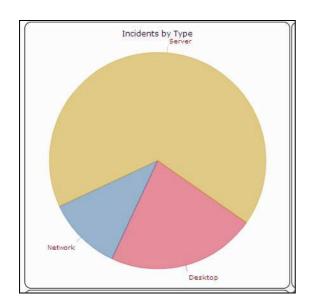
Click on Close this ticket for closing the incident ticket. Status is now "Closed". You won't be able to change this ticket anymore.

#### Incident Dashboard

The green menu "Incident Management", displays dashboard for incident management module. It help support organization to track:

Ticket by type

Ticket by status



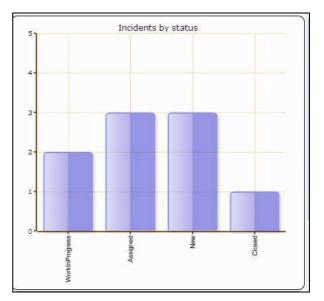


Figure 69

#### Ticket by workgroup



#### Ticket not yes assigned to any agent



Figure 70

# **Using Change management module**

The change management module allows change manager, change supervisor and change implementer to deal with changes occurring in your IT as described in ITIL best practices.

It allows those people to define which infrastructure will be impacted, and who will need to be notified.

It also document outages in advance to inform end users.

## Change life cycle

In order to enforce change management process, iTop includes a life cycle for change object. Moving from one state to another will require some action from change manager, supervisor or implementer, for example planning a change

The life cycle is described in following diagram:

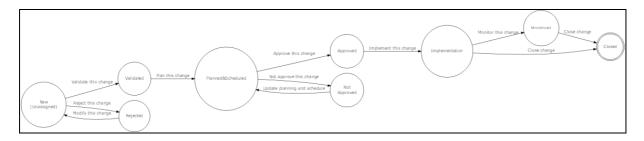


Figure 73

## Viewing changes

"Open changes" menu displays all change ticket currently open for the selected organization

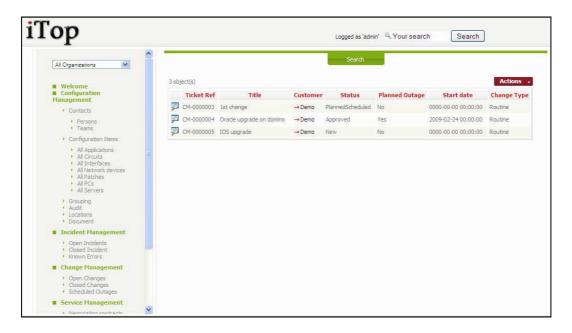


Figure 74

When you click on putton you get details for selected change.

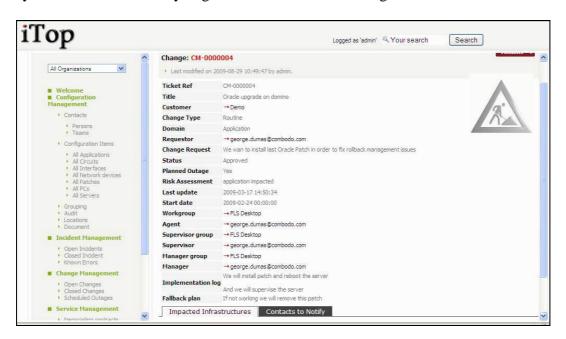


Figure 75

"Impacted Infrastructures" tab displays all infrastructures impacted by this change. This allows support agent to document how each of them are impacted. You can easily manage those relationships as describe in chapter "Managing relationships"

"Contacts to Notify" tab displays all contacts that need to be kept update during the whole life of this ticket. You can easily manage those relationships as describe in chapter "Managing relationships"

### Creating a new change

There are several ways to create a changeticket: either using Actions from a list of change ticket and selecting "New", or from the detail page of another change ticket and using and selecting "New".

A wizard then helps you to create your change with several steps:

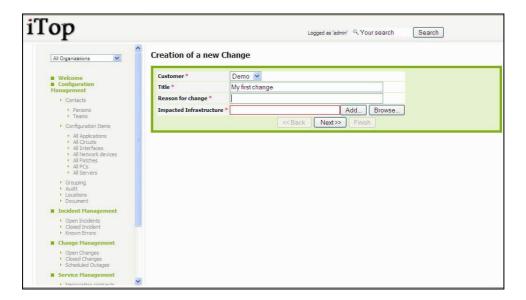


Figure 76

You can add Impacted Infrastructure by filling corresponding field and clicking on Add as many times as you want. You can also use Browse... button.

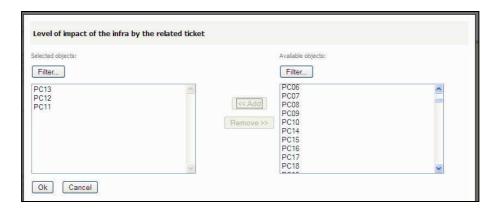


Figure 77

Once selected impacted infra, you are prompt to enter the impact

InkInfraTicket attributes		
Impact		
Ok Cancel	/ Dames	

Figure 78

Once selected all impacted infrastructure click on Next >>> to go to next step. You are prompt to enter other information for this change:

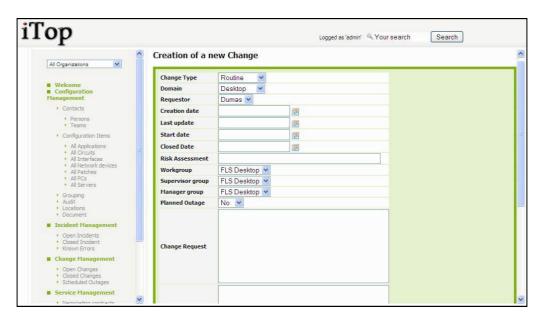
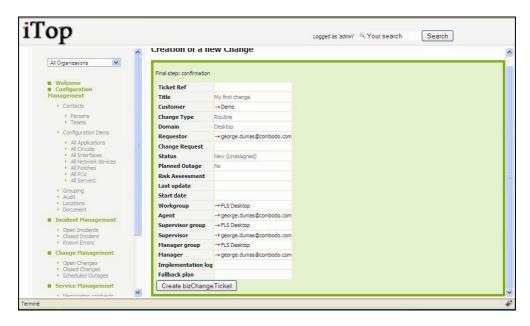


Figure 79

Once done, click on Next>> , you are prompt with a summary window that let you create your change:



#### Figure 80

### Updating a change

The life cycle defined for a change ticket allows you to follow you change management process.

#### Validating change

Once the ticket created you can validate that the caller is allowed to request this change or reject it. To do this click in details page of the change ticket on "Actions" and select either "validate this change" or "reject this change". A window similar to the following one prompts you to confirm your choice:



Figure 81

#### Planning a change

Once validated, you have to plan your change. To do this click in details page of the change ticket on Actions and select "Plan this change". Your are prompted by a window asking you to define the risk, what will be implemented, as well as the fallback plan.



Figure 82

#### Approving a change

Once a change is planned, you can approve it or not. To do this click in details page of the change ticket on and select either "approve this change" or "Not approve this change". In case you don't approve it, the change will have to be planned again. Else the change status is changed to "approved".

#### Implementing a change

Once a change is approved, you can implement it. To do this click in details page of the change ticket on and select "implement this change". A confirmation window appears:



Figure 82

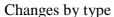
The status of the change ticket is now "implementation".

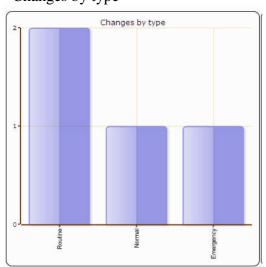
#### Monitoring and closing a change ticket

Once a change is implemented you can either monitor it, for instance to check that everything is fine, or close it directly. To do this click in details page of the change ticket on and select either "monitor this change" or "close this change". If you decide to monitor it, you will have to close it after.

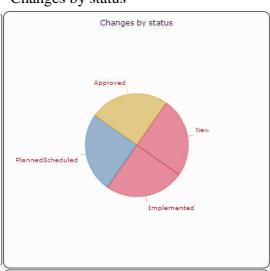
## Change dashboard

The green menu "Change Management", displays dashboard for change management module. It helps support organization to track:





#### Changes by status



#### Figure 83

#### Changes by workgroup



#### Changes not assigned



Figure 84

## **Using Service management module**

The service management module allows service manager to deal with the service definition and provider manager to manage their contract with third party provider.

It allows documenting all services provided by a given provider, and which organization is using it.

You can also document all your contracts with service providers, which infrastructure are covered, cost of the service, and contacts managing it.

## Service Life cycle

In order to enforce service management process, iTop includes a life cycle for service object. Moving from one state to another will require some action from service manager, for example moving a service to production

The life cycle is described in following diagram:

# Viewing services provided by an organization

"all services" menu displays all services provided by selected organization



Figure

When you click on putton you get details for selected service



Figure

# Creating a new service

There are several ways to create a service: either using Actions from a list of service and selecting "New", or from the detail page of another service and using Actions and selecting "New".

A wizard then helps you to create your service:

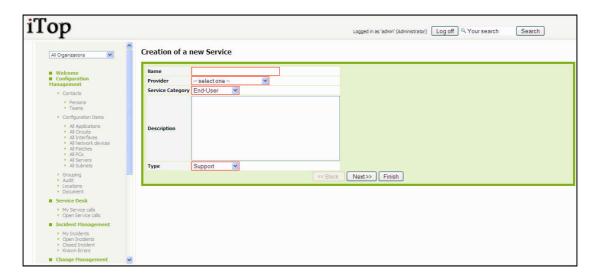


Figure 88

Once done, click on Next>>>, you are prompt with a summary window that let you create your service:

### Contract Life cycle

In order to enforce service management process, iTop includes a life cycle for contract object. Moving from one state to another will require some action from service manager, for example moving a service to production

The life cycle is described in following diagram:

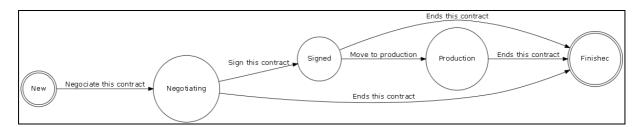


Figure 85

# Viewing contract used by a given organization

"all contracts" menu displays all contracts between selected organization and providers.

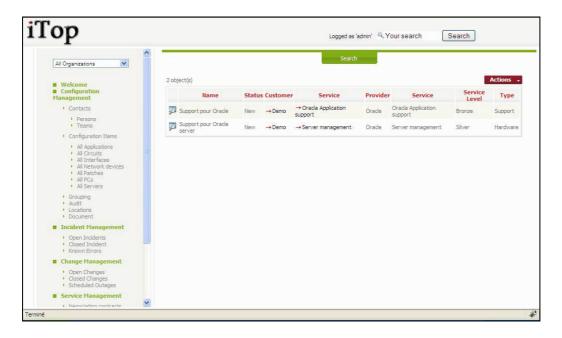


Figure 86

When you click on D button you get details for selected contract

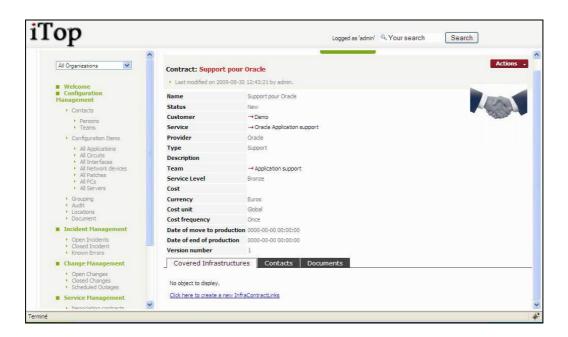


Figure 87

"Covered infrastructures" tab displays list of infrastructures covered by this contracts, as well as coverage window 24\*7,5\*8 ... You can easily manage those relationships as describe in chapter "Managing relationships"

"Contacts" tab displays all contacts for this contract and their role. You can easily manage those relationships as describe in chapter "Managing relationships"

"Documents" tab displays all documents related to this contract. You can easily manage those relationships as describe in chapter "Managing relationships"

### Creating new contract

There are several ways to create a contract: either using Actions from a list of contract and selecting "New", or from the detail page of another contract and using Actions and selecting "New".

A wizard then helps you to create your contract:

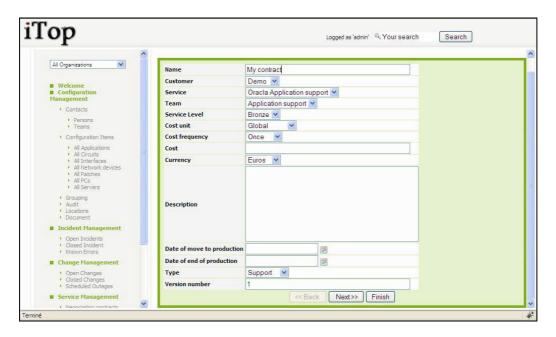


Figure 88

Once done, click on Next>>, you are prompt with a summary window that let you create your contract:

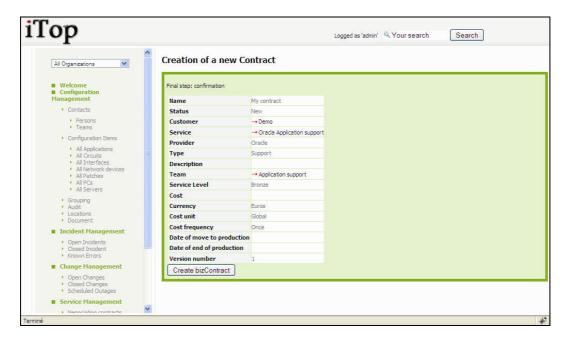


Figure 89

### Updating a contract

You can use Modify functionality to change value for attributes, but to move from one state to another, you have to use life cycle actions available in Actions menu.

### **Negotiating a contract**

When you have a new contract, you can move to Negotiating state by clicking on and "Negotiating this contract"



Just confirm to change to new status.

### Signing a contract

Once in Negotiating state, you can move to Signed state by clicking on "Actions" and "Sign this contract"



It is mandatory to fill in service level, cost unit, billing frequency, cost and cost frequency if not already done. Then confirm to change to new status.

### Moving a contract to production

Once signed, you can move your contract to production. Click on Actions and "Move to production"

The contract becomes applicable in production
Date of Move To Production 0000-00-00 00:00:00   Cancel Move to production

Move to production date has to be updated. Just confirm to change to production status.

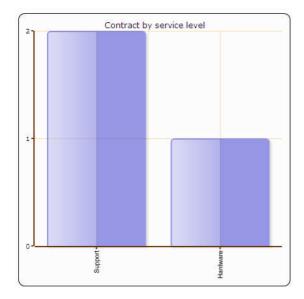
#### **Ending a contract**

Once contract is over, you can end it. Click on Actions and "End this contract".

The contract is ending	
Cancel Ends this contract	

Just confirm to move to finished state. You won't be able to modify attributes anymore.

## Service management dashboard



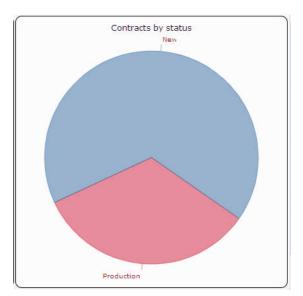


Figure 90



#### Figure 91

## Importing massively data

In order to ease management of CI and their relationships, iTop is providing a massive data load functionality that allows users to create any object using csv and excel files. This tool can be used for adding or updating objects.

	A	В	С	D	E	F	G	H		J	K	
1	me	Mgmt IP	Default Gateway	Status	Business	Organizati	Location	Brand	Model	OS Family	OS Version	Serial
2	domino.combodo.com		10.22.28.1	In Production	medium	1	2	IBM	Power 520	AIX	4.1	S4523
3	srv10		10.22.28.1	Production Candidate	high	1	2	IBM		AIX	4.1	
4	srv11	10.3.5.4	10.22.28.1	Production Candidate	high	1	2	IBM		AIX	4.1	
5	srv12		10.22.28.1	Production Candidate	high	1	2	IBM		AIX	4.1	
6	srv13	10.22.28.4	10.22.28.1	Production Candidate	high	1	2	IBM		AIX	4.1	
7												

Figure 92

To start massive import, click on "CSV import" menu on the explorer frame. A wizard helps you to massively load you object.

First step consists in selecting object you would like to load, and pasting data from you csv or excel document. First line is used to represent name of the attributes to map those data with. The wizard will automatically find separator.

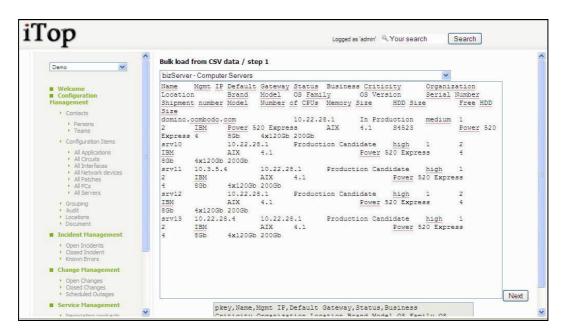


Figure 92

Second step consist in validating field mapping. If header was not good in previous step, this step helps you to define good field value using list. The tool also select automatically primary keys for reconciliation, but you can change it if required.

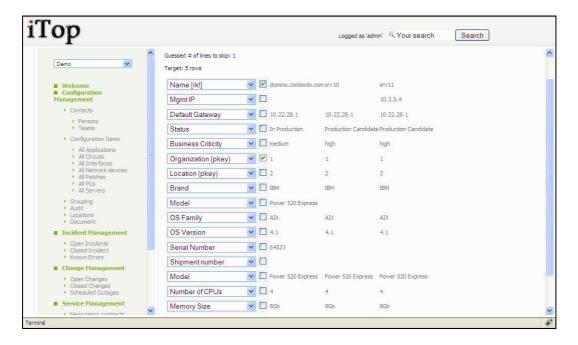


Figure 93

Third step displays result for data analysis. The wizard at this level tells you what we be updated if already stored in database using green color highlight, and what will be created.

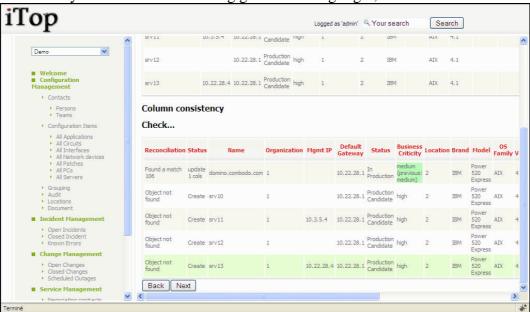


Figure 94

Last step create or update object and summarize what had been done.

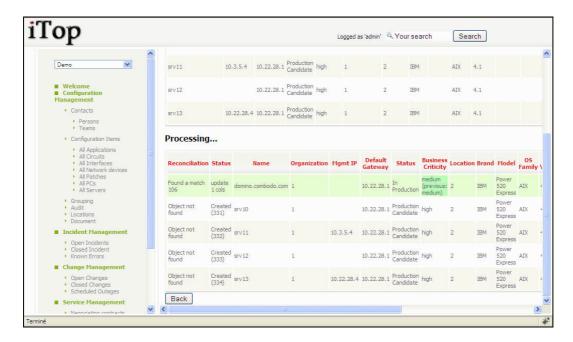


Figure 95