Localizing iTop

iTop was designed to support multi-localization. This means that – provided the right localization is available in iTop – each user can see the iTop user interface in her/his own language.

The localization of iTop consists mainly in translating a set of predefined PHP files, called "dictionaries". Since the iTop design is modular, the dictionary itself is also modular.

This document explains what needs to be translated in order to localize iTop, lists the rules and conventions to follow and describes how to test your localization once it is complete enough.

1   Setting up your environment

In order to localize iTop you will need:

- The latest version of the iTop application

- A text editor capable of editing UTF-8 text files (preferably an editor with PHP syntax highlighting, since the files to edit are PHP files)

By convention, iTop identifies each localization by the concatenation of two codes:

- a language code (two letters code ISO 639-1 or three letters ISO 639-2, see http://www.loc.gov/standards/iso639-2/php/code_list.php)

- a country code (two letters ISO 3166 country code, see http://www.iso.org/iso/english_country_names_and_code_elements)

For example the English/US localization is identified by the code "EN US", and the French/France localization is identified by "FR FR".

To start a new localization, first make a copy of the following files:

```
dictionaries/dictionary.itop.core.php
dictionaries/dictionary.itop.ui.php
modules/itop-config-mgmt-1.0.0/en.dict.itop-config-mgmt.php
modules/itop-service-mgmt-1.0.0/en.dict.itop-service-mgmt.php
modules/itop-tickets-1.0.0/en.dict.itop-tickets.php
modules/itop-request-mgmt-1.0.0/en.dict.itop-request-mgmt.php
modules/itop-change-mgmt-1.0.0/en.dict.itop-change-mgmt.php
modules/itop-incident-mgmt-1.0.0/en.dict.itop-incident-mgmt.php
```

You can name them by putting the language code at the beginning of the file name. As you can see in the list above, the convention is not strictly enforced right now. The only important point is that the file name must be reasonably unique and straightforward.

For example, the German localization code would be "DE DE", and therefore the files could be:

```
dictionaries/de.dictionary.itop.core.php
dictionaries/de.dictionary.itop.ui.php
modules/itop-config-mgmt-1.0.0/de.dict.itop-config-mgmt.php
modules/itop-service-mgmt-1.0.0/de.dict.itop-service-mgmt.php
modules/itop-tickets-1.0.0/de.dict.itop-tickets.php
modules/itop-request-mgmt-1.0.0/de.dict.itop-request-mgmt.php
modules/itop-change-mgmt-1.0.0/de.dict.itop-change-mgmt.php
```

2   Structure of a dictionary file

The dictionary is split into multiple sections, for easier maintenance. Each section is a call to the PHP static function Dict::Add and follows the same syntax:

```
Dict::Add(<language_code>, <english_name_of_the_language>, <native_name_of_the_language>,
<array_of_translations>);
```

Where:

- ◆ ‹*language_code*› is a string made of the language and country codes, separated by a space,

- ◆ ‹*english_name_of_the_language*› is the name of the language, written in English,

- ◆ ‹*native_name_of_the_language*› is the name of the language, in its own language,

- ◆ ‹*array_of_translations*› is a PHP hash array made of a list of 'TranslationCode' => 'LocalizedText'. The goal of the localization is to provide this '*LocalizedText*' for each '*TranslationCode*'.

In the example below the (Spanish localization), the parts marked in **bold** have been localized.

```
Dict::Add('ES ES', 'Spanish', 'español, castellano', array(
      'Menu:WelcomeMenu' => 'Bienvenido',
      'Menu:WelcomeMenu+' => 'Bienvenido a iTop',
      'Menu:WelcomeMenuPage' => 'Bienvenido',
      'Menu:WelcomeMenuPage+' => 'Bienvenido a iTop'
);
```

Conventions

Translation codes starting with Menu: refer to... a menu !

Translation codes starting with UI: refer to some part of the generic user interface.

Translation codes starting with Class: refer to the description of a class of object. Either a "standard" object that is part of the core of iTop, or a class described in one of the iTop data-model "modules".

Translation codes ending with a plus sign (+) refer to the same element as the code without the plus, just providing more details. For example if the name of an object/field is 'ObjCode' its label/description will be 'ObjCode+'.

Placeholders

It is sometimes necessary to translate whole sentences with some variable parts (like the number of results returned by a query, the name of a target object to be linked to the current object, etc...).

In this case the 'LocalizedText' will contain numbered placeholders, as shown in the example below:

`'UI:ManageObjectsOf_Class_LinkedWith_Class_Instance' => 'Manage %1$s objects linked with %2$s: %3$s'`

The place holders are in the form %*n*$s (or %*n*$d for numbers – 'i.e. digits') where *n* is the number of the placeholder (1,2,3...). The order of the placeholders in the translated text is not important as long as the syntax %*n*$s is preserved.

For example it possible to translate '*%1$s linked with %2$s*' by '*connexion de %2$s avec 1s*'.

Dictionary files

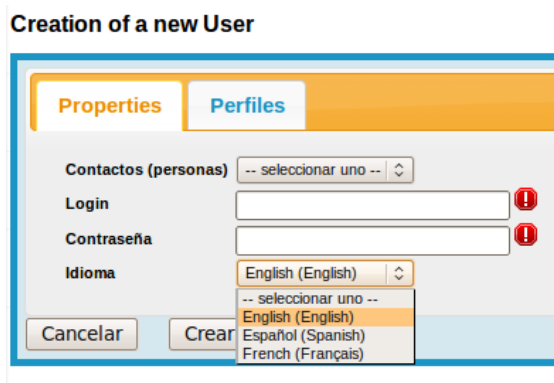| Dictionary file	Purpose
dictionaries/dictionary.itop.core.php	Translation for all iTop internal objects. Most of these objects are seen only by administrators. Localization of this dictionary is not critical.
dictionaries/dictionary.itop.ui.php	Most of the User Interface of iTop is contained in this dictionary: all messages, buttons, menus, etc.. come from this file. Especially the Welcome menu and the Admin Tools menu. It's probably the first file you should tackle.
modules/.../en.dict.itop-config-mgmt.php	Translation of all the objects and menus related to the "Configuration Management" part.
modules/.../en.dict.itop-service-mgmt.php	Translation for the "Service Management" module.
modules/.../en.dict.itop-tickets.php	Translation for the generic classes at the basis of all tickets-based modules (Incident, Request and Change Management). Tickets statuses get their values from this file.
modules/.../en.dict.itop-request-mgmt.php	Translation for the "User Request Management" module.
modules/.../en.dict.itop-change-mgmt.php	Translation for the "Change Management" module.
modules/.../en.dict.itop-incident-mgmt.php	Translation for the "Incident Management" module.

3 Testing your dictionary

Install iTop and run the setup script. Once your installation is complete, edit the configuration file 'config-itop.php' at the root of the iTop installation (warning: the setup script marks this file as read-only upon completion).

Find the section called "dictionaries", near the end of the file:

```
'dictionaries' => array (
        '../dictionaries/dictionary.itop.core.php',
        '../dictionaries/dictionary.itop.ui.php',
        '../dictionaries/fr.dictionary.itop.ui.php',
        '/opt/itop/html/modules/authent-ldap/en.dict.authent-ldap.php',
        '/opt/itop/html/modules/itop-config-mgmt-1.0.0/en.dict.itop-config-mgmt.php',
        '/opt/itop/html/modules/itop-config-mgmt-1.0.0/fr.dict.itop-config-mgmt.php',
        '/opt/itop/html/modules/authent-local/en.dict.authent-local.php',
        '/opt/itop/html/modules/itop-tickets-1.0.0/en.dict.itop-tickets.php',
        '/opt/itop/html/modules/itop-tickets-1.0.0/fr.dict.itop-tickets.php', …
```

You can then add your own dictionary files to this list, either as relative or absolute paths, it does not matter, as long as the paths are correct.

Once this is done, open iTop, log in as an administrator and go to the "Admin Tools / User Accounts" menu. Create a new user (or edit an existing one), the new language should be available in the drop-down list.

Setting the default language

In iTop the localization is defined per user,. However the initial login screen is not tight to any particular user and therefore is displayed using the 'default_language' which is defined at the beginning of the iTop configuration file (config-itop.php). Edit this setting to point to your language code if you want to display the login screen in your preferred language.

4 Having your localization integrated in the iTop release

Combodo welcomes the integration of all localizations into the main iTop release. Should you want to contribute to iTop, send your translated dictionary files to 'support@combodo.com'. Your files will be integrated into the iTop package, which is distributed under the GPLv3 licence.