Installing Specify in Portuguese
Specify Software Project
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Introduction

The Specify Software Project offers the option for collection data processing using Specify in languages other than English. Portuguese is the second language spoken by Specify, it was developed in collaboration with collections scientists in Portugal and Brazil. Specify is now fully translatable or 'localizable' and ready for additional translations. The Specify help system will remain in English until a collaborator volunteers to translate it.

An understanding of language support in Specify requires some discussion about the technology used to define Specify's user interface, in particular how Specify's menus, data field captions (labels) on forms, popup messages, etc., are configured. Specify 6.0, since its launch in 2009, has supported extensive modifications to the content and layout of data entry forms, but only in English. Individual Collections and even classes of users within a Collection can be assigned custom data forms by editing the configuration files which define their appearance.

Specify's new localization capabilities, introduced in Specify 6.2.06, addressed a whole new type of user interface customization—the translation of screen components into additional languages. The data that inform Specify on which language and words to use for field captions, menu items, help messages, and the like are stored in files called "Discipline Schemas". (Discipline Schemas for user interface customization are distinct from database schema files which define database contents.) There are two Discipline Schema files which include language information for Specify, the first is used to translate the main Specify program interface, and the second file translates the Specify WorkBench application.

Discipline Schemas are applied at the level of Disciplines in the Specify model of organizational structure (see figure below). A Discipline Schema file can contain text string translations for more than one language, and if two or more languages are installed, the language any particular Specify workstation uses can be selected from the Preferences menu. Discipline Schemas have one set of translated terms for a particular human language. They can be exported, imported and standardized across a project, institution or collaboration to facilitate best practices for data entry.

Specify's hierarchical organizational model is shown below. The data tables listed within each organizational level are scoped to that level, in other words those data tables (and the data they contain) are shared across the units in the subsidiary levels. For example, all Taxon name records are scoped to Discipline, so that within a Specify site installation all Collections share and see all Taxon data records. Agent records are shared across Disciplines and Collections within a particular Division. Storage tree data are shared across all organizational units at an institution.
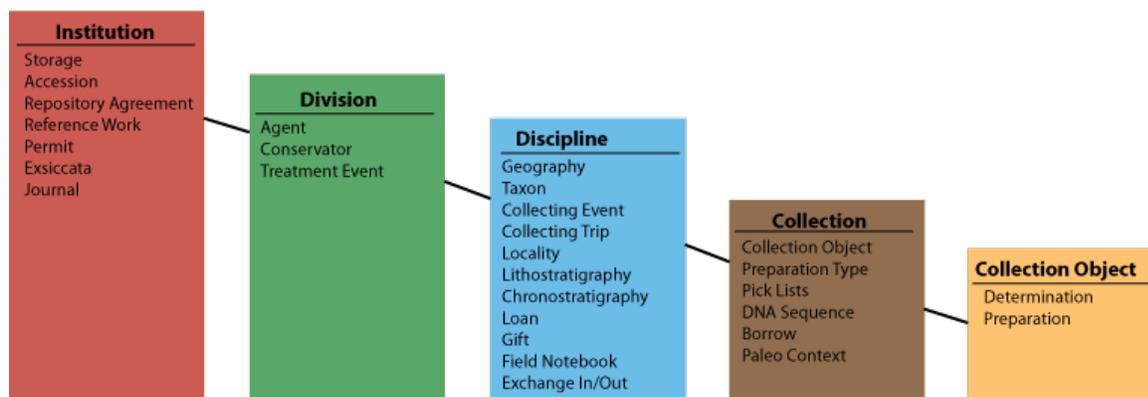
Because user interface Discipline Schema are scoped to the Discipline level, any language translations contained in a Discipline Schema are accessible only to Collection databases defined under that Discipline. Understanding the role of Discipline Schema is a little more complex than the simple rules for scoping Specify's data elements.

How data fields appear on a Collection's data entry forms is determined by the settings held in three distinct layers of software. The bottommost layer is the database schema itself. For fields to be available for display in Specify's data entry forms, they must be present in the database schema. The database schema can be viewed on the Specify Project web site (www.specifysoftware.org) in text and graphical representations.

One level up from the database definitions, Specify uses the Discipline Schema to select which fields from the database will be used within a Discipline (by one or more collections). It is important to note that Discipline Schema not only handle language translations they also add customizations such as designating fields as web links, picklists or as hidden altogether. So user interface Discipline Schema are used not only for setting the language of the Specify interface, but also the properties and behaviors of the data fields displayed.

The third layer of software involved in configuring Specify's look and feel is in Specify's data forms. They are customized by parameters defined in XML configuration files. If a data field is present in the database and designated as a picklist in the Discipline Schema, a Collection's data entry form that includes that field must also be configured in the form's XML file to display that field as a picklist. If a data form has a field defined as picklist, but it is not defined as such in the Discipline Schema, it will not work. By defining basic form customizations like picklists, weblinks and hidden fields at the Discipline Schema level, those customizations become available to the query builder interface in addition to being available for use through the data entry forms.

The Specify Project is happy to help sites decide and configure Specify's look and feel for individual collections, institutions or collaborations. Please contact us if you would like to explore options for language or data entry form customization, or simply would like to know more about how customization works.

Three Installation Scenarios for Using Specify in Portuguese

To install the Portuguese version of Specify, release 6.2.06 or later is required.

There are three installation scenarios for configuring a Portuguese version or "localization" of Specify. Which scenario is appropriate depends on a site's installation history with Specify. The three cases are: (1) a new installation of Specify with no previous Specify database on a computer running an operating system in Portuguese, (2) installing a new instance of Portuguese Specify with no previous Specify installation on a machine running an English operating system, and (3) converting an existing English version of Specify to a Portuguese Specify installation on any human language version of an operating system.

Installation Option 1: For a first-time Specify installation on a workstation, *without an existing Specify database, and with a workstation with an operating system in Portuguese*, simply download the appropriate Specify installation package from the web site which corresponds to your operating system: MS Windows, Mac OS X, or Linux. Then click on the Specify installation package file and pick Portuguese from the list of languages in the Specify installer window as shown in the figure below. (At this time the Portuguese (Brazilian) is the same as Portuguese.)

But before you do this, it is very important to read the documentation on how to install Specify which is available on the Specify Software web site (www.specifysoftware.org). Before Specify can be installed and run, the MySQL database manager must already be installed and running with a known root ("IT") user account and password on the same workstation or on a network-accessible database server computer. You must have MySQL credentials for the root user before running the Specify Installation Wizard. A new user also must also be prepared for the decisions that will arise while running the Specify Installation Wizard for the first time to configure a new Specify collection database. If you are new to Specify, it is essential to read the Specify installation and configuration documentation before installing Specify for the first time at your institution or your Specify installation will fail.

When Specify starts up, it will automatically detect the machine language as Portuguese and run the Portuguese version of Specify. At this point you will need to understand the use of user names and passwords as described in the Specify documentation on the web site.

Installation Option 2: For a first-time Specify installation on a workstation, *without an existing Specify database, and with a workstation with an operating system in English*, simply download the appropriate Specify installation package from the web site which corresponds to your operating system: MS Windows, Mac OS X, or Linux. Then click on the Specify installation package file and pick Portuguese from the list of languages in the Specify installer window as shown in the figure below. (At this time the Portuguese (Brazilian) is the same as Portuguese.)

But before you do this, it is very important to read the documentation on how to install Specify which is available on the Specify Software web site (www.specifysoftware.org). Before Specify can be installed and run, the MySQL database manager must already be installed and running with a known root ("IT") user account and password on the same workstation or on a network-accessible database server computer. You must have MySQL credentials for the root user before running the Specify Installation Wizard. A new user also must also be prepared for the decisions that will arise while running the Specify Installation Wizard for the first time to configure a new Specify collection database. If you are new to Specify, it is essential to read the Specify installation and configuration documentation before installing Specify for the first time at your institution or your Specify installation will fail.

Once MySQL and Specify are installed and configured through the Specify Wizard, follow the instructions for **Installation Option 3** to convert the installation to Portuguese.

Installation Option 3: For sites with Specify previously installed, follow the installation instructions below. Before changing Specify from an English installation to Portuguese, please consider these important issues first:

- If your existing English language installation of Specify has had any custom changes to the data field captions (displayed names of fields), changing your interface to Portuguese will not translate those changes into Portuguese. For example, if you changed the caption for a "Text1" field to "Phenology" on the data form, the caption for that field after installing a Portuguese localization will be the distributed Portuguese default value "Texto1".
- Different localizations or languages can access the same Specify database without conflict. If you have a small version of the United Nations, one user can happily use a workstation with English Specify, while another user of the same database can cheerfully use a workstation with the Portuguese translation of Specify.

- The choice of a language in Specify is assigned at the level of Specify Disciplines as described above in the Introduction section. Because of this, the Discipline schemas which contain the Portuguese translation will need to be imported for each of the Disciplines defined in your Specify installation. For example, if you have three separate collections in your institutional database, e.g. Mammals, Fish, and Fish Tissue, you will need to import the Portuguese Specify schema files (both of them) first for Mammals and then a second time for the Fish and Fish Tissue Collections. Because Fish and Fish Tissue are in the same Specify Discipline they will share the Discipline Schema files. Importing the schemas to one of the collections, imports them for both. Also please keep in mind the role the Discipline Schemas have for field customization for picklists and such. There are cases where you may want to import "Localizations Only" to protect previous field customizations made in your existing Discipline Schema. Please contact us if we can help with this (e-mail: specify@ku.edu).

There are four main parts to changing an English Specify installation to Portuguese; (1) downloading the two user interface schema files from the Specify website, (2) importing the Portuguese schema for the primary Specify application, (3) importing the Portuguese user Discipline Schema for the Workbench, and (4) changing the locale setting within Specify.

1) Download the Discipline schema files which contain the Portuguese translations from the Specify website. The schemas are located at:

> http://specify6.specifysoftware.org/Sp6Schema_pt.xml
> http://specify6.specifysoftware.org/Sp6SchemaWB_pt.xml

Save the files to a location you will remember. The name of the saved files must end in ".xml".

2) Start Specify and log into your collection database.

3) Go to System item in the top level Menu bar and select Schema Configuration from the drop down menu.
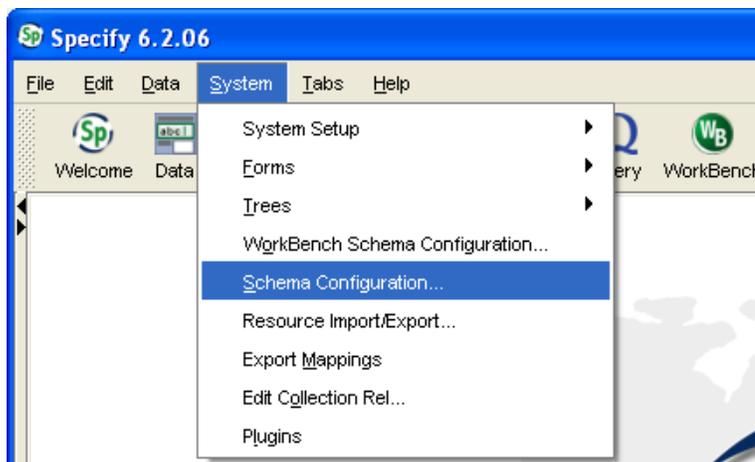
4) In the Schema & Localization Tools window, select Import a Schema.
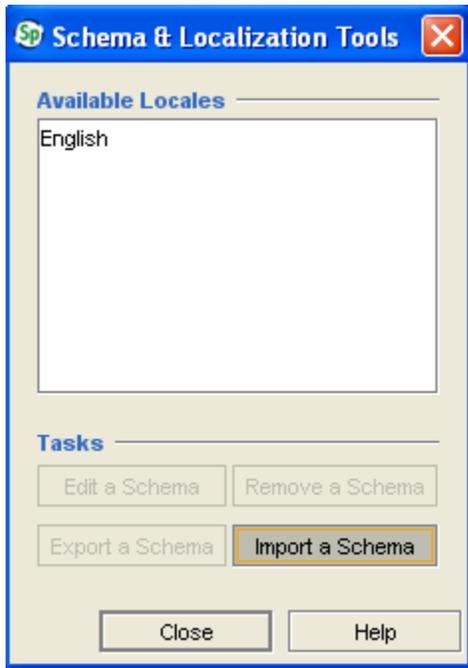
5) A window will appear asking if what type of import you want to do. All Customizations is used if you want to import changes to pick list associations, formatters, captions, etc. It will erase any customizations already done to the schema. "Localizations Only" will only change the field captions. It will not delete pick list associations or formatters. It will not erase the previous schema customizations.
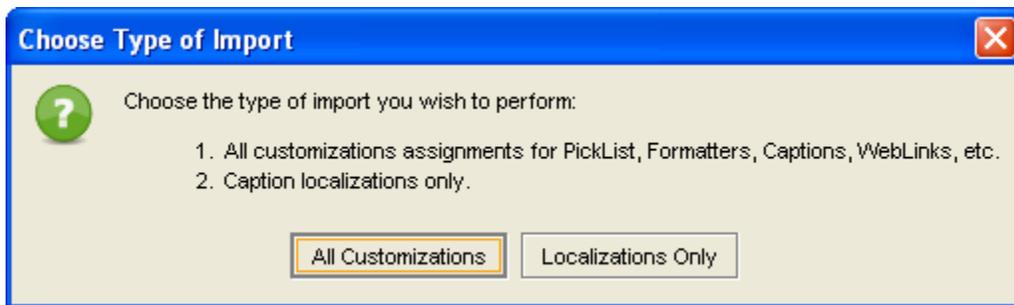
6) In the next window, navigate to the location where the schema you would like to import is saved. Select the schema to be imported and click Open.
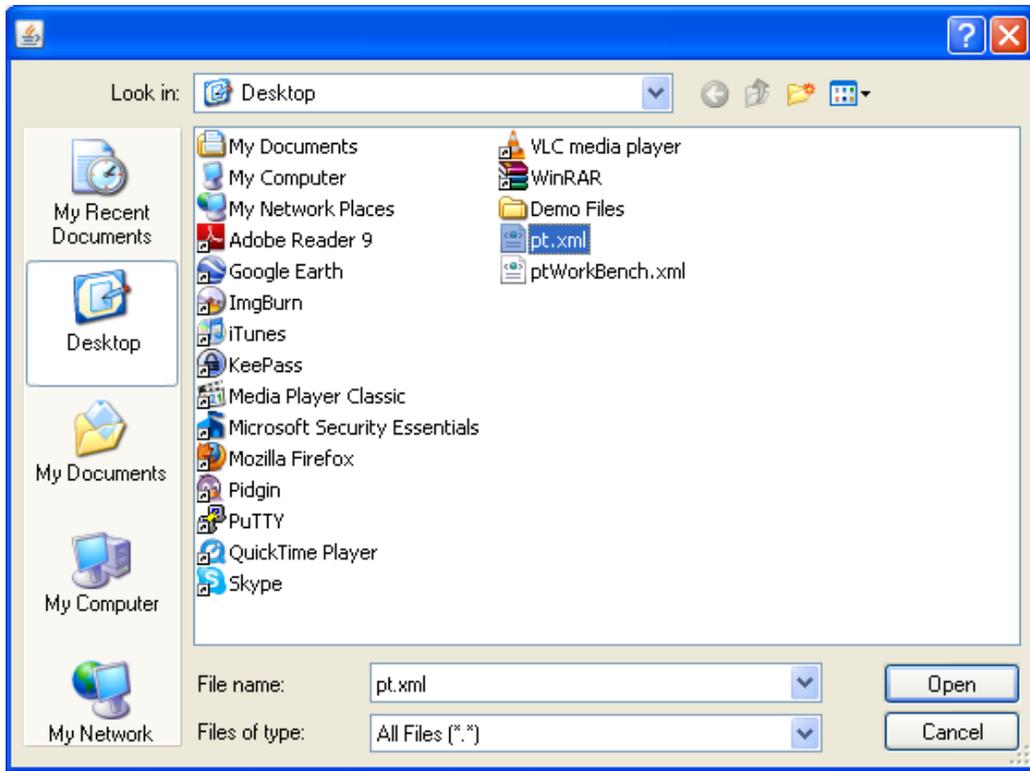
7) A progress bar will appear in the Schema and Localization Tools window.
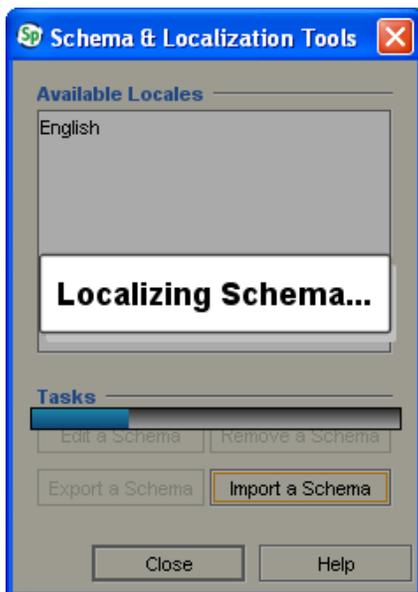
8) When the schema has been imported, a window will appear to let you know that Specify will shutdown.

9) Log back into Specify.

10) Go to System in the Menu bar and select WorkBench Schema Configuration from the drop down menu.
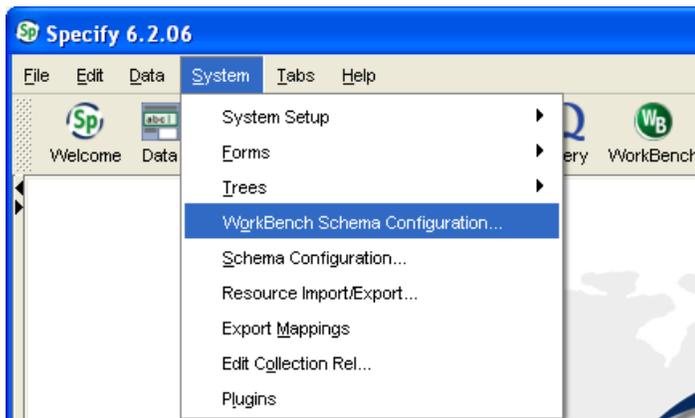
11) In the Schema & Localization Tools window, select Import a Schema.
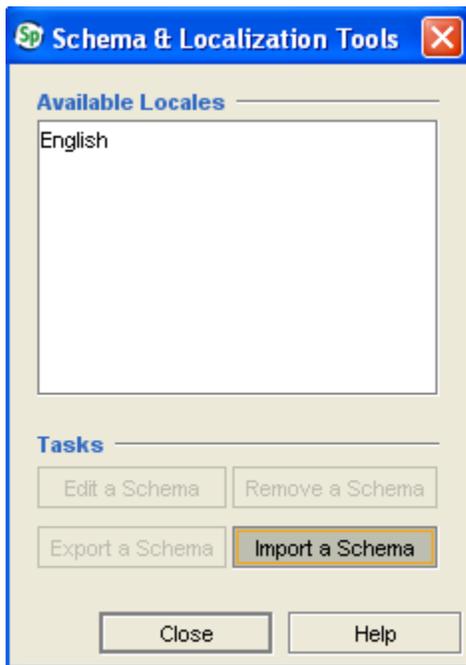
12) A window will appear asking if what type of import you would like to do. "All Customizations" is used if you want to import changes to picklist associations, formatters, captions, etc. It will erase any customizations already done to the schema. "Localizations Only" will only change the field and table captions (labels) on Specify's data entry forms. It will not delete picklist associations or formatters. It will not erase the previous schema customizations.
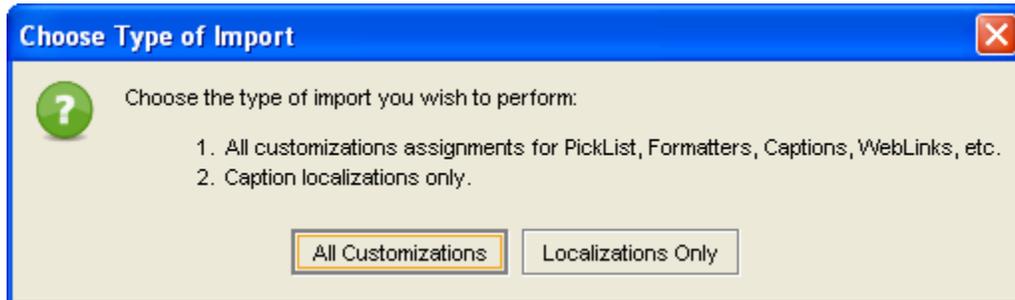
13) In the next window, navigate to the location where the Discipline Schema you would like to import was saved. Select it and click Open.
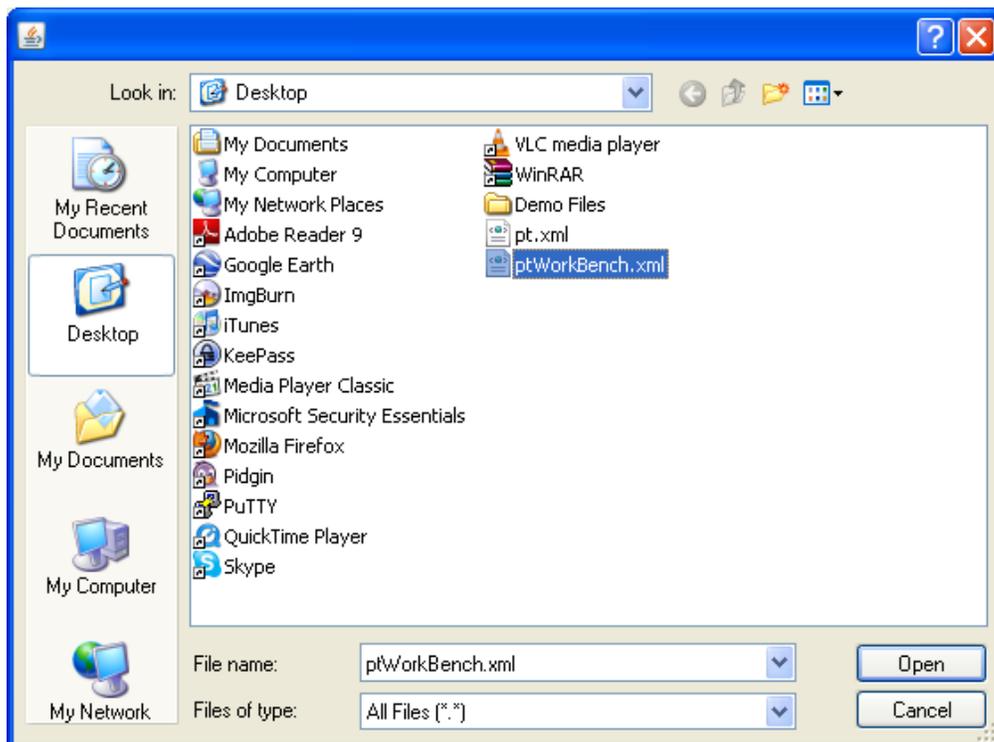
14) A progress bar will appear in the Schema and Localization Tools window.

15) When the schema has been imported, a window will appear to let you know that Specify will shutdown.

16) Restart Specify and log into your database.

17) In Specify, open the Preferences menu--

For PC and Linux users, go to Edit in the top level Menu Bar and select Preferences.
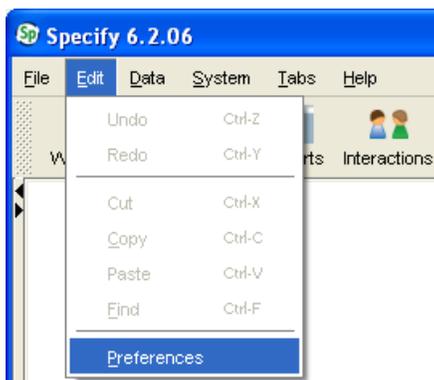
For Mac users, go to Specify in the Menu Bar and select Preferences.
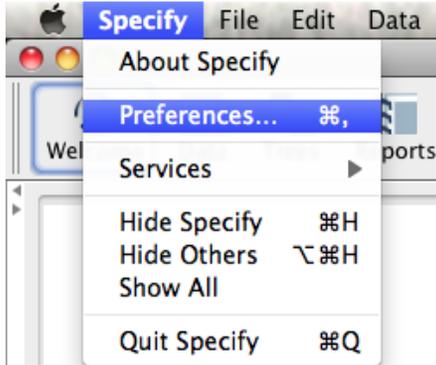
18) In the Preferences window, select System from the Task Bar at the top.

19) Choose the System too and in the System form, change the Locale from English to Portuguese. Then click OK at the bottom of the screen.

As of Specify Release 6.2.07, the Portuguese localizations for both Brazil and Portugal are under "Portuguese (Portugal)". We would welcome a Brazilian translation.
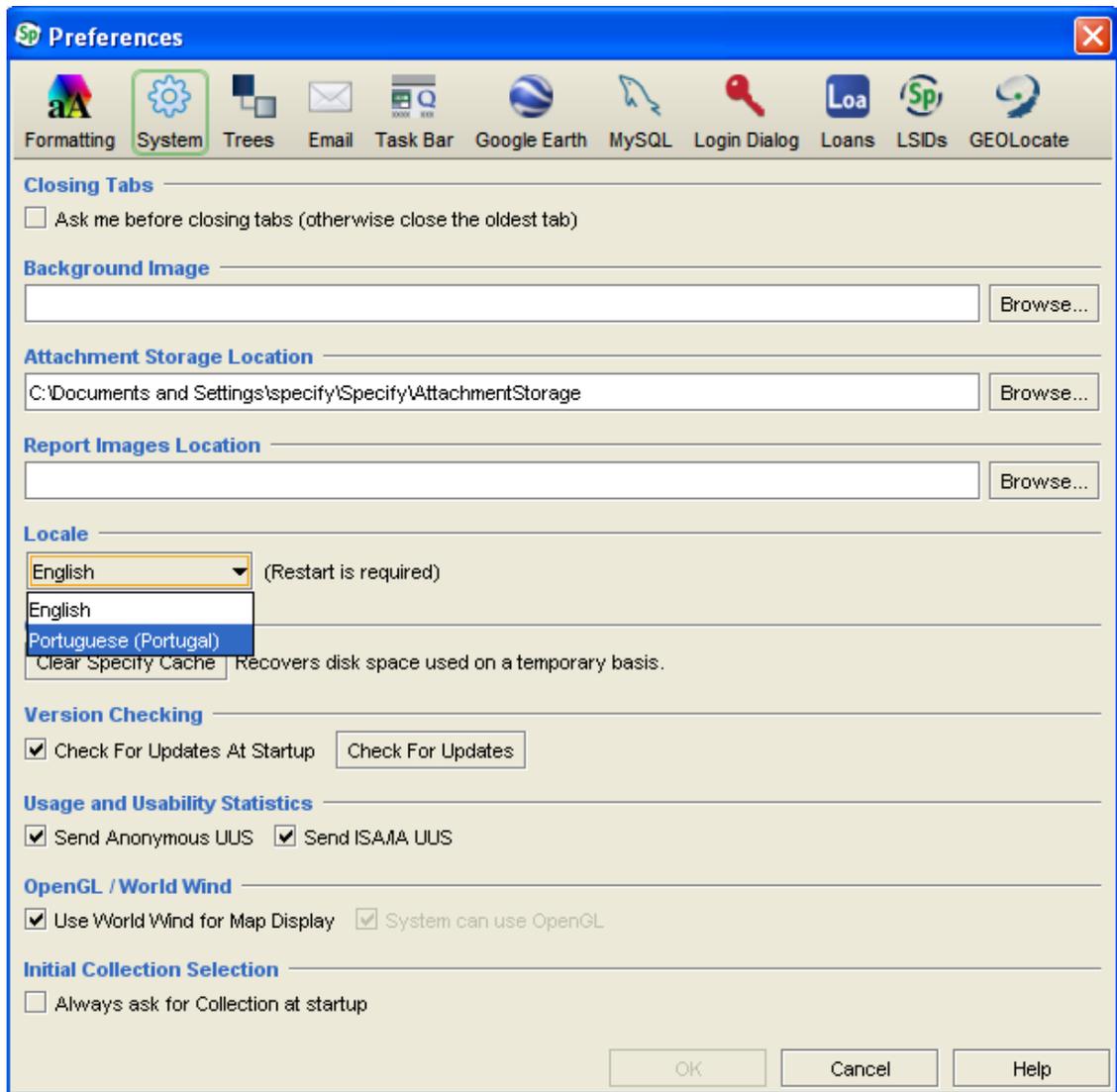
20) Restart Specify. When you log back into Specify, mostly everything, including the login screen, should be presented in Portuguese.