

Software Globalisation and Multilingual User Interface

In the past decade, the rapid growth of the Internet and markets moving towards globalisation has changed work practices of the localisation industry. IBM is one of the market leaders in providing a total globalisation solution. This is defined as the design and development of software that is not locale-dependent (Internationalisation) so that its user interface and collaterals can be adapted to the language and culture of the user (Localisation).

The Lotus Notes Client is available in more than 25 national language versions (NLV) and these International languages of the Notes 6.x Client (under W32) incorporate MUI (Multilingual User Interface) technology. Installing the Lotus Notes MUI Client allows a user to install a single Notes Client and has the ability to switch between Multiple Language User Interfaces.

Multilingual content management, translation memory technology and machine translation systems are now integrated in a workflow environment to provide multilingual data and present culturally correct information (for example, collation, date, and number formats).

The MUI feature gives the end user the ability to change the language of the user interface (UI) but this does not include the personal databases that are created for the user in the data directory based on the templates in the Data directory. For example, an end user working with Lotus Notes English UI will be able to change the language of the UI to German, UI implies Dialogs, Infopanel, Menu's and Strings and the UI displays these elements with the correct fonts and with the correct locale-specific information.

Architecture and difference between Single & Multi Client Installs

This Notes Client architecture has been modified to remove resources from the DLLs and EXEs where code exist and put these resources inside resource only DLLs and change Client code to reference these resources from the resource only DLLs.

In Single User Client Install

In this type of Install, the user specifies the Notes core and data directory paths for the install program. There will be a single Data directory used by this user, and the language of the templates inside this data directory will be the base language that the user installed. The MUI feature will allow switching the language of the UI but not the language of the personal databases that exist in the data directory.

In Multi User client Install

In this type of Install, The user specifies the Notes core directory, and the data directory will be installed on **Drive Letter:\Documents and Settings\All Users\Application Data\Lotus\Notes\Data** . Under this directory there will be two subdirectories. **Shared**, contains the files that will be used by all users of this machine like templates, modem files. **Common**, contains the files that need to be copied to every user's data directory. Whenever the user runs Notes for the first time, a personal data directory will be created for this user on **Drive Letter:\Documents and Settings\ieu94773\Local Settings\Application Data\Lotus\Notes\Data**

In this “Data” directory there will be user’s personal databases (Agentrunner.nsf, Bookmark.nsf, headline.nsf, log.nsf, names.nsf, desktop6.dsk, Notes.ini, Cache.NDK, user dictionary)

After installation is complete:

There is a single “Data” directory used by the user, and the language of the templates inside this “Data” directory will be the base language that the user installed. The MUI feature will allow switching the language of the UI but not the language of the personal databases that exist in the data directory.

There is a folder in the programs “Notes” folder called “\ **mui**” and it contains resource only language files - they contain no code. These files are named with a **.mui** extension, e.g. nnotesws.dll.mui. Within the mui folder is a file, **mui.dat** which contains information on the language and Lotus Notes version, and a folder named with the two-letter [country ISO code](#) of your language: e.g. the German country ISO code, **de**.

When the user switches to the Language UI, the code from the US files (in the Notes folder) and the resources from the Language resource-only files (in the mui\xx folder) are used. There are differences in the behaviour of Notes MUI in regard to the personal databases in the data directory depending on the Install type as follows.

There are 3 different ways to switch to different Language UIs in the MUI client:

1. By command line
2. By editing an entry in the notes.ini file
3. From the Notes Client - User Preferences.

The [Notes/Domino language versions and support](#) sidebar lists what is currently available for both the Notes client and the Domino server.

The following list shows the advantages of this approach:

- A platform developer can generate a single ROM image for multiple target languages and markets.
- Production is flexible and distribution gains flexibility, because devices are not tied to a single locale.
- Translations for additional languages can be done later.
- End users gain the flexibility to switch between UI languages.
- Multiple users who speak different languages and use the same machine can run with their own preferred language User Interface.
- More Character set and locale support
- Global deployment is possible in multiple sites

For a complete listing and explanation of the client and server language offerings, see [Globalising your e-business](#) and [Development of multi-language solutions](#)