Dlubal Software Deployment

Group Policy software installation is technology allowing automatic deployment of software in Microsoft Windows domains. In order to deploy software this way, it must be distributed as MSI file (Windows Installer package). Dlubal programs use MSI files for installation. This file must be extracted from the installation package at first.

Extraction

The MSI file can be extracted from the installation package by means of the '-E' parameter, i.e.

```
setup.exe -E
```

started from the command line. The MSI file with all depending files is extracted to a subdirectory named in the following format:

```
<PROGRAM><MAJOR>.<MINOR>.<BUILD>_<ARCHITECTURE>-bit
```

(e.g. `RFEM5.10.01_64-bit`)

Next, copy the extracted directory to distribution point on the publishing server (share with correctly set permissions).

Group Policy Configuration

At first, create the Group Policy Object (GPO) and **assign** the MSI file from the distribution point to a **computer**. The default installation language is English. To change the language, add the proper MSI transformation in the *Modification* tab of the *Package Properties* dialog box of the *Software installation* settings.

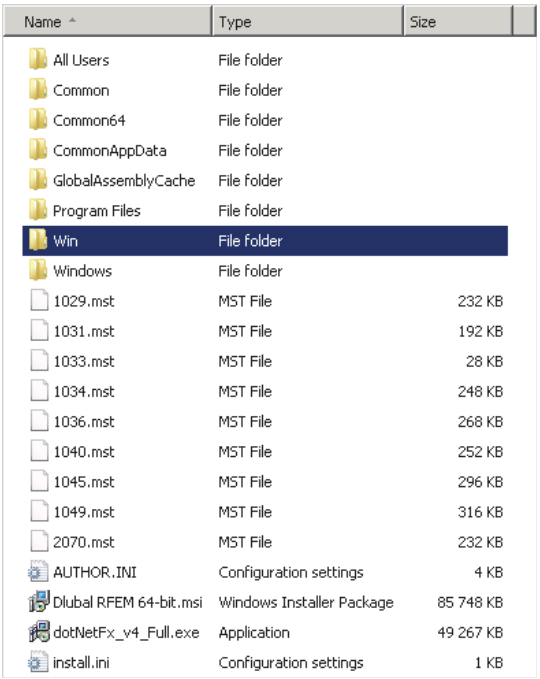
The MSI transformations are located on distribution point in the same directory as the MSI file. The following table shows transformation files for some languages.

Language	Czech	German	Spanish	French	Italian	Polish	Russian	Portuguese
File	1029.mst	1031.mst	1034.mst	1036.mst	1040.mst	1045.mst	1049.mst	2070.mst
ID	1029	1031	1034	1036	1040	1045	1049	2070

NB: A new program version always updates (overwrites) the existing version when it has the same minor version number (RFEM 5.10.01, RFEM 5.10.02 …) This means that more versions of the program can only be installed simultaneously on a computer when they differ in minor version numbers (RFEM 5.10.xx, RFEM 5.11.xx).

Installation

Group Policy software installation can normally be configured only by MSI transformations. To configure the installation, create an `Install.ini` file and copy the `AUTHOR.ini` file to the distribution point in the same directory as the MSI file. For example, the content of this directory can be as seen in the figure below.



By means of the `Install.ini` file, you can change the default directories. The content of such file is as follows:

```
[Directories]
INSTALLDIR=C:\Program Files\Dlubal
COMMONDATA=C:\ProgramData\Dlubal
GLOBALDATA=C:\ProgramData\Dlubal
USERDATA=C:\Users\Public\Documents
```

Those directories correspond to directories of the ordinary *Installation* dialog box. There is no need to set all of them, only the ones that are relevant. `GLOBALDATA` and `USERDATA` can only be changed when no Dlubal program has been installed on the computer yet: they are shared by all Dlubal applications.

Passive/Quiet Installation

Windows Installer technology makes it possible to install software in "passive" or "quiet" modes. **Passive mode** is an unattended installation mode where only the installation progress is displayed without any interaction from the user needed. **Quiet (silent) mode** is the same as passive mode, except that no user interface is displayed during the installation.

Windows Installer

To start the installation of the windows installer package (MSI file) in **passive mode**, use the following command:

```
msiexec -i <PACKAGE>.msi -passive TRANSFORMS=<ID>.mst
```

The `TRANSFORMS` parameter specifies the transformation file applied on the MSI file during the installation. Thus, the language of installation can be changed by adding appropriate MSI transformations. The table on the previous page shows transformation files of each language. If no language transformation is specified, the installation will be in English.

To start the installation in **quiete mode**, use the following command:

```
msiexec -i <PACKAGE>.msi -quiet TRANSFORMS=<ID>.mst
```

As the quiet mode shows no user interface, the command must be executed with administrator rights. Otherwise, there is no way to elevate access rights by the installer, and the installation will be aborted. Furthermore, executing the passive mode installation with administrator rights turns off the UAC dialogue box so that the installation is truly passive.

You can save detailed information in a log file which will be created during the installation in passive or quiet mode. Apply the '-l*' add-on (asterisk means the most detailed log), for example as follows:

```
msiexec -i <PACKAGE>.msi -quiet -l* log.txt TRANSFORMS=<ID>.mst
```

Installation via setup.exe

The MSI file being compressed in `setup.exe`, it can be extracted in the way described in Section *Extraction* above. The better way, however, is to use the `setup.exe` file directly. Use the following command to start the installation in passive mode:

```
setup.exe -L <ID> -passive
```

where 'ID' is the language ID from the table in Section *Group Policy Configuration* above.

To start the installation in quiet mode in the current user's language, use the following command:

```
setup.exe -S -quiet
```

With the following command, you can start the installation in quiet mode in a specific language:

```
setup.exe –S -L <ID> -quiet
```

The '-S' parameter hides the extraction dialog box while '-L' adds the `TRANSFORMS=<ID>.mst` parameter for `msiexec`. Every other parameter specified for `setup.exe` is simply added to the `msiexec` command line. For more information about `msiexec`, run the following command: `msiexec -?`

The authorization file for installed programs can be also specified by the AUTHORIZATION_FILE_PATH property.

Finally, the typical command for unattended installation could be as follows:

```
setup.exe –S -quiet -l* C:\log.txt AUTHORIZATION_FILE_PATH=E:\AUTHOR.ini
```

The full paths to the log file and the authorization file must be used because the working directory is set to the temporary directory. The log file would by deleted after the installation and the authorization file would not be found.

UNC (*Uniform Naming Convention*) or local paths have to be used instead of mapped drives. The installation is running with elevated access rights and mapped drives might not be accessible.