

# [EN] 10. Frequently Asked Questions

## Frequently Asked Questions

- [Can the dLibra system be installed on a virtual server?](#)
- [Does the dLibra system do backups itself? Which files/folders should be protected?](#)
- [How fast should the attribute values which have not been used in any description be removed?](#)
- [What should be done when the character encoding in MySQL is set to UTF-8, and Polish diacritics are still not displayed correctly?](#)
- [Why does the new publication wizard generate an invalid thumbnail from a PDF document?](#)
  - [Installation in Windows](#)
  - [Installation in Linux](#)



### Zobacz także

You can look for similar information in the [frequently asked questions](#) about the reader application and the most [frequent problems](#) related to the installing of the reader application.

## Can the dLibra system be installed on a virtual server?

There are no technical contraindications to running the dLibra system on a virtual machine. Still, it should be remembered that if the dLibra system is a great burden on the server (there are many new publications or there is heavy user traffic), it may be necessary to have a separate, dedicated physical machine.

So far, there has only been one case when a large digital library had to give up virtualization. When the dLibra system was moved to the host system, everything started going much more smoothly. In the case of a small digital library, though, and a strong machine, virtualization can be a good idea for utilizing the power of the server.

Heretofore, the dLibra system has been installed on virtual servers created on the basis of the VMWare software and on the s390x/zLinux platform of the IBM company.

## Does the dLibra system do backups itself? Which files/folders should be protected?

The dLibra system does not have any built-in complex mechanisms for creating backup copies. Any backup actions should be carried out by the person who administers the server of the digital library.

The dLibra system stores data in two places: the relational database and the file system. As regards the database, most contemporary database systems enables easy content backup creation. For details about that operation, see the documentation of the database system.

Protecting the file system is a separate issue. Let us assume the following structure of an installation of the dLibra system:

- `dlibra-webapp` – the directory with the reader application,
- `dlibra-server` – the directory with the dLibra server,
- `webapp-work` – the working directory of the reader application,
  - `cache` – the path to that directory is determined in the “`dlibra-webapp/WEB-INF/conf/cache.properties`” file,
  - `jcr` – the path to that directory is determined in the “`dlibra-webapp/WEB-INF/conf/jcr.properties`” file,
  - ..
- `content` – the directory with search files and indexes,
  - `files` – the path to directory is determined in the “`dlibra-server/conf/cs/service.properties`” file, in the “`contentDirectory`” variable,
  - `index/main` – the path to that directory is determined in the “`dlibra-server/conf/solr/main/core.properties`” file, in the “`dataDir`” variable, and
  - `index/synonym` – the path to that directory is determined in the “`dlibra-server/conf/solr/synonym/core.properties`” file, in the “`dataDir`” variable.

The data stored by the dLibra system outside of the database are located in the “`content/files`” and “`content/index`” directories. The “`content/files`” directory contains all publications and their files. Backup copies of it should be created by the user. Before making a backup copy, the user should make sure that no one is adding a documents to the repository at the given moment.

The “`content/index`” directory contains search indexes. If the indexes are lost, users will not be able to search the resources of the digital library. When creating a backup copy of them, the user should make sure that the server is not modifying the index files. Since it is a difficult task, a mechanism for automatic index backup creation has been built into the dLibra system. By default, the backup copies are created in the “`index_backup`” directory, every Sunday.

Indexes can also be recreated, however, an indexation of all resources burdens the server for a long time (depending on the power of the machine and the number and format of the publication files).

Backup copies of the “webapp-work/jcr” directory should also be made. The directory contains settings and content used by the reader application.

## How fast should the attribute values which have not been used in any description be removed?

The [tool for cleaning attribute dictionaries](#) should be used.

## What should be done when the character encoding in MySQL is set to UTF-8, and Polish diacritics are still not displayed correctly?

That is a rare occurrence. The problem may occur during the first start-up after the dLibra system has been installed, when the database is initiated; it can also occur later on. The solution is to add the following parameter at the end of the URL used for connecting with the database:

```
?characterEncoding=UTF-8
```

In the case of the dLibra server, it should be done in the “**database.properties**” file in the “**conf**” directory. In the case of a change installer, it should be done in the “**install-sql/mysql/mysql-db.properties**” file.

## Why does the new publication wizard generate an invalid thumbnail from a PDF document?

The problem occurs for documents using graphics in JPEG 2000 format. To solve it, you need to install ImageMagick version 6.8.9 or later on the Editor's computer. When ImageMagick software is available, the dLibra Editor's App automatically uses it to create thumbnails.

### Installation in Windows

1. Install GhostScript <https://www.ghostscript.com/download.html> which is needed by ImageMagick to support PDF format
2. Install ImageMagick <http://www.imagemagick.org/script/download.php#windows>

### Installation in Linux

1. sudo apt-get update
2. sudo apt-get install imagemagick