NAME

DamCompare – Daminion database verification

SYNOPSIS

```
Python DamCompare.py [-f] [-i]
    [-y PATH [PATH ...]]
    [-l] [-c1 CATALOG1] [-c2 CATALOG2] [-s SERVER] [-p PORT] [-u USER]
    [-o OUTFILE]
    [-v] [-h] [--version]
```

DESCRIPTION

Daminion digital asset management (DAM) system is a great tool for assigning meta data (tags) to your digital assets and for sorting and searching the items. Daminion writes all tags (with few exceptions) into the media files, so that the metadata is also available outside Daminion. In Daminion there is no facility to verify if the metadata in the media items is the same as is in the Daminion database. **DamCompare.py** solves this problem by reporting inconsistencies in metadata for Daminion server and standalone catalogs. Inconsistencies can arise either by changing metadata in image file outside of Daminion, so the Daminion catalog is not aware of those changes or when changes in Daminion are not completely written into the metadata in the files.

The **DamCompare.py** tool analyzes a Daminion catalog for potential inconsistent tags in the Daminion database and the media items. The analysis is done by comparing two Daminion databases. The first one is the current active/production catalog and the second one is a newly to be created catalog representing current status of the image files. The current view is generated by creating an empty catalog and importing into it the same images that are in the first catalog. The import process will take time, because the speed can be as low as 15 items per minute depending on the size and utilization of the server.

The program checks the values of these tags: *Creation Date/Time, Place, GPS, Event, People, Categories, Keywords* and *Collections*. It also reports, if the media item is referring to a non-existing file by comparing if there is an entry for the same item in the second catalog. The command line options provide the capability to configure the process of the analysis as well as contents and format of its output.

For each media item the program reports its filename and all inconsistent tag categories. It's recommended to use the **-i** option, so that it is easy to find the mismatching items from the original and copy catalogs.

The output data is separated by Tab characters so it can be directly copied and then pasted or (when using option **-o**) imported into a spreadsheet for further formatting, sorting and analyzing.

Options:

-f, --fullpath Display the full path instead of only the file name

-i, --id Display the Daminion Item Id in parenthesis () after the filename

-y, --only PATH

Compare only those items which have matching beginning of the path. String 2017 matches both 2017\ and 2017-08-22\, if you want to match a specific folder end the parameter with '\'. Use **-f** option to verify how the paths are stored in the Daminion database.

-l, --sqlite Use a standalone (based on SQLite) catalog instead of server catalog (based on Postgresql)

-c1, --catalog1 CATALOG1

The **-c1** option specifies the original Daminion catalog name. For standalone catalogs the full path and filename (including .dmc) must be specified.

-c2, --catalog2 CATALOG2

The -c2 option specifies the new created Daminion catalog against which the comparison is made. For standalone catalogs the full path and filename (including .dmc) must be specified.

-s, --server SERVER

Postgres database server (**Not** the Daminion Server). If *SERVER* is not specified, localhost will be used. You can verify the *SERVER* and *PORT* settings in the Daminion Server Administration panel.

-p --port PORT

Postgres database server port for the catalog. If not specified, the Daminion default *5432* will be used.

-u --user USER

Postgres database user/password (**Not** Daminion catalog user). If not specified the installation default *postgres/postgres* will be used.

-o --output OUTFILE

Write the report to an *OUTFILE*. If **-o** is not specified the output will be displayed on the screen. Verbose messages (**-v**) are never directed to *OUTFILE*.

- **-v, --verbose** Verbose output. Specifying the option **-v** displays a running counter, and the current Item Id and filename on the screen.
- **-h, --help** Show help message and exit
- **--version Only** displays program version information and exits.

DIAGNOSTICS

Errors and warnings are logged to the standard error stream and the diagnostic output to the standard output or the specified *OUTFILE*. If **-v** is not used, then no output means that no discrepancies were detected.

DamCompare.py terminates with zero exit status if it was able to scan through the whole catalog.

Only the specified tag categories (Creation Date/Time, Event, Place, GPS, People, Keywords, Categories, Collections) are checked, not all tag categories that are supported by Daminion. Other tag categories not in the list (e.g. Media Format, Rating, Project etc.) are ignored by **DamCompare.py**.

If the freshly created reference catalog contains only a small subset of the main catalog, it is recommended to specify the reference catalog as catalog1 and the main catalog as catalog2. Otherwise each item missing in the reference catalog will be reported as error. However, if you want to verify if items in the main catalog refer to nonexistent image files, then old one should be catalog1.

ENVIRONMENT

Python

Install Python 3.x from http://www.python.org. After you have downloaded Python package right click the package and select "*Run as administrator*". In the installation dialog select Customized installation. In the customized configuration panel, select include Python in the PATH and select installation for all users. Other options can be left to defaults.

To activate the PATH settings, Windows should be restarted before starting Python for the first time.

psycopg2

After installing Python start an elevated command window (*Run as Administrator*), because the Postgres support package will be installed in the Program Files directory. Enter commands

```
C:> python -m pip install -U pip setuptools
C:> python -m pip install psycopg2
```

EXAMPLEs

Examples below assume that you have **DamCompare.py** in your home directory (C:\Users\user) and your local catalog and the configuration files are in the Pictures sub-directory.

```
C:> python DamCompare.py -c1 NetCatalog -c2 NetCatalog1 -s ServerPC
   -p 5433
```

Run the analysis of the NetCatalog server catalog against NetCatalog1. The Postgres database is set up in ServerPC at port #5433.

```
C:> python DamCompare.py -v -l -c1 Pictures\DaminionCatalog.dmc
-c2 Pictures\DaminionCatalogCopy.dmc -o Pictures\output.txt
```

Run the analysis of the local catalog DaminionCatalog.dmc in the Pictures directory and compare it to DaminionCatalogCopy.dmc in the same directory. Print the results of the analysis in Pictures\output.txt and show progress information on the screen.

```
C:> python DamCompare.py -v -l -c1 Pictures\DaminionCatalog.dmc
    -c2 Pictures\DaminionCatalogCopy.dmc -y .\Pictures\2017
    .\Pictures\2016-12\ -o Pictures\output.txt
```

As in the previous example, but run the analysis only for items in .\Pictures sub-folders 2017-01\, 2017-02\, ... and 2016-12\.

SEE ALSO

```
<u>python</u>, language description and syntax.<u>psycopg2</u>, Python-PostgreSQL Database Adapter.
```

LICENSE

The program is licensed under GPL3.

AUTHOR(S)

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