

Ridiculously simply SIP creator

By: OneClick eArchiving project
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```
digitalia-aj@new-python-dev: ~/extraspaces/eclipse-workspace/GIT/c
0+03:00', 'File:FileInodeChangeDate': '2022:09:04 12:57:20+03:00
File:FileTypeExtension': 'DOCX', 'File:MIMEType': 'application/vnd
', 'ZIP:ZipRequiredVersion': 20, 'ZIP:ZipBitFlag': 6, 'ZIP:ZipComp
ZIP:ZipCRC': 1466929458, 'ZIP:ZipCompressedSize': 358, 'ZIP:ZipUn
.xml', 'XMP:Title': '', 'XMP:Subject': '', 'XMP:Creator': 'Jääske
XML:LastModifiedBy': 'Jääskeläinen Anssi', 'XML:RevisionNumber':
ite': '2022:08:31 16:30:00Z', 'XML:Template': 'Normal.dotm', 'XML
Characters': 452, 'XML:Application': 'Microsoft Office Word', 'X
XML:ScaleCrop': False, 'XML:HeadingPairs': ['Otsikko', 1], 'XML:T
False, 'XML:CharactersWithSpaces': 530, 'XML:SharedDoc': False,

c 2022:09:04 12:57:20+03:00 and after 2022-09-04T12:57:20+03:00
c 2022:09:04 12:57:20+03:00 and after 2022-09-04T12:57:20+03:00
c 2022:09:04 12:57:20+03:00 and after 2022-09-04T12:57:20+03:00
c 1980:01:01 00:00:00 and after 1980-01-01T00:00:00
c 2022:08:15 10:05:00Z and after 2022-08-15T10:05:00Z
c 2022:08:31 16:30:00Z and after 2022-08-31T16:30:00Z
c False and after False
ata for 5 files
7de1-058c-4183-bc2c-1ca159c6bf76 metadata to a dictionary
mets.xml filesection and structmap for id, f10f7de1-058c-4183-bc2
metadata for SIP id f10f7de1-058c-4183-bc2c-1ca159c6bf76
METS.xml file
enerated /tmp/runtimeProcessing/f10f7de1-058c-4183-bc2c-1ca159c6bf76
METS.xml file
ind in mets.xml -->[]
ata for 1 files

mp/runtimeProcessing/f10f7de1-058c-4183-bc2c-1ca159c6bf76/repres
{'SourceFile': '/tmp/runtimeProcessing/f10f7de1-058c-4183-bc2c-1
'890d7/METS.xml', 'ExifTool:ExifToolVersion': 12.16, 'File:FileNa
/f10f7de1-058c-4183-bc2c-1ca159c6bf76/representations/ef297737-89
leModifyDate': '2022:09:04 12:57:22+03:00', 'File:FileAccessDate
: '2022:09:04 12:57:22+03:00', 'File:FilePermissions': 644, 'File
MIMEType': 'application/xml', 'XMP:MetsXmLns': 'http://www.loc.gov
'890d7', 'XMP:MetsLabel': '', 'XMP:MetsType': 'Mixed', 'XMP:MetsC
//eakcsip.dilcis.eu/profile/E-ARK-CSIP.xml', 'XMP:MetsSchemaLoc
rds/mets/mets.xsd\n http://www.w3.org/1999/xlink http://www
u/XML/METS/CSIPExtensionMETS https://eakcsip.dilcis.eu/schema/E
IPEExtensionMETS', 'XMP:MetsMetsHdrCreateDate': '2022:09:04 12:57
MMP:MetsMetsHdrOaispackagetype': 'SIP', 'XMP:MetsMetsHdrAgentRole
sMetsHdrAgentOthertype': 'SOFTWARE', 'XMP:MetsMetsHdrAgentName':
umentID': 'repMETS.xml', 'XMP:MetsAmdSecId': 'amdSec', 'XMP:Mets
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pFileUse': 'datafile', 'XMP:MetsFileSecFileGrpFileSize': 14319,
b528247157b92b5a821/tletoja-kysymykset.docx', 'XMP:MetsFileSecF
FlocatType': 'simple', 'XMP:MetsStructMapLabel': 'CSIP', 'XMP:Me
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MapDiv', 'XMP:MetsStructMapDivDivLabel': 'data', 'XMP:MetsStruct
MapDivFptrFileId': 'ID-818c16c5-701c-4552-92af-3535711f9c30'}
c 2022:09:04 12:57:22+03:00 and after 2022-09-04T12:57:22+03:00
c 2022:09:04 12:57:22+03:00 and after 2022-09-04T12:57:22+03:00
c 2022:09:04 12:57:22+03:00 and after 2022-09-04T12:57:22+03:00
ata for 1 files
DC.xml file
ata for 1 files

mp/runtimeProcessing/f10f7de1-058c-4183-bc2c-1ca159c6bf76/metada
sing/f10f7de1-058c-4183-bc2c-1ca159c6bf76/metadata/descriptive/D
'DC.xml', 'File:Directory': '/tmp/runtimeProcessing/f10f7de1-05
Size': 557, 'File:FileModifyDate': '2022:09:04 12:57:22+03:00',
```

OneClick eArchiving

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- Total budget 187 500€
- 21/08/01 – 23/01/31

Originally an idea from AIT, thank you Sven

AIT dropped out

Xamk, EKA, Disec and PIQL carried on with a modified idea

Targets

- Simple automated SIP creation
- Archivematica → EARK IP conformance
- Disec YKSA archive → EARK IP conformance
- Hands on tutorial production
- EKA collection migrations

Automated SIP creation



Multiple SIP creation tools exists, but are those simple to use?



Idea → Just add some files/folders and automate everything else



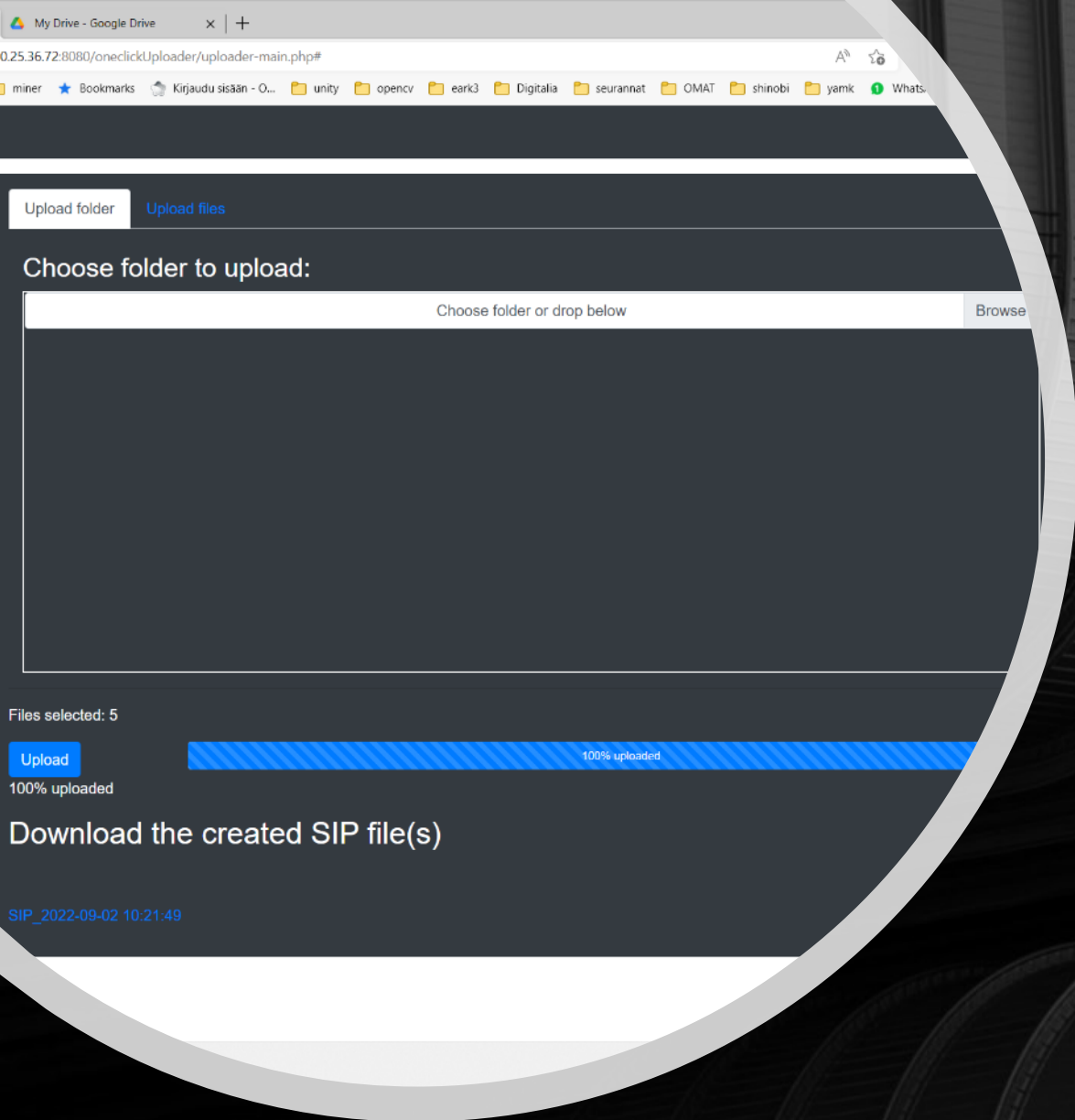
It should be

easy to take into use
easy to use
system independent



→ Dockerized online solution





Basic workflow

End
user
view

- Upload file(s) & folder(s)
- Wait for the SIP to appear



Workflow – system view

Upload

- PHP 8.1

Initiate

- watchdog (watched folder)

Wait

- for upload(s) to be completed

Check

- for viruses

Create

- the dummy SIP structure

Do

- magical things on the background

Construct

- the SIP according to above step

Validate

- the SIP

Produce

- a downloadable package

Return

- the package to the correct webUI

Magical things on the background

- Generate uuid4 identifiers
- Find provided metadata (or generate it on the fly)
- Detect language
- Calculate file sha256 hashes
- Get some metadata for the files
- Fill DC & METS templates
- Fix some date/time formats (explained on problems)
- Replace some identified mime types (explained on problems)



Live demo

```
If (own-computer==true && vpn-  
operational == true){  
    livedemo  
}  
Else{  
    Play video  
}
```



Encountered problems

- Folder uploads and maintaining its structure
- Delayed file copying (within the filesystem)
- Different data/time formats
- Fuzzy specifications & even fuzzier validation results
- Too accurate file type detections
 - application/vnd.ms-pki.seccat & image/x-canon-cr2
 - Validation is based on IANA mime types list
- Files without endings
- Files which exiftool cannot read
- Modifying php upload sizes / timeouts within docker
- Yet to be solved:
 - Creation time of the file(s) is changed on upload
 - Subfolders via webUI / docker

Taking into use

- Install docker (Does not need docker-compose)
- Clone the repo
 - Not yet publicly available. Will be during this autumn, but don't know when 😊
- Change the values in
 - ports.conf (port to be used)
 - config.ini (ip and port settings and metadata filenames)
 - uploads.ini (if larger files || longer execution time is needed)
- Run docker commands
 - `docker build -t oneclick .`
 - `docker run -e TZ=Europe/Helsinki -ti -d -p 8081:8081 oneclick (use the port you defined in config files)`
- Should be up and running
 - Check with `docker ps`



Contact

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