Tutorial session – Introduction

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- Aim of the tutorial session
- Collections & releases
- Tutorial session specifics and description of the data sets

Aim of the tutorial section

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- To become familiar with the Phase III tools for data validation and submission.
- To start thinking about how to make the best use of the Phase III collection & release concept for your surveys.

Collections & Releases – Quick recap

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- Collection = data collection
- A collection provides a logical separation of data.
- Collections are independent entities.
- The collection name is important, as this is the main identifying feature for a particular collection of data.

- Releases provide a means of adding/updating (the data in) a collection.
- Releases (within a collection) do not exist independently of each other but build on each previous release.

- It is up to the provider of the data to decide what the best way to group the data is, and how to release them (all at once, updating over time).

Collections & Releases – Two examples

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- Deep high-redshift surveys:
  - Small number of fields.
  - Deeper products for each field as survey progresses.

  ➔ One collection per field.
  - Each (superseding) release makes the collection deeper.

- Wide shallow surveys:
  - Large area.
  - More sky covered as survey progresses.

  ➔ One collection per year or period.
  - (Complementing) Releases can be done throughout the year, expanding the sky coverage of the collection.

Tutorial goals

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- Set up delegation,
- Set up collections and releases as desired,
- Make sure the data validates and
- Successfully complete the submission process, resulting in the final, ‘archived’, status.

Data set description

Four sets of data have been defined, mimicking survey deliveries:

1. VISTA SV deep Z, NB and J mini-survey of NGC 253
   (Deep tiles, weight maps and source lists)

2. VISTA SV ultra-deep Z mini-survey of NGC 253
   (Deep pawprint, contributing shallow pawprints,
   weight maps, source lists)

3. ZYJHKs mini-survey in the Orion OB Association
   (Shallow tiles, weight maps, source lists)

4. ZYJHKs mini-survey in the Orion OB Association
   (Shallow tiles for multiple epochs, weight maps,
   source lists)

Data set order

UltraVISTA, VIDEO and VIKING teams:
Please start with sets #1 and #2.

VVV, VHS, VMC teams:
Please start with sets #3 and #4.

If there is time, the other data sets can be tried as well.

Locations of data sets and the Phase III tools

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Data set	Location
Data set #1	~/workshop/tutorial1
Data set #2	~/workshop/tutorial2
Data set #3	~/workshop/tutorial3
Data set #4	~/workshop/tutorial4

Component	Location
Release Manager	http://dfidev1.hq.eso.org:8080/rm
Validator	~/workshop/validator.jar
FTP server	dfidev1.hq.eso.org

Other useful programs

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Program	Function
lftp	FTP client
dfits	List FITS headers
fitsort	Parse dfits output to show specific keywords
fv	Display and edit FITS headers
modhead	Add/modify FITS header keywords
headrem	Remove FITS header keywords
fchecksum	Add/update CHECKSUM and DATASUM keywords

Notes

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- Make the terminal extra wide to see the full progress bar of the validator.
- To run the validator: java –jar ~/workshop/validator.jar –r <directory with data to validate> -m <create | update>
- Login to the Release Manager and the FTP server with your User Portal user name and use as password this username prefixed with ‘G’, e.g. user phase3user, password Gphase3user.
- Delegation is done using email addresses as stored in the User Portal.