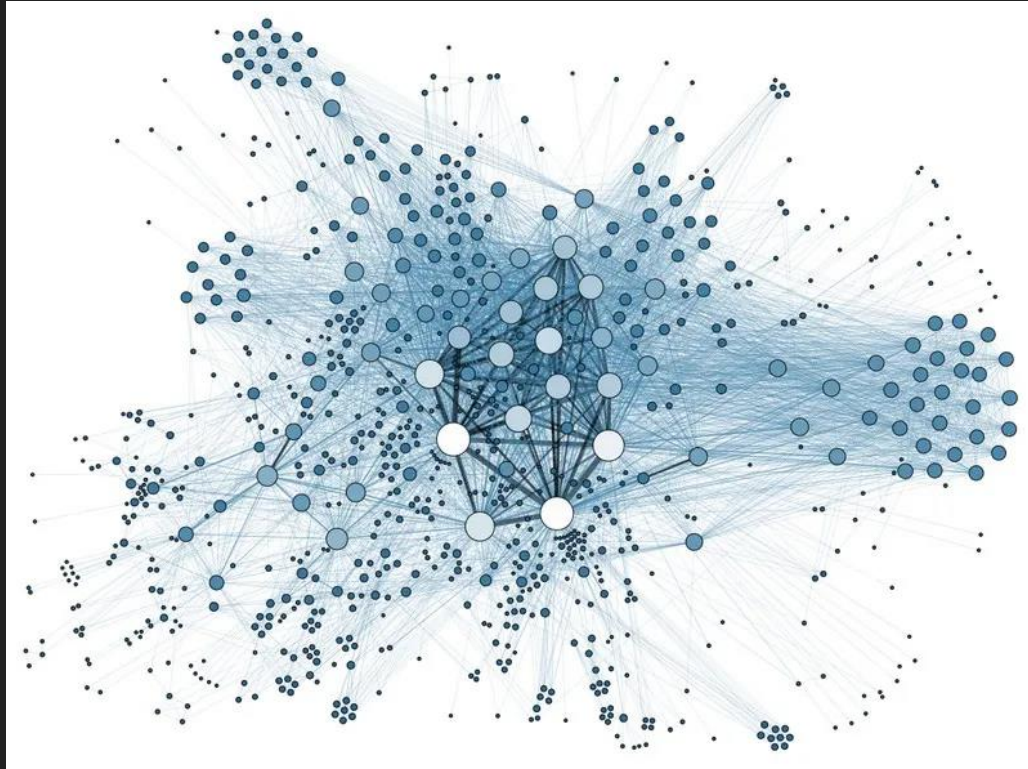


# Rucio

## Scientific Data Management



# What is Rucio ?



**Organise**



**Access**



**DATA**

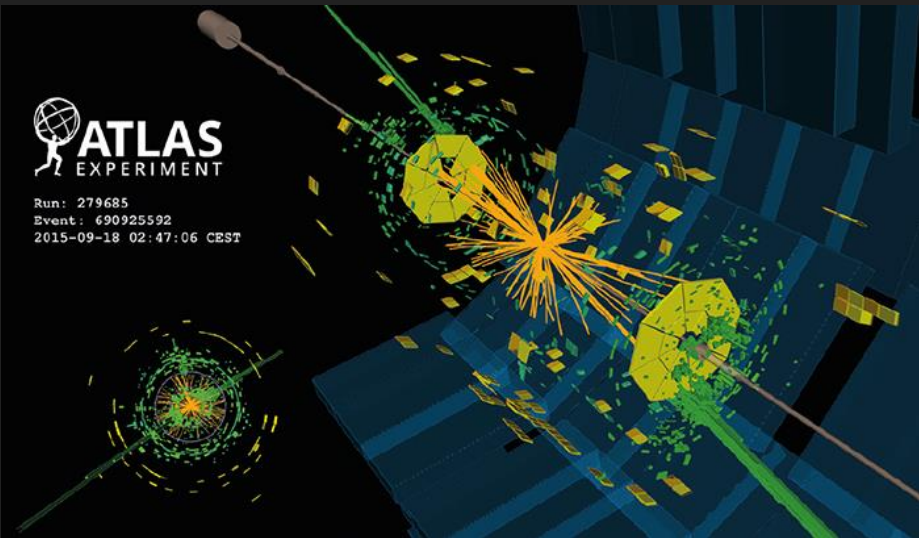


**Manage**



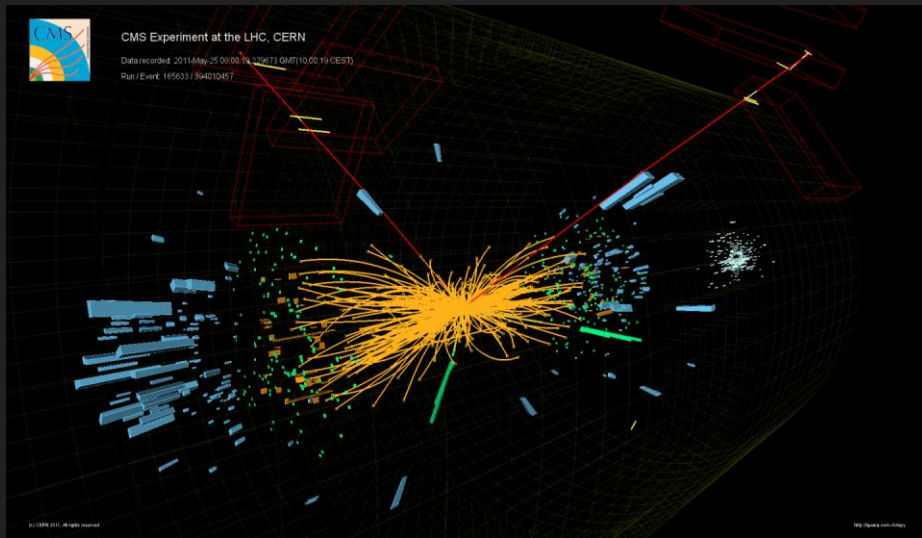
ATLAS  
EXPERIMENT

Run: 279685  
Event: 690925592  
2015-09-18 02:47:06 CEST



CMS Experiment at the LHC, CERN

Data recorded: 2011-May-25 00:00:14.02673 GMT(10:00:19 CEST)  
Run / Event: 165633 / 94010157



# What is Git in a nutshell ?



# Version Control System



# Why is Git so useful?

- **Keeps record of changes**
- **Easier collaboration**

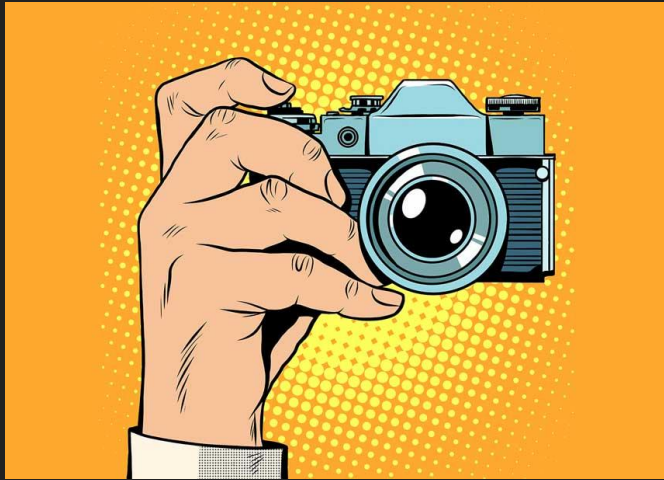
# Git Basics

## Repository

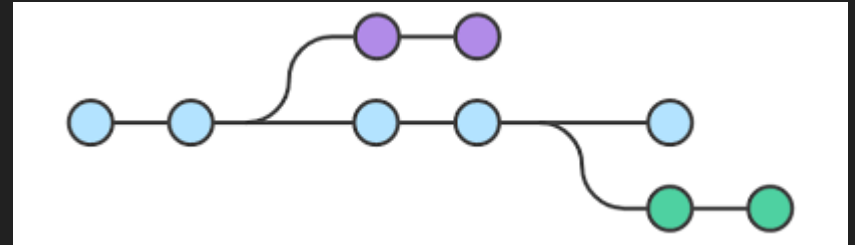




# Commit



# Branch





Create Branch

Create Pull Request

Merge Branch

# To sum up...

- **repository**: The project, contains all data and history (commits, branches).
- **commit**: Snapshot of the project.
- **branch**: Independent development line, often we call the main development line `master`.

# Our Work

## Contributing

**Step 1:** If not exist, create an [issue](#) with the description of the contribution (motivation, modification and expected results). Every issue will get a **unique issue number**.

**Step 2:** Create a local branch that corresponds to the issue. To easily identify the purpose of branches different keywords must be used:

- Patch branches must be named **patch-[issue number]-[short description]**
- Feature branches must be named **feature-[issue number]-[short description]**
- Hotfix branches must be named **hotfix-[issue number]-[short description]**

If you create these branches by hand please check the spelling because otherwise the test automation might misidentify your branch. There are utility scripts to fetch master and create these branches for you:

```
$ ./tools/create-patch-branch <unique issue number> '<short_change_message>'  
$ ./tools/create-feature-branch <unique issue number> '<short_change_message>'  
$ ./tools/create-hotfix-branch <release tag/release branch> <unique issue number> '<short_change_message>'
```

**Step 3:** Commit your change. The commit command must include a specific message format:

```
$ git commit -m "<component>: <change_message> #<issue number>"
```

Valid component names are listed in the [label list](#) and are usually specified on the issue of the change.

# Create an Issue

## Improve CSV export #4847

Open

dchristidis opened this issue 4 days ago · 0 comments · May be fixed by #4851



dchristidis commented 4 days ago

Member



### Motivation


Some Rucio CLI subcommands support exporting the information in CSV format. In some cases, there's a space inserted after the comma, which should be removed (makes it cumbersome to use `cut` or other similar utilities).

Additionally, we can make use of the `print()` function's features instead of using a format string.




### Modification

# Create a new branch














 **KosKyr / rucio** Public  
forked from [rucio/rucio](#)

[Code](#) [Pull requests](#) [Actions](#) [Projects](#) [Security](#) [Insights](#) [Settings](#)

 **patch-4847-lmp...**  5 branches  368 tags [Go to file](#) [Add file](#) [Code](#)

This branch is 2 commits ahead of [rucio:master](#). [Contribute](#) [Fetch upstream](#)

 **KosKyr** Clients: Remove trailing whitespace [rucio#4847](#) 9ac092f 4 hours ago  10,880 commits

 <b>.github</b>	Transfers: handle multihop failure in poller. <a href="#">rucio#4652</a> . Closes <a href="#">rucio#4652</a>	2 months ago
 <b>bin</b>	Clients: Remove trailing whitespace <a href="#">rucio#4847</a>	4 hours ago
 <b>etc</b>	Database: Change to OIC 19.12; Fix <a href="#">rucio#4803</a>	27 days ago
 <b>lib/rucio</b>	Merge pull request <a href="#">rucio#4691</a> from <a href="#">rcarpa/patch-4473-cosmetic_chang...</a>	14 days ago
 <b>tools</b>	Core: correct redefining of built-in vars. Closes <a href="#">rucio#4466</a> ( <a href="#">rucio#4735</a> )	last month
 <b>.flake8</b>	The "error" flagged by W503 is actually preferred now. Recent version...	2 years ago
 <b>.gitignore</b>	Documentation: Fix escaping toc anchors in doc gen	3 months ago
 <b>.pep8</b>	tests: flake8 package update to 3.5.0 (Fix issue <a href="#">rucio#1012</a> )	4 years ago
 <b>.pycodestyle</b>	Transfers: Definition of a transfertool interface <a href="#">rucio#954</a>	4 years ago

# Commit Changes


```
362 - print("{0}, {1}, {2}".format(rse[0], rse[1], rse[2]))
362 + print(rse[0], rse[1], rse[2], sep=',')
363 363     else:
364 364     for dsn in result:
365 365     print('\nDATASET: %s' % (dsn))
****
↓
↑
****
698 698     guid = '%s-%s-%s-%s-%s' % (guid[0:8], guid[8:12], guid[12:16], guid[16:20], guid[20:32])
699 699     else:
700 700     guid = '(None)'
701 - print("{0}:{1},{2},{3},{4},{5}".format(f['scope'], f['name'], guid, f['adler32'], sizeof(f['bytes'], args.human), f['events']))
701 + print('{}:{}'.format(f['scope'], f['name']), guid, f['adler32'], sizeof(f['bytes'], args.human), f['events'], sep=',')
702 702     return SUCCESS
703 703     elif args.LOCALPATH:
704 704
```

# New Pull Request

## Your branches

patch-4847-Improve\_CSV\_export Updated 4 hours ago by KosKyr

0/2

 New pull request



## Active branches





# Official Approval & Automated Checks



**dchristidis** approved these changes 5 days ago

[View changes](#)

Add more commits by pushing to the `patch-4846-fixing_spelling_mistakes` branch on `zoepap05/rucio`.



**Changes approved** ←

2 approving reviews by reviewers with write access. [Learn more.](#)

[Show all reviewers](#)



2 approvals



**All checks have passed** ←

80 successful checks

[Show all checks](#)

**Thank you for your attention**

**Kyriakopoulos Konstantinos-Fotios, Papastathopoulou Zoe, Supervised by Christidis  
Dimitrios, CERN 12-25/09/2021**

# Image Sources

Slide 1 : <https://avatars.githubusercontent.com/u/32394753?s=200&v=4>

Slide 2 : <https://public-media.interaction-design.org/images/uploads/49cc66880bd19f638136237261b1066e.jpg>

Slide 4: [https://cerncourier.com/wp-content/uploads/2016/01/CCnew3\\_01\\_16.jpg](https://cerncourier.com/wp-content/uploads/2016/01/CCnew3_01_16.jpg),

<https://cds.cern.ch/record/1374433/files/r165633-e394010457-2mu2e-3d-blackbackground.png?subformat=icon-1440>

Slide 5: <https://git-scm.com/images/logos/downloads/Git-Icon-1788C.png>

Slide 6: <https://marvel-b1-cdn.bc0a.com/f00000000075552/www.perforce.com/sites/default/files/image/2019-05/image-blog-what-is-version-control.jpg>

Slide 8 :

<https://infinityqs-web.azureedge.net/InfinityQS/media/assets/images/tabbed-content/proficient-platform/ProFicient-Platform-UnifiedData.png>

Slide 9: <https://vueschool.io/articles/wp-content/uploads/2018/04/JavaScript-Testing-4-Snapshots.jpg>,

<https://wac-cdn.atlassian.com/dam/jcr:389059a7-214c-46a3-bc52-7781b4730301/hero.svg?cdnVersion=1811>

Slide 10: <https://i1.wp.com/atlassianblog.wpengine.com/wp-content/uploads/bitbucket411-blog-1200x-branches2.png?fit=1200%2C662&ssl=1>