Contended of the second structure (UMD/CMD)

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Repositories

EGI Repositories



The EGI Software Repository provides access for the <u>middleware distributions</u> together with some <u>Community Repositories</u>

Three main categories:

 The Unified Middleware Distribution (UMD): redistribution of traditional middleware

OS Support

• Centos 7 : UMD-4

Provider:

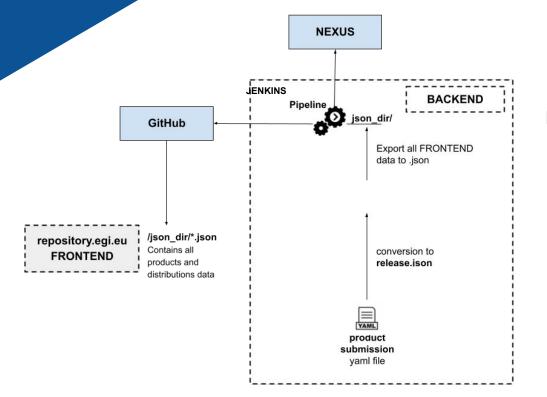
• IBERGRID since 2021

Cloud Middleware Distribution (CMD):

specific middleware for OpenStack and OpenNebula integration components **IGTF** Distribution of <u>Authority Trust Anchors</u>: packages with the trust anchor information

Architecture

Current architecture



Future:

- Integration with SQAaaS from EOSC-Synergy
- Allow it to be used by external users:
 - EGI / EOSC marketplace

Git

Tracking of the workflow all based on git

https

egi-qc / software-releases (Pub

🖒 Code 💿 Issues 2 👔 Pull requests 1 💿 Actions 🖽 Projects 🖽 Wiki 💿 Security 🗠 Insights 🛞 Settings

Frontend: https://repository.egi.eu/

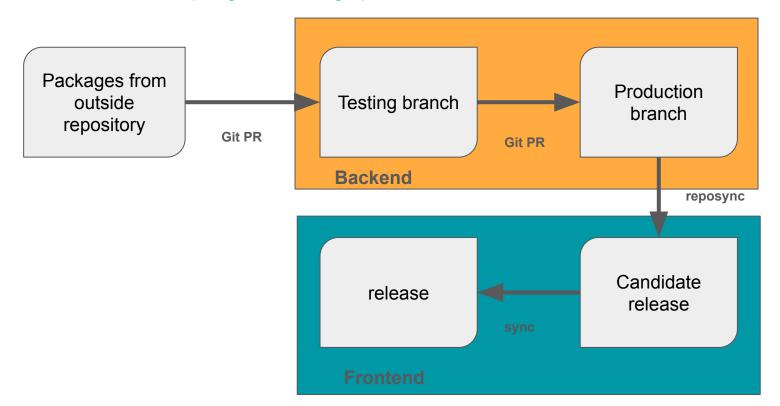
New Functionalities:

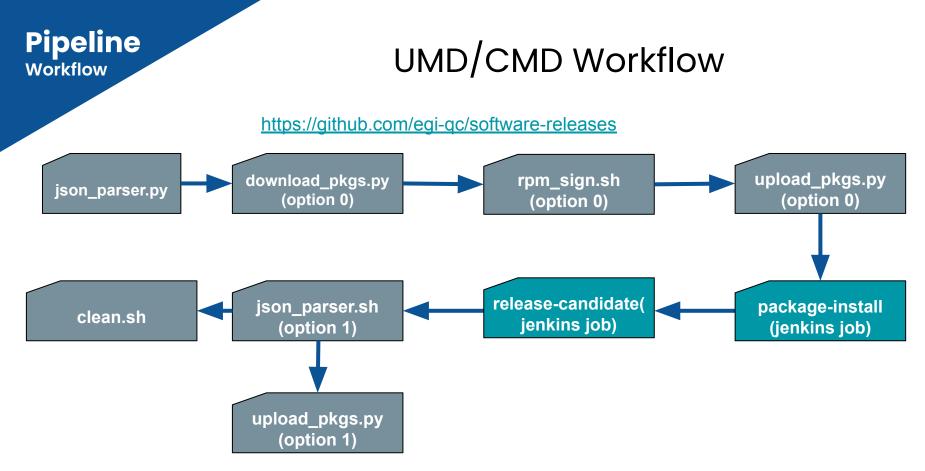
- IPV6 compliant
- New backend behind a proxy (HAProxy)
 - <u>https://repository.egi.eu/software/umd/4/centos7/x</u>
 <u>86 64/</u> (prod new)
 - <u>https://repository.egi.eu/sw/production/umd/candi</u> <u>date/4/</u> (candidate)
 - <u>https://repository.egi.eu/sw/production/umd/4/</u> (prod)
- High Availability
- Full automatic process until testing
- Testing -> production (manual git commit)

mar	riojmdavid update README	4e2ec62 9 minutes	s ago 🕥 257 commits	products validated for UMD and CM
fron	ntend-data	Add UMD-4.17.1 distribution	distributions	
img	gs	update README	9 minutes ago	-∿ Activity
json	n	Remove version from filename	3 months ago	☆ 1 star
rpm	ns	Fix path	5 months ago	 4 watching
scrip	ipts	str:removesuffix() only works on python>3.9	3 months ago	약 1 fork Report repository
giti	ignore	Ignore Python compilation files	10 months ago	hepoterepository
Doc	ckerfile.build	Import UMD RPM key	4 months ago	Releases
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REA	ADME.md	update README	9 minutes ago	Create a new release
) RPN	M-GPG-KEY-umd-cmd	Import UMD RPM key	4 months ago	
e nuli		add class Config with environment variables, document conf opt	tions 9 months ago	Packages
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UMD/CMD Workflow

https://github.com/egi-qc/software-releases





Approved the Release (Testing/Production repository)

UMD/CMD new Workflow

https://github.com/egi-gc/software-releases

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Stage Logs (Trigger validation)											×			
Building QualityCriteriaValidation = package-install (self time 2min 12a)														
Scheduling project: QualityCriteriaValidation = package-install The parameter '05' did not have the type expected by QualityCriteriaValidation = package-install. Converting to Label. Starting building: QualityCriteriaValidation = package-install #206 Build QualityCriteriaValidation = package-install #206 completed: FAILURE														
Q Full Stage View														
 GitHub ✓ Embeddable Build Status ④ Pipeline Syntax 		Declarative: Checkout SCM	Declarative: Agent Setup	Detect release changes	Get release info	Collect the list of packages	Download the packages to a temporary directory	Add UMD GPG key	Upload packages to testing	Trigger validation	Generate JSON release file	Trigger Release Candidate validation	Production download packages to a temporary directory	F
Give Build History trend ~	Average stage times:	1s	325ms	330ms	866ms	3s	25	2s	898ms	2min 12s	22ms	21ms	21ms	
Q Filter builds /	HI Mar 15 1527 No Changes	1s	325ms	330ms	866ms	Зѕ	2s	2s	898ms	2min 12s	22ms	21ms	21ms	1
নি Atom feed for all নি Atom feed for failures	Permalinks - Last build (#1), 5 days 4 hr ago - Last failed build (#1), 5 days 4 hr - Last unsuccessful build (#1), 5 days - Last completed build (#1), 5 days	ays 4 hr ago												
												REST API	Jenkins 2.3	76

Packages -> Testing

UMD/CMD new Workflow

https://github.com/egi-gc/software-releases

```
"use_backend": "auto",
        "validate_certs": true
    }
},
"item": "apel-ssm-service-3.4.0-1.el7.noarch",
"msg": "Error unpacking rpm package apel-ssm-3.4.0-1.el7.noarch\n",
"rc": 1,
"results": [
```

"Loaded plugins: fastestmirror, ovl, priorities\nLoading mirror speeds from cached hostfile\n * base: ftp.csuc.cat\n * epel: cdn.centos.no\n * extras: ftp.csuc.cat\n * updates: ftp.csuc.cat\n5 packages exc due to repository priority protections\nResolving Dependencies\n---> Running transaction check\n---> Package apel-ssm-service.noarch 0:3.4.0-1.el7 will be installed\n--> Processing Dependencies apel-ssm-service-3.4.0-1.el7.noarch\n--> Running transaction check\n---> Package apel-ssm.noarch 0:3.4.0-1.el7 will be installed\n--> Finished Dependencies

Packages -> Testing

UMD/CMD new Workflow

https://github.com/egi-qc/software-releases

	Declarative: Checkout SCM	Declarative: Agent Setup	Detect release changes	Get release info	Collect the list of packages	Download the packages to a temporary directory	Add UMD GPG key	Upload packages to testing	Trigger validation	Generate JSON release file	Trigger Release Candidate validation	Production download packages to a temporary directory	Upload packages to production
Average stage times: (Average <u>full</u> run time: ~8min 1s)	1s	353ms	338ms	1s	1s	0ms	0ms	0ms	0ms	356ms	12min 13s	967ms	1s
#3 Mar 15 1 16:08 commit	1s	387ms	337ms	876ms	628ms					356ms	15min 43s	1s	Зs
#2 Mar 15 1 15:51 commit	1s	328ms	338ms	1s	Зs					356ms	8min 42s	23ms	74ms failed
HI Mar 15 15:46 Changes	1s	344ms	340ms										

Testing -> Production



Yum repositories (new structure)

UMD-5 only

- 1. **release**: Main repository with all the packages (**= to production**).
- 2. **testing** : testing repository with rpm not fully validated in production environment. RPM belonging to release declared as production ready will be moved from testing to release.
- 3. **contrib**: repository for specific communities or special services. (**NEW**)

Dropped repositories: Staged Rollout

UMD production readiness

UMD-4 (first release plan) : Second week of April

UMD-5 (first release plan): Second half of May

- List of products for al9 (provisory):
 - BDII and site-bdii
 - o Gfal2
 - Dcache
 - Globus (evaluation)
 - HTCondor-CE





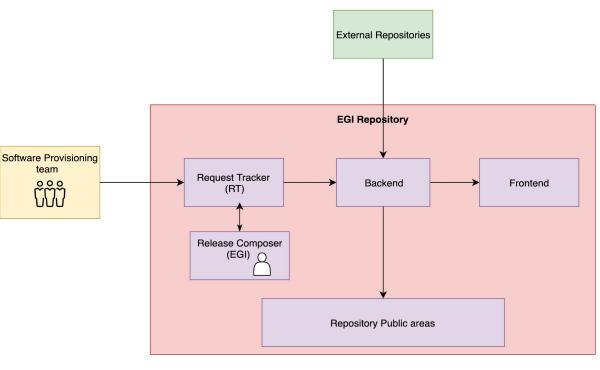


Repositories

UMD-4 architecture



- No new functionalities for many years, since it's hard to implement them.
- Backend based on perl scripts with tight relation with RT.
- To many manual steps (RT fully manual) leading to a large delay in the releases of packages
- Frontend outdated which could lead to security issues (already replaced by a simplified version)





https://github.com/egi-qc/software-releases

The pipeline is as follows:

- 1. **json_parser.py**: parse json, get the list of files to download and produce list of filenames (packages).
- 2. **download_pkgs.py** (option 0): download the packages to a temporary directory.
- 3. **rpm_sign.sh** (option 0): rpm sign each package.
- 4. **rpm_sign.sh** (option 0): verify signature of each package.
 - a. a. verification of the packages
- 5. **upload_pkgs.py**: upload each package to nexusrepo.
- 6. **Package-install**: Validate package installations from testing repository and perform functional tests.
- 7. release-candidate: Install all packages in release repo together with the new packages from testing
- 8. **json_parser.sh**: Produce new json file as asset of the new release
- 9. **clean.sh**: clean temporary directories.