Rucio Token Status Update

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WLCG token transition timeline

Milestone ID	Date	Description	Depend encies	Teams
M.8		Sufficient storage endpoints support tokens to allow DC24 to be done using only tokens.		Storage devs, WLCG ops, sites
		Done; functional but still gaining maturity		
M.9	Mar 2025	Grid jobs use tokens for reading and stageout.	M.8	Experiments,
		In progress; on track		WLCG ops, sites
M.10	Mar 2026	Users no longer need X509 certificates.	M.9	Experiments, MW devs, CERN IT

Refer to the official document



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Central deletion & third-party-copy transfer

- First demonstrated at scale during DC24
- Workflows are stable, but not yet settled on the token characteristics (i.e. scope and lifetime)
 - On-going experiments by ATLAS and CMS
 - Need to offer a functional and secure default configuration, but allow communities to make their own informed decisions
- No changes required in Rucio to support tape storages



Client download and upload

- On track to be delivered in the upcoming Rucio releases as a technology preview
 - Download at first; upload later
 - WebDAV-only at first; XRoot later
- Need to think about token traceability
 - Adding this information will scale the number of active tokens by the number of accounts, which should not be prohibitive



Concerns

- Too many combinations of choices, always with advantages and disadvantages; unclear optimal configuration
- Lack of experience with IAM capabilities
- Unintentional deviations from the token profile specification
- Inability to affect the token lifetime per request restricts flexibility



Thank You



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