



New communities for MultiONE

LHCONE meeting #54

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New MULTOne BGP communities

Use case A

- LHCONE connected Site affiliated with a given experiment, but **offering Opportunistic Resources** (OpRes) to other experiments. How those prefixes should be tagged?

Problem:

- If the prefixes are marked only with the primary experiment (e.g. ATLAS), other sites not serving that experiment may not accept these prefixes and don't be able to reach the opportunistic resources over LHCONE

Questions:

- Should we add one or more communities for such case? Or not?

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Use case B

- LHCONE Site providing resources ***to other experiments which are not declared to be using LHCONE.***

Problem:

- It is possible that LHCONE may be already used by experiments not listed in the AUP (currently WLCG, BelleII, PierreAuger, XENON, JUNO, DUNE). Should filtering be implemented, it could break connectivity for underground experiments

Questions:

- Should we add a generic community for not-LHCONE-Experiments? Or?

Problem with filtering in LHCONE

LHCONE traffic must be symmetric, to avoid connection drops in statefull firewalls.

In order for routing to be symmetric inside LHCONE, filtering of prefixes should be symmetrically consistent in any pair of sites (e.g. if site A doesn't accept the prefixes of site B, site B must not accept the prefixes of A).

Case A, Proposals

1) One community for any Opportunistic Resources (e.g. 61339:60004)

- e.g. FNAL (CMS only) offering OR to ATLAS:

FNAL prefixes should be tagged CMS (61339:3) and OpRes (61339:60004)

2) One community to offer OpRes, one community to declare interest

- e.g. 61339:1002 to offer resources to ATLAS, 61339:2002 for those sites interested in ATLAS OpRes

- e.g. FNAL (CMS only) offering OpRes to ATLAS:

FNAL prefixes should be tagged CMS (61339:3) and OpRes for ATLAS (61339:1002)

Any ATLAS site interested in O.R should their prefixes 61339:2002

FNAL must accept 61339:2002

3) Prefixes should be marked with the tags of all the experiments to which the OpRes are offered

- e.g. FNAL (CMS only) offering opportunistic resources to ATLAS:

FNAL prefixes should be tagged CMS (61339:3) and ATLAS (61339:2).

Case B, Proposals

- 1) One community for any not-LHCONE-AUP experiments** (e.g. 61339:60005)
Sites offering/using resources to/of NOT-LHCONE experiments
- 2) Wait things to break and then invite the surfacing experiment to join LHCONE**

Opinions?

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