

Use of LHCOPN for Belle-II traffic

LHCOPN meeting

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At the last LHCOPN/ONE meeting (Tsukuba, October 2017), BNL asked to discuss the possibility to use the LHCOPN to exchange Belle-II traffic with other LHC Tier1s

- BNL has been designated to replace PNNL as Belle-II US Tier1. It will need to exchange Belle-II data with Belle-II sites that are also LHC Tier1s
- While Belle-II traffic is allowed on LHCONE, it is not mentioned in the LHCOPN MoU. BNL wishes to not have to increase the complexity of its network to avoid to exchange BelleII traffic over the LHCOPN with such sites
- Eventually, BNL would like to allow all its ScienceDMZ traffic to any LHC connection

Agreement

During the LHCOPN meeting and follow-up discussions on the LHCOPN/ONE mailing lists, it has been agreed:

- **to allow Belle-II traffic over LHCOPN, if both ends of the transfers agree to do so**
- this exception concerns only sites that are already LHC Tier1s. **The LHCOPN is not going to be opened to sites that are part of Belle-II but not of LHC**, like KEK. Those Belle-II only sites must keep using LHCONE
- inform the WLCG Management Board. In case of objections or concern, reconsider the matter
- document the LHCOPN AUP here
<https://twiki.cern.ch/twiki/bin/view/LHCOPN/LHCopnAUP>

WLCG Management Board

On the 19th of December 2017, this agreement was presented to the the WLCG Management Board during one of their regular meeting.

The Board gave positive feedback and didn't oppose the agreement, as long as all the parts involved agree to do so and as long as the Belle-II traffic doesn't negatively impact the LHC data transfers.

For this last reason, the Board recommends to monitor the traffic and be ready to take corrective actions, if needed.

LHCOPN AUP

LHCOPN Acceptable Use Policy

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Preamble

LHCOPN is the private network that connect the LHC Tier0 to all the LHC Tier1s and Tier1s to Tier1s.

LHCOPN primary mission

- Only LHC Tier0 and Tier1s can connect to LHCOPN
- LHCOPN is intended to distribute LHC Experiments' data from the Tier0 to the Tier1s (T0-T1 traffic)

Accepted use cases

- LHC data transfers between LHC Tier1s are welcome (T1-T1 traffic)
- Non LHC data transfers are allowed between LHC Tier0/1 that are also members of other collaborations, as long as they don't jeopardize the LHCOPN primary mission. Currently, these collaborations have been explicitly approved:
 - Belle-II (December 2017)

<https://twiki.cern.ch/twiki/bin/view/LHCOPN/LHCopnAUP>

Other collaborations and experiments

During the LHCOPN meeting it was also discussed the fact that several LHC sites participate to multiple experiments and collaborations. Their computing resources are often shared among the experiments and are connected to the same ScienceDMZ used for LHCOPN and LHCONE. As for the case of Belle-II, keeping not-LHC traffic out of LHCOPN/ONE may be technically challenging, if both ends of data transfers are connected to those networks

Few sites have expressed the wish to allow any of their ScienceDMZ traffic over LHCOPN/ONE, regardless of the origin of the data

Opinions and comments

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