



**PIC**  
port d'informació  
científica

## LHCOPN network monitoring at PIC

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Energéticas Medioambientales  
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**UAB**

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Energies **IFAE**

- Performance & behaviour
  - Local CACTI. <http://cacti.pic.es/>
  - Anella monitoring <https://estadistiques.anella.cesca.cat>
  - RedIRIS monitoring.  
<http://www.rediris.es/conectividad/stats/Proyectos/lightpaths/lhc.html>
  - PerfSONAR
  - CERN monitoring
- At PIC we use Nagios. Network sensors in production:
  - LHCOPN\_STATUS: BGP status of primary and secondary LHCOPN links
  - INTERNET\_STATUS: BGP status of primary and secondary Internet links
  - OPN\_SRM\_CONNECTIVITY: Checks if T0/T1's SRM can be reached
  - CISCO\_INTERFACES: Alarm if a link aggregation is degraded or an enabled port has no link

## Alarm/Ops handling at PIC

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- 24x7 monitoring at PIC is based on 4 people pool with weekly shifts.
  - 24x7 Mobile phone (+34609931343)
    - SMS active monitoring
      - LHCOPN alarm 8-23h
      - Internet alarm 0-24h
    - Email ([mod@pic.es](mailto:mod@pic.es) in [network@pic.es](mailto:network@pic.es)) for ggus tickets
    - Nagios passive monitoring
- During working hours 2 people in charge of the LHCOPN Ops
  - Fernando López ([flopez@pic.es](mailto:flopez@pic.es))
  - Gerard Bernabeu ([bernabeu@pic.es](mailto:bernabeu@pic.es))

## In case of trouble

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- If Internet affected: ticket to Anella (office hours) or subcontracted service for emergencies (24\*7).
- If LHCOPN affected: ticket to Anella/RedIRIS + LHCOPN GGUS. RedIRIS support is only office hours, they've subcontracted 24\*7 L2 service but we can not contact them directly.