

# LINES AND AREAS OF RESEARCH / WORK

## GENERAL OBJECTIVE

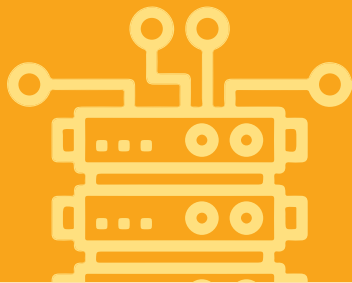
These priority lines and areas of work and research seek to promote the development of knowledge, methodologies, tools and techniques, and/or to generate original results that will promote the development of a stable and open Internet in the region, in line with LACNIC's mission.

There is particular interest in promoting and developing research, papers, case studies, adoption of best practices —among others— that have specific applications, involve solutions to real problems, and/or result in innovation in one of the areas detailed below.

## Network Architecture and Operation

Monitoring, measurement, management, optimization, automation and/or innovation in network architecture and operation related to one or more of the following priority topics:

- *BGP*
- *DNS*
- *Protocols*
- *Performance*



## Traffic Engineering and Interconnection

Monitoring, measurement, management, control, modeling, optimization and/or innovation in one or more of the priority topics and related to the specific areas below:

- *IXPs*
- *CDNs*
- *BGP*
- *QoS*



## Cryptography, Security and Resilience

Contribution to Internet security and resilience, the prevention of, and response to, attacks, incidents and anomalies in Internet infrastructure, and the generation of innovative approaches and solutions with a special emphasis on the priority issues detailed below:

- *DNS (approaches such as DNSSEC or others)*
- *Routing Security*
- *RPKI and/or Extensions*
- *Route Origin Validation*
- *IoT*
- *DDoS*
- *Malware*



## Future Development of the Internet

This line of work and research seeks to contribute to the future development of the Internet in the LAC region. Its approach is broad and places special emphasis on addressing the regional challenges posed by the priority topics detailed below:

- *IPv6*
- *High performance computing*
- *Use of Blockchain and its applications*
- *Other innovative topics related to the line of work and research*

