ISPA-DRC'S CACHE-FILL COST SHARING MODEL

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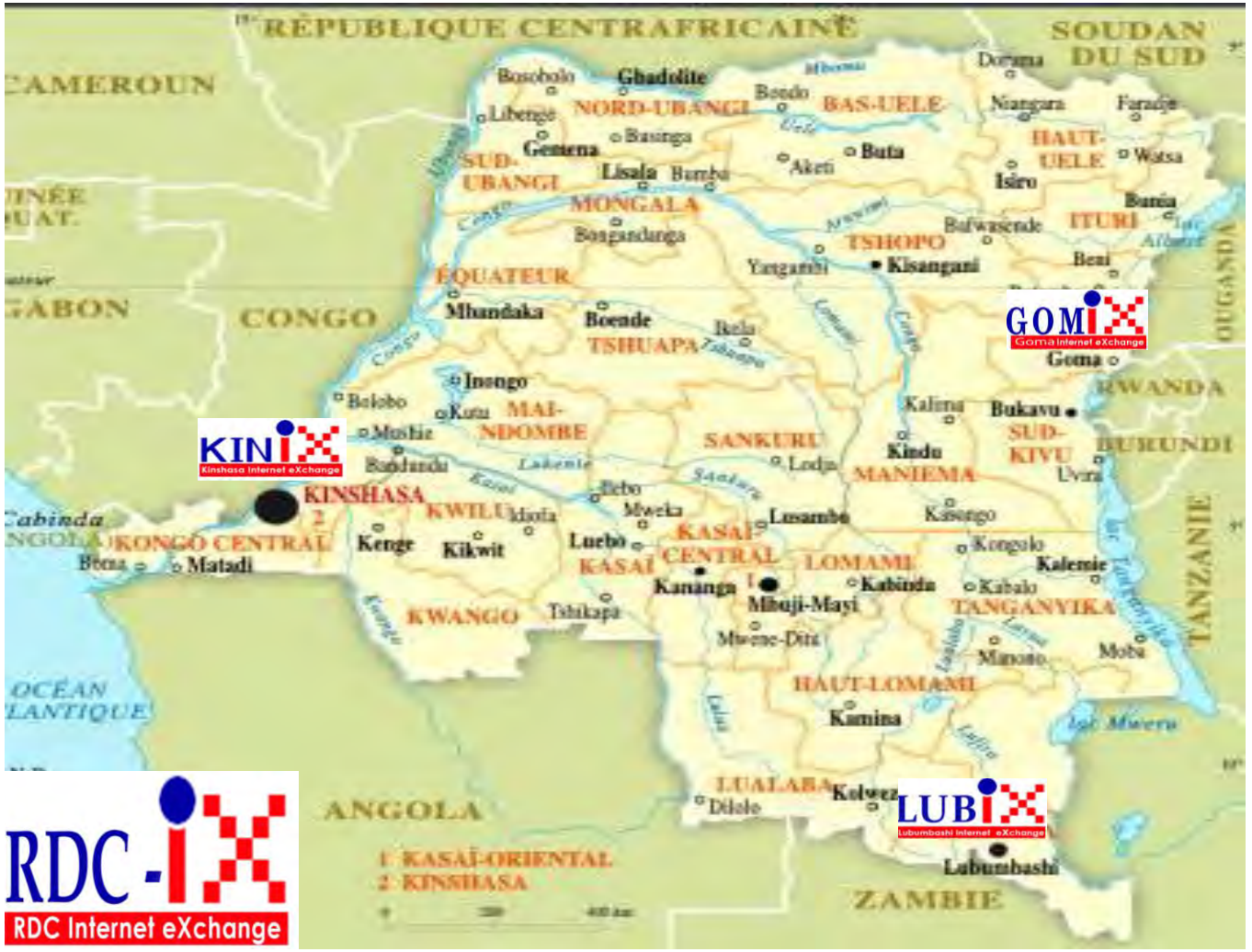
ISPA-DRC AND HIS THREE IXPs

RDC-IX is an ISPA-DRC project initiated to endow the DRC in the short and medium term with three IXPs

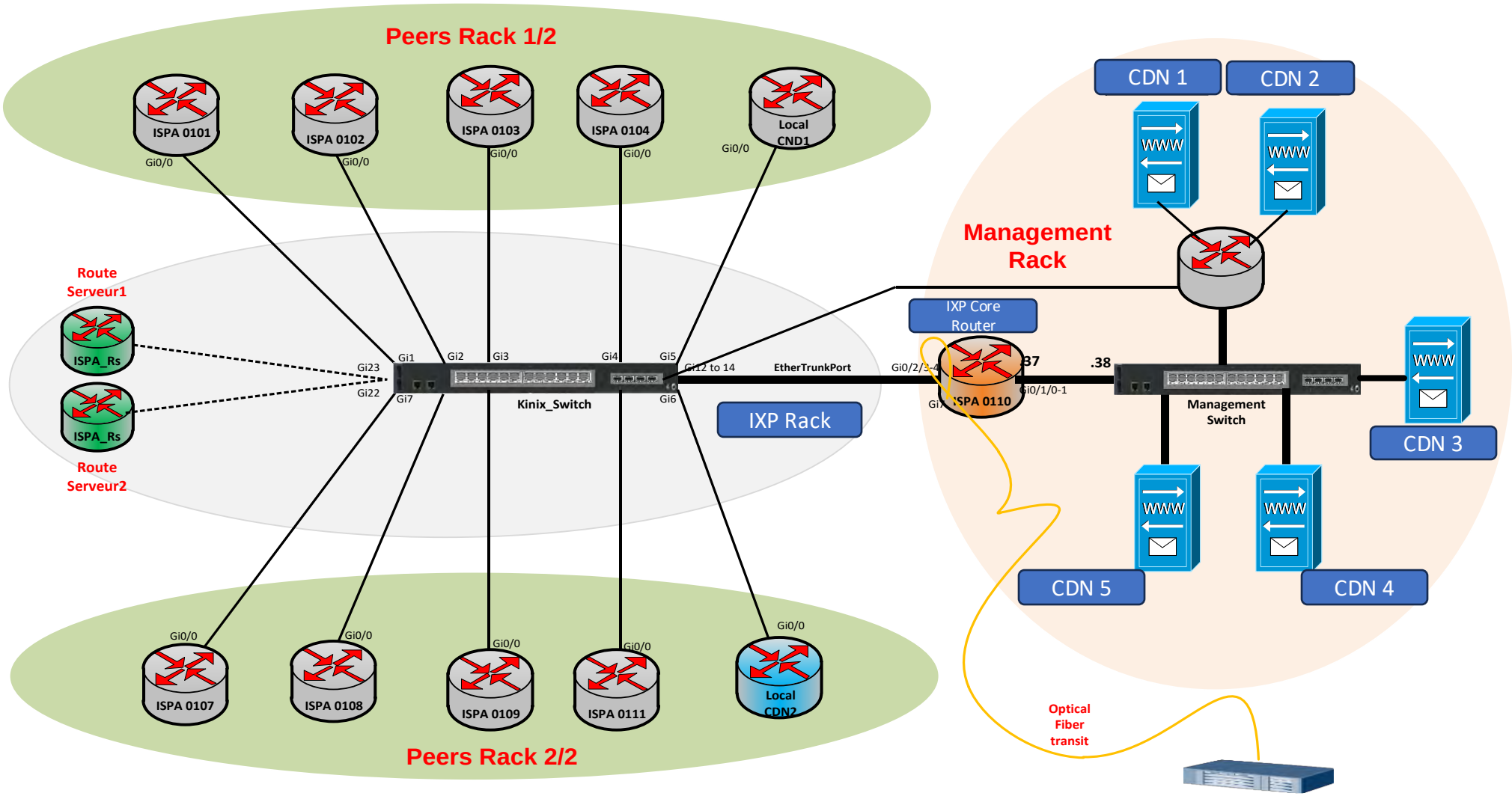
KINIX
- Launch : Novembre 2012
- Number of peers : 23
- Traffic Peak : 84 Gbps

LUBIX
- Launch: October 2019
- Number of peers: 11
- Traffic Peak : 50 Gbps

GOMIX
- Launch: September 2021
- Number of peers: 9
- Traffic Peak : 31 Gbps



CDN CACHE DESIGN ON THE RDC-IX'S IXPs



DYNAMIC TO FILL CACHES

- Consultation
  - Hosting and connecting caches on the IXP
  - Support for providing allocated international bandwidth to fill caches
- Definition and adoption of principles for the support of international bandwidth provisioning
  - Choose a alone international bandwidth provider to fill all Caches connected to IXP
  - Everyone's participation in supporting the provision of international bandwidth.
  - Preparation of the memorandum of understanding containing the terms of reference
  - Adoption of the memorandum of understanding containing the terms of reference

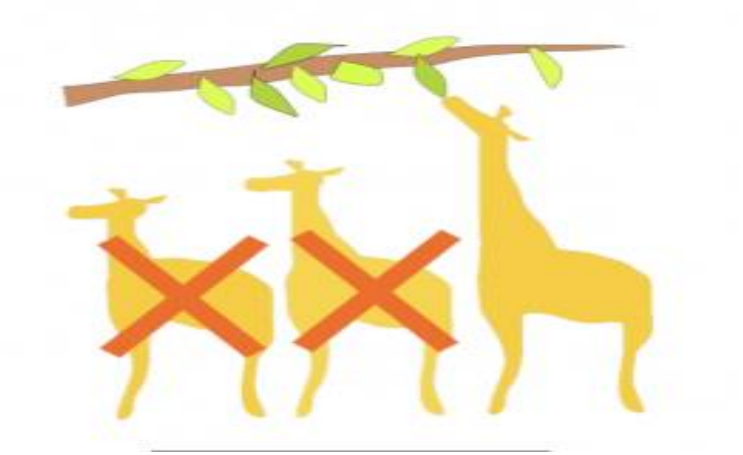
DYNAMIC TO FILL CACHES

❑ Bandwith Supplier sélection

- Publication of tender notices
  - Be a full member of ISPA–DRC in good standing with monthly dues including special dues and commitments made in connection with IXP;
  - Be connected to the IXP Internet exchange point;
  - Be able to provide unlimited quality international bandwidth to KINIX Management through a subnet identifiable by the KINIX Management ASN;
  - Be a major consumer of international bandwidth (consumption exceeding the cap of x Mbps);

- Transmission of the tender specifications
- Offers submission

DYNAMIC TO FILL CACHES



- Setting up the selection committee
  - The first team for the evaluation out of a total of:
    - 20 points for the administration sub-heading
    - 30 points for the finance sub-section
  - The second team made up of network managers from ISPA-DRC members who have not tendered to evaluate the technical tenders out of a total of 50 points.
- Publication of supplier
  - Provisional award of contract
  - Contract award

DYNAMIC TO FILL CACHES

❑ Community engagement for bandwidth

- Testing period (only for a new supplier)
- Fixing the volume of bandwidth taxable monthly by the supplier
  - For a new supplier : after the testing month for three months
  - Former supplier : after every three months
- Signature of the Service provision between ISPA-DRC and Supplier

SUPPLIER

- Provide unlimited and desired international bandwidth for the proper functioning of KINIX Management
- Ensure 24/7 service availability and provide fully redundant solutions
- Ensure the minimum SLA of 99.5% ;
- Sign with the peers of the IXP having access to IXP Management a specific memorandum of understanding for the provision of services
- Arrange the escalation matrix;
- Retrocede 5% of the total sale amount as support costs for the operation of the IXP
- Jointly sign with the Supplier the service delivery evaluation sheet;
- Jointly sign with the Supplier the minutes of the end of the service provision contract

ISPA-DRC

- Share monthly traffic statistics
- Assist the Supplier in recovery
- Facilitate the technical exchanges between the Supplier and the different CDNs
- Keep confidential data designated as "confidential" by the Supplier;
- Jointly sign with the Supplier the service delivery evaluation sheet;
- Jointly sign with the Supplier the minutes of the end of the service provision contract

DYNAMIC TO FILL CACHES

- Signature of the specific Service provision contact between the supplier and each operator connected to the caches
  - Invoicing Terms
  - Modality on payment

DYNAMIC TO FILL CACHES

❑ Cost Sharing

- Set bandwidth cost per operator connected to caches
  - The cost is set in proportion to the traffic volume of each operator

$$\text{Operator Cost} = \text{Total monthly total cost}\left(\frac{\text{Trafic volume of the operator on the caches}}{\text{Total volume Trafic of the caches}}\right)$$

  - Statistics sharing
    - Statistics on the volume of traffic and the cost are sent jointly to the provider and to each operator connected to the caches
    - A three-day period is granted to each operator for verification
    - A three-day period is granted to each operator for verification

CONNECTED CACHES TO ISPA-DRC IXPs

CACHE CHALLENGES

Satisfy our members' demand for more caches connected to our IXPs

ISPA-DRC /RDC-IX :

- E-mail: info@ispa-drc.cd
- Peering :

❑ KINIX : AS : 37431
❑ LUBIX: AS: 37785
❑ GOMIX: AS: 37788

Thank you, Merci