Technical Area Report

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APNIC 28

Top 10 Resource allocation

1. **Research and development activities (for example: network monitoring and measuring, routability testing)**
2. Support network engineering education in the Asia Pacific region
3. Support of IPv6 deployment
4. Expand training activities in scope, geographical coverage and online options
5. Increase the support of the community's efforts to adopt IPv6
6. Streamline resource requests and allocation processes
7. Further development of resource certification to support better routing security
8. **Expand network monitoring, reporting**
9. **Develop web services for automated data exchange with external systems**
10. Deploy more DNS root servers in the Asia Pacific region

Research and Development

1. Research and development activities (for example: network monitoring and measuring, routability testing)

- Coordinating with other RIRs on global Resource Certification
- DNS service alterations to observe
  - DNSSEC implementation
  - Anycast deployment

Network monitoring

8. Expand network monitoring, reporting

- Test Traffic Measurement (TTM)
  - Sponsorship of 12 Asia Pacific Nodes
  - Important Information to encourage local investment and development
- 'Day In the Life of the Internet' Project (DITL)
  - Provided over 478 gigabytes of data on DNS packetflows

Automated data exchange

9. Develop web services for automated data exchange with external systems

- Secure channel for updating member reverse delegations
- Will be used to link member DNSSEC signed zones to APNIC DNSSEC signed zones

Looking Forward

- HiAvail
- DNSSec

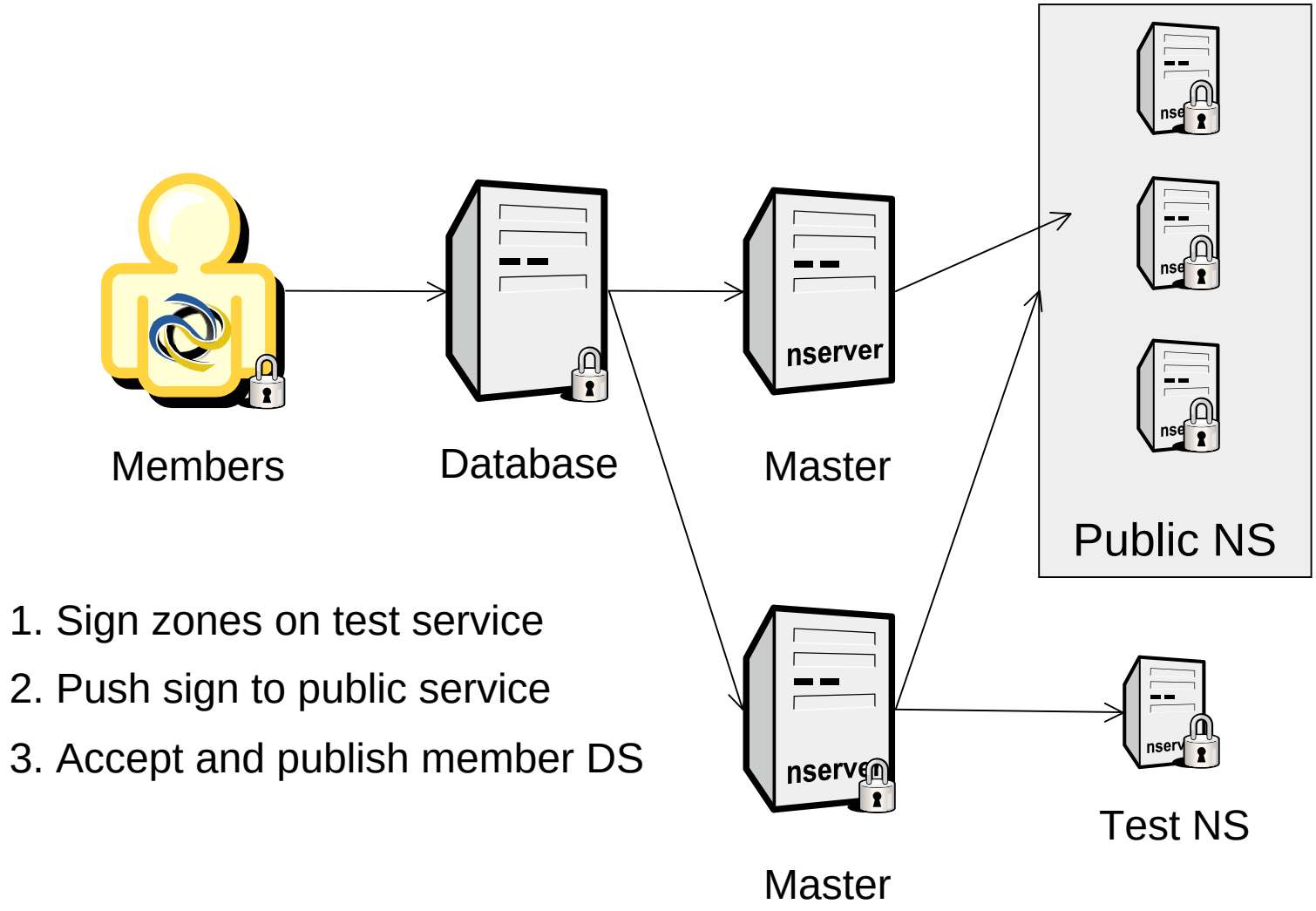
HiAvail

- Increasing redundancy and reliability
- Data centre network restructure to provide redundant connectivity
- Managed virtualisation to reduce hardware risks
- Significantly increased scope of service availability monitoring programme

DNSSEC

- APNIC provides the binding between members' reverse DNS zones and the in-addr.arpa and ip6.arpa zones
- To enable DNSSEC, APNIC must
  - Sign the zones carried by APNIC
  - Accept secure delegation records from members
  - Provide secure delegation records to IANA

DNSSEC



1. Sign zones on test service
2. Push sign to public service
3. Accept and publish member DS

Completing the Chain

- APNIC Members provide secure delegation (DS) records to APNIC
- APNIC signs zones including DS records
- APNIC provides secure delegation records to IANA when in-addr.arpa and ip6.arpa are signed