The IPv6 Skills Gap

Alvaro Vives

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- We get information from the RIPE NCC Survey, feedback from the RIPE community, internal knowledge

- What we have seen so far:

  - There is a demand for IPv6 training

  - Bookings and participation in our IPv6 learning events is above the average

  - Needs have changed over time to more advanced knowledge

- Planned: a systematic and structured needs assessment process

Challenges

- IPv6 is a complex and big topic

- The skills needed to deploy IPv6 are not homogenous

- Resistance of change ("IPv4 mindset")

- What the RIPE NCC can do is shaped by our mission and vision, and the resources available

- Evolution of the technology and best practices

Challenges

1	**Decision Making**
2	**Design/Plan/Prepare the Deployment**
3	**Deployment**
4	**Maintenance and Troubleshoot**
5	**Innovate / Enjoy!**

Challenges

- We aim for practical knowledge, BUT

  - There are many different scenarios (ISP/CDN/Ent.) and contexts

  - IP is used for **several** purposes in current infrastructure

  - Implementation depends on the vendor/model/SW version(s) used

  - Legacy technology is still used and/or there is a lack of support

Developing Learning Experiences

Quality Assurance

- Content tailored to **learner's needs**
- **Relevant** and **up-to-date** content
- Involve a **variety of SMEs**
- Sound **pedagogical methodologies and techniques**
- **Engaging and accessible** learning experiences

Learning Experiences

- Instruct in **best practices**
- Provide **practical knowledge**
- Enabling to contribute to a more secure, stable, resilient and innovative internet
- Helping with **career development**

Trusted and Neutral Source of Information

- Information **not dependent on economic or political interests**
- Focusing on **BCPs** and **standards**
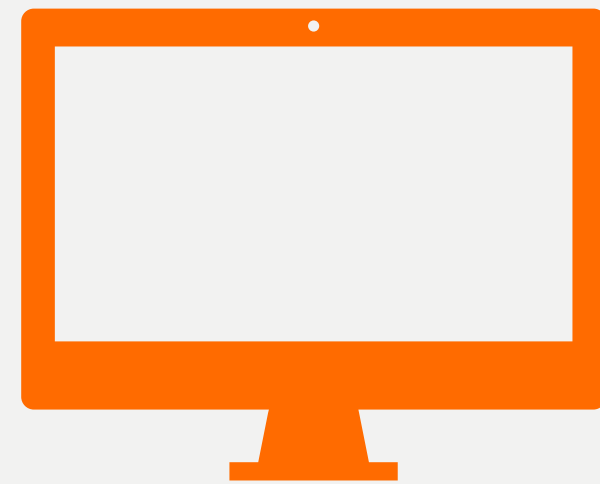- Using **open source** tools and materials

What we offer

- Learning material builds up knowledge (basic knowledge first, foundation needed for more advanced learning)

- Goals related with **design** instead of implementation

- Focus on standards and BCPs (consolidated knowledge)

- Generic scenarios and examples (that would need to be adapted to each case by learners, you know your network better than anyone else)

- We provide the first steps of the learning process! Learners have to continue their own journey (e.g. IPv6 Security)

- Hands-on labs using Open-source software to reinforce concepts and learn about design. Learners have to translate the standardised knowledge to their specific infrastructure and vendor

- Focus on decision and plan/design (for now) and the technical dimension
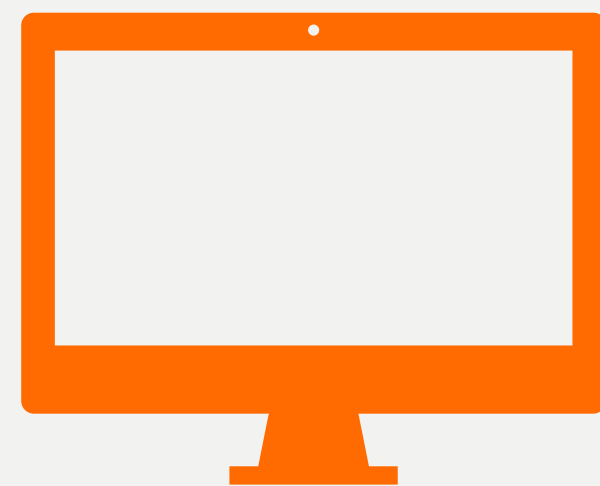
RIPE NCC IPv6 Training and Certifications

8 IPv6-related webinars

2 E-learning courses

3 In person courses

2 E-learning courses

IPv6 Certifications

RIPE NCC Certified Professionals
IPv6 Fundamentals
Analyst

RIPE NCC Certified Professionals
IPv6 Security
Expert

Our Plans

- Piloting Guided IPv6 Learning: e-learning, support webinars, and exam

- Coming next year: Advanced IPv6 e-learning and certification

The IPv6 Skills Gap

- Which IPv6 skills gap(s) do you see in your organisation?

    - Have they changed over time?

- In which stage of IPv6 deployment is your organisation (Decision, Plan, Implementation, maintenance, innovation)?

    - What do you need for the stage that your organisation is at? How can we help?

Questions

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