### NLNOG RING update

- Ubuntu 18.04 was nearly EOL
- Plan: update everything to 22.04
- First step: be able to provision NEW 22.04 nodes
- Changes in Ansible playbooks needed
- All python2 scripts had to be fixed for python3



### NLNOG RING update

- How to upgrade all nodes from Ubuntu 18.04 to 22.04?
  - 1. Manually?
  - 2. Ask the RING owners to do the upgrade?
  - 3. Reprovision everything?

#### 4. Ansible!

• But... upgrading from 18.04 to 22.04 in one go isn't supported



### Upgrading nodes

- Action plan for 2023-02-07:
  - 1. A playbook activates the  $18.04 \rightarrow 20.04$  upgrade
  - **2**. Reboot the node after the upgrade
  - 3. A @reboot cronjob (set by the playbook) activates the 20.04  $\rightarrow$  22.04 upgrade
  - 4. Profit!





# Roughly 75% of all nodes upgrades without issues from 18.04 to 20.04 to 22.04.

That still left us with well over 100 nodes with issues.



- Nodes never recovered from the first reboot due to various issues: grub problems, networking issues, etc
- Nodes ended up in boot loops: Ubuntu's do\_release\_upgrade is sometimes more a "don't"
- Small /boot partitions. Linux kernels have grown a LOT from since we started the RING



#### Fixing the issues

- Manual fixes by RING admins
- Asking RING node owners to help out
- Often the fastest solution: reinstall and reprovision

- Additional challenges:
  - 1. No contact: no response, addressess of all contacts bouncing
  - 2. A number of nodes was unknown to contacts



#### A request for RING owners

- Keep nodes as standard as possible for your organisation
- Please document them in tickets, CMDB, etc!
- Add the RING admins to your customer database
- Make sure to update your contact info (by sending us an email at ring-admins@nlnog.net)



- After trying to contact RING owners via various channels (mailinglists, IRC, peeringDB records), nearly all nodes were recovered or reinstantiated
- All nodes are running Ubuntu 22.04 now
- The public attention brought us new nodes



#### Thank you



Even with all automation in place, this was a LOT of work for a small team of volunteers, THANK YOU!

Thank you RING owners for helping us!



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- All nodes are running Ubuntu 22.04 now
- The public attention brought us new nodes
- Even with all automation in place , this was a LOT of work for a small team of volunteers, THANK YOU!
- Thank you RING owners for helping us!
- Sadly: no profit



#### SSH keys: new problems

- Ubuntu 22.04 runs a much newer OpenSSH server version
- This version deprecates ssh-rsa signatures
- (very) old SSH clients don't support newer signatures
- This results in a "Connection refused"



## SSH keys: solutions

- Upgrade your **SSH client** so it supports *rsa-sha2-256* or *rsa-sha2-512* signatures, and/or
- Create a new ssh-key using another key type, for example ecdsa or ed25519

Please contact RING admins if you cannot login to your node.



#### Current status



RING nodes: 629 ASNs: 507 Organisations: 495 Countries: 59



### IRR Explorer

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#### IRR Explorer

- We experienced problems with outdated information
- Software fixes were released to improve stability
- Reinstall of our entire setup (newer Ubuntu, python, Postgres, IRRd, latest IRR Explorer fixes)
- New feature: insights in data freshness
- Results: most problems with outdated info are gone



#### NLNOG Socials



• Mastodon!

<u>nlnog@mastodon.nl</u>

• <u>mastodon.nl/@nlnog</u>





#### NLNOG Socials



• The group of people active at NLNOG is stable

- We want to attract new people to NLNOG
- ."Be where the people are"





#### NLNOG Socials



A Discord communityTooling still WIP

• Q&A can be found at #nlnog-day



• Discord won't replace IRC

