Akvorado, collect and visualise flows the easy way

Will van Gulik

presenting
Vincent Bernat & Free's work

Swinog #38

Bio & Agenda

Will van Gulik:

- Network Engineer and associate at Nimag Networks,
- Committee member of RomandIX,
- Ripe's Connect WG co-chair,
- generally having fun with friends, Internet, books and music in not particular order

Akvorado:

- Developed by Vincent Bernat and Free (French ISP)
- https://www.akvorado.net , licensed under AGPLv3

Disclaimer:

 This is not my work, I'm just a preacher, don't shoot me yet, read the docs, and then the troubleshooting guide, it's amazing and precise.

• Agenda:

- O. Intro, Bio, Agenda (Done)
- 1. Reminder and Prerequisite
- 2. Connect, Start the deployment
- 3. Talk while magic happens Words of advice
- 4. Demo (Hopefully show the working website)
- 5. Links to resources, Cordialement, bisous.

Reminder and Prerequisite

- Akvorado
 - " receives flows ([...] Netflow/IPFIX and sFlow), enriches them with interface names (using SNMP), geo information (using MaxMind), and exports them to Kafka, then ClickHouse. It also exposes a web interface to browse the collected data. "
- Previously done (before the install):
 - Prepared my 2 routers (VXR w/G2) to send netflow to the Akvoradhost
 - Modified my docker storage path to /opt/docker in /etc/docker/daemon.json,
 - Downloaded the quickstart's tgz, uncompressed it and docker pulled.
- The scripts I created are simple, dirty and I'm not a developer. You're more than welcome to suggest improvements.

Start the deployment

- My script used in this demo:
 - Moves to the Akvorado directory
 - Removes the demo parameters from the config files (2 files)
 - Modifies the SNMP community to match my routers (1 file)
 - Insert a default sampling rate (needed by my old G2s) (1 file)
 - Adds the export / import filters that I modified to match my infra.
 - Starts Akvorado

Words of advice ...

- RTFM. Really.
 - Forget the old ways of NFsen because ...
 - It's simple as hell, if you follow the documentation,
 - Before bugging the dev team, use the troubleshooting guide, I fixed most of my issue using it, and the rest of my problems by re-reading the docs,
- Requirements:
 - SNMP reachability of your routers by the Akvoradhost
 - Some flows reaching your Akvoradhost (example in the docs for Juniper, Cisco, and more)
 - Not so much storage
 - At Nimag, collecting since 22.10.22, 22G used, sampling rate of 1/1024 (less than 5Gbps avg.)
 - In my lab, collecting since 22.03.23, 24G used, sampling rate of 1/10 (less than 10Mbps avg.)



... and links

- Akvorado:
 - https://www.akvorado.net
- My scripts / docs :
 - https://p.under.ch/Scripts/
 - https://www.porcus.ch/blog/
- No questions, it's a lightning talk, come bug me later.



Cordialement, bisous.

Failover Screenshot

