



# **IETF Hackathon:** **Customized Ansible** **API Generator**

**IETF 112**  
**1-5 November 2021**  
**Online**

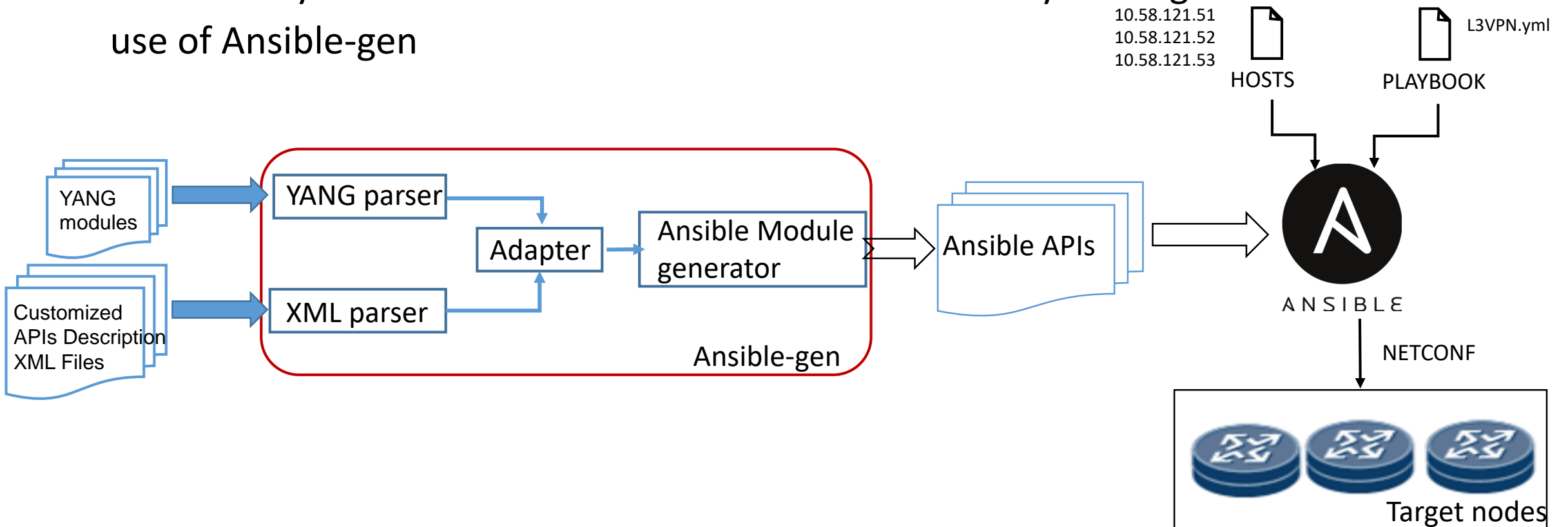


# Hackathon Plan

- Motivation
  - Not all vendors provide Ansible API to manage their devices through NETCONF and vendor-native YANG modules.
  - Even though there are some integrated solutions between Ansible and different vendors, generalized APIs cannot meet customized requirements.
- We hope there exists a tool to generate any desired Ansible APIs
  - Be used directly through NETCONF/YANG
  - Greatly reduce the workload of developers
- Related drafts/RFCs
  - <https://datatracker.ietf.org/doc/html/rfc8969>
  - <https://datatracker.ietf.org/doc/html/draft-ietf-bess-l3vpn-yang>
  - <https://datatracker.ietf.org/doc/html/draft-ietf-opsawg-l3sm-l3nm>
  - <https://datatracker.ietf.org/doc/html/draft-ietf-lsr-isis-srv6-yang>

# What got done——Ansible-gen

- An automatic Ansible API generation tool (<https://github.com/HuaweiDatacomm/ansible-gen>)
- Integrate generated APIs into Ansible framework automatically
- Customized input parameter check
- Successfully deliver a L3VPN service to Huawei device by making use of Ansible-gen



# What we learned

- Documentation is important for involving others
- Test early and often
- Thanks to Peng Liu, Chang Liu, Wei Wang and Benson Muite for visiting our project and providing valuable suggestions and great input.
- Next Step
  - Support the latest version of Ansible
  - Explore ways to define API profiles more efficient

# Wrap up

- Champions

- Frank Feng
- Benoit Claise
- Qiufang Ma
- Xiang Ren
- Qin Wu

- Resources

- Open Source Project

- <https://github.com/HuaweiDatacomm/ansible-gen>
    - <https://github.com/HuaweiDatacomm/ansible-gen-examples>
    - <https://github.com/HuaweiDatacomm/ne-ansible-plugin>

- Video Demo

- <https://www.youtube.com/watch?v=up-fYpTZnFY>

- Further contributions are welcome! 😊