IETF 120: Host Speaker Series

The Host Speaker Series session at IETF 120, "AI Cluster Network: Co-design and Integration of Network, Computation and Memory" was held at 18:45 UTC on 25 July 2025.

What's so hard about deploying an app? You just fill out a few values in a manifest values file and you're done, right? If that sounds naive to you, then you would have found this talk useful. When deploying a complex application in a complex organization, figuring out the right "values" isn't necessarily easy. It can involve several different parts of the organization, like the infrastructure team, the network planning team, the app operations team, the security team, and more. Just getting the right input from each of those organizations for a single instance of an app can be painful. Now, try to fan that out across 1,000 - or 10,000 - clusters, and you have a "values" management nightmare.

Guests came to this talk to learn how the novel concepts of Configuration-as-Data (CaD) are used in the Nephio project to allow distributed, collaborative editing of application configuration, and enable automation and rapid app delivery. They saw how these techniques can help you decouple the configuration process within your organization, give different departments control over their parts of the config, and allow them to independently manage and automate the parts they own. They learned how to use the open source Nephio tools to dramatically simplify and improve the app delivery process.

**Speaker Biography**

David Lou is the chief researcher of the Network Technology Lab, Huawei. His research interests lie in data center networks and wide-area networks. Before joining Huawei, he was a senior researcher at Bell Lab, Alcatel-Lucent. He received the Ph.D. degree from Department of Information Technologies, University Ghent, Belgium.