

Aether Overview



Aether Deployment View



Aether Architecture - Component Level



Aether Consumption Models - Aether-in-a-Box

Aether-in-a Box



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RANSim	Single ra

ngle radio

- Aether installed on single machine
 One radio, or Simulated RAN
- Ideal for:
 - Evaluating Aether
 - Learning Cloud Platform, 5G
 - University Research on Aether cloud platform
 - Learn & Research on Programmable SD Fabric

Aether Consumption Models - Aether Standalone



- Aether installed Inside a private network
 - Multiple radios/RANs
 - UPF can be extended to RAN for edge computing
 - Hardware acceleration of UPF (P4-based)

Ideal for:

- Provide 4G/5G connectivity services built on readily available hardware
- Extensible architecture for "Pay as you grow" model
- Writing Applications on Aether Platform
- Enterprise Smart edge POC/Trial

Aether Consumption Models - Aether Cloud

Aether Connected Edge (ACE)



- Aether core installed in commercial cloud provider (GCP, AWS and others)
 - RAN and radios installed across multiple sites
 - Multiple radios/RANs
 - UPF can be extended to RAN for edge computing
 - Hardware acceleration of UPF (P4-based)

Ideal for:

- Provide 4G/5G connectivity services built on readily available cloud provider infrastructure
- Extensible architecture
- Writing Applications on Aether Platform
- Open Source developer

Aether Consumption Direction

Aether-in-a-Box

- Simplification enhance documents and tools
- Broaden radio vendors as needed
- Simplify subscriber provisioning (SIM cards)
- Continued evolution of
 ROC
- Add CPU target support (ARM)

Aether Standalone

- Straightforward installation and upgrade to higher capacity and higher reliability configurations
- cultivate additional UPF accelerators
- More complex and bespoke configurations
- mix and match UPF

Aether Cloud

- customizable installation for cloud
- continued easy integration with SD-RAN
- additional cloud vendor support (e.g. Azure)
- security enhancements (VPN) between cloud and edge
- Complex multi-edge configurations

Community

ONF

Aether Resources

• Aether document page

https://docs.aetherproject.org/master/index.html

- Aether Slack channel <u>https://join.slack.com/t/onf-community/shared_invite/zt-g2ed9rid-</u> <u>t9mAGa4Y2RrKfBWbY665tA</u>
- Aether TST information

https://wiki.opennetworking.org/display/COM/Aether

• Aether Community meeting notes

https://docs.google.com/document/d/1haQNZ6kecEDorkANEeOqskpoyufAGwav9ECp2HIHDI/edit?usp=sharing



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