

IP Resource Management in the Age of AI Factories and Edge Computing

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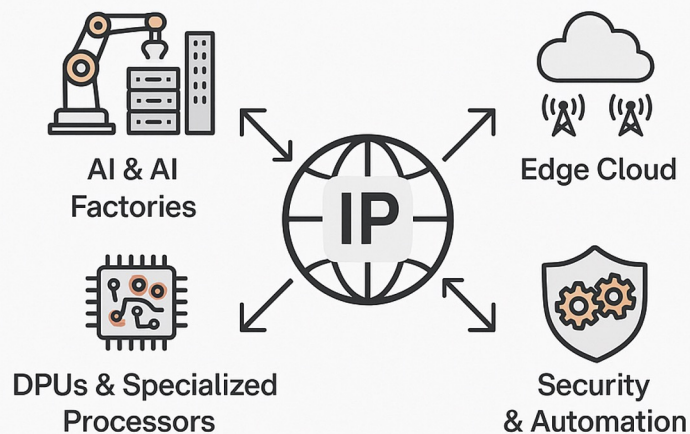
The Dawn of Intent-Based Networking

- AI Factories and edge cloud pave the way for ubiquitous computing
- Users' intent will be interpreted and brought to live by AI agents
- Existing tools with AI-enhancements won't do – we need new thinking.



The Connected World is Changing with AI

Future-Proofing IP Resource Management in the Age of AI Factories, Edge Cloud, and DPUs





AI Factories Emerging at the Edges



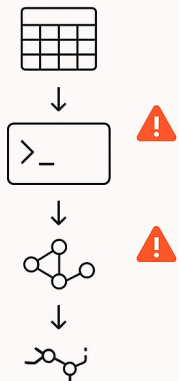
- Say hello to NVIDIA GB200 NVL72
 - More power than a pre-covid super computing DC
 - NVLink spine moving more packets than the Internet
 - Utilizes 36 BlueField DPUs for IP networking and infra
- AI factories can have hundreds of these racks. Sold to majority of customers as dynamic capacity services.
- Connected to the world over IP networks.



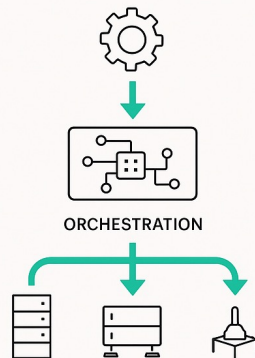
IP Resource Management in the New Era

WHY TRADITIONAL IP MANAGEMENT FAILS AT AI FACTORY SCALE

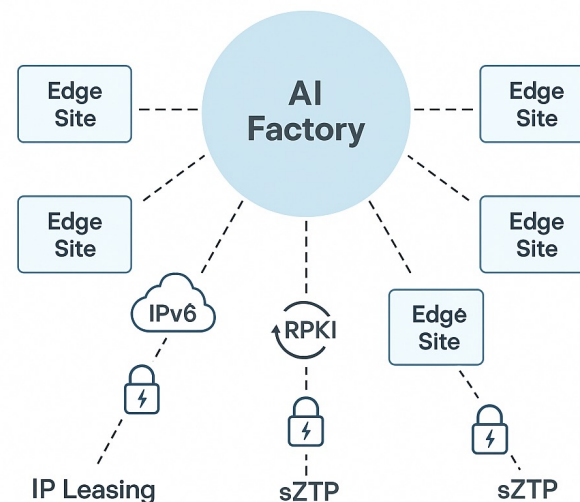
Manual



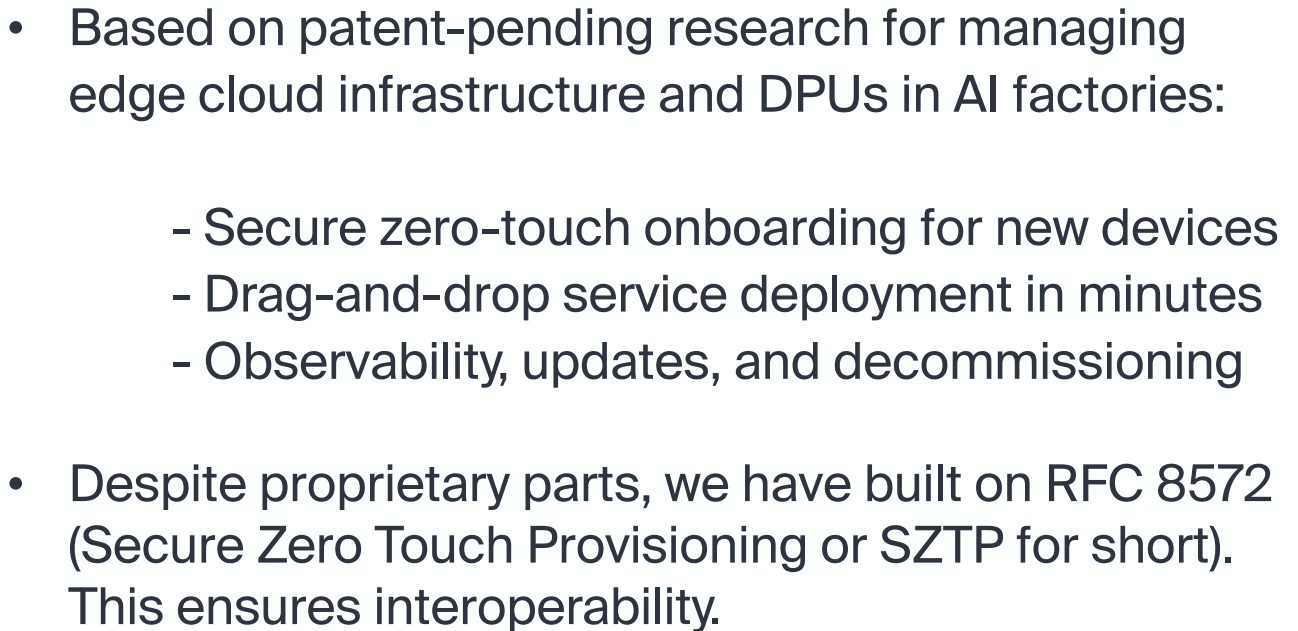
Automated



Edge Cloud Integration & Security



Automating IP resource management is a great start... ...but Intent-Based Networking doesn't stop there.





Developments within the Linux Foundation

- The Open Programmable Infrastructure (OPI) Project under Linux Foundation is developing infrastructure best practices.
- SZTP is the standard that has been chosen for secure onboarding and assignment of IP resources among other things.
- FusionLayer has released the production-grade SZTP client under Apache 2.0. Merged into the OPI project, it is freely available to anyone:

<https://github.com/fl-sztp/sztp-client>



Thank you.



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