CASE STUDY

IP FABRIC
AUTOMATED NETWORK ASSURANCE PLATFORM

How IP Fabric delivered unprecedented network visibility and reduced incident resolution time for Prague's public transport operator

CLIENT | Dopravní podnik hlavního města Prahy

Passenger journeys per year
1,2 billion

Size
12 000 employees

Fleet size
3 000 vehicles

About

Founded in 1897, the Prague Public Transport Company (DPP) has provided transport services for many generations of locals and tourists in the Czech capital of Prague. Today, 12,000 DPP employees operate a combined fleet of trams, buses and subway trains across more than 2,450 kilometers of transport lines and 61 subway stations.

Challenge

With its network infrastructure undergoing regular changes and distributed between 96 locations, DPP lacked a tool for the efficient visualization of its topology and tracking of day-to-day differences. DPP's engineers had to rely on custom scripts, static network maps and manual data gathering to resolve operational issues.

Solution

Implementing IP Fabric gave DPP teams a unified overview of network infrastructure and provided reliable inventory and quick access to information without the need to extract it manually from devices. Being able to compare the current network situation with the previous working state has greatly decreased the mean time for resolution of network problems.

Prague public transport is a lifeline infrastructure to the vibrant city. It serves 3.2 million passengers on their journeys every day and operates a fleet of over 3,000 vehicles. Over 43 percent of Prague residents rely on public transport. The company's support systems must be ready to react swiftly to unexpected situations: this requires deep, accurate knowledge of the underlying network infrastructure .

Challenge

- The network team was missing a reliable and always up-to-date inventory and vizualisation of its network infrastructure. Data collection was done only partially through custom scripts or manual collection, taking up large amounts of team resources.

- Frequent network changes combined with inadequate documentation and the lack of a tool for thorough compliance checks led to increased time for incident resolution and longer service outages.

- DPP was looking for an easy to deploy tool with ease of use for the network team and allowed for fine tuning to deliver the expected results.

Solution

- IP Fabric discovered DPP's network of 1,200 managed devices in under 30 minutes. Network documentation and visualisation was completely automated.

- Being able to compare the current network state with historical information has proven essential for quick incident response. It has significantly the quality of services provided.

- Automated collection of network information resulted in the abandonment of the majority of custom--made, and typically undocumented, scripts. Team collaboration is now more standarized and efficient.

Benefits

- With the ability to track device lifecycle milestones, IP Fabric is used as a strat- egic tool for budgeting and innovation planning.

- Automated configuration backups provide another angle for quick resolution of network incidents.

- IP Fabric's assurance engine lets DPP run compliance checks proactively across the whole network infrastructure and address discovered issues before they turn into service outages.

Customer's take on IP Fabric

IP Fabric brings unprecedented visibility to our network and accelerates our troubleshooting processes.

All information that had previously been gathered manually through a command line is now collected automatically and available to all members of my team. Thanks to its standardized data representation and intuitive user interface, IP Fabric really provides a „network as a database" experience and has quickly become our go-to tool whenever a detailed network overview is needed.

Jaroslav Duda
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DPP