Lifecycle of Backbone Maintenances

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Introduction

Types of Backbone Networks: DC <-> DC, POP <-> DC, EDGE

Different networks = Different failure domains

One maintenance can impact multiple networks
Problem Statement

- Scale requires automation
- Balance between availability, safety and downtime
- Reliability of operations
Lifecycle: Without Failures

Vendor Notification → Maintenance Parser → Maintenance Orchestrator → Safety Checks Traffic Shifts

Maintenance Window
Lifecycle: With Failures (Scenario #1)
Lifecycle: With Failures (Scenario #2)
Commonly Observed Issues

- Lack of standardization across and within vendors
- Categorizing maintenances: what is safe vs not safe
- Enabling systems to look into future state
How do we fix this?
Normalize vendor email formats

Front load initial noise

Policies on safety checks
It will take a village an INDUSTRY!!
Let’s work together to standardize our maintenances
LinkedIn - Vendor Network Maintenance Notification Standardization - Working Group

APIs vs standardized email modeling

Revisit existing Internet draft
Maintenance Notification Improvements Using iCalendar
Want to help?