



Autonomes Netzwerk- und Servicemanagement

Visionen, Trends und Praxisansätze

BMW, Commerzbank, EnBW, E.on

RheinEnergie, BBraun, LVM, AXA

Schwarz IT (Lidl), Global Foundries

Vodafone UK, MTN Group, Verizon

SUNRISE, Orange, Liberty Global

1&1 Versatel, Netcom BW, htp

Rakuten Symphony (1&1 Mobilfunk)

Deutsche Glasfaser, Thüringer Netkom

...more References on Request



Infosim[®] Gruppe

- Gegründet in 2003, Privatbesitz
- Ca. 200 Mitarbeiter weltweit

Zielmarkt

- Telkos und Enterprise Netzwerke (IT & IoT)

Fokussierung

- Herstellerunabhängige Automatisierung von Netzwerk & Service Management
- Universitäre Kooperationen im R&D
- Software und Services “Made in Germany”
- Weltweiter Vertrieb durch Partner

Fokus Produkt

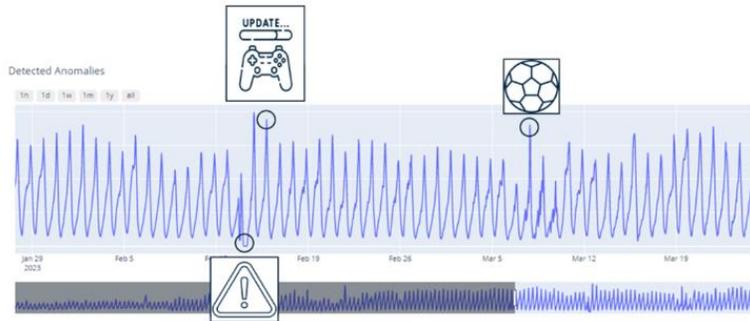
- StableNet[®] - OSS Umbrella

Offices

- Deutschland/Würzburg (HQ) & Münster, USA/Austin TX, Singapore

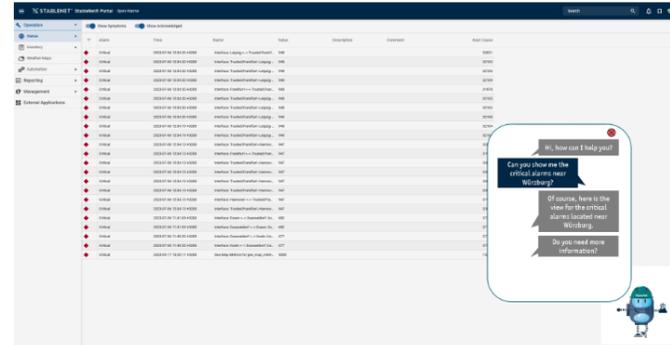
Anomaly Analysis with Event Store

Status: PoC



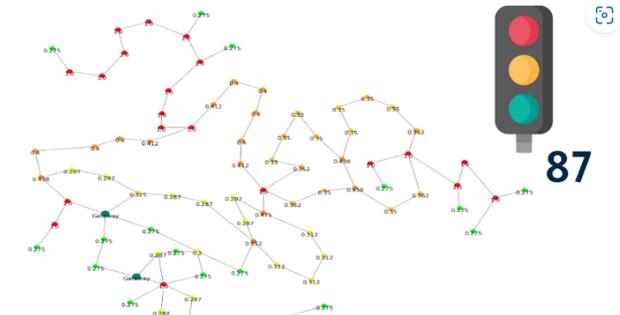
Chat-based Navigation in StableNet®

Status: PoC



Network Anomaly Indicator

Status: PoC



AI-NET-PROTECT

Automatisierte, widerstandsfähige und sichere Netze sind für kritische Infrastrukturen und Unternehmen
Forschungsprojekt

Themenbereiche

KI oder auch AI (Generative AI, AI Agent, Agentic AI), LLM, ...

- Predictive Maintenance und Anomalie Detection
- Large Language Model (LLM) und große Datenmengen
- Traffic Management zur Überlastvermeidung
- Config Management, da wo Syntax vorherrscht
- Kleinstaufgaben wie automatisierter Port Reset
- Chatbots
- Code Review



Standardisierung und Automatisierung ist Basis für autonome Netze

Catalyst: "AI-driven network automation for traffic and service resilience"

What Our Catalyst Is Solving!

"It's time to rethink the network—moving from reactive to proactive."



How the solution works?



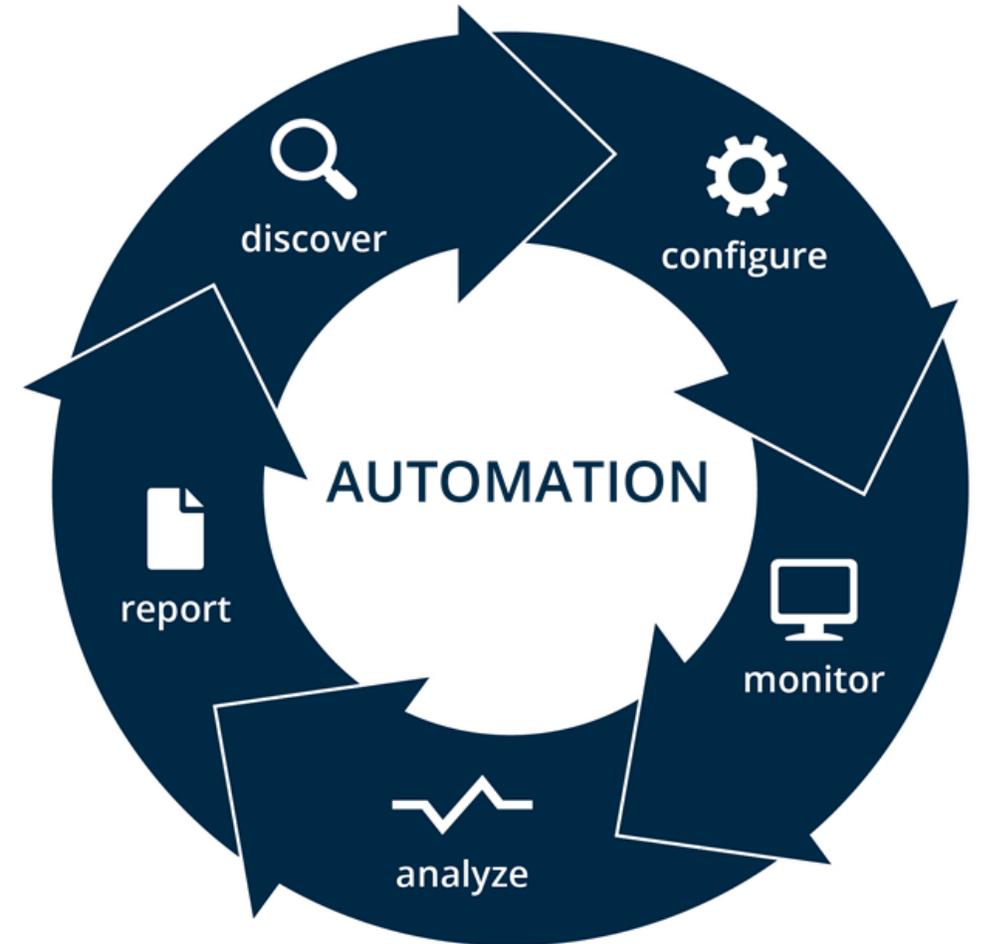
"This Catalyst brings self-X and zero-X automation to all telco domains, with intent-based control and CaaS capabilities."



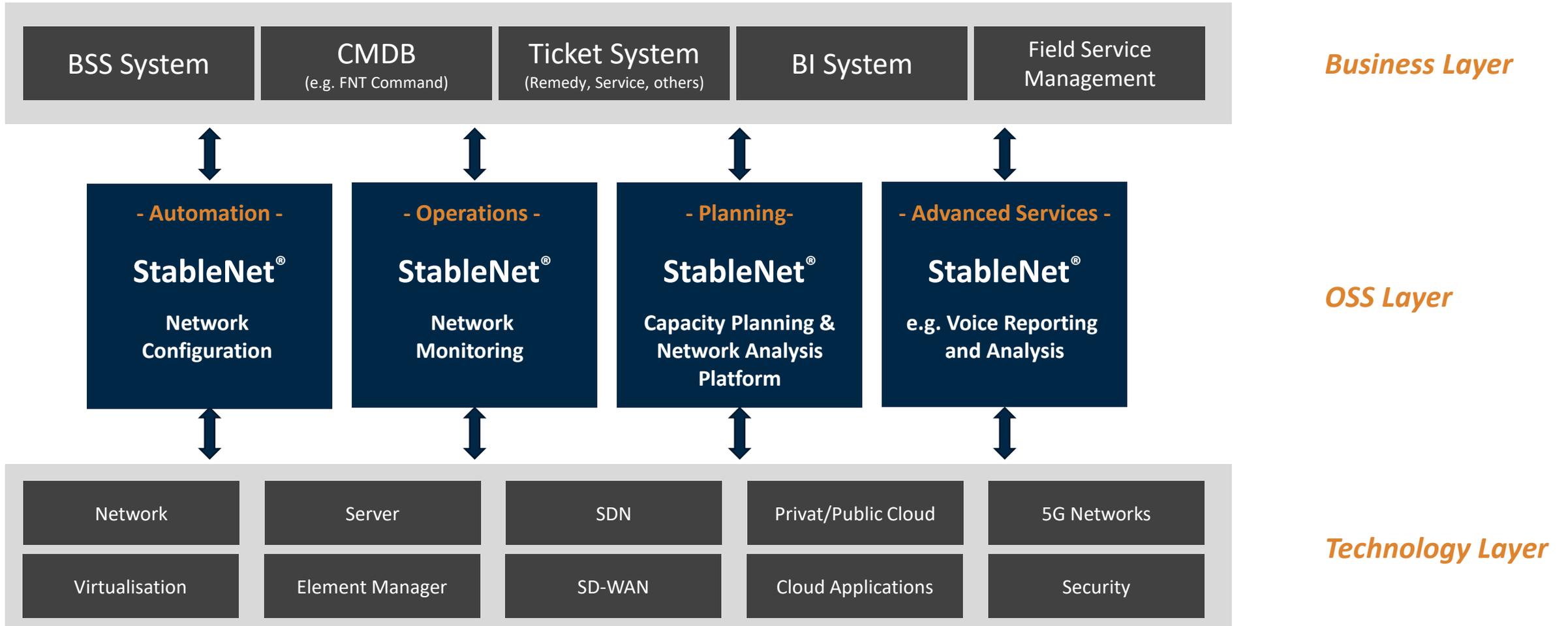
The network automation workflow includes the following:

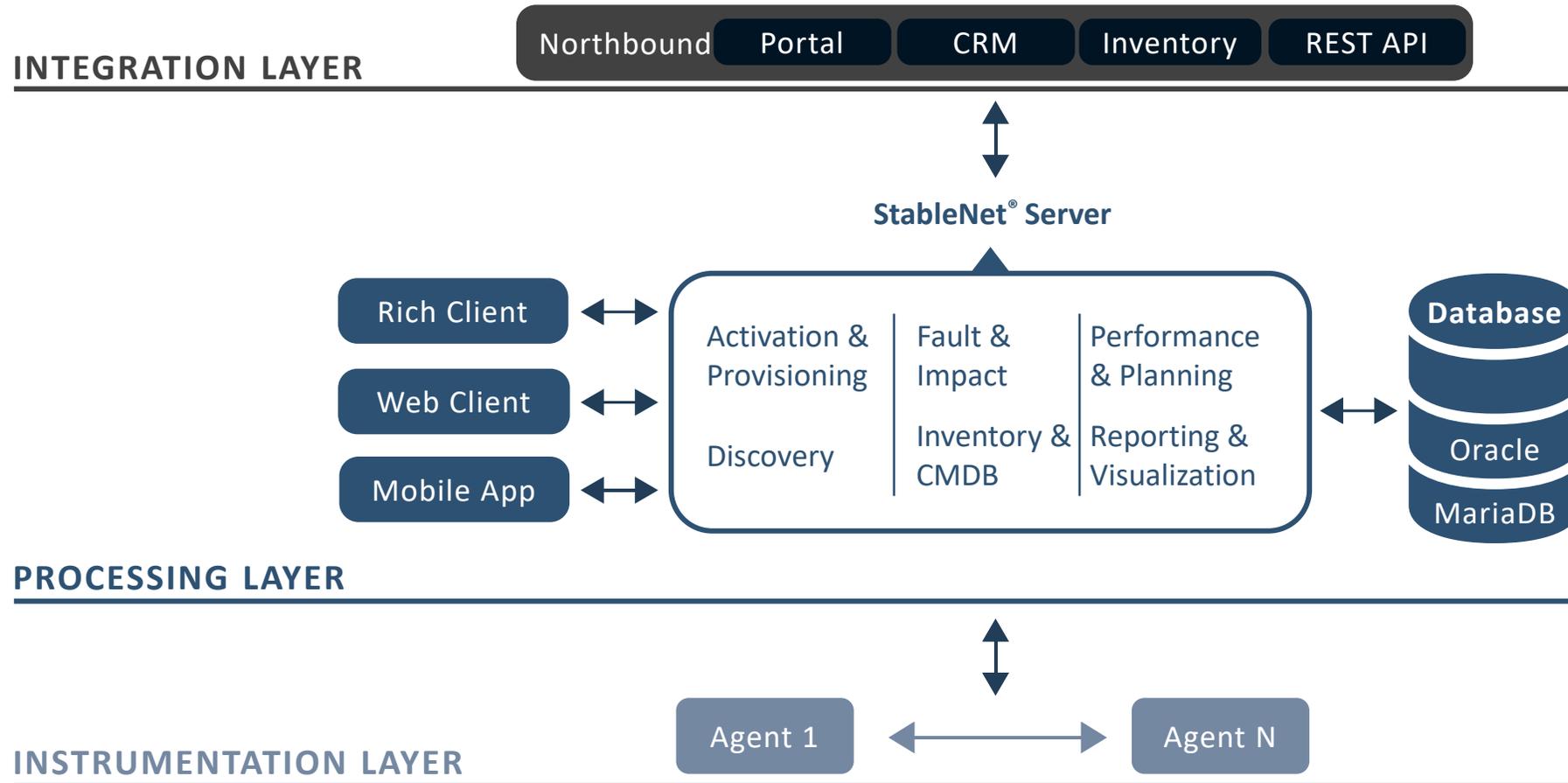
- repeated checks and discovery of your inventory
- completes simplified configuration jobs
- root cause analysis and continuous SLA monitoring
- compliance tracking
- simplified and automated backups and reporting

While each network is unique, with StableNet® you can greatly simplify even the most customized tasks.

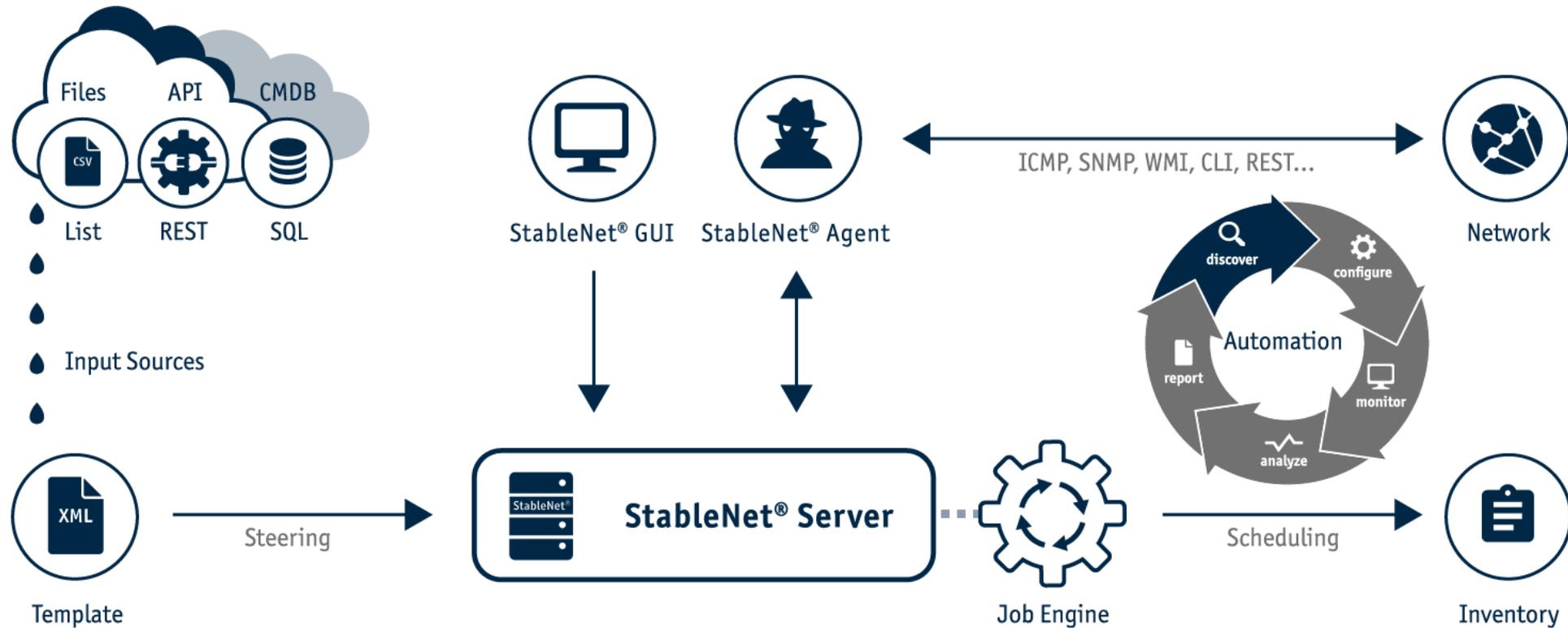


Network Automation with StableNet[®]



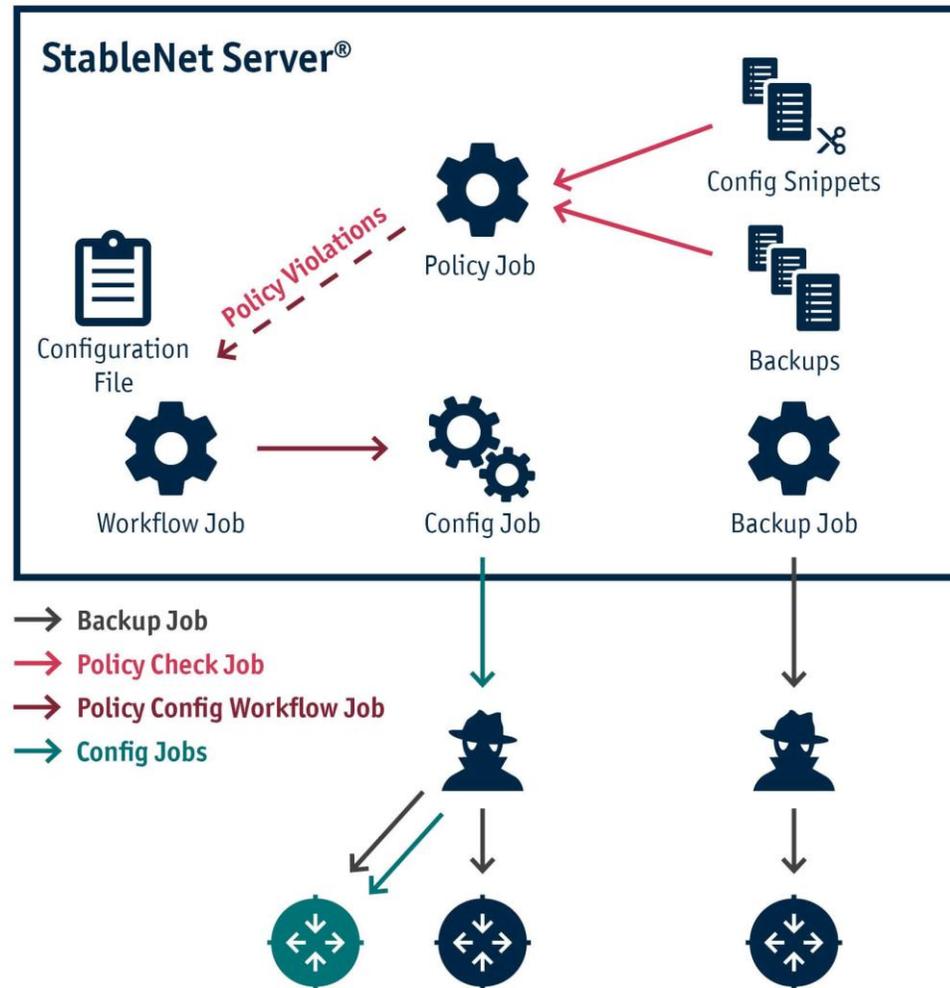


The StableNet® Discovery Workflow

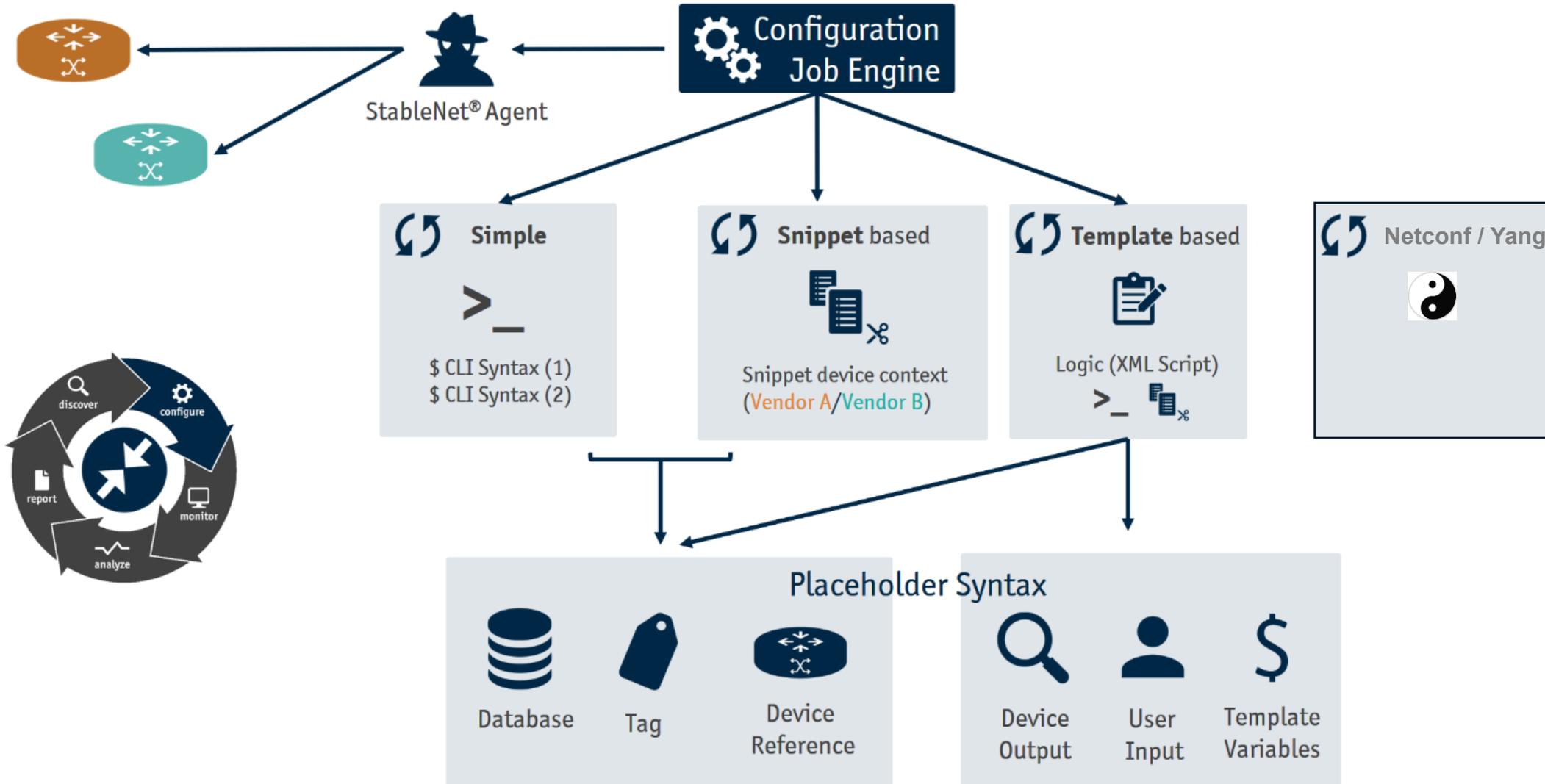


NCCM	Legacy Tools	The StableNet® Automated Solution
 Discovery & Inventory	Discovery of supported vendors with basic information on hardware and software	Discovery Automated discovery, tagging and enriching, integration of external databases, support of multiple technologies and vendors
 Configuration Backup	Ability to make config changes assuming protocol and vendor support	Config Backup Engine Multiple-protocol and vendor support, automated backup jobs, track config changes, fully customizable reports
 Compliance	Checking supported network infrastructure against industry standards	Policy and Compliance Engine Along with automated checks against industry standards, ability to customize policies and End-to-End services
 Change Management	Make changes to discovered infrastructure through various proprietary GUIs	Configuration Change Manager „On-the-fly“ changes simplified with Config Jobs, full audit-trail of changes, automated alerts for new devices & changes
 Vulnerability	Ability to manually check for vulnerabilities in each vendor user interface	Vulnerability Scanning Engine Automated common vulnerability exposure (CVE) scans entire infrastructure, define compliance policies & identify security weaknesses
 EoX (Lifecycle Management)	Identify End-of-Life on supported hardware and software	Lifecycle Maintenance Service Automated scanning of hardware and software for EoL and EoS, auto-announcements, dashboard for visualization

Compliance Check & Automated Fix Workflow

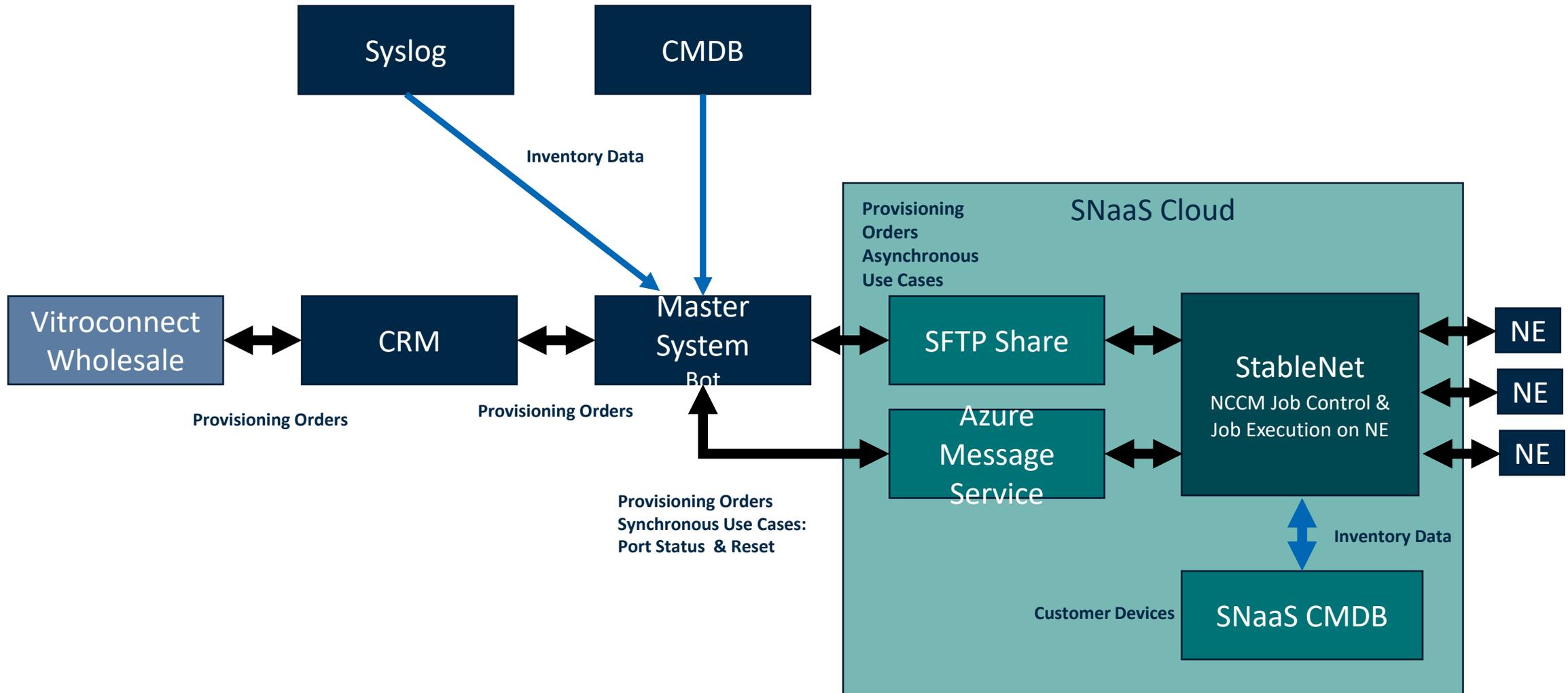


StableNet Configuration Jobs

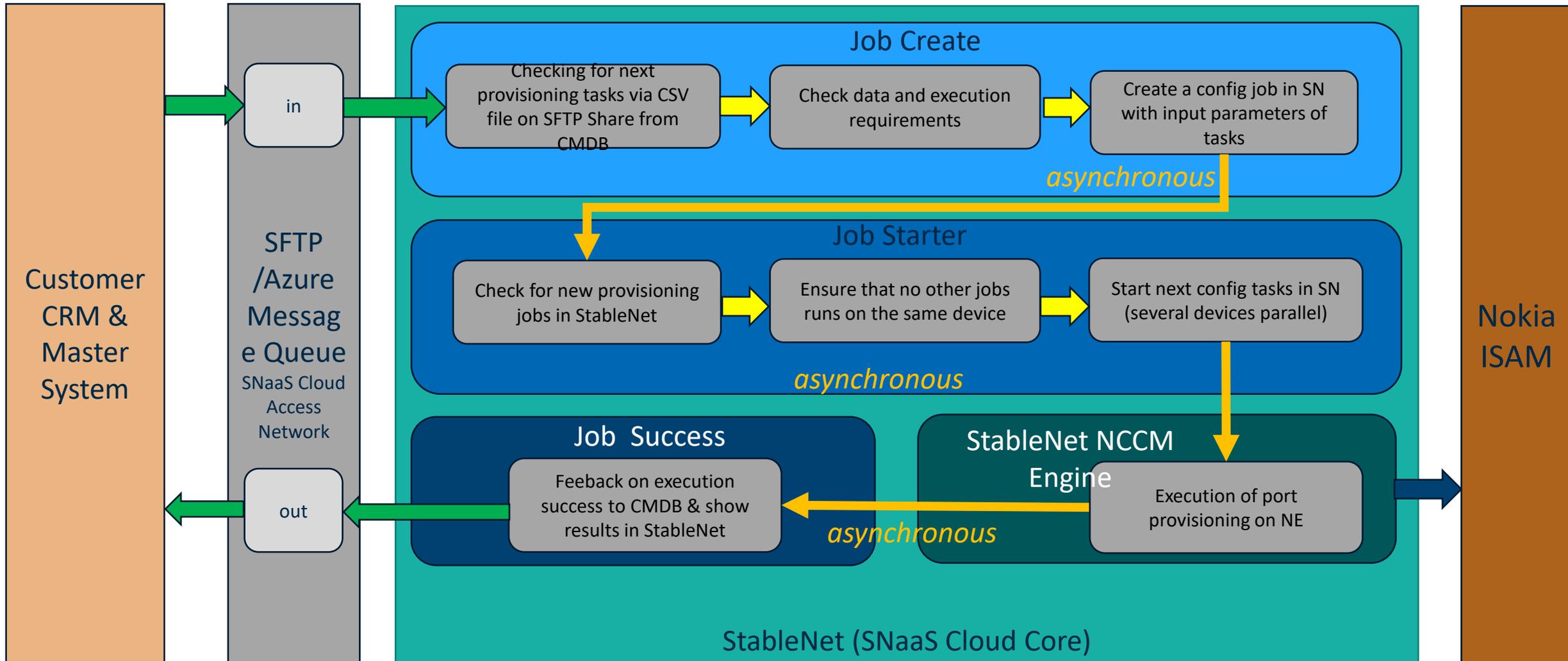


- Technical goals:
 - Automation of customer port provisioning for FTTC and FTTH
 - Creation of automated interfaces between vitroconnect (OpenAccess), CRM and StableNet® to have a process chain from business order to configuration of network elements
- Business goals:
 - Reduction of costs by reduction of error handling efforts and less manual work
 - Reduce risks for operations and business
 - Relieve of valuable human resources
 - Enablement of wholesale business via vitroconnect
- Use Cases Implemented:
 - ONT Pre-Provisioning & ONT De-Provisioning, Port Reservation & Release, Port Provisioning & Port De-Provisioning, Port Status, Port Reset, Profile Change, Provider Change, Port Change

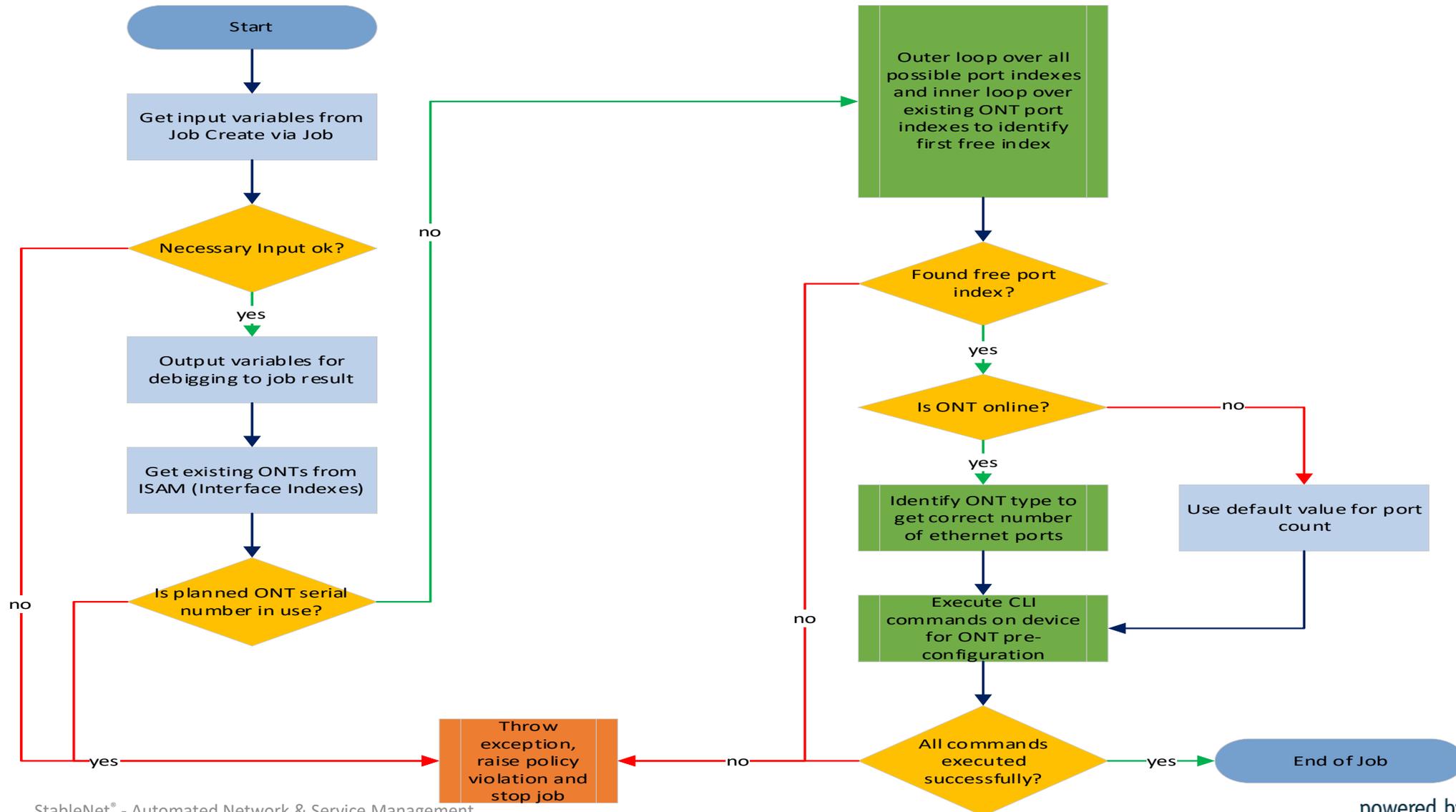
Customer Setup – Adding Wholesale



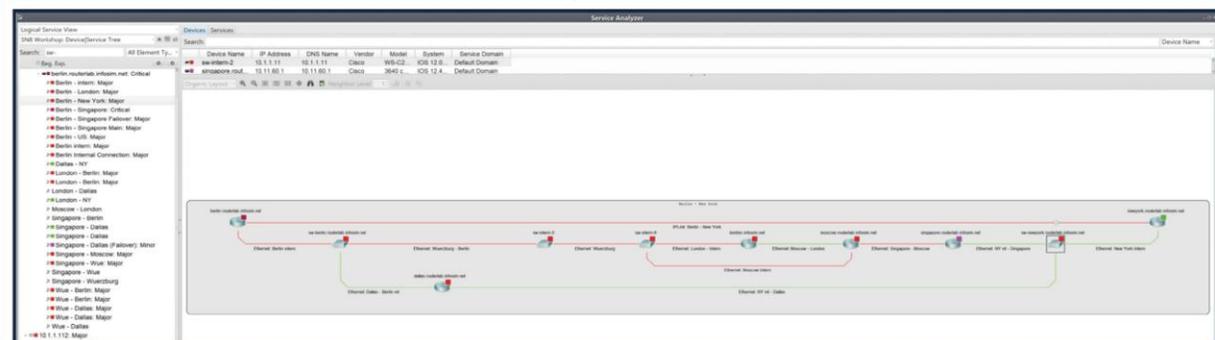
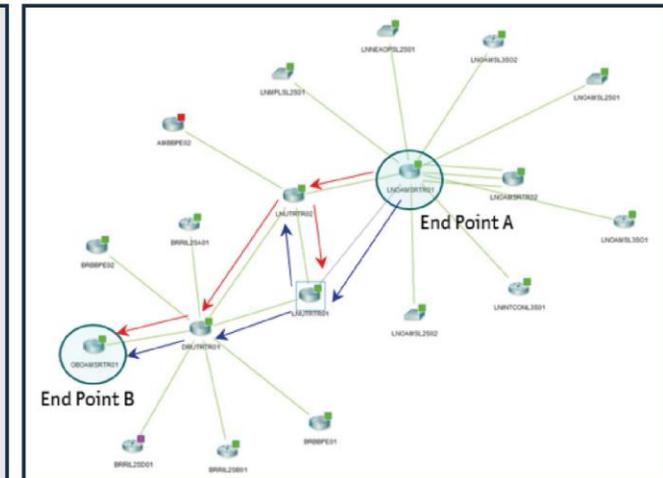
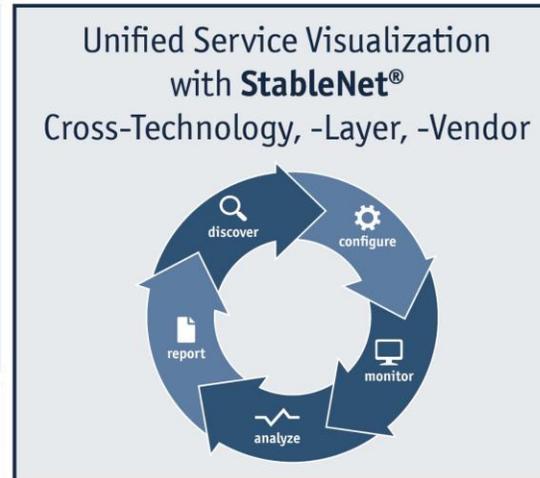
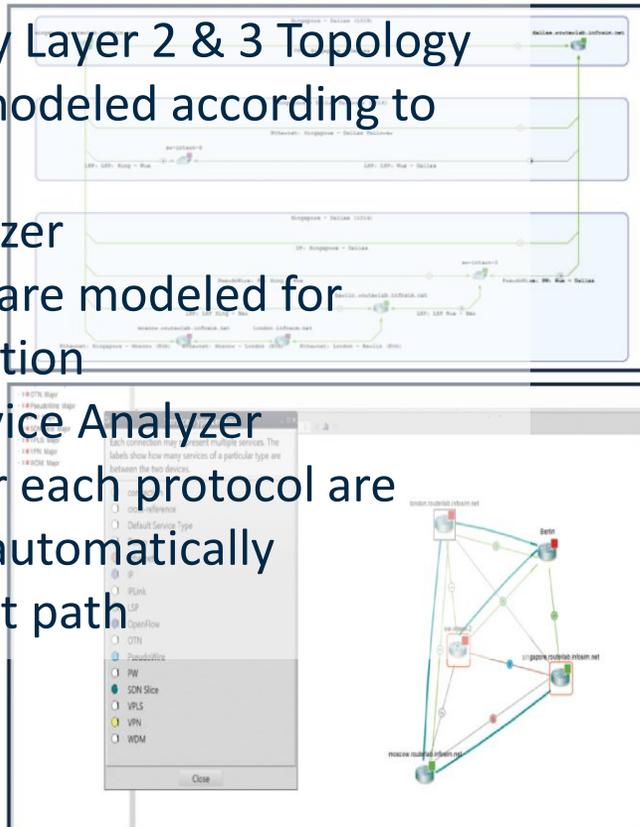
Customer Setup – Process View



Example: Configuration Template Flow Chart



- Automatic Root Cause Analysis for Events
 - Driven by Layer 2 & 3 Topology
 - Can be modeled according to needs
- Service Analyzer
 - Services are modeled for visualisation
- Network Service Analyzer
 - Views for each protocol are created automatically
- Show shortest path



Thank you

