

PIWORKS

PI.WORKS
EVO
PLATFORM™



EXA



EXA

An Effective Way of
Automating End-to-End
Network Management
Towards 5G

Industry-Leading Centralized SON

*A learning based approach for
autonomous and real-time mobile
network optimization.*

EXA by P.I. Works is the industry-leading, multi-vendor and multi-technology automated network management solution. EXA helps mobile operators to efficiently manage their network resources and improve customer experience levels. This is done with the help of extensive optimization capabilities, enriched by top-class AI/ML algorithms.

For network operators, EXA yields significant OpEx and CapEx savings and streamlines their network optimization processes. This leads to better managed networks and improved service quality levels from day one.

Key Capabilities

- ✓ Proven track record in Tier 1 mobile operators worldwide
- ✓ 30%+ OpEx and CapEx reductions through AI-based automation
- ✓ 20%+ faster download speeds
- ✓ 5%+ lower electricity costs
- ✓ 60+ off-the-shelf functionalities supporting all vendors and technologies, including Open RAN vendors
- ✓ Significant improvements in operational efficiency via 24/7 closed loop automation
- ✓ Guaranteed customer experience driven by advanced data correlation capabilities, including third party data sources such as crowdsourced, geolocation or CEM systems

The Formula for Superior Customer Experience

EXA helps operators manage and optimize their complex multi-vendor networks in the most efficient way possible using AI-driven automation, orchestrating the entire network on a 24/7 basis to improve customer experience levels.



Product Features

Selected Automation Modules of EXA

- ✓ **Energy Saving** evaluates carrier loads in a centralized manner. Based on macro-macro, macro-small cell, inter-technology, and inter-band traffic patterns, it automatically forecasts traffic levels and turns off/on network elements to reduce energy costs and the carbon footprint.
- ✓ **Code (PSC/PCI/RSI) Optimization** offers user mobility and cell type-aware code planning optimization in two modes of operations; bulk planning and conflict resolution.
- ✓ **Plug and Play** offers optimal initial site configurations, including but not limited to PCI/RSI/PSC/BCCH/BSIC codes and initial neighbour relations for rapid and consistent network rollouts.
- ✓ **Special Event Handling** performs instant improvement actions prior to and during planned and unplanned customer events, based on its machine learning-powered anomaly detection algorithms.
- ✓ **Cell Outage Detection & Compensation** instantaneously detects and compensates cell outages as well as sleeping cell and sick cell problems, to reduce customer complaints, churn, traffic loss and the MTTR (Mean Time to Recover).
- ✓ **Coverage & Capacity Optimization** boosts coverage and resolves capacity issues with near-real-time actions, using network logs, call-traces, external system metrics, crowdsourced data and RF prediction outputs.
- ✓ **Hybrid Load Balancing** dynamically offloads traffic from heavily utilized cells by intra-frequency, inter-frequency and IRAT traffic steering actions, in order to proactively prevent congestion issues and minimize site capacity expansion needs by considering the load quality status on target carriers.
- ✓ **Mobility Robustness Optimization** improves the mobility experience of subscribers by resolving handover problems and ping-pong activities, based on the data collected from source and target cells in heterogeneous networks.
- ✓ **Automated Neighbour Relations** accepts the mobility management policies set on the web-user interface and identifies optimum intra-frequency, inter-frequency and inter-technology neighbours, including inter-OSS, inter-vendor borders with call-trace enabled operations.

Creating Value for Our Customers

P.I. Works' EXA offers the most comprehensive capabilities in the market, having been field-proven in numerous Tier 1 operators worldwide.

EXA is the best choice for mobile operators looking to automate their networks and provides:

Streamlined and consistent network operations



Truly vendor-agnostic network optimization



Proven OpEx and CapEx reductions via automation



Reduced customer churn and better service quality



Proactive actions to detect problems beforehand



A single platform for managing all network resources



Lower total cost of ownership and faster time-to-impact



Correlation with other P.I. Works products and third party systems



About P.I. Works

P.I. Works is a leading provider of AI-driven mobile network planning, management and optimization solutions. P.I. Works combines field-proven expertise with a commercially available product portfolio and services. These solutions enable Mobile Network Operators to accelerate 5G transformation and improve network quality. P.I. Works has deployed its solutions at 60 mobile network operators in 42 countries.

For more information, please visit
<http://www.piworks.net/products>
or send e-mail to sales@piworks.net
Copyright© 2022 P.I. Works. All Rights Reserved.

... unlocking the full potential of mobile and
redefining the mobile experience worldwide



Unlocking
the Full
Potential of
Mobile

www.piworks.net

