

Telecom in Focus

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- Umbrella system that can integrate monitoring and analytics of several systems
- Can also operate as several smaller instances sharing data
 - If necessary, each country can have their own instance and share data when necessary
- Out of box supports tens of protocols and hundreds of device types, meaning that development cost for new installation is very small
- Easily integrated with external systems
- All major external interfaces support rich scripting using JavaScript and platform built-in tools
- Fully configurable and usable with public REST APIs
- Configurable views/dashboards per user and user groups with strong and granular authorization capabilities
- GDPR compliant, data stays at customer premises (if in-house installation)
- 3rd party security reviewed, strong emphasis on security
- Lossless data storage with several years data retention
- Supports monitoring on several levels
 - Low level network protocols
 - Netflow and similar traffic analysis
 - Modern REST APIs
 - Service health
- Comprehensive monitoring helps with network health (Backbone availability has risen from 99.5% to 99.95% at DNA after Pace installation, 2012 data)

model and **networking** challenges **Umbrella platform** that seamlessly integrates

Very strong understanding of telco operation

with existing and new systems

Very competitive development cost for any new installations

24/7/365 support

- Infrastructure, network and services can all be monitored and shown in unified displays
- Machine learning support for both prediction and anomaly detection
- Real time analysis of all incoming data for fault monitoring
 - Received/measured in-contract/out-ofcontract
 - Either simple data streams or multiple sources aggregated
- Root cause analysis for complex alert situations via automated network topology analysis
- Customizable reports for long term analysis (service level agreements, performance monitoring)

SDWAN Monitoring

- External services and cloud instances can be seamlessly integrated
- Either full monitoring or push/pull fault information from systems like Meraki
- Fault monitoring in real time allows for quick reaction
- Performance monitoring allows for predictive maintenance
- All data integrated into one system, or multiple smaller systems talking to each other SOAR capabilities
- Automatic system reconfiguration based on SDWAN configuration data
- SDWAN provider is authoritative data source

Basen

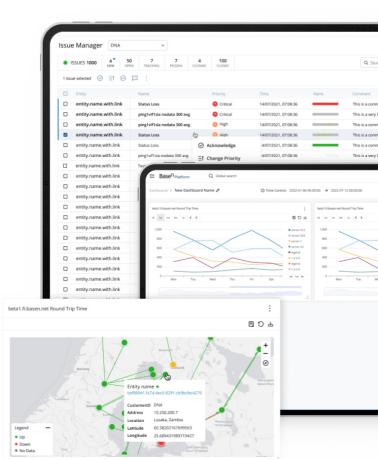
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• New and modern UI

- Completely code-less configuration of dashboards based on entities and metrics
- Maps of both physical and logical topologies
- Weather maps showing network state
- Alert and issue views
- Drill in capabilities from both maps and alerts
- Drill in supports both single measurement history and logical drill-in BaseN on entities (overview → site → service → device)
- Dashboards can be shared between users

Integration to other systems

- System can be integrated to various other 3rd party systems
 - •Authentication, ticketing/workflow, black box machine learning
- Security, Orchestration, Automation and Response (SOAR) analysis and reaction can be done in platform
 - Alert triggers actions
 - Issue manager suggests course of action
 - Traffic analysis like Netflow can be switched on when necessary
- SOAR analysis can trigger actions in external system
- History data is stored lossless for all measurements, hence SOAR actions can be easily simulated with full datasets



- Full API access, so platform can be used fully, or as part of a bigger system
 - Data lake
 - Analysis platform
 - Interoperability platform

