





#### Advanced Autonomous Solution for Remote Mobile Network Test Management and Analysis

Pilot Fleet Edge is DingLi's brand new test management and data processing system for fully autonomous remote mobile network testing, benchmarking and monitoring. The centralized system supports DingLi's entire data collection portfolio for device and data management, test configuration and assignment, device monitoring, analytics and reporting.

Pilot Fleet Edge is an evolution of the legacy Pilot Fleet Unify system with enhancements and advanced features such as a web-based application platform, cloud-based storage, multi-technology with SA/NSA 5G support, and Linux operating system. It can be deployed with a standalone physical server or hosted on the cloud. The cloud server solution minimizes CapEx and improves operational performance with stable, fast and secure cloud servers for data management and display.



## **Multiple Network Technologies**

• Pilot Fleet Edge is a state-of-the-art autonomous measurement platform that is compatible with 2G/3G/4G/4.5G/IoT/5G(SA/NSA).

## **Centralized Device and Data Management**

- Pilot Fleet Edge supports Pilot RCU, Pilot Matrix, Pilot Walktour, Walktour Pack, Pilot Scout.
- Measurement data processing, analysis and storage, test device configuration and execution are managed remotely from a centralized platform.

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#### **Analysis Functions**

Various analysis functions to identify network issues through

the analysis of measurement samples, events, parameters, etc.

- Large data volumes e.g., daily analysis up-to 2TB
- Customized analysis conditions, output, and display modes
- Customized data query with SQL statement
- Multi-dimensional data query, e.g., samples, events, services, etc.
- Online data replay on Pilot Fleet Edge Web for analysis, KPIs comparative analysis
- Verifies data files validity.
- Online data re-decoding, re-analysis and re-import to the database on Pilot Fleet Edge Web
- Powerful GIS rendering of high-volume measurement data and cell sites.
- Customizable measurement parameters display
- Network events and signaling for detailed analysis
- The analysis of poor coverage and recurring bad quality for multiple networks
- cell line linking by sampling points & grids

- Various options for cell site-based analysis and map format
- Parameter route, parameter evaluation, multiparameter comparison
- Multi-operator benchmarking, regions comparison
- Trending analysis
- Difference value analysis
- Trouble grid analysis
- Route completion ratio, grid completion ratio
- Recurring low uplink and downlink throughput analysis
- Non-anchor cell analysis
- Recurring low voice quality testing score analysis
- CSFB/VoLTE dropped call analysis
- Customize analysis with any SQL dataset
- Innovative smart analysis with BI
- GIS analysis (e.g. measure test route length and test region size, locate the position, pick coordinates, street view)



## **Remote Real-time Monitoring**

- Online device status and alarm
- Network events, alarms, parameters and test route display.
- Server's system operation alarm
- Customized event alarms
- Multi-network coverage, throughput, and voice quality testing parameter monitoring.
- Support messages monitoring





## Multiple Data and Services Test

- Voice Call, CSFB, VoLTE, EPS Fallback
- VoLTE with POLQA/PESQ voice quality testing standard
- FTP Upload/FTP Download, Multi FTP Download/Multi FTP Upload, Ping, HTTP Page/HTTP Download/HTTP Upload, MHTTP Download, PBM, Video Play, Speed Test
- Tracert, Facebook, Iperf, Email Send, Email Receive, Attach
- SMS Send, SMS Receive, SMS Self,
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# **Flexible Statistics Report Function**

- Supports data preprocessing and generates statistics reports instantly
- Provides various statistics report templates for all test services
- Multi-technology data statistics
- Multi-service KPIs statistics
- Database-based reports
- Multi-dimension statistics
- User-defined statistics reports
- Scheduled reports
- Network optimization KPIs summary report

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# **Powerful Data Processing Capability**

- Powerful data **pre**-processing capability for operational efficiency
- Powerful data **post**-processing for root cause analysis and recommendations
- Automatic test data decoding to minimize RAM usage
- Various grid granularity for data visualization (10\*10/30\*30/50\*50/100\*100/200\*200 meters)
- Approximately 1000 simultaneous online device test
- Approximately 100 simultaneous user logins
- Approximately 4 GB of data file processing and 1 GB database import per hour (note: depending on the HW and SW specifications)
- Automatic data files clearance management
- Test data management
- Cell site data management
- Region data management
- Route data management

## **Product Values**

- widely used around the world, a total of more than 3000 various types of test terminals
- Applicable to both indoor and outdoor test scenarios with DingLi autonomous data collection devices
- Powerful customized functions: e.g., report, analysis conditions, data query with SQL statement, and measurement parameters display
- Apply a variety of network optimization use cases with the flexible work order configuration and scheduling.
- Instant statistics generation, data analytics and presentation
- Automate work order or processes to improve operational efficiency and reduce cost
- New intuitive GUI that is easy to use and understand
- Runs on open-source Linux OS for greater stability, speed, and security
- Flexible deployment: own/manage the system, host it on the cloud, or subscribe as SaaS.