

**DELIVERING RELIABLE AND AGILE NETWORK
TRANSFORMATION WITH INTEGRATED
NEXT-GEN WIRELESS NETWORK TESTING**

**End-to-end consultancy, automation,
and testing services for wireless systems**



KEY CHALLENGES



Beamforming Measurement

First-time right of signal strength and accuracy lead to faster rollout.



Continuous Validation

Identify the readiness of the deployed solution and its ability to provide the necessary efficiency and scaling with customer satisfaction.



Interoperability

Multiple vendor systems requiring interoperability testing from Fronthaul, backhaul, ORAN networks, and virtualization of network elements lead to a complex and dynamic environment.



Time to Market

Faster revenue realization with an ability to market the tested product on multiple bands.



Benchmarking

Identify the E2E performance of the L2 network or L3 IP-based network as per the customer requirements.

CYIENT VALUE PROPOSITION

CyFast - Framework for Automated System Testing

A single, integrated solution for efficient and reliable software testing across various platforms, leveraging existing automation assets, prioritizing tests through risk-based analysis, integrating with ALM tools, enabling multisite execution, and generating detailed reports, ultimately reducing automation effort by 50%, cutting costs, and accelerating time to market.

1

Natural extension to your value chain related to design, Transformation, and Onboarding of the latest services.

2

Digitalization and AI-Driven Root Cause Analysis Enhancing Network Testing Experience.

3

Improve in Quality of services through continuous validation and verification approach.

4

Optimize the Live Networks through Observability.




5

Scale-out & automate the network elements and their configuration through Hyper Testing.




COMMUNICATION TESTING SOLUTIONS

| TESTING CONSULTANCY SERVICES | TESTING AUTOMATION SERVICES | MANAGED TESTING SERVICES | TEST AS A SERVICE |
|--|---|---|--|
| <ul style="list-style-type: none"> • Wireless Network benchmark • Test process optimization. • Current testing cycle analysis and improvement • Behavior-driven testing • Test environment setup • Continuous testing plan and approach • Test tool enablement for automation | <ul style="list-style-type: none"> • Automated beamforming testing • End-to-end 5G network testing • UE device and interoperability testing • NFV/CNF onboarding testing • ORAN onboarding and interoperability testing • Passive network testing • Fiber optics testing | <ul style="list-style-type: none"> • SLA/KPI driven testing • 24x7 lab management • Testing consultancy services • Test environment and tools setup and management • Quality Assurance and management services | <ul style="list-style-type: none"> • Pre-certification testing soak testing • Performance testing • Functional and non-functional testing • White box testing • Integration testing |


| | | |
|---|---|---|
|  <p>Wireless</p> <p>5G, 4G, Small cell, IMS, VOLTE, Spectrum, Wi-Fi</p> |  <p>Cloud</p> <p>SDN, xNF</p> |  <p>Orchestration</p> <p>OSS, NFVO, Service Orchestration & Assurance</p> |
|---|---|---|

CYIENT BASED SOLUTION BUSINESS BENEFITS

Improving speed-to-market (up to 40%) **for products** (B2B networks, B2B2C and B2C networks) **by reducing cycle time and increasing automation.**



Reducing the cost of testing, compliance, and delivery by 20% through AI-enabled solutions.



CASE STUDY

Delivering an Interoperable Agile Network for a Tier 1 OEM

WATCH VIDEO



Business Challenges

- Reduce the time for regression testing and identify the issues related to interoperability testing.
- Simplify interoperability testing and end-to-end protocol testing like N2, N4, etc.
- Generate auditable reports and essay quality analysis

Outcomes Realized

- Saved ~50% of effort in identifying the regression test suite
- Developed a functionality-based vendor-agnostic testing framework

Solution Provided

- Provided end-to-end testing automation tool designed using Robot Framework and Selenium
- Created multiple plugins for the NFV/CNF vendors for performing horizontal and vertical scalability, Auto configuration, API compliance, and interoperability
- Designed and deployed AI/ML model, which provides traceability, recommends test cases and test scripts, executes test cases, and provides results
- Designed and deployed solutions that can help in the execution of test cases in parallel and for multiple sites



About Cyient

Cyient (Estd: 1991, NSE: CYIENT) partners with over 300 customers, including 40% of the top 100 global innovators of 2023, to deliver intelligent engineering and technology solutions for creating a digital, autonomous, and sustainable future. As a company, Cyient is committed to designing a culturally inclusive, socially responsible, and environmentally sustainable Tomorrow Together with our stakeholders.

For more information, please visit www.cyient.com



Contact Us

North America Headquarters

Cyient, Inc.
99 East River Drive
5th Floor
East Hartford, CT 06108
USA
T: +1 860 528 5430
F: +1 860 528 5873

Europe, Middle East, and Africa Headquarters

Cyient Europe Limited
Apex, Forbury Road,
Reading
RG1 1AX
UK
T: +44 118 3043720

Asia Pacific Headquarters

Cyient Limited
Level 1, 350 Collins Street
Melbourne, Victoria, 3000
Australia
T: +61 3 8605 4815
F: +61 3 8601 1180

Global Headquarters

Cyient Limited
Plot No. 11
Software Units Layout
Infocity, Madhapur
Hyderabad - 500081
India
T: +91 40 6764 1000
F: +91 40 2311 0352

Follow us on:  