

## Spirent Wi-Fi Testing Services and Solutions

The Wi-Fi industry is going through major and rapid technology evolutions, enabling many new use cases for residentials and enterprises. Silicon suppliers, network equipment manufacturers, service providers and enterprises choose Spirent's state-of-the-art test and measurement services and solutions to develop and deploy Wi-Fi networks and products. Getting the most out of these cutting-edge testing solutions—the full Return on Investment (ROI) and the comprehensive advantage, requires an expert team that is fully versed in a broad range of qualified capabilities and Wi-Fi domain knowledge.

## **Assuring Superior User Experiences**

Spirent is the world's leading provider of end-to-end testing expertise and solutions, ranging from traditional performance testing of Wi-Fi to detailed functional and scalability testing in various deployment scenarios, thus ensuring a superior "Day 1" end-user experience.

Comprehensive Wi-Fi testing services and solutions cover all phases of product and network life cycles, enabling customers to **design**, **develop and deploy** next-generation Wi-Fi products and networks, quickly, efficiently and **with confidence**:

- Technology Consultation
- In-Lab and Field Testing
- Compliance Testing
- Wi-Fi Turn-up Testing



#### **Trusted Advisor**

Spirent has been a leader for network testing for over 20 years. That experience combined with thought leadership, industry participation and technology innovation have been proven over multiple generations of network technologies used to accelerate your design, development and deployment cycles and now includes comprehensive Wi-Fi turn up services.

#### **Unparalleled Expertise**

Whether you are looking for a turn-key solution to meet current testing needs or to strategically augment organizational gaps and limitations, Spirent's broad technical expertise can maximize your investment by avoiding delays, or cost overruns, to meet business objectives.



## **Technology Consultation**

Building Wi-Fi test labs or live Wi-Fi networks to meet today's requirements while protecting investment during rapid technology evolutions can be challenging. Consult with industry experts to benefit from the "know-how" and best practices for building effective, automated labs and deploying a future-proof Wi-Fi network.

#### **Service Elements:**

- Technology consultancy to build lab or live network
- Technology consultancy on developing test strategy and methodologies
- · Technology training

# Technology Consultation

## In-Lab and Field Testing

With new Wi-Fi technologies such as Wi-Fi 6 and Wi-Fi 6E, testing is more important than ever before. Due to the large number of new features and various use cases, the complexities and challenges of testing can become overwhelming for any organization.

Spirent in-lab and field testing services offers peace of mind, from testbed set-up and configuration, through the development of comprehensive test plans and automated test pack creation, to final execution and test reports with recommendations. Access an extensive test library with automated test cases/test packs used by many major companies worldwide or have test cases and automated test packs customized to your unique requirements.

#### **Service Elements:**

- Testbed set-up and configuration
- Test plan development
- Test case(s) and automated test pack creations (Spirent test library and/or customer defined)
- Test pack execution
- Review results and recommendations



Compliance

## **Compliance Testing**

Network equipment manufacturers and service providers are testing to certify their products to industry standards in order to stand out from competition and guarantee promised performance to their end-users. Spirent experts can assist with this process, with services provided at Spirent Labs or at customer-premises.

#### **Services Elements:**

- Test cases aimed at compliance to latest regulatory requirements
- Testing packages for TR-398, DFS, interoperability, and vendor-specific use cases
- Test reports with Pass/Fail results and recommendations
- L2-7 traffic benchmark performance numbers

## Wi-Fi Turn-up Testing

Wi-Fi has become the preferred technology when building smart stadiums, connected airports and venues, and campuses due to the unlicensed spectrum it operates on and total cost of ownership considerations. To ensure that Wi-Fi performance meets current and future end-user needs for these deployment scenarios, requires careful planning and analysis. Spirent experts can help select the right technology and products based on short- and long-term business objectives, through the entire design, development and deployment cycle.

#### **Services Elements:**

- Technology and product selection based on business requirements
- Network planning/analysis and management
- Pre and post launch testing
- Data collection, analysis and recommendation
- · Assured confidence with deployment





### **USE CASE: Technology Consulting / Compliance Testing**

A leading regulatory authority in Europe was faced with the challenge of benchmarking the performance of the country's Wi-Fi service providers under the same testing conditions. They were looking for an automated, flexible and repeatable testbed to reduce testing time.

Spirent provided technology consultation and compliance testing services, including the development and execution of 28 customer-defined, automated test cases, and sharing their findings and recommendations based on the results achieved.

#### **Customer benefits included:**

- Creation of a high quality, efficient and realistic testing regime to ensure end-user experience, with benchmarks accepted by each service provider
- Reduction of testing time from weeks to hours, accelerating service provider Timeto-Market (TTM)



### **USE CASE: Field Testing / Service Assurance**

Beijing Daxing International Airport, the world's largest single-structure airport, was planning to create an unrivaled technology experience for passengers and airport personnel. When faced with a strict service delivery deadline to meet the launch schedule, they called Spirent experts to provide field testing and assurance services for the airport's networks and data center, traveler Wi-Fi, network security and other key supporting systems.

As a result, a highly efficient testing system was developed and executed over a four-month engagement to help assure security, reliability and high-availability of information systems deployed across the airport premises.

#### **Customer benefits included:**

- · On-time, on-budget Wi-Fi network deployment for launch
- Rigorous validation of Wi-Fi network coverage and performance



## **USE CASE: Turn-Up Testing**

A central European government agency was in the process of relocating to a new building housing the latest Wi-Fi technology, Wi-Fi 6, and LAN networks that needed to support a large number of users and significant network traffic. Prior to the relocation, the agency needed to validate the installation and configuration of those networks within a very tight timeframe to ensure the throughput, latency, and overall stability and performance were acceptable for all users.

Spirent was able to provide unique services and tools for heavy traffic emulation and mass user testing over both Wi-Fi 6 and Ethernet concurrently with many access points and hundreds of clients on multiple floors.

#### **Customer benefits included:**

- Early identification of Wi-Fi 6 network issues that would have resulted in poor performance and inferior user experience.
- Confidence the facility could be opened on time with assured network performance, coverage, and security from day one



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## **About Spirent**

**Spirent Communications** (LSE: SPT) is a global leader with deep expertise and decades of experience in testing, assurance, analytics and security, serving developers, service providers, and enterprise networks. We help bring clarity to increasingly complex technological and business challenges. Spirent's customers have made a promise to their customers to deliver superior performance. Spirent assures that those promises are fulfilled.

For more information visit: www.spirent.com

## You Promised Best-in-Class Next-Gen Wi-Fi Experience.

Let Spirent assure you fulfill your promise.

As a global leader with deep expertise and decades of experience in testing, assurance, analytics and security, serving developers, service providers, and enterprise networks, Spirent helps bring clarity to increasingly complex technological and business challenges.

For over 20 years, Spirent has been offering products, solutions and services for high-speed Ethernet, positioning and mobile network infrastructure markets, with expanding focus on active service assurance, cybersecurity, 5G, IoT, NFV, SD-WAN, and more. Spirent is accelerating the transition of connected devices, network equipment and applications from development labs to the operational network, as it continues to innovate toward fully automated testing and autonomous service assurance solutions.

## **Spirent Advantage**

Spirent Services and Solutions will modernize your business' internal skill set and help preserve existing investments so you can continue delivering top quality products and services to customers. Gain access to industry expertise through a wide breadth of solutions and services that will transform your business objectives into revenue, enabling you to focus on core competencies and first-to-market differentiators such as end-to-end reliability and continuous high performance.







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