

Cybersecurity Testing Solutions



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Navigating The Complexities Of Cybersecurity Threats

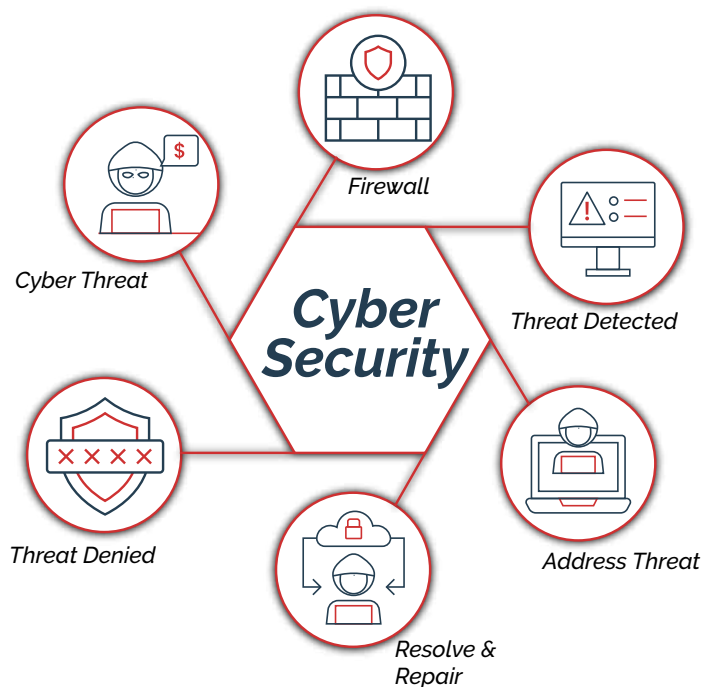
Telecommunications networks form the backbone of modern communication systems, connecting us to each other, and businesses, and governments worldwide. Critical to our daily lives, the communications networks we depend on every day also become attractive targets for cyber threats.

Protecting telecommunications infrastructure from cyber-attacks is a complex and ongoing challenge, requiring a comprehensive understanding of the risks and the implementation of effective solutions.



Security Challenges

- ✓ **Evolving Threat Landscape** - Cybercriminals, state-sponsored actors and hackers continuously develop and change tactics to breach networks. The constant evolution and changing of hacking methods makes it difficult for operators to withstand cyber threats
- ✓ **Increased Complexity of Networks** - Due to the integration of more and more devices and emerging technologies, networks are becoming more complex and more vulnerable to cyber attacks
- ✓ **Legacy Systems** - Component and network upgrades are never thorough or all-encompassing, therefore integrating different levels of technology can leave networks vulnerable to attacks
- ✓ **Supply Chain Vulnerabilities** - As supply chains include multiple vendors and providers, each with its own security practices, any break or weakness can compromise the entire system

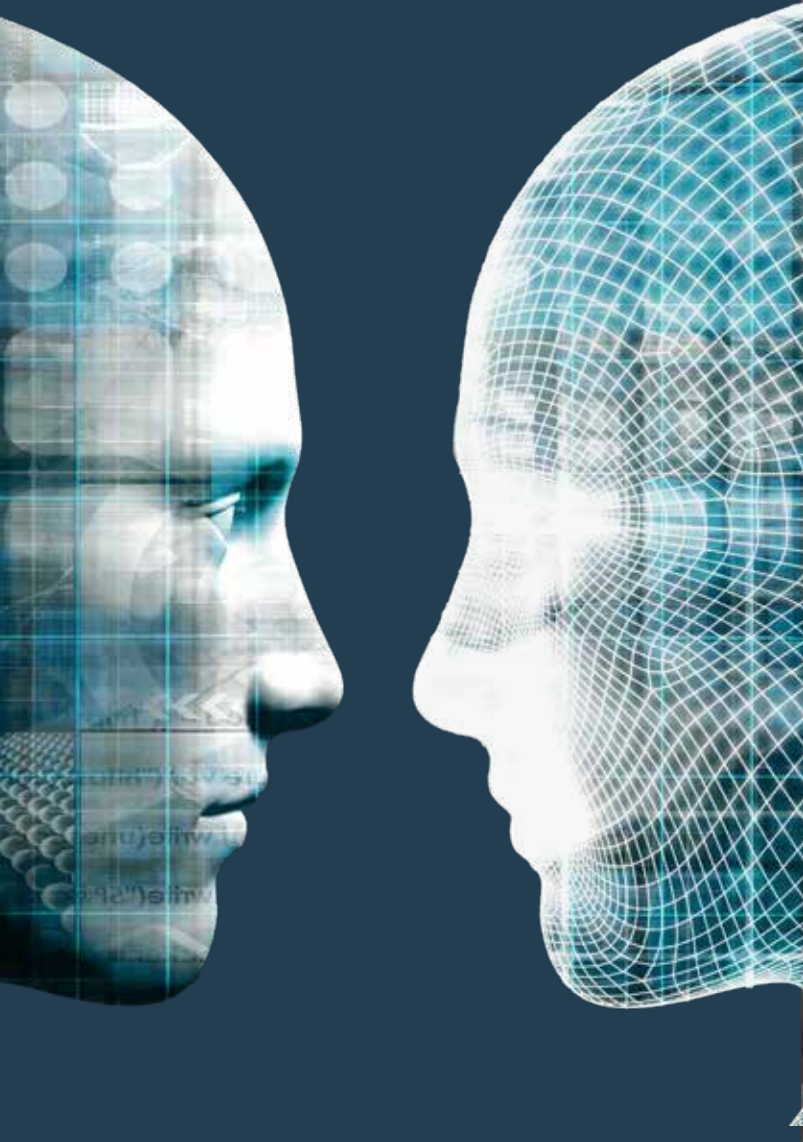


Strengthening Telecom Networks

The cybersecurity challenges faced by telecommunications networks and network providers are significant and complex. However, by understanding these challenges and implementing robust security measures, and testing protocols, organizations can help to minimize and protect their infrastructure from cyber threats.

- ✓ Threat Detection & Response System - Are crucial to identifying and mitigating threats in real-time and before any damage is caused
- ✓ Network Segmentation - Segmenting critical systems, organizations can help to prevent lateral movement within a network by attackers
- ✓ Regular Security Testing - Pre-planned and scheduled security testing helps identify weaknesses and vulnerabilities within the network
- ✓ Authentic & Access Control - Ensuring that only authorized users have access to networks is essential for maintaining security
- ✓ Supply Chain Security - Working closely with partners to ensure that all adhere to robust security standards, along with regular testing, helps ensure accurate addressing of potential threats
- ✓ Incident Response Plan - A well-defined plan is crucial for minimizing the impact of cyber-attacks. Regularly testing and updating the plan ensures it remains effective in the face of evolving threats





The Next Frontier: Welcome To The Digital Twin Revolution In Testing Technology

Advancements in technology occur virtually each week, some are small adjustments, others, large resource intensive upgrades. It becomes mission critical for businesses and organizations to stay current, effectively manage new tech, maintain security and the interoperability of networks. Digital Twin Technology answers that call.

Offering a dynamic representation of real-world assets, processes, systems and environments Digital Twin Technology from Valid8 offers:

- ✓ **Insight** - Into intricate network relationships and the impact of new tech
- ✓ **Preparation Time** - anticipate for upgrades and changes
- ✓ **Scalability** - Ensure that as networks grow so does network infrastructure
- ✓ **Stability** - Understand and prepare for stability issues due to new tech or network expansion
- ✓ **Testing & Validation** - Ensure that network performs as planned before it goes live

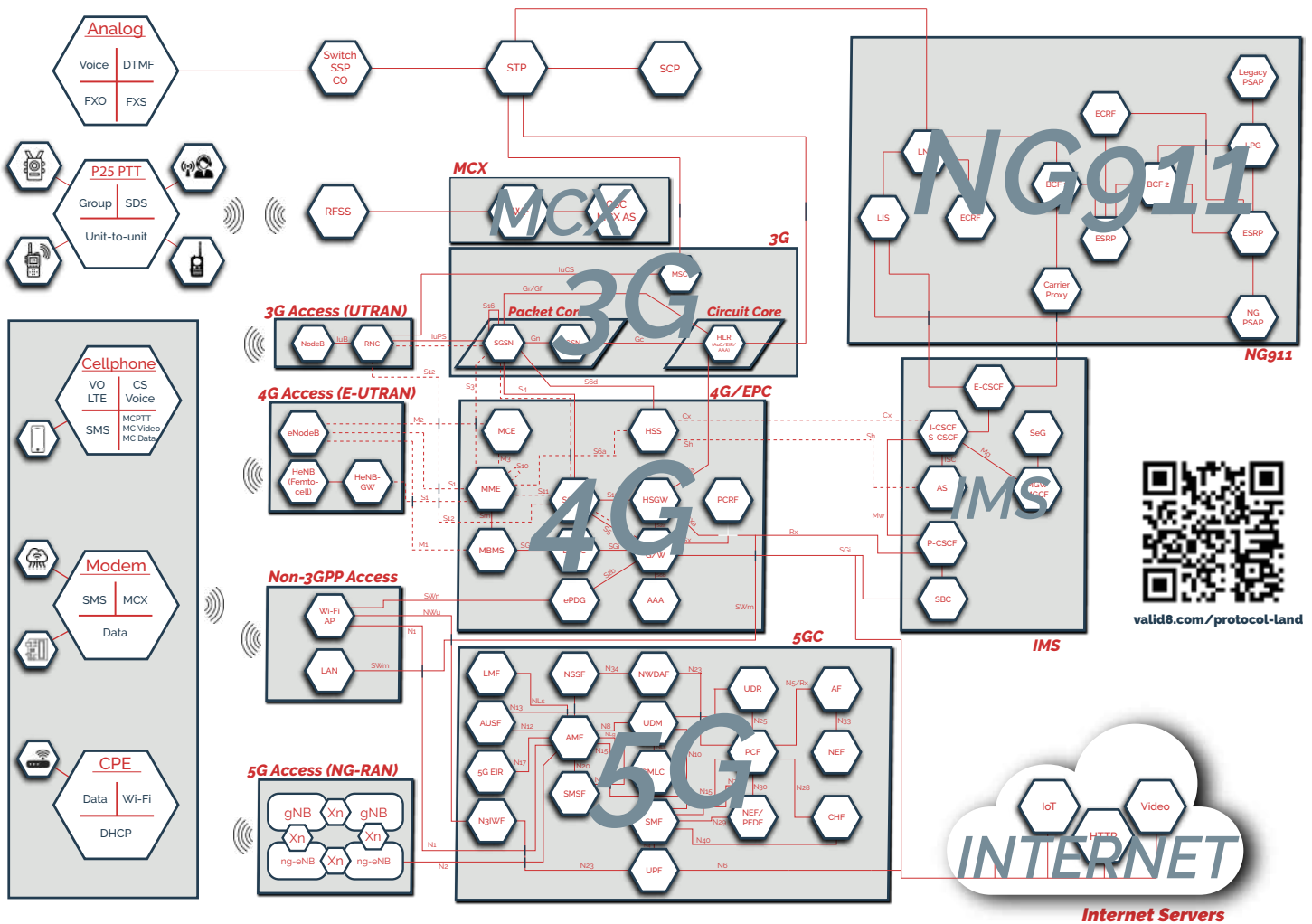


“Our goal was to create a secure environment for businesses and organizations that would provide a quick and easy replication of their unique environment. A place where they could explore and test virtually unlimited network possibilities. All before any equipment purchase.”

- Ian Carpenter -

Discover Protocol Land

Testing & Measurement Solutions



The Protocol Land Diagram above is an all-inclusive view of the capabilities of Valid8 Testing Solutions. Valid8 can emulate and test all the protocol areas and network nodes as illustrated in the diagram above through the use of our proprietary Protocol Engine.

Built from the ground up for browser control, and with both engineer and end-user in mind, the Linux-based Protocol Engine offers unparalleled flexibility and versatility. Its modern and responsive user interface supports control, scenario editing, remote access, and sharing capabilities. Users can modify call-flows, while integrated version control facilitates team-driven development and testing. Additionally, our open Cloud API enables seamless integration into existing test automation environments.



Future-Proofing Your Network For The Next Threat

Advanced threat detection and response, network segmentation, regular security assessments, strong authentication and access controls, employee training, supply chain security, and incident response planning are all essential components of a comprehensive cybersecurity strategy. As the threat landscape continues to evolve, ongoing vigilance and adaptation will be key to safeguarding telecom networks.

Integration & Testing

Once the infrastructure is in place, the next step is to integrate and test the network:

- ✓ Interoperability Testing - Ensure that 5G equipment from different vendors works seamlessly together
- ✓ Network Performance Testing - Conduct extensive testing to measure key performance indicators (KPIs) like data speed, latency, and reliability
- ✓ User Experience Testing - Evaluate the end-user experience to ensure the network meets customer expectations

Continuous Improvement Through Testing & Measurement

- ✓ Network Optimization - Routine testing to ensure performance
- ✓ Technology Upgrades - Testing that upgrades are interoperable, stable, and secure
- ✓ Standards & Regulation - Testing to ensure that standards and regulations are in compliance

"As cyber threats continue to proliferate and become more sophisticated, testing our networks against these threats becomes even more critical. At Valid8 our core focus is providing testing tools that meet the demands of today's network environments." - Ian Carpenter -

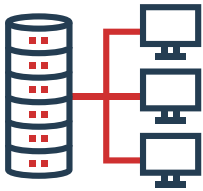
Testing & Measuring Your Network Just Got Smarter



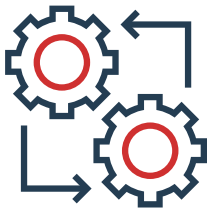
Cost Effective - purchase only the components you need and eliminate unnecessary test expenses



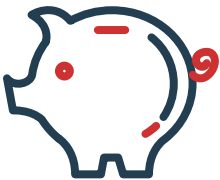
Funding Strategies - the deployment of new technologies can involve substantial financial investment in new infrastructure, equipment, and training. Valid8 provides flexible deployment, purchase, subscription and lease options



Streamline Testing - Leveraging automated testing tools and cloud-based solutions, organizations can streamline testing processes, reducing the time and resources required for comprehensive evaluations



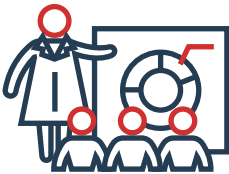
Adaptable - Our automated tests can be run over 5G, 4G, WiFi or ethernet and are designed to be flexible and scalable, capable of adjusting to the changing demands of different network environments and technologies



Resource Savings - Optimizing the use of time, personnel, and equipment, with the capability of performing multiple tests. Concurrent testing allows multiple tests to be conducted simultaneously, reducing the overall testing duration and accelerating the deployment of new technologies and services



Stability - Testing helps identify vulnerabilities, optimize network performance, and ensure compliance with industry standards and regulations and proactively detect and mitigate potential issues before they impact service availability



Support & Training - Transitioning to new technologies and equipment requires training and support for users to effectively utilize the new technology. Valid8 provides engineering support subscription services



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Let's Meet!

