

Overcoming Cyber Threats in a 5G World

As the fifth generation (5G) mobile network becomes increasingly accessible, cybersecurity risks also increase.



While 5G has many benefits—including more reliability, massive network capacity and improved efficiency—the increased connectivity also allows for more cybersecurity threats that could greatly impact society.

There are several moving parts to navigate when it comes to cybersecurity in a 5G world, and authorities must protect not only 5G infrastructure and services, but also the applications and internet of things (IoT) devices that run across 5G rails. The following are reasons why this more complex system of technologies and operations is susceptible to cyber risks:

- **5G connects the virtual and real world**—The convergence of the virtual and real world exposes new points of attack for cybercriminals and leads to challenges in cybersecurity management.
- **5G is linked through an application programming interface (API)**—5G utilizes APIs to communicate between service functions. If an API is insecure, it can expose core services to cybercriminals and place the entire network at risk.
- **5G is linked with enterprise, industrial and IoT services**—Since 5G will include advanced enterprise, industrial and IoT services, cyber risks are no longer limited to network providers and users; they also extend to much larger systems.

In order to make the most of this technology, it's imperative that policymakers work with the private sector to implement effective 5G prevention and control measures. These can include:

- **Adopting zero-trust frameworks**—Zero-trust frameworks ensure that all 5G network activity is secure. This framework limits access to and regulates all interactions, partitions assets through small segments and regularly monitors security systems.
- **Verify supply chain security**—Recent major cyberattacks make it evident that supply chains are primary targets for hackers. Trustworthy components and vendors must make up the foundation for 5G cybersecurity.
- **Preventive security controls**—Regulators can utilize machine learning capabilities and AI to focus on preventive security controls by periodically monitoring physical devices that are connected to 5G networks, and responding to actions.

Contact your local advisor today to learn more about protecting your organization against cyber threats.

LET US HELP YOU MANAGE YOUR RISK

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