

IoT SECURITY

With our global network capabilities and more than 20 years of experience in the field of empowering connections, we are your global operator of access for the connection of things.



iBASIS Global Access for Things™ is a global mobile connectivity and network-level data analysis solution for things worldwide. We are leading the industry in the use of next generation eSIM/eUICC technology to provide a single global, remotely programmable, SIM that provides mobile data connectivity to your smart devices all over the world.

THE iBASIS SECURITY APPROACH

The emergence of the Internet of Things (IoT) enables mobile devices, sensors, machines, and vehicles to connect to each other and to the Internet. New types of service providers are being created rapidly to offer innovative services and solutions, which involve chip, sensor and device manufacturers, application developers, communication (mobile and fixed) providers, and Internet, Public, and Private Cloud service providers.

In this new ecosystem, each element from an end-to-end perspective faces a variety of security and privacy challenges as well as the risk myriad of attacks from the internet. To ensure that end-to-end security can be maintained, each stakeholder needs to address the risks and challenges in the design stage in conjunction with other related stakeholders under an end-to-end security framework. Since almost all IoT services are required to leverage a communication network (e.g., mobile networks), the GSM Association (GSMA), which represents the telecommunication industry, has created a set of security guidelines to help achieve the end-to-end security that benefits the whole ecosystem.

KEY BENEFITS

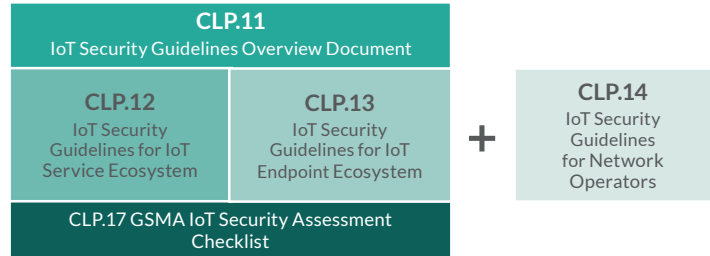
- Remotely programmable mobile network solution
- Standards-based eSIM/eUICC and Remote SIM Provisioning (RSP) technology
- Single eSIM solution to eliminate mobile connectivity logistic issues
- Open programmable and flexible with API interface at all levels

BE THERE FIRST

Looking for a customized solution?
Talk to one of our specialists at
info@iBASIS.net.

The structure of the GSMA security guideline document set is shown below:

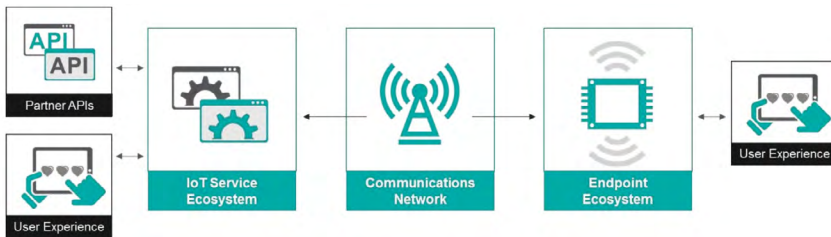
Network Operators, IoT Service Providers and other partners in the IoT ecosystem are advised to read GSMA document CLP.14 "IoT Security Guidelines for Network Operators" which provides top-level security guidelines for Network Operators who intend to provide services to IoT Service Providers to ensure system security and data privacy.



The guideline for each of the components is based on the following generic IoT Model.

iBASIS Global Access for Things is one of the innovative IoT services created recently to offer cellular based data access service for IoT devices. To learn more, visit iot.ibasis.com.

The iBASIS IoT service architecture is comprised of APIs, IoT data services, and Communication Network components according to the generic IoT model above and therefore, our security framework addresses the security challenges reflected in CLP.11, CLP.12, and CLP.14. The following summarizes iBASIS' IoT security approach and extra security services offered to customers for their end IoT devices.



SECURITY CONNECTIVITY

- Each IoT device is connected through the iBASIS secure IPX network infrastructure which is GSMA security-compliant
- Each service element facing the internet is protected by a firewall and a Distributed Denial of Service (DDoS) protection system
- VPN to Private Cloud or Enterprise Premise is available

DATA AND APPLICATION

- API with mutual authentication and encryption
- Policy-based Data Anomaly Detection for each accessed IoT device

SECURITY SERVICE

- On-demand data access control per IoT device to limited IP destinations
- On-demand location-based access control per IoT device
- Entire eSIM data path is either encrypted, on a private network, or on a secure VPN

ABOUT iBASIS

iBASIS is the leading communications solutions provider enabling operators and digital players worldwide to perform and transform. Powered by Tofane Global, iBASIS is the first independent communications specialist and Tier One IPX vendor with 800+ LTE destinations. iBASIS today serves 1,000+ customers across 28 locations worldwide. iBASIS optimizes global connectivity, quality and security, so customers achieve high return on voice, SMS A2P messaging, mobile data, 5G roaming and IoT.

iBASIS provides the end-to-end Global Access for Things™ connectivity solution, delivering single source cellular IoT access (LTE, LTE-M and NB-IoT) worldwide provisioned through GSMA-standard eSIM/eUICC technology. The solution simplifies IoT device connection through one unified platform for seamless, remote, programmable, and secure communication.

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