

# Floodgate IoT Security Toolkit

## *Comprehensive Security for the IoT*

### Overview

The **Floodgate IoT Security Toolkit** provides engineers developing IoT devices a comprehensive security solution allowing them to build secure, authenticated, and trusted devices. The solution enables a scalable level of security for any IoT device running an RTOS or embedded Linux. It is the only security platform providing a full suite of device protection, secure credentialing services, and full integration with IoT cloud services. The toolkit includes the following security elements: secure boot, secure software updates, firewall, intrusion detection, MQTT, TLS, and a management agent.

*"More connected devices mean more attack vectors and more possibilities for hackers to target us.*

*IoT security, previously ignored, has now become an issue of high concern."*

- Ben Dickson,  
Crunch Network



### Product Description

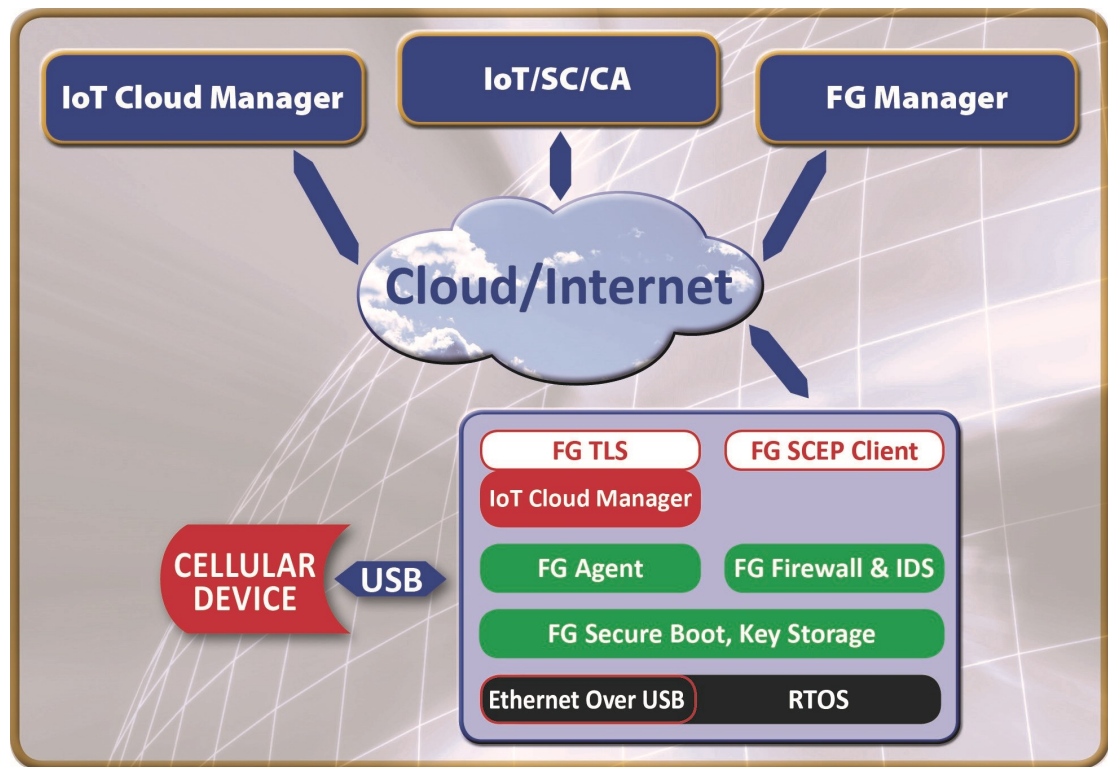
Providing end-to-end security management for IoT devices, the **Floodgate IoT Security Toolkit** allows a client application to harden devices, manage endpoints from the cloud, and report security events. Designers now have an interactive and scalable drop-in security solution protecting IoT devices from external and insider attacks.

The **Floodgate IoT Security Toolkit** provides integration with any secure credentialing services, including Verizon's IoT SC Certificate Authority using its Floodgate Key Manager component, an embedded key management client providing automated enrollment with certificate authorities using the industry's only RTOS-compatible implementation of the SCEP protocol.



The **Floodgate IoT Security Toolkit** is a single vendor, scalable solution providing seamless and secure integration with a variety of cloud services, including Verizon's ThingSpace IoT solution. Key elements of the toolkit are:

- Management system integration with Verizon ThingSpace and the Floodgate Security Manager
- Certificate Authority integration allows enrollment with any CA
- Floodgate firewall and intrusion detection
- Secure communication via TLS
- Secure boot—validates the boot process at all stages
- Secure firmware updates
- Secure key/certificate storage
- TLS—a lightweight implementation providing security over any network connection
- MQTT— a messaging protocol ideal for resource constrained connections



The **Floodgate IoT Security Toolkit** provides the building blocks for compliance with security standards including EDSA, ISA/IEC 62443 and NIST Cybersecurity guidelines.

**Floodgate Firewall**, an award-winning embedded firewall, provides Stateful Packet Inspection (SPI), rules-based filtering, and threshold-based filtering to protect IoT devices from Internet-based threats.

**Floodgate Intrusion Detection Software (IDS)** provides a critical, missing layer of security for the IoT. Floodgate IDS protects IoT devices from malicious or accidental changes to firmware, configuration information, or static data.

**Floodgate Secure Boot** ensures only authenticated firmware from the OEM is allowed to run on the IoT device.

**Floodgate Secure Firmware Update** validates software updates before installation.

**Floodgate Agent** provides situational awareness, security event reporting, command audit log support, and security policy management for embedded and IoT devices.

**Certificate Authority** integration allows enrollment with any CA including Verizon's IoT SC CA.

**TLS** – A lightweight implementation providing security over any network connection.

**MQTT** – A lightweight implementation of the MQTT messaging protocol for use on top of TCP/IP. It is ideal for IoT connections where a minimal code footprint is required or bandwidth is limited.

*As industries, public utilities, military, home, and personal IoT devices become more connected, hackers are getting more sophisticated, resulting in greater vulnerabilities and increased risk of costly, devastating cyberattacks. The **Floodgate IoT Security Toolkit** protects your devices, your networks, and your corporate intelligence; critical components to your success. Don't wait until it's too late; protect what matters now.*